FINAL | APRIL 2017

Mammoth Creek Park West New Community Multi-Use Facilities

ENVIRONMENTAL IMPACT REPORT

PREPARED FOR:

Town of Mammoth Lakes

PREPARED BY:

Michael Baker International



FINAL
ENVIRONMENTAL IMPACT REPORT

Mammoth Creek Park West
New Community Multi-Use Facilities

SCH NO. 2016062009

Lead Agency:

TOWN OF MAMMOTH LAKES
437 Old Mammoth Road, Suite R
Mammoth Lakes, California 93546
Contact: Ms. Sandra Moberly,
Community and Economic Development Manager
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smoberly@townofmammothlakes.ca.gov

Prepared by:
MICHAEL BAKER INTERNATIONAL
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949.472.3505

April 21, 2017

JN 151373

This document is designed for double-sided printing to conserve natural resources.

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B: Traffic and Sight Distance Memorandum

C: Noise Reference Data

D: Hydrology/Water Quality Memorandum

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1.0 Introduction

1.0 INTRODUCTION

In accordance with the *California Environmental Quality Act Guidelines* (CEQA Guidelines) Section 15088, the Town of Mammoth Lakes, as the lead agency, has evaluated the comments received on the Mammoth Creek Park West New Community Multi-Use Facilities Draft Environmental Impact Report (Draft EIR).

The Draft EIR for the proposed Mammoth Creek Park West New Community Multi-Use Facilities (herein referenced as the project) was distributed to potential responsible and trustee agencies, interested groups, and organizations. The Draft EIR was made available for public review and comment for a period of 45 days. The public review period for the Draft EIR established by the CEQA Guidelines commenced on December 29, 2016 and ended on February 13, 2017.

The Final EIR consists of the following components:

- Section 1.0 – Introduction
- Section 2.0 – Responses to Comments
- Section 3.0 – Errata
- Section 4.0 – Mitigation Monitoring and Reporting Program

Due to its length, the text of the Draft EIR is not included with this document; however, it is included by reference in this Final EIR. None of the corrections or clarifications to the Draft EIR identified in this document constitutes "significant new information" pursuant to Section 15088.5 of the CEQA Guidelines. As a result, a recirculation of the Draft EIR is not required.

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2.0 Response to Comments

2.0 RESPONSE TO COMMENTS

In accordance with the *California Environmental Quality Act Guidelines* (CEQA Guidelines) Section 15088, the Town of Mammoth Lakes, as the lead agency, evaluated the written comments received on the Draft Environmental Impact Report (EIR) (State Clearinghouse No. 2016062009) for the Mammoth Creek Park West New Community Multi-Use Facilities (herein referenced as the project) and has prepared the following responses to the comments received. This Response to Comments document becomes part of the Final EIR for the project in accordance with CEQA Guidelines Section 15132.

A list of public agencies, organizations, and individuals that provided comments on the Draft EIR is presented below. Each comment has been assigned a letter number. Individual comments within each communication have been numbered so comments can be cross-referenced with responses. Following this list, the text of the communication is reprinted and followed by the corresponding response.

Commenter	**Letter Number**
Agencies	
State Clearinghouse (February 14, 2017)	1
Lahontan Regional Water Quality Control Board (February 3, 2017)	2
Mammoth Community Water District (February 7, 2017)	3
Great Basin Unified Air Pollution Control District (February 9, 2017)	4
California Department of Fish and Wildlife (February 13, 2017)	5
Organizations	
Shute Mihaly & Weinberger LLP (February 13, 2017)	6
High Sierra Energy Foundation (February 10, 2017)	7
Mammoth Resorts LLC (February 10, 2017)	8
Sierra Club (February 12, 2017)	9
Public	
Raymond Landis (January 12, 2017)	10
John and Sue Hellestoe (January 13, 2017)	11
Doug Jastrab (January 18, 2017)	12
David McNamara (January 19, 2017)	13
Bruno Saunier (January 20, 2017)	14
Howard and Tricia Yamamoto (January 20, 2017)	15
Russ and Pam May (January 20, 2017)	16
Kelly and Susan Morris (January 22, 2017)	17
Ruth Gerson (January 22, 2017)	18
Jane Kenyon (January 23, 2017)	19
P. Vignery (January 23, 2017)	20

Steve and Maria Ball (January 23, 2017) 21
Aaron and Jessica Ross (January 24, 2017) 22
Gary Baker (January 25, 2017) 23
Steve Cumins (January 26, 2017) 24
Don Stanley (January 27, 2017) 25
Linda Mueller (January 28, 2017) 26
Linda Mueller (January 29, 2017) 27
Lynn Boulton (January 30, 2017) 28
T.J. and Jennifer Chase (January 30, 2017) 29
Deanna Clark (February 1, 2017) 30
Linda Mueller (February 5, 2017) 31
Don Lawson (February 6, 2017) 32
Gayle and Jeffrey Brown (February 6, 2017) 33
Allison McDonell (February 7, 2017) 34
John and Pat Thornton (February 7, 2017) 35
Paul Oster (February 9, 2017) 36
Tom Bell (February 10, 2017) 37
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Public Meeting

Planning and Economic Development Commission Public Meeting (February 8, 2017) 45

Late Letters Received

Bill Fischbeck (Received February 21, 2017) 46

MASTER RESPONSE

In an effort to clarify concern that the public has regarding special events that could occur at the project site, the following Master Response (MR) has been prepared:

MR-1 Special Events

Multiple comments asked what special events may occur at the project site and whether or not those types of events were considered in the Draft EIR. Per the Town's Municipal Code, a Special Event or Festival is defined as "A temporary use such as a circus, carnival, music festival, outdoor art and craft shows and exhibits, and similar amusement or entertainment activities; may include sporting events (e.g., running races, bicycle events, fishing tournaments, and similar activities); does not include "Outdoor Display and Sales."

Existing permitted special events have taken place at the project site. These have included, but are not limited to, community events such as the annual POPS in the Park event, Farmers Market, Parks and Recreation Department Easter Egg Hunt and Town Clean Up day BBQ, along with smaller one-day (or hourly rentals) for private events. These permitted events are typically for a short duration (2 to 4 hours) and have included amplified sound and involve approximately 50 to 300 people. Further, although not historically used, these special events can seek approval to serve alcohol under the existing administrative permit approvals (Municipal Code Section 17.56.040).

Pursuant to Municipal Code Section 17.56.040, the following temporary uses and events are currently allowed on the project site, as it is in a Public and Quasi Public (P-QP) zone with approval of an administrative permit. These temporary uses and events must comply with the following standards.

B. *Festivals*. Music festivals, outdoor art and craft shows and exhibits, and similar outdoor entertainment activities in any zone except single-family residential and rural residential, subject to a limitation on the number of days of operation as determined by the Director.

C. *Seasonal Sales Lots*. Seasonal sales activities for Thanksgiving, Christmas, or other holidays, on non-residential properties, including temporary residence/security trailers.

D. *One Day Events*. Special one-day events such as local service club breakfasts, bingo, or Monte Carlo nights in any zone except single-family residential. This provision does not apply to events within an approved public assembly site or any other location described in 17.56.030.

E. *Sports Events*. Special sports events such as running races or bicycle races in any zone.

F. *Commercial Filming*. Commercial filming may be authorized on properties within residential, commercial/industrial, and special purpose zoning districts.

J. *Off-Site Snow Storage*. Off-site snow storage is any snow storage that involves the use of public rights-of-way to access snow storage sites.

L. *Similar Temporary Uses*. Similar temporary uses which, in the opinion of the Director, require an administrative permit and are compatible with the zoning district and surrounding land uses.

None of the project-proposed entitlements would amend Municipal Code Section 17.56.040, or permit any Special Event or Festival. Special Events and Festivals are not part of the project.

The following events are not allowed in the P-QP zone:

A. *Events*. Circuses, carnivals, and similar transient amusement enterprises in any commercial or industrial zone subject to no more than 30 days of site occupation and operation in any calendar year.

G. *Snow Chain Installers*. Snow chain installers on commercially zoned parcels.

H. *Snow Removal Equipment (Residential Zone)*. Storage of snow removal equipment in a residential zone, pursuant to the following restrictions:

1. In any residential zone, one piece of snow removal equipment may be maintained at the home of the business operator from November 1st through April 30th.

2. If the vehicle/equipment is maintained at the home of the business owner or primary operator and is stored within a standard garage at all times, this one vehicle/equipment may be stored year round; providing, such equipment is not used for any non-snow removal business from the residential zone.

I. *Snow Removal Equipment (Commercial Zones)*. Storage of snow removal equipment in a commercial zone, pursuant to the following restrictions:

1. Snow removal vehicles/equipment may be stored outdoors between November 1st and April 30th.

2. Snow removal vehicles/equipment may be stored outdoors between May 1st and October 31st only in the Mixed Lodging/Residential District (MLR) zone and only to accommodate the needs of the lodging project with no off-site work being permitted at any time.

3. This section applies to snow removal operations only and does not permit the outdoor storage and/or industrial use of other heavy equipment not intended for snow removal.

4. Snow removal vehicles/equipment may be permitted within an enclosed building all year in any zone.

K. *Temporary Freestanding Campaign Offices*. Campaign offices in any commercial or industrial zone subject to no more than seventy continuous days of site occupation and operation in any calendar year. Temporary campaign offices within an existing suite do not require an administrative permit.

Municipal Code Section 17.56.050 also provides general requirements for all temporary uses. These requirements include the following:

A. *Cumulative Time Limits*. Temporary uses shall not be allowed on or within a parcel, shopping center, professional center, or business park for more than 90 days in any calendar year.

B. *Building Permits*. Any new structure or any new electrical service connection shall require a Building Permit unless specifically exempted by the California Building Standards Code.

C. *County Health Department Approval*. All temporary uses are, where applicable, subject to the issuance of a Certificate of Operation from the Mono County Health Department for all temporary uses involving the handling of foods.

D. *Parking*. Adequate temporary parking facilities, pedestrian and vehicular circulation, including vehicular ingress and egress and public transportation shall be provided in compliance with the requirements of the Director. The Director may require parking areas to be surfaced with crushed rock or other surface(s).

E. *Site Restoration*.

1. The subject site shall be restored to its original condition within five days from the date of termination of the permit.

2. The Director may require the submission of a performance bond or other surety measures, in compliance with Public Works Performance Guarantee requirements, to ensure that any temporary facilities or structures used will be removed from the site within a reasonable time following the event, the property will be cleaned of debris, litter, or any other evidence of the temporary event upon completion or removal of the event, restored to the former condition, and shall continue to be used in compliance with this Zoning Code.

F. *Operating Hours*. The Director may regulate operating hours and days, including limitation of the duration of the temporary use.

G. *Nuisance Factors*. The Director may apply conditions to regulate nuisance factors including prevention of glare or direct illumination on adjoining parcels, dirt, dust, gases, heat, noise, odors, smoke, waste, and vibration.

H. *Screening Required*. The Director may require temporary outdoor sales areas to be screened from adjoining public rights-of-way by temporary decorative walls, fences, and/or landscaping.

I. *Security*. Security and safety measures shall be provided in compliance with the requirements of the Police Chief.

J. *Waste Collection and Disposal*. Provisions shall be made for solid waste collection, recycling and/or disposal, in compliance with the requirements of the Director.

K. *Other Conditions*. The Director may impose any other conditions which will ensure the operation of the proposed temporary use or event in an orderly and efficient manner and in full compliance with the purpose/intent of this chapter.

(Ord. No. 14-02, § 4, 3-19-2014)

The Sale of Alcohol

Alcohol is currently permitted at the project site during Special Events through an Administrate Permit (Special Event Permit), as described above, on an as needed basis as permitted by the Town (Draft EIR page 3-17), similar to existing Special Events currently permitted in the Town. As part of the Town's permit process, the Town of Mammoth Lakes Police Department (MLPD) could, as warranted, require additional police services during Special Events.

Noise Considerations

The project proposes a community recreational facility and not a concert venue or large outdoor music venue. The existing permitted events range from 50 to 300 people. The community recreational facility could, with receipt of a permit, continue to host such weddings or similar Special Events with live and/or amplified music. These existing events are not comparable to large outdoor music venues (such as professional concert venues, which can host thousands). Further, the proposed project has been intentionally designed to minimize all noise impacts, whether from the uses proposed by the project or from any future, speculative, Special Events, to surrounding uses by locating the primary activity areas that would generate noise at the project center, as far as practicable from surrounding uses. The community buildings and other structures have been carefully placed between the primary activity areas and the receptors. The proposed intervening structures and roof structure act as a noise barrier and would attenuate sound levels from potential activities and events at the project site, including low frequency noise from live music. As described in the Draft EIR (Section 5.8, *Noise*, Impact Statement N-4), noise impacts from this scale of activity would not exceed the Town's standards and potential worst-case conditions can be mitigated to a less than significant level with Mitigation Measures NOI-2 and NOI-3.

It should be noted that noise levels from public address systems, amplified noise sources, and amplification systems are limited to specific levels during the daytime and nighttime. The limits are required to be incorporated into a Noise Control Plan and verified by the Town per Mitigation Measure NOI-3. Additionally, third party events held at the project site would be required to obtain a Special Events Permit, which would provide Town control over the types of equipment used on-site. As described above, Special Events are exempt from Town standards per Section 17.56 of the Municipal Code. It should be noted that Special Event can currently be permitted on the project site or any other location in the Town. As described above, the project has been designed to minimize impacts to the neighboring land uses. Special events do not occur on a daily basis and as such, noise levels from these events are not enough to create a temporary or permanent increase in the ambient conditions which are established over the long term, per the CEQA Guidelines.

COMMENT LETTER 1

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

February 14, 2017

Sandra Moberly
City of Mammoth Lakes
P.O. Box 1609
437 Old Mammoth Road, Suite R
Mammoth Lakes, CA 93546

Subject: Mammoth Creek Park West New Community Multi-Use Facilities
SCH#: 2016062009

Dear Sandra Moberly:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on February 13, 2017, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

1-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2016062009
Project Title Mammoth Creek Park West New Community Multi-Use Facilities
Lead Agency Mammoth Lakes, City of

Type EIR Draft EIR

Description The project consists of constructing new community multi-use facilities at the project site, encompassing a max 100-ft by 200-ft ice rink (winter)/recreation/event area covered by an approximately 30,000 sf roof structure and additional storage and support space. In addition, the proposed project includes a 13,000 sf complementary community center, reconfiguration and improvements to an existing playground, restroom improvements, and 107 additional surface parking spaces. The project would also include an active outdoor recreation area to the west of the new community multi-use facilities. Upon project completion, the existing Mammoth Ice Rink/RecZone would be made inactive, and the existing community center would remain under Town operation.

Lead Agency Contact

Name Sandra Moberly
Agency City of Mammoth Lakes
Phone (760) 934-8989 x 251 **Fax**
email
Address P.O. Box 1609
437 Old Mammoth Road, Suite R
City Mammoth Lakes **State** CA **Zip** 93546

Project Location

County Mono
City Mammoth Lakes
Region
Lat / Long 37° 38' 08" N / 118° 58' 03" W
Cross Streets Old Mammoth Rd and Mammoth Creek Rd
Parcel No. 040-140-001-000, -002-000
Township 4S **Range** 27E **Section** 2 **Base** MDBM

Proximity to:

Highways SR 203
Airports
Railways
Waterways Mammoth Creek
Schools Multiple
Land Use GP: OS
Z: P-QP

Project Issues Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Other Issues; Aesthetic/Visual

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 6 (Inyo & Mono Region); Department of Parks and Recreation; Department of Water Resources; Caltrans, District 9; Regional Water Quality Control Bd., Region 6 (So Lake Tahoe); Native American Heritage Commission

Date Received 12/29/2016 **Start of Review** 12/29/2016 **End of Review** 02/13/2017

Note: Blanks in data fields result from insufficient information provided by lead agency.

1. RESPONSES TO COMMENTS FROM STATE OF CALIFORNIA OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE, FEBRUARY 14, 2017.

1-1 This comment indicates that the State Clearinghouse submitted the Draft EIR to selected State agencies for review and that the comment period for the Draft EIR concluded on February 13, 2017. The comment indicates that the lead agency complied with the public review requirements for draft environmental documents pursuant to CEQA. As such, the comment does not provide specific comments regarding information presented in the Draft EIR, and no further response is necessary. The comment also indicates that comments from responsible or other public agencies are enclosed and responses to those comments are provided in response to those letters.

California Water Boards

Edmund G. Brown Jr. Governor

Matthew Rodriquez Secretary for Environmental Protection

Lahontan Regional Water Quality Control Board

February 3, 2017

File: Environmental Doc Review
Mono County

Sandra Moberly, Manager
Town of Mammoth Lakes
Community and Economic Development Department
P.O. Box 1609
437 Old Mammoth Road, Suite R
Mammoth Lakes, CA 93546
Email: smoberly@townofmammothlakes.ca.gov

Comments on the Draft Environmental Impact Report for the Mammoth Creek Park West New Community Multi-Use Facilities Project, Mono County, State Clearinghouse Number 2016062009

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received the Draft Environmental Impact Report (DEIR) for the above-referenced project (Project) on January 5, 2017. The DEIR was prepared by Michael Baker International on behalf of the Town of Mammoth Lakes (Town) and circulated for public comment in compliance with provisions of the California Environmental Quality Act (CEQA). Water Board staff, acting as a responsible agency, are providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. Based on our review of the information provided, we encourage the Town to integrate elements into the Project that: 1) promote watershed management; 2) support low impact development (LID); 3) reduce the effects of hydromodification; and 4) provides incentive for projects that avoid or enhance/restore wetlands and other water resources. Our comments are outlined below. 2-1

PROPOSED PROJECT

Generally, the proposed Project includes construction of a multi-use park, including a 100-foot by 200-foot ice rink/recreation/event area covered by an approximately 30,000 square foot roof structure, a 13,000 square foot community center, improvements to an existing playground, improvements to restroom facilities, and 107 additional parking spaces in the Town of Mammoth Lakes. The Project is located at the existing Mammoth Creek Park West on Old Mammoth Road, and is north of Mammoth Creek.

WATER BOARD'S AUTHORITY

All groundwater and surface waters are considered waters of the State. Surface waters include streams, lakes, ponds, and wetlands, and may be ephemeral, intermittent, or perennial. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the U.S. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the U.S.

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml **2-1**

SPECIFIC COMMENTS ON THE ENVIRONMENTAL REVIEW

Our specific comments on the Project and DEIR are outlined below.

1. Section 5.9, Hydrology and Water Quality, 5.9.2, Regulatory Setting, State Level, State Water Resources Control Board, refers to the General Construction Activity Storm Water Permit, Water Quality Order No. 99-08-DWQ, modified on December 2, 2002, currently being revised. Please be aware the National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit, Water Quality Order (WQO) No. 2009-0009-DWQ, amended by 2012-006-DWQ, became effective on July 12, 2012 and supersedes WQO No. 99-08-DWQ..

2. Activities such as construction of the overhead structure and paving the parking lot may increase the amount of impervious surfaces in the area and, thus, has the potential to increase run-off rates to and impact beneficial uses associated with Mammoth Creek. The Water Board requires impacts to water resources be avoided where feasible and minimized to the extent practical. Compensatory mitigation will be required for all unavoidable permanent impacts to surface water resources. Water Board staff coordinate all mitigation requirements with staff from other federal and state regulatory agencies, including the U.S. Army Corps of Engineers (USACE) and the California Department of Fish and Wildlife. In determining appropriate mitigation ratios for impacts to waters of the State, Water Board staff considers Basin Plan requirements, which include, at minimum, a 1.5 to 1 mitigation ratio for impacts to wetlands. Water Board staff uses *12501-SPD Regulatory Program Standard Operating Procedure for Determination of Mitigation Ratios*, published December 2012 by the USACE, South Pacific Division, to enable us to determine a mitigation ratio for projects that impact waters in our region. **2-2**

3. Storm water management should be considered a significant component of the Project. The foremost method of reducing impacts to watersheds from urban development is "Low Impact Development" (LID), the goals of which are to maintain a landscape functionally equivalent to predevelopment hydrologic conditions and to minimize generation of non-point source pollutants. LID results in less surface runoff and potentially less impacts to receiving waters, the principles of which include: maintaining natural drainage paths and landscape features to slow and filter runoff and maximize groundwater recharge; managing runoff as close to the source as possible; and maintaining vegetated areas for storm water management and onsite filtration. **2-3**

4. Water quality objectives and standards, both numerical and narrative, for **all** waters of the State within the Lahontan Region, including surface waters and groundwater, are outlined in Chapter 3 of the Basin Plan. Water quality objectives and standards are intended to protect the public health and welfare, and to maintain or enhance water quality in relation to the existing and/or potential beneficial uses of the water. It is these objectives and standards that should be used when evaluating thresholds of significance for Project impacts. **2-4**

5. To ensure that no net loss of function and value will occur as a result of Project implementation, we request that site facilities, equipment staging areas, and excavated soil stockpiles be microsited outside stream channels and floodplain areas. Buffer areas should be identified and exclusion fencing used to protect the water resource and prevent unauthorized vehicles or equipment from entering or otherwise disturbing the surface waters. Equipment should use existing roadways to the extent feasible. **2-5**

6. Vegetation clearing should be kept to a minimum. Where feasible, existing vegetation should be mowed so that after construction the vegetation could reestablish and help mitigate for potential storm water impacts. **2-6**

7. Temporary impacts should be restored (recontoured and revegetated) to match pre-Project conditions. **2-7**

PERMITTING REQUIREMENTS

A number of individual projects that may be implemented as part of the proposed Project have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include the following. **2-8**

8. Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill waste discharge requirements for impacts to non-federal waters, both issued by the Lahontan Water Board or State Water Board. Early consultation with Water Board staff regarding these types of permits is highly encouraged.

9. Land disturbance or more than 1 acre, including linear construction projects, may require a CWA, section 402(p) storm water permit, under National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit, Water Quality Order (WQO) 2009-0009-DWQ, as amended, obtained from the State Water Board, or an individual storm water permit obtained from the Lahontan Water Board. 2-9

10. Water diversion and/or dewatering activities may be subject to discharge and monitoring requirements under either NPDES General Permit, Limited Threat Discharges to Surface Waters, Board Order R6T-2014-0049, or General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality, WQO-2003-0003, both issued by the Lahontan Water Board. 2-10

Please be advised of the permits that may be required, as outlined above. The specific Project activities that may trigger these permitting actions should be identified in the appropriate sections of the DEIR. Should Project implementation result in activities that trigger these permitting actions, the Project proponent must consult with Water Board staff. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/. Obtaining a permit and conducting monitoring does not constitute adequate mitigation. Development and implementation of acceptable mitigation is required. 2-11

Thank you for the opportunity to comment on the DEIR. If you have any questions regarding this letter, please contact me at (760) 241-7305 (Brianna.St.Pierre@waterboards.ca.gov) or Patrice Copeland, Senior Engineering Geologist, at (760) 241-7404 (Patrice.Copeland@waterboards.ca.gov). Please send all future correspondence regarding this Project to the Water Board's email address at Lahontan@waterboards.ca.gov and be sure to include the State Clearinghouse Number and Project name in the subject line. 2-12

Brianna St. Pierre, PG
Engineering Geologist

cc: State Clearinghouse (SCH 2016062009) (state.clearinghouse@opr.ca.gov)
California Department of Fish and Wildlife, Region 6 (AskRegion6@wildlife.ca.gov)

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2. RESPONSES TO COMMENTS FROM LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD, DATED FEBRUARY 3, 2017.

2-1 The commenter summarizes the Lahontan Regional Water Quality Control Board's (RWQCB) statutory responsibilities pursuant to the CEQA Guidelines, summarizes the project, and summarizes the RWQCB's authority. The commenter states that Section 5.9, Hydrology and Water Quality, references the General Construction Activity Storm Water Permit, Water Quality Order No. 99-08-DWQ (modified on December 2, 2002), which is currently being revised. The commenter requests that the Town be aware the National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit, Water Quality Order (WQO) No. 2009-0009-DWQ, amended by 2012-006-DWQ, became effective on July 12, 2012 and supersedes WQO No 99-08-DWQ.

The Town recognizes that the project would be subject to the federal and state laws and regulations, including those imposed by the RWQCB. As discussed on Draft EIR page 5.9-21, the project would be required to conform to the requirements of an approved Storm Water Pollution Prevention Plan (SWPPP) (Mitigation Measure HWQ-2), the NPDES Construction General Permit No. CAS000002 (2009-0009-DWQ [as amended by 2010-0014-DWQ and 2012-006-DWQ]) (Mitigation Measure HWQ-3), and utilize the Town of Mammoth Lakes MOU, which would require the implementation of construction period Best Management Practices (BMPs) to minimize the potential for water quality impacts.

2-2 As discussed in the Draft EIR Impact Statement HWQ-2 (page 5.9-23), development of the proposed project could potentially result in increased run-off amounts and degraded water quality. Activities associated with operation of the project would generate substances that could degrade the quality of water runoff, particularly vehicle-related pollutants. The deposition of certain chemicals by cars in the parking areas could have the potential to contribute metals, oil and grease, solvents, phosphates, hydrocarbons, and suspended solids to surface water flows. However, impacts to water quality generated from project operation can be reduced through the implementation of proposed BMPs designed to protect water quality in receiving water bodies. The project currently proposes BMPs that would be employed for the project, which include an oil/water separator and retention basins designed to filter runoff on the project site (refer to Draft EIR Exhibit 5.9-3, *Conceptual Drainage*). The additional BMPs, if necessary, would be included upon finalizing grading/improvement plans (refer to Mitigation Measure HWQ-6).

Additionally, increased runoff can contribute to increased soil erosion (Draft EIR page 5.9-26). Soil erosion contributes to decreased water quality. However, as the project proposes storm drain facilities that would filter runoff, soil erosion would be minimized through infiltration. The facilities would be finalized in the grading/improvement plans (refer to Mitigation Measure HWQ-4). Mitigation Measure HWQ-5 would also ensure that the storm drain facilities are properly maintained during operation. Compliance with the Mitigation Measures HWQ-4 through HWQ-6 would reduce potentially significant impacts on receiving water quality in Mammoth Creek resulting from project

operation to acceptable levels. As such, impacts related to operational water quality would be less than significant.

As discussed on Draft EIR page 8-3, the *Habitat Assessment for the Mammoth Creek Park West New Community Multi-Use Facilities Project* (Habitat Assessment), prepared by Michael Baker International, Inc., dated August 2, 2016 (provided in Appendix 11.2, *Habitat Assessment*, of the Draft EIR), did not identify any drainage or wetland features within the project footprint that would be considered jurisdictional by the United States Army Corps of Engineers (USACE), RWQCB, or California Department of Fish and Wildlife (CDFW). Thus, no regulatory approvals from the USACE, RWQCB, or CDFW would be required regarding waters of the U.S. or wetlands. The proposed project would not result in any impacts to USACE, RWQCB, or CDFW jurisdictional waters or wetlands. No impacts would occur in this regard.

2-3 Implementation of the Draft EIR Mitigation Measure HWQ-6 (Draft EIR page 5.9-26) would require the Public Works Director to identify and implement a suite of stormwater quality BMPs and Low Impact Development (LID) features to address the most likely sources of stormwater pollutants resulting from operation of the proposed project. Pollutant sources and pathways to be addressed by these BMPs include, but are not necessarily limited to, parking lots, maintenance areas, trash storage locations, rooftops, interior public and private roadways, and storm drain inlets. The design and location of these BMPs are required to generally adhere to the standards associated with the Phase II NPDES stormwater permit program. Implementation of these BMPs must be assured by the Community & Economic Development Manager and Town Engineer prior to the issuance of Grading or Building Permits.

2-4 Draft EIR page 5.9-10 identifies the beneficial uses per the adopted Water Quality Control Plan for the Lahontan Region (Basin Plan). As further discussed on Draft EIR page 5.9-14, the Basin Plan outlines policies and regulations for municipal wastewater, treatment, disposal, and reclamation. The Basin Plan also establishes specific erosion and sediment control guidelines for land developments within the Town. These standards are designed to provide developers with a uniform approach for the design and installation of adequate systems to control erosion and mitigate urban drainage impacts from the Town in an effort to prevent the degradation of waters of Mammoth Creek and Hot Creek. Under a Memorandum of Understanding (MOU) with the Lahontan RWQCB (MOU No. 6-91-926), the Town administers erosion control measures on a project by project basis to make sure that they are in place and operational. As discussed in Response 2-1, the project would be required to utilize the Town of Mammoth Lakes MOU, ensuring that proposed BMPs consider beneficial uses identified in the Basin Plan.

2-5 As discussed on Draft EIR page 5.9-18, Municipal Code Section 17.08.020, *Standards for All Development and Land Use, Grading and Clearing*, also requires a grading permit for any lot graded or cleared of vegetation. This section requires all construction and uses to comply with the Lahontan RWQCB requirements, which would include equipment staging areas and excavated soil stockpiles be microsited outside floodplain areas (no stream channels are located on-site). As enforced by the RWQCB, buffer areas may be

required to be identified and fencing used to protect water resources and prevent unauthorized vehicles or equipment from entering or otherwise disturbing the surface waters.

2-6 As discussed on Draft EIR page 3-14, the existing park grass within the southeastern portion of the project site would remain. However, the remainder of the project site would be graded and replanted with drought-tolerant landscaping. As discussed in Draft EIR Impact Statement HWQ-1 (page 5.9-21), the proposed project would be required to comply with the Town's Municipal Code Chapter 12.04, 12.08, 15.08, and 17.08.020. The construction site must be stabilized in order to reduce runoff velocities, preventing erosion and sedimentation from exiting the project site during construction. During grading activities, all drainage paths must be protected and devices to capture stormwater runoff during construction would be required, as necessary. The Contractor would be required to control erosion from areas cleared of vegetation during construction. The project would also be subject to a grading permit, which would require compliance with the Lahontan RWQCB requirements during construction. With implementation of laws and regulations, as well as recommended mitigation, impacts in this regard would be reduced to less than significant levels.

2-7 As discussed on Draft EIR page 5.9-23, the proposed grading for the project would maintain the existing drainage patterns on-site (refer to Draft EIR Exhibit 5.9-3, *Conceptual Drainage*).

2-8 Refer to Response 2-2.

2-9 Refer to Response 2-2.

2-10 The project would not require dewatering activities.

2-11 It is acknowledged that the RWQCB is identified as a Responsible Agency, as permits are anticipated to be required. The Town would coordinate with the RWQCB accordingly, as required by law.

2-12 It is acknowledged that the RWQCB has requested all future correspondence regarding the project be sent to Brianna St. Pierre, P.G., or Patrice Copeland, Senior Engineering Geologist, as indicated in Comment 2-12.

COMMENT LETTER 3

Mammoth Community Water District
Post Office Box 597
1315 Meridian Blvd.
Mammoth Lakes, CA 93546
(760) 934-2596

February 7, 2017

Sandra Moberly, Manager
Community and Economic Development Department
Town of Mammoth Lakes
Mammoth Lakes, CA 93546

Dear Ms. Moberly,

Thank you for the opportunity to review the Draft Environmental Impact Report on the Mammoth Creek Park West New Community Multi-Use Facilities. The Mammoth Community Water District (MCWD) has no comments on the proposed project. However, MCWD would like to remind the Town that a connection permit will be required for any new uses of water on the project site. Kris McDaniel-Roberts, MCWD Permit Official is available to provide assistance. She can be reached at (760) 934-2596 ext. 223. **3-1**

Sincerely,

Irene Yamashita
Public Affairs/Environmental Specialist

3. RESPONSES TO COMMENTS FROM MAMMOTH COMMUNITY WATER DISTRICT, DATED FEBRUARY 7, 2017.

3-1 The Mammoth Community Water District (MCWD) has no comments on the Draft EIR at this time. The MCWD acknowledges that the project would likely require a connection permit for any new uses of water on the project site from the MCWD. As discussed on Draft EIR page 8-14, the MCWD is acknowledged as the water provider and based on the analysis presented from the *Draft 2015 Urban Water Management Plan* (Draft 2015 UWMP), the project's water demand would be met. Also, refer to Appendix E, *MCWD Will-Serve Letter*, of this Final EIR, for a copy of the "will-serve" letter issued on April 14, 2017 for the proposed project.

From: Jan Sudomier [mailto:jan@gbuapcd.org]
Sent: Thursday, February 9, 2017 3:48 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: Draft EIR for Mammoth Creek Park West New Community Multi-Use Facility Project comment

Greetings Sandra Moberly -

Thank you for the opportunity to comment on the Mammoth Creek Park West New Community Multi-Use Facility Project [Project].

Great Basin Unified Air Pollution Control District [District] has regulations that apply to this Project. Information regarding the District's general permitting requirements may be found at our website www.gbuapcd.org

Pre-Construction

> The Project proponent is required to apply for, and get an Authority to Construct [District Rule 200]. **4-1**

During the construction phase, the Project would be subject to;

> District Rule 400 - called Ringelmann Chart - requires dust emissions to be controlled.
> District Rule 401 - Fugitive Dust - requires precautions be taken to prevent dust from moving across the property boundary.
> District Rule 402 - Nuisance - requires control of all discharge of air contaminants, so they do not adversely impact the public.

I'd also like to make you, and the potential contractors, aware of some Air Pollution related California regulations, that out-of-state contractors would also be subject to. All diesel-fueled engines, portable, on heavy equipment, or trucks, must be registered with the state of California. Various other non-diesel-fueled equipment must be registered as well, like portable concrete batch plants. If the project goes forward, and the contractor(s) have any questions about these state diesel regulations, they can phone California Air Resources Board's diesel representative at 866-6DIESEL (866-634-3735), or the District at (760) 872-8211. If they have questions about other non-diesel-fueled portable equipment, they can contact the state of California's Portable Equipment Registration Program [PERP - https://www.arb.ca.gov/portable/portable.htm] at portable@arb.ca.gov, or (916) 229-0584. **4-2**

The restroom improvements may also be subject to the federal National Emission Standards for Hazardous Air Pollutants [NESHAP] for Asbestos. If more than 160 square feet of existing materials [walls have two sides, and both sides count toward the 160 sq ft] are being impacted by the improvements, there are steps that must be taken before the impacts take place. The District is the delegated agency for this, and the contractor(s) can contact me [Jan Sudomier (760) 872-8211 x 228] with any questions. **4-3**

Please share my contact information with anyone who has questions on this.

Thank you, Jan

Jan Sudomier, Air Quality Specialist II
Great Basin Unified Air Pollution Control District
157 Short Street, Bishop, CA 93514
ofc (760) 872-8211 fax (760) 872-6109
cell, if no answer at ofc, (760) 937-5788

4. RESPONSES TO COMMENTS FROM GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT, DATED FEBRUARY 9, 2017.

4-1 As identified on Draft EIR page 5.6-11, Mitigation Measure AQ-1 requires that construction activities comply with GBUAPCD Rule 401 and Rule 402, such that excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures. Draft EIR page 5.6-13 also discusses that the project would be required to apply for a Permit to Construct permit prior to construction (required pursuant to Mitigation Measure AQ-2). Further, Mitigation Measure AQ-3 would require necessary permitting approvals pursuant to Great Basin Unified Air Pollution Control District (GBUAPCD) Rule 216-A, *New Source Review Requirement for Determining Impact on Air Quality Secondary Sources*. With implementation of Mitigation Measures AQ-1 through AQ-3, the project would comply with all applicable GBUAPCD Rules.

Other permits identified by the GBUAPCD that would apply to the proposed project include compliance with District Rules 200 and 400. These rules, in addition to those acknowledged in the Draft EIR, further reduce those identified less than significant impacts with mitigation incorporated.

4-2 It is acknowledged that all construction activities for the project would be subject to California law, including construction equipment registration requirements.

4-3 As required by existing federal and state law, renovation of the existing restroom facility would be subject to the federal National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos (including Rule 1002).

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

February 13, 2017

Sandra Moberly, Community and Economic Development Manager
PO Box 1609
Mammoth Lakes, CA 93546

Subject: **Mammoth Creek Park West New Community Multi-Use Facilities Project Draft Environmental Impact Report SCH# 2016062009**

Dear Ms. Moberly:

The California Department of Fish and Wildlife (CDFW) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Mammoth Creek Park West New Community Multi-Use Facilities Project (Project) (State Clearinghouse No. 2016062009) prepared by the Town of Mammoth Lakes (Town, Lead Agency). Pursuant to The Guidelines for the Implementation of the California Environmental Quality Act (Cal. Code Regs., tit. 14, § 15000 et. seq.; hereafter CEQA Guidelines), CDFW has reviewed the DEIR and offers comments and recommendations on those activities involved in the Project that are within CDFW's area of expertise and germane to its statutory responsibilities, and/or which are required to be approved by CDFW (CEQA Guidelines, §§ 15086, 15096, and 15204).

CEQA Role

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (i.e., biological resources). CDFW is a Trustee Agency with responsibility under CEQA for commenting on projects that could affect biological resources. As a Trustee Agency, CDFW is responsible for providing, as available, biological expertise to review and comment upon environmental documents and impacts arising from project activities (CEQA Guidelines, § 15386; Fish & G. Code, § 1802). **5-1**

CDFW will also act as a Responsible Agency based on its regulatory authority regarding any discretionary actions (CEQA Guidelines § 15381) such as the issuance of a Lake or Streambed Alteration Agreement (Fish & G. Code, §§ 1600 et seq.) and/or a California Endangered Species Act (CESA) Incidental Take Permit (ITP) for take of endangered, threatened, and/or candidate species (Fish & G. Code §§ 2050 et seq.).

Project Description

The Project consists of constructing new community multi-use facilities at the Project site, encompassing a maximum 100-foot by 200-foot ice rink covered by an approximately 30,000 square feet roof structure and additional storage and support space. In addition, the proposed Project includes a 13,000 square-foot complementary community center, reconfiguration and improvements to an existing playground to add accessible interactive components, restroom improvements, and 107 additional surface parking spaces. The Project would also include an

active outdoor recreation area to the west of the new community multi-use facilities. The Project is located at Mammoth Creek Park West (686 Old Mammoth Road) in the Town of Mammoth Lakes in Mono County, California. 5-1

Comments and Recommendations

1. While the areas north of the project have generally been converted from natural habitat into residential and commercial land uses, the area to the south of the Project site is generally undeveloped, open space. CDFW's comments submitted on June 29, 2016 in response the Notice of Preparation of the DEIR recommended that the DEIR provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project. However, the DEIR does not address potential impacts from lighting, noise, human activity, and wildlife-human interactions created by the Project as it relates to this adjacent open space. CDFW requests that such impacts are incorporated into the final EIR. 5-2

2. Mitigation Measure BIO-2 states that "Pursuant to the Migratory Bird Treaty Act, Bald/Golden Eagle Protection Act, and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513), if the Town of Mammoth Lakes conducts all site disturbance/vegetation removal activities…outside the avian nesting season…no further action is necessary." Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey regardless of when construction activities occur. CDFW recommends that surveys focus on all suitable nesting habitats within the Project area, including the ground. 5-3

3. The DEIR should include a discussion on invasive species, including any invasive species present at the Project site, as well as avoidance and minimization measures to prevent the spread of invasive species to adjacent open space during construction activities. 5-4

Thank you for the opportunity to provide comments on the DEIR for the Mammoth Creek Park West New Community Multi-Use Facilities Project. Please contact Rose Banks, Environmental Scientist, with questions regarding this letter and further coordination at (760) 873-4412 or Rose.Banks@wildlife.ca.gov.

Sincerely,

Heidi Calvert

for Leslie MacNair, Regional Manager
Inland Deserts Region

Cc: State Clearinghouse, Sacramento

5. RESPONSES TO COMMENTS FROM CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, DATED FEBRUARY 13, 2017.

5-1 The commenter summaries the California Department of Fish and Wildlife's (CDFW) statutory responsibilities pursuant to CEQA Guidelines and the CDFW's authority and summarizes the proposed project.

5-2 The Draft EIR acknowledges and incorporates the input received from the CDFW regarding the Notice of Preparation (NOP) for the project (Draft EIR Section 2.3, *Notice of Preparation/Early Consultation [Scoping]*, pages 2-2 and 2-3). As there is no direct impact threshold pertaining to potential indirect impacts to adjacent open space areas (e.g., riparian communities along a creek), the Draft EIR considers these potential indirect impacts in each respective topic areas, as applicable, which is further described as follows:

- *Lighting* – Draft EIR Impact Statement AES-2, page 5.2-14, discusses the project's potential to generate additional light and glare beyond existing conditions. The project would be required to comply with the Municipal Code Section 17.36.030, *Exterior Lighting* (Draft EIR page 5.2-15). An outdoor lighting plan would be required to be submitted in conjunction with the application for design review approval. The plan would be required to show that all outdoor lighting fixtures are designed, located, installed, aimed downward or toward structures, retrofitted if necessary, and maintained in order to prevent glare, light trespass, and light pollution. Outdoor lighting installations must be designed to avoid harsh contrasts in lighting levels between the project site and the adjacent properties. With compliance with the Town's Municipal Code, impacts in this regard would be reduced to less than significant levels.

  Appendix A, *Biological Resources Memorandum*, of this Final EIR, provided at the end of the response to Letter 9, documents considerations for indirect impacts to wildlife along Mammoth Creek. As discussed, wildlife currently using the habitats associated with Mammoth Creek have adapted to a high level of human activity associated with the adjacent residential developments, on-site recreational activities, and vehicular activity along Old Mammoth Road. Further, wildlife species on and adjacent to the project site have acclimated to night lighting associated with the existing residential developments to the north and west of the project site and street lights associated with Old Mammoth Road south of the project site. Proposed lighting at the project site is not expected to significantly increase ambient lighting and glare in the immediate vicinity of the project site, in particular along Mammoth Creek, over current conditions.

  As a result, indirect impacts to biological resources within Mammoth Creek are not expected to occur. Further, as discussed above, compliance with the Town's Municipal Code would ensure that the project uses proper shielding techniques to direct light towards the ground and not onto off-site properties, including open space land along Mammoth Creek.

- *Noise* – Draft EIR Impact Statement N-4, page 5.8-23, discusses the project's potential increases in long-term (stationary) noise impacts on surrounding sensitive uses (including Mammoth Creek). The wildlife habitat area is primarily located along Mammoth Creek, which is approximately 240 feet from the proposed activity areas on the project site. At this distance, noise levels from the loudest potential activities (i.e., ice hockey games) would be reduced to 54 dBA. When accounting for attenuation from the surrounding dasher boards and a Plexiglas, noise levels would be further reduced to 46 dBA, which is consistent with the ambient noise levels. As such, noise levels from the project and potential human activity would not affect the habitat areas within the adjacent open space.

- *Human Activity and Wildlife-Human Interaction from the Project to Adjacent Open Space* – Draft EIR Impact Statement BIO-3, page 5.3-22, discusses the project's potential to impact the wildlife corridor along Mammoth Creek, as a result of increased human activity and wildlife-human interaction. The Draft EIR acknowledges that the project is in close proximity of Mammoth Creek, which provides potential wildlife movement opportunities along the wildlife corridor. According to page 8 of the *Habitat Assessment for the Mammoth Creek Park West New Community Multi-Use Facilities Project* (Habitat Assessment), prepared by Michael Baker International, Inc., dated August 2, 2016 (Draft EIR Appendix 11.2, *Habitat Assessment*), *The proposed project site is not located within any local or regional designated migratory corridors or linkages. However, Mammoth Creek, south of and outside of the proposed project site, has the potential to provide west to east wildlife movement opportunities along the riparian corridor associated with the creek from the mountains to the valley floor. The proposed project site will not impact Mammoth Creek and is not expected to disrupt or have any adverse effects to potential wildlife movement along Mammoth Creek.* As concluded on page 5.3-23 of the Draft EIR, project implementation is not expected to disrupt or have any adverse effects to potential wildlife movement along Mammoth Creek due to the distance from the project site (approximately 240 feet away) and lack of disturbance to Mammoth Creek. Therefore, based on the CEQA thresholds of significance, impacts involving wildlife movement would be less than significant.

  Draft EIR Impact Statement HWQ-2, page 5.9-23, discusses the project's potential to affect runoff and water quality, including those downstream along Mammoth Creek. Refer to Responses 6-42 and 6-43, which discusses less than significant impacts from pollution of water as a result of human activities and increased erosion potential.

  Regarding potential impacts pertaining to human activity and wildlife-human interaction at the project site, these conditions are already experienced at Mammoth Creek in the vicinity of the project site. As discussed above and documented in Final EIR Appendix A, wildlife currently using the habitats associated with Mammoth Creek for have adapted to a high level of human activity associated with the adjacent residential developments, on-site recreational activities, and vehicular activity along Old Mammoth Road. Currently, La Visa

Blanc Condominiums and the existing Town Loop trail are present in the project vicinity and situated closer to the creek than the proposed project. The existing La Visa Blanc Condominiums are situated less than 100 feet from Mammoth Creek, exposing this corridor (upstream) to human activities on a daily basis. The general public also uses this portion of the Creek as a result of the existing Mammoth Loop trail, which is situated to the south of the proposed project, between the project site and Mammoth Creek. Further, approximately 0.6 mile of creek, upstream the project site, is bounded by condominium development along Snow Creek Road, some of which are situated approximately 100 feet from the creek. Thus, based on the existing development in the Town, human activity is already present within proximity (100 feet or less) of Mammoth Creek and the creek and associated riparian habitat is already exposed to many of these types of stressors. The proposed project is not anticipated to substantially increase adverse impacts involving human activity and wildlife-human interaction in this area of Mammoth Creek, as these activities already occur.

5-3 Mitigation Measure BIO-2 has been revised as follows, per the commenter's request:

Section 5.3, Biological Resources, page 5.3-23, Mitigation Measure BIO-2

BIO-2 Pursuant to the Migratory Bird Treaty Act (MBTA), Bald/Golden Eagle Protection Act, and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513), if the Town of Mammoth Lakes conducts all site disturbance/vegetation removal activities (such as removal of any trees, shrubs, or any other potential nesting habitat) outside the avian nesting season, December 1 through August 31, no further survey~~action~~ is necessary. However, if ground disturbance/vegetation removal cannot occur outside of the nesting season, a pre-construction clearance survey for nesting birds shall be conducted within three days of the start of any ground disturbing activities to ensure that no birds are nesting on or within 500 feet of the project site. The biologist conducting the clearance survey shall document a negative survey with a brief letter report indicating that no impacts to active bird nests, including those on the ground, would occur during site disturbance activities.

If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside a buffer determined by the biologist in consultation with California Department of Fish and Wildlife (CDFW), or construction shall be delayed until the nest is inactive. The buffer shall also be and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 300 feet from the nests of non-listed, non-raptors and 500 feet from the nests of listed species or raptors. A biological monitor shall be retained and be present during site disturbance activities in order to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction

activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, a monitoring report shall be prepared and submitted to the Applicant for review and approval prior to initiation construction activities within the buffer area. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until written authorization is received by the Contractor from CDFW.

5-4 Based on the Habitat Assessment, no invasive species are currently present on-site. Further, per the Town's Municipal Code Section 17.40.040, use of noxious weeds as identified by the U.S. Department of Agricultural (USDA) and invasive plant species as identified by the *California Invasive Plan Inventory* are prohibited. Thus, with implementation of the Town's Municipal Code, development of the project would not result in the spread of invasive species on-site or in the surrounding area (including the Mammoth Creek riparian corridor).

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CATHERINE C. ENGBERG
Attorney
engberg@smwlaw.com

February 13, 2017

Via Electronic Mail

Sandra Moberly, Manager
Community & Economic Development
Town of Mammoth Lakes
PO Box 1609
Mammoth Lakes, CA 93546
smoberly@townofmammothlakes.ca.gov

Re: Mammoth Creek Park West New Community Multi-Use Facilities Draft Environmental Impact Report - SCH #2016062009

Dear Ms. Moberly:

On behalf of the La Vista Blanc Condominiums, the Mammoth Creek Condominiums, the Sunrise Condominiums, and the Chateau Blanc Condominiums homeowner associations ("Associations") we have reviewed the Draft Environmental Impact Report ("DEIR") for the proposed Mammoth Creek Park West New Community Multi-Use Facilities Project ("Project") in the Town of Mammoth. Based on our review, it is our legal opinion that the DEIR fails to comply with the California Environmental Quality Act ("CEQA"), Public Resources Code § 21000 et seq., and the CEQA Guidelines, California Code of Regulations, title 14, § 15000 et seq. ("CEQA Guidelines").

6-1

As set forth in more detail below, the DEIR is inadequate in numerous respects. First and foremost, the DEIR fails to accurately describe the Project, leaving important details to be determined after the DEIR is certified. For example, the DEIR provides no information about the building design or landscaping design, deferring both until after Project approval. The failure to describe the specific Project proposed for approval violates the most basic tenet of CEQA: to provide the decision maker and the public with information about a project *before* the project is approved.

In part because the project description is inadequate, the DEIR fails to adequately analyze impacts relating to aesthetics, land use, traffic, air quality, noise and

water quality. These impacts may have potentially devastating effects on the Town's character, its residents and visitors, and its unparalleled environmental resources. The EIR's failure to analyze impacts leads to a failure to consider feasible mitigation measures that would reduce the impacts caused by the Project. CEQA requires more. 6-1

The DEIR also presents a faulty analysis of alternatives to the Project. In particular, the DEIR fails to accurately describe the no project alternative and fails to consider a reasonable range of alternatives. This failure defeats CEQA's purpose of creating a process by which the public and decision-makers can fully appreciate the consequences of Project approval. 6-2

To ensure that the public as well as the Town's decision makers have adequate information to consider the effects of the proposed Project – as well as to comply with the law – the Town must prepare and recirculate a revised draft DEIR that properly describes the Project, analyzes its impacts, and considers meaningful alternatives and mitigation measures that would help ameliorate those impacts. 6-3

This letter, along with the transportation report prepared by MRO Engineers (Exhibit 1), the noise report prepared by Charles Salter and Associates (Exhibit 2), and the hydrology report prepared by Dr. Thomas Myers (Exhibit 3) constitute our comments on the DEIR. Please refer to these reports for further detail and discussion of the DEIR's inadequacies with regard to impacts to transportation, noise, and hydrology and water quality. We request that the Town respond to both the comments in this letter and to each of the comments in the attached exhibits. 6-4

I. The DEIR's Flawed Project Description Does Not Permit Meaningful Public Review of the Project.

In order for an EIR to adequately evaluate the environmental ramifications of a project, it must first provide a comprehensive description of the project itself. "An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR." *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 730, (quoting *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193). As a result, courts have found that even if an EIR is adequate in all other respects, the use of a "truncated project concept" violates CEQA and mandates the conclusion that the lead agency did not proceed in a manner required by law. *San Joaquin Raptor*, 27 Cal.App.4th at 729-30. Furthermore, "[a]n accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity." *Id.* at 730 [citation omitted]. Thus, an 6-5

inaccurate or incomplete project description renders the analysis of significant environmental impacts inherently unreliable.

Here, the DEIR's project description omits significant details necessary to understand the project. For example, the DEIR fails to describe the Project design. Any reasonably complete description of the Project would give the public and decision-makers a sense of what this Project would look like, how it would operate, and how it would mesh with the surrounding uses. The DEIR's project description does none of this. It is merely a general conceptual scheme for the site. **6-5**

The DEIR should have provided extensive detail, both through textual description and detailed simulations, more accurately depicting exactly the appearance of the proposed building. Aside from the building height, there is no description or rendering of the proposed buildings, no discussion of the architectural styles, the types of building materials to be used or the color schemes, the landscaping design, or visual screening methods.

In another example, the DEIR indicates that "[T]he open area south of the Mammoth RecZone may also be used occasionally for access and seating for events." DEIR at 1-3. This vague description leaves the reader in the dark about where the "open area to the south…" is located. Is it the area immediately adjacent to the rink or will these activities spill over onto adjacent Forest Service lands? A revised EIR must clarify all uses and the location of those uses. If activities are proposed on Forest Service lands, the DEIR must evaluate corresponding impacts to those lands (e.g., impacts to vegetation and impacts related to increased human presence) and identify measures to mitigate them. **6-6**

The inadequate project description implicates other sections of the DEIR. For example, given the lack of information about what the community will experience once the Project is built, the analysis does not convey the extent or severity of the impacts on visual resources and community character. In short, because it fails to adequately describe the Project, the DEIR fails to identify, analyze and mitigate its potential impacts. **6-7**

In addition, the DEIR fails to include information on the following additional Project components: **6-8**

- description of extent of tree removal;
- description of construction-related activities (including location, number of construction employees, location of the Project staging areas, location of **6-9**

spoils sites and haul routes, description of reuse or disposal of site spoils, etc.); 6-9

- a description of the proposed sound wall; 6-10
- plans relied upon to reduce project impacts, including but not limited to: a construction hauling plan, an erosion control plan, a storm water plan, a tree removal plan, and a landscaping plan; 6-11
- other Project features such as fences, gates or other proposed improvements. 6-12

The failure to describe the whole of the Project is a serious and pervasive deficiency, as it renders faulty the EIR's environmental impact analyses as well as the discussion of potential mitigation measures and alternatives to minimize those impacts. Moreover, these omissions skew the DEIR's analysis of impacts and, thus, undercut the validity of the entire document under CEQA. Without a complete and accurate project description, an agency and the public cannot be assured that all of a project's environmental impacts have been revealed and mitigated. This information is necessary to allow decision makers, the public and responsible agencies to evaluate potential environmental impacts. 6-13

II. The DEIR Mischaracterizes the Project Setting.

Accurate and complete information pertaining to the setting of the project and surrounding uses is critical to an evaluation of a project's impact on the environment. *San Joaquin Raptor/Wildlife Center v. Stanislaus County*, 27 Cal.App.4th 713, 728 (1994); see also *Friends of the Eel River v. Sonoma County Water Agency*, 108 Cal.App.4th 859, 875 (2003) (incomplete description of the Project's environmental setting fails to set the stage for a discussion of significant effects). Here, the DEIR's deficiencies in describing the Project's setting undermine its adequacy as an informational document. 6-14

The DEIR fails to present important contextual information related to Mammoth Creek and the associated riparian habitat, both located immediately adjacent to the Project site. The Mammoth Creek corridor connects blocks of habitat to the east and west of the project site. This corridor appears to be the only significant riparian corridor running through the Town of Mammoth, connecting riparian areas east of town, such as Twin Lakes, with those west of town, such as the Hot Creek area. The Mammoth Creek corridor is thus an important natural feature for the town because it provides habitat linkage for a continuous system.

The DEIR also fails to provide rudimentary information, such as maps depicting key features of the site and surrounding area. For example, the DEIR contains a general text description of existing biological resources at the site, but does not include any mapping of California Department of Fish and Wildlife ("CDFW") jurisdictional boundaries or habitat types, making it difficult to evaluate exactly where potential impacts to sensitive habitat may occur. This omission is surprising given that CDFW specifically requested such information in comments they submitted on the Notice of Preparation for this DEIR. DEIR Appendix 11-2, CDFW letter from L. MacNair to S. Moberly dated June 29, 2016. A map of the site and surrounding area showing generalized habitat types, and other pertinent habitat features should be included in the DEIR. 6-14

Perhaps most egregiously, the DEIR fails to adequately describe the existing hydrologic setting of the site and the vicinity. The DEIR discloses that Mammoth Creek is the primary watercourse in the Mammoth Hydrologic Basin (DEIR at 5.9-1). Yet neither the DEIR nor the supporting technical documents adequately describe the existing water quality of Mammoth Creek, the ultimate receiving body for storm water from this site. This is important information from which to establish a baseline.

Without describing the hydrology and water quality of the onsite drainage and that of Mammoth Creek downstream, the reader of the DEIR has no context from which to evaluate potential Project impacts. For example, Mammoth Creek is on the 303d list of impaired water bodies for manganese, mercury, and total dissolved solids (TDS). Myers Report at 6. This means existing conditions in the watershed diminish the water quality of the stream so that water quality standards are exceeded. *Id.* A revised analysis must include a Hydrology and Water Quality section that adequately describes the hydrologic setting. 6-15

In addition, the DEIR fails to describe existing storm water runoff or snowmelt flows in Mammoth Creek, fails to describe base flow at the site and fails to describe the existing discharge of runoff from the Project site. Myers Report at 6. As explained in the Myers report, without this information, it is impossible for the public to undertake an independent evaluation of the DEIR to determine how existing runoff affects the creek or whether changes in dry season flows due the Project will negatively affect flow in the creek. *Id.* 6-16

III. The DEIR Fails to Adequately Analyze the Project's Impacts

An EIR's basic job is to provide a sufficient degree of analysis to inform the public about the proposed project's adverse environmental impacts and to allow 6-17

decision-makers to make intelligent judgments. CEQA Guidelines §15151. In this case, the DEIR's analysis of environmental impacts fails to provide the necessary facts and analysis to allow the City, the agencies and the public to make an informed decision concerning the project, mitigation measures and project alternatives. CEQA requires that an EIR be detailed, complete, and reflect a good faith effort at full disclosure. *Id.* Consistent with this requirement, the information regarding the project's impacts must be "painstakingly ferreted out." *Environmental Planning and Information Council of Western El Dorado County v. County of El Dorado*, 131 Cal.App.3d 350, 357 (1982).

One of CEQA's fundamental purposes is to provide meaningful analysis of impacts so as to "inform the public and responsible officials of the environmental consequences of their decisions before they are made." *Laurel Heights II*, 6 Cal.4th at 1123. To accomplish this purpose, an EIR must contain facts and analysis, not just an agency's bare conclusions. *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal.3d 553, 568 (1990). An agency may not defer its assessment of important environmental impacts until after a project is approved. *Sundstrom v. County of Mendocino,* (1988) 202 Cal.App.3d at 306-07. An EIR's conclusions must be supported by substantial evidence. *Laurel Heights Improvements Ass'n v. Regents of the University of California*, 47 Cal.3d 376, 394 (1988) (Laurel Heights I). As described below, the DEIR fails to identify, analyze or support with substantial evidence its conclusion regarding the Project's significant environmental impacts. **6-17**

As part of its flawed approach to the analysis of impacts and identification of feasible mitigation, the DEIR repeatedly concludes that the majority of the Project's environmental impacts are either less than significant or will be rendered less than significant by mitigation or by project features, while at the same time deferring necessary analysis of mitigation measures. These "bare conclusions" are insufficient; the EIR "must contain facts and analysis" to support and explain such conclusions. *Santiago County Water Dist. v. County of Orange*, 118 Cal.App.3d 818, 831 (1981). An EIR may conclude that impacts are insignificant only if it provides an adequate analysis of the magnitude of the impacts and the degree to which they are mitigated by the project's design or mitigation measures. *See Sundstrom*, 202 Cal.App.3d at 306-07. If an agency fails to investigate a potential impact, its finding of significance cannot stand. *Id.*

Feasible mitigation measures must be identified and analyzed in a revised DEIR. If mitigation measures are deferred until after Project approval or so undefined that it is impossible to evaluate their effectiveness, the EIR is in violation of CEQA. CEQA requires all mitigation measures be adopted simultaneously with, or prior to, project approval. Mitigation measures may not be deferred when their effectiveness is **6-18**

uncertain or when deferral would prevent the DEIR from disclosing the potentially significant impacts of those measures. *Sacramento Old City Ass'n v. City Council of Sacramento*, 229 Cal.App.3d 1011, 1027-29 (1991). Uncertainties regarding the mitigation of impacts must be resolved before a lead agency may make the required CEQA findings; an agency may not rely on mitigation measures of uncertain efficacy or feasibility. *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d 692, 727 (1990). An agency may defer preparation of a plan or completion of a study only when the agency commits itself and/or the project proponent to satisfying specific performance standards that will ensure avoidance of any significant effects. *Id.* If a mitigation measure would itself create new significant environmental effects, those effects must be evaluated. *Sacramento Old City Ass'n*, 229 Cal.App.3d at 1027; *see also Stevens v. City of Glendale*, 125 Cal.App.3d 986, 995-96 (1981). 6-18

Contrary to these well-stablished principles, the DEIR violates CEQA by deferring critical analysis of project impacts and feasible mitigation measures.

A. The DEIR's Analysis of Project-related Traffic Impacts is Incomplete and Inaccurate.

The DEIR's analysis of transportation impacts fails to achieve CEQA's most basic purpose: informing governmental decision-makers and the public about the potential significant environmental effects of a proposed activity. CEQA Guidelines § 15002(a). CEQA additionally requires "adequacy, completeness, and a good-faith effort at full disclosure" in an environmental document. CEQA Guidelines § 15003(i). Here, the DEIR's analysis of the Project's traffic impacts fails to meet these standards. 6-19

The DEIR concludes that the Project would not result in any potentially significant impacts related to traffic. DEIR at 1-11 and 1-12. However, this conclusion is not supported by substantial evidence. In fact, the DEIR's analysis of Project-related traffic impacts contains numerous omissions and deficiencies that must be remedied in order for the public and decision-makers to fully understand the Project's impacts. The report prepared by Neal Liddicoat at MRO Engineers ("MRO Report"), attached as Exhibit 1, provides detailed comments on the shortcomings in the DEIR's transportation impacts analysis. We incorporate the MRO Report into these comments. Some of the DEIR's most troubling errors identified in the MRO Report are described below.

Specifically, the evaluation of the Project's transportation and traffic impacts must be revised to address: (1) use of an inadequate study area; (2) use of obsolete traffic volume data; (3) deficient level of service ("LOS") analysis (4) deficient estimates of Project Trip Generation; (5) deficient safety analysis; and (6) failure to 6-20

adequately analyze cumulative traffic impacts. These issues, and other deficiencies, are discussed in greater detail in the MRO Report. 6-20

1. The DEIR Uses an Inadequate Study Area.

The DEIR fails to adequately analyze the Project's traffic impacts in part because it artificially limits the study area, in clear violation of CEQA. The California Supreme Court has emphasized that "an EIR may not ignore the regional impacts of a project approval, including those impacts that occur outside of its borders; on the contrary, a regional perspective is required." *Citizens of Goleta Valley*, 52 Cal.3d at 575. An EIR must analyze environmental impacts over the entire area where one might reasonably expect these impacts to occur. *See Kings County Farm Bureau*, 221 Cal.App.3d at 721-23. This principle stems directly from the requirement that an EIR analyze all significant or potentially significant environmental impacts. Pub. Res. Code §§ 21061, 21068. An EIR cannot analyze all such environmental impacts if its study area does not include the geographical area within which these impacts would occur.

If the proposed Project were approved, the new facilities would add a substantial amount of new traffic on Old Mammoth Road. The Project will generate hundreds of trips, particularly during special events such as hockey tournaments. Despite, this anticipated increase in traffic, the DEIR limits the study area to just three intersections: the Project driveway providing access to the site and two intersections to the north. As explained in the MRO Report, such a limited study area is insufficient to evaluate the impacts of the proposed Project. At a minimum, a revised DEIR should expand the study area to consider other area intersections south of the Project site, including: 6-21

- Old Mammoth Road/Mammoth Creek Road;
- Old Mammoth Road/Sherwin Creek Road;
- Old Mammoth Road/Sierra Nevada Road;
- Old Mammoth Road/Minaret Road/Fairview Drive; and
- Old Mammoth Road/Main Street (State Route 203).

By not analyzing the Project's regional impacts, the DEIR leaves the public and decision-makers in the dark as to the Project's regional traffic impacts. MRO Report at 2 and 3. The revised DEIR must evaluate impacts to these five intersections.

2. The DEIR Relies on Obsolete Traffic Volume Data.

The DEIR describes the traffic volume data as being from the year 2015. DEIR at 5.5-1. However, as explained in the MRO Report, this approach is misleading. The DEIR bases its analysis on "existing conditions" traffic counts obtained in 2009 to which a six percent growth factor is applied to estimate traffic volumes. MRO Report at 1 and 2. Essentially, the DEIR fabricates the "existing conditions" data rather than collecting data on conditions on the ground. This approach is unusual and the resulting estimates may not represent current conditions. MRO at 1. Moreover, using outdated traffic data violates CEQA's baseline requirements. *See* CEQA Guidelines § 15125(a). In addition, use of the outdated traffic data violates accepted practice within the traffic engineering profession. Specifically, the Institute of Transportation Engineers specifies that ". . . traffic volume data should generally be no older than 1 year." 2006 Institute of Transportation Engineers (ITE), Transportation Impact Analyses for Site Development at 19; MRO Report at 2. **6-22**

Similarly, the DEIR relies on questionable assumptions regarding traffic volumes for the Project site access intersection. MRO at 2. Specifically, the DEIR employs guesses for the existing number of trips at the Project site rather than collecting data and analyzing it. To make matters worse, the DEIR employs these same questionable estimates (i.e., eight existing vehicle trips at the Project intersection) for the future years analysis, despite the fact that the Town's permanent resident population is expected to grow 18-33 percent by 2020 and 36-68 percent by 2030. MRO at 2. Therefore, even though the Town's population is expected to increase substantially, the DEIR projects no additional activity at the Project site's intersection. This assumption is not supported by any evidence. **6-23**

As explained in the MRO Report, use of current traffic volume data may result in substantially different (and worse) delay and level of service results than presented in the DEIR. MRO at 2 and 5. Traffic volumes represent "the most critical input parameter" in evaluating level of service. *Id.* If the traffic analysis uses the wrong numbers, it will misrepresent the environmental setting and project impacts. *Id.* Thus, the traffic impacts of the Project must be reanalyzed using up-to-date traffic volume data, and the EIR must be revised to reflect the corrected analysis. **6-24**

3. The DEIR Presents Deficient Estimates of Project Trip Generation

6-25

The DEIR's analysis of the Project's trip generation is limited to traffic generated on a "typical" day. MRO at 3. However, the DEIR ignores impacts associated

with increased traffic of other allowable activities on site that will occur on a regular basis. For example, the DEIR indicates that activities on site may include hockey tournaments, weddings, concerts, and other special events. DEIR at Table 5.5-3 at 5.5-16. These events will likely draw large crowds of several hundred people and a substantial amount of traffic. This substantial increase in project trip generation appears to have been completely ignored in the traffic analysis. MRO at 3. Consequently, the project trip generation used in the traffic analysis understates both project-related peak hour traffic and impacts to the area roadways. *Id.* 6-25

4. The DEIR Fails to Adequately Analyze Project-Related Safety Risks

The Project has a single vehicular access point. DEIR at Exhibit 3-4. The DEIR concludes that impacts related to emergency access would be less-than-significant, but once again, the DEIR provides no evidence to support this conclusion. DEIR at 8-12 and 8-13. The DEIR's conclusion rests on two points. First, the DEIR states that related impacts would be less-than-significant because the Project would maintain the entrance on Old Mammoth Road. The use of a single ingress/egress point poses potential emergency access issues. For example, emergency responders may be unable to access the site if the sole driveway is blocked (due to an accident or fire for instance.) 6-26

Second, the DEIR states that related impacts would be less-than-significant because the Project would be designed to comply with the Town's Code regarding emergency access. DEIR at 8-13. However, the DEIR provides no information regarding how the Project will comply with the applicable Code provisions. If the Project requires re-design, those changes should be part of the EIR so that the public and decision-makers can evaluate them. As discussed above, CEQA requires an EIR to describe the whole of the Project. Therefore, a revised EIR must include any required Project changes and an analysis of impacts related to adequate emergency access.

In addition, the DEIR fails to provide an adequate analysis of safety impacts related to reduced sight distance at the Project driveway. The DEIR concludes that the Project site will have adequate site distance, but fails to define what constitutes "adequate site distance" in this case. MRO at 4. Moreover, the DEIR implies that the primary constraint to achieving adequate site distance would be installation of landscaping at the Project entrance. *Id.* However, the DEIR ignores the fact that sight distance at the Project driveway be compromised in winter if snow is piled in the areas where the driveway meets Old Mammoth Road. *Id.* 6-27

Moreover, during larger events, the proposed parking area may not be sufficient. When overflow parking is needed, it is likely that facility users will park on nearby Meadow Lane and other neighborhood streets. Additional street parking and congested roadways will further affect emergency access. 6-28

Finally, because the Project would allow alcohol at the site, safety issues would be exacerbated by many drivers consuming alcohol during events such as weddings and tournaments. DEIR at 3-14. The revised DEIR must evaluate these safety impacts and identify feasible mitigation measures to address them. 6-29

B. The DEIR Understates the Project's Noise Impacts.

The noise generated by the Project during construction and operation would greatly affect the residents located near the site, particularly residents of the Associations located immediately adjacent to the project site's boundary. The DEIR acknowledges that the Project will increase the noise levels in and around the Project area, but it concludes that they will be mitigated to less-than-significant levels. DEIR at 1-14 to 1-16. The DEIR offers no evidence or support for this conclusion. The report prepared by Jeremy Decker at Charles Salter Associates ("Salter Report"), attached as Exhibit 2, provides detailed comments on the shortcomings in the DEIR's noise impacts analysis. We incorporate the Salter Report into these comments and summarize the DEIR's most glaring errors identified in the Salter Report below. 6-30

The DEIR's analysis and proposed mitigation measures for noise impacts are wholly inadequate for the reasons described below. First, the DEIR's established thresholds of significance ignore multiple, applicable standards. Second, the DEIR employs faulty methodology for evaluating Project-related increases in noise. The noise analysis inadequately describes sources of noise from the Project, proposes only minimal measures to lessen the severity of noise impacts and absolutely no measures to avoid them. For all of these reasons, the DEIR's noise analysis does not meet the requirements of CEQA. 6-31

1. The DEIR's Thresholds of Significance Ignore Multiple Standards

The DEIR's noise analysis ignores several applicable standards. For example, the DEIR fails to evaluate whether the Project could have "a substantial permanent increase in ambient noise levels." CEQA Guidelines, Appendix G, Section XII. As explained in the Salter Report, the DEIR largely ignores this required analysis. 6-32

Salter at 2. With the exception of Project-related traffic noise, the DEIR fails to evaluate changes to ambient noise levels that would result from Project operations. 6-32

In another example, and as described in section 2 below, the DEIR fails to properly evaluate the community noise equivalent level (CNEL) as required by the Town's General Plan. The DEIR itself acknowledges these standards as applicable to the Project. DEIR at 5.8-10. Yet, the DEIR completely ignores both standards. 6-33

2. The DEIR Employs Faulty Methodology to Establish the Baseline Noise Setting

As explained in more detail in the Salter Report, the DEIR's description of existing noise levels at the Project site and the vicinity is flawed and may not reflect background ambient noise levels. Salter Report at 3. For example, in contravention of General Plan Policies C.6.A and C.6.B, the noise measurements are taken in insufficient increments (i.e., less than 24 hours) so that the measurements are inadequate to calculate the CNEL. *Id.* Similarly, the DEIR ignores the Town's noise standards for short-term noise measurements. Salter Report at 3. The Town's General Plan provides direction regarding appropriate metrics to be used to evaluate noise compatibility and provides guidance that noise measurements are to "include representative noise level measures with sufficient sampling periods and locations to adequately describe local conditions…." DEIR at Table 5.8-5. The DEIR fails to meet this mandate. 6-34

In addition, the DEIR fails to evaluate existing ambient noise conditions in the evening and nighttime hours between 7:00 pm and midnight. Inasmuch as the Project would allow noise-generating uses during these hours, the DEIR must establish baseline conditions during this same time period.

Finally, the DEIR employs noise measurements that are not representative of varying seasonal activity levels. Specifically, the DEIR presents noise measurements that were collected in the winter, but presents no data for other seasons. Because levels of activity, tourism, and traffic may differ by season, winter noise measurements may not accurately represent noise levels in summer. The resulting ambient noise measurements are insufficient to serve as baseline noise data.

It is critical that the Project's noise impacts be evaluated against a realistic representation of existing noise levels. Under CEQA, the Town is required to evaluate the Project's environmental impacts against a realistic representation of existing conditions as they exist on the ground today. As the Salter report explains we can find no logical explanation as to why long-term, multi-day noise measurements were not conducted for

the site. The Town should conduct and use updated noise measurements as the baseline for evaluating Project impacts. 6-34

3. The DEIR Fails to Adequately Analyze or Mitigate the Project's Noise Impacts.

a. The DEIR Fails to Adequately Evaluate Noise from Sporting Events and Crowds

The DEIR's noise analysis fails to provide an accurate picture of the impact that this Project will have on the surrounding community, in particular with respect to the noise impacts from sporting events. The type of noise generated by the Project will, in part, consist of many peak sounds, such as whistles, buzzers, and car doors slamming. Salter at 3. These single-event sounds are particularly disturbing to humans because they can significantly exceed the ambient noise level and interfere with common activities (e.g., speech, sleep, quiet enjoyment, etc.). Moreover, as indicated in the Salter Report, the DEIR underestimates crowd noise. *Id.* Together, these flaws result in a document that does not analyze the full range of noise impacts associated with the Project. 6-35

b. The DEIR Fails to Adequately Evaluate and Mitigate Noise from Amplified Music

Similarly, the DEIR fails to adequately analyze the Project's impacts resulting from use of amplified music at the site. First, the DEIR fails to use an appropriately conservative estimate for amplified music. Salter at 4. Second, the DEIR fails to evaluate low-frequency noise (e.g., such as is produced by drums or bass guitars). Low-frequency noise is experienced by human listeners as audible noise, vibration, and/or a sensation of pressure at the eardrums and can travel with relatively undiminished strength over long distances. Hundreds of residents located adjacent to the Project site may be impacted by low frequency noise and a revised environmental document must analyze the extent and severity of this impact. 6-36

In addition, the DEIR's measures proposed to minimize the noise impacts from amplified music are vague and unenforceable. The DEIR provides no evidence that implementation of the measure is feasible let alone effective. Salter at 4. A revised DEIR must fully evaluate the noise impacts from allowing amplified music at the site and must identify feasible, effective mitigation to reduce those impacts.

c. The DEIR Fails to Adequately Evaluate Noise from the Project's Heating, Ventilation, and Air Conditioning (HVAC) System.

Finally, the DEIR's analysis fails to adequately describe and analyze noise impacts associated with the HVAC system that will be installed as part of the Project. The DEIR uses generic noise estimates for noise levels expected from this equipment on the site, with no indication as to whether the equipment to be used at the Project site will be similar or louder. Salter at 4 and 5. 6-37

C. The DEIR's Analysis of the Project's Impacts Related to Hydrology and Water Quality is Inadequate.

The DEIR's treatment of the Project's hydrology and water quality impacts fails to provide the public and decision-makers with essential information about the Project. The DEIR fails to adequately analyze project impacts associated with hydrology and water quality because, among other reasons, key setting information is missing (e.g., existing water quality of Mammoth Creek). In addition, as detailed in the attached Myers Report, the DEIR has failed to consider two major aspects of hydrogeology that are required under CEQA: 6-38

- the first is that the increase in impervious area which leads to an increase in runoff volume and faster transmission of runoff from upstream will directly affect groundwater recharge; and
- the second is that site development will affect drainage patterns across the site and may affect flow and water quality in Mammoth Creek. 6-39

CEQA Guidelines, Appendix G, Section IX; Myers Report at 5 and 6. These deficiencies are described in more detail below.

1. The DEIR Fails to Adequately Analyze the Project's Potential Impacts to Groundwater Recharge.

According to the DEIR, the Project would add 2.33 acres of additional impervious surfaces, including the ice rink, buildings, parking areas and walkways. DEIR at 5.9-23. Rather than analyzing the Project's potential for increasing storm water runoff and decreasing groundwater recharge, the DEIR dismisses these impacts. The DEIR concludes that impacts related to groundwater recharge would be less than significant 6-40

because the site would still allow for some infiltration. DEIR at 8-8 and Myers Report at 9. However, the DEIR fails to support its conclusion with facts or evidence.

As explained in the Myers Report, the DEIR appears to confuse the terms "infiltration" and "recharge"; the difference is the infiltration of flow into the soils at the site and recharge is movement of that moisture through the soil to the water table. Myers Report at 9. In this case, offsite drainage currently enters the site as sheet flow which can also infiltrate the soil and eventually recharge groundwater. *Id.* The proposed Project's addition of 2.33 acres of impervious area would cause storm water that had previously become recharge to groundwater beneath the site to runoff as discharge. *Id.* The proposed project would channelize the offsite flow into two swales that bypass the Project site, so that most of the runoff would pass through the site without infiltrating, becoming runoff to the creek downstream of Old Mammoth Road. *Id.* This loss of recharge must be evaluated in a revised analysis.

Moreover, the storm runoff plan for the Project includes retention basins that may or may not also be infiltration basins. DEIR, Appendix 11-7; Myers Report at 9. The DEIR fails to consider the effects infiltration from these retention basins may have on groundwater flow in the alluvial aquifer near Mammoth Creek. Myers Report at 9. In addition, eliminating infiltration from the impervious portions of the site and causing it to occur at a basin would cause groundwater mounds to form under the basins. *Id.* While the decreased recharge under the impervious areas would cause groundwater levels to fall, the mounds under the basins may cause the groundwater to move in directions that differ from its previous flow paths. Moreover, mounds under the basins could intersect the bottom of the basins thereby causing flooding, extended periods of shallow groundwater, and swampy conditions. *Id.*

6-40

For these reasons, the DEIR's conclusion of impacts on groundwater recharge is flawed. A revised DEIR for the Project should include analysis of lost recharge due both to the increase in impervious surface and due to faster storm water runoff. In addition, the DEIR must identify feasible mitigation for any significant project-level or cumulative impacts related loss of groundwater recharge.

2. The DEIR Fails to Adequately Analyze Potential Impacts to Drainage Patterns.

The Project design will result in changes to the existing sheet flow pattern of runoff. Myers Report at 7. However, the DEIR concludes that runoff from the site and upstream would result in less than significant impacts because of the Project's proposed retention basins. Once again, the DEIR fails to support this conclusion with evidence.

6-41

As explained in the Myers Report, the DEIR fails to adequately analyze the flow through the proposed retention basins. Myers Report at 11 and 12. Given the size of the basins, during a 20-year storm they would fill relatively quickly and overflow, contributing to the flow downstream. *Id.* During long-term periods of rainfall or snowmelt, these basins would be full before high peak flows in Mammoth Creeks even begin. Even if there is some infiltration through the bottom, the basins would begin to overflow during significant events and contribute to downstream peak flows. Routing the runoff through retention basins results in a longer period of high flows from the site such that the increased runoff would be more likely to coincide with high flow in Mammoth Creek. Such conditions would exacerbate flood conditions on Mammoth Creek. The DEIR fails to consider how the basins will change the flow hydrograph for runoff from the basins, whether peak flows from the site would coincide with high flows in Mammoth Creek, and what those impacts could be. *Id.* 6-41

3. The DEIR Fails to Adequately Analyze Potential Impacts to Water Quality

Technical analyses prepared in support of the DEIR disclose that the Project would create approximately two acres of new impervious surface. DEIR at 5.9-23. The relationship between increases in impervious surfaces and water quality degradation is well known. Impervious surfaces collect pollutants from vehicles and atmospheric sources and discharge them in storm water. Infiltration of precipitation is greatly reduced, surface runoff dramatically increases, and downstream erosion is increased. Instead of providing facts or analysis to show that the Project's potential impacts to water quality will be reduced to insignificance, the DEIR presents a deficient analysis and provides unsupported conclusions. 6-42

The DEIR fails to adequately identify and analyze project impacts to water quality as a result of pollution or sedimentation. For example, the DEIR fails to adequately characterize and quantify the types and amounts of pollutants that will be generated by the project. The developed site runoff would be comprised of a variety of urban pollutants that are commonly generated in this type of development. Examples of urban runoff anticipated with this project include: landscape wastes, pesticides and fertilizers in irrigation runoff, pet wastes, and dust, rubber tire residues and brake linings, possibly automotive fluid drips, other solid and liquid wastes that may build up on parking lot surfaces between rain storms, and chemicals associated with maintenance of the ice rink. Runoff from the developed site would thus be substantially different from the existing, largely undeveloped condition and would contain a mixture of water pollutants that do not presently occur on site.

In addition, the DEIR fails to quantify the increase in sediment likely to result from project grading and operations. While the DEIR proposes mitigation measures to reduce grading-associated sediment, such mitigation measures are not 100% effective. The revised EIR should disclose the estimated amount of sediment that will be generated during grading and construction, after mitigation, and compare that with standards for sediment production (e.g., those set by the Regional Water Quality Control Board). Any exceedances should be considered significant impacts. The revised analysis must also disclose the likely indirect impacts of the proposed drainage features (e.g. drainage discharge and retention basin spillover into the adjacent waterway.). 6-43

D. The DEIR Fails to Adequately Analyze the Project's Impacts on the Town's Water Supply

The DEIR's evaluation of the Project's impacts on water supply acknowledges that the Project would result in a net increase in water use of almost seven acre feet per year compared to existing conditions. DEIR at 8-15. However, the DEIR concludes that this amount of additional water use would not constitute a significant impact because the Project's water supply would represent only 20 percent of the anticipated surplus in the Town's water supply in 2020. *Id.*

As explained in the Myers Report, the DEIR failed to adequately consider the water supply and the Town's ability to meet future water demand. The principal deficiency in the DEIR's analysis lies in its failure to account for the vast uncertainty inherent in the Town's surface water supply, which make up the bulk of the total supply. Myers Report at 6. The Town's Urban Water Management Plan indicates that the Town's surface water supply is highly variable and shows very little surplus. Myers Report at 5. Given the limited amount of surplus water anticipated, committing even 20 percent of that surplus to this Project may result in water shortages. *Id.* In other words, the Town may be relying on more surface water than can be reliably depended on based on historic diversions. At a minimum, a revised DEIR must include an analysis that takes into account the variability and unreliability of the Town's water supply. 6-44

E. The DEIR Fails to Adequately Analyze and Mitigate Significant Impacts to Biological Resources

1. The DEIR Fails to Adequately Analyze the Project's Direct and Indirect Impacts to Sensitive Species and Sensitive Habitats. 6-45

The Project site is located immediately adjacent to sensitive riparian habitat along Mammoth Creek. DEIR at 5.3-3. The DEIR acknowledges the riparian habitat

adjacent to the Project site and importance of Mammoth Creek as a movement corridor providing linkages to other open space areas. DEIR at 5.3-4. The DEIR also discloses that Mammoth Creek supports native fish. DEIR at 5.3-3. The DEIR concludes the Project would not have a significant impact on sensitive biological resources including sensitive species with implementation of a mitigation measure requiring preparation of a tree removal and protection plan. DEIR at 5.3-21 and 5.3-22. However, the DEIR fails to provide supporting facts or substantive analysis. **6-45**

The DEIR's conclusion is based on the assumption that any and all Project-related impacts will be contained on site so that no adverse impacts would affect the riparian corridor along Mammoth Creek. This assumption is highly questionable given the Project site's proximity to the creek. First, as explained above and in the Myers Report, the DEIR fails to adequately analyze storm water runoff to Mammoth Creek. Myers Report at 11 and 12. Given that Mammoth Creek supports native fish populations, a revised DEIR must analyze potential impacts to water quality that would impact native fish populations. DEIR at 5.3-3. **6-46**

Second, the DEIR fails to analyze indirect impacts to the riparian corridor and sensitive species resulting from implementation of the Project. Indirect impacts from noise, vibration, light, and pollution can be just as devastating to wildlife as the direct loss of habitat. *See generally* Exhibits 4, 5, 6, and 7, Radle, The Effect of Noise on Wildlife: A Literature Review; Jones, Sensory Ecology: Noise Annoys Foraging Bats; Schaub et al., Foraging Bats Avoid Noise; and Longcore et al., Ecological Light Pollution. The riparian corridor along Mammoth Creek is likely to include suitable habitat for sensitive bird species. The Project would result in increased automobile traffic and the addition of regular events that would draw hundreds of people to the site. This would in turn lead to increased noise from traffic, sporting events, and music, which will affect the adjacent sensitive habitat. A revised EIR must analyze these impacts. **6-47**

These omissions are particularly surprising given that the California Department of Fish and Wildlife specifically commented during the Notice of Preparation for this Project that the DEIR should include the following: **6-48**

- "a complete, recent inventory of rare, threatened, endangered, and other sensitive species located within the project footprint and *within offsite areas with potential to be affected*";
- "[A] discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions…"; and **6-49**

- "[A] discussion of *potential indirect project impacts* on biological resources, including resources in *areas adjacent to the project footprint, such as nearby public lands (e.g., National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors*….

6-50

DEIR Appendix 11-2, CDFW letter from L. MacNair to S. Moberly dated June 29, 2016 at 2 and 3. The DEIR provides none of this analysis. Moreover, the DEIR also fails to evaluate the cumulative effects of direct and indirect project-related impacts. *Id.* at 3 and 4. A revised DEIR must include analysis and mitigation of these impacts.

6-51

2. The DEIR Lacks Adequate Mitigation for the Project's Significant Impacts to Biological Resources

Because the EIR fails to identify impacts to the biological resources as significant, it fails to adequately mitigate impacts. An EIR is inadequate if it fails to identify feasible mitigation measures. *Lotus v. Department of Transportation* (2014) 223 Cal. App. 4th 645; *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 79. An EIR is inadequate if it fails to suggest mitigation measures, or if its suggested mitigation measures are so undefined that it is impossible to evaluate their effectiveness. *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61 at 79. The City may not use the inadequacy of its impacts review to avoid mitigation: "The agency should not be allowed to hide behind its own failure to collect data." *Sundstrom*, 202 Cal.App.3d at 306. The formulation of mitigation measures may not properly be deferred until after Project approval; rather, "[m]itigation measures must be fully enforceable through permit conditions, agreements, or legally binding instruments." CEQA Guidelines § 15126.4(a). Here, the DEIR's identification and analysis of mitigation measures, like its analysis of biological impacts, are legally inadequate.

