Midpeninsula Regional Open Space District

Memorandum

DATE: September 11, 2019

MEMO TO: Board of Directors

THROUGH: Ana Ruiz, General Manager

FROM: Aaron Hébert, Water Resources Specialist

SUBJECT: Pescadero-Butano Watershed Total Maximum Daily Load Regulations for Sediment Impairment

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SUMMARY

On December 11, 2018 the San Francisco Bay Regional Water Quality Control Board (RWQCB) adopted a Total Maximum Daily Load (TMDL) for sediment in the Pescadero-Butano Watershed that went into effect on May 21, 2019. Increased sedimentation has caused impaired habitat for steelhead and coho salmon, and contributes to flooding in the town of Pescadero. The TMDL establishes regulations on landowners that require sediment assessment and different levels of mitigation depending on the size of the property and type of land use. These regulations are to be phased in over time and effect Midpeninsula Regional Open Space District's (District) current land management in the upper Pescadero-Butano watershed (i.e. Skyline Ridge and Long Ridge Open Space Preserves (OSP)) as well as any future potential acquisitions (e.g. Cloverdale). District staff's preliminary analysis of the regulations suggests that the District will meet or exceed the regulatory targets on existing lands, but certain ongoing/planned efforts may need to be accelerated in order to comply. Some uncertainty exists as to how regulations may be enforced by RWQCB staff and how community-based watershed groups may negotiate or propose TMDL plan compliance with the RWQCB.

BACKGROUND

The Pescadero-Butano watershed was first listed as an impaired waterbody for sediment in 1998. Conditions did not improve in the decade that followed. Subsequently in 2013, RWQCB staff began studying the extent of the problem in advance of a TMDL adoption. Since 1998, steelhead and coho populations broadly declined across the region. In 2013, District staff provided the RWQCB with existing technical studies on District lands. In January 2018, the draft TMDL was released for public comment and District staff submitted comments on the TMDL adoption. In December 2018, the RWQCB adopted the TMDL. The TMDL *does not* include the Pescadero-Butano marsh and estuary and thus does not directly regulate sediment management in the marsh that is associated with local flooding. However, upstream sedimentation effects the rate of deposition of sediment in the marsh.

DISCUSSION

In the Pescadero-Butano watershed, the District currently owns approximately 3,800 acres of land in fee, holds another 400 acres under easement (Attachment 1), and may potentially manage additional lands in the future (a 1,500 acre portion of the POST Cloverdale property is within this watershed). In 2005, the District contracted with Pacific Watershed Associates (PWA) to evaluate all 25.6 miles of roads and 9.8 miles of trails onDistrict lands within the watershed for sediment delivery potential (i.e. Skyline Ridge and Long Ridge OSPs). Staff implemented a number of the high priority restoration and sediment reduction projects in the Pescadero-Butano Watershed identified in that evaluation, including routine maintenance projects (e.g. culvert replacements) as well as a large restoration project at Big Dipper Ranch in Skyline Ridge OSP that was completed in 2011 (R-11-64).

The RWQCB's principal regulatory monitoring mechanism for stream sediment impacts in the Pescadero-Butano TMDL is the "V-Star" method. The District is using the same method to monitor the effectiveness of watershed restoration at El Corte de Madera OSP in the San Gregorio watershed. District and consulting hydrologists from Balance Hydrologics have shared data and conducted field training sessions with RWQCB staff on the V-Star method to ensure consistent techniques are used across watersheds and to understand the best practices for interpreting the data.

