

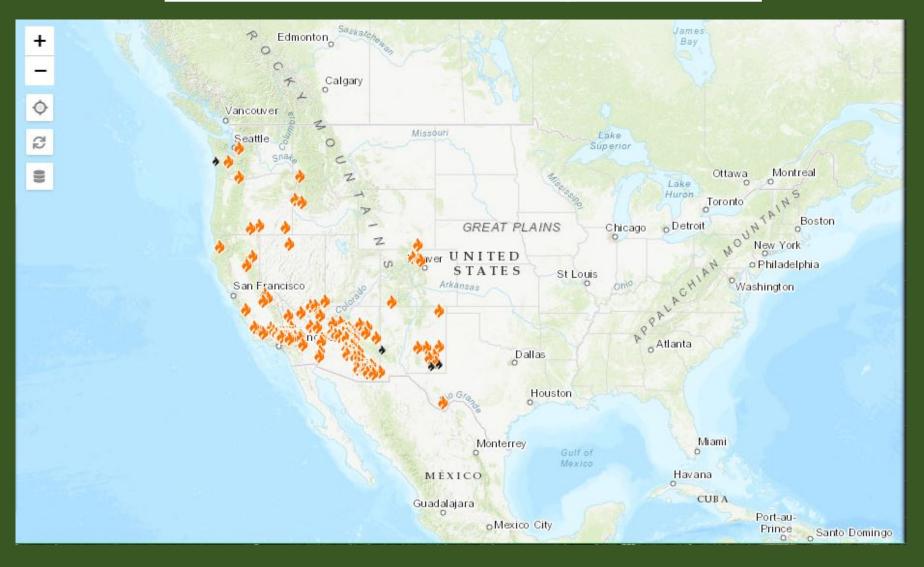
Wildfires and Habitat Management for Utilities

Postcards from the ROW Edge

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Davey Resource Group, Inc.

Dan Williams, Project Developer Davey Resource Group, Inc.

Active Fires February 14, 2019





Wildfires, Habitat... AND ROW

- Wide range of ecosystem diversity intersects ROW corridors: desert, tropical, alpine meadow...
- ROWs exist <u>within</u> each ecosystem landscape
- Fires happen
 - some ecosystems have evolved to depend on fire and require "fire" like conditions for sustainability

To:
The Rights-of-Way as

Habitat Working Group

c/o Iris Caldwell

ERC - UIC

Chicago, 11 60607

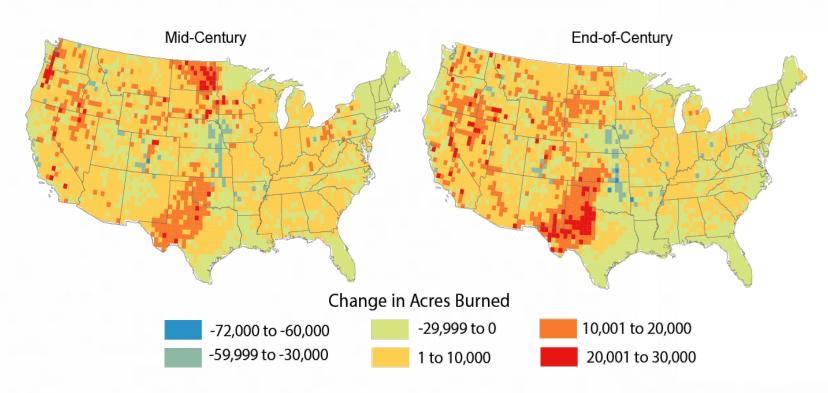
...the ROW edge Anywhere, USA

Projected Mid-21st Century/ End 21st Century Fire Activity



Figure 1. Projected Impact of Unmitigated Climate Change on Wildfire Activity

Change in average annual acres burned under the Reference scenario by mid-century (2035-2064) and end of century (2085-2114) compared to the historic baseline (2000-2009) using the IGSM-CAM climate model. Acres burned include all vegetation types and are calculated at a cell resolution of 0.5° x 0.5°.



Source: US EPA For more information, visit EPA's "Climate Change in the United States: Benefits of Global Action" at www.epa.gov/cira.



Changing Conditions & Consequences

- Historical and varied forest management practices
- Drought, forest pests and habitat conversion resulting from climate change
- The Wildland Urban Interface and Land Use Planning
- Increased frequency of incidents competes with resources required for recovery

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CalTrans Tree Mortality Mitigation Project, Davey Resource Group, Inc.



A Western DOT Highway Manager Perspective

- Traditional on-ROW considerations (clearance and hazard abatement)
- Concern for ignition sources: dragging chains/hot rims
- Defensible space considerations
- Post fire erosion control

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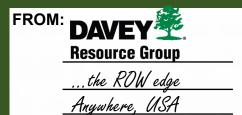
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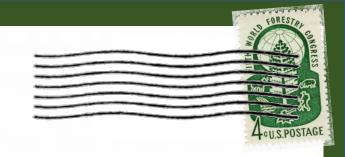
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Western Transmission ROW, Davey Resource Group, Inc.





An Energy Utility Manager Perspective

- Compliance & Risk Management Come First
- Scale of the management challenge
- Asset protection and system continuity
- Poor habitat vegetation types may support operational objectives

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Post Fire Considerations

- The concept of Recovery
 - In Nature (self-managed) systems
 - In Non-natural (human-altered & managed) systems
- Fire intensity affects vegetation recovery; weed and invasive management may be required
- Erosion control and site disturbance
- Regular, consistent management is required to avoid a reoccurrence of dangerous fuel loads

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