

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF FINANCIAL ASSISTANCE
MAY 7, 2013**

ITEM 3

SUBJECT

CONSIDERATION OF A RESOLUTION TO ALLOCATE \$475,030 FROM THE CLEANUP AND ABATEMENT ACCOUNT (CAA) TO THE NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD (NORTH COAST WATER BOARD) FOR THE ELK RIVER RECOVERY ASSESSMENT AND PILOT PROJECT FOR SEDIMENT REMEDIATION IN THE ELK RIVER WATERSHED (PROJECT)

DISCUSSION

The North Coast Water Board is requesting a total of \$475,030 from the CAA to conduct the Elk River Recovery Assessment (Recovery Assessment) and Pilot Project which will lead to sediment remediation in the Elk River Watershed. The Recovery Assessment portion will (1) conduct a system-wide analysis of sediment; (2) assess a suite of sediment removal and restoration activities; and (3) develop an implementation framework that promotes recovery of ecosystem functions and beneficial uses in Elk River, including domestic drinking water supplies, recreation, aquatic habitat and the prevention of nuisance flooding conditions. The Pilot Project (mechanical removal of sediment) will demonstrate the feasibility of sediment removal, assess the transport and disposal of waste sediment, evaluate realistic implementation costs, test the system response and longevity to sediment removal, and interpret beneficial use attainment resulting from the project.

Accelerated timber harvest and road construction activities, beginning in 1986, followed by large storm events in 1995–1998, caused unprecedented discharges of sediment and organic debris and resulted in major geomorphic changes in the Middle Reach of Elk River, near the confluence of North Fork and South Fork. Residents of these watersheds have historically used surface water for domestic water supply, and the sedimentation has impaired the ability of the residents to use the water for domestic beneficial use. In addition, sedimentation has degraded salmonid habitat in the stream channel by filling pools and burying spawning gravels and large woody debris. There has also been an increase in the frequency and magnitude of flooding, affecting the safety and livelihood of residents in the Middle Reach of Elk River.

Records indicate that stored instream deposits have reduced channel conveyance capacity in the upper Mainstem Elk River by 60 percent, and the North Fork Elk River now overtops its banks an average of four times per year. The instream deposits are largely a result of discharges of waste from non-point source activities (timber harvest activities). The impacted geomorphic and hydraulic conditions have resulted in lower conveyance capacity, lower flow velocities, and ongoing sediment deposition that exacerbated nuisance flooding conditions in the Middle Reach of Elk River. The Elk River was first included on the Clean Water Act Section 303(d) List of impaired waters in 1998 on the basis of excessive sedimentation.

In 2004, the North Coast Water Board received a petition from 64 affected Elk River residents requesting cleanup (dredging) of the instream sediment deposits to abate the nuisance flooding conditions and recover beneficial uses of water. The North Coast Water Board rejected the petition, citing the need for a lead entity and a feasibility study prior to initiating a major channel modification effort. Since then, California Trout (CalTrout), a non-profit organization, has stepped forward as a viable lead entity. The Elk River Recovery Assessment, which will constitute a feasibility study, is intended to result in a peer-reviewed sediment reduction implementation framework that is scientifically defensible and has the best prospect of leading to recovery of beneficial uses.

The primary landowner responsible for the source of legacy pollutants, Pacific Lumber Company, is no longer in business. The Humboldt Redwood Company (HRC) assumed the liability of Pacific Lumber Company, including accrued penalties for failure to report required information about sediment sources in Elk River. To that end, HRC paid \$330,000 into the CAA in 2009-2010. At the time, the North Coast Water Board attempted to divert a portion of these funds toward a Supplemental Environmental Project (SEP) – the Elk River Recovery Assessment. However, the timing of the matching funds did not result in a SEP and therefore, the full balance of penalties went to the CAA.

The North Coast Water Board previously received \$600,204 from the CAA to support activities necessary to develop and implement water quality attainment strategies to remediate the severe sediment load impairment to Freshwater Creek, Jordan Creek, Stitz Creek, Bear Creek, and Elk River in Humboldt County through [Resolution 2002-0139](#). The money was spent primarily on the development of the remote sensing data necessary to assess erosion and sedimentation in those affected basins.

In June 2007, the Redwood Community Action Agency (RCAA) received \$1,376,933 from the State Water Board 2005-2006 Consolidated Grants - Prop 50 Coastal Nonpoint Source Pollution Control Program to improve water quality and Salmonid Habitat in Elk River, Freshwater Creek and Humboldt Bay. The money has been used for restoration work in Martin Slough (not part of the Upper Elk River watershed), landowner interviews used to establish the extent of nuisance flooding over time, and the piloting of the recovery assessment tool, the full-scale application of which is the subject of this funding request.

