

Phosphorus Blue-Ribbon Panel

Supporting Compliance Towards Watershed Restoration

Part of the Nutrient Offset Program

March 21, 2019



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Overview

- Brief history of nutrient offset requirements
- Purpose of Blue-Ribbon Panel (BRP)
- Results of BRP Report
- Next Steps

Phosphorus Regulatory Requirements

- 2006 Permit: Nitrogen & Phosphorus Zero Net Loading
- 2008 RWB Approves Nutrient Offset Program (NOP)
- 2009-present: City implements NOP Projects
- 2013 Permit: Zero Net Loading for Phosphorus only
- 2018 RWB Adopts Water Quality Trading Framework – Includes Windsor Treatment Plant



Phosphorus Compliance Strategy

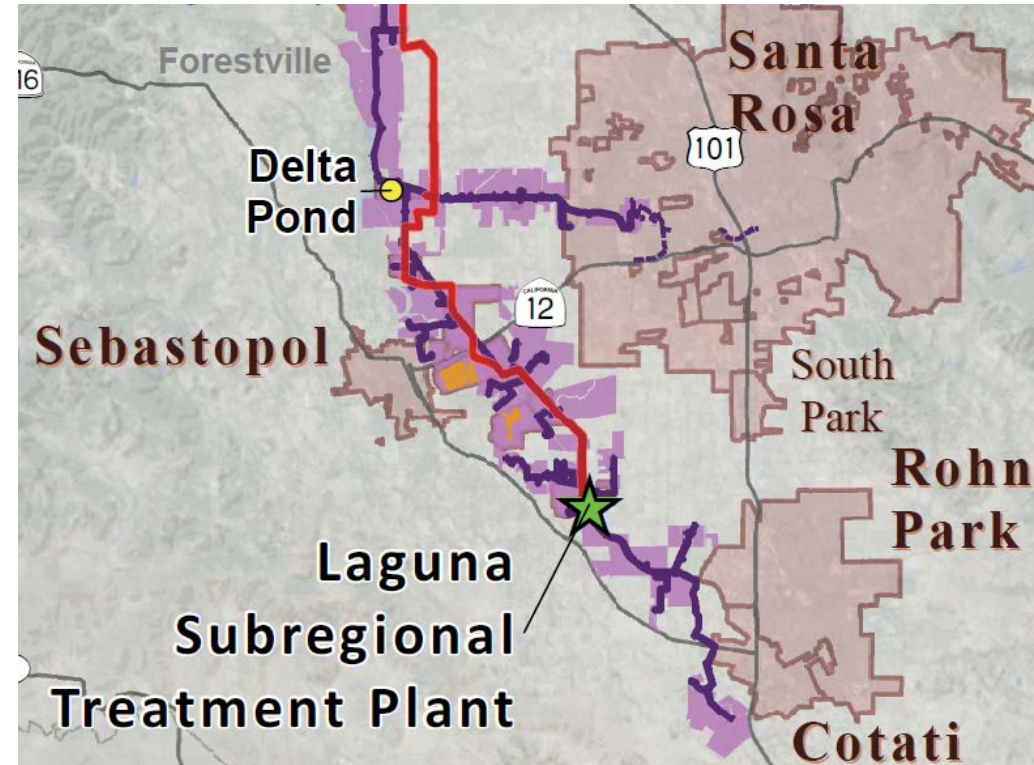
1. Maximize reuse/minimize discharges
2. Decrease phosphorus in recycled water
3. Offset discharges via nutrient offset projects

Overview: Recycled Water Program

67%: Geysers Steamfields
(All Year)

