



## Item 5

# Update on the Development of the Agricultural Lands Discharge Program

An Information Item of the  
North Coast Regional Water Quality Control Board

September 26, 2013  
Fortuna, California

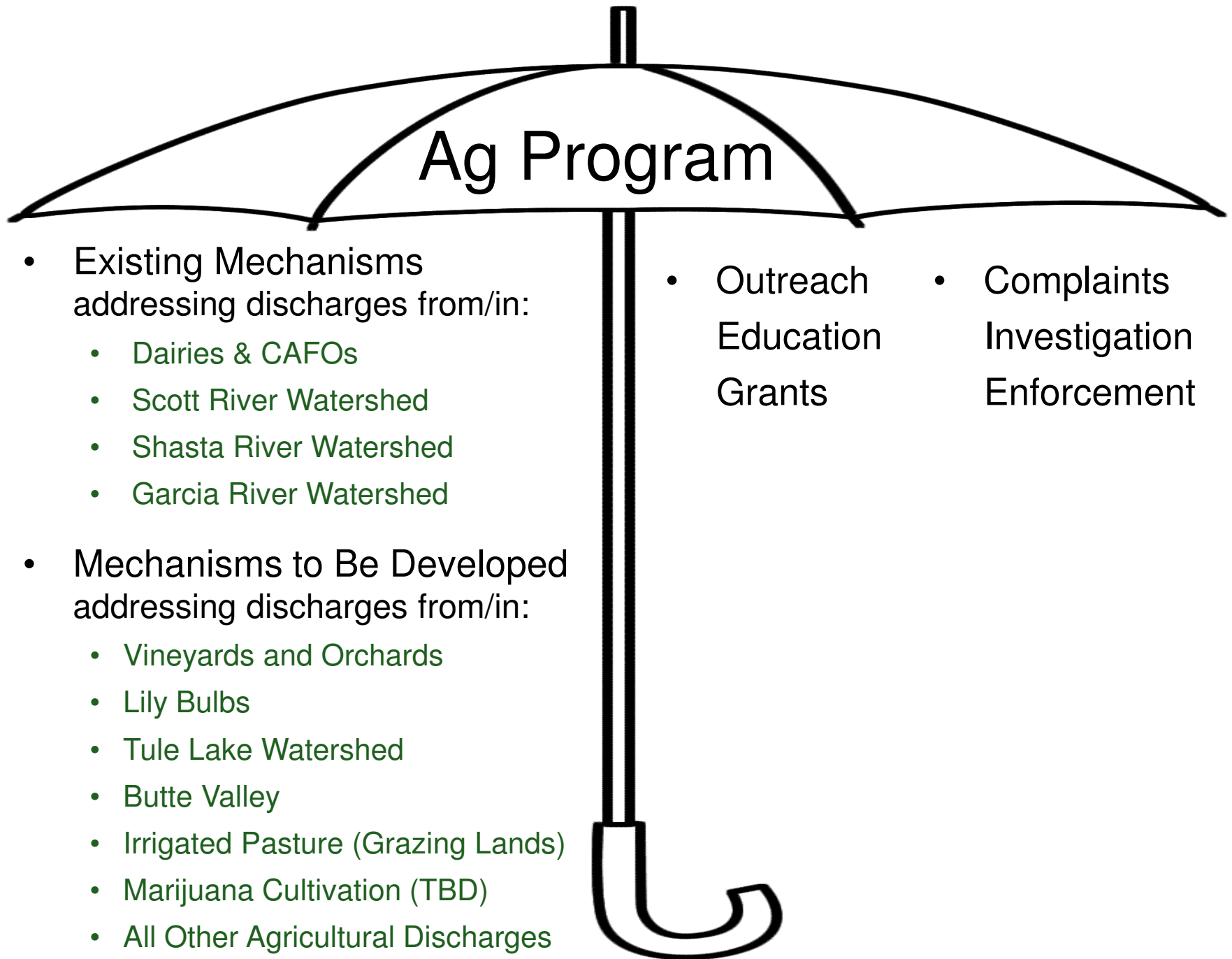


# Presentation Outline

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- I. Agricultural Program's Progress to Date
- II. Proposal to Revise the Ag Program's Scope
  1. Discharges from Vineyards and Orchards
  2. Discharges from Lily Bulbs
  3. Agricultural Discharges in the Tule Lake Watershed
  4. Agricultural Discharges in the Scott River and Shasta River Watersheds
  5. Agricultural Discharges in Butte Valley
  6. Discharges from Irrigated Pasture (Grazing Lands)
  7. Discharges from Marijuana Cultivation
  8. All Other Agricultural Discharges
- III. Summary of Feedback from Stakeholder Advisory Group
- IV. Comments & Discussion on the Re-Scoping Proposal
- V. Options for Regulating Discharges from Marijuana Cultivation





