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Docket Number:	23-SB-100
Project Title:	SB 100 Joint Agency Report
TN #:	254243
Document Title:	CARB Presentation for SB 100 Land Use Workshop
Description:	CARB presentation for 02/01/2024 SB 100 Land Use Workshop "Natural and Working Lands Climate Planning" by Dr. Adam Moreno
Filer:	Xieng Saephan
Organization:	California Energy Commission
Submitter Role:	Commission Staff
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Natural and Working Lands Climate Planning

Dr. Adam Moreno Manager, Nature-Based Strategies Section

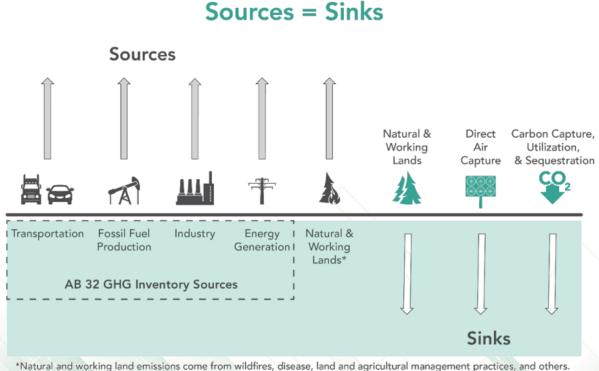
Agenda

- The Scoping Plan and Natural and Working Lands (NWL)
- Assembly Bill 1757 NWL Implementation Targets and Monitoring
- Clean Energy Siting NWL Considerations



Scoping Plan and Natural and Working Lands

Figure 1-5: Carbon neutrality: Balancing the net flux of GHG emissions from all sources and sinks







Scoping Plan and Natural and Working Lands

• 2022 update expanded to carbon neutrality





Natural and Working Lands and Carbon Neutrality

Quantify statewide carbon dynamics (both where climate action is and isn't occurring)



Project level accounting (the benefit of climate action)

Statewide accounting (the entire carbon balance of the state)



NWL Scoping Plan Scenario Updates

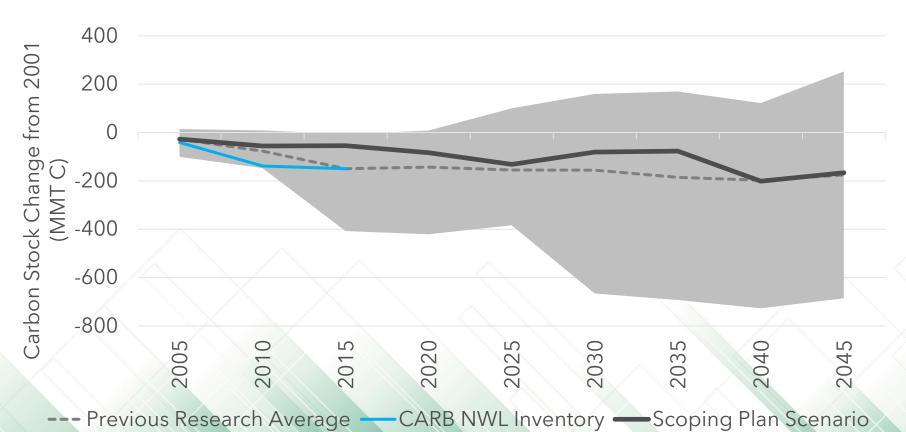
• 2022 NWL Scoping Plan Scenario

Action	Level of Action
Forest, shrubland, and grassland fuel reduction and restoration (acres/year)	2,300,000
Regenerative agriculture and cropland conservation above BAU (acres/year)	150,000
Urban Forest investment increase above current investment (annual % increase)	200%
Defensible space establishment in wildland urban interface (properties/year)	50,000
Delta wetland restoration (total acres by 2045)	60,000
Desert Conservation above current conservation (acres/year)	



NWL Scoping Plan Scenario Updates

Carbon Stock Results



Note: Grey shadow shows range of results from previous independent research



AB 1757 - Natural and Working Lands

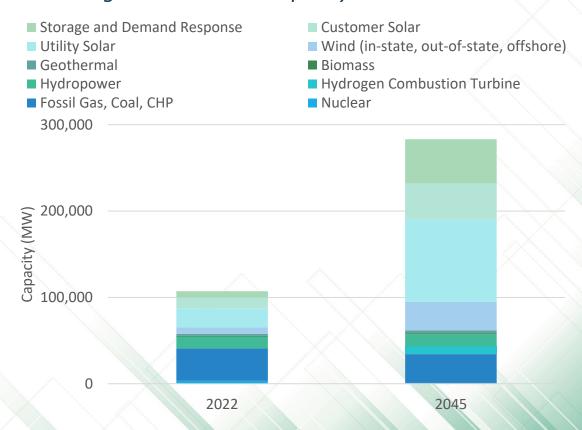
- CNRA, in consultation with CARB and CDFA, set comprehensive implementation targets
 - Conservation will be included in these targets
- Mandate tracking and reporting of the impact of management and land use change actions on NWL
- Monitor multiple benefits and impacts of climate action, not only carbon



2022 Scoping Plan for Achieving Carbon Neutrality Electric Sector Transition

- Grid to be the backbone of California's decarbonized economy
- Accelerate pace of building clean energy infrastructure and clean technology deployment to achieve the 2030 target and be on track for carbon neutrality
- At this scale of build out, key factors include permitting, transmission and generation, and available land
- Areas of uncertainty include permitting times and local opposition to utility-scale renewables

4x existing wind and solar capacity in 2045





NWL Clean Infrastructure Considerations

- Prioritize siting on already developed, disturbed, and degraded landscapes
- In terms of carbon and water, conversion of forests should be avoided
- Carbon is not the only consideration when prioritizing land use change impacts (public health, sensitivity, cultural importance, etc.)
- Many externalities exist with loss of ecosystem services that cannot currently be quantified for costs.



Competing Priorities and Opportunities

- Innovative planning and cooperation from local jurisdictions can address both energy infrastructure and land conservation needs
- More analysis is needed to understand if currently developed, disturbed, or degraded land is sufficient to meet clean energy infrastructure needs
- To reduce development on natural lands may require development closer to communities and increased costs
- Integration of clean energy infrastructure with agriculture, brownfields, mining, and landfills

