

**North Coast Regional Water Quality Control Board**

**Cannabis Waste Discharge Regulatory  
Program and 3-Acre Conversions**

**Josh Curtis**

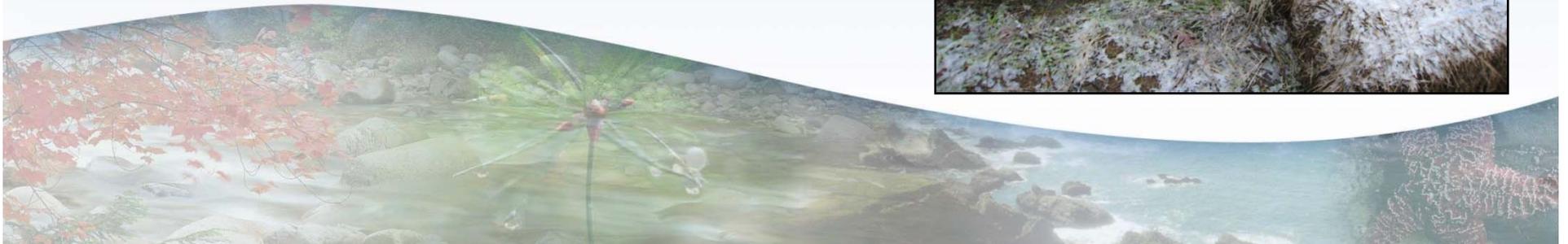
Planning, Stewardship, and Compliance Assurance  
Division Chief

September 28, 2016



# Overview

- North Coast Regional Board
- Statewide Cannabis Initiative
  - Regulatory Program
  - Interagency Coordination
- 3-acre conversions and cannabis cultivation
  - Cumulative impacts
  - Water quality issues
  - Broader concerns
- Recommendations

