



# The Marbled Murrelet and Timber Harvest Planning in California

**Scott D. Osborn**

California Dept. of Fish and Game

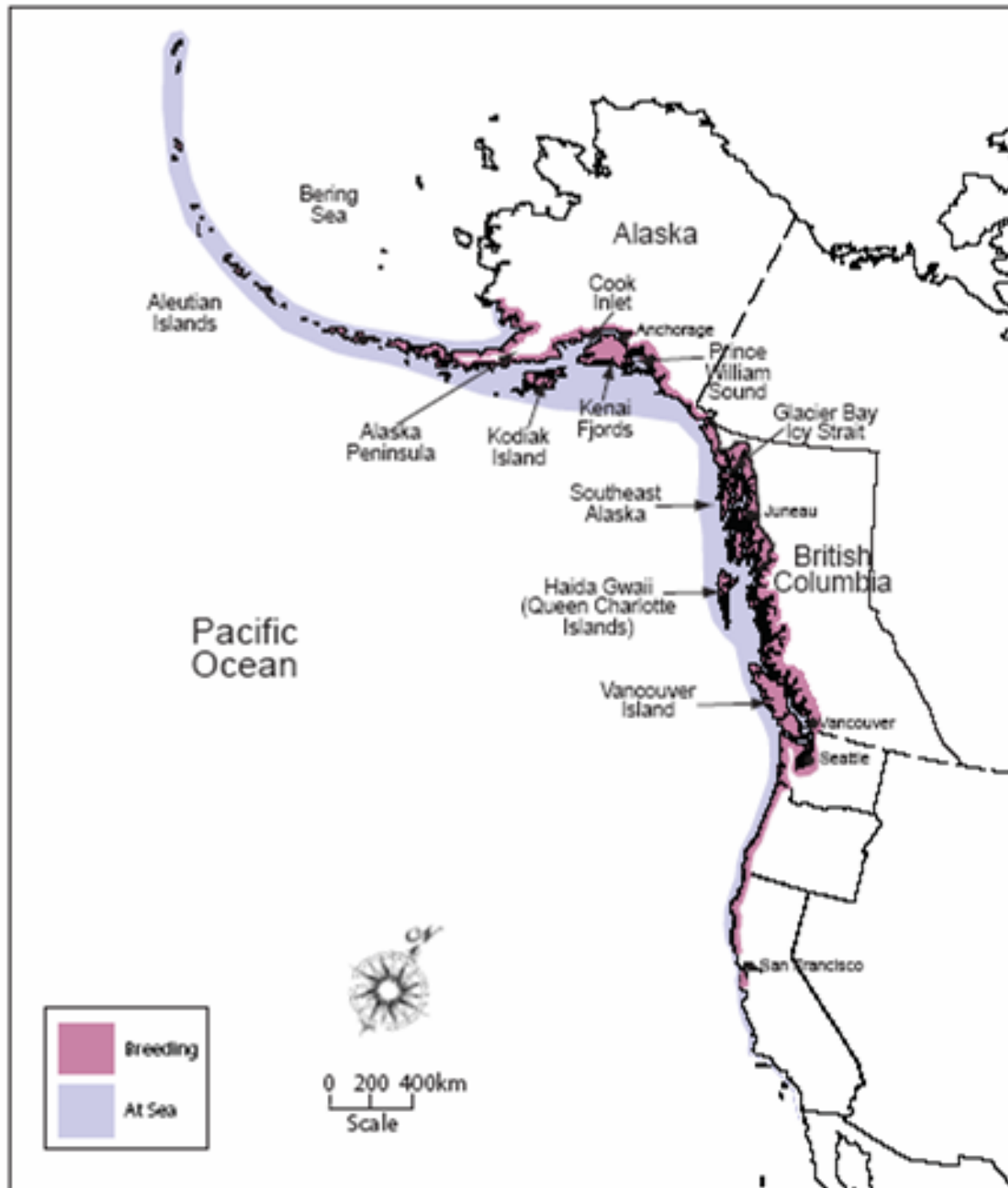
Coastal Timberland Planning

Eureka, California









Piatt et al. 2007



**confirmed marbled  
murrelet nest site**





© Ram Papish





# Current Population Estimates

<u>State/Province</u>	<u>Number</u>
Alaska (2006)	271,000
British Columbia (2006)	54,000 – 92,000
Washington (2007)	9,500
Oregon (2007)	ca. 4,000
California (2007)	ca. 4,000



