

**SAN  
DIEGO  
REGIONAL  
MEETING**

# California's 2030 Natural and Working Lands Climate Change Implementation Plan



**CalEPA**  
California Environmental  
Protection Agency



**CALIFORNIA**  
*natural  
resources*  
**AGENCY**



**CALIFORNIA**  
AIR RESOURCES BOARD



**CALIFORNIA DEPARTMENT OF  
FOOD & AGRICULTURE**



**CALIFORNIA**  
STRATEGIC  
GROWTH  
COUNCIL

# Agenda

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1. Overview of state direction for natural and working lands
2. Overview of draft goals for conservation, restoration, and management in the San Diego region
3. Questions & discussion on regional draft goals; outlook for future implementation

# California's natural and working lands

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*rangeland*



*forests*



*wetlands*



*grasslands*



*farms*



*riparian areas*



*seagrass*



*urban green-space*



# Overarching goal

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## CALIFORNIA'S CLIMATE POLICY PORTFOLIO



Double building efficiency



Cleaner freight and goods movement



50% renewable power



Slash potent "super-pollutants" from dairies, landfills and refrigerants



More clean, renewable fuels



Cap emissions from transportation, industry, natural gas, and electricity



Cleaner zero or near-zero emission cars, trucks, and buses



Invest in communities to reduce emissions



Walkable/Bikeable communities with transit



Protect and manage natural and working lands



***Fully integrate natural and working lands into California's climate change policy portfolio***

# December 2017 Scoping Plan directive

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1

**Maintain** lands as a long-term **resilient carbon sink** – achieve net zero or negative greenhouse gas emissions

2

**Minimize**, where applicable, net greenhouse gas and black carbon **emissions**

3

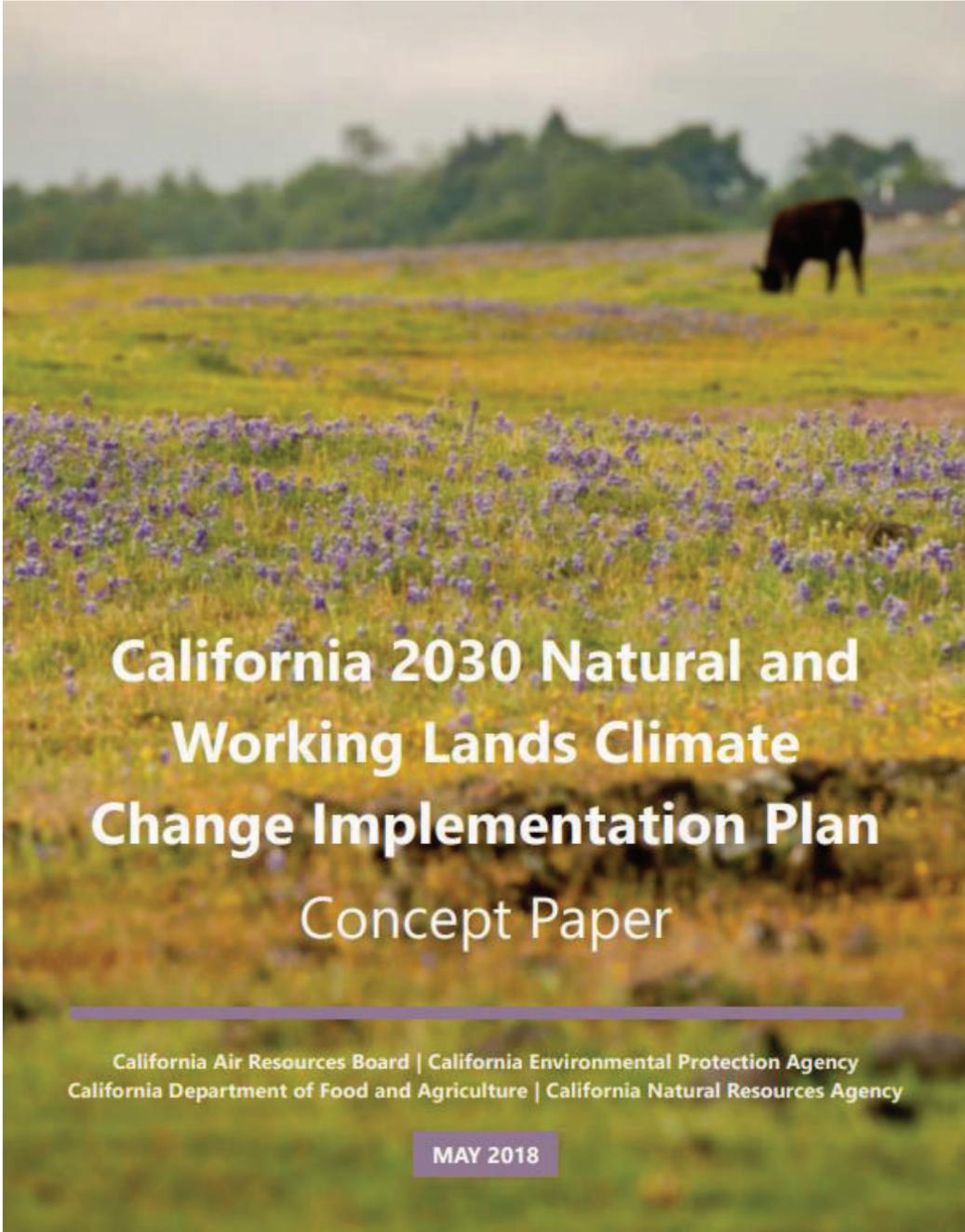
Sets a **preliminary ‘intervention-based’ goal** for sequestration and avoided emissions of at least 15-20 MMT CO<sub>2</sub>e by 2030 through existing pathways and new incentives

