



EXECUTIVE OFFICER'S REPORT North Coast Regional Water Quality Control Board

January 2012

Lake Shastina CSD Pond Construction

Kason Grady

Lake Shastina CSD incorporated in 1968 and operates a wastewater treatment facility (WWTF) currently serving 995 residences, the CSD offices, police and fire stations, and a golf course maintenance yard and restaurant. The WWTF has historically consisted of a solids containment structure followed by three wastewater percolation and evaporation ponds.



Ponds 1, 2, and 3. April, 2009.
Photo Credit: Kason Grady

The CSD is currently constructing two new ponds (Ponds 4 and 5), to regain capacity up to the permitted discharge of 132K gpd. The new Pond 4 will be lined with a 60-millimeter thick HDPE liner to protect ground water and the remaining ponds will be lined as funding becomes available. Ultimately, the CSD

intends to increase treatment to enable agricultural reclamation of the effluent. Staff intend to have a draft WDR permit renewal before the Board in March, 2012.



Grading of Ponds 4 and 5. September, 2011.
Photo Credit: Kason Grady

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Klamath Fish Health Assessment Team – 2011 in Review

Rebecca Fitzgerald

2011 has been a relatively quiet, but productive year for the Klamath Fish Health Assessment Team (KFHAT).

The alert level for the Klamath River was green (river conditions suitable, fish healthy) for most of the year. KFHAT held several conference calls early in the year to re-connect, and then agreed to operate on “stand-by” with the

understanding that should conditions deteriorate the group would increase communication as warranted.

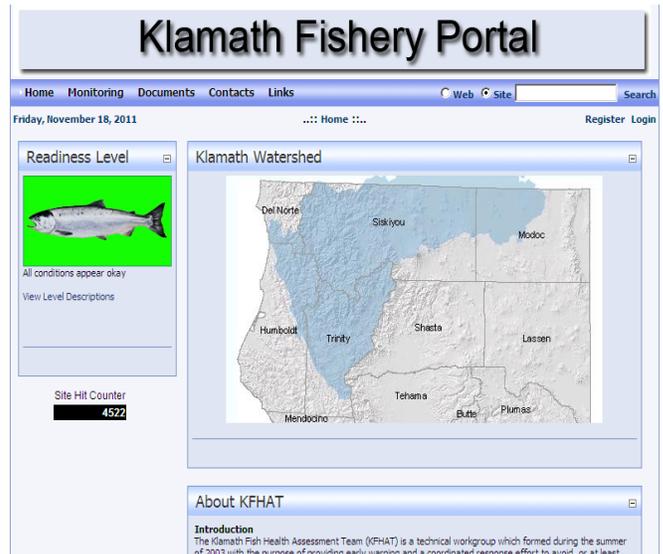
In May, staff of the North Coast Regional Water Board, California Department of Fish and Game, Yurok Tribe, Karuk Tribe and U.S. Fish and Wildlife Service conducted the KFAT Fish Kill Response Plan Training at the Oak Bottom campground on the Salmon River (a tributary to the Klamath River). A summary of this training was reported in the June Executive Officer's Report.

KFHAT intends to conduct training for its members every two or three years, so that both permanent staff and seasonal field crews are fully prepared to respond in the event of a fish kill. Cooler than average air and water temperatures in the Klamath Basin, coupled with high flows resulted in generally suitable conditions for salmonids and KFAT responded to only one report of sick and dying fish.

In September, KFAT members began to notice sick fish in the mainstem Klamath near the Scott River. The alert level was raised to yellow (increased investigation, communication, and data sharing) and KFAT members organized surveys of the Klamath River and tributaries near the area where sick fish were located. The findings of these investigations were that the sick fish were those that had come into the Klamath River early in the run and been holding in the river for a long time. The majority of salmonids in the river appeared to be bright in color and healthy. Disease did not appear to be spreading, and they were able to gain access to tributaries due to high flows (Scott River flows were 50 cfs and temperature was 13.5^F). After a week of

heightened alert, investigations were ceased as there did not appear to be any threat of a large scale fish kill.

