
North Coast Regional Water Quality Control Board

Elk River Watershed Stewardship Program Health and Safety Summary

Watershed Stewardship Program¹

The Watershed Stewardship Program (Stewardship Program)—one of the three core components of the [Upper Elk River Sediment 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)—is a non-regulatory, collaborative approach to complement traditional regulatory TMDL implementation actions. The Action Plan was approved in 2016 by the North Coast Regional Water Quality Control Board (North Coast Water Board), the State Water Resources Control Board (State Water Board) in 2017, and the US Environmental Protection Agency and the Office of Administrative Law in 2018. In addition to the Stewardship Program, the Action Plan identifies two other components, waste discharge requirements (WDRs) and an Elk River Recovery Assessment to achieve its goals.

The Stewardship Program is designed not only to assist in the recovery of beneficial uses, but to also proactively address important community health and safety issues—such as flooding hazards, and threats to water quality. The program emphasizes collaboration among diverse participants to integrate these concerns into a comprehensive approach to watershed recovery.

This document provides an overview of Stewardship Program efforts to address sediment related impacts broadly categorized into nuisance flooding, water supply, safe transportation, and public and private property as well as general health and safety and community engagement.

Nuisance Flooding: Sediment buildup in the river has resulted in increased flooding, posing a risk to properties and community access. Stewardship Program activities to address this include developing and/or recommending actions aimed at reducing flood hazards via sediment control and restoration planning through collaboration.

¹ Stewardship Program project participants include, but is not limited to, CalTrout, Humboldt County, the Office of Emergency Services, the State Water Resources Control Board.

Water Supply: Sediment impairment threatens the reliability and quality of domestic and agricultural water supplies. Stewardship Program activities to address this concern include coordinating actions to protect and enhance water supply.

Safe Transportation: During high water events, sediment-related changes to channel morphology have affected transportation routes. The Stewardship Program engages stakeholders to find solutions that improve transportation access and safety during floods.

Public and Private Property: Sedimentation has impacted residential and agricultural lands, disrupting property use and posing structural risks. The Stewardship Program considers these impacts in watershed restoration and remediation strategies.

General Health and Safety: Other areas addressed by the Stewardship Program incidental to those identified in the TMDL but related to its implementation such as emergency response planning and community engagement.

Nuisance Flooding

Watershed Restoration and Recovery Planning

Elk River Recovery Assessment

Funded by the State Water Board, the [Elk River Recovery Assessment](https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/190516/ERRA_Framework_Final_compiled_031419.pdf) (https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/190516/ERRA_Framework_Final_compiled_031419.pdf) was completed in 2019 by CalTrout with technical assistance from Northern Hydrology & Engineering (NHE) and Stillwater Sciences and in cooperation with the North Coast Regional Water Board. The Recovery Assessment is a non-regulatory assessment of sediment remediation and channel restoration activities. It uses a modeling tool with which to evaluate different restoration and recovery strategies to predict the routing of water and sediment through the watershed from the impacted reach to the Humboldt Bay under varying precipitation events. The assessment provides valuable insight and technical information for future watershed restoration activities and led to the development of the [Elk River Sediment Restoration and 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).

Elk River Sediment Restoration and Recovery Plan (Recovery Plan)

The Recovery Plan was completed with funding from the North Coast Regional Water Board in 2022 by CalTrout with technical assistance from NHE and Stillwater Sciences. The Recovery Plan builds on the tools developed in the Recovery Assessment and serves as a blueprint for restoration and recovery actions from just above the confluence of the North and South Fork Elk down to Humboldt Bay. Together the Recovery Assessment and the Recovery Plan provide a technical pathway to understand different sediment transport scenarios and guide the practical development and implementation of a strategy for long-term restoration and recovery actions.

Watershed Restoration and Recovery Project Implementation

For planning and project design purposes, the Stewardship Area (the 19.2 miles evaluated and described by the Recovery Assessment) has been separated into four distinct Planning Areas each with its own project planning, design, and implementation effort. However, the Planning Areas do not function in isolation as each provides a part of the overall watershed restoration and recovery effort. When completed, all Planning Areas will work together to contribute to watershed recovery. Each of the Planning Areas and potential associated project types are described in the Recovery Plan. The Planning Area approach has so far proven to be a more effective approach for project design, permitting and funding than attempting to undertake restoration in the entire watershed through a single action.