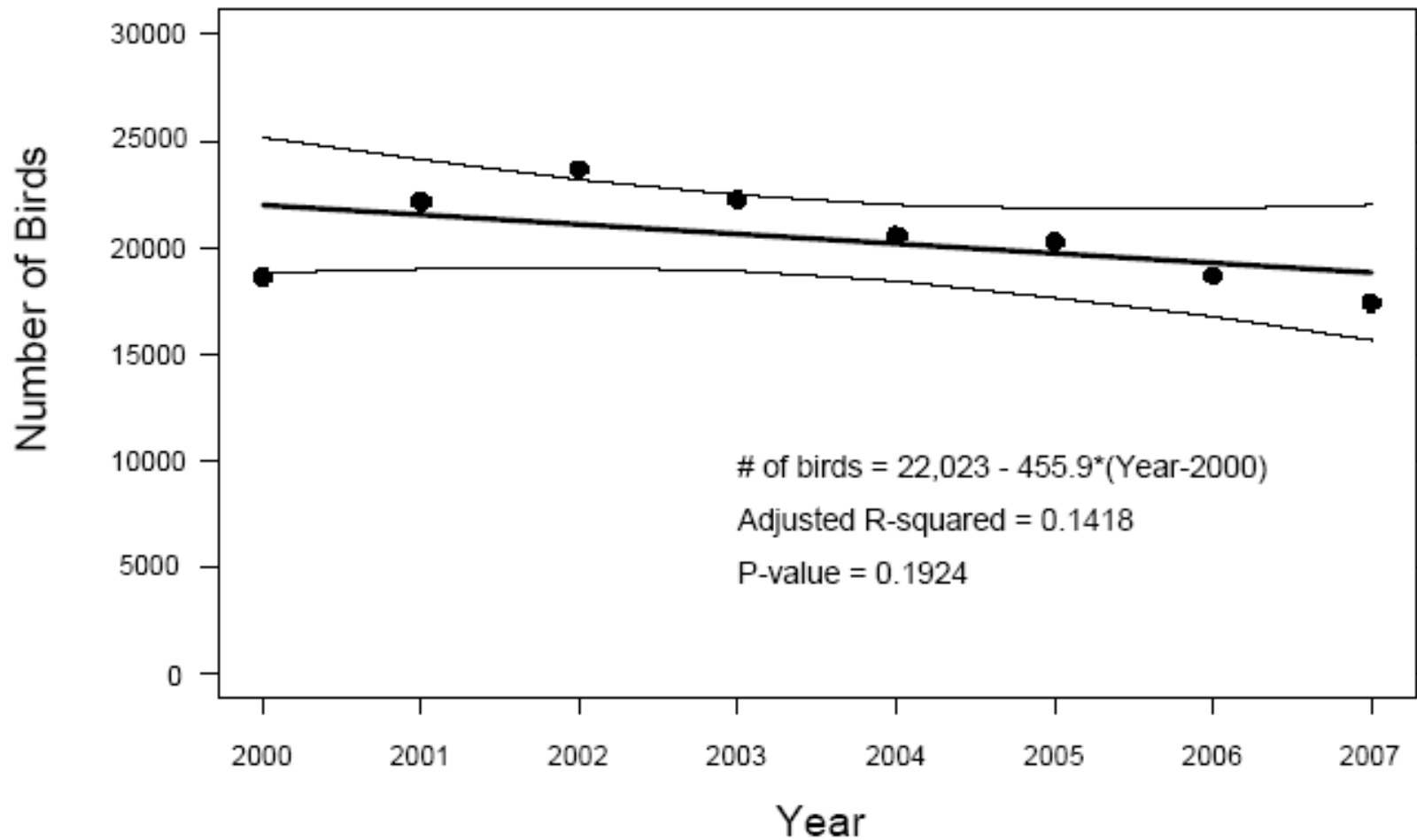


Figure 5. Results of preliminary trend analysis for Conservation Zones 1 through 5 combined, for the 2000 to 2007 period. Figure shows regression line through the annual population estimates, with 95 percent confidence limits for line, as well as regression equation and associated statistics.



## Listing Status

- CESA Endangered (Mar 1992)
- ESA Threatened (Sep 1992)
  - delisting petition warranted (Oct 2008)
- CA BOF “Sensitive” 14 CCR 895.1



## **14 CCR 919.11 Marbled Murrelet Protective Measures**

Requires CAL FIRE to consult with DFG

- where there is evidence of an active MAMU site in or adjacent to plan, or
- where there is evidence of a potential impact to a murrelet.

Plan must be disapproved unless no-take measures are incorporated or incidental take is permitted



## Timber Harvest Planning

- Is the project within about 30 miles of the ocean?
- Is there a **known** or **potential** MAMU nest stand **in** or **near** the project?

**If yes, then DFG consultation is probably necessary.**



# What is Potential Habitat?

- Broadly, old-growth and residual old-growth stands
- Suitability affected by many factors
- Presence of suitable nest platforms is critical





# Timber Harvest Planning

- Is the project within about 30 miles of the ocean?
- Is there a **known** or **potential** MAMU nest stand **in** or **near** the project?

**If yes, then DFG consultation is probably necessary.**



# Protection Measures

## Goals:

- Maintain nest stand functionality
- Minimize visual and auditory disturbance of nesting marbled murrelets

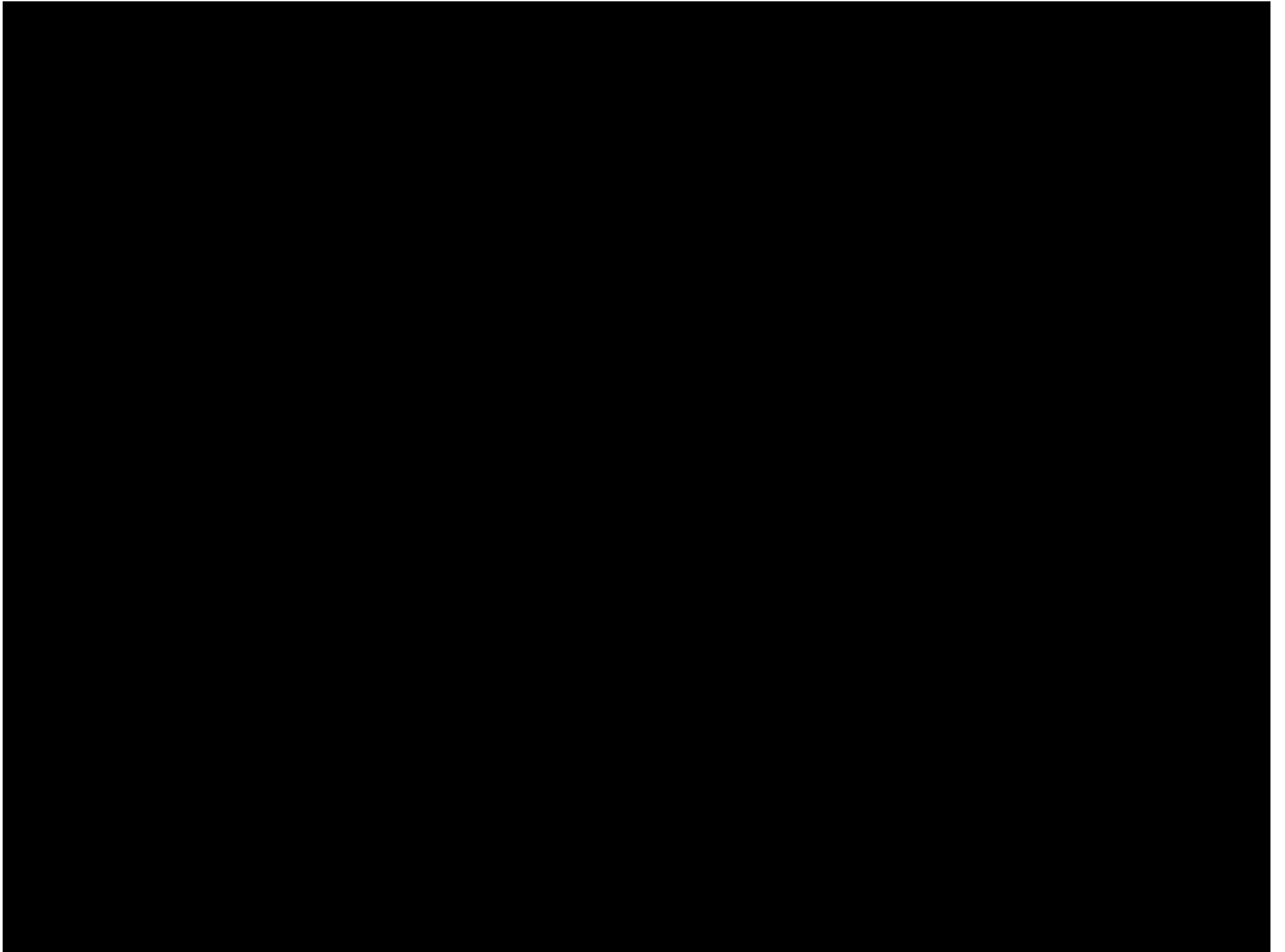


# Disturbance Minimization

## Current Procedure:

- Based on July 2006 USFWS Guidance
- Incorporates physical characteristics of noise propagation and attenuation
- Uses both **relative** and **absolute** noise thresholds for disturbance take





# Coho and NTMPs



**California Department of Fish & Game  
Coastal Timberland Planning**

# Purpose

- Assist RPFs to update existing approved NTMPs to avoid take of, or significant impacts to coho salmon
- Accomplish necessary NTMP amendments prior to NTO submittals via preconsultations with DFG

# Fish Scoping Resources

- **Bios** (<http://bios.dfg.ca.gov/>)

"...system designed to enable the management, visualization, and analysis of biogeographic data collected by the Department of Fish and Game."

