Tributary Tribune

District D, 2013
Volume 19 Issue 4

Stories and Art by the Watershed Stewards Project

The Watershed Stewards Project's (WSP) mission is to conserve, restore, and enhance anadromous watersheds for future generations by linking education with high quality scientific practices.

A project of the California Conservation Corps, WSP is administered by CaliforniaVolunteers and sponsored by the Corporation for National and Community Service.

The Tributary Tribune showcases the adventures, insights, and artwork of members of the Watershed Stewards Project. For nineteen years WSP has been serving communities throughout California's coastal watersheds. This issue features articles and artwork by members from Region II, District D, which extends from San Luis Obispo to Ventura, CA.

Contents

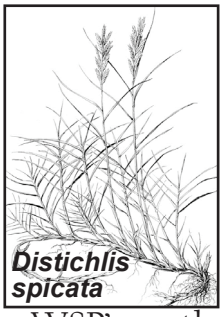
Coastal Plant Communities - **Diana LaRiva** 3
'Santa Barbara' - **Carrie Fong** 5
The Greywater Mural Project -**Dann Block** 6
A Snapshot of Santa Barbara - **Tessa Reeder** 9
Fish Politix - **Lizzy Montgomery** 10
Selected Photographs - **Karissa Willits** 12
Volunteers Are A Powerful Tool - **Tessa Reeder** 14
Fish Food 15

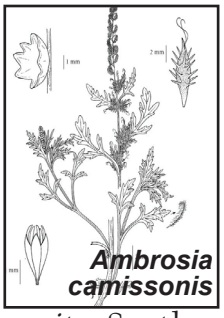
Credits

Editor- Jody Weseman and Lizzy Montgomery
Layout Designer - Lizzy Montgomery
Cover Image - Karissa Willits

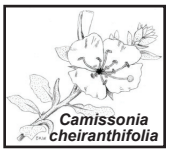
Coastal Plant Communities

Written by Diana LaRiva, placed at South Coast Habitat Restoration





WSP's southern site, South Coast Habitat Restoration, has project sites along creeks, rivers, beaches, and estuarine habitats. When barriers to steelhead trout migration are removed from watersheds, native plants are placed to re-vegetate the disturbed terrain and to stabilize troubled creek banks. The plant species are propagated with seed from the same watershed when possible, and propagated in local nurseries until they are ready to go into the ground. When deciding on which species to use at these restoration areas, we consider local plant communities; two in particular are the coastal strand and the coastal sage scrub plant communities.



Coastal Strand

The coastal strand is the area of land along beaches including dunes and any space between ocean and bluffs. Plants in this zone are adapted to harsh conditions like dryness, wind, and salt spray. Species diversity is relatively low and vegetation tends to be sparse. Some common native species of the coastal strand include *Distichlis spicata* (saltgrass), *Ambrosia chamissonis* (silver beach-bur), *Atriplex leucophylla* (beach saltbush), *Camissonia cheiranthifolia* (beach evening primrose), *Abronia maritima* (red sand verbena), and *Abronia umbellata* (pink sand verbena). These species are all low lying, usually with lighter green leaves and often have colorful flowers of yellow, red and pink.

Coastal Sage

Scrub Coastal sage scrub is an area that occupies dry lands above beaches, western slopes, and areas along the foothills and in canyons where the marine layer still reaches. This plant community thrives in elevations below 3000 feet, where freezing is rare, and where temperatures are below 90 degrees Farenheit, on average. The zones where coastal sage scrub is prevalent receives about 10" to 12" of rain annually in conjunction with hot, dry summer months.

The native plants of the coastal sage scrub have adapted to store water as well as reduce water loss during the hottest months. They will conserve water using specialized leaf structures or by going dormant. Some leaves are covered in tiny hairs that reflect sunlight and keep the plant cool while others have waxy coatings that prevent water loss. While dormant, plants will drop their

(Cont. next page)

Coastal Plant Communities, Cont.

Venegasia carpesioides

If one has the chance to hike through these communities I would recommend finding some California sagebrush and Hummingbird sage, and rubbing their leaves in your hands to smell their wonderful aromas. Stop and smell the sage!

