



EXECUTIVE OFFICER'S REPORT

North Coast Regional Water Quality Control Board
October 20, 2016

California Nonpoint Source Program Annual Report. State Fiscal Year 2015- 2016. North Coast Region

Rebecca Fitzgerald

The following are summaries of North Coast Regional Board Nonpoint Source Program achievements included in the Fiscal Year 2015-2016 Annual Report.

Initiatives RB1.1.03.a & RB1.5.01.c: *Elk River Watershed Permit Development & Stewardship*

The 2015-2016 fiscal year was perhaps one of the most active and successful years to date with respect to efforts to confront the highly complex sediment issues in the Elk River. Important advancements were made on several fronts: scientific, funding, policy, and stewardship-based coordination.

After many years of analysis and review, the North Coast Regional Water Board adopted the [Action Plan for the Upper Elk River Sediment TMDL](#) as an amendment to the Basin Plan via Resolution R1-2016-0017 on May 12, 2016. Staff also completed a public review draft of the companion [Waste Discharge Requirements for NPS Discharges Related to Timber Harvesting](#) to further control sediment sources in the upper watershed. It will be considered by the Regional Water Board for adoption on November 30, 2016.

Stewardship efforts have greatly advanced as well. The Regional Water Board hired a permanent, full time watershed steward –stakeholder partnerships solidified and formalized under the stewardship program; and two grants and one contract began producing deliverables.

Under the stewardship program, led by the County of Humboldt and supported by a [2015 319\(h\) planning grant](#), contracts were executed, steering committee and work groups were assembled operating agreement completed, and outreach to the larger community was conducted. One large public meeting and several work group meetings were held during the fiscal year. The Watershed Stewardship process is on track to deliver action plans for in-channel sediment remediation, science and monitoring, and health and safety by early 2018.



Elk River Stewardship Meeting. June 30, 2016. Photo by Rebecca Fitzgerald, NCRWQCB

The [Elk River Recovery Assessment](#), led by California Trout and supported by a 2015 California Timber Fund grant, successfully completed the collection and analysis of a wide range of parameters for the Elk River, including continuous suspended sediment data, thalweg profiles, channel cross-sections, channel bed conditions, flow velocity, and more. Data were used to construct a conceptual model of desired future conditions for the river. A hydrodynamic sediment transport model is being calibrated and validated based on the data. Additional data

compilation and analysis were provided in late 2015 through Tetra Tech, Inc.'s [Upper Elk River Technical Analysis for Sediment](#).

Three sediment remediation pilot projects are being designed to incorporate technical and community input from both the Recovery Assessment and the stewardship work groups to test the efficacy of active, mechanical sediment remediation in key reaches of the Elk River. In total, the removal of approximately 32,000 yd³ of sediment from impacted reaches of the Elk River is now funded under various projects. The framework is also in place to evaluate associated successes and challenges, while ensuring that all interested stakeholders can access information and provide input throughout the remediation process.

Initiative RB1.2.07: *Grazing Program Development*

On September 16, 2015, the State Water Board adopted [Resolution 2015-0062](#) to discontinue discussions to develop a statewide approach for addressing water quality impacts from livestock grazing. The resolution directed regional water boards to work collaboratively with livestock operators and interested stakeholders on approaches that may be necessary to address water quality impacts from livestock grazing in each region, given each region's level of impacts and unique physical and climatological characteristics. They also encouraged the establishment of monitoring requirements in any approaches that may develop.

On October 9, 2015, the North Coast Regional Water Board adopted a revised [Waiver of Waste Discharge Requirements for the United States Forest Service](#) (USFS) to address grazing-related discharges and other NPS discharges from USFS lands. The Waiver includes new [monitoring requirements](#) to assess potential impacts from USFS grazing allotments and the effectiveness of grazing-related management practices. The new requirements include monitoring for fecal indicator bacteria levels, streambank stability and

erosion, riparian vegetation, and potential physical and vegetation impacts to wetlands and wet areas.