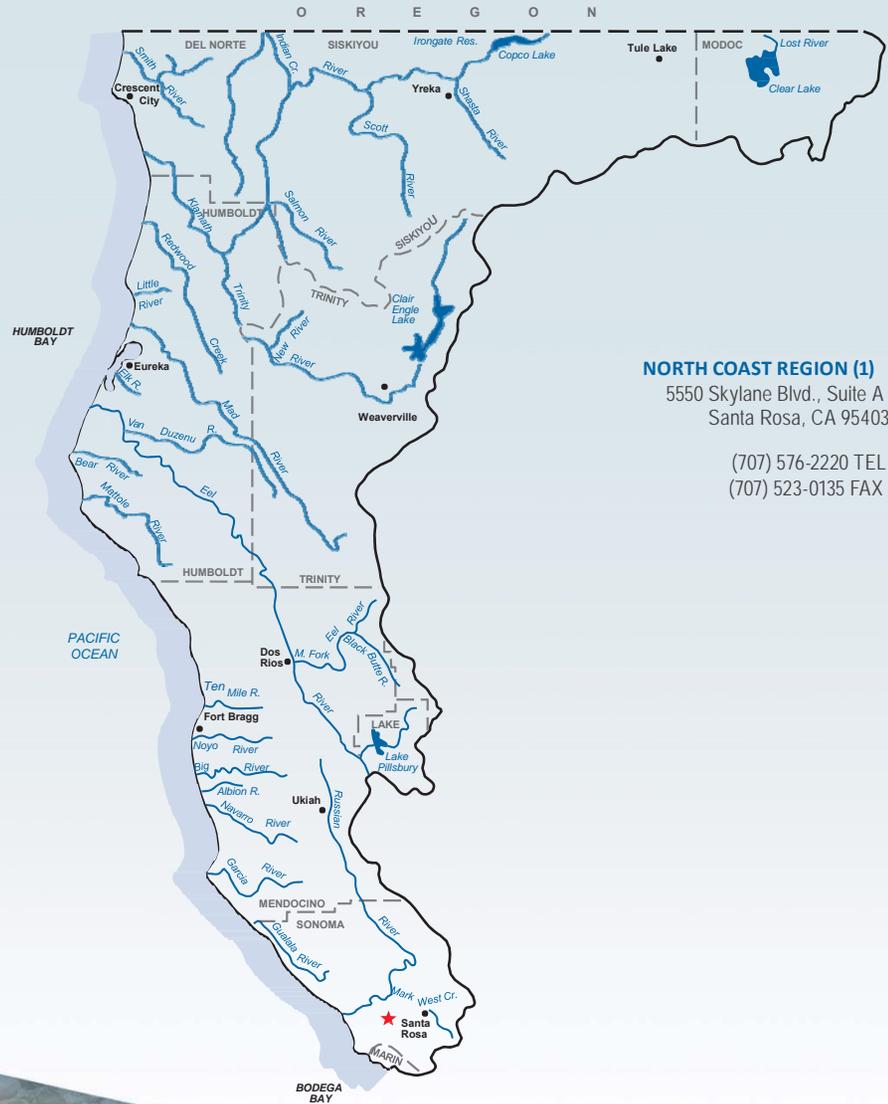


# North Coast Regional Water Board



## WATER GLANCE

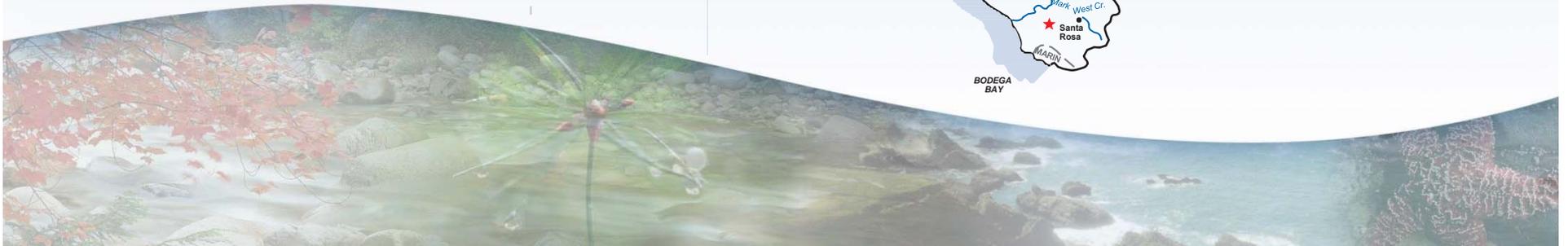
- Area Size (Square Miles): Appx. 20,000 miles
- Coastline (Square Miles): 340 miles



## NORTH COAST REGION (1)

5550 Skylane Blvd., Suite A  
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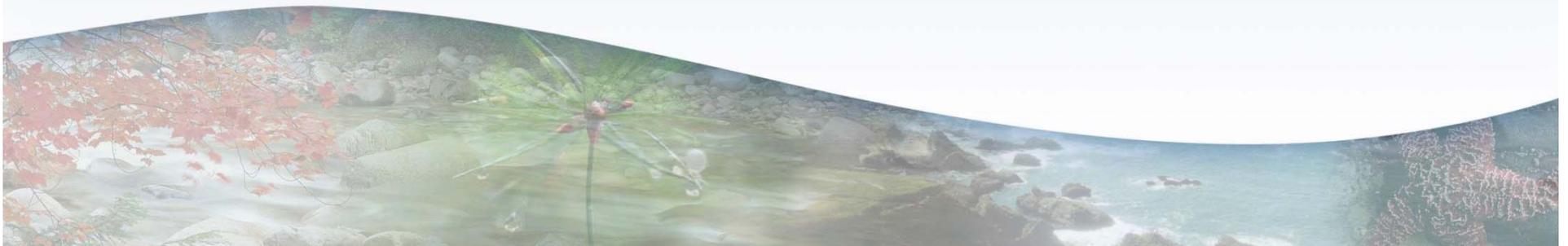


# North Coast Regional Board

**Mission:** To preserve, enhance, and restore the quality of California's water resources, for the benefit of present and future generations.