4

Directs state to develop a **2030 Natural and Working Lands Climate Change Plan Implementation Plan** that outlines scale and scope of State-supported **land conservation, restoration, and management acreage targets** needed for long-term objectives & 2030 goal by December 2018

**May 2018  
Concept Paper  
for the final  
Plan**

<https://arb.ca.gov/cc/natandworkinglands/nwl-implementation-plan-concept-paper.pdf>



**California 2030 Natural and  
Working Lands Climate  
Change Implementation Plan  
Concept Paper**

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California Air Resources Board | California Environmental Protection Agency  
California Department of Food and Agriculture | California Natural Resources Agency

MAY 2018

# State-funded activity (“intervention-based”) approach

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- Plan relies on using **identified activities (interventions)**
- Sets an ambitious but achievable goal with targets that are scalable
- Focuses on **State-supported land conservation, restoration, and management activities**
- Will leverage **new and existing programs** at California state agencies, departments, boards, and conservancies
- Facilitates **tracking** and **reporting** on progress towards goal

# Multiple benefits of implemented projects

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**biodiversity  
& habitat**



**water supply  
& quality**



**climate  
adaptation**



**tourism &  
recreation**



**public  
health**



**economic  
development**



**cultural &  
spiritual  
values**



**temperature  
cooling**

# Land protection, restoration, and management activities in the plan

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<i>Land protection</i>	Avoided conversion of land for development
<i>Agricultural practices</i>	Soil conservation practices, compost amendment, rotational grazing, crop rotation, mulching, riparian restoration, etc.
<i>Urban forests</i>	Expansion of existing urban tree canopy
<i>Forest management</i>	Understory treatment, partial cut, prescribed burn, biomass utilization, improved management
<i>Restoration activities</i>	Restoration and expansion of the extent of mountain meadows, managed wetlands, oak woodlands, riparian areas, and seagrass

# Tools for setting the 2030 carbon goal

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*Tools for projecting the carbon impacts of conservation, restoration, and management activities:*

## **California Natural and Working Lands Carbon and Greenhouse Gas Model (CALAND)**

ecological restoration, land conservation, and management practices, land use change, climate change impacts, wildfire

## **COMET-Planner**

### **Compost-Planner**

modeling the benefits of agricultural practices incentivized by CA's Healthy Soils Program



# Setting acreage targets

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Three scenarios based on:

**no state activities**



**BASELINE SCENARIO**

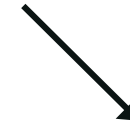
Regulatory minimum  
only

**two alternatives**



**BUSINESS-AS-USUAL  
SCENARIO**

Maintaining  
California's current  
track



**AMBITIOUS  
SCENARIO**

More aggressive levels  
of state funding for  
programs/ voluntary  
efforts

# Results of projections

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- Acreage targets run through models; alternative scenarios compared to baseline to show impact of state activities
- Projections provide outlook on scale needed and reasonableness of proposed strategies
- Final Implementation Plan will list acreage targets and projected benefits, alongside additional implementation considerations