In addition, during the fiscal year (FY) 2015 - 2016, Regional Water Board staff continued to address NPS impacts from beef cattle grazing in the Scott and Shasta River watersheds. Staff assessed two ranches with cattle grazing operations in the Scott Valley and one ranch in the Shasta Valley to determine compliance with the [Scott River TMDL Conditional Waiver of Waste Discharge Requirements](#) and the [Shasta River TMDL Conditional Waiver of Waste Discharge Requirements](#). Riparian fencing, riparian grazing, pasture irrigation, tailwater management, feeding areas, pesticide use, and other ranch management practices were observed and discussed with the owners/operators. Staff will complete assessment reports in FY 2016-2017.



Shasta River with riparian fencing, March 9, 2016. Photo by Rebecca Fitzgerald, NCRWQCB

Initiative RB1.3: *Mendocino County Permit Coordination Program*

North Coast Regional Water Board staff continues to work closely with the Mendocino County Resource Conservation District (MCRCD) through the implementation of the Mendocino County Permit Coordination Program. The program is a streamlined permit process for landowners who want to conduct conservation and restoration projects on their property. Such projects can easily acquire regulatory and CEQA coverage

under the Regional Water Board’s [Waiver of Waste Discharge Requirements and General Water Quality Certification](#).

In FY 2015-2016, staff worked with the MCRCD on a variety of projects, including: (1) treatment on the upper Russian River watershed to control the spread of invasive *Arundo donax* also known as Giant Reed or Elephant Grass; (2) removal of a major fish passage barrier on Denmark Creek, a tributary to the Navarro River; (3) removal of several other fish barriers and implementation of erosion control projects in of the Navarro River Watershed; and (4) sediment and erosion control efforts on several tributaries to the Garcia River. The Annual Post-Construction Report is available upon request.

Staff also worked with the MCRCD during FY 2015- 2016 to acquire \$800,000 through the 2016 Timber Fund grant program for the Mendocino Coast TMDL Implementation Program grant. The grant agreement is currently being finalized and will result in treatments of eighteen miles of road in the Navarro, Gualala, and Garcia River watersheds. The Permit Coordination Program will be utilized for the permitting and CEQA analysis associated with all sediment control work.



Pre-construction photo of a road crossing that blocks salmonid passage in the Navarro River Watershed. September 2, 2015. Photo by Rebecca Fitzgerald, NCRWQCB



Post-construction photo of the same road with a new bridge and open salmonid passage. September 30, 2015. Photo by Rebecca Fitzgerald, NCRWQCB

Initiative RB1.4: *Wood for Salmon Working Group*

Staff continued to promote the implementation of priority recovery actions for threatened and endangered salmonids through the ongoing leadership and organization of the [Wood for Salmon Working Group](#). The group is a coalition of state and federal regulatory agencies, tribal representatives, environmental non-profits, resource conservation districts, and other stakeholders that work together to support implementation of restoration actions, especially large wood augmentation projects. The group held three meetings during Fy 2015 - 2016 covering a range of topics related to habitat restoration, new regulatory requirements, permit updates, grant funding opportunities, education and outreach, and monitoring.

Staff worked closely with partners from Trout Unlimited to acquire \$569,000 through the 2015 Timber Fund grant program for the Large Wood Augmentation Projects in the Mendocino Coast Hydrologic Unit. The grant is underway and will facilitate large wood restoration projects across at least fifteen miles of salmon and trout streams, plus a large wood technical restoration field school.

The Wood For Salmon Working Group also worked closely with the CAL FIRE, NOAA-National Marine Fisheries Service, and California Department of Fish and Wildlife, to develop guidance documents for implementation of large wood restoration projects through the [Anadromous Salmonid Protection Rule Section V Guidance of the Forest Practice Rules](#). The guidance is designed to educate timberland owners on this underutilized permitting pathway by providing regulatory clarity and insights, permitting expectations, and process rules.