# Progress To Date

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## Waters, Pollutants & Issues Addressed:

- Surface water bodies
- Groundwater
- Nutrients & fertilizers
- Pesticides
- Pathogens
- Erosion & sediment
- Organic matter
- Shade-producing riparian vegetation
- Other wastes



# Progress To Date

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## Stakeholder Advisory Group:

- Started meeting in 2011
- Includes Tribal, environmental, agency, and industry representatives

## Key Elements:

- Tiered permitting framework
- Water quality performance standards
- Concept of implementation that relies upon best management practices (BMPs)
- Farm water quality management plans
- 3<sup>rd</sup> party certifications and group membership
- Monitoring and reporting options



## Old Scope

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To develop a single, region-wide permit to address discharges from:

- Vineyards
- Orchards
- Row crops
- Field crops
- Irrigated pasture with tailwater runoff
- Forage crops with tailwater runoff
- Wholesale nurseries
- Medicinal marijuana

The scope included discharges from agricultural lands in the Scott River, Shasta River, and Garcia River watersheds, but not discharges from dairy lands.



# Proposed New Scope

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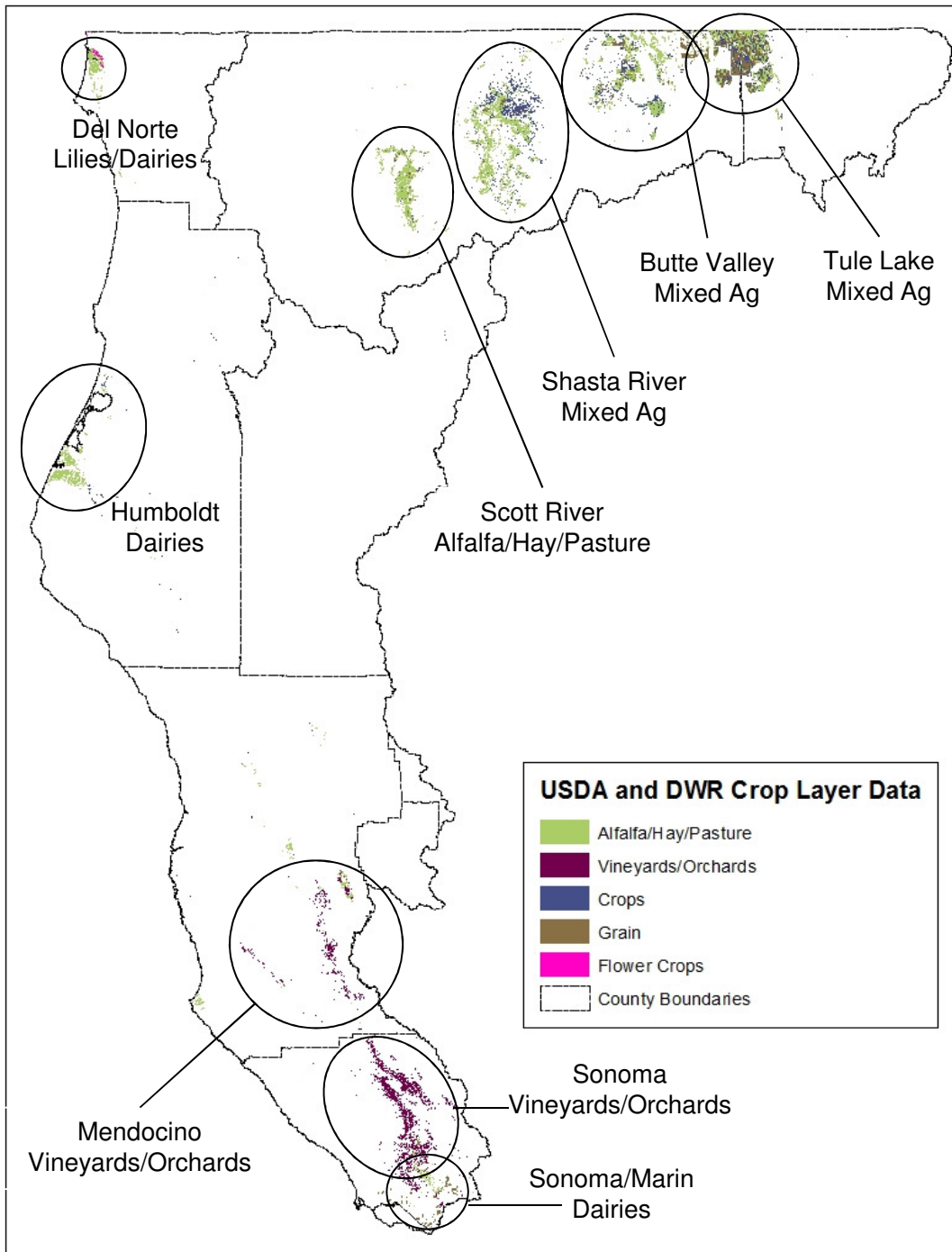
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To develop separate permits in the near term to address discharges from/in:

- Vineyards & orchards
- Lily bulbs
- Tule Lake watershed

To take a variety of approaches to address discharges from the following agricultural areas:

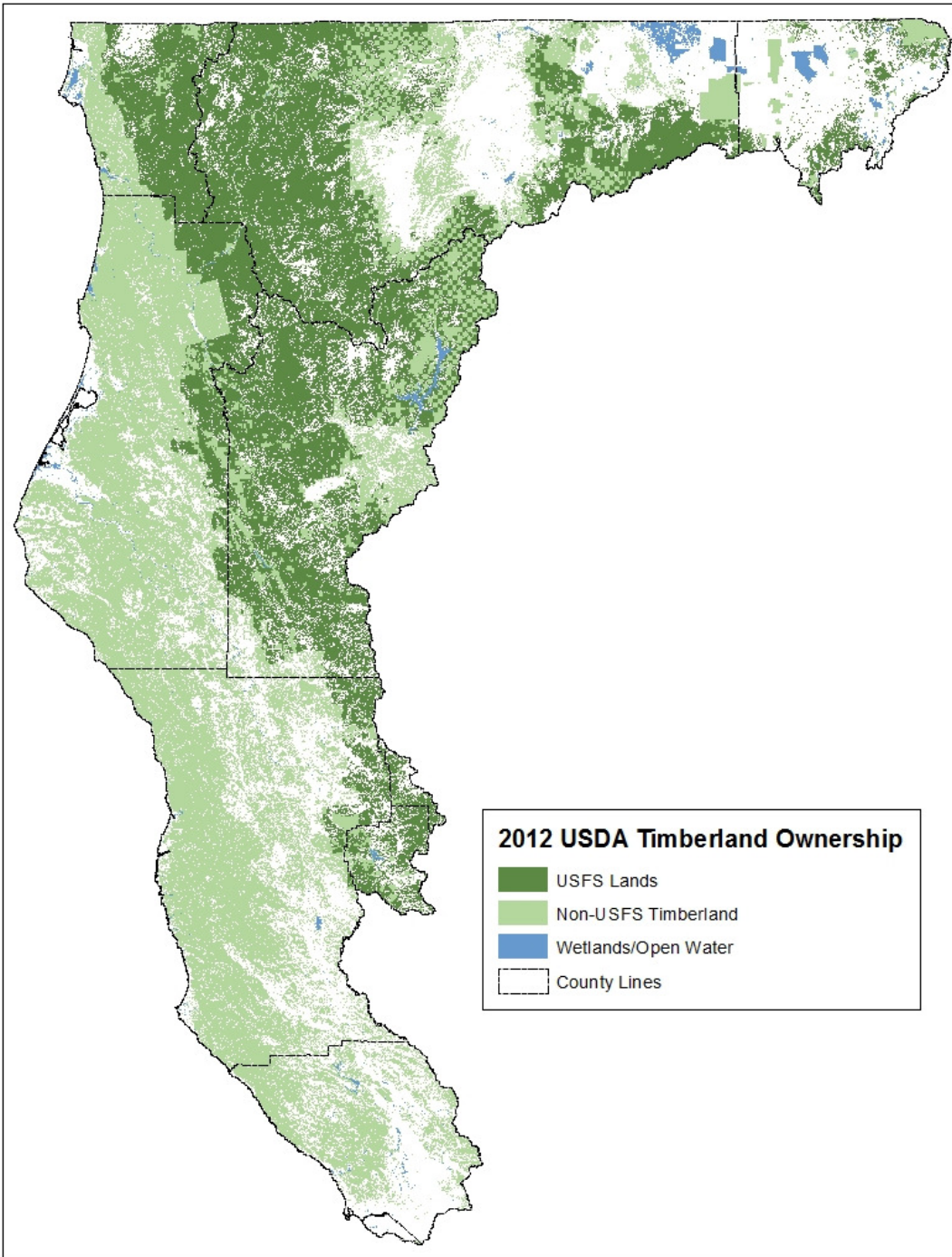
- Scott River and Shasta River watersheds
- Butte Valley
- Irrigated pasture (grazing lands)
- Marijuana cultivation
- All other agricultural discharges