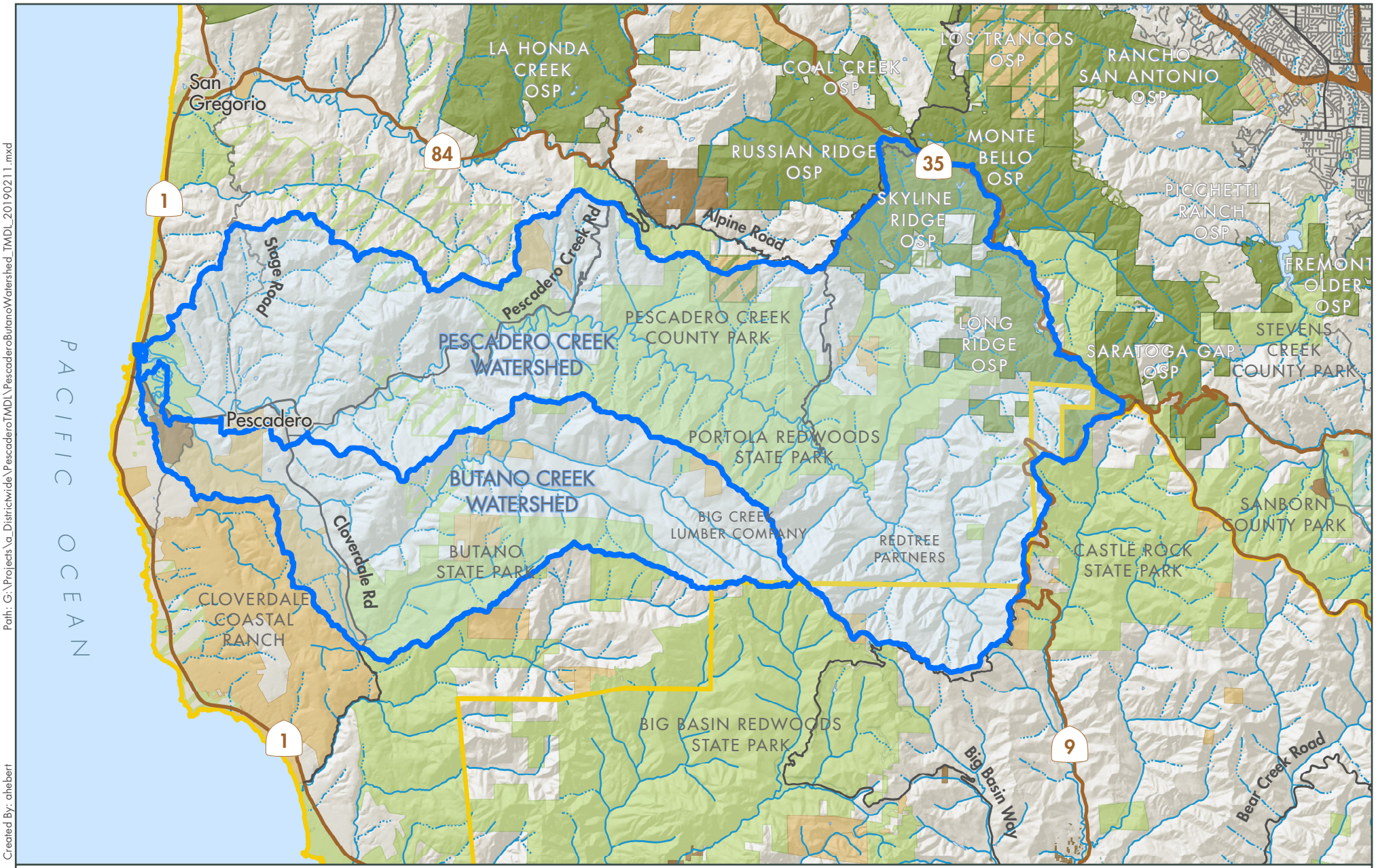
NEXT STEPS

The 2005 sediment assessment on District lands will need to be updated to reflect the 14 years of subsequent change (to 2019) and to incorporate new lands acquired since 2005. The sediment inventory will identify and prioritize future work efforts and associated implementation costs. Identifying project sites early in the TMDL regulatory process may help the District seek grant funding for high cost projects. The FY2019-20 budget includes $15,000 for some preliminary review of past project sites.

This information will be incorporated into future Action Plan and budgeting processes. In 2005, PWA estimated implementation of sediment reduction work would be $860,000 in direct labor costs. While some work has been implemented since then, those costs did not include CEQA, biological monitoring, permitting, and are not escalated to 2019 dollars. District staff's initial estimate is between $1.5M and $2.0M of potential projects implemented over a 10-year period. Smaller, routine projects may be conducted by District Land & Facilities Department staff whereas larger restoration projects may be contracted out.

RWQCB staff are also working on a sediment TMDL plan for the San Gregorio watershed. Based on the Pescadero-Butano TMDL, District staff anticipates the need for some increased sediment reduction projects in the San Gregorio watershed as well as review of land management practices in sensitive areas to ensure best practices are employed that reduce sediment input into the system.

Attachment 1: Pescadero-Butano Watershed Map



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Created By: ahebert

Pescadero-Butano Watershed TMDL Map

- MROSD Preserves
- Other Protected Lands
- Private Property
- Watershed
- Land Trust
- Other Public Agency
- District Boundary

Midpeninsula Regional Open Space District
(MROSD)
August 2019

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While the District strives to use the best available digital data, these data do not represent a legal survey and are merely a graphic illustration of geographic features.