Atriplex leucophylla)

Phacelia ramosissima

leaves or sprout smaller ones on secondary shoots. Typical native species of the coastal sage scrub include Artemisia californica (California sagebrush), Artemesia douglasiana (mugwort), Eriogonum parvifolium (cliffside buckwheat), Baccharis pilularis (coyote brush), Salvia mellifera (black sage), Salivia leucophylla (purple sage), Salvia spathecea (hummingbird sage), Encelia californica (coast sunflower), Venegasia carpesioides (canyon sunflower), Isocoma menziesii (coast goldenbush), Phacelia ramosissima (branching phacelia), Ceanothus spinosus (greenbark ceanothus), and Mimulus aurantiacus (sticky monkey flower).

Ceanothus spinosus

Isocoma menziesii

Mimulus aurantiacus

‘Santa Barbara’

Drawn by Carrie Fong, placed at the Department of Fish and Wildlife of Santa Barbara

The Greywater Mural Project

Written by Dann Block, placed at San Luis Obispo Steelhead Initiative

(The initial design, put on the wall and waiting for Region II members to add color)

Last October, during our site tour on the Los Padres CCC campus, our mentor, Meredith Hardy, showed us the grey-water system that a previous WSP member had installed at the laundry facility. The walls of the laundry room were plain white and the old building had a run-down, drab, and uninteresting feel to it. Meredith showed interest in putting up information about the grey-water system so corps members could learn how it works and the importance of using the special, environmentally-friendly soap available on center.

Grey-water systems reuse water from washing machines, hand washing sinks, and showers to water gardens and recharge groundwater. The soaps and dirt from washing clothes break down in the soil and provide nutrients for plants. This is a quick and dirty explanation, and a quick Google search will provide good sources of information on grey-water systems. At the Los Padres campus, the grey-water from the laundry room is fed to a garden with fruit trees and native plants. The water also helps recharge groundwater sources that feed Chorro Creek, the local anadromous stream less than a half mile away.

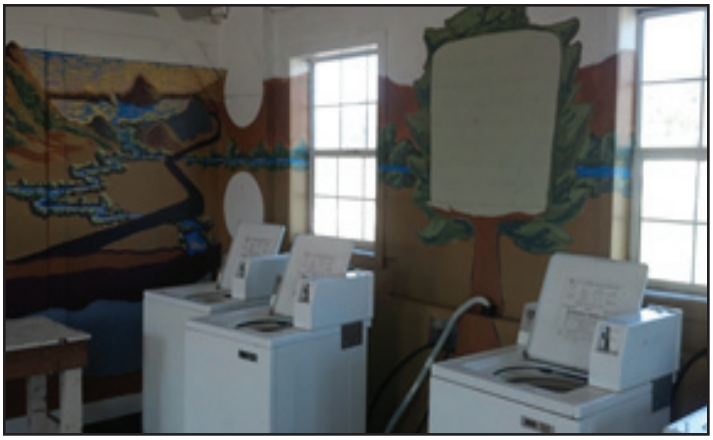
And so I put together a design, transferred the design on to the wall, and had Region II members help add color when they came to the Los Padres CCC Campus for regional training. Their work helped speed up the process and gave the mural its first touch of life.

The Greywater Mural Project, Cont.

Region II worked faster than I anticipated; I decided to add places for the text describing the grey-water system on the adjoining wall. Improvisation!

