East San Joaquin Water Quality Coalition
Sediment Discharge and Erosion Assessment Report
Proximity to Major Waterbodies

March 24, 2016

Introduction
The East San Joaquin Water Quality Coalition (ESJWQC or Coalition) received a conditional approval of the Sediment Discharge and Erosion Assessment Report (SDEAR) on July 24, 2015. In response to that conditional approval, on December 1, 2015 the Coalition submitted to the Central Valley Regional Water Quality Control Board (Regional Water Board) a work plan with a timeline to address proximity to surface waters. This Work Plan was conditionally approved on December 24, 2015.

The goal of the work plan was to identify parcels that were required to complete the Sediment and Erosion Control Plan (SECP) based on their proximity to surface water. Despite their proximity, many of these parcels are not able to discharge sediment due to several factors including: levees between the parcel and the waterbody, the parcel is below the elevation of the waterbody, and/or the presence of a buffer of natural riparian vegetation between the farmed land and the waterbody. Consequently, parcels identified as being adjacent to a waterbody but meeting one of the following criteria will not require a SECP:

1. The parcel is below the level of the adjacent surface water body or a hydraulic barrier (berm, levee, or elevated roadway) is between the surface water and the parcel.
2. The parcel has riparian vegetation that would prevent sediment discharges or erosion.

Addressing Proximity to Major Waterbodies
The Coalition identified parcels that are adjacent to a major waterbody (within 200 yards of a major river) and determined which parcels are enrolled in the ESJWQC. The major waterbodies evaluated include the San Joaquin River, Stanislaus River, Merced River, Chowchilla River, Tuolumne River and Fresno River. Figure 1 includes a map of the ESJWQC area and the proximity analysis including an assessment of which areas are within proximity of the rivers and not enrolled in the Coalition compared to member parcels already mailed SECPs. Figures 2-8 include zoomed in areas of the parcels in proximity of the major waterbodies.

In December 2015 the Coalition mailed SECPs to members with parcels that have the potential to discharge sediment based on 1) the results of the Revised Universal Soil Loss Equation (potential to discharge sediment at greater than 5 tons/acre/year during rainfall runoff events) analysis performed by the Coalition, 2) self-identified through Farm Evaluations, and 3) failure to complete a Farm Evaluation.
Of the member parcels that are enrolled in the ESJWQC and are adjacent to a major waterbody, 135 members (211 parcels) have not been notified that they need to complete a SECP. For these remaining parcels, the Coalition evaluated the Farm Evaluation responses and found that 146 parcels are associated with at least one of the following sediment and erosion control measures are in place resulting in no discharge of sediment:

1. Berms are constructed at low ends of fields to capture runoff and trap sediment.
2. No storm drainage due to field or soil conditions.
3. Field is lower than surrounding terrain.

The Coalition attempted to determine if conditions 1 – 3 above applied to each of the parcels that self-identified that the conditions are applicable. It was not possible using aerial photography or GIS land use layers to definitively confirm that any or all of the three control measures identified above were in place and sufficient to prevent discharge to surface waters.

The Coalition will mail postcards to members identified in the proximity analysis who are implementing at least one of the above sediment and erosion control measures. The member will be asked to confirm that their parcel is below the level of the adjacent surface water body, or that a hydraulic barrier (berm, levee, or elevated roadway) is located between the surface water and the parcel. If the member indicates that one or more of the conditions apply and provides some documentation, they will not need to complete an SECP. If they do not indicate that the conditions apply, they will be mailed an SECP which will need to be completed by February 2017.

For the remaining parcels, the Coalition will mail postcards to members inquiring if riparian vegetation prohibits sediment discharges or erosion. Riparian vegetation will be defined as woody vegetation including cottonwood trees, elderberries, eucalyptus, oaks, willows and woody vines. The riparian vegetation will need to be at least 35 feet wide1 and be present throughout the year. If the member indicates that there is riparian vegetation between their parcel and the river, they will not need to fill out an SECP; if they do not indicate that this is true, an SECP will be mailed to them and will need to be completed by February 2017.

Mailings will occur during the summer of 2016 to allow for the completion of SECPs by February 2017.

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1 NRCS Conservation Practice Standard Code 319 references a minimum of 35 feet to be measured horizontally on a line perpendicular to the watercourse or water body (https://extension.umd.edu/sites/default/files/_docs/programs/riparianbuffers/http___efotg.sc_.egov_.usda_.gov __references_public_MN_391mn.pdf). USDA Forest Service also references 25-30 feet of buffer for sediment settling (http://nac.unl.edu/documents/agroforestrynotes/an04rfb03.pdf).
Figure 1. Parcels within proximity to major waterbodies. Parcels identified as Proximity Analysis are enrolled in the ESJWQC but have not been previously identified as requiring an SECP. Zoomed in portions of the map are included in Figures 2-8.
Figure 2. STANISLAUS RIVER - Parcels within proximity to major waterbodies. Parcels identified as Proximity Analysis are enrolled in the ESJWQC but have not been previously identified as requiring an SECP.
Figure 3. TUOLUMNE RIVER - Parcels within proximity to major waterbodies. Parcels identified as Proximity Analysis are enrolled in the ESJWQC but have not been previously identified as requiring an SECP.
Figure 4. MERCED RIVER - Parcels within proximity to major waterbodies. Parcels identified as Proximity Analysis are enrolled in the ESJWQC but have not been previously identified as requiring an SECP.
Figure 5. SAN JOAQUIN RIVER NEAR MERCEDE- Parcels within proximity to major waterbodies. Parcels identified as Proximity Analysis are enrolled in the ESJWQC but have not been previously identified as requiring an SECP.
Figure 6. CHOWCHILLA RIVER - Parcels within proximity to major waterbodies. Parcels identified as Proximity Analysis are enrolled in the ESJWQC but have not been previously identified as requiring an SECP.
Figure 7. FRESNO RIVER - Parcels within proximity to major waterbodies. Parcels identified as Proximity Analysis are enrolled in the ESJWQC but have not been previously identified as requiring an SECP.
Figure 8. SAN JOAQUIN RIVER NEAR FRESNO: Parcels within proximity to major waterbodies. Parcels identified as Proximity Analysis are enrolled in the ESJWQC but have not been previously identified as requiring an SECP.