

North Coast Regional Water Quality Control Board

Elk River Drinking Water Delivery Overview and Summary of Considerations

The Staff Report and Action Plan for the Upper Elk River Sediment Total Maximum Daily Load (Elk TMDL) was approved in 2016 by the North Coast Regional Water Quality Control Board (Regional Water Board), the State Water Board (State Board) in 2017, and the US Environmental Protection Agency and the Office of Administrative Law in 2018. [The Action Plan for the Upper Elk River Sediment TMDL \(Action Plan\)](https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/180319/ACTION_PLAN_FOR_THE_UPPER_ELK_RIVER_SEDIMENT_TMDL.pdf) (https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/180319/ACTION_PLAN_FOR_THE_UPPER_ELK_RIVER_SEDIMENT_TMDL.pdf) was incorporated into the [Water Quality Control Plan for the North Coast Region \(Basin Plan\)](https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/basin_plan_documents/) (https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/basin_plan_documents/) in 2018. The Action Plan “describes the implementation actions necessary to attain water quality standards in the Upper Ek River Watershed” with the goal “to achieve sediment related water quality standards, including the protection of the beneficial uses in the upper watershed and prevention of nuisance conditions (Basin Plan p.4-129)”. Impacted beneficial uses include domestic and agricultural water supply.

While the majority of the 44.2 square mile Upper Elk River Watershed is predominantly timberland it also includes residential and agricultural parcels that extend the full length of the watershed from immediately below commercial timberlands to the Elk River drainage into the Humboldt Bay. A significant number of these private lands traditionally relied on riparian water rights to supply domestic and agricultural water needs. However, the ability to consistently use these water rights has been impacted due to excessive sedimentation.

In September 1998 a [Clean Up and Abatement Order \(CAO 98-100\)](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2012/120522_coa_scotia_palco_98-100.pdf) (https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2012/120522_coa_scotia_palco_98-100.pdf), which superseded a previous order [CAO 97-115](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2012/120522_scotia_palco_cao_97-115.pdf) (https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2012/120522_scotia_palco_cao_97-115.pdf), was adopted by the Regional Water Board. Subsequent to CAO 98-100 a Stipulated Agreement between the Water Board and Pacific Lumber Company (PalCo)¹ regarding compliance with CAOs 97-115 and 98-100 was signed in February 1999. Agreement 3(a)(b) provides that the discharger will comply fully with the conditions of CA 98-100 including identification of properties with

¹ In 2008, a bankruptcy court agreed to Mendocino Redwood Company’s proposal to reorganize the financially troubled PalCo, acquire its land and operate as Humboldt Redwood Company. Legal and regulatory obligations including the CAO were retained in the ownership change and are now the responsibility of HRC.

impacted water supplies and providing downstream landowners with temporary water until a permanent supply is established. Agreement 7 limits compliance with CAO 98-100 to landowners who utilize water from the North Fork Elk (upstream of the confluence with the South Fork Elk). As a result, a limited number of North Fork Elk River community members now receive regular water delivery to cover residential and/or agricultural water needs from HRC who took over Pacific Lumber Co. lands including associated legal and regulatory obligations. While this addressed the water needs for these approximately 10 households along the North Fork Elk, hauling water/paid water delivery is not a sustainable long-term solution, nor does it address the overall water quality needs of the watershed, or address water delivery needs for all Elk River community members.

In 2016 when the Elk TMDL was adopted by the Regional Water Board the drinking water issue was still unresolved with exception of CAO 98-100 and the Stipulated Agreement process. Recognizing this, the Elk TMDL Action Plan called for the creation of the Elk River Stewardship Program (Stewardship Program), a non-regulatory participatory program to engage with stakeholders to find common ground and identify strategies to improve overall watershed conditions. Stewardship program goals include identifying strategies and solutions to improve domestic water and agricultural water supplies (Basin Plan pg. 4-133). Consistent with the intent of the Stewardship Program, Regional Water Board staff have spent significant time engaging with federal, state, and local agencies to identify applicable programs and available funding sources.

