

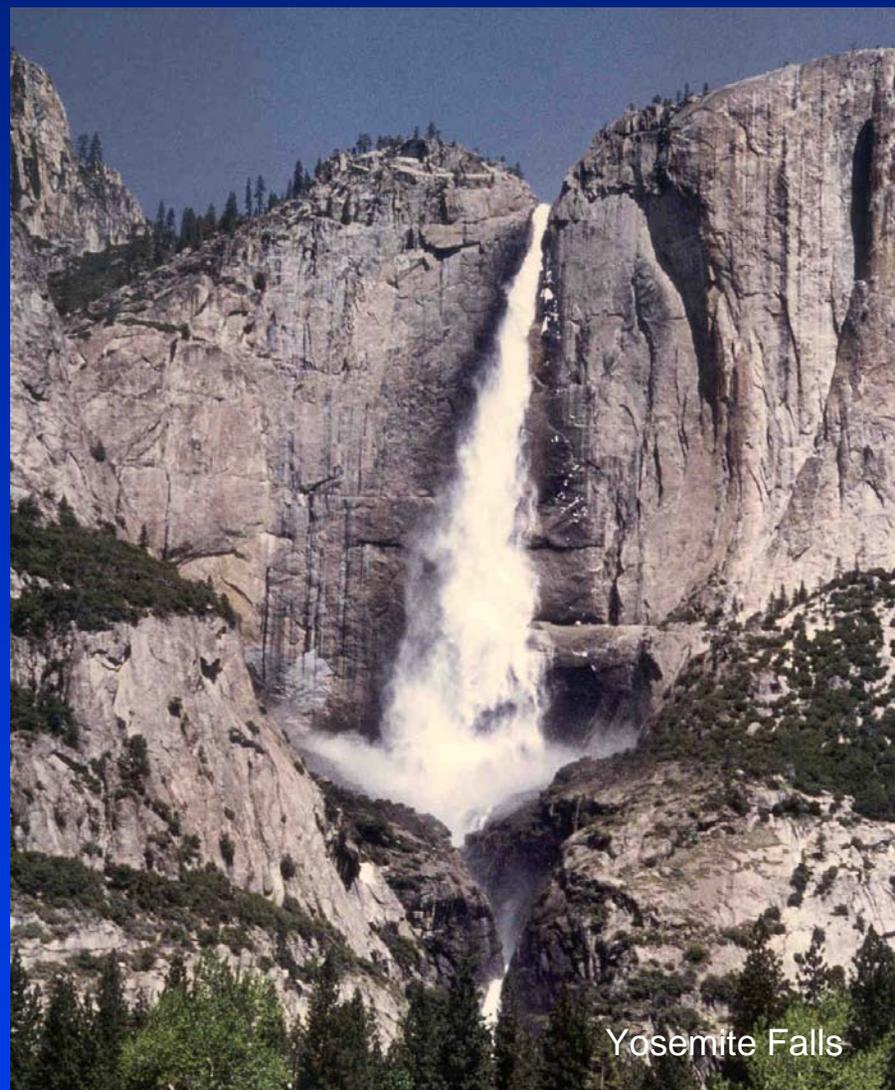
The State of the Central Valley Region



Pamela Creedon, Executive Officer
December 10&11, 2015
Item 6.a

Outline

- Background
- Status of Major Programs
- Priorities
- Summary



Central Valley Region Facts

- Nearly 40% of State's Land area
- ~20% of State's population
- 2/3 of State's drinking water
- Nearly 30 million acre-feet of reservoir storage



Staffing



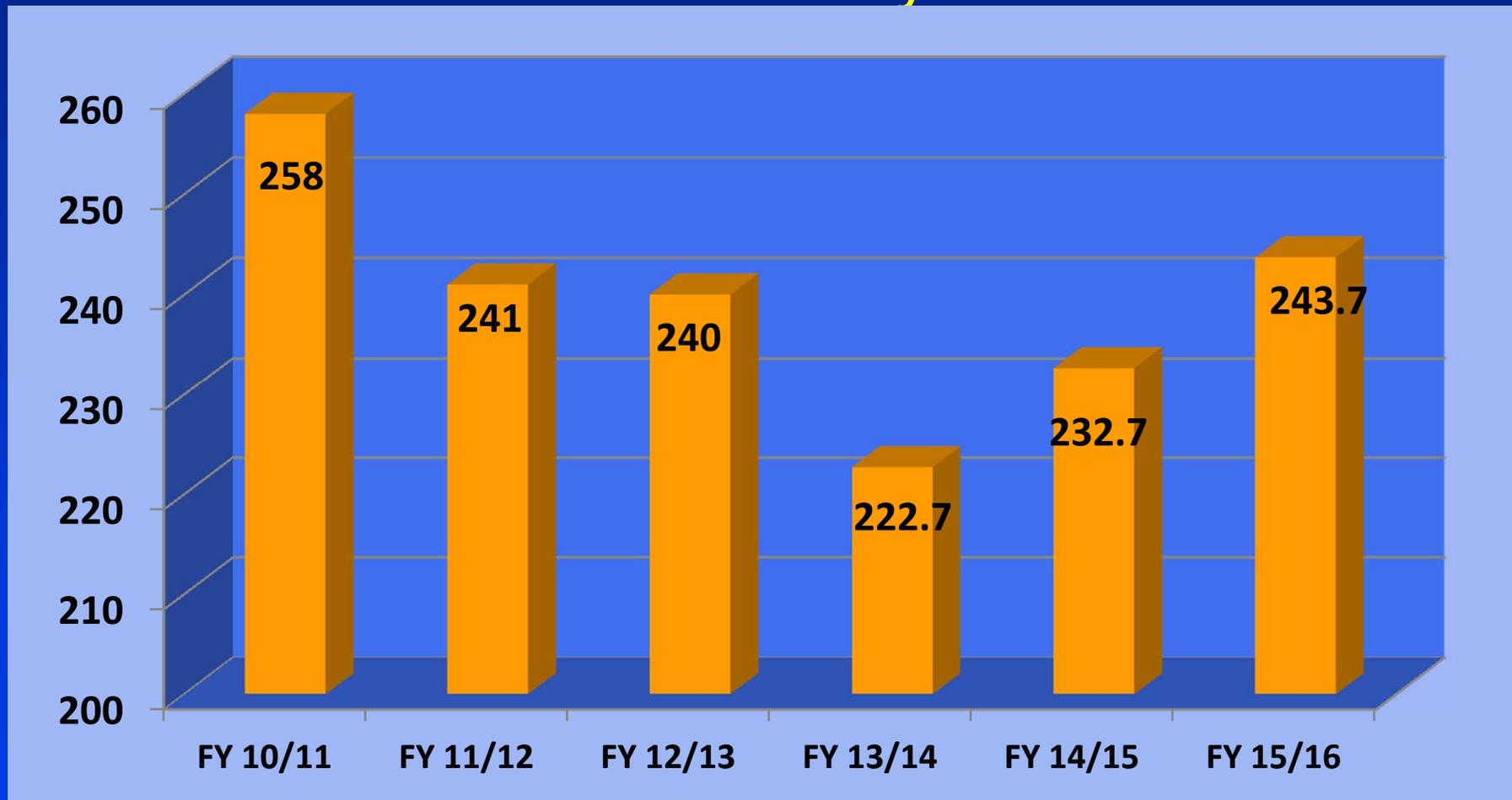
Central Valley Region Staff Facts

● Staff

- ◆ \$35.9 million personal services
- ◆ \$350,000 operating expense
- ◆ 243.7 authorized positions
 - 55 managers
 - 175.7 technical staff
 - 13 support staff
- ◆ 45 – temp help

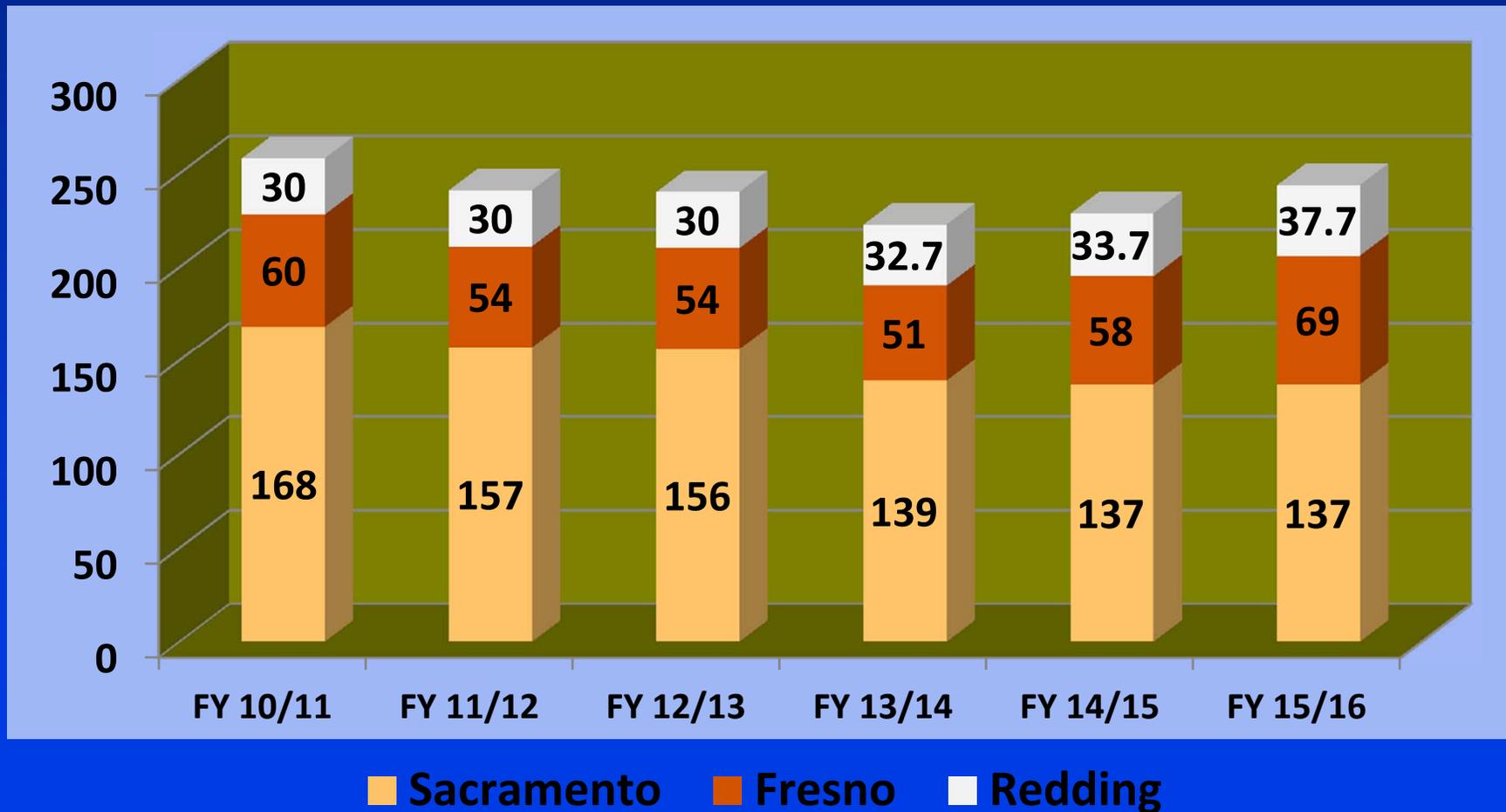
Central Valley Region Staff Facts

Total Positions by Fiscal Year



Central Valley Region Staff Facts

Authorized Positions by Fiscal Year



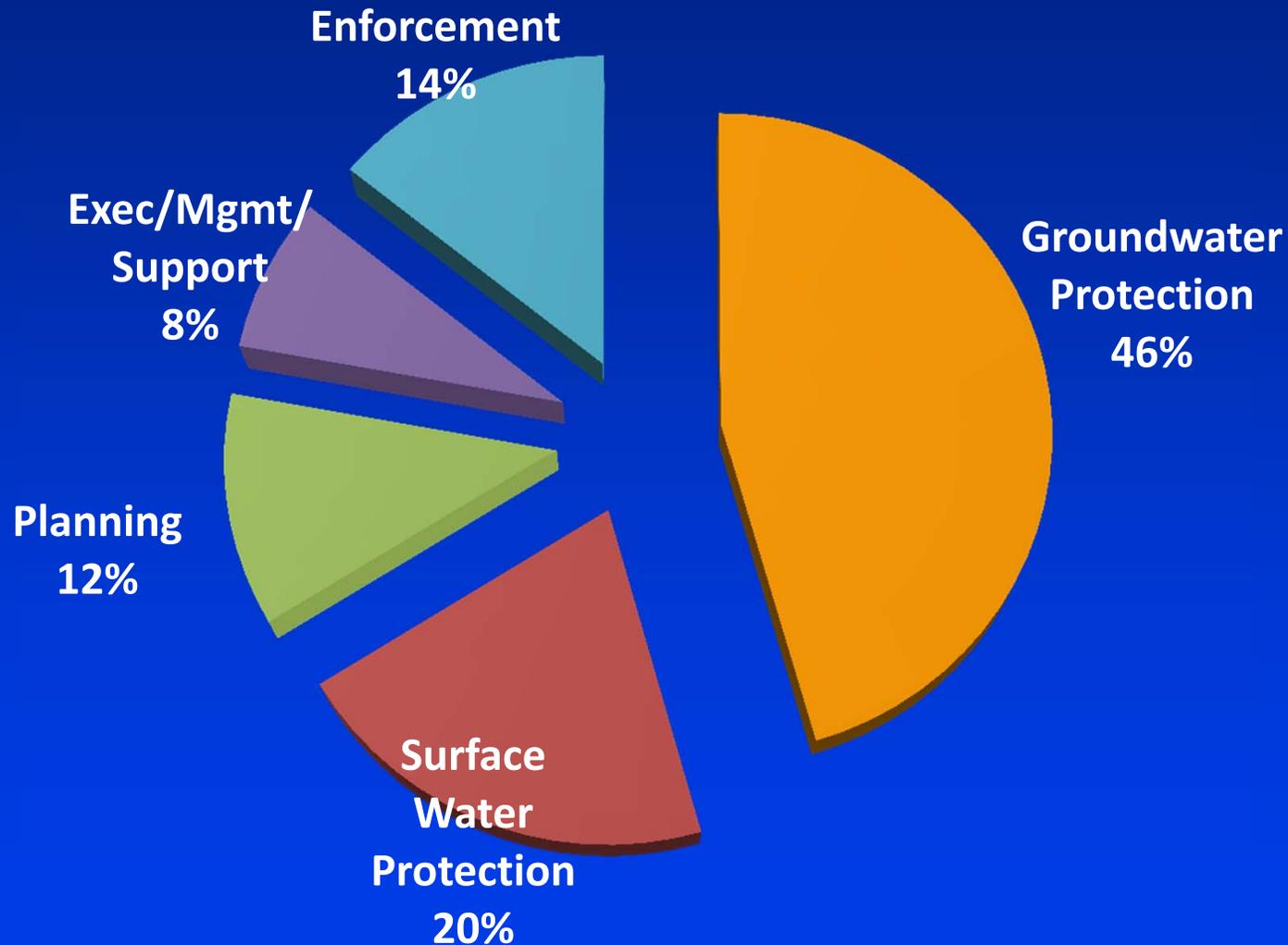
Central Valley Region Staff Facts

- Potential Retirements in Next 2 Years

	Redding	Fresno	Sac
Mgmt	1	2	3
Tech Staff	0	7	3
Support	0	0	2

Central Valley Region

Staff Distribution by Major Programs

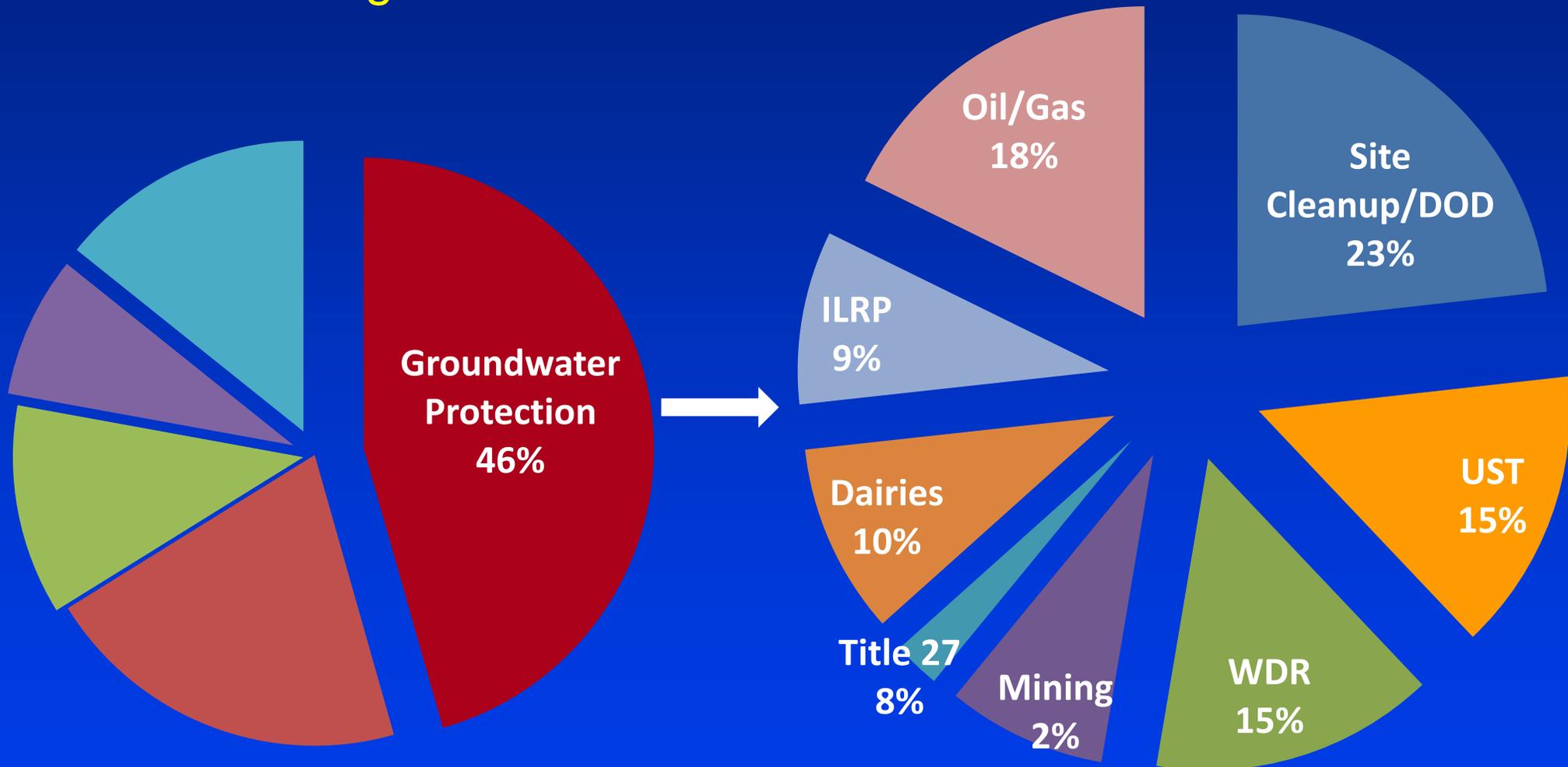


Ground Water Protection



Groundwater Protection

Staff Distribution between GW Protection Programs



Groundwater Quality Protection Strategy

- June 2011
Workplan

- High Priority
Actions

- ◆ CV-SALTS
- ◆ Long-Term ILRP
- ◆ Reduce WDR
Backlog

- June 2013
Workplan

- Medium Priority
Actions

- ◆ IRWM Coordination
- ◆ Expansion of CAF
Program
- ◆ Reduce Site
Cleanup Backlog