KFHAT has a webpage which is currently housed on the California Department of Fish and Game (CDFG) server (<https://r1.dfg.ca.gov/Portal/Default.aspx?alias=r1.dfg.ca.gov/portal/kfp>).



Changes to the webpage generally only occur when there is need to change the alert level for the Klamath River, as there is no dedicated staff or funding to maintain the webpage. In November, representatives of the Klamath Basin Monitoring Program (KBMP) offered the possibility of housing the KFAT webpage on the KBMP website, which is actively managed and updated. Being under the KBMP webpage will allow KFAT greater visibility in the basin and facilitate information sharing. The next step is for the KFAT members to propose an integration plan for KBMP members to consider. If approved, the switch would likely take place in early 2012.

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**Humboldt State University (HSU)
Telonicher Marine Laboratory**

Charles Reed

On October 18, 2011, the State Water Resources Control Board granted an exception to the Ocean Plan prohibition against discharges of waste to Areas of Special Biological Significance (ASBS) to the Humboldt State University (HSU) Telonicher Marine Laboratory in Trinidad, Humboldt County. Under terms of State Water Board Resolution No. 2011-0049, the Telonicher Marine Lab (TML), in operation at its currently location since 1965, will be allowed to continue discharges of waste seawater and storm water runoff into the ASBS. The State Water Board has determined that the exception will not compromise protection of ocean waters for beneficial uses and will serve the public interest.

TML is a unit of HSU, providing lecture rooms and laboratories for biological oceanography, chemical oceanography, geological oceanography, marine biological sciences, mariculture and fisheries instruction and student research in support of the HSU departments of Oceanography, Fisheries Biology, and Biology. Although primarily a research and instruction facility, TML also provides guided public tours and naturalist-led summer programs.

TML operates a recirculating seawater system that consists of a seawater intake pump on Trinidad Pier and a set of holding tanks with a combined storage capacity of 115,000 gallons. After pre-treatment, high quality seawater is circulated throughout the laboratory, supplying classrooms and a 2,400 sq. ft. wet lab. Waste seawater

and storm water originating from the laboratory roof and parking lot are comingled and discharged to a common outfall pipe located in the high intertidal zone adjacent to Little Head (Trinidad). TML was extensively remodeled during 2008 at a cost of approximately \$350,000, and included plumbing and other infrastructure improvements that minimize the wastewater and storm water discharges from the facility to the Trinidad Head ASBS.

In the coming months, Regional Water Board staff will be working with staff from TML and the State Water Board to incorporate conditions of the Ocean Plan Exception in a new National Pollutant Discharge Elimination System (NPDES) permit for TML. Regional Water Board staff expect to complete the draft NPDES permit in fiscal year 2012-2013.



Trinidad Bay: Little Trinidad Head and Trinidad Pier Copyright © 2002-2010 Kenneth & Gabrielle Adelman, California Coastal Records Project, www.californiacoastline.org

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Elk River Restoration Summit
Adona White

Regional Water Board staff and Redwood Community Action Agency, funded by a Proposition 50 grant from the State Water Resources Control Board, will host an Elk River Restoration Summit in Eureka on the tentative date of February 8 and 9, 2012.

The summit is designed to be a working session and will be very informative. It will be crucial in building momentum toward accomplishing actions to improve conditions for beneficial uses of water, to restore ecosystem function and abate nuisance flooding conditions in Elk River.

The desired outcome of the summit is agreement on a strategy to identify restoration actions and a funding and permitting strategy designed to improve ecosystem health and reduce nuisance flooding in the confluence reach of Elk River.