6-52

The DEIR inappropriately defers mitigation. For example, as discussed above, the DEIR discloses that the Project would result in tree removal. DEIR at 5.3-21. However, rather than providing an inventory of existing trees and a detailed tree removal and protection plan, the DEIR defers this analysis until after Project approval. *Id.* In short, the DEIR's analysis of impacts to biological resources dramatically understates the Project's potential to significantly affect sensitive species and sensitive habitats. At the same time, the DEIR fails to provide effective, enforceable measures to mitigate such potentially significant impacts. To comply with CEQA, the County must prepare a revised DEIR fully analyzing the Project's potential impacts to these resources and

6-53

identifying effective mitigation measures. Revisions of the required magnitude will in turn require recirculation of the DEIR. CEQA Guidelines § 15088.5(a)(4). 6-53

3. The Project is Inconsistent with Policies in the Town's General Plan.

The DEIR glosses over many of the Project's glaring inconsistencies with General Plan and Municipal Code provisions relating to the preservation of open space and natural resources. The DEIR acknowledges that the Project is subject to compliance with these policies. DEIR at 5.3-17. The DEIR even identifies a threshold of significance related to conflicts with these policies and ordinances. DEIR at 5.2-19. Inexplicably, the DEIR then omits the required analysis. The Project is inconsistent with at least two General Plan policies in particular. First, General Plan Policy R.3.B provides that the Town is to 'manage all properties held by the Town of Mammoth Lakes along the Mammoth Creek corridor for open space, habitat preservation, and *passive* recreation." DEIR at 5.3-17. The Project site is located immediately adjacent to the Mammoth Creek corridor, yet the Project would convert uses at the site from the current passive uses to active recreational uses. The proposed Project uses of a hockey rink/sports arena, music concerts, wedding parties, and other uses do not fit the definition of "passive recreation."[1] Furthermore, as discussed throughout this letter, implementation of the Project would result in impacts to adjacent open space and sensitive habitat. 6-54

In addition, General Plan Policy R.1.C states that "*[P]rior to development*, projects shall identify and mitigate potential impacts to site specific sensitive habitats…, *and mature trees*." *Id.* As pointed out above, the DEIR inappropriately defers analysis of the Project's tree removal. Without this analysis, the Town cannot demonstrate that the Project is consistent with the General Plan and cannot legally approve the Project. Thus, the EIR should be revised to analyze each of the Project's inconsistencies with the General Plan. 6-55

F. The DEIR Fails to Adequately Analyze the Project's Impacts on Visual Resources.

The proposed Project will alter and adversely impact the visual landscape of the site and the surrounding area by completely transforming this open space into one dominated by extensive buildings and parking lots. As discussed above, the Project will 6-56

[1] Typically, passive recreation uses include such activities as trails/hiking, picnicking, and wildlife viewing. Active recreation facilities include sports facilities such as playing fields for team sports, or in this case, a hockey rink.

result in paving over 65 percent of the site and will change uses at the site from largely passive uses (i.e., picnicking and a children's playground) to a sports complex attracting hundreds of people at a given time. The DEIR acknowledges that the Project would increase active uses on the site but it concludes that the Project's aesthetic impacts will be less than significant because of certain landscaping and design features. DEIR at 5.2-14. However, as discussed above, the DEIR fails to provide a landscaping plan or to provide any details on the Project's design features. Furthermore, the DEIR's conclusion that aesthetic impacts will be insignificant flies in the face of established CEQA precedent. **6-56**

Under CEQA, it is the state's policy to "[t]ake all action necessary to provide the people of this state with . . . enjoyment of *aesthetic*, natural, scenic, and historic environmental qualities." Pub. Res. Code § 21001(b) (emphasis added). "A substantial negative effect of a project on view and other features of beauty could constitute a significant environmental impact under CEQA." *Ocean View Estates Homeowners Assn., Inc. v. Montecito Water District* (2004) 116 Cal.App.4th 396, 401. No special expertise is required to demonstrate that the Project will result in significant aesthetic impacts. *Ocean View Estates*, 116 Cal.App.4th at 402 ("Opinions that the [project] will not be aesthetically pleasing is not the special purview of experts."); *The Pocket Protectors v. City of Sacramento* (2005) 124 Cal.App.4th 903, 937 ("[N]o special expertise is required on this topic."). **6-57**

It appears that the visual simulations presented in the DEIR are intended to show the bulk and scale of the building rather than how the building will actually look. Instead, the DEIR should present a specific design, demonstrate how the design specifically incorporates the Town's design guidelines, and describe how the design would be implemented to lend character and aesthetic quality to the Project. Similarly, the DEIR should present details on the landscape design and signage so that decision-makers and the public can fully understand how the project site will appear. All of these elements are particularly critical given that this Project will be in close proximity to the surrounding residential community. **6-58**

Instead of addressing and analyzing the Project's visual effects and changes to the character of the site and area, the DEIR employs contorted logic to mask its clear impacts. For example, the DEIR states that impacts to public views will not result in significant impacts in large part because existing mature pine trees screen views to the site. DEIR at 5.2-11 and 5.2-13. But as discussed above, the DEIR provides no details or analysis of the number of trees to be removed or retained so that the very trees that currently screen the site from public views may be removed during Project construction. In other words, the DEIR defers analysis of impacts (from tree removal) and defers **6-59**

mitigation by failing to prepare a landscape plan. Moreover, the DEIR refers the reader to Mitigation Measure BIO-1, which purportedly would reduce the Project's impacts, but that measure does not even include the actual landscaping design or tree removal and protection plan, inappropriately deferring its development until after Project approval. DEIR at 5.3-22. **6-59**

The DEIR also relies on the Project's compliance with the Town's Design Guidelines to conclude that the Project's visual impacts would be less than significant. DEIR at 5.2-13 and 5.2-14. However, the DEIR fails to provide any specific information or analysis as to how the Project will comply with the guidelines or how the proposed measures and existing regulations would mitigate significant impacts to existing views from Old Mammoth Road, Meadow Lane, and other public viewpoints. **6-60**

Even the simulations themselves are inadequate and somewhat misleading, depicting an idealized version of the Project, rather than the worst case scenario. For example, the parking areas are not shown in the simulations. DEIR at Exhibit 5.2.2. In addition, the visual simulations in the DEIR present an unusual perspective from what appears to be an aerial point of view. DEIR Exhibit 5.2.2. These viewpoints do not represent a typical viewpoint from street level. Instead, the images distort the views, which serves to minimize the mass and scale of the project and misrepresents impacts to views. **6-61**

A revised EIR must include a detailed and thorough analysis of the project's likely aesthetic impacts, as outlined above. It must provide an adequate analysis that would permit informed decisions about the project, effective mitigation measures, and alternatives that could have less intensive impacts. The revised EIR must also analyze all project components that could impact views. **6-62**

IV. The DEIR's Analysis of Project Alternatives is Inadequate.

The DEIR's analysis of project alternatives fails to fulfill CEQA's basic purpose of fostering informed decisionmaking and public participation by providing an opportunity to meaningfully compare the Project to possible alternatives. Adequate alternatives analysis is essential to CEQA compliance, which includes a substantive mandate that "[p]ublic agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects" of the project. Pub. Res. Code § 21002. The DEIR's discussion of alternatives in the present case fails to live up to these standards. **6-63**

As a preliminary matter, the DEIR's failure to disclose the extent and severity of the Project's broad-ranging impacts necessarily distorts the document's analysis of Project alternatives. As a result, the alternatives are evaluated against an inaccurate representation of the Project's impacts. Proper identification and analysis of alternatives is impossible until Project impacts are fully disclosed. Moreover, as discussed above, the document's analysis is incomplete and/or inaccurate so that it is simply not possible to conduct a comparative evaluation of the Project's and the alternatives' impacts. 6-63

Here, the DEIR's alternatives analysis is inadequate on two counts: first, for failing to accurately describe the No Project alternative and second, for failing to consider a reasonable range of alternatives. These failures render the DEIR insufficient for enabling the public and decisionmakers to determine if a feasible alternative to the proposed Project would prevent the Project's significant effects. 6-64

A. The DEIR Inaccurately Characterizes the No Project Alternative.

CEQA requires a "no project" alternative be evaluated among the chosen project alternatives. CEQA Guidelines § 15126.6(e). The No Project alternative must discuss existing conditions at the time the Notice of Preparation ("NOP") for the project is published, or if there was no NOP, at the time environmental analysis was commenced. CEQA Guidelines § 15126.6(e)(2). The No Project alternative, however, is not necessarily based on static conditions and does not assume that there will be no changes from existing conditions. It must incorporate reasonable, foreseeable future conditions if the project is not approved, based on existing plans. CEQA Guidelines § 15126.6(e)(2), (e)(3)(B-C); *see also Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 454 (In most cases, "the baseline for determining a project's significant adverse impacts is not the same as the no project alternative"). Furthermore, "[i]f disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed." CEQA Guidelines § 15126.6(e)(3)(B). 6-65

Here, the DEIR's No Project analysis assumed that (1) the facility would remain at its current location at 416 Sierra Park Road, (2) the lease for that land with Mammoth Unified School District and the Mono County Office of Education (collectively "School District") would be renewed, and (3) that a roof would not be added to the ice rink. DEIR at 7-6. It furthermore assumed that "[t]he . . . facility's deficiencies, including extensive building deterioration, on-going maintenance issues, and functional inefficiencies, would remain." DEIR at 7-6. The assumption that no roof would be added

to the facility and that the facility would be maintained in disrepair under a no project alternative is contrary to the terms the Town's existing agreement with the School District and the proposed renewal lease between the Town and the School District. *See* Exhibit 8, Joint Use and Lease Agreement for the Use of Land and Development, Maintenance, Scheduling and Operations of an Ice Rink (May 14, 2007); see also Exhibit 9, Confidential Memorandum and Attached Draft Lease Agreement from Daniel C. Holler to Lois Klein and Stacey Adler (June 6, 2015) at 5.

The DEIR's inaccurate characterization of the no project alternative is in clear violation of CEQA, and will have a meaningful impact on the public and decisionmakers' understanding and analysis of the proposed Project. *See Woodward Park Homeowners Assn., Inc. v. City of Fresno* (2007) 150 Cal.App.4th 683, 788 (holding that the DEIR for a commercial development did not give adequate attention in its no project alternative analysis to "hypothetical future developments" under existing plans as well as existing conditions on the ground as required by the Guidelines, and was therefore legally inadequate). The DEIR concluded that the no project alternative would not attain any of the Project's basic objectives, and among its justifications for this conclusion stated "this Alternative would not provide a covered roof structure over the Town's ice rink facility." DEIR at 7-10. **6-65**

As described above, there is extensive evidence that the addition of a roof on the existing facility would be a requirement of any renewed lease with the School District. Therefore, the No Project alternative would, in fact, meet at least some of the project objectives. The DEIR's claims to the contrary are inaccurate. They serve to mislead the public and decision makers in assessing the desirability of leaving the facility at it existing location. The DEIR acknowledges that maintaining the existing facility would have lesser environmental impacts than the proposed Project for seven issue areas, and even selected this alternative as the environmentally superior alternative to the proposed Project. DEIR at 7-28.

B. The DEIR Fails to Describe a Reasonable Range of Alternatives by Excluding Analysis of the Shady Rest Site.

CEQA requires that an EIR describe "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." CEQA Guidelines § 15126.6(a). A reasonable "range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives **6-66**

necessary to permit a reasoned choice." Guidelines § 15126.6(f). In order to provide a reasonable range of alternatives in an EIR, lead agencies may need to consider alternatives that do not meet all project objectives, but which reduce significant impacts. *See Watsonville Pilots Association v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1087 (noting that "[i]t is virtually a given that the alternatives to a project will not attain all of the project's objectives.").

Here, the EIR failed to include a reasonable range of alternatives by excluding from its analysis the Shady Rest site. Shady Rest is a 24.7 acre site located in half-mile walking distance from the high school and a mile from the main commercial section of town. It is located near bike and trail routes, making it conveniently accessible for the ice rink's young target audience. Locating the new facility at Shady Rest has been considered in past downtown revitalization studies conducted by the Town. *See Mammoth: Executing the Plan for a Premiere Destination Community*, at 37 available at http://mammothlakes.granicus.com/MetaViewer.php?view_id=4&clip_id=568&meta_id=55887. Furthermore, the Shady Rest site would likely have reduced environmental impacts, particularly those impacting nearby residential areas at the proposed Project location. **6-66**

The DEIR provides no justification for its exclusion of Shady Rest from the alternatives analysis, other than stating that the property is "located in the jurisdictional boundaries of the United States Forest Service (USFS). Due to the existing land use restrictions imposed by the USFS, the Town would not be permitted to construct" on the property. DEIR at 7-4. The DEIR does not explain what these land use restrictions are, if they are permanent, or if there might be some avenue for removing those restrictions. Instead, the DEIR leaves the public to take it on faith from the Town that the site is un-buildable. This justification for excluding Shady Rest as an alternative location for the Project fails to adequately explain the site's limitations and feasibility as an alternative site.

V. The Project is Inconsistent with the Town's General Plan.

The state Planning and Zoning Law (Gov't Code § 65000 et seq.) requires that development decisions be consistent with the jurisdiction's general plan. As reiterated by the courts, "[u]nder state law, the propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." *Resource Defense Fund v. County of Santa Cruz* (1982) 133 Cal.App.3d 800, 806. Accordingly, "[t]he consistency doctrine [is] the linchpin of California's land use and development laws; it is the principle which infuses the concept **6-67**

of planned growth with the force of law." *Families Unafraid to Uphold Rural El Dorado County v. Board of Supervisors* (1998) 62 Cal.App.4th 1332, 1336.

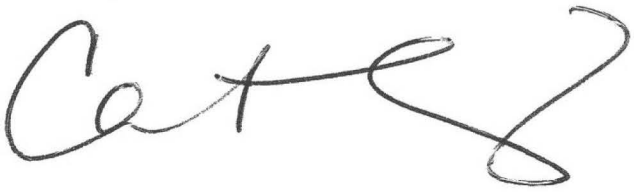
It is an abuse of discretion to approve a project that "frustrate[s] the General Plan's goals and policies." *Napa Citizens for Honest Gov't v. Napa County* (2001) 91 Cal.App.4th 342, 379. The project need not present an "outright conflict" with a general plan provision to be considered inconsistent; the determining question is instead whether the project "is compatible with and will not frustrate the General Plan's goals and policies." *Napa Citizens*, 91 Cal.App.4th at 379. Here, the proposed Project does more than just frustrate the General Plan's goals. As discussed in section, E.3 above, the Project is directly inconsistent with several provisions in the General Plan. This inconsistency means that the Project cannot lawfully be approved. 6-67

VI. Conclusion

For the reasons set forth above, we respectfully request that no further consideration be given to the Project as proposed until an EIR is prepared that fully complies with CEQA.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Catherine C. Engberg



Carmen J. Borg, AICP
Urban Planner

List of Exhibits:

Exhibit 1	MRO Engineers Report Regarding Review of Traffic Impact Analysis For Mammoth Creek Park West New Community Multi-Use Facilities, February 3, 2017.
Exhibit 2	Noise Report prepared by J. Decker, Charles M. Salter and Associates, Inc. Regarding Review of the DEIR For Mammoth Creek Park West New Community Multi-Use Facilities Project, February 7, 2017.
Exhibit 3	Hydrology Report prepared by T. Myers, Ph.D, Regarding Review of the DEIR For Mammoth Creek Park West New Community Multi-Use Facilities, February 3, 2017.
Exhibit 4	Radle, A., *The Effect of Noise on Wildlife: A Literature Review*, March 2, 2007.
Exhibit 5	Jones, G., *Sensory Ecology: Noise Annoys Foraging Bats*, Current Biology, 2008.
Exhibit 6	Schaub et al., *Foraging Bats Avoid Noise*, Journal of Experimental Biology, August 14, 2008.
Exhibit 7	Longcore et al., *Ecological Light Pollution*, The Ecological Society of America, 2004.
Exhibit 8	Joint Use and Lease Agreement for the Use of Land and Development, Maintenance, Scheduling and Operations of an Ice Rink, May 14, 2007.
Exhibit 9	Confidential Memorandum and Attached Draft Lease Agreement from Daniel C. Holler to Lois Klein and Stacey Adler, June 6, 2015.

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February 3, 2017

Ms. Carmen Borg
Shute, Mihaly & Weinberger LLP
396 Hayes Street
San Francisco, California 94102

Subject: ***Review of Traffic Impact Analysis***
Mammoth Creek Park West New Community Multi-Use Facilities
Mammoth Lakes, California

Dear Ms. Borg:

As requested, MRO Engineers, Inc., (MRO) has completed a review of the "Traffic and Circulation" analysis completed with respect to the proposed Mammoth Creek Park West New Community Multi-Use Facilities project in Mammoth Lakes, California. The proposed project is the subject of a Public Review Draft Environmental Impact Report (DEIR) prepared by Michael Baker International and completed on December 28, 2016. The DEIR incorporates (as Appendix 11.4) a traffic impact analysis, which was documented in a Technical Memorandum prepared by LSC Transportation Consultants, Inc., on July 29, 2016.

Our review focused on the technical adequacy of the "Traffic and Circulation" analysis, including the detailed procedures and conclusions documented in the LSC memorandum.

TRAFFIC AND CIRCULATION ANALYSIS REVIEW

Our review of the traffic impact analysis for the proposed Mammoth Creek Park West New Community Multi-Use Facilities project revealed several issues that must be addressed prior to certification of the environmental document and approval of the project by the Town of Mammoth Lakes. These issues are presented below.

6-68

1. ***Traffic Volume Data*** – According to the DEIR "Traffic and Circulation" section (p. 5.5-1) and the LSC memorandum (p. 1), the existing conditions (2016) turning movement volumes at two of the three study intersections were developed by applying a one percent growth factor to year 2015 traffic volumes taken from the Mammoth Mobility Element EIR. (The traffic volumes for the third study intersection, the project access location, were derived differently. This is discussed in greater detail below.)

   Review of the Mammoth Mobility Element EIR reveals that the traffic volumes used in that analysis were, in fact, year 2009 volumes that had been increased by six percent (i.e., a one percent per year average annual growth rate) to represent estimated year 2015 values. Thus, the "existing" conditions traffic volumes used in the current analysis were, in effect, fabricated by modifying seven-year-old values.

   It is a substantial concern that the bulk of the "existing" intersection traffic volumes were estimated in this fashion, rather than based on recent data collection. This is quite unusual, and the resulting estimates may not accurately represent current conditions in Mammoth Lakes.

   Moreover, the use of seven-year-old data as the basis for the traffic study is contrary to accepted practice within the traffic engineering profession. Page 19 of the 2006 Institute of

Transportation Engineers (ITE) document, *Transportation Impact Analyses for Site Development*, specifically states that:

> *. . . traffic volume data should generally be no older than 1 year.*

Because these estimated traffic volumes represent the most critical input parameter in the intersection level of service calculation process, any inaccuracies in those values directly affect the validity of the level of service results. In short, to the extent that the estimated peak-hour traffic volumes are inaccurate, the corresponding delay and level of service results reported in the DEIR are invalid, and a misleading representation of the environmental setting is provided. 6-68

New "design day" traffic volume data must be obtained, and the analysis must be revised to incorporate that new data.

2. ***Project Access Intersection Traffic Volume*** – The DEIR (p. 5.5-1) and the LSC memorandum (pp. 1 - 2) describe the derivation of the existing conditions PM peak hour traffic volumes at the project site access intersection on Old Mammoth Road as follows:

> *Even though the existing park is closed in the winter, eight existing vehicle trips are estimated to be generated (with four entering and four exiting the site) in the existing winter p.m. peak hour. Considering that a minimal amount of traffic uses the plowed parking lot and playground (in low snow years) or the park for snow play.*

In other words, the traffic volumes for the project site access intersection, which is the one location where all project trips (and, potentially, the greatest project-related impact) will occur, are based on guesses instead of any form of data collection or analysis. 6-69

Moreover, the same guesses are used for the future year analysis, even though the *Town of Mammoth Lakes Travel Model, Final Report* (LSC, February 15, 2011), which was used in developing both the Mammoth Lakes General Plan (Appendix E) and the Mobility Element (pp. VII-1 - VII-2), states:

> *. . . the Town's permanent resident population is expected to grow 18 – 33 percent by 2020 and 36 – 68 percent by 2030.*

Thus, even though the local population is expected to increase substantially, no additional activity is projected at the site access intersection. This is a questionable assumption, for which there appears to be no basis in fact.

3. ***Study Area*** – The study area for the traffic impact analysis is limited to three intersections – the site access location and two intersections to the north of the site on Old Mammoth Road. No intersections to the south of the site were evaluated, despite the fact that the following two intersections just to the south of the project driveway are directly and adversely impacted by events at the project site: 6-70

- Old Mammoth Road/Mammoth Creek Road, and
- Old Mammoth Road/Sherwin Creek Road.

Further, the *Mammoth Mobility Element Transportation Impact Analysis* (LSC, April 18, 2016, p. 25 - 26) states that two intersections in the vicinity of the project site will exceed the Town's

level of service standards under the "Buildout with New FAR Land Uses with Mobility Element" scenario, which is the same one used in the current DEIR. Those intersections are:

- Old Mammoth Road/Sierra Nevada Road, and
- Old Mammoth Road/Minaret Road/Fairway Drive.

6-70

Moreover, the key intersection of Old Mammoth Road/Main Street (State Route 203) was ignored.

To ensure a thorough analysis of the proposed project's traffic impacts, we believe these five additional intersections must be evaluated.

4. ***Project Trip Generation*** – The volume of project-related traffic was estimated based on an assessment of activities that are expected to occur at the proposed facilities. Those activities are listed in DEIR Table 5.5-3 (p. 5.5-16) and LSC Table 2, including designation of the "design day" activities that are addressed in the traffic impact analysis.

   However, a number of additional activities are identified that potentially generate substantial traffic, although perhaps more occasionally. Examples include hockey tournaments (200 attendees), private rentals (200 attendees), and community and social gatherings (100 attendees). This suggests the need to prepare an analysis of an "event" scenario, which would address the possible traffic impacts of large, but less frequent, activities at the proposed facilities. Once again, such an analysis is necessary to ensure thorough consideration of the project's potential traffic impacts.

6-71

5. ***Project Trip Distribution*** – The geographic distribution of project-generated trips is described at DEIR p. 5.5-15, DEIR p. 5.5-20, and LSC Table 5. According to the DEIR:

   > *The distribution of traffic arriving and departing the project site is estimated based on existing traffic patterns, the location of the site relative to residential and commercial uses in the region, and regional access patterns.*

   However, the same geographic trip distribution was used for the future year analysis scenarios, which might well have different traffic patterns based on evolving land use characteristics associated with the substantial growth referenced above.

6-72

   The use of the "existing" traffic distribution patterns for future year conditions must be justified. If it cannot be satisfactorily explained, the analysis must be revised to incorporate a more meaningful and defensible future trip distribution pattern.

6. ***Existing Ice Rink Usage*** – The LSC traffic impact study (p. 3, Table 3, and Table 4) presents the "net impact" of the project on area roadways. This is also presented at DEIR p. 5.5-15, Table 5.5-4 (p. 5.5-17), and Table 5.5-5 (p. 5.5-18). The net impact is derived by subtracting the number of trips associated with the existing ice rink from the estimated number of trips generated by the proposed project.

6-73

   This is, of course, misleading, as it misrepresents the fact that the existing ice rink trips will continue to occur; they will simply be relocated within Mammoth Lakes. The "net impact" discussion inappropriately suggests that they will go away, and the impacts of the proposed project will only result from its additional trips.

Further, there is absolutely no description as to how the trip generation numbers for the existing ice rink were derived. Those unsubstantiated values are presented as fact, without any basis. **6-73**

7. ***Emergency Access*** – As described at DEIR p. 5.5-12, one of the CEQA significance criteria concerns whether the proposed project would result in inadequate emergency access. DEIR pp. 8-12 – 8-13 state that the proposed project would have a less than significant impact in this regard. However, we note that the project site has only one vehicular access location. If that driveway were to be blocked in an emergency (by an auto accident or a fire, for example), access to the site would be effectively eliminated, potentially creating a dangerous situation within the park. **6-74**

8. ***Sight Distance*** – No analysis was performed to evaluate safety at the project access intersection, particularly with respect to "sight distance" at that location. Such an analysis would determine whether a driver exiting the project site can see far enough in each direction to ensure that it is safe to turn onto Old Mammoth Road. The LSC memorandum (p. 5) states that:

   > *Adequate traffic conditions are expected to be provided with the proposed project, so long as the final landscaping plans provide adequate drive* [driver?] *sight distance at the site driveway.*

   No guidance is provided with respect to what constitutes "adequate drive[r] sight distance," though.

   The *Highway Design Manual* (Caltrans, March 7, 2014) sets forth the minimum requirements for sight distance at intersections in California. That document (p. 400-22) states the following: **6-75**

   > *At unsignalized public road intersections . . . corner sight distance values given in Table 405.1A should be provided.*

   Referring to the values presented in Table 405.1A of the *Highway Design Manual*, for a roadway with a 25 MPH speed limit, such as Old Mammoth Road adjacent to the project site, the minimum required corner sight distance is 275 feet. The LSC traffic study fails to address whether 275 feet of clear sight distance is available at the site access driveway, particularly with respect to the curve in Old Mammoth Road to the south of the driveway.

   Finally, as noted above, the LSC memorandum suggests that the primary constraint to achieving adequate sight distance at the driveway is landscaping materials. This ignores the substantial issue associated with piles of snow in the winter (i.e., on a potential "design day"). As snow piles accumulate on street corners, they present a considerable challenge in terms of the minimum necessary driver sight lines and visibility. This potential safety deficiency must be addressed in the DEIR.

9. ***Peak Hour Factor*** – The intersection delay and level of service (LOS) calculations are presented in the appendices to the LSC memorandum. One of the key elements of any intersection LOS calculation is a parameter known as the "Peak Hour Factor" or PHF. The purpose of that factor is to convert hourly traffic volumes to represent the volumes occurring in the peak 15 minutes within the peak hour. The intent of this is to develop a "worst case" indication of intersection operations. **6-76**

The other function of the PHF is to describe the variation in traffic flow within the peak hour. Values that are close to 1.00 indicate that traffic is relatively uniform throughout that one-hour period. If the value is relatively low, it suggests substantial variation from one 15-minute period to the next. Lower PHF values result in higher intersection delay values. Conversely, higher PHF values lead to lower delays.

The actual PHF values for each intersection are derived from the traffic volume data, and are typically presented on the count data sheets. Because, as described above, the "existing" traffic volumes used in this analysis are based on seven-year-old data, the data sheets are apparently unavailable, so the actual PHF values are unknown. **6-76**

For the "existing" analysis scenarios, the LOS calculations consistently employ a PHF value of 0.90. The future year analyses, however, all use a PHF value of 0.95. As noted above, higher PHF values lead to lower intersection delay values. Thus, the use of this higher value could lead to underestimation of future year intersection delay.

No factual basis is provided to justify the use of a different PHF value for future conditions.

CONCLUSION

Our review of the traffic analysis completed in connection with the proposed Mammoth Creek Park West New Community Multi-Use Facilities project revealed several issues affecting the validity of the conclusions presented in the Public Review Draft Environmental Impact Report. These issues must be addressed prior to approval of the proposed project and its environmental documentation. **6-77**

We hope this information is useful. If you have questions concerning any of the items presented here or would like to discuss them further, please feel free to contact us at (916) 783-3838.

Sincerely,

MRO ENGINEERS, INC.

Neal K. Liddicoat, P.E.
Traffic Engineering Manager

NEAL K. LIDDICOAT, P.E.

Traffic Engineering Manager

Mr. Liddicoat has 39 years of experience in the analysis of a broad range of traffic engineering, parking, and transportation planning issues, for both public and private sector clients. He has conducted traffic and parking analyses for a wide variety of development proposals, including office buildings, retail/commercial centers, multiplex cinemas, and residential projects. He has a particular expertise in the analysis of unique development proposals, including stadiums, arenas, convention centers, theme parks, and other facilities where large numbers of vehicles and pedestrians converge in a short period of time.

Mr. Liddicoat has developed and presented seminars on technical procedures and quality control in the conduct of traffic impact analyses, both in-house and as a co-instructor for the UCLA Extension Public Policy Program. For several years, he served as instructor for the traffic engineering portion of the Civil Engineering licensing exam review course conducted by the Sacramento chapter of the American Society of Civil Engineers.

Mr. Liddicoat manages the firm's traffic engineering services practice. He is frequently called upon to serve as an expert "peer reviewer" for traffic impact analyses prepared by others. In that role, he has commented on the technical adequacy of traffic studies for a variety of projects, including retail centers, office complexes, and mixed-use master plans. His recent experience as a peer reviewer includes the following projects:

- *Village at Squaw Valley, Placer County, CA*
- *Oil Exploration Zoning Ordinance Amendment, Kern County, CA*
- *State Route 85 Express Lanes, Santa Clara Co., CA*
- *Vacaville General Plan, Vacaville, CA*
- *Canyon Springs Residential, Truckee, CA*
- *Saddle Crest Homes, Orange County, CA*
- *Highway 43/198 Retail Ctr., Hanford, CA*
- *Irwindale Materials Recovery Facility & Transfer Station, Irwindale, CA*

Other significant traffic impact analysis experience:

STAPLES Center Traffic Impact Analysis – Los Angeles, CA – Responsible for the completion of detailed traffic and parking analyses for the STAPLES Center arena in downtown Los Angeles. In addition to the 20,000 seats and 250 luxury suites contained in the arena, the analysis evaluated up to 100,000 square feet of retail, restaurant, and entertainment facilities. The analyses focused on the impacts of a sold-out event during the key hours before and after the event. In addition, the analyses were performed both with and without a major concurrent event at the adjacent Los Angeles Convention Center.

Sacramento City College Transportation Master Plan Analysis, Sacramento, CA – Project Manager for the traffic and parking analysis evaluating a proposed master plan aimed at adding 1,260 parking spaces to the Sacramento City College campus, as well as various other improvements to the campus transportation system.

Raley Field Traffic and Parking Analysis, West Sacramento, CA – Project Manager for traffic and parking analyses for Raley Field, a 14,000-seat baseball stadium in West Sacramento. The analysis addressed pre-event and post-event conditions for baseball games as well as other events (such as concerts) that might have attendance as high as 17,000. An extensive set of mitigation measures was developed, including a variety of operational strategies to minimize impacts and optimize event-related traffic flows.

Additional Projects Include:

- *Convention Center Traffic & Parking Studies, Sacramento, Los Angeles, and Anaheim*
- *Disney "California Adventure" Preliminary Traffic Analysis, Anaheim*
- *Elk Grove Boulevard Master Plan, Elk Grove*
- *CSUS Bicycle/Pedestrian Study, Sacramento*
- *SR 99/Twin Cities Road Traffic Operations, Galt*
- *Thunder Valley Casino, Placer County, CA*

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Dee E. Garcia
Catherine F. Spurlock

Subject: **Mammoth Lakes - Park West Community Facility**
Comments on Draft Environmental Impact Report
Salter Project: 17-0062

Dear Carmen:

As requested, we reviewed Section 5.8 Noise of the Draft Environmental Impact Report (DEIR) for the proposed Mammoth Creek Park West New Community Multi-Use Facilities Project, a new community center in the Town of Mammoth Lakes, CA. We also reviewed the noise data in Appendix 11.6. This letter summarizes our review and comments.

INTRODUCTION

The project site is approximately 4.9 acres and is bounded by multi-family residential uses and commercial uses, primarily to the north and west. The project consists of constructing new community multi-use facilities, including a 13,000 square-foot community center, an area to be used as an ice rink in the winter and a recreation/event area (RecZone) in the summer, and other playground and outdoor use areas. The conceptual site plan from the DEIR is provided below:



Source: HMC Architects, dated March 10, 2016.

NOT TO SCALE
Michael Baker INTERNATIONAL

ENVIRONMENTAL IMPACT REPORT
MAMMOTH CREEK PARK WEST
NEW COMMUNITY MULTI-USE FACILITIES
Conceptual Site Plan
Exhibit 3-4

The proposed ice rink would be open on two sides (to the south and east), oriented in an east-west direction, and would be up to 100-feet long by 200-feet wide. Viewing areas and bleachers would be included under the proposed roof structure. Areas for the ice preparation machine and chillers would be provided along the west boundary of the ice rink. Programmed activities include recreational skating and hockey, weekly programs for curling and skate programs, ice rentals for hockey, and birthday parties. Special events may include community events, hockey tournaments, private facility rentals, and professional/club/college/school rentals and events. Ice rink operations would generally run between 9:00 a.m. and 10:00 p.m., Monday through Sunday, with occasional use from 6:00 a.m. to 9:00 a.m. or 10:00 p.m. to 12:00 a.m.

In the summer months the multi-use facility would operate as the Mammoth RecZone. The Mammoth RecZone would be the home of Parks and Recreation Department summer camps, regular programs, and special events. Sports may include basketball, badminton, pickleball, small-sided soccer, volleyball, street hockey, dodgeball, kickball, roller/inline skating, and tennis. Weekly programs would include sports events, professional/club/college/school rentals, and birthday parties. Community events such as farmers market, art and music festivals, movie nights, holiday events, and other special events may also occur. Special events may include, but are not limited to weddings, trade shows, birthday parties, small carnivals, and other private events. The open area south of the Mammoth RecZone may also be used occasionally for access and seating for events. Mammoth RecZone operations would generally run between 6:00 a.m. and 10:00 p.m., Monday through Sunday, with occasional use from 10:00 p.m. to 12:00 a.m. **6-78**

COMMENTS ON THE DEIR

The Significance Thresholds and Impact Analysis Ignore Multiple Standards

The Project analysis significance thresholds are provided in the "Noise Impact Criteria" subsection. These thresholds and the associated noise impact analyses ignore several standards that are required for an appropriate assessment of noise impact. These are explained below.

- Land-use compatibility standards offered in the "Regulatory Setting" in Table 5.8-5 are ignored. Compatibility standards are also mentioned in the Town General Plan in Policies C.6.A and C.6.B. The Project impact analysis should include a review of expected Project noise with respect to such standards.
- CEQA, via Appendix G, specifically directs a study of environmental impact to evaluate whether a project could have "a substantial permanent increase in ambient noise levels." The DEIR ignored this area of required analysis with respect to all sources of operational noise (e.g., utility equipment, HVAC systems) with the one exception of Project-related traffic. Other sources of expected operational noise were not evaluated based on the existing ambient noise levels. This area of required analysis was virtually ignored. Therefore, the impact analysis is inadequate. Such an analysis should be performed in a revised DEIR and appropriate noise mitigation developed. **6-79**

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Ambient Noise Measurements Were Insufficient

Ambient noise measurements were performed at several locations noted in Table 5.8-3 and Exhibit 5.8-2 (and Appendix 11.6). Most of the measurements only lasted for 10 minutes. One measurement lasted for 20 hours. These are insufficient for the purpose of analyzing expected noise impact for the following reasons:

- Noise measurements for a duration less than 24 hours are insufficient for the calculation of community noise equivalent level (CNEL). The Town General Plan, in Policy C.6.B, provides direction to "measure noise use for establishing compatibility in dBA CNEL". Noise compatibility standards offered in the "Regulatory Setting" in Table 5.8-5 are also listed in terms of the CNEL (or Ldn) metric.
- Short-term noise measurements on one day or for only 10 minutes do not provide a representative or statistically valid sample of the noise environment. The Noise Element of the Town of Mammoth Lakes (in Appendix B) provides "Requirements for an Acoustical Analysis" which provide direction to "include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and significant noise sources." Therefore, multiple sampling periods would be appropriate. These standards were ignored in the DEIR. **6-80**
- There is a concern of operational activities and special events that would generate noise during evening (7 p.m. to 10 p.m.) and even nighttime (10 p.m. to 12 a.m., see project description) activities. The short-term ambient noise measurements conducted do not assess the existing noise environment during these hours. Therefore an appropriate assessment of evening and nighttime noise impact was not performed.
- It appears that ambient noise measurements were only performed in the winter, which is insufficient. Ambient noise levels during other seasons may be different (e.g., with seasonal activities or levels of tourism and traffic or other environmental factors). A summertime ambient noise survey should be performed for the noise impact analysis of the expected summer program activities and events.
- Long-term, multi-day noise measurements are feasible with modern noise monitoring equipment. Such an approach should be taken to provide a valid sampling of the existing noise environment.

Therefore, a valid measurement survey of ambient noise should be conducted so that an appropriate evaluation of noise impact can be performed.

Crowd Noise is Not Adequately Addressed

In our professional opinion, noise from crowds and other sports-related activity noise is underestimated and not adequately addressed in the DEIR. On Page 5.8-25, crowd noise is estimated to be 62 dBA at one meter from the source. The DEIR references crowd noise at a "raised normal" speech sound level from the "Prediction of Crowd Noise" paper by M.J. Hayne. The following table is an excerpt from that paper. **6-81**

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Table 1. Equivalent A-weighted sound pressure levels of speech for different vocal efforts (at 1m)

Vocal Effort	Speech Level (dB(A))
Whispering	36
Soft	42
Relaxed	48
Relaxed, normal	54
Normal, raised	60
Raised	66
Loud	72
Very loud	78
Shouting	84
Maximal shout	90
Maximal shout (in individual cases)	96

Source: (Lazarus, 1986)

6-81

In our experience, crowd noise levels can significantly exceed normal, or conversational, voice levels of approximately 60 dB. "Loud" and "shouting" vocal effort levels are common from crowds at sporting events. This is supported by recent noise measurements that we conducted near bleachers at various high school sporting events in the Bay Area. We measured noise levels up to approximately 90 dB from crowd cheering. In the "Handbook of Environmental Acoustics" by James Cowan, average noise levels from crowds of people are listed as between 88 and 90 dBA for football, basketball, and ice hockey games. Therefore, we find that the noise impact analysis of crowd noise is incorrect by assuming unrealistic crowd noise levels. Crowd cheering noise should be addressed in a revised DEIR analysis with an appropriate assumption that voice levels can reach "shouting" vocal efforts.

Single-Event Sports Activity Noise is Not Adequately Addressed

6-82

The impact analysis virtually ignores common sources of single-event noise from sports and recreational activities, including whistles, buzzers from scoreboards, and public address (PA) or other speech reinforcement devices, such as megaphones. The potential noise impact from these and similar sources should be analyzed in a revised DEIR and appropriate noise mitigation determined. This analysis should address "single-event" or short-term maximum noise levels (i.e., L_{max}) of these types of activities, to address potential "periodic increases in ambient noise levels" as described by CEQA Appendix G Part XI.

6-83

Performing this additional analysis is also appropriate given the short-term noise limits of the Town of Mammoth Lakes Noise Ordinance. Sections 8.16.070 Part B and 8.16.080 Part B.2 include noise limits for sources that could occur for short periods of time (e.g., 15 minutes, 5 minutes, 1 minute, or at any time). The DEIR failed to incorporate these municipal standards as noise impact criteria (i.e., significance thresholds). These Town noise limits should be addressed in the impact analysis since single-event noise from common sources mentioned above can significantly increase the ambient noise levels at neighboring residential properties. For example, Table 5.8-3 shows that the maximum (L_{max}) noise level from ice hockey practice could reach 99 dBA. The DEIR failed to analyze the impact of this event and other similar short-term or single-event sources.

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The Interim Phase 1 Sound Wall is not Sufficiently Documented as Mitigation

In certain discussions of noise impact (e.g., from the RecZone on page 5.8-24 and the ice rink on page 5.8-25) the DEIR mentions an "interim phase 1 sound wall" as a noise reduction feature. However, as mitigation, the DEIR provides no additional information on the construction of this sound wall or the expected noise reduction effect. Since the sound wall is needed to reduce noise to an insignificant level, the DEIR should include effective requirements for the construction of the wall so that it provides the intended benefit. This should include the extent/length, location, height, materials, and other detailed requirements. Without these requirements, the public has insufficient information to review the purported benefit of the sound wall, and therefore, the mitigation documentation is inadequate. **6-84**

Noise from Music during Special Events is Not Adequately Addressed

Music from live or amplified sources is a common issue in community developments and special event facilities and should be carefully addressed. We have the following comments:

- The DEIR states that amplified music is typically 88 dBA at 20 feet. In our professional opinion, this underestimates the expected noise levels for certain events (e.g., weddings, live music, and similar gatherings). For example, in Exhibit 5.8.1, the DEIR indicates that a "rock music band" is approximately 110 dBA. Therefore, the DEIR analysis conflicts with this reference exhibit. In our experience, music noise levels can easily reach 80 to 90 dBA at much greater distances than 20 feet. At a recent large outdoor music venue, we measured sound levels up to 98 dBA at the sound engineer mix position approximately 100 feet from the stage. Based on measurements at a smaller outdoor music event under a temporary "tent" structure, we found amplified music to be 93 dBA, on average, at a distance of 25 feet from the loudspeakers. Therefore, an appropriately conservative estimate of future music noise levels should be incorporated into a revised DEIR analysis. **6-85**
- The DEIR also proposes to limit amplified music noise to 82 dBA and 78 dBA at a distance of 20 feet from the sources. However, there is no evaluation of whether these limits are feasible. In our experience, we have not found a venue for live music to practically implement a noise limit that is so low. In addition, an electronic noise limiter for amplified sound would not limit unamplified musical sources. Noise from unamplified musical instruments should be analyzed and addressed. If an electronic limit on music is not feasible, an alternative means of controlling music noise should be developed. **6-86**
- A common problem with music noise limits is the potential for 3rd parties to bring their own sound system, particularly if the facility will be rented. This potential scenario was not addressed in the DEIR. **6-87**
- One particular aspect of music noise that is a common source of complaints is low-frequency noise (e.g., from drums or bass guitars or similar instruments). An appropriate analysis of music noise impact should compare expected dBC noise levels to existing ambient dBC levels. These noise levels are measured using a "C" weighting as opposed to an "A" weighting and places a greater emphasis on low-frequency noise. In our experience, this is an appropriate means of assessing noise impact from low-frequency noise sources such as music. **6-88**

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HVAC System Noise Analysis and Proposed Mitigation is Not Adequate

The noise analysis and mitigation proposed to address operational noise from the community building HVAC systems do not provide enough detail for public review. On Page 5.8-23, the DEIR states that "HVAC systems…typically result in noise levels that average between 40 and 50 dBA L_{eq} at 50 feet from the equipment." There is no indication of the source of this information to substantiate the claim. In our experience, air-conditioning systems can easily exceed the quoted noise levels. A credible source of preliminary HVAC equipment information should be provided for the public review of the EIR. And valid analysis of expected equipment noise should be performed. **6-89**

The DEIR analysis of ice-rink chiller noise was based on measurements of an existing ice-rink chiller in town. Based on the photo, this may have been a multi-stage chiller. However, the noise measurement information provides no indication of the operating mode of the chiller and no explanation regarding whether this is a reasonable analysis of the worst-case expected condition. This calls into question the validity of the related noise impact analysis of the future chiller. The DEIR also provides no other explanation on whether the future chiller would generate similar noise levels. A larger or otherwise different chiller could generate higher noise levels. **6-90**

The Project mitigation should require a noise analysis during the design phase of the project (when detailed equipment information becomes available) and the preparation of a HVAC design and noise reduction report. This study must include a detailed noise analysis of the proposed equipment and identify the specific noise reduction measures that are to be incorporated into the project and thus demonstrate that appropriate performance criteria would be met. **6-91**

* * *

This concludes our comments on the Mammoth Creek Park West Community Facility DEIR noise study. Should you have any questions, please call.

Sincerely,

CHARLES M. SALTER ASSOCIATES

Jeremy L. Decker, PE
Vice President

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RESUME

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President



Mr. Salter has practiced acoustical engineering for over 40 years. With educational backgrounds in architecture, planning, engineering, and business, Mr. Salter has conducted a wide range of consulting in the areas of architectural acoustics, noise control engineering, and environmental noise impact. He has had project responsibility for various facility types including schools, recreation centers, offices, theaters, residences, hospitals, and civic buildings.

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Boston College MBA
Finance, 1972

Massachusetts Institute of Technology, BS Art and Design, major in Architecture, minor in City Planning, 1969

Tufts University BSCE major in Structural Engineering, minor in Economics, 1965

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Institute of Noise Control Engineering, Board Certified (1975)

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US Green Building Council, Former Technical Advisory Committee Member

honors

- Fellow of the Society, Acoustical Society of America, 2006

  Received "for contributions to the teaching of architectural acoustics and to its practical applications."

- Allied Professions Honor Award, American Institute of Architects, California Council, 1998

  Received "in recognition of unique dedication and focused drive to enhance, support and significantly contribute to the advancement of architectural practice. The extensive knowledge displayed as an acoustical consultant, author and educator creates an invaluable balance that bridges the language among various disciplines. The three decades as an innovator, practitioner and mentor, has been instrumental in increasing awareness of crucial acoustical considerations in architectural design. The level of personal commitment coupled with industrious contributions, merit the highest admiration from the profession of architecture."

teaching experience

- Continuing Lecturer, UC Berkeley College of Environmental Design, 1973-Present

publications

- Salter, Charles, " Community Noise, Urbanization, and Global Health: Problems and Solutions" in *Innovating for Healthy Urbanization*, ed. Roy Ahn, Thomas F. Burke, and Anita M. McGahan, (Springer New York, 2015) Chapter 8, p.165
- Coauthor, *ACOUSTICS: Architecture, Engineering, the Environment* (William Stout Publisher, 1998)

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- Caldecott Tunnel Fourth Bore Environmental Noise Study, Berkeley, Oakland, and Orinda, CA
- Silicon Valley VTA Extension Noise Study, San Jose, CA
- Kaneohe/Kailua Sewer Tunnel Noise Study, Kailua, HI
- FedEx Distribution Facility Noise Impact Studies, CA, AZ, and TN
- Bayfront Levee Construction Noise Study, San Mateo, CA
- Decker Island Mine Noise Study, Solano County, CA
- Kaiser Construction Noise and Vibration Study, Oakland, CA
- Alta Bates Construction Noise and Vibration Study, Oakland, CA
- Stanford Hoover Pavilion Construction Noise Study, Stanford, CA
- Devil's Slide Tunnel Noise/Vibration Study, San Mateo County, CA
- Lawrence Berkeley National Lab CRT Noise Study, Berkeley, CA
- Gateway Valley Noise Study, Orinda, CA
- Lantana Expo Noise/Vibration Study, Santa Monica, CA
- West Dublin BART Transit Village Noise Study, Dublin, CA
- Saratoga Noise Element Update and EIR, Saratoga, CA
- Fresno General Plan Update, Fresno, CA
- American Canyon Circulation Element EIR, American Canyon, CA
- Daly City General Plan Update and EIR, Daly City, CA
- Saranap Village EIR Noise Study, Walnut Creek, CA
- Tamal Vista Mixed-Use EIR Noise Study, Corte Madera, CA
- Center Place South EIR Noise Study, Walnut Creek, CA
- UC Berkeley Lower Sproul Redevelopment Study, Berkeley, CA
- Bay Meadows Noise/Vibration Study, San Mateo, CA

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Technical Memorandum

Review of Draft Environmental Impact Report
Mammoth Creek Park West New Community Multi-Use Facilities

February 10, 2017

Prepared for:

Shute, Mihaly & Weinberger LLP
396 Hayes Street
San Francisco, CA 94102-4421

Summary and Conclusions

The proposed project would include new community multi-use facilities at a partially-developed site on the southeast portion of Mammoth Lakes, CA. Mammoth Creek runs from west to east just south of the project site. About 6.4 percent of the existing site is impervious, and the project would increase that to over 60 percent. The draft environmental impact report improperly treats three factors of the development as significant – providing water supplies, stormwater and drainage, and the effects on groundwater recharge and how that could affect groundwater levels and discharges near Mammoth Creek. 6-92

The DEIR does not account for the vast uncertainty inherent in the Town's surface water supplies as it claims the increased usage would be less than 20% of the Town's surplus water. 6-93
The DEIR does not discuss the existing storm runoff or snowmelt flows in Mammoth Creek, or how the changes in runoff could affect the creek. The DEIR also does not describe baseflow at the site, so there is no way to assess whether changes in dry season flows due to the project will negatively affect flow in the creek. 6-94

The project affects runoff and decreases recharge due to the increase in impervious area which leads to an increase in runoff volume and faster transmission of runoff from upstream. The DEIR fails to consider how recharge from the site supports alluvial groundwater and baseflow in Mammoth Creek. The DEIR also fails to consider how development, including the retention basins, would change that recharge as well as discharge to Mammoth Creek. 6-95

Runoff from the site and upstream could affect downstream flows because the retention basins may slow the peak runoff from the site in ways that cause it to coincide with peak flow on the creek. The DEIR fails to consider how the retention basins will change the flow hydrograph for runoff from the basins and whether peak flows from the site would coincide more with high flows in Mammoth Creek and what those impacts could be. 6-95

Introduction

This technical memorandum reviews the draft environmental impact report (DEIR) for the proposed Mammoth Creek Park West New Community Multi-Use Facilities (Project). The review focuses on the project water supply and impacts the project would have to groundwater recharge in the basin and to storm runoff at and downstream of the Project site.

My experience includes a Ph.D. and M.S. in Hydrology/Hydrogeology from the University of Nevada, Reno, and a B.S. in Civil Engineering from the University of Colorado. I have approximately 23 years of experience consulting and researching hydrogeology, including groundwater modeling and contaminant transport. My curriculum vitae is attached after the reference section.

Proposed Project

The proposed project would include new community multi-use facilities at a partially-developed site on the southeast portion of Mammoth Lakes, CA (Figure 1). North and west of the site, there are commercially and residentially developed areas and south and east of the site there is open space including land owned by the US Forest Service (Figures 1 and 2). Mammoth Creek runs from west to east just south of the project site (Figure 1). Old Mammoth Road bounds the proposed project site on the east (Figure 1), from which there is an egress to the existing parking lot (Figure 2). The site is partially developed on about one-third of its eastern end which includes a 42-space parking lot (Figure 2). The undeveloped portion of the site apparently has shrubs with scattered trees (Figure 2 and DEIR Exhibit 5.2-1). 6-96

The proposed project would include the construction of new community multi-use facilities at the project site. These facilities would include an ice rink with a 30,000 ft^2 roof structure and a 13,000 ft^2 community centers, improvements to an existing playground, 107 new (in addition to the existing 42 space parking lot) parking spaces in a larger parking lot, shown on Figure 3.

The existing site has approximately 18,142 ft^2 of impervious area, or 6.4% of the project site (DEIR, p 5.9-4). Landscaping covers some of the currently developed area. DEIR Exhibit 5.2-1 shows the landscaping includes a grassy lot. The proposed project would have 101,695 ft^2 of new impervious area, including 48,244 ft^2 roof area and 35,977 ft^2 of asphalt (DEIR, p 5.9-23).



Figure 1: Snapshot of a portion of DEIR Exhibit 3-2 showing the project site.

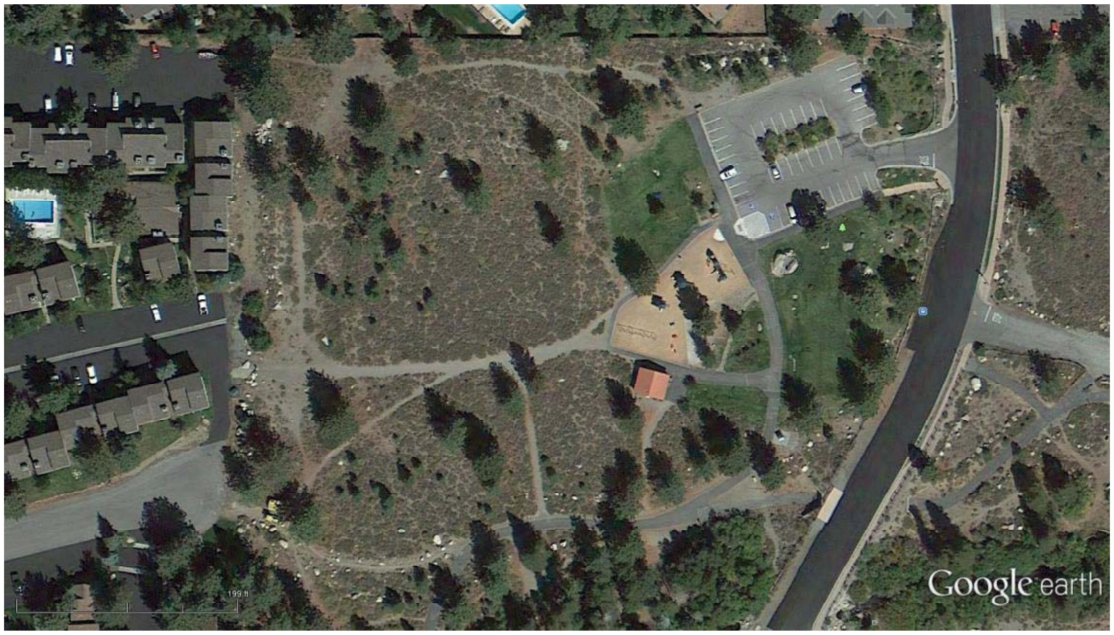

Figure 2: Close-up aerial view of the project site, from Google Earth. Notice the scale bar on the bottom left, showing a 200 foot length.

6-96

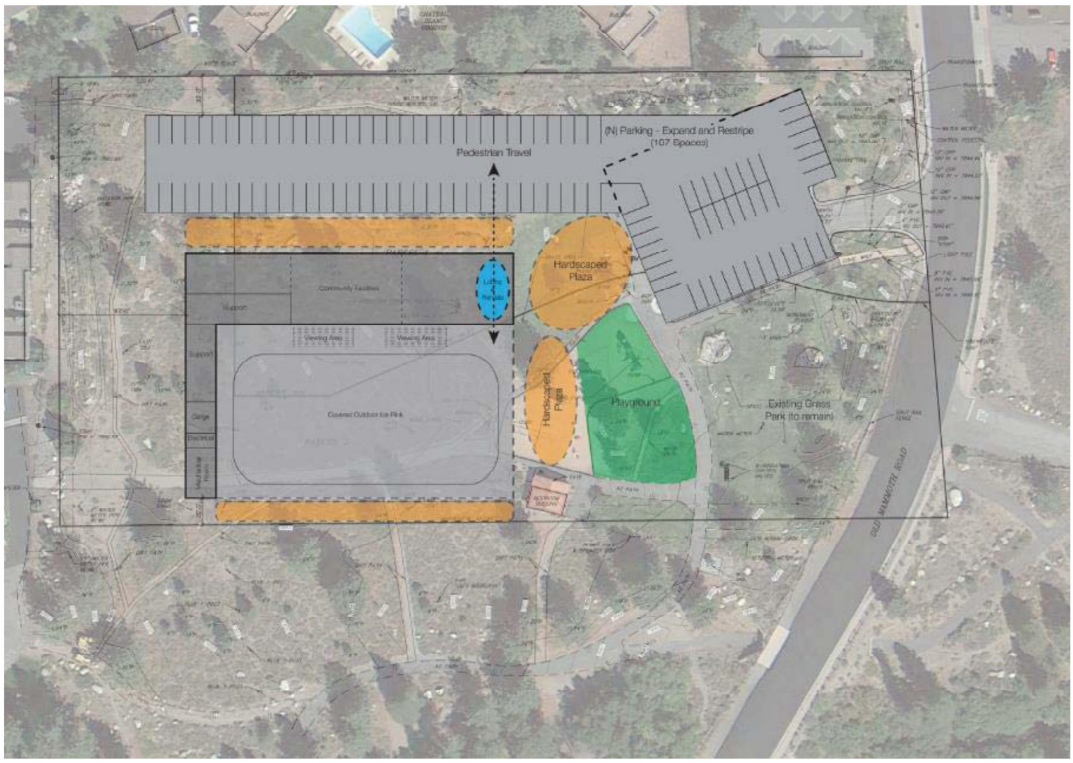

Figure 3: Snapshot of DEIR Exhibit 3-4 showing the conceptual site plan for the proposed project.

6-96

Water Supply

The DEIR treats the water demand as an insignificant impact and does not analyze the potential water supply impacts because the increased usage is a proportion of projected excess water supply (DEIR, p 8-14, -15). The project would cause a net increase in water used of 6200 gallons per day (gpd) (6.94 af/y). The DEIR relies on the Town of Mammoth Lake's (Town) Urban Water Management Plans (UWMP) but does not adequately account for the lack of water supply reliability discussed in those reports (the most recent UWMP is MCWD (2017)).

The DEIR describes water supplies based on 2005 and 2010 UWMP planning documents, but then uses the 2015 UWMP which has superseded the others (DEIR, p 8-14). Therefore, the supply and demand figures in MCWD (2017) are the most up-to-date and are the only ones discussed herein. The DEIR should not use data from older documents that have been updated in more recent documents.

The town has an "allocated 4,387 acre-feet per year" of water supply which is an agreed cap on use resulting from the settlement of litigation (DEIR, p 8-14), but the Town's water supply has never provided this much water (MCWD 2017). The cap includes surface water, groundwater, and recycled water usage (MCWD 2017, Table 7-1). The maximum surface water diversion is 2670 af/y, based on water rights, and there is no limit to the groundwater yield (Id.). However,

the Town has never used near this much surface water. This passage describes the extreme variability in the Town's surface water supplies:

> The District's license and permit allow up to a maximum annual surface water diversion of 2,760 acre-feet. However, actual diversions are typically significant lower due to the combined influence of natural variability in snowpack runoff quantity and timing, limited storage to manage the variable runoff, mismatch between the seasonal trends in supply availability and community water demands, and compliance with the monthly minimum Mammoth Creek fisher bypass-flow requirements. For example, between 2011 and 2015, of which the last four years were below average runoff years, the District diverted an average of **914 acre-feet per year**, even though total service area demands were substantially higher, with the difference made up by groundwater supply. In 2011, the snowpack water content was 153% of average and MCWD used 1,850 acre-feet of surface water. In 2015, a 4% of average year, MCWD used 47 acre-feet of surface water. Between 2005 and 2010, their average annual surface water supply was 1,444 acre-feet. MCWD 2017, p ES-7, -8, emphasis added

The Town's projected water supplies for 2020, 2025, 2030, and 2035 include 1181, 1314, 1507 and 1742 af/y of surface water (MCWD 2017, Table ES-6), which is more than the average 914 af/y used between 2011 and 2015. It shows the Town may be relying on more surface water than can be reliably depended on based on historic diversions as just discussed. **6-96**

The difference between supply and total demand for an average for 2020, 2025, 2030, and 2035 is 35, 45, 36, and 43 af/y (MCWD 2017, Table ES-7), or just a couple percent of the projected supplies. The difference for a single dry year occurring in either of those future years is projected to be 468, 547, 665, and 742 af/y, respectively, because MCWD expects demand to decrease during drought years (MCWD 2017, Table ES-8). This is in contrast to common practice because demand usually increases during drought years because of increased landscape irrigation demands. Also, it varies substantially from the analysis of a multiple year dry period (MCWD 2017, Table ES-9), which assumes supply and demand during the first year are the same as for a normal year and for the second and third year are the same as just reported for a single-year drought. This analysis makes no sense, especially since a single year drought would have the same usage as the first year of the multiple year drought.

The DEIR notes that the Town anticipates a surplus of 35 and 43 af/y in 2020 and 2035, respectively, or 19.8 and 16.1% of the surplus water supply anticipated during those years. Considering the 2020 and 2035 demand "is anticipated to be" 2264 and 3719 af/y, respectively, the projected surplus is a very small amount of the demand. A very small decrease in the water supply due to a drought decreasing surface water and an inability to increase groundwater pumping would cause the Town to experience water supply shortages which this Project would contribute to.

Deficiencies in the DEIR

The DEIR has failed to adequately consider the water supply and the ability of the Town of Mammoth Lakes to meet that demand, and whether meeting it would cause shortages. The DEIR does not account for the vast uncertainty inherent in the Town's surface water supplies as it claims the increased usage would be less than 20% of the Town's surplus water. The surplus water estimates do not account for diminished surface water supplies described in the passage above. 6-96

Existing Hydrogeology

The slope of much of the site would be south and southeast to Mammoth Creek if a bicycle path did not divert the runoff east to Old Mammoth Hwy which channels under the highway at the bike path and eventually to Mammoth Creek (Figure 4). West of the bike path, the ground topography shows a small topographic divide that would separate Area A (the project site) from ground that drains toward Mammoth Creek (Figure 4). Figure 4 shows estimated storm runoff peak flow rates for Area A, the area that would be developed, and Areas B1 and B2 which drain onto or through the proposed project site. Areas B1 and B2 are residential areas from which the runoff "sheet flows across the property from west to east" (DEIR p 5.9-2). A wooded riparian area lines both sides of Mammoth Creek, as is apparent on Figure 1.

Mammoth Creek is the primary watercourse in the Mammoth Hydrologic Basin (DEIR, p 5.9-1). Mammoth Creek is on the 303d list of impaired water bodies for manganese, mercury, and total dissolved solids (TDS) (DEIR, p 5.9-10). This means existing conditions in the watershed diminish the water quality of the stream so that water quality standards are exceeded. 6-97

Deficiencies in the DEIR

The DEIR does not discuss the existing storm runoff or snowmelt flows in Mammoth Creek, therefore it is not possible to estimate how the existing storm runoff (Figure 4) affects the creek.

The DEIR also does not describe baseflow at the site, so there is no way to assess whether changes in dry season flows due to the project will negatively affect flow in the creek. The changes to impervious area at the site, as described below, would change the groundwater discharge to the site.

The DEIR does not describe the existing discharge of runoff from the project site, other than to claim it "occurs at the eastern portion of the project site". As noted above, the aerial

photography looks like Old Mammoth Highway would channel the drainage through a bike overpass and then to Mammoth Creek.

6-97

The DEIR has failed to consider two major aspects of hydrogeology that are required by CEQA regulations.

- The first is that the increase in impervious area which leads to an increase in runoff volume and faster transmission of runoff from upstream will directly affect groundwater recharge. The Town should complete a water balance analysis of the aquifer beneath the site to assess prospective changes to the water levels and discharges to the creek.

6-98

- The second is that site development will affect drainage patterns across the site and may affect flow and water quality in Mammoth Creek.

6-99

The following sections describe these impacts in more detail and provide more specifics on how the DEIR is deficient.

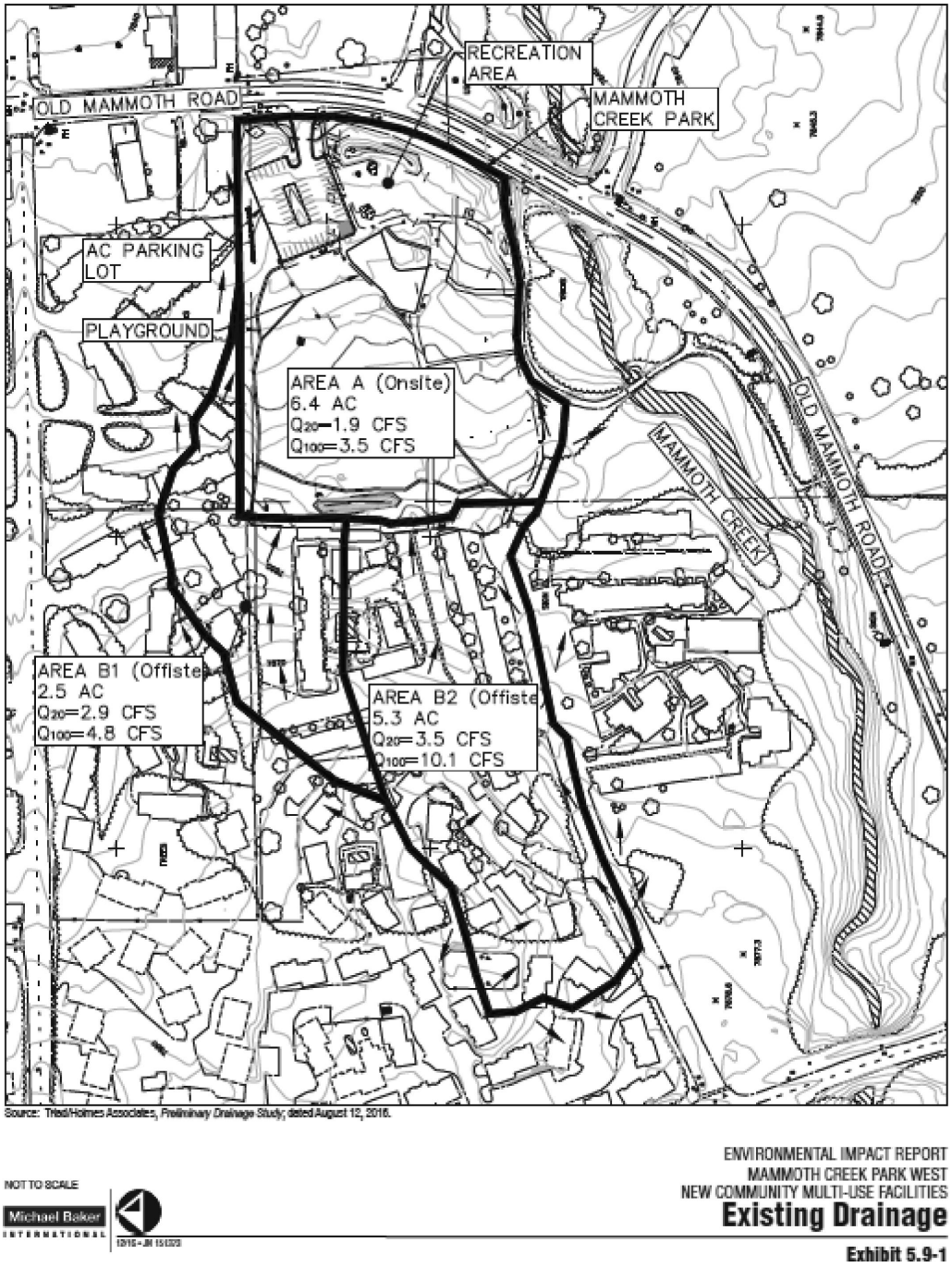

Figure 4: DEIR Exhibit 5.9-1 showing existing drainage patterns and estimate storm flows. Note that North is to the left.

6-99

Reduced Groundwater Recharge

6-100

CEQA Guidelines indicate that a project may create a significant adverse impact if it would "[s]ubstantially deplete groundwater supplies or substantially interfere with groundwater

recharge such that there would be a net deficit in aquifer volume or a lowering of the groundwater table level" (DEIR, p 5.9-19). Without discussion, the DEIR refers the reader to "Section 8.0, Effects Found Not To Be (sic) Significant" (Id.). Section 8 claims the "proposed project would not result in any groundwater extraction or the depletion of groundwater supplies" (DEIR, p 8-8). There is no groundwater pumping on the site, so impacts to groundwater resources would be due to decreased recharge caused by increasing the impervious area by "approximately 62.5 percent, leaving the remaining 37.8 percent of the project site pervious" (Id.). The DEIR dismisses this impacts because "the proposed project would still allow infiltration at the project site" (Id.). Presumably, the DEIR mistakenly substitutes "infiltration" for recharge; the difference is the infiltration of flow into the soils at the site and recharge is movement of that moisture through the soil to the water table.

As noted above, only 6.4% of the site is currently impervious, and the development would increase that to 62.5 %. The 101,695 ft^2 (2.33 acres) of newly impervious area would cause runoff of precipitation that had previously become recharge to groundwater beneath the site. As noted above, the drainage from offsite currently enters the site as sheet flow which could also infiltrate the soil and eventually recharge groundwater. The proposed project would channelize the offsite flow into two swales that bypass the project (Figure 5), so much of the runoff would pass through the site without infiltrating. It would become runoff to the creek downstream of Old Mammoth Hwy.

6-100

The storm runoff plan, discussed in the next section, includes retention basins that may or may not also be infiltration basins (DEIR, Appendix 11-7). The DEIR does not describe potential infiltration in any way including a conceptual description of the infiltration or an estimate of the amounts. If in fact the basins do infiltrate some of the runoff, they would create large groundwater mounds under the basins. The DEIR does not describe depth to groundwater at the site, but because it is near Mammoth Creek the groundwater is probably shallow. Eliminating infiltration from the impervious portions of the site and causing it to occur at a basin would cause groundwater mounds to form under the basins. While the decreased recharge under the impervious areas would cause groundwater levels to fall, the mounds under the basins may cause the groundwater to move in directions that differ from its previous flowpaths. Mounds under the basins could intersect the bottom of the basins thereby causing flooding.

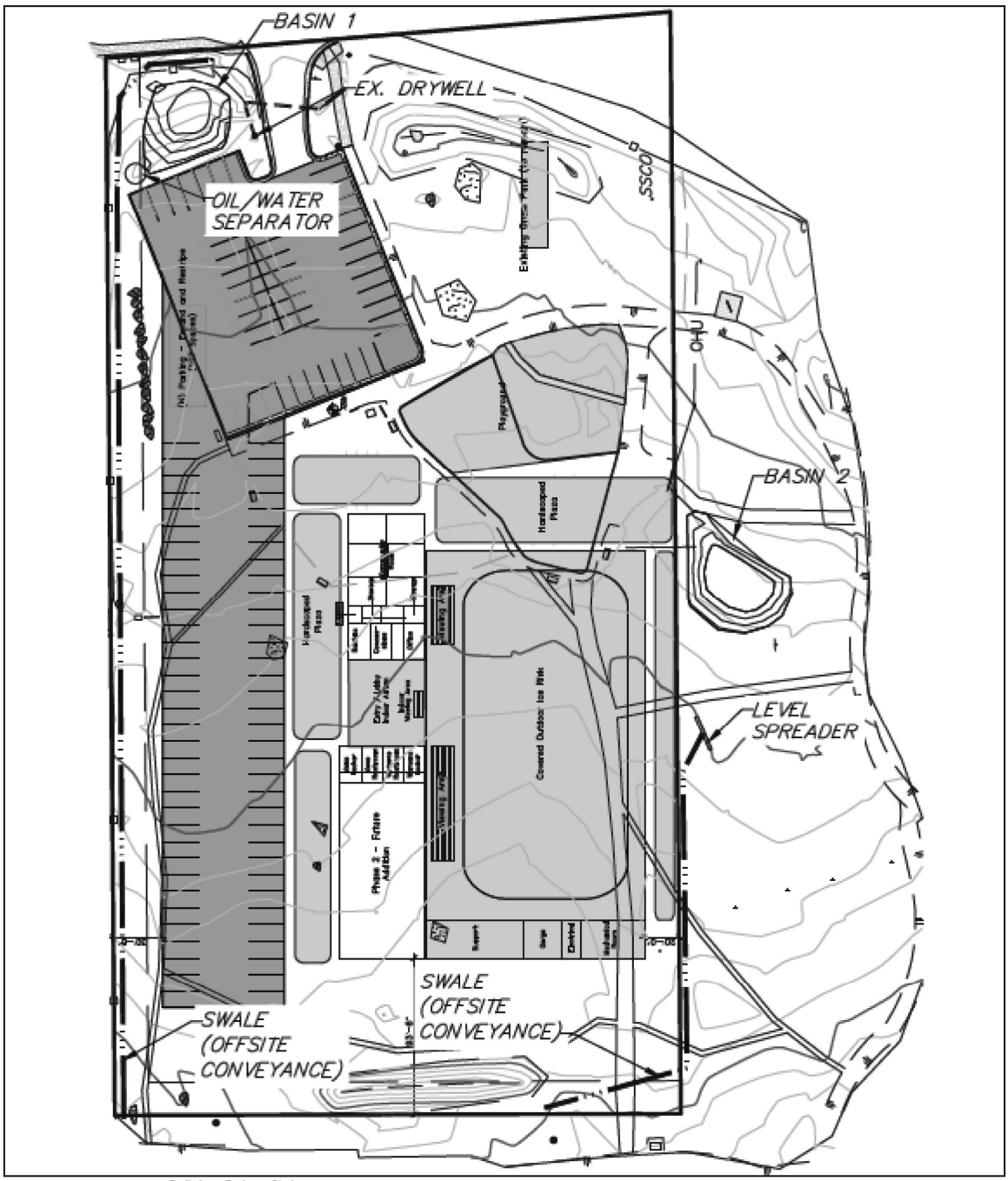

Figure 5: Snapshot of DEIR Exhibit 5.9-3 showing the conceptual drainage plans for the proposed project.

6-100

Deficiencies in the DEIR

The DEIR fails to analyze in any way the existing recharge at the site or how the project would affect that recharge.

The DEIR fails to consider how recharge from the site supports alluvial groundwater and baseflow in Mammoth Creek. The DEIR also fails to consider how development would change that recharge as well as discharge to Mammoth Creek. **6-100**

The project fails to consider the effects infiltration from retention basins may have on groundwater flow in the alluvial aquifer near Mammoth Creek. It also fails to consider whether mounds that could form under the basins would flood the basins and even cause extended periods of shallow groundwater and swampy conditions.

Stormwater Runoff and Impacts to Drainage Patterns

The proposed project would include two retention basins "designed to contain the 20-year intensity storm for one hour" (DEIR, p 5-9.23). There is also a proposed oil/water separator, for the runoff from the parking lots, which would discharge into retention Basin 1. Figure 5 shows the site map which illustrates these proposed project features.

The drainage study prepared for the project (DEIR, Appendix 11-7) describes the basins as retention/infiltration basins. The site has 6.2 acres (DEIR, p 5.9-1) and the two proposed retention basins would contain 7100 ft^3 of volume (3000 ft^3 in Basin 1 and 4100 ft^3 in Basin 2). When completely full, the basins would contain the equivalent of 0.32 inches of runoff from the entire 6.2-acre project site. At the predicted 20-year runoff rate or 4.5 cfs (DEIR, Table 5.9-2), the basins would be full in 28 minutes. During long-term periods of rainfall or snowmelt, these basins would be full before high peak flows in Mammoth Creek even begin. Even if there is some infiltration through the bottom, the basins would begin to overflow during significant events and contribute to downstream peak flows as described above. The previous section described the potential effects of infiltration from these basins. These retention basins would likely overflow and contribute flow downstream. **6-101**

The DEIR fails to analyze how the release of flow from retention basins, either due to overflowing or through controlled releases, could affect flow both downhill in the Town's drainage system and in Mammoth Creek (DEIR, p 5.9-27, 28). The DEIR relies on an assumption that because runoff rates would be limited to pre-development rates, there would be no effect on downstream receiving waters, such as Mammoth Creek. During pre-development conditions, runoff from a site resembles a hydrograph in which flow increases to a peak that then decreases to pre-runoff levels. After development, the peak flow increases due to a

decrease in pervious area at the site allowing infiltration. However, in addition to the peak flow, the overall runoff volume increases. A retention basin captures the runoff and slowly releases it a rate not to exceed the pre-development rates. Because there is much more runoff volume, the basin would release water at rates near the pre-development peak flow rate for much longer than occurs during the predevelopment conditions. Because the project site is so close to Mammoth Creek, in pre-development conditions the peak would discharge to Mammoth Creek before the peak in Mammoth Creek passes the site. Due to the longer period of high flows from the site caused by routing the runoff through retention basins, the increased runoff would be more likely to coincide with high flow in Mammoth Creek and therefore exacerbate flood conditions on that creek.

6-101

A portion of the project site lies within the FEMA 100-year flood zone. Because the project would mostly leave the area as it currently is, without constructing new facilities within it, and because the project proposes that its retention basins would prevent increased stormflow from the site, the DEIR claims the project would have less than significant impacts on flooding (DEIR, p 5.9-27). Because the retention basins make it much more likely that peak flows from the site would add to the flows in Mammoth Creek, as described in the previous paragraph, it is much more likely that the project site runoff would increase peak flows in Mammoth Creek. HWQ-3

6-102

The cumulative impacts analysis of the potential for the project, along with ultimate development of other nearby parcels, fails to consider how the cumulative runoff from this site along with other sites as they develop would increase downstream flows. The DEIR assumes that all future projects would similarly develop retention basins to limit the peak flow to historic rates (DEIR, p 5.9-27, 28). As described above for the proposed project site, all new sites would release runoff at rates near the pre-development peak for much longer than they did during pre-development conditions. These flows would combine to create a much higher flow rate downstream because there would be an increased likelihood compared to the present for peak flows to be combined. Because the project site is so close to Mammoth Creek, in pre-development conditions the peak would discharge to Mammoth Creek before the peak in Mammoth Creek passes the site. Due to the extension of time that peak flows are released from the proposed project site and all future sites to be developed, the increased runoff would be more likely to coincide with high flow in Mammoth Creek and therefor exacerbate flood conditions on that creek.

6-103

Mammoth Creek is on the 303d list of impaired water bodies, as noted above, due to existing conditions in the watershed. Changes in storm runoff routing through the project site could change the amount of TDS reaching the stream. Retention basins may allow some infiltration to the groundwater which would then reach Mammoth Creek as groundwater discharge. The groundwater flow pathway from the retention basins to the creek would be a new or longer

6-104

pathway. Groundwater flow could increase the leaching of TDS from the aquifer and from previously unsaturated soils. This additional TDS in groundwater would discharge to Mammoth Creek and potentially increase the TDS load in Mammoth Creek. 6-104

Deficiencies in the DEIR

The DEIR declares that runoff from the site and upstream would have insignificant impacts because of the proposed retention basins, without analyzing the flow through those basins. 6-105

The DEIR fails to consider how the basins will change the flow hydrograph for runoff from the basins. It fails to consider whether peak flows from the site would coincide more with high flows in Mammoth Creek and what those impacts could be. 6-106

The DEIR has failed to consider how stormflow routing and infiltration will change TDS loading in the stream and whether that loading would further impair Mammoth Creek.

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Curriculum Vitae

Objective: To provide diverse research and consulting services to nonprofit, government, legal and industry clients focusing on hydrogeology specializing in mine dewatering, contaminant transport, natural gas development, groundwater modeling, NEPA analysis, federal and state regulatory review, and fluvial morphology.

Education

Years	Degree	University
1992-96	Ph.D. Hydrology/Hydrogeology	University of Nevada, Reno Dissertation: Stochastic Structure of Rangeland Streams
1990-92		University of Arizona, Tucson AZ Classes in pursuit of Ph.D. in Hydrology.
1988-90	M.S. Hydrology/Hydrogeology	University of Nevada, Reno Thesis: Stream Morphology, Stability and Habitat in Northern Nevada
1981-83		University of Colorado, Denver, CO Graduate level water resources engineering classes.
1977-81	B.S., Civil Engineering	University of Colorado, Boulder, CO

Professional Experience

Years	Position	Duties
1993-Pr.	Hydrologic Consultant	Completion of hydrogeology studies and testimony focusing on mine dewatering, groundwater modeling, natural gas development, contaminant transport, NEPA review, and water rights for nonprofit groups and government agencies.
1999-2004	Great Basin Mine Watch, Exec Director	Responsible for reviewing and commenting on mining projects with a focus on groundwater and surface water resources, preparing appeals and litigation, organizational development and personnel management.
1992-1997	Univ of NV, Reno, Res. Assoc.	Research on riparian area and watershed management including stream morphology, aquatic habitat, cattle grazing and low-flow and flood hydrology.
1990-1992	U of AZ, Res. and Teach. Assistant	Research on rainfall/runoff processes and climate models. Taught lab sections for sophomore level "Principles of Hydrology". Received 1992 Outstanding Graduate Teaching Assistant Award in the College of Engineering
1988-1990	U of NV, Reno Res. Asst	Research on aquatic habitat, stream morphology and livestock management.
1983-1988	US Bureau of Reclamation Hydraulic Eng.	Performed hydrology planning studies on topics including floodplains, water supply, flood control, salt balance, irrigation efficiencies, sediment transport, rainfall-runoff modeling and groundwater balances.

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Myers, T., 1995. Decreased surface water flows due to alluvial pumping in the Walker River valley. Annual Meeting of the Nevada Water Resources Association, Reno, NV, March 14-15, 1995.

Special Coursework

Years	Course	Sponsor
2011	Hydraulic Fracturing of the Marcellus Shale	National Groundwater Association
2008	Fractured Rock Analysis	MidWest Geoscience
2005	Groundwater Sampling Field Course	Nielson Environmental Field School
2004	Environmental Forensics	National Groundwater Association
2004 and -5	Groundwater and Environmental Law	National Groundwater Association

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Curriculum Vitae

Objective: To provide diverse research and consulting services to nonprofit, government, legal and industry clients focusing on hydrogeology specializing in mine dewatering, contaminant transport, natural gas development, groundwater modeling, NEPA analysis, federal and state regulatory review, and fluvial morphology.

Education

Years	Degree	University
1992-96	Ph.D. Hydrology/Hydrogeology	University of Nevada, Reno Dissertation: Stochastic Structure of Rangeland Streams
1990-92		University of Arizona, Tucson AZ Classes in pursuit of Ph.D. in Hydrology.
1988-90	M.S. Hydrology/Hydrogeology	University of Nevada, Reno Thesis: Stream Morphology, Stability and Habitat in Northern Nevada
1981-83		University of Colorado, Denver, CO Graduate level water resources engineering classes.
1977-81	B.S., Civil Engineering	University of Colorado, Boulder, CO

Professional Experience

Years	Position	Duties
1993-Pr.	Hydrologic Consultant	Completion of hydrogeology studies and testimony focusing on mine dewatering, groundwater modeling, natural gas development, contaminant transport, NEPA review, and water rights for nonprofit groups and government agencies.
1999-2004	Great Basin Mine Watch, Exec Director	Responsible for reviewing and commenting on mining projects with a focus on groundwater and surface water resources, preparing appeals and litigation, organizational development and personnel management.
1992-1997	Univ of NV, Reno, Res. Assoc.	Research on riparian area and watershed management including stream morphology, aquatic habitat, cattle grazing and low-flow and flood hydrology.
1990-1992	U of AZ, Res. and Teach. Assistant	Research on rainfall/runoff processes and climate models. Taught lab sections for sophomore level "Principles of Hydrology". Received 1992 Outstanding Graduate Teaching Assistant Award in the College of Engineering
1988-1990	U of NV, Reno Res. Asst	Research on aquatic habitat, stream morphology and livestock management.
1983-1988	US Bureau of Reclamation Hydraulic Eng.	Performed hydrology planning studies on topics including floodplains, water supply, flood control, salt balance, irrigation efficiencies, sediment transport, rainfall-runoff modeling and groundwater balances.

Peer-Reviewed Publications

Myers, T., 2016. A modeling approach to siting mine facilities in northern Minnesota USA. *J Hydrology* 533: 277-290. Doi: 10.1016/j.jhydrol.2015.12.020

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Myers, T.J. and S. Swanson, 1997. Stochastic modeling of pool-to-pool structure in small Nevada rangeland streams. *Water Resources Research* 33(4):877-889.

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Myers, T., 2014. Expert Report/Deposition: In the Matter of California Department of Parks and Recreation v. Newmont Mining Corporation, et al. Prepared for the California Department of Justice, February 2014

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Myers, T. 2016. International Technology Exchange, Mongolia. Working with Mongolian and Russian NGOs regarding Mining and Energy Development.

Myers, T. 2016. Technical Memorandum: Completeness Review of the Mine Operating Permit Application, Black Butte Copper Project, Meagher County MT. Prepared for Montana Chapter, Trout Unlimited.

Myers, T. 2016. Technical Memorandum. Response to the US Fish and Wildlife Service Hydrologic Reasoning in its Response to the Center for Biological Diversity's Notice of Intent to Sue to Reopen

Consultation on Various Memorandums of Agreement Regarding the Muddy River Springs. Prepared for the Center for Biological Diversity, September 10, 2016.

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Special Coursework

Years	Course	Sponsor
2011	Hydraulic Fracturing of the Marcellus Shale	National Groundwater Association
2008	Fractured Rock Analysis	MidWest Geoscience
2005	Groundwater Sampling Field Course	Nielson Environmental Field School
2004	Environmental Forensics	National Groundwater Association
2004 and -5	Groundwater and Environmental Law	National Groundwater Association

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The Effect Of Noise On Wildlife: A Literature Review

Author: Autumn Lyn Radle

Abstract: Noise pollution, as it effects humans, has been a recognized problem for decades, but the effect of noise on wildlife has only recently been considered a potential threat to animal health and long-term survival. Research into the effects of noise on wildlife, which has been growing rapidly since the 1970s, often presents conflicting results because of the variety of factors and variables that can effect and/or interfere with the determination of the actual effects that human-produced noise is having on any given creature. Both land and marine wildlife have been studied, especially in regards to noise in the National Parks System and the onslaught of human- made cacophony in the oceans from military, commercial and scientific endeavors.

Most researchers agree that noise can effect an animal's physiology and behavior, and if it becomes a chronic stress, noise can be injurious to an animal's energy budget, reproductive success and long-term survival. Armed with this understanding it should follow that humans would attempt to minimize the threat to wildlife by reducing the amount of noise that they are exposed to in natural areas; but this has not been the situation. Natural areas continue to be degraded by human-made noise, wildlife continues to suffer from these disturbances, and to date the majority of the debate revolves around the egocentric demands of people to either produce more noise in nature (through motorized recreation, scientific research, military exercises etc.) or experience natural areas in the absence of anthropogenic noise. Neither side has adequately addressed the issue from the biocentric view of wildlife and the known, or as yet undiscovered, damage that our increasingly noisy human-altered environment is inflicting upon them.

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INTRODUCTION

People are becoming increasingly aware of and disturbed by the cacophony of sounds in the environment. More often than not these sounds are loud, intrusive and unwelcome side-effects of our fast-paced, progress-motivated society. While tolerating noise in our urban and even suburban environment may seem like a necessary compromise for the services, improved construction and transportation we receive in return, noise in the natural

environment is much less palatable. As more and more people seek temporary escape from the confines and clamor of the built environment and seek solace in our National Parks and other land and water wilderness areas, they are noticing the absence of quiet, let alone natural silence that once predominated a wilderness experience.

As avid environmentalists and weekend naturalists alike rally a defense against the noise-makers in industrial tourism, the military, commercial airlines, and scientific research, a nagging question lurks in back of some minds: What about the animals in these noise-riddled environments? In many areas wildlife are being subjected to noise at a greater frequency and intensity than perhaps ever before in their evolutionary history. While noise has been considered a pollutant in the human environment for decades, noise in the natural environment has not been framed as such until quite recently.

Although we recognize that noise can affect humans psychologically and be physically injurious, little attention has been paid to the potential effects that noise may have on individual animals and populations within an area. This ignorance of the potential harm that could be caused by our own actions and the inertia with which research and concern about the issue has grown is symptomatic of the anthropocentric way in which we value and view the world. Wanting to reduce the human-produced din in natural areas for the sake of our solitude is not unjust, but failure to consider the effects on other life within those areas epitomizes the arrogance and egocentrism with which we typically approach and subsequently degrade the environment. We must ask ourselves, as the debate over man-made noise in natural areas becomes more heated, how much we value life beyond that which exists in the human form. Are we willing to protect wildlife from the onslaught of airplanes, helicopters, ships and scientific experiments that generate colossal noise at the expense of our traveling convenience, our military advancement, and scientific discovery? The verdict is yet undecided because to date we do not have conclusive evidence of the effects of noise on wildlife (which in and of itself may be indicative of our apathy and lack of inclination to discover the effects expediently).

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The following discussion will introduce the problem of noise in natural areas, review both historical and more recent research into the effects that noise may inflict on wildlife, and disclose the current challenges and policies that are facing the American people today in choosing between natural quiet and other desirables of civilization.

DETERMINING THE EFFECTS OF NOISE ON WILDLIFE

The study of acoustic ecology began in the late 1970s, but it has just recently been recognized as a useful means for determining the health of both marine and terrestrial habitats (Krause, 1993). In his article "Niche Hypothesis", Bernard Krause suggests that every creature has an "aural niche" or its own particular voice and specific place in a habitat based on the relative frequency, amplitude, timbre and duration of the sound it produces. Taken together, the vocalizations of all the creatures in a given habitat zone produce a unique vocal fingerprint which Krause believes can be used to infer the biological integrity of the area. With increasing destruction and loss of habitat, many creatures are forced into different areas with consequently different aural zones in which they lack an established niche. The inability of creatures to successfully communicate or otherwise employ their auditory senses is detrimental to the long-term survival of these displaced creatures and the overall biological intergrity of the environment. Krause thus argues that in natural areas "...the sounds of each of these zones are so unique and important to creature life in a given location..." that disturbance to this soundscape could be detrimental to the future of the individuals, populations or entire species (Krause, 1993).

Determining the effect of noise on wildlife is complicated however because responses vary between species and between individuals of a single population. These variable responses are due to the characteristics of the noise and its duration, the life history characteristics of the species, habitat type, season, activity at the time of exposure, sex and age of the individual, level of previous exposure, and whether other physical stresses such as drought are occurring around the time of exposure (Busnel, 1978).

In determining the effects of aircraft stimuli on wildlife Congress issued a report that collaborated the complexity of determining the effects on wildlife due to the various factors that influence an individual's response. Chapter Five of the Report on the Effects of Aircraft Overflights on the National Park System discusses the differences in perception of stimuli based on the physical environment and the psychological attributes of the animal at the time of its exposure. The report states that: "Some habitats enhance stimuli associated with aircraft overflights. The sound and visual stimuli associated with aircraft have different effects in an open desert than in a forest where trees can obscure the sight and may reduce the sound of aircraft." In addition the report surmised that "One relationship between aircraft and animals is clear: the closer the aircraft, the greater the probability that an animal will respond...Unfortunately, there is no particular overflight altitude at which all animals are or are not disturbed." Thus determining the effects of noise on wildlife is not an easy endeavor. The following section will examine the historical studies that often support the findings of Congress and that helped direct the most recent research and discoveries.

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RESEARCH INTO THE EFFECT OF NOISE ON TERRESTRIAL WILDLIFE DURING THE 1970s

The 1970s heralded an increase in scientific interest into the effects of noise on wildlife. In 1975 Dorrance et. al published an article that probed the issue of the effects of snowmobile noise on white tailed deer. Between 1973 and 1974 they studied the responses of a population of Odocoileus viginianus in Minnesota's St. Croix State Park that was exposed to up to 195 snowmobiles per day compared to the responses of a control population on Mille Laes Wildlife Management Area that had never been exposed to snowmobile noise. While the deer at St. Croix State Park seemed to have become habituated to the noise of the snowmobiles due to years of previous exposure, the deer at Mille Laes Wildlife Management Area appeared to increase their home range size and avoided the snowmobile trails as snowmobile activity increased. In Mille Laes "deer responded to very low intensities of intrusion by man and vehicles. Some deer were particularly sensitive to intrusion by man and vehicle and changed their home ranges to entirely different locations." The scientists acknowledged that this avoidance of snowmobiles and the extra movement that avoidance necessitates could change the Mille Laes deer's energy budgets such that they would be expending more energy than they were conserving. The resulting energy deficit would thus endanger the animals' health during the winter season.

Even though the St. Croix deer appear habituated to the stimuli of snowmobile's the researchers recommended that in both populations the snowmobilists should avoid areas of high deer concentration and avoid use of any one trail on consecutive days to minimize detected and possible undetected injurious effects.

Noise: The New Menace was published by Lucy Kavaler in 1975 and included various sections on the hazards of noise to wildlife. Kavaler reminded readers in the mid 1970s that the first determinants of the effect of noise on wildlife were conducted in laboratories rather than in the field. During these studies it was concluded that the most readily observable effect was harm to hearing and/or deafness due to damage to the sensory cells of the inner ear and

adjacent nerve endings and hair cells. Disorientation, nausea, and signs of alarm were also common responses. Kavaler also called attention to the study of the little cotton rat which "...however fragmentary, is one of the few that has been made anywhere to date that considers the possible effect of noise on the ecosystem of an area."

