WESTERN STATEWIDE WOOD ENERGY TEAM FORUM

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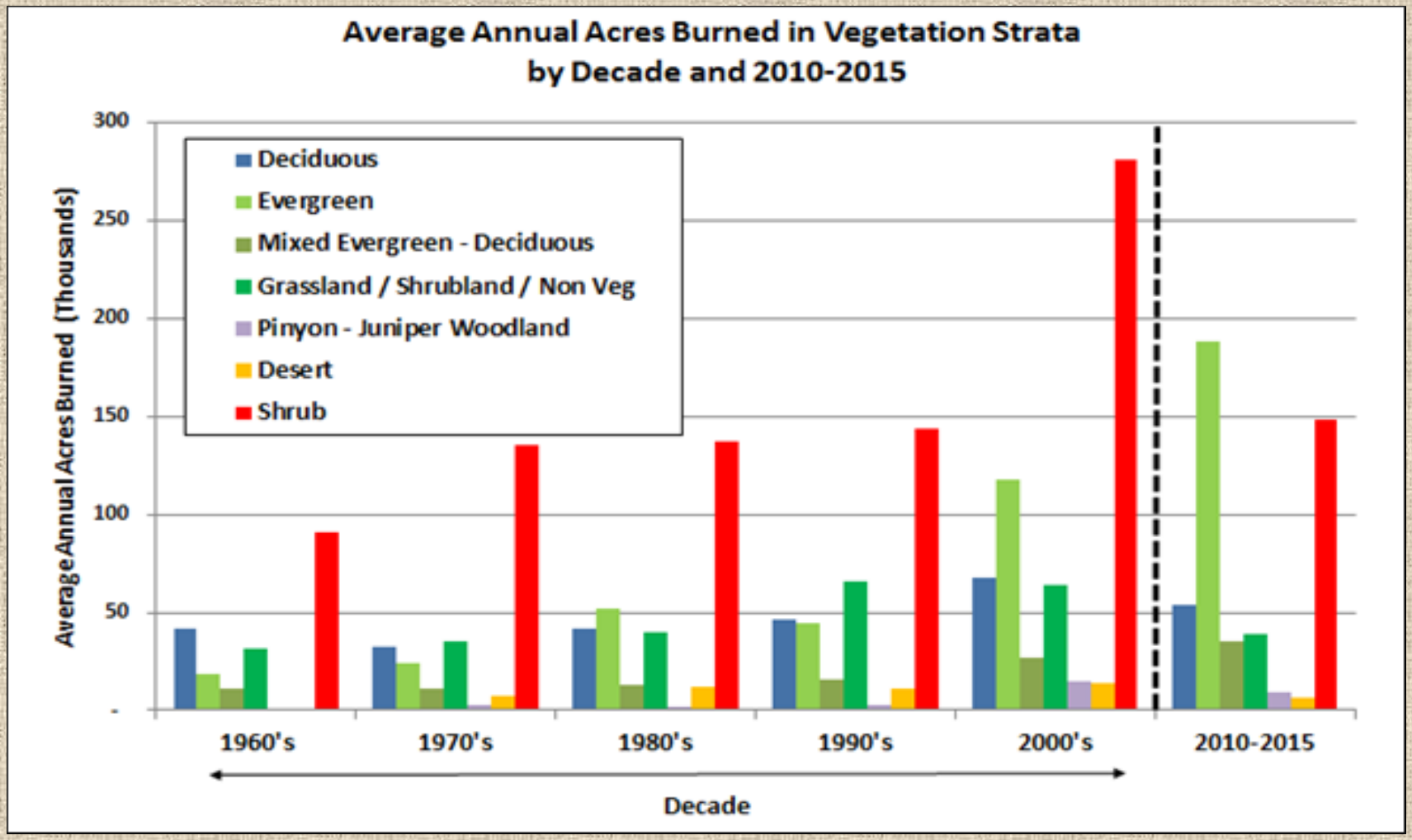
Resource Management

California Situation Status

- Increasing number and complexity of fires
- Average temperature is increasing
- Weather patterns are changing
- Five years of persistent drought
- Forest Health/Tree mortality epidemic
- Expanding wildland urban interface


Average Annual Acres Burned in Vegetation Strata
by Decade and 2010-2015
Average Annual Acres Burned (Thousands)
300
250
200
150
100
50
-
Deciduous
Evergreen
Mixed Evergreen - Deciduous
Grassland / Shrubland / Non Veg
Pinyon - Juniper Woodland
Desert
Shrub
1960's
1970's
1980's
1990's
2000's
2010-2015
Decade

Tree Mortality

- Lower elevation pine mortality rate decreasing, high elevation red fir mortality rate increasing
- Rapid spread
- Species diversity has moderated the impact

Future of Tree Mortality?

Investment Considerations:

- One big pulse or a new normal
- Access
- Supply agreements
- Rapidly deteriorating blue stain wood from lands in the southern Sierra Nevada
- 20 year investment

CAL FIRE Fuels Reduction Targets

- 20,000 acres of broadcast prescribed burning
- 20,000 acres of fuels treatment, including chipping, thinning, pile burning, fuel breaks, etc.
- 250,000 annual defensible space inspections

Goals:

Healthy Forests
Resilience
Resistant to Wildfires
Diversity
Carbon Sequestration

Fuels Treatments, Thinning, Harvesting

- Thin stands to achieve management targets
- Preserve ecological attributes
- Create revenue, contain costs
- Carbon sequestration
- Reduce greenhouse gas emissions
- Rural economic security
- Rural energy independence

How Make Bioenergy Cost Competitive?

Integrated Landscape Level Projects:

- Combine fuels reduction with commercial harvest
- Sales of greenhouse gas and criteria air pollution reductions as mitigation offsets
- Monetize criteria air pollution reduction benefits
- Healthy forests, clean water

- Transportation biofuel
- Chip based engineered wood products
- Long term secure supply: cost effective supply chain from private and public forests to new plants


CCES ESR-1387
SFI Certified Sourcing
SFI-00008
Made in Canada
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High Hazard Zone Fuel Requirements

Is there enough material in High Hazard Zones to meet the BioRAM requirements?

- Haul costs
- Access
- Decay
- Equipment

BioMAT:

- First Power Purchase Agreements have begun to be negotiated
- How to keep program running, high pricing

BioRAM:

- Successful in keeping plants open for now
- How to support long term

CCA:

- Some CCAs specifically support biomass power
- Paying for the cost of programs like BioRAM

Cap and Trade

AB 109:

- Fire Prevention, Forest Health: $200,000,000
- Urban Forestry: $20,000,000
- SRA Backfill: $74,805,000

Cap and Trade Issues

- Capacity
- Expenditure by 6/30/2020, liquidation by 6/30/2022
- Large, landscape level projects
- Demand will help suggest funding by category

Forest Health Timeline:

Milestone	Date
Revise Procedure Guides	11/3/2017
Advertise Public Workshops	11/15/2017
Hold Public Workshops	11/30/17-12/6/17
Deadline for Concept Proposals	1/30/2018
Evaluation and Selection	2/15/2018
Deadline for Project Applications	4/15/2018
Evaluation and Selection	5/15/2018
Award	5/30/2018

Good Neighbor Authority

GNA Implementation Challenges

- Environmental compliance, state and federal
- Grant administration and tracking
- Two agreements, GNA and Wyden
- Crew availability limited during fire season, access in winter

GNA Lessons Learned

- Start administrative work early
- Start communication with federal partners early
- Coordinate state agencies, anticipate issues
- Perfect internal processes
- Combine GNA and Wyden documents