**Authorities:**

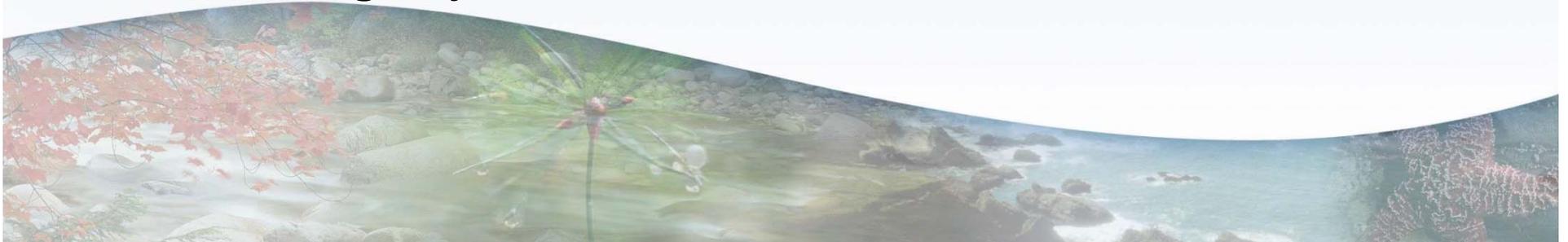
- Federal Clean Water Act
- Porter-Cologne Water Quality Control Act
- North Coast Regional Water Quality Control Board Basin Plan



# Statewide Cannabis Initiative

Unregulated land development for cannabis cultivation threatens public safety, impacts wildlife, pollutes the land and streams, and destroys habitat.

- Pilot program initiated in July 2014
- Joint Water Boards/Fish and Wildlife Strategic Plan
- Four-pronged strategy:
  - Regulatory order development and implementation
  - Education and outreach
  - Enforcement
  - Interagency coordination



# Strategy

## Regulatory Program

- Order R1-2015-0023
- Compliance assistance
- 3<sup>rd</sup> Party program

## Education and Outreach

- Enrollment workshops
- Pre-Consult inspections
- BMP Handbook
- Media Interviews

## Enforcement

- Aerial review
- Watershed prioritization
- Ongoing inspections
- Water quality violations

## Interagency Coordination



- Counties
- Cities
- Other agencies

# Regulatory Program

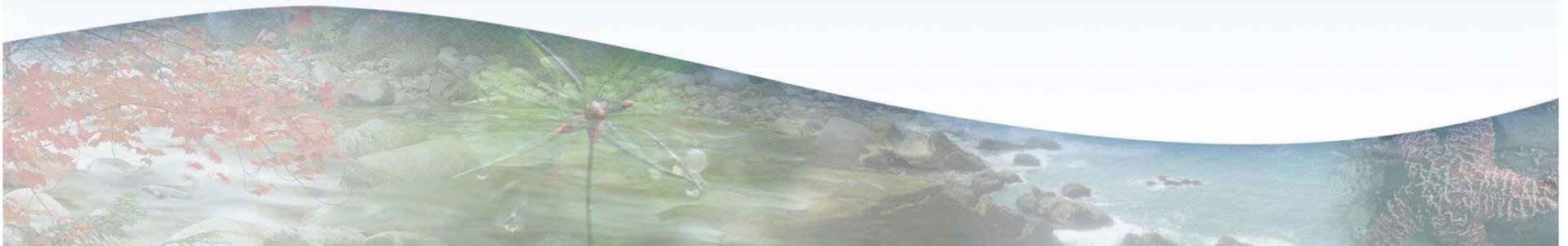
- August 13, 2015: North Coast Regional Water Board adopted Order No. R1-2015-0023
  - Regulates the discharge of waste from cannabis cultivation and associated activities or operations with similar environmental effects.
  - As of February 15, 2016: cultivators with 2000 square feet or more of cannabis were required to enroll for coverage under the Order.



# Regulatory Program

## General Waiver

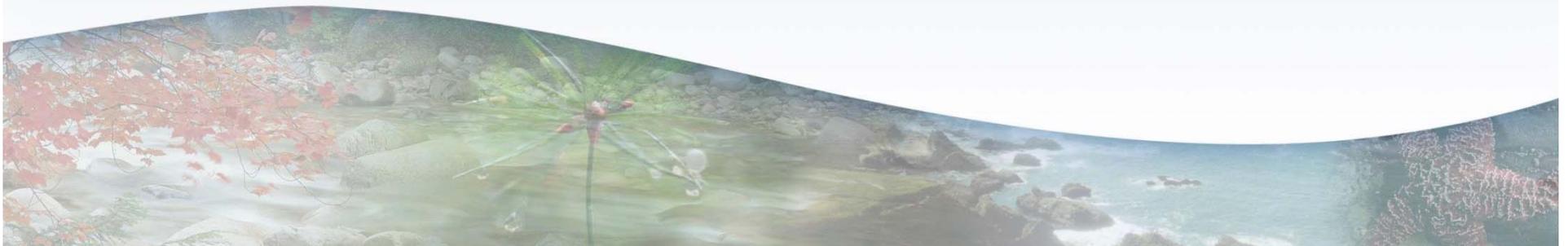
- Property-wide coverage
- Standard Conditions
- Tiered enrollment relative to water quality threats
  - Tier 1 – Low Threat
  - Tier 2 – Water Quality Management Tier
  - Tier 3 – Cleanup Tier
- Framework for third party programs