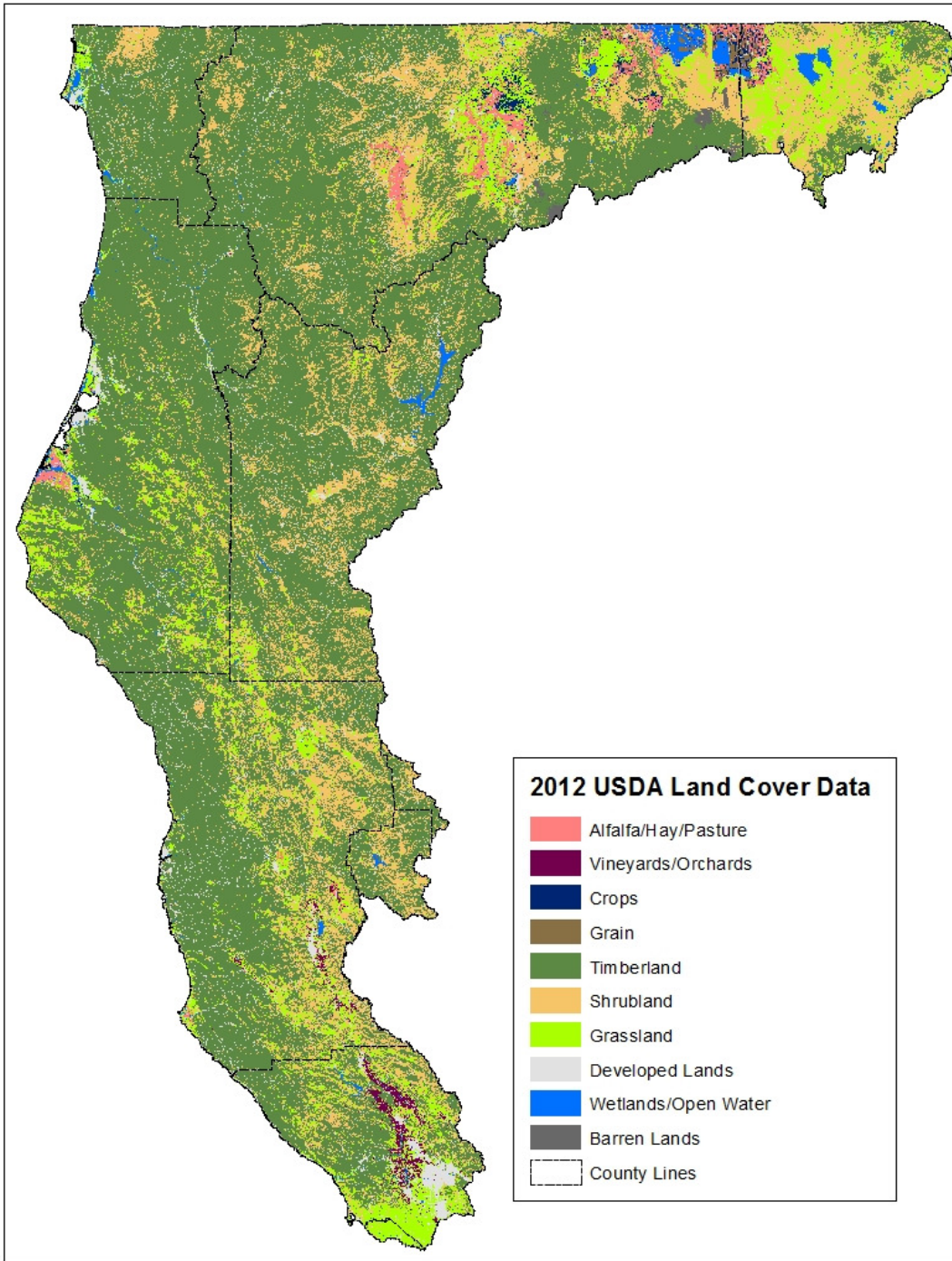
Acreage by Crop Type	
Crop Type	Acres
Vineyards & Orchards	67,000
Flowers (Lily Bulbs)	1,300
Crops	63,000
Grain	48,000
Alfalfa, Hay & Non-Dairy Pasture	118,000
Dairy Pasture	50,000
Marijuana	?
<b>Total</b>	<b>347,300</b>

Acreage by Commodity & Area	
Commodity/Area	Acres
Vineyards & Orchards	67,000
Flowers (Lily Bulbs)	1,300
Tule Lake Watershed	60,000
Scott River Watershed	35,000
Shasta River Watershed	50,000
Butte Valley	50,000
Alfalfa, Hay & Non-Dairy Pasture	34,000
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Marijuana	?
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Timberland Acreage	
Type	Acres
National Forests (U.S. Forest Service)	5,105,000
Private Timberland & Non-USFS Public Timberland	2,653,000
<b>Total</b>	<b>7,758,000</b>



<b>North Coast Region Acreage</b>	
<b>Commodity/Area/Type</b>	<b>Acres</b>
Vineyards & Orchards	67,000
Flowers (Lily Bulbs)	1,300
Tule Lake Watershed	60,000
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USFS Timberland	5,105,000
Private/Non-USFS Timberland	2,653,000
Shrubland	2,543,000
Grasslands	1,113,000
Developed Lands, Barren Lands, & Water	665,000
<b>Region 1 Total</b>	<b>12,426,000</b>