33%: Irrigation

- Agriculture
 - Urban
 - ~ Santa Rosa
 - ~ Rohnert Park
- (Growing Season)*

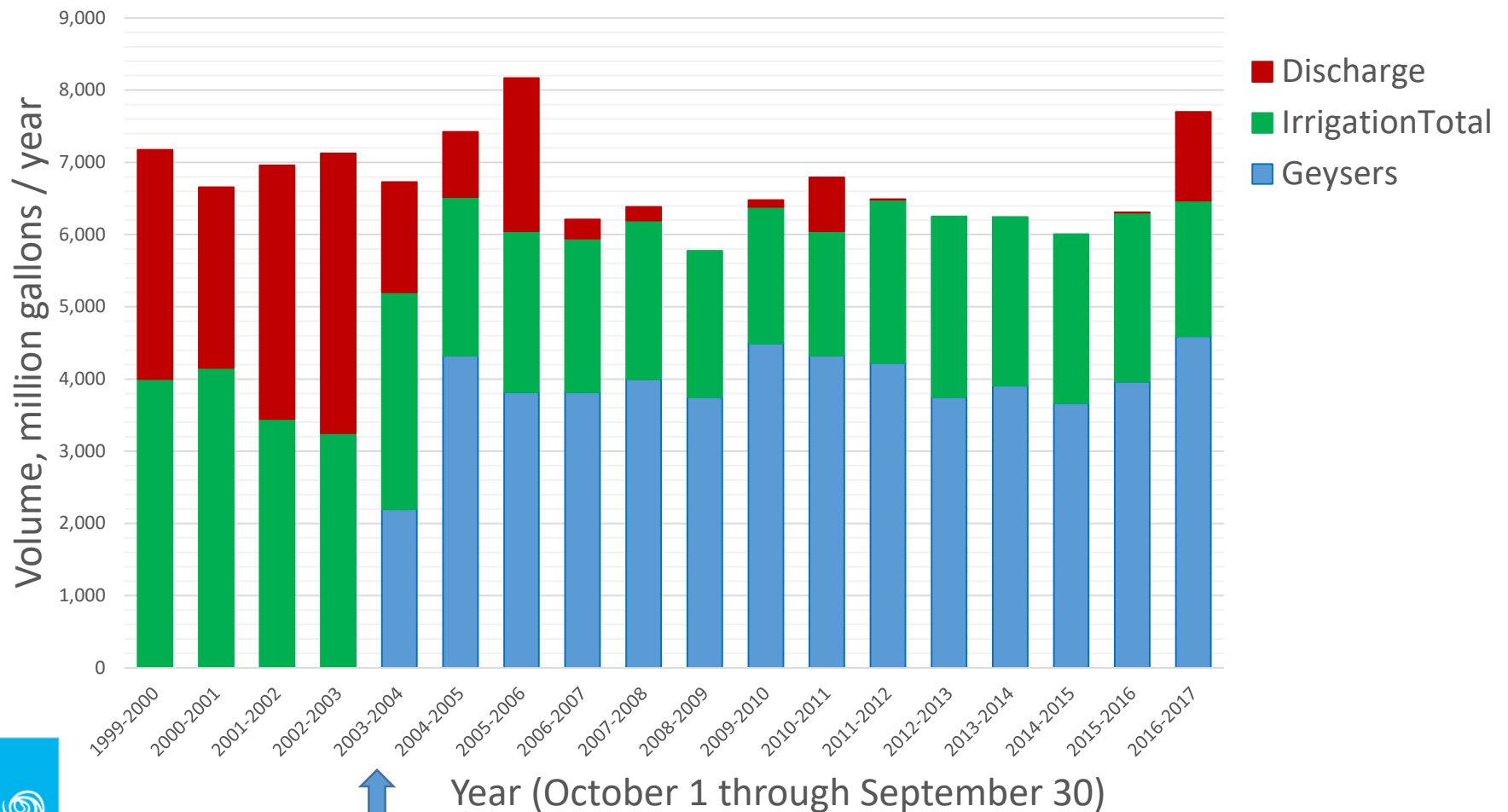


Recycled Water – Geysers Steamfields

- Project Construction \$225M
 - 42 miles long
 - 5 Pump stations
- Year-round Reuse