The study of the little cotton rat, Sigmodon hispidus , was conducted at Cape Kennedy Regional Airport in Melbourne, Florida and compared a population in a high noise corridor to a population a few hundred feet away. The density of the rats in the high noise corridor was 2.58 animals per acre while the population at a greater distance from the airport was as dense as 10.3 animals per acre. The study revealed that the little cotton rats closer to the airport were more timid and less social then their counterparts farther from the noise and researchers thus concluded that noise was the cause of "...general behavior differences between the two groups" (Kavaler, 1975).

Noise: The New Menace also reported on early research into the effects low flying supersonic aircraft on Dry Tortugas Sooty Terns. The population of Florida birds averaged 25,000-30,000 fledglings during their hatching seasons until 1969 during which a 99% failure rate in hatching occurred. In that same year low flying supersonic aircraft began repeated pass-overs of the nesting areas of the sooty terns. National Parks Service biologist Dr. W.B. Robertson Jr. blamed the sonic booms associated with these military flights because the noise presumably caused the mother birds to panic and fly from the nests. Sudden escape often ejected eggs from the nest or left the nest open to predation and neglect in the mothers' absence.

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In addition to population decimation of birds through fledgling failures, Kavaler also noted the possible disruption to animal communication that would result as human-made noise encroached on the natural environment. She noted that "the bat, relying totally on echo location, is unable to find food when interference is produced by natural or mechanical means." A similar threat would also exist for marine mammals and others who depend on echo location for finding prey, mates or determining their migration routes. As Kavaler astutely observed, and as scientists continue to lament today, "no adequate answers are available to questions to the possible harm of such booms, known to be startling to man and animals, to life above and below the surface of the ocean."

In 1976 Calef et. al published "The Reaction of Barren Ground Caribou to Aircraft" at the conclusion of their studies of fixed winged aircraft and helicopters in Alaska and northern Yukon. In determining the possible effects of noise on the caribou populations they considered the effects of aircraft altitude, the type of aircraft, season, terrain, and the activity and size of the caribou that were exposed to the aircraft. The two year study (1973-1974) focused on the Porcupine Herd of Rangifer tarandus, which included 736 groups of caribou and four different types of aircraft. Calef and his associates grouped the responses of the caribou to the aircraft into five categories: panic response, strong escape response, mild escape response, stationary response and no visible response. They observed that panic reactions (animals out of control, colliding, stumbling etc.) and strong escape responses (trotting, running for long distances) were common in a high percentage of all groups when the aircraft flew at or below 60 meters. Thirty to 65% of all groups continued to exhibit these responses for altitudes up to 150 meters. However, they also noted that "the activity of caribou at the time of observation influenced their response to the aircraft." For example, when the caribou were traveling, feeding, and at river crossings their reactions were greater than when they were resting. During spring and fall migrations, while on calving grounds, in pre-rut conditions and during cold weather in early winter, the caribou were more likely to exhibit panic and strong escape responses. Calef et al. noted that neither the size of the group, the terrain, nor the vegetation contributed any significant effect on the caribou's response to the noise. In differentiating between the fixed winged aircraft and the helicopters, the researchers noted

the extra abilities of helicopters to hover and more closely pursue animals. According to their article "...following is the most dangerous from of harassment, and is possible only with a helicopter."

At the conclusion of their study, they determined that in panic responses the caribou were most in danger of injury through collisions with each other and stumbling on obstacles, whereas sustained running in the strong escape responses would create a less immediate, but equally great danger. Running in cold weather not only promotes pulmonary disorders, but it also creates a large depletion of energy reserves which is particularly harmful during the stresses of long winters and insect harassment when conservation of energy is critical to the animals' survival. While this study provided seemingly conclusive evidence that noise can indeed have a detrimental impact on wildlife, or at least caribou in particular, other studies have not concurred.

In the study, "Eastern Wild Turkey Responses Induced by Sonic Booms," Lynch and Speake placed 164 Megahertz transmitters in the habitat of twenty wild turkeys and exposed them to real and simulated sonic booms. The turkeys would generally stand at attention, and often run for four to eight meters when exposed to the sonic booms, but within thirty seconds they would return to their previous activity. According to Lynch and Speake "the results of this study indicate that sonic booms do not initiate abnormal behavior in wild turkey that would result in decreased productivity. The reaction is usually slight and they seem to adapt readily to further booms." The disparities between this and the aforementioned study of caribou is indicative of the difficulty in assessing the problem of noise pollution. One species may be more or less affected than another, different noises have correspondingly different effects, and even individuals within the same species may have dissimilar responses depending on any number of physiological and location differences. Reconciling these difficulties is but one of the challenges for scientists and policy makers.

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Publication of the book The Effect of Noise on Wildlife alleviated some of this confusion by providing a thorough summary of the physiological and behavioral responses that wildlife generally experience when introduced to human-made noise (Busnel, 1978). Physiological responses to noise include an increased heart rate, and altering of metabolism and hormone balance. Behavioral reactions consist of head raising, body shifting, trotting short distances, flapping of wings (birds), and panic and escape behavior. According to the text, the coupling of these effects has the potential to cause bodily injury, energy loss, a decrease in food intake, habitat avoidance and abandonment, and reproductive losses. This text exemplifies how the historical research served to frame and direct subsequent research by providing various foci for later studies.

RESEARCH INTO THE EFFECTS OF NOISE ON TERRESTRIAL WILDLIFE DURING THE 1980's

Richard Knight exposed the problematic interaction between bald eagles and boating activity in 1984 with his study of wintering populations that are closely associated with open water used for motorized recreation. He noted that the rapid motion of boats allows them to impact large areas in short periods of time which increases the probability of negative repercussions on the eagles nesting along the shore lines. The boat noise disrupted feeding activity which reduced the eagles' energy intake, while avoidance flights simultaneously increased the energy expended by the eagles, thereby magnifying their energy deficit. With continued exposure to the motor noises the eagles had a decreased tendency to fly away, but Knight was unable to determine as to whether this was a result of habituation or a consequence of decreased food availability farther from shore. As with any other study on the effects of noise on wildlife, this study was complicated by the fact that it is impossible to isolate the noise

from other factors influencing the behavior and physiology of an animal.

The publication of "Elk Calf Responses to Simulated Mine Disturbances" added a new type of sound to the field of research into noise pollution in the natural environment (Hompland, 1985). This study assessed the calf movements, habitat selection patterns and survival of Cervus elaphus when exposed to sounds similar to those encountered in mining operations as compared to a control population. The researches found that calves exposed to the noise moved greater distances, used larger areas, and lacked selection for favorable physiographic parameters. Cow and calf pairs also readily abandoned their traditional calf rearing areas, but cows did not abandon calves in the noise-exposed population. Researchers worried that calves could imprint on the less favorable habitat and continue to use marginal areas even after the noise source was removed which would likely reduce their chances of long-term survival. In addition, the effects of exposure to mining disturbances "...are cumulative and could result in reduced calf survival or aborted fetuses in cows," thus endangering the survivorship of the entire population. In regards to mitigating the potential of long-term effects of mining noise on elk and other wildlife, the researchers intimated the need for federal and state involvement in the planning process of mining to prevent or minimize unnecessary exposure through fragmentation of critical elk habitat. Suggestions for eliminating or minimizing the impact of noise on wildlife, which was largely absent in earlier research, became more prevalent with the transition into the 1980s with the increasing awareness of the problem.

Krausman et. al presented a different view of the effect of noise on wildlife in their 1986 publication: "Desert Mule Deer Response to Aircraft." During May-September 1984 they studied twenty two Odocoileus heminonus crooki in the Picacho Mountains of South-central Arizona. Through the use of radio collars they hoped to determine whether these deer altered their habitat use in response to aircraft overflights between thirty and 300 meters in altitude. Krausman et al. determined that "whether a deer changed habitats as a result of overflights was independent of the average height of the aircraft." Ninety seven percent of the time "desert mule deer in South-central Arizona rarely responded to aerial overflights by changing habitat." They speculated that the deer had become habituated to noise because the Picacho Mountains border an interstate highway that serves Tucson and which is followed regularly by aircraft. Thus, we are again presented with a divergent view that refutes the concern for the injurious effects of noise on wildlife populations, but attests to the diversity of responses that researches continue to discover.

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In order to address this conundrum, the U.S. Fish and Wildlife Service in cooperation with Ecological Services, field offices, refuges, hatcheries, research centers conducted a survey in January of 1987 that focused on the perceived effects of aircraft noise and sonic booms on fish and wildlife. The survey asked directors and supervisors of the aforementioned locations about the impact on species, populations, and habitat utilization as a result of aircraft induced impacts. They were to document the reaction of animals to the aircraft on a scale from no known adverse effect, to animals abandoning the area, to death (such as at a hatchery in response to intense sonic booms). In summarizing the results of the survey, the Fish and Wildlife Service concluded that helicopters engender a greater flight/fright response, waterfowl are most frequently disturbed by aircraft - especially colonial nesting species and that, impacts to all wildlife range from minor behavioral responses to severe changes in the use of an area.

From the data collected and the suggestions of directors and supervisors, the Fish and Wildlife Service made several recommendations including the need for better relations with the FAA, airport operators, and military bases such that discussions of the effects of aircraft operations on fish and wildlife could be openly and productively pursued. The directors and

supervisors also suggested that a clearing house be created to disseminate information about the actual and potential affects of aircraft on wildlife which would be gathered as a result of continued research. This survey served as a much needed impetus for further research and expanded interest in the problem of human-produced noise in natural areas.

RESEARCH INTO THE EFFECT OF NOISE ON TERRESTRIAL WILDLIFE DURING THE 1990s

Harrington and Veitch published "Short Term Impacts of Low-level Jet Fighter Training on Caribou in Labrador" in December of 1991 at the conclusion of their 1986-1988 studies of ten Rangifer tanrandus. Satellite telemetry, video tape, visual observations, and radio collars were used to determine the effects of exposure to noise by indirect measurement of the caribou's daily movements and activity levels. They observed that the usual response of the caribou to the jet overflights was a startle reflex (an activation of the sympathetic nervous system) which induced bolting and running. This reaction was intensified when the jets made a direct overpass. Because it is a reflex action, it is unlikely that the caribou would habituate to the noise. Harrington and Veitch noted that the startle response, although short-lived, did pose a threat during calving season by increasing the likelihood of: cow and calf separations, injuries to newborn calves (if the mother were to bolt) and stillbirths. Such panic during a thaw might also cause the caribou to become mired in wet snow.

The researchers also hypothesized that the stress caused by overflights may cause mother cows to produce less milk and calves to have reduced thyroid function which would slow their growth and thus increase their probability of death through predation. While the startle reaction had the greatest impact on the caribou, Harrington and Veitch did not find a significant increase in overall activity level in animals that were deliberately overflown on a daily basis. "Neither the twenty-four hour activity index nor the daily distance traveled was consistently related to the degree of exposure to low level flying aircraft," which they attributed to the short-lived nature of the caribou's reactions. The study concluded with a recommendation by the authors that in order to minimize actual and as yet undiscovered impacts, flightpaths should be monitored so that excessive exposure of specific areas could be avoided - especially during calving.

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A study of the potential effects of helicopter noise on big horn sheep time budgets in the Grand Canyon by Berger et. al looked at if and/or how food intake might be impaired. They found that during the winter Ovis canadensis nelson were more sensitive to noise such that the sheep experienced a forty-three percent reduction in foraging efficiency. In the spring however, they found no significant effect in foraging efficiency. The disturbance threshold they calculated for big horn sheep in regards to helicopter altitude was 250-450 meters which lead them to hypothesize that the difference in disturbance between spring and winter was due to the migration to lower elevations in the spring which created a greater distance between them and the helicopter. Minimizing the effects to big horn sheep in the Grand Canyon would be achieved by limiting the helicopter flights to the spring and/or maintaining at least 450 meters between the helicopter and the animals. As with the previous studies, this study does not go so far as to propose the elimination of such flights, nor does it address the possible incompatibility of human-made noise in the natural environment. Later into the 1990s however, this recognition of dissonance between noise and nature became more apparent and publicized, but all too often the reports ignored the wildlife aspect and focused instead on the impact to our human wilderness experience.

A 1996 study "Effects of Simulated Jet Aircraft Noise on Heart Rate and Behavior of Desert Ungulates," questioned the management objectives of public lands and the congruity of allowing military airspace to be underlain by National Parks and other wildlife refuges given

the disturbances created by the noise of their engines. The purpose of the study was to determine the cardiac responses (immediate and long-term) of desert mule deer and bighorn sheep to simulated low level aircraft noise and to establish whether or not the animals become habituated to such exposure. The animals were implanted with heart rate monitors and studied over three twenty-eight day sessions during the summer, late summer and early spring during which overflight frequencies ranged from one per day to seven per day.

During the summer and late summer desert mule deer exhibited a significant increase in heart rate one minute before an aircraft passed overhead and during the overpass, but no significant increase was detected beyond two to three minutes after the overflight. During the spring their heart rates were significantly elevated before, during, and up to three minutes following the overflight. Big horn sheep had significantly elevated heart rates at the time of the overflights and for three minutes after the aircraft passed during the two summer seasons, but during the spring a significant increase in heart rate was only observed during the direct overpass. For both deer and sheep the intensity and frequency of alerted and alarmed responses to aircraft was greater in the summer than in other seasons. This finding was consistent with past studies as was the finding that aircraft that generated louder noise caused greater elevations in heart rate.

The researches concluded that "the animals in this study habituated rapidly and probably did not view this stimuli as a threat. The frequency and noise level were not detrimental to their well-being" nor did it inhibit their reproductive mechanisms. Direct, unexpected human harassment was deemed a greater threat to the animals' health than the noise produced by such things as aircraft and mining disturbances.

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A different study in the desert, that of the kangaroo rat and the sidewinder rattlesnake, painted a rather contrary picture of the effects of noise in that habitat. Richard Immel's article "Shhhh...those `peculiar people' are listening" observed that in the desert "...man-made noise is the enemy - and it's more serious than a mere distraction" (Immel, 1995). In determining the effects of dune-buggy noise on the desert kangaroo rat the article stated: "the roar of a dune-buggy engine can temporarily disable a reflexive defense of the desert kangaroo rat against one of its archenemies, the sidewinder rattlesnake. The rat normally can hear the snake at 30 inches, which gives it time to kick sand in the snake's eyes and escape. But the engine noise deafens the rat and virtually eliminates its defensive hearing. Until the rat's normal hearing returns, several days later, the snake often wins in an encounter" (Immel, 1995). The dissimilarity between this and the aforementioned study of desert ungulates again demonstrates the diversity of effects that noise can have among and between species and the ensuing difficulty the scientific community has in presenting definitive evidence for wildlife as a whole. Issues of management and protection become a morass when each species could potentially have different thresholds of disturbance.

In accordance with the side that purports the maleficent effect of noise on wildlife was a February 1997 report that announced a pending agreement between federal wildlife and aviation officials concerning bald eagles near Denver Airport. Fish and Wildlife representatives charged that planes taking off west or landing east on runway 7125 were in violation of the Endangered Species Act because the noise of the aircraft was effectively driving up to thirty bald eagles from their roosting site in a grove of cottonwoods on the east side of the Rocky Mountain Arsenal. In escaping the noise the birds were forced into less secure roosting areas including trees amongst lakes and industrial areas that had been heavily polluted during four decades of pesticides and chemical weapons production.

In order to comply with the Endangered Species Act and return the eagles to their cottonwood sanctuary, federal aviation officials agreed to re-route planes away from this

sensitive winter habitat. Although not what many people would consider a `natural area' the habitat is crucial to the long-term survival of that bald eagle population and thus necessitate a reprieve from the hazards of human-produced noise. It is interesting however, that this decision was made in favor of wildlife while in other, more `natural' areas, the issue of wildlife and their right to a quiet environment is dismissed in deference to the rights of humans to either create noise or seek solitude from it. Perhaps the enforcement of the Endangered Species Act is what saved the eagles and not some revelation in regards to the perilous effects of unnatural noise and our duty to protect other creatures.

NOISE IN THE NATIONAL PARKS

"The first government official to note what air traffic might do to the National Parks was Secretary of the Interior Harold Ickes in 1934. He stated that he did not see any sense in looking at parks flying by at one hundred miles an hour" (Lee, 1994). Since Ickes' statement over sixty years ago the problem has worsened significantly for humans and wildlife alike, but looking at the media publications one would think this was only a problem that affected humans. However, somewhat surprisingly, Congress has periodically addressed the issue of human-made noise in our National Parks from the perspective of its effects on wildlife. In the 1994 Report to Congress entitled "Report on the Effects of Aircraft Overflights on the National Park System," Chapter Five was dedicated to detailing the effects of overflights on wildlife. The report discussed physiological and behavioral responses to overflights, indirect effects, accidental injury, reproductive losses, energy losses, habitat avoidance and abandonment, impact on Endangered Species, problems with detecting long-term effects of aircraft disturbance, and development of impact criteria.

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In regards to the physiological responses of wildlife to aircraft overflights, the report stated that depending on the characteristics of the noise and the species, (its natural history, health at the time etc.) the reaction of a particular animal could range from mild annoyance to panic and escape behavior. Such responses are manifestations of stress, and while the effects of stress from overflights are not well documented, the report did warn that "...excessive stimulation of the nervous system can amount to chronic stress, and that continuous exposure to aircraft overflights can be harmful for the health, growth, and reproductive fitness of animals" (Fletcher, 1980, 1990). As with physiological responses, behavioral responses vary between species and within a species due to a variety of factors (such as age, sex, prior exposure etc.). While the report stated that "behavioral responses reflect a variety of states, from indifference to extreme panic," the aforementioned variability only allowed for anecdotal information on individuals which "...is not useful for drawing conclusions for that or any other species." The report only briefly discusses indirect losses, noting that it is difficult to assess such harm because "whether or not such indirect effects occur depends on other factors associated with the natural history of a species." Again, researchers were impeded in their attempts to secure decisive information due to the inherent variability of species and individual animals in their responses to noise.

In regards to accidental injury the report cited that "A common concern among biologists is that animals will occasionally fall, run into objects, or become trampled when they panic and run from aircraft." In addition they noted that young animals are more likely to be trampled in panic situations and that the topography of an area could increase the probability of injury, particularly if the population density is high. The reproductive losses discussed in the report included those caused by "...altered patterns of attendance to young," accidental breakage of eggs in a panic response, and malnourishment of young due to inhibited milk production. Energy losses, according to the document, resulted from a two pronged effect - energy expended in escape and panic responses, and a reduced energy intake due to missed feeding

opportunities. In reference to habitat avoidance and abandonment the report again noted that generalizations could not be made because different species and individuals within species have varying sensitivities, and thus have variable tendencies to leave a habitat. Of great concern however, is the possibility of habitat avoidance and abandonment by "...species whose high-quality habitat is already scarce" because this could jeopardize the future stability and success of the population. The overflight impacts on endangered species, at the time of the report were largely unknown. "Of all threatened and endangered species Federally listed in the United States, there is information regarding responses to overflights only for the grizzly bear, sonoran pronghorn, peregrine falcon, bald eagle, and everglades kite. None of these species have been studied enough to differentiate between aircraft activities that do and do not cause harm." The lack of knowledge is not limited to endangered species and is representative of the difficulty that scientists, the public, and policy makes have in drawing conclusions and making informed decisions about what should be done in regards to noise in the National Parks.

Adding to this predicament are the problems with detecting long-term effects of aircraft disturbance. According to the report "This is due both to the limitations of ecological research and to the nature of long-term responses." While speculation on the effects experienced by particular species was limited, the report did concede that "Long-term responses that might occur include permanent changes in habitat use, increased mortality of birds during migration (due to lower weight gains during staging), or population effects due to reduced reproductive success (due to egg loss, for example)." In spite of these dilemmas, the report did offer recommendations for developing impact criteria "...meant to help agencies in determining the severity of impacts." The report divided impacts into four categories: negligible, low, moderate, and high and proceeded to list examples of what each might include. While the report laid a decent foundation for addressing the issue of noise in our National Parks and the effect that the noise may be having on wildlife, much of the proceeding governmental discussions and media exposure, nevertheless remained focused on the impact to people.

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At the center of the controversy over noise in our National Parks is Grand Canyon National Park. Approximately thirty years ago an airport opened in Tusayon, Arizona, a small town near the south rim of the Grand Canyon (Udall, 1997). Shortly thereafter pilots began selling sightseeing flights to interested tourists and the historic quiet of the Grand Canyon was eliminated. According to flight records, over 80,000 flights occur over the Grand Canyon per year, with as many as 10,000 flights per month during the summer season (Lee, 1994). During busier days at Tusayon Airport there are as many as one hundred take-offs and landings per hour. The FAA has named the Grand Canyon "...the air tour capital of the USA, if not the world" (Udall, 1997). In response to the excessive noise in the Grand Canyon, Transportation Secretary Federico Pena declared: "if we can't enjoy peace and quiet in our National Parks, where can we?" (Lee, 1994). Secretary of the Interior Bruce Babbit`s remark "It's an outrage," likewise expressed displeasure at the current cacophony in our National Parks (Udall, 1997). Congress, despite the sentiments of these top officials, and the demands of environmentalists, has been slow to enact legislation. Their reluctance is partially a response to the issue's other side - that of the industrial tourism industry and those tourists who believe that they have a right to view the National Parks by aircraft (automobile, snowmobile, etc.).

Air tourism exerts a considerable influence in Congress because of the revenue it creates in the nation's economy. The thirty-one tour operators at the Grand Canyon in 1996 served over 800,000 customers, thus grossing approximately 117 million dollars (Udall, 1997). Clearly the operators and the other businesses that they indirectly support have a vested interest in maintaining or increasing the number of flights over the Grand Canyon and other National Parks. Jack Thompson, flight operations manager for the National Transportation Association

deflected criticism of the air tour industry by asserting that they "...provide valuable service for the 1000s of visitors who want to see the Grand Canyon," many of whom would not be able to explore it by other means (Lee, 1994). Absent from much of this discussion and similarly neglected in Congress' discussions is the impact of these overflights on wildlife. Without detracting from the importance of a quiet wilderness experience for people, it is essential that values and issues beyond those ascribed by and important to humans be considered.

Senator John McCain, who introduced the "National Overflights Act of 1997" to Congress alluded to the importance of wildlife in instructing people to heed the lessons from the Grand Canyon: "We cannot wait until natural quiet has been lost before we take steps to prevent the impairment of natural resources" (1997). Contrary to this sentiment however, Senator McCain's version of the National Parks Overflights Act of 1997 did not contain any mention of wildlife per se. While two of the goals of the Act were "to protect the resources of any national park experiencing an adverse impact associated with noise from aircraft overflights;" and "to prevent resource impairment from noise associated with overflights at any national park," concern specific to wildlife was disregarded. The restrictions placed on aircraft such as limitations on the number, altitude and areas of flights will aid in the restoration of quiet, but the benefits to wildlife will be incidental. For as long as the rights and health of wildlife is not preeminent in the minds of people, the issue of the effects of noise on wildlife will remain unaddressed, thus risking irrevocable impairment to individuals, populations, and species as a whole.

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RESEARCH INTO THE EFFECTS OF NOISE ON MARINE WILDLIFE

Land animals are not the only wildlife effected by human-produced noise; their brethren in the aquatic world are also subjected to noise, often at greater intensities. The recognition of noise as a pollutant in the hydrosphere was delayed longer than noise pollution in the atmosphere, perhaps because we are not as aware of or concerned about noise that we cannot readily hear. Noise, particularly in the oceans, is created by numerous sources including commercial and military ships, oil exploration, and military and scientific tests. The National Marine Fisheries Service, which enforces the Marine Mammal Protection Act of 1972 announced in 1994 that scientists, often in an effort to protect marine life through their research "...contribute to the harassment of these denizens of the deep" (Schulhof, 1994). In agreement with this declaration, the Acoustical Society of America announced in that same year that human-created noise was posing an ever greater threat to the health of marine mammals. To support their stance they cited the increasing tendency of whales to become caught in nets in New Foundland after blasting occurred in an effort to enlarge a channel for tanker travel. Entanglement in the nets suggested that the whales' ability to echolocate had been impaired. Dr. Darlene Ketten, a hearing specialist from Harvard University confirmed this suspicion after finding the ear bones of two whales killed in the blast shattered and the ear canals filled with blood and pus. The National Marine Fisheries Service, partly in response to Ketten's discovery, recommended that a 120 decibel cap be placed on underwater noise in order to minimize the injurious effect on whales and other aquatic life. Many researchers were outraged by this demand, asserting that dolphin calls have been recorded at levels of 130 decibels and that a decibel cap would undermine their ability to perform experiments. In addition they argued that enforceability would be veritably impossible, especially outside of United States waters. The cap was not enacted, but the debate over noise in the ocean and other waterways was far from over and to date remains unresolved.

The issue of noise in the ocean is not unlike the issue on land in that both solutions hinge on similar points - how much we value the rights of other animals to live a peaceful, healthy

existence (and what costs we are willing to incur to ensure this quiet), and how much effort we are willing to put forth in terms of research that will ideally unravel the diversity of varying effects that noise has on wildlife. The disagreements over and the uncertainty of what is currently known and the vast amount of undiscovered knowledge is a great impediment to our understanding and progress towards protection of wildlife.

Tom Norris' studies of "The Effects of Boat Noise on the Acoustic Behavior of Humpback Whales" exemplifies this obstacle of uncertainty. Dr. Norris studied the songs of Megaptera novaegliae as they were introduced to boat noise and discovered that "...boat noise level might affect humpback whale song structure at the most basic level by altering the rhythm or increasing the tempo of songs..." (Norris,1994). As Dr. Norris noted however, the significance of these effects, especially on the behavior of the whales, remains uncertain. Similarly, disagreements among scientists also engender a level of uncertainty. In the 1994 report "Low Frequency Sound and Marine Mammals," a committee appointed by the Ocean Studies Board of the National Academy of Sciences National Research Council scientists could not come to consensus (Holing, 1994). "While it acknowledged that the effects of loud, low frequency sound `could conceivably range between potential hearing damage and gradual deafness for the entire species - and eventual extinction - and practically no discernible impact' the report concluded that a dearth of scientific evidence makes it virtually impossible to predict what those effects will be" (Holing, 1994). While that particular committee made that conclusion, other scientists such as Sylvia Earle, former chief scientist at the National Oceanic and Atmospheric Association, are of a different opinion. Dr. Earle asserted that "each sound by itself is probably not a matter of much concern, but taken all together, it's creating a totally different environment than existed fifty years ago. The high level of noise is bound to have a hard, sweeping impact on life in the sea" (Holing, 1994). Disagreement among scientists and their inability to provide concrete proof on either side of the debate confuses the public and virtually paralyzes policy makers seeking to settle the issue. Taking this attitude however, is another manifestation of our anthropocentric view of the world, for if our view was biocentric we would intuitively understand that a cacophony of noise, even if not life threatening, cannot provide for a decent quality of life for any organism, land or marine. This knowledge would in turn serve as the basis for our decisions to mollify the situation and greatly reduce if not eliminate the impact of noise everywhere.

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The decision of course is not that easy, for we have structured our society around noise-producing progress, and in order to deal in reality we must acknowledge and accept a certain level of noise. Agreeing upon an acceptable level of noise, especially in regards to the ocean and the sound sensitive life that resides there is a daunting challenge. Richard Pattock, in the article, "Cacophony of human-made noise pounds oceans," echoes this sentiment by posing the question "...how much noise is too much?" Pattock discusses the intensity of noise in the oceans, noting that supertankers, "....the largest human-made source of ocean noise... are so loud they can be heard under water a full day before they appear on the horizon." While the levels of sound are easily measured, the problem again lies in determining the effects of this noise on marine life because "...so little is known about these creatures that scientists cannot say for sure how they are affected by the noise of humans, particularly the cumulative effect of low frequency sound." This dearth of knowledge was evident to Peter Schiefele, a researcher at the National Undersea Research Center at the University of Connecticut, as recently as May 1997. Scheifele, who is trying to determine whether noise levels in the St. Lawrence and Saugenay Rivers in Quebec are damaging the hearing and capacity of survival for beluga whales was forced to admit that the extent of damage continues to remain unclear. (Chang, 1997).

In March of 1997 a forty foot sperm whale became trapped in the inshore waters of Firth of Forth near Edinburgh, Scotland (Quinn, 1997). Scientists attributed this to traffic noise from

the rail and road bridges that traverse the waterway. Although they could not confirm their suspicions, the scientists believed that the clamorous noise made the sperm whale reluctant to return to open waters which eventually caused it to become stranded in the shallows between the bridges. This incident, like many others of its kind provides anecdotal rather than definitive evidence and as such is often dismissed by researchers, policy makers and those responsible for generating the noise. As researcher Ronald Larkin asserted, "Research is hampered by a preponderance of small, disconnected, anecdotal or correctional studies as opposed to coherent programs of controlled experiments" (1996). This absence of concrete answers begets the question of whether, as a society, we are willing to risk waiting for undisputed proof, cognizant that, as we wait, we may be allowing a multitude of marine organisms to be deafened or otherwise injured in regards to the quality and length of their lives. The American Oceans Campaign, which monitors governmental and industrial sound generation, believes that "what marine mammals in the Pacific Ocean experience now is akin to living next to a freeway with the windows closed" (Preston, 1997). While this may not seem intolerable to humans, the American Oceans Campaign reminds us that we do not know what it means to them and their greater sensitivity to sound, and as such our failure to enact preventative measures could be causing irreparable damage to the marine ecosystem.

ACOUSTIC THERMOMETRY OF OCEAN CLIMATE

At the center of the debate over how much noise is too much and what effects noise pollution is having on marine life is the controversial Acoustic Thermometry of Ocean Climate (ATOC) project lead by Scripps Institution of Oceanography. ATOC, a thirty five million dollar program, is designed to measure the oceans' temperatures in an effort to predict climate change (Brown, 1995). Using low frequency sound waves, "underwater microphones in the Pacific Ocean will measure average deep-water temperatures by clocking the travel time of sound from submerged emitters off California and Hawaii." ATOC concerns many marine scientists, environmentalists and animal welfare advocates "...because the 195 decibel noise - a low rumble to be broadcaster six times daily for as long as 10 years - could affect as many as 677,000 marine mammals in the ocean off Big Sur, south of San Francisco" (LA Times). Congruous with the lack of understanding of the potential affects of noise in general, and ATOC noise specifically, a National Resource Defense Council senior attorney admonished, "We simply cannot afford to play Russian roulette with our global oceanic system" (Preston, 1997).

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The opposition with which ATOC was met prompted public hearings which in turn persuaded Scripps Institution of Oceanography to use their Marine Mammal Research Program (MMRP) to study the effects of ATOC-like noise in the oceans. While Scripps Oceanographer David Hyde supported the public hearings, welcomed the suggested research and stated that "We're not out to harm a single animal and we will stop the project if there is any evidence of that," Christopher Clark, head of the ATOC marine mammal study was rankled by the controversy stating that "This is environmental activism gone completely astray" (Brown, 1995). Clark conducted the study none-the-less and published MMRP's report "Results From Over a Year of Acoustic Transmissions" on May 14, 1997. He and Adam S. Frankel concluded that "Presently there are no MMRP results indicating that any species shows any biologically significant adverse response to ATOC or ATOC-like sounds..." The finding of no ill effects to marine mammals allowed the ATOC program to commence, but the MMRP continues to monitor the acoustic transmissions and watches for adverse impacts on the aquatic ecosystem.

SUMMARY

R. Murray Schafer, composer and author of The Tuning of the World believes that "the general

acoustic environment of a society can be read as an indicator of social conditions which produce it and may tell us much about the trending and evolution of that society" (Giansante, 1979). Assuming Schaefer is correct, the issue of noise in our National Parks and other natural areas is very telling of the social conditions and trends of our society in regards to our encroachment on the last remaining wilds and degradation of natural quiet. In addition, our narcissistic focus on the right of humans to either generate noise or be free of human noise in nature, and consequent indifference to the effect that our noise is having on wildlife is likewise very poignant in revealing our values as a society. By allowing human-produced noise to destroy the historic quiet of natural areas we are valuing the consumptive desires of motorized tourists, exorbitant military practice flights, and research of questionable value over the inestimable worth of areas free of human cacophony. By remaining unconcerned or unaware of the potential harm that this unnecessary noise is having on wildlife we are valuing our anthropocentric wants over the very survival and future of other creatures. Nature recordist and Nature Sounds Society member Bernard Krause "...says there is now almost no place on Earth - including the North Pole, Antarctica and the dense forests of Indonesia and the Amazon - that is free of aircraft overflights, the buzz of chain saws and other human clatter. Krause remembers when it took 20 hours to get 15 minutes of usable recorded material. `Now it takes 200 hours,' he says" (Immel, 1995). If we remain on this course of introducing our sounds to every inch of the Earth, there will not be any escape from our clamorous, progress-oriented world and worse still there may be less wildlife, for many species may not be able to adapt to the changes in their once peaceful habitats. Ultimately the choice rests in our hands, but to choose quiet and protect the welfare of other animals in addition to ourselves, we must summon the courage to challenge those who would deny the rights of wildlife and leave neither us nor them respite from the human-altered world.

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species, early eye evolution has the potential to rapidly go from blur to clarity.

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DOI: 10.1016/j.cub.2008.10.025

Sensory Ecology: Noise Annoys Foraging Bats

Traffic noise reduces foraging time and effort in greater mouse-eared bats, presumably by masking rustling sounds made by moving arthropods. Anthropogenic noise is becoming a major concern in conservation biology.

Gareth Jones

We are acutely aware of the difficulties involved in holding conversations next to busy roads. The sound of passing traffic makes communication problematic. Such problems are not restricted to humans — there is increasing evidence that hearing is affected by traffic noise in a wide range of animals. Noise not only affects individuals receiving signals: the signalling animals may alter signal design to cope with masking, so that the signal stands out against background noise [1]. This can be achieved in several ways. For example, nightingales occupying territories exposed to traffic noise sing louder on weekdays (when traffic noise is louder) than on weekends [2]. Common marmosets increase signal duration in noise, because longer sounds are easier to hear [3]. Great tits produce shorter songs, sing more rapidly, and use higher frequencies in urban environments than in forests [4] to enhance signal transmission in noisy environments.

These examples show how noise pollution can influence acoustic communication. A new study by Schaub *et al.* [5] shows how traffic noise can influence foraging behaviour in animals that find their food by listening for the sounds that their prey produce. The authors worked on the greater mouse-eared bat, *Myotis myotis*, a species that often gleans beetles, mole-crickets, spiders and centipedes from the ground (Figure 1). The sensory basis of prey detection in greater mouse-eared bats is well understood [6,7]. The bats use echolocation to find aerial prey, but echolocation is ineffective when prey are amongst vegetation, because echoes from the vegetation overlap with echoes from the prey, making detection difficult. In vegetated habitats, the bats find their food by reducing the volume of their echolocation calls and instead listening for the rustling sounds made by movements of their prey. Arthropods that make louder rustling sounds are more likely to end up eaten by greater mouse-eared bats [8].

Because the bats find prey on the ground by listening for prey-generated sounds, potentially the cues emitted by the prey might be masked by the sound of traffic, and prey detection in noisy habitats might be compromised severely. The movement of ground beetles in vegetation produces a series of broadband clicks, with peak amplitude around 12 kHz [9]. Traffic noise contains considerable energy at this frequency [5], so masking is highly likely.

To test the hypothesis that the foraging behaviour of greater mouse-eared bats is altered under traffic noise, Schaub *et al.* [5] conducted an elegant experiment under carefully controlled laboratory conditions. Bats were flown in a flight room containing two foraging compartments separated from each other by walls covered in sound-absorbing foam. Each compartment contained six landing platforms, two of which contained prey (live mealworms that produce similar rusting sounds to ground beetles). Each compartment also contained a speaker, and the bats were observed in the dark by using a video recorder and infrared illumination.

Four treatments were used in the experiments. The control was a playback of an empty sound file, and this served as a baseline for

measuring foraging activity in the absence of noise. Noise treatments were either continuous broadband noise, traffic noise played at levels equivalent to those experienced 10–15 m from a highway, or noise that mimicked the wind-induced movements of reeds along a river close to foraging areas used by greater mouse-eared bats. The noise treatments had a clear effect on how much time the bats spent searching for prey in the stimulus compartment: when traffic noise was broadcast, the bats spent 10% less time in the stimulus compartment compared with the silent control, and their prey capture rate also decreased by about 10%.

Even stronger effects were noted with playbacks of reed movement and broadband noise, even though the reed bed noise was 12 dB lower in amplitude than the traffic noise. The reed bed noise contained broadband clicks similar to those produced by arthropods moving in vegetation, and could be particularly effective at masking the sounds made by moving arthropods. Although acoustic masking seems to be the most likely explanation for reduced foraging activity and prey capture rates under noise, another factor may be the difficulties involved in processing multiple streams of auditory information simultaneously [10].

Anthropogenic noise has major consequences for hearing and signalling in animals. In future, it will be interesting to determine whether noise affects other taxa that rely on listening for prey-generated sounds, such as owls, in similar ways. It will be valuable to observe the foraging behaviour of bats that experience road traffic noise in nature, for example to determine if capture success deteriorates with distance from the road, and to determine if bats avoid road margins. Of course, roads also affect the behaviour of animals in other ways. Bats are sometimes killed by collisions with traffic [11]. Interestingly, street lights with mercury-vapour lamps attract aerial insects, and increase the densities of some aerial-feeding bat species [12].

Because aerial insects can be detected by echolocation, and the call frequencies of most echolocating bats are above the frequencies typically produced by traffic, it is unlikely that aerial feeding bats will be adversely affected by traffic noise. Extinction risk in bats is related to flight morphology, and species with short, broad wings (low aspect ratios) are especially vulnerable to extinction [13,14]. Many of these bats are gleaners that need manoeuvrable flight to find prey among vegetation, and which locate prey by listening for sounds produced by their movement — so the species most affected by noise are likely to be among those at greatest risk.

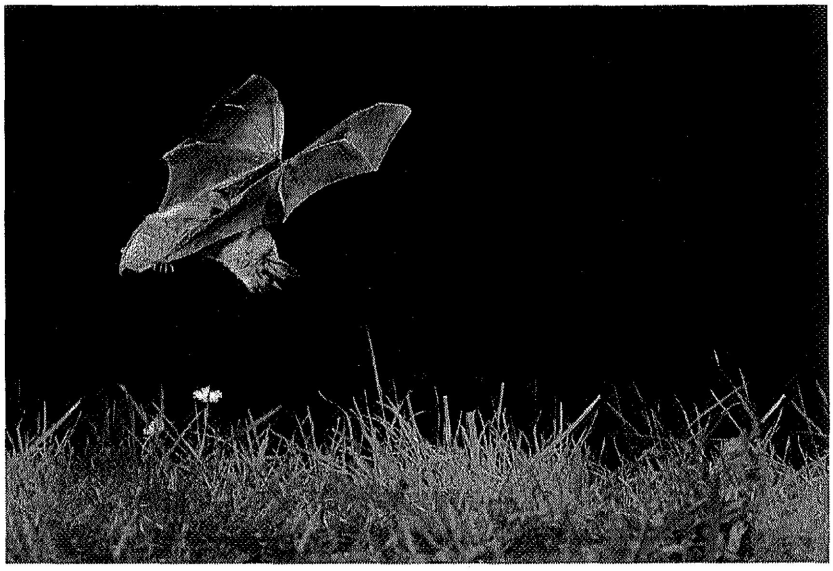

Figure 1. A greater mouse-eared bat searching for terrestrial prey. Photograph by Dietmar Nill.

Increased urbanisation has resulted in fewer areas being devoid of roads. Today in the US, no area (other than in Alaska) is more than 35 km from a road and 6.3 million kilometres of roads cover the country [15]. Noise pollution has increased substantially in Europe in recent decades, and over 65% of inhabitants of the EU were exposed regularly to sound levels (55–65 dB) that led to serious annoyance, sleep disturbance and speech interference at the end of the last century [16]. Although the implications for human health are well documented [16], the consequences of noise pollution for conservation biology are often subtle and warrant further research. In particular, the effects of underwater noise pollution on marine mammals with well developed hearing may be severe. Low-frequency ambient marine noise levels have probably increased by two orders of magnitude in the northern hemisphere over the last 60 years [17]. Male humpback whales increase song length if they hear low frequency (150–320 Hz) military sonar [18].

Evidence linking intense military sonar to strandings of beaked whales is compelling and suggests that the whales make sudden changes in dive trajectory whereupon they may die from the effects of decompression [19]. Catch rates of cod and haddock may be reduced by 50–70% following seismic surveys that use air guns to produce sound in the 20–150 Hz bandwidth [20]. A better understanding of the extent of noise pollution, and of its impact on animal sensory ecology in a range of environments is needed urgently.

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DOI: 10.1016/j.cub.2008.10.005

Social Evolution: Daily Self-Sacrifice by Worker Ants

Each evening, a few workers of a Brazilian ant doom themselves to die overnight by remaining outside the nest to seal its entrance. This striking behaviour is a novel form of worker self-sacrifice.

Andrew F.G. Bourke

According to the precepts of Stalinist society exposed so vividly by Arthur Koestler in *Darkness at Noon*, the definition of an individual was "a multitude of one million divided by one million". The implication is clear that, in such a society, selfhood has dissolved in a mass of interchangeable units, each existing only to serve the collective. This social model, nightmarish to the liberal human mind, is close to the reality in some insect colonies. In many species, workers have adaptations the use of which destroys or at least handicaps their bearer, while benefiting the colony. The canonical example is the sting of the honey bee worker, deployment of which kills the stinging bee [1]. In other cases, workers of some ants become distended and immobilized within the nest through use as living food stores [2], and larvae of other species provide queens with blood meals via special organs from which queens sip their haemolymph [3].

An international team of researchers, led by Adam Tofilski of the Agricultural University of Krakow and Francis Ratnieks of the University of Sussex, has now added to the catalogue of adaptations for worker self-sacrifice by describing a novel behaviour in the Brazilian ant *Forelius pusillus* [4]. When external activity ends at the close of each day, a small group of workers seals the nest entrance from the outside with sand or soil. Because at night-time the external environment proves fatal to them, these workers effectively condemn themselves to death. This behaviour differs from previously-described forms of defensive self-sacrifice, like the stinging behaviour of honey bee workers, because it is not facultative: it does not arise in direct response to danger, but occurs routinely as a defence in anticipation of a possible threat. In the words of the researchers, it is pre-emptive self-sacrifice [4].

Forelius is a small genus of ants that occurs exclusively in the Americas and is typified by a fondness for nesting underground in hot, arid habitats [5]. One species, *F. pruinosus* (formerly *Iridomyrmex pruinosum*), is a desert and urban ant of the southern United States, foraging on the ground for small insect fragments and on vegetation for plant and homopteran secretions [6,7]. Colonies contain multiple queens and up to 100,000 workers [6,7]. In general, however, little is known about the social and genetic structure of colonies of *Forelius* species. Tofilski *et al.* [4] studied a group of *F. pusillus* nests in bare sandy soil at the edge of a sugar cane field near São Simão, São Paulo State, Brazil. During the hot summer day, the tiny workers (each is around 2 mm long) labour for the colony by removing spoil from within the nest or by foraging. Excavation followed by dumping of the spoil creates a characteristic elliptical layer of spoil centred on the nest entrance. The researchers noticed that, towards sunset each evening, excavation and foraging ended and some workers began to seal the nest by placing sand and soil particles in the mouth of the entrance shaft. Nearly all workers returned inside before the nest was totally sealed, but, on almost every occasion, a few workers (one to eight) remained outside. These individuals walled themselves off from their nestmates by facing away from the nest entrance and kicking fine sand backwards (Figure 1) until the entrance was totally covered and barely distinguishable from its surroundings. The immediate reason for this was presumably that, given the sandy substrate, it achieved more effective closure and concealment than was possible from inside the nest.

In the morning, Tofilski *et al.* [4] found no workers near each nest entrance, which was always reopened from within by workers digging

First published online September 19, 2008
Journal of Experimental Biology 211, 3174-3180 (2008)
Published by The Company of Biologists 2008
doi: 10.1242/jeb.022863

Foraging bats avoid noise

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Accepted 14 August 2008

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SUMMARY

Ambient noise influences the availability and use of acoustic information in animals in r While much research has focused on the effects of noise on acoustic communication, he present the first study concerned with anthropogenic noise and foraging behaviour. We greater mouse-eared bat (*Myotis myotis*) as a model species because it represents the e vulnerable group of gleaning bats that rely on listening for prey rustling sounds to find f `passive listening'). In a choice experiment with two foraging compartments, we investi influence of background noise on foraging effort and foraging success. We tested the hy

compartments and on the distribution of prey capture events. When playing back silence equally successful in both compartments. In the other three treatments (where a non-si avoided the playback compartment. The degree to which the background noise deterred from traffic noise to vegetation movement noise to broadband computer-generated nois traffic noise amplitude, had a larger repellent effect; presumably because of its acoustic experimental data suggest that foraging areas very close to highways and presumably a broadband noise are degraded in their suitability as foraging areas for such `passive lis

Key words: environmental noise, anthropogenic noise, traffic noise, foraging, road ecolc listening, echolocation, masking

INTRODUCTION

Ambient noise influences the availability and use of acoustic information in animals in r addition to noises produced by other animals and natural abiotic sources (e.g. wind or r water), anthropogenic noise emissions, such as urban and traffic noise, constitute a maj ambient noise. The main body of research on the effects of noise on wild animals has cc on acoustic communication (for reviews, see Brumm and Slabbekoorn, 2005+; Patricelli 2006+; Slabbekoorn and Ripmeester, 2008+) because noise can mask relevant acoustic potential receivers. Some species of birds, amphibians and dolphins shift the frequency an effort to avoid strong overlap with ambient noise (Slabbekoorn and Peet, 2003+; Nari Feng et al., 2006+; Slabbekoorn and den Boer-Visser, 2006+; Bee and Swanson, 2007+). call amplitude when singing in noisy environments, such as a big city (Brumm and Todt, time to less noisy periods (Fuller et al., 2007+). Such behavioural flexibility and evolutio and populations, respectively, to cope with natural environmental noise. Indeed, it has e communication systems to anthropogenic noise, at least to some degree. However, ther pollution can negatively affect wild animals (Forman and Alexander, 1998+; Forman and Roadless space is becoming scarce in many places on our planet (Watts et al., 2007+) ar important issue. Traffic noise has been suggested to decrease the occurrence, breeding (Brotons and Herrando, 2001+; Fernandez-Juricic, 2001+). In marine environments, nois behaviours of whales, porpoises and seals (Morton and Symonds, 2002+; Koschinski et a

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Surprisingly, the degree to which noise can influence another crucial behaviour - foragir for a study on noise-increased predator vigilance, which could result in reduced foragin 2006+), the present study is the first to address the effects of noise on foraging ability. impact an animals' ability to use acoustic information for foraging because a variety of t their prey. For example, owls (Konishi, 2003+) and insect-eating primates (Goerlitz and sounds produced by moving animals to detect and localize food. Bats represent a specia intercept flying insects using echolocation (Griffin, 1958+; Kalko, 1995+; Siemers and Sc listening for prey-produced sounds (Marimuthu and Neuweiler, 1987+; Faure and Barcla and Swift, 2006+). This strategy of `passive listening' is adopted by bat species speciali or the ground where prey echoes are masked by overlapping, strong background echoes conceivable that environmental noise interferes with the detection of prey. As these bat orientation, the reception of relevant echoes could potentially be impaired by noise as w Frenckell and Barclay, 1987+; Mackey and Barclay, 1989+; Rydell et al., 1999+; Spanjer,

In the present study, we assessed the reaction of bats to both anthropogenic and natura The greater mouse-eared bat (*Myotis myotis* Borkhausen 1797) was used as a model sp bats that find prey by listening to their rustling sounds (Kolb, 1961+; Arlettaz et al., 20(vulnerable to noise impact on both `passive listening' and echolocation. Furthermore, g protected species (European Habitats Directive, Annex II). They are widely distributed (G) and have expansive home ranges (Audet et al., 1991+; Arlettaz, 1999+; Zahn et al., 20 in virtually all environmental impact assessments for larger highway or railway projects projected traffic routes in Europe will cross *M. myotis* foraging areas. The greater mouse to assess noise impact on foraging behaviour in the large and, from a conservation pers Kerth, 2004+) group of `passive listening', gleaning bats.

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Greater mouse-eared bats roost in caves in southern Europe and typically in large attics +; Dietz et al., 2007+). Colony size ranges from a handful of reproductive females to sev colony members disperse into individual foraging areas at a distance of 17 km or more f et al., 2001+). They listen for ground-running (epigaeic) arthropods by low search flight (Arlettaz, 1996+; Güttinger et al., 2001+; Pereira et al., 2002+). Greater mouse-eared ba ground; carabids and other ground-running beetles, mole-crickets, spiders and lithobiic (Bauerova, 1978+; Arlettaz, 1996+; Pereira et al., 2002+; Siemers and Güttinger, 2006+) that arthropod taxa and size classes that produce relatively loud rustling sounds when c the diet of greater mouse-eared bats (Siemers and Güttinger, 2006+). This finding indic

potential prey could limit the bats' sensory access to food. As acoustic conspicuousness is probably determined by signal-to-noise-ratio, both rustling amplitude and background noise level will influence foraging success, provided they cover the same frequency range. Arthropod rustling sounds are a series of broadband clicks; they contain frequencies of up to 100 kHz and above. The main energy is concentrated between 3 and 40 kHz, however (Goerlitz and Siemers, 2007; Goerlitz et al., 2008).

Environmental noise is generally measured only in the frequency range of human hearing. Often an A-weighting filter is applied, which results in units of dBA sound pressure level and accounts for the frequency response of human hearing. While this approach is obviously correct to assess noise pollution as perceived by humans, it is not appropriate when it comes to other mammals whose hearing ranges extend beyond human range. In the present study, we therefore took `a bat's perspective' and recorded the frequency spectrum of traffic noise up to 60 kHz.

We then conducted a choice experiment to test whether bats avoid noisy environments. In a large flight room, we constructed two equally profitable foraging compartments. In each trial, noise was played back in one of the compartments. We then measured whether and to what degree it affected foraging effort and foraging success of the bats in this compartment. The aim of this research was to test: (1) if bats will avoid foraging areas with strong noise impact (hypothesis one); and (2) if the frequency-time structure of the noise will affect its deterring effect (hypothesis two).

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MATERIALS AND METHODS

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Animals and housing

Seven male greater mouse-eared bats (*Myotis myotis*) were used for experimentation. The animals were captured as juveniles in August 2005 near Freiburg, Germany, for the present investigations under licence from the responsible authority (Regierungspräsidium

Freiburg, licence #55-8852.44/1095). Bats were held and tested in specially designed facilities at the University of Tübingen, Tübingen, Germany (approved by Regierungspräsidium Tübingen). They were housed in a flight cage of 2 mx1.5 mx2 m (lengthxwidthxheight) with an inverted light regime [8 h:16 h (darkness:light)]. The bats received food (mealworms - larvae of *Tenebrio molitor* Linnaeus 1758), and water *ad libitum* during the experiments. Their diet was also supplemented with desert locusts (*Schistocerca gregaria* Forskal 1775) once a week and with vitamins and minerals once every four weeks. All seven bats were in good health at the end of the experiments and remained in the Tübingen animal unit thereafter for further investigations of how traffic noise impacts on bat foraging ecology.

Flight room and setup

Bats were tested in a large flight room with dimensions of 13 mx6 mx2 m (lengthxwidthxheight); walls and ceiling were covered with sound-absorbing foam to reduce echoes and reverberations. Two equally sized compartments [2.5 mx3 mx2 m (lengthxwidthxheight)] were constructed by erecting a dividing wall made from PVC and sound-absorbing foam (Fig. 1). Each compartment was equipped with six cylindrical landing platforms (diameter, 40 cm; height, 10 cm). The platforms were arranged in two rows of three, 20 cm apart. Mealworms, as food reward, could be offered on a plastic Petri dish inserted on the centre of the platforms.

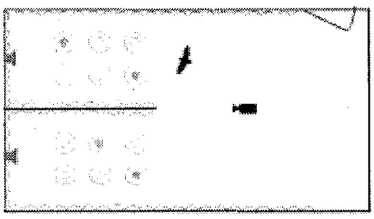

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Fig. 1. Schematic representation of the flight room and the experimental setup (not to scale). Each of the two foraging compartments was equipped with a loudspeaker and six landing platforms, two of which contained live mealworms. The room and the division between the compartments were lined with sound-absorbing acoustic foam. A video camera and infrared illumination served to document the bats' behaviour.

A loudspeaker (Swans, RT2H_A; Arcadia, CA, USA) was mounted on the wall at a height of approximately 1.8 m at the rear end of each compartment for the playback of background noise. The speakers were tilted slightly downwards and directed

towards the platform array in an attempt to broadcast sound as homogenously as possible. Test measurements showed maximal variations of 3 dB in the incident sound pressure levels [SPL (measured 80 cm above the platforms)].

Experimental procedure

In each trial, one compartment was the `stimulus compartment' where sound was played back and the other compartment was the `silent compartment' where the loudspeaker was activated but an empty file was played. Sound played back in the stimulus compartment was also audible in the silent compartment. Due to the dividing wall, it was attenuated by 17 dB in comparison with the stimulus compartment (measured at the two platform fields; SdB02 sound level meter, 01dB-Stell, MVI technologies group; Villeurbanne, France). We used four different stimulus types of playback: (1) silence – the loud speaker was activated and an empty file was played back. The silence treatment was a control and served to measure the baseline of the bats' search effort allocation in the two compartments; (2) broadband, digitally generated noise, which served as a broadband control; (3) traffic noise recorded 7.5 m from a highway [30.7±2.5 passing vehicles min^{-1} (mean±s.d.)]; and (4) noise recorded from strongly moving reed vegetation (reed bed running alongside a river, which flows across *M. myotis* foraging habitats; bats are known to hunt on meadows adjacent to these reeds; B.M.S., personal observation).

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The experiments were divided into three periods of eight days. Different stimuli were used for each period. Each of the four stimuli was presented once on the left side and once on the right side for each bat, resulting in eight experimental conditions per period (i.e. one a day). To factor out day or sequence effects, each bat received a different experimental condition on a given test day (Latin square design). Two out of the six platforms per compartment were continuously baited with 4 g of mealworms, which corresponded to approximately 40 individual larvae. The mealworms produced faint rustling noises with main energy between 3 and 20 kHz, with stronger clicks of up to 50 kHz and above. Measured at 10 cm distance, the loudest peaks ranged from approximately 45 to 62 dB SPL. The mealworm rustling was thus roughly similar to the sounds produced by a carabid beetle (typical greater mouse-eared bat prey) walking on soil, meadow or moist leaf-litter (Goerlitz et al., 2008). Rewards were not placed on the same platform location (front, middle, back) within the two compartments to achieve a homogeneous distribution of the

rewarded dishes within the sound field of the speakers. As a result, there were 12 different combinations to choose from. For a balanced design, we used each combination twice within the 24 experimental days, avoiding repeating a dish combination within any of the 8 day periods. The two rewarded dishes of each side were always unrewarded dishes the following day to avoid place conditioning. The assignment of rewarded dishes was independent between the two sides to deter the bats from extracting information from the rewarding scheme of the stimulus compartment from the silent compartment. Platform positions were exchanged between consecutive experiments in order to avoid olfactory labelling on the currently rewarded platforms (scent ieft from bats of previous session of the day).

Data acquisition started after a 15 day training phase without noise playback in which the bats were accustomed to the flight room. The bats learned to search for prey in the two compartments without much training effort. Bats were tested individually during their natural activity period. After 15 capture events (brief landing on a baited platform, followed by in-flight smacking sounds, which indicate that the bat was chewing food) at a given platform, we removed the remaining prey from this platform. With two baited platforms per compartment, the bats could thus retrieve a maximum of 30 mealworms from a single compartment per session. The bats were prevented from perching inside the compartments by slowly approaching and gently touching them. To ensure sustained foraging motivation throughout data acquisition, the session was stopped when 45 mealworms had been eaten or 15 min had elapsed. The bats maintained or slightly increased their weight with a daily supply of 45 to 50 mealworms, which was a naturalistic amount of food.

Acquisition and analysis of behavioural data

Experiments were run in the dark and filmed (Sanyo BW CCD camera VCB-3572 IRP, Munich, Germany; Computar lens M0518, Düsseldorf, Germany; Sony recorder GVD1000E, Berlin, Germany) under IR-illumination (custom made IR-strobes) for online display and videotaped for later off-line analysis. For off-line analysis, we used an event-recorder software (Department of Animal Physiology, University of Tübingen) to extract the following parameters: (A) flight time spent in each compartment; (B) number of flights into each compartment. Capture events were counted online and subdivided into; (C) capture events per compartment; and (D) capture events per compartment for the 25 first capture events. The latter measure

was introduced because each bat in every session performed at least 25 capture attempts. As a maximum of 30 were allowed per compartment, these first 25 events could be allocated entirely to one compartment, i.e. noise avoidance could be especially pronounced.

The data were normalized and expressed as percentages for display and statistical analysis. Performance of each individual bat was averaged over the three replicas (experimental periods) for a given experimental condition (combination of stimulus type and stimulus compartment position, e.g. `traffic noise' played in the `left' compartment) for the statistical analysis. To account for possible individual differences, we used repeated-measures analysis of variance (ANOVA) and *post hoc* paired *t*-tests with sequential Bonferroni correction to test for the influence of playback treatment on the bats' behaviour. To test for possible preferences of the bats for one of the two test compartments, we included stimulus compartment position (left or right) as a factor into the ANOVAs. For testing, percentage data was transformed following Zar (Zar, 1999) ($p'=\arcsin\sqrt{p}$). Tests were run in SPSS 15.0.0 for Windows (SPSS, Inc., Chicago, IL, USA).

Recording, generation and playback of acoustic stimuli

Traffic noise was recorded at a distance of 7.5 m from the centre of the right lane of a highway and 1.5 m in height (Autobahn A8, Stuttgart–Munich, Germany recording location at 48 deg. 37'53.79N and 9 deg. 32'22.36 E). We recorded only when it was not raining and when the asphalt was dry. Recordings were taken on windless days; therefore, no wind guard was used (which would have acted as an unwanted low pass filter). Passing vehicles were videotaped to determine vehicle type (car or truck) and to roughly estimate speed. The sound of the cars was picked up with a sensitive, broadband condenser measurement microphone for playback purposes (1/2" low noise Microphone System Type 40HH, G.R.A.S., Holte, Denmark; frequency response ±1dB between 0.5 and 10kHz; ±8 dB between 10 and 50 kHz, internal noise floor 6.5 dBA re. 20μPa). To ensure a quantitative, broadband analysis of traffic noise, we used a slightly less sensitive but more broadband measurement microphone (G.R.A.S. 1/4" 40BF free field microphone). The microphones were oriented perpendicular to the highway, i.e. we obtained on-axis recordings from passing vehicles. Signals were digitized *via* a custom-built external A/D-converter (`PCTape'; Animal Physiology, University of Tübingen, 16 bit depth, 8xoversampling,

digital anti-aliasing; sampling rate 192 kHz) and recorded online onto a laptop computer and stored as wav-files (custom-made recording software). From recordings of the passes of 50 cars and 50 trucks at speeds of approximately 80 km h^{-1}, we selected the loudest 500 ms window (maximum root means square (RMS) amplitude) with a custom Matlab (TheMathWorks, Inc., Natick, MA, USA) routine. To measure the energy distribution over frequency, we computed power spectral densities (PSDs, FFT 256) in Matlab on these 500 ms windows. The average PSDs for these 50 cars and 50 trucks (Fig. 2) show that traffic noise has its main energy clearly within the human audio range but does contain ultrasonic components up to 50 kHz.

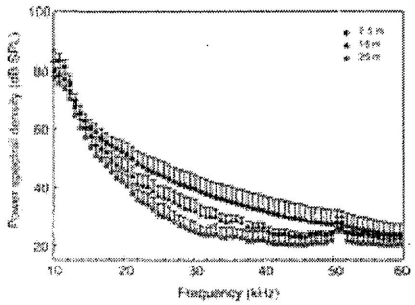

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Fig. 2. Mean power spectral densities (PSDs) for 50 cars and 50 trucks recorded at a highway in 7.5 m, 15 m and 25 m distance from the middle of the right lane. Microphone height was 1.5 m. Error bars display the standard deviation.

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We recorded the sound produced by moving vegetation with the above described 1/2" microphone and setup. As we faced a prolonged period without wind, we moved bundles of stalks in a dry reed bed by hand in an undulating way in order to simulate wind-induced movement. When the stalks and leaves of the dry reed touched each other, they produced series of broadband click-like and noise-like signals with energy ranging from 0 to frequencies higher than 85kHz (example in Fig. 3).

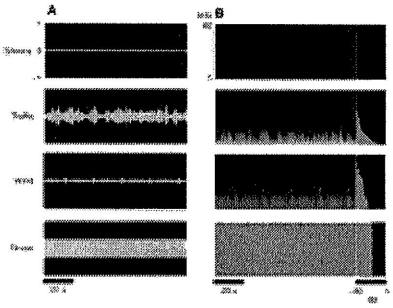

Fig. 3. Examples of the sound files used for playback. (A) Oszillogram, (B) sonagram representation and mean power spectrum.

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All playback files were arranged or generated in Adobe Audition 1.5 (Adobe® Systems, Mountain View, CA, USA). Representative recordings of traffic noise and of moving reed vegetation were used. An empty wav-file (amplitude values of all samples at zero) was generated for the silence treatment. The broadband noise treatment was digitally generated using continuous white noise. The noise spectrum was subsequently altered due to digital filtering, the speaker characteristics and the transmission through air. As a result, the noise spectrum at the platforms was no longer `white' (i.e. all frequencies at equal amplitude). Higher frequencies were attenuated but were considerably more pronounced than in the traffic noise. All playback files had a sampling rate of 192 kHz, i.e. contained frequencies up to 96 kHz. All files were highpass-filtered at 1 kHz (Adobe Audition; digital FFT filter, 2048 points, Blackman window) to remove sound probably not audible to the bats and to avoid damage to the speaker. The playback amplitude of the digitally generated broadband noise was adjusted in such a way that incident sound measured 80 cm above the platforms had an SPL of 80 dB. This corresponds to the noise level 10-15 m next to a highway as a vehicle passes. The traffic playback files were digitally set at the same RMS sound pressure level for the loudest 500 ms window contained in the playback file (Adobe Audition Analyze). While the broadband noise remained constant at this level, the traffic noise oscillated around this level. The traffic noise would drop when no vehicle was travelling by the recording microphone and would rise in level for periods shorter than 500 ms when a vehicle passed. The playbacks of vegetation movement were set at 12 dB below the broadband noise and the traffic noise files; however, the vegetation movement

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playbacks were still unnaturally loud or at least corresponding to movement induced by very strong wind as from a human perspective.

Files were played in a continuous loop throughout a trial. They were played back from a laptop through an external D/A-converter (RME Fireface 800 Interface, sampling rate 192 kHz, Haimhausen, Germany), broadband amplifiers (WPA-600 Pro, Conrad Electronics, Hirschau, Germany) and the above mentioned speaker.

RESULTS

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There was a clear noise effect on the proportion of flight time allocated to the stimulus compartment (Fig. 4A) (factor stimulus type, $F_{3,18}=27.45$, $P<0.0001$). The bats did not show any preference for either of the two compartments (factor stimulus compartment position, $F_{1,6}=0.03$, $P=0.872$; interaction noise treatment x compartment position, $F_{3,18}=0.36$, $P=0.786$) when accounting for the influence of stimulus playback. As there was no side preference for any of the behavioural measures (see below), we combined the behavioural data from both compartments for graphic representation (Fig. 4) (averaged within each individual). In the silent treatment, approximately 50% of the flight time was allocated to the stimulus compartment and the remaining 50% to the silent compartment (Fig. 4A). The proportion of search time in the stimulus compartment decreased from the silence treatment *via* traffic and vegetation noise to broadband noise (for pair-wise *post hoc* tests see Fig. 4). In the latter case, only 19% of the flight time was spent in the stimulus compartment and the remaining 81% in the silent compartment (Fig. 4A).

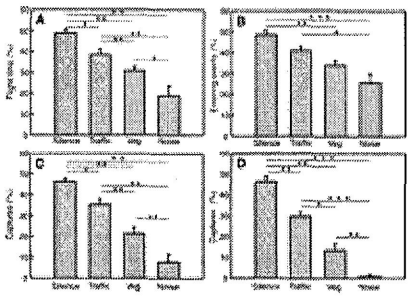

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Fig. 4. Influence of noise treatments on foraging behaviour of the mouse eared bats. (A) Percentage of the flight time in the stimulus compartment. (B) Percentage of flights into the stimulus compartment. (C) Percentage of total capture events that occurred in the stimulus compartment. (D) Percentage of the first 25 capture events per session that occurred in the stimulus compartment. Results from repeated-measures ANOVAs for the factors noise treatment and stimulus compartment position are given in the text. As the latter did not have a significant effect on any of the behavioural measures, we combined the behavioural data from both compartments for this graphic representation (averaged within each individual; error bars give the standard error, N=7 bats). Asterisks show significant differences revealed in *post hoc* paired t-tests for these combined data sets (sequential Bonferroni correction to account for multiple testing). $^{***}P<0.001$, $^{**}P<0.01$, $^{*}P<0.05$.

Likewise, there was a clear effect of the type of noise treatment on the percentage of flights into the stimulus compartment (Fig. 4B) (two-way repeated-measures ANOVA, factor stimulus type, $F_{3,18}=24.29$, $P<0.0001$; factor stimulus compartment position, $F_{1,6}=0.23$, $P=0.650$; interaction, $F_{3,18}=0.45$, $P=0.721$). The order of effect magnitude again increased from silence to traffic and vegetation to broadband noise.

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The percentage of prey capture events that occurred in the stimulus compartment was affected by the noise treatment. This applies when analysing all capture events per session (maximally 45 per bat) (Fig. 4C) (factor stimulus type, $F_{3,18}=35.41$, $P<0.0001$; factor stimulus compartment position, $F_{1,6}=0.07$, $P=0.805$; interaction, $F_{3,18}=0.50$, $P=0.685$) and even more pronounced when only considering the first 25 capture events per bat and session (Fig. 4D) (factor stimulus type, $F_{3,18}=76.40$, $P<0.0001$; factor stimulus compartment position, $F_{1,6}=0.02$ $P=0.893$; interaction, $F_{3,18}=0.09$, $P=0.962$). The order of stimulus types by effect magnitude was the same as for the two above behavioural measures.

DISCUSSION

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Foraging bats avoid noise

Noise treatment clearly affected the foraging effort and foraging success of the bats. When playing back `silence', the bats, as expected, made equal use of and were equally successful in both compartments. However, when a noise stimulus was present, the bats avoided the stimulus compartment (hypothesis one). Bats allocated more search effort to the silent compartment and less to the stimulus compartment by specifically avoiding foraging areas with strong noise impact. However, avoidance of the stimulus compartment was not complete. Even during the apparently most disturbing broadband noise, the bats still allocated 20% of their time in the compartments to the noisy stimulus compartment.

In the present study, we specifically assessed noise impact on foraging activity. Therefore, we are unable to draw conclusions on the role environmental noise will play for other bat activities. Bat colonies, including those of greater mouse-eared bats, roost in church towers close to the belfry and sometimes in road and railway bridges (Güttinger et al., 2001). If a church has functional bells, they are in use only for a small proportion of the time. When found in bridges, they typically roost inside the structure of the bridge where high frequency components of traffic noise will be strongly attenuated. This might reduce traffic noise impact on the bats. Nevertheless, bell tower and bridge-roosting are anecdotal evidence for the ability of bats to cope with considerable background noise in non-foraging situations.

Influence of noise structure

The deterring effect differed between stimuli; it increased from traffic to vegetation to broadband noise. It is interesting to note that the vegetation noise, although set 12 dB below the traffic noise amplitude (still unnaturally loud), had a greater repellent effect than the traffic noise. This supports our second hypothesis, predicting that the frequency-time structure of the noise will affect its deterring intensity. The vegetation noise consisted of a series of transient, broadband signals, not unlike the clicks produced by walking arthropods (Goerlitz and Siemers, 2007; Goerlitz et al., 2008). This similarity to prey sounds might render the vegetation noise an effective masker that reduces the bats' ability to detect insects. Unless shaken by a storm, sounds of naturally wind-moved vegetation will be much less

intense than that created in the present study and, hence, will be of less impact for wild bats. Nevertheless, natural noise is likely to affect the foraging efficiency of bats. Behaviour observation and playback experiments suggested that noise from turbulent water could interfere with echo-based prey detection in bats that forage close to, as well as several meters above, water surfaces (von Frenckell and Barclay, 1987+; Mackey and Barclay, 1989+; Rydell et al., 1999+).

The artificial broadband noise in our experiments contained higher frequencies than the traffic noise. It was continuous whereas both traffic and vegetation noise contained short intervals of less intense sound. Both its continuous nature and its content of higher frequencies might in part explain why the broadband noise treatment had the strongest deterrent effect on the bats (see also Huebner and Wiegrebe, 2003+).

Reasons for noise avoidance

An unspecific aversive character of noise (Beerda et al., 1998+) could be part of the reason why greater mouse-eared bats avoided noisy foraging patches. As these bats do roost in noisy places (see above), it appears more likely, however, that a specific noise-impairment on perception of prey sounds (Huebner and Wiegrebe, 2003+; Goerlitz et al., 2008+), on echolocation (Griffin and Grinnell, 1958+; Rydell et al., 1999+; Spanjer, 2006+; Gillam and McCracken, 2007+) or on both were the reason. Impairment could be caused by the masking of relevant sounds or echoes and by the difficulty of processing several auditory streams simultaneously (Barber et al., 2003+). The fact that we did not observe any change in flight ability or landing accuracy argues against a relevant impairment of echolocation. Calls of greater mouse-eared bats are broadband sweeps from between 120 and 70kHz down to approximately 27kHz (Boonman and Schnitzler, 2005+), i.e. they contain considerable energy above the frequency band covered by the noise playbacks in the present study. The strong effect of the click-like vegetation noise, despite its reduced amplitude, points in the direction of an impairment of the perception of prey rustling-clicks. Further experiments will be needed to verify this explanation and to quantify the conceivable reduction of the ability of bats to detect prey by natural and anthropogenic noise.

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Conclusions

Data from the present study suggest that foraging areas very close to highways and presumably also to other sources of intense broadband noise are degraded in their suitability as foraging areas for the greater mouse-eared bat. The situation, which mimicked the traffic noise treatment, corresponds to a distance of 10–15 m from a highway. Noise intensity and, hence, noise impact will level off with distance. However, it is likely that bats foraging 50 m away from the highway will still be impacted by traffic noise (B.M.S. and A.S., unpublished data). Relatively large areas will be affected and a fitness relevance for natural populations is likely. In addition to distance, the number of passing vehicles will affect the intensity of acoustic habitat degradation. In addition to the greater mouse-eared bats, many other species of bat find their prey predominantly by listening to prey sounds. We therefore assume that acoustic habitat degradation will affect these species in a similar way. This group is especially vulnerable to extinction and is, therefore, of special conservation concern (Safi and Kerth, 2004). In Europe, the potential vulnerable bat species include the lesser mouse-eared bat (*Myotis blythii/oxygnathus*), Bechstein's bat (*Myotis bechsteinii*) and all long-eared bats (genus *Plecotus*) (Arlettaz et al., 2001; Swift and Racey, 2002; Siemers and Swift, 2006). In North America, species such as the pallid bat (*Antrozous pallidus*), the long-eared bat (*Myotis evotis*), the Northern long-eared bat (*Myotis septentrionalis*) and possibly the big-eared bats (genus *Corynorhinus*) as well as the little-known spotted bat (*Euderma maculatum*) might also be affected by acoustic habitat degradation (Faure and Barclay, 1992; Fullard and Dawson, 1997; Lacki and Ladeur, 2001; Leslie and Clark, 2002; Barber et al., 2003; Ratcliffe and Dawson, 2003). Interestingly, the reluctance of bats to forage in very noisy environments potentially also brings about conservation benefits. If bats indeed allocate little foraging time to noisy highway margins and highways themselves, the number of potential traffic casualties (Kiefer et al., 1994; Lesinski, 2007) could be reduced. By contrast, aerial hawking bats that detect and track insects by echolocation can be attracted by the high prey abundance associated with anthropogenic habitat alterations, such as streetlights alongside roads (Arlettaz et al., 2000; Avila-Flores and Fenton, 2005) or garbage dumps (Kronwitter, 1988). While this might indicate some dichotomy in how bats from different ecological groups deal with human impact, previous playback experiments indicate that in addition to `passive listening' bats as shown in the present study, aerial hawking species are also

affected and deterred by broadband noise (Mackey and Barclay, 1989+; Spanjer, 2006+; Szewczak and Arnett, 2006+). In the course of environmental impact assessments for highway planning, appropriate preventive measures (noise reduction) or compensatory measures (amelioration of alternative bat foraging habitats) will, according to the respective applicable national and international law, have to be considered. Further research is needed to mechanistically understand the impact of anthropogenic noise on both `passive listening' gleaning bats and aerial hawking bats, which find prey by echolocation.

▶ ACKNOWLEDGMENTS

We thank Professor Hans-Ulrich Schnitzler for constant support and valuable discussion, Professor Markus Fendt for the event-recorder software, Ingrid Kaipf and Daniela Schmieder for much appreciated help with bat husbandry and video analysis. Amanda Windhof and John Lesku are acknowledged for native speaker language editing; Drs Peter Stilz, Holger Goerlitz and Henrik Brumm for discussion; Brock Fenton as well as an anonymous referee for constructive comments. This research was funded in the framework of a research project commissioned by the German Federal Ministry of Transport, Building and Urban Affairs (FE 02.256/2004/LR `Quantifizierung und Bewältigung verkehrsbedingter Trennwirkungen auf Arten des Anhangs der FFH-Richtlinie, hier Fledermauspopulationen', subproject Siemers). The responsibility for the contents of this manuscript lies solely with the authors. Data analysis, writing and Open Access were supported by the Max Planck Society. Ministry officers Dr Udo Tegethof and Andreas Wehner-Heil supported us throughout and the project partners Dr Gerald Kerth, Dr Jochen Lüttmann, Jutta Kusenbach, Malte Fuhrmann, Manfred Weißhaar and Birgit Gessner provided discussion.

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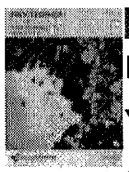

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Ecological light pollution

Travis Longcore and Catherine Rich

Ecologists have long studied the critical role of natural light in regulating species interactions, but, with limited exceptions, have not investigated the consequences of artificial night lighting. In the past century, the extent and intensity of artificial night lighting has increased such that it has substantial effects on the biology and ecology of species in the wild. We distinguish "astronomical light pollution", which obscures the view of the night sky, from "ecological light pollution", which alters natural light regimes in terrestrial and aquatic ecosystems. Some of the catastrophic consequences of light for certain taxonomic groups are well known, such as the deaths of migratory birds around tall lighted structures, and those of hatchling sea turtles disoriented by lights on their natal beaches. The more subtle influences of artificial night lighting on the behavior and community ecology of species are less well recognized, and constitute a new focus for research in ecology and a pressing conservation challenge.

Front Ecol Environ 2004; 2(4): 191–198

As diurnal creatures, humans have long sought methods to illuminate the night. In pre-industrial times, artificial light was generated by burning various materials, including wood, oil, and even dried fish. While these methods of lighting certainly influenced animal behavior and ecology locally, such effects were limited. The relatively recent invention and rapid proliferation of electric lights, however, have transformed the nighttime environment over substantial portions of the Earth's surface.

Ecologists have not entirely ignored the potential disruption of ecological systems by artificial night lighting. Several authors have written reviews of the potential effects on ecosystems or taxonomic groups, published in the "gray" literature (Health Council of the Netherlands 2000; Hill 1990), conference proceedings (Outen 2002; Schmiedel 2001), and journal articles (Frank 1988; Verheijen 1985; Salmon 2003). This review attempts to integrate the literature on the topic, and draws on a conference organized by the authors in 2002 titled *Ecological Consequences of Artificial Night Lighting*. We identify the roles that artificial night lighting plays in changing ecological interactions across taxa, as opposed to reviewing these effects by taxonomic group. We first discuss the scale and extent of ecological light pollution and its relationship to astronomical light pollution, as well as the measurement of light for ecological research. We then address the recorded and potential influences of artificial night lighting within the nested hierarchy of behavioral and population ecology, community ecology, and ecosystem ecology. While this hierarchy is somewhat artificial and certainly mutable, it illustrates the breadth of potential consequences of ecological light pollution. The important effects of light on the physiology of organisms (see Health Council of the Netherlands 2000) are not discussed here.

In a nutshell:

- Ecological light pollution includes chronic or periodically increased illumination, unexpected changes in illumination, and direct glare
- Animals can experience increased orientation or disorientation from additional illumination and are attracted to or repulsed by glare, which affects foraging, reproduction, communication, and other critical behaviors
- Artificial light disrupts interspecific interactions evolved in natural patterns of light and dark, with serious implications for community ecology

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■ Astronomical and ecological light pollution: scale and extent

The term "light pollution" has been in use for a number of years, but in most circumstances refers to the degradation of human views of the night sky. We want to clarify that this is "astronomical light pollution", where stars and other celestial bodies are washed out by light that is either directed or reflected upward. This is a broad-scale phenomenon, with hundreds of thousands of light sources cumulatively contributing to increased nighttime illumination of the sky; the light reflected back from the sky is called "sky glow" (Figure 1). We describe artificial light that alters the natural patterns of light and dark in ecosystems as "ecological light pollution". Verheijen (1985) proposed the term "photopollution" to mean "artificial light having adverse effects on wildlife". Because photopollution literally means "light pollution" and because light pollution is so widely understood today to describe the degradation of the view of the night sky and the human experience of the night, we believe that a more descriptive term is now necessary. Ecological light pollution includes direct glare, chronically increased illumina-

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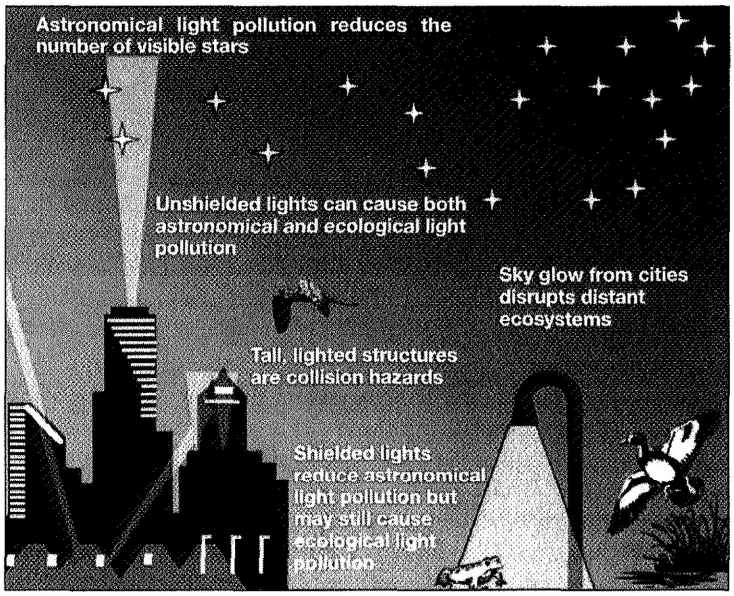

Figure 1. Diagram of ecological and astronomical light pollution.

tion, and temporary, unexpected fluctuations in lighting. Sources of ecological light pollution include sky glow, lighted buildings and towers, streetlights, fishing boats, security lights, lights on vehicles, flares on offshore oil platforms, and even lights on undersea research vessels, all of which can disrupt ecosystems to varying degrees. The phenomenon therefore involves potential effects across a range of spatial and temporal scales.

The extent of ecological light pollution is global (Elvidge *et al.* 1997; Figure 2). The first atlas of artificial night sky brightness illustrates that astronomical light pollution extends to every inhabited continent (Cinzano *et al.* 2001). Cinzano *et al.* (2001) calculate that only 40% of Americans live where it becomes sufficiently dark at night for the human eye to make a complete transition from cone to rod vision and that 18.7% of the terrestrial surface of the Earth is exposed to night sky brightness that is polluted by astronomical standards. Ecosystems may be affected by these levels of illumination and lights that do not contribute to sky glow may still have ecological consequences, ensuring that ecological light pollution afflicts an even greater proportion of the Earth. Lighted fishing fleets, offshore oil platforms, and cruise ships bring the disruption of artificial night lighting to the world's oceans.

The tropics may be especially sensitive to alterations in natural diel (ie over a 24-hour period) patterns of light and dark because of the year-round constancy of daily cycles (Gliwicz 1999). A shortened or brighter night is more likely to affect tropical species adapted to diel patterns with minimal seasonal variation than extratropical species adapted to substantial seasonal variation. Of course, temperate and polar zone species active only during a portion of the year would be excluded from this generalization. Species in temperate zones will also be susceptible to disruptions if they depend on seasonal day length cues to trigger critical behaviors.

■ Measurements and units

Measurement of ecological light pollution often involves determination of illumination at a given place. Illumination is the amount of light incident per unit area – not the only measurement relevant to ecological light pollution, but the most common. Light varies in intensity (the number of photons per unit area) and spectral content (expressed by wavelength). Ideally, ecologists should measure illumination in photons per square meter per second with associated measurements of the wavelengths of light present. More often, illumination is measured in lux (or footcandles, the non-SI unit), which expresses the brightness of light as perceived by the human eye. The lux measurement places more emphasis on wavelengths of light that the human eye detects best and less on those that humans perceive poorly. Because other organisms perceive light differently – including wavelengths not visible to humans – future research on ecological light pollution should identify these responses and measure light accordingly. For example, Gal *et al.* (1999) calculated the response curve of mysid shrimp to light and reported illumination in lux adjusted for the spectral sensitivity of the species.

Ecologists are faced with a practical difficulty when communicating information about light conditions. Lux is the standard used by nearly all lighting designers, lighting engineers, and environmental regulators; communication with them requires reporting in this unit. Yet the use of lux ignores biologically relevant information. High-pressure sodium lights, for instance, will attract moths because of the presence of ultraviolet wavelengths, while low-pressure sodium lights of the same intensity, but not producing ultraviolet light, will not (Rydell 1992). Nevertheless, we use lux here, both because of the need to communicate with applied professionals, and because of its current and past widespread usage. As this research field develops, however, measurements of radiation and spectrum relevant to the organisms in question should be used, even though lux will probably continue to be the preferred unit for communication with professionals in other disciplines.

Ecologists also measure aspects of the light environment other than absolute illumination levels. A sudden change in illumination is disruptive for some species (Buchanan 1993), so percent change in illumination, rate, or similar measures may be relevant. Ecologists may also measure luminance (ie brightness) of light sources that are visible to organisms.

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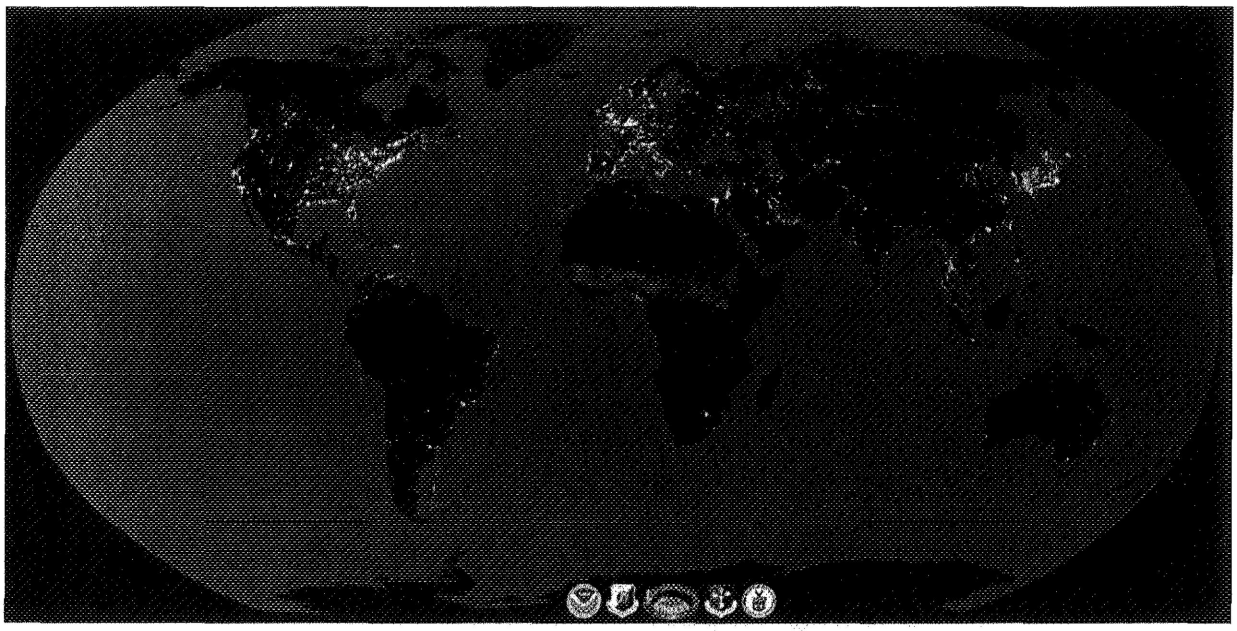

Figure 2. Distribution of artificial lights visible from space. Produced using cloud-free portions of low-light imaging data acquired by the US Air Force Defense Meteorological Satellite Program Operational Linescan System. Four types of lights are identified: (1) human settlements – cities, towns, and villages (white), (2) fires – defined as ephemeral lights on land (red), (3) gas flares (green), and (4) heavily lit fishing boats (blue). See Elvidge et al. *(2001) for details. Image, data processing, and descriptive text by the National Oceanic and Atmospheric Administration's National Geophysical Data Center.*

Behavioral and population ecology

Ecological light pollution has demonstrable effects on the behavioral and population ecology of organisms in natural settings. As a whole, these effects derive from changes in orientation, disorientation, or misorientation, and attraction or repulsion from the altered light environment, which in turn may affect foraging, reproduction, migration, and communication.

Orientation/disorientation and attraction/repulsion

Orientation and disorientation are responses to ambient illumination (ie the amount of light incident on objects in an environment). In contrast, attraction and repulsion occur in response to the light sources themselves and are therefore responses to luminance or the brightness of the source of light (Health Council of the Netherlands 2000).

Increased illumination may extend diurnal or crepuscular behaviors into the nighttime environment by improving an animal's ability to orient itself. Many usually diurnal birds (Hill 1990) and reptiles (Schwartz and Henderson 1991), for example, forage under artificial lights. This has been termed the "night light niche" for reptiles and seems beneficial for those species that can exploit it, but not for their prey (Schwartz and Henderson 1991).

In addition to foraging, orientation under artificial illumination may induce other behaviors, such as territorial singing in birds (Bergen and Abs 1997). For the northern mockingbird (*Mimus polyglottos*), males sing at night before mating, but once mated only sing at night in artificially lighted areas (Derrickson 1988) or during the full moon. The effect of these light-induced behaviors on fitness is unknown.

Constant artificial night lighting may also disorient organisms accustomed to navigating in a dark environment. The best-known example of this is the disorientation of hatchling sea turtles emerging from nests on sandy beaches. Under normal circumstances, hatchlings move away from low, dark silhouettes (historically, those of dune vegetation), allowing them to crawl quickly to the ocean. With beachfront lighting, the silhouettes that would have cued movement are no longer perceived, resulting in disorientation (Salmon *et al.* 1995). Lighting also affects the egg-laying behavior of female sea turtles. (For reviews of effects on sea turtles, see Salmon 2003 and Witherington 1997).

Changes in light level may disrupt orientation in nocturnal animals. The range of anatomical adaptations to allow night vision is broad (Park 1940), and rapid increases in light can blind animals. For frogs, a quick increase in illumination causes a reduction in visual capability from which the recovery time may be minutes to hours (Buchanan 1993). After becoming adjusted to a light, frogs may be attracted to it as well (Jaeger and Hailman 1973; Figure 3).

Birds can be disoriented and entrapped by lights at night (Ogden 1996). Once a bird is within a lighted zone at night, it may become "trapped" and will not leave the lighted area. Large numbers of nocturnally migrating birds are therefore affected when meteorological conditions bring them close to lights, for instance, during inclement weather or late at night when they tend to fly lower.