Groundwater Quality Protection Strategy

● Highlights

- ◆ Central Valley Water Board Meetings Webcast since October 2014
- ◆ Increased engagement with IRWM groups both informational and technical support
- ◆ Priority to bring Strategy Update to Board February 2016

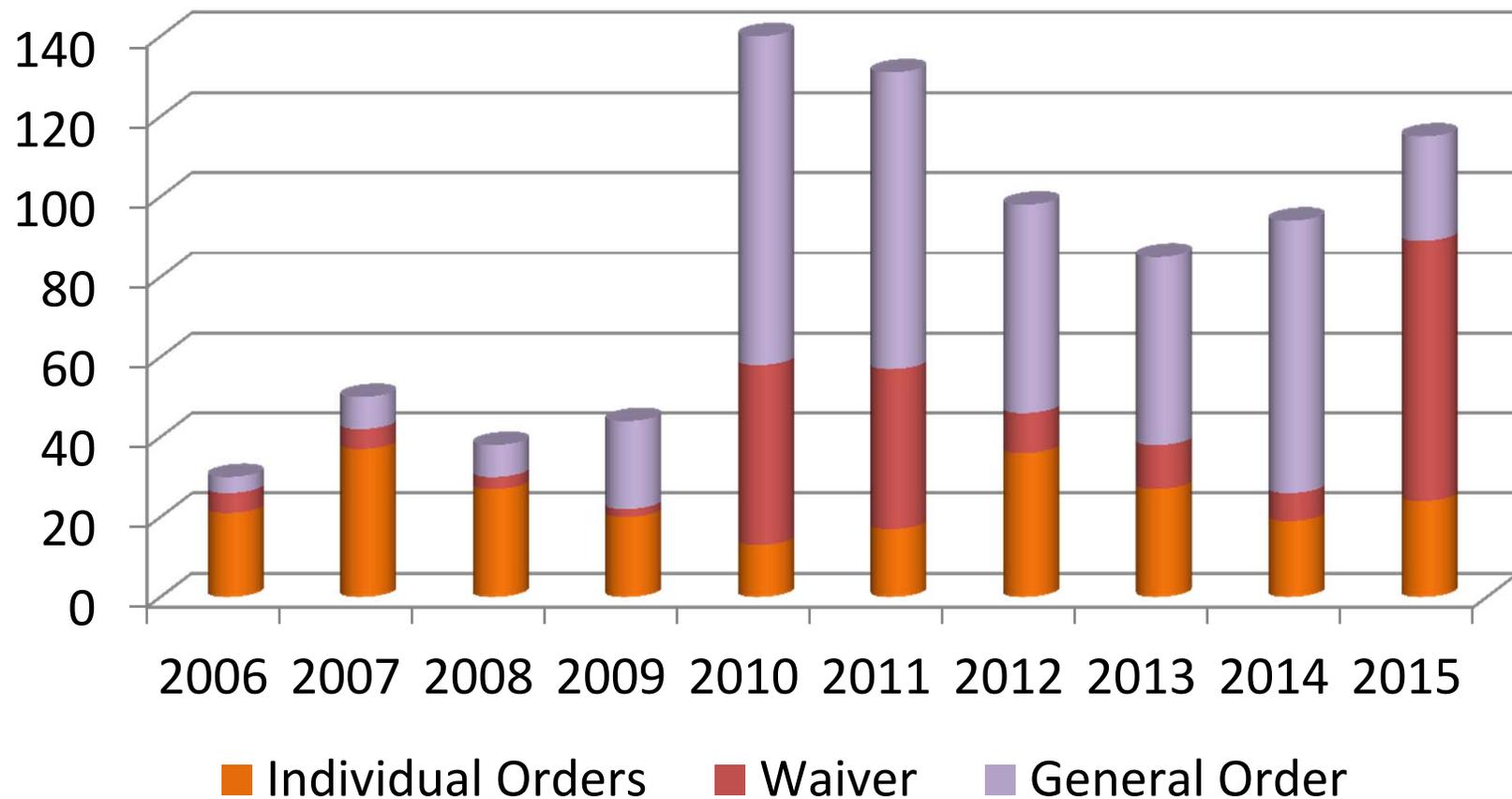
WDR Program

- **1,400 Facilities**
- **40% of State**
- **26 PYs**
- **Increased focus on water recycling**



WDR Program

Calendar Year Performance



WDR Program

Recycled Water



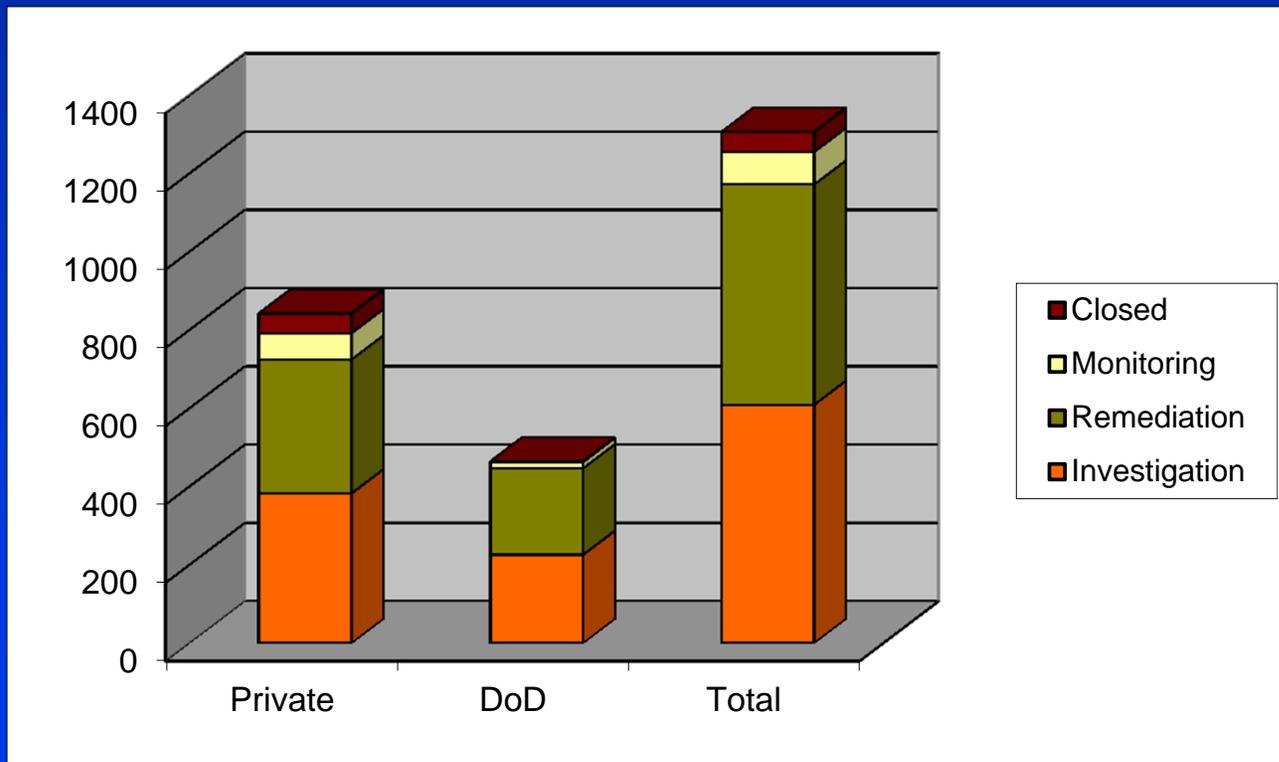
OWTS Policy



- 1.2 million in CA
- 571,000 in Central Valley
- 30 Local Agency programs
- Tools to streamline implementation

