

FIRE WISE LANDSCAPING

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Horticulture Dayz!

March 7, 2016

Front Royal, VA



PRESENTATION OVERVIEW

OVERVIEW

RISK

DEFENSE

LANDSCAPE

TAKE HOME

- **Historical natural fire regimes**
- **Effects of fire suppression, demographics, and climate change on wildfire risk**
- **Concept of “defensible space” for protecting woodland homes from wildfire**
- **Landscape plant selection and maintenance**
- **Feedback from you about Fire Wise**



www.firetrax.us

FIRE REGIMES

OVERVIEW

RISK

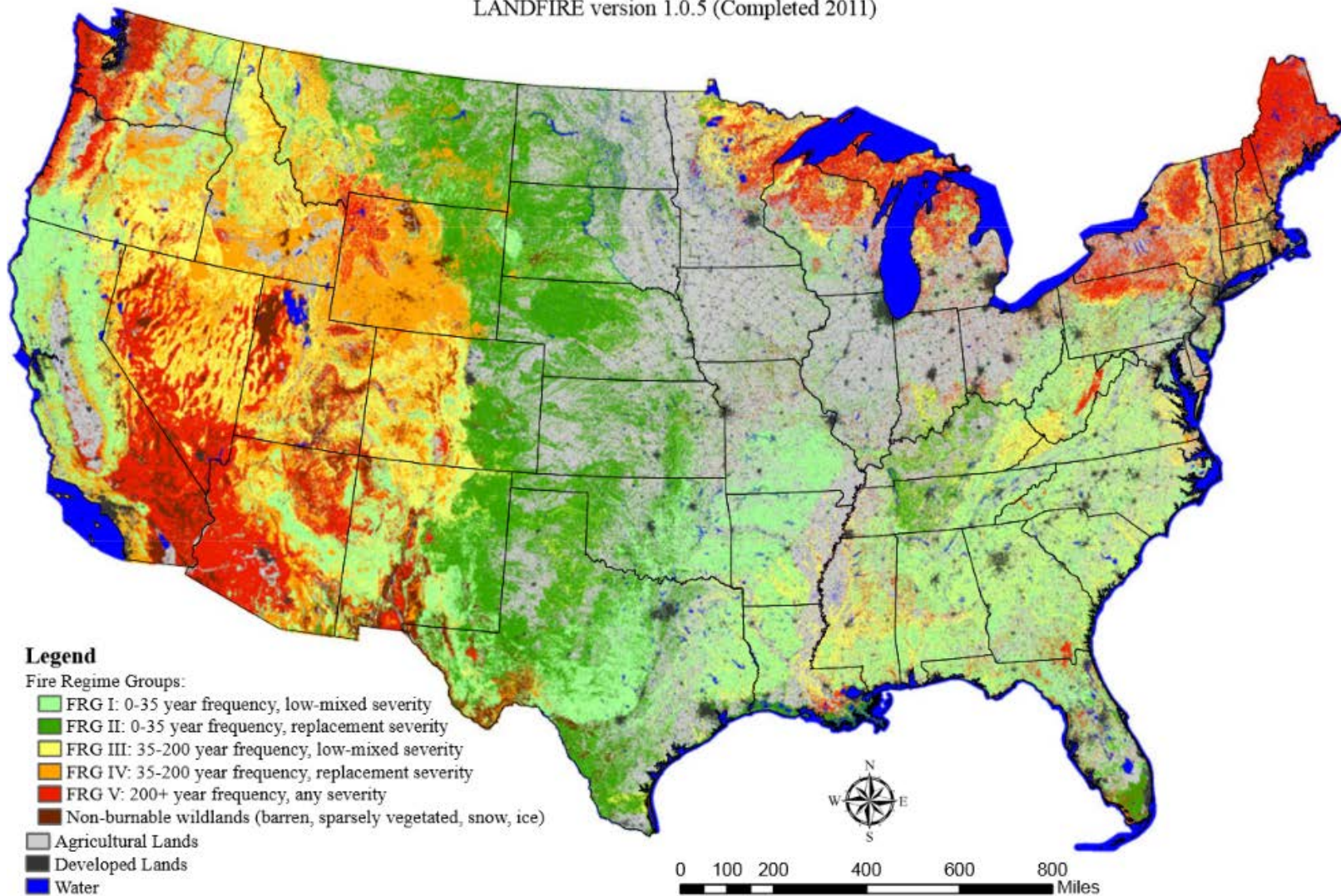
DEFENSE

LANDSCAPE

TAKE HOME

Historical Natural Fire Regimes

LANDFIRE version 1.0.5 (Completed 2011)