Annual Recycled Water Distribution



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Geysers Starts

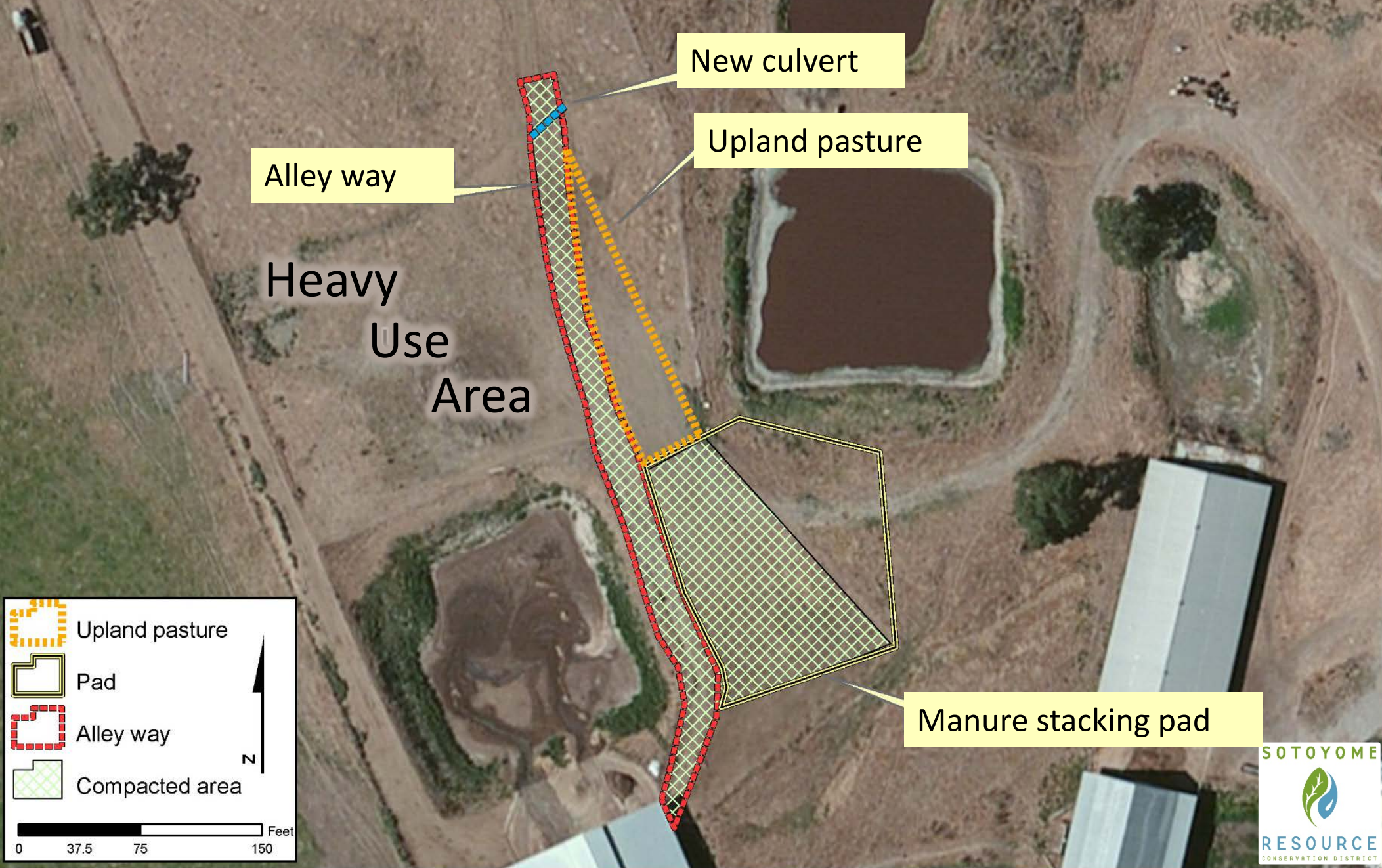
Three Nutrient Offset Projects Implemented

