
STAFF REPORT

Date: June 22, 2023

To: TRPA Hearings Officer

From: TRPA Staff

Subject: Lake-wide (not including Emerald Bay) Crayfish Removal Project, Environmental Improvement Program No.: 01.03.01.0005

Requested Action:

Hearings Officer action on the findings and proposed project.

Summary and Staff Recommendation:

The applicant is proposing a commercial boating operation to remove Signal crayfish in Lake Tahoe, Nevada. The project is considered an Environmental Improvement Program (EIP) project to reduce the spread of Aquatic Invasive Species in Lake Tahoe (EIP # 01.03.01.0005). TRPA staff recommends that the Hearings Officer approves the proposed project subject to the conditions in the draft permit.

Project Description/Background:

John Steude, Sierra Lobster, Inc. (applicant) is proposing a commercial boating operation to remove Signal crayfish from the Nevada portion of Lake Tahoe. Signal crayfish are an aquatic invasive species (AIS) in Lake Tahoe. The presence of AIS in Lake Tahoe can negatively impact native aquatic ecosystems, water quality, and the recreation experience. The goal of the project is to remove the Signal crayfish and monitor the effects of removal on resident fish populations. The applicant is exploring the feasibility of sustaining a crayfish removal effort through the commercial sale of biomass harvested.

Initially, one watercraft will be used, a 25-foot Seahawk Hardtop made by North River. One watercraft ranging from 16 – 20 feet in size will be used to set and collect the crayfish traps. Traps will be serviced 48 hours after they are placed. Watercraft will launch and harvested crayfish will be unloaded at existing marinas, either Cave Rock or Sand Harbor, both in Nevada.

Issues and Concerns:

The proposed project includes a commercial boating operation which is a special use in Lake Tahoe and requires Hearings Officer approval. The primary issues related to the project include:

Source Water intakes: Water purveyors with source water intakes in Lake Tahoe have identified a potential for the deployment of crayfish traps to interfere with or damage water intakes. TRPA has established a 1,000-foot exclusion zone around all source water in-takes. The placement of crayfish traps in the 1,000-foot exclusion zone is not permitted.

Shorezone and Lakezone Structures: TRPA identified a potential for the deployment of crayfish traps or other trapping equipment to interfere with the use and operation of existing structures.

Therefore, staff developed a 50-foot exclusion zone around all structures, including but not limited to piers or docks, mooring or navigation buoy floats or anchors, breakwaters, and a 1000-foot exclusion zone around boat-launching facilities.

Crayfish Transport and Sale: Although this permit does not pertain to the transport and sale of Signal crayfish, TRPA has coordinated with the Nevada Department of Wildlife to ensure that invasive crayfish are not transported in the Tahoe Basin other than for the purpose of commercial distribution. Signal crayfish may not be released in any waters in the Tahoe Basin, detailed Record of Transfer forms are required for all catch, and Signal crayfish may only be sold to food wholesalers or retailers and may not be sold to individuals.

Removal Effectiveness/Environmental Improvement Program: The effectiveness of this project at controlling the Signal crayfish population and/or reducing the ecologic and environmental effects of crayfish on Lake Tahoe is unknown at this time. The draft permit therefore includes a large amount of monitoring and reporting, and the opportunity for adaptive management through coordination with other agencies. Further, this project will be evaluated annually to assess its effectiveness as an Environmental Improvement Project.

Environmental Review:

The applicant has submitted an Initial Environmental Checklist (IEC) to assess the potential environmental impacts of the project. No significant impacts were identified, and a finding of no significant effect is appropriate for the proposed project. The IEC is provided as Attachment C.

Public Comment:

Property owners within 300 feet of the proposed project were noticed via mail. No comments have been received to date.

Regional Plan Compliance:

The proposed project is consistent with the Regional Plan.

Contact Information:

For questions regarding this agenda item, please contact Shannon Friedman, at (775) 589-5205 or sfriedman@trpa.gov.

Required Actions:

Staff recommends that the Hearings Officer take the following actions:

- 1) Approve the findings contained in this staff summary (Exhibit A), and a finding of no significant environmental effect.
- 2) Approve the project, based on the staff summary, and record evidence, subject to the conditions contained in the attached Draft TRPA Permit (Attachment B).

Attachments:

- A. Required Findings/Rationale
- B. Draft Permit
- C. Initial Environmental Checklist

Attachment A
Required Findings/Rationale

Attachment A: Required Findings/Rationale

Required Findings: The following is a list of the required findings as set forth in Chapters 4, 21, 80, and 81 of the TRPA Code of Ordinances. Following each finding, Agency staff has indicated if there is sufficient evidence contained in the record to make the applicable findings or has briefly summarized the evidence on which the finding can be made.

1. **Chapter 4.4.1 – Required Findings:**

- a. **The project is consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, Plan Area Statements and maps, the Code and other TRPA plans and programs.**

Land Use: The project area lies within the Lake Tahoe lakezone. The project is designed to have no net change in existing uses within the project area. The project would effectively implement goals and policies of the TRPA Regional Plan. Specifically, the proposed project would partially implement an Environmental Improvement Program (EIP) project (01.03.01.0005, Lake-wide control of aquatic invasive species) Therefore this project, as conditioned in the Draft Permit, is consistent with the Regional Plan and will not adversely affect implementation of Land Use or implementation of sub-elements of the Regional Plan.