"Open to the public. Only non-sensitive data are included."

- **Cal Fish** (<http://www.calfish.org/>)



**CALFISH**

A CALIFORNIA COOPERATIVE ANADROMOUS  
FISH AND HABITAT DATA PROGRAM

[Home](#) [About CalFish](#) [Tutorials](#) [Search](#) [Contact Us](#)

"...a multi-agency cooperative program designed to gather, maintain, and disseminate fish and aquatic habitat data and data standards."

- **Check with Local and DFG fisheries staff**

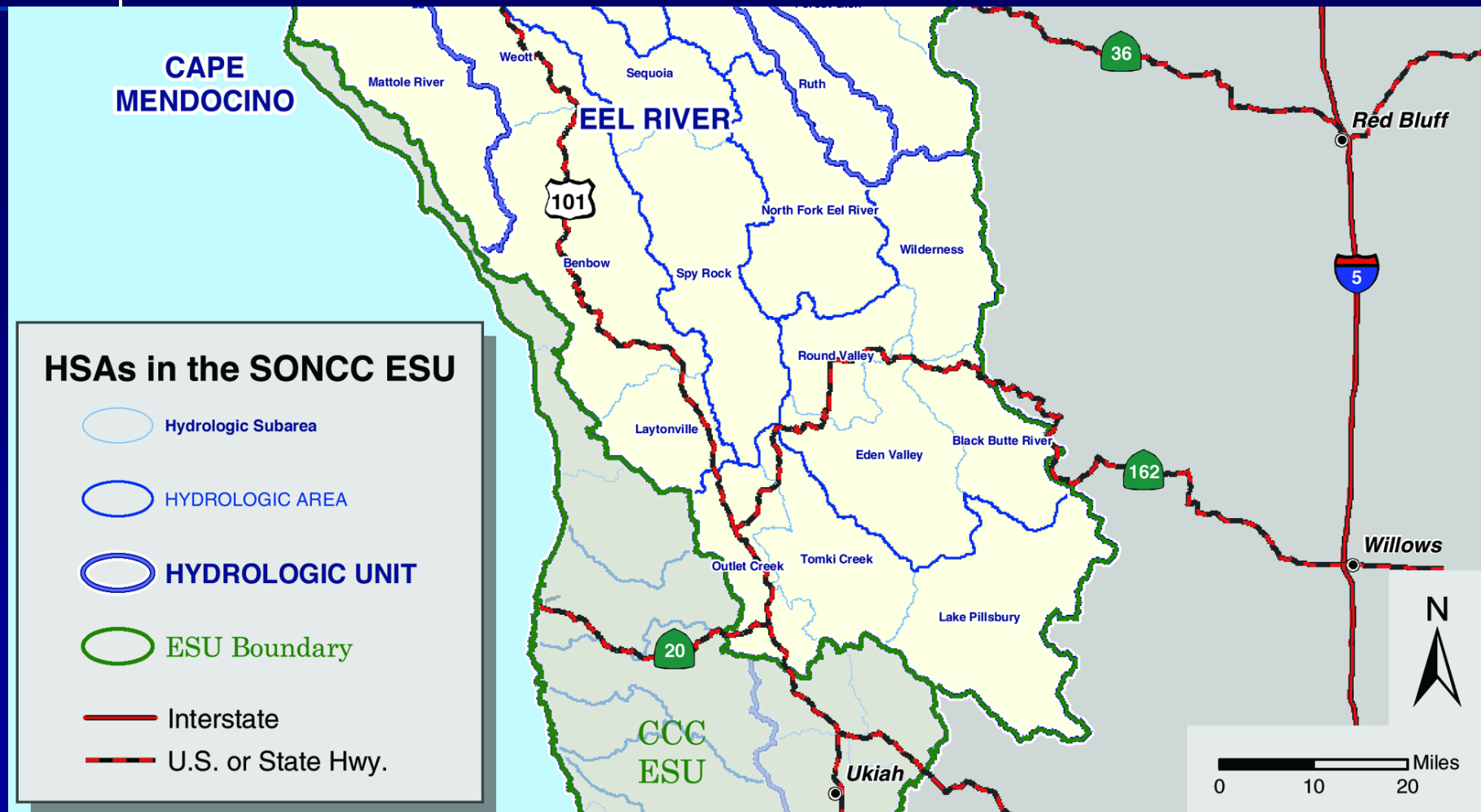
# Coho SONC and CCC ESUs

<http://www.dfg.ca.gov/fish/Resources/Coho/index.asp>



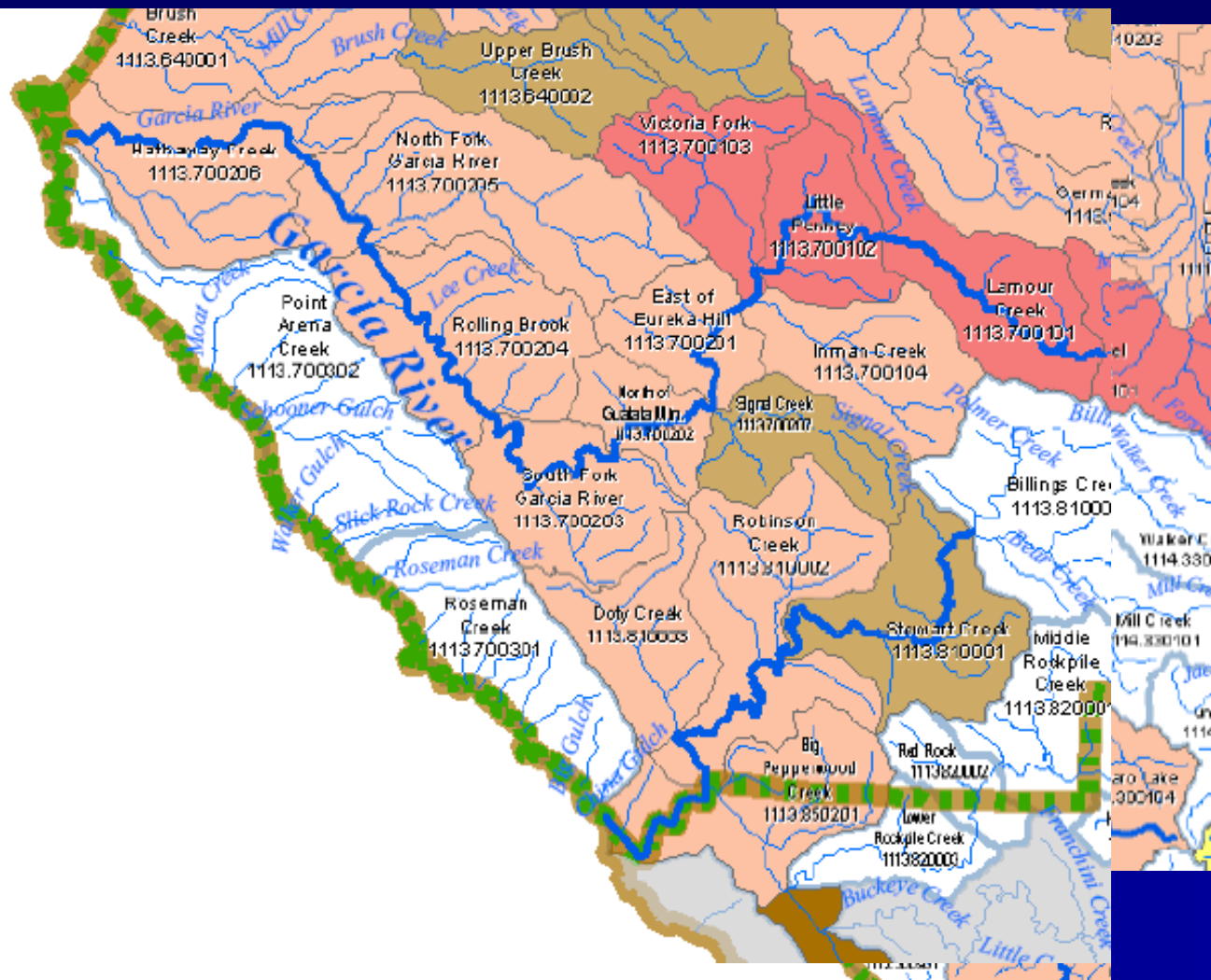
# Coho SONC and CCC ESU boundary

<http://www.dfg.ca.gov/fish/Resources/Coho/index.asp>



# Coho planning watersheds

[http://www.dfg.ca.gov/habcon/timber/files/Coho\\_Watershed\\_List\\_070912.pdf](http://www.dfg.ca.gov/habcon/timber/files/Coho_Watershed_List_070912.pdf)



# NTMPs in Coho Planning Watersheds

- **Humboldt County: 151 Approved NTMPs**
- **Mendocino County: 148 Approved NTMPs**
- **Also 25 NTMPs in planning watersheds which drain directly into coho planning watersheds**
- **Approximately 324 NTMPs need DFG coho preconsultations in Humboldt and Mendocino counties**



# NTMP Process for Coho

1. Does the project include activities that may take coho?
2. Does the project include activities that may cause potentially significant impacts to coho?
3. Preconsultation with DFG will help answer 1 and 2 above. Additional BMPs may be needed to avoid take or significant impacts

# Forest Practice Rules

- Existing T & I Rules 916.9.1  
923.9.1 (applies to all NTMPs)
- 916.9.2 and 923.9.2 (applies where take of coho may or is likely to occur)
- Measures similar to 916.9.2 and 923.9.2 may be recommended by DFG to avoid take or significant impacts

