



TRI SAGE CONSULTING
Monthly Report
Carson Truckee Water Conservancy District

January 6, 2020

MONTHLY ACTIVITIES- November/December 2019

- 1) Complete USACE Semi Annual Inspection with Superintendent.
- 2) Finalize Debris Removal Agreements for contractors & obtain related documents and pricing.
- 3) Pursue Right of Entry authorizations for debris removal work and provide notifications.
- 4) Work with City Forester to remove/protect trees threatening river.
- 5) Monitor Debris Removal work by contractors.
- 6) Draft USACE Semi Annual Inspection Report.
- 7) Draft NDEP Working in Waters and Debris Removal Report.
- 8) Submit comments to RTC on Arlington Bridge Replacement Needs.
- 9) Review with City Trees encroaching on Bridges and discuss remedies.
- 10) NDOT Spaghetti Bowl –Issue final Permit & Pursue invoice payment through Jacobs including possible Subcontract.
- 11) Discuss 408 Permit process and requirements with RTC Path engineers.
- 12) Discuss Kayak Park sedimentation with City’s engineer and request flow modeling for sediment loading.
- 13) Work with model engineer to update flow model upstream of Booth Bridge as approved by the board and discuss section frequencies.

UPCOMING ACTIVITIES

- 1) Complete Debris/Tree Removal Work.
- 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

Tri Sage has been working on the annual Debris Removal project for much of the past two months. This includes obtaining right of entry authorizations to access the river and developing scopes of work for debris to be removed through river inspections. Agreements were developed and executed for this work with pricing and quotes obtained. Trees removals have been coordinated and approved by the City Forester. Debris removal work was scheduled, parties were notified and work was monitored; the NDEP report for this work near the river has been written. There are still several trees that are dead and leaning toward the river that are planned to be removed during January 2020 using the project funds remaining as approved by the Board and in cooperation with the City tree crews. Tri Sage has worked with the City engineers to review trees at bridges identified as problems during the past NDOT inspections and has provided the City with documentation on debris removal at bridges for the past several years.

Superintendent Penrose and Tri Sage completed the Semi-Annual inspection as required by the USACE under the Martis Agreement. The report for this inspection has been drafted and has been waiting on the completion of the debris removal project and report for submittal to the USACE. One possible issue identified during the inspection relates to the sediments deposited in the City Kayak Park upstream of the Arlington Ave. bridge. After discussion with the city, the District has requested that the flow modeling engineer evaluate the kayak park for sediment loading and limits of the channel capacity before work to remove sediments be undertaken. This model will provide guidance to both the City and the District as to how much sediment can be tolerated in the Kayak Park before channel capacity is

impaired and the sediments need to be removed. Otherwise, there were no notable findings during the inspection except that there is enhanced beaver activity along the river which is negatively impacting trees along the channel from Idlewild Park, through downtown Reno and downstream to Fisherman's Park.

Tri Sage has had multiple conversations with engineers for the RTC mixed use Path to be constructed from I-580 to Champion Park along the south bank of the river. Tri Sage has a meeting planned with the project engineer to discuss the application and timing as well as the review process. RTC would like to construct the path in 2020; however, this is not likely to be possible since a permit application has yet to be submitted.

The fully executed 408 Permit for the NDOT Spaghetti Bowl Xpress project is expected to be issued in early November. In anticipation of this permit being authorized, Tri Sage has prepared and invoice for the permit application and model reviews conducted for the District. This invoice has been issued to the NDOT engineer for this project.

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.