

# Dry Creek Project

## Dry Creek Habitat Enhancement Bulletin

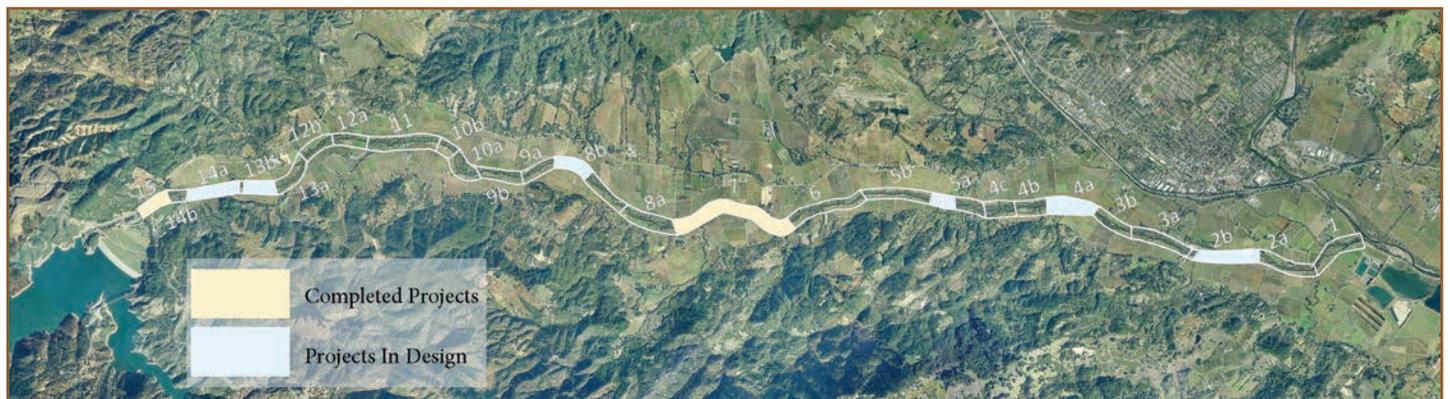
Vol. 1, Fall, 2015

### Slowing velocity, creating refuge are key to habitat project

The Dry Creek Habitat Enhancement Project provides a unique opportunity for the Sonoma County Water Agency (Water Agency) and landowners to protect endangered fish species in the Russian River watershed while continuing to deliver water to 600,000 customers. The National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife biologists have determined that current water velocities in Dry Creek in the summer are too high for young endangered Coho and threatened Chinook salmon and Steelhead.

The Habitat Enhancement Project is creating habitat features that include low-velocity areas for juvenile coho and steelhead along six miles of the 14-mile length of Dry Creek, while still allowing the Water Agency to use Dry Creek as a means of moving water downstream for water supply purposes. The first mile of the project, known as the Demonstration Project, was completed in 2014. Backwater pools and side channels to slow the speed of the water and create refuge for young fish were constructed using natural materials such as logs and rocks. Bank stabilization will reduce erosion and provide vegetation cover. Working with willing landowners, five additional miles of habitat enhancements will be constructed by 2020. The Water Agency and its contractors are currently conducting surveys covering miles 2-6 of Dry Creek. The continued cooperation of property owners and the support of the community are key to the success of this program.

*Dry Creek habitat enhancement features, such as this backwater pool (top, right), were able to withstand the high flows in December, 2014 (below, right) when heavy rains swelled Dry Creek. The log features remained intact and performed as designed.*



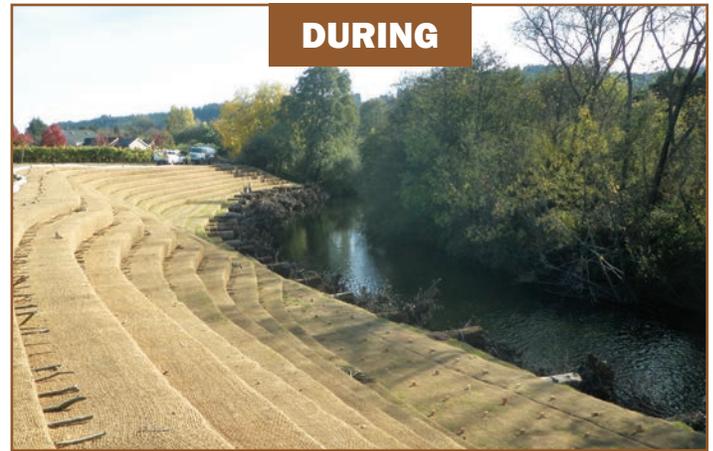
*This map shows the habitat enhancement projects along Dry Creek that have been completed and projects that are being designed. Lake Sonoma can be seen at bottom left and the city of Healdsburg near top right.*

