

Executive Order (E.O.) 11988 Analysis
408 Permission (No. 19552)
Central Valley Flood Protection Board
for the
Sanchez Property Industrial Development
San Joaquin County, CA

References

- Central Valley Flood Protection Board Permit Application dated November 17, 2020.
- Executive Order (E.O.) 11988 ANALYSIS, Sanchez Industrial Development, Weber Slough Drainage Outfall, Channel Widening and Rock Slope Protection, Farmington Project Authorization submitted by BaseCamp Environmental Inc. in support of the request for Section 408 Permission (Attachment 1).
- Engineering Circular (EC) 1165-2-220, Policy and Procedural Guidance for Processing Requests to Alter U.S. Army Corps of Engineers Civil Works Projects Pursuant to 33 U.S.C 408.
- Engineering Regulation (ER) 1165-2-26, Implementation of Executive Order 11988 on Floodplain Management.
- Water Resources Council, Floodplain Management Guidelines for Implementing E.O. 11988, 10 February 1978 (43 FR 6030).

Background & Introduction

The Central Valley Flood Protection Board (CVFPB) has requested review under Section 14 of the Rivers and Harbors Act of 1899, 33 U.S.C. § 408 (Section 408) for ET Stockton Owner, LLC to alter the Farmington Project (which includes improvements to the Littlejohn Creek Channel and its tributaries), authorized by the Flood Control Act of 1944, Public Law No. 534, 78th Congress, Second Session. The proposed Sanchez Property Industrial Development alteration includes construction of an outfall structure, channel widening, and installation of rock slope protection located on Weber Slough, within San Joaquin County, CA. The proposed alterations are located southeast of the City of Stockton at approximately 37.908465°N 121.188658°W NAD83 within San Joaquin County, CA.

E.O. 11988 requires USACE to provide leadership and take action to (1) avoid development in the base floodplain (1-in-100 annual event) unless such development is the only practicable alternative; (2) reduce the hazards and risk associated with floods; (3) minimize the effect of floods on human safety, health, and welfare; and (4) restore and preserve the natural and beneficial values of the base floodplain.

The Water Resources Council Floodplain Management Guidelines for implementation of E.O. 11988, as referenced in USACE's Engineer Regulations 1165-2-26, requires an 8-step process that agencies are to carry out as part of their decision

making on projects that have potential impacts to or within the floodplain. The project proponent prepared and submitted the *Executive Order (E.O.) 11988 ANALYSIS, Sanchez Industrial Development, Weber Slough Drainage Outfall, Channel Widening and Rock Slope Protection, Farmington Project Authorization* in support of the request for Section 408 Permission (Attachment 1). The following sections discuss the 8-step analysis undertaken by USACE to comply with E.O. 11988.

Scope of Review for this EO 11988 Analysis

Due to differences in the implementing policies for Section 408 and EO11988, the scopes of the two reviews differ. This section discusses the scopes of each review.

Scope of Section 408 Review – The scope of a Section 408 review is intended to reflect USACE jurisdiction and therefore focuses on proposed actions within the Federal project footprint and adjacent areas that are directly or indirectly affected by the alteration. The actions subject to 408 permission (hereafter 408 Alteration Components) include installation of two (2) 18-inch diameter storm drain pipes and outfall structure; installation of a 48-inch diameter storm drainpipe crossing approximately 10 feet below the channel; installation of two (2) 4 feet by 10 feet box culverts adjacent to Austin Road; modification of an existing box culvert, associated channel widening along Austin Road; installation of riprap; and removal of two (2) dilapidated farm road crossings. Although the proposed 408 Alteration Components are a component of the larger 149-acre Sanchez Property Industrial Development Project (Project), only the proposed 408 Alteration Components would represent a direct alteration to the Federal project. Therefore, the scope of the Section 408 review and any subsequent authorization is limited to construction and operation of the proposed 408 Alteration Components. This scope is consistent with the request #19552 by the Central Valley Flood Protection Board for review of the proposed action under Section 408.

