Regulatory Division
1455 Market Street, 16th Floor
San Francisco, CA 94103-1398

US Army Corps of Engineers ®
San Francisco District

SAN FRANCISCO DISTRICT

PUBLIC NOTICE

NOTICE OF AVAILABILITY
FOR THE UPPER LLAGAS CREEK FLOOD PROTECTION PROJECT
FINAL ENVIRONMENTAL IMPACT STATEMENT

PUBLIC NOTICE NUMBER: 2014-00086S
PUBLIC NOTICE DATE: December 7, 2018
COMMENTS DUE DATE: January 11, 2019

PERMIT MANAGER: Mr. Keith Hess TELEPHONE: 707-443-0855 E-MAIL: Keith.D.Hess@usace.army.mil

INTRODUCTION: Pursuant to the National Environmental Policy Act (NEPA), the U.S. Army Corps of Engineers, San Francisco District, Regulatory Division (Corps), in cooperation with the Federal Aviation Administration (FAA) has prepared the final Environmental Impact Statement (EIS) for the Upper Llagas Creek Flood Protection Project in Southern Santa Clara County.

PROPOSED PROJECT:

Project Site Location: The proposed project is located within the Llagas Creek watershed and includes East Little Llagas Creek, West Little Llagas Creek, and Llagas Creek specifically in the City of Morgan Hill, community of San Martin, and the City of Gilroy. The project consists of seven reaches (4, 5, 6, 7A, 7B, 8, and 14) of Llagas Creek, East Little Llagas Creek, and West Little Llagas Creek. The total length of the project area is approximately 13.9 miles; 6.1 miles of which are along the main branch of Llagas Creek, 2.8 miles along West Little Llagas Creek; and 3.4 miles of East Little Llagas Creek. An additional 1.6 miles of new diversion channel would also be constructed along West Little Llagas Creek to Llagas Creek. On the north, the physical limits of the project are at the creek's intersection with Llagas Road on West Little Llagas Creek in Morgan Hill; and, in the south, approximately 800 feet downstream of the creek's intersection with Buena Vista Avenue in Gilroy. The project is located within the Morgan Hill, Mount Madonna, and Gilroy U.S. Geological Survey (USGS) 7.5-minute quadrangle maps. the communities of Morgan Hill, San Martin, and City of Gilroy. Specifically, within southern Santa Clara County, approximately 25 miles southeast of San Jose, in

Project Site Description: Prior to Euro-American settlement, Llagas Creek within the project limits did not maintain a defined channel across the valley floor. Instead the water dissipated into the alluvial soils to recharge groundwater and maintain wetland seeps which were abundant. Riparian vegetation was sparse with riparian scrub and occasional trees interspersed with grasslands leading to a braided stream channel with abundant gravel beds and bars. Nineteenth century orchards, row crops, population expansion and water management actions changed the drainage patterns within the watershed and eliminated many of the wetland seeps on the valley floor. As the result of the construction of an upstream reservoir during the early 1950's for groundwater management via in-stream percolation, riparian habitat within Llagas Creek became more contiguous and dense than that which was present historically.

Currently vegetation types within the project limits reflect both the historic condition, with sparse, open patchy riparian habitat interspersed with ruderal grasslands to dense riparian woodland and scrub where reservoir releases influence stream flow patterns. Presently, the project area maintains a mix of urban, suburban, and agricultural land use. Within the project area, there are approximately 57.71 acres of potentially jurisdictional waters. This includes approximately: 10.88 acres of wetlands and 46.83 acres of

other waters. Other waters is comprised of 27.61 acres of intermittent stream, 9.9 acres of perennial stream, 1.37 acres of culverts, 0.05 acres of drop structures and 7.9 acres of pond.