- 3. Presentation of recent pilot technical analyses of hydraulic and sediment transport modeling of a reach around the confluence;
- 4. An optional field trip;
- 5. Group discussions aimed at agreement on approach for identifying preferred restoration actions;
- 6. Working groups including:
 - a. monitoring, data collection and processing;
 - b. restoration design;
 - c. funding and permitting.
- 7. Action planning.

Invitees will include permitting and funding agency staff, affected landowners, and other interested individuals and groups. Staff look forward to Regional Water Board participation.



Flood on North Fork Elk River.
Photo Credit: Kristi Wrigley

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The agenda includes two full days covering the following:

- 1. Background on the need for restoration;
- 2. Proposed approach for identifying restoration actions;

**Freshwater Creek TMDL**  
Matthew Buffleben

Regional Board staff work in the Freshwater Creek watershed has continued in 2011; however, staff

resources for development of the total maximum daily load (TMDL) have been diverted to other high priority efforts. As a result, tasks on this TMDL project were not scheduled for completion for FY 10/11. Regardless, some progress has been made on the TMDL staff report. Drafts of the first two chapters of the TMDL (Introduction and Problem Statement) have been completed and work has begun on the third chapter (Sediment Budget). Furthermore, the largest landowner in the watershed, Humboldt Redwood Company (HRC), is revisiting its watershed analysis. The watershed analysis has many of the same components of a TMDL (e.g. sediment budget, and analysis of current conditions). By participating in the meetings with HRC regarding the watershed analysis, staff is able to coordinate data analysis for both the TMDL and watershed analysis. Strategically, working cooperatively with the major land owner promotes a common approach and subsequent results associated with the sediment budget.

Based on staff understanding of the watershed and the extent of aggradation in the lower parts of the watershed that contributes to the increases in flooding in the mainstem, staff anticipates that source control alone will not restore the watershed and meet water quality standards. Therefore, staff is evaluating other options to restore the beneficial uses of water in the watershed. This may entail revisions to both the Waste Discharge Requirements and the Cleanup and Abatement Order issued in 2006 to HRC, or may require other approaches to address the aggradation in the lower watershed.

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**Coho Salmon of the Central California Coast – A Population on the Brink**

Jonathan W. Warmerdam

For over a million years, coho salmon – also known as silver salmon - have been returning annually to spawn within the watersheds of California. Tragically, within one human lifespan, California’s coho salmon populations have declined so precipitously that today we may be observing the final runs before regional extinction.



Photo Credit: Robin Loznak Photography

According to Peter Moyle’s book, *Inland Fishes of California*, historic runs of coho salmon may have topped one million returning adults during a year of high ocean productivity. After the founding of California as the 31<sup>st</sup> state in 1850, conditions in the watersheds hosting once robust runs of coho salmon began to change as a rapidly growing population began altering the landscape, extracting resources, and modifying natural stream conditions. By the 1940s, the maximum number of returning coho salmon adults across the state had already declined to a range of 200,000 to 500,000. In the 1960s, numbers had declined further to approximately 100,000 statewide. By the 1980’s, the number dropped even further to an estimated average of

33,500 adult coho returning to spawn in the entire state.

Coho salmon in California are divided into two separate populations, known as Evolutionarily Significant Units (ESUs), based on adaptations to regional environments and the tendency to interbreed more with each other than other populations. The *southern Oregon-Northern California coast* (SONCC) ESU is composed of populations in streams from Cape Blanco in southern Oregon (just north of the Rogue River) to Punta Gorda (Mattole River, Humboldt County) in northern California. The *central California coast* (CCC) ESU extends from Punta Gorda to the San Lorenzo River, in Santa Cruz County, which includes the southernmost populations of the species, as well as those in San Francisco Bay.



Big River Watershed. Photo Credit: Matt Coleman, Mendocino Land Trust.

Currently, the CCC ESU of coho salmon is critically endangered with extinction. Unfortunately, the SONCC ESU populations continue to follow the same downward trajectory.

