



TRI SAGE CONSULTING
Monthly Report
Carson Truckee Water Conservancy District

January 9, 2023

MONTHLY ACTIVITIES- December 2022

- 1) Begin fall debris Removal Scope of Work commencing at Wingfield Park.
- 2) Participated in Arlington Bridges Design Review Meetings and scheduled project pre-application meeting with USACE.
- 3) Monitored river for potential flood including discussions with homeowners, Watermaster and City of Reno.
- 4) Coordinated with RTC regarding the Arlington Bridges Replacement Geotechnical Borings 408 Application and submittal to USACE, as well as status of NEPA decision.
- 5) Submitted response to USACE's initial questions and requests from City of Reno regarding the Booth Street Siphon project.
- 6) Followed up with Congressman Amodei's office to request assistance with 408 program funding.
- 7) Followed up with USACE regarding status of Truckee River field inspection report.
- 8) Continued to follow up with Washoe County regarding plans to address exposed metal at Ambrose Diversion Structure.
- 9) Schedule site walk with City of Reno to review rip rap placement and discuss upcoming s between John Champion Park and Fisherman's Park II.
- 10) Review projects near river for Permit requirements; provide inundation maps for parcels, as required. This included discussions with RTC regarding permitting for Keystone and Booth Street bridge replacements, as well as proposed development at 25 White Fir Dr and dry utility improvements near Sutro.
- 11) Plan for follow up call with USACE to discuss inundation outside of flood channel at Island Avenue, West Street Plaza and Riverside Drive.

UPCOMING ACTIVITIES

- 1) Continue debris removal project.
- 2) Reach out to Boca/Stampede Bureau of Reclamation contact to schedule a CTWCD Board field trip for the spring.
- 3) Receipt of USACE Truckee River field inspection report. Follow up on any maintenance items that may be requested.
- 4) Draft letter to Waste Management regarding their responsibility to keep the river bank that they own to OHWM secure and clear of encroachments and hazard trees.

- 5) Submit revised 408 permit application for the geotechnical bores for the RTC Arlington Bridges Replacement project. Waiting on NEPA determination from FHWA.
- 6) Finalize work on guidance document and installation details for rip rap placement for erosion repairs within the 14,000 cfs flood channel. Discuss preliminary erosion guidelines with City or Reno and SWCA to possibly incorporate along with their vegetation management effort.
- 7) Continue to collaborate with the City Forester for the removal of hazard trees within the 14,000cfs flood channel if budget dollars permit.
- 8) Continue to collaborate with TRFMA and their modeling engineers to discuss status of their HEC-RAS modeling and future coordination.
- 9) Work with the City of Reno to pursue a permanent encroachment permit for the West Street Plaza and any associated projects.
- 10) Continue to evaluate and discuss temporary flood control measures including flow limitations, cost, storage, installation requirements and options for West Street Plaza and Booth-Riverside Drive areas.
- 11) Continue working with project proponents for encroachment permit applications for future RTC bridge replacements, 25 White Fir Drive, Uprise Fiber, One Truckee River Broadhead Park, USFWS fish passage projects, Arlington Bridges replacement project and other projects within the 14,000cfs flow channel.
- 12) Share modeling evaluation of the deposits within the Kayak Park Project in Wingfield Park with the City of Reno and establish a river capacity maintenance plan with the City based on this evaluation.
- 13) Schedule informational meetings with potential entities with river crossings to inform them of CTWCD maintenance activities/capabilities and 408 Encroachment Permit requirements for projects along and across the river. Communicate changes to the 408 Permit process with likely applicants including the City, and utilities; update on Categorical Permission review and differences. Communicate updated fees and Fee Policy for 408 Permit Review.
- 14) Continued coordination with City of Reno for 1) Flood Response evaluation and incorporation of Interim Risk Reduction Measures into their Flood Response Plan for West Street Plaza, Oxbow Park Platform and Riverside Drive, and 2) Flap-gate Installation Phase 2 needs assessment and installation project.

SUMMARY REPORT

Todd and Kayla have corresponded with Congressman Amodei's office regarding the insufficient funding of the USACE 408 program. Tri Sage shared the notice that we received from the USACE 408 Permissions Section Chief back in June 2022 regarding anticipated funding shortages and expected impacts to the 408 program. It was also relayed that a similar situation occurred previously in 2020 and CTWCD requested assistance from Congressman Amodei's office and the overall 408 budget was nearly doubled, so it is unclear if the budget was later reduced or if USACE is just working through the increased budget faster. We stressed that review and issuance of 408 encroachment permits is the prime purpose of CTWCD and the inability to work with USACE on permit reviews slows our timelines and

responses to project proponents on the Truckee River. The concerns were forwarded to Amodei's Legislative Director, Ken Brooke. We have sent a follow-up email requesting an update.

