

TRUCKEE RIVER HABITAT ENHANCEMENT PROJECT ENVIRONMENTAL ASSESSMENT PORTFOLIO



PREPARED BY
NEVADA ENVIRONMENTAL CONSULTING, LLC
ON BEHALF OF
TROUT UNLIMITED



Purpose

Nevada Environmental Consulting, LLC. on behalf of Trout Unlimited, is submitting this transmittal package for the Truckee River Habitat Enhancement Project, an in-channel habitat restoration project focused on enhancing aquatic habitats within the Truckee River to address critical challenges faced by native cold-water fish species, particularly the Lahontan Cutthroat Trout (LCT).

Contained within this transmittal package is an Environmental Assessment prepared in support of the Truckee River Habitat Enhancement Project, confirming its compliance with relevant environmental jurisdictions. Additionally, this package includes the necessary supporting documents required by these jurisdictions and agencies, as well as the analyses and methods of research that informed the findings outlined in the assessment and all relevant discussions of construction methodology and timelines.

Agency Coordination

In channel work in the Truckee River is governed by Federal and Nevada State Lands therefore, no County Special Use or Grading Permits are supported. A County Parkland Easement Application is requested to account for ingress and egress points, to edge of bank. In support of the environmental assessment, the following jurisdiction adheres to:

Nationwide Permit (NWP), Clean Water Act (404) of 1972, Environmental Protection Agency (EPA), Rivers and Harbors Appropriation Act of 1899 Section 10, U.S. Army Corps of Engineers (USACE):

This applies to any projects where project could involve minor discharges with minimal adverse environmental effects.

Parkland Easement, Washoe County Regional Parks and Open Space:

The sale or lease of county real property is generally governed by N.R.S. 244.2795, 244.281, 244.282 and 244.283. This application grants access to equipment and crews during project construction. The possibility that Washoe County will require easement access to be temporary or permanent is yet to be determined. All applicants will be requested to present their proposal for public review and comment to the appropriate Washoe County Citizen Advisory Board or other appropriate Approved by the Board of County Commissioners, November 13, 2024 community forum and provide notice to all adjacent property owners as required in Washoe County Code Chapter 110 noticing provisions related to project proposals. All public noticing costs will be paid for by the applicant.

Section 408 (33 U.S.C. § 408), Rivers and Harbors Appropriation Act of 1899, U.S. Army Corps of Engineers (USACE):

This section governs alterations to existing USACE civil work projects and boundaries, relevant to projects Lockwood site.

Section 401 (33 U.S.C. § 1341), Clean Water Act of 1972, Environmental Protection Agency (EPA), Nevada Division of Environmental Protection (NDEP):

This section mandates water quality certification to ensure that any discharges into state waters comply with Nevada's water quality standards, relevant to both sites and their respective counties (Washoe, Storey). NDEP 401 water quality certification within a water of the State requires a temporary Working



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in Waters permit for any construction, excavation, or filling activities in state waters at the Storey County site, ensuring protection of water quality and aquatic habitats.

State Owned Submerged Lands Application, Nevada Division of State Lands (NDSL)

This applies to construction projects affecting the floor of navigable waters of the State (Truckee River), up to the ordinary high water mark.

Trout Unlimited

Trout Unlimited (TU), a non-profit organization dedicated to the conservation, rehabilitation, and protection of North America's fish habitats.

Nevada Environmental Consulting, LLC.

Nevada Environmental Consulting, LLC (NVENV) was founded to provide integrated environmental resource services to our clients. We pride ourselves on high quality data, scientific transparency, proven regulatory communication strategies, and cost effectiveness.

Sincerely,

Matthew Setty, Principal Scientist, CEM # NV2187 exp. 4/2025



Clean Water Act Section 401 Water Quality Certification Application

Please refer to the “Clean Water Act Section 401 Water Quality Certification Application Guidance” document for assistance with completing this application.