Scope of EO 11988 Analysis – Compliance with EO 11988 is a required component of all USACE actions, including review and authorization of proposed alterations under Section 408. ER 1165-2-26 provides the general guidance and policy for USACE's implementation of EO 11988. EO 11988 has as an objective for avoidance, to the extent possible, of long-and short-term adverse impacts associated with the occupancy and modification of the base floodplain and the avoidance of direct and indirect support of development in the base floodplain wherever a practicable alternative exists. ER 1165-2-26 defines direct support of floodplain development as an action in the floodplain that encourages, allows, serves, or otherwise likely induces additional floodplain development.

USACE's action is limited to Section 408 review and authorization of the stormwater outfall; however, because the stormwater outfall directly serves, and is integral to, the development of the adjacent 149-acre site, the associated development will be included in the EO 11988 analysis as a component of the proposed action. In summary, the action under evaluation in this EO 11988 analysis is the proposed construction of the

408 Alteration Components and adjacent 149-acre site. The action, as defined, will serve as the basis for evaluation of alternatives and application of tests of practicability.

8 Step Analysis

1. Determine if the proposed action is in the base floodplain.

The majority of the proposed action area is located within the Federal Emergency Management Agency's (FEMA) designated 100-year flood zone (base floodplain) as identified in the effective Flood Insurance Rate Maps (FIRMs) Panel Numbers 06077C0490F & 06077C0495F (Figure 1). The proposed alterations to the USACE federal project are entirely located within the FEMA designated base floodplain (Figure 2).

2. If the action is in the base floodplain, identify and evaluate practicable alternatives to the action or to location of the action in the base floodplain.

The Water Resources Council Floodplain Management Guidelines and ER 1165-2-26 define "practicable" as "capable of being done within existing constraints. The test of what is practicable depends upon the situation and includes consideration of the pertinent factors, such as environment, cost, and project objectives. Alternatives discussed below include the proposed action; alternative actions (other means which accomplish the same purpose as the proposed action); alternative siting (carrying out the proposed action outside the floodplain); and no action. Key considerations in the evaluation of alternatives are summarized below:

- The Project objectives are to implement industrial development of both Phases 1 and 2 of the 149-acre industrial development, including development and installation of an independent stormwater management system meeting the storm drainage needs of both Project phases. The Project objectives include:
 - Construction of a detention basin at the northwest corner of the property, with other interconnected sub-basins, which would accumulate runoff from the Project site for discharge into Weber Slough.
 - Construction of an on-site pump station and outfall adjacent to the slough with electronic control of discharges from the basin.
 - Obtain required permits and approvals for the project, including U. S. Army Corps of Engineers, Section 404 Permit for discharge associated with the construction of the Storm Drainage Pump Station and other modifications to Weber Slough.
 - Expand Norcal Logistics Center east of Logistics Drive, providing land area for further development of industrial warehousing and distribution.
 - Industrial development of the project site in accordance with the Stockton General Plan 2040 land use designations, objectives, goals, and policies.
 - Industrial development in an area supported by existing development-ready infrastructure, including urban streets, potable water, and wastewater systems.

- Comply with natural resource management objectives and policies of the Stockton General Plan 2040, by siting new industrial development where impacts to natural resources are minimized.
- Comply with the urban planning and design objectives and policies of the Stockton General Plan 2040 and Development Code.
- Compliance with Stockton Municipal Code Chapter 15.44 Flood Damage Protection. Conformance with Conditions of Approval for the Project.

Given these considerations and other relevant factors of practicability (ER 1165-2-26 Sec. 7), an alternative action would be considered practicable if it offers a clear advantage over the proposed action (i.e., meaningful reduction in environmental impacts, with a special focus on impacts related to development within the floodplain) while providing a comparable level of benefits (i.e., meeting project objectives).

a. Sanchez Property Industrial Development (Preferred Alternative)

The Proposed Action is light industrial/warehouse development on the 149-acre Sanchez property. Up to 2.8 million square feet of industrial building space is proposed to be developed, along with circulation, parking, and utility improvements. The outfall structure includes a concrete headwall, wingwalls and apron as well as rock slope protection in the bed and opposite bank of Weber Slough. The Proposed Action also includes widening 550 feet of the on-site portion of the Weber Slough channel, including extending the existing concrete box culvert at the slough crossing of Austin Road, adding two concrete box culverts at a proposed driveway, and providing rock slope protection at both ends of the box culverts and at the end of the improved section to reduce erosion.