The Fall 2022 Debris Removal Project has been scoped with two contractors and work has begun. Work began at Wingfield Park on 1/5/23 in order to remove a large red willow that had become uprooted during the snow storm. The willow was in the channel and was at risk of becoming detached from the channel bottom during a high flow event. NVENV mobilized their crews to remove sections of the tree with a chainsaw and cable them across the river and City of Reno crews were set up to assist with haul off and chipping. The branchy portion of the tree was removed to alleviate the immediate threat of creating a blockage and the crews will schedule a second day when flows are reduced to stump the tree closer to the root ball. Local media outlets were present for some of this work. While at Wingfield, other downed debris that had been previously identified was removed from the channel as well.

Tri Sage accompanied USACE on a field inspection of the Truckee River during the week of June 13th. Federal projects are supposed to be completed every 5 years, but the last inspection of the Truckee River was in 2013. The inspection kicked off on Monday, June 13th at Idlewild Park continuing east to the East 2nd Street bridge. The inspection continued on Tuesday, June 14th at Glendale Bridge to John Champion Park to inspect east end of the CTWCD jurisdiction. USACE will provide an inspection report indicating any areas that require maintenance. This has not yet been received. Some items expected to be noted are a larger push of the City of Reno Flap Gate program, as well as some minor channel wall maintenance in areas of degradation. A follow up email was sent to USACE on October 10th. USACE responded that they are currently working on a backlog from 2021 and hope to have a report issued in 2-3 months.

RTC has selected Jacobs as the most qualified consultant to provide environmental and engineering design services for the Arlington Avenue Bridges Replacement Project. RTC is kicking off the NEPA/Design Phase of this Project that will replace two bridges over the Truckee River on Arlington Avenue from Island Avenue to First Street. RTC would like to start construction in 2024. CTWCD provided comments and recommendations regarding the design of the Arlington Bridge Replacement, which was sent via letter to RTC in March 2021, including the need for access to the river from the bridge deck, as well as from the river banks, and the requirement that the water surface elevation is not increased by more than 0.1 ft as a result of the project. A pre-application meeting with USACE was held on April 5th. This included the project proponents, as well as the Flood and Regulatory branches of the USACE to ensure all NEPA requirements are being met and hopefully streamline the environmental review of the permit. The lead federal agency (FHWA) did not participate in the call. During the call, it came to USACE's attention that Jacobs was preparing to complete a geotechnical boring in the river channel to support bridge design. USACE noted that a boring requires a separate 408 encroachment permit and would likely take 9-12 months to review and issue. This was a concern to the Jacobs and RTC teams due to their 2024 construction requirement in order to receive the federal RAISE grant. Tri Sage urged Jacobs to submit their CTWCD application as soon as possible, as there are likely to be 2

