

# Public Workshop

Tentative Investigative Order R9-2014-0020  
Loma Alta Slough Phosphorus TMDL

April 24, 2014

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# Our Team

Barry Pulver, Impaired Waters Restoration

Chad Loflen, Monitoring Assessment and Research Unit

Jeremy Haas, Branch Chief Healthy Waters

Cynthia Gorham, Monitoring Assessment and Research Unit

Eric Becker, Storm Water Management

Laurie Walsh, Storm Water Management



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# Today's Proceeding

Regional Board Presentation (30 minutes)

Introductory Comments

Overview of TMDL Report

Overview of Tentative Investigative Order

Open Discussion



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# Public Participation

Engage in Stakeholder Process

Review Tentative Order

Participate in Public Workshop

Provide Written Comments

Provide Testimony at Public Hearing

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# Stakeholder Process

## Stakeholders

Special Studies  
Modeling  
Numeric Targets

## San Diego Water Board

Use Results to Develop:

- TMDL
- TMDL Allocations
- Implementation Plan
- Schedule
- Regulatory Approach

# Tentative Order No. R9-2014-0020

## Monitoring Requirements

Workplan  
Monitoring  
Reporting

## TMDL Report

Pollutant  
Pollutant Sources  
Numeric Targets  
TMDL and Allocations  
Implementation



# Why Doesn't Look Like a Typical TMDL?

## It Doesn't Change

Water Quality Objective  
Effluent limitation

## It Doesn't Need

Basin Plan Amendment  
Peer Review  
CEQA  
State Board Adoption  
OAL Approval

# Why it Does Look Like a Typical TMDL

**Includes USEPA's:**  
TMDL Elements  
Implementation Plan Elements



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# Benefits

## **San Diego Water Board**

Efficient use of Resources  
Shorter Approval Process  
Adaptable

## **City of Oceanside**

Minor Additional Requirements  
City Controls Implementation  
Adaptable



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# Problem Statement



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# Pollutant Sources

## Non Storm Water Discharges



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# Physical Considerations

## Flood Control



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# Physical Considerations

## Seasonal Variations

July 2013



October 2013



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# Selection of Numeric Targets

Developed Through Stakeholder Process

Uses Biological Objectives

Nutrient Numeric Endpoints



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# Potential Numeric Targets Ecological Conditions

Biomass (g dw / m <sup>3</sup> )	Percent Cover				
	<5%	5% to 15%	15% to 25%	25% to 75%	>75%
>530	Moderate	Low	Very Low	Very Low	Very Low
175-530	Moderate	Moderate	Low	Very Low	Very Low
90-175	Good	Moderate	Moderate	Low	Low
10-90	Very High	Good	Good	Moderate	Low
<10	Very High	Good	Good	Moderate	Moderate

# Definition of Ecologic Conditions

Very High	Good	Moderate	Low	Very Low
Non-Eutrophic Nearly Undisturbed	Non-Eutrophic Slight Change in Composition and Biomass	Non- to Eutrophic Moderate change in Composition and Biomass	Eutrophic Major Change in Biological Communities	Non-Eutrophic Severe Change in Biological Communities



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# Selected Numeric Targets Ecological Conditions

Biomass (g dw / m <sup>3</sup> )	Percent Cover				
	<5%	5% to 15%	15% to 25%	25% to 75%	>75%
>530	Moderate	Low	Very Low	Very Low	Very Low
175-530	Moderate	Moderate	Low	Very Low	Very Low
90-175	Good	Moderate	Moderate	Low	Low
<b>10-90</b>	High	Good	Good	<b>Moderate</b>	Low
<10	High	Good	Good	Moderate	Moderate

