

ARB's Forest Sector GHG Inventory

- **Inventory Background**
- **Draft Symposium Plan**



ARB GHG Inventory Overview

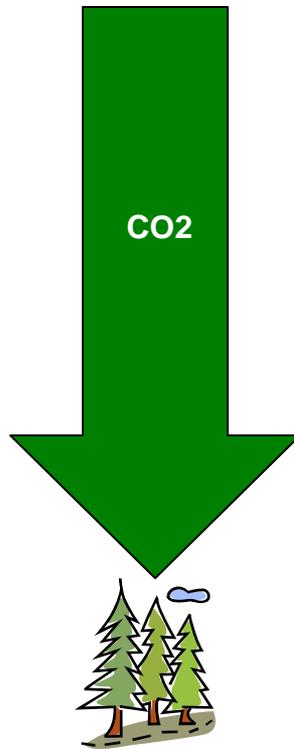
- ARB responsible for maintaining state's GHG inventory per AB 1803
- Accounts for emissions from all major economic sectors in the state
- Inventory serves multiple purposes for AB 32
 - 1990 emissions level and statewide 2020 target
 - Informed Scoping Plan development
- Forest sector inventory unique
 - CO2 sequestration
 - Only sector that estimates the net CO2 exchange to and from the atmosphere



Atmosphere

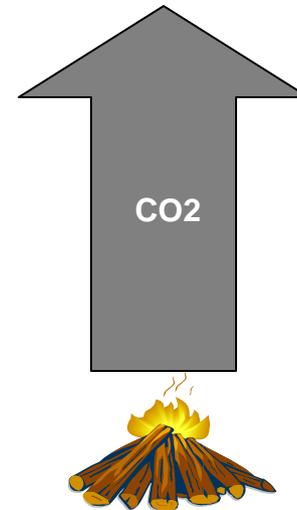
CO2 Removal (sequestration)

- vegetative growth in forests and wooded rangelands



CO2 Emissions

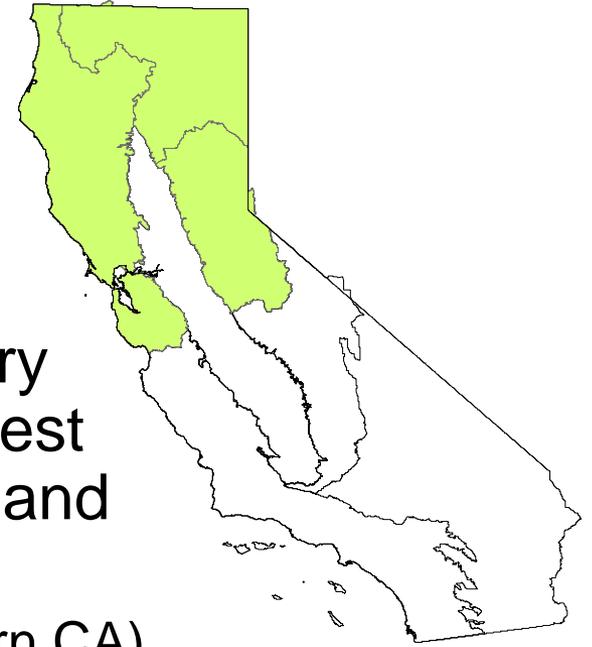
- wildland fire, land conversion, other disturbances
- harvest slash combustion, decomposition
- mill waste combustion
- landfilled wood waste decomposition, landfill gas combustion (wood products portion)
- composted wood waste decomposition



Land

GHG Inventory: Forest Component

- Forest sector of current inventory uses 2004 Winrock Study of forest and rangeland GHG emissions and CO₂ uptake
 - Limited geographical area (northern CA)
 - 1994-2000 time period
 - Stock change used for CO₂ estimation
 - CH₄, N₂O estimates
- Results from Winrock study extrapolated to other years for forests and rangelands statewide





Key Forest Sector GHG Inventory Issues

- Winrock study limitations
 - Data (temporal and spatial information)
 - Methods (fire emissions)
 - Comprehensiveness (soil CO₂, urban forests, wood product decomposition)
 - Projections (forest land)



Planned Improvements

- Increased coverage of the state's forests and rangelands
- Updated and improved emissions accounting methods
- Improved accounting of carbon pools to include imported and domestic wood products
- Mechanism to allow for in-house data updates
- Improved forecasting



Symposium on Forest Accounting, Assessment and GHG Exchange

Purpose

- Symposium will consider the capabilities of ongoing forest inventory programs, observational networks, and special studies and identify opportunities for improved quantification of California forest GHG inventory
 - Land inventories in CA
 - Forest and rangeland stocks, GHG emissions, and CO₂ removal
 - Forecasting to 2020 and beyond



Symposium on Forest Accounting, Assessment and GHG Exchange *(cont.)*

Planned Sessions

- ARB's forest sector GHG Inventory: key categories and processes
- Land inventories in CA: Fundamental to GHG inventory
- Ecosystem Stocks, CO₂ Removal and GHG Emission Processes
- Future Scenarios of Forest Condition



Symposium on Forest Accounting, Assessment and GHG Exchange *(cont.)*

Invited speakers

- USDA-FS
- NASA
- CalFIRE
- University of California
- Oregon State University
- LBNL
- CEC-PIER