The anticipated Project duration is approximately 2.5 years and will consist of documenting existing channel morphology and sediment conditions reach-wide; developing, calibrating, and validating a reach-wide hydrodynamic and sediment transport model; conducting analyses to assess the trajectory of the system under (1) existing sediment loads, (2) reduced sediment loads, and (3) a suite of broad recovery actions in combination with reduced sediment loads; establishing a robust monitoring network to track long-term system recovery; prioritizing a suite of direct recovery actions independently and in conjunction with sediment reduction measures already being designed and/or implemented; and obtaining peer review from a pre-established Technical Advisory Committee.

The Recovery Assessment will provide the basis for the design of three moderate-scale pilot projects to be implemented within the middle reach of the Elk River. The Implementation projects will be designed to test key assumptions and predictions of the hydrodynamic and sediment analysis, as well as examine several proposed treatment approaches. Three pilot projects, Sediment Retention, Mechanical Removal and Riparian Removal, are proposed for implementation and will be refined and designed during the recovery assessment. One of the pilot projects is included in the funding request to the State Water Board's CAA (Mechanical

Removal). The other two will be in the request for funding from the Integrated Regional Water Management Plan (IRWMP) and/or the Fisheries Restoration Grant Program (FRGP). The Mechanical Removal Pilot project will design and implement a project to remove approximately 4,000 cubic yards of in-channel and floodplain sediment deposits, then re-contour the channel, banks, and floodplain to enhance flood conveyance and salmonid habitat (in-channel and off-channel rearing).

The requested CAA funding for this project will be used in conjunction with matching funds from Humboldt Redwood Company, State Coastal Conservancy and Redwood Community Action Agency. The total project funding for the Recovery Assessment and Mechanical Removal Pilot project is \$697,040. Additional funding will be necessary in order to implement the plan that will result from this project.

The State Water Board established Program Preferences for CAA funds based on statewide priorities and Strategic Goals outlined in the Strategic Plan Update 2008-2012. The Project meets the following CAA program preferences:

Preference # 3: Cleanup and/or abatement of 2006-listed water bodies that will help to implement a Total Maximum Daily Load (TMDL). The project will result in strategies that will help implement the Draft TMDL for sediment in the Elk River watershed which is currently under development.

Preference # 4: Cleanup and/or abatement of non-point source legacy pollutant (i.e., Stormwater) when the source(s) of the pollution have been mitigated. The three pilot projects constitute the cleanup element of the project. Results from the three pilot projects will aid in the development of the best implementation strategy to address the water quality problem.

Preference # 8: Completion of a Study/Plan and/or Monitoring addressing significant statewide water quality problems.

The North Coast Water Board adopted [Resolution No. R1-2012-0079](#) in August 2012 to request that the State Water Board approve funding from the CAA for the Project.

The requested allocation is consistent with the purposes of Water Code Section 13442. Section 13442 provides that the State Water Board may order monies to be paid from the CAA to a public agency and certain not-for-profit organizations and tribal governments that serve disadvantaged communities and have the authority to clean up or abate the effects of a waste in order "to assist it in cleaning up the waste or abating its effects on the waters of the state."

POLICY ISSUE

Should the State Water Board:

1. Approve funding for \$475,030 from the CAA to the Project?
2. Approve the funding with the expectation that if the agreement has not been executed by November 21, 2013, the Executive Director will bring this item back to the State Water Board in December 2013 for possible rescission of funding?

3. Make the funds available until May 30, 2016, and revert any unexpended funds to the CAA as of August 30, 2016, unless the Deputy Director or Assistant Deputy Director of the Division of Financial Assistance authorizes an extension?

FISCAL IMPACT

The current uncommitted CAA balance is estimated to be no less than \$8 million.

REGIONAL BOARD IMPACT

Yes, the North Coast Water Board will oversee the project as Contract Manager; though CalTrout will take the lead as Project Manager. Staff of the North Coast Water Board will continue to participate on the Technical Advisory Committee during the course of this project, providing review and guidance on work products.

The issues associated with erosion and sedimentation resulting from Pacific Lumber Company's logging operations in the Elk River watershed have required significant staff time over the years. The North Coast Water Board anticipates that the funding of this project will result in the development of the mechanisms necessary to remediate this long-standing environmental and public health problem.

STAFF RECOMMENDATION

The State Water Board should adopt the proposed Resolution.

State Water Board action on this item will assist the Water Boards in reaching Goal 1 of the Strategic Plan Update: 2008-2012, implement strategies to fully support the beneficial uses for all 2006-listed water bodies by 2030. It will also assist the Water Boards in reaching Goal 3 of the Strategic Plan Update: 2008-2012, increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year by 2015, and ensure adequate flows for fish and wildlife habitat. It will also assist the Water Boards in reaching Goal 4 of the Strategic Plan Update: 2008-2012, to comprehensively address water quality protection and restoration, and the relationship between water supply and water quality, and describe the connections between water quality, water quantity, and climate change, throughout California's water planning processes.