# Numeric Targets

## May through October

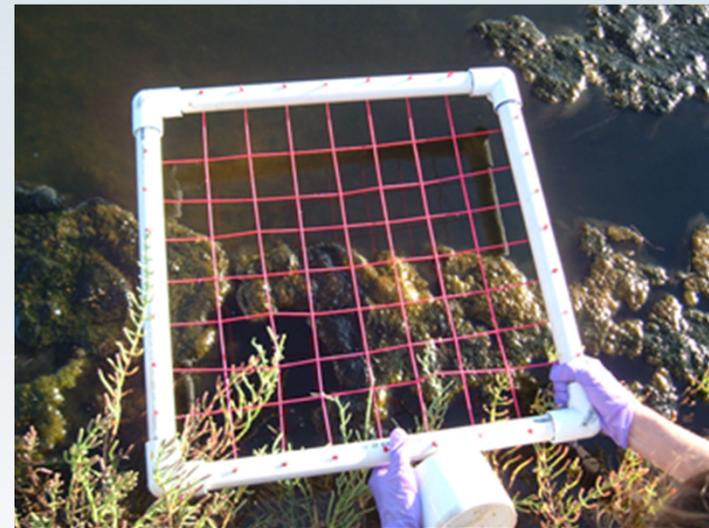
### Macroalgal Biomass

Less than 90 Grams Dry Weight per Cubic Meter



### Macroalgal Cover

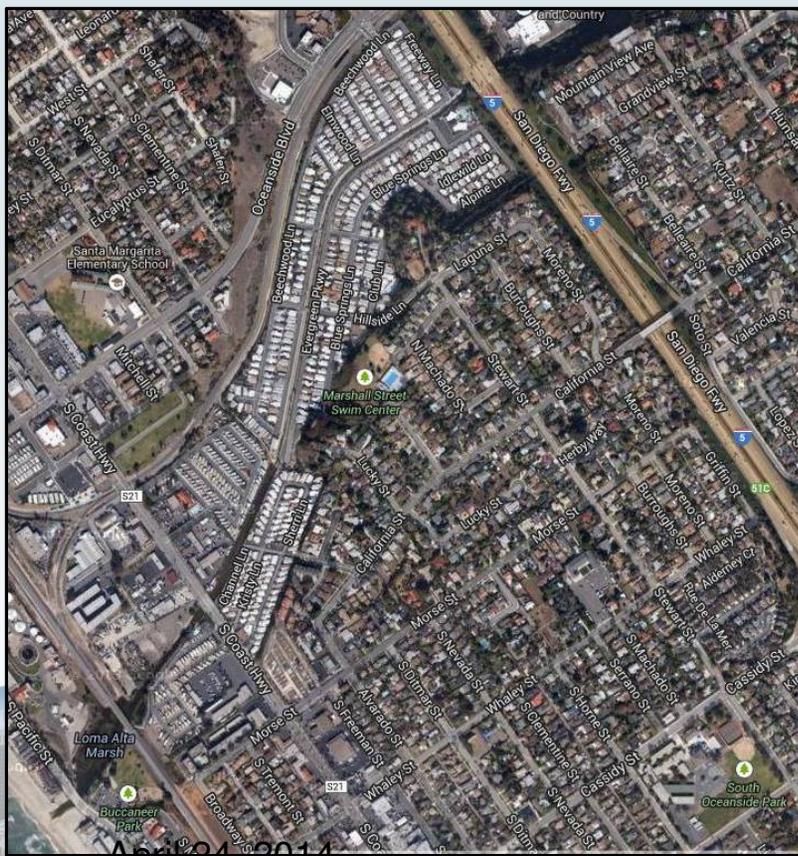
Less than 50 Percent



# Linkage Analysis

## Timeframe

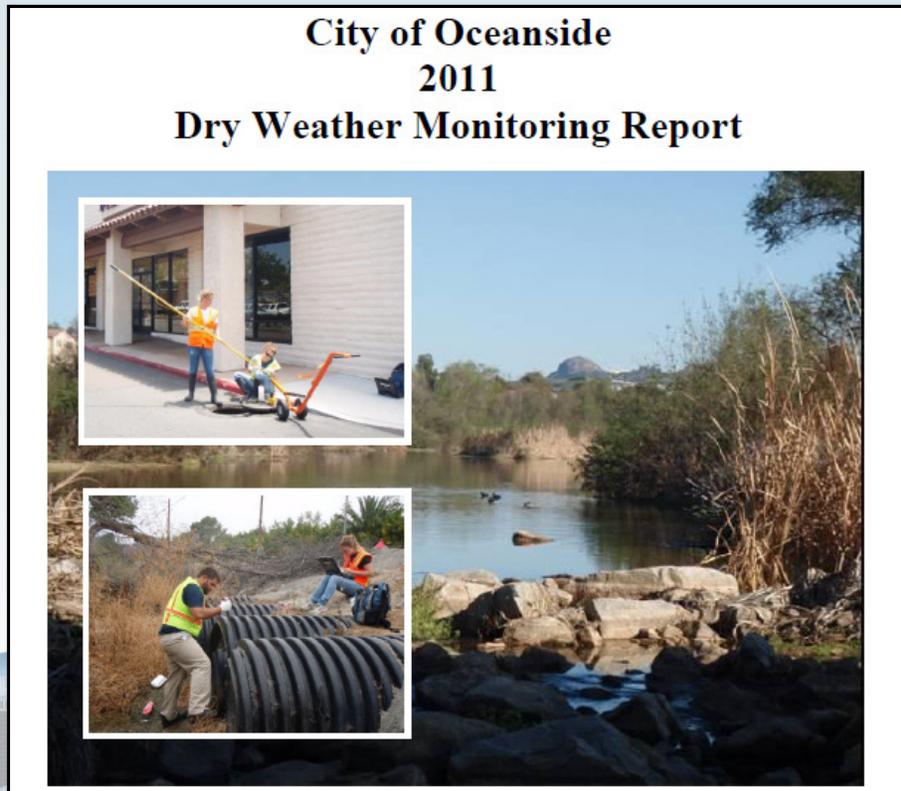
### “New” in Summer



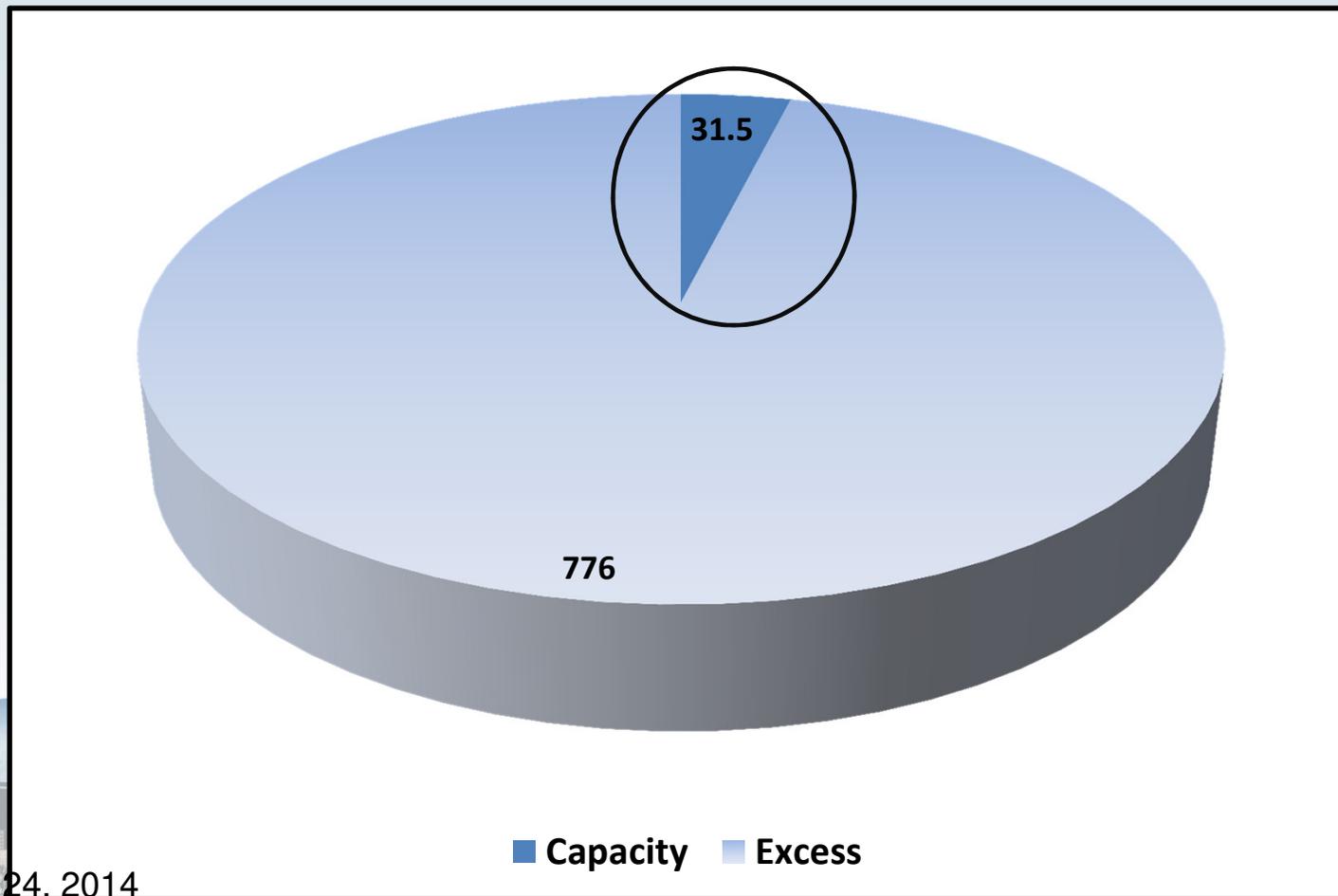
# Linkage Analysis

## Sources

### MS4 and Groundwater

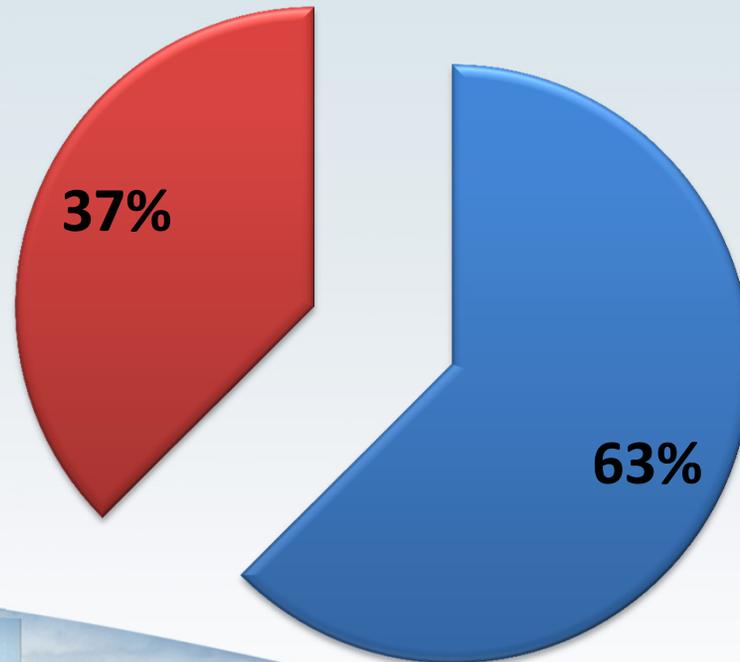


# TMDL Reductions Phosphorus Loading: Grams per Month



# TMDL Allocations Phosphorus Loading

■ Groundwater \* ■ Waste Loading \*