# Moving Forward

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**July-August**

Revise and  
finalize acreage  
targets



**August-  
September**

Develop draft  
2030 natural and  
working lands  
goal and Plan



**September  
2018**

Announce  
intervention-  
based carbon  
goal for natural  
and working  
lands



**November  
2018**

Release final  
Implementation  
Plan

Arroyo Seco Confluence with the LA River



# DRAFT GOALS FOR NATURAL AND WORKING LANDS IN THE SOUTH COAST

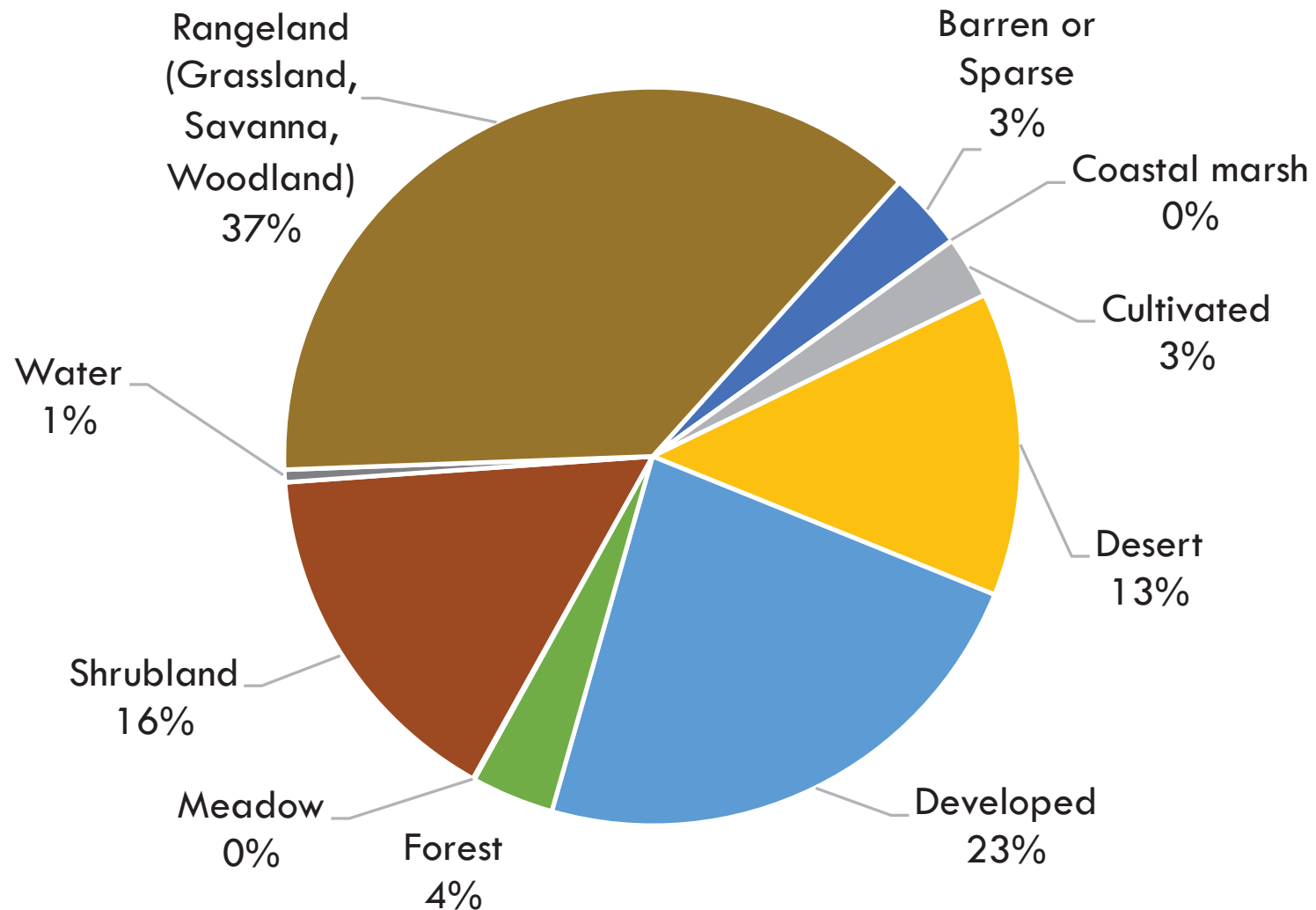
# South Coast and Mountains Ecoregion



v 4 Draft proposal by  
R Walker, 8/13/14

# Land Cover in the South Coast

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# Developing acreage target scenarios