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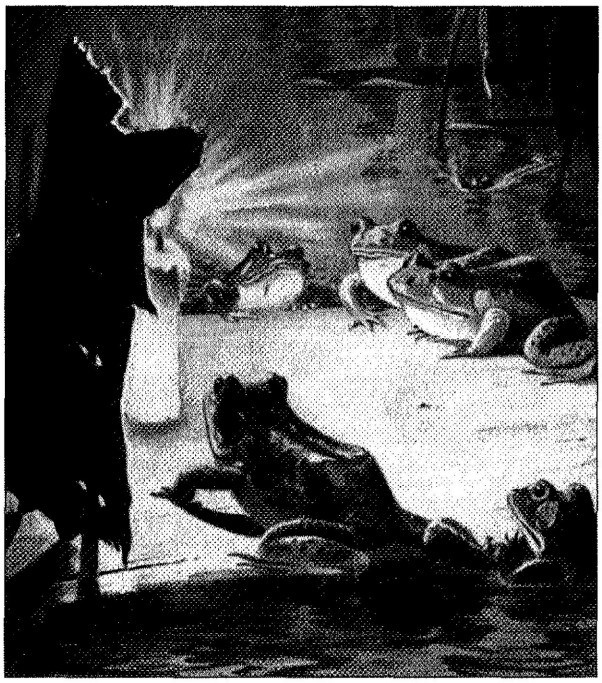

Figure 3. *Attraction of frogs to a candle set out on a small raft. Illustration by Charles Copeland of an experiment in northern Maine or Canada described by William J Long (1901). Twelve or fifteen bullfrogs* (Rana catesbeiana) *climbed on to the small raft before it flipped over.*

Within the sphere of lights, birds may collide with each other or a structure, become exhausted, or be taken by predators. Birds that are waylaid by buildings in urban areas at night often die in collisions with windows as they try to escape during the day. Artificial lighting has attracted birds to smokestacks, lighthouses (Squires and Hanson 1918), broadcast towers (Ogden 1996), boats (Dick and Donaldson 1978), greenhouses, oil platforms (Wiese *et al.* 2001), and other structures at night, resulting in direct mortality, and thus interfering with migration routes.

Many groups of insects, of which moths are one well-known example (Frank 1988), are attracted to lights. Other taxa showing the same attraction include lacewings, beetles, bugs, caddisflies, crane flies, midges, hoverflies, wasps, and bush crickets (Eisenbeis and Hassel 2000; Kolligs 2000; Figure 4). Attraction depends on the spectrum of light – insect collectors use ultraviolet light because of its attractive qualities – and the characteristics of other lights in the vicinity.

Nonflying arthropods vary in their reaction to lights. Some nocturnal spiders are negatively phototactic (ie repelled by light), whereas others will exploit light if available (Nakamura and Yamashita 1997). Some insects are always positively phototactic as an adaptive behavior and others always photonegative (Summers 1997). In arthropods, these responses may also be influenced by the frequent correlations between light, humidity, and temperature.

Natural resource managers can exploit the responses of animals to lights. Lights are sometimes used to attract fish to ladders, allowing them to bypass dams and power plants (Haymes *et al.* 1984). Similarly, lights can attract larval fish to coral reefs (Munday *et al.* 1998). In the terrestrial realm, dispersing mountain lions avoid lighted areas to such a degree that Beier (1995) suggests installing lights to deter them from entering habitats dead-ending in areas where humans live.

Reproduction

Reproductive behaviors may be altered by artificial night lighting. Female *Physalaemus pustulosus* frogs, for example, are less selective about mate choice when light levels are increased, presumably preferring to mate quickly and avoid the increased predation risk of mating activity (Rand *et al.* 1997). Night lighting may also inhibit amphibian movement to and from breeding areas by stimulating phototactic behavior. Bryant Buchanan (pers comm) reports that frogs in an experimental enclosure stopped mating activity during night football games, when lights from a nearby stadium increased sky glow. Mating choruses resumed only when the enclosure was covered to shield the frogs from the light.

In birds, some evidence suggests that artificial night lighting affects the choice of nest site. De Molenaar *et al.*



Courtesy of PJ DeVries

Figure 4. *Thousands of mayflies carpet the ground around a security light at Millecoquins Point in Naubinway on the Upper Peninsula of Michigan.*

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(2000) investigated the effects of roadway lighting on black-tailed godwits (*Limosa l. limosa*) in wet grassland habitats. Breeding densities of godwits were recorded over 2 years, comparing lighted and unlighted conditions near a roadway and near light poles installed in a wet grassland away from the road influence. When all other habitat factors were taken into account, the density of nests was slightly but statistically lower up to 300 m away from the lighting at roadway and control sites. The researchers also noted that birds nesting earlier in the year chose sites farther away from the lighting, while those nesting later filled in sites closer to the lights.

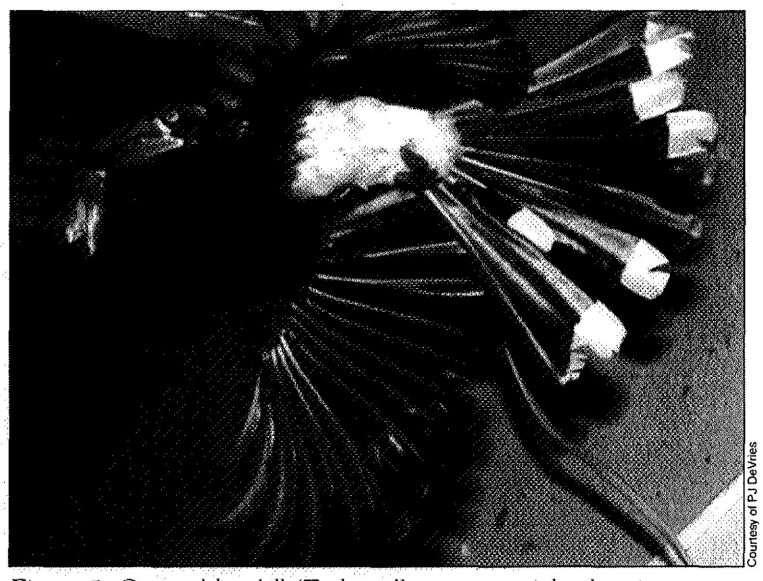

Figure 5. *Crowned hornbill* (Tockus alboterminatus) *hawking insects at a light at the Kibale Forest National Park, Uganda.*

Communication

Visual communication within and between species may be influenced by artificial night lighting. Some species use light to communicate, and are therefore especially susceptible to disruption. Female glow-worms attract males up to 45 m away with bioluminescent flashes; the presence of artificial lighting reduces the visibility of these communications. Similarly, the complex visual communication system of fireflies could be impaired by stray light (Lloyd 1994).

Artificial night lighting could also alter communication patterns as a secondary effect. Coyotes (*Canis latrans*) group howl and group yip-howl more during the new moon, when it is darkest. Communication is necessary either to reduce trespassing from other packs, or to assemble packs to hunt larger prey during dark conditions (Bender *et al.* 1996). Sky glow could increase ambient illumination to eliminate this pattern in affected areas.

Because of the central role of vision in orientation and behavior of most animals, it is not surprising that artificial lighting alters behavior. This causes an immediate conservation concern for some species, while for other species the influence may seem to be positive. Such "positive" effects, however, may have negative consequences within the context of community ecology.

■ Community ecology

The behaviors exhibited by individual animals in response to ambient illumination (orientation, disorientation) and to luminance (attraction, repulsion) influence community interactions, of which competition and predation are examples.

Competition

Artificial night lighting could disrupt the interactions of groups of species that show resource partitioning across illumination gradients. For example, in natural communities, some foraging times are partitioned among species that prefer different levels of lighting. The squirrel treefrog (*Hyla squirrela*) is able to orient and forage at lighting levels as low as 10^{-5} lux and under natural conditions typically will stop foraging at illuminations above 10^{-3} lux (Buchanan 1998). The western toad (*Bufo boreas*) forages only at illuminations between 10^{-1} and 10^{-5} lux, while the tailed frog (*Ascaphus truei*) forages only during the darkest part of the night at below 10^{-5} lux (Hailman 1984). While these three species are not necessarily sympatric (ie inhabiting the same area), and differ in other niche dimensions, they illustrate the division of the light gradient by foragers.

Many bat species are attracted to insects that congregate around light sources (Frank 1988). Although it may seem that this is a positive effect, the increased food concentration benefits only those species that exploit light sources and could therefore result in altered community structure. Faster-flying species of bats congregate around lights to feed on insects, but other, slower-flying species avoid lights (Blake *et al.* 1994; Rydell and Baagøe 1996).

Changes in competitive communities occur as diurnal species move into the "night light niche" (Schwartz and Henderson 1991). This concept, as originally described, applies to reptiles, but easily extends to other taxa, such as spiders (Frank pers comm) and birds (Hill 1990; Figure 5).

Predation

Although it may seem beneficial for diurnal species to be able to forage longer under artificial lights, any gains from increased activity time can be offset by increased predation risk (Gotthard 2000). The balance between gains from extended foraging time and risk of increased preda-

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tion is a central topic for research on small mammals, reptiles, and birds (Kotler 1984; Lima 1998). Small rodents forage less at high illumination levels (Lima 1998), a tendency also exhibited by some lagomorphs (Gilbert and Boutin 1991), marsupials (Laferrier 1997), snakes (Klauber 1939), bats (Rydell 1992), fish (Gibson 1978), aquatic invertebrates (Moore *et al.* 2000), and other taxa.

Unexpected changes in light conditions may disrupt predator–prey relationships. Gliwicz (1986, 1999) describes high predation by fish on zooplankton during nights when the full moon rose hours after sunset. Zooplankton had migrated to the surface to forage under cover of darkness, only to be illuminated by the rising moon and subjected to intense predation. This "lunar light trap" (Gliwicz 1986) illustrates a natural occurrence, but unexpected illumination from human sources could disrupt predator–prey interactions in a similar manner, often to the benefit of the predator.

Available research shows that artificial night lighting disrupts predator–prey relationships, which is consistent with the documented importance of natural light regimes in mediating such interactions. In one example, harbor seals (*Phoca vitulina*) congregated under artificial lights to eat juvenile salmonids as they migrated downstream; turning the lights off reduced predation levels (Yurk and Trites 2000). Nighttime illumination at urban crow roosts was higher than at control sites, presumably because this helps the crows avoid predation from owls (Gorenzel and Salmon 1995). Desert rodents reduced foraging activity when exposed to the light of a single camp lantern (Kotler 1984). Frank (1988) reviews predation by bats, birds, skunks, toads, and spiders on moths attracted to artificial lights. Mercury vapor lights, in particular, disrupt the interaction between bats and tympanate moths by interfering with moth detection of ultrasonic chirps used by bats in echolocation, leaving moths unable to take their normal evasive action (Svensson and Rydell 1998).

From these examples, it follows that community structure will be altered where light affects interspecific interactions. A "perpetual full moon" from artificial lights will favor light-tolerant species and exclude others. If the darkest natural conditions never occur, those species that maximize foraging during the new moon could eventually be compromised, at risk of failing to meet monthly energy budgets. The resulting community structure would be simplified, and these changes could in turn affect ecosystem characteristics.

■ Ecosystem effects

The cumulative effects of behavioral changes induced by artificial night lighting on competition and predation have the potential to disrupt key ecosystem functions. The spillover effects from ecological light pollution on aquatic invertebrates illustrates this point. Many aquatic invertebrates, such as zooplankton, move up and down within the water column during a 24-hour period, in a behavior known as "diel vertical migration". Diel vertical migration presumably results from a need to avoid predation during lighted conditions, so many zooplankton forage near water surfaces only during dark conditions (Gliwicz 1986). Light dimmer than that of a half moon ($<10^{-1}$ lux) is sufficient to influence the vertical distribution of some aquatic invertebrates, and indeed patterns of diel vertical migration change with the lunar cycle (Dodson 1990).

Moore *et al.* (2000) documented the effect of artificial light on the diel migration of the zooplankton *Daphnia* in the wild. Artificial illumination decreased the magnitude of diel migrations, both in the range of vertical movement and the number of individuals migrating. The researchers hypothesize that this disruption of diel vertical migration may have substantial detrimental effects on ecosystem health. With fewer zooplankton migrating to the surface to graze, algae populations may increase. Such algal blooms would then have a series of adverse effects on water quality (Moore *et al.* 2000).

The reverberating effects of community changes caused by artificial night lighting could influence other ecosystem functions. Although the outcomes are not yet predictable, and redundancy will buffer changes, indications are that light-influenced ecosystems will suffer from important changes attributable to artificial light alone and in combination with other disturbances. Even remote areas may be exposed to increased illumination from sky glow, but the most noticeable effects will occur in those areas where lights are close to natural habitats. This may be in wilderness where summer getaways are built, along the expanding front of suburbanization, near the wetlands and estuaries that are often the last open spaces in cities, or on the open ocean, where cruise ships, squid boats, and oil derricks light the night.

■ Conclusions

Our understanding of the full range of ecological consequences of artificial night lighting is still limited, and the field holds many opportunities for basic and applied research. Studies of natural populations are necessary to investigate hypotheses generated in the laboratory, evidence of lunar cycles in wild populations, and natural history observations. If current trends continue, the influence of stray light on ecosystems will expand in geographic scope and intensity. Today, 20% of the area of the coterminous US lies within 125 m of a road (Riiters and Wickham 2003). Lights follow roads, and the proportion of ecosystems uninfluenced by altered light regimes is decreasing. We believe that many ecologists have neglected to consider artificial night lighting as a relevant environmental factor, while conservationists have certainly neglected to include the nighttime environment in reserve and corridor design.

Successful investigation of ecological light pollution will require collaboration with physical scientists and

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engineers to improve equipment to measure light characteristics at ecologically relevant levels under diverse field conditions. Researchers should give special consideration to the tropics, where the constancy of day–night lighting patterns has probably resulted in narrow niche breadths relative to illumination. Aquatic ecosystems deserve increased attention as well, because despite the central importance of light to freshwater and marine ecology, consideration of artificial lighting has so far been limited. Research on the effects of artificial night lighting will enhance understanding of urban ecosystems – the two National Science Foundation (NSF) urban Long Term Ecological Research sites are ideal locations for such efforts.

Careful research focusing on artificial night lighting will probably reveal it to be a powerful force structuring local communities by disrupting competition and predator–prey interactions. Researchers will face the challenge of disentangling the confounding and cumulative effects of other facets of human disturbance with which artificial night lighting will often be correlated, such as roads, urban development, noise, exotic species, animal harvest, and resource extraction. To do so, measurements of light disturbance should be included routinely as part of environmental monitoring protocols, such as the NSF's National Ecological Observatory Network (NEON). Future research is likely to reveal artificial night lighting to be an important, independent, and cumulative factor in the disruption of natural ecosystems, and a major challenge for their preservation.

Ecologists have studied diel and lunar patterns in the behavior of organisms for the greater part of a century (see Park 1940 and references therein), and the deaths of birds from lights for nearly as long (Squires and Hanson 1918). Humans have now so altered the natural patterns of light and dark that these new conditions must be afforded a more central role in research on species and ecosystems beyond the instances that leave carcasses on the ground.

■ Acknowledgements

We thank PJ DeVries for his photographs, and B Tuttle and C Elvidge for the satellite image. Research was supported in part by the Conservation and Research Foundation. We are grateful for constructive comments and advice from W Briggs, BW Buchanan, KD Frank, JE Lloyd, JR Longcore, MV Moore, WA Montevecchi, G Perry, and M Salmon.

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JOINT USE AND LEASE AGREEMENT FOR THE USE OF LAND AND DEVELOPMENT, MAINTENANCE, SCHEDULING AND OPERATIONS OF AN ICE RINK

THIS AGREEMENT is made and entered into this 14TH day of May, 2007, by and between the Mammoth Unified School District, ("DISTRICT,") the Mono County Office of Education, ("MCOE,")) and the Town of Mammoth Lakes, ("TOWN") collectively referred to as the "PARTIES"). The PARTIES hereby agree as follows:

1. RECITALS

1.1 DISTRICT and MCOE are the owners of real property (APN 35-010-37 and APN 35-010-41) , located on the south side of Meridian Blvd, east of the intersection of Sierra Park Road, described more particularly in Exhibit A, attached hereto, and incorporated herein. ("PROPERTY").

1.2 DISTRICT, MCOE and TOWN are mutually interested in supporting adequate programs for the community in the areas of education, athletics and recreation.

1.3 Representatives of DISTRICT, MCOE and TOWN, as identified in paragraph 6.8 are authorized to enter into agreements with each other and to do any and all things necessary to meet the obligations of their agencies.

1.4 DISTRICT and MCOE are responsible for the public education of students in the community and their respective districts, including physical education and other athletic activities related to the education program.

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1.5 TOWN has established a Tourism and Recreation Department to be responsible for carrying out the purpose of community athletic and recreation programs.

1.6 DISTRICT, MCOE and TOWN are stewards of public lands of Town; and because it is in the interest of the community and of the respective agencies to provide the best possible service to meet their obligations with the least possible expenditure of public funds, cooperation of the agencies is necessary and will benefit all entities.

1.7 DISTRICT, MCOE and TOWN recognize that the PROPERTY can be used to meet broader community needs for education, athletics and recreation than either party can provide separately.

1.8 TOWN is interested in developing a hockey-sized ice rink that may include a cover or enclosure, concession/sitting area, skate rental, equipment storage, restrooms, utilities and infrastructure, lighting, shared parking and pedestrian access to meet the recreation and athletic needs of the community (hereinafter collectively referred to as the "ice rink."

1.9 DISTRICT and MCOE own PROPERTY which is currently not planned for the development of educational facilities and would provide a location with ready-access to Mammoth High School, Mammoth Middle School, Mammoth Elementary School, Jan Work

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Communit chool, Mammoth Olym c Academy for Academic Excellence and Sierra High School stu ts for use in future phy al education programs.

PROPERT or twenty (20) years, b nning on the date of this Agreement, with an option to extend the eement for an addition ten (10) years by mutual agreement of all PARTIES.

1.10 DISTRICT an fCOE are interested in allowing TOWN the use of

operation c ice rink for the same t n stated in Paragraph 1.10. above. However, it is the intent of th)WN to request a sepa e agreement for the ultimate construction of a permanent multi-use r ation, education and cu ral center on land owned by the DISTRICT, and MCOE and the Ker ommunity College Dist ct. This intent is not governed by the present Agreement.

1.11 TOWN is inte ed in a use and lease agreement for the construction and

constructior d operation of all facilities and all improvements constructed on the PROPERTY PROPERTY maintain the PROPERTY in a safe and sound condition, and to restore the PROPERTY its original condition, including revegetation, upon the expiration of this Agreement, ess an alternate agreement is executed by all agencies.

1.12 The TOWN intends to be fully responsible for the maintenance,

2. PRO RTY

the PROPER currently owned by DISTRICT and generally described as the area (attached hereto as Ex "A") of the PROPERTY nearest to the MCOE property line, to construct and operate the i nk. .

.1 DISTRICT agrees to allow use by TOWN of approximately 2.0 acres of

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PROPERTY rently owned by MCOE and generally described as the area (attached hereto as Exhibit "A") he PROPERTY nearest to the DISTRICT property line, for the purpose of parking, pede an access, signage, and utility connections.

2 MCOE agrees to allow use by TOWN of approximately 2.0 acres of the

construction, a clear depiction of any and all improvements, landscaping, parking and/or access govern by or referenced in this Agreement is or will be attached hereto as Exhibit "A". If the site map not available at the time this Agreement is executed, TOWN will provide it to all parties for roval within thirty (30) days of execution.

3 A site map of the PROPERTY, showing the total leased area and areas for

3. TERM

3.1 The term of this Agreement shall be for twenty (20) years, beginning on the date of execution of this Agreement, with an automatic option to extend the agreement for up to an additional ten (10) years by mutual agreement of all PARTIES.

4. ASSIGNMENT AND SUBLETTING

4.1 The TOWN may not assign its rights or sublease the facility or any portion of the PROPERTY, to any other organization without the consent and approval of DISTRICT

and MCOE and such sub-lease will be subject to all conditions and requirements of this Agreement, and any and all applicable local, state and federal laws. This provision does not prohibit the TOWN from contracting for services with outside entities or from renting the facility for activities permitted under this AGREEMENT.

5. PAYMENTS

5.1 Town shall pay to DISTRICT the sum of $42,000.00 for lease of the PROPERTY per year for the term of the Agreement with the first payment due on or before July 31, 2008 and each subsequent payment due by July 31st of each year thereafter. The compensation paid for the months leased prior to July 31, 2007 shall be pro-rated for the actual days leased and paid on July 31, 2007.

5.2 The lease rate shall be adjusted every five years year, beginning July 31, 2012, by the Consumer Price Index as calculated by the highest of the Los Angeles//Riverside/Orange County area annual index for the prior five years, but not less than 2% and not more than 6% or as otherwise negotiated and mutually agreed to by the PARTIES.

5.3 Payment described in this paragraph does not include utilities or any other costs subsequently described in this Agreement.

5.4 TOWN agrees to file an application, at its own expense, with the State of California for grant funding of the sidewalk/trail from the Library to the Kern Community College facilities on behalf of MCOE. No guarantee of receipt of said grant is implied.

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5.5 TOWN agrees to perform all snow removal, at its expense, in the Library parking lot, on the road leading to the Library parking lot, the drop-off circle, the driveway leading to the ice rink parking lot and the ice rink parking lot. TOWN will also clear snow around the ice rink and modular building and paths around the ice rink. TOWN will not clear the snow around the Library or on the paths leading to the Library. TOWN further agrees to perform all snow removal, at its expense, in any used portion of the Mammoth High School parking lot during school weekends and school holiday periods to provide for "overflow" parking, when necessary.

5.6 TOWN agrees to work cooperatively with MCOE to design, construct and fund a sign that will identify the Library and the ice rink.

6. DESIGN AND CONSTRUCTION OF ICE RINK

6.1 Prior to consideration by the Planning Commission of the required Use Permit, both Superintendents of the DISTRICT and MCOE shall approve the design, in writing, of the ice rink. The PARTIES acknowledge that the Planning Commission has the authority to make some design changes at its discretion.

6.2 Once the final design is approved, DISTRICT and MCOE agree to allow typical and necessary construction efforts to occur on the PROPERTY to facilitate completion of

the construction of the ice rink. TOWN agrees to respect MCOE's right to complete the Library project in accordance with signed contracts in place at the effective date of this Agreement and will meet with the Library general contractor to coordinate work efforts of both projects.

6.3 TOWN agrees to obtain and pay the costs of all permits required to construct the ice rink, and agrees to construct the facility subject to all required permits, conditions and approvals of the Town, State of California and applicable agencies, at no cost to DISTRICT or MCOE.

6.4 DISTRICT and MOE agree to provide TOWN with a title report. If TOWN must provide a current title report with the submittal of the Use Permit, it shall do so at its own cost.

6.5 TOWN agrees to prepare an Addendum to the Environmental Impact Report (EIR) SCH # 1994012060, previously certified by the DISTRCT and MCOE, in accordance with the provisions of the California Environmental Quality Act (CEQA). While the Addendum to the EIR will provide environmental clearance and cover all potential environmental impacts, emphasis should be placed on the traffic and parking impacts of the ice rink. TOWN shall be solely responsible for the costs of defending any challenges to the Addendum, including the cost of preparing a new EIR if the Addendum is determined to be insufficient for the project. TOWN shall also implement any and all environmental mitigation required for the project at no cost to DISTRICT or MCOE.

6.6 TOWN agreed to conduct a site assessment of the Mammoth Middle School site to certify that the location is acceptable for a day care center. The site assessment concluded that a day care center could be accommodated on the site, but the design and construction of the facility may be subject to zoning, building and grading regulations of the TOWN and the State of California.

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6.7 TOWN agrees to evaluate, design and construct adequate parking and access for the ice rink to minimize traffic impacts around the property, pursuant to all applicable traffic studies. To assist TOWN in meeting parking needs, TOWN, MCOE, and DISTRICT agree to share existing and future parking spaces located on Assessor's Parcel Numbers 35-010-37 and 41, estimated to be a total of 144 , for the purpose of accommodating parking for the Library, administration/classroom buildings of MCOE and DISTRICT and the ice rink. MCOE and DISTRICT also agrees to allow "overflow" parking on Mammoth High School property during weekends, scheduled school holidays and any other time when school is not in session, including summers. MCOE and DISTRICT may limit or cease use of shared parking if parking becomes problematic, as determined by MCOE and DISTRICT.

6.8 The Superintendent of DISTRICT, The Superintendent of Schools for MCOE and Town Manager of TOWN are authorized and agree to sign any and all required applications, as the property owners and applicant, necessary to complete the review and approval process for the construction and operation of a ice rink.

6.9 TOWN agrees to comply with all provisions of Education Code sections 45125.1 and 45125.2. Pursuant to Education code sections 45125.1 and 45125.2 TOWN shall

conduct criminal background checks of all employees and contractors assigned to work on DISTRICT property, and shall certify that no employees or contractors who have been convicted of serious or violent felonies, as specified in Education Code Section 45122.1, will have contact with pupils. TOWN and its contractors must provide the District with a list of all employees and contractors providing services pursuant to this Agreement. In performing the services set forth in this Agreement, TOWN shall not utilize any employees who are not included on the above referenced list. At DISTRICT'S and/or MCOE's sole discretion, either may make a finding, as authorized under Education Code Sections 45125.1 and 45125.2, that TOWN'S employees and contractors will have only "limited contact" with pupils. TOWN'S failure to comply with this law shall be considered a material breach of this Agreement upon where this Agreement may be terminated, at DISTRICT'S and/or MCOE's sole discretion. TOWN represents that it anticipates that the construction of the ice rink performed under the Agreement will involve no or limited contact with DISTRICT and/or MCOE students on any DISTRICT and/or MCOE property. Pursuant to Education Code Section 45125.2, TOWN shall ensure the safety of pupils at DISTRICT and MCOE premises through the installation of a physical barrier at the worksites.

6.10 DISTRICT and MCOE represent and warrant to TOWN that they have no knowledge of any substance, chemical or waste on or affecting the PROPERTY that is identified as hazardous, toxic or dangerous under any applicable federal, state or local law or regulation (collectively, "Hazardous Substance"). If, at any time during the term of this Agreement, a Hazardous Substance is discovered on the PROPERTY, TOWN shall immediately remove, cleanup and remediate the Hazardous Substance or, at TOWN's option, terminate this Agreement pursuant to Article 12 and return the site to DISTRICT and MCOE in its original condition. TOWN further agrees that it will not introduce or use any Hazardous Substance on the PROPERTY in violation of any applicable law, and TOWN will indemnify, defend and hold harmless DISTRICT and MCOE from and against all claims arising out of TOWN'S breach of this Paragraph. The indemnity obligations under this Paragraph will survive termination of this Agreement.

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6.11 DISTRICT and MCOE agree to allow TOWN reasonable and ample time to implement the construction and operation of the ice rink. However, if TOWN has not completed the construction and commenced operation of the ice rink by December 31, 2008, this agreement shall become void unless an extension is mutually agreed upon by all PARTIES.

7. USE OF PROPERTY

7.1 TOWN'S Obligations

a. TOWN agrees to use the ice rink for athletic and recreational ice skating and other educational, cultural, athletic and recreation purposes that can be fully accommodated within the confines of the PROPERTY as shown on Exhibit "A". This may include, but is not limited to any of the following: roller skating; basketball; community events; and musical events.

b. TOWN agrees to obtain all permits and licenses required to operate the facility and agrees to operate the facility subject to all required permits, conditions and

approvals of Town, State of California and applicable agencies, at no cost to DISTRICT and MCOE.

c. TOWN shall be fully responsible for the ongoing maintenance and operation of the ice rink in a safe and sound condition, including any and all unforeseen fees and governmental requirements.

d. The TOWN agrees to maintain the facility in a neat, orderly and sanitary condition and make necessary improvements to create a quality experience for the user. It is understood and agreed that TOWN will provide normal janitorial service, necessary restroom supplies, and keep premises in proper order and repair except as to damage caused by DISTRICT and/or MCOE, which damage DISTRICT and/or MCOE agree to repair.

e. The TOWN shall be solely responsible for all safety precautions in or around the ice rink to ensure the public is protected from any potential danger to include, but not limited to: adequate fencing, securing the facility with locks, and/or other safety measures. Additionally, the TOWN is responsible for and has the right to install any warning signs on or about PROPERTY as required by federal, state or local law.

f. TOWN agrees to hook up to the MCOE Library sewer system at TOWN's cost. The sewer system will be used solely by the Library and ice rink. Maintenance on the sewer system will be shared by Library and ice rink unless the problem is specific to either facility.

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g. TOWN will be fully responsible for restoring the PROPERTY to its original condition, including re-vegetation with indigenous plants, but excepting reasonable wear and tear, upon the expiration of this Agreement, unless an alternate agreement is executed by the PARTIES.

7.2 Utilities

a. TOWN shall pay for all utilities, including, but not limited to: sewer, water, electricity, propane, and trash to service the ice rink.

b. DISTRICT and MCOE shall grant to TOWN and all local utility companies (as appropriate) any easement(s) reasonably required by TOWN or the utility companies for the life of this agreement in order to provide utility service required by TOWN for its construction or operation of the ice rink and shall execute any instrument(s) reasonably necessary to evidence such rights.

7.3 Parking

a. TOWN shall not charge a fee for parking at the ice rink.

b. TOWN shall enforce parking in parking areas of the Library parking lot.

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c. TOWN shall perform all snow removal in all parking areas in accordance with paragraph 5.5 of this Agreement.

d. After the first year of operation, TOWN shall evaluate whether sufficient parking and access has been provided for customers of all facilities on the PROPERTY. If parking is insufficient, TOWN shall provide solutions, subject to appropriate local review and approval processes, and shall work with MCOE and DISTRICT to address and resolve parking, access and traffic issues. TOWN shall be solely responsible for the cost of construction required to provide additional parking on the ice rink portion of the PROPERTY.

7.4 Operation of the Ice Rink

a. TOWN shall prepare written site operating rules consistent with: federal, state, and local laws; adopted DISTRICT and MCOE policies, procedures and regulations; and adopted TOWN ordinances. Should DISTRICT or MCOE wish to modify a policy, procedure or regulation which affects the use of the PROPERTY, after TOWN has taken possession thereof, a representative of TOWN shall be included in any discussion of said modification.

b. The ice rink shall be made available to the general public on a first-come, first-served basis, up to the maximum allowable occupancy rate, as determined by all applicable permits, ordinances, regulations and statutes, except as provided in paragraph 7.4(c).

c. TOWN agrees to provide DISTRICT and MCOE pre-requested exclusive use of the ice rink facility, between 7:30 am and 10:30 am on all days in which school is in session and non-exclusive use at any other time Monday through Friday for school classes, functions and sports. TOWN agrees to work with DISTRICT/MCOE for occasional exclusive use to accommodate special school or sporting events excluding weekends and holidays. There shall be no fees or costs associated with School classes, sports or special event use. TOWN understands that sections of the rink may need to be roped off or segregated from public use for school class/sports use during school hours up to 1:30 PM.

d. The TOWN agrees to comply with all applicable laws, statutes, and regulations, of any governmental authority regarding the sale of alcoholic beverages at the ice rink.

e. Advertising and sponsorships are a means of supporting the operational cost of the ice rink and therefore, signage, plaques, banners and similar media (collectively "Signage") shall be allowed on the interior of PROPERTY as permitted by law. Outdoor signage identifying the ice rink shall also be allowed as permitted by law subject to the approval of DISTRICT and MCOE, said approval not to be unreasonably withheld. TOWN may advertise the programs in publications and other media, at its own cost.

f. TOWN agrees that it will charge a discounted admission fee of two dollars ($2.00) to all DISTRICT and MCOE students, upon the presentation of valid identification, during those hours when the facility is open to the general public. This discounted admission will be inclusive of equipment rentals.

g. Notwithstanding the exclusive and non-exclusive use by the DISTRICT and MOE at no charge pursuant to paragraph 7.4(c) or the discounted fees for MCOE and DISTRICT students pursuant to paragraph 7.4(f), TOWN may charge user fees for services, maintenance, material, labor and overhead, which fees shall be set at TOWN's discretion and solely allocated to TOWN to offset the costs of building and maintaining the ice rink.

h. TOWN agrees to comply with its own noise ordinances in the operation of the ice rink. TOWN further agrees to work cooperatively and collaboratively with MCOE and/or District should the activities conducted at the ice rink unreasonably interfere with the normal operation of surrounding businesses, including the adjacent Library. While it is understood that individual events will be noisy, large numbers of consecutive events which are consistently audible inside the Library may result in an unreasonable impact on use of the Library, including an unreasonable reduction in available parking. In such circumstances, DISTRICT and MCOE may object to future activities when reviewing the Quarterly Operations Plan pursuant to paragraph 7.6 in an effort to reduce these impacts

7.5 Uses Prohibited

a. The PROPERTY shall not be used except for the purposes specified in this Agreement.

b. TOWN shall not do or permit anything to be done in or about the PROPERTY that will in any way unreasonably obstruct or interfere with the rights of DISTRICT and/or MCOE, or injure or annoy DISTRICT and/or MCOE, or use or allow the PROPERTY to be used for any unlawful or unreasonably objectionable purpose, nor shall the TOWN cause, maintain or permit any nuisance in or about the PROPERTY.

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c. TOWN shall not commit or suffer to be committed any waste in or upon the PROPERTY.

d. TOWN shall not use the PROPERTY or permit anything to be done in or about the PROPERTY that will in any way conflict with any applicable law, statute, ordinance or governmental rule, or regulation or requirement.

7.6 TOWN shall prepare a Quarterly Operations Plan identifying proposed activities and events within the ice rink and discuss that Plan with a committee composed of a designee from MCOE and the DISTRICT with the objective of addressing potential impacts to all parties of the proposed activities and events. If MCOE and/or DISTRICT has an objection to a proposed activity, said PARTIES will work cooperatively with the TOWN to modify any objectionable activities or events to remove the stated objections, if possible. If the PARTIES are unable to reach a resolution of a dispute under this section, the PARTIES shall refer the matter to a mediator pursuant to paragraph 13.2 of this Agreement.

8. DAMAGE OR DESTRUCTION OF PROPERTY

8.1 If the PROPERTY is totally destroyed by fire or other casualty, or the PROPERTY cannot be restored as required herein under applicable laws and regulations, notwithstanding the availability of insurance proceeds, then, upon agreement between all PARTIES, this Agreement shall terminate effective the date of the total loss.

8.2 Neither DISTRICT nor MCOE shall be required to repair any injury or damage by fire or other cause, or to make any restoration or replacement of any improvements installed in the PROPERTY by TOWN or at the direct or indirect expense of the TOWN. TOWN may restore or replace same if damaged. TOWN shall have no claim against DISTRICT or MCOE for any damage suffered by reason of any such damage, destruction, repair or restoration unless caused by the sole negligence or wrongful intentional acts of DISTRICT or MCOE.

9. INSURANCE

9.1 General Liability Insurance. TOWN agrees to furnish DISTRICT and MCOE with a Certificate or Evidence of Insurance evidencing coverage under a Commercial General Liability Insurance Policy ("GL Policy"). The GL Policy shall provide limits of no less than $2,000,000 combined single limit per occurrence for bodily injury, personal injury, and property damage, and for those policies where aggregates are applicable, a $4,000,000 aggregate limit.

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a. The GL Policy shall include coverage for bodily injury (including death) and property damage arising out of the use of all owned, non-owned and hired vehicles.

b. The GL Policy shall name the DISTRICT and MCOE, its officers, elected and appointed officers, board members, employees, volunteers and agents as additional insureds by applicable endorsement.

c. The GL Policy shall include a provision that the insurance shall not be cancelled without first providing DISTRICT and MCOE thirty (30) days written notice of cancellation.

9.2 Pollution Liability Insurance. TOWN agrees to furnish DISTRICT and MCOE with a Certificate or Evidence of Insurance evidencing coverage under a Pollution Liability Insurance Policy ("PL Policy") or Pollution Liability coverage under the GL Policy by endorsement.

a. The PL Policy (or PL coverage under the GL Policy by endorsement) shall provide coverage for the accidental discharge, escape or release of contaminants, irritants or pollutants into or on land, the atmosphere or any body of water and the consequential containment, clean-up, disposal and penalties associated therewith with minimum limits of $1,000,000 per occurrence and a $2,000,000 aggregate limit.

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b. The PL Policy shall name the DISTRICT and MCOE, its officers, elected and appointed officers, board members, employees, volunteers and agents as additional insureds by applicable endorsement.

c. The PL Policy shall include a provision that the insurance shall not be cancelled without first providing DISTRICT and MCOE thirty (30) days written notice of cancellation.

d. The PL Policy shall only cover acts as described in a.) above which occur after the effective date of this Agreement.

9.3 Excess/Umbrella Liability Insurance. TOWN is not required to obtain Excess/Umbrella Liability Coverage. However, if such insurance provides coverage for the ice rink, TOWN shall name DISTRICT and MCOE as additional insureds by applicable endorsement.

9.4 Builders Risk/Course of Construction Insurance. TOWN agrees to furnish DISTRICT and MCOE with a Certificate or Evidence of Insurance evidencing Builder's Risk or Course of Construction Insurance ("BR Policy"). The BR Policy shall provide limits equal to the anticipated value of the ice rink at the completion of construction.

a. The BR Policy shall provide "All-Risk" coverage for the full replacement cost of materials, supplies and other property to be incorporated into the finished work. Coverage for vandalism, theft, flood, snow, rain and wind shall not be excluded and shall be included by endorsement if necessary.

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b. The BR Policy shall provide coverage for business personal property at full replacement cost and shall include property belonging to DISTRICT and/or MCOE.

c. The BR Policy shall provide coverage for property in transit and/or property stored off site with a minimum limit of $100,000.

d. The BR policy may be acquired by and may list either the TOWN or the Contractor retained by TOWN to build the ice rink as the insured.

9.5 Property Insurance/Fire Policy. Upon completion of the construction of the ice rink, TOWN agrees to furnish DISTRICT and MCOE with a Certificate or Evidence of Insurance evidencing a Commercial Fire Insurance Policy or Property Insurance Policy which includes fire coverage ("Fire or Property Policy"). The Fire Policy shall provide coverage equal to the replacement value of the property upon a total loss.

a. The Fire or Property Policy shall provide "All-Risk" coverage including coverage for loss due to vandalism, theft, flood, snow, rain and wind, by endorsement if necessary.

b. The Fire or Property Policy shall provide coverage for business personal property at full replacement cost and shall include property belonging to DISTRICT and/or MCOE.

c. The Fire or Property Policy shall provide coverage for lost business income due to any partial or complete interruption in the operation of the ice rink.

9.6 District/MCOE Insurance. At all times when DISTRICT and/or MCOE conduct their own programs at or within the ice rink, DISTRICT and MCOE shall carry their own general liability insurance with limits of no less than $1,000,000 per occurrence and $2,000,000 in the aggregate limits to cover the participants in said programs.

a. DISTRICT and/or MCOE shall provide a Certificate or Evidence of Insurance to TOWN prior to use of the ice rink.

b. Any general liability policy obtained by DISTRICT or MCOE for their own programs at or within the ice rink shall name TOWN, its officers, elected and appointed officers, board members, employees, volunteers and agents as additional insureds by applicable endorsement.

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10. INDEMNIFICATION

a. TOWN shall indemnify, hold harmless, and defend DISTRICT and MCOE, their trustees, elected and appointed officers, board members, employees, volunteers and agents against and from any and all claims, demands, actions, suits, losses, liability, expenses and costs for any injury, death or damage to any person or property occurring in, on or about the PROPERTY after DISTRICT and MCOE deliver possession of the PROPERTY to TOWN, or arising from the TOWN'S use of the PROPERTY or TOWN's possession operation or maintenance of the ice rink excepting those claims, demands, actions, suits, losses, liability, expenses and costs arising out of or relating to obligations of DISTRICT and MCOE as they relate to the PROPERTY or caused by the sole negligence or wrongful intentional acts of DISTRICT and/or MCOE, their employees, agents, officers and invitees.

b. DISTRICT and MCOE shall indemnify, hold harmless, and defend TOWN, their trustees, elected and appointed officers, board members, employees, volunteers and agents against and from any and all claims, demands, actions, suits, losses, liability, expenses and costs for any injury, death or damage to any person or property occurring in, on or about the PROPERTY arising from the DISTRICT's or MCOE's use of the PROPERTY excepting those claims, demands, actions, suits, losses, liability, expenses and costs arising out of or relating to obligations of TOWN as they relate to the PROPERTY or caused by the sole negligence or wrongful intentional acts of TOWN, their employees, agents, officers and invitees.

11. NOTICES

All notices, statements, demands, requests, consents, approvals, authorizations, appointments or designations hereunder by either party to the other will be in writing and will be deemed given and served upon the other party, if delivered personally or by depositing in the United States mail, postage prepaid, addressed to:

If to the TOWN:
Town of Mammoth Lakes
437 Old Mammoth Road, Suite R
P. O. Box 1609
Mammoth Lakes, CA 93546
Attn: Town Manager

If to the DISTRICT:
Mammoth Unified School District
1601 Meridian Boulevard
P. O. Box 3509
Mammoth Lakes, CA 93546
Attn: Superintendent

If to MCOE:
Mono County Office of Education
1651 Meridian Boulevard
P. O. Box 130
Mammoth Lakes, CA 93546
Attn: Superintendent

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12. TERMINATION AND RIGHTS AFTER TERMINATION

12.1 This Agreement may be terminated, with cause, at any time during the term hereof by any of the PARTIES to this Agreement upon one (1) year's written notice to the other PARTIES.

12.2 If this Agreement terminates by expiration of the agreed upon terms as set forth in paragraph 3.1, TOWN shall, upon termination of this Agreement, remove any structures and/or fixtures affixed to the PROPERTY and revegetate the PROPERTY to the same condition as that existing at the time of entering into this lease, reasonable wear and tear and tree caliper excepted.

12.3 If the DISTRICT or MCOE terminates the lease prior to its expiration of the lease term, TOWN shall, upon termination of this lease, remove any structures and/or fixtures affixed to the PROPERTY and restore the PROPERTY to the same condition as that existing at the time of entering into this Agreement, reasonable wear and tear excepted. Documented costs of restoration of the PROPERTY and reimbursement to the State of California of any grant funds used to construct the ice rink, if required, shall be shared equally among the PARTIES.

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12.4 If TOWN terminates the lease prior to its expiration of the lease term, TOWN shall, upon termination of this lease, remove any structures and/or fixtures affixed to the PROPERTY and restore the PROPERTY to the same condition as that existing at the time of entering into this Agreement, reasonable wear and tear excepted.

13. DISPUTE RESOLUTION

13.1 **Informal Conference.** The parties agree to make good-faith efforts to settle any dispute or claim that arises under this Agreement through discussion and negotiation. In the event of a claim or dispute, any party to this Agreement may request an informal conference of all parties.

13.2 **Mediation.** If the parties are unable to resolve their claim(s) through informal discussions within thirty (30) days of the demand for an informal conference, either party may submit a request, in writing, to the other to refer the dispute to mediation. Upon receipt of a request for mediation, all parties shall make a good faith effort to select a mediator and complete the mediation within sixty (60) days. All costs of mediation shall be allocated equally among the parties to the claim. The mediator's recommendation for settlement, if any, is non-binding on the parties. No party shall be entitled to pre-decisional interest in mediation and each party shall bear its own attorney fees. Completion of mediation shall be a condition precedent to the filing of a civil lawsuit, unless the party against whom the claim is being made unreasonably refuses to cooperate in the setting of a mediation.

13.3 **Qualifications of Mediator.** Any mediator selected shall have expertise in the area of the dispute and be knowledgeable in the mediation process. No person shall serve as a mediator in any dispute in which that person has any financial or personal interest in the result of the mediation.

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13.4 **Privacy and Confidentiality.** Informal conferences and mediations pursuant to this Article 13 are private. Only the parties and their representatives may attend these sessions. Other persons may attend only with the permission of the parties. All persons who attend the informal conference or mediation shall be bound by the confidentiality requirements of California Evidence Code section 1115 et seq. and shall sign an agreement to that effect.

13.5 **Arbitration.** If the parties have attended mediation but have been unable to resolve the claim(s), the parties may agree to submit their dispute to arbitration. Arbitration is voluntary and is not a condition precedent to the filing of a civil lawsuit. The parties may elect either a binding or non-binding arbitration proceeding. If selected, the arbitrator's fees will be paid equally by all parties. Each party will pay its own expenses for witnesses and its own attorneys fees.

13.6 **No Waiver.** No party to this Agreement will be excused from it duties hereunder pending the final resolution of a dispute, whether by mediation, arbitration or litigation.

14. COMPLIANCE WITH LAWS

14.1 Notwithstanding anything to the contrary in this Agreement, the PARTIES shall ensure that any and all activities they perform pursuant to this Agreement shall specifically comply with all applicable laws, statutes, regulations, permits, ordinances and orders of any governmental authority.

14.2 Without limiting the generality of paragraph 13.1, PARTIES shall comply with all applicable provisions of all laws, statutes, regulations, rules, guidelines, policies, orders, permits, ordinances and orders of any governmental authority relating to environmental matters and/or occupational safety.

15. APPLICABLE LAW

This Agreement has been made and entered into in the State of California and the laws of said State will govern the validity and interpretation of this Agreement, including the performance of the PARTIES hereunder.

16. ENTIRE AGREEMENT

This Agreement sets forth the entire Agreement between the parties with respect to the PROPERTY and uses stated above. All parties must in form of a written amendment agree to any modifications.

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17. SEVERABILITY

Whenever, possible, each provision of this Agreement will be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement will be invalid under the applicable law, such provision will be ineffective to the extent of such prohibition or invalidity. without invalidating the remainder of such provision or the remaining provisions of this Agreement.

18. AMENDMENTS

This Agreement may be amended at any time but only by the mutual agreement of the PARTIES and only when the PARTIES memorialize the agreement to amend in writing.

19. WAIVER

The failure of TOWN, DISTRICT or MCOE to insist upon strict performance of any of the terms, conditions, or covenants in this Agreement will not be deemed a waiver of any right or remedy which TOWN. DISTRICT, or MCOE may have and will not be deemed a waiver of any right of remedy for a subsequent breach or default of the terms, conditions, or covenants herein contained.

20. BINDING EFFECT

This Agreement and all the terms, conditions and agreements herein contained will be binding upon and inure to the benefit of the parties hereto and their respective successors.

21. AUTHORITY TO EXECUTE

The persons signing this Agreement warrant that they are duly authorized to sign it on behalf of the persons and entities being bound.

22. COUNTERPARTS

This Agreement may be executed in counterparts, all of which, taken together, shall be deemed an original.

IN WITNESS WHEREOF, this Agreement has been duly approved by TOWN, DISTRICT and MCOE.

Mammoth Unified School District

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Mike DeRisi,
Superintendent

Date: 5-14-07

Mono County Office of Education

Catherine Hiatt,
Superintendent of Schools

Date: 5/15/07

Town of Mammoth Lakes

Kirk A. Stapp,
Mayor

Date: 5/14/07

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Town of Mammoth Lakes
Town Manager's Office
437 Old Mammoth RD, Suite R
P.O. Box 1609 Mammoth Lakes, CA 93546
Phone (760) 934-8989 ext. 228, Fax 934-7493
www.townofmammothlakes.ca.gov

CONFIDENTIAL MEMORANDUM

June 6, 2015

To: Lois Klein, Superintendent, MUSD
Stacey Adler, Superintendent MCOE

RE: Offer to Lease or Purchase Certain Property Referred to as "Ice Rink"

The Town has developed two offers for consideration regarding the "Ice Rink" property, referred to herein as property. The Town's preferred option is to acquire the property. However, should the direct purchase offer not be acceptable, a second offer on a new long-term lease/purchase option is proposed for consideration. Details on each proposal are attached.

The timing of each offer is tied to the expiration of the current lease, as amended with the end date of June 30, 2017, unless otherwise agreed.

A. The offer to purchase the property is for $600,000. The offer is based on a site of approximately 2.2+/- acres. The determination of the proposed purchase value as adjusted is noted in the attached information. Attachment 1.

B. The long-term lease proposal is based on the following deal points (Attachment 2):

- **New Lease for 20 years, beginning upon the expiration of current lease on June 30, 2017 – new lease July 1, 2017 – 2037, with 10 year extension**
- **Term ties to current useful life of base ice rink infrastructure and of new roof**
- **Lease purchase option at $10,000 per year lease payment, with the option to purchase at the end of 20 years at $500,000, subject to the District not having a funding plan or need for the property to provide space for a specific educational facility(s). If not purchased, the 10 year extension would be granted at $1 year.**
- **Non-purchase option is Lease Rate at $1 per year (same as MCOE lease at Community Center Park/Old Library building)**

A rough draft of a lease is attached as a starting point for a new lease document discussion if this option is considered.

Sincerely,

Daniel C. Holler
Town Manager

cc: Stuart Brown, Recreation Manager

Lease Deal Points:

- **New Lease for 20 years, beginning upon the expiration of current lease on June 30, 2017 – new lease July 1, 2017 – 2037, with 10 year extension**
- **Term ties to current useful life of base rink infrastructure and of new roof**
- **Lease purchase option at $10,000 per year lease payment. The Town has the option to purchase at the end of 20 years at $500,000, subject to the District not having a funding plan and need for the property to provide space for a specific educational facility. If not purchased the 10 year extension would be granted at $1 year.**
- **Non-purchase option is Lease Rate at $1 per year (same as MCOE lease at Community Center Park)**
- **Reduced restrictions on time of use**
- **Modified snow removal requirements**
- **Town to prepare a new map of the area to be surveyed (Exhibit A to be updated)**
- **Clean up and clarification of several sections – assume more will need to be done**

THIS AGREEMENT is made and entered into this ____ day of _____, ~~2007~~2015, by and between the Mammoth Unified School District, ("DISTRICT,") the Mono County Office of Education, ("MCOE,") and the Town of Mammoth Lakes, ("TOWN") collectively referred to as the "PARTIES"). The PARTIES hereby agree as follows:

1. RECITALS

6-113

1.1 DISTRICT and MCOE are the owners of real property (APN 35-010-37 and APN 35-010-41) located on the south side of Meridian Blvd, east of the intersection of Sierra Park Road, described more particularly in Exhibit A, attached hereto, and incorporated herein. ("PROPERTY").

1.2 DISTRICT, MCOE and TOWN are mutually interested in supporting adequate programs for the community in the areas of education, athletics and recreation.

1.3 Representatives of DISTRICT, MCOE and TOWN, as identified in paragraph 6.8 are authorized to enter into agreements with each other and to do any and all things necessary to meet the obligations of their agencies.

1.4 DISTRICT and MCOE are responsible for the public education of students in the community and their respective districts, including physical education and other athletic activities related to the education program.

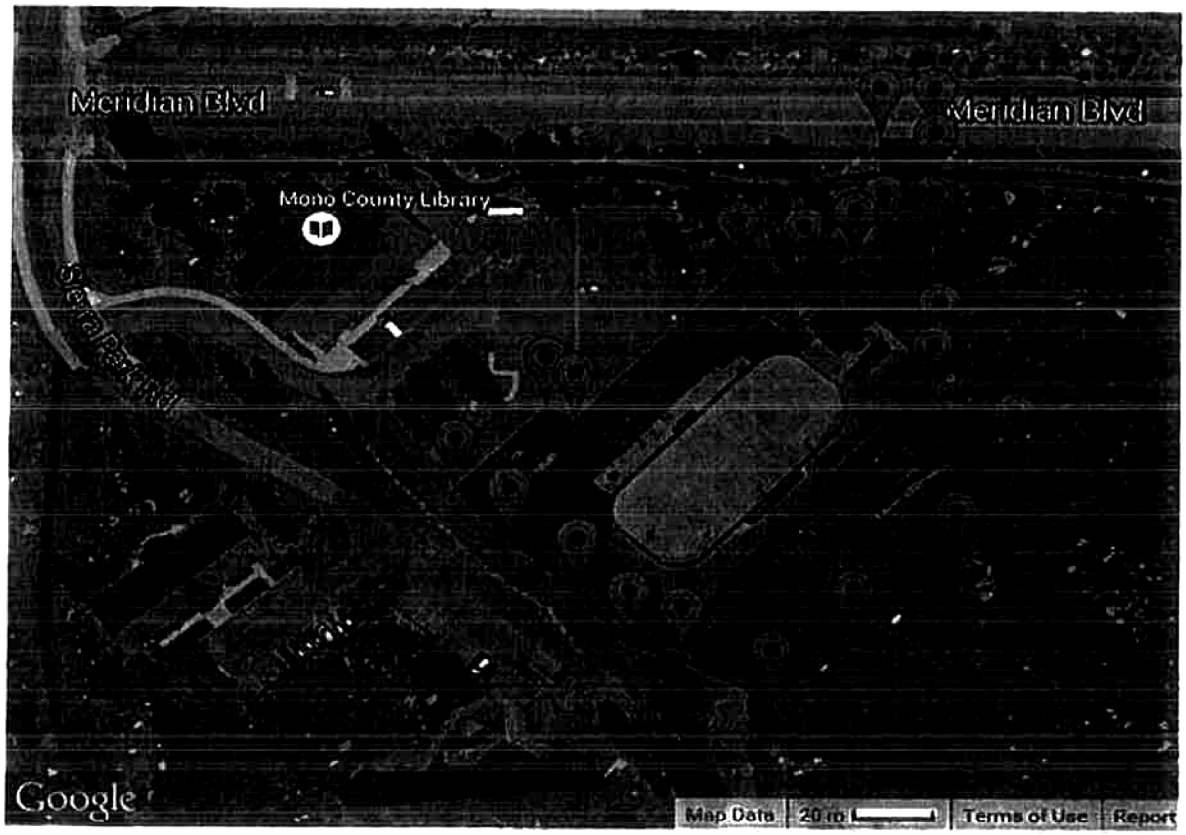
1.5 TOWN has established a ~~Tourism and~~ Parks and Recreation Department to be responsible for carrying out the purpose of community athletic and recreation programs.

1.6 DISTRICT, MCOE and TOWN are stewards of public lands of Town; and because it is in the interest of the community and of the respective agencies to provide the best possible service to meet their obligations with the least possible expenditure of public funds, cooperation of the agencies is necessary and will benefit all entities.

Attachment 1

Purchase Price Offer:	**$600,000**	
Appraised Base Value:		$1,930,000.00
Less Lease Payments:		($367,550)
Adjusted Value:		$1,562,450
Value by Acre (used 2.6):		$600,942
Modified site for Purchase by .4 acres		($240,377)
Reduced Value for 2.2 acres:		$1,322,073
Adjustment for purchase vs. relocation 50%:		$661,037
Less Estimated Costs for:		($60,000)
Survey		
Title/Deed		
Parcel Map		
Legal		
Easements		
Misc.		
Adjusted Purchase Price:		$601,036.54

Approximate Site Boundary 2.2+/- Acres



1.7 DISTRICT, MCOE and TOWN recognize that the PROPERTY can be used to meet broader community needs for education, athletics and recreation than either party can provide separately.

1.8 TOWN is interested in developing a hockey-sized ~~ice rink~~Facility that may include a cover or enclosure, concession, sitting area, skate rental, equipment storage, restrooms, utilities and infrastructure, lighting, shared parking and pedestrian access to meet the recreation and athletic nee the community (hereinafter collectively referred to as the "Multi -Use Facility or "Facility." The Facility serves as a multi-purpose recreational and community use facility throughout the year.

1.9 DISTRICT and MCOE own PROPERTY which is currently not planned for the development of educational facilities and would provide a location with ready access to Mammoth High School, Mammoth Middle School, Mammoth Elementary School, Jan Work Community School, Mammoth Olympic Academy for Academic Excellence [SB1]and Sierra High School students for use in future physical education programs.

1.10 DISTRICT and MCOE are interested in allowing TOWN the use of PROPERTY for twenty (20) years, beginning on July 1, 2017 as provided for in ~~the date of~~ this Agreement, with an option to purchase the property, or in lieu of purchase with an option to extend the Agreement for an additional ten (10) years ~~by mutual agreement of all PARTIES~~. 6-113

1.11 TOWN is interested in a use and lease agreement for the construction and operation of ~~an~~ ~~ice rink~~Facility and recreational multi-use facility on the property. ~~for the same term stated in Paragraph 1.10 above. However, it is the intent of the TOWN to request a separate agreement for the ultimate construction of a permanent multi-use recreation, education and cultural center on land owned by the DISTRICT, and MCOE and the Kern Community College District. This intent is not governed by the present agreement.~~

1.12 The TOWN intends to be fully responsible for the maintenance, construction, and operation of all facilities and all improvements constructed on the PROPERTY, to maintain the PROPERTY in a safe and sound condition, and to restore the PROPERTY to its original condition, including re-vegetation, upon the expiration of this Agreement, unless an alternate agreement is executed by all agencies.

2. PROPERTY

2.1 DISTRICT agrees to allow use by TOWN of approximately 2.2~~0~~ acres of the PROPERTY currently owned by DISTRICT and generally described as the area (attached hereto as Exhibit "A") of the PROPERTY nearest to the MCOE property line, to construct and operate the ~~ice rink~~Facility.

2.2 MCOE agrees to allow use by TOWN of approximately 2.~~0~~2 acres of the PROPERTY currently owned by MCOE and generally described as the area (attached hereto as Exhibit "A") of the PROPERTY nearest to the DISTRICT property line, for the purpose of parking, pedestrian access, signage, and utility connections.

2.3 A site map of the PROPERTY, showing the total leased area and areas for ~~construction~~any additional construction, with a clear depiction of any and all improvements, landscaping, parking and/or access governed by or referenced in this Agreement is or will be attached hereto as Exhibit "A". ~~If the site map is not available at the time this Agreement is executed, TOWN will provide it to all parties for approval within thirty (30) days of execution.~~

3. TERM

3.1 The term of this Agreement shall be for twenty (20) years, beginning on July 1, 2017~~the date of execution of this Agreement~~ . At the end of 20 years if the option to purchase is not executed then ~~, with an~~ the Town has an automatic option to extend the agreement for up to an additional ten (10) years ~~by mutual agreement of all PARTIES~~.

4. ASSIGNMENT AND SUBLETTING

4.1 The TOWN may not assign its rights or sublease the facility or any portion of the PROPERTY, to any other organization without the consent and approval of DISTRICT and MCOE and such sub-lease will be subject to all conditions and requirements of this Agreement, and any and all applicable local, state and federal laws. This provision does not prohibit the TOWN from contracting for services with outside entities or from renting the facility for activities permitted under this AGREEMENT.

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5. PAYMENTS

5.1 Town shall pay to DISTRICT the sum of ten thousand dollars ($10,000.00) ~~$42,000.00~~ for lease of the PROPERTY per year for the initial 20 year term of the Agreement, ~~t~~. due ~~with the first payment due~~ on or before ~~July~~ June 30~~1~~, ~~2008~~ 2017 and each subsequent payment due by ~~July~~ June 3~~1~~0~~st~~ of each year thereafter. ~~The compensation paid for the months leased prior to July 31, 2007 shall be pro-rated for the actual days leased and paid on July 31, 2007.~~

5.2 ~~The lease rate shall be adjusted every five years year, beginning July 31, 2012, by the Consumer Price Index as calculated by the highest of the Los Angeles/Riverside/Orange County area annual index for the prior five years, but not less than 2% and not more than 6% or as otherwise negotiated and mutually agreed to by the PARTIES~~**The Town has the option to purchase the property for five hundred thousand dollars ($500,000) at the end of the 20 year lease period, provided the District does not have a funding plan or need for the property to provide space for a specific educational facility.**

5.3 Payment described in this paragraph does not include utilities or any other costs subsequently described in this Agreement.

~~5.4 TOWN agrees to file an application, at its own expense, with the State of California for grant funding of the sidewalk/trail from the Library to the Kern Community College facilities on behalf of MCOE. No guarantee of receipt of said grant is implied.~~

5.~~5~~4 TOWN agrees to perform all snow removal, at its expense, ~~in the Library parking lot,~~ on the road leading to the Library parking lot, the drop-off circle, the driveway leading to the ~~ice rink~~Facility parking lot and the ~~ice rink~~Facility parking lot. Town will provide snow removal from other parking areas if they are generally used for the Town's facility. TOWN will also clear snow around the ~~ice rink~~Facility including the modular building and paths around the ~~ice rink~~Facility. TOWN will not clear the snow around the Library, the Library parking lot, ~~or~~ on the paths leading to the Library. TOWN further agrees to perform ~~all~~ its' snow removal requirements, at its expense, in any used portion of the Mammoth High School parking lot during school weekends and school holiday periods to provide for "overflow" parking, when necessary. Town will coordinate and bill for other snow removal services for Library parking area upon request. This section does not preclude the Town from plowing the whole parking area at the Town's expense if found to be in the interest of the Town.

5.~~6~~5 TOWN agrees to work cooperatively with MCOE to design, construct and a sign that will identify the Library and the ~~ice rink~~Facility.

6. DESIGN AND CONSTRUCTION OF ~~ICE RINK~~FACILITY

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6.1 If the TOWN makes any substantial changes to the approved Facility as approved by the Planning and Economic Development Commission, ~~Prior to consideration by the Planning Commission of the required Use Permit,~~ both Superintendents of the DISTRICT and MCOE shall approve ~~the~~ any design changes, in writing of the ~~, of the ice rink~~Facility. The PARTIES acknowledge that the ~~Planning Commission has the authority to make some design changes at its discretion.~~actual construction conditions may require minor changes. The approved project is provided as Attachment B (Needs to be updated to reflect the roof as the project).

6.2 ~~Once the final design is approved,~~ DISTRICT and MCOE agree to allow typical and necessary construction efforts to occur on the PROPERTY to facilitate completion of the construction of the ~~ice rink~~Facility. ~~TOWN agrees to respect MCOE's right to complete the Library project in accordance with signed contracts in place at the effective date of this Agreement and will meet with the Library general contractor to coordinate work efforts of both projects.~~

6.3 TOWN agrees to obtain and pay the costs of all permits required to complete construction of the ~~ice rink~~Facility, and agrees to construct the facility subject to all required permits, conditions and approvals of the Town, State of California and applicable agencies, at no cost to DISTRICT or MCOE.

~~6.4 DISTRICT and MOE agree to provide TOWN with a title report. If TOWN must provide a current title report with the submittal of the Use Permit, it shall do so at its own cost.~~

6.~~5~~4 TOWN agrees to prepare an Addendum to the Environmental Impact Report (EIR) SCH # 1994012060, previously certified by the DISTRCT and MCOE, in accordance with the provisions of the California Environmental Quality Act (CEQA) as necessary for any future project on the site. ~~While the Addendum to the EIR will provide environmental clearance and~~

~~cover all potential environmental impacts, emphasis should be placed on the traffic and parking impacts of the ice rink~~Facility. TOWN shall be solely responsible for the costs of defending any challenges to the Addendum, including the cost of preparing a new EIR if the Addendum is determined to be insufficient for the project. TOWN shall also implement any and all environmental mitigation required for the project at no cost to DISTRICT or MCOE.

~~6.6 TOWN agreed to conduct a site assessment of the Mammoth Middle School site to certify that the location is acceptable for a day care center. The site assessment concluded that a day care center could be accommodated on the site, but the design and construction of the facility may be subject to zoning, building and grading regulations of the TOWN and the State of California.~~

6.7 TOWN agrees to evaluate, design and construct adequate parking and access for the ~~ice rink~~Facility to minimize traffic impacts around the property, pursuant to all applicable traffic studies. To assist TOWN in meeting parking needs, TOWN, MCOE, and DISTRICT agree to share existing and future parking spaces located on Assessor's Parcel Numbers 35-010- 37 and 41, estimated to be a total of 144 (Need to confirm #), for the purpose of accommodating parking for the Library, administration classroom buildings of MCOE and DISTRICT and the ~~ice rink~~Facility. MCOE and DISTRICT also agrees to allow "overflow" parking on Mammoth High School property during weekends, scheduled school holidays and any other time when school is not in session, including summers. MCOE and DISTRICT may limit or cease use of shared parking if parking becomes problematic, as determined by MCOE and DISTRICT. Town agrees to direct parking away from those spaces closest to the Library during any activity that may impact such parking for Library users (approximately 23 spaces) and for larger events will direct users to other parking areas and the upper Facility parking lot.

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6.8 The Superintendent of DISTRICT, The Superintendent of Schools for MCOE and Town Manager of TOWN are authorized and agree to sign any and all required applications, as the property owners and applicant, necessary to complete the review and approval process for the construction and operation of the Facility~~an ice rink~~.

6.9 TOWN agrees to comply with all provisions of Education Code sections 45125.1 and 45125.2. Pursuant to Education code sections 45125.1 and 45125.2 TOWN shall conduct criminal background checks of all employees and contractors assigned to work on DISTRICT property, and shall certify that no employees or contractors who have been convicted of serious or violent felonies, as specified in Education Code Section 45122.1, will have contact with pupils. TOWN and its contractors must provide the District with a list of all employees and contractors providing services pursuant to this Agreement. In performing the services set forth in this Agreement, TOWN shall not utilize any employees who are not included on the above referenced list. At DISTRICT'S and/or MCOE's sole discretion, either may make a finding, as authorized under Education Code Sections 45125.1 and 45125.2, that TOWN'S employees and contractors will have only "limited contact" with pupils. TOWN'S failure to comply with this law shall be considered a material breach of this Agreement upon where this Agreement may be terminated, at DISTRICT'S and/or MCOE's sole discretion. TOWN represents that it anticipates that the construction of ~~the~~ a roof structure and any improvements to existing ~~ice rink~~Facility

performed under the Agreement will involve no or limited contact with DISTRICT and/or MCOE students on any DISTRICT and/or MCOE property. Pursuant to Education Code Section 45125.2, TOWN shall ensure the safety of pupils at DISTRICT and MCOE premises through the installation of a physical barrier at the worksites.

6.10 DISTRICT and MCOE represent and warrant to TOWN that they have no knowledge of any substance, chemical or waste on or affecting the PROPERTY that is identified as hazardous, toxic or dangerous under any applicable federal, state or local law or regulation (collectively, "Hazardous Substance"). If, at any time during the term of this Agreement, a Hazardous Substance is discovered on the PROPERTY, TOWN shall immediately remove, cleanup and remediate the Hazardous Substance or, at TOWN's option, terminate this Agreement pursuant to Article 12 and return the site to DISTRICT and MCOE in its original condition. TOWN further agrees that it will not introduce or use any Hazardous Substance on the PROPERTY in violation of any applicable law, and TOWN will indemnify, defend and hold harmless DISTRICT and MCOE from and against all claims arising out of TOWN'S breach of this Paragraph. The indemnity obligations under this Paragraph will survive termination of this Agreement.

~~6.11 DISTRICT and MCOE agree to allow TOWN reasonable and ample time to implement the construction and operation of the ice rink~~Facility~~. However, if TOWN has not completed the construction and commenced operation of the ice rink~~Facility by December 31, 2008, this agreement shall become void unless an extension is mutually agreed upon by all PARTIES.~~

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7. USE OF PROPERTY

7.1 TOWN'S Obligations

a. TOWN agrees to use the ~~ice rink~~Facility for athletic and recreational ice skating and other educational, cultural, athletic and recreation purposes that can be fully accommodated within the confines of the PROPERTY as shown on Exhibit "A". This may include, but is not limited to any of the following: roller skating/blading; basketball; other "court" type sports, skate board, horse shoes, other related recreational activities; school activities and programs; community events; and musical events.

b. TOWN agrees to obtain all permits and licenses required to operate the facility and agree to operate the facility subject to all required permits, conditions and approvals of Town, State of California and applicable agencies, at no cost to DISTRICT and MCOE.

c. TOWN shall be fully responsible for the ongoing maintenance and operation of the ~~ice rink~~Facility, and any use of the leased area in a safe and sound condition, including any and all unforeseen fees and governmental requirements.

d. The TOWN agrees to maintain the facility in a neat, orderly and sanitary condition and make necessary improvements to create a quality experience for the user. It is understood and agreed that TOWN will provide normal janitorial service, necessary restroom supplies, and keep premises in proper order and repair except as to damage caused by DISTRICT and/or MCOE, which damage DISTRICT and/or MCOE agree to repair.

e. The TOWN shall be solely responsible for all safety precautions in or around the ~~ice rink~~Facility to ensure the public is protected from any potential danger to include, but not limited to: adequate fencing, securing the facility with locks, and/or other safety measures. Additionally, the TOWN is responsible for and has the right to install any warning signs on or about PROPERTY as required by federal, state or local law.

f. TOWN agrees to hook up to the MCOE Library sewer system at TOWN's cost. The sewer system will be used solely by the Library and ~~ice rink~~Facility. Maintenance on the sewer system will be shared by Library and ~~ice rink~~Facility unless the problem is specific to either facility.

g. TOWN will be fully responsible for restoring the PROPERTY to its original condition, including re-vegetation with indigenous plants, but excepting reasonable wear and tear, upon the expiration of this Agreement, unless an alternate agreement is executed by the PARTIES. (Do we have a good idea of what the site looked like?)

7.2 Utilities

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a. TOWN shall pay for all utilities, including, but not limited to: sewer, water, electricity, propane, and trash to service the ~~ice rink~~Facility.

b. DISTRICT and MCOE shall grant to TOWN and all local utility companies (as appropriate) any easement(s) reasonably required by TOWN or the utility companies for the life of this agreement in order to provide utility service required by TOWN for its construction or operation of the ~~ice rink~~Facility and shall execute any instrument(s) reasonably necessary to evidence such rights.

7.3 Parking

a. TOWN shall not charge a fee for parking at the ~~ice rink~~Facility.

b. TOWN shall enforce parking in parking areas of the Library parking lot.

———c. TOWN shall perform all snow removal in all parking areas, drop off areas and access areas necessary to serve the Facility in accordance with paragraph 5.54 of this Agreement.

———d. ~~After the first year of operation, TOWN shall evaluate whether sufficient parking and access has been provided for customers of all facilities on the PROPERTY. If parking is insufficient, TOWN shall provide solutions, subject to appropriate local review and approval processes, and shall work with MCOE and DISTRICT to address and resolve parking, access and traffic issues.~~ TOWN shall be solely responsible for the cost of construction of any future ~~required~~ parking needed ~~to provide~~for additional parking on the ~~ice rink~~Facility portion of the PROPERTY.

7.4 Operation of the ~~Ice Rink~~Facility

a. TOWN shall prepare written site operating rules consistent with: federal, state, and local laws; adopted DISTRICT and MCOE policies, procedures and regulations; and adopted TOWN ordinances. Should DISTRICT or MCOE wish to modify a policy, procedure or regulation which affects the use of the PROPERTY, after TOWN has taken possession thereof, a representative of TOWN shall be included in any discussion of said modification.

b. The ~~ice rink~~Facility shall be made available to the general public on a first-come, first-served basis, up to the maximum allowable occupancy rate, as determined by all applicable permits, ordinances, regulations and statutes, except as provided in paragraph 7.4(c). The Town may at its discretion allocate specific times for classes, events, group uses or as otherwise provided in the TOWNS operational plans, except as provided in paragraph 7.4(c).

c. TOWN agrees to provide DISTRICT and MCOE pre-requested exclusive use of the ~~ice rink~~Facility ~~facility~~, between 7:30 am and 10:30 am on all days in which school is in session and non-exclusive use at any other time Monday through Friday for school classes, functions and sports. TOWN agrees to work with DISTRICT/MCOE for occasional exclusive use to accommodate special school or sporting events excluding weekends and holidays. There shall be no fees or costs associated with School classes, sports or special event use. TOWN understands that sections of the rink may need to be roped off or segregated from public use for school class/sports use during school hours up to 1:30 PM. If the DISTRICT and MCOE do not program or utilize the pre-requested exclusive use times, the Town may program such times for other uses.

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d. The TOWN agrees to comply with all applicable laws, statutes, and regulations, of any governmental authority regarding the sale of alcoholic beverages at the ~~ice rink~~Facility.

e. Advertising and sponsorships are a means of supporting the operational cost of the ~~ice rink~~Facility and therefore, signage, plaques, banners and similar media (collectively "Signage") shall be allowed on the interior of PROPERTY as permitted by law. Outdoor signage identifying the ~~ice rink~~Facility shall also be allowed as permitted by law subject to the approval of DISTRICT and MCOE, said approval not to be unreasonably withheld. TOWN may advertise the programs in publications and other media, at its own cost.

f. TOWN agrees that it will charge a discounted admission fee of two dollars ($2.00) to all DISTRICT and MCOE students, upon the presentation of valid identification, during those hours when the facility is open to the general public. This discounted admission will be inclusive of equipment rentals. This discounted rate may be increased over time not to exceed a total of $10.00 during the term of the agreement.

g. Notwithstanding the exclusive and non-exclusive use by the DISTRICT and MOE at no charge pursuant to paragraph 7.4(c) or the discounted fees for MCOE and DISTRICT students pursuant to paragraph 7.4(f), TOWN may charge user fees for services, maintenance,

material, labor and overhead, which fees shall be set at TOWN's discretion and solely allocated to TOWN to offset the costs of building and maintaining the ~~ice rink~~Facility.

h. TOWN agrees to comply with its own noise ordinances in the operation of the ~~ice rink~~Facility. TOWN further agrees to work cooperatively and collaboratively with MCOE and/or District should the activities conducted at the ~~ice rink~~Facility unreasonably interfere with the normal operation of surrounding businesses, including the adjacent Library. While it is understood that individual events will be noisy, large numbers of consecutive events which are consistently audible inside the Library may result in an unreasonable impact on use of the Library, including an unreasonable reduction in available parking. In such circumstances, DISTRICT and MCOE may object to future activities and will work with the TOWN to reduce or eliminate the objectionable impacts.~~when reviewing the Quarterly Operations Plan pursuant to paragraph 7.6 in an effort to reduce these impacts~~.

7.5 Uses Prohibited

a. The PROPERTY shall not be used except for the purposes specified in this Agreement.

b. TOWN shall not do or permit anything to be done in or about the PROPERTY that will in any way unreasonably obstruct or interfere with the rights of DISTRICT and/or MCOE, or injure or annoy DISTRICT and/or MCOE, or use or allow the PROPERTY to be used for any unlawful or unreasonably objectionable purpose, nor shall the TOWN cause, maintain or permit any nuisance in or about the PROPERTY. **6-113**

c. TOWN shall not commit or suffer to be committed any waste in or upon the PROPERTY.

d. TOWN shall not use the PROPERTY or permit anything to be done in or about the PROPERTY that will in any way conflict with any applicable law, statute, ordinance or governmental rule, or regulation or requirement.

7.6 TOWN shall prepare a Seasonal ~~Quarterly~~ Operations Plan identifying proposed activities and events within the ~~ice rink~~Facility and ~~discuss~~ provide that Plan ~~with~~ to ~~a committee composed of a designee from~~the MCOE and the DISTRICT with the objective of addressing any potential impacts to all parties of the proposed activities and events. If MCOE and/or DISTRICT ~~has~~ have an objection to a proposed activity, said PARTIES will work cooperatively with the TOWN to modify any objectionable activities or events ~~to~~ to remove the stated objections.~~, if possible. If the PARTIES are unable to reach a resolution of a dispute under this section, the PARTIES shall refer the matter to a mediator pursuant to paragraph 13.2 of this Agreement.~~ Failure to remove the stated objections will result in the activity or event to not take place on the site.

8. DAMAGE OR DESTRUCTION OF PROPERTY

8.1 If the PROPERTY is totally destroyed by fire or other casualty, or the PROPERTY cannot be restored as required herein under applicable laws and regulations, notwithstanding the

availability of insurance proceeds, then, upon agreement between all PARTIES, this Agreement shall terminate effective the date of the total loss.

8.2 Neither DISTRICT nor MCOE shall be required to repair any injury or damage by fire or other cause, or to make any restoration or replacement of any improvements installed in the PROPERTY by TOWN or at the direct or indirect expense of the TOWN. TOWN may restore or replace same if damaged. TOWN shall have no claim against DISTRICT or MCOE for any damage suffered by reason of any such damage, destruction, repair or restoration unless caused by the sole negligence or wrongful intentional acts of DISTRICT or MCOE.

9. INSURANCE

9.1 General Liability Insurance. TOWN agrees to furnish DISTRICT and MCOE with a Certificate or Evidence of Insurance evidencing coverage under a Commercial General Liability Insurance Policy ("GL Policy"). The GL Policy shall provide limits of no less than $2,000,000 combined single limit per occurrence for bodily injury, personal injury, and property damage, and for those policies where aggregates are applicable, a $4,000,000 aggregate limit.

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a. The GL Policy shall include coverage for bodily injury (including death) and property damage arising out of the use of all owned, non-owned and hired vehicles.

b. The GL Policy shall name the DISTRICT and MCOE, its officers, elected and appointed officers, board members, employees, volunteers and agents as additional insureds by applicable endorsement.

c. The GL Policy shall include a provision that the insurance shall not be cancelled without first providing DISTRICT and MCOE thirty (30) days written notice of cancellation.

9.2 Pollution Liability Insurance. TOWN agrees to furnish DISTRICT and MCOE with a Certificate or Evidence of Insurance evidencing coverage under a Pollution Liability Insurance Policy ("PL Policy") or Pollution Liability coverage under the GL Policy by endorsement.

a. The PL Policy (or PL coverage under the GL Policy by endorsement) shall provide coverage for the accidental discharge, escape or release of contaminants, irritants or pollutants into or on land, the atmosphere or any body of water and the consequential containment, clean-up, disposal and penalties associated therewith with minimum limits of $1,000,000 per occurrence and a $2,000,000 aggregate limit.

b. The PL Policy shall name the DISTRICT and MCOE, its officers, elected and appointed officers, board members, employees, volunteers and agents as additional insureds by applicable endorsement.

c. The PL Policy shall include a provision that the insurance shall not be cancelled without first providing DISTRICT and MCOE thirty (30) days written notice of cancellation.

d. The PL Policy shall only cover acts as described in' a.') above which occur after the effective date of this Agreement.

9.3 Excess/Umbrella Liability Insurance. TOWN is not required to obtain Excess/Umbrella Liability Coverage. However, if such insurance provides coverage for the ~~ice rink~~Facility, TOWN shall name DISTRICT and MCOE as additional insureds by applicable endorsement.

~~9.4 Builders Risk/Course of Construction Insurance. TOWN agrees to furnish DISTRICT and MCOE with a Certificate or Evidence of Insurance evidencing Builder's Risk or Course of Construction Insurance ("BR Policy"). The BR Policy shall provide limits equal to the anticipated value of the ice rink~~Facility ~~at the completion of construction.~~

~~a. The BR Policy shall provide "All Risk" coverage for the full replacement cost of materials, supplies and other property to be incorporated into the finished work. Coverage for vandalism, theft, flood, snow, rain and wind shall not be excluded and shall be included by endorsement if necessary.~~

~~b. The BR Policy shall provide coverage for business personal property at full replacement cost and shall include property belonging to DISTRICT and/or MCOE.~~

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~~c. The BR Policy shall provide coverage for property in transit and/or property stored off site with a minimum limit of $100,000.~~
~~d. The BR policy may be acquired by and may list either the TOWN or the Contractor retained by TOWN to build the ice rink~~Facility ~~as the insured.~~

9.5 Property Insurance/Fire Policy. Upon completion of the construction of the ~~ice rink~~Facility, TOWN agrees to furnish DISTRICT and MCOE with a Certificate or Evidence of Insurance evidencing a Commercial Fire Insurance Policy or Property Insurance Policy which includes fire coverage ("Fire or Property Policy"). The Fire Policy shall provide coverage equal to the replacement value of the property upon a total loss.

a. The Fire or Property Policy shall provide "All-Risk" coverage including coverage for loss due to vandalism, theft, flood, snow, rain and wind, by endorsement if necessary.

b. The Fire or Property Policy shall provide coverage for business personal property at full replacement cost and shall include property belonging to DISTRICT and/or MCOE.

c. The Fire or Property Policy shall provide coverage for lost business income due to any partial or complete interruption in the operation of the ~~ice rink~~Facility.

9.6 District/MCOE Insurance. At all times when DISTRICT and/or MCOE conduct their own programs at or within the ~~ice rink~~Facility, DISTRICT and MCOE shall carry their own general liability insurance with limits of no less than $1,000,000 per occurrence and $2,000,000 in the aggregate limits to cover the participants in said programs.

a. DISTRICT and/or MCOE shall provide a Certificate or Evidence of Insurance to TOWN prior to use of the ~~ice rink~~Facility.

b. Any general liability policy obtained by DISTRICT or MCOE for their own programs at or within the ~~ice rink~~Facility shall name TOWN, its officers, elected and appointed officers, board members, employees, volunteers and agents as additional insureds by applicable endorsement.

10. INDEMNIFICATION

a. TOWN shall indemnify, hold harmless, and defend DISTRICT and MCOE, their trustees, elected and appointed officers, board members, employees, volunteers and agents against and from any and all claims, demands, actions, suits, losses, liability, expenses and costs for any injury, death or damage to any person or property occurring in, on or about the PROPERTY after DISTRICT and MCOE deliver possession of the PROPERTY to TOWN, or arising from the TOWN'S use of the PROPERTY or TOWN's possession operation or maintenance of the ~~ice rink~~Facility excepting those claims, demands, actions, suits, losses, liability, expenses and costs arising out of or relating to obligations of DISTRICT and MCOE as they relate to the PROPERTY or caused by the sole negligence or wrongful intentional acts of DISTRICT and/or MCOE, their employees, agents, officers and invitees.

b. DISTRICT and MCOE shall indemnify, hold harmless, and defend TOWN, their trustees, elected and appointed officers, board members, employees, volunteers and agents against and from any and all claims, demands, actions, suits, losses, liability, expenses and costs for any injury, death or damage to any person or property occurring in, on or about the PROPERTY arising from the DISTRICT's or MCOE's use of the PROPERTY excepting those claims, demands, actions, suits, losses, liability, expenses and costs arising out of or relating to obligations of TOWN as they relate to the PROPERTY or caused by the sole negligence or wrongful intentional acts of TOWN, their employees, agents, officers and invitees.

11. NOTICES

All notices, statements, demands, requests, consents, approvals, authorizations, appointments or designations hereunder by either party to the other will be in writing and will be deemed given and served upon the other party, if delivered personally or by depositing in the United States mail, postage prepaid, addressed to:

If to the TOWN:
Town of Mammoth Lakes
437 Old Mammoth Road, Suite R
P. 0. Box 1609
Mammoth Lakes, CA 93546
Attn: Town Manager

If to the DISTRICT:
Mammoth Unified School District
1601 Meridian Boulevard

P. 0. Box 3509
Mammoth Lakes, CA 93546
Attn: Superintendent

If to MCOE:
Mono County Office of Education
1651 Meridian Boulevard
P. 0. Box 130
Mammoth Lakes, CA 93546
Attn: Superintendent

12. TERMINATION AND RIGHTS AFTER TERMINATION

12.1 This Agreement may be terminated, with cause, at any time during the term hereof by any of the PARTIES to this Agreement upon one (1) year's written notice to the other PARTIES.

12.2 If this Agreement terminates by expiration of the agreed upon terms as set forth in paragraph 3.1, TOWN shall, upon termination of this Agreement, remove any structures and/or fixtures affixed to the PROPERTY. If hard surfaces are requested to be removed the Town will ~~and~~ revegetate the PROPERTY in a similar manner to the surrounding property excluding trees. ~~to the same condition as that existing at the time of entering into this lease, reasonable wear and tear and tree caliper excepted.~~ 6-113

12.3 If the DISTRICT or MCOE terminates the lease prior to its expiration of the lease term, TOWN shall, upon termination of this lease, remove any structures and/or fixtures affixed to the PROPERTY and restore the PROPERTY to the same condition as that existing at the time of entering into this Agreement, reasonable wear and tear excepted. Documented costs of restoration of the PROPERTY and reimbursement to the State of California of any grant funds used to construct the ~~ice rink~~Facility, if required, shall be shared equally among the PARTIES.

12.4 If TOWN terminates the lease prior to its expiration of the lease term, TOWN shall, upon termination of this lease, remove any structures and/or fixtures affixed to the PROPERTY and restore the PROPERTY to the same condition as that existing at the time of entering into this Agreement, reasonable wear and tear excepted.

13. DISPUTE RESOLUTION

13.1 Informal Conference. The parties agree to make good-faith efforts to settle any dispute or claim that arises under this Agreement through discussion and negotiation. In the event of a claim or dispute, any party to this Agreement may request an informal conference of all parties.

13.2 Mediation. If the parties are unable to resolve their claim(s) through informal discussions within thirty (30) days of the demand for an informal conference, either party may submit a request, in writing, to the other to refer the dispute to mediation. Upon receipt of a request for mediation, all parties shall make a good faith effort to select a mediator and complete the mediation within sixty (60) days. All costs of mediation shall be allocated equally among the

parties to the claim. The mediator's recommendation for settlement, if any, is non-binding on the parties. No party shall be entitled to pre-decisional interest in mediation and each party shall bear its own attorney fees. Completion of mediation shall be a condition precedent to the filing of a civil lawsuit, unless the party against whom the claim is being made unreasonably refuses to cooperate in the setting of a mediation.

13.3 Qualifications of Mediator. Any mediator selected shall have expertise in the area of the dispute and be knowledgeable in the mediation process. No person shall serve as a mediator in any dispute in which that person has any financial or personal interest in the result of the mediation.

13.4 Privacy and Confidentiality. Informal conferences and mediations pursuant to this Article 13 are private. Only the parties and their representatives may attend these sessions. Other persons may attend only with the permission of the parties. All persons who attend the informal conference or mediation shall be bound by the confidentiality requirements of California Evidence Code section 1115 et seq. and shall sign an agreement to that effect.

13.5 Arbitration. If the parties have attended mediation but have been unable to resolve the claim(s), the parties may agree to submit their dispute to arbitration. Arbitration is voluntary and is not a condition precedent to the filing of a civil lawsuit. The parties may elect either a binding or non-binding arbitration proceeding. If selected, the arbitrator's fees will be paid equally by all parties. Each party will pay its own expenses for witnesses and its own attorneys fees.

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13.6 No Waiver. No party to this Agreement will be excused from it duties hereunder pending the final resolution of a dispute, whether by mediation, arbitration or litigation.

14. COMPLIANCE WITH LAWS

14.1 Notwithstanding anything to the contrary in this Agreement, the PARTIES shall ensure that any and all activities they perform pursuant to this Agreement shall specifically comply with all applicable laws, statutes, regulations, permits, ordinances and orders of any governmental authority.

14.2 Without limiting the generality of paragraph 13.1, PARTIES shall comply with all applicable provisions of all laws, statutes, regulations, rules, guidelines, policies, orders, permits, ordinances and orders of any governmental authority relating to environmental matters and/or occupational safety.

15. APPLICABLE LAW

This Agreement has been made and entered into in the State of California and the laws of said State will govern the validity and interpretation of this Agreement, including the performance of the PARTIES hereunder.

16. ENTIRE AGREEMENT

This Agreement sets forth the entire Agreement between the parties with respect to the PROPERTY and uses stated above. All parties must in form of a written amendment agree to any modifications.

17. SEVERABILITY

Whenever, possible, each provision of this Agreement will be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement will be invalid under the applicable law, such provision will be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

18. AMENDMENTS

This Agreement may be amended at any time but only by the mutual agreement of the PARTIES and only when the PARTIES memorialize the agreement to amend in writing.

19. WAIVER **6-113**

The failure of TOWN, DISTRICT or MCOE to insist upon strict performance of any of the terms, conditions, or covenants in this Agreement will not be deemed a waiver of any right or remedy which TOWN, DISTRICT, or MCOE may have and will not be deemed a waiver of any right of remedy for a subsequent breach or default of the terms, conditions, or covenants herein contained.

20. BINDING EFFECT

This Agreement and all the terms, conditions and agreements herein contained will be binding upon and inure to the benefit of the parties hereto and their respective successors.

21. AUTHORITY TO EXECUTE

The persons signing this Agreement warrant that they are duly authorized to sign it on behalf of the persons and entities being bound.

22. COUNTERPARTS

This Agreement may be executed in counterparts, all of which, taken together, shall be deemed an original.

IN WITNESS WHEREOF, this Agreement has been duly approved by TOWN, DISTRICT and MCOE.

Signature to follow -

6. RESPONSES TO COMMENTS FROM SHUTE MIHALY & WEINBERGER LLP, DATED FEBRUARY 13, 2017.

6-1 The commenter summarizes the their comments regarding the Draft EIR, particularly regarding the project description; inadequacy of impacts considered related to aesthetics, land use, traffic, air quality, noise, and water quality; and failure to consider feasible mitigation measures to reduce impacts caused by the project. Refer to Responses 6-5 through 6-62.

6-2 The commenter summarizes their concerns regarding the Draft EIR's analysis of alternatives to the project. In particular, the commenter states that the Draft EIR fails to accurately describe the no project alternative and fails to consider a reasonable range of alternatives. Refer to Responses 6-63 through 6-67.