# Dry Creek Project

## Demonstration Project is a model for future phases

Construction of the first mile of the habitat enhancement project was completed in November of 2014 as the Dry Creek Habitat Enhancement Demonstration Project. A variety of habitat features were built to stabilize banks, reduce erosion and create slow-flowing areas where young fish can escape high summer and winter flows. Features were designed to minimize the effect on existing vineyard operations.

*The photo below shows a bank stabilization site before construction in June, 2014. Photo at right was taken during final construction in November, 2014. The photo at bottom right was taken after construction was completed in June, 2015. The increase in woody cover improves the riparian habitat and conditions for fish.*



## Salmon Stewards of Dry Creek recognizes landowners' role in project

The Salmon Stewards of Dry Creek program was created to recognize the landowners along the creek that have willingly participated in the project by allowing enhancement work to be completed on their property.

“Without willing landowners this project would not be possible,” said David Manning, Environmental Resources + Manager with the Water Agency and project supervisor. “The cooperation and support we have received from property owners and the entire Dry Creek community has been tremendous. Obviously, the success of this project to enhance the habitat and protect the endangered species in the Russian Riv-



er watersheds depends on community support.”

The Salmon Stewards of Dry Creek program allow wineries, vineyard owners and property owners to display the Salmon Steward logo, and utilize it in marketing materials. The program is voluntary and does not require any certification. Property owners participating in the Dry Creek Habitat Enhancement Project are allowed to be part of the Salmon Steward program.

For information about the Salmon Stewards of Dry Creek, contact Barry Dugan at the Sonoma County Water Agency at 547-1930 or [barry.dugan@scwa.ca.gov](mailto:barry.dugan@scwa.ca.gov).

# Dry Creek Project

## Property Owner Profile

### Dry Creek Vineyard owners tout the benefits of the project

When the idea of a habitat project along Dry Creek was first proposed, there was not unanimous agreement in the Stare Wallace household.

The project would improve conditions for endangered fish in the creek and stabilize eroding banks on their property. But it would also mean noise, dust, construction and an intrusion on their rural lifestyle.

Don Wallace and Kim Stare Wallace are the owners of Dry Creek Vineyard and their property runs along the creek just downstream of Lambert Bridge. “I was against this when I first heard about it,” said Kim. “I was convinced it would turn our property into a park. I was concerned about giving anyone access to our property.”

Her husband held a different view. Don saw the potential to improve conditions for endangered fish in the creek, and halt damaging erosion that threatened his property. As a farmer and winery owner, he values the land and the environment. “I think most people want to do what is right for the environment,” he said. “Every farmer is a steward of the land.”

Eventually, Kim was persuaded. “I was very skeptical,” she said. “What Don convinced me of was that it’s the right thing to do from an environmental standpoint. He convinced me it was a good idea. So far, we haven’t been disappointed.”

The Stare Wallace property was the first to be signed up for the project, more than three years ago. Their agreement became the model for contracts with other landowners, of which there were 10 in the first phase of the project.

“What we saw was that it was an opportunity that was good for everybody,” said



*Kim Stare Wallace, pictured with her husband, Don Wallace, was initially skeptical about the Dry Creek Habitat Enhancement Project. After seeing the results and the benefits produced on her property, she is a proponent and supporter.*

Kim. “It was good for the creek, good for the fish and good for Dry Creek Valley. And good for property values.”

fish during high flows, and a riffle was constructed in the creek that slows down fast-moving water.

Don was impressed with the opportunity to have input into the project as it was being designed. “We were encouraged to interface with the design firm, Interfluve. They were receptive to our ideas about how to make it better,” he said.