A. Pre-Filing Meeting	
Please provide the date that a pre-filing meeting was requested from Nevada Division of Environmental Protection (NDEP) Bureau of Water Quality Planning (BWQP).	A pre-filing meeting occurred on Tuesday, January 16th, 2024 at 9:00AM.
<i>Note: If a pre-filing meeting has not been requested, please schedule a pre-filing meeting with NDEP BWQP.</i>	

B. Contact Information			
Project Proponent Information			
Company Name: Trout Unlimited		Address: 10035 Church St. Suite 1	
Applicant Name: Dan Johnson		City: Truckee	
Phone: (530)333-5125	Fax: -	State: CA	
Email: Dan.Johnson@tu.org		Zip Code: 95959	
Agent Information			
Company Name: Nevada Environmental Consulting, LLC.		Address: 316 California Ave #763	
Agent Name: Matthew Setty		City: Reno	
Phone: (775)544-1149	Fax: -	State: NV	
Email: matt@nvenv.net		Zip Code: 89509	

C. Project General Information			
Project Location			
Project/Site Name: Truckee River Habitat Enhancement Site 1: Crystal Peak Park		Name of receiving waterbody): Truckee River	
Address: 561 Crystal Park RD		Type of waterbody present at project location (<i>select all that apply</i>): <input checked="" type="checkbox"/> Perennial River or Stream <input type="checkbox"/> Intermittent River or Stream <input type="checkbox"/> Ephemeral River or Stream <input type="checkbox"/> Lake/Pond/Reservoir <input type="checkbox"/> Wetland <input type="checkbox"/> Other: _____	
City: Verdi			
County: Washoe			
State: NV			
Zip Code: 89439			
Latitude (UTM or Dec/Deg): 39.51686		Longitude (UTM or Dec/Deg): -199.99618	
Township: 19 North	Range: 18 East	Section: 18	¼ Section: NE ¼ of the NE ¼

Project Details	
Project purpose:	Trout Unlimited Inc. is proposing an aquatic habitat improvement project on the Truckee River utilizing J-Hook weir structures to address fishery habitat and geomorphic stability issues within the project boundaries. This is a dual-phase initiative with two sites on the Truckee River, with a total of 10 weirs planned – 5 allocated to each site. For all purposes, this 401 application refers to Site 1 of 2, located at the Crystal Peak Park in Verdi, NV.
Describe current site conditions: Attachments can include, but are not limited to, relevant site data, photographs that represent current site conditions, or other relevant documentation.	See Attachments for Mapping Detail and Weir Construction Plans.
Describe the proposed activity including methodology of each project element:	Construction will be done using clean, locally sourced boulders to install 5 naturally stacked J-Hook weirs within the Truckee River at Crystal Peak Park. There will be no concrete utilized. All construction will be done in-channel, below the Ordinary High-Water mark. Transportation of materials will be done using already established roads / trails and conducted with vegetative mats.
Estimate the nature, specific location, and number of discharge(s) expected to be authorized by the proposed activity:	Due to placement of only clean boulders, it is estimated discharge will be minimally low at each of the 5 structures.
Provide the date(s) on which the proposed activity is planned to begin and end and the approximate date(s) when any discharge(s) may commence:	October 2025
Provide a list of the federal permit(s) or license(s) required to conduct the activity which may result in a discharge into regulated waters (see mandatory attachments):	<ul style="list-style-type: none"> - Nationwide 27 Permit - 401 Permit (this document) - Working In Waterways Permit - Stormwater Pollution Prevention Plans Permit (SWPPP) - 404 Permit - 408 Permit
Provide a list of all other federal, state, interstate, tribal, territorial, or local agency authorizations required for the proposed activity and the current status of each authorization:	<ul style="list-style-type: none"> - Nationwide 27 Permit (USACE) – In Progress - 401 Permit (this document) (NDEP) – In Progress - Working In Waterways Permit (NDEP) – In Progress - Stormwater Pollution Prevention Plans Permit (SWPPP) (NDEP) – In Progress - 404 Permit (USACE) – In Progress - 408 Permit (USACE) – In Progress
Total area of impact to regulated waterbodies (acres):	~0.06.
Total distance of impact to regulated waterbodies (linear feet):	~600 Lin ft. (based on distance from most upstream weir to most downstream).
	Temporary: ~600 lin. ft. Permanent: 1,250 sq ft total (based on weir sizing)