FIRE REGIMES

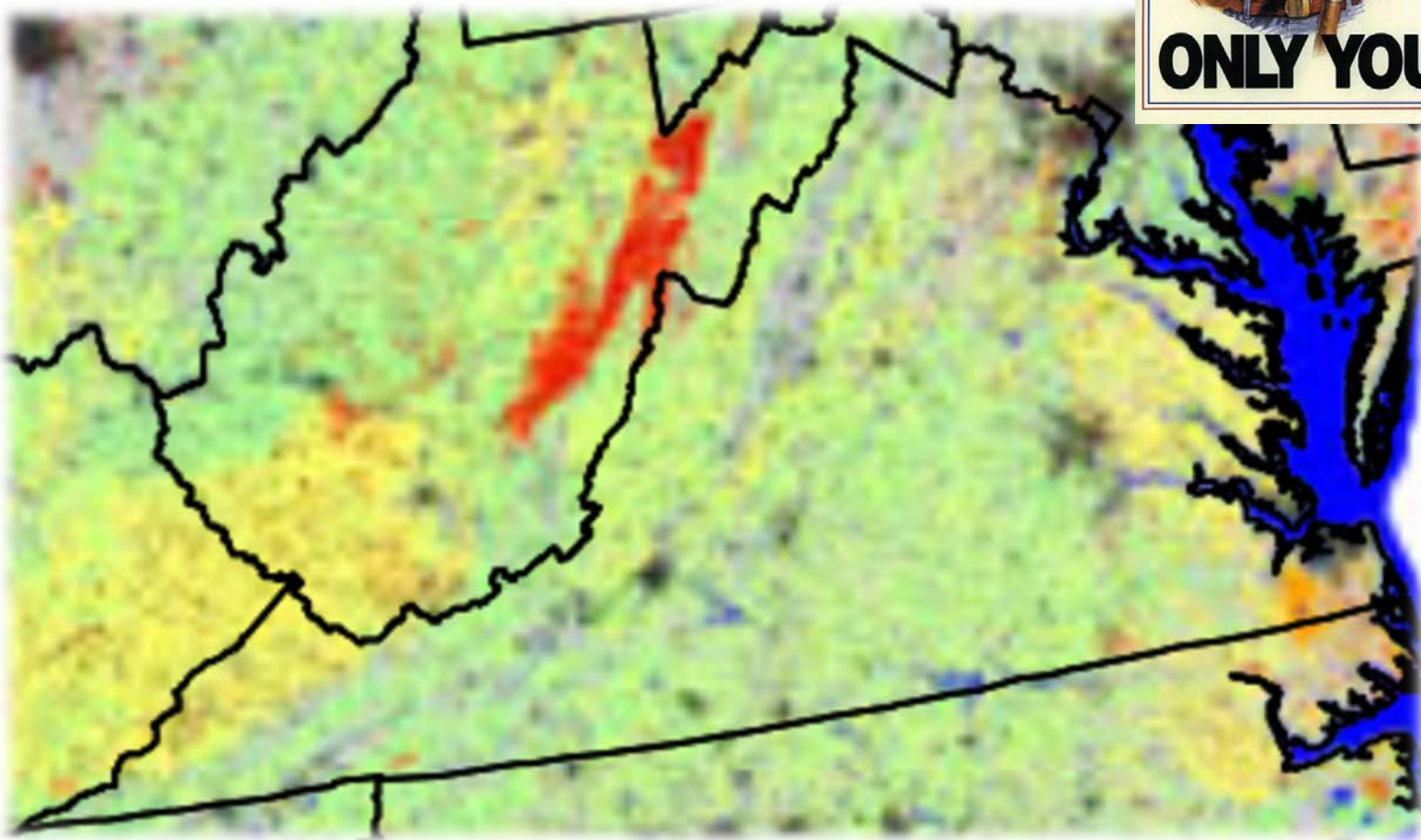
