

Deschutes County
Natural Hazards Goal 7
Plan And Code Review:
Wildfire Workshop

University of Oregon
Community Planning Workshop

April 23, 2015

Agenda

- Overview of Project
- Meeting Objectives
- Wildfire Risk in Deschutes County
- Existing Programs and Policies
- Model Ordinances and Best Practices
- Present Wildfire Research and Review of Deschutes Development Code
- Next Steps

Overview of Project

Task 1

Project Kick-Off:

Meeting with
County Staff
Working Group

Task 2

Review:

County Code
Review and NHMP
Cross-reference

Task 3

Research:

Literature/Best
Practice Review
Model Ordinances
Case Studies

Task 4

Work Sessions:

Present findings
to Planning
Commission and
Board of County
Commissioners

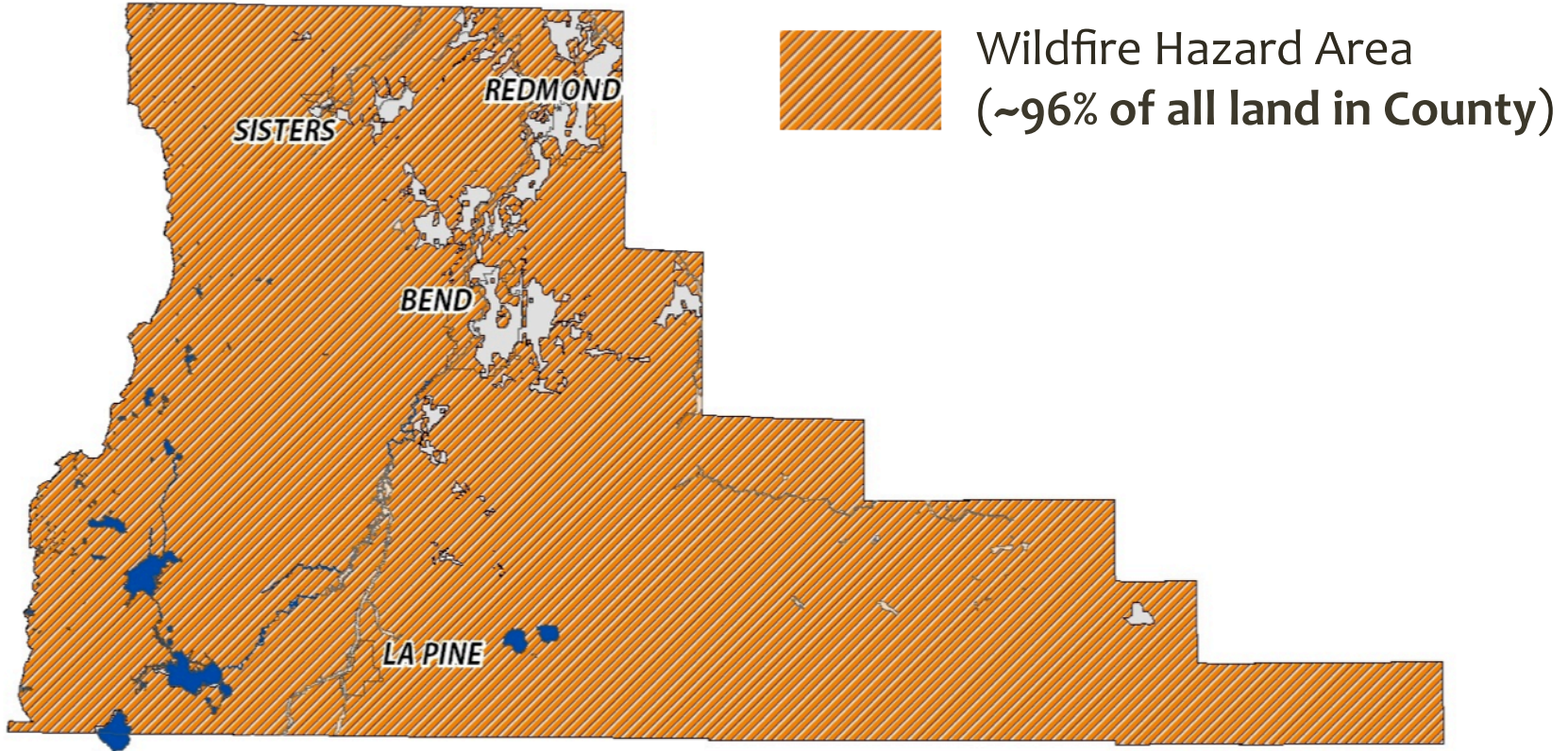
Meeting Objectives

- Informational
 - Current Policies
 - Review of Deschutes Development Code
 - Standards and Best Practices
 - Implications of adopting higher standards and best practices
- Recommendation: Transition from voluntary to regulatory wildfire hazard mitigation strategy

Wildfire Risk in Deschutes County

- Population Increasing
 - 2000-13: 41% increase (47,158 people)
 - 2013-25: 48% increase (forecast 78,300 people)
 - Rural, non-incorporated: 33% of growth (forecast 25,700 people, 10,400 households)
- Unprotected residential development