Amount excavation and/or fill discharged within regulated waters (acres, linear feet, and cubic yards):	N/A	100 cubic yards. (200 Cubic Yards for entire project / both sites.)
Amount of dredge material discharged within regulated waters (acres, linear feet, and cubic yards):	Temporary: N/A	Permanent: N/A
	N/A (No dredging performed.)	N/A (No dredging performed.)
Describe the reason(s) why avoidance of temporary fill in regulated waters is not practicable (if applicable):	Temporary fill is non-applicable, as all "fill" will be permanent (boulder constructed J-Hook Weirs.)	
<p>Describe the Best Management Practices (BMPs) to be implemented to avoid and/or minimize impacts to regulated waters:</p> <p>Examples include sediment and erosion control measures, habitat preservation, flow diversions, dewatering, hazardous materials management, water quality monitoring, equipment or plans to treat, control, or manage discharges, etc.</p>	<p>Materials:</p> <ul style="list-style-type: none"> - All boulders used for weir construction will be locally sourced, and deep cleaned prior to installation into river to ensure turbidity would only occur during initial placement. - Weir structures will be naturally stacked; therefore, no concrete or other anchoring is necessary. <p>Construction:</p> <ul style="list-style-type: none"> - Construction will only occur during the fall low-water period using an excavator to reduce discharge / erosion / turbidity. - Placement of weir structures will be below the Ordinary-High water mark to ensure maximum habitat benefits. - There will be no construction of cofferdams, nor diversion structures, which will reduce likelihood of fishery and habitat impactions. - Site and site access routes will have minimal ground disturbance due to the use of vegetative mats to preserve existing vegetation. 	
Describe how the activity has been designed to avoid and/or minimize adverse effects, both temporary and permanent, to regulated waters:	<p>Materials:</p> <ul style="list-style-type: none"> - All boulders used for weir construction will be locally sourced, and deep cleaned prior to installation into river to ensure turbidity would only occur during initial placement. - Weir structures will be naturally stacked; therefore, no concrete or other anchoring is necessary. <p>Construction:</p> <ul style="list-style-type: none"> - Construction will only occur during the fall low-water period using an excavator to reduce discharge / erosion / turbidity. - Placement of weir structures will be below the Ordinary-High water mark to ensure maximum habitat benefits. - There will be no construction of cofferdams, nor diversion structures, which will reduce likelihood of fishery and habitat impactions. - Site and site access routes will have minimal ground disturbance due to the use of vegetative mats to preserve existing vegetation. 	
Describe any compensatory mitigation planned for this project (if applicable):	N/A	

D. Signature		
Name and Title (Print): Matthew Setty	Phone Number: (775) 544 – 1149	Date: January 8, 2025
<p>X </p> <hr/> <p>Signature of Responsible Official</p>		

Mandatory Attachments:

- **Federal Permit or License Identification:**
 - Project proponents seeking a federal general permit or license must include a copy of the draft federal license or permit and any readily available water quality-related materials that informed the development of the draft federal license or permit, or;
 - Project proponents seeking a federal individual permit or license must include a copy of the federal permit or license application and any readily available water quality-related materials that informed the development of the federal license or permit application.
- **Site Map** - A map or diagram of the proposed project site including project boundaries in relation to regulated waters, local streets, roads, and highways.
- **Engineered Drawings** - Engineered drawings are preferred to be submitted at the 70% design level. If only conceptual designs are available at the time of application, plans for construction should be submitted prior to the start of the project. Specific locations of the proposed activities and details of specific work elements planned for the project should be identified (e.g., staging areas, concrete washouts, perimeter controls, water diversions, or other BMPs).

Submit the completed application materials to NDEP (ndep401@ndep.nv.gov) with the appropriate U.S. Army Corps of Engineers Regulatory Office copied on the communication (<http://www.spk.usace.army.mil/Missions/Regulatory/Contacts/Contact-Your-Local-Office/>).



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Truckee River Habitat Enhancement Project Supplemental Information for Sites 1 and 2

Document Overview

To further facilitate the objectives and compliance requirements of this project, Nevada Environmental Consulting, LLC. (NVENV) has prepared this supplemental information document in support of agency permitting efforts. This document provides an overview of the project purpose, construction methodology, and relevant background details. Additionally, it includes information on neighboring parcels, a list of relevant agencies, and primary points of contact to ensure streamlined coordination and regulatory adherence.