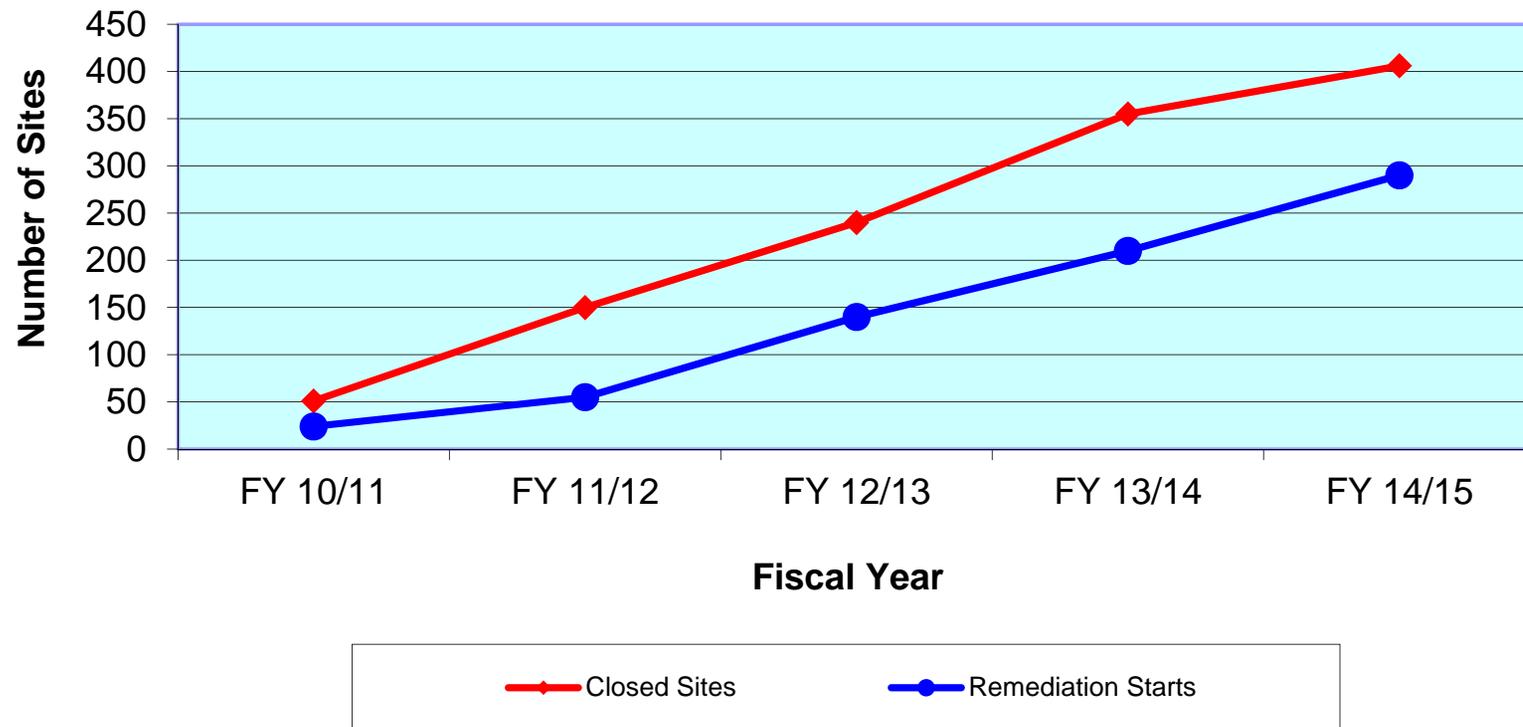
Site Cleanup Program

- Active Sites: 1362
- Sites in Remediation: 563
- Sites Closed: 51
- 27.4 PYs

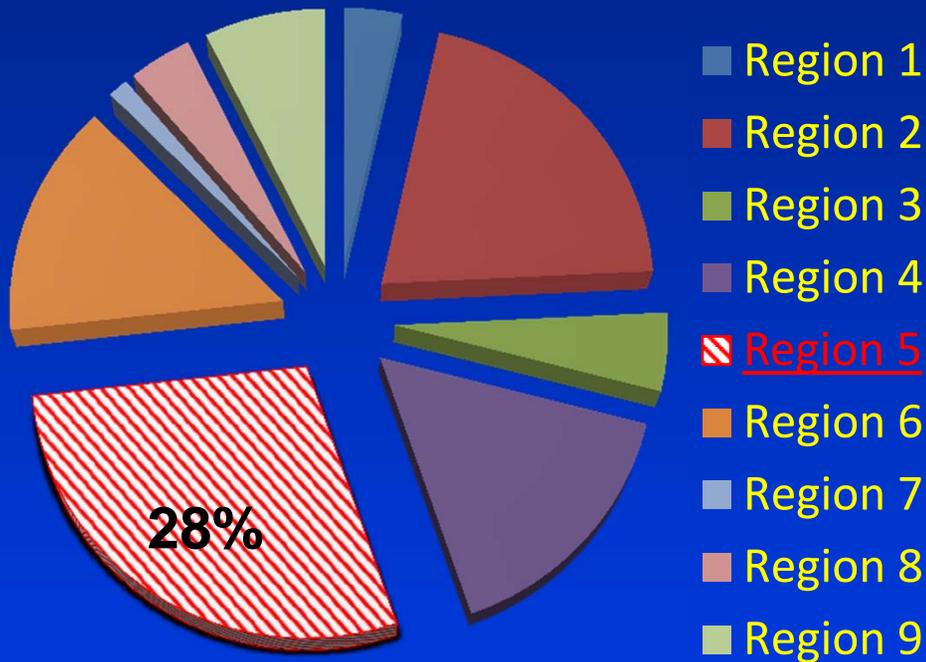


Site Cleanup Program

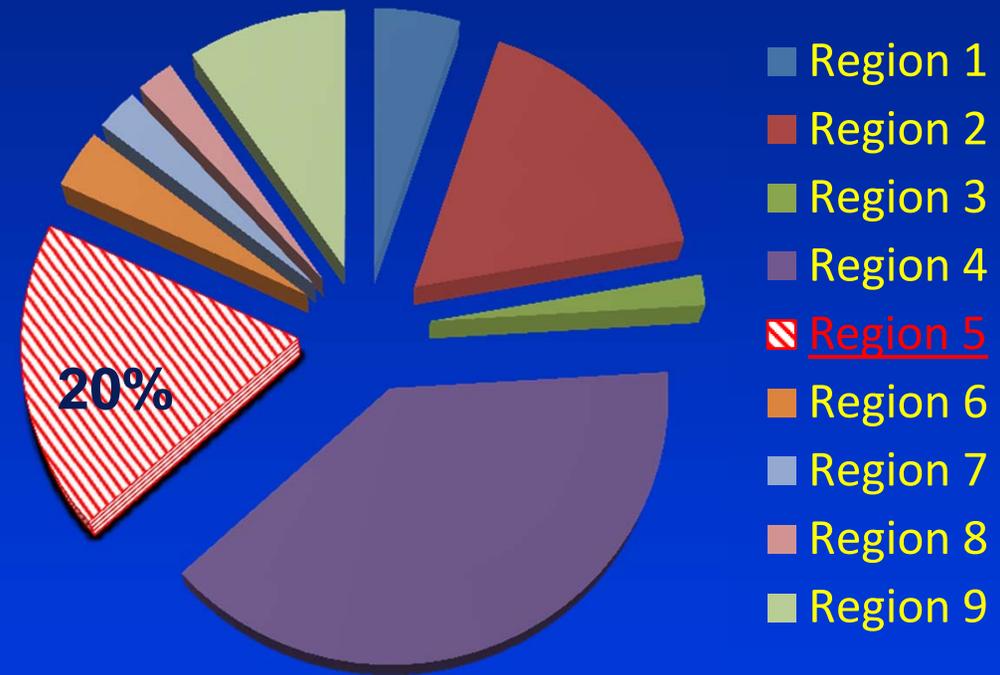
Performance Indicators 2011-2015



Site Cleanup Program



Total Active Cases Statewide
By Region



Cases Closed and Moved
To Remediation Statewide by Region
FY 13/14

Site Cleanup Program



Site Cleanup Program

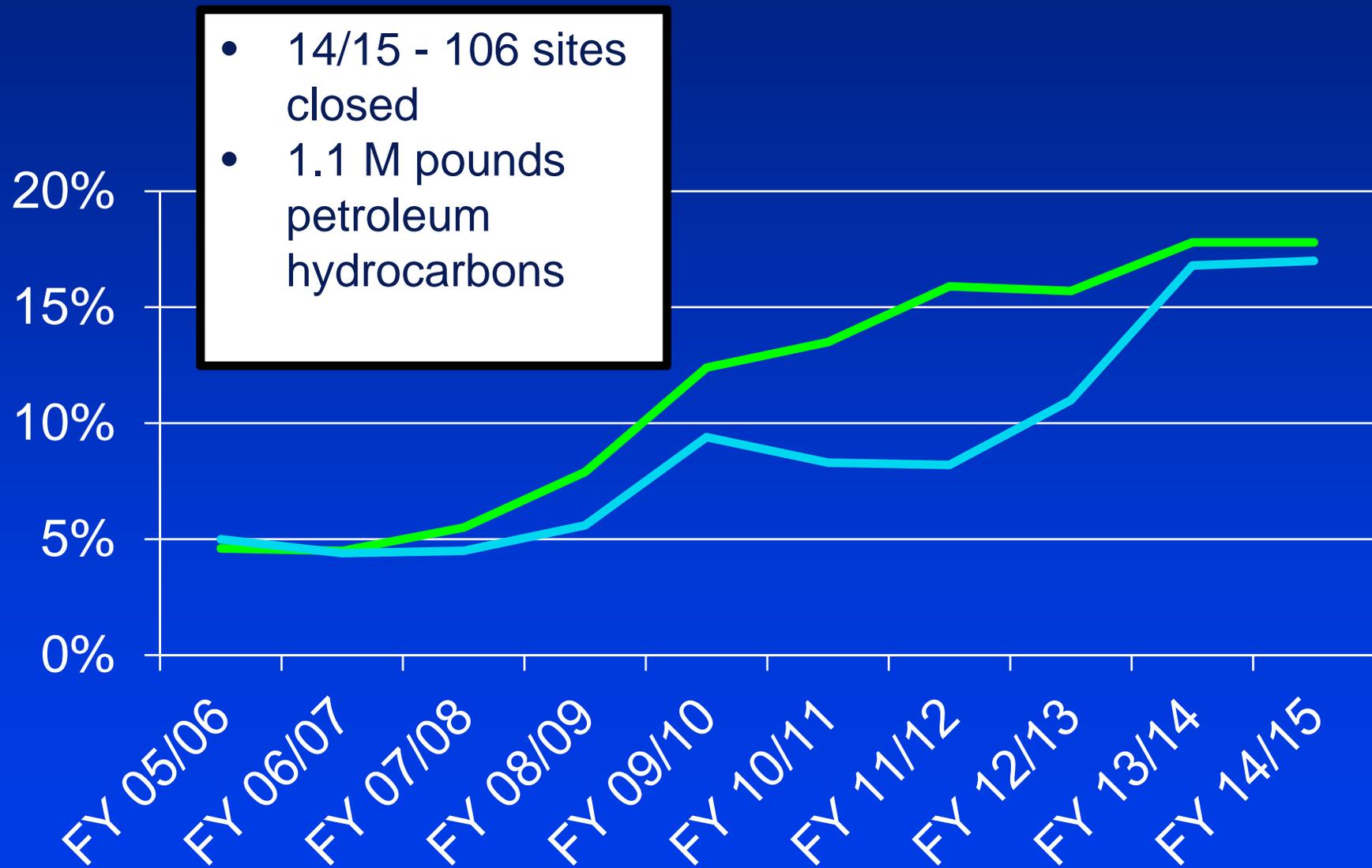
- Program Trends for Next Year:
 - ◆ Brownfields and redevelopment work will continue to increase (AB440)
 - ◆ Underground tank fund which includes funding for non-tank cleanups will continue to increase work load (SB445)
 - ◆ Continue evaluation of petroleum sites for early closure
 - ◆ Groundwater availability concerns will maintain focus on contaminant source identification and remediation

UST Program

- 628 cases
- > 23% of State
- 15.5 PY

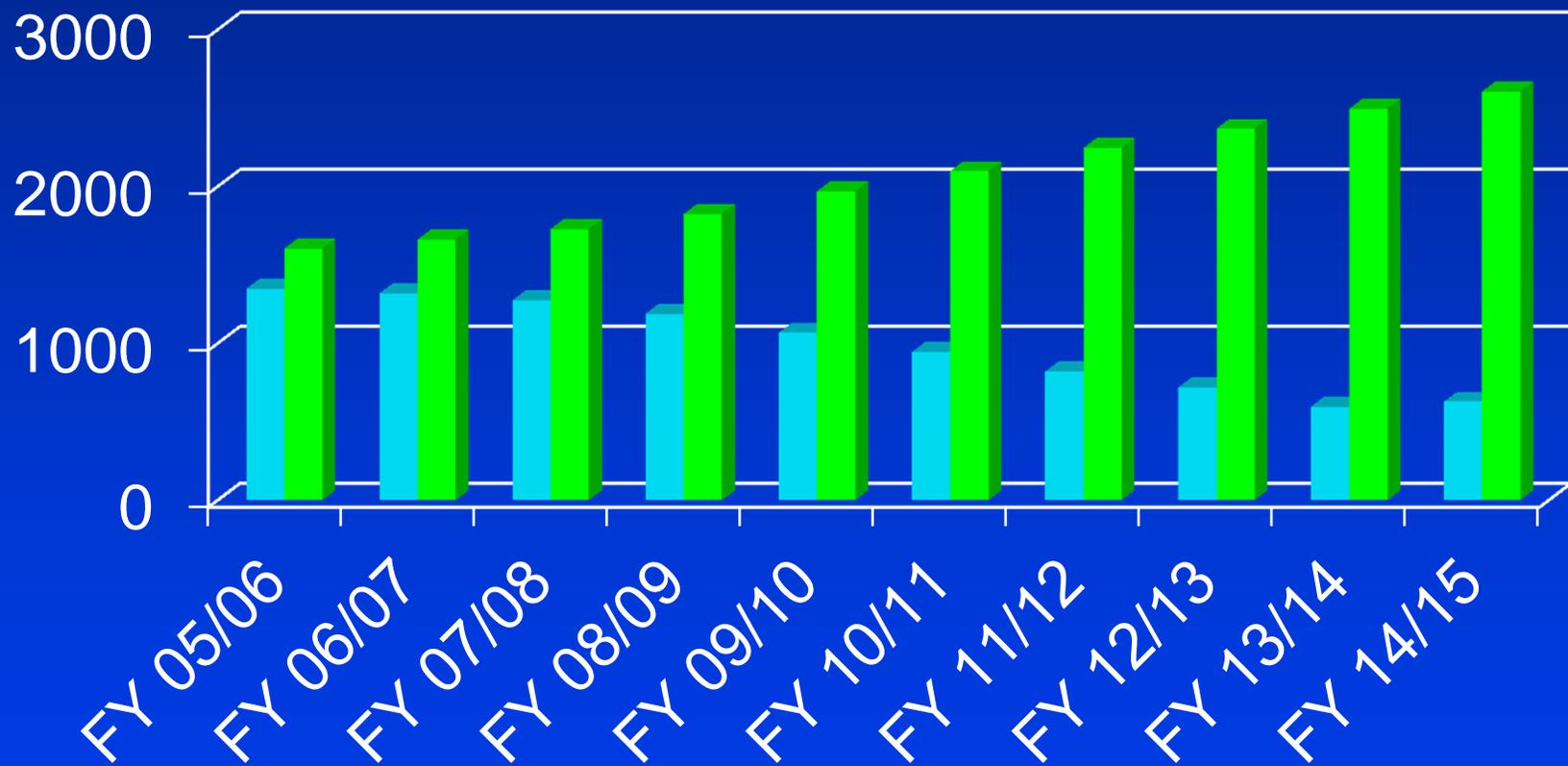


Region 5 Closure Rate Vs Other Regions



UST Cleanup Program

Open versus Closed UST cases



Land Disposal Program

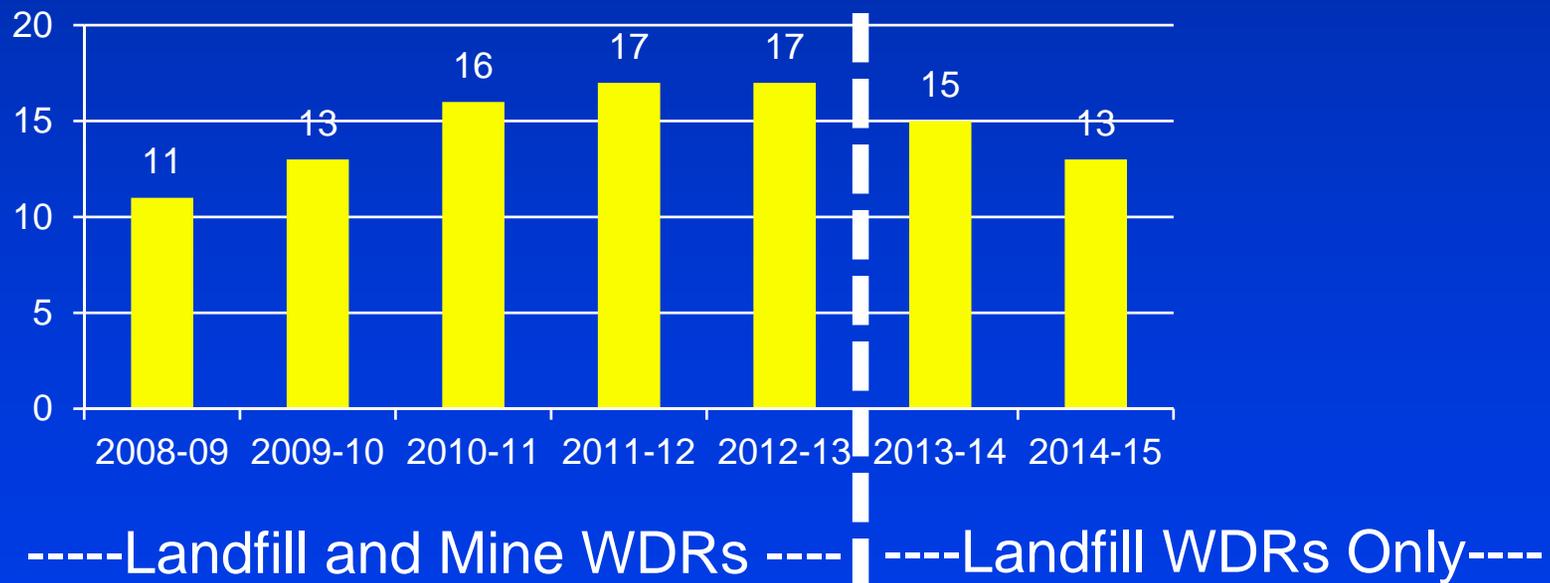
- Title 27 Regulations
 - ◆ Active and Closed Landfills
 - ◆ Surface Impoundments
 - ◆ Waste Piles
- 175 facilities
 - ◆ 39 actively receiving waste
- 16 PYs



Land Disposal Program

- Fiscal Year 2014-15
 - ◆ 13 WDRs adopted
 - ◆ 128 Compliance and Construction Inspections Completed

Total WDRs per Fiscal Year



Land Disposal Program

- Highlights

- ◆ SB General WDRs for Composting Operations
 - 59 existing sites
 - NOI required by 8/4/16
 - 46 sites to be investigated
- ◆ Financial Assurances
 - 87% in place



Mining Program

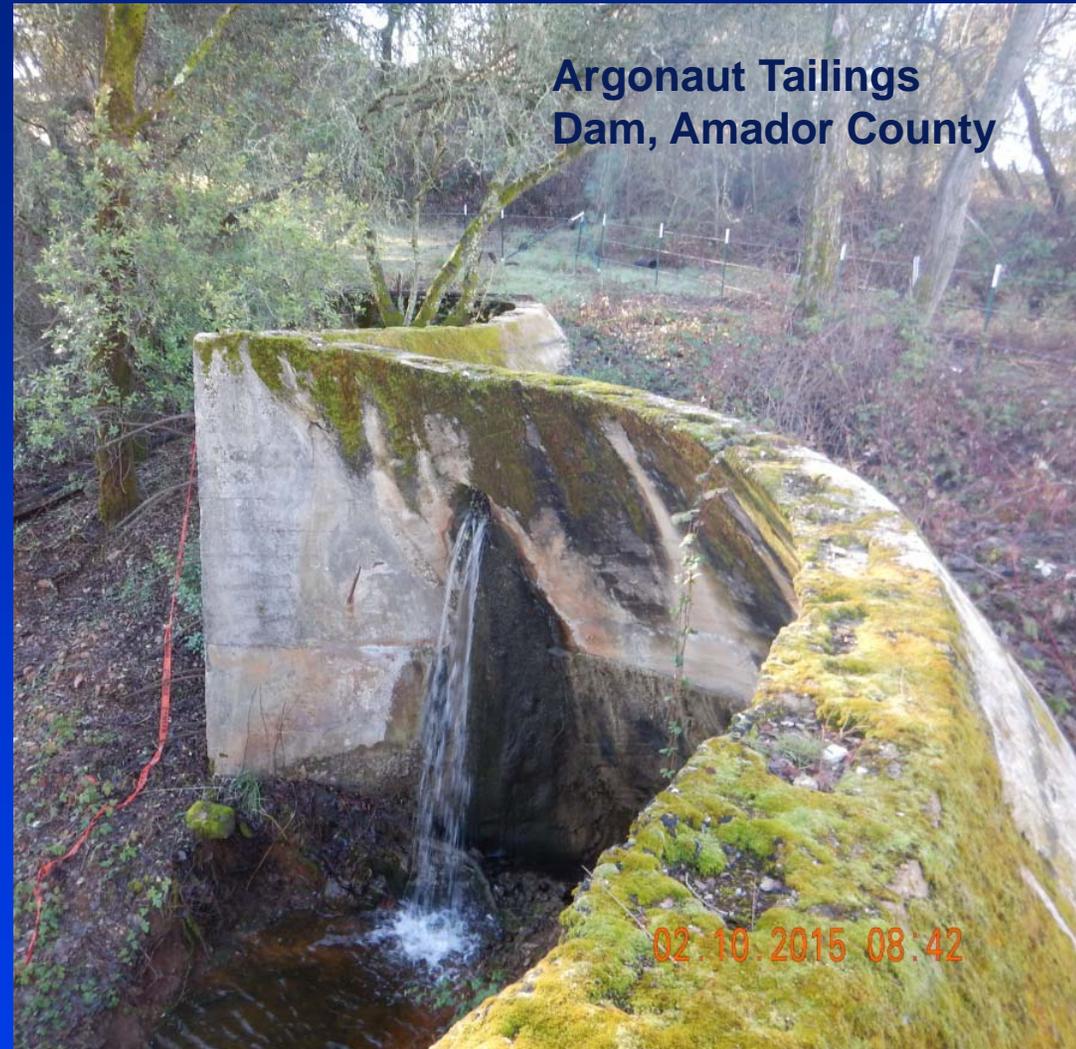
- Oversight of 120 Mine Sites
 - ◆ Many abandoned mine sites
 - ◆ Some mine sites in remediation

- ~5 PY



Mining Program

- Fiscal Year 2014-15
 - ◆ 2 CAOs
 - ◆ 2 WDRs adopted
 - ◆ 15 Compliance Inspections
 - ◆ Coordinate with EPA, DTSC, and DOC
- Issues and Challenges
 - ◆ Walker Mine
 - ◆ Sudden Discharge Potential
 - Argonaut Tailings Dam
 - ◆ Responsible Party searches



Oil Fields

- 19.7 PYs
- Sumps
- Produced Water Ponds
 - ◆ Food Safety Panel
 - ◆ Interagency Group
- Underground Injection Control (UIC)
- Well Stimulation (SB4)



Netted produced water pond and pump jacks – Coalinga



Surface seep of oil caused by steam flooding enhanced oil recovery operations - McKittrick Oil Field, western Kern County

Oil Fields

Work Plan Status – November 2015

Facilities	326
Ponds	1074
<i>Active Ponds</i>	716
Regulated	534
Unregulated	182
<i>Inactive ponds</i>	358
Regulated	106
Unregulated	252
13267 Orders to Operators - active and inactive ponds	78
13267 Orders to Operators - inactive ponds only	23
Request for Info Letters - Operators not ID'd with ponds	184
CAOs - unregulated active ponds	40
CDO - existing discharger	1

Confined Animal Facilities

- 1,300 Dairies
- 800-1000 Feedlots
- ~200 Poultry
- Few other
- 12 PY



Confined Animal Facilities

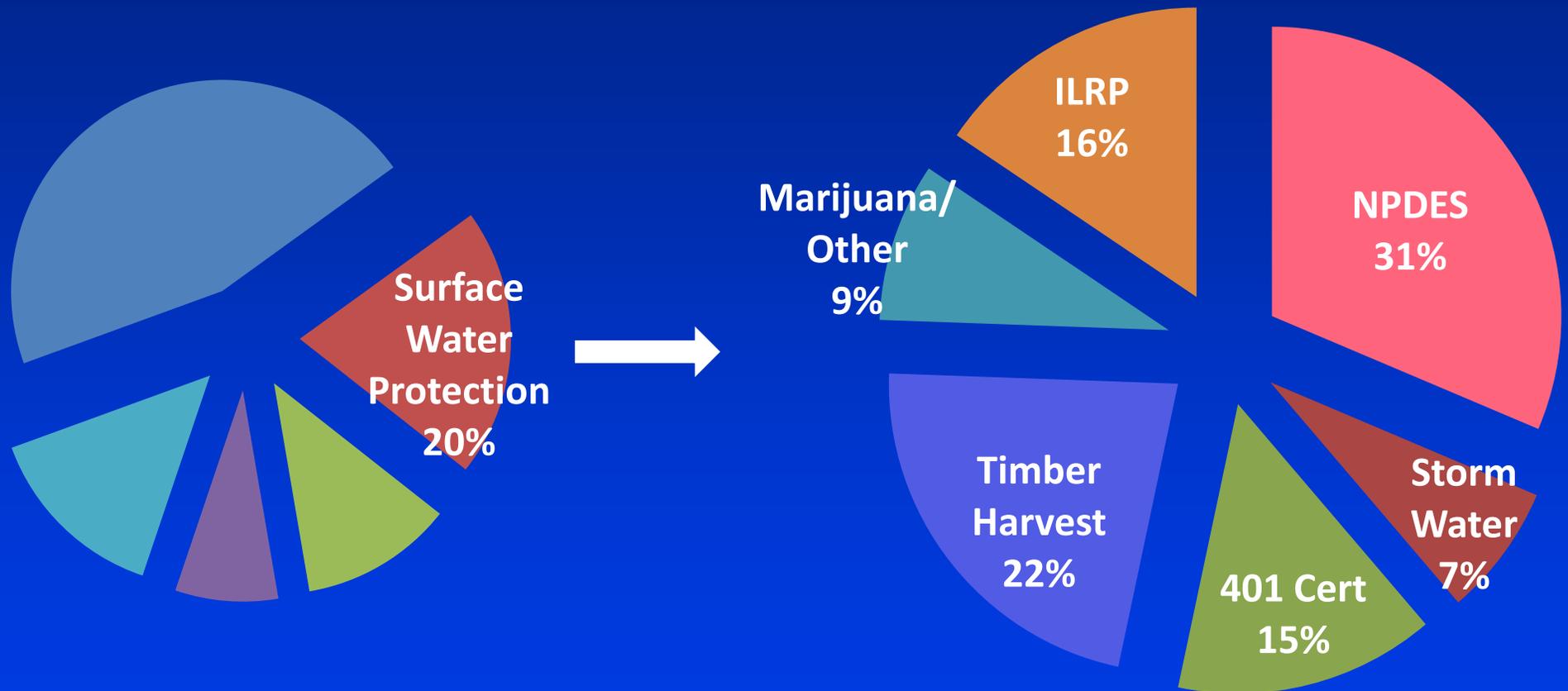
- Compliance and Enforcement
 - ◆ 437 Inspections
- Representative Monitoring Program
 - ◆ 3-years of data
 - ◆ Management Practice Improvements Needed
- General Orders
 - ◆ Bovine Feedlots
 - ◆ Poultry Facilities

