Dudek

- Founded in 1980
- Employee-owned
- 400+ planners, scientists, civil engineers, and support staff
- 12 offices in California, Oregon, and Hawaii
- Proven track record working in the development, energy, conservation, and education industries
Offices in 13 locations
Projects in 40 states
Specialists for any task

We work where you work.
With multidisciplinary teams strategically spread across the west, Dudek teams can quickly mobilize to your project site.
If we aren’t working there yet, chances are you’ll see one of our orange vests soon…
Overview

01 Urban Forest Management Plan Update
02 Wildfire Tree Hazard Assessment
03 Next Steps
Urban Forest Management Plan

Framework for a Sustainable Urban Forest
Assessment of the Urban Forest

- Tree Canopy Cover of 26%
- City Managed Trees Valued at $121 Million
- Palms account for 20% of the City Inventory but only 3% of leaf area
- Monoculture street tree planting makes neighborhoods susceptible to mass tree removals
- Tree species suitable for a changing climate
Assessment of Internal Practices

- Extremely well funded urban forest program
- Trees pruned and maintained at a high level
- Stronger policies and ordinances needed to preserve trees on private property
- Clarification needed on internal tree standards
- A desire to create a model urban forest program
Next Steps

- Developing City standards to be shared across departments
- Solidifying tree species palate
- Recommendations for updates to ordinances
- More community engagement
- Developing long-term strategy with City
Wildfire Tree Hazard Assessment

Strategies for a Fire Safe Community
Very High Fire Hazard Severity Zone
Trees and Landscape Can Facilitate Fire Spread
Methods

Private Trees
- High spectral imagery
- Arborist/forester – remote sensing with GIS
- Mapping potentially higher flammability trees
- Cedar, cypress, eucalyptus, juniper, palm and pine
- Created Distribution maps

Public Trees
- City’s tree inventory and mapping data
Observations
Private Property vs City Managed Trees

**Private Trees**
- Estimated 9,600 to 17,000 higher flammability tree types
- Approximately 25% of the total trees north of Sunset Blvd.

**Public Trees**
- 3,500 higher flammability tree types
- 45% of the total trees north of Sunset Blvd.
Private Property vs City Managed Trees

**Private Trees**
- Trees within defensible space – within 100 feet of structures
- Varying maintenance levels
- More dense, uninterrupted fuels in landscape
- Adjacent to varying levels of hardened structures

**Public Trees**
- Highly maintained
- Lifted crowns
- Crown separation
- High internal fuel moisture
- Trousdale Pines Topped
- Palms along evacuation corridors
Recommendations: Private Trees

- Restrict higher flammability tree types within 100 feet of structures
- Stronger fuel modification ordinances
  - City’s Fuel Modification Standard (Pending)
  - Set higher flammability trees back from structures
  - Restrict replacement of these tree types to approved species list
- Maintaining existing trees at high, ignition resistant levels – public outreach plan
Recommendations: **Public Trees**

- Topped Trousdale trees varying conditions – many considered less than good – removal justified
- Future Pipeline replacement Coldwater Canyon will require tree removals
- Potential risk of tree or tree part failure during evacuation
  - Increased maintenance/crown thinning on evac corridor trees
  - Increased inspections on trees to reduce risk of failures
  - Evacuation Pre-Planning to include dealing with downed trees on roadways
Dudek to continue evaluations and refine recommendations
Immediate Next Steps

Next Steps for Privately Owned Trees

- Individual homeowner’s tasked with creating hardened landscapes and maintaining them
- City enforcing landscape requirements and triggers for replacing more vulnerable trees
- Structural hardening through retrofits of existing residences would be valuable
Next Steps

Publicly owned trees – Short Term

▪ City conduct tree failure risk assessments on evacuation corridors (whole tree, tree part, hardscape related, etc.)
▪ City start higher corridor tree maintenance and inspection program
▪ City determine the extents of tree removal for:
  ▪ Pipeline replacement work (Coldwater Canyon)
  ▪ Poor condition/future issue trees (Trousdale)
▪ City evaluate short- and long-term tree removal and replacement along evac corridors
Next Steps

Publicly owned trees – Longer Term

- Based on results of tree failure risk assessments, remove and replace trees identified as very high and high risk.
- As remaining trees are removed, replace with acceptable species from approved list for VHFHSZ.
- Enforcement of fuel mod standards on private property.
- Fire Code Official review landscape plans in HFHSZ.
- City or 3rd Party inspections of landscape installations.
- City or 3rd Party ongoing fire hazard inspections.
Questions & Answers

Beverly Hills Urban Forest Management Plan