

Pre-construction Notification

Date:	August 19, 2026	50 West Liberty St
Project name:	Sierra Street Bridge Replacement Project	Suite 205
Company:	U.S. Army Corps of Engineers	Reno, NV 89501
Prepared by:	Dan Soucy	United States
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On behalf of Dale Keller (Deputy Director and Director of Engineering) with the Regional Transportation Commission of Washoe County (RTC), Jacobs is requesting authorization under the terms and conditions of Nationwide Permit (NWP) 14 (Linear Transportation Projects) and Nationwide Permit 3 (Maintenance) for the Sierra Street Bridge Replacement Project (Project) in Reno, Nevada. This pre-construction notification (PCN) is being submitted for activities associated with the replacement of the bridge along Sierra Street over the Truckee River (NWP 14), as well as the reconstruction of the existing Cochrane Ditch inlet near the southwest corner of the bridge (NWP 3). Construction is scheduled to begin in 2027 and be completed by late 2028.

This request for authorization includes the Nationwide Permit PCN form (Attachment A), a Project location figure and impact exhibits (Attachment B), draft 100% design plans dated April 2026 (Attachment C), Aquatic Resources Delineation Report (Attachment D), the August 19, 2025 Section 7 letter of concurrence from the U.S. Fish and Wildlife Service (Attachment E), the Nevada Department of Transportation's (NDOT) Section 106 consultation documentation including the State Historic Preservation Office's (SHPO) November 22, 2024 letter of concurrence on a finding of adverse effect the and Memorandum of Agreement between the Federal Highway Administration (FHWA) and SHPO executed in February 2026 (Attachment F).

Project Background

RTC, in cooperation with the City of Reno, NDOT, and FHWA, proposes to replace an aging bridge along Sierra Street over the Truckee River in the Riverwalk District of Reno, Nevada. The Project is located on Sierra Street between West 1st Street and Court Street. The existing bridge, which was constructed in 1937, is structurally deficient and needs to be replaced. The three-span steel bridge with a concrete facade currently provides two travel lanes for southbound traffic as well as a parking lane and sidewalk on each side of the bridge. The proposed Project would address the structural deficiencies of the existing bridge, enhance safety for the traveling public, and maintain the existing hydraulic capacity for the Truckee River during flood events.

Block 5 – 7: Applicant

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Block 8 – 10: Authorized Agent

Jacobs is the lead consultant agent authorized by the applicant to prepare this Project PCN. Dan Soucy is the contact to assist RTC with Section 404 permit authorization. Mr. Soucy's contact information:

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Block 12: Project Name

Sierra Street Bridge Replacement Project

Block 13: Name of Waterbody

Truckee River and unnamed wetlands along the Truckee River

Block 14 – 17: Location of the Proposed Activity

The Project is located along Sierra Street in Reno Nevada, centered around the bridge over the Truckee River.

Approximate center point of the Project – Latitude: 39.524634° / Longitude: -119.813850°

NW/SE Section 11, Township 19 North, Range 19 East

Block 18: Identify the Specific Nationwide Permit(s) you Propose to Use

NWP 14 – Linear Transportation Projects

NWP 3 – Maintenance

Block 19: Description of the Proposed Nationwide Permit Activity

Bridge Replacement

The Project includes the replacement of the existing Sierra Street bridge over the Truckee River. The existing bridge would be replaced with a two-span concrete bridge with precast concrete girders. The

single-pier concept maintains a similar roadway elevation and the dimensions of the new bridge would be similar to existing conditions; the bridge would be approximately 144 feet long and 63 feet wide. The existing concrete railing would be replaced with upgraded bridge railing to meet current design standards. The bridge would continue to have two southbound travel lanes and sidewalks on each side. The space that is currently used for parking lanes on each side of the road would be reconfigured to allow for wider sidewalks, while retaining one parking lane on the east side of the road with a buffer between the travel lane and the parking lane.

The existing sidewalks on both sides of Sierra Street are approximately 8 feet wide. The sidewalks would be widened to 10 feet, 6 inches. Pedestrian overlooks would be added along the sidewalks at the center pier on both sides of the bridge. At the north end of the bridge, flashing pedestrian crossing lights called rectangular rapid flashing beacons would be added to alert drivers of the Riverwalk crossing that is heavily used by pedestrians and bicyclists. At the south end of the bridge where Sierra Street crosses Island Avenue, curb extensions would be added to improve visibility of pedestrians and reduce the distance pedestrians need to traverse to cross Sierra Street.

The construction of the new Sierra Street Bridge would replace the existing two bridge piers with one pier. The single-pier concept maintains a roadway elevation similar to existing conditions. Currently, the two piers have a footprint of approximately 380 square feet (0.009 acre, 71 cubic yards of material), which would be removed entirely. The new single bridge pier would be at the approximate center-point of the river and bridge and would have a small area of grouted rock (scour protection) at the upstream end of the pier. Based on the current design, the area of the new bridge pier below the ordinary high water mark (OHWM) would be approximately 203 square feet (0.004 acre). The volume of the bridge pier below the OHWM and the channel bottom elevation would be approximately 35 cubic yards. The scour protection would also place 580 square feet (0.01 acre) of grouted rock around and in front of the bridge pier, accounting for 64 cubic yards of fill material. In total, the new pier with rock protection around the pier would have a footprint of approximately 783 square feet (0.02 acre), with 99 cubic yards of concrete and grouted riprap fill material, thereby increasing the area and volume of fill associated with the bridge pier by 403 square feet (0.01 acre) and 28 cubic yards. These areas are displayed on Figure 1 in Attachment B.

Grouted riprap would also be replaced and extended along the southern abutment and ramp walls. Currently, there are 711 square feet (0.02 acre, 79 cubic yards) of grouted riprap within the river at the southwest corner of the bridge. The installed grouted rock would extend approximately 75 feet upstream and downstream of the bridge, resulting in 3,157 square feet (0.07 acre, 351 cubic yards) of permanent impacts below the OHWM along the southern abutment. Additionally, the grouted rock to be placed in the channel at this location would result in approximately 194 square feet (0.004 acre) of permanent impact to the wetland island.

To address issues with sedimentation that have occurred around the bridge, in addition to the improvements needed for kayaker safety because of the new pier location, approximately 23,860 square feet (0.56 acre) of the channel bottom would be recontoured, which would include the removal of 684 cubic yards of aggregated sediment (refer to Attachment C for proposed channel grading plan). The regrade is designed to help direct flows between the southern abutment and new pier location promoting safer passage beneath the bridge. The design intent is to avoid an eddy effect, so river users are not pushed into the pier. As the channel gets beyond the new bridge, the grading would conform to the existing grading.

River Access Ramp

River access would be improved along the south side of the river on both the upstream and downstream sides of the bridge. At the southwest (upstream) end of the bridge, the existing river access ramp would be

reconfigured and widened to accommodate City of Reno maintenance vehicles. The vertical grade of the ramp would not be compliant with Americans with Disabilities Act (ADA) requirements and therefore, would not be open to the public. The ramp does, however, allow access for fire, police, and emergency medical services. A new ADA-compliant river access would be provided on the southeast side of the bridge at the existing Fountain Walk. This new ADA-compliant ramp would add 253 square feet (0.006 acre) of concrete below the OHWM, accounting for 20 cubic yards of fill.

Cochrane Ditch Inlet

The Cochrane Ditch inlet at the southwest corner of the Sierra Street Bridge would be reconstructed as part of the Project. There are end water users that have rights to the water that need to be perpetuated during construction. To accommodate this, the contractor may use pumps at the southeast corner of the Virginia Street Bridge to pump 1.5 to 5 cubic feet per second of water into the ditch. There are a series of maintenance holes in the parking lot of the historic post office that would allow water to be pumped directly into the ditch without cutting in a new access. The pumps would be electric, powered by a diesel generator located above the river in the adjacent parking lot. Pipes would carry the water from the pumps to the ditch. There would be no fueling of generators or pumps within 100 feet of the river, as the generators can be swapped out and fueled offsite.

Reconstruction of the Cochrane Ditch inlet requires replacement of the existing weir and rock slope, which are currently within the boundary of the delineated wetland island. Excavation and vegetation removal needed to replace these features is estimated to temporarily impact 496 square feet (0.01 acre) of the wetland island. The grouted rock to be placed to reconstruct the rock slope would result in approximately 194 square feet (0.004 acre, 32 cubic yards) of permanent impact to the wetland island. Additionally, the installation of a new concrete intake slab and weir would occur below the OHWM, adding 6 cubic yards of fill across 175 square feet (0.004 acre).

Construction Methods

The construction approach is heavily influenced by the allowable timeframes for work to occur in the Truckee River channel, as established by the Carson-Truckee Water Conservancy District (CTWCD). The standard allowable timeframe is July 1 through October 31 to avoid the Truckee River flood season. The CTWCD has indicated that with written approval from its Board, work can occur until November 30 depending on weather and river conditions. The Board typically grants the request on the condition that the permittee stops construction and demobilizes from the channel if an event of 8,000 cubic feet per second is anticipated.

Project construction is expected to start in spring of 2027 with a construction duration of 2 years. Based on the current Project schedule, work in the river channel would occur between July 1 and October 31, 2027, extending until November 30 if necessary and if approved. However, if work within the channel cannot be completed in 2027, additional work would occur again between July 1 and October 31, 2028.

To facilitate work in the river channel, the water beneath the bridge would be diverted to one side or the other of the Truckee River to create a "dry" work zone. Water diversions would be in place for 4 to 5 months in 2027, and under a worst-case scenario, 4 to 5 months in 2028. Over the duration of the Project, the diversions would be in place for a total maximum of 8 to 10 months.

Reconstruction of the bridge would be completed in up to three phases. Each phase is described as follows, and the layouts of the river diversion phases are included in Attachment B and Attachment C.

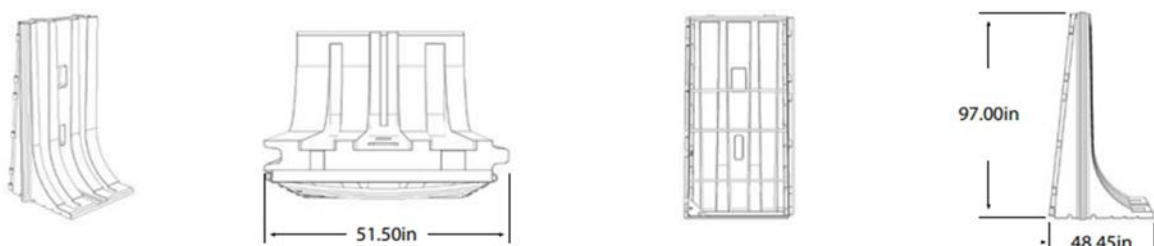
- **Phase 1:** The river would be diverted to the southern portion of the channel to allow the northern portion to be dewatered. During this first phase, the northern span of the bridge, a portion of the

center span, the north pier, and the northern abutment and floodwall would be demolished. Once demolition is complete, the river bottom would be recontoured per the Project plans and the diversion would be shifted to Phase 2.

- **Phase 2:** The river would be diverted to the northern portion of the channel to allow the southern portion to be dewatered. There would be a small diversion in place along the northern floodwall to allow work on the northern bridge abutment and floodwall to be completed. A small diversion structure would also be placed at the western end of the Cochrane Ditch to dry out the intake. After dewatering, the remaining portion of the bridge would be demolished, along with the southwest and southeast corner ramp structures. The new center pier and southern abutment would be constructed. A portion of the river recontouring would also be completed and girders would be set. The southeast and southwest ramp reconstruction would begin during this phase but would potentially be completed under a third phase.
- **Phase 3 (if necessary):** If the girders for the bridge are set and the southern ramps are still under construction, the contractor would implement a third, smaller, diversion that would keep the ramp areas dry but allow more flow in the river. Late season storms in October can often bring more water with them and the extra channel width would allow the water to pass while the contractor finishes any remaining work.

Primary river diversions would divert water from one-half of the river channel at a time to maintain flows with a natural channel bottom. The downstream extent of each diversion is designed to keep backwater out of the construction zone for the bridge. It is anticipated that the Project would utilize muscle walls as the temporary river diversions, which would involve placing portable 8-foot-tall by 4-foot-wide barrier rail on gravel bags, with an impermeable geotextile liner to seal off the work zone (refer to Exhibit 1 for dimensions). Nontoxic materials would be used, such as 10-mil (0.010-inch) polyethylene sheeting. Large sandbags or aqua dams may also be considered as a diversion method, which are both approaches that have proven effective on other river projects.

Exhibit 1. Muscle Wall Dimensions



The lengths of the diversions are estimated to be 529 feet for Phase 1, 832 feet for Phase 2, and 531 feet for Phase 3. Based on the dimensions of the muscle wall, Table 1 summarizes the area of fill, quantity of fill, and area of temporarily diverted streambed associated with each phase of river diversion (refer to Attachment B for corresponding figures).

Table 1. Fills and Quantiles Associated with Each Phase of the River Diversions

Diversion Phase	Area of Diversion Structure	Volume of Diversion Structure	Area of Temporarily Diverted Streambed
Phase 1	2,116 square feet	633 cubic yards	18,503 square feet
Phase 2	3,328 square feet	995 cubic yards	36,504 square feet
Phase 3	2,124 square feet	635 cubic yards	19,322 square feet
Total	7,568 square feet	2,263 cubic yards	74,329 square feet

Riverbed material excavated from the river channel for the demolition and construction of the new bridge infrastructure would be temporarily stored in the diverted portion of the river channel and then be put back in place. During the demolition and construction of the bridge, it is expected that a total of 1,297 cubic yards of native earthen material would be excavated and temporarily stored within the dry area of the river. During the Phase 1 diversion (when the river is diverted to the southern side of the channel), it is estimated that 201 cubic yards of material would be temporarily excavated for the removal and installation of the northern abutment. During the Phase 2 diversion (when the river is diverted to the northern side of the channel), it is estimated that 1,096 cubic yards of material would be temporarily excavated for the removal of the two bridge piers, installation of the new center pier, and removal and installation of the southern abutment. The bridge piers and abutments would be removed with excavators equipped with hydraulic hammers. Once the material has dried out, it will be loaded out and hauled to the contractor's facility for proper disposal. All demolished bridge material would be loaded out via the designated ingress and egress locations, or would be lifted out via cranes, and would be stockpiled in designated laydown areas more than 100 feet outside of the river. Additionally, all new or imported material will be stockpiled in designated laydown areas, at least 100 feet from the river.

A temporary river access point (shown in Attachment B) is expected to be constructed during the Phase 2 diversion when the southern portion of the bridge is removed and constructed. This allows for seamless access to the river for construction equipment and helps prevent damage to any existing riverbank structures. The access ramp would have roughly 569 square feet of sediment fabric and washed rock below the OHWM accounting for approximately 930 cubic yards of temporary fill. When access into the river is no longer required, all materials used to construct the access ramp would be removed. When the river is diverted to the southern side of the channel to provide a dry work zone on the northern side, it is likely that construction equipment will be lowered into the channel using cranes, because the floodwall height on the northern side would make it impractical to build suitable ingress and egress ramps.