Surface Water Protection



Surface Water Protection

Staff Distribution between Surface Protection Programs

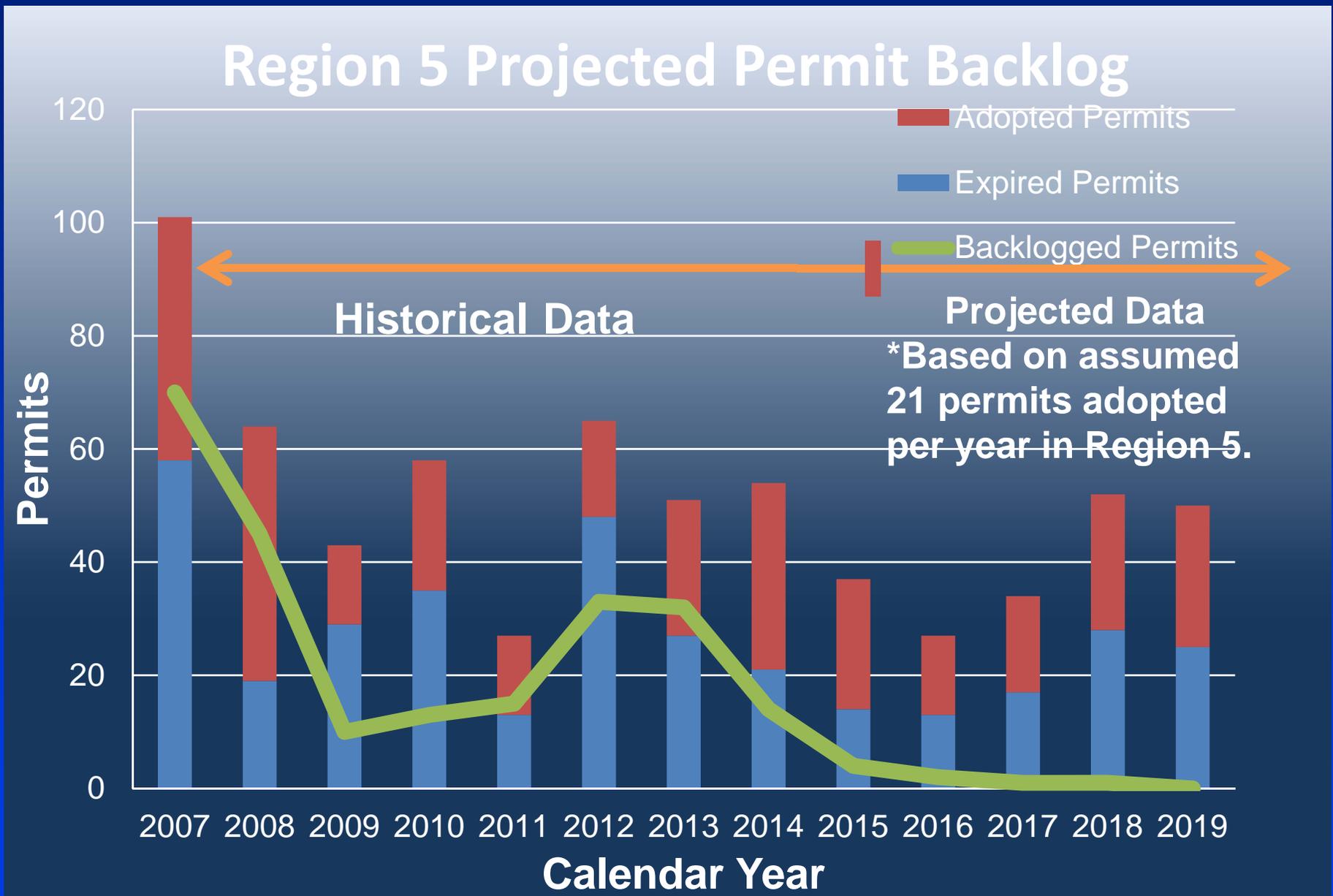


NPDES Permitting Program

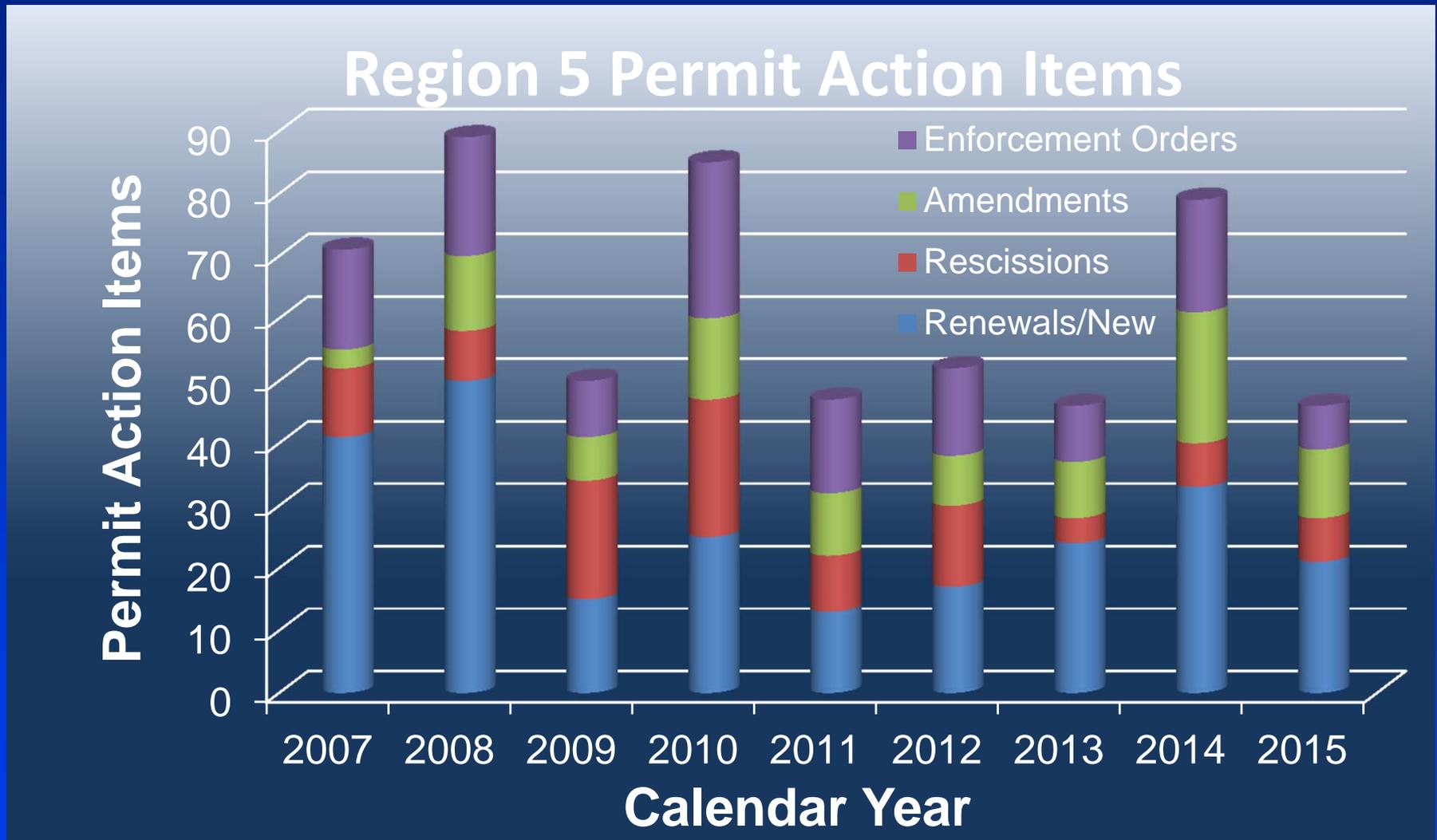
- 125 Individual Permits
- 24% of State
- 52 majors
- 73 minors
- 15.5 PYs



NPDES Permitting Program



NPDES Permitting Program



NPDES Permitting Program

- Top FY 2015/2016 Priorities
 - ◆ CSPA/Regional San Litigation
 - ◆ Continue to eliminate backlog
 - ◆ Adopt Title 22 General NPDES Permit

NPDES Permitting Program

- Adopt a Title 22 General NPDES Permit
 - ◆ 61 Advanced Treatment Facilities
 - 38 Majors/23 Minors
 - 26 Qualify for proposed General NPDES Permit

NPDES Storm Water Program

- Construction
- Industrial
- Municipal
- 9.6 PYs



Construction and Industrial Storm Water

- Construction:
1,500 sites/year
600 inspections/year
- Industrial:
1,800 sites
200 inspections/year



Municipal Storm Water

- 31 Large/Medium MS4s
- 126 Small MS4s
- Storm Water Management Programs
- Regionwide MS4 Permit



Water Quality Certification Program

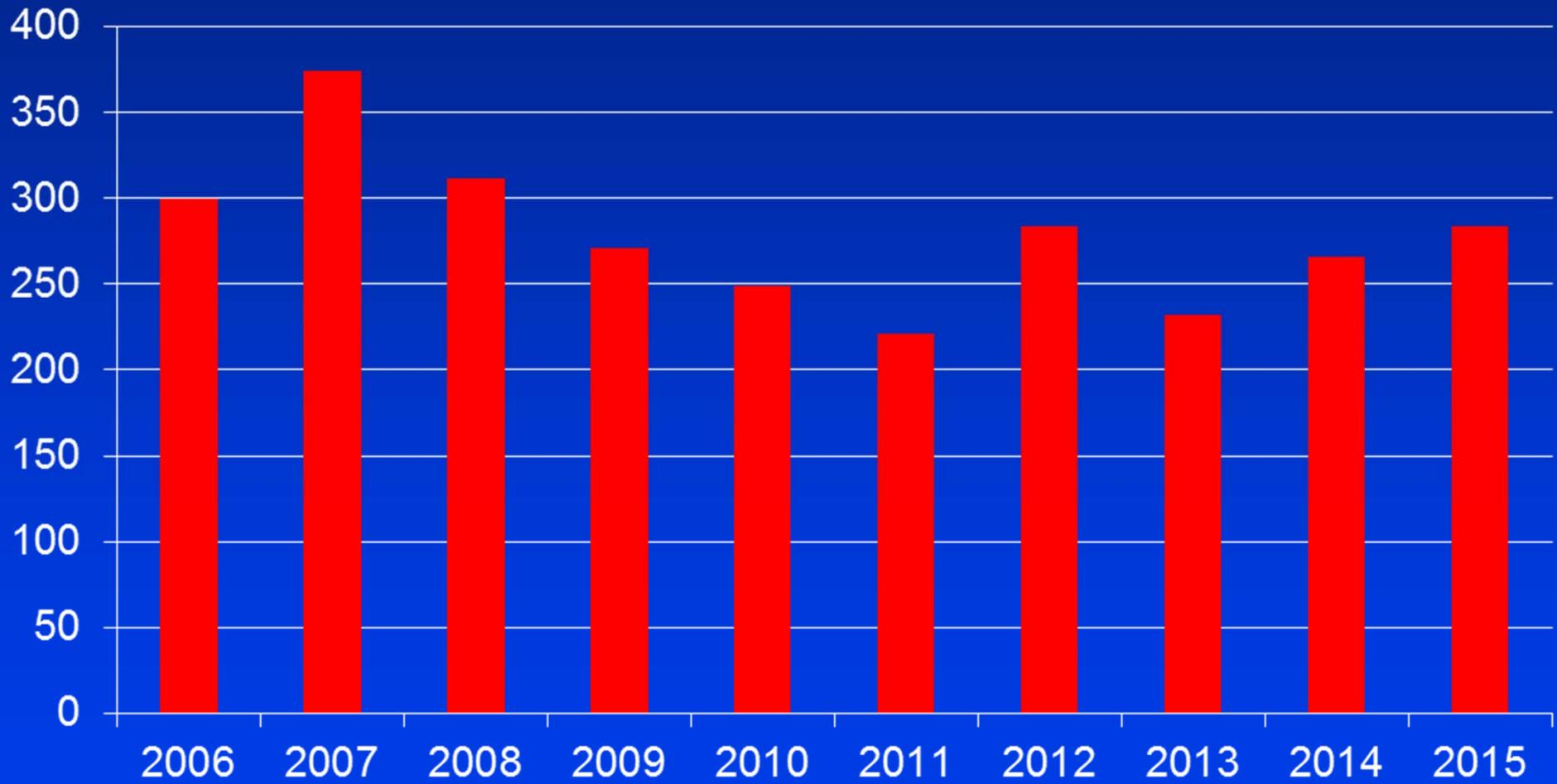
- Minimize impacts from dredge and fill
- No net loss of wetlands
- Certify Army Corps permit
- 6.9 PYs



Bass Lake-Crane Valley Dam earthquake retrofit project

Water Quality Certification Program

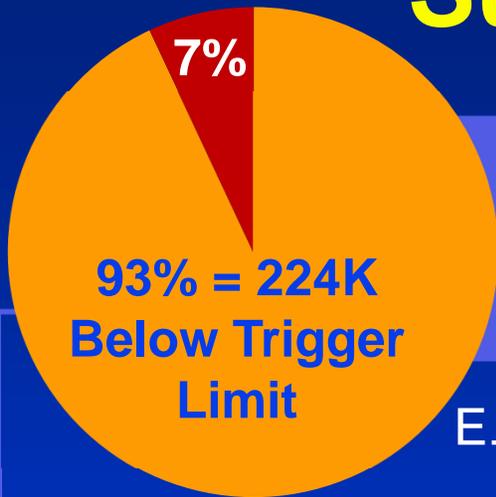
Certifications Issued



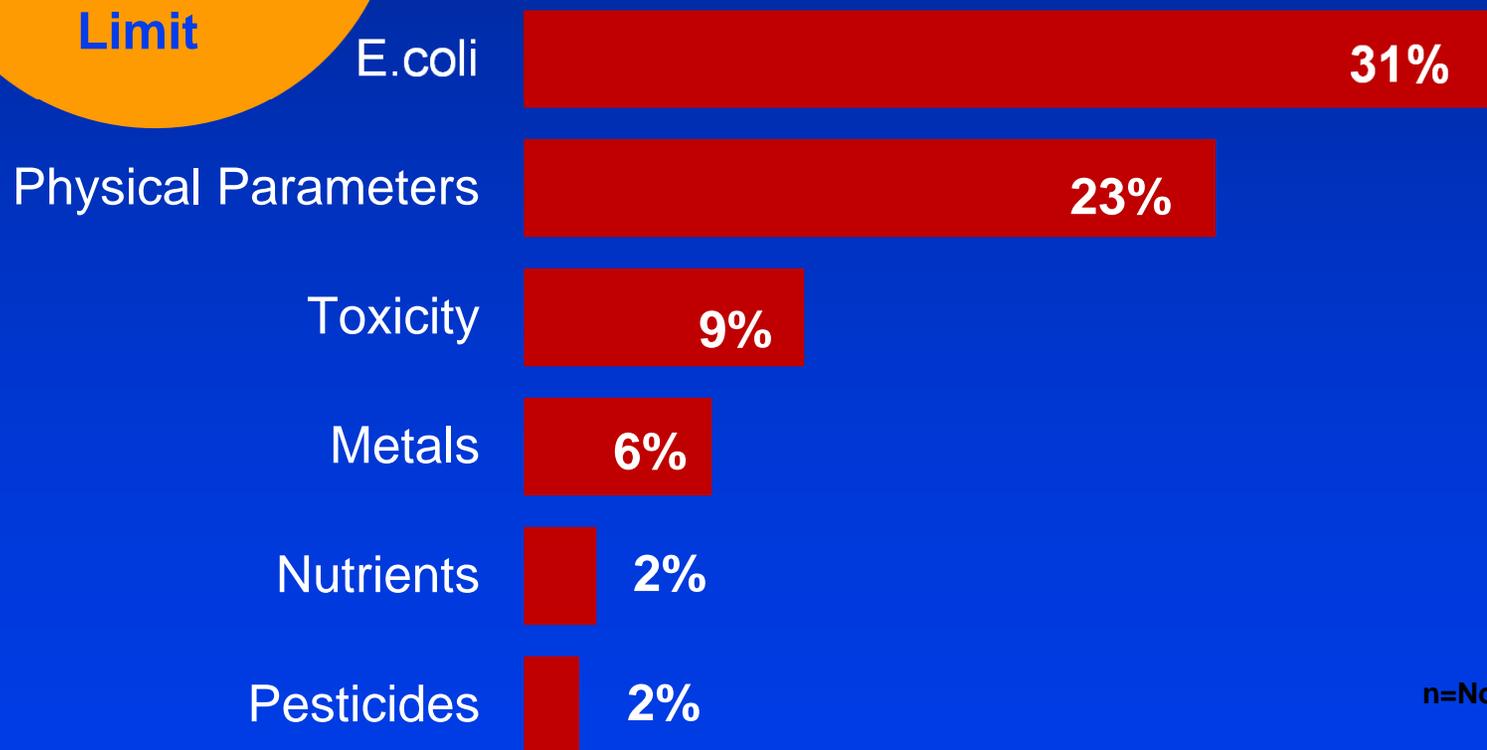
Irrigated Lands Regulatory Program

- Surface water & Groundwater Protection Program
 - ◆ 6.6 million acres
 - ◆ 35,000 grower operations
 - ◆ 14 agricultural coalitions
- 18 PY total

