



FIVE PEAKS CONSULTING
Monthly Engineering Report
Carson Truckee Water Conservancy District

December 11, 2023

MONTHLY ACTIVITIES- November 2023

- 1) Completed 2023 debris removal scopes of work with Noah's Park Tree Care and NV Environmental. Work came in under budget for both contractors.
- 2) Received 2023-2024 access agreement with Reno Sparks Indian Colony – this needs to be executed by CTWCD. We included two of their parcels in the 2023 debris removal and worked closely with their team to identify trees and debris that could be removed.
- 3) Followed up with NDOT regarding the I-580 SBX project to discuss corrections needed to properly armor the bank below the pedestrian path. NDOT's contractor is scheduled to begin bank stabilization work the week of December 10th with the goal of completing the work before Christmas.
- 4) Followed up with Washoe County regarding the status of the hazard removal at Ambrose Dam – this work was completed on November 30th.
- 5) Communicated with Charles Albright regarding the history of the South Side Canal.
- 6) Continued communication with the project proponent of the 408 application for 25 White Fir to finalize application revisions before transmitting to USACE.
- 7) Participated in a meeting with the City of Reno and TRFMA on Wednesday, November 29th regarding the Riverside Drive project. George Robison, executive director of TRFMA, agreed to ask his modeling consultant to determine what the height of the wall would need to be to contain the 14,000 cfs. The City of Reno understands the need and obligation to complete this project. The group will meet again at the end of January to discuss next steps. At this time, I recommend that we hold off on approval of the JUB proposal until next year.
- 8) Received USACE Truckee River field inspection report on June 27th. Provided CTWCD comments on the “Unacceptable” ratings which are generally associated with unpermitted alterations and working through list of action items to address each. Continuing to follow up with USACE inspection team.
- 9) Followed up with Vero Fiber regarding status of their request to complete maintenance to Sutro bridge conduit attachments. Waiting on Vero to execute draft consent agreement. Work is tentatively planned for March.
- 10) Participated in monthly status calls with USACE on November 28th to discuss 408 review progress for City of Reno Booth Street Siphon project and RTC Arlington Bridges project. Provided permit review updates to project proponents.

- 11) Corresponded with project proponents for Sierra Street and Keystone Avenue bridge replacement projects.
- 12) Corresponded with project proponent/consultant on upcoming Verdi bridge replacements. Provided upstream HEC-RAS model and 14,000 inundation shapefiles to determine permitting requirements.
- 13) Review projects near river for Permit requirements; provide inundation maps for parcels, as required. This included discussions with NDOT regarding upcoming Verdi bridges work, as well as other various projects/parcels adjacent to the flood channel.

UPCOMING ACTIVITIES

- 1) Prepare fall debris removal work report.
- 2) Initiate bi-annual river inspection this week and complete report.
- 3) Follow up with City of Reno on the meeting that was held on June 29th to confirm that West Street Plaza is included in their Flood Response Action Plan (FRAP), continue to discuss next steps for Riverside Drive inundation, and share modeling evaluation of the deposits within the kayak park to establish a river capacity maintenance plan with the City based on this evaluation.
- 4) Reach out to Boca/Stampede Bureau of Reclamation contact to schedule a CTWCD Board field trip.
- 5) Follow up on USACE Truckee River field inspection report. Prepare action plan for maintenance items that have been requested.
- 6) Continue to participate in monthly check in meeting with USACE. These are scheduled for the third Tuesday of every month.
- 7) Draft letter to Waste Management regarding their responsibility to keep the river bank that they own to OHWM secure and clear of encroachments and hazard trees.
- 8) 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 of Reno and SWCA to possibly incorporate along with their vegetation management effort.
- 9) Continue to collaborate with the City Forester for the removal of hazard trees within the 14,000cfs flood channel if budget dollars permit.
- 10) Continue to collaborate with TRFMA and their modeling engineers to discuss status of their HEC-RAS modeling and future coordination.
- 11) Continue working with project proponents for encroachment permit applications for 25 White Fir Drive, One Truckee River Brodhead Park, USFWS fish passage projects, NDOT I-80 Verdi Bridge Replacement Project, Keystone/Booth/Sierra Bridges replacement project and other projects within the 14,000cfs flow channel.
- 12) 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.

- 13) 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

Fall 2023 Debris Removal scopes with both Noah's Park Tree Service and Nevada Environmental are nearly complete. Both scopes came in under budget. The bi-annual inspection is being completed now and may result in additional debris that we can include in the existing contracts.

2023-2024 CTWCD grantees continue to make progress. Carson Valley Conservation District provided a Q3 grant status report and summary of work completed. City of Reno provided a final completion report and request for disbursement which was under budget. Mary Pat and Kayla can follow up with other grantees.

