



FIVE PEAKS CONSULTING
Monthly Engineering Report
Carson Truckee Water Conservancy District

May 20, 2024

MONTHLY ACTIVITIES- April/May 2024

- 1) Responded to initial comments from USACE to support the 408 permit application for 25 White Fir.
- 2) Spoke with Charles Albright regarding downed trees and misplaced rocks downstream of Glendale Bridge and provided contact information for Nevada Division of Water Resources.
- 3) Received USACE permission for Permit 22-01 Booth Street Sewer Siphon project. Participated in a phone call with the project proponent to discuss possible changes to the permit. Awaiting follow up to prepare the 408 permit for execution.
- 4) Received draft report for the Riverside Drive alternatives analysis (see attached). Three alternatives include 14,000cfs containment, 100 year flow containment and an intermediate containment that will be determined by approx. 2' wall extension.
- 5) Requested extension to the monthly status calls with USACE as the calendar invite ended on March 19th.
- 6) Reviewed and provided comments on the Arlington Bridges 100% hydraulic model and design set. After many iterations, the final package is ready to be submitted to USACE.
- 7) Corresponded with project proponent/consultant on Riverbend Park parking lot in Verdi. Provided upstream HEC-RAS model and 14,000cfs water surface elevation figure to determine permitting requirements. After some refinements to project plans, all work occurs outside of the 14,000cfs inundation boundary and no permitting is required.
- 8) Corresponded with project proponents for Sierra Street bridge replacement project and participated in design review meetings. Pre-application meeting with USACE for upcoming geotechnical boring permit was held on April 15th. Received application for geotechnical boring and provided comments. Will request board approval at the May meeting.
- 9) Corresponded with project proponents for Keystone Avenue bridge replacement project and participated in design review meetings. Received draft application for geotechnical borings and provided comments. They do not yet have their NEPA decision so that will delay submittal. Working to schedule a pre-application meeting with USACE.
- 10) Received notification from USACE that the Section 408 program is currently anticipating a budgetary shortfall that will impact the capacity of the Sacramento District 408 Permissions Program to respond to ongoing and new requests to alter USACE projects. Funding for the USACE Section 408 program is managed by USACE Headquarters and the scope of impact of the funding shortfall on the Sacramento District is uncertain.

- 11) Corresponded with project proponent/consultant on upcoming Verdi bridge replacements. Provided upstream HEC-RAS model and 14,000 inundation shapefiles to determine permitting requirements.
- 12) Corresponded with project proponent/consultant on upcoming Trout Unlimited J-hook weir structures in Verdi and noted that CTWCD cannot waive the application fees. Waiting to hear if the project is moving forward.
- 13) Began discussions with JUB and TRFMA regarding merging the CTWCD and TRFMA HEC-RAS models into one model to streamline future permitting and modeling efforts.
- 14) Received USACE Truckee River field inspection report on June 27, 2023. We received follow up from NV Energy that 1 of the 3 identified powerline crossings pre-dated the Martis Creek agreement. Other 2 crossings will require as-built 408 applications. We had a meeting with the City of Reno on March 15th to discuss additional flap gates required. Continuing to follow up with USACE inspection team.
- 15) Review projects near river for Permit requirements; provide inundation maps for parcels, as required. This included discussions with NDOT regarding upcoming Trout Unlimited J-hook weir structures in Verdi, as well as other various projects/parcels adjacent to the flood channel.

UPCOMING ACTIVITIES

- 1) Submit final 100% Arlington Bridges package to USACE for review and permission.
- 2) Submit Sierra Street geotechnical boring package to USACE for review and permission.
- 3) Meet with One Truckee River to review 90% plans for Brodhead Park Restoration and provide guidance on whether a 408 permit will be required.
- 4) 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) and pursue a final encroachment permit.
- 5) Reach out to Boca/Stampede Bureau of Reclamation contact to schedule a CTWCD Board field trip.
- 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 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

The 408 application for 25 White Fir was finalized and sent to USACE on January 23rd, along with CTWCD's Statement of No Objection. We received initial comments from USACE on February 21st. Comments included requested additions to the Section 106 cultural report, real estate verification and request for categorical permission checklist. These comments were provided to the project proponent to address. The project proponent provided a complete response and the updated files were sent to USACE on May 8th.

Reno Sparks Indian Colony reached out in January to discuss the permit and associated permit window for the Truckee River Shared Use Path that was permitted as project CTWCD 20-01. This was originally permitted by RTC to be completed in parallel with the NDOT SBX project. It was not completed 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. RSIC is hoping to move this project forward with a phased approach.

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 meeting was held in November with USACE to further discuss the hydraulics and they requested a risk assessment report. Project proponent has not yet provided a response. 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. The 100% submittal was received on March 19th. There are extensive modeling comments and these were discussed with RTC and Jacobs on April 1st. We received a revised submittal on April 11th. The team met again on April 25th to review modeling concerns and plan set inconsistencies in more detail with a follow up meeting between the hydraulic modelers. We received a final submittal on May 6th and JUB subsequently approved the set to be submitted to USACE for review.

We are making great traction with the City of Reno and TRFMA on addressing the Riverside Drive inundation. TRFMA commissioned a conceptual design that showed a reasonable wall height (< 2.5 feet) to contain 14,000 cfs. Next steps are complete construction plans and bid package, as well as overall project funding. After many discussions with City of Reno and TRFMA, the following roles/responsibilities have been proposed:

1. CTWCD – Fund and manage final design of 14,000 cfs containment. This could be via floodwall, revisions to channel bank grading or a mixture of these solutions.
2. City of Reno – Fund and manage design of pedestrian path and landscape restoration, manage public outreach, issue bidding and construction documents, manage project construction.
3. TRFMA – Design review and construction funding.

The CTWCD board voted at the March meeting to approve funding an alternatives analysis by JUB. We received the draft report on May 10th that included conceptual designs for all three alternatives, as well as cost estimates. Once the CTWCD board has discussed, the draft should be sent to City of Reno and TRFMA for comments and next steps.

Design review committee meetings are ongoing for RTC's Sierra Street (2028) and Keystone Avenue (2030) bridge replacements. We received an application from RTC/Jacobs to support 408 permitting for the geotechnical borings for the Sierra Street Bridge. We had a pre-application meeting with USACE on April 15th and received a revised application on April 23rd. Five Peaks will present to the Board at the May meeting to request approval. We received a draft application from RTC/Parametrix to support 408

permitting for the geotechnical borings for the Keystone Bridge. They have not yet received NEPA determination from NDOT/FHWA, so will wait to submit the final application.

Received a request for consultation from Washoe County Parks/Dowl on the need for 408 permit to support the parking lot that will be constructed to support the Riverbend Park trailhead. We provided the 14,000cfs inundation boundary and requested small refinements to the grading and boulder placement so a 408 permit would not be required.

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. We received notice from USACE in February that the submittal has been deemed complete. USACE has issued their permission for the alteration. The project proponent requested a meeting on April 16th to discuss the possibility of sleeving the existing pipe instead of boring a new pipe. We discussed implications with the permit. They are completing further due diligence and will follow up with a final decision.

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. 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 Parametrix (Verdi and Keystone bridge replacements) and NVENV (Trout Unlimited J-hook weir structures). 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). Preliminary review indicates that CTWCD’s model is more conservative and TRFMA’s model is more accurate because it is a full 2D model. At this point, it may make sense to “merge” the CTWCD and TRFMA models from Mayberry Park to Glendale.

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.