Project Alternatives: The range of alternatives considered by the applicant includes the No Action Alternative, the applicant's Proposed Action - Tunnel Alternative, Natural Resources Conservation Service (NRCS) Alternative, Culvert/Channel Alternative, and Reach 6 Bypass Alternative. There are project features and channel modifications which are common to all of the action alternatives. However most of the differences between the action alternatives are focused on the project alignment for flood routing and the type of flood management features used in areas in Reach 8 to minimize impacts to existing habitat along West Little Llagas Creek within downtown City of Morgan Hill.

Applicant's Proposed Action (Tunnel Alternative):

The key feature of the Tunnel Alternative is to use an underground concrete tunnel instead of channel widening and deepening proposed through downtown Morgan Hill under the NRCS design. The main components of the Tunnel Alternative would include: a 250-foot-long sediment trap and an inlet weir structure would be constructed in the 600 feet of channel between Wright Avenue and Hillwood Lane; a 36-inch-diameter reinforced concrete pipe culvert would be constructed paralleling Hale Avenue, stretching from the weir structure 2,400 feet downstream and discharging into the existing West Little Llagas Creek channel south of West Main Avenue. The 2,400-foot-long earthen channel section of West Little Llagas Creek between Wright Ave and West Main Ave would be replaced with the RCP culvert. The culvert would maintain low flows up to 50 cfs in the existing creek through the downtown area without exceeding the existing West Little Llagas Creek capacity. Two high flow bypass culverts would be constructed. One would be 10 feet by 8 feet in size, while the other would be 10 feet by 9 feet in size. Both culverts would extend from the weir structure parallel to Hale Avenue and stretch 2,750 feet to Warren Avenue where they would convey high flows to the tunnel. A 2,100-foot-long tunnel would be constructed, extending under Nob Hill between Warren Avenue and Del Monte Avenue, continuing under Nob Hill Terrace. This modification also includes constructing underground box culverts for transition to and from the tunnel, and construction of a tunnel portal at the upstream end. The channel would be deepened and widened downstream from the Llagas Road bridge to the inlet of the sediment detention basin near Hillwood Lane. Also as part of this alternative, Reach 7B would be modified with double box culverts from the tunnel outlet at West Dunne Avenue to downstream Ciolino Avenue where high flows would return into existing West Little Llagas Creek.

The applicant's Proposed Action described above would result in discharge of fill into waters of the United States for project construction. The proposed fill volumes are approximated as follows; stream bed material excavated from bed and banks during construction and reused to facilitate construction of bankfull geometry (6355 cy); cobbles and gravel (2476 cy); grouted boulders (4257 cy); engineered stream bed material (1213 cy); boulders (3992 cy); aggregate base (339 cy); concrete (385 cy); sheet piles in linear feet (37); culverts in linear feet (2037).

Natural Resources Conservation Service (NRCS) Action Alternative:

The key difference with this action alternative is the proposed channel modifications through the urbanized City of Morgan Hill in Reach 8 beginning at Llagas Road and extending downstream to West Dunne Avenue. The features designed for Reach 8 under this alternative would include the following modifications: the channel would be deepened and widened along a 2,500-foot section of channel downstream from the Llagas Road bridge to Hillwood Lane. Widen and deepen approximately 600 feet of channel between Wright Avenue and Hillwood Lane with an 8-foot-deep trapezoidal channel, with a 20-foot bottom width and 70-foot top width. This channel would be designed to pass the 1-percent flow. Widen and deepen approximately 3,000 feet of channel between West Dunne Avenue and Main Avenue to form a trapezoidal vegetated channel, a channel with two vertical walls, or a hybrid section, as appropriate depending upon available right of way. Replace approximately 2,200 feet of the existing creek between Main Avenue and Wright Avenue with two 10-foot wide by 7- to 8-foot-deep reinforced concrete box culverts following the existing stream alignment, but under Hale Avenue. Replace culverts at West Main Avenue and Wright Avenue. Replace five additional existing undersized culverts with new culverts, 10 feet wide by 9 feet deep, at the following locations: 5th Street, 4th Street/Monterey Highway, 3rd Street, 2nd Street/Del Monte Avenue, and Warren Avenue .