For further details on the project’s environmental considerations, please refer to the *Truckee River Habitat Enhancement Project Environmental Assessment* (EA) and the contained *Biological Assessment* (BA). For agency-specific requirements or additional information, consult the respective permit included in the document delivery package.

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Contact Information

For questions, clarifications, or coordination related to the *Truckee River Habitat Enhancement Project*, please refer to the following contacts:

Dan Johnson Project Proponent Trout Unlimited 10035 Church St. Suite 1, Truckee, CA, 95959 Dan.Johnson@tu.org (530) 333 - 5125	Matt Setty Agent / Principal Scientist Nevada Environmental Consulting, LLC. 316 California Ave #763, Reno, NV, 89509 Matt@nvenv.net (775) 544 - 1149	Devin Alston Agent / Staff Scientist Nevada Environmental Consulting, LLC. 316 California Ave #763, Reno, NV, 89509 Devin@nvenv.net (702) 343 - 7795
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Project Background

The Truckee River Habitat Enhancement Project aims to improve aquatic habitat conditions within the Truckee River at two enhancement sites: Site 1 at Crystal Peak Park in Verdi, Nevada, and Site 2 at Lockwood Reach, east of Sparks, Nevada. The primary objective is to install J-Hook and Rock Vane weirs at each site to enhance geomorphic diversity, stabilize channel flow, and create critical habitat features for native cold-water fish species, including the federally listed Lahontan Cutthroat Trout (LCT). The project design incorporates strategic placement of these structures to improve spawning and rearing habitat by increasing water depth and creating low-velocity zones. Construction activities will occur primarily within the existing river channel using pre-cleaned boulders, with staging

areas placed on previously disturbed lands adjacent to the river. Best management practices will be adhered to throughout the project to minimize environmental impacts.

Project Purpose and Justification

The Truckee River Habitat Enhancement Project directly supports the goals of the Lahontan Cutthroat Trout Recovery Plan (Coffin & Cowin, 1995) by addressing critical habitat barriers within the Truckee River. During periods of low water flow, anoxic zones and sediment deposition often restrict habitat availability for the LCT and other cold-water fish species. This project aims to mitigate these barriers by restoring geomorphic complexity and improving habitat conditions during low-flow periods. By reducing sedimentation, enhancing water quality, and creating stable flow refugia, the project will provide critical habitat for juvenile trout and improve migratory opportunities for mature trout. In doing so, it supports the ecological recovery of the LCT and broader river ecosystem while ensuring compliance with state and federal conservation objectives.

Construction Methodologies

Construction methods for the Truckee River Habitat Enhancement Project are designed to minimize environmental impacts while adhering to Best Management Practices and regulatory requirements. No cofferdams or diversion structures will be utilized, avoiding disturbance to the river substrate and reducing the potential for turbidity. Temporary staging areas will be located away from the waterway to ensure that fueling, maintenance, and cleaning activities do not impact aquatic environments. Boulders used for weir construction will be pre-washed to remove soil and dust, minimizing fine particle turbidity during placement. Equipment access routes will be coordinated with Washoe County Parks to avoid sensitive areas, using mats where necessary to reduce soil compaction and vegetation disturbance. Materials will be staged above the Ordinary High-Water Mark (OHWM) and placed into the river using an excavator stationed outside the active channel. Upon project completion, all staging areas and access routes will be restored to their original condition, ensuring no long-term impacts.

Neighboring Parcel Information

As part of the permitting process, certain regulatory entities require detailed information on parcels adjacent to or directly touching the project's activity area boundaries. The following sections provide a summary of parcels for Site 1 (Crystal Peak Park) and Site 2 (Lockwood Reach).