Irrigated Lands Regulatory Program Surface Water Results



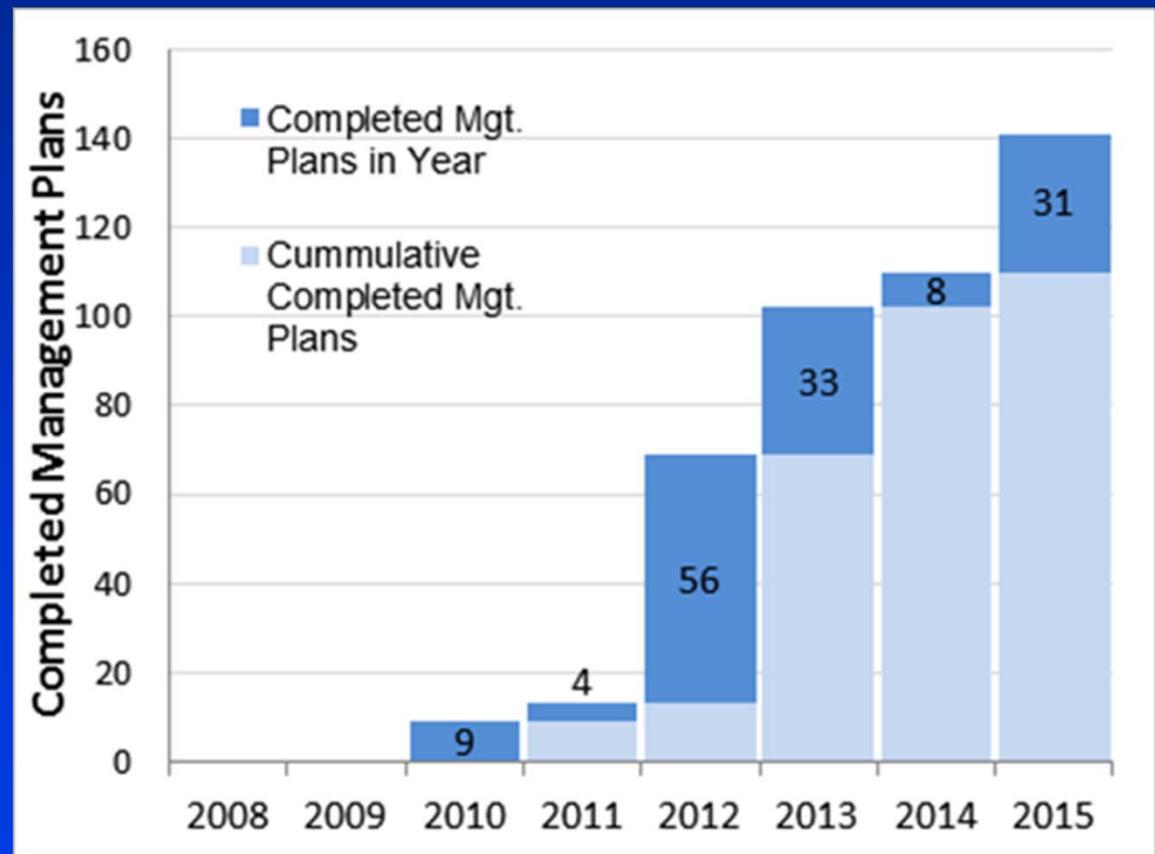
Pie: 7 Percent of tests exceed Trigger Limit
Bar: % of tests exceeding Trigger Limit
Range 2004-2014



n=No. of Tests

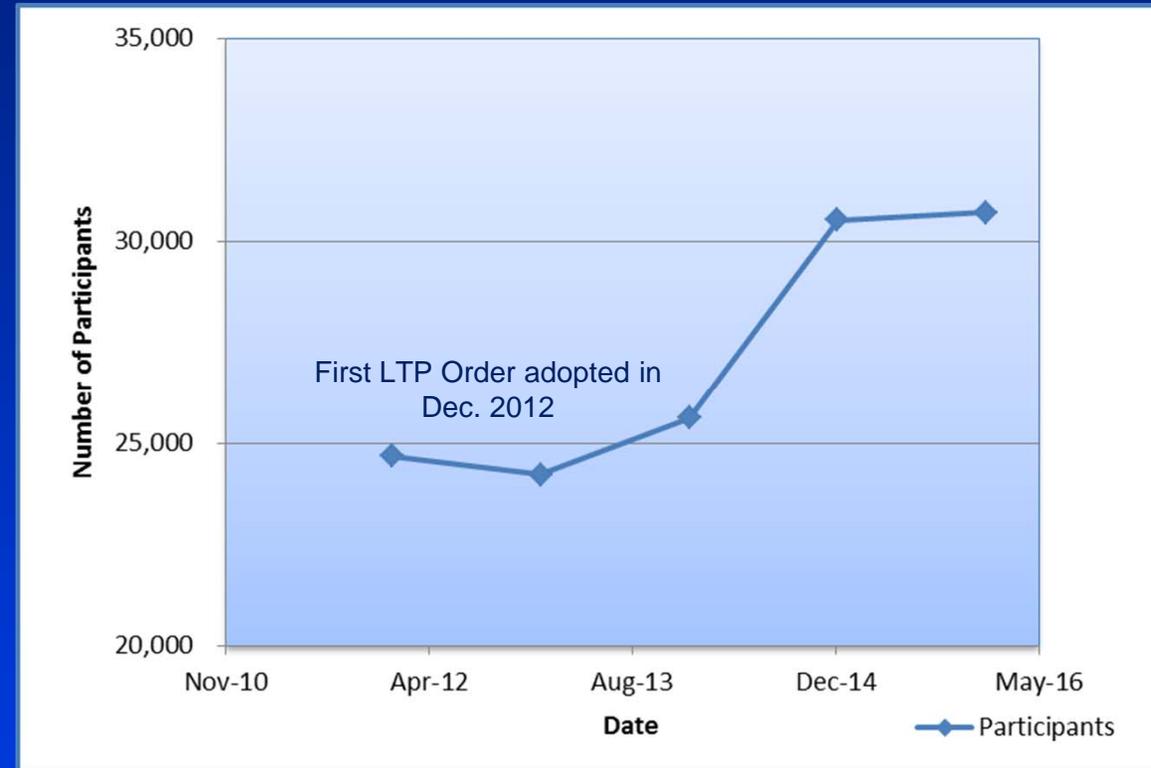
Irrigated Lands Regulatory Program Surface Water Management Plans

- Over 740 Active Management Plans
- 141 Management Plans Completed



Irrigated Lands Regulatory Program

- Participant enrollment up 21% since 2012
- Supports WQ monitoring and management plans
- \$622,000 in total Administrative Penalties to-date



Irrigated Lands Regulatory Program Priorities

- Groundwater Protection
 - ◆ Assessment Reports and Management Plans
 - ◆ Management Practices Evaluation Programs
 - ◆ Trend Monitoring Plans
- Surface Water Protection
 - ◆ Sediment and Erosion Control
 - ◆ Management Plan Completions
- Enforcement
 - ◆ Non-enrollment and Order Compliance

Forest Activities Program

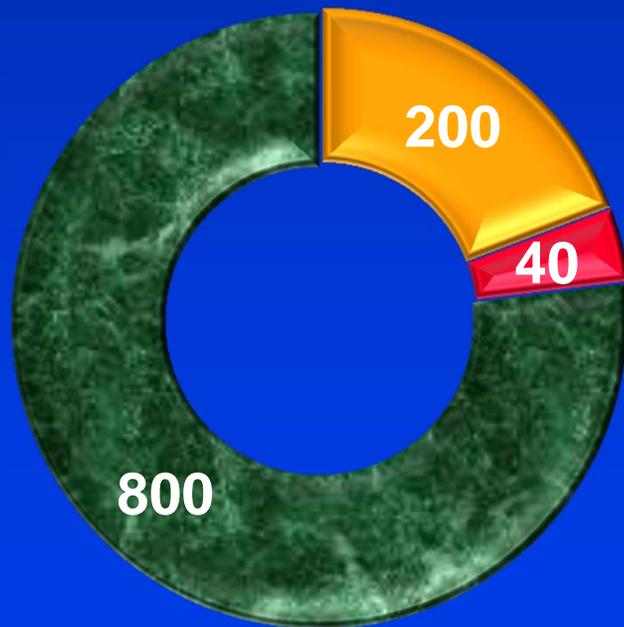


Bagley Fire of 2012 (Shasta County)

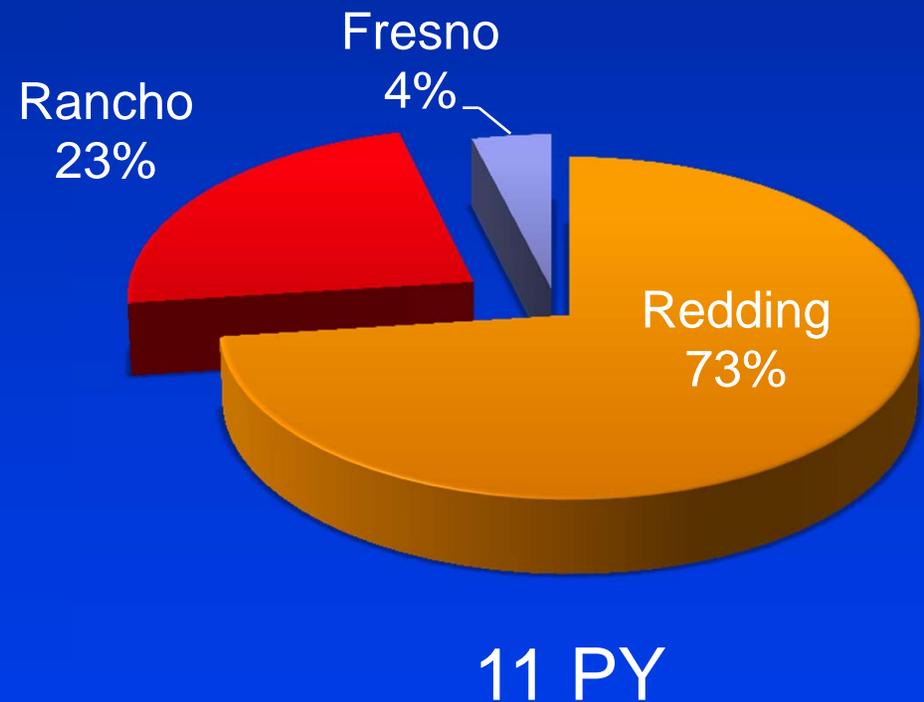
Forest Activities Program

Projects Received Annually

- Non-Federal Projects
- Federal Projects
- Emergency/Exemptions (non-federal)



Internal Workload Distribution



Forest Activities Program Performance - Inspections

Inspections Conducted 2004-2015



Forest Activities Program

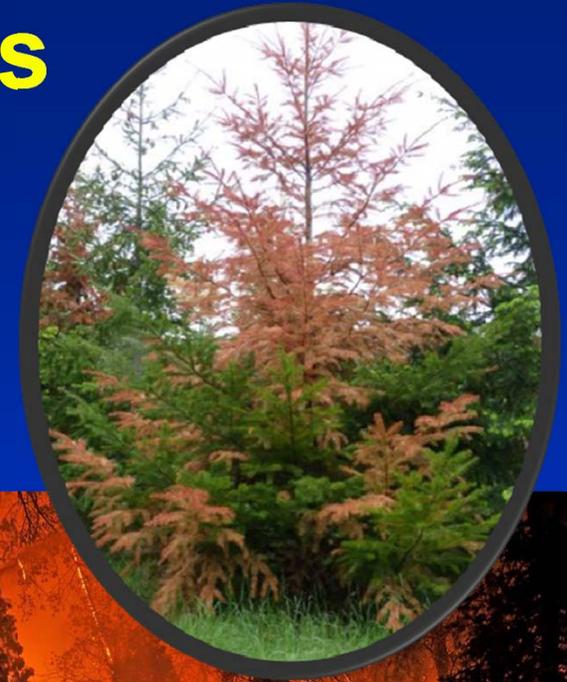
Successes in FY 14/15

- Finalized mitigation, rescinded CAOs for Rubicon Trail and BLM's Doe Mill Road
- Post-fire assessment



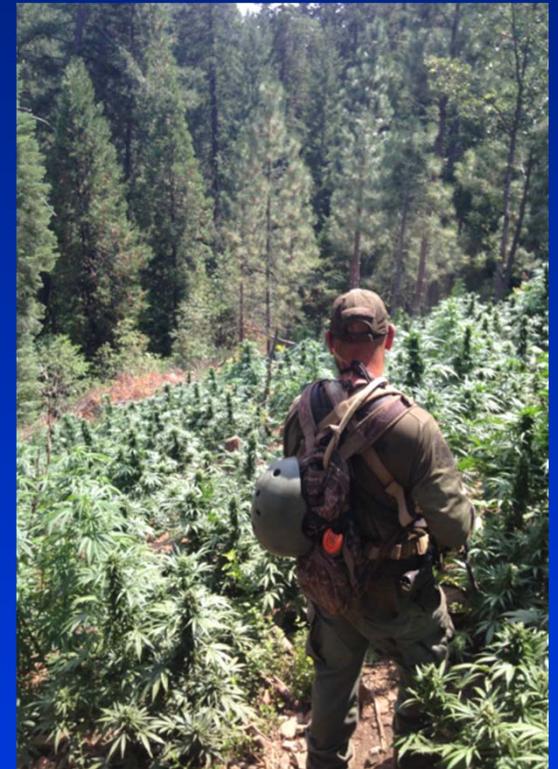
Forest Activities Program FY 16/17 Priorities

- Federal NPS permit development
- Post-fire assessment and recovery
- Harvest of drought-killed trees



Cannabis Cultivation Program

- Budget Act of 2014
- Joint Agency Partnership
- 4 PY in Redding



Cannabis 15/16 Highlights

Program Development

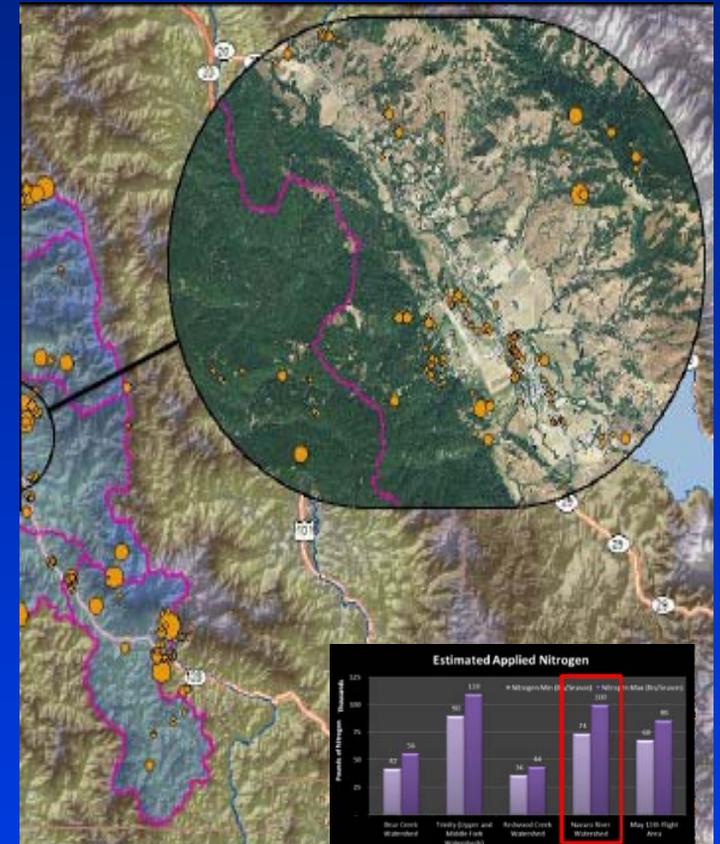
- Public Outreach/Education
- MOU
- Cannabis Identification & Prioritization System

Permitting

- General Order

Enforcement

- 26 - Inspections
- 11 - Notices of Violation
- 4 - 13267 Orders
- 4 - Cleanup and Abatement Orders
- 1 - ACL