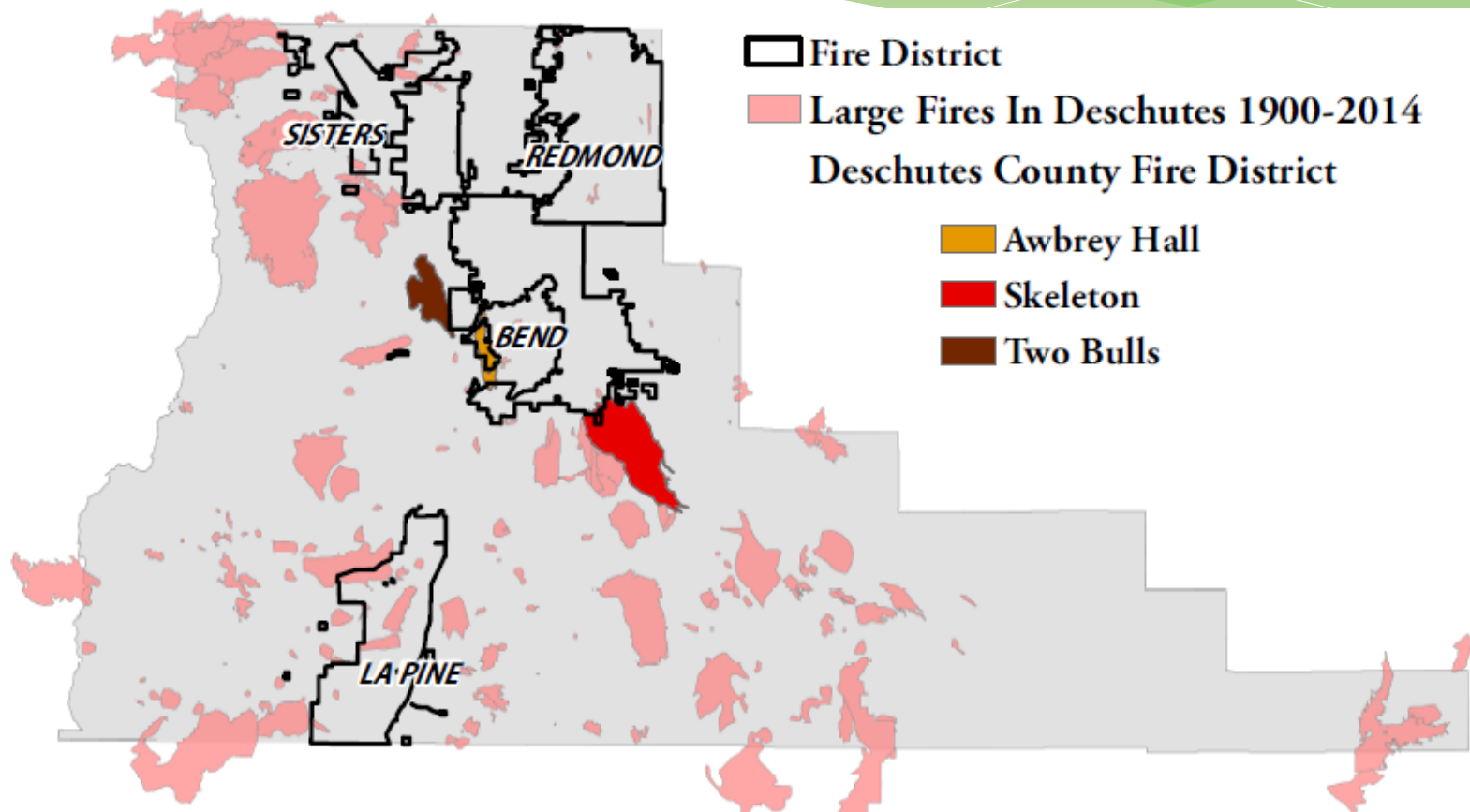
Wildfire Risk in Deschutes County



Wildfire History in Deschutes County

Two Bulls Fire, 2014	<ul style="list-style-type: none">• 7,000 acres• Cost \$5.7 million to suppress
Skeleton Fire, 1996	<ul style="list-style-type: none">• 18,000 acres• 30 structures damaged or destroyed• Led to launch of FireFree in 1997
Awbrey Hall Fire, 1990	<ul style="list-style-type: none">• 3,500 acres• 22 homes• \$9 million in damage; cost \$2 million to suppress

Wildfire History in Deschutes County



Oregon and Deschutes County Programs and Policies

- Oregon State Senate Bill 360
- Natural Hazards Mitigation Plan
- Community Wildfire Protection Plans
- Project Wildfire
 - FireFree Program
- Comprehensive Plan Policies