# Focus Areas for NTMPs

- Watercourse Protection Measures
- Road Protection Measures
- Water Drafting Protection Measures



# Potential Added Class I Protection Measures

- Identify and protect restorable Class I habitat
- Retain the 10 largest diameter conifers within 100 feet of the watercourse on each side per 330 feet

# Potential Added Class II Watercourse Protection Measures

- Increase canopy retention and WLPZ width
- Focus on larger Class IIs (e.g. mapped on USGS 7.5 minute topographic map)

# Potential Added Class III Watercourse Protection Measures

- No group selection across Class IIIs
- No initiation of burning
- Retain at least 15 square feet basal area/acre hardwoods
- Retain snags, LWD, non-merchantable trees



# Potential Added NTMP Road Protection Measures

- Comprehensive road assessment
- Seasonal restrictions
- Hydrologically disconnect roads
- Road approach treatments
- WLPZ road treatments



# Water Drafting Protection Measures

- All drafting requires Notification to DFG for Streambed Alteration Agreement
- Site-specific water drafting criteria to avoid take of, or significant impacts to coho



# Summary

- Amend with T&I Rules if pre-2000, and disclose coho status if pre-2005
- Schedule Preconsultation with DFG
- Amend NTMP per outcome of DFG preconsultation



# DFG Contacts

## Northern Region

### Eureka

- Mark Moore
- Erik Helgoth

### Fort Bragg

- Jon Hendrix
- Terra Fuller

## Bay Delta Region

- Brenda Blinn
- Terris Kastner
- Stephanie Buss



Thank You





# Pacific Fisher

- Candidate for listing under ESA
- Petition to list under CESA rejected
- Remains a CA Species of Special Concern



# Pacific Fisher

- Formerly ranged through coastal Del Norte, Humboldt, Mendocino, Sonoma counties
- Now restricted to HUM, DN, northeastern Mendocino



