



TRI SAGE CONSULTING
Monthly Report
Carson Truckee Water Conservancy District

March 2, 2018

MONTHLY ACTIVITIES- November, December, January

- 1) Prepared and submitted Quarterly Financial Reports and Quarterly Progress reports to DEM for Grant Award for Project CTWCA04; Received confirmation of Project Change Requests for time extension and Grant award modifications.
- 2) Follow up with NDOT on Verdi Bridge Scour supplemental application materials including temporary diversion plans; notify applicant of potential permit review charges prior to permit being issued.
- 3) Meet with USFWS to intake application for Steamboat Dam Retrofit Project; begin review of this project submittal. Emails with USFWS re: ownership and permit signatory and requested use of model sections.
- 4) Draft 408 Permit to include USACE requested language for City Stoker Storm Drain Permit; get permit executed by City of Reno and Board Chairman and forward to USACE for authorization.

UPCOMING ACTIVITIES

- 1) 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.
- 2) Communicate changes to the 408 Permit process with likely applicants including the City, and utilities; update on Categorical Permission review once in place.
- 3) Continue working with project proponents for encroachment permit applications for City of Reno Stoker Storm Drain Addition, USFWS fish passage and NDOT Verdi Bridge Scour Projects.
- 4) 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.
- 5) Work with the City of Reno to pursue a permanent encroachment permit for the West Street Plaza and any associated projects.

- 6) 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.
- 7) 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.
- 8) 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 project.
- 9) Finalize the Equipment Access/Entry Point Documentation and Mapping for the District Jurisdiction;

SUMMARY REPORT

During this period, Tri Sage has continued to provide additional information to DEM regarding project CTWC A04 which is the largest of our projects and includes the sediment removal below Lake Street Bridge. During February, the District received confirmation that both of our project change requests for this project have been approved. The first request asked for the extension of the performance period from August 17, 2017 to September 30, 2017; this is necessary to allow our late August and early September work to be eligible for reimbursement by the DEM/ FEMA grant award. The second Project Change Request modified the grant amount by removing the work at Stagg Lane that was unable to be completed due to property owner access issues and it also authorized the District to shift funds between categories so that more of our grant could be reimbursed for project management costs. We now await the review of all the documentation provided in support of this work and questions from the auditors so that this grant award can be issued. The amount of the award is \$52,162.50.

The NDOT Bridge Scour project has submitted a supplemental package that includes an updated plan for temporary river diversion and dewatering. This information has been supplied to the USACE for their permit review. The District engineer is reviewing this information and hopes to be able to recommend approval of this permit at the March Board meeting. NDOT has been notified that they will owe the district approximately \$2400 plus dollars prior to the issuance of the permit for the District's time spent on this review. The review was costly for NDOT due to the incomplete information submitted, the model system that NDOT uses (SRH-2D) which is not the same as the District's HEC-RAS model and the need for clarifications of several statements made in the original application. Supplemental information was provided to address all issues and questions thoroughly by NDOT and this information has been passed on to the USACE for their review.

The USFWS has submitted an application for the Steamboat Dam Retrofit project; this project is being funded by USFWS as part of their fish bypass upgrade funding thus USFWS and their engineer Otis Bay prepared the application for this work and they have paid the \$400 application fee. The project plans are under review and have been submitted to the USACE for their review as well. The USFWS has been

notified that the District's 408 Encroachment Permit will require to permit signatory to take responsibly for the long-term maintenance and operation of the project; this is not something USFWS can take on so the party to the Permit cannot be USFWS. The ownership and responsibility for this project will have to clearly be defined in an agreement prior to the permit being issued such that the District will be ensured that the party to the agreement can and will take on the permit requirements. USFWS is working to resolve this matter with their partners in the project. This project is in a section of the river where little or no modeling data is currently available so the District has requested that USFWS authorize the District to use this model built for this project or pieces of it, not only for this project review, but also to update the District's flow model for this area of the river; USFWS is investigating what authorization for this model use will be required and allowed.

The City of Reno is continuing with their review of the Flap-Gate requirements in order to address the USACE inspection issue; the city has engaged an engineering firm to design the flap-gates for installation at several locations and will pursue permitting and installations in the coming year. This project may be placed on hold due to high river flows and funding limitations following the flood.

The City is evaluating alternatives for the West Street Plaza interim risk reduction measures to be incorporated into the City's Flood Response Plan while the City works with a potential developer who is interested in the West Street Plaza. The City is working toward an application for a permanent encroachment permit for this project pending the outcome of work with the potential developer.

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.