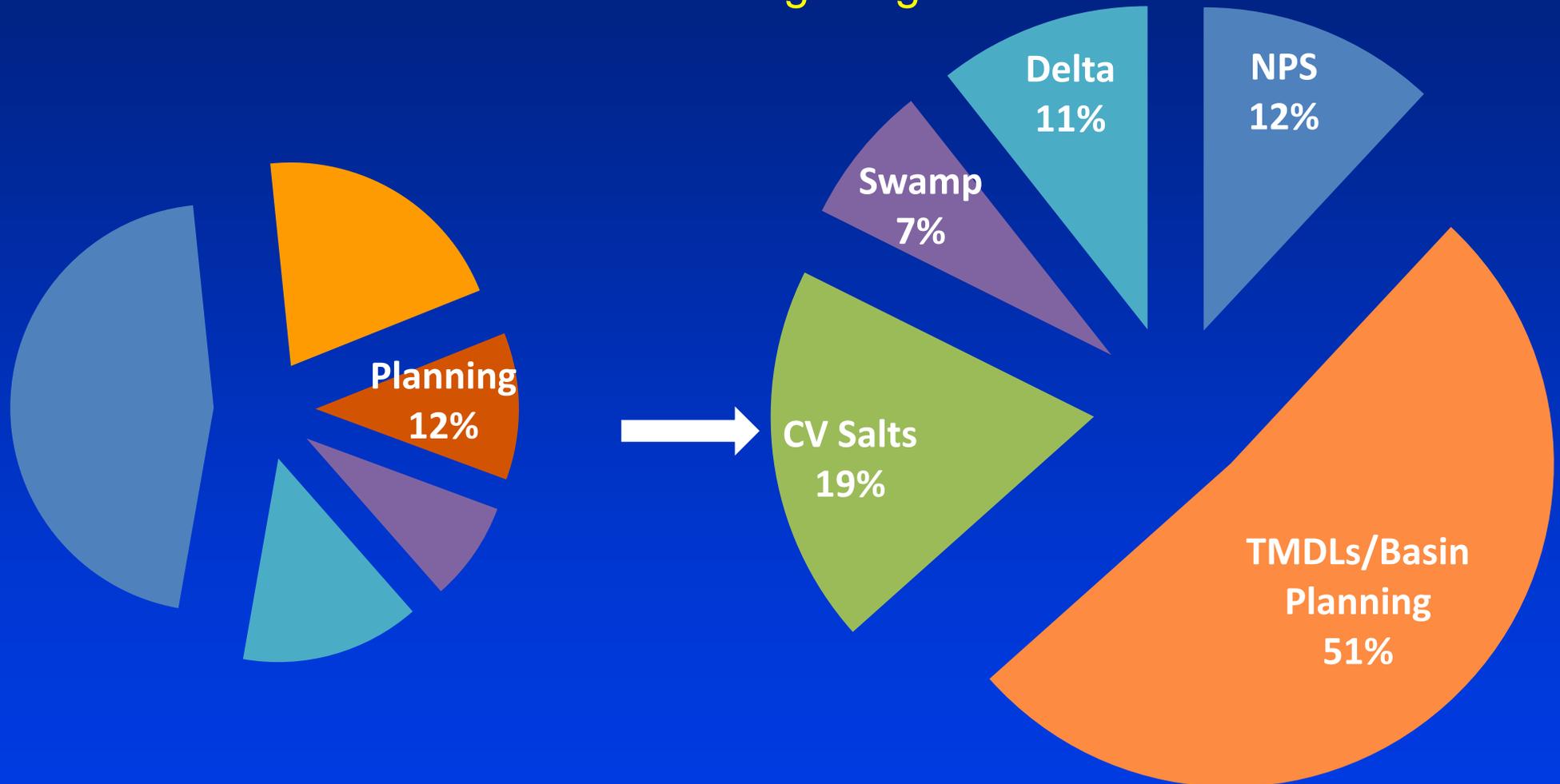
Cannabis 16/17 Priorities

- Continued
 - ◆ Public Outreach & Education
 - ◆ Multi-Agency Coordination Implement General Order
 - ◆ Enforcement



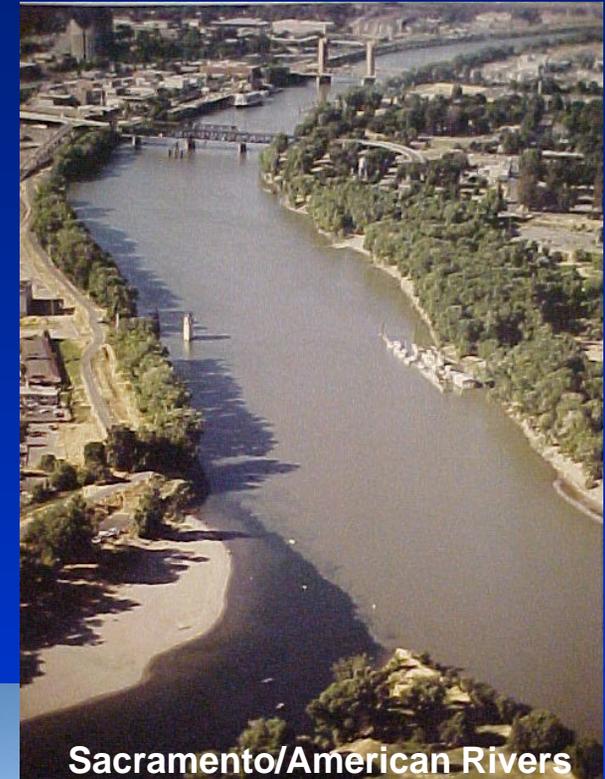
Planning

Staff Distribution between Planning Programs



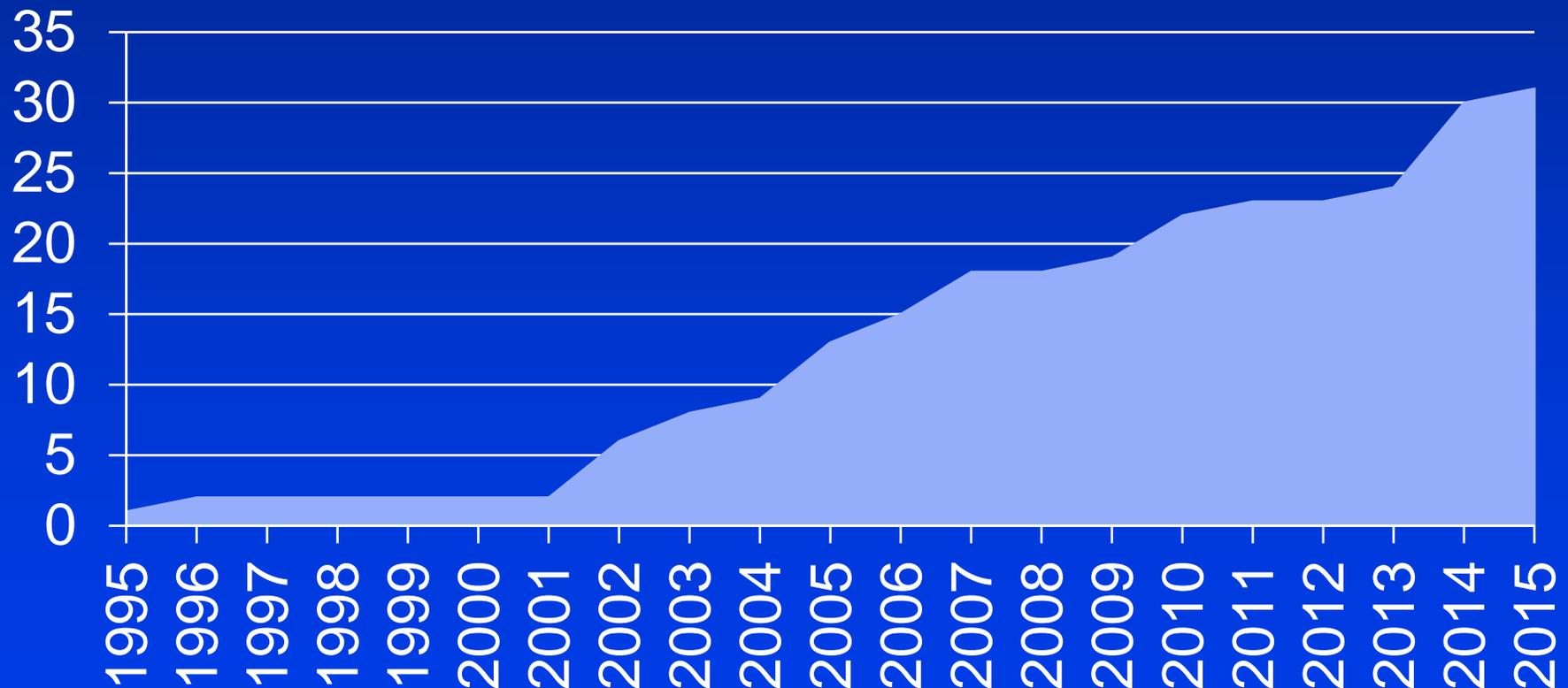
Basin Planning and TMDL Programs

- Activities
 - ◆ Integrated Report (303(d) list)
 - ◆ Develop and implement TMDLs
 - ◆ Develop Basin Plan Amendments
- 19.1 PYs



Basin Planning and TMDLs

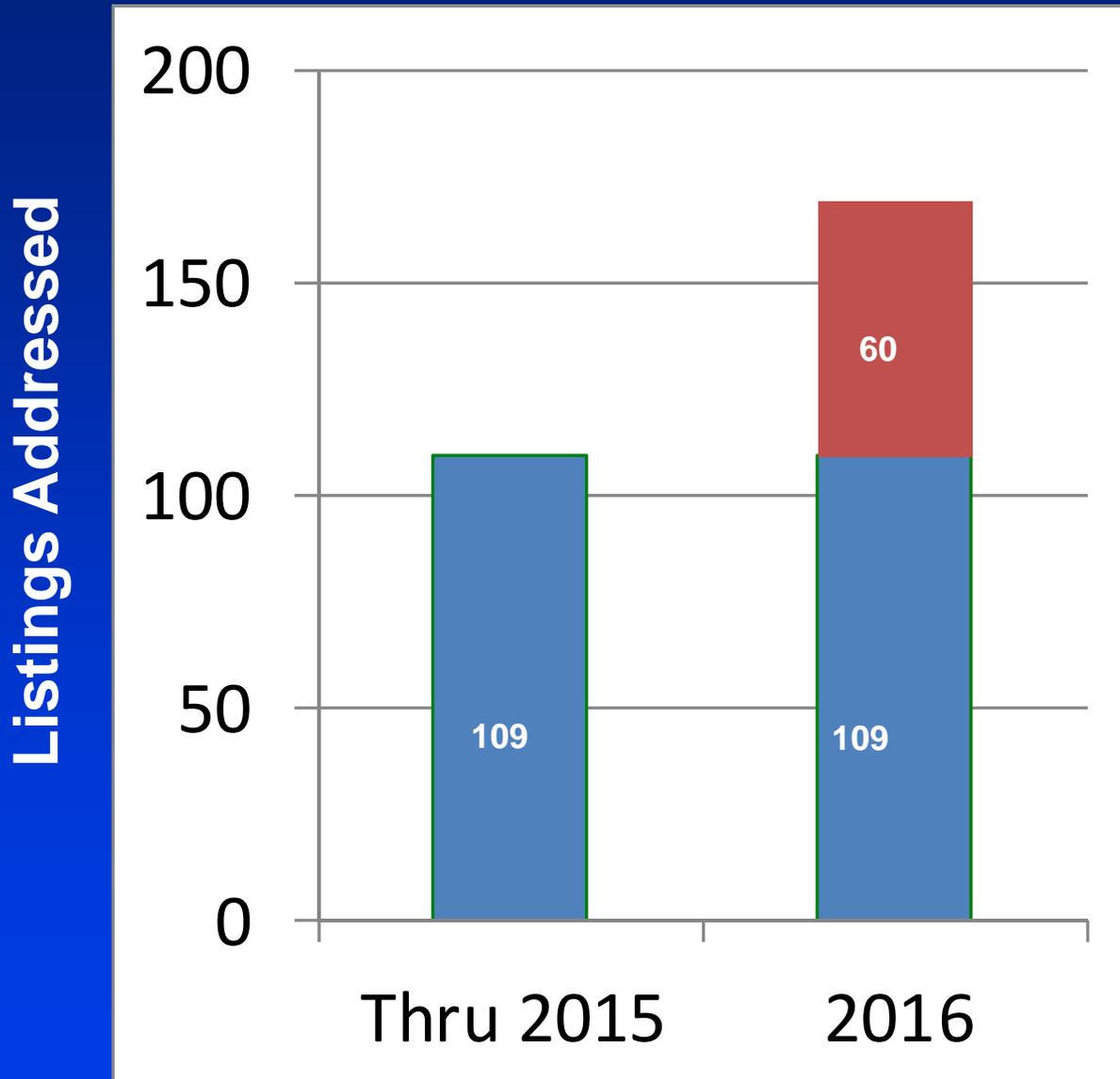
Total Amendments since 1995



Key 2015 Basin Planning

- Basin Plan Amendment to Remove MUN from 12 Constructed/Modified Ag Drains
- Triennial Review Approval (Both Plans)
 - ◆ Priority TMDLs
 - ◆ CV-SALTS
 - ◆ Implement 2014 Delta Strategic Plan

TMDL Progress



- Thru 2015
 - ◆ Includes Delta
- Pending 2016
 - ◆ Pyrethroids
 - ◆ Statewide Hg Reservoirs

Water Quality Improvements

- 24 de-listings
- Success stories:
 - ◆ Diazinon in the Sacramento, Feather, San Joaquin Rivers
 - ◆ Metals in the Sacramento River
 - ◆ Bacteria in Whiskeytown Reservoir
 - ◆ Selenium in San Joaquin River
- More de-listings to come
- *500+ to go*



Pesticide TMDLs & Basin Planning

2015

- ◆ Pyrethroid TMDL to Peer Review
- ◆ Statewide Urban Pesticide Framework
- ◆ Coordination with USEPA and DPR

2016

- ◆ DPR Management Agency Agreement Update
- ◆ 303(d) List / Integrated Report—Category 4(b)
—Document existing controls (no TMDL required)

Nonpoint Source Program

- Federal 319(h) or “Nonpoint Source”
 - ◆ TMDL Implementation: Clear Lake Nutrient & Grasslands Selenium TMDLs
 - ◆ Watershed and Integrated Regional Water Management (IRWM) Groups
 - ◆ Erosion & Sediment Control
- Funding
 - ◆ 3.4 PY

Nonpoint Source Program

Clear Lake Nutrient TMDL Implementation:

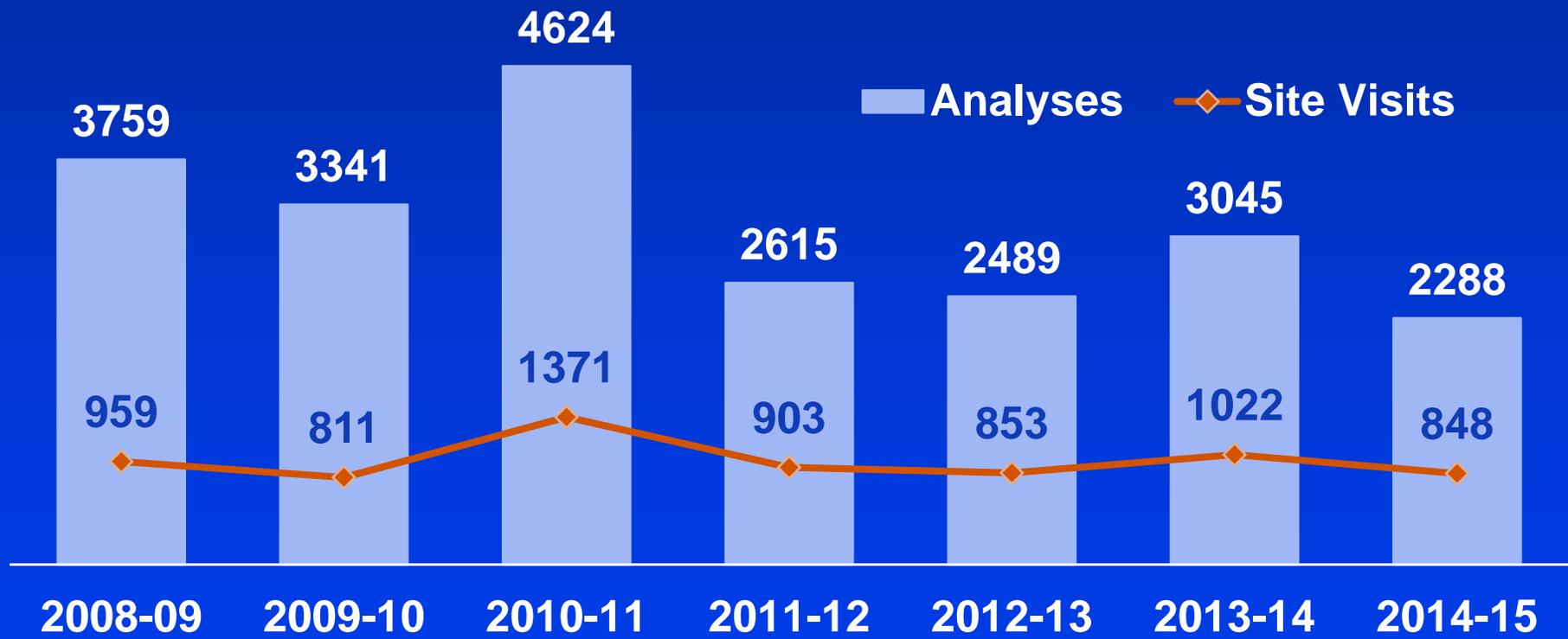
- Forest Services road storm proofing grant
- BLM sediment reduction grant
- Cyanobacteria Task Force
- Westside IRWM Group
- Post-fire monitoring assistance



Clear Lake during algae bloom

Surface Water Ambient Monitoring Program

Sampling Events and Analyses Conducted by Fiscal Year



Surface Water Ambient Monitoring Program



Program Priorities:

- Delta RMP toxicity
- Battle Creek Watershed
- Ongoing ambient monitoring
 - ◆ DWR Collaboration
 - ◆ Safe-to-Swim
 - ◆ Basin Rotational Monitoring

Special Planning Initiatives

- Statewide Reservoir Mercury TMDL
- CV-SALTS
- 2014 Delta Strategic Plan
 - ◆ Regional Monitoring Program
 - ◆ Stockton DWSC Low DO Control Program
 - ◆ Delta Nutrient Research Plan
 - ◆ Delta Methylmercury TMDL