From April 2022 through September 2023 significant progress was made towards understanding and contextualizing drinking water project needs, constraints, and identifying possible solutions. Information gathered during this time was shared through an iterative process with potential project leads including the Humboldt Community Services District (HCSD), Humboldt County Planning Department, Humboldt County Public Works, Humboldt County Supervisors, CalTrout, the Elk River Community, and the State Water Board Division of Financial Assistance (DFA) and Division of Drinking Water (DDW). A summary of key information from this process is included below:

Water Delivery Service: The lower portion of the watershed is within the HCSD boundaries and currently receives HCSD water. The upper and middle portions of the watershed are within the HCSD Sphere of Influence only and lack any water delivery infrastructure. For the HCSD to provide service to the entire watershed, areas currently in the sphere of influence need to be annexed into their boundaries, and water delivery infrastructure would need to be built. *(Annexation is a separate process that can be requested by community members or at direction of the State and requires Local Agency Formation Commission approval. Annexation is generally preferred as it consolidates service areas over creating new smaller ones).*

Service Consolidation vs. New Service District: DDW is working to stop the proliferation of small, individual Community Water Systems (CWS). Given the Upper Elk is already within the HCSD sphere of influence, direction would likely

be given that it be incorporated into the HCSD vs. developing a new and separate CWS.

Community Member Perspectives: As a result of a series of community member interviews, currently all community members do not agree on a single water delivery solution. Some community members have expressed support for the expansion of HCSD water delivery while others have expressed opposition to paying for any water and will only be satisfied with full watershed remediation and a return to relying exclusively on riparian water rights to meet all water needs. Returning to riparian water rights is a long-term goal of the Elk TMDL and is the focus of the actions described in the [Elk River Sediment Remediation and Habitat Rehabilitation Recovery Plan](https://caltrout.org/wp-content/uploads/2019/05/Elk-River-Stewardship-Recovery-Plan-Public-Draft-July_2022.pdf) (https://caltrout.org/wp-content/uploads/2019/05/Elk-River-Stewardship-Recovery-Plan-Public-Draft-July_2022.pdf). However, the Regional Water Board recognizes that it can take several years to several decades to fully experience benefits from restoration-based habitat recovery. Therefore, while it is expected that water quality will benefit from restoration, it should not be the only tool used to address immediate water delivery needs.

Population and Income: Community population size and household income are factors in determining the water delivery project type and funding source (e.g., *Small Community Water System vs. Expanded Small Community Water System vs. State Small Water System*) in State led projects. A Small Community Water System serves no more than 3,300 service connections or a yearlong population of no more than 10,000. An Expanded Small Community Water System serves more than 3,300 service connections, but no more than 6,600 service connections, or a yearlong population of more than 10,000 persons but no more than 20,000 persons. A State Small Water System serves at least five, but not more than 14 service connections and does not regularly provide drinking water to more than an average of 25 individuals daily for more than 60 days of the year. Income determines Disadvantaged Community (DAC) status, which is met when the entire service area of community water system is less than 80% of the statewide median household income.

Based on current 2024 population estimates and a DAC determination completed by Regional Water Board staff of an estimated \$66,199 median household income, the Elk River project would be a Small or Expanded Community Water System, and be eligible for non-repayable financing (i.e., principal forgiveness) for planning/design or construction through the [Drinking Water State Revolving Fund](https://www.waterboards.ca.gov/drinking_water/services/funding/documents/srf/dwsrf_policy/dwsrf_policy_final.pdf) (https://www.waterboards.ca.gov/drinking_water/services/funding/documents/srf/dwsrf_policy/dwsrf_policy_final.pdf). DAC status is also a consideration in other funding sources.

Relevant Funding Opportunities: Potential funding sources include:

[Drinking Water State Revolving Fund \(DWSRF\)](https://www.waterboards.ca.gov/drinking_water/services/funding/SRF.html)

(https://www.waterboards.ca.gov/drinking_water/services/funding/SRF.html): Assists public water systems in financing the cost of drinking water infrastructure projects need to achieve or maintain compliance with the Safe Drinking Water Act by providing loans and other assistance.