Transportation: This project will not adversely affect implementation of the Transportation Element of the Regional Plan. The project is designed to have no net change in existing uses and public access within the project area. Although project uses would not result in significant traffic impacts or additional Daily Vehicle Trip Ends (DVTE) after construction, additional DVTE would be generated on a short-term basis during harvest operations.

Conservation: Implementation of this project may result in aquatic habitat enhancement consistent with the TRPA Goals and Policies. The project may benefit water quality by reducing the effects of Signal crayfish on aquatic algae, nutrient loading, and lake clarity. The project is a pilot-study that includes effectiveness monitoring and evaluation to determine project effects on Signal crayfish; therefore, the level and certainty of habitat enhancement is unknown. No negative impacts to cultural or historic resources area are expected.

Recreation: This project will not affect recreation. Through the special conditions of the permit, any potential impacts to navigation and recreational users have been addressed through requirements that equipment shall not interfere with the navigation of motorized or non-motorized watercraft, swimming areas, topline fishing, or other recreational uses. The applicant must also maintain conformance with all U. S. Coast Guard requirements for use of the watercraft on Lake Tahoe, including avoidance of navigational hazards. The project is designed to have no net change in existing recreational uses and public access within the project area.

Public Service and Facilities: This project will not affect public services or facilities. The project is design to have no net change in existing public services and access within the project area. The project will utilize existing boat-launching facilities for the launch and retrieval of the watercraft.

Implementation: This project will not affect the Implementation Element of the Regional Plan.

- b. The project will not cause the environmental threshold carrying capacities to be exceeded.

TRPA staff has reviewed the Initial Environmental Checklist (IEC) (Attachment C) of the staff report prepared by the applicant, and Article (V)g “Findings” in accordance with Chapter 4, Subsection 6.4 of the TRPA Code of Ordinances. All responses contained on the checklist indicate compliance with the environmental threshold carrying capacities. A copy of the completed (V)g checklist is available as part of the project record which will be available at the public hearing.

- c. Wherever federal, state or local air and water quality standards applicable for the Region, whichever are strictest, must be attained and maintained pursuant to Article V (g) of the TRPA Compact, the project meets or exceeds such standards.

(Refer to paragraph b, above)

2. Chapter 21.2.2 – Special Uses

Commercial Boating is a special use in the lakezone of Lake Tahoe. Before issuing an approval, TRPA shall make the following findings:

- a. The project to which the use pertains is of such a nature, scale, density, intensity, and type to be an appropriate use for the parcel on which and surrounding area in which it will be located.

Commercial boating associated with the project is of relatively small scale and intensity. This permit authorized the use of one watercraft to be used at any time. The type of boating is consistent with existing recreational fishing activities, and existing commercial and recreational boating on Lake Tahoe. Commercial boating operations like this crayfish removal project are an appropriate use for Lake Tahoe.

- b. The project to which the use pertains will not be injurious or disturbing to the health, safety, enjoyment of property, or general welfare of persons or property in the neighborhood, or general welfare of the region, and the applicant has taken reasonable steps to protect against any such injury and to protect the land, water, and air resources of both the applicant's property and that of surrounding property owners; and

The project applicant has included in the boating operation plan reasonable measures to avoid areas where crayfish traps could disturb the health, safety, enjoyment of property, or general welfare of the Lake Tahoe region. All trapping equipment, traps, pods, floats or ropes shall be placed no less than 50 feet from any structure – including but not limited to piers or docks, mooring or navigation buoy floats or anchors, breakwaters. Equipment shall not be placed within 1,000 feet of any launch ramp or drinking water intake structures/lines. Equipment shall not interfere with the navigation of watercraft, swimming areas, topline fishing, or other recreational uses. Any surface floats shall be clearly visible and/or display reflective or lighted surfaces when deployed.

- c. The project to which the use pertains will not change the character of the neighborhood, or detrimentally affect or alter the purpose of the applicable.

The project is designed to not change the character of Lake Tahoe or alter the purpose of the lakezone. Boating operations, watercraft launching, and harvest or equipment loading/unloading associated with this project will occur within existing boating facilities (i.e. marinas) that are characterized by similar existing activities.

3. Chapter 80.3.1 – Findings Required for Lakezone, Shorezone, and Lagoon Projects. Review of Projects in the Shorezone and Lakezone; Required Findings.

A project in the shorezone or lakezone shall not be approved unless TRPA finds that:

- a. General Environmental Findings. TRPA must analyze and make the required environmental findings pursuant to Chapter 3, Environmental Documentation. In addition, such environmental findings must demonstrate that the project will not adversely impact Littoral processes, fish spawning, backshore stability, or onshore wildlife habitat, including wildfowl nesting areas.

The applicant has submitted a TRPA Initial Environmental Checklist and TRPA staff has completed the Vg checklist to make a finding of no significant effect. The project will occur on Lake Tahoe or at established lake-access facilities; therefore, the project will not adversely affect backshore stability or onshore wildlife habitat. Trapping equipment will be located in areas with water-depths greater than 15 feet; therefore, it is unlikely that the project will impact littoral processes or fish spawning. The project may have a beneficial impact on fish spawning by removing non-native predatory crayfish.

- b. Accessory Facilities - There are sufficient accessory facilities to accommodate the project.