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STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2013-

ALLOCATE \$475,030 FROM THE CLEANUP AND ABATEMENT ACCOUNT (CAA) TO THE NORTH COAST REGIONAL WATER QUALITY CONTROL BOARD (NORTH COAST WATER BOARD) FOR THE ELK RIVER RECOVERY ASSESSMENT AND PILOT PROJECT FOR SEDIMENT REMEDIATION IN THE ELK RIVER WATERSHED (PROJECT)

WHEREAS:

1. The North Coast Water Board is requesting a total of \$475,030 from the CAA to fund the Project;
2. Accelerated timber harvest and road construction activities, beginning in 1986, followed by large storm events in 1995–1998, caused unprecedented discharges of sediment and organic debris and resulted in major geomorphic changes in the Middle Reach of Elk River, near the confluence of North Fork and South Fork;
3. In 1998, mechanical removal of instream sediment deposits was considered too environmentally damaging by North Coast Water Board staff. However, the impacted geomorphic and hydraulic conditions have resulted in lower conveyance capacity, lower flow velocities, and ongoing sediment deposition that exacerbated nuisance flooding conditions in the Middle Reach of Elk River. Residents now experience flooding conditions on an average of four times per year which constitutes “nuisance” under Porter-Cologne. The Elk River was first included on the Clean Water Act Section 303(d) List of impaired waters in 1998 on the basis of excessive sedimentation;
4. In 2004, the North Coast Water Board received a petition from 64 affected Elk River residents requesting cleanup (dredging) of the instream sediment deposits to abate the nuisance flooding conditions and recover beneficial uses of water, including domestic water supplies, recreation, and aquatic habitat. The North Coast Water Board rejected the petition citing the need for a lead entity and a feasibility study prior to initiating a major channel modification effort. The Elk River Recovery Assessment is the requested feasibility study. California Trout (CalTrout), a non-profit organization, is the identified lead entity;
5. The primary landowner responsible for the source of legacy pollutants, Pacific Lumber Company, is no longer in business;
6. The Humboldt Redwood Company (HRC) assumed the liability of Pacific Lumber Company, including accrued penalties for failure to report required information about sediment sources in Elk River. HRC paid \$330,000 into the CAA fund in 2009-2010;

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7. The North Coast Water Board previously received \$600,204 ([Resolution 2002-0139](#)) from the CAA to support activities necessary to develop and implement water quality attainment strategies to remediate the severe sediment load impairment to Freshwater Creek, Jordan Creek, Stitz Creek, Bear Creek, and Elk River in Humboldt County;
8. The Redwood Community Action Agency (RCAA) received \$1,376,933 from the State Water Board 2005-2006 Consolidated Grants - Prop 50 Coastal Nonpoint Source Pollution Control Program in June 2007 to improve water quality and Salmonid Habitat in Elk River, Freshwater Creek and Humboldt Bay;
9. The CAA funds will be used to conduct a system-wide analysis of sediment; assess a suite of sediment removal and restoration activities; and develop an implementation framework that promotes recovery of ecosystem functions and beneficial uses in Elk River;
10. The CAA funds will also be used to conduct a Mechanical Sediment removal pilot project to demonstrate the feasibility of sediment removal, assess the transport and disposal of waste sediment, evaluate realistic implementation costs, test the system response and longevity to sediment removal, and interpret beneficial use attainment resulting from the project;
11. The requested CAA funding for this project will be used in conjunction with matching funds from Humboldt Redwood Company, State Coastal Conservancy and Redwood Community Action Agency for a total funding for the Recovery Assessment and Mechanical Removal Pilot project of \$697,040;
12. The Project is intended to result in a peer-reviewed sediment reduction implementation framework that is scientifically defensible and has the best prospect of leading to recovery of beneficial uses;
13. The North Coast Water Board adopted [Resolution No. R1-2012-0079](#) in August 2012 to request that the State Water Board approve funding from the CAA for the Project; and
14. The requested allocation is consistent with the purposes of the Water Code section 13442. Water Code section 13442 provides that the State Water Resources Control Board (State Water Board) may order monies to be paid from CAA to a public agency with the authority to cleanup or abate the effects of a waste in order "to assist it in cleaning up the waste or abating its effects on waters of the state."

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves to set aside \$475,030 from the CAA to fund the Project.
2. Approves the funding with the expectation that if the agreement has not been executed by November 21, 2013, the Executive Director will bring this item back to the State Water Board in December 2013 for possible rescission of funding.

D R A F T

3. Shall make the funds available until May 30, 2016, and shall revert any unexpended funds to the CAA as of August 30, 2016, unless the Deputy Director or Assistant Deputy Director of the Division of Financial Assistance authorizes an extension.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Board held on May 7, 2013.

Jeanine Townsend
Clerk to the Board