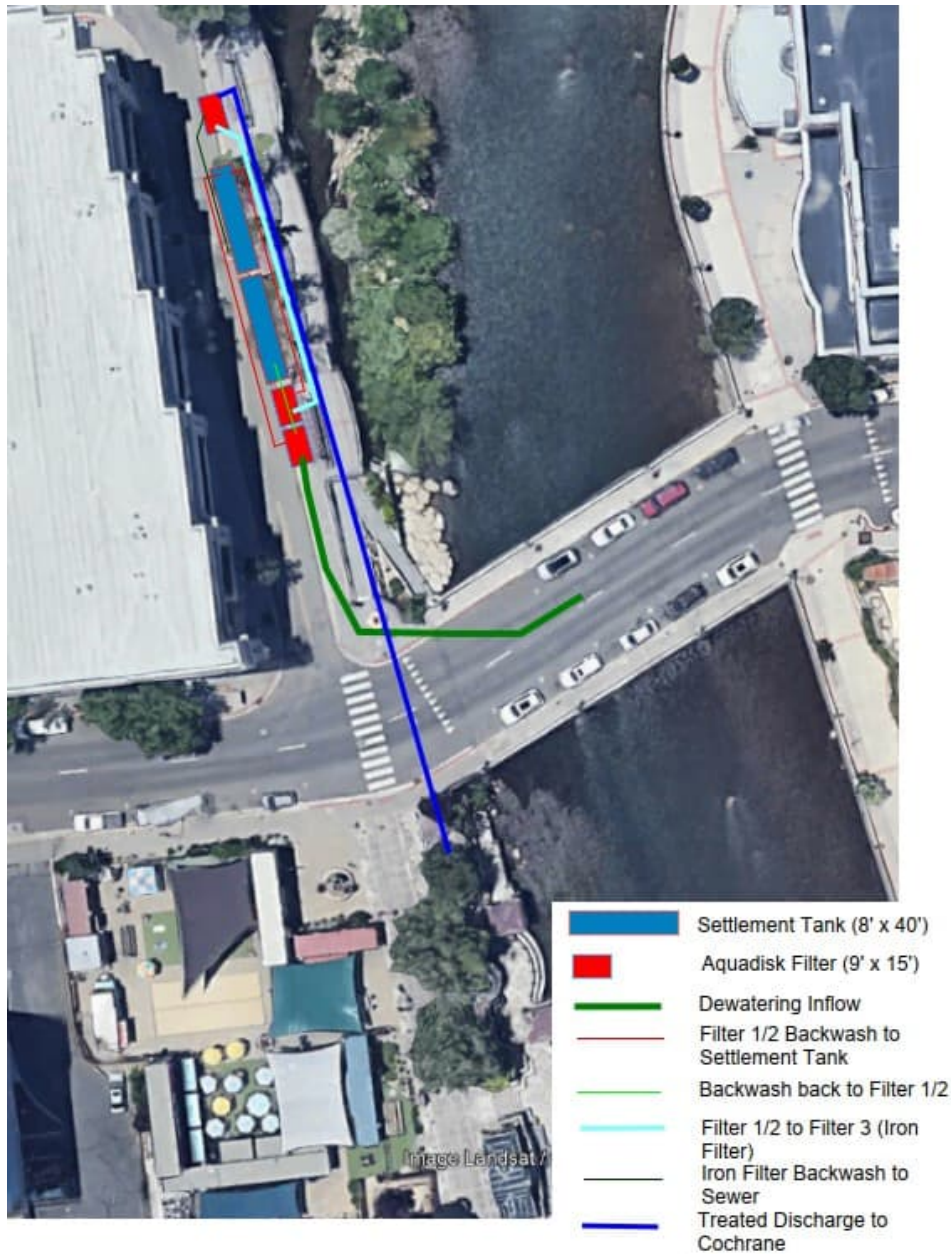
During construction of the project, the contractor will need to dewater the work zone utilizing dewatering wells. To help limit passive flows during construction, a series of dewatering wells would be installed into the riverbed within the designated dry work areas to eliminate groundwater saturation from the river.¹ During the Phase 1 river diversion, an estimated 12 dewatering wells would be installed within the diverted portion of the river, while 11 dewatering wells would be installed during the Phase 2 river diversion. After the completion of work within each diverted area, the dewatering pumps and wells would be removed from the river and then the diversion structures would also be removed. Each dewatering well would be 3 feet in diameter (7 square feet) and would temporarily excavate 8 cubic yards of material. Therefore, during the Phase 1 diversion (12 dewatering wells), 84 square feet (96 cubic yards) of riverbed material would be temporarily excavated, while during the Phase 2 diversion (11 dewatering wells), 77 square feet (88 cubic yards) of riverbed material would be temporarily excavated. All dewatering pumps would be operated by an electric power source located at the bridge site.

The use of dewatering pumps is anticipated to control nuisance water and thus to help to keep the designated work areas dry and minimize sediment discharge into the river. Water that is pumped from these wells will need to be discharged to keep the site dry. Based on the current strategy, the contractor plans to utilize an on-site treatment system that will be placed along Island Avenue (see Exhibit 2). The system will utilize a series of electric pumps and above ground pipes to pump water out of the wells into the treatment system (green line in Exhibit 2). The system will be set up in one of two configurations:

¹ The dewatering well driller will be a certified well driller with the Nevada department of water resources.

1. **Preferred approach:** The system will use two Aquadisk filters and two settlement tanks (also known as frac tanks or Baker tanks) to remove sediment from the groundwater. The treated water will then be discharged to the city sewer. Occasionally, the system will have to be backwashed, and the backwash will also be discharged into the sewer. The sewer discharge is being coordinated with the City of Reno and the Truckee Meadows Water Reclamation Facility (TMWRF). There may be limitations on how much water the system can take. If flows exceed the capacity of the city sewer system, approach 2 below would be followed.
2. If flows exceed the city's sewer system capacity, a third Aquadisk would be added to treat for potential iron in the groundwater. There was iron in groundwater samples taken during previous geotechnical investigations. The treated water would be discharged directly to the Truckee River or to the Cochrane Ditch in this approach. Discharged water in this scenario would meet NDEP requirements for discharge to Waters of the U.S. The backwash for this setup would still be discharged into the sewer. This approach is displayed in Exhibit 2

Exhibit 2. Dewatering Configuration



Anticipated construction equipment within the river channels includes the following:

- Two 330 class excavators – one with a hydraulic hammer for demolition work
- Bulldozer
- 966 Loader
- Crane drill rig and oscillator plus associated hydraulic package
- 90-ton rough terrain crane
- Concrete pump truck
- Smooth pad drum vibratory roller
- 10-wheeler dump trucks

Effects

The Project is expected to result in temporary alterations to the streambed in the Truckee River from the sediment removal and channel recontouring around the bridge, removal and installation of the bridge piers and abutments, and installation of the grouted riprap. The goal of the sediment removal is to restore the river channel depth and contours, improve hydraulic performance and recreational safety. No streambank would be lost and the reduction of one bridge pier in the river would reduce the amount of bridge structure within the river.

Adverse environmental effects to the aquatic environment include the placement of the temporary fills associated with the proposed river diversions which will temporarily reduce aquatic habitat within the extents of the diversions. Because river flows will be maintained on either the north or south side of the channel and not diverted outside of the river, the temporal loss of habitat is expected to be minimal. Because the diversions are proposed to only be in place for a set duration (during low flows), this avoids the spawning periods for the federally listed Lahontan cutthroat trout and cui-ui (see Attachment E).

The temporary diversions will allow construction in the river channel to occur in a relatively dry environment, which minimizes the potential for construction activities to cause temporary spikes in turbidity. The diversions will also reduce the potential for accidental leaks or spills from entering surface water. However, the installation and removal of the water diversions likely presents the greatest potential to increase turbidity as there would be sudden, short-term impacts to the channel bottom. To help minimize the potential for sediment transport, the diversion structure would be removed slowly to allow water to enter the completed work area, allowing the river to fill the previously occupied work area slowly without scouring the riverbed or banks. Any sediment releases or increases in turbidity associated with these activities are expected to be minor and temporary.

To help minimize environmental impacts, the contractor will prepare a Storm Water Pollution Prevention Plan as well as a Spill Prevention and Countermeasures Plan. Per the diversion plans, all construction equipment entering the river channels must be steam cleaned off-site to eliminate any pollutants (i.e., grease, oil, gasoline, etc.) that may be present on vehicles or equipment.

Specific impact quantities are summarized in Block 22. An impact overview figure is provided in Attachment B and draft 100 percent design plans are in Attachment C.

Block 20: Description of Proposed Mitigation Measures

Avoidance and Minimization

No mitigation is anticipated for the proposed actions as there would be very minimal permanent wetland loss (less than 1/10 acre). Wetland loss has been minimized to the greatest extent possible, and the loss would be associated with the replacement of the existing Cochrane Ditch inlet. The Project consists of replacing structures that are currently in place and in service within the Truckee River. Utilizing temporary diversions in phases to establish dry areas in the river will help lessen potential effects to aquatic species as no construction would occur in active water which will also reduce the opportunity for turbidity increases downstream during construction. Temporary, short-term impacts will result from general construction access and disturbances required to establish the necessary work (diversion) areas. All temporary fills will be removed in their entirety upon completion of construction. Overall, the permanent fills to the Truckee River would be an extension of already existing structures (i.e., bridge pier, grouted riprap, access ramp, Cochrane Ditch inlet), and channel depth or width would not be decreased. Temporary wetland impacts will be restored through the installation of willow stakes and jute netting.

Temporary best management practices (BMPs) for the in-river work installed at the beginning of construction will remain in place during the diversion structure removal and would be the last items to be taken away when construction activities in the river are complete. Potential temporary BMPs may include a turbidity curtain, clear water diversion, outlet protections/velocity dissipation, and a temporary stream crossing and would be determined at the time of construction. The pouring of concrete will not be done in live water or during rain events, and any wet or uncured concrete will be covered or protected to not enter the Truckee River. All project temporary BMPs outside of in-river work will be detailed in the Storm Water Pollution Prevention Plan and maintained throughout the duration of the Project. All equipment will be cleaned prior to arrival on the jobsite. Equipment working in or near the water will be inspected at the beginning of each shift and throughout the day to prevent spills/leaks from entering the river. A spill kit will remain onsite in case a spill event occurs. Administrative best management practices (BMPs) will be used by all staff onsite, such as "Stop Work Authority" if any environmental issues or risks arise. Additionally, the Project will implement BMPs in accordance with NDOT's 2014 *Standard Specifications for Road and Bridge Construction*.

Block 21: Purpose of Nationwide Permit Activity

NWP authorization is being requested for impacts to waters of the U.S. caused by the removal and replacement of the bridge, removal of the two bridge piers and installation of a new single bridge pier with rip rap scour protection, removal of accumulated sediment, replacement of a river access ramp, temporary river diversions to aid in construction, and reconstruction the current inlet for Cochrane Ditch near the southwest corner of the bridge.

The purpose of the Project is to provide a transportation facility for southbound traffic on Sierra Street across the Truckee River that is safe, structurally sound, and meets current design standards. Originally constructed in 1937, the bridge has exceeded its typical lifespan and is now structurally deficient, with significant deterioration in the deck, superstructure, and substructure. The existing bridge would be replaced with a two-span concrete bridge with precast concrete girders. The single-pier concept maintains a roadway elevation similar to existing conditions. The dimensions of the new bridge would be similar to existing conditions. The bridge would be approximately 144 feet long and 63 feet wide, with a deck thickness of approximately 3 feet, 9 inches. The existing concrete railing would be replaced with upgraded bridge railing to meet current design standards. The bridge would continue to have two southbound travel lanes and sidewalks on each side. The space that is currently used for parking lanes on each side of the road would be reconfigured to allow for wider sidewalks, while retaining one parking lane on the east side of the road with a buffer between the travel lane and the parking lane. Construction is scheduled to begin in 2027 and be completed by late 2028.

Block 22: Quantity of Wetlands, Streams, or Other Types of Waters Directly Affected by the Proposed Nationwide Permit Activity

Bridge

- The area of the new bridge pier below the OHWM would be approximately 203 square feet (0.004 acre) with a volume of 35 cubic yards of fill. As a scour protection measure, 580 square feet (0.01 acre) of grouted rock would be placed around and in front of the bridge pier, accounting for 64 cubic yards of fill material. In total, the new pier with rock protection of the bridge would have a footprint of approximately 783 square feet (0.02 acre), with 99 cubic yards of concrete and grouted riprap fill material. This would increase the area and volume of fill associated with the bridge pier by 403 square feet (0.01 acre) and 28 cubic yards.

- Grouted riprap would be placed along the southern abutment, which would include 3,157 square feet (0.07 acre, 351 cubic yards) of permanent impact below the OHWM.
- Flows within the Truckee River would be temporarily diverted during construction of the bridge. In total, the river diversions would occur within an approximately 74,329 square foot area (1.7 acres) of the river. However, only portions of that area would be diverted at a time, resulting in temporarily impacted portions of the river while still maintaining river flows. Diverting the river to the northern side of the channel (Phase 2) could result in approximately 6,630 square feet (0.15 acre) of temporary impacts to the wetland island upstream of the bridge. While the diversion may temporarily impact the wetland hydrology, only a very minor amount of wetland vegetation would be impacted during the installation and removal of the diversion structures.

River Access Ramp

- The new ADA-compliant ramp on the eastern side of the bridge would add 253 square feet (0.006 acre) of concrete below the OHWM, accounting for 20 cubic yards of fill.

Cochrane Ditch Inlet

- Excavation and vegetation removal needed to reconstruct the existing weir and rock slope is estimated to temporarily impact 496 square feet (0.01 acre) of the wetland island. Additionally, grouted rock to be placed in at this location would result in approximately 194 square feet (0.004 acre, 32 cubic yards of fill) of permanent impacts to the wetland island. Additionally, the installation of a new concrete intake slab and weir would occur below the OHWM, adding 6 cubic yards of fill across 175 square feet (0.004 acre).

Temporary River Diversions

- Impacts due to temporary diversions would be located upstream and downstream of the existing bridge. The diversions would involve the placement of a temporary structure called muscle wall approximately 4-feet-wide by 8-feet-tall. The length of the Phase 1 diversion would be 529 feet, 832 feet for Phase 2, and 531 feet for Phase 3. So, while over the course of the Project there would be a total of 7,568 square feet of temporary fill associated with the diversions, only portions of temporary fill would be in place at a time because only one set of diversions would be installed. Based on the dimensions of the muscle wall (diversion structure), temporary fills associated with Phase 1, Phase 2, and Phase 3 would 633 cubic yards, 995 cubic yards, and 635 cubic yards, respectively.

Temporary Ingress and Egress Ramps

- It is estimated that 569 square feet (930 cubic yards) of washed rock would be temporarily placed within the dry channel to construct the temporary ingress and egress ramp.

Dewatering Wells

- During the Phase 1 diversion, when the river is diverted to the southern side of the channel, it is estimated that 12 dewatering wells would be installed, in which 84 square feet (96 cubic yards) of riverbed material would be temporarily excavated. During the Phase 2 diversion, when the river is diverted to the northern side of the channel, it is estimated that 11 dewatering wells would be installed, in which 77 square feet (88 cubic yards) of riverbed material would be temporarily excavated.

Sediment Removal

- To address the sediment deposition, approximately 684 cubic yards of sediment would be removed within a 23,860-square-foot section of the river centered around the bridge. This sediment removal

would improve kayaker safety necessary due to the placement of the new bridge pier. This would help direct flows between the southern abutment and the new pier location promoting safer passage beneath the bridge. The sediment will first be temporarily stored within the dry work zones to dry out the material. It will then be removed offsite to the contractor's facility and undergo hazardous material testing. Depending on the results of the testing, the sediment will be disposed of at an approved facility and not returned to the river.

Table 2 summarizes the proposed temporary and permanent fills associated with the Project. Table 3 summarizes the proposed temporary and permanent fills associated with the Cochrane Ditch Inlet reconstruction (NWP 3).