Sufficient accessory facilities exist to accommodate the project. The project will utilize existing boat-launching facilities for the launch and retrieval of all watercraft. Accessory facilities potentially accommodating the project are marinas, boat storage, access to public waters, and restrooms.

- c. Compatibility - The project is compatible with existing shorezone and lakezone uses or structures on, or in the immediate vicinity of, the littoral parcel; or that modifications of such existing uses or structures will be undertaken to assure compatibility.

The project is compatible with existing lakezone uses. No modifications to existing uses or structures in the shorezone or lakezone are allowed under this permit. No additional shorezone structures are authorized under this permit.

- d. Use - The use proposed in the foreshore or nearshore is water dependent.

The project area does not include the foreshore. Commercial boating operations are, by nature, water dependent.

- d. Hazardous Materials - Measures will be taken to prevent spills or discharges of hazardous materials.

Measures have been included in project design to prevent the spill or discharge of hazardous materials. The applicant will comply with TRPA Code of Ordinances pertaining to boating, engines, and hazardous materials. Refueling will occur at existing refueling stations or pumps.

- f. Construction - Construction and access techniques will be used to minimize disturbance to the ground and vegetation.

No disturbance to the ground or terrestrial vegetation is allowed under this permit. Traps will be deployed in areas that will minimize disturbances to aquatic vegetation.

- g. Navigation and Safety - The project will not adversely impact navigation or create a threat to public safety as determined by those agencies with jurisdiction over a lake's navigable waters.

The project will not adversely impact navigation or create a threat to public safety. Commercial activities will be restricted in the vicinity of all boating facilities and structures according to TRPA defined exclusion zones. Trapping equipment is not allowed within 50 feet of a structure or within 1000 feet of a launch facility. Trap lines will be marked with buoys that are submerged at least 5-feet from the water surface and will be clearly marked with a light or reflective surface. Surface markers for this project were designed in coordination with the US Coast Guard and the Nevada Department of Wildlife.

- h. Other Agency Comments - TRPA has solicited comments from those public agencies having jurisdiction over the nearshore and foreshore and all such comments received were considered by TRPA prior to action being taken on the project.

TRPA has solicited comments from and developed this permit in coordination with Nevada State Lands Commission, Nevada Department of Wildlife, US Coast Guard, California Department of Fish and Game, and Lake Tahoe water purveyors.

4. Chapter 80.3.3 – Additional Findings for Special Use Projects in the Shorezone and Lakezone;

Before issuing an approval for special uses in the shorezone or lakezone, TRPA shall make the following findings:

- a. The project, to which the use pertains, is of such a nature, scale, density, intensity and type to be an appropriate use for the parcel on which, and surrounding area in which, it will be located.

(Refer to paragraph 2.a, above)

- b. The project, to which the use pertains, will not be injurious or disturbing to the health, safety, enjoyment of property, or general welfare of persons or property in the neighborhood, or in the region.

(Refer to paragraph 2.b, above)

- c. The applicant has taken reasonable steps to protect the land, water and air resources of both the applicant's property and that of surrounding property owners.

The project has been designed to protect the land, water, and air resources through elements to minimize travel, prevent a hazardous material spill, and avoid transport of non-target aquatic invasive species. The project is designed to restore water resources by removing Signal crayfish.

- d. The project, to which the use pertains, will not change the character of the neighborhood, detrimentally affect or alter the purpose of the applicable plan, area statement, community, redevelopment, specific, or master plan as the case may be.

(Refer to paragraph 2.c, above)

Attachment B
Draft Permit

DRAFT PERMIT

PROJECT DESCRIPTION: Crayfish Removal Project (EIP #01.03.01.0005)

FILE #: EIPC2023-0002

APN: 560-101-00

PERMITTEE(S): Sierra Lobster, Inc. John Stuede

COUNTY/LOCATION: The project area is located in the Nevada portion of Lake Tahoe.

Having made the findings required by Agency ordinances and rules, the TRPA Hearings Officer approved the project on June 22, 2023 subject to the special conditions found in this permit.

This permit is valid for a period of 2 (two) years, expiring on June 22, 2025. This permit may be renewed prior to expiration, pending a review of the Environmental Improvement resulting from the commercial harvest operation and a request for renewal by the application prior to permit expiration.

NO COMMERCIAL OPERATION SHALL COMMENCE UNTIL:

- (1) TRPA RECEIVES A COPY OF THIS PERMIT UPON WHICH THE PERMITTEE(S) HAS ACKNOWLEDGED RECEIPT OF THE PERMIT AND ACCEPTANCE OF THE CONTENTS OF THE PERMIT;
- (2) ALL PRE-PROJECT CONDITIONS OF APPROVAL ARE SATISFIED AS EVIDENCED BY TRPA'S ACKNOWLEDGEMENT OF THIS PERMIT; AND,
- (3) A TRPA INSPECTION HAS BEEN CONDUCTED WITH THE BOAT OWNER AND THE OPERATOR, AND A COMMERCIAL OPERATION SCHEDULE SUBMITTED.