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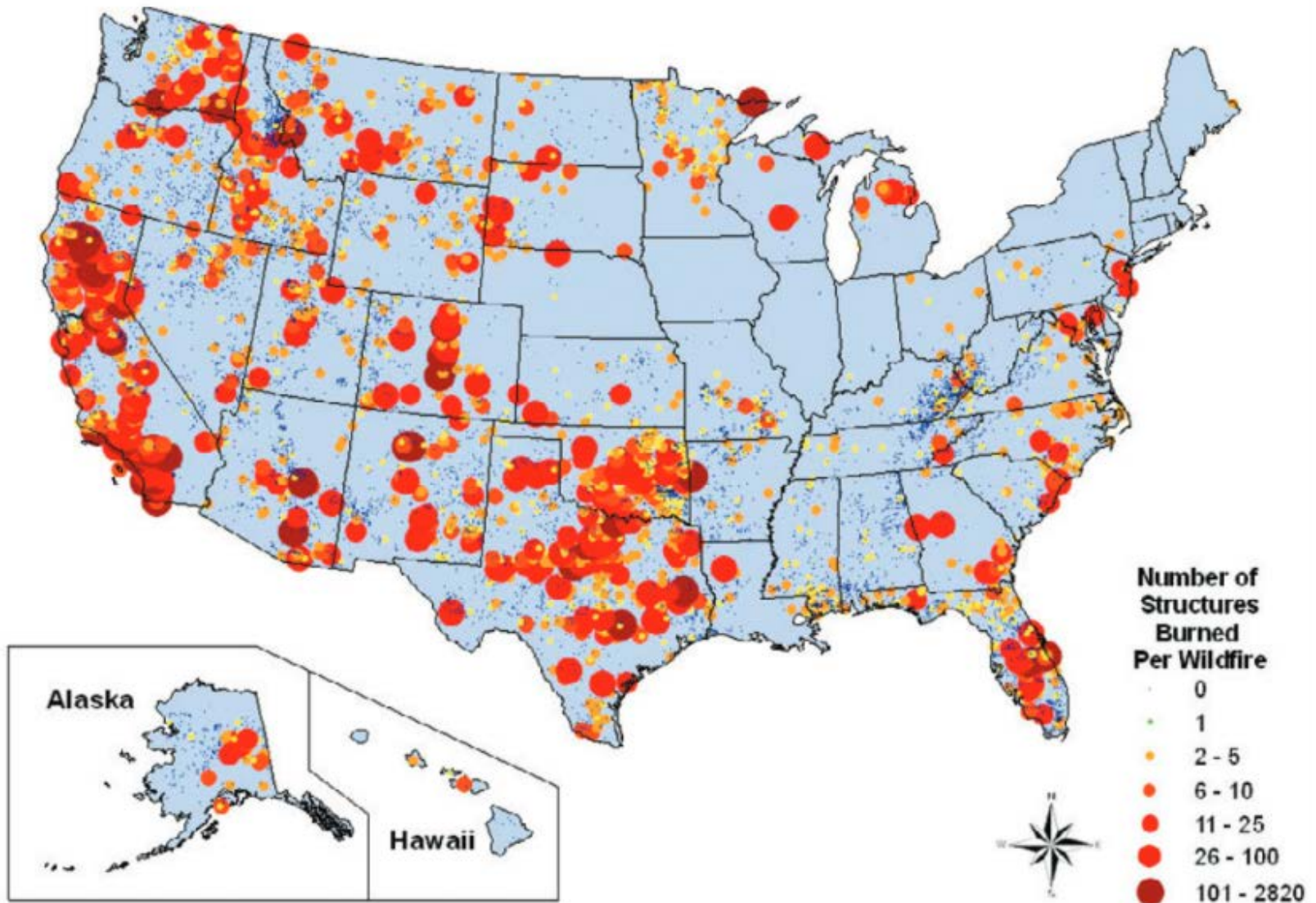
LANDSCAPE