Statewide Reservoir Mercury TMDL

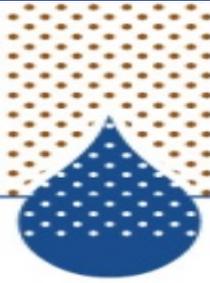


Source control



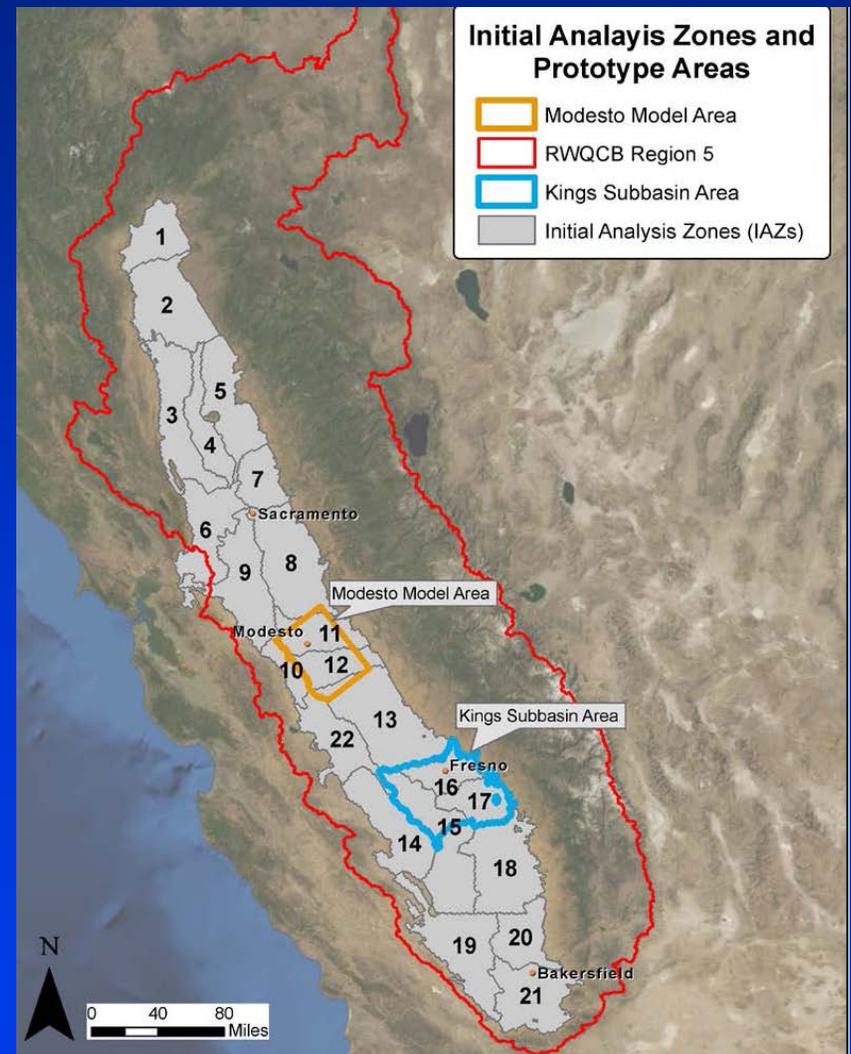
Water chemistry
(decrease methylation)





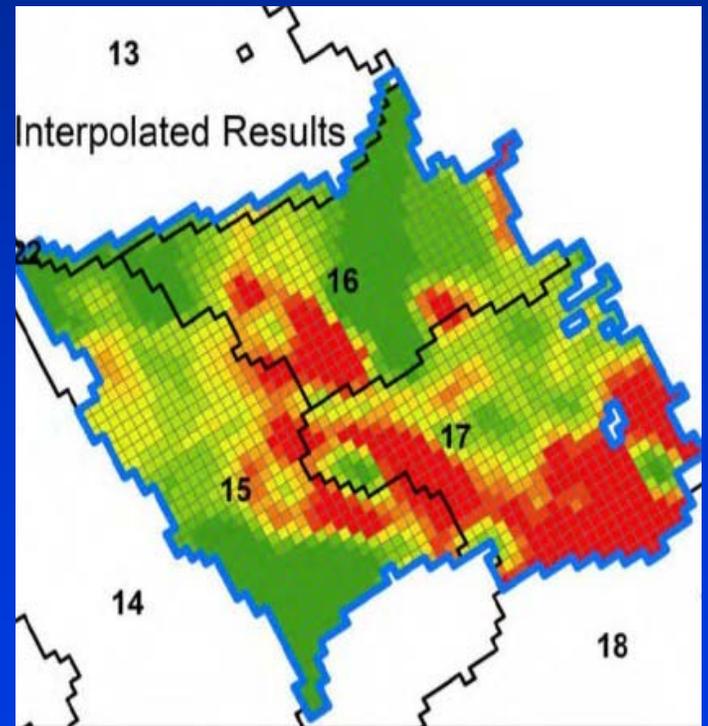
Central Valley Salt and Nitrate Management Plan

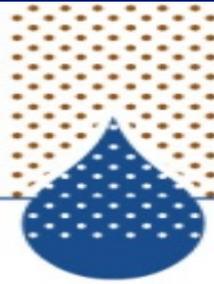
- ◆ Implementation
 - SSALTS (Accumulation & Transport)
 - NIMS (Nitrate Implementation Measures)



Alternate Compliance Strategies (Legacy Nitrate)

- ◆ Safe Drinking Water
- ◆ Reduced Loading
- ◆ Managed Groundwater Restoration





Basin Planning Case Studies

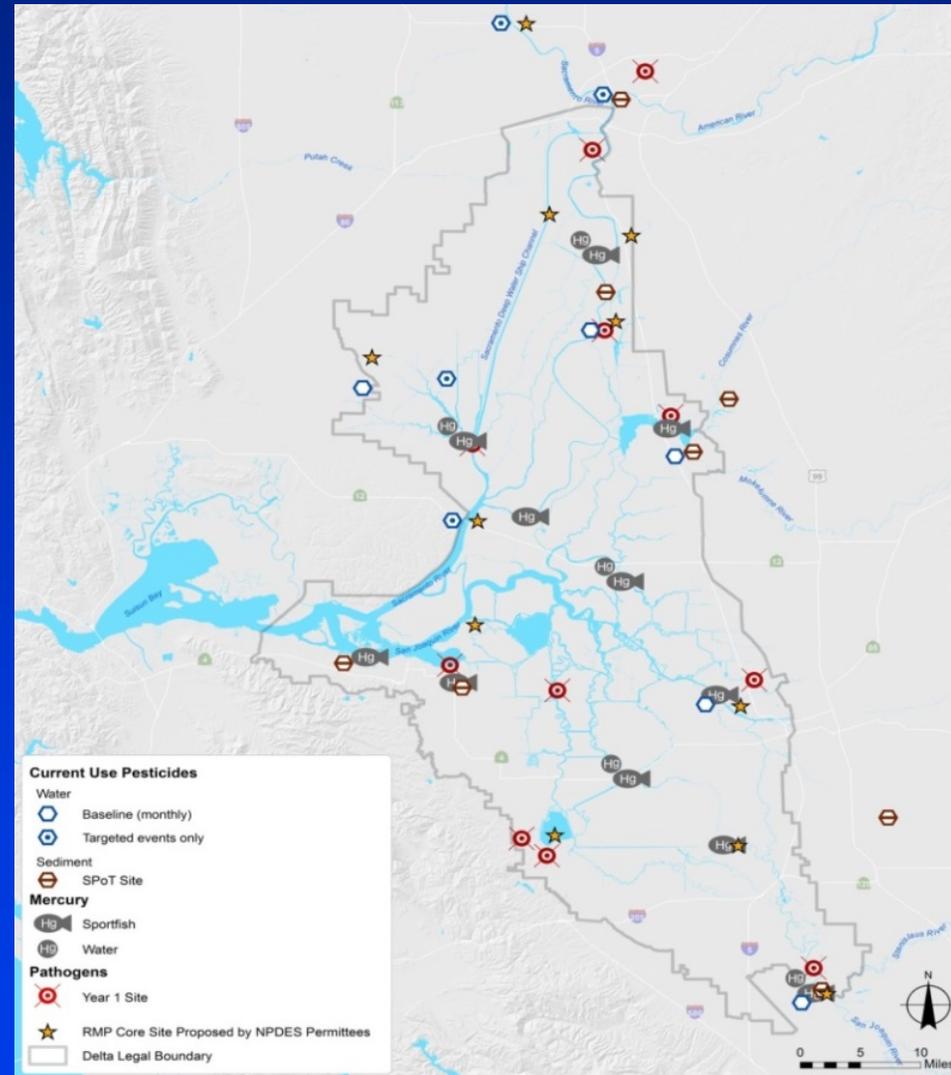
- ◆ MUN in Ag Water Bodies
 - 2015: MUN POTW
 - 2016: Evaluation Process

- ◆ Lower San Joaquin River Salt/Boron Objectives
 - 2015: Technical
 - 2016: Amendment



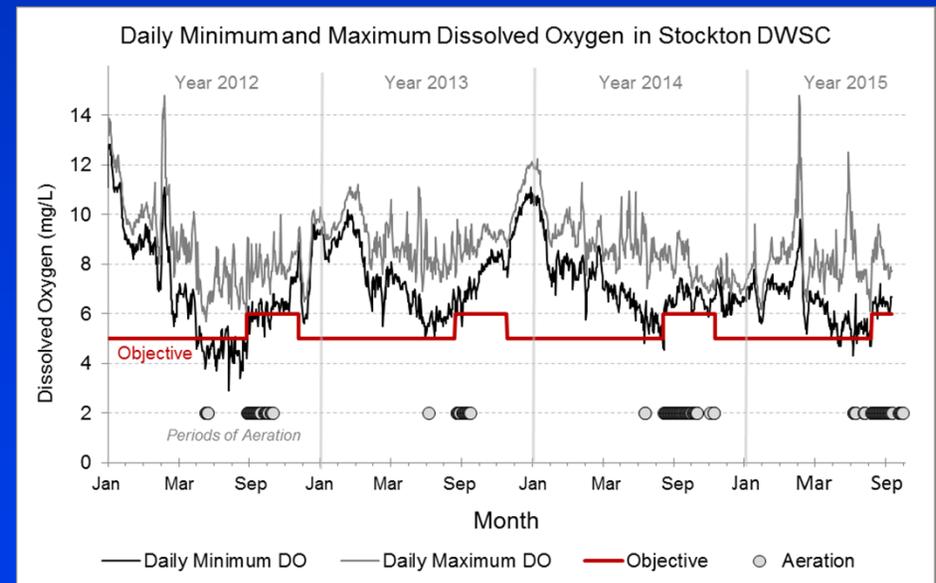
Delta Regional Monitoring Program

- Monitoring design, annual workplan
- Participants
 - ◆ 11 POTWs
 - ◆ 2 large MS4s
 - ◆ 11 small MS4s
 - ◆ 3 irrigated lands coalitions
 - ◆ water supply contractors
- 2015: pathogens, toxicity and pesticides
- 2016: nutrients and mercury



Stockton Deep Water Ship Channel Low Dissolved Oxygen Control Program

- February 2015 Board Resolution:
 - ◆ Improved DO conditions
 - ◆ Continue control program
 - ◆ Support long-term agreement to operate aeration facility
- 2016: New aeration agreement



Delta Nutrient Research Plan

2015

- ◆ Stakeholder & Technical Advisory Group established
- ◆ Science Work Groups formed
- ◆ 3-white papers developed

2016

- ◆ Joint nutrient workshop
- ◆ Nutrient Research Plan



Nutrient Issues

- Invasive aquatic plants
- Increased harmful algal blooms
- Decreased phytoplankton abundance and shift in species composition

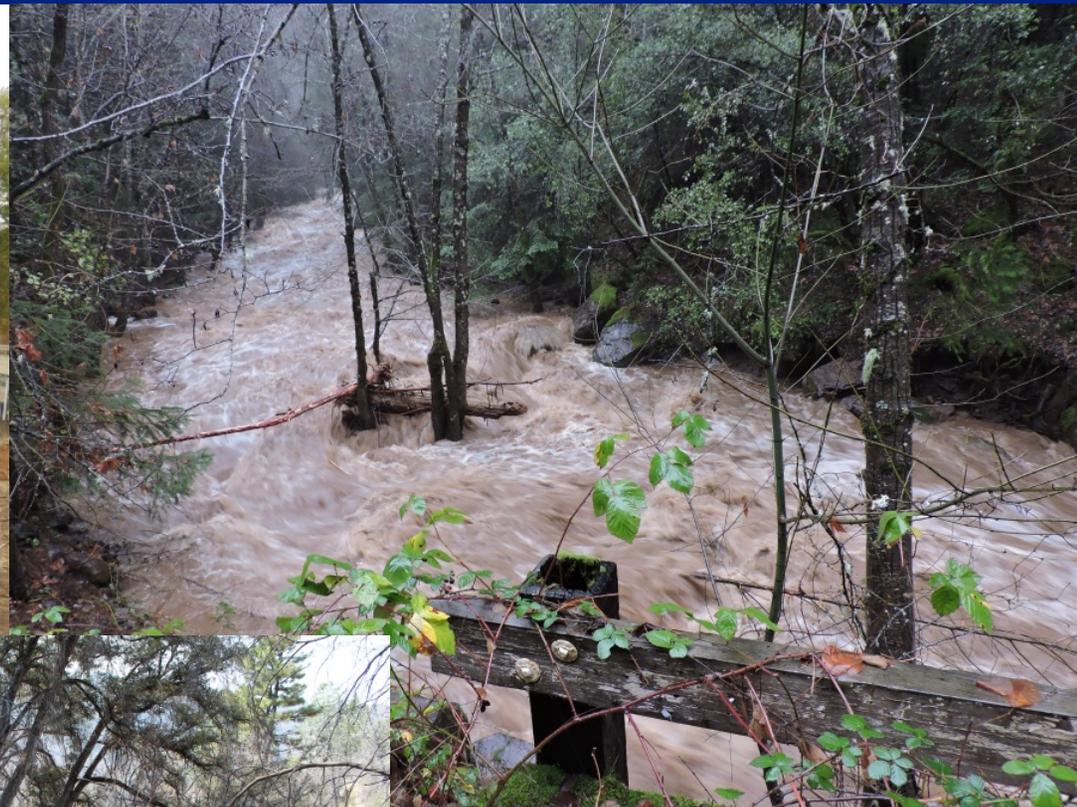
Delta Methylmercury TMDL

- Methylmercury studies underway
- Exposure reduction activities in progress



New/Emerging Programs and Activities

Battle Creek Watershed Based Plan

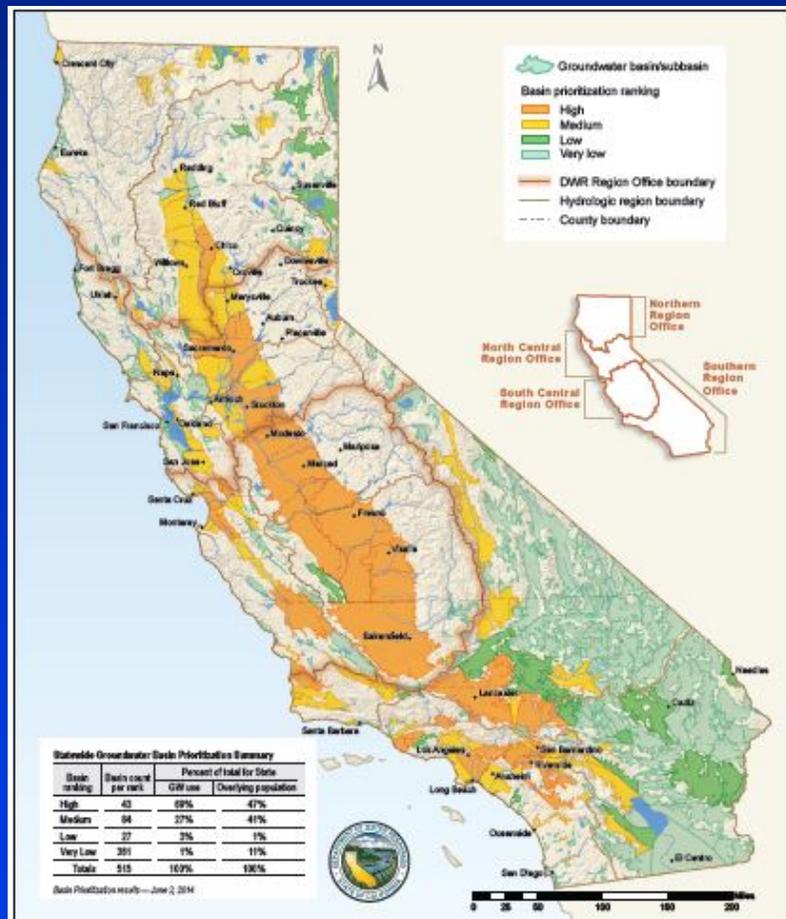


Anti-Degradation Review

- State Board Activity
- For Application to Groundwater
- Met with Focused Stakeholder Groups
- State Board Scoping Document
- Seeking Assistance from UC Davis
- http://www.waterboards.ca.gov/plans_policies/antidegradation.shtml

Sustainable Groundwater Management Act (SGMA) Coordination

SGMA



- ◆ Promotes local control of groundwater
- ◆ Requires Groundwater Sustainability Agencies
- ◆ Requires Groundwater Sustainability Plans
- ◆ State Board – Intervention Backstop