Site 1: Crystal Peak Park

- **Karl and Krysta Watts** (Parcel 038-081-12) at 525 Crystal Park Rd, Verdi, NV.
- **Hall Family Trust** (Parcel 038-081-14) at 517 Crystal Park Rd, Verdi, NV.
- **Miller Trust** (Parcel 038-081-11) at 529 Crystal Park Rd, Verdi, NV.
- **Moore Trust** (Parcel 038-081-10) at 535 Crystal Park Rd, Verdi, NV.
- **Crystal Sand Harbor Living Trust** (Parcel 038-081-09) at 533 Crystal Park Rd, Verdi, NV.
- **Smith Family Trust** (Parcel 038-081-13) at 543 Crystal Park Rd, Verdi, NV.
- **Washoe County** (Parcel 038-081-01) at 561 Crystal Park Rd, Verdi, NV.
- **Washoe County** (Parcel 038-212-01) at 0 Highway 40 W, Verdi, NV.

Site 2: Lockwood Reach

- **Lockwood Development Group LLC** (Parcel 084-080-15) at 10705 Lockwood Dr, Sparks, NV.
- **State of Nevada** (Parcel 084-070-24) at 0 Lockwood Dr, Sparks, NV.
- **Wonderhaven LLC** (Parcel 084-070-25) at 10455 Lockwood Dr / 10485 Lockwood Dr, Sparks, NV.
- **State of Nevada** (Parcel 004-121-04) at PIN S17 & S18 T19N R21E.
- **Menezes & Young** (Parcel 004-121-31) at 500 Menezes Way, Building #1, Clark, Storey County, NV.
- **Menezes & Young** (Parcel 004-121-29) at 400 Menezes Way, Clark, Storey County, NV.
- **Menezes & Young** (Parcel 004-121-28) at 300 Menezes Way, Clark, Storey County, NV.
- **Peavine Leasing LLC** (Parcel 004-121-24) at 200 Menezes Way, Clark, Storey County, NV.
- **T&R Industries LLC** (Parcel 004-121-30) at 100 Menezes Way, Clark, Storey County, NV.

Permitting and Regulatory Entities:

To ensure clarity and streamline communication between participating organizations, this section outlines the permitting and regulatory framework for the Truckee River Habitat Enhancement Project. Given the multi-jurisdictional nature of this project, it is crucial to detail the involved entities and their corresponding permits to facilitate coordination and compliance.

U.S. Army Corps of Engineers (USACE)

- Section 408 Authorization Permit - Site 1
- Section 408 Authorization Permit - Site 2
- Pre-Construction Notice (PCN) for Nationwide Permits - Site 1
- Pre-Construction Notice (PCN) for Nationwide Permits - Site 2

Nevada Division of Environmental Protection (NDEP)

- 401 Water Quality Certification - Site 1
- 401 Water Quality Certification - Site 2
- SWPPP (Stormwater Pollution Prevention Plan) - Site 1
- SWPPP (Stormwater Pollution Prevention Plan) - Site 2

Carson-Truckee Water Conservancy District (CTWCD)

- CTCWD 408 Encroachment Permit - Site 1

Nevada Division of State Lands

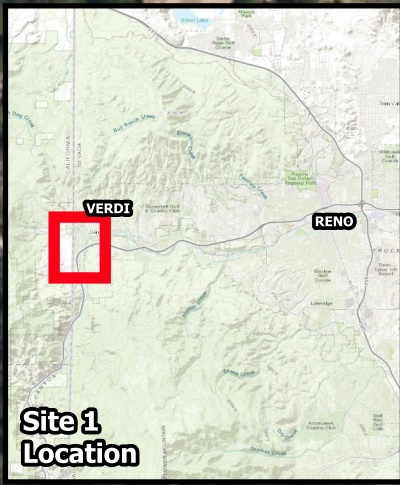
- NV State Lands Permit - Site 1
- NV State Lands Permit - Site 2

Washoe County Parks Department

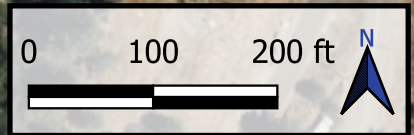
- Parkland Easement Permit - Site 1
- Parkland Easement Permit - Site 2

U.S. Fish and Wildlife Service (USFWS)