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- **Business-as-usual alternative:** How many acres could be restored or managed over 12 years assuming current bond and program funding?
  - Includes projections based on historical acres of current grant and bond-funded programs
- **Ambitious alternative:** How many acres could be restored or managed over 12 years with an ambitious but achievable increase in funding?
  - Aims to reflect goals from existing regional plans and ecological restoration needs assessments

# Agencies and departments developing acreage targets

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## Conservation, restoration, & management practices:

### California Natural Resources Agency departments

State Coastal Conservancy

Santa Monica Mountains Conservancy

San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy

San Diego River Conservancy

Baldwin Hills Conservancy

Department of Conservation

Department of Fish and Wildlife

Department of Water Resources

Department of Parks and Recreation

Department of Forestry and Fire Protection

Wildlife Conservation Board

## Cultivated land and rangeland practices:

California Department of Food and Agriculture



**Still under development**

**Draft targets listed on the following slides**

# Compiled DRAFT acreage targets for the South Coast

Practice	BAU acres	Ambitious acres	Reporting Agencies
Land Protection	75,645	131,778	Department of Fish and Wildlife, Department of Water Resources, Department of Conservation, State Parks, Wildlife Conservation Board, Rivers and Mountains, San Diego River, Santa Monica Mountains, and State Coastal Conservancies
Reforestation	-	60	State Parks, San Diego River Conservancy
Partial cut/ fuel reduction	32,637	61,822	Department of Forestry and Fire Protection, State Parks, Santa Monica Mountains Conservancy, San Diego River Conservancy, Department of Water Resources
Forest Understory Treatment	300	12,500	San Diego River Conservancy, Santa Monica Mountains Conservancy
Forest Prescribed Burn	27,975	50,480	Santa Monica Mountains Conservancy, Department of Forestry and Fire Protection, State Parks
Improved Forest Management	300	12,500	Santa Monica Mountains Conservancy
Add. Forest Biomass Utilization	-	-	Santa Monica Mountains Conservancy
Oak Woodland Restoration	2,229	5,438	Rivers and Mountains Conservancy, State Coastal Conservancy, Santa Monica Mountains Conservancy, San Diego River Conservancy, State Parks
Meadow Restoration	1,498	1,808	State Parks, San Diego River Conservancy
Coastal Marsh Restoration	3,729	11,426	Rivers and Mountains Conservancy, State Coastal Conservancy, Department of Water Resources, Department of Fish and Wildlife, State Parks
Riparian Restoration	4,395	9,816	San Diego River Conservancy, Santa Monica Mountains Conservancy, Department of Conservation, State Parks, Department of Water Resources, Wildlife Conservation Board
Soil Conservation Practices	5,496	5,736	San Diego River Conservancy, State Parks
Rangeland Composting	300	500	State Coastal Conservancy
Rangeland Rotational Grazing	-	-	-
Seagrass Restoration	-	-	State Coastal Conservancy, Ocean Protection Council
Urban Forest Expansion	1,320	2,168	San Diego River Conservancy, Santa Monica Mountains Conservancy, Rivers and Mountains Conservancy, Department of Forestry and Fire Protection, Resources Agency

# Ecological Restoration and land protection DRAFT targets for the South Coast

Description	Practice	BAU	Ambitious	Implementing Agencies
Reestablishment of oak woodlands on grasslands and cultivated lands	Oak Woodland Restoration	2,229	5,438	Rivers and Mountains Conservancy, State Coastal Conservancy, Santa Monica Mountains Conservancy, San Diego River Conservancy, State Parks
Creation of saline tidal wetlands in coastal regions	Coastal Marsh Restoration	3,729	11,426	Rivers and Mountains Conservancy, State Coastal Conservancy, Department of Fish and Wildlife, Department of Water Resources, State Parks
Riparian trees, primarily oaks, are established on grassland or cultivated lands	Riparian Restoration	4,395	9,816	San Diego River Conservancy, Santa Monica Mountains Conservancy, Department of Conservation, State Parks, Department of Water Resources, Wildlife Conservation Board
Creation of sub-tidal seagrass beds where none previously existed	Seagrass Restoration	-	-	State Coastal Conservancy, Ocean Protection Council
Reduced conversion of natural and working lands to urbanized land	Land Protection	75,645	131,778	Rivers and Mountains Conservancy, San Diego River Conservancy, Santa Monica Mountains Conservancy, State Coastal Conservancy, Department of Water Resources, Department of Conservation, State Parks, Wildlife Conservation Board

# Developing ecological restoration & land protection targets: what regional plans, goals, & strategies should be included?