6-3 The commenter claims that the Town must prepare and recirculate a revised Draft EIR that properly describes the project, analyzes its impacts, and considers meaningful alternatives and mitigation measures that would help ameliorate those impacts. As discussed through Reponses 6-5 through 6-67, no significant new information has been added to the Draft EIR (CEQA Guidelines Section 15088.5[a]). No new impacts or new mitigation measures have been identified. No substantial increases in the severity of an impact have been identified. No new feasible project alternatives have been identified, nor have any mitigation measures been revised such that they are considerably different from others previously considered. Further, as detailed in this Final EIR, the Draft EIR analysis was not fundamentally and basically inadequate and conclusory in nature such that a meaningful public review and comment were precluded. As discussed in CEQA Guidelines Section 15088.5(b), recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications. Thus, a recirculation of the Draft EIR is not required.

6-4 The commenter incorporates Exhibit 1, Exhibit 2, and Exhibit 3 (enclosed in the commenter letter provided) as comments submitted on the Draft EIR. Refer to Responses 6-68 through 6-77, Responses 6-78 through 6-91, and Responses 6-92 through 6-107, respectively, for responses to these comments.

6-5 The commenter claims that the Draft EIR's project description omits significant details necessary to understand the project, including failing to describe the project design. While it is true that a project description must contain sufficient specific information about the project to allow an evaluation and review of its environmental impacts, it is not required to provide a design-level description of the project, instead a conceptual description of project components is sufficient where the description contains sufficient detail to enable decision-makers and the public to understand the environmental impacts of the proposed project. (*Citizens for a Sustainable Treasure Island v. City & County of San Francisco* (2014) 227 Cal.App.4th 1036, 1055; *Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20.) CEQA Guidelines Section 15124(c) states that an EIR is only required to contain a general description of the project's technical, economic, and environmental characteristics. Further, CEQA discourages speculation (CEQA Guidelines Section 15145). The actual design of the proposed community multi-use

facilities is unknown at this time. The Town has begun the process to plan, design and construct Community Multi-Use Facilities at Mammoth Creek Park. The Town has allocated funding for the initial planning, preliminary design, and the environmental documentation effort. The preliminary design and a Draft EIR have been prepared. Certification of the EIR, Site Plan Review, Architectural Review, Ministerial Permits (Grading Permit and Building Permit), and Administrative Permits (subsequent Special Event Permits on an as needed basis) have yet to be conducted. The Town of Mammoth Lakes retained HMC Architects to develop an understanding of the square footage necessary to accomplish the goals of the project and develop a preliminary design of the facility. The preliminary design includes the proposed building envelope and areas of proposed hardscape (including the expansion of the surface parking lot). This level of detail provides enough technical detail to determine what the future massing and scale would be compared to the surrounding structures and environment. Draft EIR Exhibit 5.2-2, *Proposed Project Conceptual Massing*, has been provided to illustrate the proposed building envelope envisioned by the Town for the project. However, specific architectural and landscaping details are unknown and, thus, conducting full architectural-level simulations would be speculative at this time. No visual screening is proposed at this time. However, the project would be subject to the Town's design review process, Zoning Code Chapter 17.88, *Design Review*. As discussed on Draft EIR pages 5.2-7 and 5.2-8, the Town's Zoning Code Chapter 17.88, *Design Review*, outlines the following objectives of the design review requirements:

- Implement the goals, policies, and objectives of the General Plan related to community design and character;

- Promote excellence in site planning and design and the harmonious appearance of buildings and sites and ensure the man-made environment is designed to complement, not dominate, the natural environment;

- Regulate the design, coloration, materials, illumination, and landscaping of new construction, and renovations within the Town in order to maintain and enhance the image, attractiveness, and environmental qualities of the Town as a mountain resort community;

- Ensure that new landscaping provides a visually pleasing setting for structures on the site and within the public right-of way and to prevent indiscriminate destruction of trees and natural vegetation, excessive or unsightly grading, indiscriminate clearing of property, and destruction of natural significant landforms;

- Ensure that the architectural design of structures and their materials and colors are appropriate to the function of the project and the high-elevation climate of Mammoth Lakes and are visually harmonious with surrounding development and natural landforms, trees, and vegetation; and

- Supplement other Town regulations and standards in order to ensure control of aspects of design that are not otherwise addressed.

Pursuant to Chapter 9.0, *Design Review Process*, of the Town's Design Guidelines, the design review process is to be conducted by the Community and Economic Development Department (CEDD) and the Planning and Economic Development Commission (PEDC). As part of the Design Guidelines Review Process, the CEDD reviews project materials such as drawings, site development plans, landscape plans, building elevations, cross-sections, sample materials/color palettes, and visual simulations to determine compliance with the Design Guidelines. Particularly, as the proposed project would require a Major Design Review, the CEDD would require submittal of a site plan, floor plan, colored elevation drawings, preliminary landscape plan, and a materials board. Site plans are required to include the location of propane tanks, trash enclosures, fences, walls, site lighting, utility structures, and other structures located on-site. Preliminary landscape plans are required to identify all existing trees over 12 inches in diameter, and other areas of significant vegetation, indicating the size and type, and significant features (boulders, knolls, etc.), as well as the proposed plant materials, including the location, type, size, pattern, and spacing. All new trees would be required to be described in height, not in gallons.

This submittal is then reviewed against the Town's *Design Guidelines and Color Handbook*. CEDD staff findings must include consistency with the standards and requirements of the Zoning Code, as well as consistency with the General Plan, Design Guidelines, and design criteria provided in Municipal Code Section 17.88.050. The following design review criteria (Section 17.88.050), must be satisfied by the project, to the extent that they apply:

A. The site design and building design elements including the architectural style, size, design quality, use of building materials, and similar elements, combine together in an attractive and visually cohesive manner that is compatible with and complements the desired architectural and/or aesthetic character of the area and a mountain resort community, encourages increased pedestrian activity, and promotes compatibility among neighboring land uses.

B. The design of streetscapes, including street trees, lighting, and pedestrian furniture, is consistent with the character of commercial districts and nearby residential neighborhoods.

C. Parking areas are located, designed, and developed to foster and implement the planned mobility system for the area; buffer surrounding land uses; minimize visibility; prevent conflicts between vehicles and pedestrians and cyclists; minimize stormwater run-off and the heat-island effect; and achieve a safe, efficient, and harmonious development.

D. Down-directed and shielded lighting and lighting fixtures are designed to complement buildings, be of appropriate scale, provide adequate light over

walkways and parking areas to create a sense of pedestrian safety, minimize light pollution and trespass, and avoid creating glare.

E. Landscaping is designed to conserve water resources, promotes a natural aesthetic, and be compatible with and enhance the architectural character and features of the buildings on site, and help relate the building to the surrounding landscape.

All Town staff findings and recommendations are forwarded to the PEDC in a staff report. At the PEDC Meeting, the PEDC may deny, approve, approve with conditions, or continue the hearing to receive additional input with regards to a project's compliance to the Design Guidelines.

6-6 Draft EIR Exhibit 3-4, *Conceptual Site Plan*, depicts the proposed open area immediately south of the ice rink and Mammoth RecZone, which would provide access to the facility as well as possible additional seating during events. This identified area is located on Town-owned property and is not located on the adjacent United States Forest Service (USFS)-owned land.

6-7 Based on the proposed massing of the on-site structures, the aesthetics/light and glare analysis of the Draft EIR considers proposed setbacks and building heights compared to the existing surrounding uses. The proposed massing is also considered in comparison to the Town's General Plan goals and policies, particularly regarding proposed building heights and setbacks in relation to the existing surrounding mature pine trees and residential development. Draft EIR Impact Statements AES-2 and AES-3 consider impacts to visual resources and community character, respectively. Refer to Response 6-5 regarding the level of detail available for the proposed project.

6-8 As discussed on Draft EIR page 5.2-14, second sentence, large pine trees are present on-site and may be required to be removed as part of the proposed project. Based on the existing trees present at 12-inches in diameter at breast height, approximately 50 trees may be required to be removed.[1]

6-9 All staging, grading, spoil piles, and construction activities would occur on-site. Further, as described on Draft EIR page 3-17, first paragraph, construction hauling/access would periodically occur along both Old Mammoth Road and Meadow Lane. The analysis based the number of employees and truck trips on conservative estimates for construction intensity and size of the site. Truck trips were based on for conservative earthwork estimates and deliveries and worker trips were based on the California Emissions Estimator Model (CalEEMod) defaults. CalEEMod was used to quantify the project's air quality and greenhouse gas emissions. As discussed on Draft EIR page 5.6-11, the project would require the excavation and transport of approximately 6,500 cubic yards of soil to the USFS pit at Mammoth Yosemite Airport.

[1] E-mail correspondence with Triad/Holmes Associates, dated April 13, 2017.

6-10 No permanent soundwalls are proposed. As discussed on Draft EIR page 5.8-24, an interim solid wall barrier would be constructed, between proposed buildings constructed in Phase I. As discussed on Draft EIR page 5.8-24, this barrier would be designed as a continuation of the proposed buildings. Upon development of Phase II, the wall would be removed and new structures would be erected. This temporary barrier, which would be situated along the northern portion of the rink, would also provide sound attenuation. As discussed on Draft EIR page 5.2-13, this new wall feature would be constructed of similar color, material, and architectural style as the proposed structures. This wall would also be subject to the Town's Design Guidelines and Architectural Review process as well.

6-11 Currently, the Town has not prepared a construction hauling plan, erosion control plan, stormwater plan, tree removal plan, or landscaping plan for the project. Preliminary design has been completed. However, specific design details have not yet been identified. Thus, development of these plans would be speculative at this time. However, as part of the Town's development process, implemented through the Municipal Code, as well as recommended Mitigation Measures identified in the Draft EIR, these plans would be required. For those plans required as part of the Town's Municipal Code requirements (i.e., site development plans, landscape plans, and sample materials/color palettes), the CEDD would review these materials to determine compliance with the Design Guidelines, as part of the Town's Design Guidelines Review Process. All Town staff findings and recommendations are forwarded to the PEDC in a staff report. At the PEDC Meeting, the PEDC may deny, approve, approve with conditions, or continue the hearing to receive additional input with regards to a project's compliance to the Design Guidelines. For those plans recommended via a mitigation measure, specific performance criteria are outlined in order to ensure that impacts remain less than significant. Specifically regarding the construction hauling plan recommended by Draft EIR Mitigation Measure AES-2, this measure has been modified in order to provide clarification of specific performance criteria required to enforce this measure. These modifications, identified below, do not affect the overall conclusions of the environmental document. Refer to Section 3.0, *Errata*.

Draft EIR Page 5.2-10, Mitigation Measure AES-2

AES-2 The construction hauling plan shall be prepared and approved by the Public Works Director prior to issuance of grading permit. The plan shall, at a minimum, indicate the equipment and vehicle staging areas, stockpiling of materials, and haul route(s). Identified haul route(s) must avoid residential areas to the maximum extent practical, thus, ensuring~~The plan shall ensure~~ that construction haul routes minimize impacts to sensitive uses in the Town.

A construction hauling plan is not required per the Town's Municipal Code or as part of the Town's application process. Thus, no construction hauling plan was proposed as part of the project. However, it is acknowledged that, overall, the Draft EIR did analyze

impacts from hauling activities. A construction Mitigation Measure AES-2 requires a construction hauling plan, in order to minimize these potential impacts. The Mitigation Measure AES-2 includes performance standards in order to ensure no significant impacts result in this regard. The construction hauling plan is required to be prepared and approved by the Public Works Director prior to issuance of grading permit. The plan must ensure that construction haul routes minimize impacts to sensitive uses in the Town.

Mitigation Measures HWQ-1 through HWQ-3 ensure the project comply with the RWQCB's erosion control measures during construction. These Mitigation Measures use compliance with the National Pollution Discharge Elimination System (NPDES) Construction General Permit No. CAS000002 (2009-0009-DWQ [as amended by 2010-0014-DWQ and 2012-006-DWQ]), preparation of a Notice of Intent (NOI), and preparation of a Notice of Termination (NOT), as performance criteria to meet this measure, ensuring no significant impacts involving soil erosion during construction occur.

For operational storm water, Mitigation Measures HWQ-4 through HWQ-6 require implementation of final design of storm drain infrastructure that ensures additional surface flows are retained on-site prior to discharge. All storm drain infrastructure must be approved by the Town prior to issuance of Grading or Building Permits. A Storm Drain Facilities Maintenance Plan must be prepared prior to issuance of a Certificate of Occupancy in order to ensure continued efficiency of proposed storm drain facilities. Implementation of the Maintenance Plan must be overseen by the Public Works Director. Particular performance criteria, ensuring significant impacts are avoided, include (but are not limited to) cleaning of the grates, removal of foreign materials from storm drainage pipes, maintenance, as necessary, to outlet facilities, and repairs, as necessary, to damaged facilities. Any storm drain pipe with a slope of less than 0.5 percent must be identified and more frequent maintenance is required to be performed to ensure efficiency of these low-incline facilities. Further, the Maintenance Plan is required to ensure that snow removal activities conducted near proposed storm drain facilities do not restrict drainage collection in gutters, inlets, and flow paths.

Lastly, prior to submittal of grading plans, the Public Works Director is required to identify and implement a suite of stormwater quality Best Management Practices (BMP) and Low Impact Development (LID) features to address the most likely sources of stormwater pollutants resulting from operation of the proposed project. Pollutant sources and pathways to be addressed by these BMPs include, but are not necessarily limited to, parking lots, maintenance areas, trash storage locations, rooftops, interior public and private roadways, and storm drain inlets. The design and location of these BMPs shall generally adhere to the standards associated with the Phase II NPDES stormwater permit program. Implementation of these BMPs must be assured by the Community & Economic Development Manager and Town Engineer prior to the issuance of Grading or Building Permits. With implementation of these performance criteria identified in Mitigation Measures HWQ-4 through HWQ-6, impacts in this regard would be reduced to less than significant levels.

Should tree removal be required (which is anticipated), the project would be required to prepare a tree removal and protection plan that is consistent with Section 17.36.140 of the Municipal Code, and required as part of Draft EIR Mitigation Measure BIO-1. The tree removal and protection plan would be required to depict all trees to be preserved and/or removed on the site. If trees are removed, in keeping with typical practices, a portion of the trees slated for removal are required to be replaced pursuant to Zoning Code Section 17.36.140.G. Based on the overall site plan, the Town expects to plant up to twenty 7-gallon trees for the required tree replacement (Zoning Code Section 17.36.140.I). Replacement trees would be required to be consistent with the species identified in the Town of Mammoth Lakes' Recommended Plant List and be a minimum size of seven gallons. A Registered Professional Forester or arborist may also determine the value of the tree and include additional replacement requirements. It will be the Applicants responsibility to maintain the plantings. Adherence to the Town's Municipal Code (Section 17.36.140) and implementation of Mitigation Measure BIO-1 would reduce impacts in this regard to a less than significant level.

Per Municipal Code Section 17.32.100(c), all future landscape design would be required to be Town standards, including standards for screening of facilities and uses and landscaping of the site, as specified in the Design Review approval. The Town's Zoning Code Chapter 17.88, *Design Review*, outlines the design review objective requirements, including:

- Implement the goals, policies, and objectives of the General Plan related to community design and character;

- Promote excellence in site planning and design and the harmonious appearance of buildings and sites and ensure the man-made environment is designed to complement, not dominate, the natural environment;

- Regulate the design, coloration, materials, illumination, and landscaping of new construction, and renovations within the Town in order to maintain and enhance the image, attractiveness, and environmental qualities of the Town as a mountain resort community;

- Ensure that new landscaping provides a visually pleasing setting for structures on the site and within the public right-of way and to prevent indiscriminate destruction of trees and natural vegetation, excessive or unsightly grading, indiscriminate clearing of property, and destruction of natural significant landforms;

- Ensure that the architectural design of structures and their materials and colors are appropriate to the function of the project and the high-elevation climate of Mammoth Lakes and are visually harmonious with surrounding development and natural landforms, trees, and vegetation; and

- Supplement other Town regulations and standards in order to ensure control of aspects of design that are not otherwise addressed.

With implementation of these performance criteria set forth as part of the Town's Design Review process, potential aesthetic impacts as a result of future landscape design would be reduced to less than significant levels.

6-12 Preliminary design has been completed. However, specific design details have not yet been identified, including proposed fencing. Refer to Response 6-5.

6-13 Refer to Response 6-5. The Draft EIR project description and environmental analysis provides enough information to provide an analysis of the potential project impacts, without being speculative. As discussed in Response 6-11, for those Mitigation Measures included in the Draft EIR, specific performance criteria have been included in each measure in order to ensure that the respective environmental impacts are less than significant.

6-14 Draft EIR Exhibit 3-2, *Site Vicinity*, depicts the proposed project's proximity to Mammoth Creek and associated riparian vegetation. Also, Draft EIR page 3-4 describes the surrounding uses, including open space/recreational trail uses, Mammoth Creek, and Mammoth Creek Park lands (owned by the USFS). Draft EIR page 5.3-4, identifies that Mammoth Creek, south of and outside of the project site, has the potential to provide west to east wildlife movement opportunities along the riparian corridor associated with the creek from the mountains to the valley floor. Draft EIR Exhibit 5.3-1, *Existing On-Site Vegetation*, identifies all on-site habitat, none of which include riparian habitat along Mammoth Creek (as this is off-site to the south). There are no California Department of Fish and Wildlife jurisdiction waters or associated riparian habitat located on-site. As discussed on page 4 of *Habitat Assessment for the Mammoth Creek Park West New Community Multi-Use Facilities Project* (Habitat Assessment), prepared by Michael Baker International, Inc., dated August 2, 2016 (provided in Appendix 11.2, *Habitat Assessment*, of the Draft EIR), *No jurisdictional drainage or wetland features were observed on the project site during the site investigation that would be considered jurisdictional by the Corps, Regional Board, or CDFW. It should be noted that Mammoth Creek generally flows west to east approximately 240 feet south of the project site. The riparian corridor associated with the Creek is topographically confined and lined with coyote willow (Salix exigua), Booth's willow (S. boothii) and shining willow (S. lucida ssp. caudata), alder (Alnus sp.), and aspen. Based on the current design plan, no impacts to Mammoth Creek will occur as a result of development of the proposed project.* Refer to Response 2-2.

6-15 Draft EIR page 5.9-10 describes the existing water quality conditions of Mammoth Creek, near the project site. Mammoth Creek is classified as an impaired water body and has been placed on the 303(d) list of impaired waters for the following pollutants: manganese, mercury, and total dissolved solids (TDS). According to the Lahontan Regional Water Quality Control Board (RWQCB), manganese and mercury impairment are caused by natural sources, whereas the source of TDS are unknown.

A Total Maximum Daily Load (TMDL) sets a limit for the total amount of a particular pollutant that can be discharged to a waterbody, such that the pollutant loads from all

sources would not impair the designated beneficial uses of the waterbody. The timeframe for compliance with TMDL targets varies, but may take many years. TMDLs often include a compliance schedule, identifying interim and final targets. The Lahontan RWQCB has not set any TMDLs for these pollutants of concern within this segment of Mammoth Creek.

The project site is currently developed with passive and active recreational uses and a surface parking lot. These uses are assumed to generate suspended solid/sediments, nutrients, heavy metals, pathogens, pesticides, oil and grease, toxic organic compounds, and trash and debris.

Draft EIR page 5.9-4 describes the existing drainage patterns of the project site. The existing impervious areas of the project site encompass approximately 18,142 square feet (or 6.4 percent of the project site). As shown on Draft EIR Exhibit 5.9-1, *Existing Drainage*, and Table 5.9-1, *Existing Flowrates*, the existing 20- and 100-year runoffs through the project site (referenced as Area A) are 1.9 cubic feet per second (cfs) and 3.5 cfs, respectively. Discharge of runoff at the project site occurs at the eastern portion of the project site, which is tributary to Mammoth Creek (to the east-southeast).

6-16 Refer to Response 6-15. Currently, there are no Mammoth Creek base flows across the project site, rather Mammoth Creek is down-gradient from the project site, particularly to the east. The Mammoth Creek watershed tributary area upstream of the site is roughly 9,000 acres. The project impervious surface composes less than one tenth of one percent of the watershed. The upper portion of the watershed (the lakes basin) receives on average twice the annual amount of precipitation as the area surrounding the project site. The area of Town tributary to Mammoth Creek at the site encompasses 600 acres, much of which is developed by single- and multi-family residential and commercial projects. The 1.9 acres of impervious surface created by the project is less than 1 percent of the area of Town that has been or will be developed. Impacts to dry season flows are insignificant even if a summer rain event that exceeds the 20-year storm event with a one hour duration precipitation event occurs. This is due to the additional runoff into the creek from the previously developed properties upstream, many of which do not include storm water retention facilities.

6-17 Refer to Responses 6-11 and 6-13. Draft EIR Sections 5.1 through 5.9 provide existing conditions, the regulatory framework, and impact analysis regarding potentially significant impacts as a result of the proposed project. As identified in each respective section, where potentially significant impacts result, feasible mitigation measures (with appropriate performance criteria) are included in order to reduce those potentially significant impacts to less than significant levels. Each respective impact analysis includes consideration of the magnitude of impacts and the degree to which they are mitigated by the project's design, regulatory framework, or mitigation measures.

6-18 Proposed mitigation measures are consistent with CEQA Guidelines Section 15126.4. Proposed mitigation measures, as outlined in the Draft EIR, are fully enforceable through the permit conditions, agreements, or other legally binding instruments.

Further, performance criteria are included to ensure that impacts are reduced to less than significant levels.

6-19 Draft EIR Section 5.5, *Traffic and Circulation*, is based upon the *Mammoth Community and Multi-Use Facilities Focused Traffic Impact Analysis* (Traffic Impact Analysis), dated July 29, 2016, prepared by LSC Transportation Consultants, Inc. (LSC) (provided in Draft EIR Appendix 11.4, *Traffic Impact Analysis*). The purpose of the Traffic Impact Analysis is to evaluate development of the proposed project from a traffic and circulation standpoint. Based on the analysis presented in Draft EIR Section 5.5, no significant unavoidable impacts related to traffic/circulation have been identified.

The commenter references Exhibit 1 (enclosed in the commenter letter provided) as comments submitted on the Draft EIR, which are referenced as Responses 6-68 through 6-77 and are also detailed in Responses 6-20 through 6-29 below.

6-20 Refer to Responses 6-20 through 6-29.

6-21 As depicted in Draft EIR Table 5.5-6, *P.M. Peak Hour Intersection Turning Movement Volumes*, the study area focuses on significantly affected intersections and, contrary to the assertion in the comment, does not need to be expanded to additional intersections because at:

- Old Mammoth Road/Mammoth Creek there is minimal net impact south of the site (4 peak-hour trips).
- Old Mammoth Road/Sherwin Creek Road there is minimal impact south of the site (4 peak-hour trips).
- Old Mammoth Road/Sierra Nevada Road there is minimal impact north of Meridian along Old Mammoth Road. There is a net impact of 11 one-way trips in the PM peak hour to the north of Meridian (or about 1 vehicle every 5-1/2 minutes, on average).
- Old Mammoth Road /Minaret/Fairway there is minimal impact south of the site (4 peak-hour trips).
- Old Mammoth Road /Main there is minimal impact north of Meridian along Old Mammoth Road. There net impact would be less than 11 one-way trips in the PM peak hour at the Old Mammoth Road /Main intersection.

6-22 As the traffic study was conducted in the non-winter months, there was no opportunity to conduct new winter traffic counts. The 2009 counts used as the basis for the study were also used as the basis for both the Mammoth Travel Demand Model and the Mammoth Mobility Element EIR. No significant changes in land uses have occurred in Mammoth in many years. As such, the 1 percent annual growth rate follows the California Department of Transportation's (Caltrans) traffic trends is considered a reasonably conservative adjustment in estimating existing year volumes. Although this

methodology was used for the purposes of the Draft EIR, similar to other analyses conducted in the Town, LSC has provided winter Saturday traffic count information for comparative purposes, as documented in the Final EIR Appendix B, *Traffic and Sight Distance Memorandum*. For traffic count methodology, Town of Mammoth Lakes staff conducted intersection turning movement counts on Saturday, March 18, 2017 from 3:00 p.m. to 6:00 p.m. at the following three intersections:

- Old Mammoth Road/Meridian Boulevard;
- Old Mammoth Road/Chateau Road; and
- Old Mammoth Road/Mammoth Creek Park Site Access.

The design day for traffic volumes in Mammoth is a typical busy Saturday in the winter. In order to determine if this count day represents the design day, daily traffic volume on State Route 203 were obtained from Caltrans. The most recent data available was from the winter of 2015/2016. Based on this data, the count day (the third Saturday in March) is a good representation of a typical busy winter Saturday.

The peak hour at each intersection was calculated from the counts and shown in Table 1, *Comparison of Intersection Turning Movement Volumes*. These volumes were then compared to the traffic study existing no project volumes (also shown in Table 1).

Table 1
Comparison of Intersection Turning Movement Volumes

Intersection	Northbound			Southbound			Eastbound			Westbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Old Mammoth Road/ Meridian Road													
Traffic Study	128	230	48	118	295	59	188	680	112	96	365	75	2,394
March 2017 Counts	86	178	57	107	263	61	84	125	87	86	150	63	1,347
Old Mammoth Road/ Chateau Road													
Traffic Study	11	251	5	48	300	75	37	16	11	5	11	27	797
March 2017 Counts	4	166	11	80	246	55	37	17	8	7	3	53	687
Old Mammoth Road/ Mammoth Creek Park Site Access													
Traffic Study	2	259	0	0	300	2	2	0	2	0	0	0	567
March 2017 Counts	4	195	0	0	244	4	7	0	1	0	0	0	455

Source: LSC Transportation Consultants, *Memorandum*, dated April 21, 2017, provided in Final EIR Appendix B, *Traffic and Sight Distance Memorandum*.

The new March 2017 counts are lower at all three study intersections, compared to that analyzed in the Draft EIR. It is acknowledged that the volumes derived for the Town's travel demand model (used in the Draft EIR) are an average volume from multiple Saturdays over a three-winter season period, providing volumes for a "typical winter Saturday". Therefore, the volumes in the Draft EIR are more reflective of a "typical winter Saturday" and presents a "worst-case" scenario, compared to the March 2017 counts. As the Draft EIR analysis identified that all intersection level of service (LOS)

was acceptable, and in light of the recent traffic counts taken, these impacts remain acceptable.

6-23 As the traffic study was conducted in the non-winter months, there was no opportunity to conduct new winter traffic counts. However, as discussed in Response 6-22, the Town conducted counts in March 2017 for clarification purposes as part of the Final EIR. As described in Table 1, all study intersections are lower in volume in March 2017 compared to that analyzed in the Draft EIR. Based on the Draft EIR assumptions (which are conservative) and the traffic counts taken in March 2017, the site access intersection would operate at a level of service (LOS) B or better under existing and future cumulative conditions. Thus, there is some reserve capacity. Furthermore, new turn lanes on Old Mammoth Road would not be expected to meet the peak-hour volume warrant with additional turns to/from the site (e.g., the left turns in to the site could more than double before a new left-turn lane would be warranted).

6-24 Refer to Responses 6-22 and 6-23.

6-25 The analysis was conducted for a "typical busy" winter Saturday, which is the standard time frame for the Mammoth Lakes area.[2] Private rentals were not assumed, as this type of event is not expected to occur on a Saturday. Per the Mammoth Creek Park Recreation Facilities "Playbook" developed by Stuart Brown, Mammoth Lakes Parks and Recreation Director, hockey tournaments with up to 200 attendees could occur occasionally, this would be a special event and it would end well before the PM peak hour. Rather than assuming a hockey tournament on the design day, two 50-person meetings or events are assumed to occur over the course of the day, with one affecting the PM peak hour. This resulted in a more conservative (conservatively high traffic volumes) peak-hour analysis and determination of operational impacts than if a hockey tournament is assumed (which would not generate PM peak-hour traffic). Finally, a community/social gathering with 100 attendees is not included in the design day, as two 50-person events are assumed to better reflect "typical busy" conditions. Note that road and intersection improvements are not usually designed based on special event traffic; rather, they are based on typical busy conditions.

6-26 The proposed structure would be sited such that emergency vehicles would be able to access all sides of the structure during an emergency event. Further, as discussed on Draft EIR page 3-14, the Mammoth Lakes Fire Protection District (MLFPD) would also utilize a proposed fire access road at Meadow Lane for secondary emergency access to the project site. Draft EIR page 8-13 discusses that the project would be required to comply with applicable MLFPD codes for emergency vehicle access as well. With compliance with the Town's regulations, site access would be sufficient for emergency vehicles and impacts in this regard would be less than significant.

6-27 Mammoth Creek Park West has an existing driveway, depicted on Draft EIR Exhibit 3-4, *Conceptual Site Plan*, and the Draft EIR assumed that adequate sight distance was allowed when the driveway was created. In order to provide additional information

[2] Town of Mammoth Lakes, *Town of Mammoth Lakes Travel Model Final Report,* February 15, 2011.

regarding stopping site distance requirements for safety consideration (including concerns pertaining to vehicle, pedestrian, and wildlife crossing safety issues, the Town conducted a driver sight distance evaluation at Mammoth Creek Park Driveway; refer to page 2 of the Final EIR Appendix B. This evaluation also considered increased activity along Old Mammoth Road and the vicinity of the Mammoth Creek Park Driveway as a result of cumulative conditions as a result of the future Snowcreek VIII development.

As part of this evaluation, stopping sight distance criteria was considered. Stopping sight distance is the distance that is required for a vehicle on the major roadway to stop in a safe manner once an object in the roadway becomes visible. It is noted that snow berms are not considered in sight distance analysis as they can vary dramatically and are not at the control of the developer.

With a speed limit of 25 miles per hour, the design speed of the roadway would be 30 miles per hour. Based on that design speed, the Caltrans Highway Design Manual's minimum stopping sight distance is 200 feet. Looking to the north of the driveway, 338 feet of sight distance was reported, therefore adequate stopping site distance is provided. To the south of the driveway, Old Mammoth Road curves to the west. A total of 242 feet of stopping sight distance exists to the south, which is more than the required 200 feet. Thus, the Mammoth Creek Park Driveway meets the minimum stopping distance in the north and south direction.

6-28 As discussed in Response 6-26, compliance with the MLFPD codes for emergency vehicle access, emergency vehicles would have allocated space, including necessary red curb areas, for emergency vehicles.

6-29 Refer to MR-1.

6-30 Draft EIR Section 5.8, *Noise*, is based upon the *Town of Mammoth Lakes General Plan 2007* (General Plan) and the *Town of Mammoth Lakes Municipal Code* (Municipal Code). For the purposes of mobile source noise modeling and contour distribution, traffic information contained in the *Mammoth Community and Multi-Use Facilities Focused Traffic Impact Analysis*, prepared by LSC Transportation Consultants, dated July 29, 2016 (Draft EIR Appendix 11.4, *Traffic Impact Analysis*) was used. Noise measurement and traffic noise modeling data can be found in the Draft EIR Appendix 11.6, *Noise Data*. Based on the analysis presented in Draft EIR Section 5.8, no unavoidable significant impacts related to noise have been identified following implementation of the recommended Mitigation Measures NOI-1 through NOI-3 and compliance with the applicable Federal, State, and local regulatory requirements.

The commenter references Exhibit 2 (enclosed in the commenter letter provided) as comments submitted on the Draft EIR, which are referenced as Responses 6-78 through 6-91 and are also detailed in Responses 6-31 through 6-37 below.

6-31 Criteria used for the thresholds of significance, pertaining to noise are outlined on Draft EIR pages 5.8-16 and 5.8-17. These criteria are based on Title 8.0, *Health and Safety*, of the Municipal Code, which covers all noise standards (Draft EIR page 5.8-10). Chapter

8.16, *Noise Regulation*, of the Municipal Code sets forth all noise regulations controlling unnecessary, excessive and annoying noise and vibration in the Town. The analysis considers all of the Town's noise standards including the standards within the Municipal Code and the land use compatibility standards within the General Plan Noise Element.

6-32 Contrary to the comment, the Draft EIR contains an extensive discussion of ambient noise levels from project operations. Stationary noise sources from the project are considered in Draft EIR Impact Statement Long-Term (Stationary) Noise Impacts (Draft EIR page 5.8-23). These project considerations include the following:

- Mechanical equipment (including heating, ventilation, and air conditioning units [HVAC];
- Chillers and mechanical equipment serving the ice rink;
- Noise from community activities at the community center;
- Ice rink activity noise including noise from active hockey games, crowd noise and use of an ice resurfacer/Zamboni;
- RecZone activity noise;
- Park playground noise;
- Active outdoor recreational activity noise; and
- Noise from the surface parking lot.

Noise modeling included consideration of the proposed partial enclosure by buildings to the west and north, a roof structure, and two open sides of the facility. As discussed on Draft EIR page 5.8-28, the combined noise levels of these project-related stationary noise sources would be less than significant with implementation of Draft EIR recommended Mitigation Measures NOI-2 and NOI-3. It should be noted that the ambient noise levels in the area range from 40.2 to 48.2 dBA L_{eq}. The Draft EIR analyzed and mitigated noise levels to ensure that the project noise levels would not exceed 50 dBA at the closest receptors. As such, the analysis accounts for the existing ambient noise levels and provides mitigation to ensure that a substantial noise increase would not occur. Furthermore, considerable care has been taken in the design of the proposed project to ensure land use compatibility and the minimization of noise impacts. The primary activity areas that would generate noise have been intentionally located at the project center, as far as practicable from surrounding uses. The community buildings and other structures have been carefully placed between the primary activity areas and the receptors. The proposed intervening structures and roof structure act as a noise barrier. As described above, compliance with these standards has been demonstrated and the project would not result in a substantial increase in noise levels.

6-33 As discussed on Draft EIR page 5.8-28, Exhibit 5.8-3, *Recreational Noise Contours*, and the analysis above demonstrate that the proposed project would not exceed the Town's Noise Ordinance Standards or the General Plan 1997 Noise Element standards (50 dBA hourly L_{eq} in the daytime and 45 dBA hourly L_{eq} at night, as well as the 70 dBA maximum daytime and the 65 dBA maximum nighttime levels. As discussed on Draft EIR page 5.8-30, the implementation of Mitigation Measures NOI-2 and NOI-3 would

be required to ensure compliance with the Town's noise standards. Impacts would be less than significant with implementation of Mitigation Measures NOI-2 and NOI-3.

The comment incorrectly states that the analysis does not incorporate Community Noise Equivalent (CNEL) standards. The analysis does evaluate the land use compatibility CNEL standards within Draft EIR Table 5.8-5, *Land Use Compatibility for Community Noise Environments*. For example, multiple family residential dwelling units (the land use type adjacent to the north and west of the project boundary) are considered Normally Acceptable between 50 and 65 dBA. As indicated in the Draft EIR impact analysis section, mitigated noise levels from the proposed project would not exceed 50 dBA (the lower end of the Normally Acceptable range) at the closest receptors.

6-34 General Plan Policy C.6.A requires the minimization of community exposure to noise by ensuring compatible land uses around noise sources. General Plan Policy C.6.B requires development to be consistent with the Noise Element and associated policies. The Town evaluates land use compatibility using the CNEL metric (the Town's Land Use Compatibility standards are depicted in Draft EIR Table 5.8-5). As CNEL is a 24-hour metric and applies a +5 dBA adjustment for evening hours and a +10 dBA adjustment for the nighttime hours, the land use compatibility standards are higher than the Town's standards for stationary sources (depicted in Draft EIR Table 5.8-10). For example, the land use compatibility standards for multiple family residential uses are 55 – 65 dBA CNEL and the stationary source standard is 50 dBA L_{eq}. Land use compatibility CNEL standards are used in the evaluation of the traffic noise impacts because traffic noise occurs on a 24-hour basis. Existing and future CNEL noise levels are provided in Draft EIR Table 5.8-4 and Table 5.8-13, per the requirements of General Plan Policy C.6.B. The Draft EIR has minimized community exposure to noise and ensured that land uses are compatible (per the requirements of General Plan Policy C.6.A) with the implementation of Mitigation Measures NOI-2 and NOI-3, which would ensure compliance with the Town's standards.

As discussed on Draft EIR page 5.8-5 and 5.8-6, in order to quantify existing ambient noise levels in the project area, Michael Baker International conducted noise measurements on January 12-13, 2016; depicted on Draft EIR Exhibit 5.8-2, *Noise Measurement Locations,* and Draft EIR Table 5.8-3, *Noise Measurements*. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the project site.

The noise monitoring consisted of four ambient short-term (10 minute) noise measurements around the surrounding condominium communities, one long-term (approximately 20 hours) overnight noise measurement, and three short-term reference measurements. The purpose of the short-term measurements is to collect a sample of noise levels that is representative of the ambient conditions in the area. These noise measurements were taken during off-peak traffic periods and avoided noise from atypical activities that could skew or otherwise influence the measured noise levels (e.g., people congregating at close proximity, operation construction equipment/heavy machinery, etc.). Additionally, activity at residential and commercial land uses is generally consistent and random noise events are minimal. Therefore, short-term (10

minute) measurements are appropriate and representative of the ambient conditions in the area. The long-term measurement was taken to establish a baseline evening noise level.

Winter is anticipated to be the season with the greatest activity and therefore the greatest potential noise impacts. As such the noise measurements were taken during this time. The analysis conservatively analyzes the worst case scenario. Additionally, multi-day noise measurements are not necessary to analyze noise impacts in the project area. The land uses generally consist of residential, hotel, and office. Noise levels associated with these uses are consistent throughout the day and do not widely fluctuate from day to day. As such, multi-day noise measurements would not provide baseline data that would vary greatly from what was collected for the proposed project.

6-35 While the project would introduce single event noises at the site, the vast majority of jurisdictions (including the Town) evaluate noise on a time averaged scale. For example, the Town's standard for stationary noise sources is the hourly equivalent level and the land use compatibility standard is CNEL, which is a 24-hour average. Single event noise levels are associated with all land use types. Section 8.16.070(B) of the Town's Municipal Code provides allowances for short-term exceedances of the noise standard to account for the fact that noise levels constantly fluctuate and can regularly exceed a time-averaged standard. For example, the noise measurements in Draft EIR depict L_{max} and Peak levels that currently exceed the Town's time-averaged standards; refer to Draft EIR Table 5.8-3, *Noise Measurements*. However, these exceedances are generally acceptable because they occur over a relatively short duration.

As the anticipated single event and peak noise levels from the potential events would be unpredictable and irregular, the noise analysis focused on the time-averaged noise levels that would potentially occur. Additionally, the analysis is based on conservative assumptions appropriate for the anticipated activities and level of intensity. The comment also incorrectly states that crowd noise was underestimated. The crowd noise analysis accounted for the size of the proposed facility, the size of the viewing area where people would congregate (the site plans only provide enough space for a couple of rows of bleachers on the north side of the ice rink. As depicted in Draft EIR Exhibit 3-4, *Conceptual Site Plan*, the viewing area would be located north of the proposed ice rink and south of the Community Facilities building). The facility is intended to host community events and would not include regional competitions with large audiences. The crowd noise levels analyzed in the Draft EIR are appropriate for the type and size of the proposed venue. Additionally, noise levels (including noise from single events) would be in attenuated by distance and the proposed intervening structures as well as the proposed roof structure.

6-36 Refer to MR-1.

6-37 The analysis for HVAC equipment is conservatively based on reference levels from the EPA document *Noise from Construction Equipment and Operations, building Equipment, and Home Appliances* (1971) (an excerpt of this document with the applicable data is provided in Final EIR Appendix C, *Noise Reference Data*). It should be noted that the HVAC

would be required for various rooms within the 13,000 square foot community building. The rooms within the community building would not require exceptionally large HVAC units that would be inconsistent with the reference level. Additionally, it should be noted that any noise from the HVAC units would be similar to the HVAC units utilized by the surrounding residences and offices.

6-38 Refer to Response 6-15 pertaining to the existing water quality conditions of Mammoth Creek. Refer to Response 6-40 regarding groundwater recharge.

6-39 For a specific discussion regarding identified drainage patterns affecting flow and water quality of Mammoth Creek, refer to Response 6-41.

6-40 The project site is not used as a groundwater recharge site. However, the Draft EIR acknowledges that an increase in impervious surfaces could affect runoff infiltrating into the groundwater. However, as discussed on Draft EIR page 8-8, impacts in this regard would be less than significant. Further, the project would not affect the movement of moisture through the soil to the water table, such that groundwater recharge in the basin would be impacted. As detailed in Final EIR Appendix D, *Hydrology/Water Quality Memorandum*, prepared by Triad, following this response, the project would not decrease groundwater recharge. Project runoff would be attenuated by the installation of retention basins that are sized to intercept and percolate stormwater generated from a 20-year storm event with a one-hour duration from the newly created impervious surfaces. Over 95 percent of the groundwater recharge occurs by snowmelt that never reaches the level of runoff from the 20-year rainstorm event. The retention basins proposed by the project readily percolate the snowmelt runoff without overflow into the creek as the site is underlain by more than 20 feet of gravelly sands with a high infiltration rate. The proposed graded swales would direct runoff from the site further north and south around the Multi-Use Facility and would be unlined. The swales would only convey stormwater runoff from the upstream developments (Areas B1 and B2 identified in the Drainage Study; refer to Draft EIR Exhibit 5.9-1, *Existing Drainage*) during a storm event that exceeds the intensity of the 20-year storm event with a one-hour duration, as all properties that are tributary to the site have stormwater retention facilities sized to retain that event.

The comment provides no evidence that any of the projects constructed over the last 32 years with detention facilities have created groundwater mounding that has changed the flow path of the groundwater. This is because of the thickness of the underlying soil and relatively fast percolation rate. As detailed in Final EIR Appendix D, the proposed retention basins would not affect the direction of groundwater flow or the potential for groundwater to surface as seeps or springs. As discussed above, 95 percent of the runoff comes from snowmelt and the proposed basins and the underlying soil will readily absorb and infiltrate the runoff. Groundwater mounding, if any, would only occur during a significant storm event such as a thunderstorm, which is what a retention basin is designed to attenuate. A storm of this type is typically a short term, high intensity event. The volume of runoff from the 20-year short-term event would be 7,100 cf, as calculated in the *Preliminary Drainage Study* (Drainage Study), prepared by Triad/Holmes Associates, dated August 12, 2016, provided in Draft EIR Appendix 11.7, *Drainage Study*.

Due to the moderate to fast percolation rates of the soil, the water in the basins would percolate within 4 hours when using an infiltration rate of 3 inches per hour over the proposed 7,000 square feet of retention basin bottom surface area.

6-41 Water quality in Mammoth Creek would not be affected as the project improvements include a stormwater treatment unit to remove oils from pavement runoff and the retention system that would remove sediment by percolating the majority of runoff. The water quality improvements are a requirement that was imposed by the Lahontan Regional Water Quality Control Board through a Memorandum of Understanding with the Town of Mammoth Lakes. Retention facilities sized for the 20-year rainstorm event have been installed in the Town since at least 1984 when the Storm Drain Master Plan for the Town of Mammoth Lakes was completed. The 20-year retention volume would intercept and percolate the first inch of precipitation falling on the impervious surfaces created by the project. Therefore, runoff from any storm event up to the 20-year event would not discharge off-site. During an event exceeding the 20-year event the runoff would enter and mix in the basin allowing the sediment particles to settle and be removed from the stormwater prior to exiting the retention basin at a significantly reduced velocity.

Also, refer to Response 6-16.

6-42 As discussed on Draft EIR pages 5.9-25 and 5.9-26, activities associated with operation of the project would generate substances that could degrade the quality of water runoff, particularly vehicle-related pollutants. The deposition of certain chemicals by cars in the parking areas could have the potential to contribute metals, oil and grease, solvents, phosphates, hydrocarbons, and suspended solids to surface water flows. However, impacts to water quality generated from project operation can be reduced through the implementation of proposed BMPs designed to protect water quality in receiving water bodies. The project currently proposes BMPs that would be employed for the project, which include an oil/water separator and retention basins designed to filter runoff on the project site. The additional BMPs, if necessary, would be included upon finalizing grading/improvement plans (Draft EIR Mitigation Measure HWQ-6).

6-43 Soil erosion contributes to decreased water quality. However, as the project proposes storm drain facilities that would filter runoff, soil erosion would be minimized through infiltration. The facilities would be finalized in the grading/improvement plans (Draft EIR Mitigation Measure HWQ-4). Mitigation Measure HWQ-5 would also ensure that the storm drain facilities are properly maintained during operation. Compliance with the Draft EIR Mitigation Measures HWQ-4 through HWQ-6 would reduce potentially significant impacts on receiving water quality in Mammoth Creek resulting from project operation to acceptable levels. As such, impacts related to operational water quality would be less than significant.

The Mammoth Lakes groundwater basin is recharged by percolation of runoff from over 13,000 acres. This includes the lakes basin and a large portion of Mammoth Mountain that receive more than twice the amount of precipitation annually. Once again the additional impervious surface created by the project of 1.9 acres is less than one tenth of

one percent of the overall groundwater basin recharge area. Therefore, as concluded in Final EIR Appendix D, page 2, last paragraph, an increase in the TDS levels in Mammoth Creek from an increased flow in groundwater into the creek would not occur from the project.

Also, refer to Response 6-41.

6-44 As discussed on Draft EIR pages 8-14 and 8-15, project implementation could require additional water supplies to meet the increased demands of the proposed project. The existing on-site restroom and ice rink facilities water demands are approximately 2,300 gallons per day (gpd). The proposed restrooms, ice rink/RecZone, and community space would demand approximately 8,500 gpd. Project implementation would result in a net increase of 6,200 gpd in water demand (or 6.94 acre-feet per year).

The MCWD's *2010 Urban Water Management Plan* (2010 UWMP) considered the *Town of Mammoth Lakes Parks and Recreation Master Plan* (Parks and Recreation Master Plan) in demands for water for public sector uses from approximately 374 acre feet annually in 2010 to approximately 660 acre feet annually in 2025. The proposed project is within the Parks and Recreation Master Plan, which would comprise a small portion of the demand for treated water at General Plan build-out and demand is anticipated to occur within the anticipated growth parameters (660 acre feet by 2025).[3] In addition, the MCWD's 2010 UWMP indicates that available water sources particularly groundwater would be sufficient to serve the Town through 2030. Based on the 2010 UWMP, projected water demand by 2020 is anticipated to be 3,387 acre feet per year (and an available supply of 4,436 acre feet per year) and by 2030 is anticipated to be 4,180 acre feet per year (and an available supply of 4,436 acre feet per year). Thus, the MCWD anticipates having a surplus of 1,049 acre fee per year in 2020 and 256 acre feet per year by 2030. The proposed project would result in a net increase of 6.94 acre feet per year, which would only be 0.07 percent of the surplus water supply anticipated in 2020 and 2.7 percent of the surplus water supply anticipated in 2030 for an average year.

Further, during the preparation of the Draft EIR, the MCWD had published the *Draft 2015 Urban Water Management Plan* (Draft 2015 UWMP), which accounts for the Town's Parks and Recreation Master Plan.[4] For the assumptions presented in the 2015 UWMP, the Town was allocated 4,387 acre-feet per year. The 2015 UWMP assumed the Town would have an increase in water demand for Institutional/Governmental uses. This increase was an additional four acre-feet from 2015 to 2020 (during development of Phases I and 2 of the project) and an increase in seven acre-feet from 2020 to 2030 (during development of Phase 3 of the project). Based on the Draft 2015 UWMP, projected water demand by 2020 is anticipated to be 2,264 acre feet per year (and an available supply of 2,299 acre feet per year) and by 2035 is anticipated to be a demand of 3,719 acre feet per year (and an available supply of 3,762 acre feet per year). Thus, the

[3] PCR, *Town of Mammoth Lakes Parks and Recreation Master Plan Project Final Initial Study/Mitigated Negative Declaration,* December 2011.

[4] It is acknowledged that the 2015 UWMP was adopted in January 2017 and is the long-term planning document that assists the District and the community it serves, which is primarily the incorporated area of the Town of Mammoth Lakes.

MCWD anticipates having a surplus of 35 acre fee per year in 2020 and 43 acre feet per year by 2035. The proposed project would result in a net increase of 6.94 acre feet per year by buildout, which would only be 19.8 percent of the surplus water supply anticipated in 2020 and 16.1 percent of the surplus water supply anticipated in 2035 for an average year. This analysis is conservative, since most of the project would not affect surplus supplies, as the water supply already accounted for the project in buildout considerations.

Therefore, the project's water demand would be met. The proposed project does not include any growth-inducing land uses. Therefore, the Town would have the necessary infrastructure and water supply to accommodate the proposed project. Impacts to water demand, water supplies, and infrastructure would be less than significant in this regard.

Further, it is acknowledged that the MCWD commented on the Draft EIR and did not state that it was unable to serve the project; refer to Comment Letter 3. Based on correspondence conducted with the MCWD, a "will-serve" letter is not required to be issued, as the project would only be requesting a connection permit.[5] Notwithstanding, the Town requested, and MCWD provided, a "will-serve" letter on April 14, 2017; refer to Appendix E, *MCWD Will-Serve Letter*, of this Final EIR. Per this letter, existing main water and sewer collection pipelines currently service existing uses at the project site. The Town currently receives domestic water through a two-inch meter and irrigation water through a four-inch meter at the project site. Both meters have additional, unserved capacity that is available for new uses. Sufficient water supplies currently exist to furnish the proposed project. The Town would be required to apply for and acquire water and sewer Connection Permits prior to construction of the project, as acknowledged in Response 3-1.

6-45 Draft EIR Section 5.3, *Biological Resources*, describes the existing biological resources on the project site, and the potential adverse impacts associated with implementation of the proposed project. An analysis of compliance with all Federal, State, and local regulations and policies regarding biological resources has also been conducted. This section is primarily based upon the *Habitat Assessment for the Mammoth Creek Park West New Community Multi-Use Facilities Project* (Habitat Assessment), prepared by Michael Baker International, Inc., dated August 2, 2016; provided in Draft EIR Appendix 11.2, *Habitat Assessment*. Based on the analysis presented in Draft EIR Section 5.3, biological impacts associated with project implementation would be less than significant with incorporation of the recommended mitigation measures. No significant unavoidable impacts to biological resources would occur.

6-46 Refer to Responses 5-2 and 6-41. As discussed in Response 6-41, the project would not result in substantial impacts to the hydrology of Mammoth Creek, such that fish populations are affected.

6-47 Refer to Response 5-2. The commenter references Exhibits 4, 5, 6, and 7 (enclosed in the commenter letter provided).

[5] Mammoth Community Water District, John Pedersen, P.E., District Engineer, electronic mail correspondence dated March 29, 2017.

6-48 The California Department of Fish and Wildlife (CDFW) has reviewed the Draft EIR and submitted a comment letter (Comment Letter 5). Draft EIR Table 5.3-1, *Potentially Occurring Sensitive Biological Resources*, identifies special-status plant and wildlife species were evaluated for their potential to occur on the project site based on habitat requirements, availability/quality of suitable habitat, and known distributions, which included consideration of proximity to Mammoth Creek.

6-49 Refer to Response 5-2.

6-50 Refer to Response 5-2.

6-51 Refer to Responses 5-1 through 5-4. Draft EIR Section 5.3.5, *Cumulative Impacts*, considers the project's potential for cumulatively considerable biological impacts based on Draft EIR Table 4-1, *Cumulative Projects List*, and Draft EIR Exhibit 4-1, *Cumulative Projects Map*.

6-52 Refer to Response 6-11.

6-53 Refer to Response 6-11. Further, it is acknowledged that the pine tree community is noted as a sensitive community solely for the purpose of complying with the Town's tree preservation policy (Section 17.36.140 of the Municipal Code). With compliance with the Town's Municipal Code, the project would be consistent with the tree policy and impacts in this regard would be less than significant. Implementation of the recommended Mitigation Measure BIO-1 would ensure the project's consistency with the Town's Municipal Code requirements.

6-54 Draft EIR page 5.1-20 identifies the project's consistency with General Plan Policy R.3.B. General Plan Policy R.3.B, states *Manage all properties held by the Town of Mammoth Lakes along the Mammoth Creek corridor for open space, habitat preservation and passive recreation.* As stated by General Plan Goal R.3, it is the intent of this Policy to *Preserve and enhance the exceptional natural, scenic and recreational value of Mammoth Creek*. For land along Mammoth Creek in the vicinity of the project site, this land is owned by the USFS and in part under a Special Use Permit to the Town. Further beyond these properties, which are deed-restricted for open space purposes, are the Town-owned Mammoth Creek Park West site (the project site). Currently, the project site is used for a playground facility, which is not considered passive use. Implementation of the project would continue to use this land for more active uses. However, development of the project would not preclude passive recreational uses along Mammoth Creek. Thus, development of the project would not result in conversion of existing passive recreational uses along Mammoth Creek to more active uses (as these uses would be more set back from lands along the creek).

6-55 Draft EIR page 5.1-19 explains the project's consistency with General Plan Policy R.1.C, which provide *Prior to development, projects shall identify and mitigate potential impacts to site-specific sensitive habitats, including special status plant, animal species and mature trees*. As stated in Draft EIR Impact Statement BIO-1 (pages 5.3-20 and 5.3-21), no known special status plant or animal species, or habitat have been identified on-site. As described in Impact

Statement BIO-2, no sensitive natural communities are present on-site. Pine trees are protected by the Town through Municipal Code Section 17.36.140. However, as discussed in Response 6-53, with compliance with the Town's Municipal Code, the project would be consistent with the tree policy and impacts in this regard would be less than significant. Implementation of the recommended Mitigation Measure BIO-1 would ensure the project's consistency with the Town's Municipal Code requirements. As discussed in Response 6-11, with the incorporation of the performance criteria outlined in Mitigation Measure BIO-1, impact considerations have not been deferred.

6-56 Implementation of the proposed project would increase the developed nature of the project site, as described in Draft EIR Impact Statement AES-3 (page 5.2-13). Development of the project would construct new buildings on-site. However, these buildings would comply with the Town's regulations pertaining to setbacks and building heights. Further, proposed building heights would be lower than many structures to the west and north. Development of the project would be consistent with the land use and zoning designations for the site. Further, with implementation of the Town's development regulations pertaining to design review, as well as Mitigation Measure BIO-1 (which would ensure consistency with the Town's tree policy), development of the project would not result in the degradation of character/quality at the project site or in the surrounding area.

6-57 As discussed in Draft EIR Impact Statement AES-2, the Town of Mammoth Lakes protects specific public views identified on Figure 1, *Major View Corridors and Vistas*, of the General Plan. Of these scenic views, the scenic western public views of Mammoth Mountain, and southern views of the Sherwin Range and Mammoth Crest are afforded from the project site and public viewers in the immediate vicinity. As analyzed in Impact Statement AES-2, public views from southbound Old Mammoth Road, public views along Town Loop Trail, and public views from Mammoth Creek Park West would not be significantly impacted as a result of the proposed structures. Due to the proposed setbacks, massing, and scale of the new multi-use facilities structure, existing views of the Sherwin Range, Mammoth Crest, and Mammoth Mountain (which are identified scenic resources within these public views) would not be obstructed. In addition, the project design would allow for increased public views of the Sherwin Range and Mammoth Crest to the south from the proposed structure. Therefore, project implementation would result in less than significant impacts in this regard.

6-58 Refer to Responses 6-5 and 6-11 pertaining to the Town's design review process.

6-59 Even with consideration of some tree removal in the area and construction of new structures on-site, the proposed project would not increase this view obstruction toward visual resources, from publicly accessible areas, as described in Draft EIR Impact Statement AES-2. This is due to the orientation and setback of the new facility to Old Mammoth Road and public trails, as well as the existing trees present on-site and in the surrounding area. Refer to Responses 6-8 and 6-11 regarding tree removal activities and the number of trees to be removed as a result of the project. Refer to Response 6-11 pertaining to deferral of mitigation inquiries.

6-60 The project's specific impacts to designated public scenic views is considered in Draft EIR Impact Statement AES-2. Refer to Response 6-57. Regarding the project's potential to degrade the character/quality of the site and surrounding area, the Town has an extensive design review process. Refer to Response 6-11 pertaining to the Town's design review process. As outlined in Draft EIR Impact Statement AES-3, pages 5.2-13 and 5-2.14 outline how implementation of the Town's design review process would reduce potential impacts in this regard to less than significant levels.

The new structure, including building architecture and color scheme would be required to be consistent with the policies and goals of the Town's Design Guidelines. Per Municipal Code Chapter 17.88, the overall color scheme would be subject to the Town Design Guidelines Color Handbook, subject to approval by the Town PEDC. The project would construct a perimeter wall along the periphery of the rink, between the structures for the first phase of the project. This new wall feature would be constructed of similar color, material, and architectural style as the proposed structures. This wall would also be subject to the Town's Design Guidelines and Architectural Review process as well.

Per Municipal Code Section 17.32.100(c), landscape design would be required to be Town standards. Large pine trees are present on-site and may be required to be removed as part of the proposed project. However, all tree removal activities would be required to comply with Municipal Code Section 17.36.140, which requires a tree removal and protection plan. For those trees removed, the Town would be required to mitigate with tree replacement at a ratio determined by the Community and Economic Development Manager (refer to Mitigation Measure BIO-1). If replacement plantings of the removed trees is required, the minimum replacement tree size would be required to be seven gallons. Further, replacement would be limited to plantings in areas suitable for tree replacement with species identified in the Town of Mammoth Lakes' Recommended Plant List. Replacement requirements may also be determined based on the valuation of the tree as determined by a Registered Professional Forester or arborist. Overall, the Design Review process would ensure that landscaping would enhance the character of the on-site development and would be required to be compatible with, and complementary to, the natural environment in Mammoth Lakes and the surrounding region.

Although the proposed project would increase the active recreational uses at the project site (including construction of a new 35-foot structure), the existing views toward visual resources would at Mammoth Creek Park West would be expanded. Proposed landscaping would be required to meet Municipal Code requirements, including tree replacement. Further, the proposed 35-foot structure would be similar in visible massing to the existing buildings in the surrounding area (which range in height from 15 to 40 feet). Last, the proposed project would be consistent with the recreational intent of the site, and would comply with the existing OS land use designation and P-QP zoning for the site. With implementation of the recommended Mitigation Measure BIO-1 and the Town's Municipal Code, including compliance with the Town's Design Review process, long-term impacts pertaining to the degradation of character/quality would be reduced to less than significant levels.

6-61 As discussed on Draft EIR page 5.2-11, Exhibit 5.2-2, *Proposed Project Conceptual Massing*, is intended to illustrate the mass and scale of the structure (not depict architectural details, such as the parking lot design). Refer to Response 6-5. The analysis for view impacts considers the project's ability to block public views toward scenic resources identified in the Town's General Plan. Specific renderings illustrating architectural level detail are not necessary to analyze view blockage from proposed structures.

6-62 As discussed in Responses 6-56 through 6-61, the Draft EIR provides an adequate analysis of potential aesthetic impacts. Where appropriate, effective mitigation measures have been recommended where necessary. As no significant and unavoidable aesthetics impacts have resulted, as documented in the Draft EIR, no further alternative analysis considerations with regard to this topic area are necessary (although considered in the Draft EIR Section 7.0, *Alternatives to the Proposed Project*).

6-63 As documented in this Final EIR, the Town of Mammoth Lakes has adequately considered the project's potential to impact the environment, as required per California Public Resources Code [PRC] Section 21000 et seq.); CEQA Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq.); and the rules, regulations, and procedures for implementation of CEQA, as adopted by the Town of Mammoth Lakes. Thus, the consideration of alternatives is based on adequate analysis of each topic area for the proposed project.

6-64 Refer to Response 6-65 regarding failure to adequately describe the No Project alternative. Refer to Response 6-66 regarding failure to consider a reasonable range of alternatives.

6-65 As documented in Draft EIR page 7-6, in accordance with the *CEQA Guidelines*, "the no project analysis shall discuss the existing conditions …, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."[6] The *CEQA Guidelines* continue to state that "in certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained."[7] The "No Project" Alternative includes a discussion and analysis of the existing baseline conditions at the time the Notice of Preparation was published on June 2, 2016. The commenter claims that the No Project Alternative was inaccurately depicted, as no permanent roof structure over the existing ice rink was considered. The commenter includes Exhibits 8 and 9 (enclosed in the comment letter); refer to Responses 6-112 and 6-113, respectively.

Since June 6, 2015, the Town has undertaken additional investigation as to the feasibility of placing a permanent roof structure over the existing ice rink. On October 13, 2015, the Town of Mammoth Lakes Recreation Commission approved a motion to not pursue a temporary shade structure. As detailed in the October 7, 2015 Agenda Action Sheet, the Town Council considered the School District's offer for a long term lease, but respectfully decided to look for another long term permanent location. On October 5,

[6] *CEQA Guidelines Section 15126.6(e)(2).*
[7] *CEQA Guidelines Section 15126.6(e)(3)(B).*

2015, the Mammoth Lakes Recreation Board of Directors approved the recommendation of the Multi-Use Task Force to not pursue a temporary shade cover unless there is a low cost bid that meets all of the compliance codes for the Town and is approved by the Mammoth Unified School District (MUSD)/Mono County Office of Education (MCOE).

Specifically, on April 1, 2015, Town Council directed staff to provide recommendations regarding the relocation of the Multi-use Facility to Mammoth Creek Park West. This direction was based on Council's action to not renew a long-term lease with the MUSD and MCOE at its current location. Analysis of the current site included, but was not limited to, the following findings regarding the current location:

- It is not in the best interest of the Town to continue to invest in a leased facility for a 20+ year time frame;
- The enhanced use of the Facility at its current location creates some unintended conflicts with other facilities (i.e., Library, parking, etc.), which may grow in the future;
- The location has operational constraints; and
- The site is constrained in size and location, thereby limiting the Town's ability to develop future complementary community amenities, such as a community center, expanded play areas for summer use, etc.

Based on a review of the options to continue with the Multi-Use Facility at the current location with additional investment, the pros and cons of the site for each of the parties, and looking long-term with the best interests of the community in mind, it was determined that the best strategy was to look at an alternative location for an improved Facility.

On October 21, 2015, Town Council accepted the recommendations from the Recreation Commission, Mammoth Lakes Recreation and members of the Ad Hoc Facility Task Force to commence preliminary design and environmental documentation for the location of community recreation facilities within Mammoth Creek Park West. This action followed extensive due diligence conducted by Town staff along with representatives from Mammoth Lakes Recreation and the Recreation Commission on a proposed relocation of the Community Multi-Use Recreation Facility and the consideration of location options and environmental analysis. This Ad Hoc Committee worked as a short-term task force for three months to provide options to Council that also included the determination and investigation of an appropriate and low cost alternative for a temporary shade cover at the current facility. After extensive research and analysis the consensus of the group was to: a) recommend the Multi-Use Facility be located at Mammoth Creek Park West with the plan to include a Community Center as a complementary use, and b) not recommend the installation of a temporary shade structure at the existing facility, especially considering those funds could be used for the permanent facility.

The Town also considered purchasing the land containing the Multi-use Facility; however, there are specific Education Codes Pertaining to Disposing of Surplus School Property. The first is the district would have to make a finding that the property will not be needed for school classroom buildings (Education Code Section 17455). This is determined by the appointment of the "Seven Eleven Committee" advisory committee (Education Code Sections 17387-17391), and that according to Education Code Section 17459—The sale of real property is subject to provisions of the Government Code Section 54220 (pertains to offering property first to other local government entities for development of low and moderate income housing or park and recreational purposes). Finally, the sale is subject to the Naylor Act Education Code Section 17485. The Act sets forth the following three conditions which must exist for the Act to apply. (Education Code Section 17486):

- Either the whole or a portion of the school site consists of land which is used for school playground, playing field, or other outdoor recreational purposes and open-space land particularly suited for recreational purposes.

- The land described above has been used for one or more of the purposes specified for at least eight years immediately preceding the date of the governing board's determination to sell or lease the school site.

- No other available publicly owned land in the vicinity of the school site is adequate to meet the existing and foreseeable needs of the community for playground, playing field, or other outdoor recreational and open-space purposes.

In addition, recent discussions with MCOE indicated that the land currently being leased by the Town for the operation of the Multi-use Facility is being considered for a future community day care facility. The current lease also expires on June 30, 2017, and at this time, Town Council has not directed staff to negotiate with MUSD/MCOE for a short-term lease extension.

Thus, as it is unlikely that the Town would construct a cover over the existing ice rink facility, the Draft EIR "No Project" Alternative appropriately analyzed this scenario as such.

6-66 Per CEQA Guidelines Section 15126.2, the lead agency should consider changes in the existing physical conditions in the affected area as they exist at the time the Notice of Preparation (NOP) is published. The NOP was distributed for the EIR on June 2, 2016. At this time, the Town of Mammoth Lakes was not in negotiation for the purchase of the Shady Rest site. Thus, the Shady Rest site was not under consideration as an alternative site, since the Town does not own this property, this site is not zoned appropriately for the project, and the Town was not negotiating purchase of this property as of June 2, 2016.

6-67 Refer to Responses 6-54 and 6-55. As documented in Draft EIR Impact Statement LU-1, the proposed project is consistent with the Town's General Plan (refer to Draft EIR

Table 5.1-1, *General Plan Policy Consistency Analysis*. Further, the General Plan Land Use Map designates the project site as Open Space (OS). As the project is an allowed use for the OS designation, development of the project would be consistent with the land use anticipated for the site by the General Plan.

Refer to Response 6-3.

6-68 Refer to Responses 6-22 and 6-23.

6-69 Refer to Response 6-22 and 6-23.

6-70 Refer to Response 6-21.

6-71 Refer to Response 6-25.

6-72 As discussed on Draft EIR page 3-1, the operations of the existing community center would continue, as well as the winter and summer operations of the Multi-Use Facility (Mammoth Ice Rink/Mammoth RecZone). Furthermore, the traffic analysis did not use a different distribution for the future scenario, since the location of housing, commercial, and recreational areas is not expected to significantly change in the Mammoth area overall. The ski base areas are not changing location, and the locations of commercial centers and residential areas are not expected to change, although they may expand/grow. Thus, the project considered a net change in traffic trips.

6-73 As discussed on Draft EIR page 3-1, the operations of the existing community center would continue. However, the winter and summer operations of the Multi-Use Facility (Mammoth Ice Rink/Mammoth RecZone) would be relocated from the existing facility to the project site. Thus, the project considered a net change in traffic trips, which is the "big picture" or "town-wide" analysis.

In order to determine the net impact of the project, the full impact of the project's trip generation was applied to the site access intersection and all surrounding study intersections then the existing trips for the existing ice rink were removed. As shown in Draft EIR Table 5.5-4, *Proposed Project Daily Trip Generation*, it is estimated that the Multi-Use/Community Center would generate 590 daily trips. The number of these trips occurring in the peak hour is summarized in Draft EIR Table 5.5-5, *Proposed Project P.M. Peak Hour Trip Generation*, for a total of 116 PM peak hour (62 entering, 54 exiting). Not all the trips generated by the project are "new" trips as all the ice skating rink-related trips are already on the area roadways. These trips would be shifted to the new site; therefore the net impact of the project on area roadways is 210 daily trips with 36 occurring in the peak hour (16 entering, 20 exiting).

Draft EIR pages 5.5-14 and 5.5-15 discuss how the project trip generation assumptions were derived. The Institute of Transportation Engineers (ITE) Trip Generation Manual does contain trip rates for an ice skating rink; however, the rates are not utilized in this analysis since there is an insufficient amount of data points available. Additionally, for the proposed multi-use facilities, the ITE Manual standard trip generation rates would

not accurately reflect the trip generation due to the unique activities to be offered at the site. The ITE trip Generation Manual only has one data point for ice skating rinks, meaning the rate is based on data collected at only one ice rink location. Users of the manual are cautioned to use this data with care because of the small sample size. A more accurate estimation of trip generation is provided based on a 'person-trip analysis', which evaluates the number of persons that are estimated to arrive and depart the site over the course of the day, factored by their expected travel modes, vehicle occupancy rates, and drop-off/pick-up activity. Multiplying the number of person trips entering and exiting the site driveway by the percent of trips made by automobile, and dividing by the average vehicle occupancy rate yields the number of vehicle trips. Next, additional vehicle trips are included to reflect the drop-off and pick-up trips (given that one drop-off trip generates two trips at the site driveway, one entering and one exiting).

6-74 Refer to Response 6-26.

6-75 Refer to Response 6-27.

6-76 The existing Peak Hour Factor (PHF) of 0.90 was calculated based on the actual turning-movement counts on Saturday, January 31, 2009. The PHF of 0.95 under future cumulative conditions reflects the assumption that with the forecasted growth in intersection volumes, the 15-minute intervals within the peak hour would be more uniform than under existing conditions.

6-77 As discussed in Responses 6-68 through 6-76, no new impacts or new mitigation measures have been identified. No substantial increases in the severity of an impact have been identified. No new feasible project alternatives have been identified, nor have any mitigation measures been revised such that they are considerably different from others previously considered. Further, as detailed in this Final EIR, the Draft EIR analysis was not fundamentally and basically inadequate and conclusory in nature such that a meaningful public review and comment were precluded.

6-78 Refer to Responses 6-31 and 6-33. This comment provides introductory information and a project summary. The comment does not specifically raise a comment related to the Draft EIR or any other CEQA issue. Refer to the responses below for detailed comments to specific comments. No further response is necessary.

6-79 Refer to Responses 6-33 and 6-34. The comment incorrectly states that the analysis ignored the Land Use Compatibility standards and the General Plan policies. The analysis does consider the land use compatibility CNEL standards within Table 5.8-5, *Land Use Compatibility for Community Noise Environments*. For example, multiple family residential dwelling units (the land use type adjacent to the north and west of the project boundary) are considered Normally Acceptable between 50 and 65 dBA. As indicated in the Draft EIR impact analysis section, mitigated noise levels from the proposed project would not exceed 50 dBA (the lower end of the Normally Acceptable range) at the closest receptors.

Furthermore, considerable care has been taken in the design of the proposed project to ensure land use compatibility and the minimization of noise impacts. The primary activity areas that would generate noise have been intentionally located at the project center, as far as practicable from surrounding uses. The community buildings and other structures have been carefully placed between the primary activity areas and the receptors. The proposed intervening structures and roof structure act as a noise barrier. As described above, compliance with these standards has been demonstrated.

Regarding the comment related to a substantial permanent increase in ambient noise levels, it should be noted that "substantial" is not defined in the CEQA guidelines; however, a noise level increase that would exceed applicable standards is typically used. As a frame of reference, Caltrans identifies 12 dBA or more as a substantial increase. The ambient noise levels in the area range from 40.2 to 48.2 dBA Leq. The Draft EIR analyzed and mitigated, where necessary, noise levels, including operational (mobile and stationary) noise sources (Draft EIR Impact Statements N-3 [page 5.8-22] and N-4 [page 5.8-23], respectively), to ensure that the project noise levels would not exceed 50 dBA at the closest receptors. As such, the analysis accounts for the existing ambient noise levels and provides mitigation to ensure that a substantial noise increase would not occur. As noted above, the project also includes design features that inherently minimize noise impacts at the surrounding receptors. The comment incorrectly states that the analysis is inadequate and that existing ambient noise levels were ignored. Further analysis and mitigation is not required.

6-80 Refer to Response 6-34 pertaining to General Plan Policies C.6.A and C.6.B. The commenter notes several concerns pertaining to the methodology used to establish the baseline noise setting. The following are responses to each concern:

- The noise analysis took four ambient short-term (10 minute) noise measurements around the surrounding condominium communities, one long-term (approximately 20 hours) overnight noise measurement, and three short-term reference measurements. The purpose of the short-term measurements is to collect a sample of noise levels that is representative of the ambient conditions in the area. These noise measurements were taken during off-peak traffic periods and avoided noise from atypical activities that could skew or otherwise influence the measured noise levels (e.g., people congregating at close proximity, operation construction equipment/heavy machinery, etc.). Additionally, activity at residential and commercial land uses is generally consistent and random noise events are minimal. Therefore, short-term (10 minute) measurements are appropriate and representative of the ambient conditions in the area.

- This comment misconstrues the purpose of the long-term measurement and assumes it was to calculate the community noise equivalent level (CNEL). As noted above, the purpose of the long-term (20-hour) measurement was to obtain a sample of the evening/nighttime noise levels. Modern Sound Level Meters readily provide CNEL values from samples shorter than 24 hours. CNEL is the average sound level over a 24 hour period, with a penalty of 5 dB added between 7 p.m. and 10 p.m. and a penalty of 10 dB added for the nighttime hours of 10

p.m. to 7 a.m. As indicated in the comment CNEL is a 24-hour average noise level. However, as stated above a 24-hour measurement is not necessary to determine the CNEL level.

- The comment incorrectly states that the standards in the Noise Element were ignored. The Draft EIR analyzed and mitigated noise levels to ensure that the project noise levels would not exceed the Noise Element's daytime and nighttime standards at the closest receptors. The evening and nighttime penalties in the CNEL calculation compensate for the fact that ambient noise levels tend to decrease and sensitivities to these noise levels increase during these hours. Therefore, CNEL value are typically similar (within one or two dBA) of the daytime Leq levels.

- As indicated above, the purpose of the long-term noise measurement was to determine the ambient conditions during the evening hours. An inappropriate assessment of evening and nighttime noise impact was performed. Specifically, the Draft EIR Impact Statements N-1 (page 5.8-18), N-3 (page 5.8-23), and N-4 (page 5.8-23) fully analyzed all potential noise impacts using the applicable standards within the General Plan Noise Element (identified on Draft EIR page 5.8-14) and the Town Municipal Code (identified on Draft EIR page 5.8-10).

- Winter is anticipated to be the season with the greatest activity and therefore the greatest potential noise impacts. As such the noise measurements were taken during this time. The analysis conservatively analyzes the worst case scenario.

- Multi-day noise measurements are not necessary to analyze noise impacts in the project area. The land uses generally consist of residential, hotel, and office. Noise levels associated with these uses are consistent throughout the day and do not widely fluctuate from day to day. As such, multi-day noise measurements would not provide baseline data that would vary greatly from what was collected for the proposed project.

6-81 Refer to Response 6-35. The reference level for crowd noise was selected based on the size of the proposed facility, the size of the viewing area where people would congregate (the site plans only provide enough space for a couple of rows of bleachers on the north side of the ice rink). The facility is intended to host community events and would not include regional competitions with large audiences. The events would not be on the scale of high school events that the comment compares the facility to. The crowd noise levels analyzed in the Draft EIR are appropriate for the type and size of the proposed venue. Furthermore, the analysis in the Draft EIR also modeled noise levels associated with concurrent activities at the project site using the SoundPLAN 3D noise model. The SoundPLAN modeling uses a more conservative level of 84 dBA and a sound power level of 94.8 dBA (the "People Shouting" category)[8]. Even with the more conservative

[8] Crowd noise levels were modeled with the SoundPLAN software. The modeling utilized the reference data within the SoundPLAN library. For crowd noise, the "People Shouting" category of the SoundPLAN library/reference data was utilized. This data is an average from 15 measured frequency spectra within the TÜV Hessen (a technical testing organization) technical paper from a study of noise emission dated February 1991.

levels modeled, noise levels would not exceed Town standards due to the project design, distance attenuation, proposed intervening structures, and roof structure.

6-82 Refer to Response 6-35. As noted above, the comment confuses single event noise levels and L_{max} levels. It should be noted that single event noise levels are best described as unique events and is usually lower than the L_{max}. Single event noise is the cumulative noise exposure from a single event, but does not represent a combination of events. Single event noise levels do not provide an accurate depiction of noise exposure nor do they reflect a true representation of noise impacts on a community. L_{max} is the maximum level with a time-constant applied. As the anticipated single event and peak noise levels from the potential events would be unpredictable and irregular, the noise analysis focused on the time-averaged noise levels that would potentially occur. Additionally, the analysis is based on conservative assumptions appropriate for the anticipated activities and level of intensity.

6-83 Refer to Response 6-35 and 6-82. As indicated in the comment, Section 8.16.070(B) of the Town's Municipal Code provides allowances for short-term exceedances of the noise standard to account for the fact that noise levels constantly fluctuate and can regularly exceed a time-averaged standard. For example, the noise measurements in Draft EIR depict L_{max} and Peak levels that currently exceed the Town's time-averaged standards; refer to Table 5.8-3, *Noise Measurements*. However, these exceedances are generally acceptable because they occur over a relatively short duration.

6-84 As discussed on Draft EIR page 5.8-24, a solid wall barrier would be constructed in the interim, between proposed buildings constructed in Phase I. This barrier would be a continuation of the proposed buildings. The barrier would be constructed of masonry, would be the same height as the proposed Phase I structures, and would not have any gaps. These design features would allow the barrier to attenuate noise from the project site. Upon development of Phase II, the wall would be removed and new structures would be erected. The Draft EIR analyzed the proposed design of the barrier, as described above. The barrier is a design feature because it is proposed as part of the project in order to enclose the primary activity area and would be constructed regardless of any potential impacts. As the barrier is a project design feature, it does not need to be required as a mitigation measure.

6-85 Refer to MR-1. The reference noise level of 110 dBA for a "rock music band" on Draft EIR Exhibit 5.8.1 applies to music/performance at a greater intensity than what is anticipated at the project site. Additionally, this is not a reference level. It is the noise level at the source and used for general comparison to other sources. This level does not account for distance and should not be directly compared to the reference levels used in the Draft EIR. The comment also provides anecdotal information about measurements at a "large outdoor music venue" and a "smaller outdoor music event", but does not define the venue, number of attendees, or any other specifics of their reference measurement. The project proposes a community recreational facility that and not a concert venue or "large outdoor music venue" as purported in the comment. The comment does indicate noise levels at "the sound engineer mix position approximately 100 feet from a stage" for the large outdoor music venue. This information indicates

that the commenter's measurements were taken at a much larger facility/venue than what is proposed at the project site. For example, it is approximately 96 feet from the center of the ice rink to the proposed building to the west. Additionally, events that would occur at the proposed facility would not be large enough to require a sound engineer. The community recreational facility could host weddings or similar events with live and/or amplified music. These events are not comparable to large outdoor music venues. As described above, the proposed project has been intentionally designed to minimize noise impacts to surrounding uses by locating the primary activity areas that would generate noise at the project center, as far as practicable from surrounding uses. The community buildings and other structures have been carefully placed between the primary activity areas and the receptors. The proposed intervening structures and roof structure act as a noise barrier. Therefore, the types of events and associated noise levels described in the comment are not representative of the activities and noise that would occur on the project site.

6-86 Refer to MR-1. Also refer to Response 6-85, above. As indicated above, the comment attempts to equate events at the proposed community recreational center to large outdoor music venues. The project does not propose a large outdoor music venue and only has capacity for small scale events. Draft EIR Mitigation Measure NOI-3 requires the preparation of a Noise Control Plan that includes several different methods to reduce music noise levels and the most feasible method may be used in order to meet the performance standard. For example, the sound level of the speakers may be adjusted (i.e., reduced), if this is not feasible, then the speakers shall be moved further away from the receptors. Speaker noise is also limited during nighttime hours. If the performance standards in the Noise Control Plan cannot be met, then the music would not be allowed. It should be noted that the noise scenarios analyzed in the Draft EIR represent the worst case condition and other scenarios would not be as loud. Unamplified music is not a concern because it consists of acoustic instruments and unamplified vocals. These levels do not exceed crowd noise or the other noise sources evaluated in the Draft EIR. Louder instruments such as drums are not used with unamplified music performances because they drown other unamplified instruments out. Only amplified instruments are used with drums so the other instruments can be heard. As noise levels of unamplified music would consist of acoustic instruments and vocals, they would not exceed the other noise sources addressed in the Draft EIR and would be effectively attenuated through distance to the receivers and the intervening structures.

6-87 Refer to MR-1. Third party events held at the project site would be required to obtain a Special Events Permit, which would provide Town control over the types of equipment used on-site. Special Events are exempt from Town standards per Section 17.56 of the Municipal Code. It should be noted that Special Event can currently be permitted on the project site or any other location in the Town. However, as described above, the project has been designed to minimize impacts to the neighboring land uses. Special events do not occur on a daily basis and as such, noise levels from these events are not enough to create a temporary or permanent increase in the ambient conditions which are established over the long term.

6-88 Refer to Responses 6-36, 6-85, 6-6 and 6-87, above. The comment attempts to equate the events at the project site to a large outdoor music venue. The project proposes a community events facility that would host small scale recreational activities and special events that may include music. As described in the Draft EIR, noise impacts from this scale of activity would not exceed the Town's standards and potential worst-case conditions can be mitigated to a less than significant level. As noted above, noise from musical events/performances would be small scale and would be attenuated by distance and the proposed intervening structures as well as the proposed roof structure.

6-89 Refer to Response 6-37.

6-90 Refer to Response 6-37. The Town proposes to use a similar size and type chiller to what is currently used at the Town's existing ice rink. As such, reference noise measurement were taken at the existing chiller to evaluate potential future chiller noise levels. The reference measurements of the existing chiller were taken while it was operating in order to determine the worst-case noise levels.

6-91 Refer to Response 6-37. Also, refer to Responses 6-89 and 6-90, above. Sufficient data was available at the time of the analysis. The Draft EIR based its findings on conservative worst-case assumptions. A future study is not required.

6-92 Refer to Responses 6-16, 6-40, and 6-44.

6-93 Refer to Response 6-44.

6-94 Refer to Response 6-16.

6-95 Refer to Response 6-40.

6-96 The Mammoth Community Water District (MCWD) recently adopted their *2015 Urban Water Management Plan* (2015 UWMP) (January 2017). The 2015 UMWP is an important long term planning document for the District and the community it serves, which is primarily the incorporated area of the Town of Mammoth Lakes (Town). The conclusions and recommendations from the 2015 UWMP will determine key aspects of long-term capital investment by the District for water supply and treatment, and influence future land use planning and development levels within the Town, to the extent these are influenced by the practical and regulatory requirements linking water supply reliability and land use decisions. The comment suggests that the information presented in the 2015 UWMP is unreliable. However, this is the planning document used by the MCWD and Town of Mammoth Lakes for water supply information. As discussed in Response 6-44, the Draft EIR considers both the 2010 UWMP (adopted at the time of public review of the Draft EIR) and the 2015 UWMP.

6-97 Refer to Response 6-16 regarding the existing hydrologic conditions. Refer to Response 6-15 regarding a discussion of the existing water quality conditions. Refer to Response 6-40.

6-98 Refer to Response 6-40.

6-99 Refer to Responses 6-40 and 6-41.

6-100 Refer to Response 6-40.

6-101 Refer to Response 6-41. The Meyers Report mistakenly states that the retention basins contain the equivalent of 0.32 inches of runoff from the entire site. The statement is erroneous as the basins are sized to percolate the runoff from the newly created 1.9 acres of impervious surface as required by Lahontan. An existing drywell that would remain was sized and was already installed for the existing parking lot runoff. All other site runoff from undeveloped areas or areas developed with pervious surfaces would not be directed to the basins and therefore retention of runoff from these areas is not required.

6-102 The 100 year flood zone would not be affected by this project. The drainage area of the basin is approximately 9,000 acres. The flow rate just east of Old Mammoth Road was determined to be 640 cfs per the Flood Insurance Study for Mammoth Lakes as revised in 1992. As detailed in Final EIR Appendix D, the predevelopment 100-year runoff was determined to be 3.6 cfs based on the 2005 Mammoth Lakes Storm Drainage Master Plan. When incorporating the retention basin into the design calculations the post development runoff decreases from 7.3 cfs to 5.1 cfs utilizing the 1984 Mammoth Lakes Storm Drain Design Manual formulas for site runoff. The increase in runoff from existing to post development conditions would be 1.6 cfs. The increase in flow would raise the level of the floodplain on the property less than one tenth of an inch downstream of Old Mammoth Road where the stormwater would discharge. This was calculated using section A of the Flood Insurance Study, which has a flood width of 80 feet, 350 feet upstream of Old Mammoth Road.

6-103 Draft EIR Section 5.9.5, *Cumulative Impacts*, page 5.9-27, considers the project's cumulative contribution to impacts pertaining to hydrology and water quality. For cumulative projects, each individual project would be required to submit a drainage analysis to the Town for review and approval prior to issuance of grading or building permits. As required by each development project pursuant to Section 404 of Federal Clean Water Act (CWA), as enforced by the Lahonton RWQCB and the Town of Mammoth Lakes (Memorandum of Understanding [MOU] No. 6-91-926), the Town administers erosion control measures on a project by project basis to make sure that they are in place and operational. Thus, each drainage analysis must illustrate how peak flows generated from each project site would be accommodated by the Town's existing and/or proposed storm drainage facilities. Where necessary, each related project would be required to include retention or infiltration features designed to reduce the total rate and/or volume of runoff generated at its site. Therefore, cumulatively considerable impacts to the Town's existing or planned stormwater drainage system capacity would be less than significant. Further, with compliance with Mitigation Measures HWQ-4 through HWQ-6, the proposed project would not significantly cumulatively contribute to impacts pertaining to hydrology or exacerbate conditions associated with the 100-year flood zone.

6-104 Refer to Responses 6-15 and 6-43.

6-105 Refer to Response 6-100.

6-106 Refer to Response 6-40.

6-107 Refer to Response 6-43.

6-108 Refer to Response 6-47.

6-109 Refer to Response 6-47.

6-110 Refer to Response 6-47.

6-111 Refer to Response 6-47.

6-112 Refer to Response 6-65.

6-113 Refer to Response 6-65.

HIGH SIERRA ENERGY FOUNDATION

February 10, 2017

Ms. Sandra Moberly
Community and Economic Development Manager
Town of Mammoth Lakes
Community and Economic Development Department
P.O. Box 1609
Mammoth Lakes, CA, 93546

Re: Town of Mammoth Lakes Mammoth Creek Park West New Community Multi-Use Facilities Project

The High Sierra Energy Foundation, in conjunction with the Town of Mammoth Lakes, Mono and Inyo counties and the City of Bishop are in a Local Government Partnership (LGP) through Southern California Edison – the Eastern Sierra Energy Initiative (ESEI). The goal of LGPs is to provide resources for local governments to implement energy efficiency measures so that local governments can lead by example and to comply with State mandates regarding energy efficiency and greenhouse gas emissions.

As part of that mission, we urge the Town of Mammoth Lakes to review all options to design and build the most efficient building possible. We often see that a budget is set for a certain project and little consideration is made to analyze upfront costs versus ongoing reduced operating costs for efficiency measures. 7-1

In the 2007-2008 California Strategic Plan, the California Public Utility Commission Adopted Zero Net Energy (ZNE) goals that all commercial construction in California will be ZNE by 2030 and Executive Order B-18-12 includes a target for all new State constructed buildings to be ZNE by 2025. ZNE can be defined as, "The societal value[1] of energy consumed by the building over the course of a typical year is less than or equal

[1] Societal value of energy is defined as the long-term projected cost of energy including cost of peak demand and other costs including projected costs for carbon emissions, e.g., the time dependent valuation (TDV) of energy.

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to the societal value of the on-site renewable energy generated."[2] Local and state government buildings are an excellent sector in which to demonstrate ZNE and interim energy reduction targets based on measured performance. It is particularly important for government to lead by example both for educational purposes and to establish credibility of other policy efforts. Seeing and experiencing ZNE buildings firsthand can be a strong influence and inspiration to other local designers, policymakers and building owners.[3]

We realize that our climate zone and the unique nature of the building presents challenges in getting to ZNE, however there is an example of a building built in our area in 2015, UCSB's Sierra Nevada Aquatic Research Laboratory that is a ZNE Emerging Building[4]. Sierra Nevada College in Truckee, also built an efficient building a decade ago that could serve as inspiration for this project. Please review the case study at: https://energydesignresources.com/media/2392/EDR_CaseStudies_tahoecenter.pdf. Or, a more obtainable goal may be to aim for a "ZNE Ready Building" – a building that meets the same high efficiency Energy Use Intensity as ZNE Buildings, but that lack on-site renewables until a future date. 7-1

Through the Town of Mammoth Lakes' partnership in the Eastern Sierra Energy Initiative, and part of the benefits from paying Public Good Charges, automatically charged to the Town's electric bill, Southern California Edison could provide technical, engineering and planning support, as well as electricity-usage monitoring for Zero Net Energy (ZNE) projects. Also available is Savings By Design, a program where the utility will work with the property owner's designer to encourage owners to invest in energy efficiency as a major goal in their new buildings and financial incentives are available to owners when the efficiency of their new building exceeds the minimum Savings By Design threshold (generally 10% better than Title 24 Energy Efficiency Standards). The design approach can be either on the whole building or on specific systems. These services are available for no charge and can be facilitated through the ESEI partnership.

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[2] http://www.energy.ca.gov/2011_energypolicy/documents/2011-07-20_workshop/presentations/Revised_Zero_Net_Energy_Definition.pdf

[3] http://newbuildings.org/code_policy/zero-net-energy-policies/6-set-zne-goals-government-and-other-public-buildings/

[4] ZNE Emerging buildings have a publically stated goal of ZNE but do not yet meet the definition of ZNE verified. These may be in the planning or design phase, under construction or have been in operation for less than a year. Others may have been operating for 12 months or longer, but their measured energy has either yet to achieve net zero or the measured data to document ZNE verified status was not available.