Oregon and Deschutes County Programs and Policies

Senate Bill 360

- “Oregon Forestland-Urban Interface Fire Protection Act of 1997”
- Property owners responsible for fuel management on their property
- Compliance = exempt from liability if fire originates on their property

Oregon and Deschutes County Programs and Policies

Natural Hazards Mitigation Plan

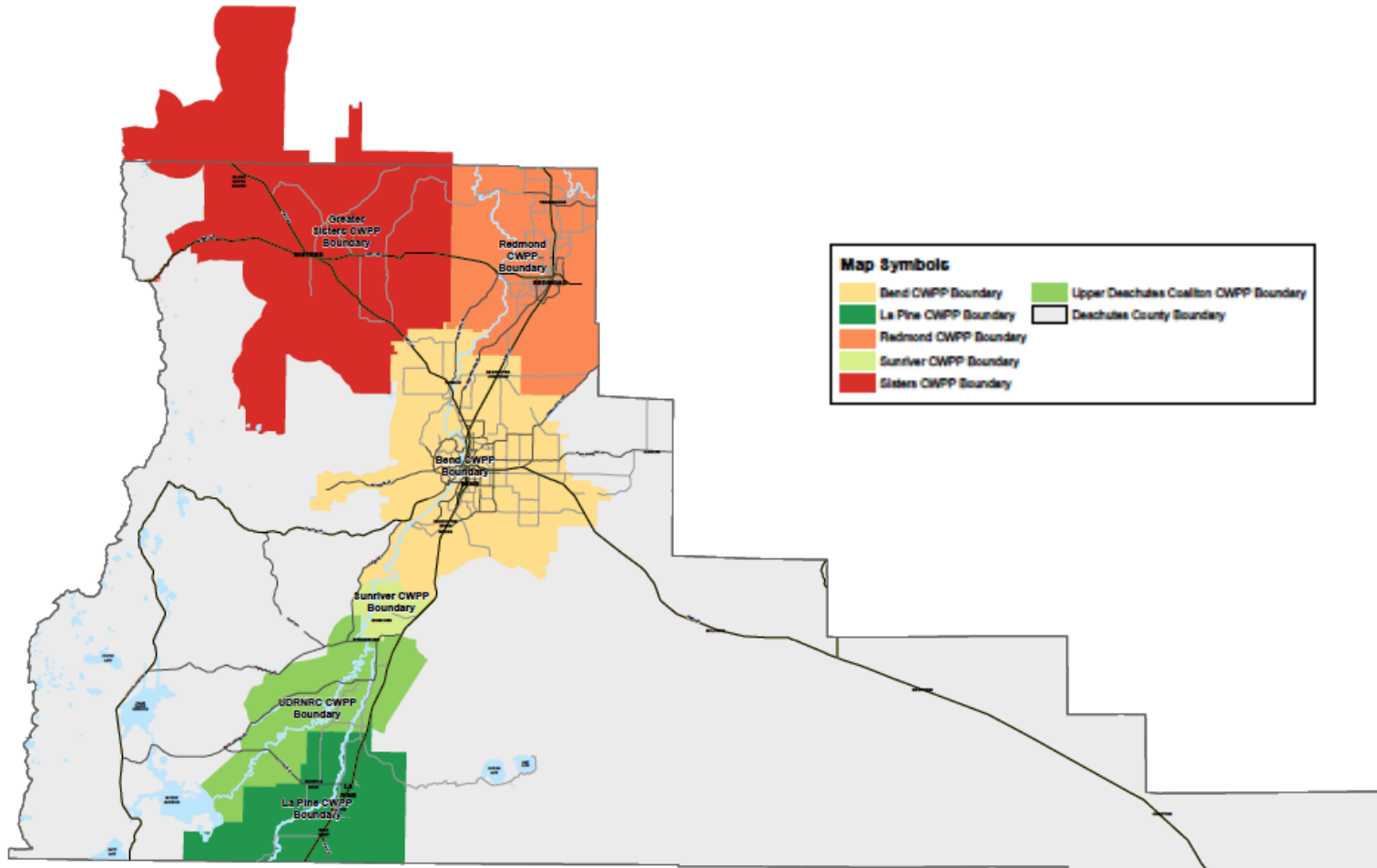
- 2010 NHMP → 2015 NHMP (Expected June 2015)
- Wildfire Action Items
 1. Expand public information/outreach to support fuel treatments
 2. Review/upgrade building and land use codes to address landscapes, structures, and fuels
 3. Continue prioritization/support for fuels reduction on private lands by utilizing FireFree and other programs