# **Board of Forestry**

## **“Sensitive” Species**

**Scott Osborn**

California Department of Fish and Game

Northern Region

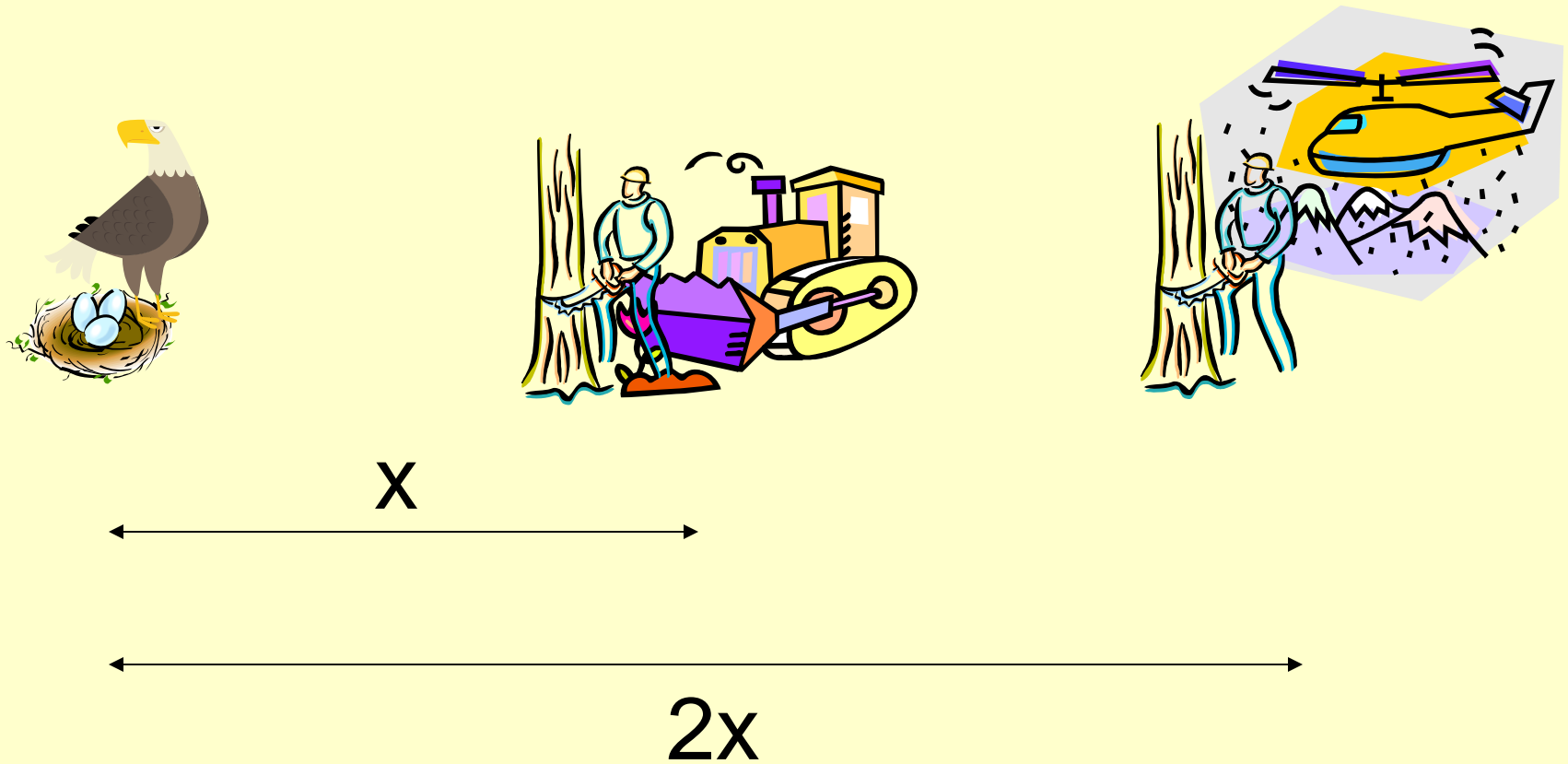
Coastal Timberland Planning



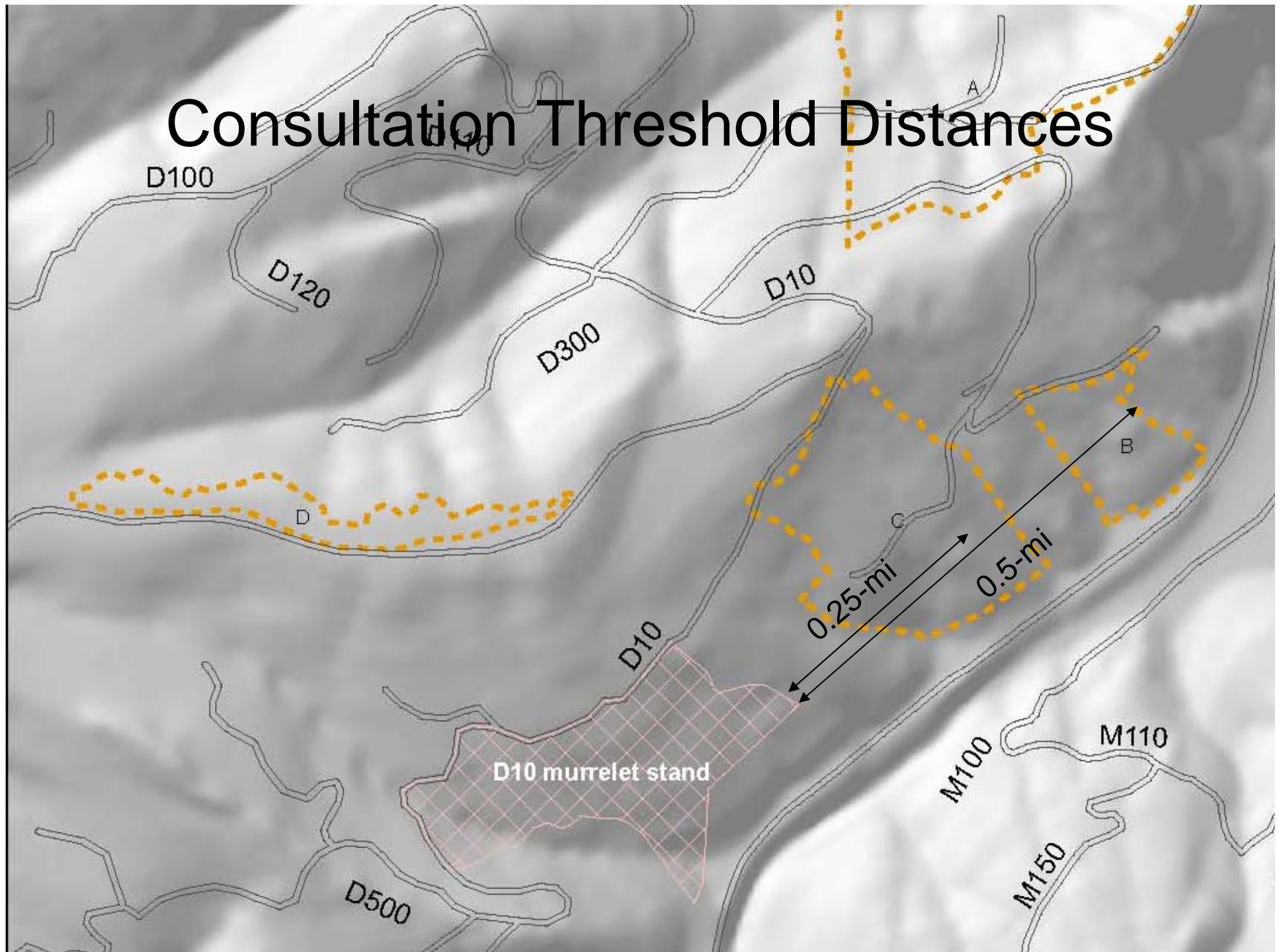
# Threatened, Endangered, Fully-Protected and Board-Sensitive Species

