

Regional Water Quality Control Board
North Coast Region

Executive Officer's Summary Report
9:00 A.M., Thursday, May 2, 2013
Wharfinger Building
Eureka, CA

- ITEM: 11
- SUBJECT: Update on Upper Elk River Sediment TMDL (*Adona White*)
- BOARD ACTION: This is an informational item on the recent developments related to the Upper Elk River Sediment Total Maximum Daily Load (TMDL). Staff will be available following the presentation to participate in a discussion of the information and answer any questions members of the Board may have.
- BACKGROUND: Staff of the North Coast Regional Water Quality Control Board (Regional Water Board) initiated the development of a sediment TMDL for the Elk River watershed in 2002 under direction from the Board to identify and assess the sources of sediment impairment impacting beneficial uses, exceeding water quality objectives, and causing nuisance flooding. In an information item before the Regional Water Board in March 2012, staff described the delineation of Elk River into three water bodies, including Upper Elk River, Lower Elk River/Martin Slough, and Upper Little South Fork Elk River. The focus of this information item is the technical TMDL assessing sediment impairment in the Upper Elk River which is specifically related to discharges of fine sediment from industrial timber operations in the Upper Elk River watershed. Staff will propose that sediment impairment in the Lower Elk River/Martin Slough be addressed through the City of Eureka and County of Humboldt's stormwater program and the statewide grazing program, once those programs are updated/adopted. Staff has identified the Upper Little South Fork Elk River as a reference stream and will propose that it be removed from the 303(d) List of Impaired Waterbodies.
- Also in March of 2012, staff presented the Introduction and Watershed Overview, Problem Statement (released to the public May 2009), and Sediment Source Analysis 1955-2003 (released to the public May 2011) chapters of the Technical Sediment TMDL for the Upper Elk River. Additionally, staff described the need for evaluation of feasible instream recovery actions to address the instream deposits located in the low gradient reaches around the confluence of North and South Forks Elk River.

DISCUSSION:

Since that time, staff has completed a draft of the *Staff Report to Support the Technical Sediment TMDL for the Upper Elk River* and submitted it for external scientific peer review (Peer Review Draft Staff Report). Further, in collaboration with a Technical Advisory Committee, staff has developed an Elk River Recovery Assessment strategy and applied to the State Water Resources Control Board (State Water Board) for funds from the Cleanup and Abatement Account (CAA) to assist in the assessment of instream stored sediment and piloting of sediment remediation techniques. This information item focuses on developments since the March 2012 update.

Technical Sediment TMDL for the Upper Elk River

The Peer Review Draft Staff Report includes the following chapters:

1. *Introduction* – Includes the delineation of the Upper Elk River watershed and the regulatory framework/water quality standards to be addressed by the TMDL.
2. *Overview of the Upper Elk River Waterbody* – Includes a description of the physical setting of Upper Elk River watershed, including hydrology, geology, geomorphology, and vegetation, as well as a description of land use history and ownership and an overview of the Regional Water Board's regulatory and non-regulatory actions in Upper Elk River.
3. *Problem Statement* – Includes an overview of beneficial use impairments, sediment monitoring efforts and resulting data and their analysis as they relate to altered channel and floodplain morphology and water quality conditions affecting salmonid habitat. Updates since the 2009 public draft include evaluation of cross-section and other habitat data collected since 2006.
4. *Sediment Source Analysis* – Describes the numerous data sources evaluated, estimates of sediment loading from natural hillslope sources (presented as a long-term average) and management related hillslope sources for seven analysis time periods (covering the period from 1955-2011). Updates since the 2011 public draft include evaluation of management-related loading for the 2004-2011 time period and the estimated magnitude of instream deposits stored in depositional reaches around the confluence of North and South Forks Elk River.
5. *Loading Capacity and Allocations* – Includes a linkage analysis considering loading capacities developed for other north coast sediment TMDLs, loading to attain the turbidity objective, and loading to initiate scour of instream deposits. The Technical TMDL establishes the loading capacity necessary to attain the turbidity objective (including a margin of safety) and describes sediment load reductions and a proposed schedule to address management-related

hillslope sources and instream deposits necessary to attain the TMDL.

6. *Numeric Targets* – Targets describe goal conditions for hillslope and instream parameters as a measure of conformance with load allocations, attainment of water quality objectives, protection of beneficial uses, and abatement and prevention of nuisance flooding.
7. *Implementation Framework* – This chapter does not include a TMDL Action Plan, but provides an overview of the regulatory and non-regulatory actions potentially necessary for the control and monitoring of sediment sources and instream stored sediment in the Upper Elk River watershed. The Implementation Framework highlights actions for five different stakeholder groups, including the Regional Water Board, Humboldt Redwood Company, Green Diamond Resource Company, Bureau of Land Management, and Residents/Water Users.

Peer Review

Regional Water Board Staff worked with staff of the Cal/EPA Scientific Peer Review Program¹ to request external scientific peer reviewers to evaluate if the assertions, findings, and conclusions that constitute the scientific portions of the Peer Review Draft Staff Report are based upon sound scientific knowledge, methods, and practices. Cal/EPA staff, in coordination with the University of California, identified four peer reviewers with collective expertise in slope stability, hydrology and geomorphology, water quality, and fisheries biology. Scientific peer reviewers received the Peer Review Draft Staff Report on March 4, 2013. Their comments were due on April 5, 2013.

Staff is in the process of reviewing comments submitted by the scientific peer reviewers and revising the staff report, as necessary, for release as a public review draft. In the presentation to the Regional Water Board, staff will provide an overview of the Peer Review Draft Staff Report and highlight key comments by the peer reviewers.

TMDL Adoption Process

Staff is currently evaluating a number of different strategies for approval and implementation of the Upper Elk River Sediment TMDL. Staff will discuss those alternatives for the Board's consideration.

Elk River Recovery Assessment and Sediment Remediation

¹ The peer review web site can be accessed at:
http://www.waterboards.ca.gov/water_issues/programs/peer_review/

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Additionally, on August 23, 2012, the Regional Water Board adopted Resolution R1-2012-0079 supporting a request for funding from the State Water Board's CAA to support the Elk River Recovery Assessment, designed to identify feasible recovery actions for the instream deposits which continue to impair beneficial uses and contribute to nuisance flooding of Upper Elk River residents. Staff, Regional Water Board members, and CalTrout have been working with State Water Board staff on the CAA funding request and have expanded the request to include pilot implementation projects. The State Water Board is scheduled to consider the CAA request during their May 7, 2013 Board meeting. Should the funding request be granted, Regional Water Board staff would establish a contract (or grant) with CalTrout to implement the identified scope of work and lead the recovery assessment. With funding in place, data collection could begin this summer (2013).

ISSUES: Information only.

SIGNIFICANT
CHANGES: Not applicable.

RECOMMENDATION: None at this time.

SUPPORTING
DOCUMENTS: None.