We want to reiterate that we are available to assist in any way to ensure that the building is built with maximum energy efficiency and believe that the project could be a wonderful showcase of energy efficiency measures and renewable energy for our community.

7-1

Sincerely,

Richard Phelps
Executive Director

Pamela Bold
Energy Efficiency Programs

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7. RESPONSES TO COMMENTS FROM HIGH SIERRA ENERGY FOUNDATION, DATED FEBRUARY 10, 2017.

7-1 As discussed on Draft EIR pages 6-6 and 6-7, Public Resources Code Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, largely in response to the oil crisis of the 1970s, the California State Legislature adopted Assembly Bill 1575 (AB 1575), which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct state responses to energy emergencies, and—perhaps most importantly—promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of caused by a project. Thereafter, the State Resources Agency Created Appendix F of the State *CEQA Guidelines*.

State *CEQA Guidelines* Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. As discussed in Draft EIR Section 6.4.1, *Environmental Setting*, the proposed project's effect on energy consumption impacts on energy resources are analyzed. Energy consumption associated with the proposed project is summarized in Draft EIR Table 6-5, *Energy Consumption*. As shown in Table 6-5, the increase in electricity usage as a result of the project would constitute an approximate 0.004 percent increase in the typical annual electricity consumption in Mono County. The project would not consume natural gas as all of the Town of Mammoth Lakes uses propane to fuel furnaces, water heaters, and stoves, etc. The increase in off-road automotive fuel consumption in Mono County would be nominal, while the on-road automotive fuel consumption from the project would be 0.003 percent.

The proposed project would be required to comply with Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage. Furthermore, the electricity provider, Southern California Edison (SCE), is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 50 percent of total procurement by 2030. Renewable energy is generally defined as energy that comes from resources, which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures projects will not result in the waste of the finite energy resources.

As mentioned above, SCE currently provides electrical services within the Town of Mammoth Lakes, while propane gas services are provided by TGS. SCE has indicated

that adequate capacity exists within the area to serve to proposed project. These utility companies would continue to provide these services and are required by the California Public Utilities Commission to update existing systems to meet any additional demand. The project would adhere to all Federal, State, and local requirements for energy efficiency, including the Title 24 standards, as well as the project's design features. The proposed project would not result in the inefficient, wasteful, or unnecessary consumption of building energy. Additionally, the proposed project would not result in a substantial increase in demand or transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure.

Title 24, California's Energy Efficiency Standards for Residential and Non-residential Buildings, was established by the California Energy Commission (CEC) in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. In 2013, the CEC updated Title 24 standards with more stringent requirements. The 2013 Standards are incorporated within the California Building Code and are expected to substantially reduce the growth in electricity and natural gas/propane use. Additional savings result from the application of the Standards on building alterations. For example, requirements for cool roofs, lighting, and air distribution ducts are expected to save about additional of electricity. These savings are cumulative, doubling as years go by. Additionally, the project may include the installation of solar panels on-site. The use of solar panels would reduce building energy demand during operations.

As shown in Draft EIR Table 6-5, the increase in electricity and automotive fuel consumption over existing conditions is minimal (less than one percent). For the reasons described above, the proposed project would not place a substantial demand on regional energy supply or require significant additional capacity, or significantly increase peak and base period electricity demand, or cause wasteful, inefficient, and unnecessary consumption of energy during project construction, operation, and/or maintenance, or preempt future energy development or future energy conservation.

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February 10, 2017

Ms. Sandra Moberly
Community and Economic Development Manager
Town of Mammoth Lakes
437 Old Mammoth Road, Suite R
Mammoth Lakes, CA 93546

RE: Mammoth Creek Park West New Community Multi-Use Facilities
Draft Environmental Impact Report
Public Comment

Dear Ms. Moberly,

Thank you for this opportunity to provide comment on the Draft Environmental Impact Report for the Mammoth Creek Park West New Community Multi-Use Facilities.

As Paul Oster so eloquently pointed out in his March 18, 2016 comment letter in response to the initial public scoping request for the project, the Mammoth Creek Park West site is an extremely valuable and sensitive asset of the community, not the least of which is its immediate proximity to the open stream corridor of Mammoth Creek, incredible public view corridors south to the Sherwin Range and west to Mammoth Mountain, fantastic solar access, flat developable topography, and its current uses as the premiere children's playground/park in town and a cross-roads of the Town's trail network. Given the high resource value of this site, it's imperative that the DEIR and eventual Final EIR document thoroughly vette all potential impacts and in view of the estimated $11 million dollar price tag, the initial economic impact and follow along economic benefits cannot be under evaluated and in fact should be maximized to the greatest benefit of the Town. Mammoth Mountain Ski Area, LLC (MMSA) has made a thorough review of DEIR and offers the following comments: 8-1

3.6 Agreements, Permits and Approvals:

The project site is located in the Open Space (OS) land use designation. In accordance with Chapter 17.32.080 – Open Space Zone, of the Municipal Code and Table 17.32.080 – Allowed Uses and Permit Requirements for Open Space Zoning Districts, Park Recreational and Cultural Facilities require a Use Permit. Section 3.6 of the Draft EIR fails to identify this necessary planning permit requirement.

5.1 Land Use and Relevant Planning:

LU-1, THE PROPOSED PROJECT WOULD NOT CONFLICT WITH THE GENERAL PLAN POLICIES OR REGULATIONS.

It should be pointed out that the General Plan discusses parks in the context of open space whereas the proposed Multi-Use Facility should be viewed and defined as a major Indoor Recreational Facility that is largely a commercial use and should in no way be evaluated as a passive recreational use. It appears there are major inconsistencies in the language and assumptions in the General Plan with regard to the disposition of Mammoth Creek Park and the proposed Multi-Use Facilities.

Table 5.1-1, General Plan Consistency Analysis of the DEIR, fails to address certain General Plan Policies or draws improper conclusions in the following areas:

1. E.3 – Diversify Economy, E.3.C – Support development of major public and private facilities that contribute to destination resort visitation to Mammoth Lakes. The proposed Multi-Use Facility will be located in currently passive park location at the furthest terminus of the commercial zone of Old Mammoth Road where few complimentary commercial uses lie within walking distance. The development of the Multi-Use Facility at this location will have no catalytic economic effect on any adjacent commercial uses and does not contribute to destination resort visitation in this location. It is beyond walking distance from any significant transient lodging of the community. Given the significance of the estimated $11 million dollar capital budget for this major Recreational Facility, the Town can ill afford to poorly invest public funds in this stand-alone facility which has no synergistic economic impact on other commercial development in town due to its poor location. **8-2**
2. Per the General Plan, the Land Use designation for this site is Open Space (OS). Open Space is established to protect the community's public and private open space resources. It is intended to preserve existing parks, and encourage future parks, maximize recreational opportunities, preserve open space, and protect sensitive environmental resources. Development of a major 43,000 sf Recreational Facility would appear to be in direct conflict with the preservation of open space and protection of sensitive environmental resources, namely Mammoth Creek, as envisioned in the General Plan. This is a significant impact. Likely requires a General Plan Amendment and Use Permit at a minimum. **8-3**
3. M.3.C – Reduce automobile trips by promoting land use and transportation strategies such as: implementation of compact pedestrian-oriented development; cluster and infill development; mixed uses and neighborhood-serving commercial mixed use centers. Again, this is a major 43,000 sf Recreational Facility proposed to be developed in a General Plan designated Open Space. The proposed development of the Multi Use Facility at **8-4**

Mammoth Creek Park West is in direct conflict with this General Plan Policy as it is encouraging sprawl in an area that is defined to support passive recreational uses not an intense commercial use. 8-4

4. M.6.A – Develop efficient and flexible parking strategies to reduce the amount of land devoted to parking. M.6.B – Support development of strategically located public parking facilities. The proposal includes the development of 107 incremental surface parking spaces to support the Multi-Use Facility only. This parking will have no ability to be shared with any other commercial uses and again creates sprawl and only encourages the use of the private automobile and therefore does not support the priority of feet-first mobility. This is a significant impact. 8-5
5. R.3.B – Manage all properties held by the Town of Mammoth Lakes along Mammoth Creek corridor for open space, habitat preservation and passive recreation. <u>The analysis in the DEIR is completely wrong to state that the proposal is consistent with this policy. Every aspect of a 43,000 sf major Recreational Facility at this location is in conflict with open space, habitat preservation, and passive recreation. This is a significant impact and likely requires a General Plan Amendment to address.</u> 8-6

LU-2, THE PROPOSED PROJECT WOULD NOT CONFLICT WITH THE TOWN OF MAMMOTH LAKES MUNICIPAL CODE STANDARDS OR REGULATIONS

There appears to be a huge discrepancy between the current Town Zoning Map and the Land Use map defined in the Town's General Plan. The General Plan, page 35, Figure 5, clearly identifies the Mammoth Creek Park West as included in the Open Space land use designation. The current Town Zoning Map identifies the site as Public/Quasi-Public (P/QP). There are significant Land Use Goals and Policies in the General Plan that are in direct conflict with the P/QP designation in the Zoning Map. Given the intent of the General Plan with regard to the use of Open Space it would appear redesignating Mammoth Creek Park West as P/QP would require a General Plan amendment to allow the proposed development of a major Recreational Facility such as the proposed Multi-Use Facility. 8-7

Furthermore, if one is to assume the site is designated as the P/QP Zone, as per the Municipal Code Table 17.32.100 – Allowed Uses and Permit Requirements for Public and Quasi-Public Zoning Districts, Recreational Facilities are not even designated as an allowed use under the Recreation, Education, & Public Assembly Use Classification. Whereas in Table 17.32.080 – Allowed Uses and Permit Requirements for Open Space Zoning Districts of the Municipal Code, define Park Recreational and Cultural Facilities which require a Use Permit.

These conflicts are a significant impact and possibly require the processing of a General Plan Amendment and Zoning Code Amendment in order to reconcile.

5.2 Aesthetics/Light and Glare:

Scenic Views analysis and visual mock-ups provided in Exhibit 5.2-2 appear inadequate to assess visual impacts from the true pedestrian level vantage points as they are all elevated off the ground from a "bird's eye" perspective. These should be revised to reflect actual pedestrian perspectives from prominent public view corridors across the site to honestly analyze the visual impact of the proposed development. **8-8**

5.5 Traffic and Circulation:

Vehicle Miles Traveled (VMT). It is identified that the proposed location for the Multi-Use Facility will create an additional 386 VMT. It is likely most patrons of the facility will drive to and park at the facility as it is beyond the 500 yard (1/4 mile) walking distance to the vast majority of permanent residents in town and the majority of transient lodging. Alternative sites located in the "Downtown" of Mammoth Lakes would likely provide for greater pedestrian access and a significant reduction in the VMT values for this project. **8-9**

7.0 Alternatives to the Proposed Project:

The possible Alternative Sites evaluated failed to include an extremely viable site located at the Shady Rest Tract at the west end of Tavern Road which lies in the Downtown Zone of the Town. This site was analyzed in recent community planning efforts focusing on Downtown Revitalization. The current ownership are willing Sellers. The Shady Rest Tract should be evaluated as an Alternative Site in the DEIR and Final EIR. The Shady Rest Tract site has the following advantages over all other sites:

1. Greater economic benefit. This site would act as a catalytic development and investment for the revitalization of the Downtown core which would likely spurn follow-along private development and redevelopment in the core of Downtown. One only has to look to other cities across the nation who have invested in significant public infrastructure in their blighted downtown zones and realized significant follow-along private investment in those districts creating numerous economic benefits of increased property taxes, increased sales taxes from increase commerce in those commercial/downtown zones, and potentially increased TOT revenues created by the attraction of such a new Recreational Facility in the Downtown district. **8-10**
2. Encourages Feet-First Mobility. This site is within walking distance of a far greater number of local residents and transient bed base than the proposed Mammoth Creek Park West location. This site will result in far less incremental VMT's than the Mammoth Creek Park West location as a result of its superior location and should in fact reduce VMT's from the current site at the Library site.

3. Strategically Located Parking: Parking located at the Shady Rest Tract for the Multi-Use Facility will provide an opportunity for true shared parking for adjacent commercial uses that will be in the core of Downtown. This proximity will encourage park once and walk to multiple destinations in the Downtown core, including the Multi-Use Facility, and other Commercial establishments.
4. Public Facility Expansion Opportunity: The Shady Rest Tract as recently analyzed in Downtown community planning efforts could realistically provide a 5-6 acre site. Such a sized parcel would allow the Town to develop additionally anticipated indoor recreational facilities on the same site, such as the Aquatic Center, Community Center, and Community Recreation Center (Field House) to name a few. By virtue of sharing the same site many basic infrastructure needs could be shared by all facilities, i.e. parking, restrooms, office support space, and concessionaire facilities, creating efficiency in both initial capital expenditures, as well as long term operating and employee costs. The proposed Mammoth Creek Park West site has less than 2-1/2 acres of available land and cannot support more than the Ice Rink and Community Center uses. The future Aquatic Center and Field House would have to be developed on separate sites thereby sacrificing capital and operational efficiencies and losing the benefit of the critical mass created by developing all such facilities on one site. **8-10**
5. Environmentally Superior Location: The east end of the Shady Rest Tract lies immediately adjacent to the west end of the Downtown and is within the defined boundaries of the Downtown Zone, the most intensive commercial zoning allowed by the Municipal Code. It is closer to a majority of local residents in the Sierra Valley Neighborhood, it is within existing Downtown zoning that allows for 2.0 FAR densities and building heights up to 55 ft. The Multi-Use Facility is a proposed 43,000 sf intense commercial Indoor Recreational Facility which is better suited to be located in a commercial zone of Town and not in an existing park that is defined to support "passive" recreation by the General Plan.

For these foregoing reasons, MMSA urges the Town to include the Shady Rest Tract as Alternative Site that should be evaluated in the context of the DEIR and Final EIR documents. Thank you for the opportunity to comment on the Mammoth Creek Park West, New Community Multi-Use Facilities Draft Environmental Impact Report. Please contact the undersigned should you have any questions.

Very truly yours,

Tom Hodges
Vice President, Mountain Development
Mammoth Resorts, LLC

8. RESPONSES TO COMMENTS FROM MAMMOTH RESORTS LLC, DATED FEBRUARY 10, 2017.

8-1 The commenter states that the project requires a Use Permit in the Open Space (OS) land use designation and Open Space Zone for park recreational and cultural facilities. As discussed on Draft EIR page 5.1-1, based on the *Town of Mammoth Lakes General Plan 2007* (General Plan) Land Use Map, the project site is designated Open Space (OS). Based on the Town's Zoning Map, the project site is zoned Public and Quasi Public (P-QP).

As discussed on Draft EIR page 5.1-23, *Title 17, Zoning*, the proposed project falls within the following use classification, as described in Municipal Code Section 17.144.030: *Parks and Playgrounds, Public. Public parks, play lots, playgrounds, and athletic fields for non-commercial neighborhood or community use, including open space areas for passive recreation and picnicking, swimming pools, tennis courts, and other sport and active recreation facilities. This classification also includes related food concessions or community centers within the facilities. If privately owned, the same facilities are included under the definition of "Private Recreation Facility."*

Municipal Code Section 17.32.100, *Public and Quasi-Public Zone (P-QP)*, describes the permitted uses within the P-QP zone. Public parks and playgrounds are a permitted use within the P-QP zone. Further, for community assemblies, an Administrative Permit would be required, as identified on Draft EIR page 3-17. Thus, the proposed project would not require a Use Permit.

8-2 The General Plan description for the Open Space designation is as follows: *The Open Space designation is established to protect the community's public and private open space resources. It is intended to preserve existing parks and encourage future parks, maximize recreation opportunities, preserve open space, and protect sensitive environmental resources. Facilities that support the environmental and recreational objectives of the community are permitted. The OS designation may apply to environmentally sensitive areas such as wetlands, floodplains, and streams. This designation allows parks, athletic fields, golf courses, community gathering spaces and supporting facilities…*

The project proposes an ice rink and summer recreational activities that meet the intent of athletic fields, as well as community gathering spaces and supporting facilities. Further, the project site's setback from Mammoth Creek meets the Town's intent for supporting both environmental and recreational objectives of the community. The *Town of Mammoth Lakes Parks and Recreation Master Plan* (Parks and Recreation Master Plan) is an outcome of a collaborative process and provides the following:

- An assessment of existing parks and recreation facilities;
- A presentation of goals and policies that reflect community values;
- An analysis of parkland and recreation facility needs; and
- Recommendations of parks and recreation facilities to address unmet community needs, and an implementation and phasing strategy that considers funding and partnerships.

As discussed in Draft EIR Impact Statement LU-3 (page 5.1-24), the project meets the Town's recreational goals for the site.

Regarding General Plan Policy E.3, the proposed project supports the development of major public facilities that contribute to destination resort visitation in Mammoth Lakes. The proposed project is situated in the vicinity of both commercial and residential areas of the Town. Thus, the project can support both existing residents and visitors. As discussed above, the project is consistent with the General Plan land use designation for the site and the proposed project has been considered by the Town at this specific location since 1998.

Specifically regarding economic effects, the commenter states that the project will have no catalytic economic effects on any adjacent commercial uses and would not contribute to the destination resort visitation in this location. However, this statement is unfounded, as no data has been provided to support this statement. Further, an EIR is not required to analyze the project's economic impacts, as there would be no physical impacts to the environment in this regard (CEQA Guidelines Section 15126.2).

8-3 As discussed in Response 8-2 above, the intent of the OS designation is not to support solely passive open space uses, but parks, athletic fields, golf courses, community gathering spaces and supporting facilities as well. Further, the existing park open space uses to the south and east provide a more passive open space buffer along Mammoth Creek. The proposed project is consistent with the OS designation and P-QP zone for the site and would not require a General Plan Amendment or Use Permit.

8-4 As discussed in Response 8-2, the project is consistent with the intent for the identified General Plan land use for the site (OS). Development of the project would serve the surrounding neighborhood and those residents in the area would be able to walk to the project site. Further, as discussed on Draft EIR page 8-13, the project proposes multi-use community and recreational facilities situated along multi-use pathways and in close proximity to major transit stops.

Pedestrian access is currently provided via sidewalks on the eastern and western portions of Old Mammoth Road. There are no designated bike lanes along Old Mammoth Road in the vicinity of the project site. However, there are existing Class I Paved Multi-Use Paths along Old Mammoth Road and Mammoth Creek Road, adjacent to the project site. The multi-use paths provide for bicycle and pedestrian travel on a paved right-of-way completely separated from any street or highway. In addition, pedestrians/trail users can access the site via the Town Loop trail to the east and south of the project site, increasing access to public recreational amenities and allowing for pedestrian integration and improved circulation within the area. Eastern Sierra Transit and town trolley stops are currently located immediately adjacent to the project site along Old Mammoth Road and Mammoth Creek Road and in close proximity to the project area along Old Mammoth Road and Chateau Road. Access to the transit stops would be maintained, further encouraging reduction in automobile trips by providing access to transit. Existing access to the site via walking, bicycling, and public transit would be improved compared to existing conditions, and would not be interrupted or obstructed. Thus, the

proposed project would meet the intent of Policy M.3.C, emphasizing the Town's feet first policies.

8-5 Refer to Response 8-4 pertaining to the project's consistency with the Town's feet first policies. Since the project meets the Town's parking requirements, Transportation Demand Management (TDM) measures are not required pursuant to Municipal Code Section 17.44.050. Further, the existing surrounding commercial facilities, to the north of the project site, currently serve the existing local community and have existing surface parking lots to support those uses. Thus, those shared parking strategies discussed in the General Plan are not particularly applicable to the project site, compared to other hotel/commercial-visitor oriented uses in the Town.

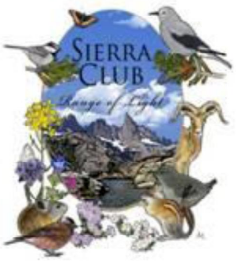
8-6 Refer to Response 6-54. No General Plan Amendment is required for the project.

8-7 Refer to Response 8-3. The project site is not located within the Open Space Zone, but rather the P-QP zone. Section 17.32.080 does not apply to the project. Applicable permit requirements are identified in Section 17.32.100. Refer to Response 8-1. No General Plan or Zoning Code Amendments are required for the project.

8-8 Refer to Responses 6-5 and 6-57.

8-9 Refer to Response 8-4.

8-10 Refer to Response 6-66.



Range of Light Group
Toiyabe Chapter, Sierra Club
Counties of Inyo and Mono, California
P.O. Box 1973, Mammoth Lakes, CA, 93546
Rangeoflight.sc@gmail.com

SIERRA CLUB

February 12, 2017

Town of Mammoth Lakes
Attn: Ms. Sandra Moberly, Community and Economic Development Manager
Community and Economic Development Department
P.O. Box 1609, Mammoth Lakes, CA 93546
(Sent via email to: smoberly@townofmammothlakes.ca.gov)

Re: Comments on Draft EIR, Mammoth Creek Park West New Multi-Use Facilities

Dear Ms. Moberly,

On behalf of our nearly 400 local members, the Executive Committee of Range of Light Group would like to express concern regarding the recently released Draft Environmental Impact Report (DEIR) for the Mammoth Creek Park West Multi-Use Facility (MUF) and Community Center. The Sierra Club is committed to maintaining natural ecosystems. We believe that wildlife, plants and their ecological communities have value in their own right, as well as value to humans.

In general, we feel the DEIR significantly downplays the impacts the MUF/Community Center will have to local wildlife, water quality and emissions. It also minimizes the light and sound pollution that will be generated by the completed project. Because the selected site is adjacent to Mammoth Creek, and also due to the scale of the proposed 43,000 square-foot industrial-style building, we're concerned about negative consequences to the nearby riparian corridor and the degradation of Mammoth Creek Park's natural values. Specifically: 9-1

Aesthetics/Light and Glare

- The DEIR states that since the ice rink will be open on two sides, "the project would result in an increase in available southern public views toward the Sherwin Range and Mammoth Crest." But a 35' high building will clearly reduce mountain views, not only from within the facility, but from the area surrounding it.
- "The majority of the western portion of the project site is open space/scrub habitat that is only nominally accessible to the public" per the DEIR. Actually, this area is fully accessible to the public and is utilized for walking, running, bicycle riding, birdwatching, dog walking, botanizing, stargazing and other recreational pursuits. 9-2
- The DEIR neglects to mention glare impacts from headlights at the newly expanded parking area. It also does not take into account spillover light from an ice rink with open 9-3

sides. Since the intention is to operate the rink until 10:00 p.m. daily, this will have harmful effects on wildlife as well as on human neighbors. It also means Mammoth Creek Park West will no longer be a good venue for night sky viewing. 9-3

Biological Resources

- The report says that only one mammal (a lodgepole chipmunk) was observed on the June 8, 2016 habitat site investigation. A sincere effort to spot mammals could have uncovered not only this chipmunk, but also the mule deer, raccoons, coyotes and bats that are listed as area species. Additionally, California black bear, mountain cottontail rabbits, deer mice, golden-mantled and Belding's ground squirrels utilize the park area but were not mentioned in the DEIR. 9-4
- The bird listing fails to note that yellow warblers (a California Species of Special Concern) and golden eagles have been known to frequent the area. While not indicated in the report, this zone is commonly used as a foraging area for raptors, likely due to the rodent concentration along the creek. 9-5
- The DEIR says species displaced from the Mammoth Creek corridor can travel south of Old Mammoth Rd. This area is slated for the Snowcreek 8 development so the cumulative impact will eliminate a natural corridor. Also, there is no creek immediately south of Old Mammoth Rd., so the habitat is not comparable. 9-6
- Noise, traffic, and light/glare effects on wildlife are not considered in the DEIR. 9-7
- Construction of this facility will remove approximately 70 Jeffrey and lodgepole pines which provide habitat. While the DEIR requires a tree removal and protection plan, the building's large footprint will prevent a sufficient number of trees from being replanted on site. 9-8

Traffic and Circulation

- The traffic study's "design day" does not anticipate an increase in use at the new MUF versus the current rink. This seems unrealistic and begs the question: "Why build a 10.5 million dollar facility that won't be used more than the current one?" 9-9
- Missing from the traffic analysis is consideration of the travel route from Old Mammoth area residences into town. Vehicles often travel at a relatively high rate of speed heading east on Old Mammoth Rd. and as the road curves north, these cars encounter a blind intersection into the MUF parking area. The danger will increase with pedestrians crossing Old Mammoth Rd. near this curve to access the MUF/Community Center. 9-10

Noise

- The DEIR concludes that the operation of the MUF will not increase long-term stationary ambient noise levels. However, the document clearly states that the open-sided MUF will host hockey games with pucks hitting sidewalls, feature amplified announcements and have on site chillers and ice cleaning equipment. This seems contradictory. 9-11
- The current ice rink plays music over loudspeakers during skating hours. This noise source is not mentioned in the DEIR, and clarification is needed as to whether this will be a feature of the new rink. With operating hours until 10:00 p.m. every night, this music 9-12

will affect wildlife and neighbors regardless of whether or not the sound exceeds allowable decibel levels. 9-12

- As stated in the DEIR: "Construction within the area could result in significant short-term noise impacts to nearby noise sensitives receivers." If the MUF/Community Center project is completed in phases as planned, construction noise will be spread out over a six-year period, which is not short-term. 9-13

Hydrology and Water Quality

- Construction of this facility and the corresponding parking lot enlargement will increase the hardscape in Mammoth Creek Park West and has the potential to increase run-off rates to Mammoth Creek. 9-14
- Storm water management needs to be a significant component of this project. Recent flooding in town indicates the current drainage system is inadequate. 9-15
- Coolant leaks are not uncommon at municipal ice rinks, and can affect groundwater and runoff. This is not addressed in the DEIR. 9-16

Further, we believe this project conflicts with some important stated goals of the Town of Mammoth Lakes: 9-17

- To maintain parks and open space within and adjacent to Town for outdoor recreation and contemplation.
- To embody values and principles that recognize the uniqueness of Mammoth Lakes' natural surroundings and character as a "village in the trees." Because the community is set within the forest, the trees and natural landscape are prominent, create a sense of scale, and set a strong aesthetic character. 9-18
- To promote excellence in site planning and design and the harmonious appearance of buildings and sites and ensure the man-made environment is designed to complement, not dominate, the natural environment.

Based on our evaluation, we support the "Environmentally Superior Alternative" that is presented in the DEIR. Locating the Multi-Use Facility at the Civic Center Parcel Alternative Site will not compromise the Mammoth Creek corridor. We appreciate your consideration of our concerns. 9-19

Respectfully,

Lynn Boulton

Lynn Boulton
Range of Light Group Chair, representing the Executive Committee

Malcolm Clark, Vice-Chair
Lesley Bruns, Secretary
Joanne Hihn, Fran Hunt, and Mike Shore, Members-At-Large

9. RESPONSES TO COMMENTS FROM SIERRA CLUB, DATED FEBRUARY 12, 2017.

9-1 Refer to Response 6-57.

9-2 The majority of the western portion of the project site encompasses scrub habitat that allows for minimal public access. The existing public trail is situated to the south of the project site, which does afford public access for walking, running, bicycle riding, birdwatching, dog walking, botanizing, stargazing, and other recreational pursuits.

9-3 As shown on Draft EIR Exhibit 3-4, *Conceptual Site Plan*, the proposed parking lot would be situated within the existing surface parking lot, extend along the northern property boundary, and terminate in the vicinity of the existing surface parking lot for La Visa Blanc Condominiums. As existing vehicle headlights are experienced in the vicinity, implementation of the proposed project would not result in a substantial increase in lighting from headlights and impacts to wildlife from vehicle headlights would not be substantially increased compared to the existing condition. Further, as illustrated on Exhibit 3-4, the proposed building configuration would block light from the ice rink facility onto surrounding residential uses to the west and north. As discussed in Response 11-3, the project would also be required to provide photometric lighting plans that show no light spillover from the new ice rink would occur at off-site areas, including to the south and east. Refer to Response 5-2 pertaining to lighting impacts on wildlife to the south.

9-4 Draft EIR page 5.3-4 acknowledges that the project site and surrounding habitat has the potential to support a limited amount of mammalian species adapted to human disturbances. Only one mammal was observed on-site during the habitat site investigation, lodgepole chipmunk (*Tamias speciosus*). However, most mammal species are nocturnal and are difficult to observe during a diurnal field visit. As documented in Final EIR Appendix A, *Biological Resources Memorandum*, other mammalian species that have the potential to occur on-site and have adapted to human presence and development include mule deer (*Odocoileus hemionus*), raccoon (*Procyon lotor*), and coyote (*Canis latrans*). However, these species are not identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Services (USFWS).

The Draft EIR Table 5.3-1, *Potentially Occurring Sensitive Biological Resources*, identifies listed special status bat species of concern that have the potential to occur in the area (the silver-haired bat), but have a low potential to occur on-site due to the lack of suitable nesting habitat; this information is also disclosed on Draft EIR page 5.3-10.

The California black bear, mountain cottontail rabbits, deer mice, and golden-mantled and Belding's ground squirrels have a moderate to high potential to occur on-site. However, these species are not listed as a special status species.

9-5 The yellow warbler and golden eagle are listed special status species of concern. As documented in Final EIR Appendix A, although the yellow warbler may forage on-site, the project site has no suitable nesting habitat for this species. Further, the golden eagle has a low potential to occur on-site due to the minimal foraging and nesting habitat available.

In general, yellow warblers breed most commonly in wet, deciduous thickets, especially those dominated by willows and in disturbed and early successional habitats. Breeds in riparian woodlands from coastal and desert lowlands up to 2,500 meters in the Sierra Nevada's. Typically found in riparian deciduous habitats in summer: cottonwoods, willows, alders, and other small tress and shrub typical of low open canopy riparian woodland. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral.

There are eBird[9] records documenting yellow warbler within Mammoth Creek and in the immediate vicinity of the project site. Mammoth Creek, south of the project site, provides suitable nesting opportunities for yellow warbler. The scattered pine trees within the big sagebrush scrub plant community found on-site has the potential to provide low quality nesting opportunities for yellow warbler compared to the riparian habitats associated with Mammoth Creek that this species typically nests in. The riparian habitats found in Mammoth Creek, south of the project site, provides suitable nesting opportunities for this species, and this species has been previously documented in the Creek. Since yellow warbler are known to occur in Mammoth Creek, they a have a moderate to high potential to forage over the project site due to the creek's proximity to the project site. Thus, although the yellow warbler may forage on-site, the project site has no suitable nesting habitat for this species.

Golden eagles occupy nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous areas where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat. Golden eagles use elevated nest sites, especially sheltered ledges on secluded cliffs that are isolated from human disturbance and are close to hunting grounds. This species typically nests on cliffs, but also nests in trees, on the ground, and human-made structures (e.g., windmills, observation towers, nesting platforms, and transmission towers). Their nests usually have a wide view of surrounding area or are on prominent escarpments.

The most recent and closest documented occurrence of this species, per eBird, was recorded near the Valentine Reserve and Ecological Study Area in February 2017, approximately 2.5 miles west of the project site.

Golden eagles are sensitive to human disturbance and are likely to abandon their nest if disturbed. Since the project site borders existing residential developments and includes an existing recreational park with frequent human activity, golden eagle are not expected

[9] http://ebird.org/content/ebird/

to nest on-site. Further, the mountainous areas, away from human disturbances, in the general vicinity of the project site provide nesting opportunities for golden eagle.

Golden eagles typically forage in open habitats including grassland or steppelike vegetation where small rodents are available. The project site does not support the open habitats needed for foraging due to its proximity to existing development and scattered pine trees. However, the area south of the project site, south of Mammoth Creek, is not developed and provides a large area of open habitat for foraging. As a result, this species was determined to have a low potential to forage on the project site due to its proximity to open habitats typically used for foraging.

Last, as discussed in Draft EIR Impact Statement BIO-3, pages 5.3-22 and 5.3-23, bird species, including raptors, could use lands along Mammoth Creek for the purposes of wildlife movement. The plant community found on the western half of the project site provides foraging habitat, nesting/denning sites, and shelter for wildlife including migrant and nesting bird species.

Although nests were not observed during the Habitat Assessment, the proposed construction activities could potentially impact nesting birds (including raptors) within the project site and within the immediate vicinity. The nesting season generally extends from February 1 through August 31, but can vary slightly from year to year based upon seasonal weather conditions. Some raptor species can nest as early as December. Nesting birds are protected pursuant to the MBTA, Bald/Golden Eagle Protection Act, and Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513). Implementation of Mitigation Measure BIO-2 would require a pre-construction clearance survey if construction cannot occur outside of the nesting season. The survey would ensure that no birds are nesting on or within 500 feet of the project site. A negative survey would be required by a biologist prior to construction to indicate no impacts to active bird nests. If active nests are found during the pre-construction clearance survey, construction activities would be required to stay outside a buffer determined by the biologist in consultation with CDFW, or construction would need to be delayed until the nest is inactive. During site disturbance activities, a biological monitor would be required to delineate the boundaries of the buffer area and monitor the active nest. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, a monitoring report and written authorization by the CDFW Contractor would be required prior to initiation of construction activities within the buffer area. Therefore, adherence to Mitigation Measure BIO-2 would reduce impacts to a less than significant level.

9-6 As stated in the Draft EIR page 5.3-23, project implementation would not impact Mammoth Creek and is not expected to disrupt or have any adverse effects to potential wildlife movement along Mammoth Creek due to the distance from the project site (approximately 240 feet south of the project site) and lack of disturbance to Mammoth Creek. Further, even after development of Snowcreek 8, the Mammoth Creek corridor and associated riparian habitat would remain, providing continued wildlife movement opportunities from west (the mountains) to the east (the valley floor), as riparian habitat is present along the length of Mammoth Creek.

9-7 Refer to Response 5-2 pertaining to the potential increase in lighting and noise to affect wildlife along Mammoth Creek. Further, as the wildlife area along Mammoth Creek in the project vicinity already experiences impacts from traffic along Old Mammoth Road and the existing park site, development of the project would not result in substantial increases to impacts in this regard, as vehicles accessing the project site would utilize existing Town roads.

9-8 Refer to Response 6-53. Further, other than supporting the intent of the Town's tree policy, Jeffery pine habitat is not designated as a sensitive natural community for the purposes of biological habitat. The Town of Mammoth Lakes has an abundance of Jeffery pine habitat and existing Jeffery pines along Mammoth Creek, to the south of the project site would remain. Thus, for the purposes of CEQA, other than meeting the Town's tree policy regarding removal and replacement of Jeffrey pine trees, the proposed project would not result in any impacts pertaining to sensitive natural communities.

9-9 Draft EIR Table 5.5-4, *Proposed Project Daily Trip Generation*, depicts the net daily trip generation assumed for the project. As show, the Draft EIR considered 380 total daily vehicle trips for the existing ice rink and 590 total daily vehicle trips for the proposed facility, which resulted in a net increase of 210 daily vehicle trips.

9-10 Refer to Response 6-27.

9-11 Refer to Response 6-32 regarding stationary noise source impacts and MR-1 regarding amplified noise.

9-12 Refer to Responses 6-36 and 5-2.

9-13 Construction is anticipated to be spread out over a six year period; however, the comment incorrectly assumes that construction would be occurring during the entire six year period. As noted in Draft EIR Section 3.0, *Project Description*, the construction would occur in three phases. The first two phases would within one year (a twelve month period). The third phase would occur approximately four years after the completion of the first two phases and would last for approximately 14 months. It should be noted that during the active construction periods, construction noise would not occur at the highest levels analyzed in the Draft EIR the entire time. Demolition and earthwork are typically the loudest phases because they use the heaviest pieces of equipment. These activities combined would only last for two months. Once demolition and earthwork are complete, the building phase would occur for the majority of the construction period. The building phase is less intense uses significantly fewer pieces of heavy duty equipment, therefore noise during the majority of the construction period would be lower than the initial construction phases.

Additionally, as discussed on Draft EIR Impact Statement N-1 (page 5.8-19), the Town has established noise standards for construction activity in Section 8.16.090 of the Town Noise Ordinance (refer to Draft EIR Table 5.8-8, *Maximum Noise Levels for Short-Term Mobile Equipment Noise*). Pursuant to Section 8.16.090, the maximum exterior noise

levels allowed in multi-family residential areas for mobile (e.g., excavator, backhoe, dozer, loader, etc.) and stationary equipment (e.g., generators, compressors, pumps, etc.) during 7:00 a.m. to 8:00 p.m. Monday through Saturday are 80 dBA and 65 dBA, respectively.

Adherence to the Town's Municipal Code Section 8.16.090 requirements, and compliance with Mitigation Measure NOI-1 would reduce short-term construction noise impacts by requiring mobile equipment to be muffled and requiring best management practices for hauling activities. In addition, Mitigation Measure NOI-1 would require a disturbance coordinator to respond to construction noise complaints and direct equipment away from sensitive receptors to further reduce construction-related noise. As construction would be limited to daytime hours per Town's Municipal Code Section 8.16.090, construction-related noise would be less than significant with mitigation.

9-14 Draft EIR Table 5.9-2, *Comparison of Existing and Proposed Flowrates*, provides a comparison of existing and proposed project conditions for the peak flow rates for the 25-year and 100-year storm event runoff for the project site. As indicated in Table 5.9-2, the proposed project would increase peak flow rates in the 20-year storm event by 2.6 cubic feet per second (cfs) and the 100-year storm event by 3.8 cfs above existing conditions, potentially resulting in a significant impact to off-site tributary areas. As discussed on Draft EIR pages 5.3-23 through 5.3-25, *Proposed Storm Water Drainage*, with implementation of the proposed storm drain facilities and compliance with Mitigation Measures HWQ-4 and HWQ-5, potential impacts associated with the increase in runoff, including potential increased erosion, would be reduced to less than significant levels.

9-15 Refer to Response 9-14.

9-16 The proposed project would be subject to all existing Federal, State, and local laws and regulations pertaining to releases of hazardous materials into the environment, including releases from on-site equipment. Further, as illustrated on Draft EIR Exhibit 3-4, *Conceptual Site Plan*, the proposed equipment would be situated in an enclosed building on all sides and mounted atop a concrete foundation, providing secondary containment for any potential spills in the equipment room.

9-17 Refer to Responses 8-1 and 8-2.

9-18 The proposed structure would not be taller than 35 feet at its highest point (at the peak of the ice rink roof). Overall, the mass and scale of the structure would be similar to those of the surrounding land uses, which range between approximately 15 and 40 feet in height. Thus, new structures would not extend above the existing on-site and surrounding tree heights and would maintain the Town's desired "village in the trees" character.

9-19 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: Landis, Raymond [mailto:rlandis@exchange.calstatela.edu]
Sent: Thursday, January 12, 2017 1:25 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: Opposition to Location of Ice Rink in Mammoth Creek Park

Dear Ms. Moberly:

I would like to express my strongest possible opposition to the location of an ice rink in Mammoth Creek Park. The proposed location is quiet, recreational site in very close proximity to several condominium complexes including La Vista Blanc.

I purchased a unit in La Vista Blanc in 1976 and was told explicitly that the land adjacent to the complex was "Forest Service Land" and would always be forest and open space. Now you are proposing to put a noisy, busy, bright lighted carnival right next to our quiet condo facility. **10-1**

Please do not do this. This would be an enormous step in the wrong direction for a beautiful, quiet, peaceful area of Mammoth Lakes.

Thank you for your consideration of my perspective on this issue.

Raymond B. Landis, PhD

Dean Emeritus of Engineering, Computer Science, and Technology

California State University, Los Angeles

10. RESPONSES TO COMMENTS FROM RAYMOND LANDIS, JANUARY 12, 2017.

10-1 Refer to Responses 8-1 and 8-2. The project site is owned by the Town of Mammoth Lakes. Lands to the south and east of the project site are owned by the United States Forest Service (USFS) and in part under a Special Use Permit to the Town.

From: John Hellestoe [mailto:hellestoe@hotmail.com]
Sent: Friday, January 13, 2017 12:50 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: Fw: EIR report concerns/ MUF

From: John Hellestoe <hellestoe@hotmail.com>
Sent: Friday, January 13, 2017 8:43 PM
To: delmarball@gmail.com
Subject: EIR report concerns Hellestoe/#50

Hello,
After reading through the EIR I do have a few concerns; first of which that is not related is a $10 million dollar price tag the town can't afford.
In regards to the EIR...
#1 Traffic- The report did not take in to account the closest intersection to the proposed project; Old Mammoth Rd. & Sherwin Creek Rd. This is a well used intersection that sees high traffic volume during special events such as the Moto X. Even with the numbers as stated; 590 cars could visit the proposed site in a day. That would be approx 50 cars per hour over a 12 hour period or almost a car a minute with higher/lower rates during certain times. This has to have a dramatic impact on a 2 lane, blind curve road. **11-1**
I also didn't notice anything in regards to Meadow Ln. i.e. traffic/parking.
#2 Watershed/Flooding- On 1/08/17 The entrance to the proposed site was flooded with over a foot of water, causing hazard signs to be placed on Old Mammoth Rd. at the location. It was only the existing vegetation and undisturbed snowpack that kept the flooding to a minimum. The site mitigation plans do not seem adequate for all the additional run-off that would occur after development. This could lead to serious contamination and degradation of the watershed of Mammoth Creek, as well as a public hazard. **11-2**
#3 Noise/Light Mitigation seems inadequate and I'm unsure on town regulations. Some events may start as early as 6am and go as late as 12 midnight.
All in all, as nice as the proposed building appears, the site is not adequate for the scope of the project. **11-3**
The best option in my opinion, at this time, would be the "environmentally preferred". No smaller project should be allowed without a complete new report and plans for a differently designed project.

John & Sue Hellestoe LVB #50

11. RESPONSES TO COMMENTS FROM JOHN AND SUE HELLESTOE, JANUARY 23, 2017.

11-1 Refer to Responses 6-21 and 6-27.

11-2 Refer to Responses 6-41 and 6-102.

11-3 The Draft EIR Section 3.3, *Project Characteristics*, outlines the anticipated hours of operation for each respective activity proposed; which includes activities starting as early as 6:00 a.m. and as late as 12:00 a.m. (i.e., community center operations and occasional ice rink/RecZone operations). These hours of operation were considered as part of the noise and light analyses presented in the Draft EIR. Refer to Response 6-31 regarding noise-related criteria thresholds. Further, as detailed on Draft EIR page 5.2-8, the project is subject to the Municipal Code Section 17.36.030, which regulates outdoor lighting within the Town. An outdoor lighting plan would be required to be submitted in conjunction with the application for design review approval. The plan would be required to show that all outdoor lighting fixtures are designed, located, installed, aimed downward or toward structures, retrofitted if necessary, and maintained in order to prevent glare, light trespass, and light pollution. Outdoor lighting installations must be designed to avoid harsh contrasts in lighting levels between the project site and the adjacent properties. With compliance with Municipal Code Section 17.36.030, the project would comply with the Town's "dark skies" ordinance.

From: Doug Jastrab [mailto:dougjastrab@gmail.com]
Sent: Wednesday, January 18, 2017 4:52 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: Draft EIR for MUF at Mammoth Creek Park West

Maybe I missed it but I didn't see any mention of noise associated with snow removal. Seems like it could be excessive if operations occurred late night or early AM. **12-1**

12. RESPONSES TO COMMENTS FROM DOUG JASTRAB, JANUARY 18, 2017.

12-1 The Town Municipal Code Section 8.16.100 exempts snow removal activities from the Town's noise regulations. Further, snow removal activities currently occur on-site and in the surrounding area and implementation of the proposed project would not result in substantial increases in this regard.

From: Dave Mc [mailto:djmc18@roadrunner.com]
Sent: Thursday, January 19, 2017 12:20 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Cc: saragomberg@yahoo.com
Subject: Mammoth Creek Park West Proposed Multi-Use facility

Dear Ms. Moberly,

I am writing to you about my concerns regarding the proposed Mammoth Creek Park West Multi-Use facility.

My primary concern is the loss of the tranquility of our area.

I've owned my unit (54) at Mammoth Creek for 10 years this month and the primary reason I bought in this area was the serenity of the surrounding property -- it has the feel of being completely out of town but, at the same time, having the convenience of being able to walk to everything along Old Mammoth Rd. We make frequent use of the park -- at day and at night, standing out in the open field to star gaze (yes, even in the cold winter months! :)) . The openness of the park and the creek was what really drew us to Mammoth Creek Condos.

I've looked at the proposed plan and it's clear that most of the open space would be gone. The opportunity to enjoy the peace & quiet of the park would be gone. The potential for noise pollution on the adjacent properties would increase substantially. Currently, there are no lights and only the soft sounds of children laughing at the play ground area. Not the sounds of pucks, cheering, banging, screaming, nor light pollution.

I understand that the city might benefit from an ice rink (as a side note, I am a life-long ice hockey player -- having played for 50+ years and still playing twice a week) -- but it seems too much of a burden for the owners of the properties surrounding Mammoth Creek Park West while there are other sites in more "commercial" areas of town (as mentioned in the Draft EIR). **13-1**

I would also like to point out that many of the "goals" of the proposed facility are already met without having to spend tax payer money to achieve them -- from 3-15 of the EIR -- I've highlighted the items in bold that are currently met with the existing park and may be decreased by the building of the park:

· Ice skating; · **Snow play;** · **Walking;** · **Fall-color viewing;** · **Birding;** · **Health & fitness;** and BMX.

The presence of ice skating, hockey, BMX and, potentially, an aquatic center in the park will completely destroy the serenity of the park.

Additionally, while property values have been coming back, I purchased my unit for a little over $600K in January 2007 -- I'd be lucky to sell it for high $300s now. I'm probably one of very few people in town who have experienced this sort of drop in value and didn't just "walk away". I've held on to the property because of its unique location and the enjoyment I get from being there. It'll be a hard pill to swallow if that serenity is taken away from us -- having a place upside-down in value and losing the enjoyment.

I thank you for your time. I hope you find my input valuable.

Sincerely,
David McNamara
96 Meadow Lane, Unit 54

13. RESPONSES TO COMMENTS FROM DAVID MCNAMARA, JANUARY 19, 2017.

13-1 Draft EIR Section 5.8, *Noise*, evaluates noise source impacts on-site and to surrounding land uses as a result of implementation of the proposed project. Based on the evaluation presented in this section, no unavoidable significant impacts related to noise have been identified following implementation of the recommended Mitigation Measures NOI-1 through NOI-3 and compliance with the applicable Federal, State, and local regulatory requirements.

Refer to Response 8-2 pertaining to the project's consistency with the General Plan land use designation for the site.

Although the existing park does provide existing recreational opportunities at the site (e.g., snow play, walking, fall-color viewing, birding, and health and fitness, as discussed on Draft EIR page 7-10), the existing condition would not attain the following basic project objectives:

- The existing ice rink and community facilities would not be relocated closer to public corridors/trails;
- New active outdoor recreational opportunities for all seasons would not be created;
- The existing condition does not provide a covered roof structure over the Town's ice rink facility;
- The winter seasonal use or enhance the summer seasonal use at the Town-operated ice rink/RecZone would not be extended; and
- Complementary facilities at the Town's ice rink/RecZone would not be provided.

Regarding economic effects, in assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced (CEQA Guidelines Section 15126.2). Thus, an EIR is not required to analyze the project's economic impacts, as there would be no physical impacts to the environment in this regard.

From: Snr5@aol.com [mailto:Snr5@aol.com]
Sent: Friday, January 20, 2017 10:12 AM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: La Vista Blanc Home owner

Ms. Moberly,
The purpose of my email is to add my voice to the list of people that are truly dissatisfied by the city's decision to put an ice rink literally in our backyard, in place of a park that we truly enjoy year round!
There are plenty of other sites around town to choose from and I sincerely hope that this project will be relocated elsewhere.
Sincerely
Bruno Saunier

14-1

14. RESPONSES TO COMMENTS FROM BRUNO SAUNIER, JANUARY 20, 2017.

14-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: hyamamoto@ca.rr.com [mailto:hyamamoto@ca.rr.com]
Sent: Friday, January 20, 2017 5:14 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: CONCERNS REGARDING THE DRAFT EIR FOR THE ICE HOCKEY RINK

Dear Ms Moberly,
My husband and I just bought our La Vista Blanc condo in October 2016. We have been visiting Mammoth for many many years and decided to buy a small studio condo.

We bought the condo because of the location. La Vista Blanc is near the creek where we have fished for many years and the location had no commercial buildings within sight. How excited we are to walk out our door see the trees, the mountain range and in 5 mins we can have our fishing poles in the water. To sit there with nature, watch and hear the birds or watch the deer come down to drink, or walk along the creek and enjoy the quiet solitude is what makes the La Vista Blanc and the surrounding condominium complex's so desirable. We even enjoy running into the occasional bear at the dumpster. **15-1**

We are very disappointed to learn the town is considering the skating rink next to our condo and literally in our backyard.

We as homeowners do not want the rink at the park's location for many reasons and am hopeful the site will be rejected.

Many of the "No mitigation measures are required" listed in the "Draft EIR", are unrealistic and would require mitigation. **15-2**

We also believe even an attempt at mitigation for many of the issues would not be successful and a huge failure.

We have listed below some of our concerns as a property owner, senior, and retired law enforcement regarding the proposed Ice Hockey Rink.

1. Increase traffic & road safety- If the towns is building this large facility and believes it is much needed and will be wildly successful, then there will be a huge increase in traffic, going in both directions. The road is narrow and with it's slight curve will pose a danger to humans and wildlife. There is a herd of deer that cross the road in that vicinity. The town knowing of the dangerous road conditions have on occasion brought in temporary electronic warning signs to warn of the dangers in the immediate area. **15-3**
WHY WOULD THE TOWN KNOWING OF THIS DANGER BRING EVEN MORE TRAFFIC INTO THE AREA?

2. Because of the increase in traffic there will be more noise and pollution.
There are many people in the area that like to leave the windows and sliding doors open to enjoy the peace and quite and the fresh air. Some of us like to sleep with an open window. **15-4**
DOES THE TOWN THINK WE CAN KEEP OUR WINDOWS OPEN WHEN THERE WILL BE SO MUCH MORE ADDITIONAL POLLUTION AND NOISE IN THE AREA?

3. It is only natural the demographic of the population using the ice rink will be more prone to smoking, drinking, engine noise,and just "hanging" out.
We as a family have a son and grandson that are involved in ice hockey so we are slightly familiar with the conditions surrounding an ice rink. **15-5**
CAN THE TOWN GUARANTEE WE WON'T BE HEARING THE REVVING OF ENGINES, LOUD ARGUMENTS, LOUD LAUGHTER?
CAN THE TOWN GUARANTEE THE CREEK WON'T BE USED AS A LATRINE?

4. As property owners, we feel the rink will impact our property value and not in a positive way. Most rinks are placed in commercial areas as to not impact residents.
HAS THE TOWN LOOKED INTO HOW MANY ICE RINKS HAVE BEEN PLACED SO CLOSE TO A RESIDENTIAL AREA?
IF THE TOWN CAN FIND RINKS IN RESIDENTIAL AREAS, WHAT WAS THE IMPACT ON THE PEOPLE LIVING NEXT DOOR AND THEIR PROPERTY VALUES?

15-6

We are thankful there are so many other people like ourselves that enjoy the peacefulness and serenity of our living situation and oppose a commercial building placed so closely to our homes.

In closing, why would this site even be considered with so many negative aspects associated with placing a commercial building directly next door to a residential area?

Thank you,
Howard & Tricia Yamamoto
167 Meadow Lane #53

15. RESPONSES TO COMMENTS FROM HOWARD AND TRICIA YAMAMOTO, JANUARY 20, 2017.

15-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

15-2 As detailed on Draft EIR page 5-2, and throughout Section 5.0, *Environmental Analysis*, each section discusses potential impacts and mitigation measures. The Draft EIR describes potential environmental changes to the existing physical conditions that may occur if the proposed project is implemented. Evidence, based on factual and scientific data, is presented to show the cause and effect relationship between the proposed project and the potential changes in the environment. The exact magnitude, duration, extent, frequency, range or other parameters of a potential impact are ascertained, to the extent possible, to determine whether impacts may be significant; all of the potential direct and reasonably foreseeable indirect effects are considered.

Impacts are generally classified as potentially significant impacts, less than significant impacts, or no impact. The "Level of Significance After Mitigation" identifies the impacts that would remain after the application of mitigation measures, and whether the remaining impacts are or are not considered significant. When these impacts, even with the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as "unavoidable significant impacts."

"Mitigation Measures" are measures that would be required of the project to avoid a significant adverse impact; to minimize a significant adverse impact; to rectify a significant adverse impact by restoration; to reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or to compensate for the impact by replacing or providing substitute resources or environment.

As evidenced by the analysis provided throughout Section 5.0, *Environmental Analysis*, where potential environmental impacts arise, specific mitigation measures are recommended to reduce those impacts. As discussed in the Draft EIR, the proposed project would not result in any significant and unavoidable impacts and all potential impacts were reduced to a less than significant level.

15-3 Refer to Response 6-27 regarding the traffic safety hazard at the project driveway.

15-4 As discussed in Draft EIR Impact Statement N-3 (page 5.8-22), Table 5.8-13, *Future Traffic Noise Levels*, identifies the noise levels (dBA at 100 feet from centerline) that would be typically be heard 100 feet perpendicular to the roadway centerline. As traffic noise levels at sensitive uses likely approach or exceed the 65 CNEL standard, a 3.0 dB increase as a result of the project is used as the increase threshold for the project. Thus, the project would result in a significant noise impact if a permanent increase in ambient noise levels of 3.0 dB occurs upon project implementation and the resulting noise level exceeds the applicable exterior standard at a noise sensitive use. Based on the analysis

presented in the Draft EIR, the proposed project would increase noise levels on the surrounding roadways by a maximum of 0.1 dBA along Chateau Road, west of Old Mammoth Road. Therefore, noise levels resulting from the proposed project would be less than significant.

Long-term (operational) air emissions as a result of mobile sources, was analyzed on Draft EIR 5.6-16. As depicted on Draft EIR Table 5.6-6, *Long-Term Operational Air Emissions*, air quality thresholds of significance are not exceeded for mobile source emissions, nor area or energy source emissions as well.

15-5 This comment is acknowledged. The project site is currently a publicly owned and used property and will continue to be so upon implementation of the proposed project. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

15-6 Refer to Response 13-1 pertaining to economic effects. Refer to Response 8-2 regarding the proposed ice rink's consistency with the existing General Plan land use designation.

From: Russ May [mailto:russandpammay@yahoo.com]
Sent: Friday, January 20, 2017 9:31 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: ice rink project

As owners of a home in Mammoth Creek Condominiums, we are satisfied with the EIR. We encourage the movement of the ice rink and look forward to enjoying the new developments in the Mammoth Creek Park West location. 16-1

Sincerely,
Russ and Pam May

16. RESPONSES TO COMMENTS FROM RUSS AND PAM MAY, JANUARY 20, 2017.

16-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

We have reviewed the Draft EIR and have numerous concerns regarding the proposed project:

1. Noise-has this dBA been verified at various times during the day and night? The chillers, the Zamboni, the cars, the players, the crowds- is this really a suitable use next to quiet residential condos? **17-1**
2. Meadow Lane- I see nothing to prevent this small street from being used as access for heavy construction equipment and crew. Will this also be an access road for the hockey games? Where is the traffic EIR on this? **17-2**
3. Residential neighbors- there is clearly no adequate mitigation of the noise, light, heavy use and traffic, particular with the proposed hours of operation. There was no reasonable mitigation for reflected light and glare. **17-3**
4. Alternative sites- there was less than adequate consideration of alternative sites further away from residential impact- why not consider the lot next to the new Police Station? This would seem to be an environmental superior site with less impact on residence and the adjacent Mammoth Creek. **17-4**
5. Pollution from almost 600 daily trips does not appear to be adequately mitigated. **17-5**
6. Cleary the impact on Mammoth Creek is not addressed **17-6**
7. The sheer density, volume, light and noise of the project and generated traffic will interfere with the quiet enjoyment of neighboring residents. **17-7**

This is simply the wrong project for this location and the detriment to neighboring residents has clearly not been mitigated by this INADEQUATE Draft EIR. We urge you to reject this project at this location and find an alterative site with less impact on residents and the environment.

Thank you for your consideration,

Kelly & Susan Morris
122 Meadow Lane
Mammoth Lakes, CA

17. RESPONSES TO COMMENTS FROM KELLY AND SUSAN MORRIS, JANUARY 22, 2017.

17-1 Refer to Responses 6-34 and 6-80 pertaining to noise measurements conducted at the project site. Refer to Response 6-32 regarding stationary noise considerations and Response 6-31 regarding criteria used for the noise analysis.

17-2 Project access from Meadow Lane would only occur during construction and would be limited to emergency access and periodic maintenance activities only during operations (Draft EIR pages 3-14 and 3-17). This access would be secured (e.g., a locked gate or use of bollards). As public access at Meadow Lane would be restricted during operations, no significant impacts pertaining to traffic, noise, or vehicle headlights would result in this regard.

17-3 The Draft EIR Section 3.3, *Project Characteristics*, outlines the anticipated hours of operation for each respective activity proposed. Considerations of noise, mobile noise, and lighting considerations were made in Draft EIR Section 5.8, *Noise* (page 5.8-28) and Section 5.2, *Aesthetics/Light and Glare* (page 5.2-15). Feasible and enforceable mitigation measures for increased lighting were included on Draft EIR page 5.2-16.

17-4 The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. The range of potential alternatives to the proposed project shall also include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, General Plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). Only locations that would avoid or substantially lessen any of the project's significant effects need be considered for inclusion. An alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative need not be considered.

Only those sites that can reasonably be acquired or controlled by the Town were considered. Draft EIR Section 7.0, *Alternatives to the Proposed Project*, considered two alternative site locations to the project site, the Civic Center Parcel and the Bell Shaped Parcel. The locations for these alternatives are identified on Draft EIR Exhibit 3-3, *Previously Considered Alternative Site Locations*, Exhibit 7-1, *Civic Center Parcel Alternative Site Location*, and Exhibit 7-2, *Bell Shaped Parcel Alternative Site Location*. The Civic Center Parcel, located on the east side of Sierra Park Road at the eastern extension of Tavern Road, is situated in the vicinity of the Town's new Police Station. As concluded on Draft EIR page 7-28, the environmentally superior alternative would be the Civic Center Parcel Alternative Site Alternative, as impacts are less than the proposed project. As concluded in the analysis presented above, the Civic Center Parcel Alternative Site Alternative would meet some of the project's basic objectives. The existing ice rink would be relocated closer to public corridors/trails. A covered roof structure over the

Town's ice rink facility would also be provided. However, a complimentary community center and new active outdoor recreational opportunities for all seasons would not be created. Further, implementation of this Alternative would preclude the Town from placing future government facilities at this property. The proposed project would not meet the Town's goals and objectives for a government facilities at this location.

17-5 Refer to Response 9-9. As concluded on Draft EIR page 5.5-25, the project's 210 net daily trips would result in no significant unavoidable impacts related to traffic/ circulation.

17-6 Refer to Response 5-2.

17-7 Refer to Responses 15-2 and 17-4.

COMMENT LETTER 18

Ruth Gerson 167 Meadow Lane #12 Mammoth Lakes, CA 93546 818-991-1236 ruthgerson@aol.com

January 22, 2017

Sandra Moberly, Town of Mammoth Lakes, CA 93546 smoberly@townofmammothlakes.ca.gov

CONCERNS: ICE RINK AND MULTI-USE FACILITY

It seems that the committee looking for a new site for the ice rink did not have anyone on it from the adjoining neighborhood of the proposed site. Otherwise, they would have been the ones to ensure "not in my backyard" for such a facility. No one would want to live next door to what is being proposed. It is obvious that the site next to the Police Station is realistically the best, besides being "environmentally superior." So, why not be good to the environment and to the park neighborhood and to the City? That would be a win-win-win situation. **18-1**

It is apparent that the Draft EIR was written with a bias and a blind eye. Scenic vistas, visual character, and quality of life were tossed aside in the rush to push this disgraceful proposal on the people. How can it be mitigated as insignificant to lose the beautiful, scenic views of our beloved mountains? The aesthetics have been glossed over as if not existing and all project negatives are mitigated easily– building lights, headlights, blocked views, noises, traffic, and changing open space character to commercial character. It is well known that residential and commercial buildings are built with the idea of giving people the most scenic views possible. Doesn't the loss of a City park have any meaning for the City Council? Not everyone can go out on the trails. **18-2**

The noise measurements during the nighttime of snow removal are a flawed excuse for saying that the noise at the end of the day is less than at night. This is intentionally misleading to the public. **18-3**

In an ethical Draft EIR all the alternative locations are described. **An EIR should have detailed descriptions and not assume that everyone knows where other sites are.** In this case, the alternatives were only mentioned by name so that only some people know exactly where the alternative sites could be. No descriptions of the locations for the Civic Center parcel or the Bell Shaped parcel were given. **18-4**

The implied use of Meadow Lane as an access route was conveniently not mentioned in the Draft EIR and should have been addressed. This seems to be an example of intentionally misleading the public by not commenting on all potential issues. **18-5**

Operating hours from 6 am to 12 midnight are not tolerable next to a residential neighborhood. Although the plan is to end events at 10 pm usually, but often at midnight, it will take another 30 to 60 minutes before everyone leaves after certain activities, and after the facility is locked, and after the people chatting in the parking lot decide to leave. So now there will be people in the parking lot until maybe 12:30 or 1 am. The way it is written, the city is expecting noise complaints – the mitigation is to call and complain! That's not going to help resolve any problems. **18-6**

The unreasonable hours of operation are an enormous intrusion and disturbance upon the surrounding residential units that would be seriously impacted by the noise, traffic, and lighting. Casual conversations that easily turn into people yelling or calling to friends, vehicles with radios blasting and often having their horns go off, as well as lights of the buildings and the cars – all these impacts are negative. Not everyone rises at 6 am nor stays up until midnight, so it will be total inconsideration and disdain of the neighborhood. Tournaments and professional events, as well as fairs, carnivals, and other outdoor events will make the site a loud centerpiece in the neighborhood. As an after-dance teen hangout, the area could become an endless noise center beyond midnight, let alone a great drug location. And, in the summer does the City Council think that any of the residents want to listen to the camp and sports activities as kids shout and yell, as tennis balls go bop bop bop, or as the BMXs tear around the track zooming? **18-7**

Lights are always a problem anywhere, and headlights and reflective lights can never be mitigated to be "less than significant" because they are ALWAYS significant. The greenhouse gasses of 18 hours of almost constant traffic (6 am – 10pm/ midnight) cannot be mitigated. How do you mitigate 18 hours of greenhouse gasses? Glare from snow and ice cannot be mitigated; and if you will look around town you will notice that glare is always present everywhere in the winter. 18-8 18-9 18-10

There is no amount of mitigation to reduce the noise and air from the Ice Chiller whether it is carried through the roof or sides of the building. This is a significant environmental issue that cannot be mitigated with mere words. The Zamboni's noise is very loud and unpleasant. Roll-up doors allow all noises through them. More than 500 daily trips, while generating noise and pollution from cars and trucks, would be an environmental nightmare for the neighborhood. Car doors slamming and car radios blasting cannot be mitigated unless you don't close the car door or ever use the car radio louder than on low – and we all know that would not happen. 18-11 18-12 18-13 18-14

The MUF does NOT have to be next to the ice rink. Ice Hockey is an aggressive, contact sport, and the players have to be aggressive. After the games, when in the parking lot, will there be verbal exchanges that deteriorate into fighting? Easily conceived. 18-15

There will most certainly be a negative effect on the riparian community of Mammoth Creek species. In addition, there will be debris in the creek during construction at that site. The impacts to the biological resources will be direct and indirect. Is there an inventory of the riparian habitat by Fish and Wildlife, and is it independent of those doing the Draft EIR? 18-16 18-17

ECONOMIC VALUES of the residences, apartments, and condominiums will be reduced at least 50% of their present value, maybe more. Would anyone want to spend their money to live next to such a commercial facility? Why does the City Council want to diminish our property values? Of course, their homes are not in the neighborhood proposed for this monstrosity.

It is not possible for a proposal of this magnitude to have ALL the problem issues mitigated with just empty words. Therefore, it is grossly obvious that above-board ethics and actions were not used by those doing the Draft EIR. They have EVERY issue listed in the Draft EIR as not having a significant impact or else being mitigated by hollow words. How can everything be mitigated so as to seem perfect as written? 18-18

This project site will promote negative community interaction with the neighbors. It will nurture antagonistic feelings towards the City Council. It will decrease confidence in the City Council to consider ALL the residents for other projects. There are many residents and visitors who do Not ice skate, Not play tennis, Not use a climbing wall, Not use summer camps, Not participate in programmed activities of art, education, fitness, theater, family, etc.

If the rink and MUF are built, and if they are not maintained, then what happens to the buildings? Is there really enough money in the city treasury to build this, or does the proposed builder have enough financial depth to get it built? What happens if he defaults during the process? How much of a bond is being required of him? What is his track record?

Sincerely Concerned,

Ruth Gerson

18. RESPONSES TO COMMENTS FROM RUTH GERSON, JANUARY 22, 2017.

18-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

18-2 Refer to Responses 6-56 (regarding visual character/quality) and 6-57 (regarding scenic views). Refer to Response 11-3 pertaining to light and glare from buildings and Response 9-3 pertaining to vehicle headlights.

Noise impacts associated with the proposed project were analyzed in Section 5.8, *Noise*, of the Draft EIR. As determined in the Draft EIR potential noise impacts would be reduced to a less than significant level. As concluded on Draft EIR page 5.5-25, the project's 210 net daily trips would result in no significant unavoidable impacts related to traffic/circulation.

Regarding Town-owned parks, implementation of the proposed project would enhance the existing park rather than eliminate it. Development of the proposed project would not reduce access to the existing trail features.

18-3 Refer to Response 12-1 regarding noise impacts from snow removal.

18-4 Refer to Response 17-4 regarding alternative site considerations.

18-5 Refer to Response 17-2.

18-6 Refer to Response 17-3.

18-7 Refer to Response 17-3.

18-8 Refer to Response 9-3 pertaining to vehicle headlights.

18-9 Draft EIR Table 5.7-1, *Project Related Greenhouse Gas Emissions*, presents the estimated greenhouse gas (GHG) emissions for the project, including mobile source emissions. As shown in Table 5.7-1, project-related emissions would be 426.46 $MTCO_2eq/yr$, which is below the 900 $MTCO_2eq/yr$ threshold. Therefore, the proposed project would result in a less than significant impact with regards to GHG emissions, including mobile source emissions.

18-10 Glare, as a result of snow at the project site, is an existing condition. Implementation of the proposed project would not result in an increase in glare, compared to the existing condition.

18-11 Refer to Response 6-32 regarding stationary noise source impacts, including those from the chillers. Regarding air quality consideration of the proposed chillers, Draft EIR Impact Statement AQ-2 (page 5.6-15) considered proposed stationary area source

emissions would be generated by the consumption of natural gas for space and water heating devices, the chilling equipment for the ice rink, the operation of landscape maintenance equipment, and the use of consumer products. As concluded in Draft EIR Table 5.6-6, *Long-Term Operational Air Emissions*, unmitigated area source emissions from the proposed project would be nominal (i.e., less than one percent of the applicable threshold), which includes the proposed chillers.

18-12 Refer to Response 6-32 regarding potential stationary noise source impacts, including those from ice rink activities, including the ice resurfacer/Zamboni.

18-13 Refer to Response 18-2.

18-14 Refer to Response 6-32 regarding potential stationary noise source impacts.

18-15 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

18-16 Refer to Response 5-2 regarding potential impacts to Mammoth Creek.

18-17 Refer to Response 6-14.

18-18 Refer to Response 13-1 pertaining to economic effects. Refer to Response 15-2 regarding the analysis, mitigation, and conclusions drawn in the Draft EIR.

Sandra Moberly
Planning Division
Town of Mammoth Lakes
Draft EIR Rink/MUF MCPW
Jane Kenyon concerns 1.23.17

1. I choose No for the Rink//MUF project at MCPW due to its impacts to the homeowners of the 4 surrounding condominiums. Commercial properties need to be further assessed for a more suitable location that will not hurt the communities' surrounding neighborhood. **19-1**

2. The ongoing poor quality AM station music the rink airs is not adequately evaluated. The loud music, bright lights, rink equipment right next to the surrounding neighborhoods is not adequately addressed. **19-2** **19-3**

3. Most of the community would like to keep MCPW as the beautiful, natural, outdoor, undeveloped park that it is. MCPW should not be handed over to special interests. I do not see that addressed. **19-4**

4. People love the trees, the creek, the exceptional views at MCPW. I don't see it evaluated or mitigated, the impact to the communities' surrounding neighborhood homeowners, of losing this undeveloped park that we love. **19-5**

5. A commercial Rink does not belong next to the creek riparian ecosystem in MCPW. I don't see this sacrifice acknowledged. **19-6**

6. The Rink needs to be assessed for its impact to migratory birds. Many species of birds migrate up the Mammoth Creek corridor in the Spring, nest along the creek, seek food, water and shelter along the creek willows, and migrate back south along the creek corridor in August and the Fall. I don't see the assessment of an industrial rinks' impacts to the creek corridor species that need access to this limited resource. **19-7**

Jane Kenyon
La Vista Blanc 37
167 Meadow Ln
Mammoth Lakes, Ca
303-916-9954

19. RESPONSES TO COMMENTS FROM JANE KENYON, JANUARY 23, 2017.

19-1 Refer to Response 17-4 regarding alternative sites considered.

19-2 Refer to MR-1 pertaining to amplified noise impacts.

19-3 Refer to Response 11-3 regarding lighting requirements. Refer to Response 6-32 regarding stationary noise source impacts from the proposed ice rink.

19-4 Refer to Response 8-2.

19-5 Refer to Responses 6-11 and 6-60 regarding tree removal consideration and requirements. Refer to Responses 5-2 and 6-41 regarding potential impacts to the creek and associated riparian habitat. Refer to Response 6-57 regarding view impacts.

19-6 Refer to Response 5-2.

19-7 Refer to Response 9-5.

From: Pvignery [mailto:pvignery@aol.com]
Sent: Monday, January 23, 2017 2:56 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: ICE SKATING RINK

PLEASE NO ICE RINK IN MY BACK YARD. I HAVE OWNED A CONDO NEXT TO THE PROPOSED RINK SINCE 1974 AND LOVE TO GET TO MAMMOTH TO RELAX FROM THE CRAZY NESS OF THE CITY.
WHAT'S NEXT A MOTOCROSS TRACK IN OUR FRONT YARD. WE HOPE THE CITY LEADERS DONT WANT TO BUILD A MONUMENT TO THEMSELVES AS SO OFTEN HAPPENS .
HOW ABOUT PUTTING IT IN A COMMERCIAL AREA LIKE NEAR THE POLICE DEPT. THAT WOULD BE THE BEST LOCATION FOR NOISE ABATEMENT AND ELIMINATING VANDALISM.
LETS TRY TO KEEP MAMMOTH IN ITS NATURAL STATE IF THATS POSSIBLE. MAYBE IT ALREADY IS TOO FAR GONE.

20-1

20. RESPONSES TO COMMENTS FROM P. VIGNERY, JANUARY 23, 2017.

20-1 Refer to Response 17-4 regarding alternative site considerations.

From: Steve Ball [mailto:delmarball@gmail.com]
Sent: Monday, January 23, 2017 11:48 AM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Cc: Steve Ball <delmarball@gmail.com>; Maria Sandoval <delmarlove@gmail.com>
Subject: Ice Hockey Rink/MUF Draft EIR Inputs

Hi Sandra,

Here are our list of Ice Hockey Rink/MUF Draft EIR Inputs:

1. The chiller for the ice hockey rink is a monster freezer the size of a school bus. Imagine the noise that emanates 6 months out the year, day and night, turning off and on, emanating from the 14-propeller driven Ice Chiller situated just off the LVB property line. I understand from the Draft EIR that there is an 8-foot tall cement wall around the chiller to mitigate noise, but is there a roof to this walled room? Knowing how chillers operate, you must push the hot air, from the refrigerant, out of the building. Doesn't the hot air carry noise with it? Is there a roof and/or chimney above the chiller? If so how is it oriented so that the noise does not reach the LVB 2nd and 3rd story balconies and windows facing the project? Or are there vents, which will also carry noise to the 2nd and 3rd stories? Moving air (including noise) has a way of bending around corners; especially the characteristically low-frequency noise from these rotating propellers. This Draft EIR was written as if the only concern was about measuring and mitigating the noise hitting 1st story windows and balconies. That is not the only case study at the LVB properties to explore. We need more details on how the pushed-out, hot air, does not also convey the noise from a 14-propeller driven chiller, whether there is a roof or venting. The sound measurements and discussion in the Draft EIR are weak, very flawed, and don't take into account the rumble and long travel of the low-frequency waves of noise those 14-propellers make. This HAS NOT been "less than significantly" mitigated away. What are the mitigation plans? **21-1**

2. Looking carefully at the Draft EIR Long Term Noise Plots, why do the sound measurements increase at 1am throughout the night? How can they be 10dBA greater than at rush hour? The sound measurements perhaps were taken as snow removal trucks were doing their trips that particular night. But this has the effect of un-naturally increasing the baseline of noise. Whenever I'm awake at 1am at my property all I hear is a faint car in the distance traveling on Old Mammoth Road. You have to admit, it's pretty quiet in the evenings. I surmise the sound readings are flawed and advantage the Town's Draft EIR. What are the mitigation plans? **21-2**

3. From reading the Draft EIR it appears Meadow Lane will now be an access route for construction trucks and perhaps for the Zamboni (ice surface scraper), and perhaps for attendees of the Ice Hockey tournaments and MUF concerts. I didn't see anywhere in the Draft EIR that traffic, pollution, noise, and lights will be mitigated away. Completely left off the table, but you and I know Meadow Lane will be used. This CANNOT be "less than significantly" mitigated away and that's why it was left off the Draft EIR. What are the mitigation plans? **21-3**

4. Hours of operation 6am until midnight, at the town's sole discretion. This is totally unacceptable for a venue of this magnitude being so close to neighborhood residents of MCPW. This CANNOT be "less than significantly" mitigated away. What are the mitigation plans to scale this way-back? **21-4**

5. Sure the lights can be pointed down and away from LVB however there is something called "reflection". Reflected light cannot be mitigated away when lights reflect off sides of buildings, sides of cars, sides of trees, nor can the headlights of cars streaming up the parking lot toward LVB properties at 1st, 2nd, and 3rd stories. Reflection and direct head-lighting CANNOT be "less than significantly" mitigated away. What are the mitigation plans? **21-5**

6. Think of the glare of sunlight hitting a snow topped roof of this magnitude. No amount of glare can be mitigated away because of the use of non-reflecting paints when snow and ice are piled on top of the roof. Glare CANNOT be "less than significantly" mitigated away. What are the mitigation plans? **21-6**

7. Scenic views & vistas will be trashed with a structure like this. How can an honest Draft EIR claim, "no mitigation required"? From whose viewpoint? Certainly not from the homeowners at LVB. Lost views CANNOT be mitigated away. What are the mitigation plans? **21-7**

8. Long Term visual character/quality is claimed to be "less than significantly" mitigated away. This is a joke, right? Compare before and after character of what Mother Nature provided and a paved-over paradise. It will most certainly be significant. Long Term character/quality CANNOT be "less than significantly" mitigated away. What are the mitigation plans? **21-8**

9. Why wasn't the site next to the new Police Station ever discussed during site selection, and is only now coming to light as an alternative? It's a perfect spot for the Ice Hockey Rink/MUF project. Given the rowdiness at Ice Hockey events how convenient it would be to have the police station next door to keep the orderly peace. After all the Draft EIR says this location is "environmentally superior". Why not make it happen? If the Town needs more Gov't offices, there are lots of choices to expand elsewhere. **21-9**

10. What about vehicle and pedestrian Traffic and Blind Curve exits from MCPW? What happens when SnowCreek VIII is built? The Town will be exposed to lawsuits as soon as accidents start occurring especially in the dead of winter when visibility can be even worse. This CANNOT be "less than significantly" mitigated away. What are the mitigation plans? **21-10**

11. Noise and Pollution from 590 daily trip generations has been mitigated away? Really? How? People slamming car doors throughout the day and night. Cars pulling in at 6am and not leaving until up until midnight? What about the exhaust pollution from the cars? Cars warming up for 15 minutes while car radios blasting? Has there been any honest input into this Draft EIR that addresses this? No, because this CANNOT be "less than significantly" mitigated away. What are the mitigation plans? **21-11**

12. What about the Zamboni Noise. Sure it has it's own "garage". Sounds great doesn't it? Except for the roll-up inside, and roll-up outside doors. How is the sound from the doors moving up and down, and the Zamboni tractor noise eliminating ice shavings, up to 7 times a day/night, not cause major distractions and headaches to the homeowners of LVB? Isn't the Ice Hockey game play noise going to penetrate through these roll-up doors? There are no cement walls here; therefore noise will make it through. Let's not minimize this; the Zamboni is a tractor, not a golf cart. This CANNOT be "less than significantly" mitigated away. What are the mitigation plans? **21-12**

13. Where is all the snow going to be piled-up given that we can have future snowfalls like the one we are having this winter? That is a big problem for such a large parking area, let alone the snowfall sliding down the roof. And won't there be "un-mitigable" noise from snow-plows adding to the park's serenity? This hasn't been factored into the Draft EIR. What are the mitigation plans? **21-13**

14. Nowhere in the Draft EIR are there studies about the sound emanating from the large, always open, entranceway into the ice hockey arena, which will most certainly leak out into Chateau Blanc, as well as, into La Vista Blanc condominiums. Imagine the noise of pucks hitting the dasher boards, the announcer calls during game play, concert music blaring out, and especially the fans within the ice hockey rink yelling and screaming. All of this will bleed-out of this large opening. What are the mitigation plans? **21-14**

Steve & Maria Ball
La Vista Blanc #68

21. RESPONSES TO COMMENTS FROM STEVE AND MARIA BALL, JANUARY 23, 2017.

21-1 Refer to Response 18-11.

21-2 Ambient noise levels in the of the project site are primarily dominated by traffic noise along Old Mammoth Road. As noted in the comment, the noise levels reach their lowest average levels at around midnight and steadily increase throughout the morning. This is due to the increase in traffic activity on Old Mammoth Road. It should be noted that traffic noise levels are typically louder during free-flow conditions that occur during off-peak hours. Peak traffic hours generally yield lower traffic noise because even though there are more vehicles, they are traveling at a slower speed. Mitigation measures are identified in Draft EIR Section 5.8-6 and are incorporated to ensure compliance with the Town's noise standards.

21-3 Refer to Response 17-2.

21-4 Refer to Response 17-3.

21-5 Refer to Response 11-3 regarding lighting requirements. With implementation of proper shielding techniques, reflected light would be minimized. Refer to Response 9-3 regarding vehicle headlights.

21-6 Refer to Response 18-10.

21-7 Refer to Response 6-57 regarding impacts to scenic views. Refer to Response 6-56 regarding potential impacts to the degradation of character/quality.

21-8 Refer to Response 6-56 regarding potential impacts to the degradation of character/ quality.

21-9 Refer to Response 17-4 regarding alternative site considerations.

21-10 Refer to Response 6-27.

21-11 Refer to Response 18-2 regarding noise and traffic impacts. Refer to Response 6-32 regarding stationary noise source impacts, including those from the proposed parking lot.

21-12 Refer to Response 6-32 regarding potential stationary noise source impacts, including those from ice rink activities, including the ice resurfacer/Zamboni and hockey activities.

21-13 The proposed project would be required to comply with all Town Municipal Code regulations pertaining to snow maintenance. Refer to Response 12-1 regarding noise impacts from snow removal activities.

21-14 The proposed structure configuration was considered in the noise model prepared for the project. Refer to Draft EIR Exhibit 5.8-3, *Recreational Noise Contours*, regarding the noise model results. Refer to Response 6-32 regarding stationary noise source conclusions and mitigation requirements.

January 24, 2017

Aaron and Jessica Ross
Aaronjessica2001@gmail.com

Sandra Moberly
Town of Mammoth Lakes
Community and Economic Development Manager
smoberly@townofmammothlakes.ca.gov

Dear Sandra Moberly and Town of Mammoth Lakes Management,

This is regarding the Environmental Impact Report (EIR) for the proposed Ice Hockey Rink/Multi Use Facility (MUF)/Community Center at Mammoth Creek Park West (MCPW) by the Town of Mammoth Lakes (TOML).

As you read this letter, I implore you to call on your sense of empathy and fellow feeling.

As you read my comments and others, please imagine that this project is completed outside your backyard, only 140 feet away. Honestly ask your heart, mind and soul how you would feel about it.

Imagine the peace and serenity that you once enjoyed while sitting on your balcony listening to the rustling of leaves, relaxing in your living room feeling the breeze through the open window, in the early evening while eating dinner or reading to your kids before they go to bed. **22-1**

Then imagine that peace and serenity replaced with the sounds of crowds yelling, hockey pucks slamming against rails, referee whistles blowing, buzzers alarming, a Zamboni engine revving and the scraping of ice with no walls to muffle the sounds. Think of the constant sound of the Chiller, whose decibel range is between a vacuum cleaner and a lawn mower. Imagine the constant unpredictable timing of car doors slamming, engines revving, stereos blasting, the screeching of tires, and the yells of teenagers to their friends. **Even though these sounds supposedly don't violate the Noise Ordinances of TOML, they replace the beautiful sounds of nature with cacophony.**

Imagine the loud booming of unregulated and unrestrained amplified music from outdoor events until 10pm or even 12am midnight. I say 'unregulated and unrestrained,' because according to the EIR the noise from **Special Events with permits do not have to abide by Noise Ordinances. They are exempt.** The EIR was very clear that there are/will be no attempts to mitigate this noise. **So Special Events with permits, "outdoor gatherings, public dances, shows, and sporting** **22-2**

and entertainment events," can play amplified music however loud they choose and as close to residences as they want, until 10 pm or even 12 am midnight. Would that be acceptable to you next to your home? (Reference EIR 5.8-28 and 5.8-29)

22-2

Imagine the beauty of being on your balcony, looking into the black night sky to be awed by the brightness of stars that you can only see in the mountains.

Then imagine this black night sky erased by the glare from lights of a parking lot and an immense building 35 feet high. The stars dim, just like in a large city. **Even though there are attempts to supposedly mitigate the light pollution, they cannot possibly be mitigated enough to preserve the "dark skies" guidelines that the residents of TOML value.**

22-3

Your picturesque vistas of the meadows and the Sherwin mountain range, replaced with staring into the back of a Zamboni garage and mechanical room. As you try to look over the massive 35 ft roof to what's left of your view, your eyes squint with pain from the glare of sunshine onto the bright white snow on the roof. **The EIR makes no mention of the impact of glare from snow on the roof.**

22-4

According to the EIR the California Environmental Quality Act Guidelines say " **'...a substantial, or potentially substantial, adverse change in any of the physical conditions within an area affected by the project including...land...ambient noise...and aesthetic significance,' constitute a significant impact."** (CEQA Guidelines Section 15382.) Despite this, the EIR has judged all of the above factors to be "Less than significant" or of "No significant impact." The writers of the EIR only worked with TOML staff. They did not work with any of the Homeowner's Associations of the surrounding residences that would be permanently affected by the project.

22-5

Much of the Noise data used by the writers of the EIR is flawed:

22-6

1. **The noise measurement from a hockey game is taken at a practice game, not an actual game with crowds yelling and screaming.**

2. The noise measurement used to estimate the sound from the Rec Zone is taken from an Orange County Women's League soccer game. Soccer is usually played on grass that would absorb sound. **The Rec Zone has a hard surface, which reflects and amplifies sound.** Additionally, soccer games are not as loud as basketball games under a roof, consisting of bouncing balls on a hard surface with a roof to reflect the noise. Basketball games are on the list for intended uses at the Rec Zone, not soccer games.

22-7

3. The soccer game assumingly takes place in Orange County, as its' name implies. **The EIR does not take in to account the difference between how sound travels in the mountains, as opposed to lower elevations.** The Journal of the Acoustical Society of America posted a study on noise pollution in an alpine valley,

conditions more like the setting of the proposed project. Here is a link http://asa.scitation.org/doi/10.1121/1.4782273 to the study. It concludes that the **meteorology of alpine conditions "leads to substantial changes in measured sound levels" making it more "intrusive."** 22-7

4. **The EIR does not take into account the "amphitheater effect" of noise to the 2nd and 3rd stories of the surrounding residences.** The EIR states it only took "perpendicular" sound measurements. The above study shows that in alpine conditions "the assumption of linear sound propagation to the slope is seriously in error." Thus the Noise data in the EIR is incomplete. The measurements shown in the EIR are just below the acceptable range in the TOML Noise Ordinances. Taking into account the way sound can be amplified upward, more so in alpine conditions, the sound levels could potentially violate the Noise Ordinances in the 2nd and 3rd stories of surrounding residences. 22-8

We came to the Town of Mammoth Lakes because of the pristine beauty and open spaces. We particularly chose La Vista Blanc for its proximity to the open space of Mammoth Creek Park West.

Being born and raised in South Orange County, we have seen our fair share of over development. We have seen towns/cities claim to develop in the name of attracting visitors, while in doing so ruin the very reason people visit. We came to Mammoth Lakes for the natural beauty and to escape the over development. **Don't ruin the reason people come here.**

However, in our combined 82 years in Orange, we have never seen the level of inconsideration to residences as is being shown by the TOML with this project. **We have been shocked by the blatant disregard of the Quality of Life of surrounding residences.** Usually clubhouses, community centers and event centers, where amplified music is expected *indoors*, are planned far away from residences. If there happen to be any of these centers near a residence, then amplified music is either prohibited, or a strict 10 pm "Music Off" policy is enforced. Amplified music *outdoors* near residences would not even be considered. 22-9

We understand the need of the TOML for an Ice Hockey Rink/MUF/Community Center. The plans look absolutely wonderful…if they were somewhere else other than MCPW. Squeezing all of this onto a plot of land that is 50% surrounded by residences is not a good idea.

Use this land in a way that is not so much in conflict of interest to so many parties. Use it for something that will not rob the surrounding neighbors of their Quality of Life. The BMX bike track, the dog park, community garden, pickle ball courts, badminton/volleyball courts, an area for Farmer's Markets, etc. are all great ideas for this space. They would provide recreation for the community, give that Town Square or Main Street feeling, without causing undo disturbance to neighbors. Maybe even a smaller (lower roofed) Rec Zone/community center, for daytime use only, at the NE end of the plot (so as not to disturb public and private views) that is

used for daytime classes, activities and art exhibits would probably be acceptable to neighbors. Of course, I cannot speak for everyone.

Please show kindness and consideration to your fellow TOML residents. Please do not be hypocritical when you say your goals are to “maintain…open space…for contemplation” and “foster a healthy community for residents,” while you blatantly disregard the Quality of Life of the “residents” who surround 50% of this project. **22-10**

Thank you for reading this and imagining that it was happening outside your balcony.

Sincerely,

Aaron and Jessica Ross

22. RESPONSES TO COMMENTS FROM AARON AND JESSICA ROSS, JANUARY 24, 2017.

22-1 Refer to Response 6-32 regarding potential stationary noise source impacts.

22-2 Refer to MR-1 pertaining to amplified noise impacts.

22-3 Refer to Response 11-3.

22-4 Refer to Response 6-57 regarding impacts to scenic views. Refer to Response 6-56 regarding potential impacts to the degradation of character/quality. Refer to Response 18-10 pertaining to glare from snow.

22-5 Refer to Response 15-2.

22-6 Refer to Responses 6-34 and 6-81.

22-7 Refer to Response 6-81. As indicated in the response, the analysis uses the combination of several reference noise levels to calculate a conservative noise level that would occur from the project. For example, the analysis uses the hockey noise measurement combined with the crowd noise levels, outdoor recreation area, and the mechanical equipment. As noted in Response 6-79, above, the project has been designed to minimize noise impacts. The primary activity areas that would generate noise have been intentionally located at the project center, as far as practicable from surrounding uses. The community buildings and other structures have been carefully placed between the primary activity areas and the receptors. The proposed intervening structures and roof structure act as a noise barrier. Additionally, the analysis conservatively does not account for the roof structure or the surrounding dasher boards with Plexiglas that would further attenuate noise.

Sound propagation at higher altitudes is typically an issue at elevations higher than 3 kilometers (approximately 9,840 feet). The elevation of the Town of Mammoth Lakes and the project site is approximately 7,870 feet. Differences in sound propagation at the project site would not be noticeable and the elevation would not affect noise levels.