Over the past three years, the California Department of Fish and Game (CDFG)

have been conducting regional surveys to estimate the number of anadromous salmonids returning to spawn within coastal Mendocino County. Although this area only represents the northern portion of the coho salmon CCC ESU, it is generally regarded to be where the bulk of the populations remain within the ESU. Watersheds surveyed as part of the coastal Mendocino monitoring program include (from north to south): Usal Creek, Wages Creek, Ten Mile River, Pudding Creek, Noyo River, Hare Creek, Caspar Creek, Big River, Little River, Albion River, Navarro River, Elk Creek, Alder Creek, Brush Creek, and the Garcia River. CDFG has developed estimates of returning adult coho salmon within the CCC EUS based on these regional surveys and reports the following results for these winter spawning periods:

2008-2009: 887 returning adults;  
 2009-2010: 1,327 returning adults;  
 2010-2011: 1,427 returning adults.

According to Sean Gallagher, "Given that recovery for one stream, Caspar Creek, in this region might require over 600 fish, these numbers are still very low."

In Marin County, Lagunitas Creek has supported one of the more consistent small-stream coho runs in the CCC ESU. The CDFG estimates that Lagunitas Creek and its tributaries historically supported 500-2,000 spawners annually. According to the Marin Municipal Watershed District, the following estimates of coho salmon returned to Lagunitas Creek over the past three spawning periods:

2008-2009: 43 adults;  
 2009-2010: 67 adults;  
 2010-2011: 152 adults.

Further south - in the watersheds between the Golden Gate Bridge and Monterey County - there were no detections of wild spawning coho in *any* of the watersheds surveyed by the CDFG and NOAA Science Center during the 2010-11 season. According to John Ambrose, biologist for the National Marine Fisheries Service, Dr. Jerry Smith of San Jose State University documented no juveniles in water bodies south of the Golden Gate during the 2010-2011 season as part of his ongoing juvenile coho monitoring program.

Significant efforts have been underway for several decades throughout various parts of the state to stop these downward population trends, including: upslope and instream restoration projects (e.g. barrier removal, stream bank stabilization, and fish habitat enhancement), best management practices (e.g. erosion and sediment controls, riparian setbacks, native vegetation planting, and invasive species removal), water management, and changes in regulations.



Inman Creek, Garcia River Watershed.  
Photo Credit: The Nature Conservancy.

New innovative methods, such as accelerated wood recruitment, are just

starting to be implemented in the range of the coho salmon CCC ESU. These methods include the widespread reintroduction of unanchored or wedged large woody material through directional felling of streamside trees, or bringing upslope trees to the stream with heavy equipment. These activities are already showing potential benefits, with juvenile salmonids being documented using wood at new introduction sites.

CCFG administered coho broodstock programs, like in the Russian River watershed, have also been providing some glimmers of hope. Wild coho salmon reared in captivity and dispersed into key subwatersheds have later returned from the ocean as spawning adults.

Surveys for juvenile coho salmon during the summer 2011 revealed the presence of approximately 5,400 total individuals across 19 tributaries to the Russian River. Also, early estimates of returning adult salmon into the Russian River watershed during the winter 2011 – based upon data from the Sonoma County Water Agency’s fish ladders – suggest an expected return of several hundred adult coho during the current spawning period, exceeding the numbers from the past ten years. Similar results are also occurring in the Salmon Creek watershed, where wild coho raised to adulthood in hatcheries have successfully been released to spawn in the wild. These adults are believed to have produced new offspring, returning salmon to a watershed where their presence had not been documented since the 1990’s.

Further, surveys conducted in the Garcia River during the summer 2011 also proved positive, with juvenile coho

being found in 10 out of 12 reaches surveyed, including within three sub-watersheds where they had never been previously identified.

The fight to maintain the remaining populations of coho salmon throughout California continues. With some luck, and resilient determination, we may be able to retain these native wild stocks of salmon.