Led by the CalTrout team, project planning and design began with Planning Area 1 (the lower watershed-from just above Showers Road to Hwy 101 bridge). Individual project designs have been guided by the Recovery Assessment and Recovery Plan. Throughout the design process, the design team has worked closely with a technical advisory committee that includes permitting agencies such as the North Coast Regional Water Board, CDFW, NOAA/NMFS and Coastal Commission. This approach has provided the opportunity for real-time feedback on project design between agency staff and the design team. It also fosters a greater level of project familiarity during the permitting phase where most major concerns can be addressed prior to permit submission-ultimately helping to streamline the final permit process. Implementation for Planning Area 1 restoration projects is expected to begin in summer 2026².

Land Acquisition

In 2025, CalTrout acquired four parcels (totaling 175 acres) of former ranch land in Planning Area 1. Funded by the State Coastal Conservancy with support from the Conservation Alliance, three of the parcels will eventually be transferred to CDFW to expand the Elk River Wildlife Area. The fourth parcel holds special cultural significance to the Wiyot Tribe and was returned to the Tribe for their ownership and management. Restoring a functioning tidal prism in Planning Area 1 will not only help the Elk River estuary support recovery of endangered species (e.g., salmonids) but will also assist in restoring sediment transport function - a key component to restoring water quality and beneficial uses as well as help to provide a buffer against sea level rise impacts. The expansive habitat restoration actions proposed in these four parcels will play an

² Two pilot projects were attempted, one for sediment removal at the flood curve along Elk River Road and one to remove an old bridge on private property that contributed to backwater flooding. The sediment removal project was never undertaken due to property owner requested changes and permit mitigation requirements that would have increased the project scope well beyond what was designed and funded. The bridge was removed but the ungraded dip remains and will be evaluated in the larger Recovery Plan efforts.

important role in the overall watershed restoration and recovery efforts in Planning Area 1.

Federal Emergency Management Agency (FEMA) Flood Maps

The 100-year flood hazard zone, also known as the Special Flood Hazard Area, is a designation used by FEMA to identify the area that has a 1% chance of experiencing a flood event in a given year. This is commonly referred to as a "100-year flood."

The concept of the 100-year floodplain was created to manage the risks associated with such floods and to aid in land use planning, flood insurance, and emergency management efforts. In short, the 100-year floodplain is a tool that communities can use to identify areas that have the highest risk of flooding and helps lenders determine insurance requirements.

As part of the community outreach effort the Stewardship Program held a series of public meetings 2019-2021³ (led by CalTrout) in which several community members expressed concern about flooding and the accuracy of the FEMA flood hazard zone mapping given the loss of Elk River sediment transport function/channel capacity. Based on community feedback received by the CalTrout team during this process the model developed as part of the Recovery Assessment was expanded to model extreme flood events up to the 1% annual chance flood. The expanded work and an accompanying [technical memorandum](#) (https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/211025/NHE_ElkRiver_100yrWSE_Memo_200929_DS.pdf) that provides a summary of the analysis was funded by the North Coast Regional Board in 2020 (completed in 2021). The memo identified an increased risk from extreme flood events for portions of the Elk River watershed that were not currently included in the FEMA mapped flood area, showing the FEMA maps to be outdated and not representative of current conditions.

Because flood risk can change over time from factors like climate change, land development, and altered hydrologic conditions, FEMA works to update its flood maps based on new technology and current technical information. There are three ways to change a flood hazard map: 1) *FEMA-Initiated Update* where FEMA initiates revisions, 2) *Community-Initiated Map Revisions* in which a community submits the request and supporting technical information, or 3) *Community-Initiated Map Revision Through the Cooperating Technical Partners Initiative* where communities, flood management agencies, universities, tribes and non-profits actively partner with FEMA in the flood hazard mapping program⁴. The Regional Board does not fall into any of these categories and so cannot request flood map changes to FEMA. However, in addition to

³ Date range is approximate.

⁴ [FEMA Flood Maps](#)

(https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/211025/NHE_ElkRiver_100yrWSE_Memo_200929_DS.pdf)

funding the technical memo, the North Coast Regional Water Board made it available to the public and Humboldt County to assist in pursuing updated maps.