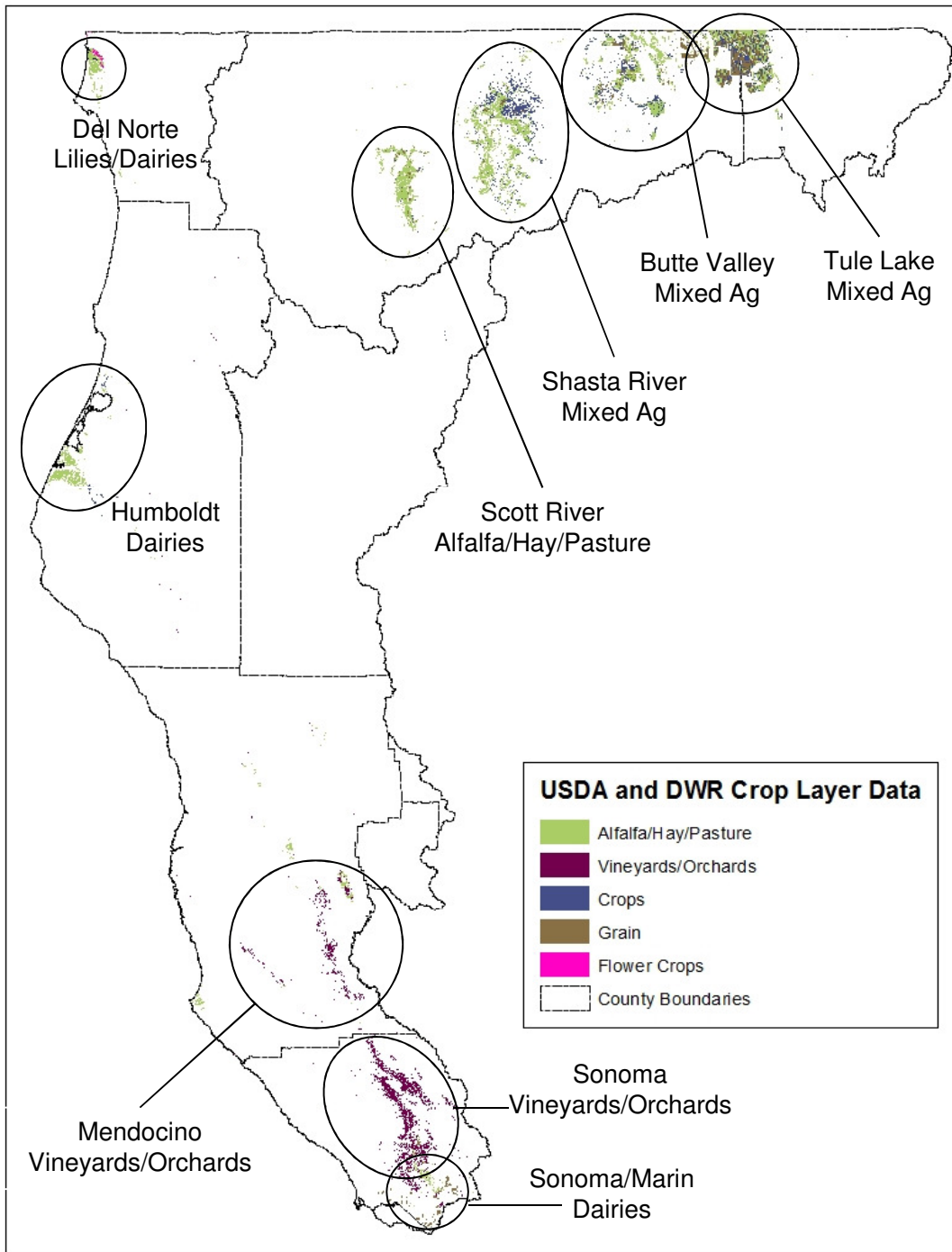
# North Coast Land Use Acreage

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North Coast Region Land Use Acreage		
Type	Acres	% of Region
Agricultural Lands	347,300	3%
Timberland	7,758,000	62%
Shrubland	2,543,000	20%
Grasslands	1,113,000	9%
Developed Lands, Barren Lands & Water	665,000	5%
<b>Region 1 Total</b>	<b>12,426,300</b>	<b>100%</b>