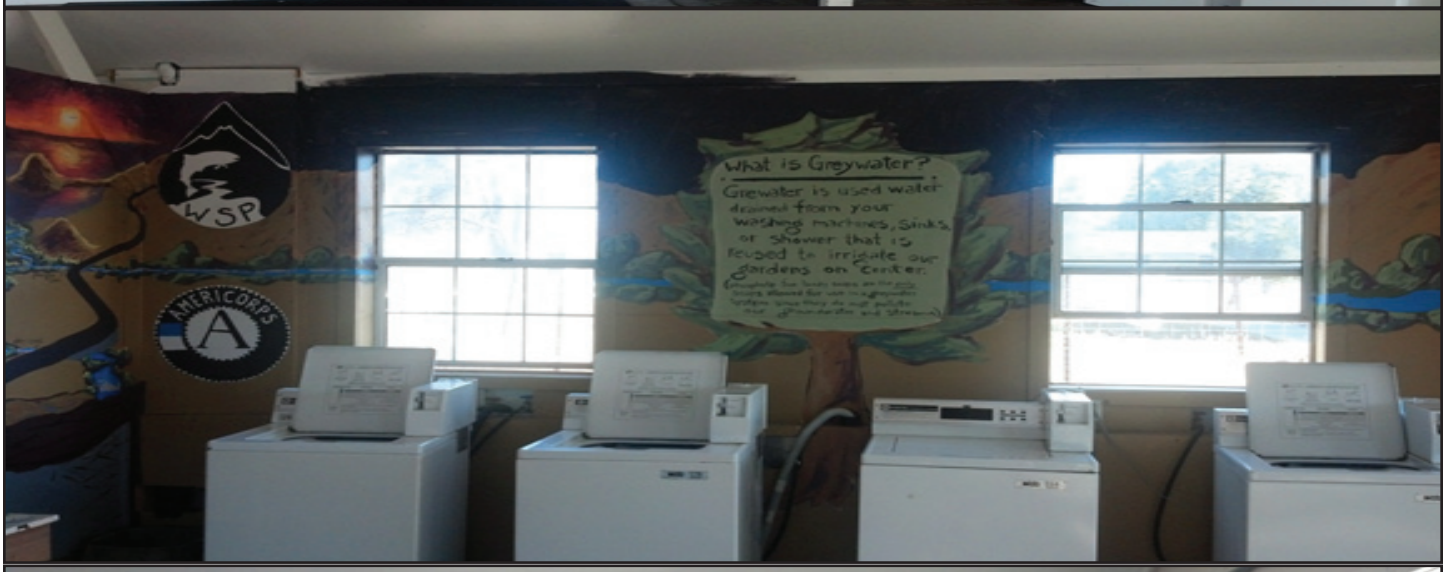
After regional training, I began to add detail and work out some perspective problems that were a bit too obvious for my liking. I recruited a CCC corps member, Sammielle Foltz, a truly gifted artist, to help work on the mural and collaborate on the design and style of the mural.

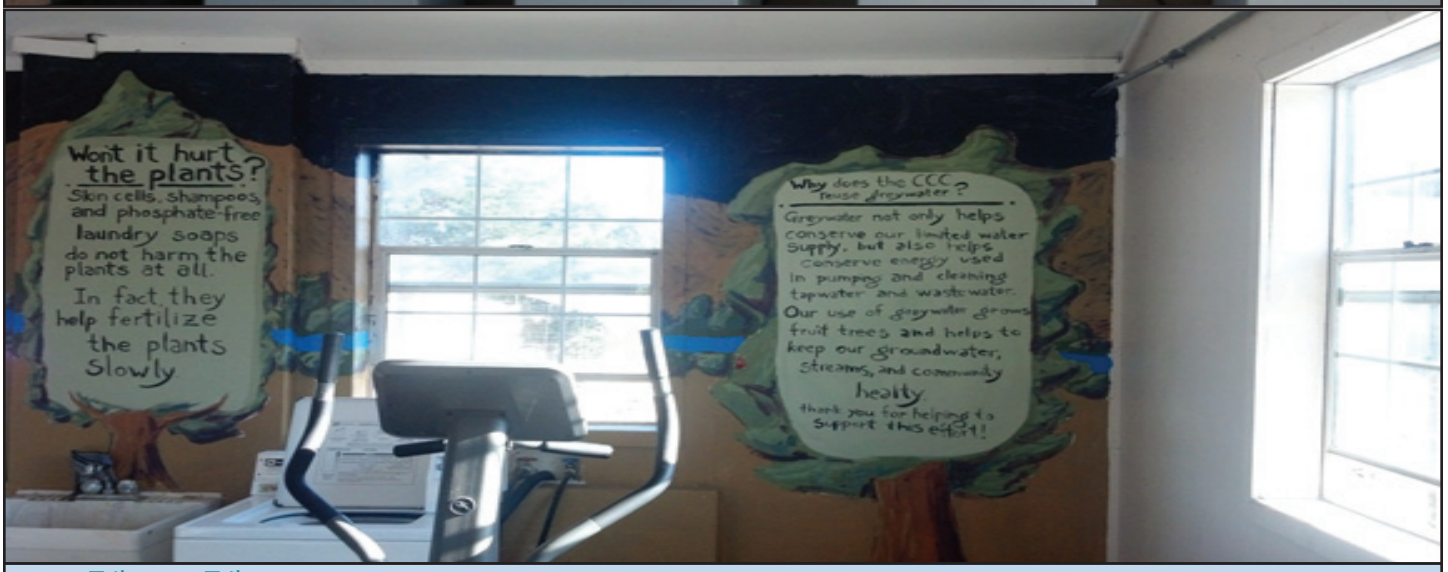
In a tragic twist of fate (no pun intended, but strangely appropriate…), Sammielle rolled her ankle in a rock climbing accident and was given an assignment with corpsmember development on center while she was on the mend. This had an unexpected benefit to the mural, since she was given permission to work on the mural during her work hours. She put a lot of hours into the mural and because of her hard work the mural developed into a great work of art and education. Below are the photos of the mural at the time I write this. I expect to put a few more hours in before the end of the term, fine-tuning the details and rewording some of the text (as well as correcting my spelling errors…can you find two among the pictures on page 8?)