\* Subject to Change!

# Implementation Plan

- Discharge Prohibition A.1.b. of Phase 1 Municipal Storm Water Permit
- Water Quality Improvement Plan prioritization of water quality conditions
- Illicit Discharge Detection and Elimination Program
- Monitoring

# Tentative Investigative Order

“...evaluate the effectiveness of the City of Oceanside’s efforts to achieve the Total Maximum Daily Load and numeric targets...”



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# Slough Monitoring Questions

1. Are watershed flows and the loading of phosphorus reduced to meet the TMDL?
2. Are the numeric targets achieved?



# Requirements

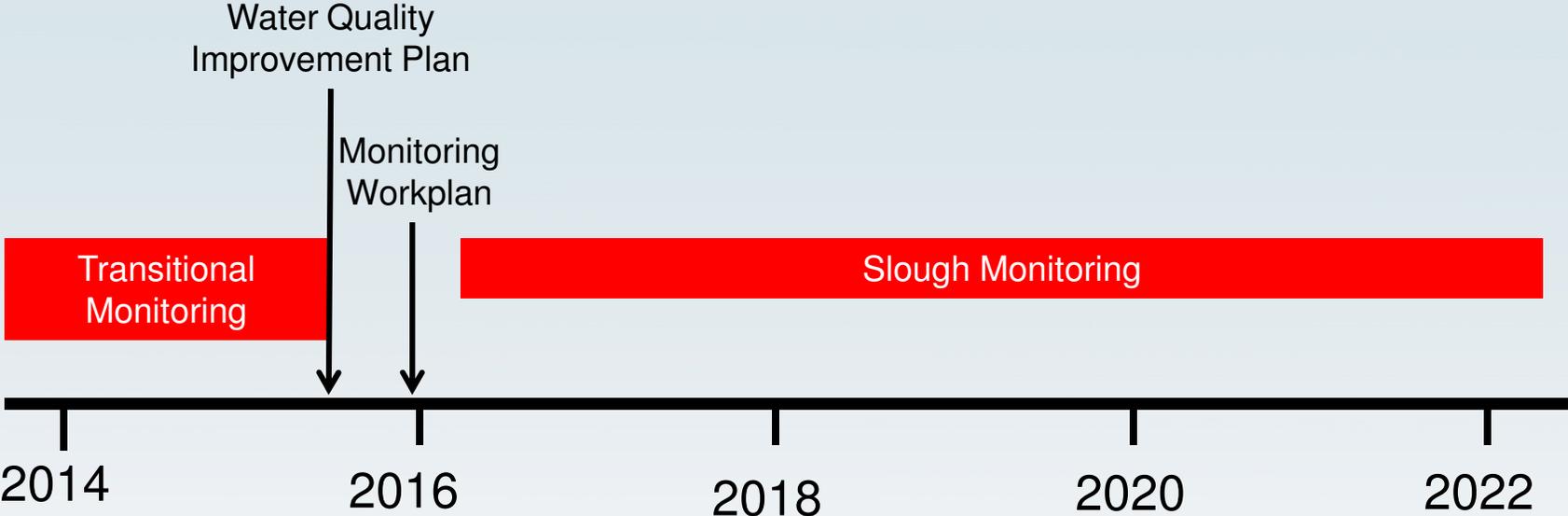
1. Workplan
2. Annual Monitoring, Sampling, Reporting

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# Compliance Dates

City's Action to Eliminate Non-Storm Water Discharges



# Schedule

**March 14, 2014:** Public Comment Period Begins

**April 24, 2014:** Public Workshop

**May 5, 2014:** Public Comment Period Ends

**June 26, 2014:** Public Hearing



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# Open Discussion



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