Oregon and Deschutes County Programs and Policies

Community Wildfire Protection Plans

- Identify interface areas and prioritize fuels reduction projects.
- Developed by community stakeholders, facilitated through Project Wildfire

Deschutes County CWPPs



Oregon and Deschutes County Programs and Policies

Project Wildfire

- Facilitates long-term wildfire mitigation strategies to provide for a disaster-resistant community
- Coordinates FireFree program
 - Homeowner outreach
- Implements projects identified in CWPP's using grant money
- Destination Resorts → Firewise Communities

Deschutes County Policies

Comprehensive Plan Section 3.5 Natural Hazards

- 3.5.4 Provide incentives and if needed regulations to manage development in hazardous areas
- 3.5.7 Address wildfire danger particularly in the wildland urban interface.
- 3.5.8 Support forest management practices that reduce severe wildfire hazard areas
- 3.5.9 Support local fire protection districts and departments
- 3.5.11 Review and revise County Code as needed

Model Ordinances

- International Wildland-Urban Interface Code (2012)
- National Fire Protection Association (NFPA) Standards
 - 1141- Infrastructure and Land Development
 - 1144- Structural Ignition

Best Practices

- *City of Ashland, OR Land Use Code*
- *Boulder County, CO Land Use Code*
- *Jefferson County, CO Wildfire Hazard Overlay Zone*
- *Wildfire Mitigation in Florida: Land use planning strategies and best development practices*

Code Review & Policy Options

Best Practices Option: Policy option derived from research and comparison to Deschutes County Code