In December 2024, after receiving a request from Humboldt County citing the memo, FEMA initiated a process to update their Flood Insurance Rate Map⁵ for the Elk River Valley to better represent current flooding conditions. The request was accepted and FEMA contractors started initial land surveys late winter/early spring 2025. The update process is expected to take approximately three years to complete and is fully funded to do so. The technical memo provided critical information and modeling assumptions to FEMA. The caliber of work completed by NHE allowed FEMA to fold in the memo findings with relatively few follow-up needs. FEMA has had a series of meetings with Humboldt County, NHE, CalTrout and North Coast Regional Water Board staff since the project started.

It is important to note that changes to the FEMA 100-year floodplain will impact flood insurance requirements and access to emergency assistance. Newly identified flood risk areas would require flood insurance, while landowners in areas no longer identified as flood risks could request the removal of federal flood insurance requirements. Information on the FEMA process and potential outcomes have been publicly provided both through the [Elk River TMDL webpage](https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/190516/ERRA_Framework_Final_compiled_031419.pdf) (https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/190516/ERRA_Framework_Final_compiled_031419.pdf), in the Fall 2023 Elk River Stewardship Newsletter, a joint effort between North Coast Regional Water Board and CalTrout, and through the Elk TMDL listserv managed by Regional Water Board staff. (Interested parties can sign up for the listserv directly from the Elk TMDL webpage under the Mailing Lists header). As the project lead, FEMA will have its own public outreach process and is expected to hold public flood risk review meetings in winter 2026.

Water Supply

Residential Water Supply

Given the complexity of water supply needs a detailed discussion is provided in a separate summary. As such, the water supply discussion in this document is limited to the following high-level summary. Additional background and context can be found in the drinking water summary.

Based on a lawsuit brought by Elk River residents citing loss of beneficial uses including loss of drinking water from riparian water rights, a Stipulated Agreement to North Coast Regional Water Board Clean Up and Abatement Order (CAO) 98-100, orders Pacific

⁵ FEMA's Flood Insurance Rate Map depicts the Special Flood Hazard Area, which is the area that is likely to be inundated by a flood event having at least a one-percent chance of occurrence in a given year.

Lumber Company to provide water for approximately 13 properties along North Fork of the Elk⁶. Water delivery for those properties continues per the Stipulated Agreement.

The Action Plan also identifies that the Stewardship Program will work to address larger water supply needs to the greater Elk River community. Beginning in earnest in 2022, North Coast Regional Water Board staff began researching various programs and potential partnerships for water supply solutions. In 2023, the Regional Board began working with various state and local programs (e.g., [Safe and Affordable Funding for Equity and Resilience \(SAFER\) Drinking Water Program](https://www.waterboards.ca.gov/safer/) (<https://www.waterboards.ca.gov/safer/>), the [Division of Drinking Water](https://www.waterboards.ca.gov/drinking_water/programs/) (https://www.waterboards.ca.gov/drinking_water/programs/), [Division of Financial Assistance](https://www.waterboards.ca.gov/water_issues/programs/grants_loans/) (https://www.waterboards.ca.gov/water_issues/programs/grants_loans/)) to find alternatives for sustainable drinking water solutions for the entire Elk River community.

In December 2024, the Humboldt County Department of Public Works, with support from North Coast Regional Water Board and Division of Drinking Water staff, submitted a request to the State Water Board's Division of Financial Assistance Technical Assistance (TA) Program⁷. The request is to assess the feasibility of extending municipal water service into the Elk River valley, which is in the Humboldt Community Services District (HCSD) Sphere of Influence, but currently lacks any water delivery infrastructure including fire hydrants. The HCSD Board unanimously voted to support TA submittal by Humboldt County, with the understanding that the feasibility study will be conducted at no cost or obligation to residents, the county, or the HCSD. The TA was approved in late May 2025. Work is underway, and the final analysis will help inform future decisions by developing accurate technical and cost information. It is a feasibility study only and does not decide if water service is to be extended. Additional detailed background and information on water supply issues and the TA progress are provided in the 2026 Elk River Water Delivery Summary posted to the Elk TMDL webpage.