Table 2. Anticipated Impacts to the Truckee River from the Bridge Replacement Activities (NWP 14)

Project Component	Temporary Fill Open Waters	Permanent Fill Open Waters	Temporary Impact Wetlands	Permanent Fill Wetlands	Linear Feet
Bridge (pier and grouted riprap along abutment)	1,297 cubic yards of excavation of native riverbed within temporarily diverted areas. Native material will be returned once new bridge infrastructure is installed.	Pier: 783 sq. ft (0.02 acre) 99 cubic yards of fill Riprap along abutment: 3,157 sq. ft (0.07 acre) 351 cubic yards of fill	--	--	--
River Access Ramp	--	253 sq. ft. (0.006 acre) 20 cubic yards of fill	--	--	--
Stage 1 Diversion	2,116 sq. ft. (0.05 acre) 633 cubic yards of diversion structure	--	--	--	529
Stage 2 Diversion	3,328 sq. ft. (0.08 acre) 995 cubic yards of diversion structure	--	6,630 sq. ft. (0.15 acre)	--	832
Stage 3 Diversion	2,124 sq. ft. (0.05 acre) 635 cubic yards of diversion structure	--	--	--	531
Temporary ingress/egress ramp	569 sq. ft. (0.01 acre) 930 cubic yards of washed rock	--	--	--	
Dewatering Wells	161 sq. ft. 184 cubic yards of riverbed	--	--	--	
Cumulative Impacts	1,481 cubic yards of riverbed 2,263 cubic yards diversion structure 930 cubic yards of washed rock	4,368 sq. ft (0.1 acre) 476 cubic yards of fill	7,126 sq. ft. (0.16 acre)	194 sq. ft. (0.004 acre) 32 cubic yards of fill	1,892

Table 3. Anticipated Impacts Associated with the Cochrane Ditch Inlet Reconstruction (NWP 3)

Project Component	Temporary Fill Open Waters	Permanent Fill Open Waters	Temporary Impact Wetlands	Permanent Fill Wetlands
Cochrane Ditch Inlet Reconstruction	--	175 sq. ft. (0.004 acre) 6 cubic yards	496 sq. ft. (0.01 acre)	194 sq. ft. (0.004 acre) 32 cubic yards of fill

Block 23: List any Other NWP(s), Regional General Permit(s), or Individual Permit(s) used or Intended to be used to Authorize any Part of the Proposed Project on any Related Activity

Nationwide Permit 3 – Maintenance for the reconstruction and replacement of the currently serviceable Cochrane Ditch inlet.

Block 24: Compensatory Mitigation Statement for Losses of Greater Than 1/10-Acre of Wetlands When Pre-Construction Notification is Required

Because only approximately 194 square feet (0.004 acre) of permanent wetland loss is anticipated, no compensatory mitigation is being proposed. Wetland loss has been minimized to the greatest extent possible, associated with the reconstruction and replacement of the Cochrane Ditch inlet.

Block 25: Is any Portion of the Nationwide Permit Activity Already Complete?

No.

Block 26: Threatened and Endangered Species

A Biological Assessment was prepared and submitted to the U.S. Fish and Wildlife Service (USFWS) in June 2025 to initiate Section 7 Consultation. The Biological Assessment determined that the Project *may affect but is not likely to adversely affect* the Lahontan cutthroat trout (LCT) or cui-ui and would have *no effect* on other Endangered Species Act listed species. On August 19, 2025, USFWS issued a concurrence letter and stated the following: "*the Service concludes that the proposed Project's effects on LCT and cui-ui are insignificant and discountable. Therefore, the Service concurs with your determination that the proposed action may affect, not likely to adversely affect LCT and cui-ui.*" The USFWS concurrence letter is included as Attachment E.

Block 27: Historic Properties

Section 106 concurrence from SHPO determined the Project would have an adverse effect to the existing Sierra Street Bridge from the replacement of the structure. A Memorandum of Agreement between the Federal Highway Administration and SHPO was executed in February 2026. Section 106 documentation is included in Attachment F.

Conclusion

On behalf of RTC, we are requesting verification for NWP 14 and NWP 3 authorization for the Sierra Street Bridge Replacement Project in Reno, Washoe County, Nevada.

The Project is proposing permanent and temporary impacts to waters of the U.S. due to the replacement of the bridge across the Truckee River, the temporary river diversions, channel grading and sediment deposition removal around the bridge, replacement of a river access ramp, and the reconstruction of the existing Cochrane Ditch inlet. While the proposed bridge would only have one pier, compared to the two piers for the existing bridge, permanent fill material below the OWHM would be greater than current fill to the Truckee River due to the placement of riprap scour protection around the pier. In total, the new pier with rock protection of the bridge would have a footprint of approximately 783 square feet (0.02 acre),

Cover Letter

with 99 cubic yards of concrete and grouted riprap fill material, thereby increasing the area and volume of fill associated with the bridge pier by 403 square feet (0.01 acre) and 28 cubic yards. Grouted riprap would also be replaced and extended along the southern abutment and ramp walls. The installed grouted rock would extend approximately 75 feet upstream and downstream of the bridge, resulting in 3,157 square feet (0.07 acre, 351 cubic yards) of permanent impacts below the OHWM along the southern abutment. Additionally, the grouted rock to be placed in the channel at this location would result in approximately 194 square feet (0.004 acre) of permanent impact to the wetland island. The new ADA-compliant ramp would add 253 square feet (0.006 acre) of concrete below the OHWM, accounting for 20 cubic yards of fill. In total, these activities would place approximately 4,368 square feet (476 cubic yards) of concrete and riprap below the OHWM of the Truckee River, and 194 sq. ft. (32 cubic yards) within the wetland. Additionally, to address on-going sediment deposition and kayaker safety from the new pier location, approximately 684 cubic yards of sediment would be removed within a 23,860-square-foot section of the river centered around the bridge.

Regarding the Cochrane Ditch reconstruction, approximately 194 square feet (32 cubic yards) of grouted riprap would be placed within the wetland island. Additionally, the installation of a new concrete intake slab and weir would occur below the OHWM, adding 6 cubic yards of fill across 175 square feet (0.004 acre).

Documentation to support consultation with USFWS regarding Section 7 and the State Historic Preservation Office (SHPO) supporting Section 106 of the National Historic Preservation Act are provided here-in. The Project PCN form is being submitted as part of this with this letter.

A Clean Water Act Section 401 Water Quality Certification Application was submitted to the Nevada Division of Environmental Protection (NDEP) on June 23, 2026 (the Department of the Army will be copied on this submittal). The 401 pre-filling meeting with NDEP was held on December 15, 2025. An application for flood channel 408 encroachment was submitted to the U.S. Army Corps of Engineers on March 18, 2026.

Thank you



Dan Soucy
Senior Biologist
(303) 905-1419
Dan.soucy@jacobs.com

Copies to: Dale Keller, RTC Deputy Director and Director of Engineering
Amanda Callegari, RTC Engineering Manager
Bryan Byrne, RTC Project Manager
Edward Woodford, FHWA
Andrea Gutierrez, FHWA
Robbie Coomes, Jacobs Project Manager
Laura Meyer, Jacobs Environmental Manager

Attachments:

Attachment A — Nationwide Permit PCN Form

Attachment B — Project Location Figure and Impact Overview Figure

Attachment C — Draft 100% Design Plans

Attachment D — Aquatic Resources Delineation Report

Attachment E — Section 7 letter of concurrence from the U.S. Fish and Wildlife Service

Attachment F — Section 106 Documentation

Attachment A

Pre-Construction Notification ENG Form 6082

U.S. Army Corps of Engineers (USACE)
NATIONWIDE PERMIT PRE-CONSTRUCTION NOTIFICATION (PCN)

33 CFR 330. The proponent agency is CECW-CO-R.

Form Approved -
OMB No. 0710-0003
Expires: 02-28-2022

DATA REQUIRED BY THE PRIVACY ACT OF 1974

Authority Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Regulatory Program of the Corps of Engineers (Corps); Final Rule 33 CFR 320-332.

Principal Purpose Information provided on this form will be used in evaluating the nationwide permit pre-construction notification.

Routine Uses This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of the agency coordination process.

Disclosure Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued.

The public reporting burden for this collection of information, 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR RESPONSE TO THE ABOVE EMAIL.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see *sample drawings and/or instructions*) and be submitted to the district engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
--------------------	----------------------	------------------	------------------------------

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME First - Dale Middle - Last - Keller Company - Regional Transportation Commission of Washoe County Company Title - Deputy Director and Director of Engineering E-mail Address - dkeller@rtcwashoe.com	8. AUTHORIZED AGENT'S NAME AND TITLE (<i>agent is not required</i>) First - Dan Middle - Last - Soucy Company - Jacobs Engineering E-mail Address - dan.soucy@jacobs.com
6. APPLICANT'S ADDRESS Address- 1105 Terminal Way City - Reno State - NV Zip - 89502 Country - USA	9. AGENT'S ADDRESS Address- 50 West Liberty St. Suite 205 City - Reno State - NV Zip - 89501 Country - USA
7. APPLICANT'S PHONE NOs. with AREA CODE a. Residence b. Business c. Fax d. Mobile (775) 335-1827	10. AGENT'S PHONE NOs. with AREA CODE a. Residence b. Business c. Fax d. Mobile (303) 905-1419

STATEMENT OF AUTHORIZATION

11. I hereby authorize, Dan Soucy to act in my behalf as my agent in the processing of this nationwide permit pre-construction notification and to furnish, upon request, supplemental information in support of this nationwide permit pre-construction notification.

 2026-08-19
SIGNATURE OF APPLICANT DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME or TITLE (*see instructions*)
Sierra Street Bridge Replacement Project

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

13. NAME OF WATERBODY, IF KNOWN *(if applicable)*

Truckee River

14. PROPOSED ACTIVITY STREET ADDRESS *(if applicable)*

1 S. Sierra Street

15. LOCATION OF PROPOSED ACTIVITY *(see instructions)*

Latitude °N Longitude °W
39.524634° -119.813880°

City:

Reno

State: Zip:

NV 89502

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN *(see instructions)*

State Tax Parcel ID

Municipality

Section

11

Township

19 North

Range

19 East

17. DIRECTIONS TO THE SITE

The project is located along Sierra Street in Reno Nevada, centered on the bridge over the Truckee River.

18. IDENTIFY THE SPECIFIC NATIONWIDE PERMIT(S) YOU PROPOSE TO USE

Nationwide Permit 14 - Linear Transportation Projects for bridge replacement and associated activities.

Nationwide Permit 3 - Maintenance for the Cochrane Ditch inlet reconstruction.

19. DESCRIPTION OF PROPOSED NATIONWIDE PERMIT ACTIVITY *(see instructions)*

Please see cover letter section titled - Block 19: Description of Proposed Nationwide Permit Activity

20. DESCRIPTION OF PROPOSED MITIGATION MEASURES *(see instructions)*

No mitigation measures proposed.

21. PURPOSE OF NATIONWIDE PERMIT ACTIVITY *(Describe the reason or purpose of the project, see instructions)*

Please see cover letter section titled - Block 21: Purpose of Nationwide Permit Activity

22. QUANTITY OF WETLANDS, STREAMS, OR OTHER TYPES OF WATERS DIRECTLY AFFECTED BY PROPOSED NATIONWIDE PERMIT ACTIVITY *(see instructions)*

Acres

Please see cover letter

Linear Feet

Please see cover letter

Cubic Yards Dredged or Discharged

Please see cover letter

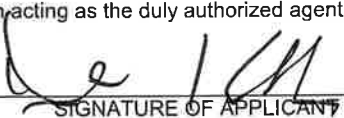
Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site.

23. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. *(see instructions)*

None

24. If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and requires pre-construction notification, explain how the compensatory mitigation requirement in paragraph (c) of general condition 23 will be satisfied, or explain why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required for the proposed activity.

Not applicable as the proposed permanent wetland loss is would be less than 1/10 acre.

25. Is any portion of the nationwide permit activity already complete?	☐ Yes	☒ No	If Yes, describe the completed work:
26. List the name(s) of any species listed as endangered or threatened under the Endangered Species Act that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. <i>(see instructions)</i> Lahontan cutthroat trout and Cui-ui. On behalf of the Regional Transportation Commission and Federal Highways Administration, a biological assessment was prepared and submitted to the U.S. Fish and Wildlife Service. A copy of the letter of concurrence from USFWS is included with this PCN in Attachment D.			
27. List any historic properties that have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic property or properties. <i>(see instructions)</i> Section 106 concurrence from SHPO determined the Project would have an adverse effect to the existing Sierra Street Bridge from the replacement of the structure. A Memorandum of Agreement between the Federal Highway Administration and SHPO was executed in February 2026. Section 106 documentation is included in Attachment F.			
28. For a proposed NWP activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, identify the Wild and Scenic River or the "study river": Not applicable			
29. If the proposed NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, have you submitted a written request for section 408 permission from the Corps district having jurisdiction over that project? ☒ Yes ☐ No If "yes", please provide the date your request was submitted to the Corps district: 2026-03-18			
30. If the terms of the NWP(s) you want to use require additional information to be included in the PCN, please include that information in this space or provide it on an additional sheet of paper marked Block 30. <i>(see instructions)</i>			
31. Pre-construction notification is hereby made for one or more nationwide permit(s) to authorize the work described in this notification. I certify that the information in this pre-construction notification is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.			
 SIGNATURE OF APPLICANT	2026-08-19 DATE	Daniel Soucy SIGNATURE OF AGENT	2026-08-12 DATE
The pre-construction notification must be signed by the person who desires to undertake the proposed activity (applicant) and, if the statement in Block 11 has been filled out and signed, the authorized agent.			
18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.			

**Instructions for Preparing a
Department of the Army
Nationwide Permit (NWP) Pre-Construction Notification (PCN)**

Blocks 1 through 4. To be completed by the Corps of Engineers.

Block 5. Applicant's Name. Enter the name and the e-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the preconstruction notification, please attach a sheet of paper with the necessary information marked Block 5.

Block 6. Address of Applicant. Please provide the full address of the party or parties responsible for the PCN. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant's Telephone Number(s). Please provide the telephone number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, consultant, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by the applicant, if an agent is to be employed.

Block 12. Proposed Nationwide Permit Activity Name or Title. Please provide a name identifying the proposed NWP activity, e.g., Windward Marina, Rolling Hills Subdivision, or Smith Commercial Center.

Block 13. Name of Waterbody. Please provide the name (if it has a name) of any stream, lake, marsh, or other waterway to be directly impacted by the NWP activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Activity Street Address. If the proposed NWP activity is located at a site having a street address (not a box number), please enter it in Block 14.

Block 15. Location of Proposed Activity. Enter the latitude and longitude of where the proposed NWP activity is located. Indicate whether the project location provided is the center of the project or whether the project location is provided as the latitude and longitude for each of the "corners" of the project area requiring evaluation. If there are multiple sites, please list the latitude and longitude of each site (center or corners) on a separate sheet of paper and mark as Block 15.

Block 16. Other Location Descriptions. If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality where the site is located.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide a description of the location of the proposed NWP activity, such as lot numbers, tract numbers, or you may choose to locate the proposed NWP activity site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed NWP activity site if known. If there are multiple locations, please indicate directions to each location on a separate sheet of paper and mark as Block 17.

Block 18. Identify the Specific Nationwide Permit(s) You Propose to Use. List the number(s) of the Nationwide Permit(s) you want to use to authorize the proposed activity (e.g., NWP 29).

Block 19. Description of the Proposed Nationwide Permit Activity. Describe the proposed NWP activity, including the direct and indirect adverse environmental effects the activity would cause. The description of the proposed activity should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal. Identify the materials to be used in construction, as well as the methods by which the work is to be done.

Provide sketches when necessary to show that the proposed NWP activity complies with the terms of the applicable NWP(s). Sketches usually clarify the activity and result in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed NWP activity (e.g., a conceptual plan), but do not need to be detailed engineering plans.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 19.

Block 20. Description of Proposed Mitigation Measures. Describe any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed NWP activity. The description of any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or additional mitigation measures.

Block 21. Purpose of Nationwide Permit Activity. Describe the purpose and need for the proposed NWP activity. What will it be used for and why? Also include a brief description of any related activities associated with the proposed project. Provide the approximate dates you plan to begin and complete all work.