# Regulatory Program

## Region 1 - Current Enrollments (01-Sept-16)

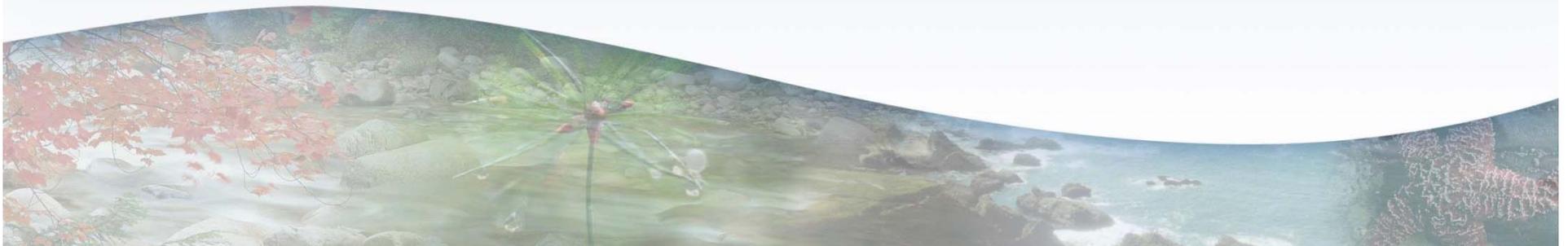
Tier	County					
	Hum	Mendo	Sis	Son	Tri	All
1	46	25	0	2	10	83
2	268	41	2	6	59	376
3	2	0	0	0	0	2
Total:	316	66	2	8	69	461
In process:						273
						Grand Total
						734



# Interagency Coordination

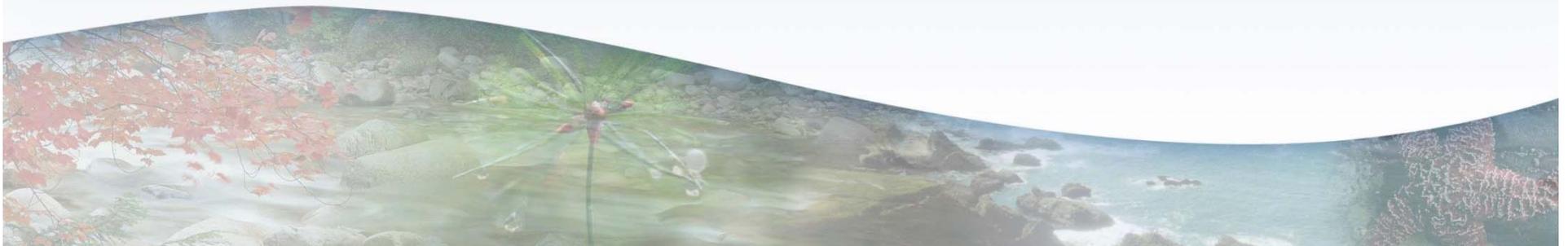
**Primary Players:** Dept. of Fish and Wildlife, Region 1, Region 5, and State Board Office of Enforcement, and State Board Division of Water Rights

- Formal Management Coordination
- Prioritization and Resource Coordination:
  - Joint Prioritization efforts
  - Joint inspections and enforcement efforts
  - Environmental crimes task force meetings and field efforts
  - Local and state agency coordination: new codes and ordinances, new legislation, new regulations



