



**TRI SAGE CONSULTING**  
**Monthly Report**  
**Carson Truckee Water Conservancy District**

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May 15, 2019

**MONTHLY ACTIVITIES- April 2019**

- 1) NDOT Spaghetti Bowl Improvements- emails with USACE regarding permit review timing and report requirements to suffice NEPA reviews.
- 2) Monitor river flows and storm events and monitor river for trees and debris in channel following storm events; no issues detected to date.
- 3) Follow up with RSIC on requested Right of Entry Agreement and request process for approvals with RSIC to renew this permit through December 2020.
- 4) Review TMWA Portage Project at Glendale and provide no permit required email with project limitations.
- 5) Update flow model in area of new project for RTC/City of Reno Mixed Use Path and provide model to Project Engineer for 408 Encroachment Permit application modeling.
- 6) Update flow model upstream of Arlington Bridge for use by project engineer reviewing the possible Arlington Bridge replacement.
- 7) Discuss possible project at TMWA Orr Ditch Weir/Intake and review modeling information for this location; begin development of 14,000cfs flow model using LIDAR and request Survey Datum.
- 8) Work to integrate updated flow model sections into a most current flow model version and fully document updates; provide to project engineers for modeling projects.

**UPCOMING ACTIVITIES**

- 1) Continue working with project proponents for encroachment permit applications for NDOT Spaghetti Bowl Project, USFWS fish passage projects, RTC Mixed Use Path, Arlington Bridge replacement review and other projects within the 14,000cfs flow channel.
- 2) Semi- Annual River Inspection and USACE Report; may need to delay due to high river flows.
- 3) Draft and mail letters to home owners along Idlewild Drive notifying them of encroachment requirements and limitations.
- 4) Follow-up with local agencies and project applicants on possible participation in the flow model updates for their impacted areas; bring findings back to District Board for discussion.

- 5) Communicate changes to the 408 Permit process with likely applicants including the City, and utilities; update on Categorical Permission review and differences.
- 6) Discuss 2-D Model updates with TRFMA and opportunity for CTWCD to use this model update; Model nearly completed and 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.
- 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 needs assessment and installation project.
- 11) Finalize the Equipment Access/Entry Point Documentation and Mapping for the District Jurisdiction;

## **SUMMARY REPORT**

During this period, Tri Sage continues to wait for response from USACE regarding the new permit language for the processing of this permit as a Categorical Permission. Tri Sage has again suggested a meeting with USACE technical staff to keep this project moving and on track as NDOT needs this permit issued in July; however, USACE has not yet provided dates for such a meeting. Also, during this period Tri Sage received confirmation from USACE regarding the report documents needed to suffice for the NEPA review and this will now impact the permitting timeline with USACE requiring not only the SHPO Letter of Concurrence but also the signed Memorandum of Agreement. In order to meet the NDOT needed timeframe for the permit to be issued by July, the technical and NEPA reviews must be completed by early June and the internal Administrative review must be initiated in early June.

During this period there have been continued Sierra storm events and elevated river flows due to releases, storms and run-off. Tri Sage has been monitoring the river flows, events and checking sections of the river for any trees down on the banks or other issues. To date no issues have been noted, but the flows are now running in the high 3000cfs range and are expected to continue at high levels during the run-off period; so the river banks will continue to need monitored. It is expected that the higher river flow will continue into June so the Semi-Annual Inspection will be delayed until flows are down to the normal 500cfs range where the banks, structures, revetments and channel can be fully inspected.

During this past month Tri Sage has followed up with RSIC on our request to renew the expired Right of Entry Agreement; but to date have not heard back from the Colony. Earlier this year, Tri Sage was notified by RSIC that our entry agreement has expired as of December 31, 2018. Tri Sage has updated

the agreement dates and parcels and submitted this to the RSIC for Tribal Council Approvals to renew this agreement through December 31, 2020.

During this past month the flow model has been updated with all the current portions and sections in response to two project inquiries and requests that will require the most updated model in order for these projects to apply for an encroachment permit for the potential work. The first project is a request for the most current flow model for use in evaluating the replacement of the Arlington Street Bridge. The flow model was recently updated and integrated for this need with the prior modeling work completed both upstream and downstream of this area and is now fully integrated into a single model as will be needed for this project evaluation. This model has been made available to the project engineer. The second project is a Mixed-Use Path along the South Bank of the Truckee River between Giroux St and Northbound I-580; this path will connect two section of existing path along the river. The flow model for this section was recently updated to incorporate the NDOT survey and cross-section work completed for the Spaghetti Bowl project prior to providing this model to the project engineer for use for the Mixed-Use Path Project; this model has been made available to the project engineer. Additional model integration efforts were completed to incorporate updated areas such as the Booth St Bridge and Riverside updated cross-sections into the CTWCD base model.

TMWA is looking at some possible construction and improvement at the Orr Ditch Intake to the Chalk Bluff Plant and the question has arisen as to whether a 408 Permit will be required for at project in this area. Since no flow model currently exists in this area, the District will create some model section and use some existing flood plain information and drawings to estimate the WSEL of a 14,000cfs flow in order to evaluate the need for a permit for such a project and to identify areas/elevations outside the jurisdiction of the District. In addition, TMWA is pursuing a boater portage project around the Glendale Diversion and upon review of the project and within specific limitations a No-Permit Required email has been issued to TMWA for this work which consists predominantly of vegetation removal and reduction of flood channel vegetation.

The City of Reno has initiated Phase I of the Flap-Gate installation project as this project has been noticed for bid. This project will generally install inline check valves at penetrations into the flow channel along the Truckee River walls downtown with installations beginning in fall 2019. This project was initiated to address the USACE inspection issue; this project was delayed due to high flows and funding needs to deal with the 2017 Flood projects. Tri Sage will monitor and document this work so that it can be reported to the USACE.

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.