The purpose of the Project is to specifically serve the City's projected growth areas in the southeastern portion of the City and to complement the surrounding industrial land uses. The City continues to experience population growth and the associated need for additional housing and employment in planned urbanizing areas. The Project is responsive to the City's development objectives and demands of the known industrial market while complying with the policies and programs of the current General Plan, including the need for industrial uses and associated employment.

b. No Action Alternative

The No Action Alternative would retain the 149-acre Project site in its current condition. The Phase 1 area of the site is, at present, largely developed for industrial use. Under the No Action Alternative, no further industrial development would occur, and the current conditions on the property would remain. At the time of City approval, the site was in active agricultural use. However, since City approvals, the northern portion of the site, the Phase 1 area, has been extensively modified and is at this time entirely developed but for the completion of tenant improvements. The eastern portion of this area has been mass graded and developed with a large industrial building; all proposed vehicular circulation and parking has been constructed, and the building and

grounds are being prepared for occupancy by the tenant. The detention basin in the western portion of this area has been constructed, and waste soil from this facility has been moved to and piled along the south bank of Weber Slough in the Phase 2 area between Logistics Drive and Austin Road. The Phase 2 southern portion of the site, south of the soil pile excavated from the detention basin, remains in relatively undisturbed condition and could conceivably continue in agricultural use.

Under the No Action Alternative, the southern portion of the proposed project would not be developed and would remain in its existing agricultural/open space use. Under this alternative, construction of the drainage outfall and widening improvements along Weber Slough would not occur. The proposed outfall is an essential improvement for completion of development of the portion of the site north of Weber Slough, which is designed to provide on-site detention of runoff but not to retain runoff long-term. Lack of the outfall may strand existing development north of Weber Slough without adequate storm drainage capacity, potentially resulting in periodic on-site flooding. Existing hydrologic conditions along Weber Slough would remain, including overtopping of its channel, and periodic flooding of this remaining undeveloped portion of the site.

Under the No Action Alternative, the onsite detention basin would not be constructed. This detention basin, servicing the entire project site, also attenuates flows into Weber Slough, and has been shown to provide post project flows that are equal to or less than pre project flows into Weber Slough. The improvements associated from the detention basin, as well as pump station and outfall would not be constructed. Additionally, the widening of the channel near Austin Road would not be constructed, which would continue to contribute to local flooding.

The financial objectives of the City and the community as approved in the Stockton General Plan and Sanchez Property Industrial Development project approvals would not be realized. There would be no further generation of employment opportunities in the industrial, commercial and construction sectors. There would be no further increase in the appraised value of the land and no increase in property taxes to assist funding the City's provision of general services, including the services necessary to serve the Project. The financial objectives of the applicant and other industrial users would only partially be met. Operation of industrial uses in the northern portion of the site would be complicated by lack of adequate storm drainage capacity.

While the No Action alternative would be environmentally preferable to the proposed action, the No Action alternative would not meet any project objectives and therefore is not a practicable alternative to the proposed action.

c. Non-Floodplain Alternative

The non-floodplain alternative involves the relocation of proposed development out of the designated floodplain. Since the entire Project site is located within a Special Flood Hazard Area, designated Zone A, Zone AE, and Zone AO, there are no on-site non-floodplain areas to which development could be moved.

For an alternative site to be considered practicable, it must be able to accommodate the same level of industrial development as the Sanchez property under the Proposed Action. Therefore, the proposed industrial development of approximately 149 acres would occur at the alternative site.

No such alternative sites exist. Industrial growth areas in the southern portion of the City, including the Project site, are predominantly located in the floodplain, and no sites suitable to accommodate the Project are located in the City. A City of Stockton study of site availability conducted in conjunction with the annexation of the project site found that industrial parcel availability was extremely limited; the largest such parcel was only 70 acres in size.