Safe Transportation

Elk River Road

Elk River Road is a narrow two-lane road that is the single point of access for the watershed. While its placement paralleling the Elk River makes it susceptible to high water flood events, the excessive sedimentation conditions identified in the Action Plan have significantly increased road flooding. Flood waters often overtake the road quickly leaving the community stranded in (or out) of their homes. The Action Plan recognizes

⁶ 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.

⁷ Background information on the long-term efforts to find drinking water solutions for the Elk River watershed are detailed in a separate Drinking Water Memo.

that road flooding will not be solved by a single action but rather from a set of complementary ones that work together to improve conditions and watershed function by addressing sediment transport and sediment source control in conjunction with improved road design.

In 2023 the North Coast Regional Water Board funded Humboldt County Department of Public Works to complete a project study report for Elk River Road. The project study report evaluates potential solutions for road flooding at three locations (Zanes Road, Berta Road and the area referred to as the flood curve), where flood waters rise at some of the quickest rates along Elk River Road resulting in some of the most significant community impacts. By identifying engineering design and project options, to improve Elk River Road flooding, the completed study can assist the county in seeking implementation funds and/or project prioritization. The project study report was completed in March 2026.

Depth Paddle Installation

Prior to 2026 there were few water depth indicators/depth paddles within the Elk River watershed; leaving people to guess if a road was passable⁸ while flooded. At a public meeting in December 2024, this issue was identified by Elk River community members as a significant safety risk. In an attempt to address the community concern and improve road safety, North Coast Regional Water Board staff, in collaboration with CalTrout and Humboldt County, worked together to secure and install the paddles⁹ at key locations. CalTrout purchased 16 Caltrans compliant depth paddles for Humboldt County to install. As of mid-March 2026, a total of six had been installed at Berta Road, Zanes Road and the flood curve locations. It is expected that installation of all depth paddles will be complete by summer 2026.

Elk River Stage Monitoring and Emergency Response

Humboldt County Office of Emergency Services (OES) lacked an Elk River specific gauge to generate localized flood stage/evacuation warnings. OES has had to use gauges on Woody Island, well outside of the Elk River watershed, to generate notices/warnings for the Elk River community. During a May 2024 meeting between the Stewardship Program and OES, an Elk River gauge was identified as tool to improve localized emergency response/emergency response notifications. In summer 2025, North Coast Regional Water Board staff identified a funding opportunity through the CalSIP program to install an Elk River gauge at no cost to the county.

⁸ Emergency response guidelines are to not drive through flood waters on roadways and urge “Turn Around Don’t Drown”.

⁹ Humboldt County Public Works agreed to coordinate with the Roads Department for installation offsetting the need for installation funds.

[CalSIP](https://water.ca.gov/Work-With-Us/Technical-Assistance/Stream-Gage-Improvement-Program) (<https://water.ca.gov/Work-With-Us/Technical-Assistance/Stream-Gage-Improvement-Program>) is a stream gauge improvement program of the California Department of Water Resources that funds public agencies to improve stream gauge infrastructure and bridge data gaps. It provides technical assistance to upgrade, reactivate or install new surface water monitoring stations (at no additional cost to the requester) that will share stream flow data to help inform water management decisions. Gauge locations and installation status can be viewed on the [CalSIP map](https://experience.arcgis.com/experience/ac8ac7d58dcc40f1b552dd34ea87f8db?data_id=dataSource_1-18b5df17cbc-layer-5%3A49867&views=Feature) (https://experience.arcgis.com/experience/ac8ac7d58dcc40f1b552dd34ea87f8db?data_id=dataSource_1-18b5df17cbc-layer-5%3A49867&views=Feature).

However, based on CalSIP funding criteria, the North Coast Regional Water Board was not eligible to apply for the funding and stewardship partner, CalTrout, agreed to do so. During the application process it was confirmed that USGS was also proposing an Elk River gauge at the same location.¹⁰ As a result, the CalTrout proposal was withdrawn. CalSIP approved the gauge request as submitted by USGS and the gauge is now installed and tracks temperature, height, and turbidity. All CalSIP funded gauges must provide real-time stream data through the CA Data Exchange Center, effectively meeting the OES data need. OES can now choose if/how to incorporate the Elk River gauge data into their emergency response programs.