Finally, staff provided technical and planning support to the State Water Board Division of Water Quality as it continues to work on the revisions to the General 401 Water Quality Certification for Small Habitat Restoration Projects. The certification is the primary permit mechanism for large wood augmentation projects, as well as other types of restoration projects in the North Coast Region.

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Bear Creek Waste Discharge Requirement (WDR) 5-Year Report
Jim Burke

On November 3, 2011, the Regional Water Board (RWB) adopted Order No. R1-2011-0100, *Waste Discharge Requirements for Discharges Related to Timber Harvesting and Associated Land Management Activities Conducted by Humboldt Redwood Company (HRC), LLC, in Bear Creek Watershed*.

Bear Creek is one of the five Humboldt County watersheds, along with Jordan, Freshwater, and Stitz Creeks, and Elk River, identified in 1998 by state timber reviewing agencies as cumulatively impacted by timber harvesting. Following a period of accelerated harvest rates and a series of wet winters and large storm events in the mid-1990s, Pacific Watershed Associates estimated that anthropogenic sediment discharge for the period

between 1994-1997, primarily from roads and harvest related landslides, increased by an order of magnitude over estimates from the period between 1987-1994. Widespread landsliding following the “New Year’s 1996/97” storm event resulted in much of the mainstem of Bear Creek being completely buried in sediment and debris. Following findings by the RWB in 2005 that the five cumulatively impacted watersheds could not be covered under the General Waste Discharge Requirements, there was no mechanism available to permit timber harvest plans in the Bear Creek watershed until a new WDR was developed. On February 27, 2008, the RWB issued letter requesting that the landowner submit a report of waste discharge for its timber harvesting and related activities.

The Bear Creek WDR was adopted by the RWB to authorize HRC to resume timber harvest in the watershed while controlling sediment discharges and addressing cumulative impacts associated with logging in the watershed. The main elements of the WDR , which are largely based on HRC’s management plan, include:

- Limits on the harvesting intensity (no clearcutting) and areal extent (no more than 30% of the watershed area harvested over a 10-year period using uneven-aged Silviculture);
- Use of a shallow landslide model to identify high hazard areas and harvest restrictions based on hazard class;
- Improved methods for road use, construction, reconstruction, decommissioning, and repair and maintenance;
- Inventory of controllable sediment discharge sources from roads, skid trails, landslides, and other sources related to timberland management;
- No harvesting within 100 feet of Class I and II watercourses to prevent sediment discharge, preserve and restore shade, prevent increases in solar radiation, and meet the temperature objective;

- Restoration of in-stream and riparian zone habitat by enhancing in-stream large wood; and
- A monitoring and reporting program (MRP) that includes watershed trend monitoring, annual work plans describing HRC's planned activities for each upcoming year, an annual summary report of activities conducted during the previous year, and a retrospective summary evaluation of the effectiveness of its management measures to control sediment and temperature impacts to be submitted every five years.

On June 17, 2016, HRC submitted its first 5-year summary report, which described area harvested by Silviculture, road work completed, inspections conducted, in-stream monitoring results, large wood enhancement, and landslide activity. Below is a summary of activity completed by HRC in Bear Creek watershed as of June 2016:

- 321.2 acres harvested, representing 22.7% of the 10 year harvest limit allowed under the WDR;
- Constructed 25 spur roads, totaling 2.7 miles, to facilitate cable yarding;
- Completed stormproofing of the entire 54.9 miles of permanent road;
- Completed treatment at all identified Controllable Sediment Discharge Sources (CSDS);
- Conducted annual road and landslide inspections;
- Submitted to the RWB annual summary reports, work plans, and landslide inventories;
- Annual in-stream monitoring, including snorkel fish surveys at three permanent aquatic trends stations;
- Large wood enhancement project along 4,500 feet of the mainstem of Bear Creek.