Five Peaks has corresponded with project proponents for two new 408 applications including a private development at 25 White Fir Drive and NDOT bridge replacements in Verdi. We received the 408 application for 25 White Fir Drive from their project engineer, Terraphase, on September 8th. We reviewed the application and HEC-RAS model and provided minor comments back to Terraphase on October 3rd. The Board approved the application and a statement of no objection during a special meeting held on October 24th. Submittal to USACE has been delayed due to a couple discrepancies in the hydraulic modeling and application.

Five Peaks reached out to RTC regarding status of the Truckee River Path project that was permitted as project CTWCD 20-01 as construction was intended to be complete in December 2022. The Truckee River Path project was unable to be advanced as part of the NDOT SBX Project because necessary ROW/easements were not transferred by RSIC as originally committed such that a continuous pathway was not able to be provided. The RSIC is now internally working to determine if/how to advance necessary ROW/easements to facilitate advancement of the project – which would include final design and construction. The formal process of how RSIC advances the project is unclear, RTC is willing to provide project management, however, they are not able to fund final design or construction. Follow up will continue to see if this project is able to move forward.

RTC and Jacobs continue to progress environmental and engineering design for the Arlington Avenue Bridges Replacement Project. RTC would like to start construction in 2024. CTWCD provided comments and recommendations regarding the design of the Arlington Bridge Replacement, which was sent via letter to RTC in March 2021, 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. At this time, all of these requests are being incorporated into the design. FHWA is the lead federal agency so they are completing the overall NEPA decision and

have issued a Categorical Exclusion. The hydraulic modeling shows that the bridge deck is not inundated at 14,000cfs which is important for USACE. Other benefits of the project include removal of the sediment deposits in the kayak park, as well as a maintenance agreement with the City of Reno to keep the park free of future deposition. Additionally, the project includes an equipment access ramp from Island Avenue to support future maintenance access to the kayak park. The application for the bridges replacement was received February 24th to support inclusion on the March Board agenda. The CTWCD Board voted to approve the project at the March 2023 meeting. Five Peaks and JUB completed technical review of the package and submitted to USACE on April 26, 2023. We received an Incomplete Letter from USACE on May 25th with some questions and requests for additional information. This was immediately forwarded to the project proponent. The response to the Incomplete Letter was sent to USACE on July 10th. We received additional comments from USACE regarding the hydraulics (localized increase of WSEL greater than 0.1ft) on August 7th and full response from project proponent was provided on September 11th. A follow up call with USACE is scheduled for November 15th. Five Peaks will continue to have a monthly check-in call with the project proponent, as well as USACE to meet on overall project status. USACE is confident that a permission could be issued to support late 2024 construction, however this is at risk due to delays with the river survey and design of the kayak park modifications.

CTWCD met with Trina Magoon and John Flansberg from the City of Reno at City Hall on June 29th. Kayla Dowty, Lori Williams and Todd Westergard attended. Overall, it was a great meeting with positive communication. Meeting notes are as follows:

- Kayak Park - there was discussion of the maintenance agreement governing the removal of sediment at the whitewater park.
 - We clarified that the maintenance agreement exists in the form of the Martis Agreement.
 - John Flansberg confirmed with Travis Truhill (City of Reno) that the Martis Agreement would be useful in designating additional funding and a separate maintenance agreement would not be needed.
- Riverside Drive – there was discussion regarding USACE’s interpretation of Riverside Drive: that although the original USACE Project did not contain the 14,000cfs flow at Riverside, it is now the responsibility of CTWCD & City of Reno to maintain flow in the channel/prevent flooding at the design capacity.
 - We noted that CTWCD’s ability to directly construct improvements necessary to mitigate/prevent flooding in that location are limited, and that role must be largely filled by City of Reno.
 - CTWCD and others have documentation of the original design deficiencies in the Riverside vicinity. Updated models show several breakouts at approx. 11,000cfs. TRFMA recognizes the need for improvements in this location and has included it in their published improvement plans.

- The bridge replacement projects being undertaken by RTC will influence and be influenced by flood mitigation improvements at Riverside. We may be able to expand the Keystone bridge replacement to mitigate the flood risk within the project area.
- J-U-B has prepared a proposal to CTWCD to design a floodwall along Riverside Drive between the Keystone Avenue Bridge and the Arlington Avenue Bridge to contain 14,000cfs. After Board review at the September meeting, we requested a revised proposal. JUB sent a revised T&E proposal with a not-to-exceed of \$60,000.
- Five Peaks had a discussion with City Public Works to discuss their commitment to be involved in the conceptual design process and ultimately implement a solution.
- West Street Plaza – there was discussion regarding improvements at West Street Plaza result in inundation of properties adjacent. There is effectively a hole in the flood wall.
 - These improvements were not permitted. USACE confirmed that a 408 encroachment application would be required to get the alteration permitted.
 - City of Reno should include emergency provisions for containing flow at this location during flood events (Plywood in openings). These provisions should be included in their Flood Response Emergency Plan (FRAP). City of Reno to confirm – CTWCD to follow up.