Region 5 SGMA Coordination

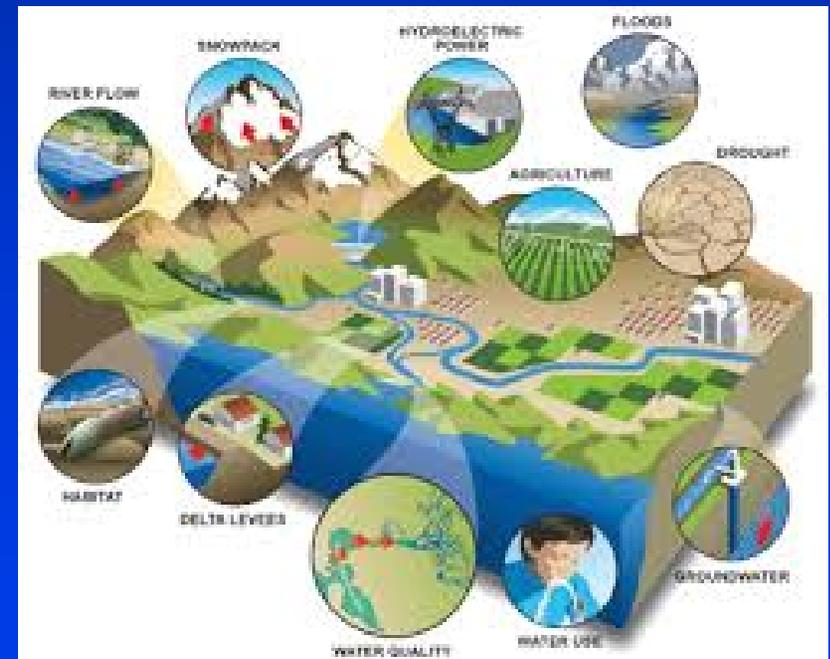
- ◆ CV-SALTS: DWR participation
- ◆ State Board Working Group

Healthy Soils

- Healthy soils initiative: Governor's 15/16 budget
 - ◆ Healthy soils = adequate soil organic matter
 - ◆ CDFA lead
 - ◆ Water Boards participating
- Multiple benefits:
 - ◆ Soil stability (reduced erosion)
 - ◆ Climate change resilience
 - ◆ Agricultural sustainability

Climate Change

- Coordination with Regions and State Board
 - ◆ Need for consistency
 - ◆ Work Plan structure: Plan, Monitor/Assess, Regulate/Permit, Enforce
- Region 5 Efforts
 - ◆ Healthy Soils
 - ◆ Wetlands
 - ◆ Nutrient and Salt Planning
 - ◆ Drought Response
 - ◆ El Nino Response



Wetland Restoration

- Coordination with Regions and State Board
 - ◆ How to foster and track net gain in wetlands?
 - ◆ Regional Boards track 2-4 restoration projects
- Recommendations
 - ◆ Monitoring/tracking
 - ◆ Incentivize creation
 - ◆ Alternative compliance
 - ◆ Streamline permitting
 - ◆ Climate change



Digesters

- 14 Digesters
- CDFA Funding for 5 Digesters - \$11M
- Dairy Digester General Orders



Drinking Water Treatment

- Fixed-bed Bioreactor Pilot Test at Paradise Colony
- City of Delano Pilot
- Paradise Colony Operational by April 2016
- Efficacy for Very Small Community



Organizational

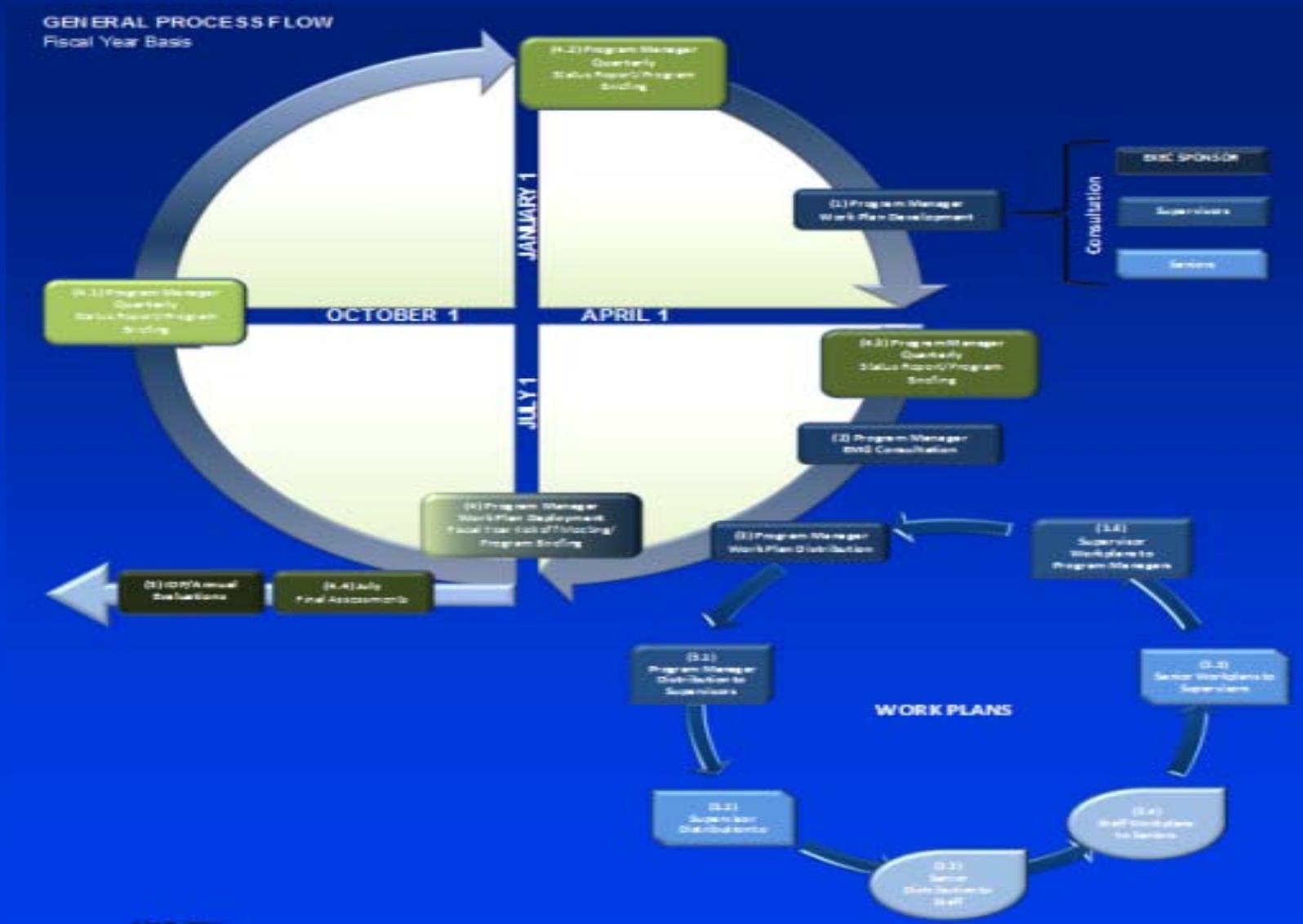
Operations and Program Support

- Electronic Content Management
 - ◆ Document Management tool
 - ◆ Electronically receive, forward, file and track incoming mail.
 - ◆ October 2014 introduced to staff and public
 - ◆ Fully implemented June 2015
- Exceeded our goals
 - 70% reduction in USPS mail
 - More than 30,000 documents electronically received

Operations and Program Support

- Program Support Analysts assigned to serve core regulatory programs.
- Allows technical staff to meet commitments more efficiently
- Additional improvements in 2016 - developing:
 - ◆ Office Procedures Manual
 - ◆ Hiring Guide

Portfolio Management



Portfolio Management

- Developed in 2013
 - ◆ 3 Offices
 - ◆ 18 Programs
 - ◆ ~240 Employees
- Region-wide Programmatic Focus
- Integrates and Builds Upon Existing Tools, Processes, and Investments
- Promotes Transparency, Accountability, and Efficiency at Levels in the Organization
- Serves as a Basic Framework or “Platform” to Build Upon

Portfolio Management

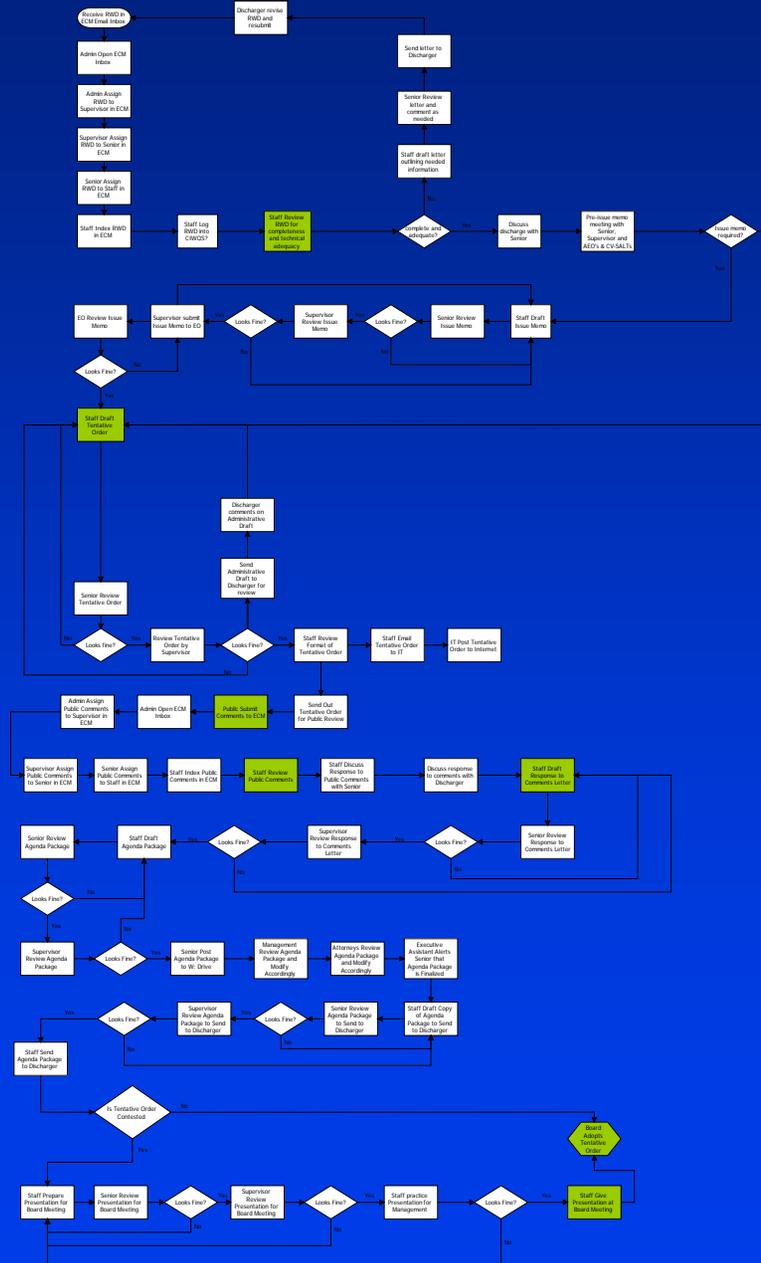
Program	Program Manager	Executive Sponsor	Office
Administration	Dave King/Brett Braidman	Linda Bracamonte	Rancho Cordova
Basin Planning	Jeanne Chilcott	Adam Laputz	Rancho Cordova
Cannabis	Clint Snyder	Clint Snyder	Redding
Dairies	Doug Patteson	Clay Rodgers	Fresno
Enforcement	Robert LHeureux	Andrew Altevogt	Rancho Cordova
Forest Activities	Angela Wilson	Clint Snyder	Redding
Irrigated Lands	Sue McConnell	Adam Laputz	Rancho Cordova
Mines	Marty Hartzell	Clint Snyder	Redding
Non-Point Source	Michelle Wood	Adam Laputz	Rancho Cordova
NPDES	Nichole Morgan	Adam Laputz	Rancho Cordova
Oil Fields	Dale Harvey	Clay Rodgers	Fresno
Site Cleanup	Stewart Black	Andrew Altevogt	Rancho Cordova
Storm Water	Bryan Smith	Clint Snyder	Redding
SWAMP	Anne Littlejohn	Adam Laputz	Rancho Cordova
Title 27/Land Disposal	Robert Busby	Andrew Altevogt	Rancho Cordova
USTs	Brian Newman	Andrew Altevogt	Rancho Cordova
Water Quality Certs	Bryan Smith	Clint Snyder	Redding
WDRs	Lonnie Wass	Clay Rodgers	Fresno

Portfolio Management

- Added 3 New Programs
 - ◆ Administration
 - ◆ Cannabis
 - ◆ Oil Fields
- Refined Leadership Team's Involvement
- Refined Annual Programmatic Work Plan's Content
 - ◆ Detailed Budget Analysis
- Leadership Team to Further Develop:
 - ◆ Roles & Responsibilities Guidelines
 - ◆ Communication matrix
 - ◆ Conflict Resolution Guidance



Lean 6 Sigma

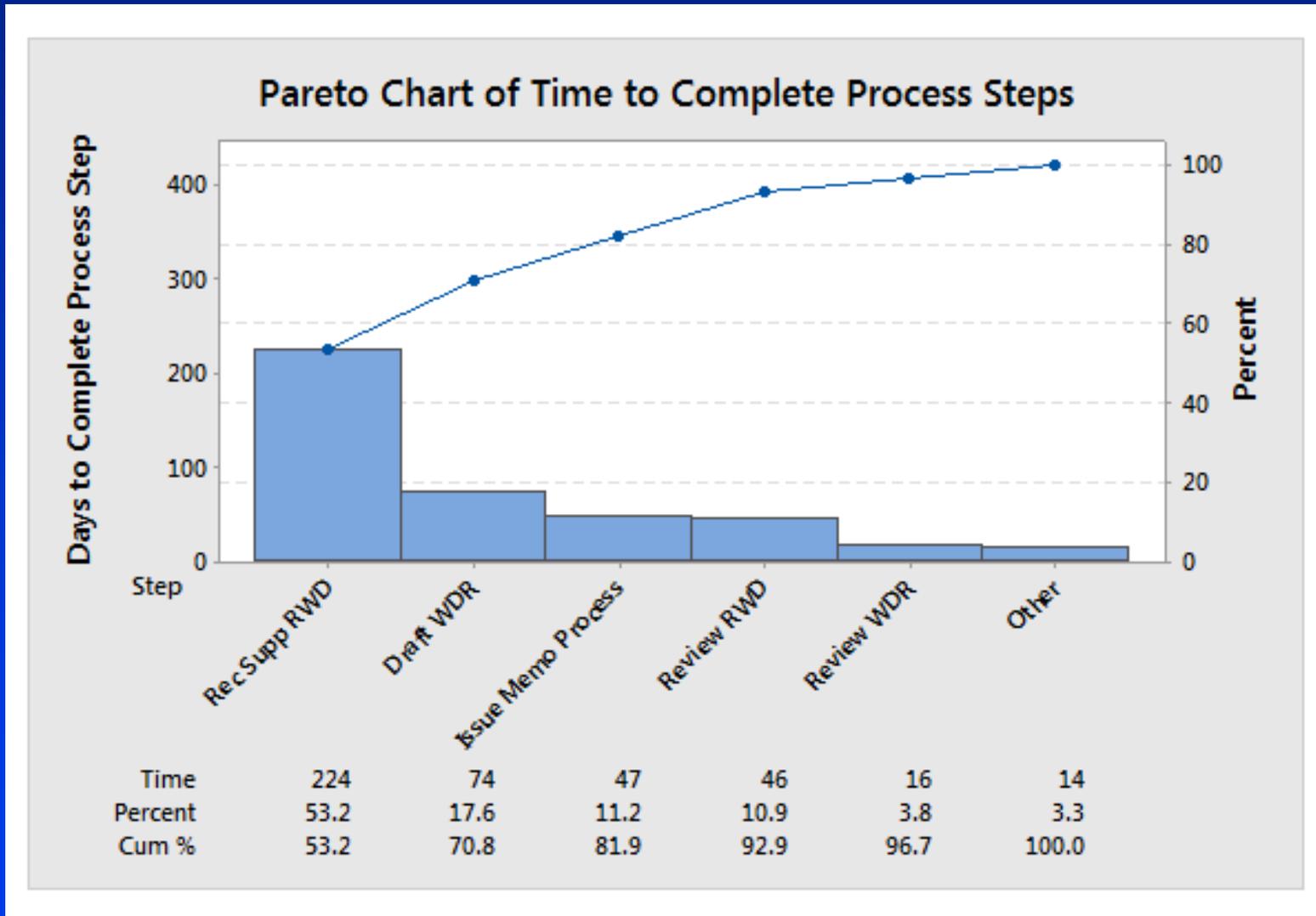


Lean 6 Sigma

- Issue: permit adoption time for non-15 WDRs
- Process
 - ◆ Analysis of time:
 - permit adoption
 - spent on steps in permit drafting
 - ◆ Determine steps that can be improved
 - ◆ Created measures to streamline
 - ◆ Implement and Tracking

Lean 6 sigma

Process Step Improvement



Lean 6 Sigma

- Process Steps Improvements
 - ◆ Resubmission of Reports of Waste Discharge
 - reduce from 200 days to zero
 - ◆ Issue Paper Process
 - Reduce from 50 days to 25
 - ◆ Initial Review of RoWD
 - Reduce from 50 days to 25
 - ◆ Drafting of WDR
 - Reduce from 75 days to 35

Lean 6 Sigma

- Specific Improvements
 - ◆ Incomplete Permit Applications
 - Application review checklist
 - Shift burden for missing information to applicant
 - Template letter for requesting additional information
 - ◆ Review Permit Applications
 - Permit application review checklist
 - ◆ Resolving Policy Issues
 - Issue paper guidance document
 - Issue memo template
 - ◆ Permitting activities
 - Assistance from non-permitting staff

Priorities for 2016/2017

- Succession Planning
- Continue Efficiency Improvements
- Strategic Planning
- Delta Strategic Work Plan
- Groundwater quality protection programs
- Oil Fields
- Battle Creek Watershed Plan
- CV-SALTS

Summary

- Exceptional and highly qualified technical staff and superb support staff
- Dedicated and experienced executive and leadership team
- Outstanding achievements
- Addressing complex issues
- Significant accomplishments

Credit and Thanks

- Technical Staff
- Administrative Staff
- Seniors
- Supervisors
- OCC Attorneys
- Assistant Executive Officers

Questions?



Photo by Barry Hilton
Dry Creek Auburn CA