[Safe and Affordable Funding for Equity and Resilience Program \(SAFER\)](https://www.waterboards.ca.gov/water_issues/programs/hr2w/)

(https://www.waterboards.ca.gov/water_issues/programs/hr2w/): Intended to ensure safe and affordable drinking water delivery to all Californians while also reaching sustainable operations for the state's drinking water systems. Projects can include water infrastructure and various operational and administrative costs.

[Small Community Drinking Water Funding Program](https://www.waterboards.ca.gov/water_issues/programs/grants_loans/sustainable_water_solutions/scfp.html)

(https://www.waterboards.ca.gov/water_issues/programs/grants_loans/sustainable_water_solutions/scfp.html): Designed to help small (less than 10,000 people), disadvantaged (less than 80% of the statewide median household income) communities to provide drinking water service. This program provides technical assistance needs, interim water supplies, and implements eligible drinking water capital improvement projects.

[Expedited Drinking Water Grant Program](https://www.waterboards.ca.gov/drinking_water/services/funding/expedited-grant-funding.html)

(https://www.waterboards.ca.gov/drinking_water/services/funding/expedited-grant-funding.html): Utilizes state funding sources administered as grants for drinking water infrastructure projects.

Each funding source has specific available dollar amounts and funding priorities. For example, in the DWSRF the available funding is dependent on the project type ranging from \$45,000 to \$80,000² per hookup while the SAFER program currently provides \$130 million annually to develop and implement sustainable solutions for small systems with violations of drinking water standards. Money may be spent on operations and maintenance costs, consolidations, provision of replacement water and administration^{3,4,5}. Funding for planning and implementation is needed in the Elk River.

² Participation in this program for water deliver hook-ups is optional. However, if after project completion, a water system hook up is desired at a location that previously opted out, the cost to do so is no longer covered by this program.

³ [Frequently Asked Questions: Safe and Affordable Funding for Equity and Resilience Program](https://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/faq_safe_drinking_water_program_overview_factsheet.pdf)

(https://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/faq_safe_drinking_water_program_overview_factsheet.pdf)

⁴ [Fact Sheet: Drinking Water Grants-Drinking Water State Revolving Fund \(DWSRF\) Program](https://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/dw-grant-fact-sheet.pdf)

(https://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/dw-grant-fact-sheet.pdf)

⁵ [Fact Sheet: SB 200 Closes Funding Gap to Provide All Californians with Access to Safe and Affordable Drinking Water](#)

Regulatory/Governing Authority Over Drinking Water: It is through the DDW that the State Board has the primary authority to enforce federal and state drinking water statutes and is responsible for the regulatory oversight of public drinking water systems. The State Board's DFA awards state and federal grants and loans for drinking water infrastructure. The DDW and DFA work together to fund and implement the various drinking water programs and funding sources. DDW and DFA staff are recognized as leads in addressing drinking water needs through their specific authority and implementing programs.

Water Delivery Project Lead: Even though the need for drinking water delivery solutions is included in the Elk TMDL, the Regional Water Board is not the appropriate office to lead such a project given a lack of regulatory authority over drinking water. However, under DFA funding and project guidelines the State Board DDW, the HCSD, Humboldt County or a 501(c)(3) working in the watershed are. Once a project lead is identified, they can then take information Regional Water Board staff has compiled and submit a project technical assistance (TA) request to DFA directly. DFA will then assist in navigating the TA process and funding opportunities.

Initiating a Water Delivery Project: A completed engineering report (also referred to as a technical or feasibility study) that evaluates technical options and assesses their feasibility is a required first step for a water delivery project from technical, project planning, and funding perspectives. In addition, a planning grant application, and all relevant environmental analysis documents are also required. (New projects approved under the [Expedited Drinking Water Grant](https://www.waterboards.ca.gov/drinking_water/services/funding/expedited-grant-funding.html) (https://www.waterboards.ca.gov/drinking_water/services/funding/expedited-grant-funding.html) have a streamlined process timeline for completing environmental documents. However, a completed engineering report is still required prior to project funding). DFA can provide technical assistance (TA) with the application and loan processes to fund and complete an engineering report and will ultimately direct an applicant to the appropriate funding source. TA and funding requests need to come from a project lead with recognized authority (*see Water Project Delivery Lead*).

