



TRI SAGE CONSULTING
Monthly Report
Carson Truckee Water Conservancy District

February 7, 2022

MONTHLY ACTIVITIES- January 2022

- 1) Completed USACE Semi Annual Inspection and Distribute.
- 2) Completed NDEP Quarterly Working in Waters and Debris Removal Report and Distribute.
- 3) Completed follow up river inspections to inventory debris after January wind storm and identify additional debris removal projects at Mayberry Park and Riverside to address in February.
- 4) Correspondence with Q&D/Ames to support temporary construction within the floodway during flood season on the NDOT SBX project.
- 5) Coordinated with Washoe County, Charles Albright and others on next steps for removal of the South Side Diversion (Ambrose Dam).
- 6) Worked to finalize grant agreement to support 2022-2023 grant applications.
- 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) Followed up with SWCA regarding One Truckee River Vegetation Management project and discussed HEC-RAS model.
- 9) Held project meetings with Jacobs and RTC regarding Arlington Bridges replacement and application of the Categorical Permission. Respond with meeting availability for future technical working groups.
- 10) Review projects near river for Permit requirements; provide inundation maps for parcels, as required.
- 11) Work with Ron on a plan moving forward for the West Street Plaza and Riverside Drive encroachments.

UPCOMING ACTIVITIES

- 1) Develop February 2022 debris removal scopes.
- 2) Schedule another meeting with the USACE to allow for regular communication, as well as updates on permit status. Upcoming discussion to include the Arlington Bridges Replacement and the Booth Street Siphon project.

- 3) 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.
- 4) Finalize revisions to draft of new CTWCD grant agreement and incorporate final comments before sending to Todd and Ernie for review.
- 5) Continue to collaborate with the City Forester for the removal of hazard trees within the 14,000cfs flood channel if budget dollars permit. Field walk for area behind Glendale Walmart scheduled for February 8th.
- 6) Continue to collaborate with TRFMA and their modeling engineers to discuss status of their HEC-RAS modeling and future coordination.
- 7) 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.
- 8) Work with the City of Reno to pursue a permanent encroachment permit for the West Street Plaza and any associated projects.
- 9) 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.
- 10) Request an updated copy of the City of Reno Flood Fighting Plan from the Public Works Department.
- 11) 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.
- 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 if approved by the Board.
- 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

Tri Sage finalized the NDEP Fourth Quarter Debris Removal report and distributed to the agencies.

Tri Sage completed another field inspection of the river after the intense wind storm in early January. Additional work is still being scoped and debris removal projects will continue through the next few months. Additionally, Tri Sage is working with the City of Reno Forester to inspect areas along the river that have not been prioritized over the last few years. These areas have been included in all previous bi-annual inspections, but tree removals have been postponed due to more urgent removal needs elsewhere. A field walk behind the Glendale Walmart and RSIC is scheduled for February 8th. In February, we will work to remove a dead elm in Broadhead Park, as well as a dead tree leaning toward the river along the walking path west of Idlewild Park.

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.

Tri Sage received a question from Ames/Q&D regarding when temporary work in the flood channel could re-commence. Tri Sage pointed them back to the language in their permit, as well as the CTWCD authorization of work within the flood way during flood season. This authorization generally allows work within the flood channel with the following exception: "In the event flows in the Truckee River are predicted to exceed 8,000 cfs during the construction period, the Grantee and/or designee or contractor shall remove all the construction equipment, material and/or de-watering appurtenances above estimated 100-year flow elevation or from area of potential impact before river flow exceeds conditions for safe operation of equipment within the river channel." Tri Sage still continues to complete regular inspections of this project.

An on-site kick-off meeting was held on November 12th to review the One Truckee River (OTR) Vegetation Management Pilot Project at Broadhead Park and receive input from relevant stakeholders. OTR has received funding for a pilot restoration project at Brodhead Park from Truckee River Fund. Both Lori Williams and Kayla Dowty attended that kick-off meeting. SWCA has put together a very comprehensive framework plan and support tools that is intended to support future revegetation projects

along the river. Tri Sage (Lori Williams) participated in the final technical working group for the One Truckee River (OTR) Vegetation Management Planning effort on December 2nd to provide feedback on that framework. Additionally, Tri Sage provided the most current HEC-RAS model to further support the project as it moves into technical design phase. A meeting was held in January with SWCA's modeling engineers to provide history of the model development and respond to any questions their team had.

USACE scheduled a quarterly meeting with CTWCD to allow for regular discussion and updates. The first meeting was held on May 27th 2021 and was very productive. Mike Fong provided a standing agenda to include review of the status of any permits currently under review, discussion of any upcoming permits that are expected to be submitted, review of USACE's categorical permissions and open discussion on what is currently going on in our area. Tri Sage was able to update them on some of the recent activity within our jurisdiction and there was really good discussion on each of the topics. Tri Sage has sent an email to Mike Fong requesting another meeting to review the upcoming 408 projects.

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. Continued discussions and board direction is necessary to address next steps.

Tri Sage held initial discussions with Farr West Engineering who 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 and some hurdles 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 Lanze (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 is probably warranted to discuss the preferred process for emergency repair work.

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. In September, Tri Sage provided the model to a project developer in Verdi to support master planning efforts. Additionally, Tri Sage will share the model with the Bureau of Reclamation and One Truckee River to support their river improvement efforts.

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.

Tri Sage is nearly complete with the draft grant agreement that could accompany the current grant process to provide more concrete dates and requirements to fulfill the grant. As discussed at a previous Board meeting, the draft agreement will be sent to Todd and Ernie for their review.

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.