



SAVE THE DATE!

Climate Stewardship: Following the Water in California Watersheds

September 14 - 16, 2017

Join us for an exciting exploration that will connect the far reaches of the greater San Francisco Bay watershed to the Sea! Our 3-day institute will offer a blend of field investigations, classroom activities and group discussions, and all participants will leave with an array of high quality, classroom-ready watershed and climate resources. We will explore three unique locations indicative of the terrestrial ecosystems within the greater San Francisco Bay and Pacific Coast watersheds:

Rush Ranch
Suisun Marsh
September 14, 2017

China Camp State Park
San Francisco Bay
September 15, 2017

Marin Headlands
Pacific Ocean
September 16, 2017

Together, we will follow the water using a variety of learning resources and 3D NGSS instructional strategies to educate and empower Middle School students to engage in learning and act upon climate change issues by:

- Making system thinking –in the context of climate change– observable, measurable, meaningful, and tangible for students;
- Using place-based climate and watershed investigations that feature direct physical investigations of environments within watersheds, geo-spatial – remote sensing analyses, and local action tools that will support student acquisition of these key 21st century success skills;
- Employing 5-E lesson modeling and cross cutting conceptual thinking tools as an effective approach to learning about the complex, big picture issues that will confront our students as they mature into community change agents;
- Approaching Earth’s natural systems in a manner woven into California’s new **History - Social Science** and Science frameworks, as well as **Common Core** and **Next Generation Science Standards**;
- Providing ample time for collegial co-planning and sharing ideas for effective classroom implementation and curriculum integration.



How will your students benefit?

Climate change is a global issue with serious local implications. Here in California, climate change is having and will continue to have profound effects on California water resources, as evidenced by changes in snowpack, sea level and river flows. At the same time, the dual impacts of climate change and ocean acidification are threatening California's iconic oceanic and coastal habitats. This is the future that our students will inherit, so we must be honest with them about the challenges while offering and encouraging effective solutions.



The cause of these environmental threats is increasing human carbon emissions. Therefore, to confront these challenges, all of us need to reduce our carbon emissions. But we all also have a more direct impact on our local coastal ecosystems...through our watersheds! Promoting healthier watersheds will promote more resilient coastal ecosystems in a future of climate change. We can all make a difference!

What will each participant receive?

In addition to the action items previously listed, Middle School teachers participating in this training will:

- Gain an in-depth Earth and Climate science perspective on connections between California inland waterways and ocean impacts;
- Explore and receive a variety of new climate science curriculum tools;
- Receive reimbursement for your travel mileage **and** substitute teacher;
- Experience an overnight stay in the Marin Headlands; and
- Receive a \$200 stipend upon completion of a classroom curriculum project.



To reserve your spot, please go to: <http://tinyurl.com/FollowWater> and enter your information. There is a \$30 registration fee that will be refunded upon completion of the training – Instructions in the above link. For questions on the training, please contact Jason Hodin, UW Friday Harbor Labs, (larvador@uw.edu)

REGISTRATION WILL CLOSE FRIDAY, SEPTEMBER 1, 2017!

Hosted by the I2SEA project (UW, Stanford, U of Gothenburg).

Sponsored by Project WET (PWET), the San Francisco Bay National Estuarine Research Reserve, Cordell Bank National Marine Sanctuary, and the California Coastal Commission (CCC)