Bald Eagle	FT, FPD	SE, Ca. FP	BoF-Sens.
Golden Eagle		Ca. FP	BoF-Sens.
Peregrine Falcon	Delisted*	SE	BoF-Sens.
Osprey			BoF-Sens.
Northern Goshawk			BoF-Sens.
Marbled Murrelet	FT	SE	BoF-Sens.
Great Blue Heron Great Egret			BoF-Sens.
California Condor	FE	SE, Ca. FP	BoF-Sens.
Willow Flycatcher		SE	
White-tailed Kite		Ca. FP	

# Consultation Threshold Distances



# Consultation Threshold Distances



# Bald Eagle (x = 0.5 mi)



Known nest tree or adults observed in suitable habitat during breeding season

Nests in large dominant live trees with open branch structure.

Usually near a permanent water source.

Nest located 50 to 200 feet above ground, usually below tree crown.



# Golden Eagle (x = 0.5 mi)



Suitable nesting habitat or known nesting habitat (coastal forests with natural grassland intermix)

Nests on cliffs of all heights and in large trees in open areas, or in emergent trees within forested stands near open areas.

Rugged, open habitats with canyons and escarpments used most frequently for nesting.

# Peregrine Falcon (x = 0.5 mi)



Known nest site or adults observed in suitable habitat during breeding season

Breeds near wetlands, lakes, rivers, or other water on high cliffs (although water may not be an evident part of the local landscape).

Occasionally uses tree or snag cavities or old nests of other raptors.

Nest is a scrape on a depression or ledge in an open site.



# Osprey ( $x = 0.25$ mi)



## Known nest tree

Nest usually within a quarter-mile of fish-producing water, but may nest farther from water.

Nests on platform of sticks at the top of large predominant snags, dead-topped trees, on cliffs, or on human made structures.

Needs tall, open-branched perch trees nearby.



# Northern Goshawk (x = 0.25 mi)



Known nest stand or adults observed in suitable habitat during breeding season

Usually nests on north slopes, near water, in densest parts of mature stands, with little understory, and close to openings.

Nests often located in a spray of branches or a fork of large, horizontal limb close to trunk, at bottom of live canopy 19-82 ft above ground.

Uses large, live trees.

Reuses old nests, often rotating among alternate nest sites in subsequent years.





# Great Blue Heron / Great Egret (x = 0.25 mi)



Known nest tree/rookery or adults observed in forest during breeding season

Usually nests in colonies in tops of secluded large snags or live trees, usually among the tallest available.



© Laura Erickson/ Binoculars.com

# Willow Flycatcher



Dense deciduous riparian  
(e.g., willow) thickets  
generally greater than a  
quarter-acre in area



# Other Species

- Nests, eggs, chicks, and adults of all raptors (Orders Strigiformes and Falconiformes) are protected under Fish & Game Code 3503.5.

Cooper's Hawk



Sharp-shinned Hawk



# Other Species

- Nests, eggs, chicks, and adults of all raptors (Orders Strigiformes and Falconiformes) are protected under Fish & Game Code 3503.5.
- Nests and eggs of all birds are protected under Fish and Game Code 3503.

Purple Martin

Vaux's Swift



# Other Species

- Nests, eggs, chicks, and adults of all raptors (Orders Strigiformes and Falconiformes) are protected under Fish & Game Code 3503.5.
- Nests and eggs of all birds are protected under Fish and Game Code 3503.
- Sonoma tree vole (CSC)





# Assessment of Sensitive Plants in THPs

Procedures and Resource Protection in the THP Review Process  
December 10, 2008 – Ukiah, California

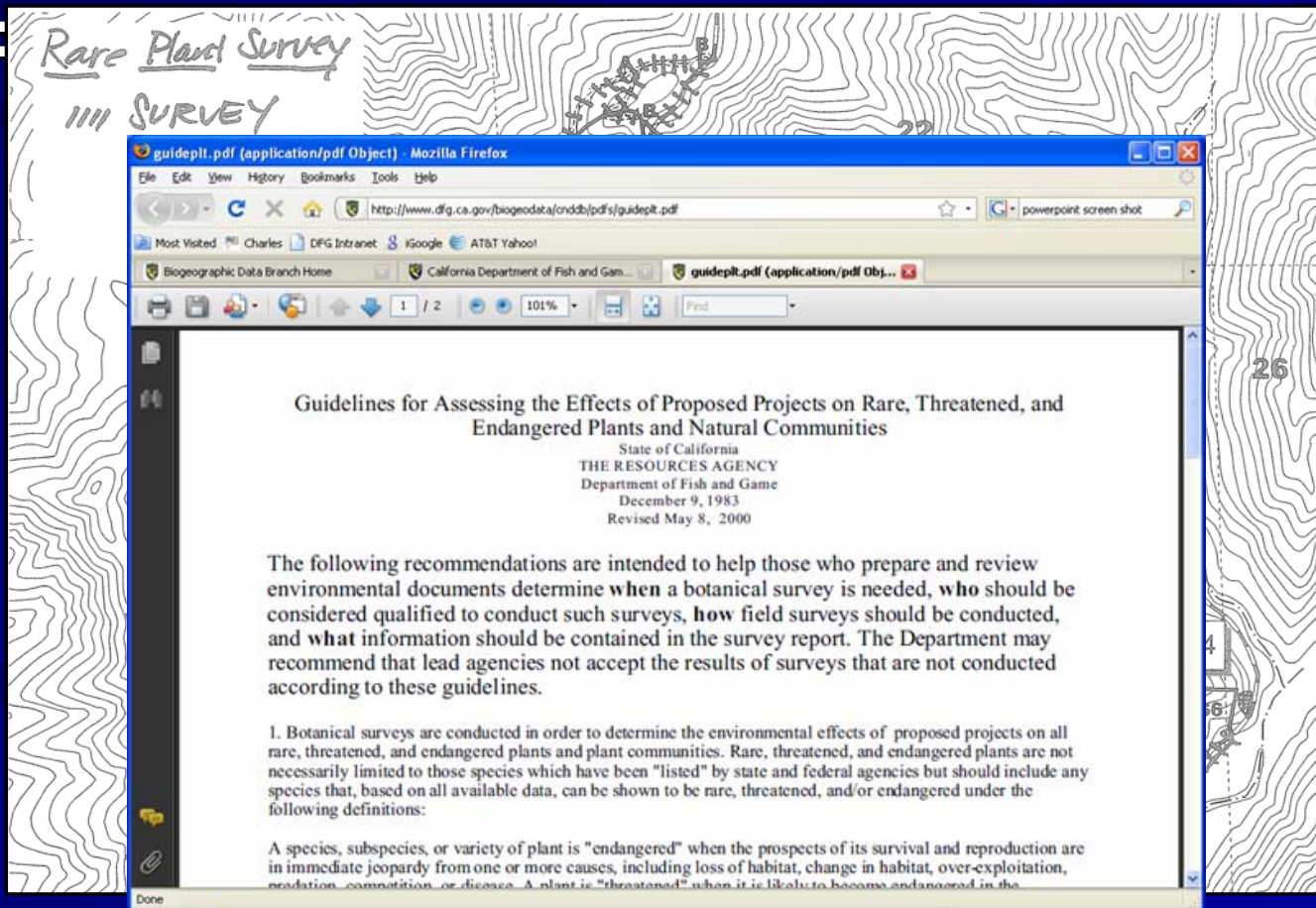
Tony LaBanca – California Department of Fish & Game



