



TRI SAGE CONSULTING
Monthly Report
Carson Truckee Water Conservancy District

February 4, 2020

MONTHLY ACTIVITIES- January 2020

- 1) Complete USACE Semi Annual Inspection Report and Distribute.
- 2) Complete NDEP Working in Waters and Debris Removal Report and Distribute.
- 3) RTC Mixed Path Project - discuss permit application and process and options; connect TMWA and City to project regarding possible conflicting plans.
- 4) Meet with City Clean and Safe project manager to discuss rock placement to prevent camping along river.
- 5) Schedule meeting with Assistant City Manager and discuss encroachment limits and projects.
- 6) Work with City Forester to remove/protect trees threatening river.
- 7) Schedule and monitor Keystone Tree removal joint work by contractor and City.
- 8) Pursue Right of Entry access to parcels downstream of Lake Bridge for dead tree removal.
- 9) Meet with property owner at Island Ave. concerned about deposit and debris.
- 10) Update Superintendent re: RTC Arlington Bridge Working Group Request and Superintendent participation.
- 11) NDOT Spaghetti Bowl –Enroll District in Jacobs vendor system and pursue execution of subcontract for payment of permit fees.
- 12) Request inundation mapping for City Parcels and projects; provide updates to City.
- 13) Pursue City Entry License renewal and provide City with parcel inundation information.
- 14) Discuss County Verdi Trail project with project engineer and provide inundation maps.
- 15) Discuss Kayak Park sedimentation with modeling engineer and request update to flow model to as-built condition.
- 16) Work with model engineer to update flow model upstream of Booth Bridge as approved by the board and discuss section frequencies.
- 17) Meet with Superintendent regarding transitioning engineering support.

UPCOMING ACTIVITIES

- 1) Complete Debris/Tree Removal Work; depending upon access and coordination with City Team.
- 2) Follow up on NDOT Spaghetti Bowl payment of District Invoice.

- 3) Continue working with project proponents for encroachment permit applications for RTC Mixed Use Path, Washoe County River Bend Trail, TMWA Washoe Diversion Portage, USFWS fish passage projects, Arlington Bridge replacement review and other projects within the 14,000cfs flow channel.
- 4) 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.
- 5) Draft and mail letters to homeowners along Idlewild Drive notifying them of encroachment requirements and limitations.
- 6) Discuss 2-D Model updates with TRFMA and opportunity for CTWCD to use this model update; when completed model will be made available to CTWCD by TRFMA.
- 7) Work with the City of Reno to pursue a permanent encroachment permit for the West Street Plaza and any associated projects.
- 8) 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.
- 9) Run 14,000cfs steady state HEC-RAS flow model to establish water surface elevations along key river locations to evaluate issues; complete sections upstream and downstream of downtown and produce inundation map layer for addition to County maps.
- 10) Continued coordination with City of Reno for 1) Flood Response evaluation and incorporation of Interim Risk Reduction Measures into their Flood Response Plan, and 2) Flap-gate Installation Phase 2 needs assessment and installation project.
- 11) Finalize the Equipment Access/Entry Point Documentation and Mapping for the District Jurisdiction;

SUMMARY REPORT

During January Tri Sage finalized the USACE Semi-Annual Inspection report and the NDEP Fourth Quarter Debris Removal report. Reports were distributed to the agencies.

Tri Sage continues to work on the annual Debris Removal project approved by the Board and has been coordinating the removal of dead trees from the riverbank. This month the City of Reno and the District's contractor worked cooperatively to control traffic on the Keystone Bridge and remove the tree at the south east corner of the bridge. The District provided notice to the adjacent property owner. This branchy tree had a seriously eroded root ball which was in jeopardy of becoming mobilized in the next flood event and the tree also had branches impinging on the bridge structure. The City's Forestry Team dropped the tree and took control of all cutting, while the District's contractor hoisted the materials on to the bridge where the City team chipped or out hauled the material loaded by the contractor. This was a successful joint venture. The District is continuing to work with the City team to remove several dead

trees downstream of the Lake Street Bridge; however one of the property owners has requested insurance in excess of normal policies, so they will be left to remove their own dead and partially burned trees from the channel. Meanwhile, the District will work with the City to prioritize removals and gain access approvals from willing properties.

Tri Sage met the City of Reno Clean and Safe Project Manager at a site upstream of the Kietzke Bridge to discuss the placement of rock to prevent camping along this parcel. Unfortunately, the property in question lies within the 14,000cfs flood channels so the placement of rock will require an encroachment permit. This parcel was noted to be within the project plan for the RTC path so the City was provided some information and contacts on the path project; since the path has yet to submit an application for encroachment permit it is possible that this rock feature could be included in the construction plan. Also at this same area, TMWA is planning to place rock to prevent camping on one of their parcels which is outside the 14,000cfs flood channel but within the RTC Path Project so as a courtesy, Tri Sage linked the TMWA team up with the RTC team so they could possibly not waste efforts. A property owner requested review of some debris along the wall at Island Avenue so Tri Sage inspected this area and while there are a few pieces of debris these will not be a priority for removal unless funding remains after other identified work is complete.

The RTC project has continued to ask questions about permitting and has provided some preliminary project information; however, no Encroachment Permit application has been received to date. The RTC team inquired about the possibility of entering a funding agreement to move this project ahead in the USACE review queue so information on that possible direction has been provided. In addition, the District provided the project team some historical survey information that may help this project with scour analysis or channel stability assessments that will be required by the USACE.

Tri Sage has a meeting scheduled with the Assistant City Manager on Friday February 7th to discuss the Martis Creek Agreement and encroachments in the flood channel. This discussion will align with the City's newly launched Clean and Safe Program.

The District's entry license for access through City parcels along the river expired at the end of 2019. Tri Sage has approached the City about renewing this permit and the City and Tri Sage have worked to update the parcels and language in the agreement. The City has agreed to issue the permit for an extended period of 5 years versus the two-year length of the prior agreements. This license is scheduled to be on the City Council agenda for approval in February. During the update process, the District became aware of some parcels that may have future projects and the District has provided the City with current model inundation maps for each parcel in question so that the City will know the extent of the flood channel into those parcels and what possible projects may require 408 Encroachment Permits.

After identifying some model discrepancies in and around the City Kayak Park, the modeling engineer is continuing to evaluate the level of sedimentation that is allowable and does not force water to leave the

14,000cfs channel. This information will help both the District and the City maintain this project as may be needed. The Modeling Engineer is continuing to build the flow model upstream of the Booth Bridge and to refine cross-sections and pursue structure information for incorporation into the flow model.

The District has been requested to participate on the RTC Arlington Bridge Working Group to evaluate bridge replacement options. Superintendent Penrose will take this role and will speak to the need for access for debris and sediment removal and maintenance of the flood channel. Superintendent Penrose is familiar with some of the limitations of the prior bridge replacement projects.

The District is continuing to work through the process to get payment for the NDOT Spaghetti Bowl Xpress project 408 Permit review through the NDOT engineer Jacobs. It appears all steps have been completed at this point and we are waiting on payment.

Superintendent Penrose met with the Tri Sage Team to discuss the transition of engineering and project work as Lori Williams steps into retirement. Tri Sage can continue to support District work with other team members and is interested in continuing to contract with the District for this work. The benefit of continuing with Tri Sage is that the District will continue to have access to Williams.

The City of Reno has completed Phase I of the Flap-Gate installation project from Booth St. to Sierra St. This project installed inline check valves at penetrations into the flow channel along the Truckee River walls downtown. This project was initiated to address the USACE inspection issue. The City expects to pursue future phases of this work in future years to continue to address this USACE issue.

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.