Consequently, there are no practicable non-floodplain alternatives for the Project because it is situated exactly where the growth is planned and necessary on land that is planned, designated, and zoned for the proposed land use.

d. Alternative Action Alternative

Construction of a storm water retention basin as an alternative to the proposed detention basin would also mitigate Project impacts to Weber Slough. A retention basin would not require an outfall into the Weber Slough because stored stormwater would be retained on-site and slowly percolate into native soils instead. A retention basin was initially a desirable design option, however geotechnical analysis of the existing soils at the basin site revealed poor soils and infiltration (clayey soils) rates up to a depth of approximately 25 feet below the existing ground surface. To compensate for these reduced infiltration rates, the theoretical retention basin bottom/percolation surface area, and thus the overall project footprint, would need to be significantly larger than the proposed detention basin bottom and top areas to achieve full percolation within the City of Stockton's prescribed 10-day requirement following the design storm. This would also carry a substantial impact on useable site area, building area, and come at a much larger cost.

Engineering evaluation by project engineer Kier and Wright indicated that development of a retention basin on the Project site would not be feasible. This conclusion is consistent with information in the project Environmental Impact Report (EIR), which notes that the clay soils underlying the Project site have slow permeability, and thus slow infiltration of runoff into the ground therefore this is not a practicable alternative to the proposed action.

3. If the action must be in the floodplain, advise the general public in the affected area and obtain their views and comments.

A public notice was conducted by USACE in accordance with EC 1165-2-220. USACE posted a 30-day public notice, with the comment period ending July 23, 2021, to the Sacramento District's website and emailed a notification to potentially interested parties, advising interested parties of the proposed action and soliciting information necessary to inform USACE's evaluation and review. One comment was received from the Central Valley Regional Water Quality Control Board (CVRWQCB). The CVRWQCB

identified water quality permits potentially required prior to construction of the proposed Sanchez Property Industrial Development. The CVRWCB issued a Section 401 Water Quality Certification (WDID#5B39CR00334) on October 05, 2020. This E.O. 11988 Analysis will be posted to the USACE Sacramento District website.

4. Identify beneficial and adverse impacts due to the action and any expected losses of natural and beneficial floodplain values. Where actions proposed to be located outside the base floodplain will affect the base floodplain, impacts resulting from these actions should also be identified.

Beneficial Impacts – The proposed action key anticipated benefits are summarized below:

- Generate employment opportunities in the industrial, commercial and construction sectors.
- Comply with natural resource management objectives and policies of the Stockton General Plan 2040, by siting new industrial development where impacts to natural resources are minimized.
- Comply with Stockton Municipal Code Chapter 15.44 Flood Damage Protection. Post project flows are equal to or less than the pre-project flows
- Increase the appraised value of the land, potentially increase property taxes that are expected to assist funding the City's provision of general services
- Be developed in an area furnished with existing development-ready infrastructure, including urban streets, potable water and wastewater systems.
- Improve the hydraulic capacity of Weber Slough downstream of the project during peak flows.

Adverse Impacts – Analysis of the proposed action identified potential adverse impacts to traffic and circulation, air quality (including climate change related to GHG emissions), and land use (including a loss of important agricultural lands). Adverse impacts associated with the proposed action are summarized below:

- Undeveloped agricultural lands will be committed to urban development.
- Air quality will be incrementally degraded. Project emissions will contribute towards the exceedance of ROG levels over the long-term operation of the project. On a cumulative basis, construction will adversely affect fugitive dust levels and construction pollutants and contribute to the non-attainment status of the County.
- Additional impermeable surfaces and increases in runoff will occur.
- New sources for potential surface water pollution will be introduced.
- Potential habitat will be lost with implementation of the project.
- Incremental increases in ambient noise levels will occur.
- Agricultural lands will be irretrievably lost.
- Additional traffic will be generated by site land uses, and incremental increases in local and regional congestion will occur.
- Increased levels of public services will be required to serve the proposed action.