TAKE HOME



WILDFIRE RISKS

Structures Lost to Wildfire 1999-2011



Source: US Forest Service, RMRS-GTR-299 (2013)

OVERVIEW

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WILDFIRE RISKS

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WILDFIRE RISKS

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- Over the past **15 years**, the number of woodland homes developments in Virginia has increased from **524** to **2,914** (source: dof.virginia.gov/fire/intro-forest-prot.htm)
- The number of dwellings in those developments increased from **18,203** to **138,111** (source: dof.virginia.gov/fire/intro-forest-prot.htm)
- **2010 population: 8.00 million**
2020 population: 8.81 million
2030 population: 9.64 million
(source: www.coopercenter.org/demographics/virginia-population-projections)



WILDFIRE RISKS

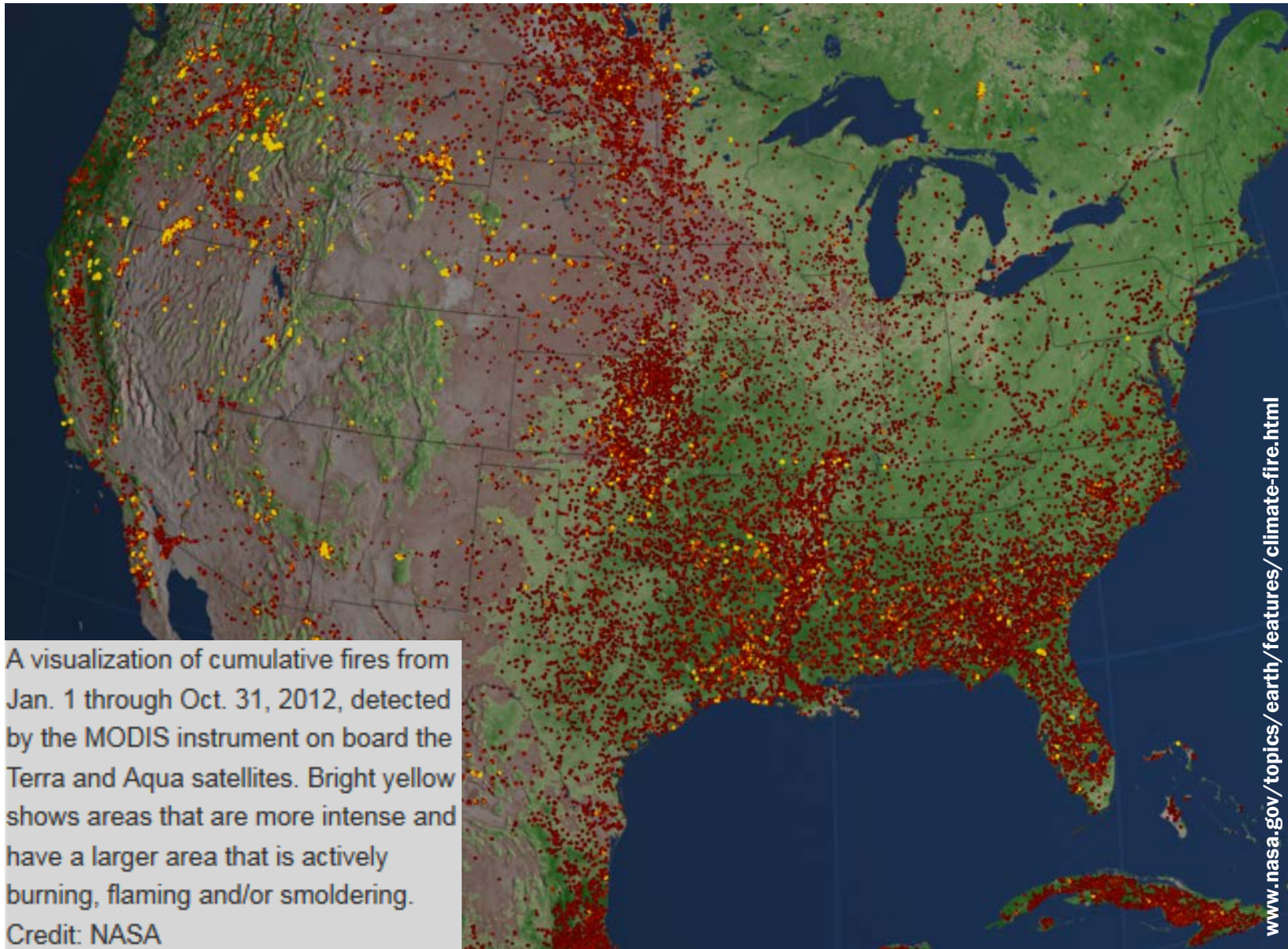
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WILDFIRE RISKS


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Climate Models Project Increase in U.S. Wildfire Risk 12.04.12

Scientists using NASA satellite data and climate models have projected drier conditions likely will cause increased fire activity across the United States in coming decades. Other findings about U.S. wildfires, including their amount of carbon emissions and how the length and strength of fire seasons are expected to change under future climate conditions, were also presented Tuesday at the annual meeting of the American Geophysical Union in San Francisco.