Block 22. Quantity of Wetlands, Streams, or Other Types of Waters Directly Affected by the Proposed Nationwide Permit Activity. For discharges of dredged or fill material into waters of the United States, provide the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained by the proposed NWP activity. For structures or work in navigable waters of the United States subject to Section 10 of the Rivers and Harbors Act of 1899, provide the amount of navigable waters filled, dredged, or occupied by one or more structures (e.g., aids to navigation, mooring buoys) by the proposed NWP activity.

For multiple NWPs, or for separate and distant crossings of waters of the United States authorized by NWPs 12 or 14, attach an extra sheet of paper marked Block 21 to provide the quantities of wetlands, streams, or other types of waters filled, flooded, excavated, or drained (or dredged or occupied by structures, if in waters subject to Section 10 of the Rivers and Harbors Act of 1899) for each NWP. For NWPs 12 and 14, include the amount of wetlands, streams, or other types of waters filled, flooded, excavated, or drained for each separate and distant crossing of waters or wetlands. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Identify Any Other Nationwide Permit(s), Regional General Permit(s), or Individual Permit(s) Used to Authorize Any Part of Proposed Activity or Any Related Activity. List any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. For linear projects, list other separate and distant crossings of waters and wetlands authorized by NWPs 12 or 14 that do not require PCNs. If more space is needed, attach an extra sheet of paper marked Block 23.

Block 24. Compensatory Mitigation Statement for Losses of Greater Than 1/10-Acre of Wetlands When Pre-Construction Notification is Required. Paragraph (c) of NWP general condition 23 requires compensatory mitigation at a minimum one-for-one replacement ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation is more environmentally appropriate or the adverse environmental effects of the proposed NWP activity are no more than minimal without compensatory mitigation, and provides an activity-specific waiver of this requirement. Describe the proposed compensatory mitigation for wetland losses greater than 1/10 acre, or provide an explanation of why the district engineer should not require wetland compensatory mitigation for the proposed NWP activity. If more space is needed, attach an extra sheet of paper marked Block 24.

Block 25. Is Any Portion of the Nationwide Permit Activity Already Complete? Describe any work that has already been completed for the NWP activity.

Block 26. List the Name(s) of Any Species Listed As Endangered or Threatened under the Endangered Species Act that Might be Affected by the Nationwide Permit Activity. If you are not a federal agency, and if any listed species or designated critical habitat might be affected or is in the vicinity of the proposed NWP activity, or if the proposed NWP activity is located in designated critical habitat, list the name(s) of those endangered or threatened species that might be affected by the proposed NWP activity or utilize the designated critical habitat that might be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 7 of the Endangered Species Act.

Block 27. List Any Historic Properties that Have the Potential to be Affected by the Nationwide Permit Activity. If you are not a Federal agency, and if any historic properties have the potential to be affected by the proposed NWP activity, list the name(s) of those historic properties that have the potential to be affected by the proposed NWP activity. If you are a Federal agency, and the proposed NWP activity requires a PCN, you must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

Block 28. List the Wild and Scenic River or Congressionally Designated Study River if the Nationwide Permit Activity Would Occur in such a River. If the proposed NWP activity will occur in a river in the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" under the Wild and Scenic Rivers Act, provide the name of the river. For a list of Wild and Scenic Rivers and study rivers, please visit <http://www.rivers.gov/>.

Block 29. Nationwide Permit Activities that also Require Permission from the Corps Under 33 U.S.C. 408. If the proposed NWP activity also requires permission from the Corps under 33 U.S.C. 408 because it will temporarily or permanently alter, occupy, or use a Corps federal authorized civil works project, indicate whether you have submitted a written request for section 408 permission from the Corps district having jurisdiction over that project.

Block 30. Other Information Required For Nationwide Permit Pre-Construction Notifications. The terms of some of the Nationwide Permits include additional information requirements for preconstruction notifications:

- * NWP 3, Maintenance –information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals.
- * NWP 31, Maintenance of Existing Flood Control Facilities –a description of the maintenance baseline and the dredged material disposal site.
- * NWP 33, Temporary Construction, Access, and Dewatering –a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions.
- * NWP 44, Mining Activities –if reclamation is required by other statutes, then a copy of the final reclamation plan must be submitted with the pre-construction notification.
- * NWP 45, Repair of Uplands Damaged by Discrete Events –documentation, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration.
- * NWP 48, Commercial Shellfish Aquaculture Activities –(1) a map showing the boundaries of the project area, with latitude and longitude coordinates for each corner of the project area; (2) the name(s) of the species that will be cultivated during the period this NWP is in effect; (3) whether canopy predator nets will be used; (4) whether suspended cultivation techniques will be used; and (5) general water depths in the project area (a detailed survey is not required).
- * NWP 49, Coal Remining Activities –a document describing how the overall mining plan will result in a net increase in aquatic resource functions must be submitted to the district engineer and receive written authorization prior to commencing the activity.
- * NWP 50, Underground Coal Mining Activities –if reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre-construction notification.

If more space is needed, attach an extra sheet of paper marked Block 30.

Block 31. Signature of Applicant or Agent. The PCN must be signed by the person proposing to undertake the NWP activity, and if applicable, the authorized party (agent) that prepared the PCN. The signature of the person proposing to undertake the NWP activity shall be an affirmation that the party submitting the PCN possesses the requisite property rights to undertake the NWP activity (including compliance with special conditions, mitigation, etc.).

DELINEATION OF WETLANDS, OTHER SPECIAL AQUATIC SITES, AND OTHER WATERS

Each PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current wetland delineation manual and regional supplement published by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. The 45 day PCN review period will not start until the delineation is submitted or has been completed by the Corps.

DRAWINGS AND ILLUSTRATIONS

General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number. For linear projects (e.g. roads, subsurface utility lines, etc.) gradient drawings should also be included. Please submit one original, or good quality copy, of all drawings on 8½x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.

ADDITIONAL INFORMATION AND REQUIREMENTS

For proposed NWP activities that involve discharges into waters of the United States, water quality certification from the State, Tribe, or EPA must be obtained or waived (see NWP general condition 25). Some States, Tribes, or EPA have issued water quality certification for one or more NWPs. Please check the appropriate Corps district web site to see if water quality certification has already been issued for the NWP(s) you wish to use. For proposed NWP activities in coastal states, state Coastal Zone Management Act consistency concurrence must be obtained, or a presumption of concurrence must occur (see NWP general condition 26). Some States have issued Coastal Zone Management Act consistency concurrences for one or more NWPs. Please check the appropriate Corps district web site to see if Coastal Zone Management Act consistency concurrence has already been issued for the NWP(s) you wish to use.

Attachment B

Project Location and Impact Overview Figure



— OHWM

— ■ — WETLAND

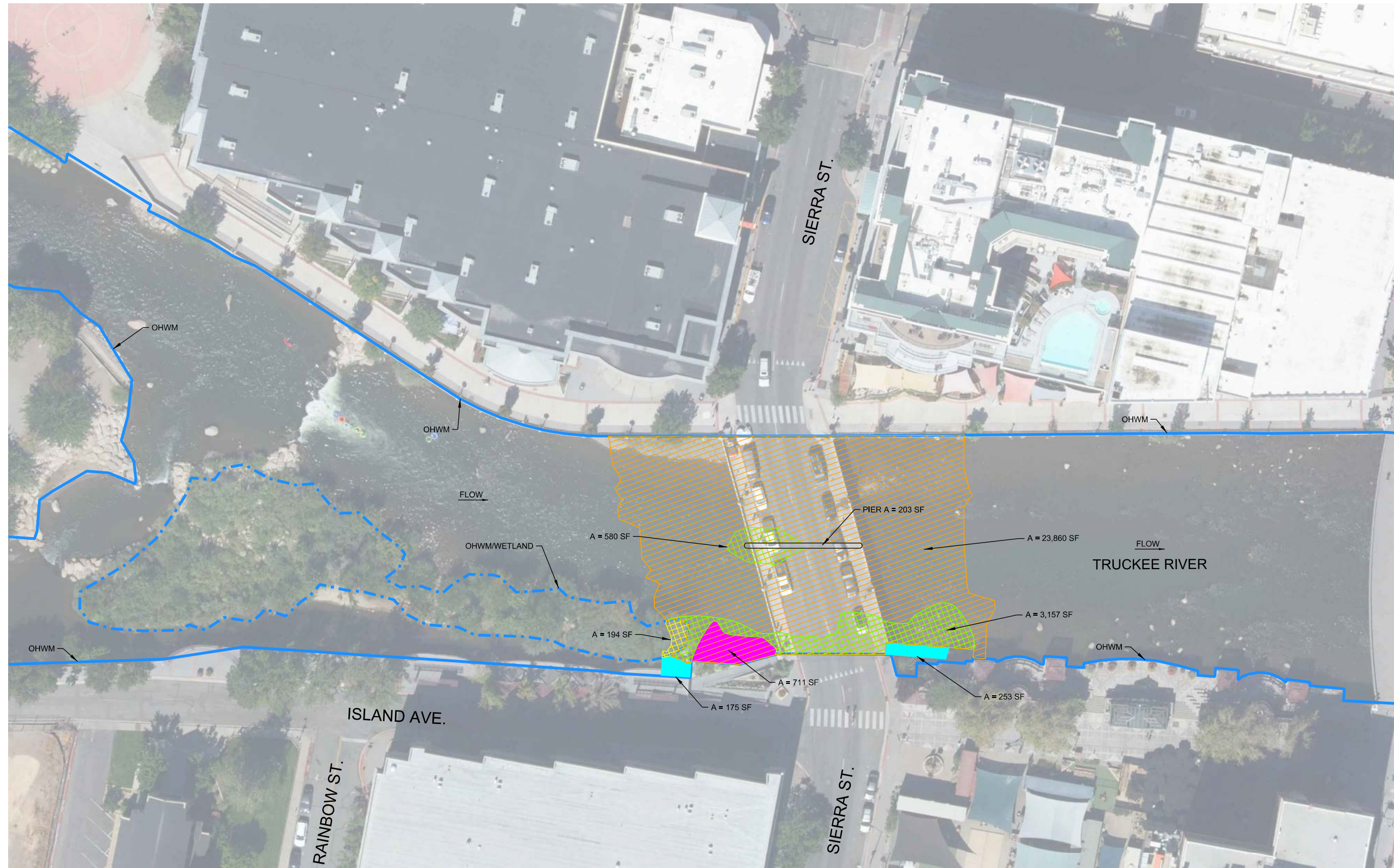
 FILL REMOVED BELOW OHWM
(GROUTED RIPRAP)

 PERMANENT FILL BELOW OHWM
(GROUTED RIPRAP)

 PERMANENT WETLAND IMPACT
(GROUTED RIPRAP)

 RIVER GRADING (SEDIMENT REMOVAL)

PERMANENT FILL BELOW OHWM WITH
INSTALLATION OF NEW ACCESS RAMP
AND COCHRANE DITCH



REGIONAL TRANSPORTATION COMMISSION OF WASHOE COUNTY
PWP-WA-2026-257 FHWA PIN: BR-0191- (343) NDOT EA:74508

SIERRA STREET BRIDGE REPLACEMENT PROJECT 401 AND 404 IMPACTS OVERVIEW PERMANENT IMPACTS

Jacobs.

50 WEST LIBERTY STREET, SUITE 205
RENO, NV 89501
PH (775) 329-7300

	N. STALDER	T. PATTISON	M. BRADY	R. COOMES
REUSE OF DOCUMENTS:	THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JACOBS AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF JACOBS.			
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NO.	DATE	REVISION		BY	APVD
0509N		DR	CHK		APVD
	N. STALDER		T. PATTISON		M. BRADY
					R. COOMES

$$1'' = 60'$$

VERIFY SCALE

BAR IS ONE INCH ON
ORIGINAL DRAWING.

DATE	APRIL 2026
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PROJ	W7Y56600
------	----------

DWG	IMPACTS-01
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SHEET 1 OF 4

\$PWURL

FILENAME:

PLOT DATE: 2026\04\14

PLOT TIME: 3:30:01 PM



Attachment D
Aquatic Resources Delineation Report

Aquatic Resources Delineation Report

Sierra Street Bridge

Washoe County, Nevada

Regional Transportation Commission of Washoe County

**1105 Terminal Way, Suite 108
Reno, NV 89502**

Regulatory Office:

**U.S. Army Corps of Engineers
Sacramento District
650 Capitol Mall, Suite 5-200
Sacramento, CA 95814**

Project Location:

**Eastern end: 39.524999° / -119.812752°
Western end: 39.524260° / -119.815271°**

Prepared by:

Jacobs

February 2026

Summary

The Regional Transportation Commission of Washoe County (RTC), in cooperation with the City of Reno, the Nevada Department of Transportation (NDOT), and the Federal Highway Administration (FHWA), proposes to replace an aging bridge along Sierra Street over the Truckee River in the Riverwalk District of Reno, Nevada. The Sierra Street Bridge Replacement Project (Project) is located on Sierra Street between West 1st Street and Court Street. The existing bridge, which was constructed in 1937, is structurally deficient and needs to be replaced. The legal description includes southeast Section 11, Township 19 North, Range 19 East.

The purpose of the delineation report is to describe aquatic resources (i.e., wetlands, other waters) in the study area that are potential waters of the U.S. (WoUS). The report was prepared following the *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* and *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program*, prepared by the U.S. Army Corps of Engineers (USACE)–Sacramento District (2016a, 2016b). The boundaries of potential WoUS described and mapped in the report should be considered preliminary until verified by USACE.

An aquatic resource delineation was completed for the 3.97-acre study area on September 7, 2023. One wetland forested/shrub wetland (0.35 acre) was identified and 2.21 acres (775 linear feet) of perennial waterway were documented in the study area. This delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the ordinary high water mark (OHWM) Regulatory Guidance Letter No. 05-05 (USACE 2005), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0* (USACE 2008), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley 2008), and the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Curtis and Lichvar 2010).

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Acronyms and Abbreviations

Acronym	Definition
°F	Fahrenheit
FHWA	Federal Highway Administration
GIS	geographic information system
GPS	global position system
HUC	Hydrologic Unit Code
NDOT	Nevada Department of Transportation
NHD	National Hydrography Dataset
NWI	National Wetlands Inventory
OHWM	ordinary high water mark
RTC	Regional Transportation Commission of Washoe County
Project	Sierra Street Bridge Replacement Project
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey
WoUS	waters of the U.S.

1. Introduction

The Regional Transportation Commission of Washoe County (RTC), in cooperation with the City of Reno, the Nevada Department of Transportation (NDOT), and the Federal Highway Administration (FHWA), proposes to replace an aging bridge along Sierra Street over the Truckee River in the Riverwalk District of Reno, Nevada. The Sierra Street Bridge Replacement Project (Project) is located on Sierra Street between West 1st Street and Court Street. The existing bridge, which was constructed in 1937, is structurally deficient and needs to be replaced as indicated in the RTC 2050 Regional Transportation Plan adopted in 2020 and amended in 2025 (RTC 2020). The three-span steel bridge with a concrete facade currently provides two travel lanes for southbound traffic as well as a parking lane and sidewalk on each side of the bridge. The proposed Project would address the structural deficiencies of the existing bridge and enhance safety for the traveling public.

The purpose of this report is to identify and describe aquatic resources. This report facilitates efforts to document aquatic resource boundary determinations for review by regulatory authorities.

This report was prepared following the *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* and *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program*, prepared by the U.S. Army Corps of Engineers (USACE)–Sacramento District (2016a, 2016b). The boundaries of potential waters of the U.S. (WoUS) described and mapped in this report should be considered preliminary until verified by USACE.

2. Study Area Description

The study area for the aquatic resources delineation is approximately 3.97 acres¹ which is situated around the Sierra Street bridge over the Truckee River in Reno Nevada (Figure 1 – Appendix A). The legal description includes southeast Section 11, Township 19 North, Range 19 East.

2.1 Land Uses

Land use within the study area is mainly recreational use within the river, in addition to pedestrian and vehicular use of Sierra Street which represents a southbound transportation corridor through the city.