Public and Private Property

Structure Raising

While impacts to structures from increased flooding due to excessive sedimentation in the Elk River system are recognized in the Action Plan, the North Coast Regional Water Board lacks authority and funding to raise private structures. However, since the concept/need was identified by several residents as a priority during health and safety interviews conducted by the North Coast Water Board, staff researched a variety of federal and state programs as potential funding sources. This included FEMA Building Resilient Infrastructure and Communities (BRIC), FEMA general programs, California Office of Emergency Management (CalOES) Flood Mitigation Program (Swift Current), Humboldt County Office of Emergency Management, California Coastal Conservancy, Division of Financial Assistance block grants and the California Water Boards Clean Up and Abatement account. Unfortunately, none were successful.

[FEMA BRIC](https://www.epa.gov/fedfunds/building-resilient-infrastructure-and-communities-bric) (<https://www.epa.gov/fedfunds/building-resilient-infrastructure-and-communities-bric>)¹¹ - In 2022, North Coast Regional Water Board staff attended a series of BRIC program webinars and individual meetings with program representatives.

¹⁰ The gauge location is the “steel bridge” along Elk River Road, which also houses WDR monitoring station 509 and is an historic USGS gauge location

¹¹ In April 2025 FEMA announced that it was ending the BRIC program and canceling all BRIC applications from Fiscal Years 2020-2023, requiring all non-distributed funds be returned and canceled future funding opportunities. Based on legal challenges BRIC is legally active however the federal government is expected to appeal the decision making the program’s future unknown.

Viewed as a pre-disaster mitigation program BRIC most closely aligned with Elk River flood response needs and North Coast Regional Water Board staff submitted notice of intent to apply. Ultimately, North Coast Regional Water Board staff were advised that the Elk River did not meet the threshold for projects (i.e., the project was too small both in size and affected population) and therefore should not submit for funding as it would not be approved.

FEMA disaster relief (Federal Declaration) - Elk River flooding has not qualified to receive flood-based FEMA funds because a federal disaster has never been declared. For FEMA funds to be dispersed the disaster has to meet loss thresholds monetary loss and/or number of affected people. Elk River has never met either and likely will not given the low population and minimal infrastructure.

CalOES Flood Mitigation Program (Swift Current) (<https://www.caloes.ca.gov/office-of-the-director/operations/recovery-directorate/hazard-mitigation/hm-grant-opportunities/fma-swift-current/>) - A state program designed to streamline federal funding through flood insurance claims and based eligibility criteria after a federal flood disaster is declared. This program is only available to those currently covered by the National Flood Insurance Program (NFIP) and have a history of repetitive or substantial damage from flooding.

California Coastal Conservancy (<https://scc.ca.gov/>) - The Coastal Conservancy does not manage emergency flood response but provides funding and technical assistance for projects that address impacts from sea-level rise and extreme storms. They do not have a program for structure raising. However, they have funded restoration and recovery projects in the Elk River watershed that help to address sea-level rise and extreme storm impacts.

State Water Board, Division of Financial Assistance (DFA) Grants and Loans (https://www.waterboards.ca.gov/water_issues/programs/grants_loans/) - DFA funded infrastructure and health and safety projects generally address upgrades for drinking water treatment and distribution, municipal sewage systems and water recycling or the contamination or failure of those systems. The Elk lacks such infrastructure. No DFA programs exist to fund private house raising.

State Water Board Clean Up and Abatement Account (CAA) (https://www.waterboards.ca.gov/water_issues/programs/grants_loans/cleanup_and_abatement.html) - The CAA account is for projects that clean up and/or abate impacts of waste on waters of the State or address urgent drinking water needs. CAA funds cannot be used to fund private house raising.

Senate Bill (SB) 1 Sea Level Rise Adaptation Grant Program (<https://opc.ca.gov/sb-1-funding/>) - SB1 was signed in 2021 and directs the state to provide funding to local and regional governments to develop sea-level rise adaptation plans and implementation projects. It has strict funding guidelines and private structure raising in the Elk does not fit funding criteria.