- 1) **Beretta Dairy –**
Manure & Pasture Management
- 2) **Pepperwood Nature Preserve –**
Road & Drainage Improvements
- 3) **Ocean View Dairy –**
Manure Removal & Land Application



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Beretta Dairy – Manure & Pasture Management



Beretta Dairy – Manure & Pasture Management

Before



After



Pepperwood Preserve – Road & Drainage Improvements



Ocean View Dairy - Manure Removal & Land Application

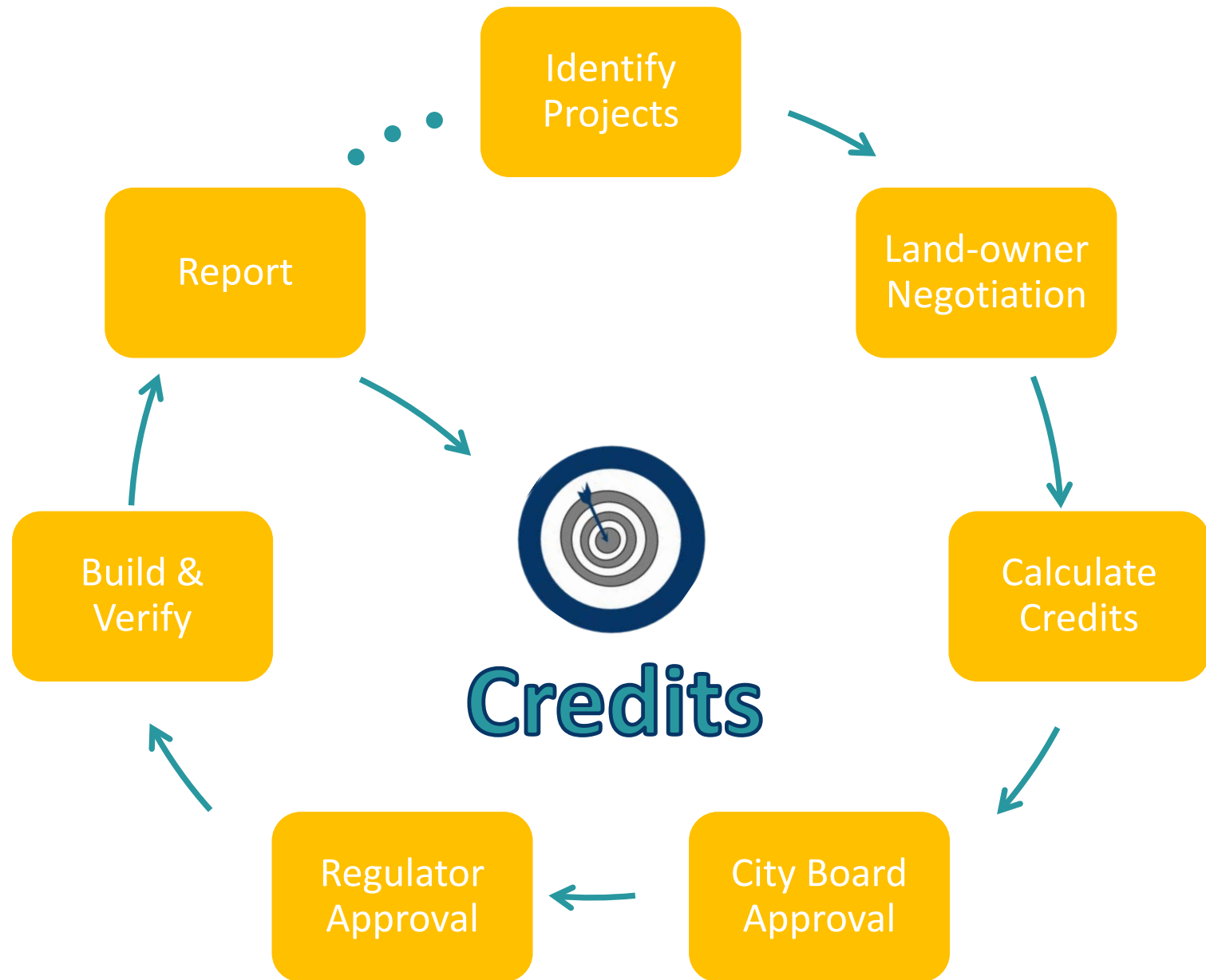


Gold Ridge
Resource Conservation District

04 Sept 2014

Cost of Projects

Project	Cost	Total Sum of Phosphorus Credits	Cost per Credit
Beretta	\$508,250	7,600	\$67
Pepperwood	\$512,850	10,964	\$47
Ocean View	\$474,000	23,345	\$20
Future Projects	Cost and credits will vary		>\$67



Phosphorus Blue-Ribbon Panel's Purpose

Explore alternative means of compliance to support watershed restoration:

- Provide a consistent compliance approach
- Support ongoing, reliable water quality benefits in the Laguna watershed
- Assure ratepayers with cost-effective phosphorus reductions

Status quo is not okay.

Panel Members

- Amelia Whitson – EPA Region 9
- Matt St. John – Regional Board
- Don McEnhill – Russian Riverkeeper
- Wendy Trowbridge – Laguna Foundation
- Ethan Brown – County EDB
- Alison Piccoli – Restaurant Association
- Michael Cohen – SSU
- John Largier – UC Davis
- Lisa Badenfort – BPU Representative