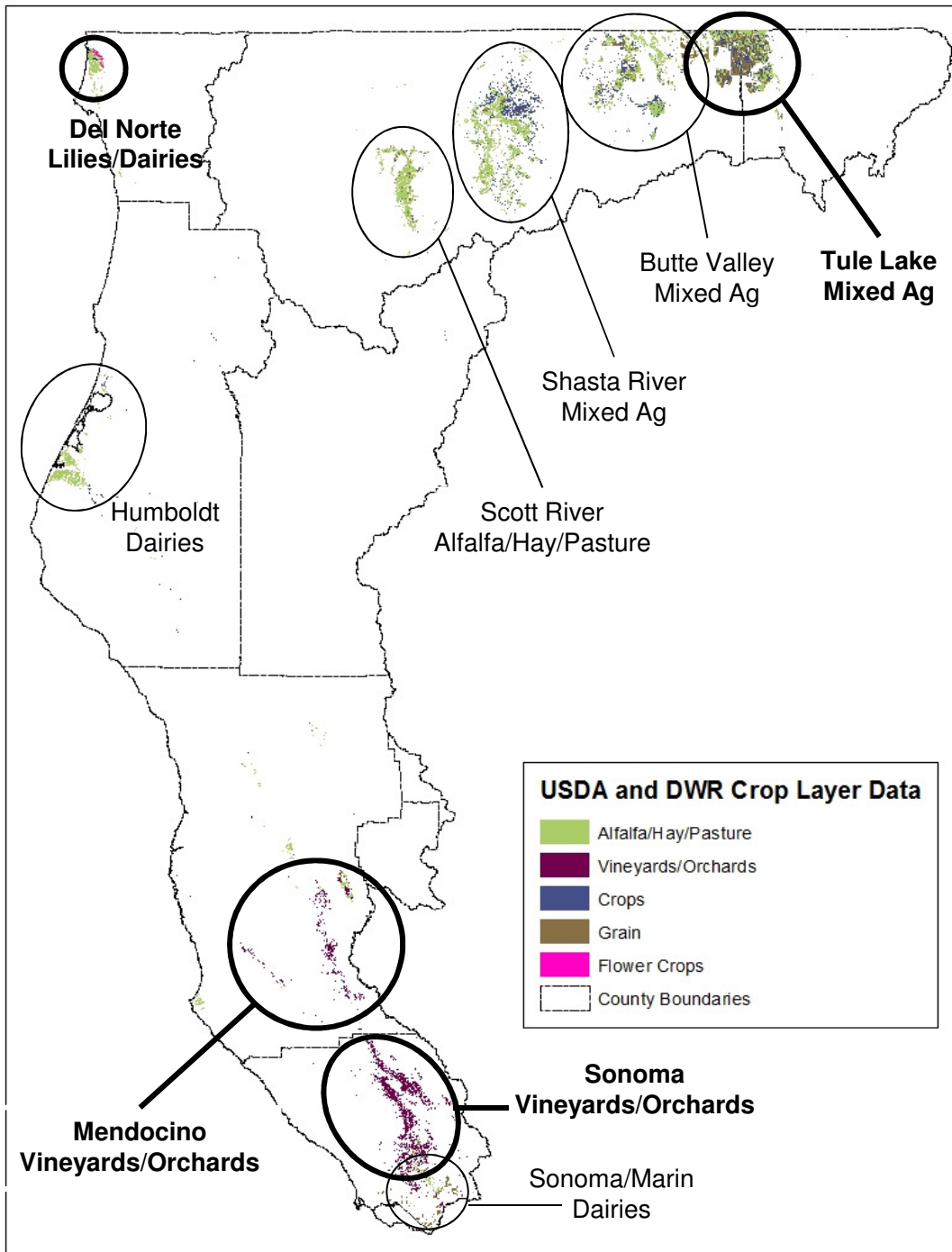
GIS Data: From the 2012 USDA Land Cover Data Map available at <http://nassgeodata.gmu.edu/CropScape/>



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# Staff's Justification to Re-Scope

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## Difficulties with Region-Wide Approach:

- General requirements did not always match unique landscapes and agricultural types
- Farms with a low threat to water quality would be subject to requirements, fees, and take substantial staff resources
- Duplicative requirements for grazing operations
- Confusion about requirements in the Scott and Shasta River watersheds

## Advantages with Commodity/Area-Specific Approach:

- Flexibility to focus on high priorities
- Requirements can be better tailored to each commodity/area
- TMDL Waiver strategy in the Scott and Shasta River watersheds can continue
- Different time schedules can provide better coordination opportunities
  - with the San Francisco Bay Region's vineyard permits
  - with the stewardship efforts in the Klamath River basin
  - with lily bulb monitoring effort



## Proposed New Scope

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To develop separate permits in the near term to address discharges from/in:

- Vineyards & orchards
- Lily bulbs
- Tule Lake watershed

To take a variety of approaches to address discharges from the following agricultural areas:

- Scott River and Shasta River watersheds
- Butte Valley
- Irrigated pasture (grazing lands)
- Marijuana cultivation
- All other agricultural discharges