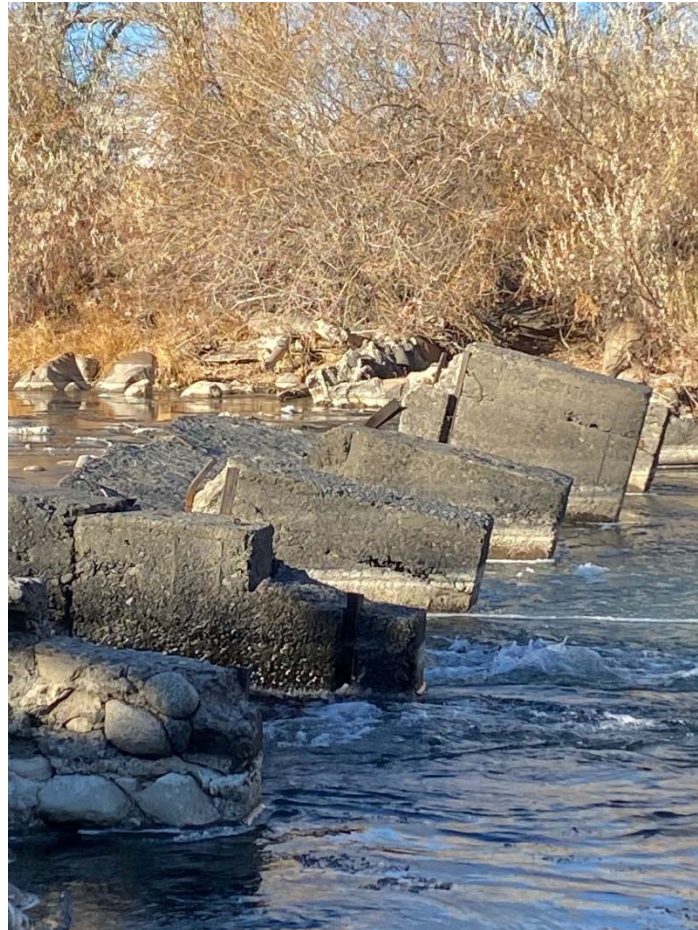
months of technical review before the Board will supply a Letter of No Objection and the RTC application to USACE Flood. We received the CTWCD application for the Geotech Boring and payment on May 4th. Tri Sage completed a technical review of the application and attachments and provided comments back to Jacobs/RTC on May 13th. We received a revised application on May 26th. During the USACE field inspection on June 13th, there was boring equipment set up on the north bridge of Arlington Avenue. Tri Sage approached the boring supervisor and asked if the work had a CTWCD permit, which it did not. During a meeting with USACE on June 29th, USACE said that they do not have authority to take punitive action on unpermitted work and that decision is left to the non-federal sponsors. USACE also said that they are unable to issue a permit on work already completed, so they will only be issuing permission for the remaining bore work. We received a letter from RTC on July 5th accepting responsibility for the violation and proposing some solutions to avoid this in the future. The Board agreed that mitigation should include a meeting with agency representatives to ensure that consultations for 408 application are completed correctly. RTC has resubmitted the Geotech Boring 408 application – the last item required prior to submittal to USACE is NEPA determination from the Federal Lead Agency (FHWA). The overall Bridges Replacement application is expected sometime in January as they wait for NEPA determination. Tri Sage has also reviewed and provided comments on the 30% design for the overall Bridges Replacement. One issue to address that will draw comment from USACE is the inundation of the bridge deck during a 14,000cfs inundation. This may require some action in the City of Reno Flood Response Plan to close the Arlington Bridge during an anticipated flood event. This will also need to be acknowledged and addressed in a letter to USACE from City of Reno, NDOT and/or FHWA. A follow up meeting requested by RTC was held to discuss modeling adjustments and/or design alternatives that could be made to help support reduced inundation at 14,000cfs. A follow up meeting with TRFMA and City was held on November 16th to discuss status of environmental permitting and hydraulic design criteria. After further modeling, Jacobs confirmed that the bridge deck is not under water during a 14,000cfs flow. A second pre-application meeting with USACE is scheduled for January 26th.

Farr West Engineering is completing the design for the Booth Street Sewer Siphon project on behalf of the City of Reno. This project will require a bore under the river. A 408 Encroachment Permit will be required as the requirements applies to any projects going over, under or thru the 14,000 CFS flood channel. Tri Sage provided the current 408 application, as well as the HEC-RAS model for that section of the river, and let them know they could expect an 18 month permitting window. A siphon project was previously completed by Farr West and CoR near Kuenzli and the City Maintenance Yard. Some hurdles of that project were addressing the scour, as well as the depth of bore. Tri Sage also alerted them that it would be best to keep all excavation outside of the 14,000 CFS channel which could be difficult due to the inundation in this area on the north side of the river. A pre-application meeting with USACE was held on March 28th. This included the project proponents, as well as the Flood branch of the USACE to ensure all NEPA requirements are being met and hopefully streamline the environmental review of the permit. There is no federal funding for this project and no disturbance below OHWM so USACE Flood will be the lead federal agency for the project. In general, the Farr West team was very

well prepared for the call and was able to respond to all of the questions from USACE. They also included their biological and cultural sub-consultants which was very helpful for the discussion. USACE urged Farr West/City of Reno to use the HDD Categorical Permission checklist and include with their application. Farr West submitted a complete application on May 20th. It was a very thorough application and the technical review was simple to complete. The Board voted to approve this permit and submit to USACE for review at the June Board meeting. A Statement of No Objection was drafted and the permit was uploaded to the FTP file share on June 30, 2022. The 408 permissions group provided an initial review of the application and comments/requests for additional information. Farr West provided response to USACE's comments and this information has been sent to USACE to support continued permit review.