- Water supplies for consumption, sewage treatment, and other utility resources will be permanently committed to the project site.
- The current rural agricultural character of the site will be committed to industrial uses. Light effects will incrementally affect the night sky.
- There is potential for disturbing potentially unknown historic and prehistoric cultural resources through site development and occupation.

Expected losses of natural and beneficial floodplain values – The proposed action would result in loss of natural and beneficial floodplain values due to a permanent change in land use. Impacts related to a change in land use include, but are not limited to, loss of habitat or degradation of adjacent habitats, an increase in impermeable surfaces which alters natural hydrology and reduces groundwater recharge, and an increase in conflicts with incompatible adjacent land uses. The proposed action would also result in impacts to the natural and beneficial floodplain values due to construction related impacts, including, but not limited to potential degradation of water and air quality.

5. If the action is likely to induce development in the base floodplain, determine if a practicable non-floodplain alternative for the development exists.

The proposed action would result in development of a 149-acre site which is located within the base floodplain. Furthermore, construction of the stormwater outfall and development of the 149-site would also likely encourage additional development with the surrounding floodplain. The analysis in step 2 above demonstrates that a non-floodplain alternative is not practicable.

6. Determine viable methods to minimize any adverse impact of the action including any likely induced development for which there is no practicable alternative and methods to restore and preserve the natural and beneficial floodplain values. This should include reevaluation of the "no action" alternative.

Construction of the Detention Basin and Outfall - The construction of the stormwater detention basin and outfall to Weber Slough as a part of the Project is the most responsive plan to minimize drainage impacts from the project site and is consistent with the approved Project Description, City conditions of approval, and CEQA mitigation measures for the proposed Project. The stormwater detention basin will provide temporary storage for all runoff generated on the site, minimizing the potential size of the outfall and avoiding significant increases in outflow to Weber Slough. Rock slope protection as an outfall mattress provides protection from scour, while maintaining a semi-natural state using local rock for materials. The outfall is sized for the proposed Sanchez Property development only; therefore, it would not induce unapproved development within the floodplain.

Minimum Floor Elevations for Structures - The proposed building footprint(s) are within the Zone AO (one-foot depth) area. The proposed building finished floor elevation(s) will be elevated by fill to 2 feet above the highest adjacent 100-year Zone

AO water surface elevation per the City of Stockton Municipal Code Section 15.44.150(C)(1). The Stockton Municipal Code is more stringent than both the National Flood Insurance Program (NFIP) and ASCE 24, referenced in the 2019 California Building Code regulations and in this report.

Other Avoidance or Minimization Measures - Proposed widening of Weber Slough would disturb approximately 550 lineal feet of the Weber Slough channel. This work would be subject to State and Federal mitigation requirements imposed as permit conditions by the USACE and Central Valley Flood Protection Board. Work in Weber Slough will be undertaken under dry or low-flow conditions to minimize potential for downstream sedimentation. Standard construction Best Management Practices will be employed to minimize dust, erosion, and potential sedimentation, including compaction of soil, use of water trucks, and re-seeding disturbed areas. Other than the installation of a new box culvert under the proposed Austin Road driveway, and installation of rock slope protection on portions of the bed and banks of a short section of Weber Slough being blanketed by rock slope protection, post-construction conditions along Weber Slough are expected to be comparable to existing conditions.

Potential biological impacts of the project as a whole, including potential effects on special-status species, will be avoided, reduced, or mitigated by Project participation in the San Joaquin County Multi-Species Habitat Conservation Open Space Plan, a federally approved Habitat Conservation Plan that requires fee payments to support habitat conservation and requires projects to undertake specific Incidental Take Minimization Measures to reduce potential impacts on special-status species. All practicable means to avoid, minimize, and mitigate potential adverse impacts on environmental resources were defined in the Project EIR and are incorporated into the Project through the City of Stockton's adopted Mitigation Monitoring and Reporting Program (MMRP).