Doug Morton of NASA's Goddard Space Flight Center in Greenbelt, Md., presented the new analysis of future U.S. fire activity. The analysis was based on current fire trends and predicted greenhouse gas emissions.

"Climate models project an increase in fire risk across the U.S. by 2050, based on a trend toward drier conditions that favor fire activity and an increase in the frequency of extreme events," Morton said.

WILDFIRE RISKS


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The researchers calculated results for low and high greenhouse gas emissions scenarios. In both cases, results suggest more fire seasons that are longer and stronger across all regions of the U.S. in the next 30-50 years. Specifically, high fire years like 2012 would likely occur two to four times per decade by mid-century, instead of once per decade under current climate conditions.

DEFENSIBLE SPACE AGAINST WILDFIRE

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www.napafirewise.org

DEFENSIBLE SPACE AGAINST WILDFIRE

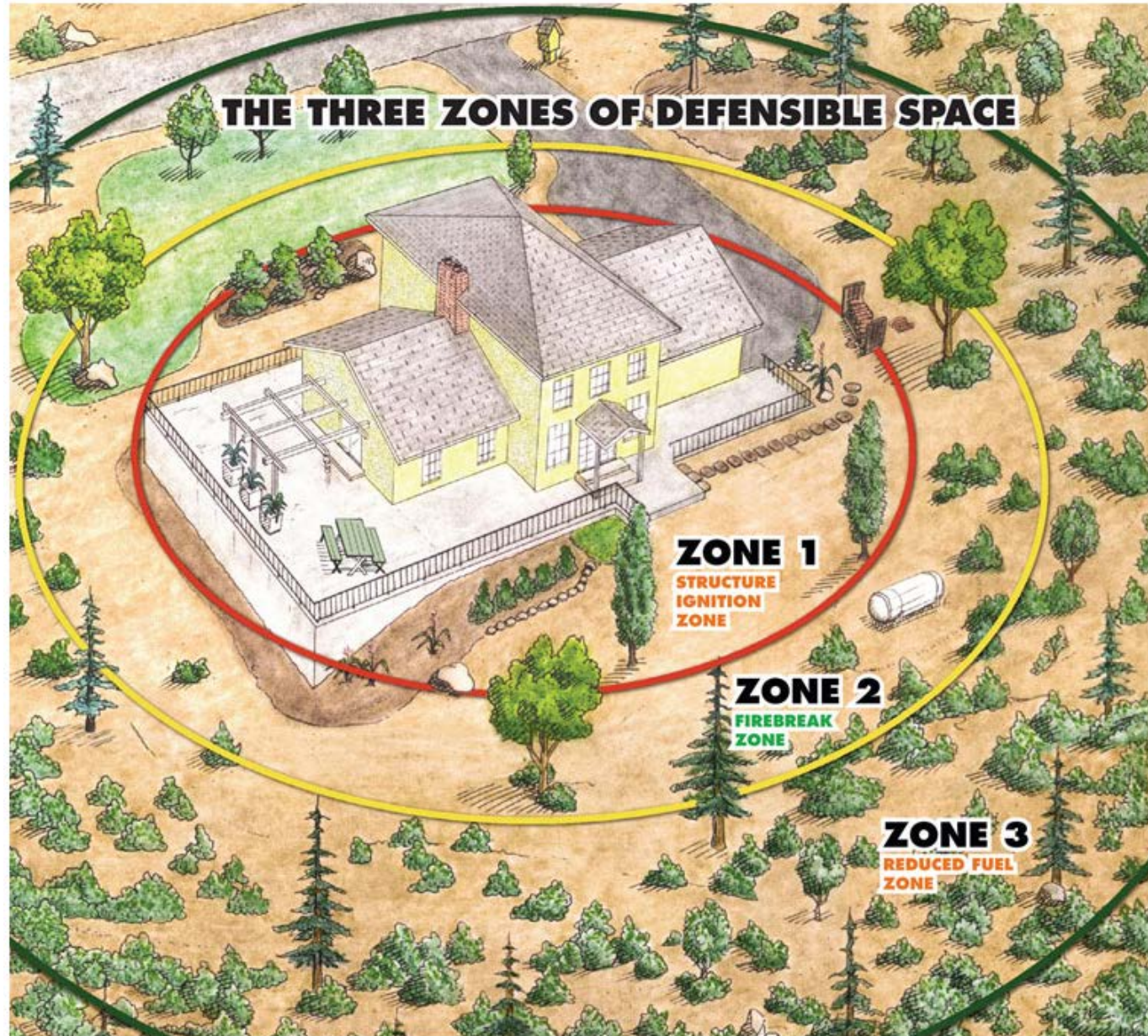
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DEFENSIBLE SPACE AGAINST WILDFIRE