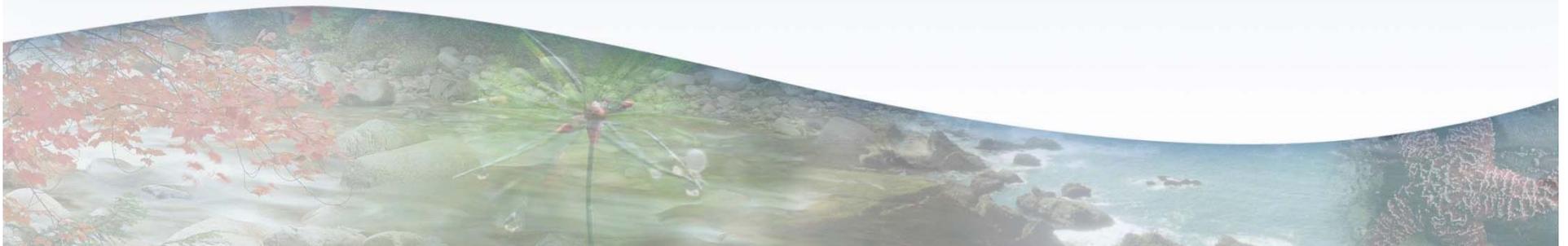
# 3-Acre Conversions and Cannabis

- Conversions have been used with increased frequency in the last 10 years to convert forested lands for cannabis cultivation sites
- Biggest issues are cumulative impacts from multiple conversions and varied land-use in a single watershed
  - Land use
  - Water use
  - Anthropogenic impacts
  - Increased need for infrastructure



# Common issues with Cultivation

- Illegal or poorly designed site development and road and stream crossing construction
- Diversion of streams
- Runoff: sediment, nutrients, fertilizers and pesticides
- Household garbage-cultivation wastes
- Fuel storage and containment
- Human wastes



# Large-scale grading



# Improper site development and maintenance



# Road Construction next to a fish bearing stream



# Road surface runoff

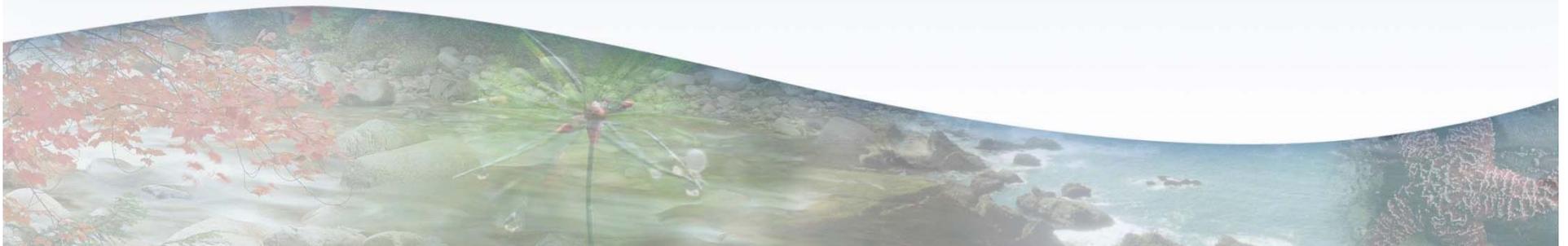


# Runoff delivering to fish-bearing stream



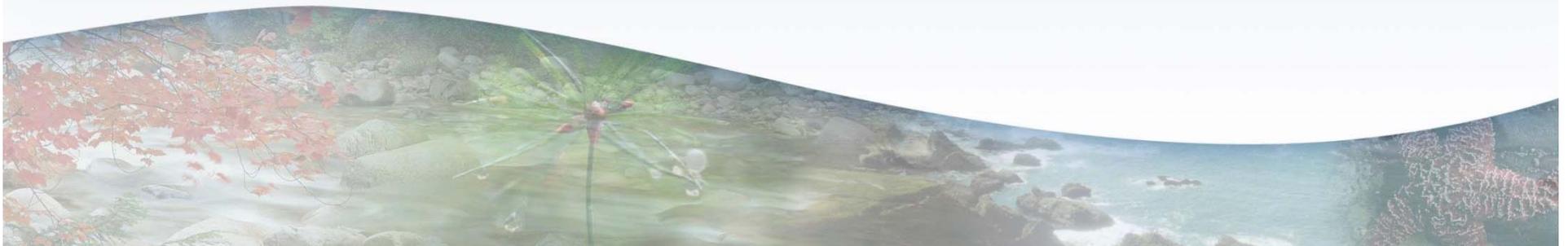
# Broader Implications of 3-Acre Conversions

- Cumulative impacts likely in conflict with Sediment TMDL Implementation Policy
- Possible need to develop new TMDLs to address beneficial use impairments
- Illegal water diversions have watershed-wide water implications