Facilitator: Dave Ceppos – Center for Collaborative Policy

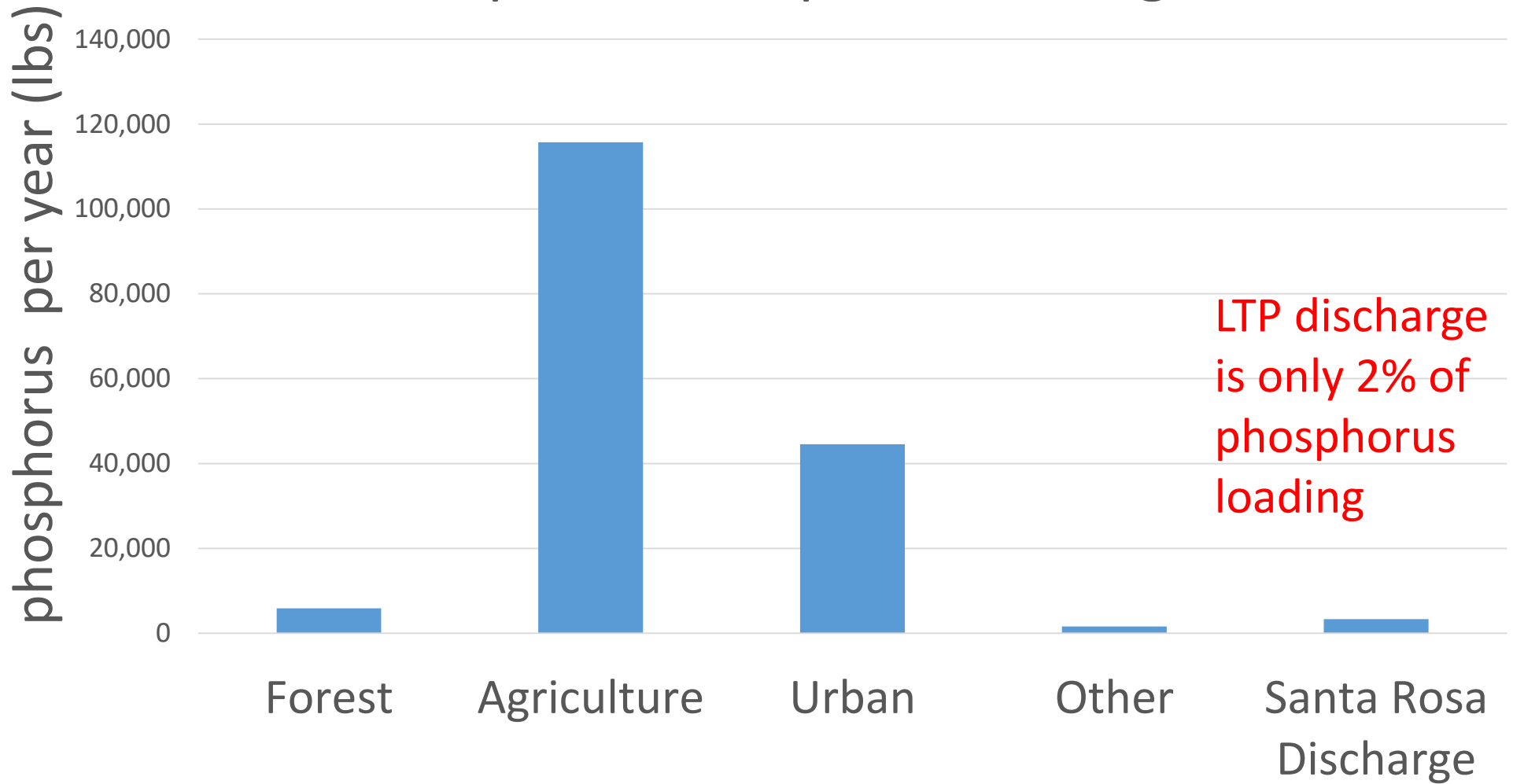
Schedule

- Three meetings approx. 3 hours each
 - Meeting 1 – April 27, 2018
 - Meeting 2 – June 1, 2018
 - Meeting 3 – June 27, 2018
- Complete Report (December 2018)
 - BRP Final Review (March 5)
- BPU Acceptance (March 21)
- Presentation to Regional Board (possibly April)

BRP Information Topics

- Natural history of the Laguna de Santa Rosa
- Introduction to Recycled Water Reuse Program and NPDES Permit discharges
- Effects of regulations on sewer rates/ratepayers
- Nutrient regulations in other regions
- Phosphorus removal through treatment
- Regional Water Board presented WQTF