# Botanical Surveys & Reporting

■ THP should discuss efforts made to determine presence of sensitive species

■ DFG



(Project)



# Documenting Surveys in THPs

## ■ Survey prior to filing THP

- Include survey report in THP
- Include PPMs in Section II, Item 32

## ■ Survey after THP approval

- Include statement in Section II, Item 32 –  
“Survey results shall be submitted to CAL  
FIRE and DFG prior to operations”
- PPMs for all species potentially present
- Include scoping in Section III

# Sensitive Plant Conservation

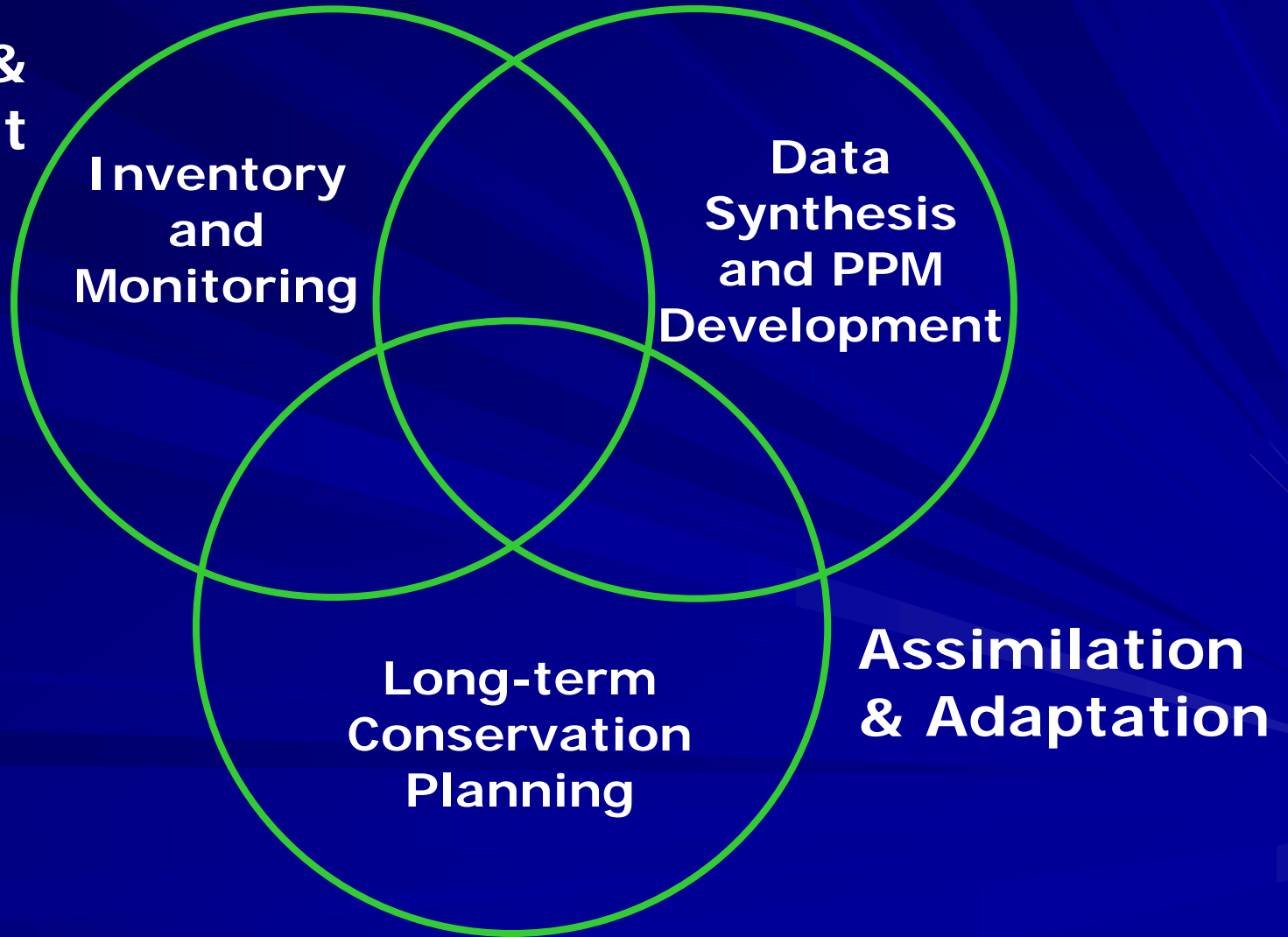
**Discovery &  
Assessment**

**Inventory  
and  
Monitoring**

**Data  
Synthesis  
and PPM  
Development**

**Long-term  
Conservation  