¹ The delineation was conducted across a larger area which also supported the adjacent Arlington Avenue Bridges Project, upstream (west) of the Sierra Street Bridge Replacement Project. The study area presented in this report encompasses the limits where Project activities may occur.

2.2 Climate

Table 1 provides a long-term climate data collected at Reno Tahoe International Airport, approximately 3 miles southeast of the study area.

Table 1. Monthly Climate Summary, Reno Tahoe International Airport (266779), 1937 to 2016

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
Average Maximum Temperature (°F)	45.6	50.9	56.8	63.9	72.9	82.2	91.7	89.8	81.9	69.7	55.5	46.4	67.3
Average Minimum Temperature (°F)	20.9	24.6	27.9	32.3	39.8	46.0	51.3	49.1	42.4	33.5	25.9	21.0	34.6
Average Total Precipitation (inches)	1.12	0.97	0.75	0.43	0.56	0.42	0.25	0.23	0.30	0.44	0.69	1.05	7.22

Source: WRCC 2026

2.3 Hydrology

The study area is in the Truckee watershed (Hydrologic Unit Code [HUC] 16050102), (USGS 2025a).

National Wetlands Inventory (NWI) and National Hydrography Dataset (NHD) maps were reviewed to determine locations of mapped aquatic resources within the study area (USFWS 2025; USGS 2025b). The Truckee River is a mapped riverine feature identified within the study area, as well as a palustrine forested/shrub wetland (Appendix A, Figure 2).

2.4 Vegetation

The study area is located within the Sierra Nevada-Influenced Semiarid Hills and Basins ecoregion as defined by the U.S. Environmental Protection Agency. This ecoregion includes the basins and lower mountain slopes immediately east of the Sierra Nevada, which affect the ecoregion's climate and contain a similar granitic substrate. Plants with slightly higher moisture requirements, such as antelope bitterbrush (*Purshia tridentata*) and desert peach (*Prunus andersoni*), may be associated with the semiarid shrub community, especially near the Sierra Nevada front. Three large river systems – the Truckee, Carson, and Walker rivers – flow eastward through this region from the Sierra Nevada, providing water for agriculture and urban development (Bryce et al. 2003).

Because the Project is located along a developed roadway within an urbanized environment, little native vegetation or non-disturbed areas remain. Development along

the banks of the river both upstream and downstream of the project has eliminated the historic riparian ecosystem. The natural vegetation communities associated with the lower Truckee River are highly disturbed and altered because of agricultural and urban development. Throughout the study area, the river is contained within floodwalls. A few narrow-leaf willows (*Salix exigua*), cottonwood (*Populus fremontii*) saplings, and Siberian elm (*Ulmus pumila*) are scattered along the floodwalls upstream and downstream of the study area. The lack of a floodplain or substrate severely limits what can grow around the Sierra Street bridge.

A list of dominant plant species identified during this delineation and its wetland indicator status is presented in Appendix B. This

2.5 Soils

A soil report from the U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS 2025) was obtained for the study area (Appendix C). None of the soils mapped in the study area are considered hydric.

3. Methods

3.1 Pre-field Investigation

General information on climate, vegetation, hydrology, and existing aquatic resources (wetlands, watercourses) were reviewed before the field survey. Data sources included U.S. Geological Survey (USGS) topographic maps, NWI (USFWS 2025), NHD (USGS 2025b), and satellite imagery (ESRI 2021). A soil resource report for the study area is presented in Appendix C.

3.2 Field Survey

Jacobs' biologists conducted the aquatic resources delineation on September 7, 2023. The field survey included all proposed areas of Project disturbance at the date of survey.

The methodology followed the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0* (USACE 2008), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley 2008), the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Curtis and Lichvar 2010), and the OHWM Regulatory Guidance Letter No. 05-05 (USACE 2005). Wetland indicator statuses for plants were taken from The National Wetland Plant List, version 3.5 (USACE 2023).

Where aquatic resources were identified, feature boundaries were mapped using a handheld global position system (GPS) unit with submeter accuracy. Data were collected in North American Datum of 1984 State Plane Nevada West in U.S. survey feet. Geographic information system (GIS) data were post-processed using ArcGIS Pro. The field sampling procedures and methods used to delineate and map aquatic resources followed protocol as detailed in the references cited in the previous paragraph.

4. Results

The field delineation identified 1 wetland (0.35 acre) and 2.21 acres (775 linear feet) of perennial waterway (Truckee River) within the study area. Table 2 presents an overview of the types and amounts of potential WoUS in the study area, and descriptions of the delineated features are presented in the following paragraphs.

The results are shown in Appendix A, Figure 3. Representative photographs are presented in Appendix D, and an OHWM data sheet is presented in Appendix E.

4.1 Wetlands

Wetland 1 (0.35 acre) – Wetland 1 is an NWI-mapped palustrine forested/shrub wetland along the southern side of the Truckee River on the western end of the study area (Appendix D, Photos 3 and 4). Dominant woody vegetation at this wetland includes speckled alder (*Alnus incana*), arroyo willow (*Salix lasiolepis*), narrow-leaf willow, and Fremont's cottonwood. The wetland is located on a gravel bar island in the river. Wetland data forms were not collected at this location due to an inability to access the island. Wetland (hydric) soils are presumed due to the dominance of wetland vegetation and the supporting river hydrology.

4.2 Watercourses

Truckee River (2.21 acres, 775 linear feet) – The Truckee River is an NHD-mapped perennial river flowing west to east through the study area (Appendix D, Photos 1 – 6; Appendix E, S-1). At the Sierra Street Bridge, the Truckee River is contained within the constructed floodwalls on each side of the river and the approximate width of the OHWM is 120 feet. The river is shallow with a relatively uniform depth with a substrate of sand, gravel, and cobble.

Table 2. Summary of Aquatic Resources Investigated in the Sierra Street Bridge Aquatic Resources Study Area

Feature Type	Feature ID	Description	Flow or Cowardin Classification	Latitude / Longitude (WGS 84)	Average Width of OHWM (feet)	Acreage within Study Area (linear feet)
Wetland	Wetland 1	Gravel bar	Palustrine forested/shrub	39.524142° / 119.814895°	Not applicable	0.35
Watercourses	Truckee River	Truckee River	Perennial	39.524699° / -119.813652°	130	2.21 (775 linear feet)

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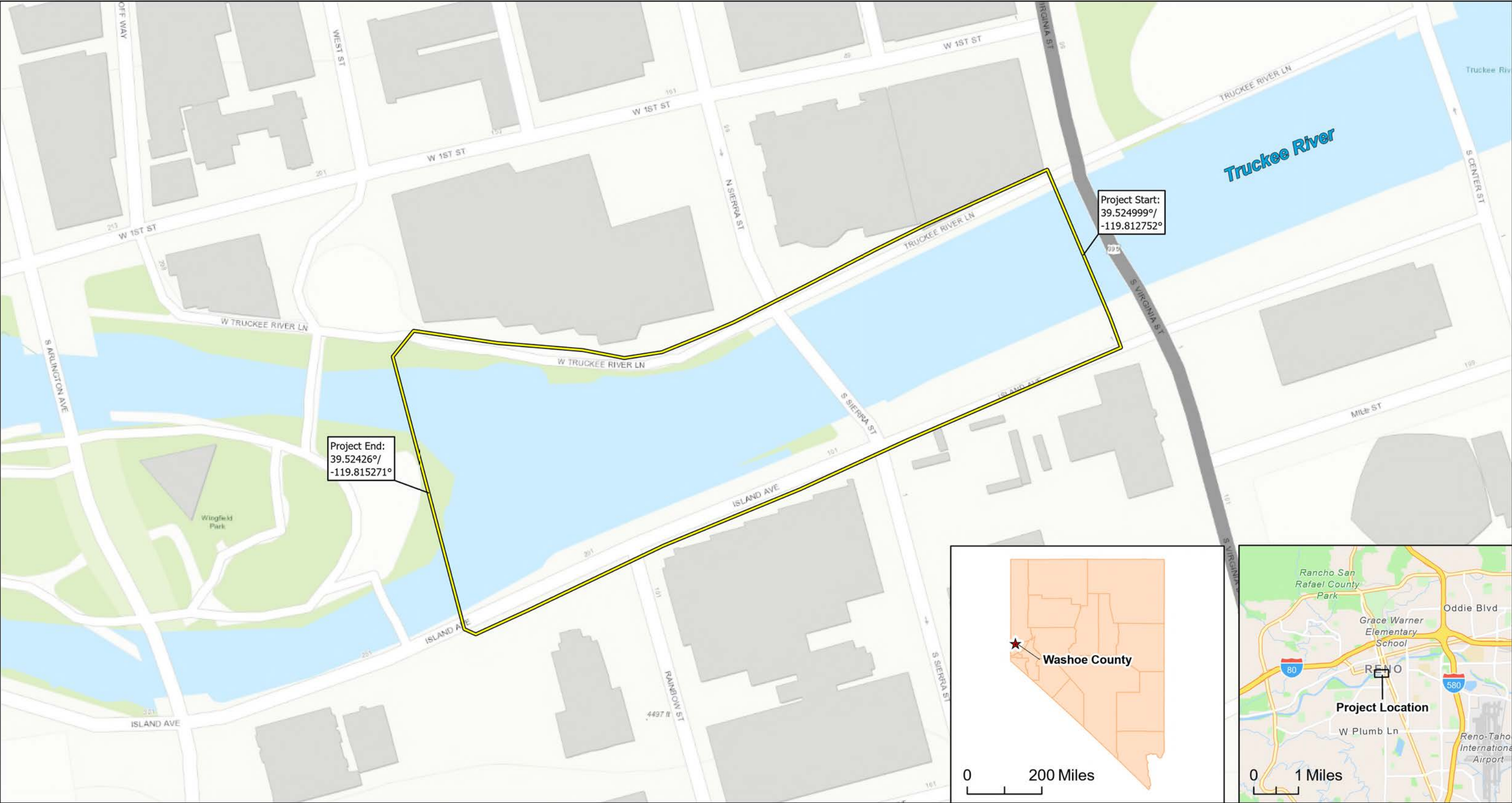
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Appendix A

Figures



Legend

 Aquatic Resources Study Area (3.97 acres)

Image Source: ESRI, World Topographic Map
Made in accordance with the Updated Map and Drawing Standards for the
South Pacific Division Regulatory Program, as amended on February 10, 2016.
Figure created by Jill Rosenberger, revised 2/19/2026

NAD_1983_2011_StatePlane_Nevada_West_FIPS_2703_Ft_US
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Projection: Transverse_Mercator
False_Easting: 2624666.666666666
False_Northing: 13123333.333333333
Central_Meridian: -118.58333333333333
Scale_Factor: 0.9999
Latitude_Of_Origin: 34.75
Linear Unit: Foot_US (0.3048006096012192)
USGS Quads: Reno, 1976

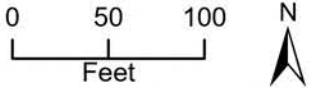
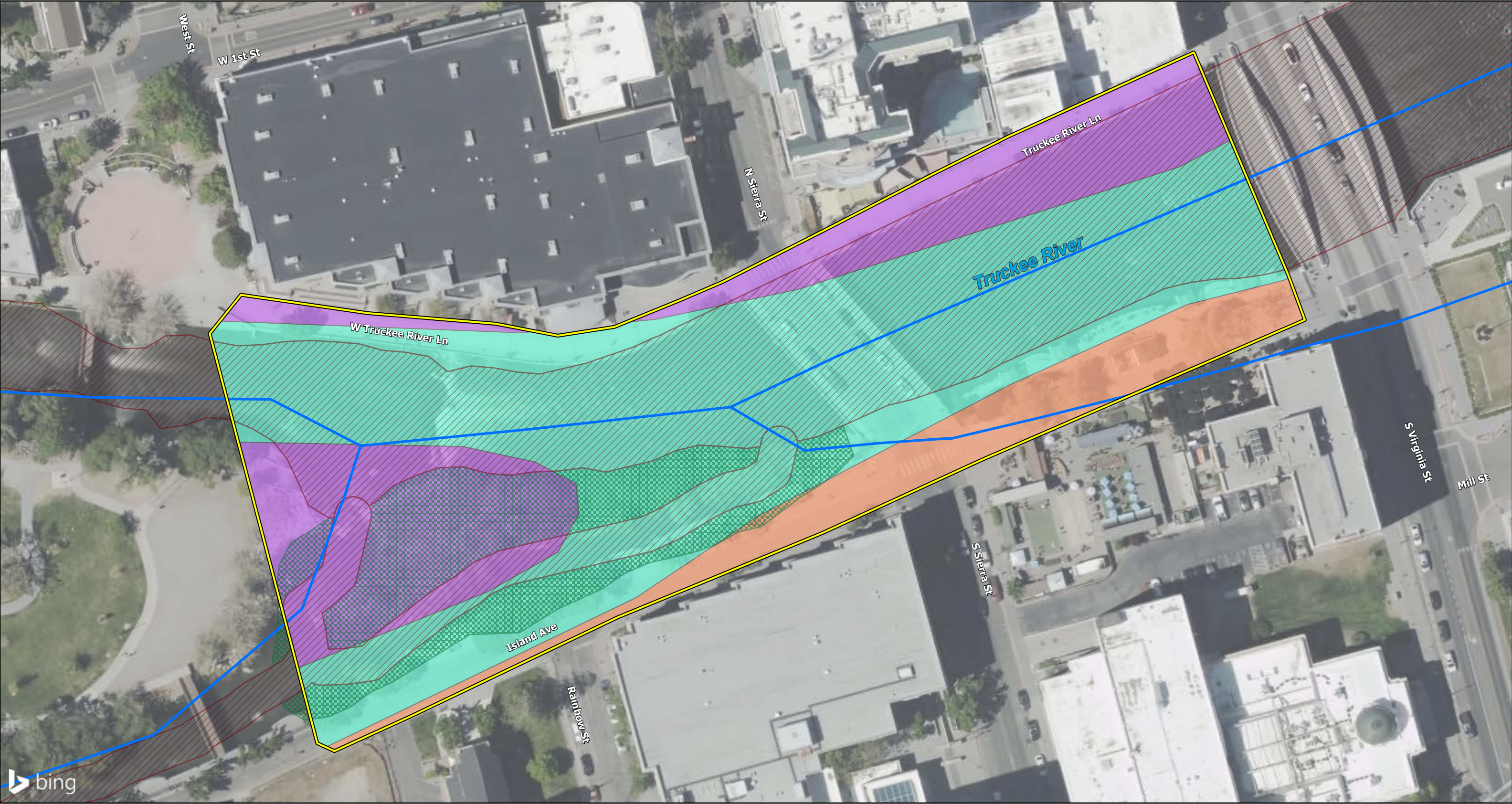


Figure 1
Regional Vicinity Map
Aquatic Resources Delineation Report
Sierra Street Bridge Replacement Project
Washoe County, Nevada



Legend

- Aquatic Resources Study Area (3.97 acres)
- NHD Stream

NWI Wetlands

- Freshwater Forested/Shrub Wetland
- Riverine

Soil

- Oest bouldery sandy loam, 2 to 8 percent slopes
- Water
- Xeric Torriorthents-Urban land complex

Image source: Bing Aerial
Data source : NRCS Soils, 2026;
USFWS, National Wetlands Mapper, 2024;
USGS National Hydrography Dataset, 2022
Made in accordance with the Updated Map and Drawing Standards for the
South Pacific Division Regulatory Program, as amended on February 10, 2016.
Figure created by Jill Rosenberger, revised 2/19/2026

\\dc1vs01\GIS\Proj\W\Washoe\NV_RTO\Sierra_Street_Bridge\MapFiles\SSB_ARDR_2026.aprx