General Health and Safety

Resident Interviews

Three rounds of Elk River community interviews were conducted 2021-2023 with a total of 12 residents willing to participate. The interviews were designed to serve two primary purposes: 1) record residents' recent experience of flooding and related hazards and 2) prepare a list of the solutions participants favored for reducing the impact of those hazards. Results of the nine interviews completed before August 2022 are detailed in the 2022 Staff Report. Road flooding was the most frequently identified challenge, followed by loss of drinking water supply, and decreased property value. These same concerns were noted by the three interviews completed after August 2022. Other challenges discussed by property owners include a loss of agricultural function of the property, risk to property and personal safety, loss of recreational and fishing beneficial uses, flooded structures, silt accumulation, loss of wash water supply, and impacts to septic systems. It is important to note that the North Coast Regional Water Board lacks the authority to directly address the majority of the identified challenges. However, it is expected that restoration and remediation projects will help to address many of these issues in the long run.

Dredging

With an estimated 640,000 cubic yards of legacy sediment in the Elk River system¹², sediment remediation is critical. However, wholesale channel dredging is not seen as feasible from a project design perspective given its high cost and lack of support from permitting agencies (e.g., CDFW, NOAA/NMFS) citing the potential for significant and unavoidable impacts to federally protected species. Instead of a massive dredge project, working with resource agencies to secure permits that include mitigation requirements and biological limitations may allow for focused dredging/sediment removal projects to be applied at specific locations where they contribute to the larger restoration plan.

Emergency Response

Given that the Regional Board does not have authority over emergency response, flooding or otherwise, it is important to identify the agencies/programs that do in order to promote emergency response awareness. Due to federal population and fiscal impact threshold requirements to trigger FEMA response, it is unlikely that the Elk River community, or even Humboldt County, will meet FEMA emergency response thresholds. In the absence of federal emergency response support, the responsibility falls to state and local programs.

Elk Community Emergency Response Meeting

On December 11th, 2024, the Stewardship Program hosted a community meeting focused on emergency planning and response. The meeting provided information on emergency response programs by OES, a watershed restoration update by CalTrout, and a road flooding update by Humboldt County. The meeting was held in the evening

¹² Estimate from the 2017 Elk River Recovery Assessment

to accommodate work schedules and included a significant amount of time for questions and answers. OES staff provided valuable local emergency response information and highlighted the little understood differences between county and state emergency programs and responsibilities. OES staff also contributed an emergency response preparedness article to the Winter 2024 Elk Stewardship Newsletter that supplemented meeting topics.

It was during this meeting that community members identified the need for depth paddles to assist with road crossing during flood conditions. With their cost covered by CalTrout and the installation covered by Humboldt County, depth paddles have now been installed at key locations throughout the watershed (*see Depth Paddle Installation section above for details on locations*).

Humboldt County Emergency Services

Humboldt County Office of Emergency Services (OES) is the primary local coordination agency for Humboldt County emergency planning and response. With the sheriff as the director, OES coordinates emergency planning, response, and recovery with local, state, and federal partners and are the first to respond in local emergencies. They have a range of flood-related programs and resources, primarily focused on mitigation, preparedness, and response.

Mitigation Programs:

- [Local Hazard Mitigation Plan \(LHMP\)](https://www.caloes.ca.gov/office-of-the-director/operations/recovery-directorate/hazard-mitigation/local-mitigation-planning/local-hazard-mitigation-plans/) (https://www.caloes.ca.gov/office-of-the-director/operations/recovery-directorate/hazard-mitigation/local-mitigation-planning/local-hazard-mitigation-plans/): OES coordinates with cities and other local partners to regularly update this plan, which assesses flood risks and outlines long-term strategies to reduce the impact of floods. Having an approved plan allows the county to access federal disaster funding. ([Humboldt County 2025 LHMP](https://humboldt.gov.org/3587/2025-Local-Hazard-Mitigation-Plan) (https://humboldt.gov.org/3587/2025-Local-Hazard-Mitigation-Plan))
- [National Flood Insurance Program](https://www.usa.gov/agencies/national-flood-insurance-program) (https://www.usa.gov/agencies/national-flood-insurance-program): The county enforces regulations to ensure residents can access flood insurance through this program. This includes requiring new development in special flood hazard areas to be elevated or floodproofed.
- Levee and flood management: While flood control districts and county public works handle levee management, OES assists with technical studies and planning related to flood risks.