Draft Feasibility/Technical Study Options: Based on input from community members, the HCSD, CalTrout, DDW and Regional Water Board staff supported including the following project alternatives for evaluation.

- Explore test wells
- Treat surface water by developing a pilot test with a focus on individual filtration systems to understand how and why (or why not) they work in the Elk
- Provide long-term mass water hauling
- Build an HCSD community fill station

- Extend HCSD infrastructure and water delivery services⁶
- Build a small community water system that taps into an aquifer

The majority of these options were identified in the health and safety interviews with Elk community members. Including them will help address concerns that the Water Board has made a pre-determined decision to require HCSD water delivery expansion at the expense of undertaking watershed recovery actions.

Regional Water Board Staff Efforts to Address Drinking Water Needs: From approximately May 2022-September 2023, Regional Water Board staff renewed and intensified efforts to identify drinking water delivery strategies for the Elk River. A significant amount of time was devoted to identifying potential funding sources, understanding regulatory and programmatic authority, and reviewing previous efforts to address water delivery needs. Staff reached out to county, state, and local agencies, non-profits, and the Elk River community to supplement this information and gauge project lead interest.

After close coordination with Regional Water Board, DDW staff submitted a TA request to “connect the HCSD and Elk River community members to explore all water delivery options and develop a plan for moving the project forward in partnership with the HCSD, community members and possibly Humboldt County”⁷ to DFA on October 5, 2023. The request included all six project alternatives previously discussed for the TMDL area only and was submitted with the understanding that a local lead would be needed if the project was approved. Ultimately, after several meetings with DFA, the TA request was denied with specific feedback on how to strengthen and re-submit. Key feedback included: narrow the request to evaluate one option only, expand project size, and have the county or HCSD be project lead.

On December 12, 2024, Humboldt County Public Works submitted a revised TA request that asks for evaluation of HCSD service expansion only, expands the project size from the Elk River community to the broader HCSD sphere of influence area that has no service (increasing the potential benefit from approximately 50 to approximately 160 homes), and was submitted by Humboldt County with the unanimous support of the HCSD Board. On May 30, 2025, the TA request was approved. [California Urban Water Agencies \(CUWA\)](https://www.cuwa.org/about) (<https://www.cuwa.org/about>) has initiated work plan development with [Brown and Caldwell](https://brownandcaldwell.com/) (<https://brownandcaldwell.com/>) as technical staff supporting

⁶ A 2023 general cost estimate from the HCSD for installing water lines was approximately \$400-\$500/foot excluding any pressure reducing or boosting stations, hydrants and additional miscellaneous fixtures needed on longer lines. With approximately 2 miles of mainline infrastructure (Upper Elk River Watershed specific). Regional Water Board does not have cost estimates for other alternatives.

⁷ Request for Technical Assistance to Department of Financial Assistance Form submitted 10/2023.

CUWA⁸, and Humboldt County as the TA request lead. Project work began in summer 2025 and is ongoing as of November 2025.

Regional Water Board staff will continue to support the county led TA process and any subsequent water delivery project through the Stewardship Program as appropriate. The transition is towards the county and the HCSD as project lead is consistent with the goals of the Watershed Stewardship Program as described in the Basin Plan to “identify strategies and solutions to... improve domestic water and agricultural water supplies.” (Basin Plan pg. 4-133).

⁸ [News Release: CUWA Seeks Small and Local Firms to Support Safe and Accessible Drinking Water through SAFER Program](https://static1.squarespace.com/static/678816235a9d104e921aabee/t/67b6610be6ca4a7bab5166d3/1740005643832/CUWA%2BPress%2BRelease_August%2B2023_FINAL.pdf)
(https://static1.squarespace.com/static/678816235a9d104e921aabee/t/67b6610be6ca4a7bab5166d3/1740005643832/CUWA%2BPress%2BRelease_August%2B2023_FINAL.pdf)