(About halfway through the process)

The Greywater Mural Project, Cont.





A Snapshot of Santa Barbara

By Tessa Reeder, placed at Department of Fish and Wildlife of Santa Barbara

A Snapshot of Santa Barbara

Don't want to get your feet wet? Make a lever!

ISP #2: Oak Park Native Planting Day

Lovingly transplanting natives

Getting ready for "snorkel yoga" in Topanga Creek

Carrie flowing through her Vinyasa

Fish Politix: A CA Legislative Review

Written By Lizzy Montgomery, placed at WSP San Luis Obispo

Let's take a look at how our dear salmonid fair today in the current California legislature. Here, there are only a handful of bills with direct reference to our fishy friends. Following is a summary of two such bills.

In S.B. 197, Democratic Senator Noreen Evans proposes: *An act to amend Section 7863 of the Fish and Game Code, relating to commercial fishing*. The bill, having passed the senate on May 28th, 2013 with a vote of 34 ayes and 3 noes, most recently passed the Assembly Committee on Appropriations on July 3rd. According to the Committee's analysis, the purpose of S.B. 197 is to extend "the sunset date on the commercial fishing salmon stamp program from 2014 to 2019."[1]

The commercial fishing salmon stamp program, introduced in 1978, requires licensed commercial fishers to obtain a salmon stamp from the Department of Fish and Wildlife in order to legally take salmon for commercial purposes. The stamp comes with a base fee of $85, but adjusted by season, total costs may range as high as $260. This revenue from stamp sales is deposited into an account in the Fish and Wildlife Preservation Fund from where it can be appropriated by the legislature for programs that will restore salmon habitat and promote anadromy. The program has generated an average of $60,000 per year in stamp revenue, over the past 3 years.[2] Although the commercial salmon stamp account reportedly has a total fund balance of $1.3 million, DFW's annual expenditure authority is limited to $295,000.[1] In 2012-2013, the department allocated $206,187 from the account to support enhancement projects for the Feather River and Mokelumne hatcheries, $34,000 went to administrative costs, and $21,000 to other projects.[3]

So how do salmonidae fair? At best, the bill might result in additional funds being appropriated for restoration projects. It is noted in the Committee's analysis that "DFW and stakeholders are interested in developing an expenditure plan for the balance in the Account,"[1] referring to the $1.3 million in reserve, but there is no guarantee. The bill is supported by Pacific Coast Federation of Fishermen's Association, California Association of Professional Scientists, California Salmon Council, Fisherman's Marketing Association of Bodega Bay and the Humboldt Fishermen's Marketing Association, Inc.