## Components of Vineyard/Orchard, Lily Bulb & Tule Lake Discharge Permits

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- General WDRs or Conditional Waiver of WDRs
- Tiered framework based on risk
- Fewer requirements for proven stewardship
- Water quality performance standards
- Concept of implementation that relies on BMPs
- Farm water quality management plans
- Individual or group water quality planning
- Options for third party programs
- Monitoring
  - BMP verification and effectiveness
  - Water sampling where appropriate





# Discharges from Vineyards & Orchards

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## Re-Scoping Proposal

- Coordinate with the San Francisco Bay Regional Water Board's vineyard permitting efforts
- Work with third party certification programs in Sonoma and Mendocino counties:
  - LandSmart
  - Fish Friendly Farming
  - Code of Sustainable Winegrowing
  - Sonoma County Vineyard Ordinance
  - Mendocino County RCD's Technical Assistance Program



# Discharges From Lily Bulb Cultivation

## Re-Scoping Proposal:

- Address discharges from Easter lily bulb cultivation in the Smith River Plain in Del Norte County
- Coordinate permit requirements with monitoring results





# Smith River Plain Monitoring Effort

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## Monitoring Plan Goals:

- To understand water quality in small, agriculture-dominated watersheds
- To see if there is a relationship between concentrations and agriculture land uses
- To see trends over time

## Parameters Being Sampled:

- Pesticides
- Nutrients
- Metals
- Sediment & Water Toxicity
- DO, pH, Conductivity, Temperature
- Total Dissolved Solids
- Organic Compounds

## Time Frame:

- Summer 2013 through Spring 2014



# Discharges in the Tule Lake Watershed

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## Re-Scoping Proposal:

- Address ag discharges in the watershed from:
  - row crops
  - field crops
  - irrigated pasture with tailwater runoff/discharges
  - forage crops with tailwater runoff/discharges
  - associated facilities
- Coordinate with the Klamath Basin Monitoring Program and the Klamath Tracking and Accounting Program
- Work with Tulelake Irrigation District (TID), Klamath Water Users Association (KWUA), Tribal, environmental representatives, and other stakeholders
- TID & KWUA have expressed interested in playing third party role





# Discharges in the Scott & Shasta Watersheds

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## Re-Scoping Proposal:

- Agricultural discharges continue to be addressed through the existing Total Maximum Daily Load (TMDL) Waivers of Waste Discharge Requirements
- Revisit the TMDL Waivers prior to their expiration in 2017 to consider the need for changes:

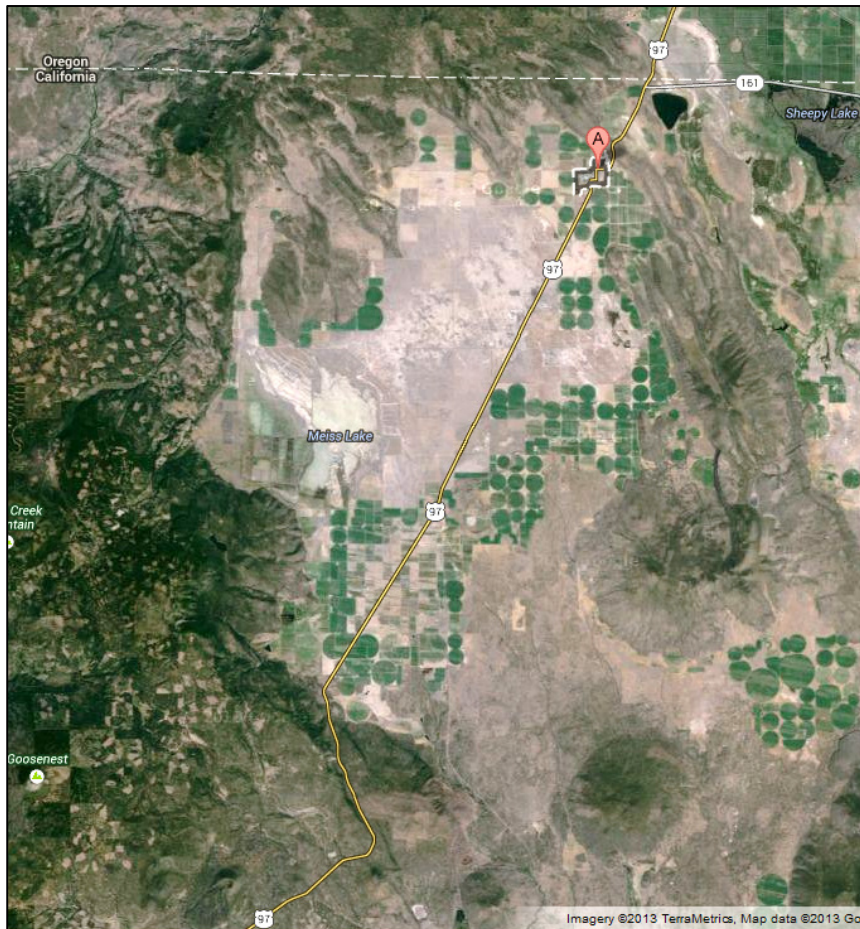
Scott River Watershed: Consider addressing nutrients, pesticides, and groundwater

