



# Friends of the **Petaluma** River



**FRIENDS OF THE  
PETALUMA RIVER**



**Watershed Classroom**

# FOPR: Promoting Stewardship of the Petaluma River

- Access Opportunities
- Education for students & the community
- Conservation in action







# Watershed Classroom Mission Statement:

To support the implementation of exceptionally engaging curriculum about the Petaluma River and Watershed to educate youth in Petaluma about

- their place in our environment
- how their decisions and actions affect their environment
- inspire conservation and celebration of the Petaluma Watershed

# Guiding Principal:

Friends of the Petaluma River believes that educators are our community's most important resource. By teaching Petaluma's youth, our teachers are guiding future generations of Petalumans whose decisions will determine the health and vitality of our wetlands and other natural resources.



# Geoliteracy: Interactions Interconnections, Implications



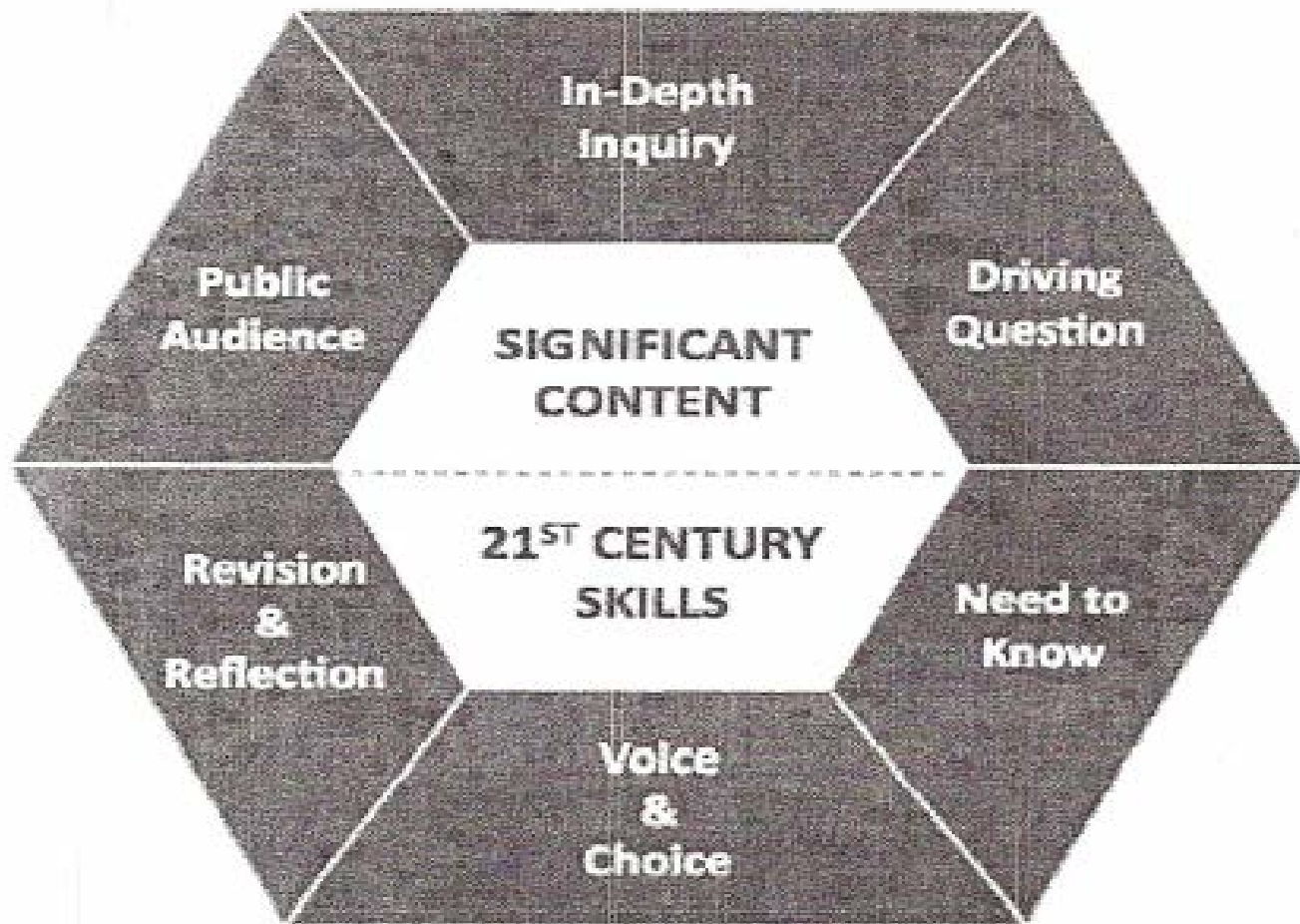
# Curriculum Requirements:

- integrated academic disciplines
- Project-based
- geoliteracy skills
- fieldwork activities
- hands-on learning activities
- CA Common Core Standards & 21<sup>st</sup> Century Skills



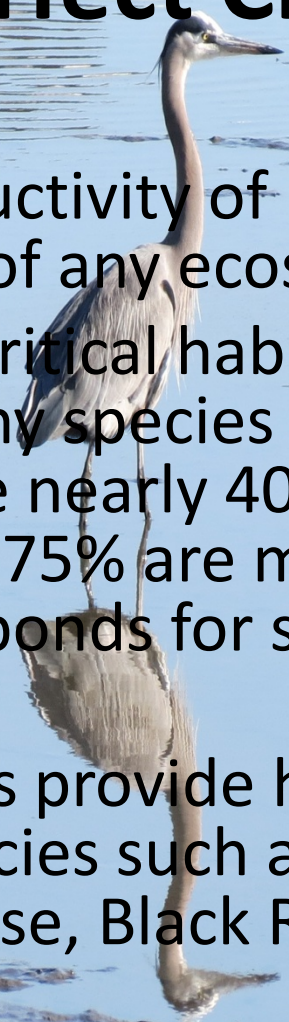


# Project Based Learning & the New CA Common Core



# The Petaluma Watershed: the Perfect Classroom

- The biological productivity of Bay Area wetlands is among the highest of any ecosystem in the world.
- Wetlands provide critical habitat for many plant and animal species. Many species of fish use wetlands as their nursery. Of the nearly 400 species of birds found in California, nearly 75% are migratory and depend upon marshes and ponds for shelter and food during migration.
- Petaluma's wetlands provide habitat for endangered and threatened species such as the Clapper Rail, Salt Marsh Harvest Mouse, Black Rail, and Western Pond Turtle.



A man in a green jacket and blue jeans stands on the right side of a rustic barn, presenting to a group of people seated in a circle. The barn has wooden beams, a red door, and various items hanging on the walls. The text "Teacher Benefits" is overlaid in a white box in the center of the image.

# Teacher Benefits

**Professional  
Development  
Resources  
Creativity  
Recognition**

# Teacher Resources: Watershed Atlas

← → ↻ [www.watershedclassroom.org/watershed-atlas/](http://www.watershedclassroom.org/watershed-atlas/) ★