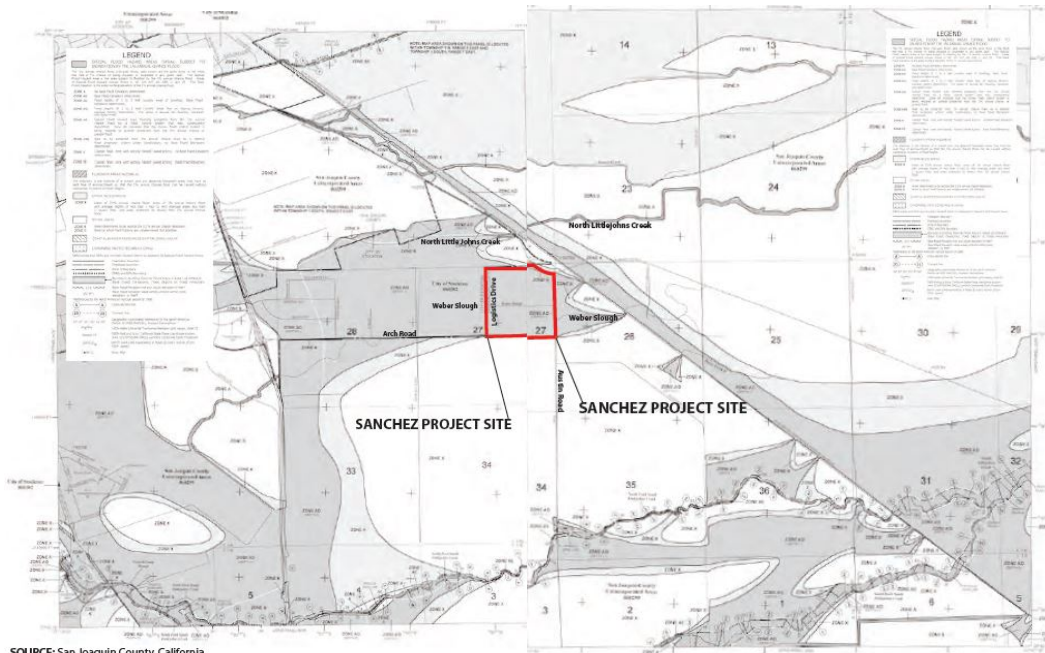
Reconsideration of the No Action Alternative - The No action alternative would avoid project related impacts; however, the No Action alternative fails to meet project objectives and furthermore, the No Action alternative would result in financial losses to the requester and lost opportunities to the region; therefore, the No Action alternative is not practicable.

7. If the final determination is made that no practicable alternative exists to locating the action in the floodplain, advise the general public in the affected area of the findings.

Following completion of the Section 408 review, the E.O. 11988 final determination will be made available to the public on the Sacramento District Public noticing website.

8. Issue findings

USACE has prepared this EO 11988 analysis in support of a Section 408 Permission review of request #19552 submitted by the CVFPB. This analysis was conducted based on information provided by the CVPFB and representatives of ET Stockton Owner LLC. The project site is within an area of southeast Stockton and adjoining unincorporated land that has been in transition from agricultural operations to urban industrial development. The Project will serve the City's projected growth areas in the southeastern portion of the City and complement the surrounding industrial land uses while complying with the policies and programs of the current General Plan, including the need for industrial uses and associated employment. There is no other location in the City or County that would better meet the goals and purposes of the proposed action. The proposed action conforms to the City of Stockton's General Plan which includes provisions to comply with applicable State and local floodplain protection standards. In addition, the proposed action incorporates avoidance and minimization measures to minimize the impacts of floods on human safety, health, and welfare, as well as impacts to the natural and beneficial values of the base floodplain. Based on the analysis above there is no practicable alternative to the proposed action.



SOURCE: San Joaquin County, California
Flood Insurance Rate Map, Panel 490 of 950.

Figure 4A
FLOOD INSURANCE RATE MAP,
PANEL 06077C0490F

Figure 1. FEMA Flood Insurance Rate Map – Approximate Project Area (Excerpts from FIRM Panel 06077C0490F & 06077C0495F.



Figure 2. Proposed alterations overlaid onto the FEMA base floodplain map.