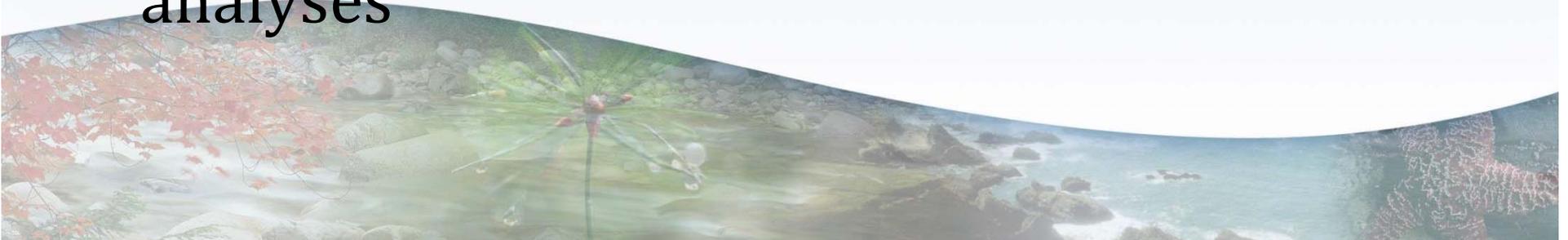
# Recommendations

- Cross reference other agency requirements in permits/documents
- Integrate CAL FIRE with interagency coordination efforts where appropriate
  - Joint inspections
  - Aligning priorities
- Greater coordination with local jurisdictions



# Recommendations (continued)

- Engage and leverage enforcement capabilities
- Share information among agencies
  - Data integration and common operating picture
  - Cannabis Identification & Prioritization System (CIPS)
- Determine who will lead cumulative impact analyses



Summary

Region 5 Summary

QUICK STATS

Evaluated Area:

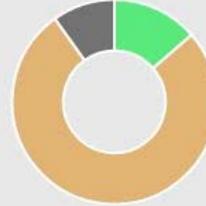
- 4 Interpretation Areas
- 79 HUC 12 Watersheds
- 16 Total Acreage

Grow Summary:

- 3,329 Number of Grows Identified
- 1,152 Grow Site Parcels
- 490 Total Grow Acreage