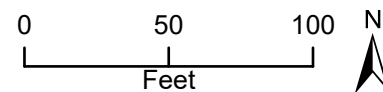
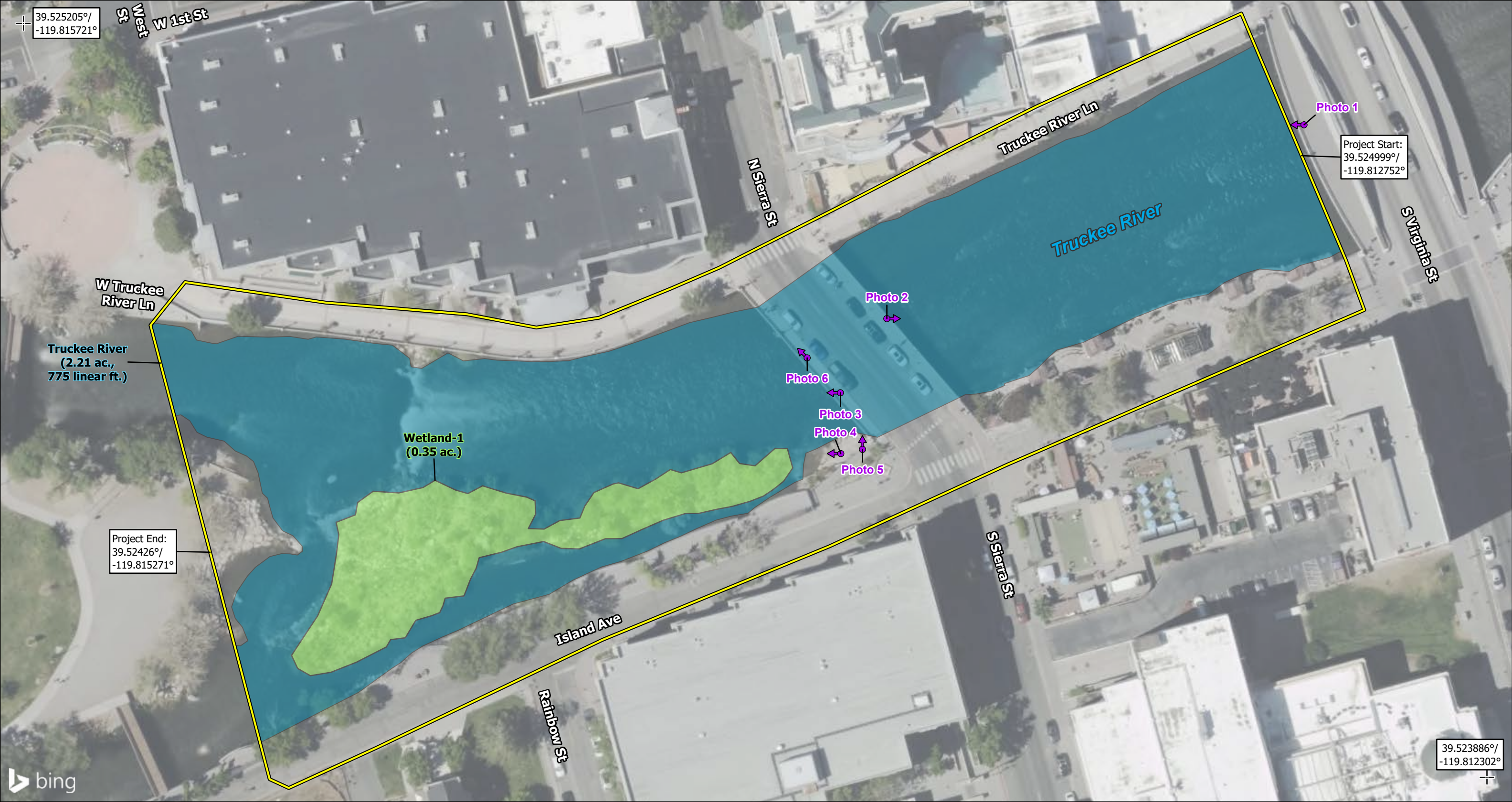


Figure 2
National Wetlands Inventory and
National Hydrography Dataset
Aquatic Resources Delineation Report
Sierra Street Bridge Project
Washoe County, Nevada



- Legend**
- Aquatic Resources Study Area (3.97 acres)
 - Coordinates
 - ➡ Photo Point

- Delineated Features**
- Truckee River
 - Wetlands

Image Source: Bing Aerial
Delineation completed by Dan Soucy/JACOBS 09/07/2023.
Made in accordance with the Updated Map and Drawing Standards for the
South Pacific Division Regulatory Program, as amended on February 10, 2016.
Figure created by Jill Rosenberger, revised 2/19/2026

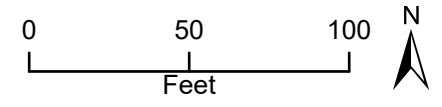


Figure 3
Potential Wetlands and Waters
Aquatic Resources Delineation Report
Sierra Street Bridge Replacement Project
Washoe County, Nevada

Appendix B

Plant List

Appendix B. Dominant Plants Identified During the Aquatic Resources Delineation ^a

Type	Scientific Name	Common Name	Status ^[b,c]
Ferns and Fern Allies	<i>Equisetum hyemale</i>	Tall scouring-rush	FACW
Graminoids	<i>Bromus inermis</i>	Smooth brome	UPL
Graminoids	<i>Poa pratensis</i>	Kentucky blue grass	FAC
Graminoids	<i>Phalaris arundinacea</i>	Reed canary grass	FACW
Forbs	<i>Cirsium arvense</i>	Canada thistle	FACU
Forbs	<i>Convolvulus arvensis</i>	Field bindweed	UPL
Forbs	<i>Melilotus officinalis</i>	Yellow sweet clover	FACU
Forbs	<i>Taraxacum officinale</i>	Common dandelion	FACU
Forbs	<i>Trifolium pratense</i>	Red clover	FACU
Shrubs, Trees, and Woody Vines	<i>Acer negundo</i>	Ash-leaf maple	FACW
Shrubs, Trees, and Woody Vines	<i>Acer saccharinum</i>	Silver maple	FAC
Shrubs, Trees, and Woody Vines	<i>Alnus incana</i>	Speckled alder	FACW
Shrubs, Trees, and Woody Vines	<i>Elaeagnus angustifolia</i>	Russian olive	FAC
Shrubs, Trees, and Woody Vines	<i>Fraxinus velutina</i>	Velvet ash	FAC
Shrubs, Trees, and Woody Vines	<i>Parthenocissus quinquefolia</i>	Virginia creeper	FAC
Shrubs, Trees, and Woody Vines	<i>Populus fremontii</i>	Fremont's cottonwood	FACW
Shrubs, Trees, and Woody Vines	<i>Rosa woodsii</i>	Woods rose	FACU
Shrubs, Trees, and Woody Vines	<i>Salix exigua</i>	Narrow-leaf willow	FACW
Shrubs, Trees, and Woody Vines	<i>Salix laiandra</i>	Pacific willow	FACW

Aquatic Resources Delineation Report
Sierra Street Bridge Project

Type	Scientific Name	Common Name	Status ^[b,c]
Shrubs, Trees, and Woody Vines	<i>Salix lasiolepis</i>	Arroyo willow	FACW
Shrubs, Trees, and Woody Vines	<i>Ulmus pumila</i>	Siberian elm	UPL

Notes:

^[a] Not all species were observed at designated wetland sample point locations but were observed in the study area. This plant list was based on the delineation that was conducted for the Sierra Street Bridge Project, and the adjacent Arlington Avenue Bridges Project.

^[b] Status follows *National Wetland Plant List, version 3.5* (USACE 2020).

^[c] Indicator Status:

FAC = Occurs in wetlands and non-wetlands

FACU = Usually occurs in non-wetlands but may occur in wetlands

FACW = Usually occurs in wetlands but may occur in non-wetlands

NI = No indicator listed

OBL = Almost always occurs in wetlands

UPL = Almost always occurs in uplands

Appendix C

Soil Resource Report



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Washoe County, Nevada, South Part**

Sierra St. Bridge



February 13, 2026

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

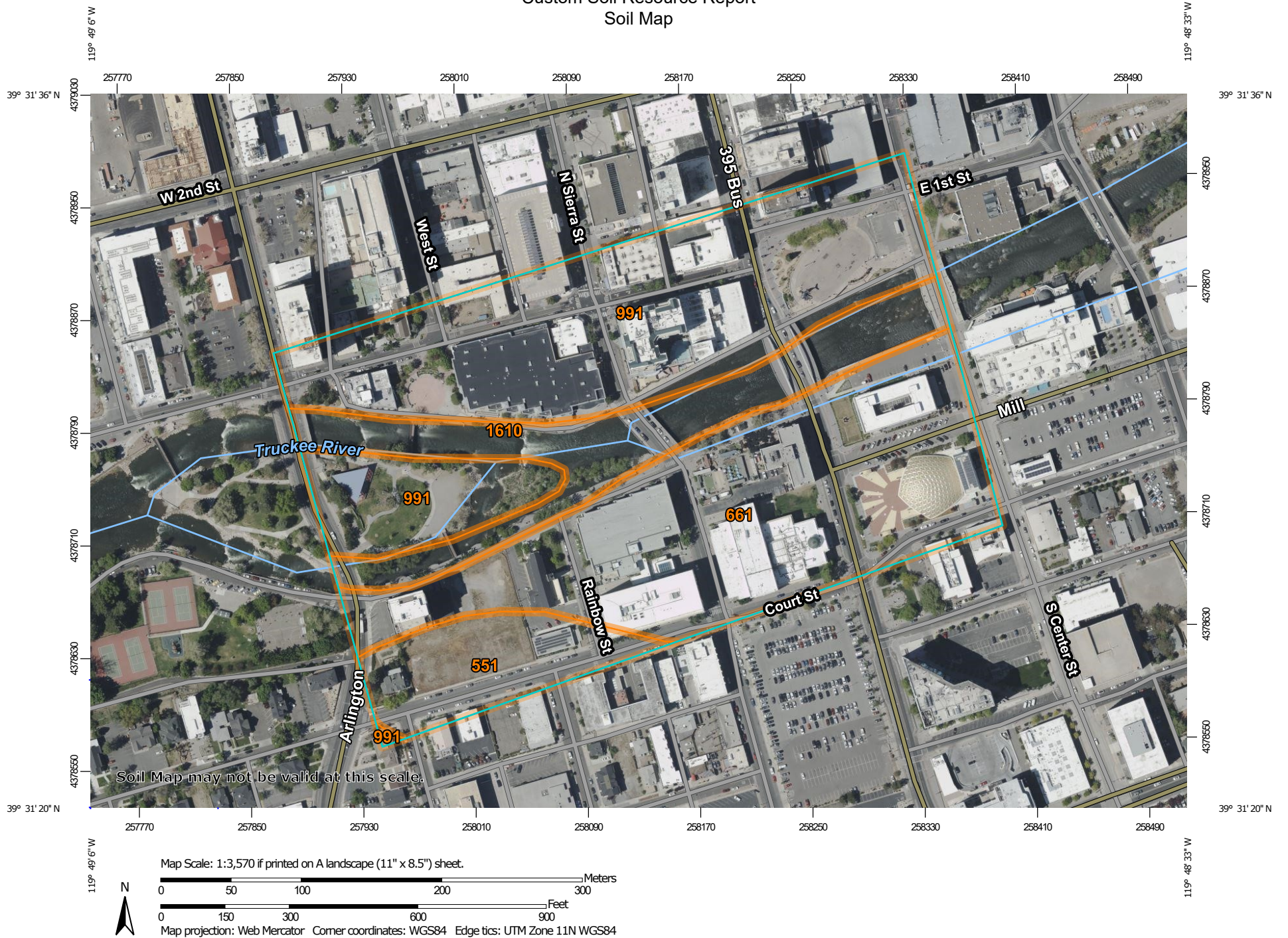
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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Washoe County, Nevada, South Part
Survey Area Data: Version 23, Aug 29, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2024—Jul 1, 2024

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
551	Leviathan stony sandy loam, 2 to 8 percent slopes	2.7	8.3%
661	Oest bouldery sandy loam, 2 to 8 percent slopes	11.6	35.3%
991	Xeric Torriorthents-Urban land complex	13.5	41.2%
1610	Water	5.0	15.3%
Totals for Area of Interest		32.8	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Washoe County, Nevada, South Part

551—Leviathan stony sandy loam, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: hxkp
Landscape: Piedmonts
Elevation: 4,800 to 6,000 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 47 to 49 degrees F
Frost-free period: 100 to 110 days
Farmland classification: Not prime farmland

Map Unit Composition

Leviathan and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Leviathan

Setting

Landscape: Piedmonts
Landform: Fan remnants
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Mixed alluvium

Typical profile

H1 - 0 to 9 inches: stony sandy loam
H2 - 9 to 60 inches: very gravelly sandy clay loam

Properties and qualities

Slope: 2 to 8 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: R026XY010NV - LOAMY 10-12 P.Z.
Hydric soil rating: No

Minor Components

Springmeyer

Percent of map unit: 5 percent
Landform: Fan remnants

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Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R026XY010NV - LOAMY 10-12 P.Z.
Hydric soil rating: No

Oest

Percent of map unit: 5 percent
Landform: Fan skirts
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R026XY010NV - LOAMY 10-12 P.Z.
Hydric soil rating: No

Reno

Percent of map unit: 3 percent
Landform: Fan remnants
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R026XY023NV - CLAYPAN 10-12 P.Z.
Hydric soil rating: No

Washoe

Percent of map unit: 2 percent
Landform: Fan remnants
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R026XY016NV - LOAMY 8-10 P.Z.
Hydric soil rating: No

661—Oest bouldery sandy loam, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: hxlq
Landscape: Fan piedmonts
Elevation: 4,500 to 5,500 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 47 to 51 degrees F
Frost-free period: 100 to 110 days
Farmland classification: Farmland of statewide importance, if irrigated

Map Unit Composition

Oest and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Oest

Setting

Landscape: Fan piedmonts
Landform: Fan remnants
Down-slope shape: Linear

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Across-slope shape: Convex
Parent material: Mixed alluvium

Typical profile

H1 - 0 to 13 inches: bouldery sandy loam
H2 - 13 to 44 inches: very cobbly sandy loam
H3 - 44 to 60 inches: very gravelly loamy sand

Properties and qualities

Slope: 2 to 8 percent
Surface area covered with cobbles, stones or boulders: 2.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B
Ecological site: R026XY010NV - LOAMY 10-12 P.Z.
Hydric soil rating: No

Minor Components

Leviathan

Percent of map unit: 5 percent
Landform: Fan remnants
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R026XY010NV - LOAMY 10-12 P.Z.
Hydric soil rating: No

Orr

Percent of map unit: 5 percent
Landform: Fan remnants
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R026XY010NV - LOAMY 10-12 P.Z.
Hydric soil rating: No

Apmat

Percent of map unit: 3 percent
Landform: Hillsides
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: F022AY130NV - Pinus Jeffreyi/ Artemisia Tridentata Ssp.
Vaseyana-Purshia
Hydric soil rating: No

Notus

Percent of map unit: 2 percent
Landform: Flood plains

Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R023XY009NV - LOAMY BOTTOM 8-12 P.Z.
Other vegetative classification: LOAMY BOTTOM 8-12 P.Z. (023XY009NV_2)
Hydric soil rating: No

991—Xeric Torriorthents-Urban land complex

Map Unit Setting

National map unit symbol: hxp2
Landscape: Piedmonts
Elevation: 4,250 to 5,590 feet
Mean annual precipitation: 9 to 12 inches
Mean annual air temperature: 50 to 52 degrees F
Frost-free period: 165 to 175 days
Farmland classification: Not prime farmland

Map Unit Composition

Xeric torriorthents and similar soils: 50 percent
Urban land: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Xeric Torriorthents

Setting

Landscape: Piedmonts
Landform: Fan piedmonts
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Mixed alluvium

Typical profile

H1 - 0 to 60 inches: variable

Properties and qualities

Slope: 0 to 30 percent
Surface area covered with cobbles, stones or boulders: 10.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydrologic Soil Group: A

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Ecological site: R027XY008NV - DROUGHTY LOAM 8-10 P.Z.