APPLY HOME ABOUT THE WATERSHED EDUCATOR RESOURCES CURRENT PROJECTS OUR PARTNERS CONTACT FROM THE CLASSROOM

Sponsor Agencies ▾

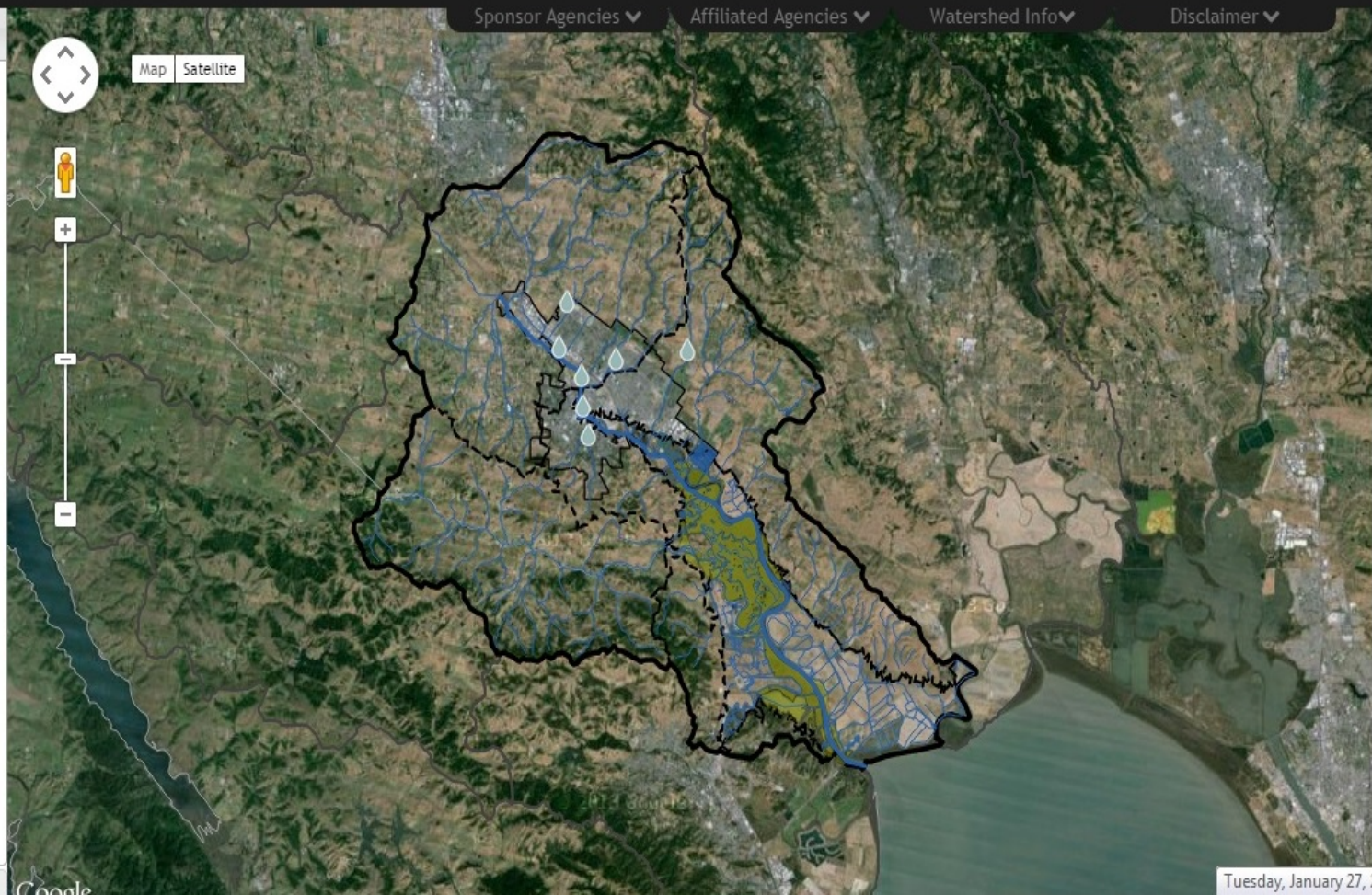
Affiliated Agencies ▾

Watershed Info ▾

Disclaimer ▾

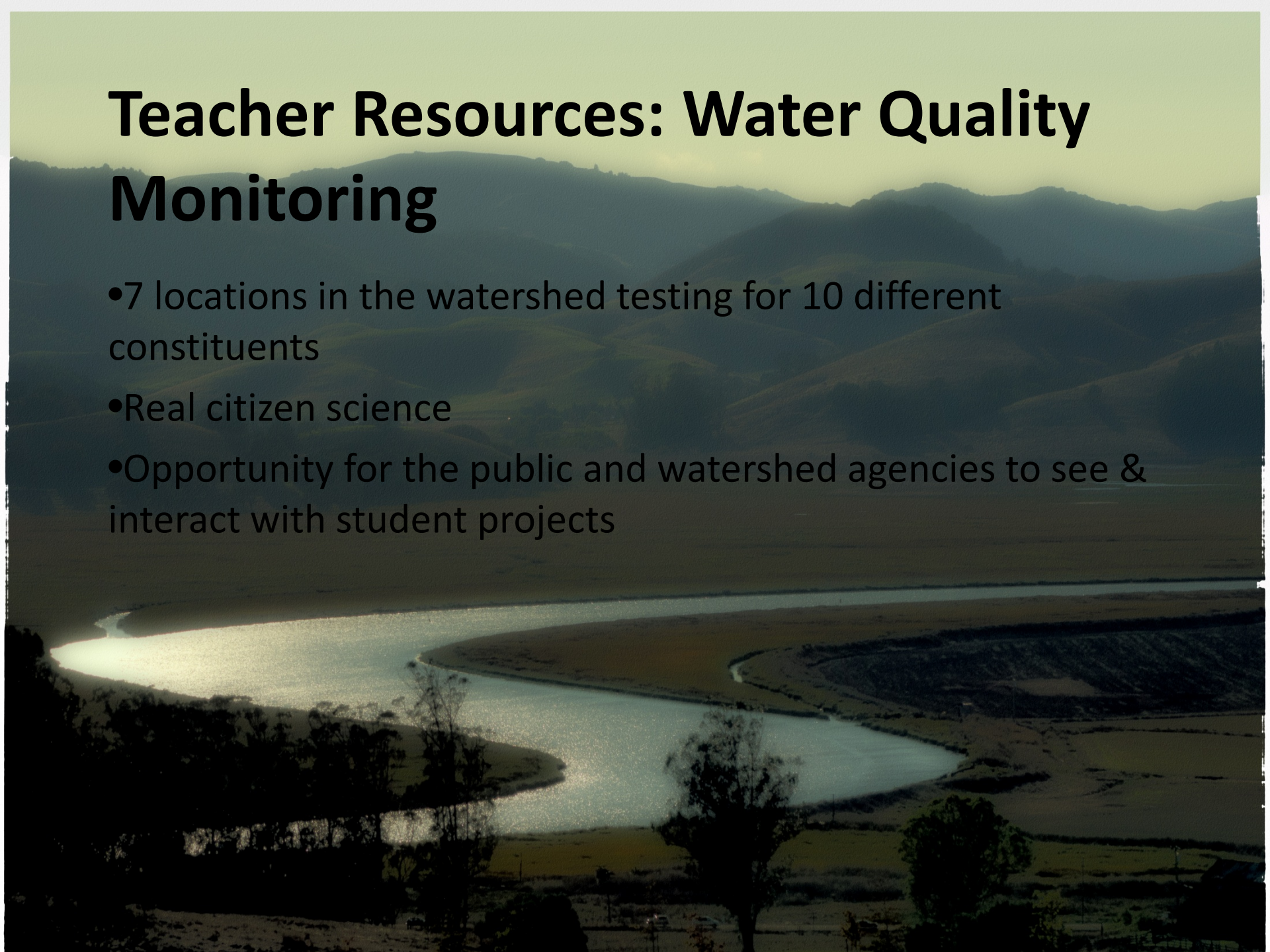
## Layers

- Monitoring Location
- Stream or Rain Gauge
- SF Bay Area Water Trail Site
- School
- Petaluma River
- Creek
- Water Body
- Marsh
- Flood Zone
- Protected Open Space
- Geology
- Subwatershed
- Petaluma Watershed
- Neighboring Watershed
- City Limit
- County
- Show/hide all



# Teacher Resources: Water Quality Monitoring

- 7 locations in the watershed testing for 10 different constituents
- Real citizen science
- Opportunity for the public and watershed agencies to see & interact with student projects



# Teacher Resources: Watershed Timeline



**1849**

## **River Declared a Navigable Stream**

The Petaluma River was first declared a navigable stream on December 15, 1849 by the first California Assembly, meeting at Pueblo de San Jose.

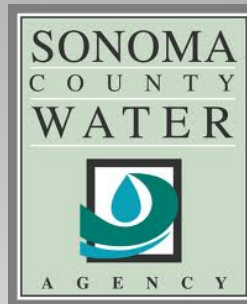


**1851**

## **River Transport and Commerce**

Petaluma established as a navigable port. The Petaluma Creek was the primary method of transportation for goods to many surrounding towns and cities.

# Teacher Resources: Watershed Experts



# Watershed Classroom Website

A hub for information and communications about the Watershed Classroom

- Curriculum content from teachers – assignments, lesson plans, student work
- Student projects, photos and testimonials
- Links to resources and information about the Petaluma Watershed
- <https://www.watershedclassroom.org>



## Welcome to the Watershed Classroom

The Watershed Classroom supports the implementation of exceptionally engaging curriculum about the Petaluma River and Watershed to educate youth in Petaluma about their place in our environment, how their decisions and actions affect their environment and inspire youth to conserve and celebrate the Petaluma Watershed.



### FROM THE CLASSROOM



The Petaluma Adobe Ranch  
A MONTH AGO

### SUPPORT US

DONATE

### GET UPDATES FROM US!

Email Address \*

SUBMIT

