

Santa Rosa Regional Water Reuse Facility

NPDES Permit Renewal
Study Session

June 21, 2018 Board of Public Utilities



OUR FUTURE IN EVERY DRÖP

Outline of Approach



Permit Review



Meetings with Regional Board



Blue Ribbon Panel



Report of Waste Discharge



Steps to Finalize NPDES Permit

Permit Review

- Staff review of current NPDES Permit
- Series of meetings with consultants and staff to identify key issues of concern
- Half-day workshop to complete list of concerns for further evaluation

Key Areas of Potential Revision

- Disinfection
- Enrollment in Statewide Recycled Water General Order
- Acute and Chronic Toxicity
- Monitoring Program
- Nutrients



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Disinfection

- Prescriptive permit language
- City desires operational flexibility
- Suggested alternatives
- Statewide practices that are difficult to change (Title 22 vs Discharge Requirements)



Recycled Water Program

- Notice of Intent to enroll under the Statewide General Order
- Distribution and use of recycled water removed from NPDES Permit
- Benefits:
 - Rohnert Park to manage and report on their recycled water program
 - Consistent with other statewide programs.



Toxicity Testing

- Acute and Chronic Toxicity
- Chronic Toxicity & City's intermittent discharges
- City's interest to address Chronic Toxicity monitoring requirement



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Monitoring Program

- Proposed reductions to monitoring requirements
 - Examples: Total Suspended Solids and Mercury



Blue-Ribbon Panel Update

Presented by Sean McNeil

- Blue Ribbon Panel Status
- Summary of Meeting #2
Presentations
- Next Steps



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Project Status

- **First meeting April 27:**
 - The Laguna Watershed - Staff
 - Wastewater Treatment and Discharge Requirements - Staff
- **Second meeting June 1:**
 - Water Quality Trading Framework – Regional Board
 - Nutrient Management in California – Larry Walker and Associates
 - Chemically Enhanced Treatment for Phosphorus Reduction – Brown and Caldwell
 - Wastewater Rate Comparison and Considerations - Staff
- **Third meeting June 27:**
 - Framework Ideas workshops and discussion – Panel Members

Water Quality Credit Trading in the Laguna de Santa Rosa Watershed



June 1, 2018

David Kuszmar, P.E.





NUTRIENT MANAGEMENT IN CALIFORNIA: CURRENT PERSPECTIVE

City of Santa Rosa Blue Ribbon Panel
Meeting No. 2

Tom Grovhoug, Larry Walker Associates
June 1, 2018

Nutrient Regulatory Policy Development in California

- Sacramento-San Joaquin Delta Nutrient Research Plan (*Central Valley Water Board*)
- San Francisco Bay Nutrient Management Strategy (*San Francisco Bay Water Board*)
- Biostimulatory Substances Objective and Program to Implement Biological Integrity (*State Water Board*)

Process to Develop a Delta Nutrients Management Strategy

Stakeholder and Technical Advisory Group – Charter Document, July 27, 2015

- Overarching goal:

“...to develop a framework that will lead to effective nutrient management decisions and actions that achieve reasonable protection of beneficial uses...of the Delta.”

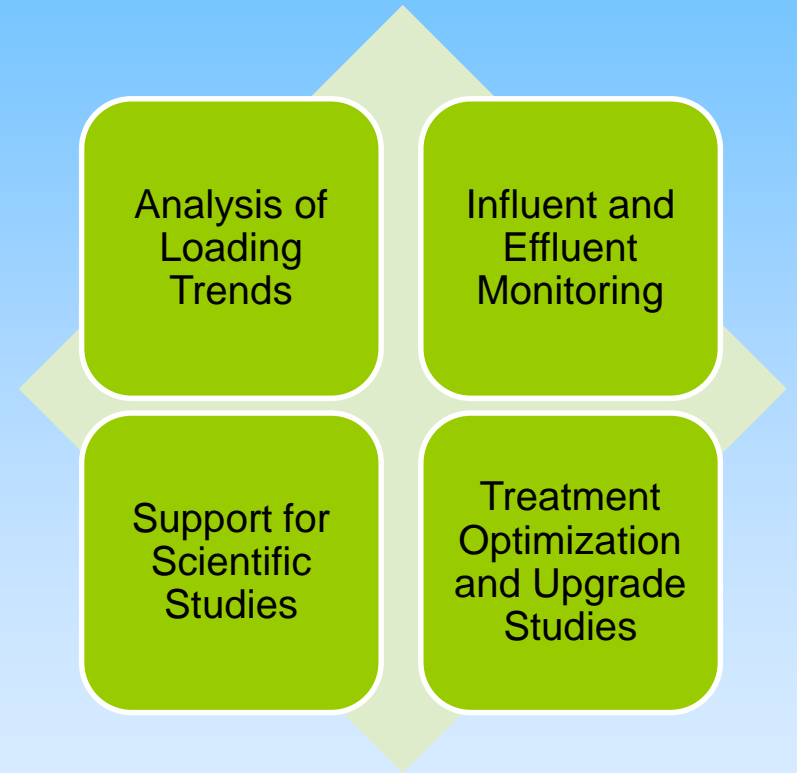
- Key Framing Question:

“...whether the management of nutrient loads can remedy the problem.”