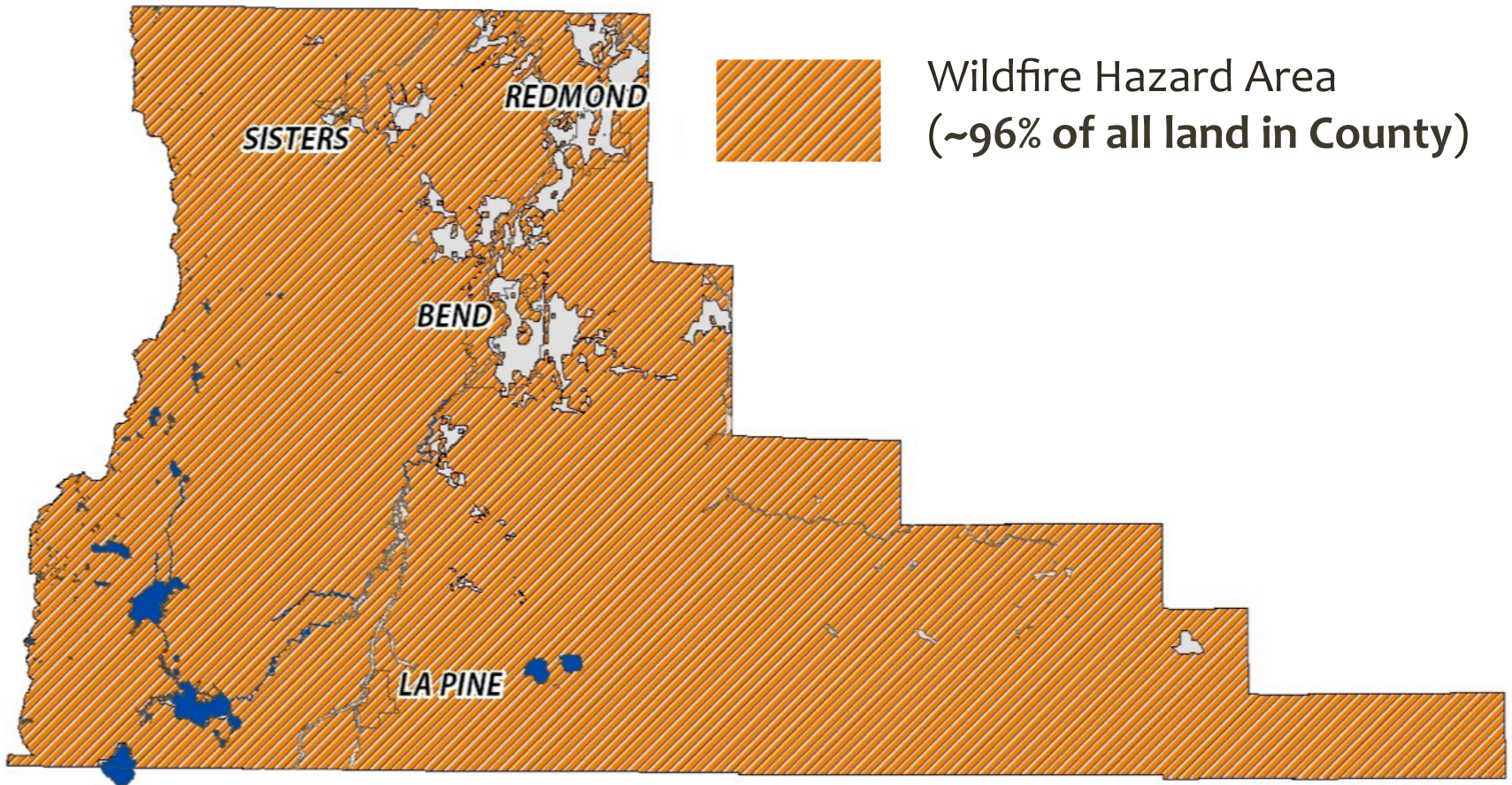
Applicable DDC: To which development code does this apply?

Implication: How is this suggestion different from what Deschutes County is currently doing? Who might be affected and how?

Code Review Objectives

- What options should we include in our report?
- What additional information would be useful in understanding the implications of each option?

WILDFIRE HAZARD COMBINING ZONE



WILDFIRE HAZARD COMBINING ZONE

Best Practices Option: Utilize an overlay zone to broadly regulate land uses regarding wildfire hazards. (Jefferson County, Colorado)

Applicable DDC: Title 18 Zoning

Implication: Eliminates the need to individually prescribe wildfire provisions for each base zone. Provides clear, consistent requirements for developers and property owners.