When Don talks with a neighbor who might be skeptical about the project, he just invites them over to see the results. “I can not only tell them, but show them, just how beneficial it can be,” he said. “If you’re like me, you want to leave the land in better shape for the next generation. Once they see what has happened here, it changes their mind.”

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**“If you’re like me, I want to leave the land in better shape for the next generation.”**

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—Don Wallace

Work on the Stare Wallace property included stabilizing banks with large wood material and replanting with native vegetation. Across the creek, a backwater channel was built to provide refuge for

# Dry Creek Project

## Team Members



**David Manning**  
**Environmental Resources  
Manager**

David supervises environmental programs including the Biological Opinion, water system improvements, and protection of fish, wildlife, and Russian River habitats.

**Contact:** 707-547-1988

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**Dan Mason**  
**Right of Way Agent**

Dan works with property owners individually concerning the temporary property rights and easement agreements that are needed for the project.

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**Dave Cuneo**  
**Environmental Specialist**

Dave is involved with landowner outreach, environmental compliance, permitting, and monitoring of the project before, during, and after construction.

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**Greg Guensch, P.E.**  
**Engineering Project Manager**

Greg is involved with landowner outreach, coordinates day-to-day project activities, reviews designs and calculations and manages design consultant contracts.

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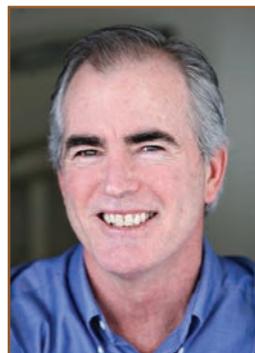


**Anne Crealock**  
**Environmental Specialist**

Anne is the lead for the preparation of the environmental impact report for the project. She also conducts biological surveys in the field, particularly pre-construction wildlife surveys.

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**Barry Dugan**  
**Outreach & Communications**

Barry coordinates media, communications and meetings. You will see him on tours and at meetings.

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Barry.Dugan@scwa.ca.gov



**Ann DuBay**  
**Outreach & Communications**

Ann supports the Dry Creek team by coordinating media, communication, and meetings. You will see Ann on tours and at the annual Dry Creek Community Meeting.

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### Project Consultants:

**Philip Luecking, P.E.**

Managing Associate Engineer, ESA

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**Josh Epstein**

Fluvial Geomorphologist, Inter-Fluve, Inc.

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Vice President, Natural Resources Division, Cardno

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# Dry Creek Project

## Monitoring projects are measuring program's effectiveness

A key component of the Dry Creek Habitat Enhancement Project is demonstrating that the project is meeting the requirements of the Biological Opinion.

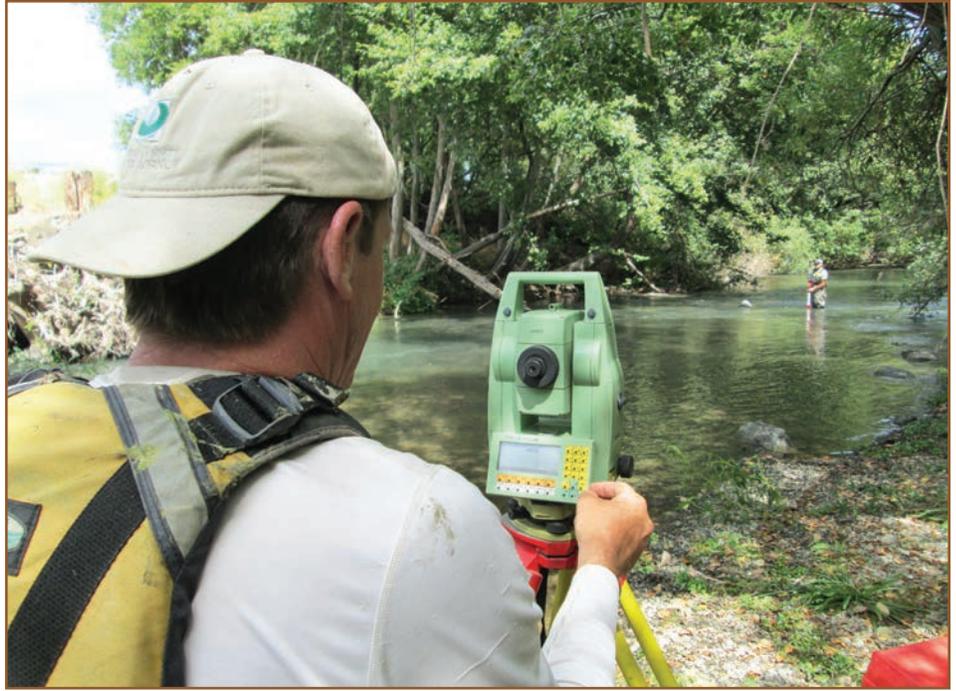
The Water Agency has developed an Adaptive Management Plan (AMP) and is conducting a thorough monitoring and evaluation process to demonstrate the effectiveness of the habitat improvements.

