## UPPER GUADALUPE RIVER FLOOD RISK MANAGEMENT PROJECT San José, California

## **Non-Federal Sponsor Support**

## **Appendix H**

## DRAFT INTEGRATED GENERAL REEVALUATION REPORT & SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

November 2022



US Army Corps of Engineers San Francisco District





Monday, November 7, 2022

Kevin P. Arnett Lieutenant Colonel, U.S. Army District Commander and Engineer San Francisco District (SPN) 450 Golden Gate Avenue, 4th Floor P.O. Box 36152 San Francisco, CA 94102-3404

Subject: Letter of Support from the Non-Federal Sponsor for the Tentatively Selected Plan (TSP) – Upper Guadalupe River Flood Risk Management Reformulation Study, Santa Clara County California.

Dear LTC Arnett:

The U.S. Army Corp of Engineers (USACE) and Valley Water have been collaborating to plan, design, and construct flood risk management projects along the Guadalupe River for many years. In that time, the USACE and Valley Water have developed a good working relationship that resulted in successfully completing Reaches 10B and 12.

On September 8, 2022, the Project Delivery Team (PDT) hosted a Tentatively Selected Plan (TSP) milestone meeting for the Upper Guadalupe River between the UPRR crossing and Blossom Hill Road. At this meeting, the PDT recommended the "Combination Plan" as the TSP. The "Combination Plan" proposes a variety of flood reduction measures such as channel widening, floodplain benching, floodwalls, and replacing narrow bridges in the constricted Reaches 7 & 8, and the Ross and Canoas Creek tributaries. Furthermore, the "Combination Plan" also significantly reduced the total project costs to \$152.8 million compared to the previous NED Plan of \$325.3 million. The BCR of the "Combination Plan" as presented is 3.4. The "Combination Plan" further provides significantly higher non-quantitative benefits such as protecting the most vulnerable economically disadvantaged populations from serious flooding as well providing significant environmental benefits with nature-based designs of widened floodplains and riparian corridors.

Valley Water is thrilled at the USACE Comprehensive benefits assessment of the alternatives and recommending the "Combination Plan" as the TSP. Valley Water supports this recommendation.

We understand that the various elements of the TSP would be further developed during the "optimization" phase of the plan development. As the non-federal sponsor, Valley Water has a strong preference to see the following design refinements evaluated as potential pathways to optimize the plan; however, these are not conditional for our support of the TSP:

1. Hydraulic modeling files submitted to Valley Water in August 2022 show that most sections of the river contain 50-year flows and in some cases 100-year flows. While we understand



that USACE design criteria is not based on a design flood, rather on maximizing benefits, Valley Water would ideally like to see optimization efforts that would meet the 100-year flow, with a minimum design criteria of 50-year flows. The design flow event could also have 2-feet of freeboard (with 95% confidence in the risk and uncertainty analysis), or 3-feet of freeboard, whichever is less. Please communicate the level of service, or performance (i.e. annual chance exceedance) after optimization and later in the design phase. This is to allow Valley Water to communicate with our customers and stakeholders as well as to properly maintain the channel to the designed conveyance threshold.

- 2. Based on the most recent hydraulic model, we observed two river breakouts in the 50-year flow that we would like to see addressed. These breakouts cause deep flooding that can be addressed as detailed below. This was shared with the USACE project team in the technical deep dive on September 1, 2022.
  - a. On Guadalupe River, just upstream of CA-87, the left bank (facing downstream) has a small area with low elevation that is spilling water during a 50-year flow, causing a sizeable flooding area and is not addressed in the TSP. Most (if not all) of this area is on Valley Water right-of-way. Optimization efforts in this area could include a short levee or floodwall to contain the flows (see Figure 1).
  - b. In Reaches 7 & 8 near Alma Avenue, there is localized flooding in the 50-year flow that causes deep ponding. Valley Water owns right-of-way near that location, and it should be possible to construct a levee or floodwall feature to contain the flows (see Figure 2).
- 3. Floodwall and levee elements moving forward should be open to height changes based upon further optimization and community needs. An alternative solution should be evaluated on Canoas Creek to avoid high floodwalls within the TSP. Community opposition is likely for such high flood walls and Valley Water would support an alternative flood risk minimization element.
- 4. On Ross Creek, additional analyses would be needed to optimize project cost and flood reduction to reduce a large shallow flooding area. This was shared with the USACE project team in the technical deep dive on September 1, 2022 (see Figure 3).
- 5. Evaluate river breakouts that occur between the 50-year flow and 100-year flow scenarios in the TSP and identify additional project features that may eliminate flooding with minimal additional cost. River breakout locations that Valley Water have identified include:
  - a. On Guadalupe River, upstream of Canoas Creek confluence, on the left bank (see Figure 4)
  - b. On Guadalupe River, upstream of Malone Road, on the left bank (see Figure 5)
  - c. On Guadalupe River, upstream of Capitol Expwy, on the right bank (see Figure 6)
  - d. On Guadalupe River, upstream of Branham Lane, on the right bank (see Figure. 7).

During the TSP meeting discussions, we noted that due to the relatively close BCR between the "Lower Scope Plan" and the "Combination Plan" there seemed to be interest within the USACE to continue with further development of the "Lower Scope Plan". Valley Water is concerned that the



"Lower Scope Plan" presents serious flooding risks to the most vulnerable economically and socially disadvantaged communities. Furthermore, the "Lower Scope Plan" would be in complete contradiction of the USACE "Modernize civil works" guidelines and comprehensive benefits evaluation. Therefore, Valley Water is hopeful that the "Combination Plan" with further optimization continues to be the TSP for this project. Valley Water commends and congratulates your dedicated team for this excellent example of a comprehensive benefits project that is also economically feasible. We appreciate SPN's partnership and commitment to complete this study. We look forward to advancing this project with your dedicated project team.

Sincerely,

-DocuSigned by Rechelle Blank -0729D65C492A46F

Rechelle Blank, P.E. Chief Operating Officer Watersheds

cc: B. Yerrapotu, K. Neuman, J. Valencia, V. Bartek, File

ATTACHMENT: Referenced Figures Identifying Areas of Flooding





Figure 1: Overbanking on Guadalupe River u/s CA-87



Figure 2: Overbanking on Guadalupe River near Alma Ave





Figure 3: Overbanking on Ross Creek (50 & 100-year)





**Figure 4:** Overbanking on Guadalupe River u/s Canoas Creek near Almaden Expwy (50 & 100-year)



Figure 5: Overbanking on Guadalupe River u/s Malone Road (50 & 100-year)





Figure 6: Overbanking on Guadalupe River u/s Capitol Expwy (100-year)



Figure 7: Overbanking on Guadalupe River u/s Branham Lane (100-year)