Planning**

**Assimilation  
& Adaptation**



# DFG Sensitive Plant Conservation Strategy

**Plant rare & regionally  
restricted.  
Little or no ecological  
data.**

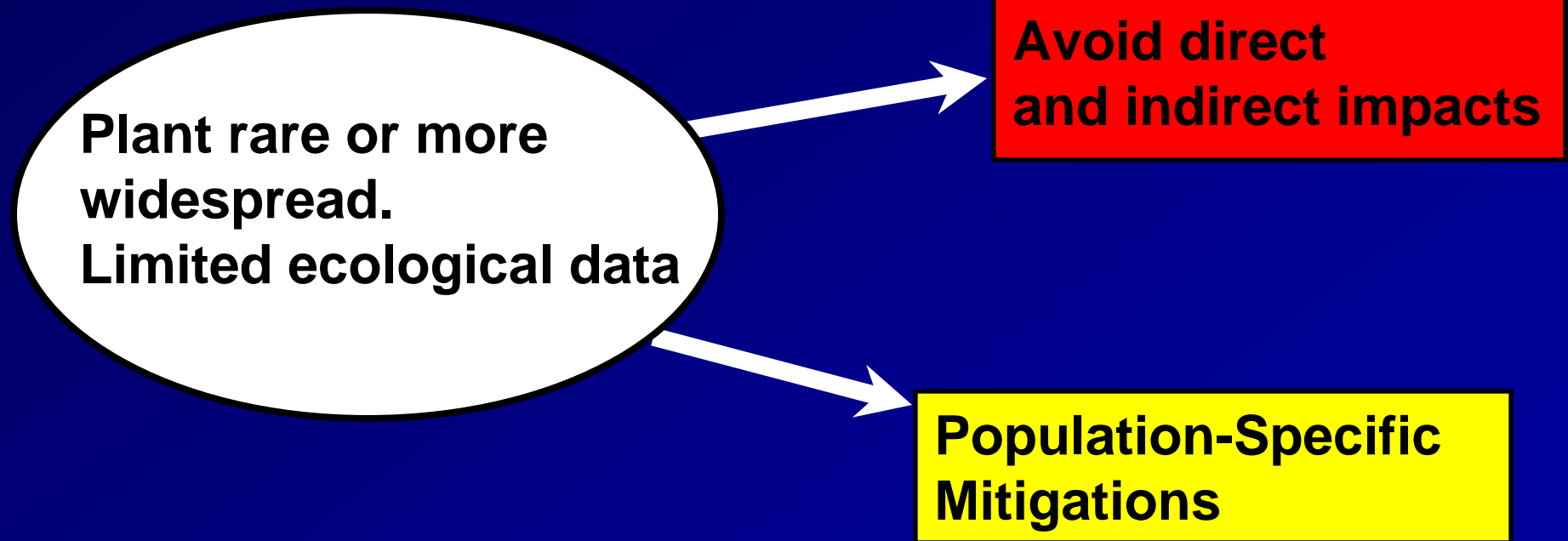


```
graph LR; A([Plant rare & regionally restricted.  
Little or no ecological data.]) --> B[Avoid direct and indirect impacts];
```

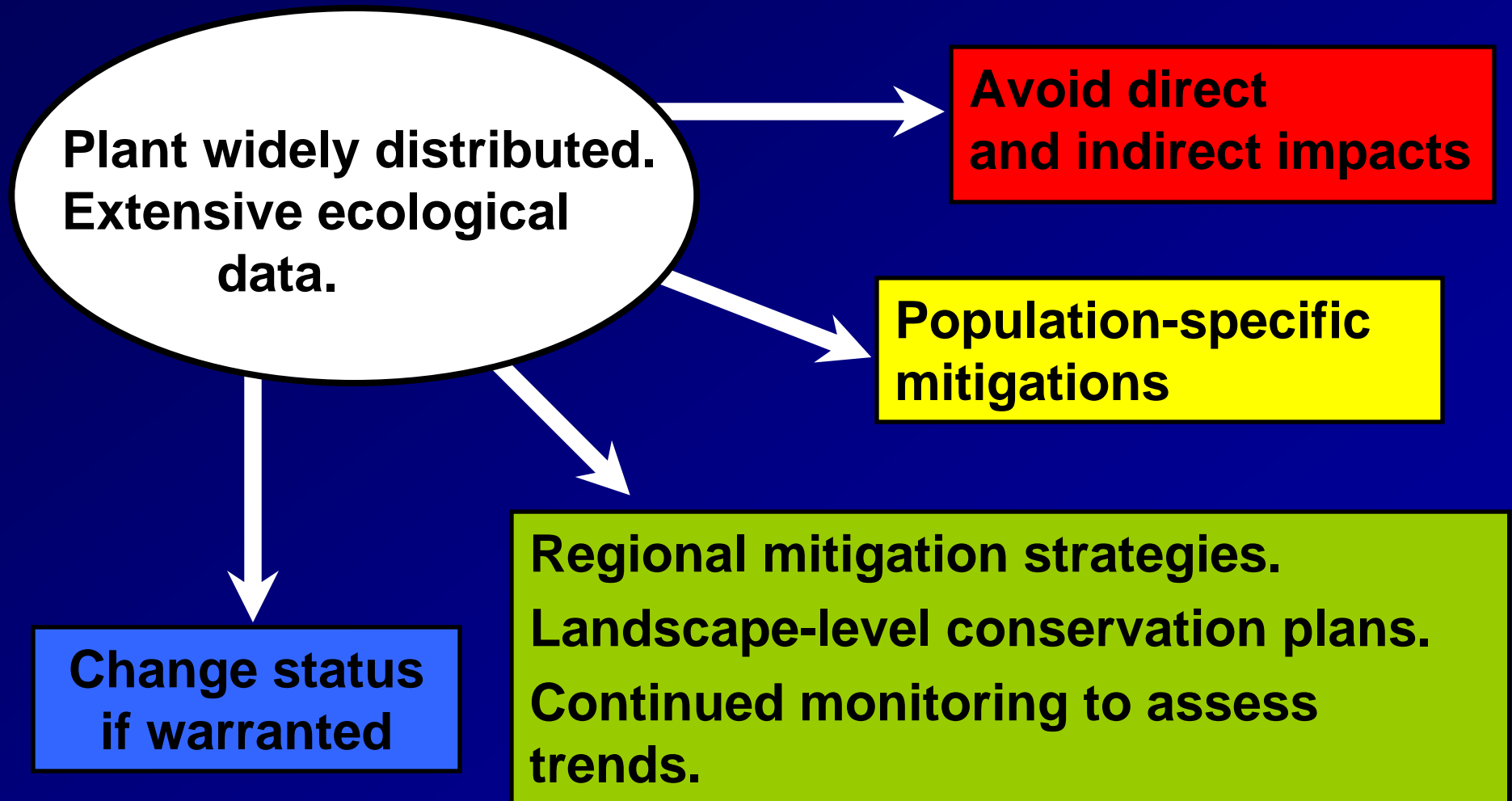
**Avoid direct  
and indirect impacts**



# DFG Sensitive Plant Conservation Strategy



# DFG Sensitive Plant Conservation Strategy



# Plant Protection Measures

- **Modify operations**
- **Establish a buffer**
- **Directional falling**
- **EEZ/ELZ**
- **Overstory retention**
- **Maintain hydrology**
- **Exclude site prep**