Although the Assembly Committee on Appropriations sent this bill to the Suspense File, you may not have to wait too long to see action on S.B. 197. The Appropriations Committee sends bills to the Suspense File if they implicate annual costs greater than $150,000 to be re-considered after the state budget has been prepared. Governor Jerry Brown signed the 2013-2014 state budget on June 27th, and so we may see movement on this bill as soon as the Assembly reconvenes from its summer recess on August 5th.

If you support the restoration of salmon and steelhead trout habitat, here is a bill for you! **A.B. 875,** proposed by Democratic representative Wesley P. Chesbro of California's 2nd district (North Coast), aims to 'amend Section Sections 4629.6 and 6217.1 of, and to add Article 5.5 to Chapter 8 of Part 2 of Division 4 of, the Public Resources Code, relating to resource protection and management.'[4] What does it all mean? You see, this past January 2013 state lawmakers created the Timber Regulation and Forest Restoration Fund (TRFR) to fund restoration grant programs. The fund is to be developed through a new 1% tax on the sale of lumber and engineered wood products. If A.B. 875 is passed , "priority (will) be given to funding restoration grant programs relating to salmon and anadromous trout species" when appropriating these funds and two pilot projects will be developed, 'one in a Coast Forest District watershed containing Central California Coast Coho Salmon and one in a Northern Forest District watershed in the Sierra Nevada, with the primary goal of improving the state's collection, organization, management, use, and distribution of vital forestry-related information."

Fish Politix, Cont.

To be more specific, the bill demands that 'Not less than 65 percent of the money (from the TRFR) shall be used for salmon habitat protection and restoration projects and training to increase fisheries protection. Of that amount, at least 75 percent shall be used for watershed (upslope) and riparian area protection and restoration activities.' The bill also states that up to 35% of this money can be allocated to fund a number of items, including (H) The salmon restoration project of the California Conservation Corps and (I) The state's share of the federal Watershed Stewards Project. In addition to giving priority to salmon and trout habitat restoration, the bill also adds that training and education elements can receive funding, which have been excluded in the past.

The pilot projects, which are to be carried out by an assessment team made up of foresters and scientists, is tasked with identifying ways to centralize forestry data and standardize information pertaining to the environmental impacts of timber harvest and best monitoring procedures. The team's final product, a draft report that includes information gathered, analyses made and conclusions drawn and recommendations would be due to the state legislature no later than August, 2018.

A.B. 875 was introduced in March, passed the Assembly Committee on Natural Resources in April, and has sat in the Committee on Appropriations ever since. It may be a while until we see any movement on this bill.

What is the Bay Delta Plan?

While not a bill currently in state legislature, the Bay Delta Plan is a proposal put forth by Gov. Jerry Brown. Interested in fish and water conservation in California? You may want to research the proposal and follow it's movement.

Thirty-one years ago Jerry Brown proposed the underground transfer of freshwater from the Sacramento River, that would otherwise replenish the the Sacramento San Joaquin Delta, to the California aqueduct. Thirty-one years later, claiming to have advanced science on his side, he proposes the same thing. Well not the same, quite, as the tunnels are no longer peripheral and instead undercut a more central part of the estuary.You can see a map of the proposed design bottom left.

The water will eventually be used to quench large farms and urban centers in the San Joaquin Valley, to Los Angeles and to Silicon Valley. An internet search will quickly reveal the controversy over this plan. Opponents cite the transfer of water away from the small-scale local farmers who depend on the delta estuary. Environmentalists also claim that although the proposal includes funding large-scale fish habitat restoration projects in the delta, the best way to help fish is by improving flow, not removing water from their habitat. Moreover, the proposal includes a transfer of $25 million from DFW's restoration fund, which could be used for other projects. Another criticism is the cost to tax payers: more than $7 billion to be shouldered by the public overall. I have found that locating a comprehensive summary/review of the project is difficult, but definetly worth checking out.