TRPA Executive Director/Designee _____

Date _____

PERMITTEE'S ACCEPTANCE: I have read the permit and the conditions of approval and understand and accept them. I also understand that I am responsible for compliance with all the conditions of the permit and am responsible for my agents' and employees' compliance with the permit conditions. I also understand that if the property is sold, I remain liable for the permit conditions until or unless the new owner acknowledges the transfer of the permit and notifies TRPA in writing of such acceptance. I also understand that certain mitigation fees associated with this permit are non-refundable once paid to TRPA. I understand that it is my sole responsibility to obtain any and all required approvals from any other state, local or federal agencies that may have jurisdiction over this project whether or not they are listed in this permit.

Signature of Permittee(s) _____

Date _____

TRPA PROJECT NUMBER 560-101-00
FILE NO. EIPC2023-0002

Security Posted: N/A

EIP Project # 01.03.01.0005

Required plans determined to be in conformance with approval: Date: _____

Air Quality Mitigation Fee amount: _____ Receipt #: _____

TRPA ACKNOWLEDGEMENT: The permittee has complied with all pre-project conditions of approval as of this date:

TRPA Executive Director/Designee

Date

SPECIAL CONDITIONS

1. This project is part of the Lake Tahoe Environmental Improvement Program (EIP), project number 01.03.01.0005, Aquatic Invasive Species Control.
2. This permit specifically authorizes commercial boating for the use of one watercraft at a time on Lake Tahoe for commercial purposes. All watercraft used for this commercial boating operation shall be described in the operations plan (see below). This permit authorizes certain uses on land and water as conditioned with this permit.
3. Prior to permit acknowledgement, the following conditions of approval must be satisfied.
 - A. The permittee shall submit a final operations schedule which includes:
 - (1) Copies of all current permits and certifications from the Nevada Department of Wildlife and Nevada Division of State Lands; and other permitting agencies, as appropriate. This includes copies of current vessel registration documentation and commercial harvest permits.
 - (2) Compliance with annual TRPA Lake Tahoe watercraft inspection and sticker program.
 - B. The permittee shall submit an air quality mitigation fee. This fee is based on the addition of commercial daily vehicle trips at a rate of \$36.20/trip.
4. The permittee shall submit a monthly report to TRPA detailing the number and type of traps used; the date, time, location and depth for each trap set, emptied and removed; the poundage and count of crayfish caught, harvested and disposed of; the type and quantity of bait used; the quantity, length, identity and condition of non-target fish caught and/or released; the quantity of crayfish sent to market and the poundage

retained for bait. This report shall be submitted in Microsoft Excel or equivalent electronic format. The monthly report is due 15 days following the end of each month.

5. The permittee shall submit an annual operations schedule by January 15 of each year. The annual operations schedule requires TRPA approval prior to yearly operation. The information shall include an updated operations schedule including those items requested in Special Condition 3.A of this permit.
6. It is the permittee's responsibility to maintain conformance with all U. S. Coast Guard requirements for use of the watercraft on Lake Tahoe. It is the permittee's responsibility to obtain authorization and maintain compliance with all applicable state, federal, and local regulations for the commercial operation at all times.
7. Commercial boating under this TRPA permit is authorized in the entirety of the waters of Lake Tahoe. Any commercial fish harvesting is subject to the regulations, exclusion or location zones, and authorizations of the respective resource authorities. All trapping equipment, traps, pods, floats or ropes shall not be placed in any area identified for closure in permits issued by any other land management or permitting agency.
8. Commercial boating is not authorized in areas where water levels do not allow clearance of watercraft draft. At no time shall any part of the watercraft come into contact with the lake bottom or subsurface erosion control structures (i.e. lake bottom revetments, rock gabions, etc.).
9. All trapping equipment, traps, pods, floats or ropes shall be placed no less than 50 feet from any structure – including but not limited to piers or docks, mooring or navigation buoy floats or anchors, breakwaters - in the shorezone or lakezone of Lake Tahoe. Equipment shall not be placed within 1,000 feet of any launch ramp or drinking water intake structures/lines. Equipment shall not interfere with the navigation of motorized or non-motorized watercraft, swimming areas, topline fishing, or other recreational uses. Any surface floats shall be clearly visible and/or display reflective or lighted surfaces when deployed.
10. All trapping equipment will be designed and tested to avoid incidental catch of native minnows and other non-target fish species. If native fish are captured in traps or pods, they will be measured, identified, and visually assessed for evidence of physical trauma. Information on all incidental catch will be included in monthly reports. TRPA may exclude certain trapping equipment or pod designs from this commercial boating operation if significant quantities of native fish species are caught.
11. No permanent structures are authorized under this permit. The temporary placement of floating markers is permitted, however temporary placement of such equipment shall not exceed 48 hours in the same location.
12. This commercial activity shall not cause violation of any of the community noise equivalent levels (CNEL) of the Plan Area Statements in which this operation will occur.
13. Any watercraft used for this commercial boating operation shall meet the TRPA Code requirements for watercraft, including subsection 60.1.3.E, prohibition of two-stroke

engines; subsection 63.4.2, aquatic invasive species inspections and decontaminations; and subsection 68.3.1.C, maximum allowable single-noise event levels.