Annual Input of Phosphorus to Laguna

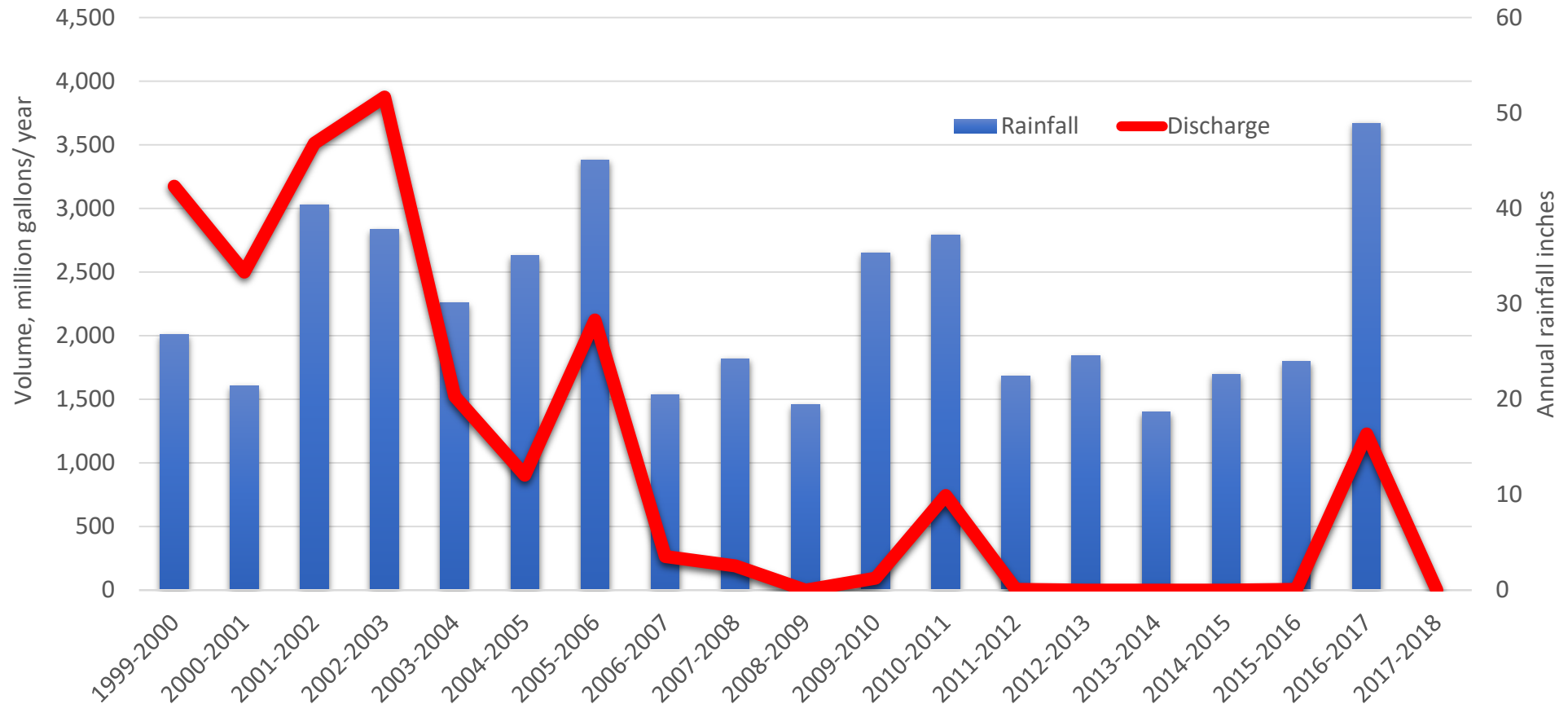


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Land Use Classification

Santa Rosa has Episodic Discharges

Annual Discharge and Rainfall



Geysers Pipeline

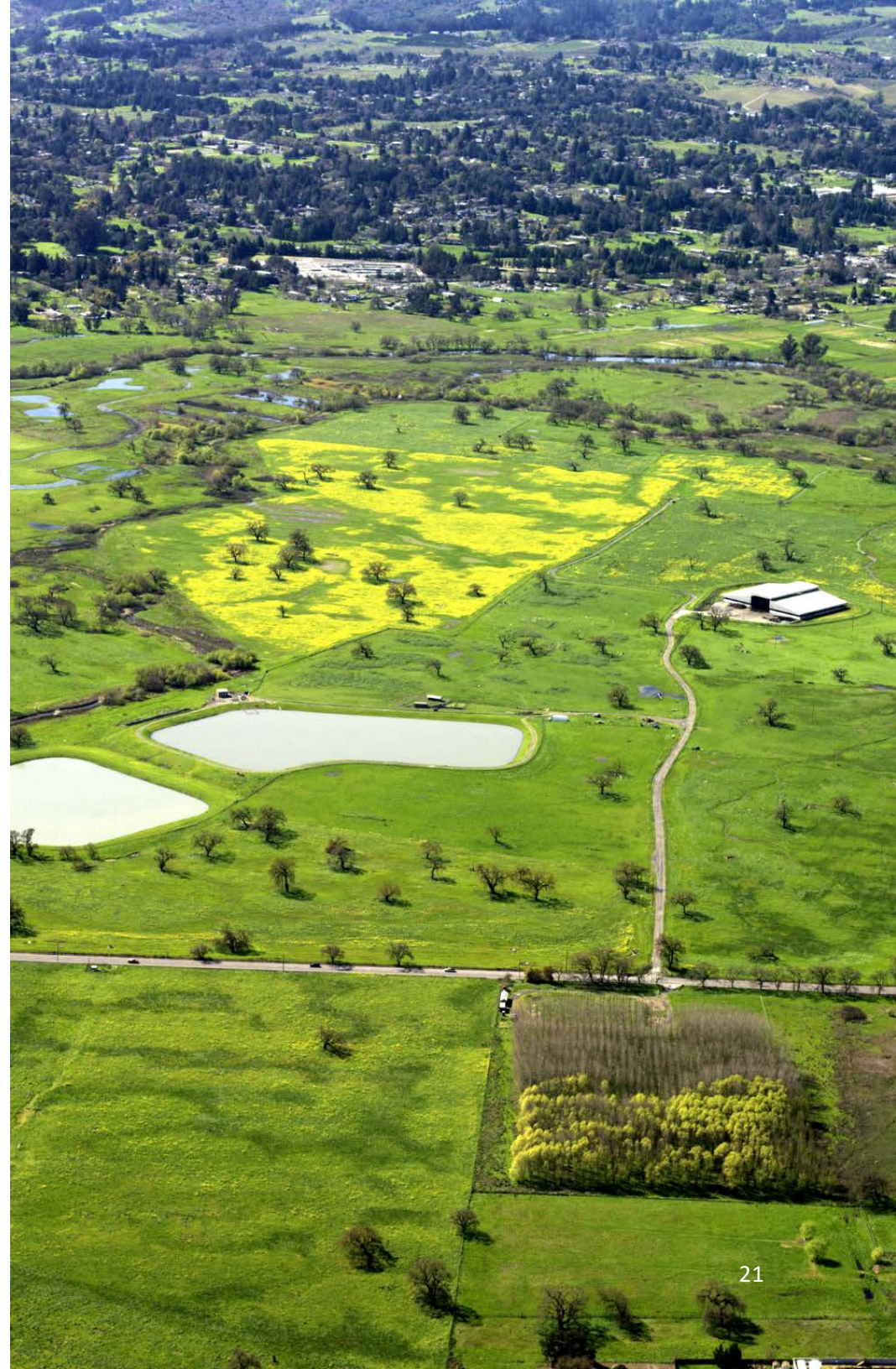
Discharge year (Oct 1 through Sep 30)



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Alternative projects

- Build more pond storage
- Increase phosphorus treatment
- Wetland restorations
- Water Quality Trading Framework
- City's project with Russian River Keeper and Laguna Foundation



Desired Outcomes

- Replace no net loading of phosphorus requirement in NPDES permit renewal with this alternative compliance approach.