San Francisco Bay Nutrient Management Strategy

Long term Investment in Science to set the stage for effective management decisions

- System Understanding – [Get the loads and processes right]
- Sustainable Monitoring Program
- Water Quality Objectives Development – [Narrative vs Numeric]
- Implementation Plan



Potential Laguna de Santa Rosa Approach

- Holistic Watershed Approach
- Stakeholder Collaboration
- Science Strategy
 - Sources/Loads
 - Processes
 - Monitoring
 - Research
 - Modeling tool development and utilization
- Management Plan

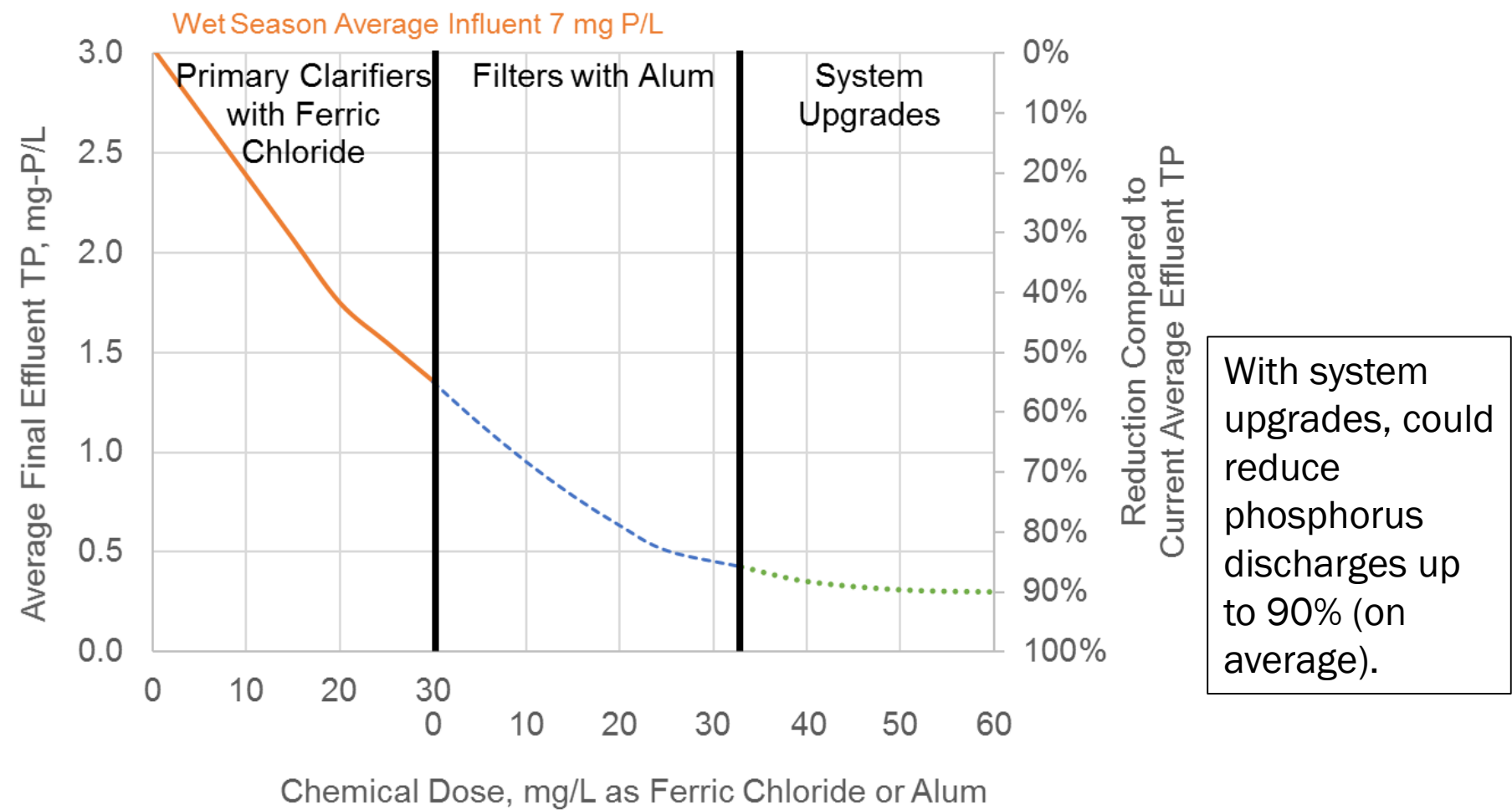


Chemical Addition for Phosphorus Removal

June 1, 2018



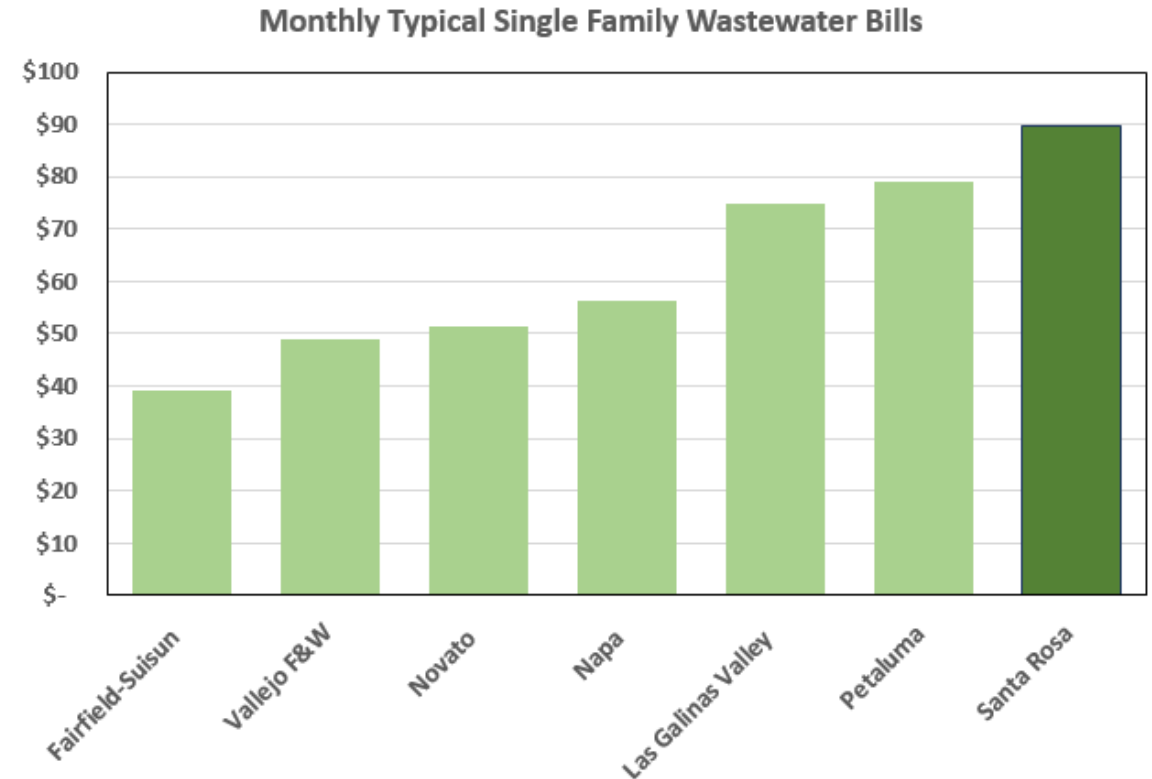
Dose-Response at Santa Rosa



Comparative Costs

Typical Single Family Wastewater Monthly Charges

- Santa Rosa's typical SFD
 - 4,600 gallons
 - Usage per 1k gal = \$14.15
 - Fixed = \$24.61
- Varied rate structures



Next Steps - Identify Options Discussion

Joint Proposal

- Laguna Foundation
- Russian River Keeper
- City of Santa Rosa



Proposal Elements

- Two compliance pathway options with no-net loading as the backstop
- City to make specified annual monetary contributions to address water quality related Laguna restoration activities
- Amount of contribution can be revised in next permit term based on discharges

Benefits of Alternative Compliance Approach

- Funds could be spent on larger projects
- Multi-benefit watershed projects
- Potential funding for regional monitoring program
- Sustainable and certain regulatory compliance
- Stability in sewer rates related to compliance

Report of Waste Discharge

- Cover Letter
- Reasonable Potential Analysis
- Required Forms
- Due August 3, 2018

Steps to Finalize NPDES Permit

- Return to BPU with final Report of Waste Discharge – Aug 2, 2018
- Report of Waste Discharge Submittal – Aug 3, 2018
- Request for Admin draft from Regional Board
- Public comment period
- City retains option to appeal final permit

BPU Feedback?