### The Watershed



The Petaluma Watershed encompasses over 300 square miles and is home to the largest remaining salt marsh in California. Our resources will take you on a virtual tour where you can explore the Watershed for yourself.

### The Curriculum



Our teachers have put together an amazing year of lessons based on the Petaluma Watershed. From high school to elementary school and from art to science, the curriculum incorporates a wide array of academic disciplines, outdoor education and project-based learning.

### Our Partners



We work with partners throughout our local community to bring the resources and experts teachers and students need to learn about the Petaluma Watershed firsthand. Our partners work with teachers to develop their curriculum and support implementation in the classroom and in



# Forum For Watershed Collaboration

Avenue for collaboration between local, regional, state and federal agencies involved in natural resources management, public education, infrastructure, sciences, health, transportation and more.



# YEAR TWO

## ACCOMPLISHMENTS:

- 18 teachers participating in teams across five schools
- Over 1000 students learning about the Petaluma Watershed
- Pre & Post Student Assessments
- Water Quality Monitoring layer on the Watershed Atlas
- Project Based Learning training with the Buck Institute for Education
- All teams report that the curriculum was
  - ❖ “highly engaging” and “students were more engaged than usual.”
  - ❖ acquisition of knowledge was “extremely successful”

# Year Three

**12 Projects**

**32 teachers participating from 10 schools  
throughout the district**

**Every grade level except middle school represented**



# YEAR 4 GOALS

- Incorporate all school districts in the Petaluma Watershed
- Include middle school in the program, reaching all grade levels
- Interactive Watershed Classroom website for educators, students, agencies and the community
- Grow the Watershed Atlas to include layers on wildlife, development, habitat and more



# Needs

- Website development
- Additional Watershed Atlas Layers
- Teacher Training
- Public Forum
- Program Administration

**\$30,000 to accomplish  
our goals**

**NBWA can help enhance the Watershed Classroom while reaching more students with meaningful watershed curriculum**



**QUESTIONS?????**