Washoe County reached out to CTWCD in early June 2021 because they were contacted by the recreational paddling community about an abandoned diversion structure near Ambrose Park in west Reno. The County is concerned that the structure poses a risk for rafters and other river recreationists. They asked whether the structure could be removed and if it would require a 408 Encroachment Permit. Tri Sage contacted the Federal Water Master's office to find out the history of the structure, as well as ownership. The Water Master said that the old diversion structure was part of the old South Side Canal and that all of the water rights in the South Side Canal were transferred to the Lake Ditch (state permit 11489, certificate 4827) in 1948. Since there aren't any valid water rights served by the structure and the ditch has long been abandoned, no one "owns" the structure. Additionally, Tri Sage researched the Martis Creek Agreement and it seems that the diversion structure was likely "grandfathered" in. A field meet was held on August 18th to further discuss the project and the permit impacts. Washoe County is looking for funding opportunities to complete the project. Tri Sage followed up via phone call to USACE and confirmed that a 408 permit would not be required for removal of the structure. This information was passed on to the County. Tri Sage received an update from the County in early January 2022 stating that the County does not have capacity to move forward on this project this year. The project would have to be managed by their Capital Improvements Project team because it would be over \$100k and there is not enough staff to include this project in this year's improvements. There is support from upper management, but it is not as high of a priority as other projects. Washoe County Parks did add the Ambrose dam removal project to the 5-year CIP list and hope to circle back next year. The Board directed at the February 2022 meeting to have legal reach out to State Lands regarding ownership of the structure. This letter was finalized and mailed to NVDSL on March 31st. Tri Sage followed up via email on May 12th and received a response that the NVDSL administrator was preparing a reply. After the June Board meeting, Tri Sage followed up with a voicemail to Ellery Stahler, NVDSL Deputy Administrator. A phone call with Ms. Stahler and Charles Donohue, NVDSL Administrator, was held on June 28th. NVDSL indicated that they did not have any additional information beyond what CTWCD had provided on the history and ownership of the structure. They suggested that the agencies work together to address the concerns from the paddling community as there are other river users that would like to see the structure remain. Discussion was held in regards to improving the safety of the structure, specifically removal of the exposed rebar. A phone call with Dave Solaro indicated that the rebar would

likely be completed in October when river flows are low. Tri Sage followed up with Dave Solaro and Alexis Hill on August 30th and again on October 10th to confirm the work has been scheduled. Dave responded that his crews visited the structure and did not see any exposed rebar. A site visit on December 7th showed heavy angle exposed. The Board direction at the November meeting was for Tri Sage to schedule a meeting with Ron Penrose and Dave Solaro – this will likely occur during the week of January 10th. Additionally, Charles Albright sent an email in early January with news of possible funding from California River Restoration and Dam Removal to help support removal of the structure.



Tri Sage received an email from the City of Reno Clean & Safe Director on April 5th requesting a meeting “to discuss an area along the river that is prone to much activity, impacting the river's natural habitat.” They were referring to the area near the Kuenzli Bridge. Tri Sage attended a field meet on April 27th. Clean & Safe representatives noted that the two bridges near Aces Ballpark are consistently inhabited. These encroachments include large items like mattresses and tents that certainly pose a risk to the channel capacity during flood season. Additionally, the area under the bridges is severely eroded with large flat pads chiseled out. The City of Reno is proposing a project to rip-rap these areas to repair the erosion and deter future encroachment. They have provided a construction estimate and are requesting CTWCD support. The CTWCD Board voted to support up to \$37,500 of project costs

associated with material and equipment rentals. Tri Sage provided a letter to the City of Reno specifying the funding amount, as well as the terms of the support including post project audit and required schedule to complete. The City Commissioners voted to accept the funding during their meeting on August 24th. A check was delivered to City of Reno after the September Board meeting. This work is scheduled for late October. Based on inspection of the area on October 18th, this project has been completed. Before and after photos are included below. The City of Reno has provided final cost audit and project close out report – CTWCD will be receiving a check from City of Reno for \$2,960.88 for the refund of grant funds that they did not spend on the Kuenzli Bridges Erosion Control project.



The City of Reno has a number of path repair projects in the upcoming year that they requested CTWCD consultation. A site walk from Reno City Plaza to Broadhead Park was held on December 8th to review the proposed projects and any permitting requirements. The City will work to keep all improvements out of the 14,000cfs inundation. Additionally, a second consultation in the area between John Champion Park and Fisherman’s Park II is scheduled for Friday 1/13.

The river flow model work is completed and the inundation maps for the entire jurisdictional reach are now available. The new inundation maps have been a very helpful tool in all of the engineering work required to support the District. Tri Sage has recently shared the model with several project proponents

including Terraphase Engineering (25 White Fir Development), RTC (Keystone & Booth Bridge Replacements), Jacobs (Arlington Bridges Replacement), Farr West (Booth Street Siphon), Atkins (Glendale Portage Path) and SWCA (Truckee River Re-Vegetation Projects). We will continue to work with TRFMA on coordination of our HEC-RAS models.

Tri Sage has nearly finalized the guidance document and supporting installation details to be distributed to the City of Reno and other agencies to aid in future erosion control projects which may help to deter new encroachments.

The model updates in the area of the kayak park indicate that any sediments in the flow channel at this location further reduce the channel capacity and are likely to over-top the banks/walls along Island Avenue. This finding will soon be shared with the City of Reno as a maintenance criteria for the kayak park.

The section that pertained to the USACE April 2013 Inspection report has been eliminated from this report; we expect that this section will be added in again after receipt of the USACE June 2022 inspection report.