Culvert/Channel Action Alternative:

The key feature of the Culvert/Channel Alternative is elimination of the need for channel deepening and widening through residential properties, and fewer culvert replacements, as proposed for the NRCS Alternative between West Main Avenue and West 2nd Street in Reach 8. The main components of the Culvert/Channel Alternative that are different from those previously described for the NRCS Alternative include the following (all focused in Reach 8); realign an 800-foot segment of the double 10-foot-wide box culverts that, in the NRCS design, would be parallel to Hale Avenue through the Britton School athletic fields up to Del Monte Avenue. The double box culvert would continue under Del Monte Avenue approximately 900 feet to West 2nd Street. Widening and deepening along with culvert replacements would occur at 2nd, 3rd, 4th, and 5th Streets.

Reach 6 Bypass Action Alternative:

The Reach 6 Bypass Alternative would construct a high flow bypass channel between Reach 6 of Llagas Creek and Reach 14 of East Little Llagas Creek. The bypass would be designed so that no flood capacity improvements would be needed along the remaining section of Reach 6 or Reach 5 of Llagas Creek downstream of the proposed bypass. Reach 14 would be designed similar to the Tunnel Alternative, except that the channel dimensions would be larger to accommodate the additional high flow routed from the upstream reaches (8, 7B, and 7A) through the Reach 6 bypass, so as not to cause induced flooding.

The proposed high flow bypass would start near the top of Reach 6, about 0.5 mile downstream of Monterey Highway. The 0.5 mile section of Reach 6 between Monterey Highway and the bypass would be widened and deepened as proposed for all of the action alternatives; however, no construction would occur downstream from the bypass channel, over a distance of approximately 2.7 miles in Reach 6 and the entire 0.5 mile length of Reach 5. The bypass channel would run east through open fields, continue under Murphy Avenue and U.S. 101, and connect to Reach 14. The alignment of the bypass channel is situated near the upstream portion of Reach 6. The proposed high flow bypass would be approximately 1,660 feet long. A hydraulic control structure consisting of trapezoidal-shaped weir and five 6-foot by 6-foot individual working sluice gates would be installed at Reach 6 to redirect high flows into the bypass.

This alternative would also require the construction of three bridges at the following locations: Murphy Avenue, U.S. 101 southbound, and U.S. 101 northbound.

The USACE has not endorsed the submitted alternatives analysis at this time. The USACE will conduct an independent review of the project alternatives prior to reaching a final permit decision.

The Notice of Availability (NOA): The NOA for the Final EIS was published in the *Federal Register* on December 7, 2018. In accordance with NEPA, the Corps will not issue a Record of Decision (ROD) on the proposed action until at least 30 days after the NOA publication date. The ROD will state the Corps' decision whether to authorize the proposed Upper Llagas Creek Flood Protection Project, and if so, the conditions under which it would be allowed to occur and the factors considered in the decision.

The EIS is available for public review on the San Francisco District website:

http://www.spn.usace.army.mil/Missions/Regulatory/RegulatoryOverview/ActionsofInterest.aspx.

Copies of the EIS are available for reviewing at the following libraries:

Santa Clara County Library District, Morgan Hill, CA
660 West Main Avenue
Morgan Hill, CA 95037

Santa Clara County Library District, Gilroy, CA
350 W. Sixth Street
Gilroy, CA 95020

San Jose Public Library, San Jose, CA
150 E San Fernando Street,
San Jose, CA 95112

To request a compact disc or hardcopy of the EIS, please contact the applicant at: Santa Clara Valley Water District (POC: Stephen M. Ferranti, P.E. 408-630-2677), 5750 Almaden Expressway, San Jose CA 95118; or by email at sferranti@valleywater.org.

Any questions pertaining to this notice may be directed to: Keith D. Hess, U.S. Army Corps of Engineers, San Francisco District, 601 Startare Drive, #13, Eureka, CA 95501; via email at: Keith.D.Hess@usace.army.mil, or; telephone at (707)443-0855.