22-8 The study cited in the comment analyzes noise propagation over slopes. However, the project site is relatively flat and the surrounding residences are not at a significantly different elevation. There is no slope between the project site and the sensitive receptors and sound from the project site would not propagate along a slope. Therefore, the amphitheater effect would not occur in the project area and there is no need to address this concept in the noise analysis.

22-9 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

22-10 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: Gary Baker [mailto:garyleebaker70@gmail.com]
Sent: Wednesday, January 25, 2017 2:43 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: hughcoffin@hcoffinlaw.com>

I am a Mammoth home-owner and am strongly against the town spending an indeterminate amount of money on a hockey rink. I am an experienced construction lender for a large bank and in 40 years have yet to see a project come in on time and on budget - especially one where public funding is involved. How can the town possibly afford this project? If I get a vote - it's a NO.

23-1

--
Gary Baker
(310) 784-3019 (office)
(310) 350-2187 (cell)

gbaker@pacificwesternbank.com
(office)
garyleebaker70@gmail.com (personal)

23. RESPONSES TO COMMENTS FROM GARY BAKER, JANUARY 25, 2017.

23-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: Steven Cumins [mailto:shcumins@gmail.com]
Sent: Thursday, January 26, 2017 3:16 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Cc: Ralph Miller <rhmiller@cpp.edu>
Subject: Ice rink

Addressed to Mammoth Lakes Council Members.
I'm an owner in the La Vista Blanc Condo's over looking the proposed ice rink location at the park. I have been staying in the condo since
1979 and have enjoyed the quiet life & nights there. Having been there this week to enjoy the wonderful snow dump & surveyed the parks layout I'm concerned. The bedrooms over look the park, there are no obstructions viewing the park except for a few tree's. Has the council members considered the residences over looking the park. I believe the rink will not only impact the quality of life around the park, it will also negatively impact the property values. I'm concerned about the car noise, head lights at night, rink maintenance noise, people noise, trash & debris, barking dogs that will accustom there family''s, & don't neglect people & alcohol. Foot traffic through the parking lot by people who don't live in the condominium neighbor hood, opportunistic people looking for stuff in cars parked that might some how benefit them. Does the City of Mammoth have plans to build a barrier between the rink and the condo's surrounding rink to protect the residences from any concerns listed above, what are the plans for litigation in the future?
Rest assured not a single council member would stand for a public play ground to be built under there own residences windows.I would hope the council would consider an alternative location, and what they would do if they lived at the proposed site. I know there are better locations through out the City of Mammoth. Please consider my concerns and of my neighbors.

24-1

24. RESPONSES TO COMMENTS FROM STEVE CUMINS, JANUARY 26, 2017.

24-1 Per the Town of Mammoth Lakes General Plan, identified scenic views are public views toward visual resources. The Draft EIR acknowledges that the surrounding residential uses would be impacted. Appendix G of the *CEQA Guidelines* requires the Draft EIR to analyze the project's impacts to the scenic views, identified in the Town's General Plan, as well as the potential for degradation of character/quality in the area. Refer to Responses 6-56 and 6-60 pertaining to the potential change in character/quality, which addresses these impacts to surrounding residential uses. Refer to Response 13-1 pertaining to economic effects. Refer to Response 9-3 pertaining to vehicle headlights. Refer to Response 6-32 regarding potential noise impacts. Noise from barking dogs would not substantially increased compared to the existing condition, as the project site is currently used for park and trail uses. Refer to MR-1 regarding alcohol consumption. Based on the noise analysis presented in the Draft EIR, no noise barriers are required to meet the Town's noise regulations. Currently, a playground exists at the project site and would continue to be present upon completion of the project. Refer to Response 17-4 pertaining to alternative sites considered. Comments pertaining to plans for future litigation do not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project.

From: puppychaos [mailto:puppychaos@gmail.com]
Sent: Friday, January 27, 2017 5:36 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: Ice rink joke

Are you serious? We don't have enough police officers, are using part-time employees to plow, by the way, did the worst job I have seen in 25 years of driving a loader and you want a stupid multi million dollar ice rink? How much money has the current ice rink grossed? Enough to pay off the 850 k plus investment? Again you have your priorities completely misplaced. News flash! We are not Aspen. We don't want to be Aspen and we currently do not have the infrastructure we need to support the town needs and you want a stupid ice rink! It looks like it's time for the people that live here to stand up to you misguided people in our local government as you obviously don't have our best interests in mind when you try to push these stupid ideas on us. Go ahead, pull another airport move. See how long it takes before we do have to file bankruptcy and maybe your job will be on the chopping block. Everyone I have spoken to is totally against this and I believe you have wasted enough of our money on this fiasco. Don Stanley. P.S. been a full time resident for twenty-five years and been coming here for more than 60.

25-1

Sent from my Galaxy Tab® A

25. RESPONSES TO COMMENTS FROM DON STANLEY, JANUARY 27, 2017.

25-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

January 28, 2017

Ms. Sandra Moberly
Community and Economic Development Manager
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546.

RE: MUF / Mammoth Creek Park West

I'm guessing that none of the members of the Mammoth Lakes Town Council – nor any of those who are in favor of the proposed Multi-Use Facilities Project at Mammoth Creek Park West – own a property or live near the site.

Well, my husband and I do. In fact, our property, which we've owned since 2003, is immediately adjacent to the propose site, and our bedroom window and back deck look out onto what is now a beautiful stand of pine trees. On pleasant summer evenings, the sound of babbling Mammoth Creek lulls us to sleep. Watching the squirrels and Steller's jays from our deck has become a favorite pastime.

The proposed project would take all of that away from us – and from every other tax-paying homeowner in the surrounding area. Moreover, it would put in jeopardy one our greatest natural resources, Mammoth Creek.

We're not necessarily opposed to the concept of a new ice rink or a new community center – though giving the existing facilities a facelift surely would cost less the than the $10 million (and growing) budget for the proposed new development. That price, by the way, excludes the $2 million plus that it would cost to decommission the existing ice rink site and the cost of likely litigation, estimated to be at least $100,000. One would think that a town owing a $2 million annual payment at 5.7% interest for its airport litigation settlement would be looking for ways to save money rather than spend it so frivolously. **26-1**

What angers us and our neighbors – to the point of litigation – is the fact that the Town would propose building such a large, commercial-type complex so near to a residential area and to Mammoth Creek. We've reviewed the Environment Impact Report, and it's done little to ease our concerns about this project. In some cases, it's only made them worse.

NOISE

Mammoth Creek Park has played host to several small events in recent years; when it does, the sound carries, and we hear it. The EIR's conclusion that "the proposed project would not result in a significant increase in long-term stationary ambient noise levels" is laughable, as are the "mitigation measures." **26-2**

With "a number of daily, weekly, monthly and occasional community-based events" and "facility rentals for small events/conferences, movie nights, and an after-dance teen hangout space" at the community center; "daily, weekly and monthly recreational activities," including curling and skate programs, hockey tournaments and birthday parties at the outdoor ice rink; and "frequent youth and adult programmed court sports, community events and special events," including weddings, farmers markets and carnivals at Mammoth Recreation Zone, the noise levels will be significantly increased. **26-2**

While Mitigation Measure NOI-2 clearly states that "the Town's Community Development and Economic Manager shall ensure that operational hours of ice hockey and hockey tournaments at the ice rink and the active outdoor recreational area do not occur past 10:00 p.m.," Section 3.3 notes that "Ice rink operations would generally run between 9:00 a.m. and 10:00 p.m., Monday through Sunday, with occasional use from **6:00 a.m. to 9:00 a.m. or 10:00 p.m. to 12:00 a.m.**" It also states that "Mammoth RecZone operations would generally run between 6:00 a.m. and 10:00 p.m., Monday through Sunday, with occasional use from **10:00 p.m. to 12:00 a.m.**" These are not reasonable hours of operation. **26-3**

As for Mitigation Measure NOI-3 and the "Noise Control Plan," simply placing amplified noise sources a certain distance away or pointing them in a certain direction will not mitigate the noise emanating from these events. What about noise from stands full of cheering parents? What about noise generated by drunken party goers (yes, alcohol would be permitted) and rowdy teenagers? What about noise from all of the mechanical equipment associated with the ice rink and the community center? What about noise from the greatly expanded parking lot – with up to 107 additional cars? These are uncontrollable noises that are not addressed in the EIR. **26-4**

The only recourse for frustrated neighbors when a party goes on past midnight and the music is too loud? Call the Parks and Recreation Department and lodge a complaint. That's really going to help at 1:00 a.m. on a Sunday morning, as I'm sure the Parks and Recreation representative would be right over to quiet things down. **26-5**

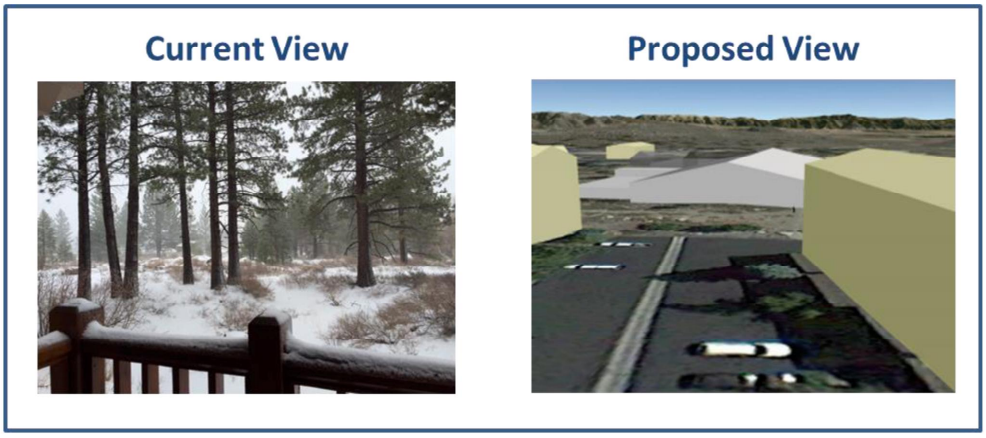
Finally, allowing the use of any amplified systems after 10:00 p.m. is unacceptable and irresponsible, regardless of what decibel limits are set. **26-6**

AESTHETICS / LIGHT AND GLARE

According to the EIR Impact Statement AES-3, "Project implementation could degrade the visual character / quality of the site and its surroundings." With that, I couldn't agree more. **26-7**

While Mitigation Measure BIO-1 states that all site development would "avoid and preserve significant groups of trees and large trees…," one look at the Conceptual Site Plan shows that's not possible. Many Jeffrey pine and lodgepole pine trees would be lost – along with the Steller's jays and squirrels that call them home.

The loss of these trees would significantly degrade the visual character and quality of the surrounding area, as well. Just take a look at the current view from our back deck and an image from the Proposed Project Conceptual Massing:



26-8

Lighting and glare also are concerns. Simply pointing lights "downward and away from adjacent residential areas" will not prevent ambient light from coming through my bedroom window at night. Nor will a "non-reflective finish" on a 30,000-square-foot roof structure completely prevent nuisance glare as we sip our morning coffee on the back deck, which looks onto the massive ice rink. What about the 107 pairs of additional headlights that will be streaming into the expanded parking lot? How will they be mitigated?

26-9

That brings me to…

Traffic and Circulation

The proposed site is located on one of the busiest thoroughfares in Mammoth Lakes. The expanded parking lot with its 151 spaces would be in use year-round, day and night – with only one way in and out. The park's single driveway is located on a significantly "blind curve" on Old Mammoth Road.

While Mitigation Measure TRA-2 calls for the Town Engineer "to provide adequate drive sight distance at the site driveway," it does not take into account that sight-lines change seasonally based on winter snow pack. Moreover, Old Mammoth Road does not have dedicated left and right turn deceleration lanes into the Mammoth Creek Park driveway, and the blind curve and driveway are located in a 40-mile-per-hour zone where many motorists exceed the speed limit.

26-10

Clearly, the traffic and circulation impacts are significant, as are the public safety issues.

Hydrology and Water Quality

This proposed commercial-type complex would be located so close to one of our greatest natural resources, Mammoth Creek, that it poses significant risk. Chemicals and toxic elements used to support and maintain the ice rink and other facilities could easily find their way into the creek. Runoff from the 151 cars in the expanded parking lot also is a real concern. **26-11**

While Mitigation Measures HWQ-5 and HWQ-6 call for a "Storm Drain Facilities Maintenance Plan," "stormwater quality Best Management Practices and Low Impact Development features," they don't say how a town that nearly went bankrupt less than five years ago and continues to face financial difficulties will be able to cover the cost of frequent and ongoing maintenance of storm drain facilities, including cleaning of the grates, removal of foreign materials from storm drainage pipes, and repairs as necessary to damaged facilities. **26-12**

Memories are short, so please let me refresh yours with the following excerpt from "These California Cities Could Be Next in Bankruptcy," *USA Today*, May 15, 2013:

> **Mammoth Lakes.** The mountain resort city filed for bankruptcy protection, then withdrew its petition last year after agreeing to a budget restructuring plan making settlement payments on a lawsuit that it lost. A developer, Mammoth Lakes Land Acquisition, filed suit charging that the city had breached a 1997 agreement to develop a hotel and condo project. The Hot Creek project stalled over federal objections that it would be too close to a planned airport runway expansion. A $30 million judgment, plus legal fees, against the city was upheld on appeal, and the city's liability grew to $42 million, 2½ times its general fund budget. Standard & Poor's says the city remains under financial pressure and rates its bonds at junk status. **26-13**

In October 2015, the Mammoth Lakes Town Council approved the decision to build MUF at Mammoth Creek Park West despite opposition from former Mayor Michael Raimondo and current Mayor Shields Richardson, who said they did not feel the facilities were the best use of public funds. Mr. Raimondo put it bluntly: "We don't have any money…. all we've done is cut and cut and cut, and now we're trying to figure out how to spend two million bucks to build a new site."

Even a supporter of the project, Lynn Alteri-Need, was quoted in an article that appeared in *The Sheet* in October 2015 saying, "Are we a town that has so much money that we can risk forcing this through?" And that was when the estimated cost of the project was a mere $1.3 million to $1.5 million.

So far, the Town Council has paid HMC Architects $200,000 for consulting services and has authorized another $250,000 to "further design, enable additional value engineering work and prepare more detailed cost estimates," which no doubt will be higher than current estimates. Anyone with reasonable intelligence would ask if that money wouldn't have been better spent upgrading the Town's current facilities.

In closing, I'd like to ask you and the members of Mammoth Lakes Town Council if you would like to live right next to MUF at Mammoth Creek Park West, in the building located closest to the proposed mechanical room and a bedroom window and back deck facing the ice rink? If so, we'd be happy to sell you our place.

26-13

Sincerely,

Linda Mueller
96 Meadow Lane, No. 3
Mammoth Lakes, CA 93546

26. RESPONSES TO COMMENTS FROM LINDA MUELLER, JANUARY 28, 2017.

26-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

26-2 Refer to 6-32 regarding stationary noise source impacts.

26-3 Although the project proposes occasional extended hours of operations, the project would be required to comply with Mitigation Measure NOI-2, which would restrict ice hockey and hockey tournaments at the ice rink and the active outdoor recreational area to no later than 10:00 p.m. in order to ensure that impacts remain less than significant.

26-4 Refer to Responses 6-36 and 6-81 regarding amplified noise and crowd noise impacts, respectively. Refer to Response 6-32 regarding potential stationary noise source impacts.

26-5 Refer to Response 17-3 pertaining to proposed hours of operation and associated impacts considered.

26-6 Refer to MR-1 regarding amplified noise.

26-7 Refer to Responses 6-11 and 6-60 regarding tree removal consideration and requirements. Refer to Response 6-53 regarding biological impacts associated with tree removal.

26-8 Refer to Response 6-56. Refer to Responses 6-11 and 6-60 regarding tree removal consideration and requirements. Refer to Response 24-1 regarding impacts to scenic views.

26-9 Refer to Response 11-3 regarding lighting requirements. With implementation of proper shielding techniques, reflected light would be minimized. Refer to Response 9-3 regarding vehicle headlights.

26-10 The Draft EIR analyzed the project's compliance with Town policies and regulations pertaining to parking. However, the Town does not have specific parking requirements for the Public and Quasi-Public Zone (P-QP). Notwithstanding, the project proposes an addition 107 surface parking spaces, for a total of 151 surface parking spaces to support the project on-site. The Town of Mammoth Lakes restricts parking along Town streets from November to April due to snow maintenance activities. The Mammoth Lakes Police Department and/or each respective Home Owners Association would be responsible for enforcing any parking rules.

Refer to Response 6-27 regarding the driveway location. Based on the *Mammoth Community and Multi-Use Facilities Focused Traffic Impact Analysis* (Traffic Impact Analysis), dated July 29, 2016, prepared by LSC Transportation Consultants, Inc. (provided in

Draft EIR Appendix 11.4, *Traffic Impact Analysis*), a dedicated left and right turn lane into the Mammoth Creek Park driveway are not required.

26-11 Refer to Responses 6-41 and 6-42.

26-12 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

26-13 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: JotForm [mailto:noreply@jotform.com]
Sent: Sunday, January 29, 2017 2:12 PM
To: info@mammothlakesrecreation.org
Subject: New submission: MLR General Contact Form

Your Name	Linda Mueller
Your E-mail Address	linda.a.mueller@gmail.com
Your Message	For the record, I own a residential property immediately adjacent to the proposed project. I'm not necessarily opposed to the concept of a new ice rink or a new community center – though giving the Town's existing facilities a facelift surely would cost less the than the $10 million (and growing) budget for the proposed new development. What angers me and my neighbors – to the point of litigation – is the fact that the Town would propose building such a large, commercial-type complex so near to a residential area and to Mammoth Creek. I've reviewed the Environment Impact Report, and it's done little to ease my concerns about this project. In some cases, it's only made them worse. This project would be the closest intrusion of a commercial-type facility to the main (and natural) tributary of Mammoth Creek that the community has ever seen. The facility is proposed to use a variety of chemicals and potential toxic elements that could easily make their way into the creek. Runoff from the 151 cars in the expanded parking lot also is a significant concern. Mammoth Creek is one of our top natural resources, and it MUST be protected. Say "NO" to MUF at Mammoth Creek Park!

27-1

27. RESPONSES TO COMMENTS FROM LINDA MUELLER, JANUARY 29, 2017.

27-1 Refer to Responses 6-41 and 6-42.

From: Lynn Boulton [mailto:amazinglynn@yahoo.com]
Sent: Monday, January 30, 2017 1:42 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: MUF Draft EIR Comments

January 30, 2017

Sandra Moberly
Community and Economic Development Manager
Town of Mammoth Lakes
437 Old Mammoth Road, Suite R
Mammoth Lakes, CA 93546

RE: MUF draft EIR Comments

Dear Ms. Moberly:

Whereas I live in Lee Vining, I work and recreate in Mammoth Lakes and it is my market center. I support the environmental alternative, placing the ice rink at Civic Center, along with a pledge to remodel of the existing community center on Forest Hill. **28-1**

The main concern I have with the Mammoth Creek Park site is that it pushes the wildlife/human buffer zone further out as the town expands and removes another area of natural wildlife habitat. Impacts to the open space across the street from Old Mammoth Road were not addressed in the EIR. The noise from the ice rink music, from weddings, and events at the proposed MUF site will be heard in the open space on the other side of the road (55.5 dBA). Birds and wildlife are more sensitive to sound than humans. Noise disrupts their ability to hear calls from their own species and of their predators. The EIR only addressed the annoyance levels for humans on the site. The noise mitigations need to lower the noise level much more than the ones proposed in the EIR. **28-2**

The EIR (pgs. 5.7-14) brings up the potential for the MUF project to install solar panels to reduce greenhouse gases stating it “may” do so. I urge the Town to insist on the MUF being a “green” project with solar panels and zero net energy use. Although we are inundated with snow this month, it is part of the climate change extreme weather pattern. Climate Change is still here and will be with us for years to come. Each and every new town project should be green, especially a 10.5 million dollar, discretionary project like this one. The GHGs associated with this project may be insignificant compared to the GHGs that the town already produces, but that doesn’t help us move toward a livable planet. We have the technology to reduce our GHGs and cost obviously isn’t a factor with this project, so please incorporate solar panels into the project along with all other possible “green” construction options so that it becomes an environmental showcase. **28-3**

I’d also like to point out that herbicides can and should be avoided (page 6-2) and only natural landscaping should be used to minimize irrigation, which could be watered by recycled/greywater to further conserve water for the drought years ahead. Pavers or pervious materials can and should be used for the walkways and the plaza to allow more water to soak into the ground to recharge the groundwater. To be on the safe side, I would like to see Mammoth Creek water quality tested regularly the first two years, post-construction, to ensure that oil, gas, salt, and sediments are not discharged into the creek from the MUF. This is a chance to impress the thousands of visitors who come to Mammoth Lakes from around the world and across the US with an environmentally state of the art facility. Thank you for the opportunity to comment. **28-4**

Regards,
Lynn Boulton
Lee Vining

28. RESPONSES TO COMMENTS FROM LYNN BOULTON, JANUARY 30, 2017.

28-1 Refer to Response 5-2 regarding the project's proximity to open space areas, mainly Mammoth Creek. Refer to Response 8-2 regarding the intent of the General Plan land use for the project site.

28-2 Refer to Response 5-2.

28-3 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

28-4 The project would be required to meet all existing Federal, State, and local laws and regulations pertaining to the applications of herbicides and the installation of drought-tolerant species. The project would also maximize potential pervious areas as much as practice, as required by the Regional Water Quality Control Board and the Town of Mammoth Lakes. As part of the existing laws and regulations enforced by the Regional Water Quality Control Board (RWQCB), the water quality is tested on a periodic basis as part of the RWQCB's Basin Plan requirements.

From: Jennifer Chase [mailto:jentravis2@yahoo.com]
Sent: Monday, January 30, 2017 6:40 AM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: EIR public comment - multi-use facility

After reviewing the Mammoth Creek Multi-Use Facility EIR we choose the "No Project" alternative. In the EIR, the Town recognizes that there are many unmet recreational needs in our community, listing an aquatic center, event and performance venues, multi-use recreational and cultural facilities to name a few. While of course we understand that the Town is limited by funding and cannot address all of those items at once; it seems short-sighted to not even have a proposal for where those large facilities will be in the future.

Goal 6 listed in the project's EIR is, "to provide parks and recreational facilities that foster a sense of community". As parents, we can assure you that if we are driving our children from one recreation facility to another (potentially to locations across town, at Whitmore, or elsewhere), it does not foster a sense of community. What fosters a sense of community is to be able to get out of the car with the whole family and enjoy all the facilities more traditional community centers have in one location (i.e. pools, gyms, meeting & multi-purpose rooms). **29-1**

If many of the recreation facilities we all desire in the future can't fit at the Mammoth Creek Park location then other locations need to be reviewed again. This is a very expensive project that we think completely misses the mark – it looks like it is going to be a nice ice skating rink plus a building with a number of different sized "multi-purpose rooms" and office spaces. If providing real indoor recreational opportunities is a goal (Goal 4 in the EIR), we don't think that these rooms really meet that goal. We read that there are suggestions for how the rooms may be used, but that is not a commitment to supply those rooms with the appropriate equipment -- as an example, if the Town is truly committed to building a gymnastics/tumbling facility then that should be designed and filled with proper equipment, not simply a room that could be used for gymnastics. Similarly, if an arts and crafts room is going to be built, then let's build a real arts and crafts studio! **29-2**

We need to have a bigger vision so that our community ends up with a real community center location, not just disjoint recreational facilities built over time as funding permits.

TJ and Jen Chase

29. RESPONSES TO COMMENTS FROM T.J. AND JENNIFER CHASE, JANUARY 30, 2017.

29-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

29-2 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: Deanna Clark [mailto:deannabclark@yahoo.com]
Sent: Wednesday, February 1, 2017 11:40 AM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: Public Comment -EIR- Multi use facility

My husband and I would really like to see a multi use facility that includes all of the facets wished for in one area. As parents of 2 it would be wonderful to have a rec center in one spot verses segments in various spots around town. This would limit driving, traffic, pollution and would be a hub for our community. Therefore, we recommend "no project" at this time until further financial savings, site choice and long term planning may include a facility that includes a pool, ice rink, gymnasium, etc in a common location. **30-1**
Sincerely,
Deanna & Peter Clark, MD

D e a n n a C l a r k
760. 914. 0060
Have a GREAT day!

30. RESPONSES TO COMMENTS FROM DEANNA CLARK, FEBRUARY 1, 2017.

30-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: Linda Mueller [mailto:lam27363@yahoo.com]
Sent: Sunday, February 5, 2017 7:33 PM
To: Bill Sauser <bsauser@townofmammothlakes.ca.gov>
Cc: Shields Richardson <srichardson@townofmammothlakes.ca.gov>; John Wentworth <jwentworth@townofmammothlakes.ca.gov>; Colin Fernie <cfernie@townofmammothlakes.ca.gov>; Cleland Hoff <choff@townofmammothlakes.ca.gov>; Sandra Moberly <smoberly@townofmammothlakes.ca.gov>; lunch@thesheetnews.com; saragomberg@yahoo.com; Ed Klotz <darthbjorn@gbis.com>
Subject: MUF at Mammoth Creek Park West

Councilman Sauser:

How dare you discount – or even worse, ignore – my comments and concerns and those expressed by other near neighbors regarding the proposed Multi-Use Facilities at Mammoth Creek Park West. ("Give It a Rest," *The Sheet*, February 4, 2017).

As *The Sheet*'s Editor Jack Lunch noted in his column, "When did living in an affected neighborhood = negation of one's opinion?"

I am a resident of the Town of Mammoth Lakes and a taxpayer, and my opinion matters. As the owner of a property that is immediately adjacent to the proposed site – in fact, my bedroom window and back deck look out onto Mammoth Creek Park – my voice deserves not just to be heard, but to be listened to. I and all of the homeowners at Mammoth Creek Condominiums, La Vista Blanc and Chateau Blanc will be most affected by this ill-planned, $10 million boondoggle. **31-1**

The taxes we pay would help fund the construction of this large, commercial-type complex so near to our homes and to one of our greatest natural resources, Mammoth Creek. These same tax dollars helped fund the "one-time" bonuses you and the other councilmembers were so eager to give yourselves. The Town Council pushing this project through despite our opposition is tantamount to taxation without representation. If you're not up on American history, that was the spark that ignited the Revolutionary War. If you want a war, sir, you've got one. We will not go quietly.

Elected officials are obligated to serve in the best interest of all the people – not just the ones who agree with them. To do that, you must consider moving the project to an alternative site or refurbishing the Town's existing ice rink and community center, which would be the most fiscally responsible solution. Otherwise, get ready for battle.

Linda Mueller
96 Meadow Lane, #3
Mammoth Lakes, CA 93546
(661) 755-7639

31. RESPONSES TO COMMENTS FROM LINDA MUELLER, FEBRUARY 5, 2017.

31-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: Donald Lawson [mailto:dnclaws@aol.com]
Sent: Monday, February 6, 2017 5:19 PM
To: Hugh Coffin, Singer & Coffin, APC <hughcoffin@hcoffinlaw.com>; Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: Re: REIMINDER - COMMENTS ON EIR FOR MULTI USE FACILITY AND ICE RINK - DEADLINE FEBRUARY 13, 2017

I could find no mitigation of the construction road from Meadow Lane at completion of construction.
How does the Town of Mammoth intend to keep Parking off of Meadow Lane besides putting up signs? Who is responsible to have them removed when they do, and they will?
I see no demarcation between the proposed facility and Chateau Blanc/ Mammoth Creek (such as a wall or fence).
Don Lawson
Sunrise #40

On Feb 6, 2017, at 10:55 AM, Hugh Coffin, Singer & Coffin, APC wrote:

> To all –
>
> This is a reminder that the Town of Mammoth Lakes is receiving comment on the Draft EIR for the Multi Use Facility and Ice Rink and Cover proposed for Mammoth Creek West. The project will have impacts on Sunrise. The Notice of Availability is attached. A link to the whole EIR is: http://www.townofmammothlakes.ca.gov/index.aspx?NID=694
>
> The Association is working with counsel and La Vista Blanc, Mammoth Creek and Chateau Blanc in reviewing and commenting on the EIR. You also are encouraged to review and comment as well. Your comments and thoughts will help in evaluating the proposed project. You can submit comments via email to the address in the Notice of Availability and the email address is: smoberly@townofmammothlakes.ca.gov
>
> Please review the EIR and if you have concerns and issues you feel were not properly covered or addressed – please send you comments – and they are due by the 13th of February. Time is short. The project will impact Sunrise. Please send your concerns before the deadline.
>
> Thank you.
>
> Hugh R. Coffin
> Sunrise at Mammoth Homeowners Association President
>
> <NOA_Final.pdf>

32-1

32. RESPONSES TO COMMENTS FROM DON LAWSON, FEBRUARY 6, 2017.

32-1 Refer to Response 17-2 regarding Meadow Lane. Refer to Response 26-10 pertaining to parking considerations.

From: Jeffrey Brown [mailto:jeffshomerepair@sbcglobal.net]
Sent: Monday, February 6, 2017 8:23 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Cc: Linda Mueller <lam27363@yahoo.com>
Subject: MUF at Mammoth Creek Park West

Dear Ms. Moberly,

I have just heard of the towns intent to put a multi-use facility at the beautiful Mammoth Creek Park. As a part time resident and frequent park user for over 25 years, I just can't imagine what the town is thinking. The proposed facility will be used by probably less than 5% of the visitors who come to Mammoth Lakes for it's beauty. Residents and visitors are in Mammoth for the outdoor recreation, not indoor. The facility would greatly reduce the enjoyment and property values of everyone who owns property near it. There are so many other areas in Mammoth that this facility could be built that wouldn't have detrimental effects on the residents surrounding it.

33-1

What's next, KMART in the meadow.

Yours truly,
Gayle and Jeffrey Brown
Snowcreek II owners since 1991

33. RESPONSES TO COMMENTS FROM GAYLE AND JEFFREY BROWN, FEBRUARY 6, 2017.

33-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: Allison McDonell Page [mailto:allisonmcpage@gmail.com]
Sent: Tuesday, February 7, 2017 1:59 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: EIR public Comment on multi-use facility

I appreciate the effort of getting something built at Mammoth Creek West and I know those wanting an ice rink for their kids who are very involved in ice hockey have been very vocal and involved. I think Mammoth Creek West is a perfect spot for this and for the Rec Zone but the plan doesn't go far enough. We also need a swimming pool. We need a high altitude training center with indoor track. We need a gymnastics facility with foam pit for skiers and kids. We need to look at Tahoe's Rec center with swimming pool, skating rink surrounded by camping facilities as our example. We don't want to have these things strewn all over our town just because some people's voices were heard the loudest. If Mammoth Creek West doesn't have enough space for it all than it's probably not the right space. A Rec Zone should be exactly that - a rec zone. The facility that people go to recreate indoors. The one stop shop. Let's make the town plan work before we start making expensive choices that don't really serve our needs. **34-1**

Thanks,

Allison McDonell Page
The Snowcreek Property Company
Cell: 323.646.5055
Allison@snowcreekproperty.com
Lic.# 01884937

34. RESPONSES TO COMMENTS FROM ALLISON MCDONELL, FEBRUARY 7, 2017.

34-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

JOHN & PAT THORNTON

96 Meadow Lane, Unit No. 5
Mammoth Lakes, CA 93546
email: JThorntonpe@H2OExpert.net
Phone: 949.857.1300

Mail Address:
26 Westport
Irvine, CA 92620

February 7, 2017

Ms. Sandra Moberly
Community and Economic Development Manager
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546.

Reference: DEIR Mammoth Creek Park West New Multi-Use Facility Project - Comments

Dear Ms. Moberly:

My wife and I are 21 year owners and part time resident of Mammoth Lakes and live at the Mammoth Creek Condos adjacent to the Park. I am a Water Resource and Environmental Consultant with extensive experience in Inyo and Mono Counties managing a team of biologist and ecologist doing CEQA/NEPA permitting for SCE and their Hydro projects. We were very involved in the opposition of the attempt of the Town's pushing the ice rink at the Mammoth Creek Park in the late 1990s/early 2000s. I attended most of the public hearings and meetings and provided both testimony and comments. That DEIR was poorly prepared and the town could not properly address the comments and dropped the project. Nothing has really changed in the design concepts of the current project and most of the same issues still exist and have not been adequately addressed. The Town is still trying to put too much on too small a site. The root of most of the opposition is locating the ice rink in a residential setting. **35-1**

Financial Viability

I know that others have commented on the financial impact of the project and it is not required to be addressed in the DEIR. However, the town should provide the community and tax payers the financial plan before the DEIR. I want to reiterate what others have said in comments, regarding financial viability that it is financially irresponsibility for the Town to commit the community and tax payers to more debt compounded by the declaration of bankruptcy only five years ago and, in addition, the Town has a very low bond rating. We have yet to see a current financial analysis for the project including the financial plan and a benefit to cost analysis showing project viability. **35-2**

In 2005 the Town started to reinvent the ice rink project. I was astounded when I reviewed the pro forma at one or our board meetings. In light of all the other needs of the Town, the Town was considering indebting the property owners to over $22,000,000 without any type of benefit to cost analysis, needs analysis or siting study. The appeared to be very incomplete and did not paint a complete economic picture of the project. Why does the Town need this project? Couldn't the monies be better spent on projects that truly benefit the property owners of the Town?

In a town memo (Mr. Clark 1/24/05) indicated the potential to sell some properties owned by the Town to help finance the project. The Town owns property located near the North Village. Why not consider building the ice skating rink at the community center site near the North Village? This would be more

consistent with the objective of the Town to create a "village center". Parking, traffic and noise issues should have already been dealt with as part of the North Village plan. The rink would be convenient to all the newer lodging being built as part of the North Village. Maybe the developers of the North Village might help finance such a project as well. As for the parking issue, what happen to the towns development deal of around 20 years ago where the town funded part of the North Village parking structure? That was supposed to take care of parking issues. **35-2**

The Town, particularly the council, should be making every effort to gain consensus on the various issues surrounding the project, its proposed location, its cost, who is going to pay for it and the overall economics of it compared to the ongoing infrastructure needs of the Town.

Sec. 5-02 Aesthetics/Light and Glare

The night time sky is one of the town most valuable aesthetics and view assets and is as important as protecting landscape views. There are few cities or towns that have a night sky like we have in Mammoth Lakes. That is why light pollution is important and requires vigorous attention. The EPA has identified Light pollution as a serious environmental problem. The EPA has its "Green Lights" program. California adopted Title 24 addressing light pollution and energy efficient lighting. There are a number of technical solutions to minimize night light pollution. The Towns lighting ordinance appears to only propose minimum requirements. The project description likewise and the lighting mitigation is only a token. Some innovative lighting solutions are required either in the project description or in the mitigation, not just compliance with the Town's code minimum code requirements. As an example, Cal Trans is starting to light state highways including freeways with more strategic placed LED, point focused, shielded highway lighting activated by motion detection. So, if there are no cars or other motion, there is no light. There needs to be specific requirements to eliminate light pollution not to exceed current conditions. **35-3**

Sec. 5-03 Biological Resources

The consultant indicated they did a search of the California Natural Diversity Data Base (CNDDB) however they failed to identify the Great Grey Owl (strix nebulosi) which has been identify in other CEQA documents for projects along Mammoth Creek. The Great Grey Owl is listed as Endangered by the California Fish and Wildlife. A report by Jon Winter indicated creditable recorded sittings at the Valentine Preserve in August, 1975 and they primarily exist in the Sierras. (*Status and Distribution of the Great Gray Owl in California: State of California The Resource Agency Department of Fish and Game April 1980*). The Great Grey Owl nests in mixed conifers and generally breed during the winter with young fledging approximately six months later. The Great Grey Owl usually return to the same nest in subsequent seasons. They are elusive and difficult to site. **35-4**

This is an important omission and suggest that there might be other sensitive wildlife or plants that may have been missed and not recorded in this DEIR. As a for instance there is at least one and probably more summer bear dens along Mammoth Creek. There has been for at least the last decade or so a summer bear den up stream of the foot/bike trail bridge. During summer nights, there are hundreds of bats that hunt for insect over the park and adjacent Forest Service land. There are several small deer herds including a "bachelor" herd of deer that move up and down the north side of the creek. We have seen them every year for over two decades. We have also seen from our deck raccoons and marmots. What impacts will the proposed project have on these and other wildlife that silently and un-noticed use the park land? **35-5**

Sec. 5-05 Traffic

It was identified during the first DEIR prepared in 1999 that there was insufficient site distance turning left out of the park parking lot on to Old Mammoth Road. Town staff said in 1999 those improvements were going to be made regardless of the park development. Those improvements were not included in the road work that took place on Old Mammoth Road around 2004/2005. These improvements were not even **35-6**

discussed in the DEIR. The only site related issues were from proposed landscaping as part of the project. The traffic analyses did not consider the site distance issues stated above nor did it consider winter site distance issues cause by high snow on the side of the road such as has occurred this winter after the January 2017 storm. Today, January 30, 2017, a car making a left turn out of the park's parking lot with snow about 3 – 4 feet high on each side of Old Mammoth Road, cannot see a car going east on Old Mammoth Road until that car is at the park exit. The snow issues are compounded by the original unresolved site distance issue at curve on Old Mammoth Road. The Town must include correcting this site distance problem as part of the project not as a mitigation not to be put off any longer. This is a safety issue that was to be taken care of years ago and is not acceptable any longer especially if this project moves forward. **35-6**

Parking: The issue of park visitors parking on Meadow Lane was discussed during the DEIR scoping along with direct discussions with Town staff. Mitigation to prevent park visitors from parking on Meadow lane or the foot traffic from the parking was not discussed in the DEIR. This is an important issue to the property owners along Meadow Lane. Currently, park users are parking on private property along Meadow Lane; especially when the park is used as an event venue. Those visitors trespass on to the condo's properties by parking in the condo projects parking lots, try to use private swimming pools and rest rooms and leave trash and debris. These issues will be worse with the proposed project. The parking issues on Meadow Lane need to be acknowledge and mitigation measures documented in the DEIR along with how they will be enforced. **35-7**

Sec. 05-08 Noise

The noise level reference for the ice rink were from the existing rink which does not have a roof. The sound pressure wave at pretty much anywhere at the existing rink will be lower with the absence of a roof. With no roof, the upward sound pressure wave travels and disperses upward. With a roof, the upward pressure wave bounces off the underside of the roof and will be deflected in many directions but ultimately focusing horizontal to the ground which will multiply the original horizontal wave. What does this mean? The sound measured around the perimeter of the rink with a roof will be louder than a rink without a roof. Table 5.8-3, siting measured sound levels for recreation and hockey skating are sited as 55.3 and 69.6dBA. According to Fig. 5.8-1 the expected sound levels would be between a quiet office and normal conservation. This is not even close to being reasonable. Also, the noise of hitting a hockey puck and a hockey puck hitting the rink side boards was not considered. The sound of a hockey puck more closely resembles that of a gunshot at approximately or greater than140dBA. The Noise analysis for the ice rink must be reevaluated with the above considerations. **35-8**

The same comment applies to ice rink crowd noise. Crowd noise will likely be louder than 60dBA. 60dBA, according to Fig. 5.8-1is considered normal conservation not crowd noise at a sporting event in a venue with a roof and open sides. This analysis needs to be redone using authoritative sound references that are relevant to a roofed ice rink. **35-9**

RecZone: The RecZone would operate on the ice rink facility in the summer. The analysis used a sound reference of a women's soccer game in Orange County. I don't see the relevance. The roofed ice rink hardly compares to an outdoor soccer pitch. The activities as described in the DEIR include roller skating, basketball, volley ball, etc., and though not mentioned but likely inline roller hockey. Once again the noise analysis must consider the effect the rink roof. Also, realistic authoritative sound references must be used. A better reference for inline roller hockey and roller skating might be sound measurements at one of The Rinks facilities in Southern California such as The Rink Irvine Inline located in Irvine California. The Rink Irvine was built by Wayne Gretzky as an outdoor roofed inline skating and roller hockey facility. Sound measurements at this facility would make a much better sound reference and be relevant to the RecZone proposed project. **35-10**

Amplified Music: It's very likely live amplified music events will be held at the project site including in the community center, rink and outdoors. The Park has been the site for various amplified music events in the past including fourth of July rock music and the Jazz festival. It's safe to assume that with the improvements there will be more such uses. 88dBA was arbitrarily assumed as a reference sound level for amplified music. A relevant authoritative reference noise level should be used not an arbitrary value. As an example, Sound Advice (www.soundadvice.info) is a good reference for sound levels for amplified music. It recommends for amplified live music 102 to 108dBA with a peak of 140dBA. I suggest a revised analysis be completed with a documented sound reference. **35-11**

The overall noise analysis for all the facilities needs to be redone using authoritative, documented noise references relative to the proposed facilities and site, not assumed or irrelevant values. This includes a revision of Exhibit 5.8-3 and reevaluation of mitigation.

Sec. 5-09 Hydrology and Water Quality

The subject of groundwater was not discussed. Several groundwater monitoring wells were constructed several years ago in the vacant lot on the south-east corner of Meriden and Meadow Lane immediately west of the Mammoth Creek Condos. Groundwater was encountered about 20 to 25 feet below ground surface at about the same elevation of the thalweg of Mammoth Creek in the vicinity of the monitoring wells. It's reasonable to assume that the same is true for groundwater in the vicinity of the park. It's also reasonable to assume that the drainage dry wells proposed in the project will have direct continuity with Mammoth Creek through the shallow perched groundwater. With about 150 parking spaces along with the intense proposed overall site use there is the potential for relative substantial drainage water contamination (oil, grease, particulates from tires and vehicle exhaust, herbicides, pesticides and fertilizers to name a few) which will go to the dry wells and into the groundwater and flow subsurface into the creek. Groundwater and Mammoth Creek are the water supply for the Town of Mammoth Lakes. Mammoth Creek is part of the potable water supply for the City of Los Angeles. Has the Water District, City of Los Angeles or Regional Water Quality Control Board been consulted on this indirect waste discharge into Mammoth Creek? Is a permit required? Is treatment required? The water quality analysis needs to address pollutants entering the dry wells and impact on water quality in groundwater and Mammoth Creek and along with mitigation measures. **35-12** **35-13** **35-14**

Sec. 7 Alternative Analysis

The Town has performed a superficial alternative analysis on three sites and reconfiguring the proposed projects but typical to most DEIS the alternatives analysis was not done to the same level of intensity or study as for the proposed project so they are not truly compared on the same level. The analysis did **not** consider separating the ice rink from the project and constructing it in a less impacted nonresidential area such as the North Village Community Center Parcel, Shady Rest Park or the long-term lease alternative for the ice rink with the school district. The North Village site was discussed earlier on page one. The Town needs to go back and review its development deals with the developers of the North Village. As I recall parking was an issue in the original development plan of the North Village and the Town participated by funding the parking structure which was to solve the parking issue. Those development agreements need to be revisited for a solution to the parking issue in the North Village and at the same time add the ice rink and other improvements to the Community Center property. If parking is such a problem at the North Village, the Town should spend the money ffom the proposed Mammoth Creek Park project on solving the immediate parking issue at the North Village. That should be higher priority. **35-15**

The Shady Rest Park is an ideal site for the ice rink. It is an open area with no residential neighborhoods nearby so noise, lights and traffic should not annoy anyone. It has good access and parking even in the winter. The road was cleared and open several days after the mega snow storm in mid-January. I parked in **35-16**

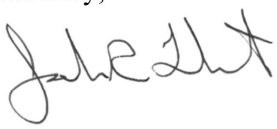
the parking lot and went cross country skiing in the area four days after the end of the storm. It is the portal for other winter snow activity during the winter and playground and field sports in the summer. It's my understanding that Shady Rest is built on a Use Agreement with the Forest Service. That agreement should be reviewed with the Forest Service with the goal of modifying it to include the ice rink facility. **35-16**

The long-term lease for the ice rink site on the school district property probably is the best deal and least cost for the Town. Sharing facility with the school district should be the norm for the Town and will usually stretch public money and maximize the use of public owned facilities. Most towns, cities and school districts work closely together sharing facilities. The Town needs to restart talks with the school district about the location of the ice rink with the goal of developing a joint ownership and use agreement where the school district contributes the property and the Town builds the rink. Not a conventional lease agreement but a joint ownership and use agreement. This should be included in the alternative analysis. **35-17**

Removing ice rink from the proposed Mammoth Creek Park project would significantly defuse many of the concerns and opposition to the proposed project presents. These three sites should be included in the alternative analysis with the same level of intensity and study as the Mammoth Creek Park Site. **35-18**

Mammoth Creek Park West is a small parcel of about 5 acres. The Town is trying to build too much on too small an area and in a residential area, including an ice rink intended to be used for hockey as well as recreational skating, winter and summer. This type of facility, serving the community and visitors as a whole should be located in a large open area, commercial or industrial or nonresidential district of the Town where noise, lighting, traffic, etc. will have no negative impacts to the quality of life to Town residents. **35-19**

Sincerely,



John R. Thornton PE
Water Resource and Environmental Consultant
Property Owner, Mammoth Creek Condos

Cc: Town Council Members
Planning Commission
Parks and Recreation Commission

35. RESPONSES TO COMMENTS FROM JOHN AND PAT THORNTON, FEBRUARY 7, 2017.

35-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

35-2 Refer to Response 13-1 pertaining to economic effects. Refer to Response 17-4 regarding alternative site considerations. Currently there is no Town-owned property in North Village. The Town has an existing lease with the Mono County Office of Education (MCOE) for educational programs at the existing Community Cent parcel. As discussed on Draft EIR 3-6, the Community Center Parcel would require major modifications due to the facilities conditions. The ad hoc committee considered several issues if the proposed Multi-Use Facility was located at this parcel. The Multi-Use Facility would displace the tennis courts and would require more parking. In addition, the existing tennis courts would be required to be rebuilt for $250,000 per court. Refer to Response 17-4 regarding alternative site considerations.

35-3 Refer to Response 11-3 regarding compliance with the Town's "dark skies" ordinance.

35-4 As documented in Final EIR Appendix A, although the Great Grey Owl is a listed State endangered species and is known to occur in the general area, it is presumed absent from the project site, as there is only sparse conifers available on-site, compared to other habitat afforded in the area.

The great gray owl is a rarely seen resident in the Sierra Nevada from the vicinity of Quincy, Plumas Co. south to the Yosemite region. This species breeds in old-growth red fir, mixed conifer, or lodgepole pine habitats, always in the vicinity of wet meadows. Breeding populations survive in isolated pockets where large trees with consistent canopy cover, their preferred nesting habitat, is still available. Great gray owls do not build their own nests; they may use old red-tailed hawk, common raven, northern goshawk, or squirrel nests. In some areas they use mistletoe brooms as a nest platform. They will also nest within rotted-out snags that are at least two feet in diameter and at least twenty feet tall. Great grays will sometimes adopt manmade nest platforms. Typically forages in open meadows from exposed perches in or on the edge of the meadow with dense populations of small mammals for hunting. Their prey include voles, moles, shrews, pocket gophers, and other small creatures that live in meadow grasses.

The most recent and closest documented occurrence of this species, per eBird, was recorded near Lake Mary in May 2015, approximately 3 miles southwest of the project site. The great gray owl that was observed was injured and found by hikers.

The scattered pine trees within the big sagebrush scrub plant community found on-site, does support an old-growth conifer forest with a dense canopy cover typically used by great gray owls for breeding and roosting. In addition, the project site's proximity to

existing residential developments and frequent human activity, have likely precluded great gray owl from inhabiting the project site. Further, the project site does not support suitable foraging opportunities for great gray owl. This species typically forages in open meadows or open habitats, which is not found on-site. As a result, the great gray owl is presumed absent from the project site.

Refer to Response 9-5 regarding required mitigation for any raptors found on-site.

35-5 Refer to Response 9-4.

35-6 Refer to Response 6-27.

35-7 As discussed in Response 26-10, it would be the responsibly of each respective Home Owners Association to enforce any parking rules for private property. The public would utilize proposed on-site parking, or existing trail connections and sidewalk along public roads. As discussed in MR-1, any special events would be required to obtain a special event permit from the Town of Mammoth Lake. As warranted on a case-by-case basis, parking programs and additional trash receptacles would be implemented as necessary, and additional police officers would be assigned as necessary to ensure laws and regulations are enforced during these occasions. For both existing and proposed conditions, it is the duty of private property owners to report trespassers to the Mammoth Lakes Police Department.

35-8 Consideration of the proposed structure with a roof over the rink was considered in the noise model analysis for the project; refer to Response 21-14.

35-9 Refer to Response 6-81.

35-10 Refer to Responses 6-81 and 6-32 regarding crowd noise and stationary noise considerations. Hockey activities would not occur in the summer months when considering RecZone activities.

35-11 Refer to MR-1.

35-12 Refer to Response 6-40.

35-13 Refer to Responses 6-41 and 6-42.

35-14 Refer to Responses 6-41, 6-44, and 2-1 through 2-12.

35-15 Per CEQA Guidelines Section 15126.6, the purposes of the alternatives analysis in the Draft EIR is to discuss alternatives that are capable of avoiding or substantially lessening any significant effects. The discussion is not required to be of the same level of detail as the proposed project. Refer to Response 17-4 pertaining to alternative site considerations. Refer to Response 35-2 regarding consideration at North Village area.

35-16 Refer to Response 6-66.

35-17 As discussed in Draft EIR Section 7.1, *"No Project" Alternative* (page 7-6), renewal of the existing lease agreement was considered in the Draft EIR.

35-18 Removing the ice rink from the project would not achieve the most basic project objectives.

35-19 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

March 18, 2016
February 9, 2017

Sandra Moberly
Town of Mammoth Lakes

RE: Comments to the Draft EIR, MUF/Mammoth Creek Park

Because my original comments to the scoping of the EIR were not incorporated in the Draft, I am including those original comments in blue. My additional comments to the Draft EIR are in black.

Town of Mammoth Lakes; Parks and Recreation Commission, Planning Commission, Town Council, Michael Baker International, etc.

RE: Scoping of the EIR, MUF/Mammoth Creek Park West.

"If you don't know where you are going,
you'll end up someplace else."
— Yogi Berra

36-1

For the record, I own residential property immediately adjacent to the proposed project and own commercial property in the immediate vicinity. In the past 34 (now 35) years I have lived in close proximity to and commuted through this project area extensively. I am essentially in favor of the project ***if*** the project can be designed to mitigate a variety of issues and concerns. And I would emphasize that a limited budget is *NOT* cause for a statement of overriding considerations.

I find many of the "enthusiasts" of the project including much of the Town staff have a cursory appreciation for the inherent qualities of the site. And because the site appears to be larger than it really is, many have overestimated what can be reasonably placed there. It is also the closest intrusion of a commercial-type facility to the main (and natural) tributary of Mammoth Creek that the community has ever seen. This should require extra diligence in the future development of this site.

The site is extremely valuable for its location, the natural resources (namely the creek), the topography, solar aspect and views. No other town-owned site has all of these attributes. That alone makes this EIR process compelling. What is done on this site is of critical importance to the community. It cannot be poorly planned or executed. A comprehensive and thorough EIR is critical. The Town is essentially the proponent *and* the lead agency. Any stone unturned will create future liability (we learned that with the airport EIR). Building the "trust" that you seek with the local property owners will only be achieved with a thorough EIR process.

36-2

I have attended some of the preliminary meetings and am aware of the general "scoping" concerns. But these are my specific concerns;

Traffic / Transportation / Circulation / Public Safety

The Traffic and Circulation Analysis (5.5) and the Traffic Impact Analysis (11.4) are completely inadequate. It is chocked full of technical data gleaned from past Town documents and no doubt

from other EIRs produced by an “EIR mill” like Michael Baker International. The presumption is that all of the technical data assures a “no significant impact” determination is a correct one.

But the data has some serious inadequacies. The raw traffic data might be fairly accurate, but what doesn’t show in the data are cyclists of all sort who ride through this area (including me). They include near-professional road bike racers who fly down Old Mammoth Road to little girls on pink tricycles riding on the bike path and sidewalks. This area is also a major ingress and egress point for mountain bikers riding on the dirt roads accessing down Mammoth Creek Road and into the Sherwin Creek/Lakes area. Many of these riders (like the skateboarders too) ride in very unpredictable ways. The immediate area is a hub for this type of behavior. **36-2**

As I said below
Further, there is a convolution of other activities and distractions right in this immediate vicinity; children’s play areas, pedestrians of all sorts including many with leashed and unleashed dogs, in warmer months fisherman (including many local kids), cyclists using formal and informal paths, skateboarders, horses, special events, informal picnics and gatherings, photo takers, and on and on. There is a broad variety of seasonal activity already at the MCPW location. There are far greater considerations than basic motorized vehicle counts.

I can even add to this; last summer a small deer herd with numerous bucks were consistently hanging out just to the south of the blind curve and many visitors were abruptly stopping, pulling over, getting out of their cars in the middle of the road, etc. Basically causing unanticipated commotion (maybe we need a deer migration study ??) in a 40 mph zone with poor sight lines even in summer. **36-3**

The traffic and circulation portion of the Draft EIR doesn’t consider any of this. There is clearly far more to consider than motorized vehicle traffic at this location. This is an intensive “park” area with far more going on than vehicle traffic. None of this has been evaluated. And the majority of the participants don’t have hundreds-of-pounds of metal surrounding them. This is clearly a health and safety issue.

What is even more disturbing is the Draft EIR’s window of site analysis. The Town Council’s approval for the EIR was on January 6, 2016. The *Traffic Impact Analysis* is dated July 29, 2016. So the study omitted the two busiest periods in Mammoth’s resort visitation — the Christmas/New Year's period and the peak of summer visitation; August. **36-4**

These omissions make the Draft EIR grossly inadequate.

The Draft EIR’s casual dismissal of the Old Mammoth Road “blind curve” is unacceptable (I’m being nice). To assume that “final landscape plans” approved by the Town’s engineer can mitigate this is an absurd dismissal by the producers of the Draft EIR. Can we assume the Town has the right to clear-cut pine trees, aspens and willows that are on National Forest land and in an environmentally sensitive riparian drainage?? And even if they did, would we want them to? **36-5** **36-6**

The Town hasn’t even proven they can maintain a respectable (and safe) site-line at the existing Mammoth Creek Park West operation. The photo below was shot at approx. 50% of Mammoth’s annual snowfall. The driveway to MCPW is already a problem in both winter and summer. Adding a high traffic facility with year-round coming and going requires mitigation measures. An **36-7**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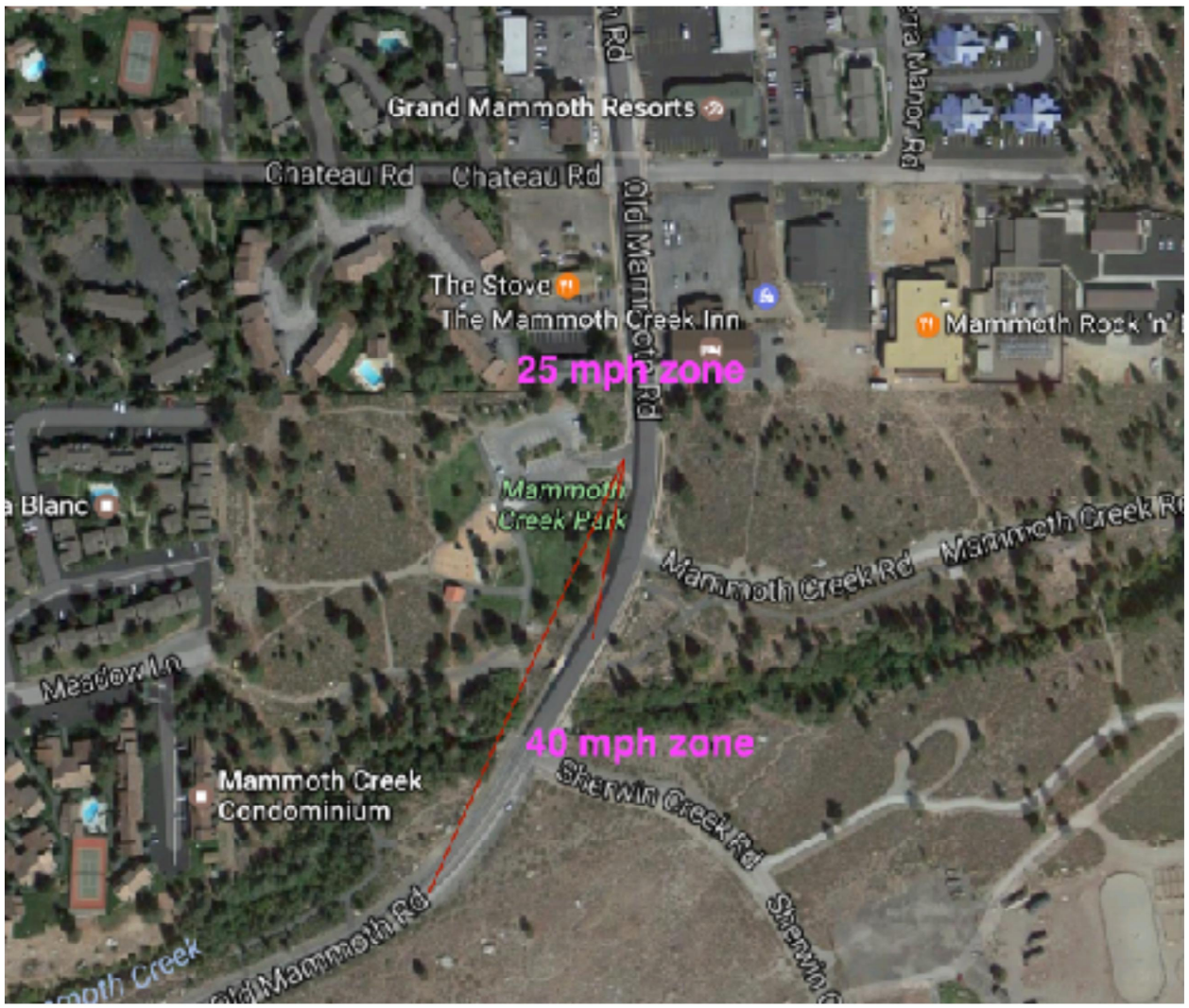
36-7


Grand Mammoth Resorts
Chateau Rd
Chateau Rd
Old Mammoth Rd
The Stove
The Mammoth Creek Inn
25 mph zone
Mammoth Creek Park
Mammoth Creek Rd
40 mph zone
Mammoth Creek Condominium
Sherwin Creek Rd

adequate assessment of the seasonal vehicle and pedestrian traffic and circulation will tell us what mitigations are necessary. It is far more involved than adjusting the landscape plan. **36-7**

The incomplete traffic studies also fail to evaluate the impact of increasing traffic on Sherwin Creek Road (did they evaluate the traffic at this intersection during the Motocross event??) The Town itself recently paved a parking lot in the area to provide more recreational opportunities. The Draft EIR simply takes a nonchalant position as to the traffic mitigations. A more further assessment and subsequent mitigations are necessary for basic public safety. Being on a contrived timeline does not excuse this. **36-8**

Site specific traffic / circulation studies from both winter and summer should be compulsory. To rely on a "memorandum" from Michael Baker International based on the Mobility Element is totally inadequate. While the Mobility Element is valuable and amazingly detailed, it failed to address this site and this "intersection" of traffic and the cumulative impacts of this site. **36-9**

There are very specific concerns that a simple (and potentially arbitrary) "memorandum" cannot address. The MCPW location is located on one of the major thoroughfares in Mammoth Lakes. The proposed MUF includes 125 parking spaces and year-round usage. All of that proposed traffic is through one driveway. That driveway is located on a significantly "blind curve" or bend in Old Mammoth Road that does not have clear sight-lines. This sight-lines change seasonally based on winter snow pack and the leafing of aspens and willows along the creek. That driveway ingress/egress to MCPW from Old Mammoth Road does not include dedicated left and right turn deceleration lanes. **36-10**

The blind curve section of Old Mammoth Road and the driveway to MCPW are located in a 40 mph zone where many north-bound autos are exceeding the speed limit. That is undeniable, I have commuted on this stretch of road literally thousands of times.

Further, there is a convolution of other activities and distractions right in this immediate vicinity; children's play areas, pedestrians of all sorts including many with leashed and unleashed dogs, in warmer months fisherman (including many local kids), cyclists using formal and informal paths, skateboarders, horses, special events, informal picnics and gatherings, photo takers, and on and on. There is a broad variety of seasonal activity already at the MCPW location. There are far greater considerations than basic motorized vehicle counts. **36-11**

The Sierra Meadows Equestrian Center has experienced increasing business in the past few years so traffic entering and exiting Sherwin Creek Road has increased. Many of these vehicles include large vehicles with horse trailers. Recreational users utilizing Sherwin Creek Road and beyond has increased so much that the Town felt the need to improve the parking lot. And again, all in a road that has poor sight-lines. And Mammoth Creek Road east of Old Mammoth Road is experiencing increased traffic. And this has been mentioned as "overflow parking" for MCPW. **36-12**

The traffic and circulation impacts are clearly significant. They need to be extensively evaluated. Public safety issues abound and are significant. A simple "memorandum" from the producer of the EIR is not adequate. And coming for one week (or one afternoon) to study the traffic and circulation tells a minute fraction of the story. The patterns are constantly changing based on the season and weather. The Mobility Element doesn't specifically address any of this. **36-13**

And I emphasize, there is an unfenced children's playground with significant spillover right in the middle of all this. And even worse, a site specific traffic study will likely show that the preponderance of drivers exiting MCPW will desire to turn left which only exacerbates the compromised sight-lines and speeding traffic. These are all significant cumulative impacts. How will all of this be mitigated with a simple memorandum? How will all of this be mitigated at all? The 1999 EIR made many traffic "assumptions." This project cannot rely on assumptions. Mitigations need to rely on accurate and comprehensive studies. It is truly an accident waiting to happen.

36-13

And why isn't a transit bus pull-out or transit hub been incorporated into this plan? Have the planners forgot that public transportation is one of our critical General Plan goals? We have bus lines driving right by MCPW. This is a glaring and significant omission. An active public transportation component must be incorporated into this plan. And on a 40 mph two-lane road with poor sight-lines a simple bus stop will be dangerous. Old Mammoth Road has many transit bus pull-outs. This would be at a minimum. And with the proposed winter usage of this proposal, a covered or enclosed transit stop would be preferable.

36-14

Noise

First, the Noise Data study is almost laughable. Taking noise samples while there is significant snowpack *and* fresh snow on the ground is a sure way NOT to collect accurate data. Anyone who has lived with snow for any length of time knows that snow is like an acoustic sponge. And this data was also collected less than week after the Town Council approved the EIR process. Another example of everybody being in a hurry, but with little care of being accurate. You *do* have to love the Site #3 **Source of Peak Noise:** Water streaming through Mammoth Creek. After four+ years of drought and in near freezing temperatures the trickle of Mammoth Creek is "Peak Noise."

36-15

The Noise Element of the EIR should really be re-titled as "Nuisance Element." The noise mitigations directly from the facility appear to be adequately mitigated. They had to be, they were the major concern from day one. But the placement of the new parking lot has great potential for uncontrollable noise and nuisance. This is just poor planning motivated by cost cutting and expediency. But what about doing the right thing?

36-16

Whatever happened to the planning theory of marrying like-to-like? This plan has married a parking lot to residences and their adjacent recreation area. The new parking area and all of its noise and nuisance should be more closely aligned with the existing parking area and the road. This only makes sense. This placement could also help mitigate the "blind curve" issue. This plan is simply the least expensive place to "stick" the parking. If this was a private development the planners would never find this acceptable. This is another serious compromise displaying the constraints of the site and the budget.

36-17

And since we're experiencing a non-drought winter; Is there a coherent snow removal plan with this site plan? A different parking lot placement makes sense to allow snow to be pushed (ramped) onto the vacant Forest Service property.

36-18

With the lack of adequate law and code enforcement in Mammoth Lakes, this current parking lot placement will inevitably become a favorite for late night partiers, impromptu tailgate parties and overnight parkers/squatters. This happens where parking is somewhat hidden and there are

36-19

public bathrooms. This parking needs to be more out in the open rather than hidden away. This would minimize the potential for public nuisances. 36-19

So far the concerns over noise have been focused on the proposed ice rink itself and the mechanical equipment associated with it. This is for good reason. This has already been the subject of much input. Clearly the dasher boards needs to be of the noise dampening variety. The ice rink related mechanical equipment needs serious mitigation including adequate enclosures (possibly underground) and potential berming to the residential areas. And hours of operation need to be within reason. 36-20

But the added parking lot has the potential to be an even bigger noise nuisance to the surrounding properties. Parking lots create all sorts of ambient and uncontrollable noise. Especially when they are poorly or haphazardly designed. So far I have seen no significant proposed mitigation measures. The planners have placed the new parking lot right on a residential property line. This is where it is being dumped simply because the project appears to be (is) underfunded and this is the least expensive route. This is truly cause for distrust. In the past the Town has respected the development of non-residential uses next to longstanding residential property. A buffer of some sort has always been required. (Example: The Church of Latter Day Saints project next to condo projects.) And does it make sense to design the parking lot to resemble a drag strip? That alone is a public safety concern. More inadequate planning. 36-21

So how should the EIR require the project to mitigate the significant noise created by the new parking area? Berming and trees can help with the visual impacts but really do little for noise, especially for second story residential units. This part of the plan needs significant “alternative” analysis. In reality the parking should be aligned with Old Mammoth Road like the 1999 plan. This is another serious liability of the plan. The Town needs to do this right or not do it at all. 36-22

As planned, this new parking lot will also be prime for abuse and mayhem. The transient nature of the community invites this. “No Overnight Parking” signs will be ignored. This will become a perfect place for the classic Mammoth motorhome squatters (and their noisy generators). And in reality, under the current Town budget, the parking lot will not be policed. The EIR truly needs to assess whether new funding sources for additional police department staff should be required based on this project and the proposed location. Or does the facility need a private security component? Without proper policing the parking lot (as planned) and immediate area is bound to become a public nuisance to the surrounding residential areas. 36-23

Is there a draft operational plan for this facility? Or do they just plan to “wing it?” Doesn’t that need to be incorporated into and considered in the EIR? If the Town can justify that the owners of nightly rentals in Mammoth Lakes need stricter regulation then this facility needs a detailed operational plan. And that plan and the resulting impacts needs to be evaluated in the EIR. The potential negative impacts to the surrounding residential properties is significant. 36-24

Visual / Environmental

Many of the potential visual impacts have been previously scoped. The 3-D modeling is very helpful but not very specific. The building and site aesthetics need to meet or exceed what the Town would require of any private developer. Design review is imperative. Again, this is one of the jewel locations within the town limits of Mammoth Lakes. The lack of funding should not be 36-25

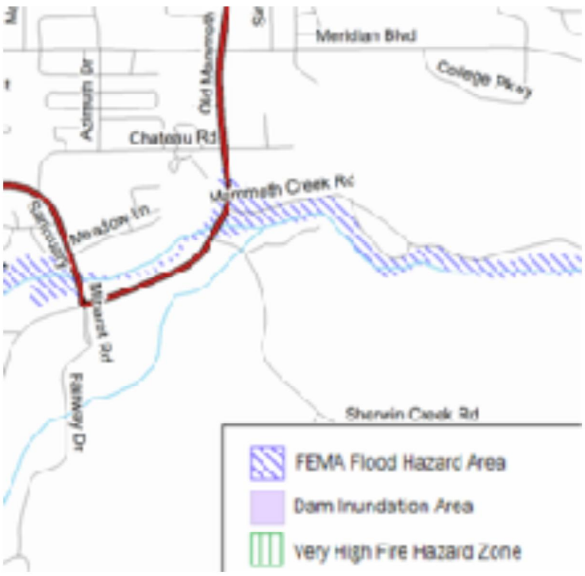
an excuse to allow a substandard project. The design review process must have the upmost scrutiny. 36-25

Because of the proximity to the residential areas, the lighting needs critical attention by designers. And the roof materials are of significant concern. The facility roof will be large. The solar impact and potential glare is significant. That needs to be mitigated. Which brings another issue…. 36-26

Why isn't this project considering the use of solar power/panels? Isn't there grant money or subsidies or low interest loans for this type of solar installation? It would appear that once again the contrived urgency and lack of adequate funding has the Town on a hellbent path to ignore the obvious. The EIR needs to consider and evaluate the use of solar power derived onsite to power this facility. This is a serious environmental concern. The long-term savings to the Town could be significant. 36-27

Water Quality

The fact that the major mitigation measures, the oil/water separator and the drywell, are basically located adjacent to a FEMA Flood Hazard Area is a bit concerning. The recent flooding in the area was serious. I am not an engineer but the potential for contaminates to backwash and end up in the Mammoth Creek drainage is apparent. These mitigation measures need to be reconsidered and bolstered. 36-28



Further, the California Department of Fish and Game has extensive comments in the Draft EIR pertaining to the mitigation of significant or potentially significant impacts to biological resources. Mammoth Creek and its fish habitat is certainly "rare and unique to the region." It precisely why many visitors come here. It is not something we want spoiled. The Department's comments appear to be completely ignored in the Draft EIR. Why is that? Do the producers of the Draft EIR believe this is just "boilerplate" commentary from a ineffectual State bureaucracy? Comments with no substance? Protecting the Mammoth Creek environment, fishery and natural 36-29

habitat should be a paramount goal of the community. The producers of the EIR certainly aren't taking it serious. 36-29

Look at the Mammoth Creek corridor. This is the closest intrusion to the sole tributary of Mammoth Creek by a commercial-type facility. The facility is proposed to use a variety of chemicals and potential toxic elements that may find their way into the creek. And they are likely to be marginally managed and maintained. What detailed mitigations will be in place and who will monitor (short term low-wage Town Parks & Rec. employees?). While we are selling recreation in this community, maintaining the pristine beauty of the surrounding natural environment is even more important. Mammoth Creek is one of our top natural resources. More people likely visit the creek than will ever use this proposed facility. 36-30

Parking lot runoff is a real concern in proximity to the creek. The new Canyon Blvd. storm drain system has the latest engineering but the storms of the past winter have proven they need regular human attention to prevent overflow and havoc. There are a multitude of downstream resources including prime fish habitat and a fish hatchery that need the upmost protection. The community simply doesn't need Mammoth Creek to become a polluted mess. A polluted or compromised creek would be the ultimate black-eye. What mitigation measures will be in place to ensure excessive runoff or some other disaster is avoided? Again, where is the draft operational plan? This needs to be part of the EIR evaluations. This is profoundly significant. And again, the urgency and underfunded nature of the project makes this an especially disconcerting "trust" issue. 36-31

Archeological and Cultural

The Town is confident that it can maintain this facility at this location in a safe and professional manner. But I question that. There is a substantial piece of art at the entry to MCPW that the Town has poorly managed and maintained over the past 20 years. This piece was originally designed, approved and implemented with beautiful stained glass panels inside the replica Devil's Postpile pillars. It was envisioned as a showcase entry statement to the Park. It was approved by the Town. The Town has been a poor steward of this art piece. They have let it be vandalized and deteriorate. They have done nothing to preserve it in its original condition. It was designed to be a cultural draw to this location and set the tone for what the park stood for. I doubt if few people even realize it is there. If this is a precursor to how the Town will manage a larger facility, it is a frightening prospect. It makes me think the project should be bonded (like a private developer) so if the Town cannot maintain it there are the resources to restore MCPW to it's present condition. 36-32

Alternative Sites

The alternative sites consideration has changed since the beginning of this process. The new cost estimates for the project continue to grow. The community is questioning whether this is the "highest and best use" of the monies. All things considering, it isn't. Too bad the EIR can't consider "alternative expenditures" or opportunity costs. That being said, the existing ice rink location needs serious consideration. Some simple financial analysis could show that this is the best location for the next 10 to 15 years. If an ice rink remains viable then a new and grander project can be envisioned, perhaps with a public/private partnership. That was the Town's original vision some 27 years ago. 36-33

The new potential Shady Rest location is being pushed by the planners at Hart Howerton. This facility is envisioned as the epicenter for the Main St. Revitalization. The central location and less environmentally sensitive location makes sense. It certainly needs to be considered. **36-34**

In compliance with CEQA, there are numerous sites that need to assessed as alternate sites. Obviously the existing site of the ice rink adjacent to the library. The Community Center site on Forest Trail. The Bell Parcel. I'm sure there are others. Quite frankly, the best part of the MCPW is that the Town owns it and it has no debt on it. The site is not the best location for this project. The site is undersized for this large venue and ambitions of staff. And MCPW likely has higher and better uses. **36-35**

The existing ice rink site adjacent to the library is a good one because of the proximity to the schools. The MUF is really just an extension of the schools as it is proposed. Nobody seems to want to express that. The long term lease negotiation with the school district has been poorly executed. A professional mediator should have been (or should be) utilized to bring common sense to the transaction and get past the egos of the respective bodies. The Mammoth property owners are essentially paying for that otherwise vacant land though property tax bonds. Ironically (and sadly) the majority of Mammoth property owners will never utilize a day of the schools district's resources but fund it substantially. It is time for the school district to "do the right thing" and be cooperative and find some mutually beneficial ground. The school board wants us to support their continued parcel tax in June. They lack public "trust" also. A professionally mediated negotiation should be mandatory under "Alternative Sites" component of the EIR. **36-36**

The old Community Center site on Forest Trail could be an optimal site to align this development into a public/private partnership. Ironically, this is very close to the proposed ice rink/events center in the 1993-94 North Village Specific Plan. And ironically too, the substructure of that facility was designed to be the primary public parking lot for the Village. The EIR needs to assess that since the Town is pursuing a public parking lot in the Village. It is not too late to make this happen. But the impatience of the crowd stands in the way. **36-37**

Ultimately, The Town needs to be held to the same development standards they have demanded of private developers in the past 25 years. That includes acceptable aesthetics, mitigations and operational plans. Anything else would be clear hypocrisy. And liability. **36-38**

Thank you for your time and consideration.

I have a long history with EIRs in Mammoth Lakes both as a public official and from the private development side. When I first received these voluminous documents, I was told by the Planning Director at the time, "just read the summary." I found that wasn't adequate. The devil is in the details. And the omissions. **36-39**

The production of EIRs has changed over the years. Today they are more likely to be produced by "mills" like Michael Baker International. They have become impersonal cut-and-paste jobs. They hope nobody gets past the Summary.

Modern EIRs have become reams of near worthless data points collected by hit-and-run specialists mixed with the repeated "no significant impact" (to the people producing the EIR??).

There is very little real ground level, common sense look at what is really going on. All to justify dispensing "tickets to development "...they have become just another government driven farce. Companies like Micael Baker can produce these documents quickly (which is what the Town wants). But do they produce them with any real sensitivity to the project and project site? The process has become all about speed and not the quality or depth of the study.

This draft EIR has serious mitigation measures that place a high burden on the competence and diligence of Town staff. The Town staff was gutted during the recent bankruptcy era and the Town clearly remains understaffed. The Town fails to enforce simple ordinances that are part of the Municipal Code; ordinances like signage, code compliance, and transient occupancies in residential neighborhoods. This lack of performance creates serious concern for their ability to execute and maintain an expensive facility in an environmentally sensitive location. And one that has the potential to negatively impact hundreds of neighboring residences. **36-39**

A condition of this project should be strengthening the Town staff by at least one law enforcement officer and one experienced personnel to oversee the projects like this to insure compliance of mitigations. Without this the community of Mammoth Lakes is exposed to the same potential nightmares that the CEQA process was designed to prevent.

Sincerely,

Paul Oster
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Mammoth Lakes, CA 93546

760 934-3026
pauloster@earthlink.net

36. RESPONSES TO COMMENTS FROM PAUL OSTER, FEBRUARY 9, 2017.

36-1 As discussed in Response 15-2, the proposed project would not result in any significant and unavoidable impacts and all potential impacts were reduced to a less than significant level. A Statement of Overriding Considerations is not required by the Town for the proposed project.

36-2 The Draft EIR considered the project's proximity to Mammoth Creek; refer to Response 5-2. The Town of Mammoth Lakes would continue to enforce the existing traffic laws, including those pertaining to vehicles yielding to pedestrians and bicyclists sharing the roads.

CEQA requires the Draft EIR to analyze if the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Refer to Response 8-4 regarding potential impacts in this regard.

36-3 Refer to Response 6-27 regarding the existing driveway location along Old Mammoth Road. The existing conditions of the Mammoth Creek Park West site are documented in the project description and throughout the analysis presented in the Draft EIR. Further, as documented on Draft EIR page 8-6, the project involves the construction of a community multi-use facility and no significant hazards to the public or environment are anticipated during the development of the project or the occupancy of the improvements due to requirements to comply with Building, Fire and other Uniform Code statutes related to the protection of the public's health and safety. The project is not anticipated to result in accidental releases of hazardous materials. Project operations would not involve the routine transport, use, or disposal of substantial quantities of hazardous materials. During operations, it is anticipated that strict standards implemented by the Mono County Health Department would be implemented, if necessary. No impacts would occur in this regard.

36-4 Refer to Response 6-23. Further, per the Town of Mammoth Lakes General Plan (page 37), the peak population is described for approximately the seventh busiest winter day, which is the Town's typical winter Saturday. Thus, for the summer months, these conditions would not be greater than those experienced in the winter months.

36-5 Refer to Response 6-27.

36-6 The proposed project is situated on Town-owned property and no riparian vegetation is present on-site; refer to Response 6-14.

36-7 Refer to Response 6-27.

36-8 Refer to Response 6-21 regarding the study area considered for the purposes of traffic.

36-9 This section is based upon the *Mammoth Community and Multi-Use Facilities Focused Traffic Impact Analysis* (Traffic Impact Analysis), dated July 29, 2016, prepared by LSC

Transportation Consultants, Inc.; refer to Appendix 11.4, *Traffic Impact Analysis*. Refer to Response 6-22 regarding the traffic data used to support the Draft EIR. The project and cumulative affects were considered in both the Draft EIR's traffic analysis and the Traffic Impact Analysis; refer to Draft EIR Section 5.5, *Traffic and Circulation*.

36-10 Refer to Response 6-27. Refer to Response 26-10 regarding requirements for dedicated turn pockets.

36-11 Refer to Response 36-2 regarding safety hazards with people sharing the roads.

36-12 All future roadway improvements are required to comply with the Town's Municipal Code, including those standards and regulations pertaining to safety measures.

36-13 Refer to Response 15-2. As concluded on Draft EIR page 5.5-25, the project's 210 net daily trips would result in no significant unavoidable impacts related to traffic/circulation with implementation of the recommended mitigation measures. Refer to Responses 6-27 and 36-2.

36-14 As discussed on Draft EIR page 8-13, the proposed project would result in beneficial impacts related to travelers within the project vicinity, since the project proposes multi-use community and recreational facilities situated along multi-use pathways and in close proximity to major transit stops (approximately 450 feet north along Old Mammoth Road). Refer to Response 8-4.

36-15 Refer to Responses 6-34 and 6-80 regarding noise measurements taken for the purposes of the Draft EIR noise analysis. As indicated above, noise measurements were taken during winter months because winter is anticipated to be the season with the greatest project activity and therefore the greatest potential noise impacts. The analysis conservatively analyzes the worst case scenario. The comment also references the source of peak noise on the noise measurement field sheets. This is to provide brief note of any identifiable noise that occurred during the measurement. In this case, water streaming through Mammoth Creek was audible during the noise measurement and noted on the field sheet. This is indicative of the relatively low ambient noise levels in the area and depicted in Draft EIR Table 5.8-3, *Noise Measurements*.

36-16 Refer to Response 6-32 regarding parking lot noise considerations made.

36-17 The proposed parking lot would be of similar location to the existing parking lot and the existing driveway access would remain. Refer to Response 6-27 pertaining to the driveway location.

36-18 The project would be subject to the Town's existing snow removal requirements.

36-19 Refer to Response 6-32 regarding parking lot noise considerations made. Further, the proposed parking lot would be visible from Old Mammoth Road, the public using the facility, and the adjoining neighbors.

36-20 Refer to Response 6-32.

36-21 Refer to Response 6-32 regarding parking lot noise considerations made.

36-22 Refer to Response 6-32 regarding parking lot noise considerations made. No significant and unavoidable impacts have been identified with regard to the proposed parking lot; thus, alternative analysis is not required.

36-23 Refer to Response 26-10. As discussed on Draft EIR page 8-11, the increase in visitors resulting from implementation of the project could result in a greater volume of emergency calls for police services and could potentially impact police protection and law enforcement services and facilities. However, the increase would be nominal as the project essentially is relocating the existing community facility and ice rink onto the project site.

36-24 Refer to Response 17-3.

36-25 Refer to Response 6-60.

36-26 Refer to Response 11-3 regarding lighting requirements. Proposed roof materials would be subject to the Town's design review process. As discussed on Draft EIR page 5.2-16, recommended Mitigation Measure AES-4 requires that a non-reflective finish to be applied to building materials, including the roof structure. Draft EIR page 5.2-16 also states that the project may include photovoltaic and/or solar panels along the south-facing pitch of the roof that could cause glare. However, glare from photovoltaic panels would be minimal, as these systems absorb light rather than reflect it. Therefore, potential increased glare impacts resulting from the photovoltaic panels would not result in significant glare impacts onto surrounding sensitive uses.

36-27 The proposed project does consider potential installation of photovoltaic panels.

36-28 Refer to Responses 6-41, 6-42, and 6-102.

36-29 Refer to Response 5-2.

36-30 Refer to Responses 6-41 and 6-42 regarding runoff and water quality impacts to Mammoth Creek. Refer to Response 28-4 regarding the monitoring of water quality in Mammoth Creek.

36-31 Refer to Responses 6-41 and 6-42.

36-32 This public art feature was donated by a local resident and included stained glass features. However, the glass was broken shortly after installation. The Town of Mammoth Lakes decided that restoring the glass was not reasonable for safety implications (having glass features in proximity to a children's playground and rock garden). Thus, this feature was never restored to its previous condition.

It is further acknowledged that this architectural feature is not considered a significant cultural resource, as it does not meet the eligibility criteria outlined in 36 Code of Federal Regulations Part 800 (defined on Draft EIR page 5.4-11). For the National Register of Historic Places (NRHP), this feature does not meet the following criteria:

- *Criterion A:* It is associated with events that have made a significant contribution to the broad patterns of our history; or
- *Criterion B:* It is associated with the lives of persons significant in our past; or
- *Criterion C:* It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- *Criterion D:* It has yielded, or may be likely to yield, information important in prehistory or history.

For the California Register of Historic Places (CRHR), a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the criteria modeled on the NRHP criteria, which are identified above.

Thus, as this architectural resource has not made a significant contribution to the broad patterns of our history; is not associated with the lives of persons significant in our past; does not embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and does not yield, or may be likely to yield, information important in prehistory or history, this feature is not considered a cultural resource.

36-33 Refer to Response 17-4.

36-34 Refer to Response 6-66.

36-35 Refer to Responses 6-66 and 35-2.

36-36 As discussed in Response 6-65, the alternative considered included extending the existing lease with the school district.

36-37 Refer to Response 35-2.

36-38 The Town of Mammoth Lakes would be required to comply with the Town's development regulations for the site.

36-39 The Town of Mammoth Lakes would be required to comply with the Town's development regulations for the site, including compliance with the project's adopted Mitigation Monitoring and Reporting Program.

February 10, 2017

Sandra Moberly, Manager
Community & Economic Development
Town of Mammoth Lakes
PO Box 1609
Mammoth Lakes, CA 93546
smoberly@townofmammothlakes.ca.gov

Re: Mammoth Creek Park West New Community MUF
Draft Environmental Impact Report - SCH #2016062009

Dear Ms. Moberly:

In reviewing the Draft EIR there are no traffic studies or information regarding the traffic and parking impact on Meadow Lane. As one of the only two ingress/egress points for the proposed MUF it is unreasonable to assume that there will be no impact. It is impossible for the public to determine the significance of the impact if there have been no study or information regarding the potential impact. The absence of such study or information is a violation of CEQA. A revised Draft EIR must include this study and information to be considered complete. **37-1**

Respectfully,

Tom Bell

37. RESPONSES TO COMMENTS FROM TOM BELL, FEBRUARY 10, 2017.

37-1 Refer to Response 17-2.

Hugh & Katie Coffin
1217 Starlit Drive
Laguna Beach, CA 92651

February 12, 2017

Ms. Sandra Moberly, Manager
Community & Economic Development
Town of Mammoth Lakes
PO Box 1609
Mammoth Lakes, CA 9346

SENT VIA EMAIL ONLY
smoberly@townofmammothlakes.ca.gov

Re: Mammoth Creek Park West New Community Multi-Use Facilities
Draft Environmental Impact Report - SCH #2016062009

Dear Ms. Moberly:

We are writing this letter concerning our review of and comments on the proposed Mammoth Creek Park West New Community Multi-Use Facilities Project (the "Project") and the Draft Environmental Impact Report - SCH #2016062009 (the "DEIR") prepared for the proposed Project.

As we set out below, the DEIR is legally and factually inadequate in many respects and must be revised and republished as a new Draft Environmental Impact Report to address the inadequacies of the DEIR. However, we urge another action. The Town should reject both the DEIR and the Project at this time. The Project, as it has evolved, is too expensive, a Project out of place and not necessary for the Town and one for which no more money should be spent. The Project should be abandoned before more money is spent and damage to the environment is inflicted.

38-1

Our concerns and the inadequacies DEIR we see include, but are not limited to, an incomplete project description, a failure to properly address the noise impacts of the Project, inadequate analysis of the planning for the Project resulting in an inappropriate land use and a massing of buildings and structures in a residential environment, inadequate study of intrusive light and glare, failure to consider the combined effect of noise and light together in the hours of quiet and darkness, a failure to properly address alternate sites for the proposed Project and a complete failure to address or consider the Project's impact on the surrounding residential communities and the specific significant negative impacts traffic and parking will have on the existing condominium developments fronting on Meadow Lane, including Sunrise at Mammoth, La Vista Blanc and Mammoth Creek and also the effects on Chateau Blanc and those developments fronting on Chateau Road.

We have been owners of a unit in Sunrise at Mammoth since 1996. We visited many developments in Mammoth prior to making our decision to purchase where we did. We consciously decided on Sunrise because of the character of that development and the character of

the residential area in which it is located. The meadow area where Sunrise is located is quiet, unimpacted by much of the hustle and bustle of other areas in Mammoth, especially in the areas much closer to Canyon Lodge, the area that is now the Village and other areas close to commercial uses. Of course, the close proximity of Mammoth Creek Park West was also a strong reason for our decision to purchase in Sunrise.

Should the Project proceed, all of those reasons for selecting our condominium location will be forever changed and altered by an intrusive and out of place Community Center and Ice Rink and the impacts that will flow therefrom. The quiet nature of the residential community surrounding the Project, if it proceeds, will resemble a commercial/high human impact area and no longer the quiet and peaceful place it has been for 40 years. There are alternative locations for the Project that were not explored or were rejected without good reason or cause that must be re-considered. **38-1**

If a decision to proceed is made the DEIR must be revised, republished and circulated before any decision can properly and lawfully be made on the proposed Project. Of course, the better option at this time is that the DEIR should be rejected and the Project abandoned.

We address our concerns on the DEIR below.

The Project Description is Inadequate

The Project Description in Section 3.3 of the DEIR is incomplete, inadequate and improper. **38-2**

First, the Community Center is not specifically described as to its size, design and building massing in the existing Mammoth Creek Park West. More importantly its scope of uses, combined with the Ice Rink and the remainder of the Park are not clearly delineated.

The Project's impact on the surrounding residential communities with proposed hours of operation from 6:00 am to 10:00 pm is not properly addressed - from a noise, light and glare and human impact point of view. Further, the suggested "occasional" use from 10:00 pm to 12:00 am is not made clear at all. What would the uses be during those hours, what is "occasional" and what controls would be put in place? Uses that extend to 10:00 pm on a daily basis are not properly addressed and the impacts on the residential uses surrounding the Project are not adequately analyzed. It seems patently clear that these late hours are completely unacceptable in a residential area. Simply stated the hours of operation proposed are both "too early" and "too late" for a residential area and this is not addressed. **38-3**

Further, the Ice Rink has a similar description of the hours of operation and the impacts on the residential areas are not addressed. To introduce this type of commercial use and its accompanying hours of operation in a residential area will forever change the residential community itself and this change is not mentioned nor addressed in the DEIR.

