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Green to Clean: Restoring Pinto Lake



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April 26, 2017

Pajaro River Watershed



City of Watsonville

Water: Capistrano Through Diversity, Unity Through Cooperation

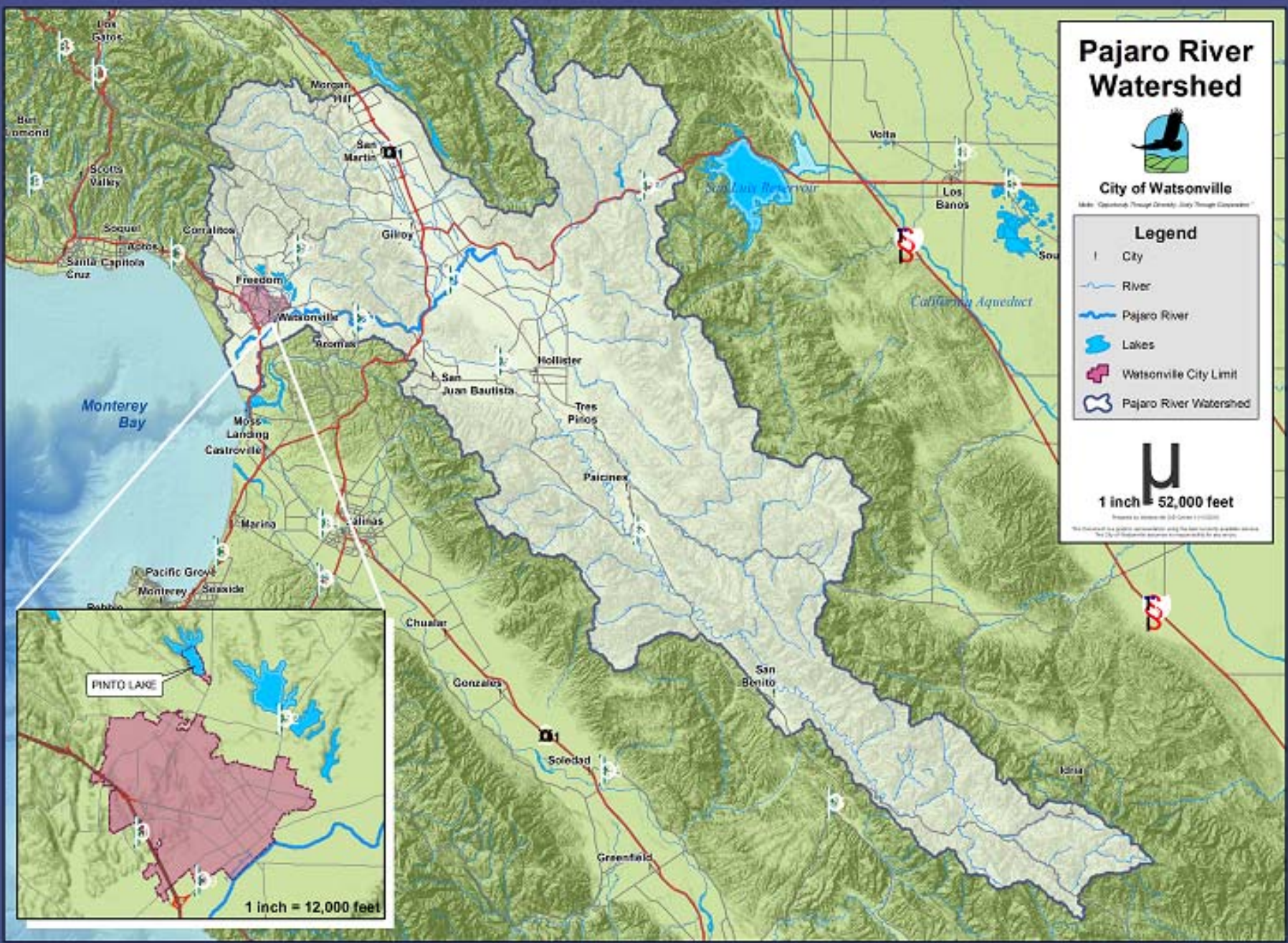
Legend

- City
- River
- Pajaro River
- Lakes
- Watsonville City Limit
- Pajaro River Watershed



1 inch = 52,000 feet

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Pinto Lake Provides Water-Based Recreational Activities To Thousands of Visitors Every Year



A photograph of Pinto Lake showing a significant blue-green algal bloom. The water is covered in a thick, greenish-blue mat of algae, particularly concentrated on the right side and in the foreground. Several ducks are swimming in the clearer water on the left. The background features a dense line of trees and a house on a hill under a clear blue sky. A concrete curb is visible in the bottom right corner.

Every Summer and Fall, Pinto Lake
Develops Blue-Green Algal Blooms.
These Blooms Can Produce Toxins

What Causes These Blooms?

- *Warm Water*
- *Sunlight*
- *Excess Nutrients*

Pinto Lake



Massive cyanobacteria blooms occur in spring, summer and fall.

- Predominantly aphanizomenon, dolicospermum and microcystis.

OEHHA and WHO Public Health Goal of 0.8ppb.

Multi agency effort to coordinate monitoring, notifications and solutions.