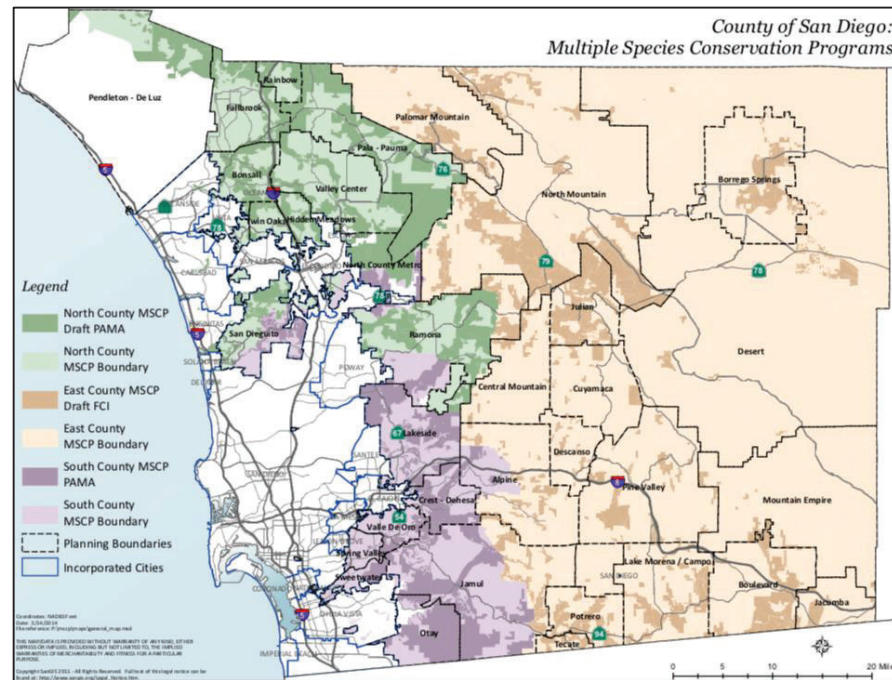
## COASTAL MARSH RESTORATION

### SOUTHERN CALIFORNIA WETLANDS RECOVERY PROJECT REGIONAL STRATEGY



NOVEMBER 2001

## LAND PROTECTION



## OAK WOODLAND RESTORATION

### Oak Woodland Conservation Management Planning in Southern CA – Lessons Learned<sup>1</sup>

Rosi Dagit<sup>2</sup>

#### Abstract

The California Oak Woodlands Conservation Act (AB 242 2001) established requirements for the preservation and protection of oak woodlands and trees, and allocated funding managed by the Wildlife Conservation Board. In order to qualify to use these funds, counties and cities need to adopt an oak conservation management plan. Between 2008 and 2011, a team of concerned arborists, biologists, county foresters, planners, and other stakeholders wrestled with questions such as how to define an oak woodland in southern California, how much oak woodlands are worth, and examined the costs associated with a) losing existing oak woodlands; b) preserving existing oak woodlands; and c) expanding oak woodland habitat to suitable areas in the county. These efforts resulted in adoption of the Los Angeles County Oak Woodland Conservation Management Plan in 2011. However, it took until 2014 to work out the associated implementation plans for regional planning and public work staffs. The pitfalls and successes of developing this plan will be discussed in hopes of sharing the lessons learned with others.

*Key words:* conservation planning, oak woodlands

#### Introduction

Many counties and cities throughout California have long protected individual oak trees, and Los Angeles County led the way with the enactment of their Oak Tree Ordinance in 1982. However, these local regulations have had limited scope and success in protecting oak resources. Recognizing that loss of oak woodlands was

# Developing targets for rangelands and cultivated lands

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*The Department of Food and Agriculture is working to develop targets for agricultural practices & to revise the numbers written on the previous slides for:*

**Soil management practices**

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**283,000**

**Cropland to herbaceous cover practices**

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*acres of cultivated land &*

**Compost application practices**

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**3,868,000**

**Establishment of woody cover practices**

*acres of rangeland in the  
South Coast ecoregion*



**QUESTIONS+  
DISCUSSION**

# Discussion Questions

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1. Are **regional projects** reflected in the baseline and more ambitious draft acreage targets for conservation, restoration, and management?
2. How should the **ambitious** scenario be scoped for activities in your region? Are there existing regional planning and goal-setting documents that should be included within the ambitious scenario?
3. What are your regional implementation **priorities**? What is needed to support successful regional implementation?

# Thank you

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