Preparedness Programs:

- Humboldt Alert: This is the county's emergency notification system. Residents can sign up to receive alerts via phone, email, or text message regarding emergency information, including flood warnings and evacuation notices.

- Know Your Zone: This is a key public awareness campaign that encourages residents to identify their specific evacuation zone using the Genasys Protect interactive map. In a flood emergency, alerts refer to these zones.
- Emergency kits and plans: OES promotes building emergency preparedness kits and developing household emergency plans. This includes having supplies to shelter in place or for a "go-bag" for quick evacuation.
- Community education: Through its website and events like "DisasterCon," OES provides educational resources and tips on how to prepare for and act during a flood.

Response Programs:

- Emergency Operations Center: During a flood or other emergency, OES activates the Emergency Operations Center to coordinate the county's response with local, state, and federal agencies.
- Disaster assistance: In the aftermath of a major flood, OES helps manage the process for residents and the public sector to apply for state and federal recovery assistance.

Who to contact for more information:

- For questions about the Hazard Mitigation Plan or local emergency information, contact [Humboldt County Office of Emergency Services](https://humboldt.gov/356/Office-of-Emergency-Services) (<https://humboldt.gov/356/Office-of-Emergency-Services>) (707) 268-2500.
- For specific flood hazard and property information, the [Humboldt County Planning and Building Department](https://humboldt.gov/2546/Planning-Building) (<https://humboldt.gov/2546/Planning-Building>) can provide flood insurance rate maps (FIRMs) and advise on floodplain regulations.

Governor's Office of Emergency Services (CalOES)

CalOES is the state's "leadership hub" for major emergencies, directing and coordinating state and federal resources across all of California. When a local jurisdiction's needs exceed its capacity, CalOES provides additional resources and can request federal assistance from FEMA. Additional information is available on the [CalOES website](http://www.caloes.ca.gov) (www.caloes.ca.gov).

Information Sharing

Online Resources

Prior to 2024 the [Elk River TMDL webpage](https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/190516/ERRA_Framework_Final_compiled_031419.pdf) (https://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/elk_river/pdf/190516/ERRA_Framework_Final_compiled_031419.pdf) contained mostly historical information about TMDL development. In an effort to promote current information sharing, major webpage updates were completed in early 2024. Sections were added for TMDL Implementation, Partnerships, Health and Safety, Watershed Restoration and Recovery, Science and Coordinated Monitoring, and Five-Year Assessments. General

information such as staff contacts, mailing list sign up, and meeting information was retained but separated out for easier access. All historical TMDL development documents were retained without change and are included in the “TMDL Development 2000-2017” section. Project updates are posted to the webpage and/or emailed through the Elk River listserv, which can be signed up for directly from the Elk River TMDL webpage under “Mailing Lists”.

Newsletters

Beginning in 2019, the Elk River Stewardship Newsletter, a collaboration between CalTrout and the North Coast Regional Water Board, was used as a way to provide focused updates to the Elk River community. Topics have included a wide range of topics including project updates, special interest stories and general outreach. Newsletters have been printed and mailed by CalTrout and were also sent electronically through the North Coast Regional Water Board Elk River TMDL listserv. In 2025 the Stewardship Program moved away from this broad newsletter format to providing focused updates via the listserv, but the existing newsletters remain available on the [CalTrout Elk River Project webpage](https://caltrout.org/projects/elk-river-recovery-project/) (https://caltrout.org/projects/elk-river-recovery-project/).

Conclusion

With its non-regulatory approach to TMDL implementation, many of the Stewardship Program goals are outside of the North Coast Regional Water Board authority and rely on partnerships to implement. While progress has been made in the areas of nuisance flooding, water supply, safe transportation and general health and safety, no funding or partnerships have been found for house raising-the area furthest from North Coast Regional Board authority. However, several projects including the water delivery technical assistance request, FEMA map revisions, restoration project implementation, and Elk River Road engineering study/project study report are expected to be completed 2026-2028. Having completed these studies helps to lay the groundwork for the next phase of project implementation in the Elk River watershed. North Coast Regional Water Board staff remain committed to maintaining existing partnerships and developing new ones to help ensure