Design review committee meetings are ongoing for RTC's Sierra Street (2028) and Keystone Avenue (2030) bridge replacements.

Farr West Engineering is completing the design for the Booth Street Sewer 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 apply 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 near Kuenzli and the City Maintenance Yard. Some hurdles of that project were addressing the scour, as well as the depth of bore. A pre-application meeting with USACE was held on March 28th. This included the project proponents, as well as the Flood branch of the USACE to ensure all NEPA requirements are being met and hopefully streamline the environmental review of the permit. There is no federal funding for this project and no disturbance below OHWM so USACE Flood will be the lead federal agency for the project. In general, the Farr West team was very well prepared for the call and was able to respond to all of the questions from USACE. They also included their biological and cultural sub-consultants which was very helpful for the discussion. USACE urged Farr West/City of Reno to use the HDD Categorical Permission checklist and include with their application. Farr West submitted a complete application on May 20th. It was a very thorough application and the technical review was simple to complete. The Board voted to approve this permit and submit to USACE for review at the June Board meeting. A Statement of No Objection was drafted and the permit was uploaded to the FTP file share on June 30, 2022. The 408 permissions group provided an initial review of the application and comments/requests for additional information. Farr

West provided response to USACE’s comments and this information has been sent to USACE to support continued permit review. USACE provided comments for the Biological Assessment on May 26th and the proponent provided revisions on June 27th. In November, USACE finally received final input from SHPO on the historical significance of the rock wall in Idlewild Park. Two final items required to complete cultural consultation – updated rock wall plans and confirmation regarding restoration photos. These were delivered in late November. All other reviews are complete. USACE is anticipating a final decision to be issued in spring 2024.

An application for conduit attachment to the Sutro Bridge was received from Vero Fiber. Five Peaks confirmed with the City that there is space available to reconfigure the bridge attachments. A consent letter has been drafted, similar to the one sent to Uprise, and has been sent to the project proponent for review and comment. We have received the \$1,000 check to cover the permit fees and are waiting for Vero to execute the letter.

CTWCD continues to be involved in concerns from the recreational paddling community about an abandoned diversion structure near Ambrose Park in west Reno. While the County doesn’t currently have the funding to pursue full removal of the structure, they committed to improving the safety of the structure, specifically removal of the exposed rebar. An email from Washoe County confirmed that the metal was removed on November 30th. Charles Albright contacted CTWCD in late November requesting additional information on the history/ownership of the South Side Canal/Ambrose Dam structure. Now that Washoe County has removed the immediate safety concern and USACE 408 will not require a permit associated with this structure, no further action is required of CTWCD.



Tri Sage accompanied USACE on a field inspection of the Truckee River during the week of June 13th. Federal projects are supposed to be completed every 5 years, but the last inspection of the Truckee River was in 2013. The inspection kicked off on Monday, June 13th at Idlewild Park continuing east to the East 2nd Street bridge. The inspection continued on Tuesday, June 14th at Glendale Bridge to John

Champion Park to inspect east end of the CTWCD jurisdiction. USACE will provide an inspection report indicating any areas that require maintenance. This has not yet been received. Some items expected to be noted are a larger push of the City of Reno Flap Gate program, as well as some minor channel wall maintenance in areas of degradation. A draft report was received via email on June 27th. Five Peaks has provided comments to USACE. We are also working on developing an action/follow up plan for the “unacceptable” ratings and maintenance items.

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. Five Peaks has recently shared the model with several project proponents including 6925 Eagle Creek Court private residence, Stantec (Sutro Fiber Project), Terraphase Engineering (25 White Fir Development), RTC (Keystone & Booth Bridge Replacements), Jacobs (Arlington Bridges Replacement), Farr West (Booth Street Siphon), Atkins (Glendale Portage Path) and SWCA (Truckee River Re-Vegetation Projects). We will continue to work with TRFMA on coordination of our HEC-RAS models. JUB recently received a version of the TRFMA model that was used to develop the FEMA Physical Map Revision (PMR).

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.

The section that pertained to the USACE April 2013 Inspection report has been eliminated from this report; we expect that this section will be added in again to address maintenance items in the USACE June 2022 inspection report.