- Create information-sharing and collaboration between the City, NGOs, regulators, business community and academic institutions.
- Assure ratepayers that rates meet regulations in the most cost-effective, environmentally beneficial manner.

Alternative Compliance Program Proposal - City's Project

- City commits an annual \$250,000 throughout the permit term for Laguna Restoration and water quality monitoring
- An additional \$25,000 per year for a non-profit to manage the program
- City staff will continue to participate and support

Interim compliance

- Could take more than a year to negotiate new permit terms
- City has approximately 4,200 credits for next year
- City is calculating credits spent in the last discharge
- Developing three options for credits

Horse property BMPs

- Support the Sonoma RCD horse property program
- Manure management
- Erosion reduction
- Buffer strips



Regional Parks Road Work

- Fix roads on Shiloh Ranch Regional Park
- Prevent sediment sources from entering waterway



Laguna Dredging Project

- Sonoma Water project
- Approved about 9,500 credits
- Discounted cost per credit estimated \$55



Schedule –Next Steps

- Blue Ribbon Panel Report Completed (Dec 2018)
- BPU Decision to Accept the report (April 2019)
- BPU and Staff Present the Findings to North Coast Regional Water Quality Control Board Meeting
- Negotiate alternative compliance with Regional Board Staff (End of 2019)

Questions?



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