14. All commercial boating operations conducted within 600 feet of the waterline of Lake Tahoe shall observe the no-wake-zone and may not create a wake or exceed 5 MPH.
15. This permit authorizes commercial boating activities on the Nevada portion of Lake Tahoe. No operations are permitted on the tributaries of Lake Tahoe or in any other lakes in the Region.
16. All project and employee vehicles, including trailers, shall be parked on existing paved surfaces in a designated legal parking area.
17. This approval is based on the permittee's representation that all plans and information contained in the subject application are true and correct. Should any information or representation submitted in connection with the project application be incorrect or untrue, TRPA may rescind this approval or take other appropriate action.
18. Information contained in special reports prepared for the project, including, but not limited to, U. S. Coast Guard Temporary Certificates of Inspection, are considered conditions of project approval.
19. The stated conditions of this permit shall be adhered to throughout the lifetime of this operation. This permit may be revoked if at any time the operation is out of compliance with the conditions of this permit.
20. The discharge of petroleum products, waste and litter, or earthen materials to the waters of the Lake Tahoe Basin is prohibited. All surplus bait and other materials shall be removed from the water body and deposited in a proper disposal site.
21. The project may be subject to the permitting requirements of other agencies with jurisdiction over the proposed project activities, including
22. To the maximum extent allowable by law, the permittee agrees to indemnify, defend, and hold harmless TRPA, its Governing Board, its Planning Commission, its agents, and its employees (collectively, TRPA) from and against any and all suits, losses, damages, injuries, liabilities, and claims by any person (a) for any injury (including death) or damage to person or property or (b) to set aside, attack, void, modify, amend, or annul any actions of TRPA. The foregoing indemnity obligation applies, without limitation, to any and all suits, losses, damages, injuries, liabilities, and claims by any person from any cause whatsoever arising out of or in connection with either directly or indirectly, and in whole or in part (1) the processing, conditioning, issuance, or implementation of this permit; (2) any failure to comply with all applicable laws and regulations; or (3) the design, installation, or operation of any improvements, regardless of whether the actions or omissions are alleged to be caused by TRPA or the permittee.

Included within the permittee's indemnity obligation set forth herein, the permittee agrees to pay all fees of TRPA's attorneys and all other costs and expenses of defenses as they are

incurred, including reimbursement of TRPA as necessary for any and all costs and/or fees incurred by TRPA for actions arising directly or indirectly from issuance or implementation of this permit. Permittee shall also pay all costs, including attorneys' fees, incurred by TRPA to enforce this indemnification agreement. If any judgment is rendered against TRPA in any action subject to this indemnification, the permittee shall, at its expense, satisfy and discharge the same.

END OF PERMIT

DRAFT

MITIGATED FINDING OF NO SIGNIFICANT EFFECT

PROJECT DESCRIPTION: Crayfish Removal Project (EIP #01.03.01.0005)

FILE #: EIPC2021-0003

APN: 560-101-00

PERMITTEE(S): Joseph Curtis Dettling

COUNTY/LOCATION: The project area is located in the Nevada portion of Lake Tahoe

Staff Analysis: In accordance with Article IV of the Tahoe Regional Planning Compact, as amended, and Section 6.3 of the TRPA Rules and Regulations of Practice and Procedure, the TRPA staff has reviewed the information submitted with the subject project. On the basis of this initial environmental evaluation, Agency staff has found that the subject project will not have a significant effect on the environment.

Determination: Based on the above-stated finding, the subject project is conditionally exempt from the requirement to prepare an Environmental Impact Statement. The conditions of this exemption are the conditions of permit approval.

TRPA Chairman or Executive Director/Designee

Date

Attachment C
Initial Environmental Checklist



**TAHOE
REGIONAL
PLANNING
AGENCY**

Mail
PO Box 5310
Stateline, NV 89449-5310

Location
128 Market Street
Stateline, NV 89449

Contact
Phone: 775-588-4547
Fax: 775-588-4527
www.trpa.gov

**INITIAL ENVIRONMENTAL CHECKLIST
FOR DETERMINATION OF ENVIRONMENTAL IMPACT**

Project Name:

APN/Project Location:

County/City:

Project Description:

See attached Project Description



Mail
 PO Box 5310
 Stateline, NV 89449-5310

Location
 128 Market Street
 Stateline, NV 89449

Contact
 Phone: 775-588-4547
 Fax: 775-588-4527
 www.trpa.gov

The following questionnaire will be completed by the applicant based on evidence submitted with the application. All "Yes" and "No, With Mitigation" answers will require further written comments. Use the blank boxes to add any additional information and reference the question number and letter. If more space is required for additional information, please attached separate sheets and reference the question number and letter.

For information on the status of TRPA environmental thresholds click on the links to the Threshold Dashboard.

I. Environmental Impacts

1. Land

Current and historic status of soil conservation standards can be found at the links below:

- [Impervious Cover](#)
- [Stream Environment Zone](#)

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. A change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Unstable soil conditions during or after completion of the proposal?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. The continuation of or increase in wind or water erosion of soils, either on or off the site?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion



2. Air Quality

Current and historic status of air quality standards can be found at the links below:

- [Carbon Monoxide \(CO\)](#)
- [Nitrate Deposition](#)
- [Ozone \(O3\)](#)
- [Regional Visibility](#)
- [Respirable and Fine Particulate Matter](#)
- [Sub-Regional Visibility](#)

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Substantial air pollutant emissions?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Deterioration of ambient (existing) air quality?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. The creation of objectionable odors?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Increased use of diesel fuel?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion



Mail
 PO Box 5310
 Stateline, NV 89449-5310

Location
 128 Market Street
 Stateline, NV 89449

Contact
 Phone: 775-588-4547
 Fax: 775-588-4527
 www.trpa.gov

3. Water Quality

Current and historic status of water quality standards can be found at the links below:

- [Aquatic Invasive Species](#)
- [Deep Water \(Pelagic\) Lake Tahoe](#)
- [Groundwater](#)
- [Nearshore \(Littoral\) Lake Tahoe](#)
- [Other Lakes](#)
- [Surface Runoff](#)
- [Tributaries](#)
- [Load Reductions](#)

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Changes in currents, or the course or direction of water movements?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Alterations to the course or flow of 100-yearflood waters?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Change in the amount of surface water in any water body?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Alteration of the direction or rate of flow of ground water?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Substantial reduction in the amount of water otherwise available for public water supplies?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. The potential discharge of contaminants to the groundwater or any alteration of groundwater quality?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Is the project located within 600 feet of a drinking water source?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion



Mail
 PO Box 5310
 Stateline, NV 89449-5310

Location
 128 Market Street
 Stateline, NV 89449

Contact
 Phone: 775-588-4547
 Fax: 775-588-4527
 www.trpa.gov

4. Vegetation

Current and historic status of vegetation preservation standards can be found at the links below:

- [Common Vegetation](#)
- [Late Seral/Old Growth Ecosystems](#)
- [Sensitive Plants](#)
- [Uncommon Plant Communities](#)

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora, and aquatic plants)?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Reduction of the numbers of any unique, rare, or endangered species of plants?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Removal of stream bank and/or backshore vegetation, including woody vegetation such as willows?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. A change in the natural functioning of an old growth ecosystem?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion



5. Wildlife

Current and historic status of special interest species standards can be found at the links below:

- [Special Interest Species](#)

Current and historic status of the fisheries standards can be found at the links below:

- [Instream Flow](#)
- [Lake Habitat](#)
- [Stream Habitat](#)

Will the proposal result in:

- | | Yes | No | No, with mitigation | Data insufficient |
|--|----------------------------------|----------------------------------|-----------------------|-----------------------|
| a. Change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)? | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Reduction of the number of any unique, rare or endangered species of animals? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Deterioration of existing fish or wildlife habitat quantity or quality? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Discussion

The Project is expected to remove approximately 300,000 invasive signal crayfish in the first year and to reach removal of up to 1,000,000 crayfish by the third year of operations.



6. Noise

Current and historic status of the noise standards can be found at the links below:

- [Cumulative Noise Events](#)
- [Single Noise Events](#)

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Area Plan, Plan Area Statement, Community Plan or Master Plan?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Exposure of people to severe noise levels?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. The placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dBA or is otherwise incompatible?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. The placement of uses that would generate an incompatible noise level in close proximity to existing residential or tourist accommodation uses?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Exposure of existing structures to levels of ground vibration that could result in structural damage?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion



7. Light and Glare

Will the proposal:

- | | Yes | No | No, with mitigation | Data insufficient |
|---|----------------------------------|----------------------------------|-----------------------|-----------------------|
| a. Include new or modified sources of exterior lighting? | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Create new illumination which is more substantial than other lighting, if any, within the surrounding area? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Cause light from exterior sources to be cast off -site or onto public lands? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Create new sources of glare through the siting of the improvements or through the use of reflective materials? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Discussion

Each bouy will have a single red led light to enhance visibility at night by boats in the nearby area. The small red lights will not be visible from shore. Red light only travels 10 to 15 feet in water so the lights will not disturb wildlife in the lake. Lights for surface bouys used in commercial crayfishing are required by special conditions issued by Nevada Department of Wildlife.

8. Land Use

Will the proposal:

- | | Yes | No | No, with mitigation | Data insufficient |
|--|-----------------------|----------------------------------|-----------------------|-----------------------|
| a. Include uses which are not listed as permissible uses in the applicable Area Plan, Plan Area Statement, adopted Community Plan, or Master Plan? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Expand or intensify an existing non-conforming use? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Discussion



9. Natural Resources

Will the proposal result in:

- a. A substantial increase in the rate of use of any natural resources?
- b. Substantial depletion of any non-renewable natural resource?

	Yes	No	No, with mitigation	Data insufficient
a.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion

10. Risk of Upset

Will the proposal:

- a. Involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions?
- b. Involve possible interference with an emergency evacuation plan?

	Yes	No	No, with mitigation	Data insufficient
a.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion



11. Population

Will the proposal:

- a. Alter the location, distribution, density, or growth rate of the human population planned for the Region?
- b. Include or result in the temporary or permanent displacement of residents?

	Yes	No	No, with mitigation	Data insufficient
a.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion

12. Housing

Will the proposal:

- a. Affect existing housing, or create a demand for additional housing?

To determine if the proposal will affect existing housing or create a demand for additional housing, please answer the following questions:

1. Will the proposal decrease the amount of housing in the Tahoe Region?
2. Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households?