Roofing Standards



- Shake roofing currently allowed if Class B or higher
- Must be treated with fire-resistant material to achieve Class B
- 2007 Witch Creek, CA Wildfire: 100% of homes with wood shake roofs destroyed vs. 24% of homes with tile roofs

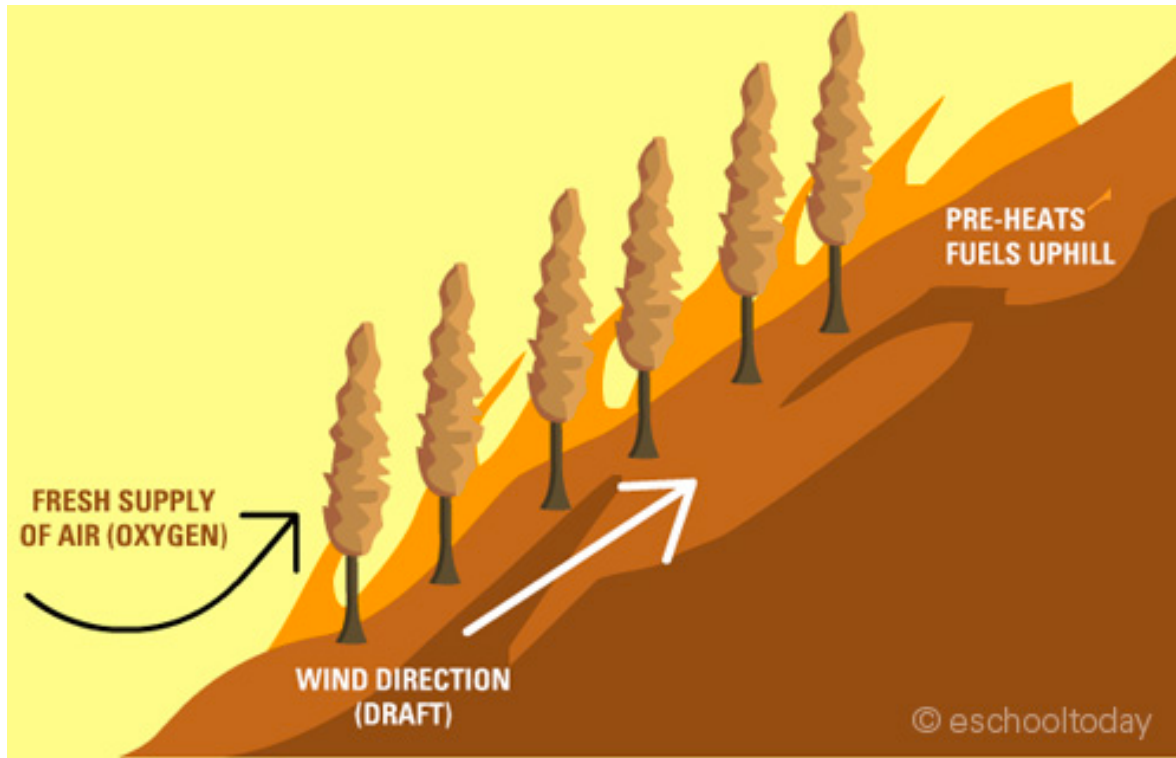
ROOFING STANDARDS

Best Practices Option: Specifically prohibit shake roofs in Wildfire Hazard Zones.

Applicable DDC: 15.04.085 Wildfire Hazard Zones

Implication: Decreased likelihood of ignition for all new structures built in Wildfire Hazard Zones.

Steep Slopes



- Fire travels rapidly up hills.
- Single-family homes are currently allowed on slopes as steep as 40% (Forest Use Zones).
- >30% is maximum risk category in ICC Hazard Severity Form.