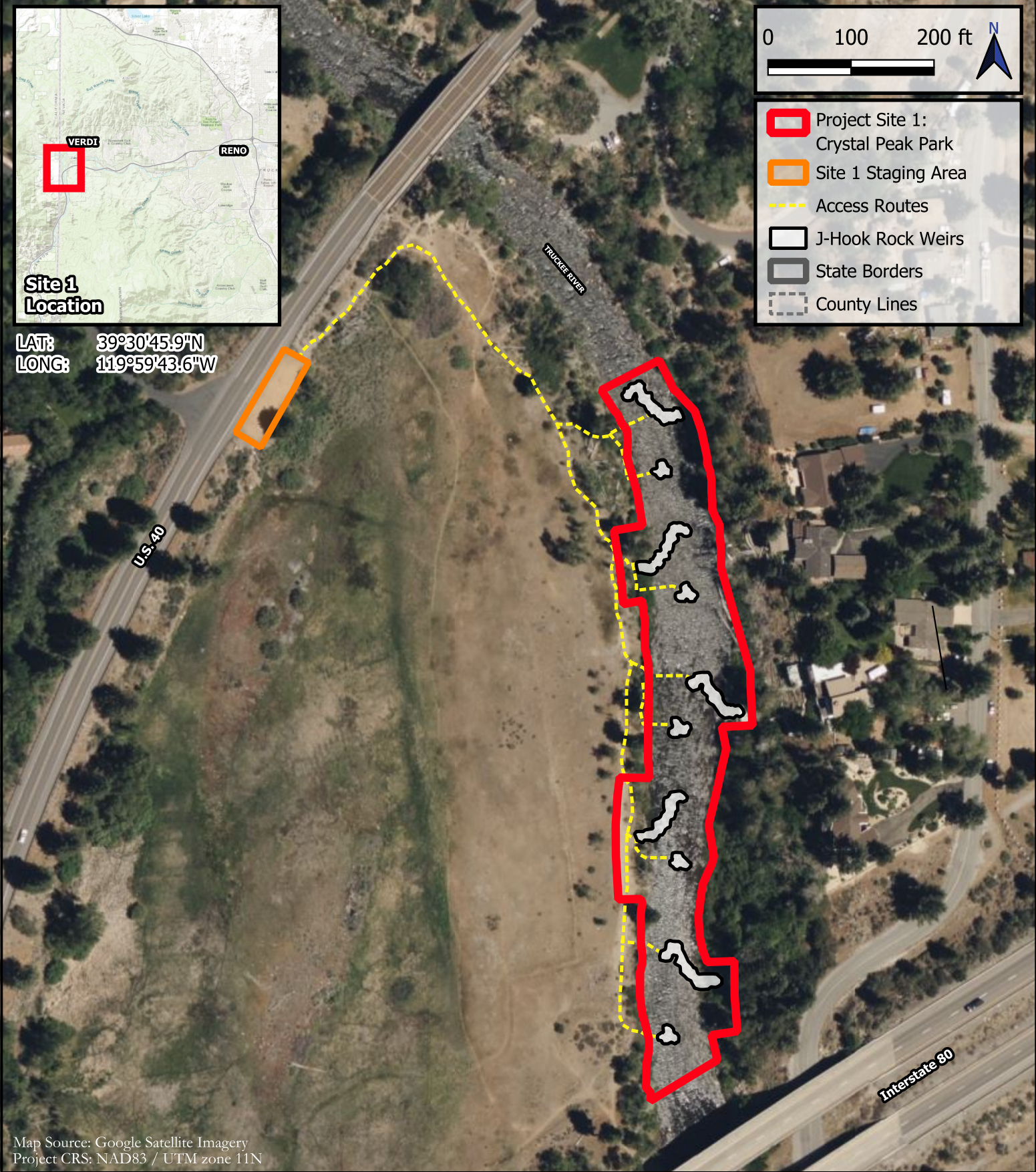
- IPaC (Information for Planning and Consultation) Report - Site 1
- IPaC (Information for Planning and Consultation) Report - Site 2



LAT: 39°30'45.9"N
 LONG: 119°59'43.6"W



- Project Site 1: Crystal Peak Park
- Site 1 Staging Area
- Access Routes
- J-Hook Rock Weirs
- State Borders
- County Lines



Map Source: Google Satellite Imagery
 Project CRS: NAD83 / UTM zone 11N

Nevada Environmental Consulting, LLC

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Site 1: Crystal Peak Park

Project: **Truckee River Habitat Enhancement Project**

Client: **Trout Unlimited**