Hydric soil rating: No

Description of Urban Land

Setting

Landform: Fan piedmonts

Down-slope shape: Convex

Across-slope shape: Convex

Typical profile

H1 - 0 to 60 inches: variable

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydrologic Soil Group: D

Hydric soil rating: No

Minor Components

Dumps

Percent of map unit: 10 percent

Landform: Fan piedmonts

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

1610—Water

Map Unit Setting

National map unit symbol: hxp9

Landscape: Basins

Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Setting

Landscape: Basins

Landform: Lake plains

Down-slope shape: Linear

Across-slope shape: Linear

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Appendix D

Representative Photographs



Photo 1: Facing upstream toward the Sierra Street bridge from Virginia Street.

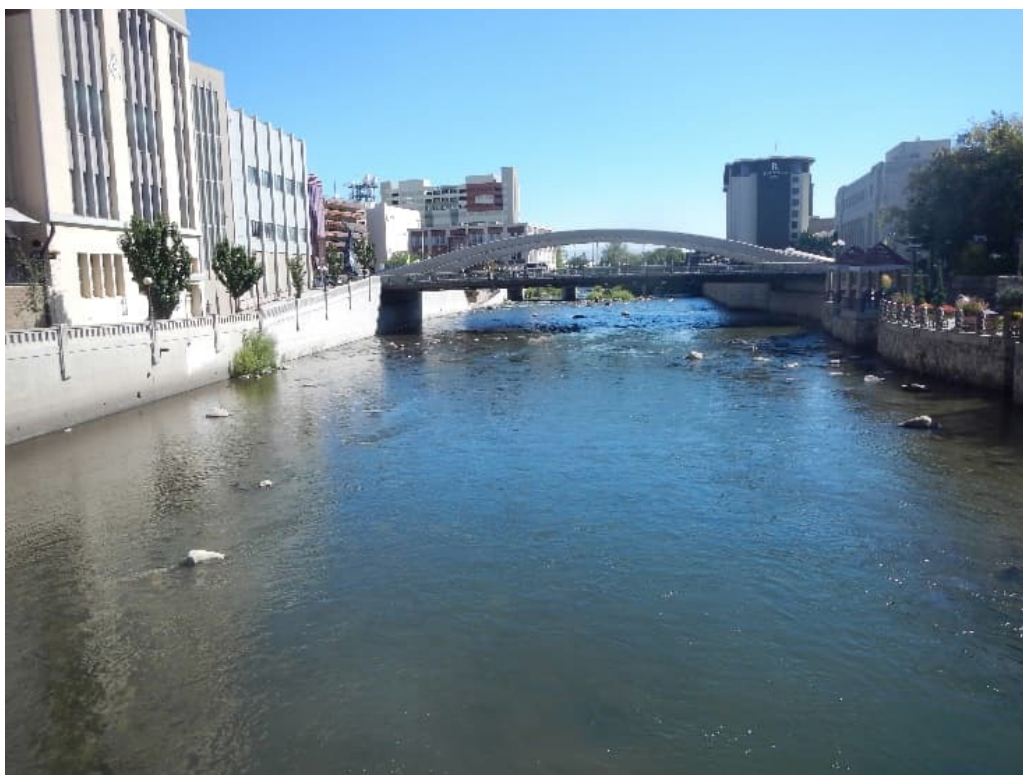


Photo 2: Facing downstream from the Sierra Street bridge toward the Virginia Street bridge.



Photo 3: Facing upstream from the Sierra Street bridge.



Photo 4: Facing upstream from the grouted riprap and boat ramp toward the Cochrane Ditch inlet and gravel bar wetland.



Photo 5: Facing north from the southwest bridge corner at the existing river access ramp.



Photo 6: View to the west of gravel bar Wetland 3.

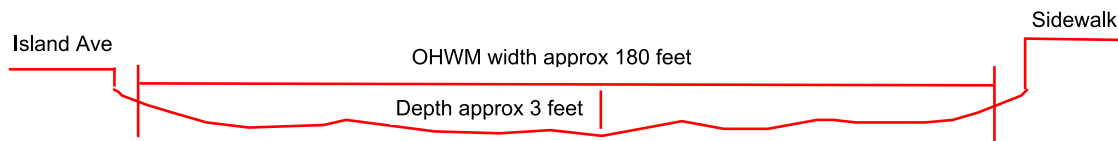
Appendix E
Ordinary High Water Mark Datasheets

Ordinary High Water Mark Data Form

Stream Name: Truckee River	Stream No:	S-5
Assoc Wetland No:	Date: 9/7/23	County/State: Reno, NV
Investigator: D. Soucy	Team No.:	Landowner/Tract No.:

STREAM PLANS -SURFACE VIEW AND CROSS SECTION

Show estimated dimensions (slope angles, crossing length), surrounding area, and direction arrow



Stream Flow	Fast _____	Moderate <u>X</u>	Slow _____	Very Slow _____	None _____				
	Perennial <u>X</u>	Intermittent _____	Ephemeral: _____						
Stream Depth (in.)	0-3 _____	3-6 _____	6-12 _____	12-18 _____	18-24 <u>X</u>	24-36 <u>X</u>	36-48 _____	48-60 _____	60+ _____
Stream Width (ft.)	Top of Banks: 200+ ft			Water Surface: ~150 ft					
Stream Substrate %	Bedrock _____	Gravel <u>X</u>	Sand <u>X</u>	Silt/Clay _____	Organic _____				
Bank Height (ft.)	Left	0-2 _____	2-4 _____	4-6 <u>X</u>	6-8 _____	8+ _____			
	Right	0-2 _____	2-4 _____	4-6 <u>X</u>	6-8 _____	8+ _____			
Bank Slope (°)	Left	0-20 <u>X</u>	20-40 _____	40-60 _____	60-80 _____	80+ _____			
	Right	0-20 <u>X</u>	20-40 _____	40-60 _____	60-80 _____	80+ _____			
Water Clarity	Clear _____	Slightly Turbid <u>X</u>	Turbid _____	Very Turbid _____	Color: _____				
Aquatic Habitat	Sand Bar _____	Gravel Bar <u>X</u>	Mud Bar _____	Gravel Riffles <u>X</u>	Deep Pools _____				
	Overhanging trees/shrubs <u>X</u>	In-stream emergent plants	In-stream submergent plants	Bank root systems	Fringing Wetlands _____				
Aquatic Organisms	Waterfowl <u>X</u>	Fish (adult) <u>X</u>	Fish (juvenile) <u>X</u>	Frogs _____	Turtles _____				
	Snakes _____	Invertebrates <u>X</u>	Other: _____						

T/E SPECIES / SUITABLE HABITAT (briefly describe potential/occurrence)

Lahontan cutthroat trout

RIPARIAN VEGETATION DESCRIPTION

Scattered, narrow-leaf willow, speckled alder, Siberian elm, cottonwood, arroyo willow

COMMENTS (construction constraints, erosion potential, existing disturbances, and meanders)

River heavily channelized by parallel streets and floodwalls, and whitewater park. Limited fringe vegetation or floodplain area.

STREAM QUALITY (indicate)	High _____	Moderate <u>X</u>	Low <u>X</u>
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Rationale for selected rank (explain):

Between low & moderate, heavily manipulated area but water quality looked fair with good clarity.

High Quality – no indication of stress or disturbance in stream or adjacent area – diverse and mature fringing shrub-dominated cover - diverse and stable fish & wildlife habitat – gravel beds, submerged logs, undercut banks, riffles and pools – no channelization.

Moderate Quality – mild to moderate disturbances result in minor recognizable alterations – pipeline, road, railroad, other ROWs – provides fair fish and wildlife habitat – some erosion potential – some habitat diversity – fine sediment deposition predominate – flow and depth variation restricted – some channelization – trees, grass, or forbs dominate bank vegetation.

Low quality – disturbances cause significant changes affecting plant species – mechanical alteration of plant species and/or soils – intense grazing activities – stream course channelization or ditching – exotic, nuisance, or invasive species – habitat diversity lacking – high erosion potential – flow and depth variation lacking - does not provide suitable wildlife habitat – grass or forbs dominate bank vegetation.

Attachment E

Section 7 Letter of Concurrence from USFWS



United States Department of the Interior

Pacific Southwest Region FISH AND WILDLIFE SERVICE

Reno Fish and Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, Nevada 89502



August 19, 2025

File No. 2023-0120828

Sent Electronically

My-Linh Nguyen
Nevada Department of Transportation
Environmental Division
1263 South Stewart Street
Carson City, Nevada 89712

Subject: Informal consultation for the proposed Sierra Street Bridge Replacement Project
in Reno, Washoe County, Nevada

Dear My-Linh Nguyen:

This correspondence responds to your request for informal consultation under the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*). We received your letter and request for consultation on July 7, 2025. You have requested concurrence from the U.S. Fish and Wildlife Service (Service) pursuant to section 7 of the ESA, on your determination that the project *may affect, but is not likely to adversely affect* the federally-listed as endangered cui-ui (*Chasmistes cujus*) and the federally-listed as threatened Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*). We have based our concurrence on the Sierra Street Bridge Project Biological Assessment (Jacobs 2025) that accompanied your request for consultation, as well as additional information at the Reno Fish and Wildlife Service Office.

PROPOSED ACTION

The proposed action is to replace the existing Sierra Street bridge with a two-span concrete bridge with precast concrete girders. The expected construction duration is 2 years. Reconstruction of the bridge would be completed in phases, during which water diversions would be installed in the Truckee River to create dry work zones. Work in the river channel would include removal of existing bridge piers and abutments, construction of new bridge abutments and a new center pier, river access improvements, and minor work to tie into existing floodwalls. Primary river diversions would divert water from one-half of the river channel at a time to maintain flows with a natural channel bottom. The downstream extent of each diversion is designed to keep backwater out of the construction zone for the bridge. It is anticipated that the

temporary river diversions would be comparable to the common construction method of placing portable precast concrete barrier rail on gravel bags, with an impermeable geotextile liner to seal off the work zone. Nontoxic materials would be used, such as 10-millimeter polyethylene sheeting. Large sandbags or aqua dams also may be considered as a diversion method, both of which are approaches that have proven effective on other river projects. There is a potential that smaller cofferdam diversions may be used at the pier or abutments to create smaller work areas that are free of water. These smaller diversion structures would be constructed with materials similar to the primary diversion structures. The dimensions of the new bridge would be similar to existing conditions (144 feet long and 63 feet wide). River access would be improved along the south side of the river on both sides of the bridge. At the west end of the bridge, the existing river access ramp would be reconfigured and widened to accommodate City of Reno maintenance vehicles. Streetscape improvements include lighting, shade trees, and decorative sidewalk patterns. Approximately 11 existing trees require removal; 9 would be replaced with large-canopy shade trees and 2 would be replaced with columnar evergreen trees.

River diversions would be in place for 4 months (July 1 through October 31) to avoid the Truckee River flood season, as defined by the Carson-Truckee Water Conservancy District (CTWCD). This duration could potentially be extended through November if approved by the CTWCD. During the duration of the project, in-channel work is planned for one season, but may require two seasons, for a total of a minimum of 4 months to a maximum of 10 months. River diversions would be accomplished in up to 3 stages as described below.

Stage 1

The river would be diverted to the south portion of the channel to allow the northern portion to be dewatered. During this first phase, the northern span of the bridge, a portion of the center span, the north pier, and the northern abutment and floodwall would be demolished. Once demolition is complete, the river bottom would be recontoured per the project plans and the diversion would be shifted to Stage 2.

Stage 2

The river would be diverted to the northern portion of the channel to allow the southern portion to be dewatered. There would be a small diversion in place along the northern floodwall to allow work on the northern bridge abutment and floodwall to be completed. A small diversion structure would also be placed at the western end of the Cochrane Ditch to dry out the intake. After dewatering, the remaining portion of the bridge would be demolished, along with the southwest and southeast corner ramp structures. The new center pier and southern abutment would be constructed. A portion of the river recontouring would also be completed and girders would be set. The southeast and southwest ramp reconstruction would begin during this phase but would potentially be completed under a third diversion.

Stage 3 (if necessary)

The Cochrane Ditch inlet at the southwest corner of the Sierra Street Bridge would be reconstructed as part of the project. There are end water users who have rights to the water that need to be perpetuated during construction. To accommodate this, the contractor may pump 1.5 to 5.0 cubic feet per second of river water into the ditch. This river water may be pumped into the ditch via access points near the ditch inlet or in the parking lot of the post office along the south side of the river between Virginia Street and Center Street. The pumps may be placed in the river or just above the river. Temporary tubing would carry the water from the pumps to the ditch. There would be no fueling of generators or pumps within 100 feet of the river. If pumps are used within 100 feet of the river, they would be powered by electricity.

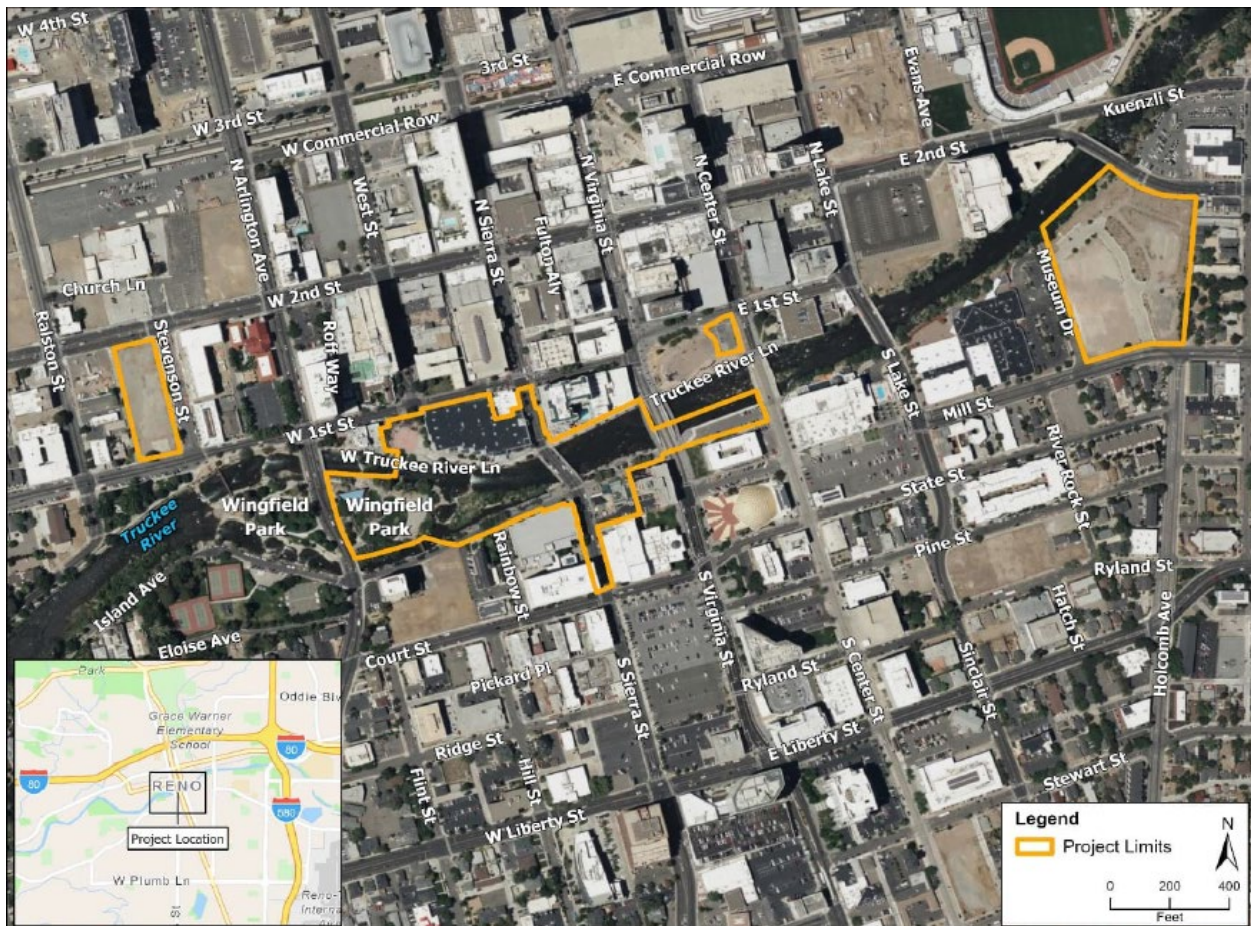


Figure 1. Map of the action area for the proposed action (Jacobs 2025)