	Yes	No	No, with mitigation	Data insufficient
1.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion



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 128 Market Street
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13. Transportation / Circulation

Will the proposal result in:

	Yes	No	No, with mitigation	Data insufficient
a. Generation of 650 or more new average daily Vehicle Miles Travelled?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Changes to existing parking facilities, or demand for new parking?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Alterations to present patterns of circulation or movement of people and/or goods?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Alterations to waterborne, rail or air traffic?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion



14. Public Services

Will the proposal have an unplanned effect upon, or result in a need for new or altered governmental services in any of the following areas?:

	Yes	No	No, with mitigation	Data insufficient
a. Fire protection?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Police protection?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Schools?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Parks or other recreational facilities?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Maintenance of public facilities, including roads?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Other governmental services?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Discussion



15. Energy

Will the proposal result in:

- | | Yes | No | No, with mitigation | Data insufficient |
|---|-----------------------|----------------------------------|-----------------------|-----------------------|
| a. Use of substantial amounts of fuel or energy? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Discussion:

16. Utilities

Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities:

- | | Yes | No | No, with mitigation | Data insufficient |
|---|-----------------------|----------------------------------|-----------------------|-----------------------|
| a. Power or natural gas? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Communication systems? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Utilize additional water which amount will exceed the maximum permitted capacity of the service provider? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Storm water drainage? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. Solid waste and disposal? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Discussion



17. Human Health

Will the proposal result in:

- | | Yes | No | No, with mitigation | Data insufficient |
|--|-----------------------|----------------------------------|-----------------------|-----------------------|
| a. Creation of any health hazard or potential health hazard (excluding mental health)? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Exposure of people to potential health hazards? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Discussion

18. Scenic Resources / Community Design

Current and historic status of the scenic resources standards can be found at the links below:

- [Built Environment](#)
- [Other Areas](#)
- [Roadway and Shoreline Units](#)

Will the proposal:

- | | Yes | No | No, with mitigation | Data insufficient |
|---|-----------------------|----------------------------------|-----------------------|-----------------------|
| a. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Be visible from any public recreation area or TRPA designated bicycle trail? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Be inconsistent with the height and design standards required by the applicable ordinance, Community Plan, or Area Plan? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Discussion



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19. Recreation

Current and historic status of the recreation standards can be found at the links below:

- [Fair Share Distribution of Recreation Capacity](#)
- [Quality of Recreation Experience and Access to Recreational Opportunities](#)

Will the proposal:

- | | Yes | No | No, with mitigation | Data insufficient |
|---|-----------------------|----------------------------------|-----------------------|-----------------------|
| a. Create additional demand for recreation facilities? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Create additional recreation capacity? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Have the potential to create conflicts between recreation uses, either existing or proposed? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Result in a decrease or loss of public access to any lake, waterway, or public lands? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Discussion



20. Archaeological / Historical

Will the proposal result in:

- | | Yes | No | No, with mitigation | Data insufficient |
|--|-----------------------|----------------------------------|-----------------------|-----------------------|
| a. An alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Is the property associated with any historically significant events and/or sites or persons? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Will the proposal restrict historic or pre-historic religious or sacred uses within the potential impact area? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Discussion



21. Findings of Significance

- | | Yes | No | No, with mitigation | Data insufficient |
|--|-----------------------|----------------------------------|-----------------------|-----------------------|
| a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.) | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?) | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Does the project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly? | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Discussion



DECLARATION:

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signature:

	at	Douglas County	▼	March 17, 2023
--	----	----------------	---	----------------

Person preparing application

County

Date

Applicant Written Comments: (Attach additional sheets if necessary)



Determination:

On the basis of this evaluation:

- a. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure YES NO
- b. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules and Procedures. YES NO
- c. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this chapter and TRPA's Rules of Procedures. YES NO

Signature of Evaluator

Title of Evaluator

Date

Proposed Signal Crayfish Harvesting Operation in Lake Tahoe
Sierra Lobster, Inc.
March 17, 2023

Sierra Lobster, Inc. proposes to commercially harvest crayfish on the Nevada side of Lake Tahoe for profit and as an Environmental Improvement Project to help improve lake clarity. Crayfish are an invasive species which reportedly process nutrients in a manner that promotes algae growth which is detrimental to lake clarity. Harvesting crayfish may be beneficial to improving lake clarity near shore. Crayfish are also a valuable food source.

Harvested crayfish will be sold to local restaurants and seafood wholesalers. A typical request is for 200 to 400 lbs of crayfish at a time to support a special event such as a "crayfish boil" or to support weekly demand by restaurants. Due to the high cost of obtaining crayfish from Lake Tahoe, compared with other crayfish sources, this minimum amount of crayfish needs to be caught for each round trip of the traps in and out of the lake for the operation to be profitable.

One can expect to get about 5 pounds per trap per day during the crayfish season which is May to October. A practical limit for the proposed operation is approximately 1 to 2 tons of crayfish per week during the peak season per fishing vessel. Sierra Lobster anticipates beginning with orders of approximately 1500 lbs per week and volume to double or triple within the first year. A second fishing vessel will likely be added to operations as the demand for Lake Tahoe crayfish increases. The number of vehicle trips per day for the truck and boat is expected to be 2 per day, 4 days per week in the beginning and increase to 4 per day, 6 days per week if warranted by demand for crayfish.

A good source of information on the seasonality, abundance and distribution of crayfish in Lake Tahoe can be found in the second half of the 2016 dissertation by John Umek entitled: "*The Ecology of Signal Crayfish in Two Large Ultra-Oligotrophic Ecosystems: Crater Lake and Lake Tahoe.*"¹ Please note Figures 3-1 to 3-7 beginning on page 103.