Sacramento-San Joaquin Delta tunnel project

Gov. Jerry Brown's proposed twin-tunnel water system attempts to do what the failed Peripheral Canal attempted in 1982: replish the Sacramento River Delta and deliver water to the California Aqueduct.

Works Cited

1. California Assembly, Committee on Appropriations. S.B. 197, Hearing, July 3, 2013. Prepared by Jennifer Galehouse.
2. California Department of Fish and Wildlife. 0200.05 Commercial Salmon Stamp Account Fund Condition Report. January 10, 2013.
3. California Department of Fish and Wildlife. Projects Undertaken With Funds From the Commercial Salmon Stamp Accounts. 2012-2013.
4. http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill id=201320140AB875

Selected Photographs

By Karissa Willits, placed at San Luis Obispo Steelhead Initiative

You could say that the central coast is in a bit of a dry spell. Two years of working in creeks in thirsty creeks have made me really excited about the water conservation projects going on in my area. Photo of Cal Poly Rainwater Harvesting Demonstration Project.

Trout release field trips are one of the most grueling activities I've done at SLOSI, but also one of the most rewarding. We get to see excited kids pile off the school bus, name a fish that they helped raise from an egg, and then watch it swim away.

Photographs, Cont.

The nature walk is one of my favorite parts of the trout release field trip. With some groups, you are lucky if the students manage to hold on to their pencil for the entire trip. Other groups find exciting animals, make surprising good leaf rubbings of plants and stop to investigate every single tree along the way.

A Few Favorite Quotes from the Field

Our Real Science series culminated in taking our three, 2nd grade classes on a trout release field trip to Lopez Lake, a local resevior. Here are some of my favorite quotes from the trips:

Park Ranger: "Does anyone know what black bears eat?"
2nd Grader: "Uh, me!"

2nd Grader #1: "Oh look! The playground!" 2nd grader #2: "Don't worry about that. Focus on our work" (apparently really enjoying our nature walk)

One second grader's response to how deer, not bears or mountain lions, cause the most animal related deaths in the US:
" You mean like if you hit a deer, a family member of that deer might get mad at you and buck you?"

I've gotten to see a lot of awesome things because of my years in WSP. Finding a live lamrey in the Big Sur River is towards the top of the list.

Volunteers Are A Powerful Tool

Written by Tessa Reeder, placed at the Department Fish and Wildlife of Santa Barbara

Volunteers are a powerful tool. Planning an event to get the community involved is one the most incredible feelings. Going into our Individual Service Projects I never expected the volunteers to accomplish as much as they did. At our first ISP we recruited **20** volunteers who switched out the storm drain markers on **121** storm drains. Our second was a native planting day in which **19** volunteers planted **150** plants! At both events, volunteers were eager to do a thorough job and achieve as much as they could.

In orange vests: Volunteers Ashley and Jasper diligently applying glue to the back of the City of Santa Barbara's new metal storm drain markers.

With shovels: Claudina, volunteer, and Tim Burgess, City employee, planting natives at Oak Park.

Winning Caption Submitted by Liza C. Spears

FISH FOOD

Assorted Fishy Jokes from the InterNET

How do fish go into business?
They start on a small scale!

Two parrots sitting on a perch…the first one says to the other "can you smell fish?"

Where does seaweed look for a job?
In the 'Kelp-wanted' ads!

How could the Salmon afford to buy a house?
He prawned everything!

Why did the whale cross the road?
To get to the other tide!

A Riddle Brainteaser Solution

Leo and Cassidy are fish and their tank broke.

Spelling Mistakes from the Grey-Water Mural

1) 'Greywater' is spelled 'Grewater' in the third picture.
2) 'Healthy' is spelled 'Healty' in the fourth picture.

Watershed Stewards Project

1455-C Sandy Prairie Court
Fortuna, CA 95540
Phone: 707-725-8601
Fax: 707-725-8602
www.ccc.ca.gov/go/wsp

Carrie Lewis- Project Director
Jody Weseman- Project Manager
Emily Afriat-Hyman - Member Coordinator
Zia Schatz- Office Manager