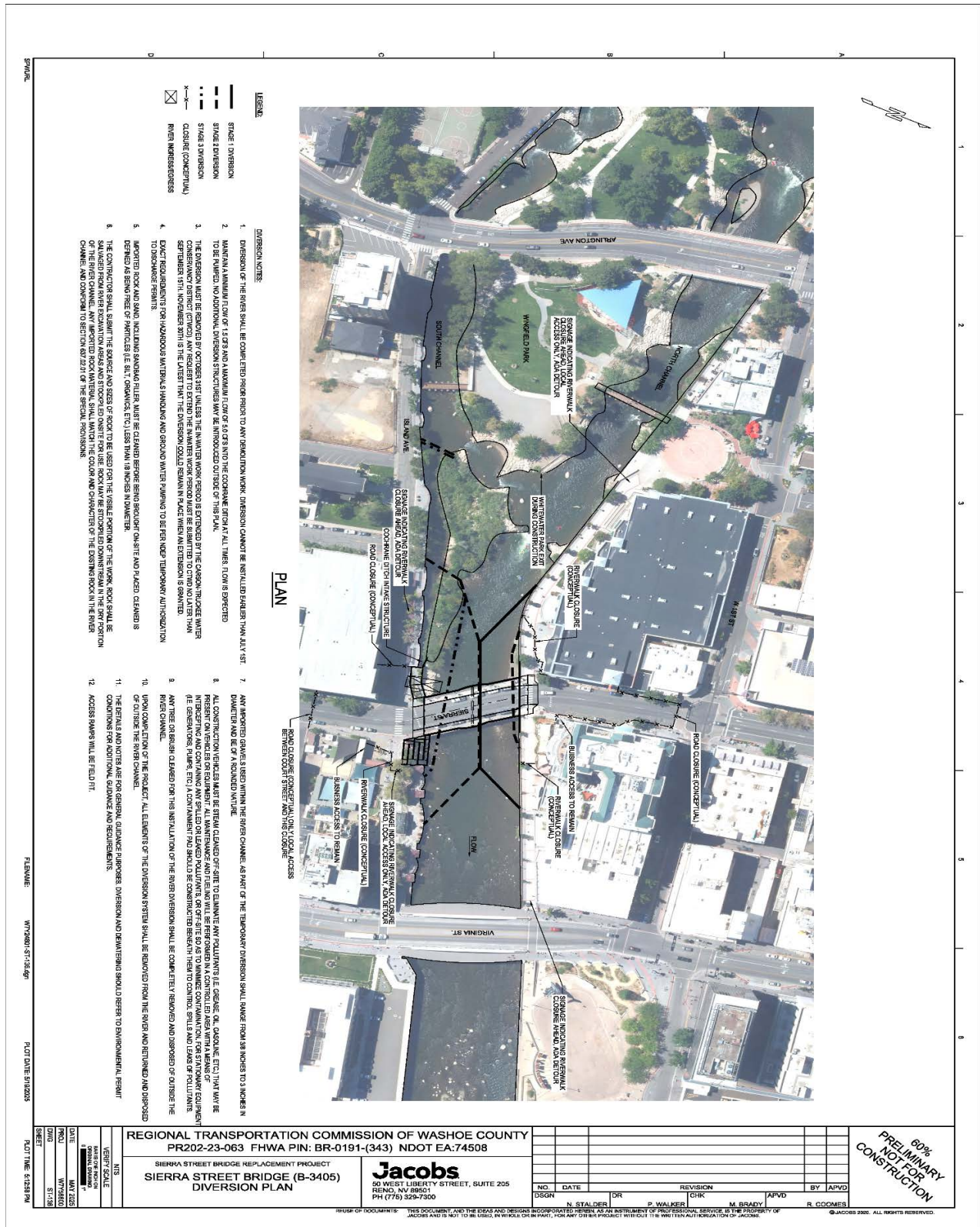


Figure 2. Truckee River de-watering plan for the proposed action (Jacobs 2025)

Avoidance and Minimization Measures

- Limit in-water work to low-flow season between July 1 and November 30.
- Maintain river flows and fish passage during construction.
- Develop and implement a stormwater pollution prevention plan (SWPPP) and a spill prevention, control, and countermeasure (SPCC) plan with control measures to minimize erosion, sedimentation, and other potential sources of water pollution in accordance with City of Reno and Regional Transportation Commission (RTC) Standard specifications.
- The design will minimize impacts to trees along the Truckee River. Trees removed will be replaced at a 1:1 ratio with native species that at maturity will provide equivalent or greater foliar coverage along the river than existing conditions. Plans will show mature canopy of landscape design to demonstrate how this result will be achieved.
- Planted trees shall have a 100 percent success requirement at one year from planting. Any planted tree determined by RTC and the City to be dead or dying after one year shall be replaced.
- Biologists from Nevada Department of Wildlife (NDOW) and/or the Service will be present for any dewatering actions in all Stages of the proposed action to salvage and move any stranded fish.

ACTION AREA

The action area includes all areas that the federal action may directly or indirectly affect and not merely the immediate area involved in the action. Therefore, the action area typically is larger than the area directly affected by the proposed action. Because portions of the river would be diverted and bridge work within the river channel would take place in a dry work zone, any increase in sediment or other pollutants that could affect water quality during construction are expected to be minimal and would likely only occur during the river diversion installation/removal. Therefore, the action area for this Project is the terrestrial and aquatic footprint of the construction limits. The action area encompasses the farthest upstream and downstream portions of the river diversions, which is approximately 400 feet upstream from the Sierra Street Bridge, to approximately 170 feet downstream of the bridge (see Figure 2 for river diversion plans). Based on the current design, the action area (which includes the limits of construction and proposed staging/laydown areas) are approximately 17.1 acres, while the grading limits are approximately 1.5 acres.

Status of the Species in the Action Area***Cui-ui***

Until the completion of the fish passage projects at Derby Dam, cui-ui only occurred in Pyramid Lake and in the Truckee River upstream to the dam. The fish passage facilities at Derby Dam now allow spawning migrations to pass upstream from that point. However, because the Derby Dam is approximately 26 miles downstream from the project, it is unlikely cui-ui are present in

the action area. If they do occur in the project vicinity, it would likely be in April during spawning. Any fry in the Truckee River would likely emerge no later than the end of May and would return to Pyramid Lake within several weeks of emergence. All life stages of cui-ui would be anticipated to be out of the Truckee River by July. As such, it is highly unlikely that cui-ui will be in the Truckee River during the bridge construction in-river work period of July 1 through October 31 (with potential to extend to November 30).

Lahontan cutthroat trout

Over the last decade-plus, LCT have been stocked in the Truckee River from Verdi, Nevada, downstream to Nixon, Nevada. Currently, up to 70,000 LCT are allocated for annual stocking along 31 miles of the river downstream of Verdi (Service 2018). This 31-mile stretch passes through the action area and, therefore, LCT are considered present, especially following spring stocking events. As previously discussed, LCT populations in the Truckee River are maintained by stocking. In 2022, NDOW stocked 34,262, 30,337 in 2023, and 55,792 in 2024 (Service 2009; 2025).

Because of the ongoing stocking efforts, hatchery LCT occur in the Truckee River in the action area, with the greatest abundance likely occurring in the spring during and post-stocking. LCT also occur in Pyramid Lake, both from hatchery stocking by Tribal hatcheries and from reproduction in the lower Truckee River below Derby Dam (Hottle 2017). Since 2014, LCT have regularly migrated out of Pyramid Lake to spawn in the lower river below Derby Dam (Service 2018). With the completion of the fish passage improvements at both Derby Dam and Numana Dam, native LCT fish will be able to move farther up the river and may now be more abundant and occur more frequently in the action area.

Even with the yearly stocking and improved fish passage along the river, it is assumed that LCT occurrence within the action area is relatively low and/or infrequent. This assumption is based on the relatively poor in-stream and overstory habitat, and frequent summer recreation along Wingfield Park. Quality LCT habitat typically includes abundant in-stream cover (boulders, woody debris, undercut banks); slow, deep water; and relatively constant stream flow and temperature regimes. This section of the river is heavily influenced because of the presence of flood walls, the presence of the whitewater park immediately upstream, and the deficiency of riparian cover or wetland banks. The whitewater park and Wingfield Park provide recreational opportunities that can introduce a lot of disturbance.

Additionally, river temperatures are likely elevated, especially during the summer months, because of the urban setting and lack of shading, and water quality is likely degraded due to the urban setting and stormwater influxes. The temperature of the river, which determines the body temperature of fish, regularly exceeds levels that are beneficial for native fish species and for the snails, worms, mollusks, and other species that provide food for fish (NDEP 2022). Because of

these reasons, it is presumed that LCT inhabit or more frequently occur in more suitable reaches of the Truckee River.

Effects of the Proposed Action or Effects to the Species

The proposed project involves work below the ordinary high-water mark of the Truckee River, including the removal of existing bridge piers and abutments, construction of new bridge abutments and a center pier, river access improvements, and tie-ins to existing floodwalls. These activities may temporarily disturb aquatic habitat in the action area. Although LCT have been stocked upstream and downstream of the action area, as well as in Pyramid Lake, their presence within the action area is considered unlikely due to poor in-stream and overstory habitat conditions.

Cui-ui and LCT Distribution and Movement

Cui-ui typically reside in Pyramid Lake but may enter the lower Truckee River during successful spawning years. Rehabilitation of several dams that historically blocked fish passage has improved upstream connectivity throughout the Truckee River. These efforts have increased the potential for both LCT and cui-ui to move through the action area during spawning runs, and for some LCT to become resident in or near this section of the river. However, given the degraded habitat conditions and the project's construction window, the likelihood of either species being present during construction remains low.

Seasonal Timing and Avoidance Measures

In-river work will occur between July 1 and October 31, with a possible extension through November 30. This window coincides with seasonal low flows and avoids the primary spawning period for cui-ui. Additionally, it reduces the likelihood of LCT presence in the action area. Maintaining a portion of the river in a natural channel during construction will allow fish movement upstream and downstream and further reduce the risk of harassment. Combined with the use of river diversions outside of the cui-ui spawning window and distance from Pyramid Lake, cui-ui are not expected to occur in the action area during implementation. While there is some potential for LCT presence, the poor habitat quality, construction timing, and continued flow during diversion support the conclusion that effects to both species will be insignificant and discountable.

Dewatering and Fish Displacement

Dewatering of half of the river channel may temporarily displace or strand fish, increasing vulnerability to predation, poor water quality, and desiccation. These effects will be short term and confined to the dewatering footprint at each construction stage. To reduce risk, water levels will be gradually lowered to promote fish escapement. Any remaining fish will be stranded in residual pools and salvaged by qualified personnel from the NDOW or the Service. Fish captured during salvage activities may experience stress, injury, or mortality; however, these risks are

minimized by the controlled dewatering process and adherence to appropriate fish-handling protocols.

Construction and dewatering activities could also entrap fish, including juvenile or adult LCT, resulting in direct injury or mortality. Like other salmonids, LCT often orient to the substrate and may be susceptible to crushing when hiding in interstitial spaces. However, these effects are expected to be minor due to the timing of work and implementation of fish salvage procedures.

Sediment and Turbidity Effects

Construction and ground-disturbing activities may increase turbidity and mobilize fine sediments, which can temporarily degrade water quality and affect fish behavior, physiology, and habitat suitability. Potential effects include avoidance of turbid water (Bisson and Bilby 1982), reduced foraging efficiency (Gregory 1993), stress responses such as increased plasma cortisol levels (Redding *et al.* 1987), and reduced survival of salmonid embryos (Bjornn and Reiser 1991). Deposition of fine sediments may reduce habitat complexity and embeddedness, affecting spawning and rearing conditions (Chapman 1988; Platts *et al.* 1989; McIntosh *et al.* 2000). Increased turbidity has also been shown to reduce predation efficiency in LCT (Vinyard and Yuan 1996).

River diversions will occur within approximately 1.1 acres of the Truckee River, although only about half of that area will be dewatered at any one time. Given the small size of the impact area relative to available habitat upstream and downstream, the effects are expected to be minor and short term. Construction in dry work zones, the use of best management practices (BMPs), and the implementation of a SPCC will help prevent sediment, petroleum, or chemical contaminants from entering the river. Any increases in turbidity are expected to be localized, limited in duration, and occur during low-flow periods. As a result, the potential for injury to LCT or cui-ui from sediment suspension is considered insignificant and discountable.

Equipment Operation

The use of heavy equipment in or near the river channel could pose a risk of direct mortality to LCT, particularly if fish are present and sheltering in substrate. However, activities will occur within dewatered work zones and during periods when the likelihood of LCT presence is low. If LCT do enter the action area during implementation, they are expected to avoid areas with active disturbance. Given the limited size of the project area (17.1 acres), restricted timing of work, and implementation of avoidance and minimization measures, effects to LCT and cui-ui from equipment operation will be insignificant and discountable.

Habitat Impacts and Vegetation

The project will require removal of some streamside vegetation, including riparian trees, which could temporarily reduce shading and cover. However, the action area is already highly developed and lacks substantial riparian structure or canopy cover. To mitigate the temporary

loss of vegetation, native trees will be planted after construction to restore shading and bank stability over time.

The project area is bordered by concrete floodwalls and urban infrastructure, with minimal remaining native vegetation. Downstream and upstream areas have been similarly developed, and the natural riparian ecosystem has been substantially altered. Scattered *Salix exigua* (coyote willow) are present, but lack of soil and substrate limits overall vegetative cover. Habitat restoration associated with the project is expected to incrementally improve conditions along the river corridor.

CONCLUSION

The proposed action includes short-term construction activities that may disturb river habitat, increase turbidity, and displace individual fish. However, these effects will occur during periods of low flow when LCT and cui-ui are unlikely to be present. In-water work will be conducted within dry, dewatered zones, and a combination of conservation measures, BMPs, controlled dewatering, active fish salvage, and revegetation will be implemented to avoid and minimize impacts. Given the degraded condition of the existing habitat, the limited spatial and temporal extent of impacts, and the use of avoidance and minimization measures, the Service concludes that the proposed project's effects on LCT and cui-ui are insignificant and discountable.

Therefore, the Service concurs with your determination that the proposed action *may affect, not likely to adversely affect* LCT and cui-ui.

This response satisfies the interagency consultation requirements under regulations promulgated in 50 CFR § 402, which established procedures governing interagency consultation under section 7 of the ESA. Although this ends informal consultation, you should evaluate the need for further section 7 consultation if: (1) new information reveals effects of the agency action that may affect listed species in a manner or to an extent not previously considered, (2) this action is subsequently modified in a manner that was not considered in this assessment, or (3) a new species is listed or critical habitat designated that may be affected by the action. If you have any questions, please contact Kaylan Hager by telephone at (775) 861-6300 or by electronic mail at Kaylan_Hager@fws.gov.

Sincerely,

Rachael Youmans
Assistant Field Supervisor

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