The scope of proposed uses is also not defined nor specified. For instance, uses are broad enough to include "fairs and festivals" which are neither defined nor limited in their scope. Do **38-4**

these include rock festivals, will this be a site for large assemblies of people from 6:00 am to 12:00 am with the accompanying nose, lighting and other impacts on the surrounding residential areas? How many people are anticipated to attend these "fairs and festivals" or other events that are listed in the DEIR, how many event and especially "fairs and festivals" will occur per year? No proper or strong mitigation measures have been set out nor can they be discussed or imposed unless and until the scope of the intended uses is properly defined. Further, there is no comprehensive discussion of effect of the combined usage of the proposed Community Center, the Ice Rink, and the existing park areas for a large event. There is no discussion of the amenities needed for such events and the certain spill-over of persons attending the events and participating in the potentially unlimited "uses" into the Forest Service property along the creek. Again this raises the unaddressed question of how many people would or could attend such events or participate in the uses? Will this location turn out to be the substitute for Sam's Woodlot along Minaret and be a huge event center for music and rock festivals, arts and crafts and other festivals? This is neither addressed nor discussed. **38-4**

Leaving the "use" details vague and general is not adequate or proper and must be refined and the uses actually set forth so the public and the decision makers understand what the Project actually is and then, and only then, can they evaluate the impacts of the Project. **38-5**

The Noise Analysis is Defective and Incomplete

The noise discussion found at Section 5.8 of the DEIR to too vague and general and does not provide a complete analysis. This is especially true since the DEIR does not study nor differentiate the effects of the noise from the Project on the adjacent residents for the "occasional" ["occasional" is not defined and there is no indication of what "occasional" means in the context of the ill-defined uses of the Project which is a significant problem in and of itself] uses between 6:00 am and 9:00 am and then from 10:00 pm to 12:00 am. Those blocks of time (both in the early morning and the evening into night) are typically very quiet and the ambient noise levels are typically quite low. The introduction of noise from loudspeakers, the noise from crowds of people, the noise of the activity itself (whatever it may be), arriving cars, slamming car doors, set up of whatever the activity may be and the take down noise and departing cars and the accompanying conversation of the audience and participants are not quantified let alone defined. The intrusive impacts of these noise events during those times of quiet will be jolting to the residents. These noise events will greatly interfere with and preclude sleep and normal early morning activities starting at 6:00 am. Further, the noise events in the late evening into the late night will prevent sleep and quiet enjoyment of the residential properties surrounding the Project site. These new noise events, where there are none at present from the site, will be particularly noticeable when compared to the current ambient noise levels during these hours. This effect is not discussed or analyzed and the DEIR is fatally defective in that regard. **38-6**

Again, in the discussion of noise generation the uses of the Project are critical and they are not defined. Will the Project become an event center for concerts, arts and crafts shows with accompanying music and large crowds and any number of other uses? Without a clear definition of the uses and enforceable mitigation measures put in place to prevent and eliminate loud events

and noise generation, the noise analysis is meaningless. No decision can be made concerning the noise impacts without more clarity of the potential events and uses that will occur if the Project proceeds. The DEIR is deficient in this regard. **38-6**

It should also be noted that proposed mitigation NOI - 2 does not consider the potential impact on the humans who reside nearby from the noise generation in the 18 hour per day time span for activity allowed at the Project in the park - between 6:00 am and 12:00 am. This is unacceptable in a residential area and failure to discuss this effect is a clear defect of the noise analysis of the DEIR. **38-7**

The Aesthetics/Light and Glare Analysis is Deficient

Initially the discussion in Section 5.2 of the DEIR is deficient without the proper architectural designs and renderings of the proposed buildings and structures to provide the reader with an understanding of the a design of the Community Center buildings and the Ice Rink, the proposed cover for the Rink and the mechanical equipment necessary to support both the Community Center and the Ice Rink. Without seeing the design it is impossible to even guess whether the proposed buildings will in any manner be compatible with the park into which it will be forcefully imposed and how they will affect the surrounding the residential uses and also the adjacent Forest Service property and the creek. **38-8**

Further, the massing of the proposed structures, their relationship to each other and the surrounding existing uses cannot be evaluated or reviewed without an architectural design in place. The public and the decision makers are left in the dark concerning the aesthetics of the proposed Project. This is unacceptable in a draft environmental impact report. This section of the DEIR needs to be totally revised with respect to the design and architectural aspects and only then can this aspect be evaluated. To leave something as critical as the design of the proposed Project to some future time after approval simply cannot stand. This is an invalid step in the process. **38-9**

Section 5.2 of the DEIR is also defective with respect to the analysis of light and glare from the Project - especially on the adjoining existing residential uses. Specifically, the DEIR does not consider the effect of lights from the Project on the residential uses between the 6:00 am start time for proposed uses until sun rise and also the effect of Project lights on those same residential uses from sun down to 12:00 am. As with noise, the intrusion of lighting before sunrise and after sunset until 12:00 am will be especially intrusive since the area is quite dark at present and the contrast with the lights will be very great. This is not discussed at all. **38-10**

The DEIR fails to Consider the Combined Effect of Early and Late Noise and Early and Late Light

Another failure of the DEIR is that it does not address or consider the combined effect of the concurrent introduction of manmade noises from the Project and the introduction of light from the Project at the same time on a daily basis. This combined effect of noise and light is not mentioned and the cumulative effect of combined noise and light on the adjacent residents is not **38-11**

considered. The noise events and lighting are each referenced separately. The combined noise and light together will certainly significantly impact sleeping residents, possibly and a daily basis, from 6:00 am onward. Likewise noise and light from the project from darkness to 12:00 am will prevent sleep and quiet time and preclude normal activity of the nearby residents. With the end time and start time - residents will only have quiet and darkness between 12:00 am and 6:00 am - a period of only 6 hours per day. This is unacceptable in a residential area and it is not mentioned in the DEIR. This omission must be corrected and a revised DEIR published so the cumulative effect of these two invasive matters can be understood. Common sense tells the reader that noise and light will, in combination, be a significant impact on humans and it has to be addressed. **38-11**

The DEIR in Inadequate in its Consideration of Alternate Sites for the Project

The DEIR purportedly considers 5 alternate sites and rejects those.

With respect to the Bell Shaped Parcel discussion it fails to take into consideration the recently accepted biological report on the parcel. That report demonstrates the minimal watercourse and riparian area of that parcel. This information was not considered in the DEIR. If this information were part of the analysis it would clearly make the Bell Shaped Parcel environmentally superior to the proposed site. The Bell Shaped Parcel is larger than the proposed site, can more easily accommodate the proposed Project and provide adequate parking which the current site clearly cannot. The Project in the Bell Shaped Parcel will have a much lesser impact on environmentally sensitive areas and the watercourse and riparian areas than the current site. Further, the Bell Shaped Parcel is not adjacent to existing residential uses and will have a much lesser impact on humans. This parcel is clearly superior in all respects and should be further reviewed and it will be determined it is a significantly better site in all respects than the present site. **38-12**

In addition to improperly downgrading the suitability of the Bell Shaped Parcel, the DEIR fails to consider a logical additional site - which can be called Mammoth Creek Park East. That parcel is owned by the Forest Service we understand. However, the Town could obtain rights to use that parcel if it chose. That parcel is far superior by almost all metrics. It is larger and can accommodate the proposed use and it can provide adequate parking. It is large enough to accommodate the massing of the Community Center and the Ice Rink without overburdening the site as the proposed site will be overburdened. That site also can be developed without impacting the existing park which is a proper park and heavily used year round. The proposed Project will adversely impact the existing park use and change its character entirely. This would not happen with respect to relocating the proposed Project to Mammoth Creek Park East. That site is already adjacent to a recreational use - the bowling alley and it is also adjacent to an industrial site - the Edison facility. There are no adjacent residential uses that would be impacted as is the case with the proposed site. Further, there is a graded and improved gravel road that separates Mammoth Creek Park East from Mammoth Creek which will significantly reduce the impacts on the creek from the proposed Project. This site must be evaluated and studied in a revised draft environmental impact report so it truly can be compared to the proposed site. It appears to be a far better choice from an environmental perspective in every regard and it must be properly evaluated. **38-13**

The DEIR is Fatally Defective in that it fails to discuss or Address how the Project will Change the Character of the Surrounding Area

The area into which the proposed Project is proposed to be placed - bounded by Old Mammoth Road, Minaret Road and Chateau Road is a very quiet residential area and has been so for 40 years. It is not a high impact residential area as those near the Village, Canyon Lodge and other areas of the Town where commercial activities are the norm. In those areas traffic and parking are major issues and this is not the case at all in the area which will be impacted if the Project goes ahead. The character of the area adjacent to the proposed Project will be permanently changed from its current quiet residential nature to a commercial area heavily impacted by human activity. This is not addressed in the DEIR. The existing quiet and dark at night residential area will be transformed to an area subject to as much as 18 hours per day of activity, noise, light, glare and general interference with normal residential activity. This change in character is significant and massive and it is not addressed in the DEIR - again showing the fatal deficiencies in that report. The DEIR must be revised and recirculated to investigate and study this significant effect on the surrounding residential environment caused solely and only by the Project as proposed. **38-14**

The DEIR is Defective in that it does not Discuss the Effects of Traffic and Parking on Meadow Lane and the adjoining Condominium Developments

It must be again pointed out that the proposed Project is generally surrounded by residential developments Chateau Blanc on the north, La Vista Blanc on the west, Sunrise at Mammoth further west and Mammoth Creek on the south. La Vista Blanc, Sunrise at Mammoth, Mammoth Creek and also Snow Flower all front on and have access from Meadow lane. Currently there are no parking or traffic issues or problems with parking on Meadow Lane. There are no parking problems within the condominium projects. There appears to be no parking permit issues with parking in any of the developments. That will all change and for the worse if the Project is approved and developed in the manner proposed. **38-15**

The DEIR discussed traffic in Section 5.5. In fact in Section 5.5.4 the DEIR considers and discusses construction traffic on Meadow Lane. However, nowhere in the DEIR does it consider traffic on Meadow Lane when the proposed Project is built and the uses contemplated are in operation. Further, nowhere in the DEIR is the parking on Meadow Lane and the parking in the condominium projects fronting on Meadow Lane mentioned or discussed. This, too, is a fatal flaw in the DEIR. **38-16**

It is clear from the DEIR that there is inadequate parking provided in the park for the activities that are mentioned as possible uses. Further, if concerts, "fairs and festivals" (as discussed in Section 3.3 of the DEIR) are to take place in the park, it must be assumed that people will have to find alternate parking once the provided parking lot is full and the first logical place to park will be Meadow Lane. Meadow Lane is logical since there is an existing asphalt foot trail **38-17**

leading from Meadow Lane into the park. Meadow Lane would be the first and logical place to park to gain easy access to the park. For the operational stage of the Project this parking issue is not discussed. Further, once Meadow Lane parking is full (and in winter when there is no street parking allowed or possible due to snow) then parkers will immediately turn into the parking lots for four projects that front on Meadow Lane. For these projects to retain parking for the residents they will have to impose parking controls to provide parking only for the residents and guests. None of the four do that now. Once the Project is approved and in operation, as proposed, huge costs and operational difficulties will be forcefully imposed on these four developments. Likewise, these same impacts will be felt on the developments that front on Chateau Road. **38-17**

The proposed Project will not only unreasonably and unnecessarily impose financial costs (which will not be reimbursed by the Town or any operator of a "fair of festival" or any other event or use in the park) it will impose significant human cost on these developments. Management and also residents will become unwilling parking control officers. This will, in turn, make the jobs of the development managers more difficult, time consuming and dangerous. For example, alcohol will be provided at events, perhaps hockey, and it is not a stretch to consider and anticipate actual physical confrontations and fights between inebriated participants and viewers of hockey games, attendees at "fair and festivals" and other events with management and residents if cars are not allowed to park and more certainly if cars are towed for illegal parking. **38-18**

Not only will there be the certainty of confrontation over parking in the developments - the residents will be subject to obtrusive, noisy, objectionable and unnecessary "walk-though" human foot traffic through the developments to park and walk to the park and then return to their cars after events to drive away. There will be almost certainly regular confrontations over parking, going to event and returning from events which is not mentioned. Also, the noise and interference caused by event guests and participants going to and from event trough the developments and along Meadow Lane is not mentioned at all in the DEIR. And, these noise events and possible confrontations will start at 6:00 am and can continue well past 12:00 am. This is an intolerable impact on the residential uses presently in place and it is not discussed. **38-19**

In this respect, the DEIR is totally deficient and it ignores the huge human cost to be imposed by the Project as proposed and the DEIR must be revised to address these real and inevitable effects on the human environment from the Project. This impact must be evaluated and all possible mitigation measures must be put in place if the Project proceeds. **38-20**

The Project is Ill-Conceived, Unnecessary and Should not go Forward

We understand the Project was started as a consideration of a roof over the existing ice rink. Somehow that simple concept morphed to a new Ice Rink and a large Community Center in small but well used park. The cost as soared to well over $10,000,000. This is an outrageous waste of taxpayer money and we are among the taxpayer in Mammoth. There is no demonstrated need for this Project and its associated costs and negative environmental and human cost - both in dollars and direct personal and environmental impacts. Perhaps this Project is motivated by someone's dream of fame and immortality - but the cost - in all respects is too high. Cooler and rational **38-21**

minds should look at the effects of this proposed Project and end it once and for all. **38-21**

The DEIR Must be Rejected as Wholly Deficient and if a Decision is Made to Proceed – Completely Revised and Republished

As a final note and request - the DEIR must be rejected as inadequate. The decision makers who review the document must conclude it is fatally defective. However, the DEIR does provide enough information for the decision makers to conclude the Project is beyond saving and it should be rejected and abandoned as a bad idea at this juncture. The Town should stop spending money to further pursue the Project as the only sensible alternative. However, if the Town decided to proceed with the Project, the DEIR has to be completely revised to consider the true impacts of the Project and to consider all the alternatives. The Project as proposed imposes great environmental and human harm and the environmental document must clearly identify those effects and discuss them with correct analysis. The DEIR must be rejected and restated consistent with the law and the regulations. **38-22**

Respectfully submitted,

Hugh R Coffin and Katie Coffin
Sunrise at Mammoth, Unit No. 3

38. RESPONSES TO COMMENTS FROM HUGH R. COFFIN AND KATIE COFFIN, FEBRUARY 12, 2017.

38-1 Refer to Response 6-3.

38-2 This comment summarizes specific concerns detailed in this letter. Refer to Response 6-5 regarding the commenters concerns of incompleteness of the project description.

38-3 Refer to Response 17-3 regarding consideration of hours of operation. Refer to Response 26-3 pertaining to specific hours of operation from the ice hockey and hockey tournaments at the ice rink.

38-4 As discussed in Response 6-5, CEQA Guidelines Section 15124(c) states that an EIR is only required to contain a general description of the project's technical, economic, and environmental characteristics. Further, CEQA discourages speculation (CEQA Guidelines Section 15145). Refer to MR-1 pertaining to the types of events that would occur as part of the project, specifically, those related to use of amplified noise. Combined activities as they would occur on a "daily" basis were considered; refer to Response 6-32. Currently, public access along Mammoth Creek is afforded; refer to Response 5-2 regarding consideration of impacts to Mammoth Creek as a result of the project.

38-5 Draft EIR Section 3.3, *Project Characteristics*, outlines specific activities that could occur as a result of the project.

38-6 As discussed on Draft EIR pages 5.8-10 and 5.8-11, the Draft EIR considered the project's consistency with the Town's Municipal Code noise standards for both daytime (7 a.m. – 10 p.m.) and nighttime (10 p.m. – 7 a.m.). As detailed in Response 26-3, specific hours of operation from the ice hockey and hockey tournaments at the ice rink are required to be limited to no later than 10 p.m. per Draft EIR Mitigation Measure NOI-2). Refer to Response 6-32 regarding stationary noise source impacts as a result of the project. Refer to Response 38-5.

38-7 Refer to Response 38-6.

38-8 Refer to Response 6-5 regarding architectural design and renderings used in the Draft EIR. The proposed mechanical equipment would be sited inside a specific mechanical room or under the proposed roof, inside the new structure. These features would not be readily visible from the uses surrounding the project site. Refer to Response 6-57 regarding potential view impacts from public views near the project site.

38-9 Refer to Responses 6-5 and 6-60.

38-10 Refer to Response 11-3 pertaining to increased lighting.

38-11 CEQA does not require a Draft EIR to consider effects cumulatively regarding both light and noise together, but rather individually. The Draft EIR considers both of these

effects as a result of the project. Refer to Response 11-3 regarding lighting considerations, as well as Response 18-2 regarding noise considerations. Lastly, Response 5-2 details specific considerations made regarding lighting and noise impacts to Mammoth Creek. With implementation of the recommended Mitigation Measures outlined in the Draft EIR, the proposed project would not have a significant and unavoidable impact on the surrounding residences with regard to light spillover or noise.

38-12 The Bell Shaped Parcel was considered as an alternative site alternative by the Draft EIR (Draft EIR Section 7.3, *"Bell Shaped Parcel Alternative Site" Alternative*, page 7-16). These considerations included the U.S. Army Corps of Engineers (ACOE), Los Angeles District, *Preliminary Jurisdictional Determination Regarding Geographic Jurisdiction*, dated September 22, 2016. As concluded on Draft EIR page 7-2, the Bell Shaped Parcel Alternative would meet most of the project's basic objectives. A complimentary community center and active outdoor area that would provide recreational opportunities for all seasons would be created. A covered roof structure over the Town's ice rink facility would also be provided. However, the multi-use community facilities would not be relocated closer to public corridors/trails and public transit within the Town. Draft EIR Table 7-1, *Comparison of Alternatives*, summarizes the comparative analysis of the project's impacts compared to the Bell Shaped Parcel Alternative Site Alternative.

38-13 As detailed on Draft EIR page 7-4, Mammoth Creek Park East is located in the jurisdictional boundaries of the United States Forest Service (USFS). Due to the existing land use restrictions imposed by the USFS, the Town would not be permitted to construct the project on this property. Refer to Response 17-4.

38-14 Refer to Response 18-2 regarding traffic impacts and Response 26-10 regarding parking considerations. Refer to Response 6-56 regarding the change in character/quality. Refer to Response 11-3 regarding compliance with the Town's "dark skies" ordinance.

38-15 Refer to Response 17-2 regarding Meadow Lane. Refer to Response 26-10 regarding parking considerations.

38-16 Refer to Response 17-2 regarding Meadow Lane.

38-17 Refer to Responses 26-10 and 35-7 regarding parking considerations.

38-18 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

38-19 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

38-20 Refer to Response 15-2.

38-21 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

38-22 Refer to Response 36-1.

From: C B Reid [mailto:xot8@live.com]
Sent: Sunday, February 12, 2017 6:56 AM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: MUF

To: Mammoth Lakes Town Council

RE: Proposed Multi Use Facility

As a property owner and taxpayer living in the town of Mammoth Lakes, **I oppose the idea of building the currently proposed multi use facility** at this time and absolutely oppose the chosen location adjacent to Mammoth Creek.

Town management in the past has made many planning errors, this current project will add to that list.

39-1

As a "hockey mom" who has been to many rink facilities all across the US, the idea that this facility will have no or little impact on the surrounding neighborhood is absolutely ludicrous. Such a sensitive natural area like Mammoth Creek should be protected and should not be imposed upon by the noise, traffic, and trash that a large facility like this will bring.

Please rethink the location, scope and timing of this project in the best interest of residents and visitors alike.

C Reid
Mammoth Lakes

39. RESPONSES TO COMMENTS FROM C. REID, FEBRUARY 12, 2017.

39-1 Refer to Response 5-2.

From: Juliana Olinka-Jones [mailto:jolinka.pgi@gmail.com]
Sent: Sunday, February 12, 2017 4:45 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: MUF Comment

This project a waste of town funds and should be put on hold. Town Council said it wants to fulfill a promise to actually build something it's been promising for a long time. The MUF project (which frankly sound like a larger ice rink and a couple of additional meeting rooms) made a modicum of sense when the project was budgeted at $1 Million. Now that the cost has ballooned to over $10 Millions-not taking into account required additions, lawsuits, etc,. that commitment is ridiculous. There are so many more projects needed in this town, not the least of which is affordable housing.

According to the town website: "On October 21, 2015, Town Council approved the use of up to $150,400, and on January 6, 2016 approved an additional $50,000 to contract for the preliminary design and environmental documentation for the location of community recreation facilities within Mammoth Creek Park West.

40-1

At this time, the majority of funding for the construction of the Multi-use Facility roof has been identified and includes the use of restricted Recreation Development Impact Fees, restricted Fractional Mello Roos District fees, set-aside general fund monies, and a $300,000 Measure R allocation. Relocation costs are anticipated to be funded primarily through an internal loan structure, with repayment to be made by funds currently used for lease payments. At this time, funding for the Community Center has not been identified. It should be noted that as this project continues to increase in costs the funding will need to be revised."

As stated above, there is no plan in place that is being shared that includes a budget.There is no business plan although there are lots of nice ideas. Ideas are cheap. Execution costs money. What are the plans for funding the building of the project? How much will the maintenance and regular upkeep cost? Who and how will those costs be paid?

Do not move forward with this project.

Juliana Olinka-Jones, Mammoth Resident

40. RESPONSES TO COMMENTS FROM JULIANA OLINKA-JONES, FEBRUARY 12, 2017.

40-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: Lew Jones [mailto:ljonesmammoth@gmail.com]
Sent: Sunday, February 12, 2017 5:44 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: MUF comments

I'm responding to the comment period for this project as someone who's lived in Mammoth Lakes for over 44 years. While I'm not in the immediate area of the project, I feel like we all, as taxpayers, will be impacted by this project.

This project didn't make a lot of sense a year ago when the proposed cost was about 2.5 million. Now that we're up to 10.5, it makes no sense whatsoever. Even this doesn't appear to be the final number so it's possible it could end up even higher, especially if there's a huge rush to be in place for the 17/18 season, that type of pressure only drives building costs up. If we add in the proposed maintenance costs at 495,000 per year, the ten year payout stands at about 15 million dollars. The town's information on the project didn't mention the cost of mitigating the existing site but I'm sure it would also be a significant. And now, with the winter we're having, breaking ground in May doesn't seem very realistic without adding even more cost. It looks more and more undoable for this year with each new snow storm. Even if the town were able to identify a source of funding we simply shouldn't be spending that kind of money at this time. There are other worthy and lower cost projects to consider such as the MACC or completing the bike/walking trail system.

41-1

I do think the plan has merit. But the town has their phasing in the wrong order. Let's use the existing plan, but make the community center phase 1 instead of the ice rink. That would be more in line with the original estimates of a couple million dollars, provide the town with a facility we actually need, and give us time to identify funding for the ice rink. In the meantime, we can continue to operate the existing skating rink for a lot less money that is being proposed here. We could even put a roof on it and continue as it is for quite a long time. If the demand were to outgrow the site then let's look at phase 2 of Mammoth Creek Park (the ice rink) and identify funding for the project to move forward

Lewis Jones
2290 Sierra Nevada Rd. #34
PO Box 8671
Mammoth Lakes, CA 93546
(760) 914-0386

41. RESPONSES TO COMMENTS FROM LEWIS JONES, FEBRUARY 12, 2017.

41-1 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: Sara Gomberg [mailto:saragomberg@yahoo.com]
Sent: Sunday, February 12, 2017 9:19 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: concerns in reviewing the DEIR

Dear Ms Moberly,

here are some concerns that do not seem to be adequately addressed in the DEIR

Over planning, too much on a small parcel sums it up

42-1

The DEIR does not address alternatives among others:

1. Partnership with the school district. e.g., school district provides the land and the town provides and maintains the facilities.
2. Town and Mountain owners partnership

The members of the community cannot make an informed decision, if the town is not more forth coming with the information regarding the details of these discussions.

42-2

WRT water and Mammoth Creek concerns:

1. Need for the DEIR to address the specifics of increase garbage in the area (styrofoam cups, food related container/utilities and food trash, event/activity related materials (paper programs, banners, "souvenirs") with much of it finding its way to the creek and onto private property or streets. The environmental impact of this is not addressed. For a venue of this size and likely large number participants this could be a significant impact.

42-3

WRT traffic concerns:

1. The entrance / exit to the park on Old Mammoth road is "un-signaled" The traffic concerns regarding this one public access to the facility is not adequately addressed What if a signal was installed, the impact is not evaluated. The cost, the blocking and backup of cars in the parking lot may hinder emergency access to and egress from the facilities as well as add noise of cars, horns, raised voices have not been addressed. A signal would not help the site distance issues but may even add to them. Drivers proceeding west on Old Mammoth Road and coming around the curve may not have view of the back of cars waiting at the signal. Result: increased rear end collisions.
2. Back up on Old Mammoth Road resulting from the signal or otherwise, may lead to back up on the near by cross streets and arteries leading onto them like Meadow Lane onto Mammoth Creek Rd.

42-4

3. None of the previously suggested site distance mitigations and their affect on the environment have been fully addressed a) removing more trees, b) straightening the curve on Old Mammoth Road, and c) moving the park entrance further north

42-5

4. The inevitable parking on Meadow Lane and in the nearby business parking lots like the Stove, other restaurants, and commercial business in the area are not addressed adequately

5. Venue parking may spill over to the Von's parking lot, the only Supermarket in town and already congested with coming and going traffic and pedestrians. **42-6**

6. Emergency Access: There is a proposed access road to the west of the project that borders on Meadow Lane. The ability for emergency vehicles to access this road may be compromised by facility/event attendees parking along Meadow Lane which dead ends at the western perimeter of the project site. The expected parking on Meadow Lane may sufficiently block access for emergency vehicles entering or leaving the facility site as well as to the adjoining condominium complexes **42-7**

7. There should be anticipated event and facility use parking in the condo parking areas adjoining Meadow Lane (who wouldn't want to avoid having to turn onto Old Mammoth Road from the venue). This will mean that condo owners will be adding to additional street parking in the vicinity of the creek. Even if parking is restricted on Meadow lane, who is going to pay for monitor and enforcement? The individual owners and HOAs? The town? **42-8**

8. There is no analysis of the effects of simultaneous events / uses on traffic and noise. **42-9**

WRT Noise concerns:

1. Noise from increased traffic, both car and human, on the immediate surrounding areas of the project area, is inadequately addressed not taking into consideration the increased coming and going of people along the creek pathways and Meadow Lane and adjoining streets and from increased numbers of people who are coming to the venue using the nearby public transportation stop points as well as on foot and bicycle. **42-10**

Is the area designated as non smoking? Smoking may then spill over to adjacent areas like Forest Service Land and private property areas, increasing the risk of fire danger made more significant with increase number of people occupying the area. **42-11**

No matter how needed is a multi facility use venue, I am not convinced that the impact of locating it at MCPW is a good choice for the well being of OUR town, one I have grown to known and love over the past 32 yrs. I want the best for all and in reviewing the DEIR am not convinced that town management personnel, which may come and go, is doing the best for those of us that have shown we are here to stay.

Respectfully,
Sara Jones-Gomberg MD, MA

42. RESPONSES TO COMMENTS FROM SARA JONES-GOMBERG, FEBRUARY 12, 2017.

42-1 Refer to Responses 6-65, 6-66, and 17-4.

42-2 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

42-3 Refer to Response 5-2 regarding potential impacts involving increased human activities near Mammoth Creek.

42-4 Based upon the *Mammoth Community and Multi-Use Facilities Focused Traffic Impact Analysis* (Traffic Impact Analysis), dated July 29, 2016, prepared by LSC Transportation Consultants, Inc. (provided in Draft EIR Appendix 11.4, *Traffic Impact Analysis*), the proposed project does not warrant a new traffic signal at the project driveway. Refer to Response 6-27 regarding site distance concerns.

42-5 Refer to Response 6-27 regarding site distance concerns. Refer to Responses 6-11 and 6-60 regarding tree removal consideration and requirements.

42-6 Refer to Response 26-10.

42-7 Refer to Response 6-26.

42-8 Refer to Response 26-10.

42-9 Noise considerations looked at multiple point sources simultaneously; refer to Response 6-32. Traffic generation assumptions looked at activities on a typical day; refer to Response 6-25. Refer to Response 18-2 regarding overall traffic and noise findings of the Draft EIR.

42-10 Noise considerations from traffic was noted. Noise along existing trails are not anticipated to substantially increase as a result of the project. Noise from traffic was evaluated. Refer to Response 6-30 regarding mobile source noise impacts.

42-11 Potential fire risks from people smoking on the site is not anticipated to substantially increase, compared to the existing condition, as the project site is currently used as a public park and public trails are present in the vicinity.

From: Wilma Wheeler [mailto:wilma88bryce@gmail.com]
Sent: Sunday, February 12, 2017 3:11 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: Mammoth Creek Park West Draft EIR

Sandra Moberly
Community and Economic Development Manager
Town of Mammoth Lakes

Dear Ms. Moberly,

I am writing to express my opposition to the site selected for the ice rink and new community multi-use facilities project. I believe Mammoth Creek Park West should remain quiet and relatively free of development. The peace and quiet of nearby condo owners must be considered and respected.There is no way to mitigate the noise and traffic that would follow the development of a multi-use facility and ice rink in Mammoth West Park. Also light pollution would be a detrimental part of such development. I don't live near the proposed development but I know how I would feel if a similar development would be proposed on our quiet street. There are other more appropriate placed for a multi-use facility and an ice rink. **43-1**

It seems the town is prepared to move ahead on the proposal without regarding the wishes of the people of the community. The town has a reputation for making unwise decisions in opposition to its citizens' wishes. Isn't it time to slow down and consider all the options and what is best for the long term? **43-2**

Sincererly,

Wilma Wheeler
760 934-3764
PO Box 3208
Mammoth Lakes, CA 93546
wilma88bryce@gmail.com

43. RESPONSES TO COMMENTS FROM WILMA WHEELER, FEBRUARY 12, 2017.

43-1 Refer to Response 18-2 regarding noise and traffic impacts. Refer to Response 11-3 pertaining to increased lighting.

43-2 This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The Town of Mammoth Lakes decision makers will consider all comments on the proposed project. No further response is necessary.

From: Sharon Clark [mailto:srclark@npgcable.com]
Sent: Monday, February 13, 2017 4:43 PM
To: Sandra Moberly <smoberly@townofmammothlakes.ca.gov>
Subject: Draft EIR for MCPW

Dear Ms. Moberly,

For the DEIR To find "no significant impact" with "mitigation efforts"
on so many issues involved with building a MUF and Community Center at MCPW makes us wonder if, in fact, enough study was actually done. **44-1**

Besides the negative impacts of increased noise, light and loss of mature trees to wildlife currently on the property, our primary concerns are lack of parking spaces, traffic, views and noise. No where did I find current ADT counts for Old Mammoth Road nor projected ADT resulting from proposed development. This major route into town for the Bluffs, Old Mammoth and the Lakes Basin is a main artery of Mammoth's traffic. **44-2**
The curve of OMR so near the anticipated new road cut needs much more thorough investigation; i.e. will a traffic light need to be installed for public safety? The line of sight for cars entering and exiting the proposed development was not illustrated nor studied. **44-3**

How were 150 parking spaces determined to be sufficient for the MUF? I did not see a comparison to parking needs at our current Ice Rink which would at least help us estimate the need at the new larger facility. No where did I see in the DEIR opportunity for over-flow parking. Why wasn't this issue explored? **44-4**

The sheer impact of both construction and operational noise was not documented...except to say "meet town standards" which is very vague.
There are numbers, measured in decibels, that should have been made available to the public. This was not available and needs to be done. **44-5**
Residents live too close for them NOT to be negatively impacted by vibrations/noise from the MUF.

Finally, there were discussions about 'scenic views and vistas' not being obstructed but there was no reference to the actual height of proposed new buildings. Therefore, we the people have no way to know whether views and vistas will be affected. Please illustrate via sight lines that no view will be negatively impacted from the new MUF. **44-6**

Thank you,
Sharon & Malcolm Clark

44. RESPONSES TO COMMENTS FROM SHARON AND MALCOLM CLARK, FEBRUARY 13, 2017.

44-1 Refer to Response 18-2 regarding noise impacts. Refer to Response 11-3 regarding lighting requirement. Refer to Responses 6-11 and 6-60 regarding tree removal consideration and requirements.

44-2 Refer to Responses 6-21, 6-22, and 6-25.

44-3 Refer to Response 6-27 regarding the driveway location for the project. Refer to Response 42-4 regarding the need for a signal at the project driveway.

44-4 Refer to Response 26-10.

44-5 Draft EIR Impact Statements N-1 (page 5.8-15) and N-2 (page 5.8-20) analyzes the project's potential noise and vibration impacts during construction. As discussed on page 5.8-19, the A-weighted decibel scale (dBA) is considered for construction. Pursuant to Section 8.16.090, the maximum exterior noise levels allowed in multi-family residential areas for mobile (e.g., excavator, backhoe, dozer, loader, etc.) and stationary equipment (e.g., generators, compressors, pumps, etc.) during 7:00 a.m. to 8:00 p.m. Monday through Saturday are 80 dBA and 65 dBA, respectively. In addition, the maximum exterior noise levels allowed in multi-family residential areas for mobile and stationary equipment during 8:00 p.m. to 7:00 a.m. Monday through Saturday, and all day Sunday and legal holidays, are 64 dBA and 55 dBA, respectively. All mobile and stationary internal-combustion powered equipment and machinery are required to be equipped with suitable exhaust and air-intake silencers in proper working order under the Town Noise Ordinance. As the majority of the construction would occur at distances of 100 to 300 feet from the closest receptors (i.e., the La Vista Blanc Condominiums and the Chateau Blanc Condominiums), the loudest construction noise level of 85 dBA would be reduced to 79 dBA and would not exceed the limits in Section 8.16.090 of the Town's Municipal Code. Additionally, haul trucks traveling along Meadow lane would be approximately 50 feet from the closest receptors. As indicated in Table 5.8-11, trucks have a maximum noise level of 80 dBA at 50 feet. Therefore, noise from truck hauling would also not exceed the Town's standards.

44-6 Refer to Response 9-18 regarding proposed heights. Refer to Response 6-57 regarding scenic view considerations.

February 8, 2017 2:00 PM
Planning and Economic Development Commission
Town of Mammoth Lakes Council Chambers
437 Old Mammoth Rd, Suite R, Mammoth Lakes, CA 93546.

Member of Public	Comment	
Tom Hodges Vice President Mammoth Mountain	Mr. Hodges expressed concerns over the location of the site. He commented that the Shady Rest Parcel should have been considered due to the following: - Proximity to transit and residents - Room to add a new aquatics center - This project would revitalized the Main Street downtown area	45-1
Sharon Clark	Ms. Clark expressed concern over the parking, particularly that there would not be enough. Should would like to know: - A comparison of existing ice rink parking availability compared to that proposed; - If the EIR can include consideration of proposed traffic at the driveway where there is a dangerous curve. - If impacts pertaining to the water table at the site were considered.	45-2 45-3 45-4
Dick Heine	Mr. Heine encourages an alternative site. Mr. Heine will follow up with a written letter regarding his specific parking, noise, and traffic issues pertaining to the project.	45-5
Ted Carlson	Mr. Carlson agrees with Tom Hodges. He is unsure about the demand and the economic impacts involved with the project. Mr. Carlson has concerns regarding the traffic pattern and driveway location at a curve.	45-6 45-7
Mary Shore	Ms. Shore is concerned that the existing water table is too shallow for an ice rink.	45-8

45. RESPONSES TO COMMENTS FROM THE MAMMOTH LAKES PLANNING AND ECONOMIC DEVELOPMENT COMMISSION, DATED FEBRUARY 8, 2017.

45-1 Refer to Response 6-66.

45-2 Refer to Response 26-10.

45-3 Refer to Response 6-27.

45-4 Refer to Response 6-40.

45-5 Refer to Response 17-4 pertaining to alternative site considerations. The Town of Mammoth Lakes did not receive a formal written letter by Mr. Heine regarding his specific concerns for parking, noise, and traffic issues pertaining to the project.

45-6 Refer to Response 13-1 pertaining to economic effects.

45-7 Refer to Response 6-21 pertaining to the traffic study area considered. Refer to Response 6-27 pertaining the driveway location.

45-8 At this time, the existing on-site groundwater table does not preclude the possibility for an ice rink at the project site.

Bill Fischbeck
P.O. Box 3048
La Mesa, CA 91944
Phone: (619) 464-1200
Email: wlf@lamesalaw.com

FEB 21 2017
TOWN OF MAMMOTH LAKES
Community & Economic Dev.

February 13, 2017

Mike Gervais
Managing New Editor
Mammoth Times
645 Old Mammoth Road, Suite A
Mammoth Lakes, California 93546

Sandra Moberly
Community & Economic Development Manager
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, California 93546

Re: Bell Shaped Parcel

Dear Mr. Gervais and Ms. Moberly:

To the Editor and Town Council:

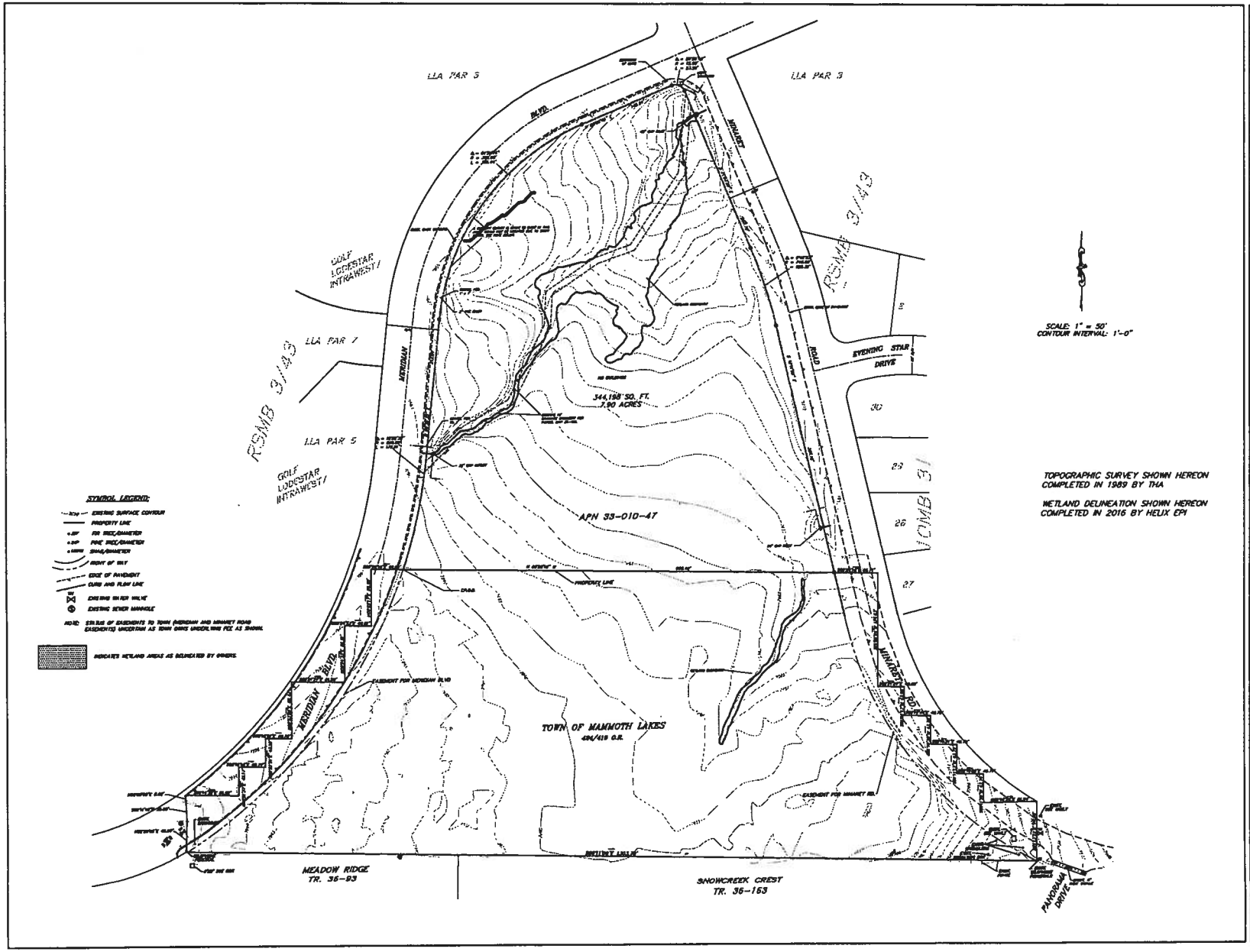
I am a devoted Mammoth Lakes owner and Sierra enthusiast. I have a deep respect for the Town and its many assets and I have been privileged to have been asked to participate in long range planning for the Town. As part of that, the Bell Shaped Parcel is always mentioned but most often it is passed over for serious consideration of development for civic uses due to a belief that it is all a riparian area best suited for open space.

We now know that is not the case. The riparian areas have just now been mapped. That map is now available and by it we can see that only two small areas are impacted by the riparian habitat. That leaves a wonderful resource for Town activities on flat, usable terrain. There are any number of important activities that could be located there, oriented so as not to be up against existing residences, and buffered by the golf course to the north and the streets that border on the north and east. It is a huge lot and it can offer many advantages to the Town. While it is labeled as open space today, it is not used for trails or parks. **46-1**

With this new study completed on the Parcel, would it not be the best course for the Town to consider this Parcel, seriously, for the Ice Rink use rather than to dismiss it with no real analysis as is the case in the EIR now under consideration? The Mammoth Creek Park West location puts the noisy ice rink up against long established residences and permanently prevents use of that area for actual Park uses rather than sports. Use of the Bell Shaped Parcel can avoid that situation completely.

If the Councilmembers are concerned about shedding the Rink lease and feel that only a Town owned property will do, it seems that giving the Bell Shaped Parcel a real, serious look would be in order. The Mammoth Creek Park location will bring long term headaches to the Town and Council because there is no real way to mitigate the impacts on the surrounding, long established residences. The Bell Shaped Parcel offers a way to fully buffer the impacts. Hockey is a great game that brings out the biggest voices and most noise. Let's put it on this fantastic resource that is languishing unused today. Go Bell Shaped Parcel! **46-1**

Bill Fischbeck
La Mesa, CA



2016 WETLAND DELINEATION

TOWN PARCEL 33-330-85 & 86

PREPARED FOR: TOWN OF MAMMOTH LAKES

triad/holmes associates

1

46. RESPONSES TO COMMENTS FROM BILL FISCHBECK, RECEIVED ON FEBRUARY 21, 2017.

46-1 Refer to Response 38-12.

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3.0 Errata

3.0 ERRATA

Changes to the Draft Environmental Impact Report (Draft EIR) are noted below. A double-underline indicates additions to the text; ~~strikethrough~~ indicates deletions to the text. Changes have been analyzed and responded to in Section 2.0, *Response to Comments*, of the Final EIR. The changes to the Draft EIR do not affect the overall conclusions of the environmental document. Changes are listed by page and, where appropriate, by paragraph. All mitigation measure modifications have been reflected in Section 4.0, *Mitigation Monitoring and Reporting Program*, of the Final EIR.

SECTION 5.2, AESTHETICS/LIGHT AND GLARE

Draft EIR Page 5.2-10, Mitigation Measure AES-2

AES-2 The construction hauling plan shall be prepared and approved by the Public Works Director prior to issuance of grading permit. The plan shall, at a minimum, indicate the equipment and vehicle staging areas, stockpiling of materials, and haul route(s). Identified haul route(s) must avoid residential areas to the maximum extent practical, thus, ensuring~~The plan shall ensure~~ that construction haul routes minimize impacts to sensitive uses in the Town.

SECTION 5.3, Biological Resources

Draft EIR Page 5.3-23, Mitigation Measure BIO-2

BIO-2 Pursuant to the Migratory Bird Treaty Act (MBTA), Bald/Golden Eagle Protection Act, and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513), if the Town of Mammoth Lakes conducts all site disturbance/vegetation removal activities (such as removal of any trees, shrubs, or any other potential nesting habitat) outside the avian nesting season, December 1 through August 31, no further survey~~action~~ is necessary. However, if ground disturbance/vegetation removal cannot occur outside of the nesting season, a pre-construction clearance survey for nesting birds shall be conducted within three days of the start of any ground disturbing activities to ensure that no birds are nesting on or within 500 feet of the project site. The biologist conducting the clearance survey shall document a negative survey with a brief letter report indicating that no impacts to active bird nests, including those on the ground, would occur during site disturbance activities.

If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside a buffer determined by the biologist in consultation with California Department of Fish and Wildlife (CDFW), or construction shall be delayed until the nest is inactive. The buffer shall also be and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 300 feet from the nests of non-listed, non-raptors and 500 feet from the nests of listed species or raptors. A biological monitor shall be retained and be present during site disturbance activities in order to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not

adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, a monitoring report shall be prepared and submitted to the Applicant for review and approval prior to initiation construction activities within the buffer area. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until written authorization is received by the Contractor from CDFW.

SECTION 5.8, NOISE

Draft EIR Page 5.8-26, 1st Paragraph, 7th Sentence

It should be noted that these operations are lower intensity ~~that~~ than resurfacing, and would generate lower noise levels than the reference noise levels identified above.

4.0 Mitigation Monitoring and Reporting Program

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring program. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring program must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, Table 4-1, *Mitigation Monitoring and Reporting Checklist*, has been prepared for the Mammoth Creek Park West New Community Multi-Use Facilities (the proposed project). This Mitigation Monitoring and Reporting Checklist is intended to provide verification that all applicable mitigation measures relative to significant environmental impacts are monitored and reported. Monitoring will include: 1) verification that each mitigation measure has been implemented; 2) recordation of the actions taken to implement each mitigation; and 3) retention of records in the Town of Mammoth Lakes Mammoth Creek Park West New Community Multi-Use Facilities Project file.

This Mitigation Monitoring and Reporting Program (MMRP) delineates responsibilities for monitoring the project, but also allows the Town flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented. This includes the review of all monitoring reports, enforcement actions, and document disposition, unless otherwise noted in the Mitigation Monitoring and Reporting Checklist (Table 4-1). If an adopted mitigation measure is not being properly implemented, the designated monitoring personnel shall require corrective actions to ensure adequate implementation.

Reporting consists of establishing a record that a mitigation measure is being implemented, and generally involves the following steps:

- The Town distributes reporting forms to the appropriate entities for verification of compliance.
- Departments/agencies with reporting responsibilities will review the Initial Study, Draft EIR, and Final EIR, which provide general background information on the reasons for including specified mitigation measures.
- Problems or exceptions to compliance will be addressed to the Town as appropriate.
- Periodic meetings may be held during project implementation to report on compliance of mitigation measures.
- Responsible parties provide the Town with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring

compliance may be documented through existing review and approval programs such as field inspection reports and plan review.

- The Town prepares a reporting form periodically during the construction phase and an annual report summarizing all project mitigation monitoring efforts.

- Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the MMRP, if required, would be made in accordance with CEQA and would be permitted after further review and approval by the Town. No change will be permitted unless the MMRP continues to satisfy the requirements of Public Resources Code Section 21081.6.

The following subsections of the Draft EIR contain a detailed environmental analysis of the existing conditions, project impacts (including direct and indirect, short-term, long-term, and cumulative impacts), recommended mitigation measures, and unavoidable significant impacts, if any.

Based on the Draft EIR, no significant impacts would occur in regard to the following environmental issue areas, which are addressed in Section 8.0, *Effects Found Not To Be Significant*:

- Agricultural Resources;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Mineral Resources;
- Population and Housing;
- Public Services;
- Recreation; and
- Utilities and Service Systems.

In accordance with Appendix G of the *CEQA Guidelines*, the following environmental issue areas were determined in the Draft EIR to have a potentially significant impact, and have been included within this EIR for further analysis:

- Aesthetics/Light and Glare;
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Greenhouse Gas Emissions;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Traffic and Circulation; and
- Tribal Cultural Resources.

For the purposes of the environmental analysis in the Draft EIR, impacts were analyzed in each environmental issue area for the proposed project. If necessary, mitigation measures were recommended in order to reduce any significant impacts.

Table 4-1
Mitigation Monitoring and Reporting Checklist

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
Aesthetics/Light and Glare								
AES-1	Construction equipment staging areas shall be screened (i.e., temporary fencing with opaque material) to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated on Final Development Plans and Grading Plans.	Public Works Director/ Construction Contractor	Prior to Issuance of a Grading Permit or any Construction Permit	Community and Economic Development Department Planning Manager	Prior to Issuance of a Grading Permit/ Review of Grading Plans			
AES-2	The construction hauling plan shall be prepared and approved by the Public Works Director prior to issuance of grading permit. The plan shall, at a minimum, indicate the equipment and vehicle staging areas, stockpiling of materials, and haul route(s). Identified haul route(s) must avoid residential areas to the maximum extent practical, thus, ensuring~~The plan shall ensure~~ that construction haul routes minimize impacts to sensitive uses in the Town.	Public Works Director/ Construction Contractor	Prior to Issuance of a Grading Permit or any Construction Permit	Public Works Director	Prior to Issuance of a Grading Permit/ Review of Hauling Plan			
AES-3	All construction-related lighting fixtures (including portable fixtures) shall be oriented downward and away from adjacent residential areas. Lighting shall consist of the minimal wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the Community and Economic Development Manager for review concurrent with Grading Permit application.	Public Works Director/ Construction Contractor	Prior to Issuance of a Grading Permit or any Construction Permit	Community and Economic Development Department Planning Manager	Prior to Issuance of a Grading Permit/ Review of Grading Plans			
AES-4	Prior to issuance the Building Permit, the Town shall identify on the building plans that potential reflective building materials (e.g., the roof and windows) shall use a non-reflective finish.	Public Works Director/ Design Contractor	Prior to Issuance of a Building Permit	Community and Economic Development Department Planning Manager	Prior to Issuance of a Building Permit/ Review of Project Plans			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
Biological Resources								
BIO-1	A detailed tree removal and protection plan shall be submitted to Community and Economic Development Manager by the project Contractor, depicting all trees to be preserved and/or removed on the site. The Contractor shall develop the tree removal and protection plan to avoid impacts to on-site Jeffrey pine and lodgepole pine trees. The project Contractor shall follow the recommended guidelines in the General Plan and Municipal Code, which include the following: • All site development shall be designed to avoid and preserve significant groups of trees and large trees as determined by the project Biologist and approved by the Community and Economic Development Manager. • Removal of native trees shall be mitigated at a ratio determined by the Community and Economic Development Manager. If replacement plantings of the removed trees is required, the minimum replacement tree size shall be seven gallons. Further, replacement shall be limited to plantings in areas suitable for tree replacement with species identified in the Town of Mammoth Lakes' Recommended Plant List. Replacement requirements may also be determined based on the valuation of the tree as determined by a Registered Professional Forester or arborist. • A tree removal and protection plan shall be developed by the project Biologist and submitted to the Community and Economic Development Manager. The landscape plan shall also limit the use of turf over root zones of native trees to	Public Works Director/ Construction Contractor/ Design Contractor/ Professional Biologist	Prior to Issuance of a Grading and Building Permits	Community and Economic Development Department Planning Manager	Prior to Issuance of a Grading and Building Permits/ Review of Project Plans			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	avoid or minimize adverse impacts of excessive water to native trees.							
BIO-2	Pursuant to the Migratory Bird Treaty Act (MBTA), Bald/Golden Eagle Protection Act, and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513), if the Town of Mammoth Lakes conducts all site disturbance/vegetation removal activities (such as removal of any trees, shrubs, or any other potential nesting habitat) outside the avian nesting season, December 1 through August 31, no further survey~~action~~ is necessary. However, if ground disturbance/vegetation removal cannot occur outside of the nesting season, a pre-construction clearance survey for nesting birds shall be conducted within three days of the start of any ground disturbing activities to ensure that no birds are nesting on or within 500 feet of the project site. The biologist conducting the clearance survey shall document a negative survey with a brief letter report indicating that no impacts to active bird nests, including those on the ground, would occur during site disturbance activities. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside a buffer determined by the biologist in consultation with California Department of Fish and Wildlife (CDFW), or construction shall be delayed until the nest is inactive. The buffer shall also be and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. These buffers are typically 300 feet from the nests of non-listed, non-raptors and 500 feet from the nests of listed species or raptors. A biological monitor shall be retained and be present during site disturbance activities in order to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by	Public Works Director/ Construction Contractor/ Professional Biologist	Prior to and During Construction	Community and Economic Development Department Planning Manager	Prior to and During Construction			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, a monitoring report shall be prepared and submitted to the Applicant for review and approval prior to initiation construction activities within the buffer area. The monitoring report shall summarize the results of the nest monitoring, describe construction restrictions currently in place, and confirm that construction activities can proceed within the buffer area without jeopardizing the survival of the young birds. Construction within the designated buffer area shall not proceed until written authorization is received by the Contractor from CDFW.							
Cultural Resources								
CUL-1	Archaeological and Native American monitoring shall be conducted for all project-related ground disturbing activities by a qualified archaeologist and Native American monitor appointed by the Public Works Director. Archaeological monitoring shall be performed under the direction of an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for prehistoric archaeology. If intact features (e.g., hearths, other intact features, burials) are encountered during ground-disturbing activities, work in the immediate area shall halt, the monitors shall immediately notify the Public Works Director, and the find shall be evaluated for significance under the California Environmental Quality Act and National Historic Preservation Act (NHPA). Consultation with the Native American Monitor, the Native American Heritage Commission, and data/artifact recovery, if deemed appropriate, shall be conducted. Under the discretion of the monitors, work shall not be halted for resources that have already been extensively recorded within the site boundary. The monitors may reduce or	Public Works Director/ Construction Contractor/ Professional Archaeologist/ Native American Monitor	During Construction	Public Works Director	During Construction			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	stop monitoring dependent upon observed conditions. Work shall not be halted or redirected for known site constituents (i.e., flakes or stone tools) that were evaluated as part of the *Phase II Cultural Resources Report*, prepared by Rincon Consultants, Inc., dated September 28, 2016.							
Traffic and Circulation								
TRA-1	Prior to Issuance of any grading and/or demolition permits, whichever occurs first, a Construction Management Plan shall be submitted for review and approval by the Public Works Director. The Construction Management Plan shall, at a minimum, address the following: • Traffic control for any street closure, detour, or other disruption to traffic circulation. • Identify construction vehicles haul routes for the delivery of construction materials (i.e., lumber, tiles, piping, windows, etc.) to the site; necessary traffic controls and detours; and a construction phasing plan for the project. • Identify any off-site construction staging or material storage sites. • Specify the hours during which transport activities can occur and methods to mitigate construction-related impacts to adjacent streets. • Require the Contractor to keep all haul routes clean and free of debris, including but not limited, to gravel and dirt as a result of its operations. The Contractor shall clean adjacent streets, as directed by the Town Engineer (or representative of the Town Engineer), of any material	Public Works Director/ Construction Contractor	Prior to Issuance of a Grading Permit	Public Works Director/ Town Engineer	Prior to Issuance of a Grading Permit			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	which may have been spilled, tracked, or blown onto adjacent streets or areas. • The scheduling of hauling or transport of oversize loads shall avoid peak hour traffic periods to the maximum extent feasible, unless approved otherwise by the Town Engineer. No hauling or transport shall be allowed during nighttime hours or Federal holidays. All hauling and transport activities shall comply with Municipal Code Chapter 8.16, *Noise Regulation*. • Haul trucks entering or exiting public streets shall at all times yield to public traffic. • If hauling operations cause any damage to existing pavement, streets, curbs, and/or gutters along the haul route, the contractor shall be fully responsible for repairs. The repairs shall be completed to the satisfaction of the Town Engineer. • All constructed-related parking and staging of vehicles shall be kept out of the adjacent public roadways and shall occur on-site. • This Construction Management Plan shall meet standards established in the current California Manual on Uniform Traffic Control Device (MUTCD) as well as Town of Mammoth Lakes requirements.							
TRA-2	Prior to Issuance of any grading and/or demolition permits, whichever occurs first, final landscaping plans shall be submitted for review and approval by the Town Engineer to provide adequate drive sight distance at the site driveway.	Public Works Director/ Design Contractor	Prior to Issuance of a Grading Permit	Public Works Director/ Town Engineer	Prior to Issuance of a Grading Permit			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
Air Quality								
AQ-1	Prior to approval of the project plans and specifications, the Public Works Director, or designee, shall confirm that the plans and specifications stipulate that, in compliance with GBUAPCD Rule 401, excessive fugitive dust emissions shall be controlled by regular watering or other dust preventive measures, as specified in the GBUAPCD Rules and Regulations. In addition, GBUAPCD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors: • All active portions of the construction site shall be watered to prevent excessive amounts of dust; • On-site vehicles' speed shall be limited to 15 miles per hour (mph); • All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized; • All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust; watering, with complete coverage, shall occur at least twice daily, preferably in the late morning and after work is done for the day; • If dust is visibly generated that travels beyond the site boundaries, clearing, grading, earth moving or excavation activities that are generating dust shall cease during periods of high winds (i.e., greater than 25 mph averaged over one hour) or during Stage 1 or Stage 2 episodes; and	Public Works Director (or designee)/ Construction Contractor	Prior to Issuance of Grading, Building, or Construction Permits/ During Construction	Public Works Director (or Designee)/ GBUAPCD	Prior to Issuance of Grading, Building, or Construction Permits/ Review of Project Plans/ During Construction			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	• All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.							
AQ-2	Under GBUAPCD Rule 200-A and 200B, the Contractor shall apply for a Permit To Construct prior to construction, which provides an orderly procedure for the review of new and modified sources of air pollution.	Public Works Director/ Construction Contractor	Prior to Issuance of a Grading Permit or any Construction Permit	Public Works Director/ Community and Economic Development Department Planning Manager/ GBUAPCD	Prior to Issuance of a Grading Permit			
AQ-3	Under GBUAPCD Rule 216-A (New Source Review Requirement for Determining Impact on Air Quality Secondary Sources), the Contractor shall complete the necessary permitting approvals prior to commencement of construction activities.	Public Works Director/ Construction Contractor	Prior to Issuance of a Grading Permit or any Construction Permit	Public Works Director/ Community and Economic Development Department Planning Manager/ GBUAPCD	Prior to Issuance of a Grading Permit			
Noise								
NOI-1	Prior to issuance of any Grading Permit or Building Permit for new construction, the Public Works Director, or designee, shall confirm that the Grading Plan, Building Plans, and specifications stipulate that: • All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers and other State required noise attenuation devices. • The Contractor shall provide a qualified "Noise Disturbance Coordinator." The Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Disturbance Coordinator shall notify the	Public Works Director/ Construction Contractor	Prior to Issuance of Grading or Building Permit /During Construction	Public Works Director	Prior to Issuance of Grading or Building Permit/ Review of Project Plans/ During Construction			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	Town within 24-hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall implement reasonable measures to resolve the complaint, as deemed acceptable by the Public Works Director, or designee. The contact name and the telephone number for the Disturbance Coordinator shall be clearly posted on-site. • When feasible, construction haul routes shall be designed to avoid noise sensitive uses (e.g., residences, schools, hospitals, etc.). • During construction, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receivers. • Construction activities that produce noise shall not take place outside of the allowable hours specified by the Town's Municipal Code Section 8.16.090 (7:00 a.m. and 8:00 p.m. Monday through Saturday; construction is prohibited on Sundays and/or federal holidays).							
NOI-2	Prior to issuance of the certificate of occupancy for the new Community Multi-Use Facilities, the Town's Community Development and Economic Manager shall ensure that operational hours of ice hockey and hockey tournaments at the ice rink and the active outdoor recreational area do not occur past 10:00 p.m. This limitation shall be enforced by the Parks and Recreation Director.	Public Works Director	Prior to Issuance of a Certificate of Occupancy	Community and Economic Development Department Planning Manager	Prior to Issuance of a Certificate of Occupancy			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
NOI-3	Prior to occupancy of the community center, the Town shall develop and implement a Noise Control Plan for event operations that have live or recorded amplified music. The Noise Control Plan shall contain the following elements: • Amplified noise sources (e.g., speakers, bandstands, etc.) shall be located more than 160 feet from the project's western and northern boundaries. Speaker systems shall also be directed away from the nearest sensitive receptors. • Amplification systems that would be used after 10:00 p.m. shall include and utilize a processor to control the maximum output that the speakers can reach. Noise levels during this period shall not exceed 82 dBA at 20 feet from the source. • The contact telephone number and email addresses of the appropriate Parks and Recreation Department representatives shall be posted at each facility entrance for neighbors to lodge noise complaints or other concerns. Complaints shall be addressed in a diligent and responsive manner.	Public Works Director	Prior to Issuance of a Certificate of Occupancy	Public Works Director/ Community and Economic Development Department Planning Manager	Prior to Issuance of a Certificate of Occupancy			
Hydrology and Water Quality								
HWQ-1	Prior to Grading Permit issuance and as part of the project's compliance with the National Pollution Discharge Elimination System (NPDES) requirements, a Notice of Intent (NOI) shall be prepared and submitted to the State Water Resources Quality Control Board (SWRCB), providing notification and intent to comply with the State of California General Permit.	Public Works Director/ Construction Contractor	Prior to Issuance of a Grading Permit	Public Works Director	Prior to Issuance of a Grading Permit			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
HWQ-2	The proposed project shall conform to the requirements of an approved Storm Water Pollution Prevention Plan (SWPPP) (to be applied for during the Grading Plan process) and the National Pollution Discharge Elimination System (NPDES) Construction General Permit No. CAS000002 (2009-0009-DWQ [as amended by 2010-0014-DWQ and 2012-006-DWQ]), including implementation of all recommended Best Management Practices (BMPs), and utilize the Town of Mammoth Lakes Memorandum of Understanding (MOU) Resolution No. 6-91-926 issued by the State Water Resources Control Board.	Public Works Director/ Construction Contractor	Prior to Issuance of a Grading Permit	Public Works Director	Prior to Issuance of a Grading Permit			
HWQ-3	Upon completion of project construction, the Public Works Director shall submit a Notice of Termination (NOT) to the State Water Resources Quality Control Board to indicate that construction is completed.	Public Works Director/ Construction Contractor	Upon Completion of Construction	Public Works Director	Upon Completion of Construction			
HWQ-4	Prior to submittal of Grading Plans, the Town shall identify and implement a suite of storm drainage routing and conveyance infrastructure components designed to retain additional surface water flows prior to discharge. The design, sizing, and location of these drainage components shall be subject to review and approval by the Town. Implementation of this storm drainage infrastructure shall be approved by the Public Works Director and Town Engineer prior to the issuance of Grading or Building Permits.	Public Works Director/ Design Contractor	Prior to Issuance of a Grading or Building Permit	Public Works Director/ Town Engineer	Prior to Issuance of a Grading or Building Permit			
HWQ-5	A Storm Drain Facilities Maintenance Plan (Maintenance Plan) shall be prepared by the Town prior to issuance of a Certificate of Occupancy in order to ensure continued efficiency of proposed storm drain facilities. Implementation of the Maintenance Plan shall be overseen by the Public Works Director. Particular items requiring maintenance include, but are not limited to, cleaning of the grates, removal of foreign materials from storm drainage pipes, maintenance, as necessary, to	Public Works Director	Prior to Issuance of a Certificate of Occupancy	Public Works Director/ Town Engineer	Prior to Issuance of a Certificate of Occupancy			

Mitigation Number	Mitigation Measure	Implementation Responsibility	Timing	Monitoring Responsibility	Timing	VERIFICATION OF COMPLIANCE		
						Initials	Date	Remarks
	outlet facilities, and repairs, as necessary, to damaged facilities. Any storm drain pipe with a slope of less than 0.5 percent shall be identified and more frequent maintenance shall be performed to ensure efficiency of these low-incline facilities. Further, the Maintenance Plan shall ensure that snow removal activities conducted near proposed storm drain facilities do not restrict drainage collection in gutters, inlets, and flow paths.							
HWQ-6	Prior to submittal of grading plans, the Public Works Director shall identify and implement a suite of stormwater quality Best Management Practices (BMP) and Low Impact Development (LID) features to address the most likely sources of stormwater pollutants resulting from operation of the proposed project. Pollutant sources and pathways to be addressed by these BMPs include, but are not necessarily limited to, parking lots, maintenance areas, trash storage locations, rooftops, interior public and private roadways, and storm drain inlets. The design and location of these BMPs shall generally adhere to the standards associated with the Phase II NPDES stormwater permit program. Implementation of these BMPs shall be assured by the Community & Economic Development Manager and Town Engineer prior to the issuance of Grading or Building Permits.	Public Works Director/ Design Contractor	Prior to Issuance of a Grading or Building Permit	Community and Economic Development Department Planning Manager/ Town Engineer	Prior to Issuance of a Grading or Building Permit			

APPENDIX A
Biological Resources Memorandum

To: **Kristen Bogue**
From: **Travis McGill**
Date: **March 22, 2017**
Subject: **Biological Response to Comments**
Project: **Mammoth Creek Park West New Community Multi-Use Facilities**

Comment 1: Confirm that the following species: 1) have the potential to occur on-site, and 2) are or are not listed special-status species.

Response:

1. California Black Bear (*Ursus americanus californiensis*): Not federally or State listed. Occurs in fairly dense, mature stands of many forest habitats, and feeds in a variety of habitats including brushy stands of forest, valley foothill riparian, and wet meadow. Require large trees and various cavities and hollows in trees, snags, stumps, logs, uprooted trees, talus slopes, or in the earth for denning. These habitat elements must be in mature, dense vegetation, and on sheltered slopes for adequate denning. Can be pests, particularly at campsites, when they feed on human refuse and occasionally take stored foods.

   Based on the project site's proximity to existing residential developments and open canopy, California black bear was determined to have a low potential to occur on the project site. There is no suitable hibernation opportunities for California black bear on the project site. Although bordered by existing development to the north and west, it was determined that the project site has a low potential to provide foraging opportunities for California black bear. California black bear moving out of the mountains via Mammoth Creek may temporarily forage on the project site during nocturnal activities, when they are more active, when not hibernating.

2. Mountain cottontail rabbit (*Sylvilagus nuttallii*): Not federally or state listed. This species occurs on the east side of the Sierra Nevada's. Primarily an animal of rocky, sage-covered hills and canyons. It is common in sagebrush, fairly common in sparse, montane riparian habitats, and uncommon in subalpine conifer, pinyon juniper, juniper, and alpine dwarf-shrub habitats.

   Although surrounded by development to the north and west, the big sagebrush scrub plant community on-site has a moderate potential to provide suitable habitat for mountain cottontail rabbit. Additionally, the riparian habitats associated with Mammoth Creek south of the project site have the potential to provide suitable habitat for this species.

3. Deer mice (*Peromyscus maniculatus*): Not federally or State listed. Abundant and common throughout California in virtually all habitats. The big sagebrush scrub plant community on the project site has a high potential to provide suitable habitat for this species.

3536 Concours Street, Suite 100 | Ontario, California 91764
Office: 909.974.4900 | Fax: 909.974.4004

4. Golden-mantled ground squirrel (*Callospermophilus lateralis*): Not federally or State listed. Common and widespread resident in openings and open stages of mixed conifer, ponderosa pine, Jeffrey pine, logepole pine, limber pine, pinyon-juniper, montane riparian, aspen, and alpine meadow edges. Common in campgrounds and along roadways. The big sagebrush scrub plant community on the project site has a moderate potential to provide suitable habitat for this species.

5. Belding's ground squirrels (*Urocitellus beldingi*): Not federally or State listed. Common in its California range, which includes the Sierra Nevada and extends north to Oregon border. Preferred habitats include alpine dwarf-shrub, wet meadow, perennial and annual grassland, and open grassy stands of bitterbush and sagebrush. The big sagebrush scrub plant community on the project site has a moderate potential to provide suitable habitat for this species.

6. Yellow warbler (*Setophaga petechia*): Not federally listed. Listed as a California Species of Special Concern. In general, yellow warblers breed most commonly in wet, deciduous thickets, especially those dominated by willows and in disturbed and early successional habitats. Breeds in riparian woodlands from coastal and desert lowlands up to 2,500 meters in the Sierra Nevada's. Typically found in riparian deciduous habitats in summer: cottonwoods, willows, alders, and other small tress and shrub typical of low open canopy riparian woodland. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral.

   There are eBird records documenting yellow warbler within Mammoth Creek and in the immediate vicinity of the project site. Mammoth Creek, south of the project site, provides suitable nesting opportunities for yellow warbler. The scattered pine trees within the big sagebrush scrub plant community found on-site has the potential to provide low quality nesting opportunities for yellow warbler compared to the riparian habitats associated with Mammoth Creek that this species typically nests in. The riparian habitats found in Mammoth Creek, south of the project site, provides suitable nesting opportunities for this species, and this species has been previously documented in the Creek. Since yellow warbler are known to occur in Mammoth Creek, they a have a moderate to high potential to forage over the project site due to the creek's proximity to the project site.

7. Golden eagle (*Aquila chrysaetos*): Not federally listed. Listed as a CDFW Fully Protected/Watch List Species. Also protected under the Bald Eagle and Golden Eagle Protection Act. Uncommon permanent resident and migrant throughout California, except center of Central Valley. Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous areas where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat. Use elevated nest sites, especially sheltered ledges on secluded cliffs that are isolated from human disturbance and are close to hunting grounds. This species typically nests on cliffs, but also nests in trees, on the ground, and human-made structures (e.g., windmills, observation towers, nesting platforms, and transmission towers). Their nests usually have a wide view of surrounding area or are on prominent escarpments.

   The most recent and closest documented occurrence of this species, per eBird, was recorded near the Valentine Reserve and Ecological Study Area in February 2017, approximately 2.5 miles west of the project site.

Golden eagles are sensitive to human disturbance and are likely to abandon their nest if disturbed. Since the project site borders existing residential developments and includes an existing recreational park with frequent human activity, golden eagle are not expected to nest on-site. Further, the mountainous areas, away from human disturbances, in the general vicinity of the project site provide nesting opportunities for golden eagle.

Golden eagles typically forage in open habitats including grassland or steppelike vegetation where small rodents are available. The project site does not support the open habitats needed for foraging due to its proximity to existing development and scattered pine trees. However, the area south of the project site, south of Mammoth Creek, is not developed and provides a large area of open habitat for foraging. As a result, this species was determined to have a low potential to forage on the project site due to its proximity to open habitats typically used for foraging.

8. Great gray owl (*Strix nebulosa*): Not federally listed. Listed as State endangered species. A rarely seen resident in the Sierra Nevada from the vicinity of Quincy, Plumas Co. south to the Yosemite region. Breeds in old-growth red fir, mixed conifer, or lodgepole pine habitats, always in the vicinity of wet meadows. Breeding populations survive in isolated pockets where large trees with consistent canopy cover, their preferred nesting habitat, is still available. Great gray owls do not build their own nests; they may use old red-tailed hawk, common raven, northern goshawk, or squirrel nests. In some areas they use mistletoe brooms as a nest platform. They also will nest within rotted-out snags that are at least two feet in diameter and at least twenty feet tall. Great grays will sometimes adopt manmade nest platforms. Typically forages in open meadows from exposed perches in or on the edge of the meadow with dense populations of small mammals for hunting. Their prey include voles, moles, shrews, pocket gophers, and other small creatures that live in meadow grasses.

   The most recent and closest documented occurrence of this species, per eBird, was recorded near Lake Mary in May 2015, approximately 3 miles southwest of the project site. The great gray owl that was observed was injured and found by hikers.

   The scattered pine trees within the big sagebrush scrub plant community found on-site, does support an old-growth conifer forest with a dense canopy cover typically used by great gray owls for breeding and roosting. In addition, the project site's proximity to existing residential developments and frequent human activity, have likely precluded great gray owl from inhabiting the project site. Further, the project site does not support suitable foraging opportunities for great gray owl. This species typically forages in open meadows or open habitats which is not found on-site. As a result, the project great gray owl is presumed absent from the project site.

Comment 2: Why lighting at the project site would not substantially increase, such that wildlife along the creek would be impacted (i.e., wildlife movement through the corridor or special-status species). Why would the project not result in indirect impacts to biological resources due to lighting?

Response: Wildlife currently using the habitats associated with Mammoth Creek for have adapted to a high level of human activities associated with the adjacent residential developments, on-site recreational activities, and vehicular activity along Old Mammoth Road. Further, wildlife species on and adjacent to the

project site have acclimated to night lighting associated with the existing residential developments to the north and west of the project site and street lights associated with Old Mammoth Road south of the project site. Proposed lighting at the project site is not expected to significantly increase ambient lighting and glare in the immediate vicinity of the project site, in particular along Mammoth Creek, over current conditions. As a result, indirect impacts to biological resources within Mammoth Creek are not expected to occur.

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APPENDIX B
Traffic and Sight Distance Memorandum

TRANSPORTATION PLANNING AND
TRAFFIC ENGINEERING CONSULTANTS

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Tahoe City, California 96145
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TECHNICAL MEMORANDUM

DATE: April 21, 2017

TO: Eddie Torres, Michael Baker International

FROM: Leslie Suen, LSC Transportation Consultants

SUBJECT: Mammoth Multi-Use Facility – Additional Traffic Count and Stopping Sight Distance Analysis

INTRODUCTION

Per your request and in response to comments on the Mammoth Multi-Use Facilities Traffic Study, LSC has completed the following additional analysis:

- A review of new intersection turning movement counts from March 2017 and a comparison to the volumes used in the original traffic study.
- A review of driver stopping sight distance analysis at Mammoth Creek Park.

NEW INTERSECTION COUNTS

Intersection turning movement counts were conducted by the Town of Mammoth Lakes staff on Saturday March 18, 2017 from 3:00 PM to 6:00 PM at all three study intersection: Old Mammoth Road/Meridian Boulevard, Old Mammoth Road/Chateau Road, and Old Mammoth Road/Mammoth Creek Park Site Access. The design day for traffic volumes in Mammoth is a typical busy Saturday in the winter. In order to determine if this count day represents the design day, daily traffic volume on SR 203 were obtained from Caltrans. The most recent data available was from the winter of 2015/2016. Based on this data the count day (the third Saturday in March) is a good representation of a typical busy winter Saturday.

The peak hour at each intersection was calculated from the counts and shown in Table 1 (attached). These volumes were then compared to the traffic study's existing no project volumes, also shown in Table 1. The new 2017 counts are lower at all three study intersections. Therefore the original Mammoth Multi-Use traffic study represents a "worse case." As the original study identified that all intersection level of

service (LOS) was acceptable, analysis of the new counts would also show acceptable LOS at all study intersections.

STOPPING SIGHT DISTANCE ANALYSIS

Stopping sight distance criteria is considered in this analysis. Stopping sight distance is the distance that is required for a vehicle on the major roadway to stop in a safe manner once an object in the roadway becomes visible. It is required for a driveway to provide adequate stopping sight distance.

With a speed limit of 25 miles per hour, the design speed of the roadway would be 30 miles per hour. Based on that design speed, the *Caltrans Highway Design Manual's* minimum stopping sight distance is 200 feet.

A driver stopping sight distance evaluation at Mammoth Creek Park Driveway was conducted by the Town of Mammoth Lakes on-call Civil Engineer Tom Platz on March 28, 2017. Looking to the north of the driveway, 338 feet of sight distance was reported, therefore adequate stopping sight distance is provided.

To the south of the driveway, Old Mammoth Road curves to the west. A total of 242 feet of stopping sight distance exists to the south which is more than the required 200 feet, therefore adequate stopping sight distance is provided.

Table 1: Intersection Turning Movement Volumes

Intersection	Northbound			Southbound			Eastbound			Westbound			TOTAL
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Old Mammoth Road / Meridian Blvd													
Traffic Study	128	230	48	118	295	59	188	680	112	96	365	75	2,394
March 2017 Counts	86	178	57	107	263	61	84	125	87	86	150	63	1,347
Old Mammoth Road / Chateau Road													
Traffic Study	11	251	5	48	300	75	37	16	11	5	11	27	797
March 2017 Counts	4	166	11	80	246	55	37	17	8	7	3	53	687
Old Mammoth Road / Mammoth Creek Park Site Access													
Traffic Study	2	259	0	0	300	2	2	0	2	0	0	0	567
March 2017 Counts	4	195	0	0	244	4	7	0	1	0	0	0	455

Source: LSC Transportation Consultants

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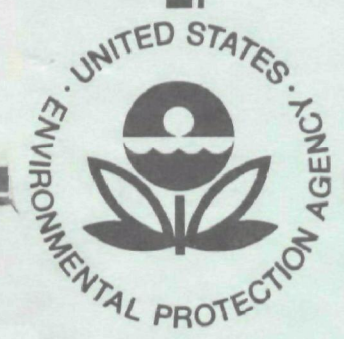
APPENDIX C
Noise Reference Data



NTID300.1

NOISE FROM CONSTRUCTION EQUIPMENT AND OPERATIONS, BUILDING EQUIPMENT, AND HOME APPLIANCES

DECEMBER 31, 1971

U.S. Environmental Protection Agency
Washington, D.C. 20460

NTID300.1

NOISE FROM CONSTRUCTION EQUIPMENT AND OPERATIONS, BUILDING EQUIPMENT, AND HOME APPLIANCES

DECEMBER 31, 1971

Prepared by

BOLT, BERANEK AND NEWMAN
under
CONTRACT 68-04-0047

for the

U.S. Environmental Protection Agency
Office of Noise Abatement and Control
Washington, D.C. 20460

This report has been approved for general availability. The contents of this report reflect the views of the contractor, who is responsible for the facts and the accuracy of the data presented herein, and do not necessarily reflect the official views or policy of EPA. This report does not constitute a standard, specification, or regulation.

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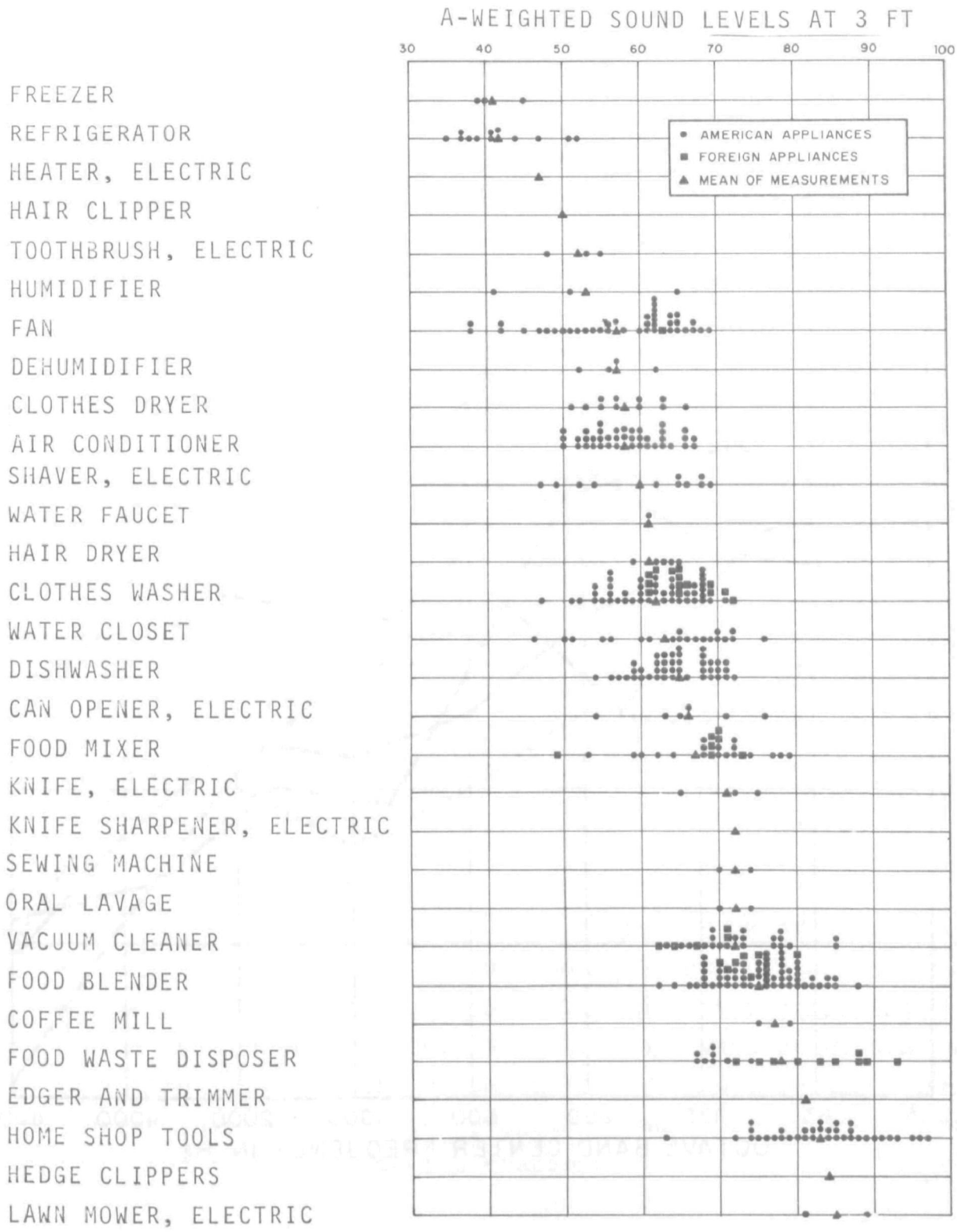

FIG. 3. A SUMMARY OF NOISE LEVELS FOR APPLIANCES MEASURED AT A DISTANCE OF 3 FT.

APPENDIX D
Hydrology and Water Quality Memorandum

triad/holmes associates
civil engineering
land surveying
mammoth lakes • bishop • redwood city
napa • san luis obispo

March 24, 2017

Michael Baker International
Attention: Eddie Torres
Via Email: egtorres@mbakerintl.com

Response to the Technical Memorandum prepared by Tom Myers dated February 10, 2017

The project does not have an effect on any of the issues raised regarding stormwater and groundwater recharge/levels as evidenced by the following:

The Mammoth Creek watershed tributary area upstream of the site is roughly 9000 acres. The project impervious surface composes less than one tenth of one percent of the watershed. The upper portion of the watershed (the lakes basin) receives on average twice the annual amount of precipitation as the area surrounding the project site. The area of Town tributary to Mammoth Creek at the site encompasses 600 acres much of which is developed by single and multi-family residential and commercial projects. The 1.9 acres of impervious surface created by the project is less than 1% of the area of town that has been or will be developed. Even without attenuation the additional proposed impervious surfaces will not impact dry season flows in Mammoth Creek. In order to attenuate post development runoff the project includes the installation of stormwater retention basins that are sized to percolate all impervious surface runoff from a 20yr 1hr precipitation event. This will reduce the runoff from the site to pre-project levels and thus will not impact the Mammoth Creek dry season flows.

The 100 year flood zone will not be affected by this project either. As stated previously the drainage area of the basin is approximately 9,000 acres. The flow rate just east of Old Mammoth Road was determined to be 640 cfs per the Flood Insurance Study for Mammoth Lakes as revised in 1992. The predevelopment 100 yr runoff was determined to be 3.6 cfs based on the 2005 Mammoth Lakes Storm Drainage Master Plan. When incorporating the retention basin into the design calculations the post development runoff decreases from 7.3 cfs to 5.1 cfs utilizing the 1984 Mammoth Lakes Storm Drain Design Manual formulas for site runoff. The increase in runoff from existing to post development conditions will be 1.6 cfs. The increase in flow will raise the level of the floodplain on the property less than one tenth of an inch downstream of Old Mammoth Road where the stormwater will discharge. This was calculated using section A of the Flood Insurance Study which has a flood width of 80 feet 350 feet upstream of Old Mammoth Road.

The project will not decrease groundwater recharge. Over 95% of the groundwater recharge in the Mammoth lakes basin occurs by snowmelt. The 2005 Storm Drain Master Plan Update included charts to determine the runoff rate from snowmelt. The estimated runoff rates within

the Mammoth Creek Park area is 7 to 10 cfs per square mile or 0.01 to 0.02 cfs per acre during a hot spring day. This is far less than 0.9 cfs per acre that is the calculated flow rate from a 20 yr storm event with a 1" per hour storm intensity. The retention basins will readily percolate the snowmelt runoff without overflow due to the moderate to fast percolation rates of the soil as the site and surrounding area is underlain by glacial moraine and alluvium over 100 feet in thickness. The deposits are very uniform and extend well below the estimated groundwater depth of 20 feet below the site. The soil in the area of the project is classified as a "B" type soil (soil with low potential to generate runoff) in the 1984 "Mammoth Lakes Storm Drain Master Plan" prepared by Brown and Caldwell.

The proposed graded swales will direct runoff from the site further north and south around the Multi-Use Facility and will be unlined. The offsite runoff will be directed away from the onsite retention basins and be allowed to spread out as sheet flow further east. This will allow for percolation of the offsite stormwater in a similar manner to existing conditions.

Water quality in Mammoth Creek will not be affected as the project improvements include a stormwater treatment unit to remove oils from pavement runoff and the retention system that will remove sediment by percolating the majority of runoff. The water quality improvements are a requirement that was imposed by the Lahontan Regional Water Quality Control Board through a memorandum of understanding with the Town of Mammoth Lakes. Retention facilities sized for the 20 yr rainstorm event have been installed in the Town since at least 1984 when the Storm Drain Master Plan for the Town of Mammoth Lakes was completed. The 20 yr retention volume will intercept and percolate the first inch of precipitation falling on the impervious surfaces created by the project. Therefore, runoff from any storm event up to the 20 yr event does not exit the site. During an event exceeding the 20 yr event the runoff will enter and mix in the basin allowing the sediment particles to settle and be removed from the stormwater prior to exiting the retention basin at a significantly reduced velocity.

The memorandum mistakenly states that the retention basins contain the equivalent of 0.32 inches of runoff from the entire 6.2-acre site. The statement is erroneous as the basins are sized to percolate the runoff from the newly created 1.9 ac. of impervious surface as required by Lahontan. An existing drywell that will remain was sized and was already installed for the existing parking lot runoff. All other site runoff from undeveloped areas or areas developed with pervious surfaces such as the playground will not be directed to the basins.

The proposed retention basins will not affect the direction of groundwater flow or the potential for groundwater to surface as seeps or springs. As discussed previously 95% of the runoff comes from snowmelt and the basins will absorb and the underlying soil will readily infiltrate the runoff. Groundwater mounding, if any, will only occur during a significant storm event such as a thunderstorm which is what a retention basin is designed to attenuate. A storm of this type is typically a short term, high intensity event. The volume of runoff from the 20 year short term event 7,100 cf as calculated in the Drainage Study. Due to the moderate to fast percolation rates of the soil that amount of runoff will percolate within 4 hours when using an infiltration rate of 3 inches per hour over the proposed 7,000 sf of retention basin bottom surface area.

The Mammoth Lakes groundwater basin is recharged by percolation of runoff from over 13,000 acres. This includes the lakes basin and a large portion of Mammoth Mountain that receive more than twice the amount of precipitation annually as mentioned previously. Once again the

additional impervious surface created by the project of 1.9 acres is less than one tenth of one percent of the overall groundwater basin recharge area. Therefore, it is easily concluded that an increase in the TDS levels in Mammoth Creek from an increased flow in groundwater into the creek would not occur from the project.

Sincerely,

Thomas A. Platz, P.E. C 41039

APPENDIX E
MCWD Will-Serve Letter

Mammoth Community Water District
P.O. Box 597
Mammoth Lakes, CA 93546
(760) 934-2596 FAX: (760) 934-2143

April 14, 2017

Town of Mammoth Lakes
Attn. Haislip Hayes
P.O. Box 1609
Mammoth lakes, CA 93546

Re: Water Service and Sewer Service
Proposed Multi-use Facility
686 Old Mammoth Road
Town of Mammoth Lakes, Mono County, CA

The following information is provided regarding water and sewer service for the existing uses and proposed Multi-use Facility project located at 686 Old Mammoth Road.

The project is located within the Mammoth Community Water District's service area and existing main water and sewer collection pipelines currently serve existing uses on the property. The Town currently receives domestic water through a two inch meter and irrigation water through a four inch meter at this location. Both meters have additional, unserved capacity that is available for new uses.

Sufficient water supplies currently exist to furnish this proposed new use at the existing Mammoth Creek West Park, although it should be noted that the District does not unconditionally guarantee any priority or reservation of capacity beyond what existing water and/ or sewer connections can supply. For any additional capacity, beyond what existing water and/ or sewer connections can supply, the Town must apply for and acquire water and sewer Connection Permits prior to construction of any new uses requiring this additional capacity, including the payment of connection fees. Such permits will be issued by the District solely on a first-come, first-served basis and only to the extent that there is then remaining available water supply and capacity in the physical facilities needed to provide water and sewer service to the proposed development, including available capacity in the District's water and wastewater treatment facilities.

Also, water from the District's distribution system that is available for use by this development is considered potable and meets all applicable State and Federal drinking water quality standards, and is of sufficient volume and pressure to meet all normal household and fire protection requirements.

Should you have any questions regarding this matter, please feel free to contact the engineering department at (760) 934-2596, extension 240.

Sincerely,
MAMMOTH COMMUNITY WATER DISTRICT

John Pedersen, PE
District Engineer