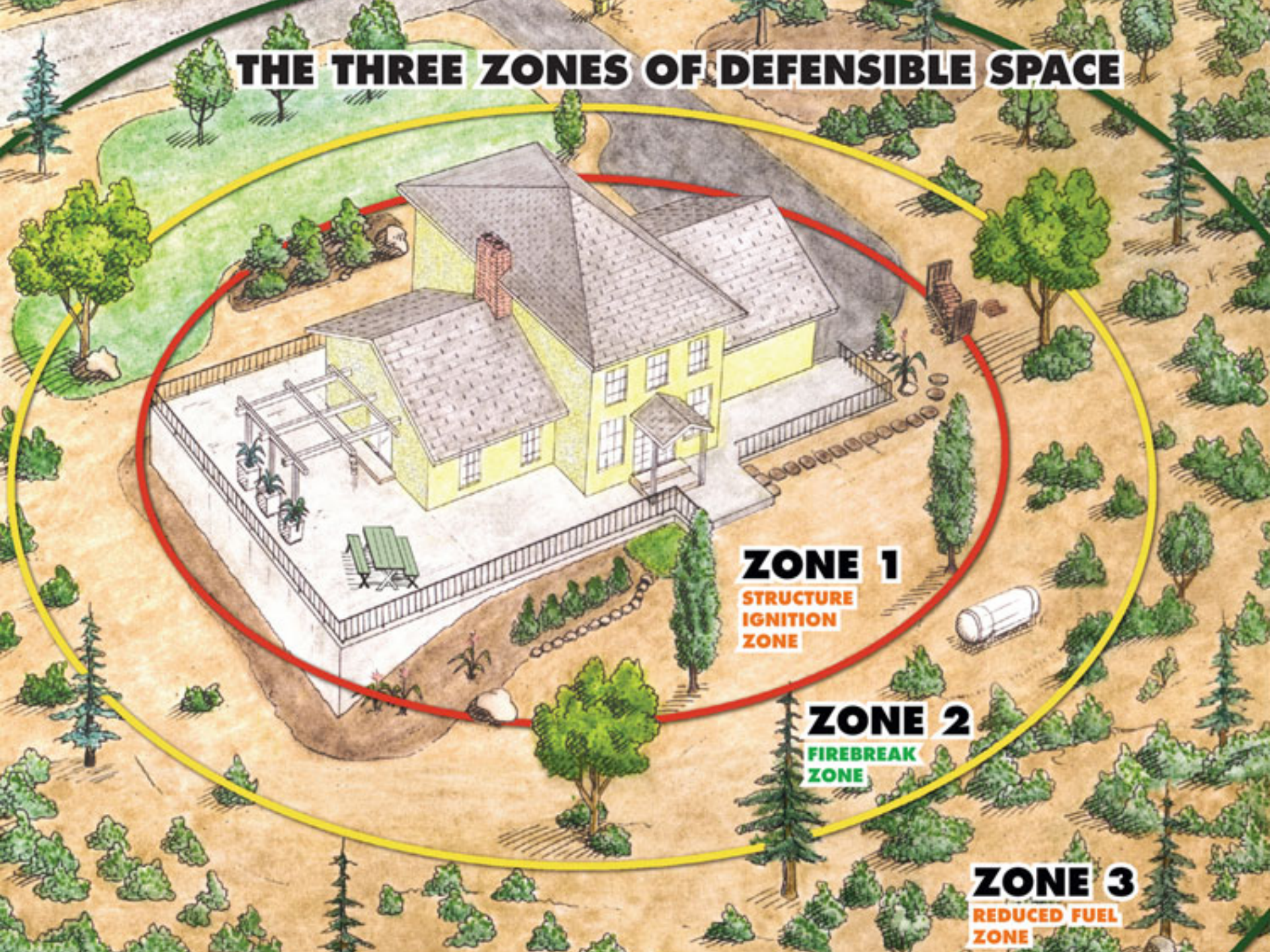
STEEP SLOPES

Best Practices Option: Lower maximum slope grade to 25%. If permitted, require greater defensible space for structures built on slopes >25%.

Applicable DDC: 18.36.070 Fire Siting Standards for Dwellings and Structures (Forest Use Zone), 18.40.070

Implication: Limits freedom to develop for landowners in areas of steep slopes. Decreases risk for residents, their property, and firefighters.

THE THREE ZONES OF DEFENSIBLE SPACE



ZONE 1
STRUCTURE
IGNITION
ZONE

ZONE 2
FIREBREAK
ZONE

ZONE 3
REDUCED FUEL
ZONE

DEFENSIBLE SPACE

Best Practices Option: 100-200ft zone around home. Split up into three zones. Standards from Firewise, NFPA 1144 and ICC

Applicable DDC: 17.16.030 Subdivision Information Requirements, 17.16.050 Master Development Plan, 18.113 Destination Resorts

Implication: Decreased risk to residential developments, increased workload for County inspector.