Shasta River Watershed: Consider addressing erosion/sediment, pesticides, and groundwater

Existing approach & BMPs will likely address many pollutants and water quality concerns



# Discharges in Butte Valley



## Re-Scoping Proposal:

- Staff are looking for opportunities to further investigate groundwater and surface water quality
- No permitting scheduled at this time



# Discharges from Irrigated Pasture and Grazing Lands

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## Old Scope:

- Discharges from private irrigated pasture with tailwater runoff
- Rely upon USFS Waiver & Dairy Permits
- Rely upon statewide Grazing Regulatory Action Project for private dryland grazing and for irrigated pasture without tailwater runoff

## Re-Scoping Proposal:

- Grazing will continue to be covered under existing programs
  - Scott and Shasta TMDL Waivers
  - Dairy Program
  - USFS managed lands
- Irrigated pasture with tailwater runoff may be covered in Tule Lake
- Rely upon statewide Grazing Project for remaining grazing discharges



# Discharges from Marijuana Cultivation

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## Re-Scoping Proposal:

- Staff are considering regulatory options

## Continuing Efforts:

- Outreach and education
- Complaint response and enforcement





## Other Agricultural Discharges

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### Re-Scoping Proposal:

- No new programmatic permits proposed at this time for agricultural discharges from commodities/areas not specifically identified
- Address on a case-by-case basis
  - Complaint based
  - Individual permits (WDRs)
  - Enforcement action as needed





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# Stakeholder Feedback

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## Feedback from Advisory Group Members:

- Near consensus in favor of re-scoping with 22 of 24 members expressing support





# Stakeholder Feedback

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## Concerns:

- The Regional Water Board must be able to ensure that all potential and actual non-point source discharges are addressed.

Staff intends to address NPS discharges with the initial focus on commodities/areas specifically identified. For the others, staff intends to address discharges through other mechanisms on a case-by-case basis, such as through the use of individual permits or WDRs when appropriate.

- There will be duplicative requirements and multiple permits when one landowner has several commodities (e.g., vineyards, grazing, timber).

Staff will continue to look for opportunities to streamline and integrated permitting requirements.

- Vineyard differences exist between the North Coast and Napa/Sonoma valleys (e.g., economics, climate, topography, water use).

While staff propose to coordinate closely with the San Francisco Bay Region's vineyard permits to provide consistency, staff recognize there are likely to be differences in the requirements.



# Stakeholder Feedback

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## Concerns:

- Additional time may be needed to develop all the commodity/area-specific permits.

Staff recognize this concern. Staff also expect that one or more commodity/area-specific permit can be completed in a shorter time frame than it would take to complete the region-wide permit for all agricultural discharges.
- Multiple permit processes are harder for stakeholders with multiple interests to participate in.

Staff also recognize this burden and are working on options to make stakeholder participation with all the permits easier.
- Separating the permits could lead to un-equal permit requirements.

Staff will attempt to include consistent water quality performance standards across the permits while allowing for variation and flexibility in compliance measures to account for geographic variability.





# Stakeholder Feedback

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## Positives:

- Re-scoping allows for differences in permit requirements to account for the vast differences in geography and commodities
- Re-scoping is a more localized, tailored approach
- Re-scoping allows staff to prioritize areas and crops within the region with the most serious known water pollution problems for permit development first
- Vineyard coordination with Napa/Sonoma permits is worthwhile and will help provide consistent requirements
- Keeping the TMDL Waiver approach in the Scott/Shasta is preferred as it is less contentious, reduces animosity, and strengthens relationships
- The area-wide approach for Tule Lake area makes sense
- Groundwater assessment is needed in Butte Valley



# Stakeholder Feedback

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There is more work to be done.

Staff needs to develop/address:

- Monitoring requirements
- Reporting requirements
- Streamlined permit requirements
- Details on how to handle leased lands
- Qualifications and selection of 3<sup>rd</sup> party certifiers
- WDRs vs Conditional Waivers of WDRs
- Incorporate the 5 Key Elements of the NPS Pollution Control Implementation Program
- Anti-degradation
- CEQA
- Timelines



# Next Steps & Recommendations

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## Next Steps:

- If we re-scope:
  - Re-align Advisory Group
  - Develop commodity/area-specific project plans with timelines and due dates
- If we do not re-scope:
  - Continue drafting one single, region-wide permit

## Staff Recommendation:

Revise the scope of the Agricultural Program's permit development efforts into several, commodity-specific or area-specific permits.