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**Update of the Aquatic Ecosystem Restoration Policy**

Alydda Mangelsdorf

In October 2011, staff distributed for public review, a "Policy for Aquatic Ecosystem Restoration, CEQA Scoping Document" (Scoping Document). Two CEQA Scoping Meetings were held in November 2011 to solicit public comment on the scope of an Aquatic Ecosystem Restoration Policy (Restoration Policy) and the environmental impacts of concern. Since that time, staff has reviewed the written and oral comments and begun drafting a proposed Restoration Policy and staff report.

Comments on the proposed project were overwhelmingly supportive and many very valuable suggestions were provided. The primary topic areas for comment included:

1. The need for permit streamlining;
2. The definition of the term "restoration";
3. Issues associated with specific exemption criteria;

4. The need to include application procedures; and
5. Issues regarding the type of restoration activities which should be eligible.

A large majority of the commenters voiced concern about the number and complexity of permits that are necessary to implement an Aquatic Ecosystem Restoration Project (AERP) and hoped for solutions to be included in the Restoration Policy. Many felt that the definition of "restoration" included in the Scoping Document, though providing a valuable ecological context for restoration, established an unrealistically high end goal. A variety of thoughtful solutions were recommended. Many commenters voiced concern regarding the proposed requirement that project monitoring demonstrate a trend towards achievement of water quality objectives. This concern was based on the lack of monitoring funds available through public restoration grants and the potential for projects to be disqualified on that basis. A comment was made that a Restoration Policy would benefit from a clear set of procedures by which to apply for relief under the policy. Finally, a number of comments addressed the type of restoration activities which should be eligible for relief under the policy, some wanting to limit the eligible activities and others wanting to expand them.

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## Enforcement Report

Diana Henriouille

Enforcement Orders may be viewed by following the Enforcement link on the Regional Water Board's web home page.

[http://www.waterboards.ca.gov/northcoast/water\\_issues/programs/enforcement/](http://www.waterboards.ca.gov/northcoast/water_issues/programs/enforcement/)

### Enforcement Report for January 2012 Executive Officer's Report

| Date Issued | Discharger               | Action Type   | Violation Type                                                               | Status as of December 6, 2011 |
|-------------|--------------------------|---------------|------------------------------------------------------------------------------|-------------------------------|
| 8/15/11     | Jack and Arlene Guccione | CAO and 13267 | Excavated and diverted Hillside Creek causing erosion and sediment discharge | Compliance efforts underway   |

Comments: On August 15, 2011, the Regional Water Board Executive Officer (EO) issued a Cleanup and Abatement (CAO) and 13267 Order No. R1-2011-0072 to Jack and Arlene Guccione for unauthorized excavation and diverting Hillside Creek, a tributary to Strongs Creek, which is a tributary to the Lower Eel River. The Order requires the Discharger to implement measures to prevent further discharge of sediment to receiving waters, and to submit a restoration plan and monitoring plan.

| Date Issued | Discharger                | Action Type       | Violation Type                        | Status as of December 6, 2011 |
|-------------|---------------------------|-------------------|---------------------------------------|-------------------------------|
| 10/12/11    | Wayne Bare Trucking, Inc. | Rescission of CAO | Vehicle fluids from trucking accident | No Further Action             |

Comments: On October 12, 2011, the Regional Water Board EO rescinded CAO No. R1-2009-0097, issued August 27, 2009, to Wayne Bare Trucking, Inc., as all necessary remedial activities had been completed.

| Date Issued | Discharger   | Action Type | Violation Type                              | Status as of December 6, 2011 |
|-------------|--------------|-------------|---------------------------------------------|-------------------------------|
| 10/17/11    | Elaine Davis | NOV         | Unauthorized tree cutting and stump removal | Ongoing                       |

Comments: On October 12, 2011, the Regional Water Board Watershed Protection Chief issued a NOV to Elaine Davis for unauthorized activities, including stump removal. The NOV requires the Discharger to develop a storm water pollution prevention plan (SWPPP).

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