Firewise Recognition



5 Steps to Recognition:

1. Community assessment and action plan
2. Local Firewise Task Force Committee
3. Firewise Day each year
4. \$2 per capita on Firewise projects
5. Annual report to Firewise

FIREWISE RECOGNITION

Best Practices Option: Use Firewise Recognition Program to create an ongoing neighborhood action plan.

Applicable DDC: 17.16.030 Subdivisions, 18.113.060 Destination Resorts

Implication: Earns neighborhood national recognition, can reduce insurance premiums, protects community from wildfire risk.

Firewise Recognition



Caldera Springs

Deschutes County Communities:

- Aspen Lakes (Sisters)
- Awbrey Glen (Bend)
- Caldera Springs (Sunriver)
- Fall River Estates (Bend)
- Ridge at Eagle Crest (Redmond)
- Wild River (La Pine)

NFPA 1141- FIRE PROTECTION INFRASTRUCTURE

Best Practices Option: Access, Building Separation, Fire Protection, Water Supply, Community Safety & Emergency Preparedness

Applicable DDC: 17.16.030 Subdivisions, 18.113 Destination Resorts

Implication: Additional restrictions and requirements to developers. Achieves Comprehensive Plan Policy 3.5.11B. Increases abilities of emergency responders to protect life and property.

NFPA 1144- REDUCING STRUCTURE IGNITION

Best Practices Option: Structure Ignition Zone, Hazard Mitigation, Proper Construction, Fuel Modification

Applicable DDC: 17.16.030 Subdivisions, 18.113 Destination Resorts

Implication: Additional restrictions and requirements to developers. Requirements that would help protect spread of wildfire and loss of homes and properties.

FIRE APPARATUS ACCESS

Best Practices Option: NFPA 1141 (3) points of access in large developments, ICC all weather roads, minimum width and height, turning radius.

Applicable DDC: 17.36.260 Subdivision Fire Hazard Design Standards

Implication: Higher access standards for emergency responders to help prevent the loss of structures. Provides additional evacuation routes for residents.

ROAD/ADDRESS IDENTIFICATION SIGNS

Best Practices Option: International Wildland-Urban Interface Code 403.4 & 403.6

Applicable DDC: 18.36.080 Fire Safety Design Standards for Roads

Implication: Creates accessible signage for emergency responders to quickly locate and identify residences.

WILDLAND FIRE HAZARD ASSESSMENT

Best Practices Option: Conduct wildland fire hazard assessment to assess hazard and risk. NFPA 1144 and ICC.

Applicable DDC: 18.36.040 Forest Zones 1 and 2

Implication: Additional staff time for individual assessments, provides specific mitigation action items for property to address before development.

WILDFIRE MITIGATION PLANS

Best Practices Option: Wildfire Mitigation Plans included in Site Review from Kane County, UT and Boulder County, CO. Site plan that includes plan for defensible space, access, and water supply.

Applicable DDC: 18.124 & 19.76 Site Plan Review Requirements

Implication: Additional restrictions and requirements to developers. Addresses wildfire mitigation prior to development.

FIRE PREVENTION AND CONTROL PLANS

Best Practices Option: 2012 International Wildland-Urban Interface Code 405, City of Ashland Land Use Ordinance 18.3.10.100

Applicable DDC: 17.16.050 Master Development Plan

Implication: Provides clear expectations for developers, wildfire planning considered in early phases of planning

FIRE PROTECTION PROOF

Best Practices Option: Land Development Regulations of Jefferson County, CO section 4.C.18
National Fire Protection Association (NFPA) 1141 & 1144

Applicable DDC: 17.16.030 Subdivisions Information Requirements

Implication: Additional administrative pressure on rural fire districts, may need to determine feasibility of possible annexation, could reduce economic use of land, confirms fire district will serve property.

Next Steps

- What didn't we cover?
- Suggestions moving forward
- Board of County Commissioners Work Session May 18th