



TRI SAGE CONSULTING
Monthly Report
Carson Truckee Water Conservancy District

May 10, 2022

MONTHLY ACTIVITIES- April 2022

- 1) Received 408 application from RTC for a proposed geotechnical boring associated with the Arlington Bridges Replacement project. Initial review completed and comments provided back on May 13th.
- 2) Continued discussions to support upcoming permit applications including the Arlington Bridges Replacement project and the Booth Street Siphon project.
- 3) Field meeting with City of Reno Forester to look at large tree behind Waste Management that had been lit on fire.
- 4) Field meeting with City of Reno Clean & Safe Team to review encroachments beneath Kuenzli Bridge near Aces Ballpark.
- 5) Followed up with Nevada Department of State Lands regarding the letter requesting ownership information for the Ambrose Dam. Follow up with Contractors to support methods discussion and ballpark estimate for removal project.
- 6) Finalized draft grant agreement to support 2022-2023 grant applications and sent to McDonald Carano for legal review.
- 7) Correspond with Farr West Engineering and City of Reno regarding Booth Street Siphon project. This project is proposed to be entirely directional drilling withing the channel, but will still require a 408 encroachment permit as the Martis Creek Agreement specified over/under/through.
- 8) Held project meetings with Jacobs and RTC regarding Arlington Bridges replacement and application of the Categorical Permission.
- 9) Contact TRFMA to request presentation to the Board. They will attend May Board meeting.
- 10) Review projects near river for Permit requirements; provide inundation maps for parcels, as required. Specifically this month, we reviewed a in-ground pool request proposed at a private residence in Verdi.
- 11) Work with Ron on a plan moving forward for the West Street Plaza and Riverside Drive encroachments.
- 12) Develop Spring 2022 debris removal scopes.

UPCOMING ACTIVITIES

- 1) Receive 408 permit applications for the Arlington Bridges Replacement project and the Booth Street Siphon project.

- 2) 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.
- 3) Continue to collaborate with the City Forester for the removal of hazard trees within the 14,000cfs flood channel if budget dollars permit.
- 4) Continue to collaborate with TRFMA and their modeling engineers to discuss status of their HEC-RAS modeling and future coordination.
- 5) Schedule meeting with City of Reno Public Works Engineer, Parks Managers and Clean and Safe Manager to discuss erosion repairs needed between Champion Park and Fisherman's Park II.
- 6) Work with the City of Reno to pursue a permanent encroachment permit for the West Street Plaza and any associated projects.
- 7) 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.
- 8) Request an updated copy of the City of Reno Flood Fighting Plan from the Public Works Department.
- 9) Continue working with project proponents for encroachment permit applications for City of Reno Siphon at Booth Street, USFWS fish passage projects, Arlington Bridges replacement project and other projects within the 14,000cfs flow channel.
- 10) 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.
- 11) 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 if approved by the Board.
- 12) 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

Tri Sage is working to finalize the Spring debris removal scopes. Areas of high priority include Mayberry Park, a gigantic tree behind the Waste Management recycling facility, as well as the removal of two trees near the City of Reno Parks Facility at Idlewild Park. We have completed the contract coordination to have this work completed as part of the 2021-2022 budget. NVENV will complete the

debris removal work at Mayberry Park and Noah's Ark Tree Services will complete the full tree removals at Waste Management and Idlewild Park.

Tri Sage met the City of Reno Forester at the Waste Management recycling facility on April 21st to look at a tree on the river bank that had been lit on fire the prior week. Initially, the fire department was concerned that the tree would need to be fell into the river to extinguish the flames, but they were able to put it out without needing to do that. When we visited the tree, the tree was still smoldering. The tree had been completely chiseled out inside and is at risk of failing. We came up with a coordinated plan to take the tree down in the next couple of weeks. Additionally, we are looking for the Board's approval to provide a letter to Waste Management, signed by CTWCD and the City of Reno, reminding Waste Management of their ownership of the bank to OHWM and their responsibility to keep the bank clear of encroachment, as well as hazard trees.