Partners include: UCSC, CSUMB, RCD, County of Santa Cruz, Central Coast Regional Board Staff





In-Lake Activities

Multiple management measures implemented pretreatment:

- Carp removal
- Outreach and stakeholder involvement
- Sediment Cores to determine amount of internal nutrient loading



Alum Treatment April 2017



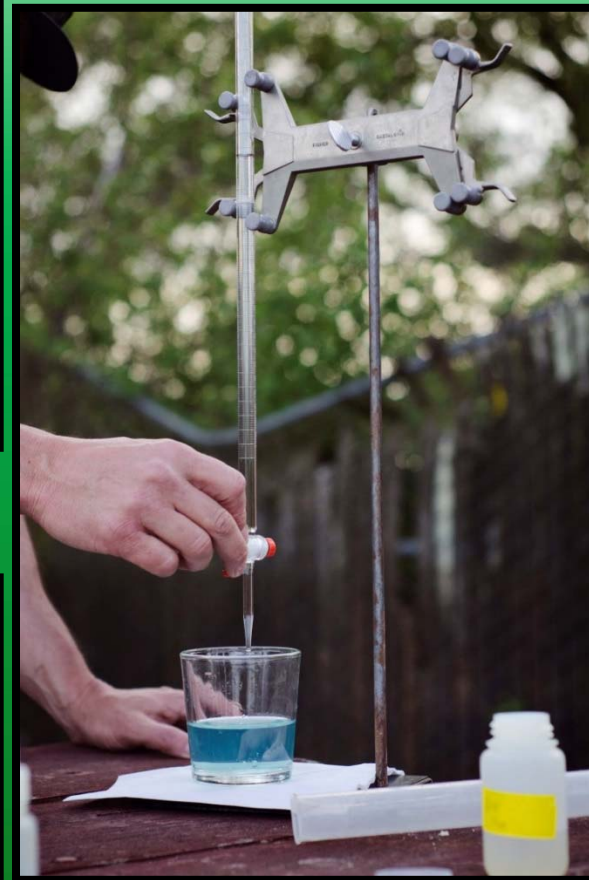
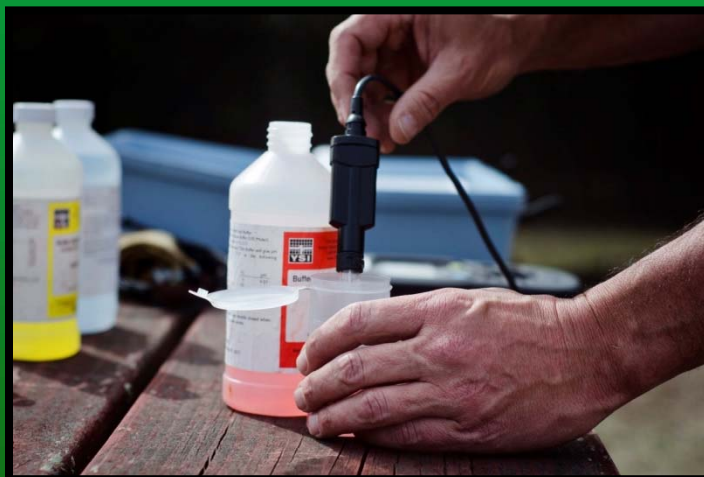
City staff researched:

- Floating wetlands
- Aeration
- Alum treatment
- Other types of chemical and biological treatment

Alum proved to be the best solution for Pinto Lake



Water Quality Testing

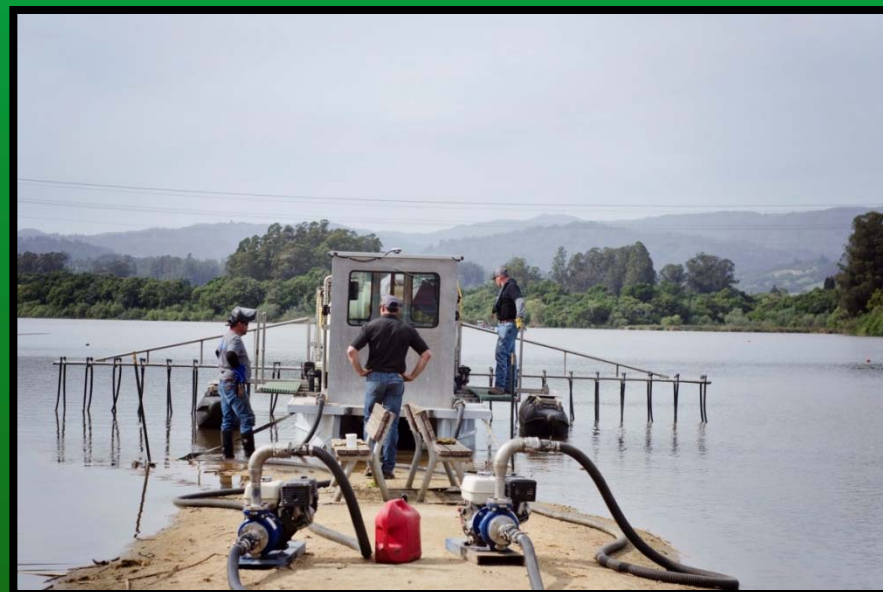


Photos courtesy of Catherine Bosley, HAB Aquatics, LLC

Pinto Lake Jar Testing



Photos courtesy of Catherine Bosley, HAB Aquatics, LLC



Photos courtesy of Catherine Bosley, HAB Aquatics, LLC

Next steps for Pinto Lake



Photos courtesy of Catherine Bosley, HAB Aquatics, LLC

Watershed Activities and Improvements



Amesti
Creek



CCC
Creek





Thank you for your time!



Photo courtesy of Catherine Bosley, HAB Aquatics, LLC

For additional information on the Pinto Lake Restoration Project:

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