Sierra Lobster, Inc. proposes to deploy approximately 100 rectangular crayfish traps, (or pair of cylindrical traps) at any one time on the lake bottom at depths ranging from 50 to 100 feet. One to two dozen traps at a time will be placed at half a dozen locations selected from the these proposed locations: Edgewood, Zephyr Point, Lincoln Park, Cave Rock, Logan Shoals, South Point, Deadman Point, Skunk Harbor, Secret Harbor, Chimney Beach, Sand Point, Sand Harbor, Memorial Point, Hidden Beach, Crystal Bay, or Stateline Point. Figure 1 shows the proposed specific locations.

Each rectangular wire trap (2' L x 2' W x 10" Ht.) or pair of cylindrical wire traps (2 X 2' L, 10" O.D., attached side by side similar to the method used by Umek), is attached by rope to a marker buoy at the surface. The three traps to be used are the Tomahawk crayfish trap², the Promar shrimp trap³, and the Snake River cylindrical crayfish trap⁴. Traps may be modified by adding a few pounds of additional weight (iron rebar) to ensure the traps will not hop up and down during high wind and wave conditions.

Each marker buoy consists of a brightly colored buoy (e.g., white, pink, or red) made of rigid foam (11" L, 5" O.D.) for good daytime visibility and a waterproof red light attached for good visibility at night.

Traps are typically left undisturbed on the lake bottom to “soak” for 24 to 48 hour intervals. After soaking, the trap is retrieved with a crab pot puller, emptied, and redeployed with fresh bait at the same location or a new location depending on catch results.

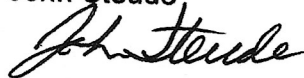
Any buoy and trap not found at the expected location (GPS waypoint) will be searched for visually at the surface and, if necessary, with a camera on a Remote Operated Vehicle (ROV) to search the lake bottom. Sierra Lobster’s equipment includes a Fifish ROV that can reach a depth of 328 feet and is equipped with a mechanical gripper arm⁴ to grab a trap or rope. It can also be deployed with a separate line, stronger than the ROV tether line, attached to a one-way hook⁵ which can grab a trap or a rope. If necessary, additional searching may be contracted with salvage divers to the extent practicable.

The fishing vessel is the Discovery, a 25' aluminum pilothouse boat (North River Seahawk). The boat will be launched and retrieved from public boat ramps and marinas such as Cave Rock or Sand Harbor. The Discovery has a Tahoe-only sticker and will only be used in Lake Tahoe. The Discovery will be inspected and serviced to ensure it is clean, drained, and dry prior to any launch in Lake Tahoe. When on land, the boat will be stored on a paved surface while in operation during the crayfish season. During the off season in winter, the boat may be stored on a non-paved surface. When this occurs, the access area to the paved surface will be inspected and swept to ensure no dirt or mud is tracked onto roads in the Tahoe Basin when the boat is taken out of winter storage.

Permit applications have been or will be submitted to the Nevada Department of Wildlife (NDOW), Nevada Division of State Lands (NDSL), Nevada Division of Environmental Protection (NDEP) and the Tahoe Regional Planning Agency. The crayfish harvesting project will comply with the U.S. Army Corps of Engineers Nationwide Permit No. 4 on a non-notifying basis. As required by ACOE NWP #4, Sierra Lobster will comply with a Clean Water Act Section 401 Water Quality Certification or waiver issued by the NDEP. The project will comply with all requirements in the NDOW Special Conditions for Commercial Collection of Unprotected Wildlife – Crayfish. A project briefing was conducted with the U.S. Coast Guard commercial fishing inspector and a list of required and recommended equipment was obtained. Sierra Lobster is currently working with the Carson City Health and Human Services to develop an approved holding facility to hold crayfish for processing and delivery.

It is anticipated all permit and license application requirements can be fulfilled over the next two months and operations could begin by the end of May 2023.

John Steude



President

Sierra Lobster, Inc.

P.O. Box 9811

South Lake Tahoe, CA 96158

530-307-2013

johnsteude57@gmail.com

Footnotes:

¹Umek dissertation:

https://scholarworks.unr.edu/bitstream/handle/11714/2255/Umek_unr_0139D_12132.pdf?sequence=1

²Tomahawk trap:

<https://www.animaltrapsandsupplies.com/products/tomahawk-crayfish-crab-shrimp-trap-24x24x10-model-4055.html>

³Promar trap:

<https://promarahi.com/products/heavy-duty-shrimp-pot>

⁴Snake River trap:

<https://www.procrayster.com/product/snake-river-cylinder-trap/>

⁵Fifish ROV gripper arm:

https://www.wellbots.com/products/qysea-fifish-v6-series-gripper-arm?variant=32664672960560&dfw_tracker=14110-32664672960560&gclid=EAlalQobChMI_sijjMne_AIVkhetBh0_DAF0EAQYBiABEgl0vvD_BwE

⁶Fifish ROV hook & separate line

https://www.blueskiesdroneshop.com/products/qysea-fifish-hook?variant=37367093526680¤cy=USD&utm_medium=product_sync&utm_source=google&utm_content=sag_organic&utm_campaign=sag_organic&utm_campaign=gs-2019-09-16&utm_source=google&utm_medium=smart_campaign