Overview of Monitoring Results

Landslides

Landslide monitoring included field investigations conducted annually as well as following a triggering event (>3 inches of rain in 24 hours or seismic event) and review of 2015 aerial photographs. Triggering rainfall events occurred in 2013 and 2015 and a magnitude 6.8 earthquake offshore from Eureka in 2014. Landslide inventories based on field investigations and aerial photograph differ somewhat, as each method is biased towards different types of features. A total of 44 landslides, including streambank failures, were identified by field investigations, resulting in an estimated 9,383 cubic yards (yd³) of sediment delivery.

The majority of recent landslides coincided with the triggering rainfall events in 2013 and 2015. Review of the 2015 aerial photographs identified 12 landslides that were not observed in the 2010 photo set, resulting in an estimated 9,400 yd³ of sediment delivery. The majority of landslide activity was associated with steep streamside slopes and roads. No open slope landslides were detected in recent harvest units.

Roads

Road drainage and watercourse crossings have performed as designed. Two new CSDS sites were identified along roads and have subsequently been treated.

In-stream monitoring

HRC has three permanent aquatic trends monitoring reaches (each approximately 450 meters in length) in the mainstem of Bear Creek, in which they measure channel dimensions, particle size distribution, pool dimension and LWD, water temperature, and riparian canopy cover each year. For the 2011-2015 reporting period, the following general results are observed:

- A decline in D₅₀ particle size;
- An increase in maximum weekly average stream temperature;

- Relative stability in residual pool depth, pool wood association, and total LWD piece frequency; and
- Annual variability in pool area, pool spacing, and riparian canopy cover.

Due to the relatively short time of the reporting period (compared to the timeframe of a recovery trajectory, which may take many years to decades) it is difficult to conclusively identify a significant trend. Due to the dynamic nature of the watershed, considerable year to year variability is to be expected. Large wood is present in, and near, the channel in much of the main reaches of Bear Creek. Repositioning key pieces so that they provide benefits to aquatic habitat structure and sediment routing can improve stream conditions.

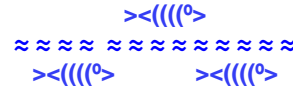
Summary

Due to its location in a steep, tectonically active part of the California Coast Range and fractured bedrock underlying the watershed, landsliding is likely the dominant erosional process. Intensive harvest practices, including removal of a large proportion of trees and extensive road and skid trail construction in streams and steep slopes in the initial tractor logging period of the 1950’s and 1960’s and to a lesser extent again in the late 1980’s through 1990s, resulted in many-fold increase in sediment production and burying of the mainstem channel. Elevated landslide related sediment production will likely persist for many years to come due to reactivation of existing landslides and prevalence of slopes weakened by earth moving. However, it is expected that landslide rates will gradually decline to closer to natural rates due to improved management practices.

Due to the relatively high stream power in Bear Creek, stream segments that were completely buried following the 1996/1997 storm event reestablished new channel through debris deposits within the first few years, and likely achieved a relatively stable “quasi equilibrium” state. Large amounts of sediment remain stored in the channel and streambanks, so that sediment loads are expected to vary considerably from year

to year and the system will likely remain sensitive to further disturbance.

The Bear Creek WDR is considered to be a successful approach to efficiently address cumulative impacts and contribute towards TMDL compliance on a watershed scale.



Road Improvements in the Navarro River Watershed

Bernadette Reed

The Mendocino County Resource Conservation District (MCRCD) recently upgraded 9.3 miles of ranch roads in the Rancheria Creek sub-basin of the Navarro River Watershed. Funding was provided by the Water Board and the U.S. Environmental Protection Agency through Clean Water Act section 319 (h) nonpoint sources grant funding. This project addresses the Navarro River Sediment and Temperature TMDLs. The project began in January 2012 and ended May 31, 2016. The grant amount was \$450,000 and the match amount was \$684,149. The match was provided by Proposition 50 bond funds through the State Coastal Conservancy, Proposition 84 bond funds through the North Coast Resource Partnership, the Natural Resource Conservation District’s Environmental Incentives Program, and contributions from landowners.