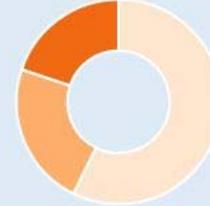
# OF GROWS BY TYPE

Outdoor vs Greenhouse



PRIORITIZATION MODELING

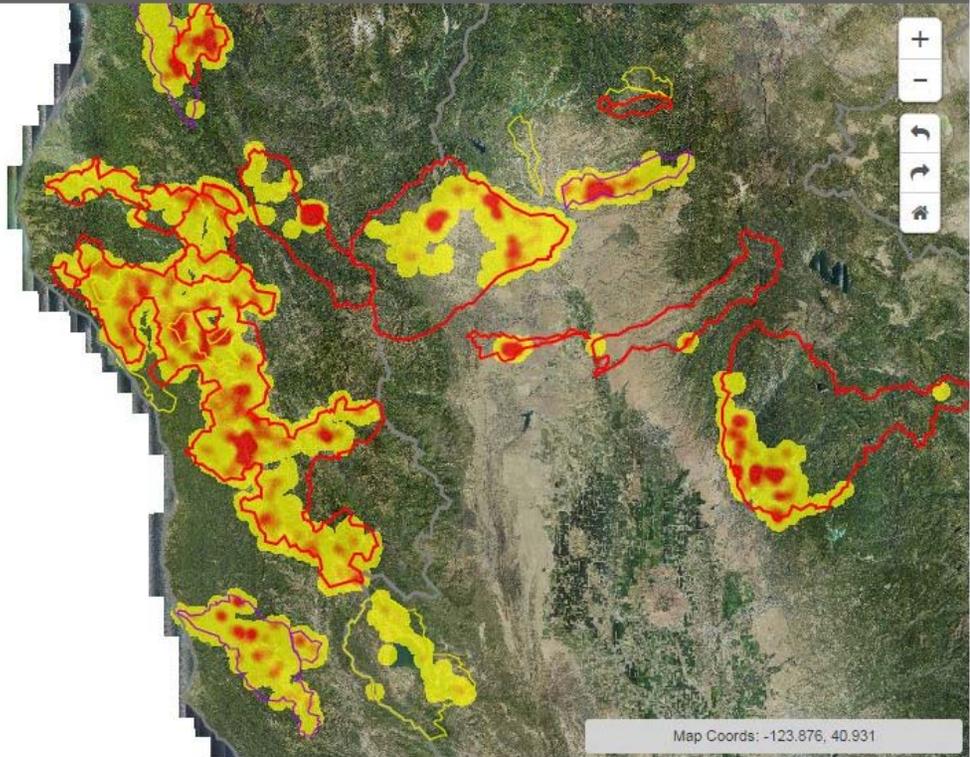
Cultivated Area



Map Search Layers Basemap Analysis Map Tools View Prioritization Model

GROWTYPE

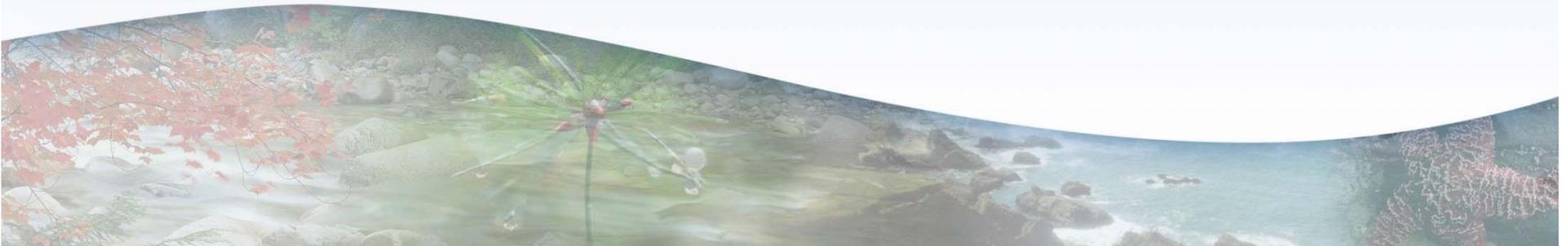
- Outdoor
- Greenhouse
- Potential
- Timber Harvest Plans (Cal Fire)
- Nonindustrial Timber Management Plans (Cal Fire)
- Grow Site Parcels
- Parcels
- OCIO\_CAParcels
- Model Source - Surface Water (Waterbody)
- Model Source - Surface Water (Area)
- Model Source - Surface Water (Flowline)
- Model Source - CNDDb
- CIPS/CIPS\_ModelSource\_Raster\_Slope
- CIPS/CIPS\_ModelSource\_Raster\_LSFactor
- CIPS/CIPS\_HeatMaps



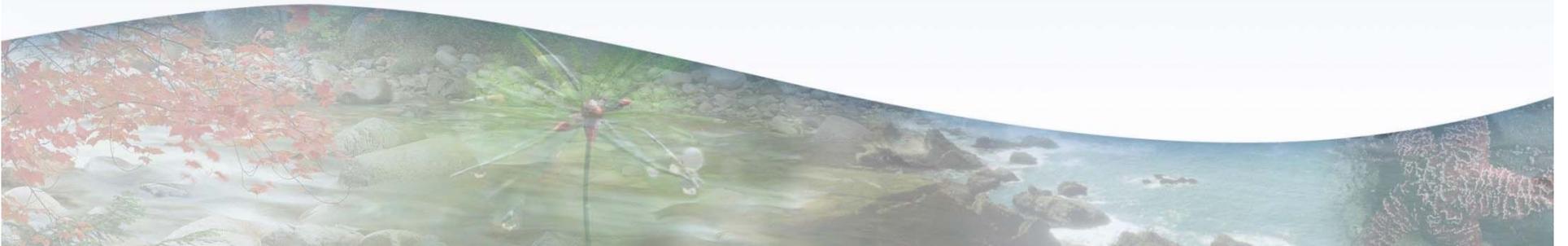
Map Coords: -123.876, 40.931

# Recommendations (continued)

- Engage and leverage enforcement capabilities
- Share information among agencies
  - Data integration and common operating picture
  - CIPS
- Determine who will lead cumulative impact analyses



# Questions?



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[http://www.waterboards.ca.gov/northcoast/water\\_issues/programs/cannabis/](http://www.waterboards.ca.gov/northcoast/water_issues/programs/cannabis/)