The evaluation process consists of three types of monitoring: implementation, effectiveness, and validation.

- Implementation monitoring determines if the habitat enhancements were constructed by the contractor according to the design.
- Effectiveness monitoring determines whether habitat enhancement is having the intended effect on physical habitat quality. This is done by measuring pre- and post-habitat enhancement conditions, including data on water depth and velocity, and the amount of instream cover.
- Validation monitoring will determine if the habitat enhancements are improving the production and survival of steelhead and coho salmon in Dry Creek.

Snorkel surveys and implanted passive integrated transponder tags and remote detection devices are used to determine fish counts. Other monitoring will gauge the summer and winter habitat use, and the growth and survival of young fish. Water quality monitoring will determine if goals are being met for water temperatures and dissolved oxygen levels.

The goal of the AMP is to monitor habitat conditions over multiple years to detect changes that result from enhancement projects.



*Water Agency biologists use survey equipment and instream current meters to determine the pre- and post-habitat enhancement conditions, such as water depth and velocity.*



*Underwater cameras are used during snorkel surveys to film young steelhead that are living in the newly constructed habitat sites.*

**Sonoma County Water Agency**  
404 Aviation Blvd.  
Santa Rosa, CA 95404

## **DRY CREEK COMMUNITY MEETING**

The annual Dry Creek Community Meeting will provide an update on the Dry Creek Habitat Enhancement Project.

**WHEN:** Thursday, January 14, 2016 from 6-8 p.m.

**WHERE:** Milt Brandt Visitors Center at Lake Sonoma, 3333 Skaggs Springs Rd., Geyserville

**WHAT:** Water Agency staff will present information about the status of the project and plans for construction of the next phase of the project in 2016.

## **Welcome from Sonoma County Fourth District Supervisor James Gore**

As your County Supervisor and a Dry Creek Valley native, it gives me great pleasure to introduce the first issue of the Dry Creek Habitat Enhancement Project Bulletin. This bulletin — provided by our Sonoma County Water Agency — endeavors to inform all community members about our actions to balance the protection of threatened and endangered fisheries with the demands of delivering drinking water to more than 600,000 customers. As you will read here within, this undertaking requires a unique private-public partnership between the Water Agency and Dry Creek landowners, the same landowners who co-manage the needs of production agriculture and environmental stewardship through working lands conservation.

Please join us for a Community Meeting to provide an update on the Dry Creek Habitat Enhancement on Thursday, January 14, 2016 from 6-8 p.m. at the Milt Brandt Visitors Center at Lake Sonoma, 3333 Skaggs Springs Rd., Geyserville. Water Agency staff will present information about the status of the project and plans for construction of the next phase of the project in 2016. We look forward to seeing you there and hearing from you about the project.

Sincerely,  
James Gore  
Sonoma County Fourth District Supervisor and  
Sonoma County Water Agency Director

## **More about the Project**

For questions related to the project, contact Barry Dugan at (707) 547-1930 or [barry.dugan@scwa.ca.gov](mailto:barry.dugan@scwa.ca.gov). Information about the Dry Creek Habitat Enhancement Project can be found at [www.sonomacountywater.org/drycreek/](http://www.sonomacountywater.org/drycreek/)



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Russian River Instream  
Flow and Restoration