The Navarro River watershed covers approximately 315 square miles and is the largest coastal watershed in Mendocino County.

This project prevented a potential of 10,410 cubic yards of sediment from delivering to Rancheria Creek, upgraded 9.3 miles of forest and ranchland roads, treated 85 sediment discharge sites, and upgraded 57 stream crossings. Two post construction fish surveys documented salmonids above one of the crossing.

Enforcement Report for October 2016 Executive Officer's Report

Diana Henrioulle

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
7/18/16	Michigan California Timber Co.	NOV	Failure to Enroll Timber Harvest Plan	Resolved

Comments: On July 18, 2016, the Nonpoint Source & Surface Water Protection Division Chief issued a Notice of Violation (NOV) to Michigan California Timber Company for failure to enroll a Timber Harvest Plan for coverage under the General Waste Discharge Requirements for Timber Harvest Activities. Because the THP has been completed and the project area met the definition of a completed project, the NOV advised the Discharger that no further action was required at this time.

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
7/18/16	Dan Larivee	NOV	Failure to Enroll Timber Harvest Plan	Resolved

Comments: On July 18, 2016, the Nonpoint Source & Surface Water Protection Division Chief issued a NOV to Dan Larivee for failure to enroll a Timber Harvest Plan for coverage under the General Waste Discharge Requirements for Timber Harvest Activities. The NOV required that Mr. Larivee submit an application for permit coverage under the GWDR by August 1, 2016.

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
7/22/16	Crescent City WWTF	ACLC	MMPs	Ongoing

Comments: On July 22, 2016, the Assistant Executive Officer (AEO) issued an Administrative Civil Liability (ACL) Complaint No. R1-2016-0035 to the Crescent City Wastewater Treatment Facility in the amount of \$21,000 for Mandatory Minimum Penalty (MMP) violations. The discharger has waived its right to a hearing and requested to enter settlement discussions.

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
7/22/16	Olive Franklin, Trustee of the Charles A. Franklin & Julia F. Franklin Trust, and Daniel Franklin	ACLC	Unauthorized discharge to waters of the state	Ongoing

Comments: On July 22, 2016, the AEO issued an ACL Complaint No. R1-2016-0033 to Olive Franklin, Trustee of the Charles A. Franklin & Julia F. Franklin Trust, and Daniel Franklin in the amount of \$381,947 for an unauthorized discharge to waters of the state. A fuel bladder containing water burst, and immediately released approximately 50,000 gallons or more of water onto native soil. The water eroded and transported earthen material, including sediment, soil, and rocks into a nearby watercourse and eroded additional material from the stream channel as it traveled approximately 2,000 feet down to the Upper Main Eel River. This matter is presently scheduled for a hearing before the Board at its December meeting.

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
7/25/16	City of Yreka	NOV	Failure to comply with the Small MS4 General Permit	Ongoing

Comments: On July 25, 2016, the Point Source and Groundwater Protection Division Chief issued an NOV to the City of Yreka for failure to complete permit requirements under the General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Small MS4 General Permit). The NOV requires compliance with the permit. This matter is ongoing.

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
7/27/16	Mr. Rob Hayes-St. Clair	NOV	Failure to file Waste Discharge Report	Ongoing

Comments: On July 27, 2016, the AEO issued an NOV to Mr. Rob Hayes-St. Clair, JH Ranch, for failure to file waste discharge reports. The NOV requires that the Discharger prepare and submit a plan to control the discharge of pollutants from the site by August 26, 2016. The Discharger has provided a response, presently under review by staff.

