

Students and Teachers Restoring A Watershed (STRAW)

STRAW is combating climate change with every restoration. Combining quality science education, collaborative partnerships, the latest restoration science, and professional hands-on restoration, STRAW empowers communities to heal their damaged landscapes, revitalize wildlife habitats, generate cleaner water, sequester greenhouse gases, empower underserved children, and inspire the next generation of conservation leaders.

STRAW and Science Education

STRAW makes science real to more than 3,000 K-12 students every year through meaningful watershed restoration projects. They're literally getting their hands dirty. STRAW activities take place both in the classroom and at the restoration site, connecting students and their learning to real-world issues and solutions.

- In 2014, HLJ Research evaluated the program and found that STRAW improved students' basic understanding of watersheds and provided students with a broader global context of watersheds and their importance to the environment.
- Approximately 30% of the schools STRAW works with are in underserved communities. The program is recognized for its ability to provide valuable educational experiences to diverse students and communities, that last a lifetime.

STRAW, Climate Change, Biodiversity, and the Economy

Point Blue scientists focus on climate change research, which informs STRAW education and restoration practices. Stream and wetland habitat restoration prevents erosion, retains more water on the land, and provides habitat for wildlife, by planting trees and shrubs – critical elements of resilience in the context of rapidly changing climate. Habitat restoration's impact is exponential. Here are some of the short- and long-term benefits of habitat restoration as a solution to climate change:

- Each mile of stream habitat STRAW restores sequesters an average of 289 tons of carbon dioxide equivalents every year for at least the next 50 years, equal to **taking 55 cars off the road or offsetting the energy use of 24 homes each year.**
- For every dollar invested in the STRAW Program, California citizens receive a **return value of \$14.22** in environmental benefits. This value is based on storm water treatment and wildlife habitat, but does not include additional value from carbon emission offsets and social investment benefits of science education.
- Each STRAW restoration project increases the number and diversity of birds, and collectively the impact is even greater. The number of bird species detected at STRAW sites has **gone from as low as 0 species (pre-restoration) to as high as 30 after restoration.**
- In the last 8 years, approximately \$6.4 M of public money has been leveraged for climate-smart restoration and education programming, additional benefits not provided by our competitors.

What Makes STRAW Work?

A collaborative network powered by respectful, dynamic, and vibrant partnerships with educators, students, scientists, ranchers, public agencies, and other community members who plan and restore over 50 stream and wetland habitats together each year

Longevity and proven record of accomplishment, receiving 25 awards in the last 26 years

Professional quality restoration completed by students, educators, and community members

Authentic, current, and innovative education and restoration design, addressing our biggest threat, climate change