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. Tri Sage has held three meetings with the Jacobs team to provide information on the 408 permitting process, USACE's available categorical permissions, as well as history and details of the CTWCD HEC-RAS

model. Tri Sage reiterated CTWCD's comments and recommendations regarding the design of the Arlington Bridge Replacement, which was sent via letter to RTC in March 201, 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. Jacobs/RTC is kicking off aesthetic stakeholder working group meetings, as well as design review meetings this month. Either Kayla Dowty or Ron Penrose will participate in those meetings. After a call with USACE on March 1st, a follow-up call was held with the Jacobs/RTC team on March 7th to discuss specific feedback that USACE provided based on review of the Categorical Permission checklist for bridge replacements. Tri Sage scheduled a pre-application meeting with USACE 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 have advised them that a complete application will need to be provided no later than May 27th to support a Board vote during the June meeting.

Farr West Engineering is completing the design for the Booth Street 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. An email from Kerri Lanza (City of Reno) on February 3rd indicated that "Recent inspection and camera work reveals that this sewer pipe constructed in 1958 could be failing, and the pipeline is partially plugged with debris. The City views this repair as very high; the consequence of failure would be sewage overflow." A discussion with USACE Flood Branch was held on March 1st and they indicated that emergency projects are typically not considered and they would require a complete permit for this project. They also indicated that an increased bore depth would likely be required and suggested a pre-application meeting be scheduled to discuss with the project proponent. Tri Sage scheduled a pre-application meeting with USACE 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. Tri Sage urged Farr West to submit their CTWCD application as soon as possible, as there are likely to be 3-4 weeks of technical review before the Board will supply a Letter of No Objection and the application to USACE Flood. USACE Flood indicated the permit would likely take 9-12 months to review and issue. Farr West followed up after the meeting and indicated that the application would be submitted no later than May 20th. We are expecting a hand delivered check this week to initiate the review process.

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. Independently, the District received a call from Charles Albright who represents the paddling community and is very passionate about this project. He is working to request Congressional support, as well as gathering all of the agencies that have jurisdiction to understand what permits may be required for this project. The CTWCD Board is supportive of this project and asked at the January meeting if an inter-local agreement could be set up with the County for the CTWCD engineer to provide the project management and the County could provide the project funding. After the meeting, Kayla Dowty followed up with Lori Williams, and was reminded that CTWCD doesn't have the framework to support federally funded projects with payroll processing, Davis Bacon wage requirements, etc. This would be a large undertaking for the District. The Board directed at the February 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. Tri Sage has worked to reach out local contractors to help determine means and methods for construction as well as a ballpark estimate to complete the removal. This will help to determine permitting required, as well as funding that will be needed. A site meeting with Q&D will be held in the next 1-2 weeks.

Tri Sage reached out to George Robison and Eric Sheetz at the Truckee Regional Flood Management Authority (TRFMA) and requested a presentation to update the CTWCD Board on progress of current flood work and priorities of future work. George agreed to prepare a presentation for the May 17th Board meeting. We also talked about coordination of our HEC-RAS models and some of the design elements of the Arlington Bridges Replacement. We look forward to improved coordination with their team in the future.

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, if possible.

Tri Sage completed the draft grant agreement that could accompany the current grant process to provide more concrete dates and requirements to fulfill the grant. The draft agreement was sent to Todd and Ernie for their review, and then sent to Leo for legal input. We hope to have the final draft completed in May to provide to the 22-23 grantees.

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 Jacobs (Arlington Bridges Replacement), Farr West (Booth Street Siphon), Atkins (Glendale Portage Path) and SWCA (Truckee River Re-Vegetation Projects).

Due to the large volume of consultation requests, Tri Sage revised the CTWCD policy to include a \$350 consultation fee for requests that come in that require determination and review of whether a 408 permit will be required. The Board approved this fee addition at the June meeting. Tri Sage will work with Mary Pat to get the updated permit fee policy posted to the CTWCD website.

Tri Sage's participation in the US Bureau of Reclamation's Truckee Basin Water Management Option Pilot (WMOP) Alternative Operational Scenarios Development workshops is complete for now. Tri Sage will share the CTWCD river model with the BoR to support their continued efforts.

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 transition of the Tri Sage Team District lead from Lori Williams to Kayla Dowty is complete. The inspection and reporting work and much District information has been shared through the inspection and reporting process. Kayla continues to call Lori on an as needed basis when questions come in that require historical reference.

The section that pertained to the USACE April 2013 Inspection report has been eliminated from this report; and it is recommend the District continue to pursue improvements and correction of items noted in that last inspection report. The District has addressed or is currently addressing those items through its work.