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
8/3/16	Mendocino Railway Skunk Train	CAO & 13267	Unauthorized discharge to waters of the state	Ongoing

Comments: On August 3, 2016, the EO issued a Cleanup and Abatement and 13267 Order No. R1-2016-0036 to Mendocino Railway Skunk Train for unauthorized discharges into Pudding Creek. In February 2015, unstable hillslopes surrounding the western portal of the Skunk Train's Tunnel No. 1 collapsed. The Discharger began efforts to repair the damaged tunnel, but ceased repair sometime in June 2015 reportedly as a result of lack of funds. In response to a complaint received on October 23, 2015, staff inspected the site on October 28, 2015 confirming exposed stockpiles of bare soil/spoils generated during construction activities on the west and east banks of Pudding Creek and lack of erosion and sediment controls to prevent discharges

into waters of the state. The CAO and 13267 Order directs the Discharger to submit technical information and perform cleanup and abatement actions with various compliance dates and to submit a long-term stabilization plan by October 14, 2016. This matter is ongoing.

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
8/4/16	Douglas & Heidi Cole	CAO & 13267	Unauthorized release to waters of the state	Ongoing; petitioned

Comments: On August 4, 2016, the EO issued CAO & 13267 Order No. R1-2016-0031 to Douglas & Heidi Cole for unauthorized discharges to waters of the state. The Dischargers maintain a diversion ditch from Stanshaw Creek to Irving Creek in the Klamath River watershed. The Dischargers operate the ditch to provide water to the Marble Mountain Ranch (Ranch), for domestic uses, as well as to generate electricity, and to fill and maintain a small pond for recreational use and potentially fire protection. The upper segment of the ditch carries water from Stanshaw Creek to the Marble Mountain Ranch. Tailwater from the Pelton wheel used for power generation flows through the property to the pond. Overflows from the pond flow to a discharge point where they enter Irving Creek. Water in the upper segment of the ditch periodically overtops or breaches portions of its outboard containment berm, eroding slopes below the ditch discharging or threatening discharges of sediment into Stanshaw Creek. Outflows to Irving Creek erode and transport sediment from the discharge point into Irving Creek. The CAO directs the Discharger to submit technical information and perform cleanup and abatement actions with various compliance dates and at the conclusion of restoration work, when the site is stable and the monitoring program has been filled, submit a Summary report by January 1, 2021 or the year that meets the approved success criteria. The Discharger has petitioned the CAO to the State Water Board. This matter is ongoing.

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
8/5/16	Turner Automotive	CAO & 13267	Unauthorized discharges of petroleum to waters of the state	Ongoing

Comments: On August 5, 2016, the AEO issued CAO & 13267 Order No. R1-2016-0037 to The Selwyn Bruce Turner and Barbara Ann Turner 2013 Trust, Selwyn Bruce Turner and Barbara Ann Turner, Turner’s Automotive for unauthorized discharge of petroleum hydrocarbons to groundwater and/or surface waters draining to Atascadero Creek and the Russian River, waters of the state, from underground tanks on the property. The CAO and 13267 Order directs the Dischargers to submit technical information and perform cleanup and abatement actions with various dates and to submit and to implement an approved Final Deep Groundwater Remedial Action Plan by March 1, 2019.

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
9/7/16	Fouche Brothers Auto Wreckers	CAO	Unauthorized discharge of petroleum and other pollutants to waters of the state	Ongoing

Comments: On September 7, 2016, the EO issued CAO No. R1-2016-0040 to Michael F. Gasparini, Allan A. Henderson, Paseo Vista, Inc., and Lloyd M. Fouche, Fouche Brothers Auto Wreckers for unauthorized discharge of petroleum hydrocarbons and other pollutants to groundwater and/or surface waters draining to Colgan Creek, a tributary to the Laguna de Santa Rosa. The CAO directs the Dischargers to submit technical reports and plans to perform cleanup and abatement actions to clean up the site.

Date Issued	Discharger	Action Type	Violation Type	Status as of September 26, 2016
9/19/16	City of Eureka	NOV	Failure to comply with the Small MS4 General Permit	Ongoing

Comments: On September 19, 2016, the Point Source and Groundwater Protection Division Chief issued an NOV to the City of Eureka for failure to complete permit requirements under the General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Small MS4 General Permit). The NOV requires compliance with the permit. This matter is ongoing.