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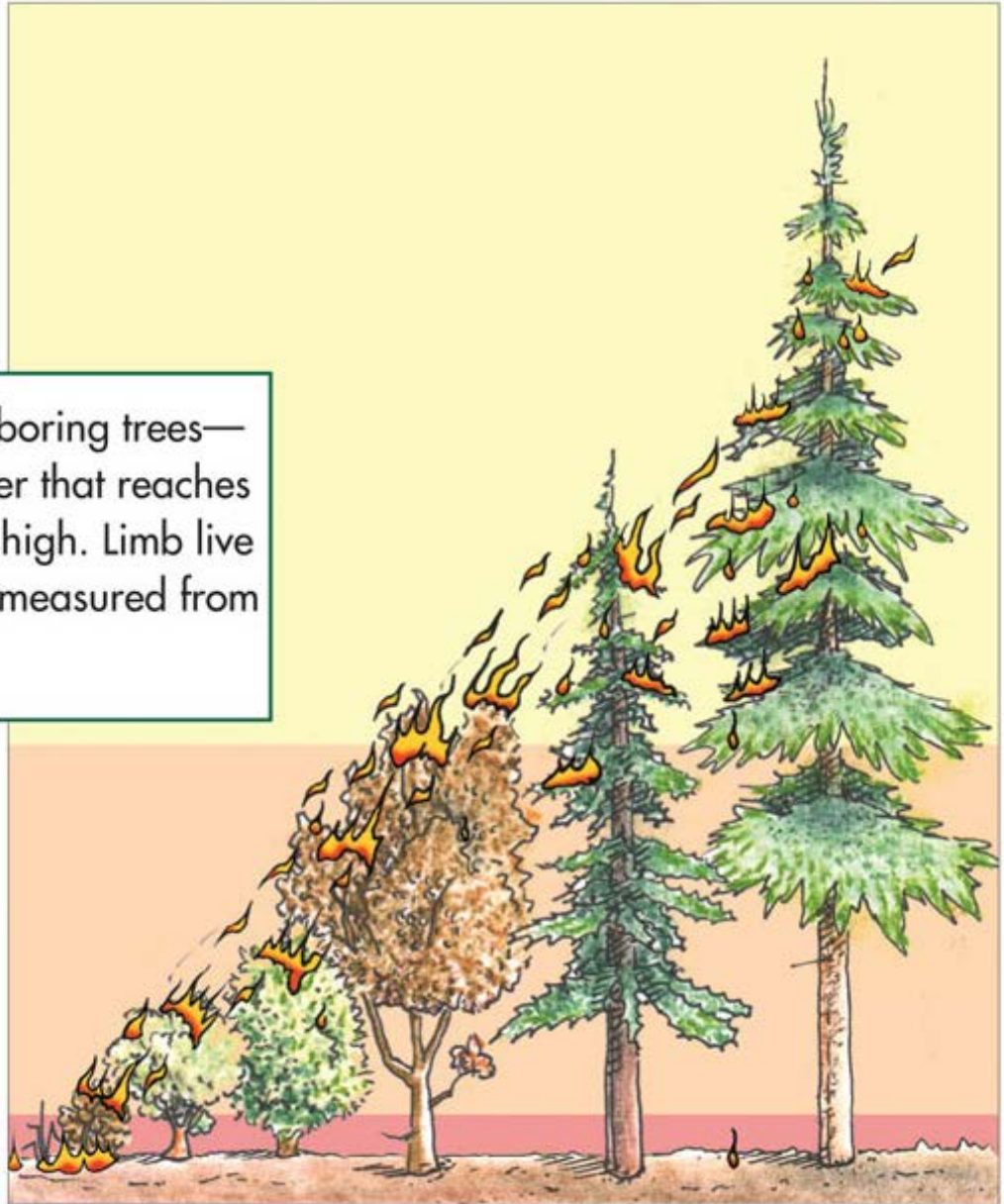
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Fire “climbs” neighboring trees—don’t give it a ladder that reaches from the low to the high. Limb live trees up 10 feet as measured from the uphill side.



DEFENSIBLE SPACE AGAINST WILDFIRE

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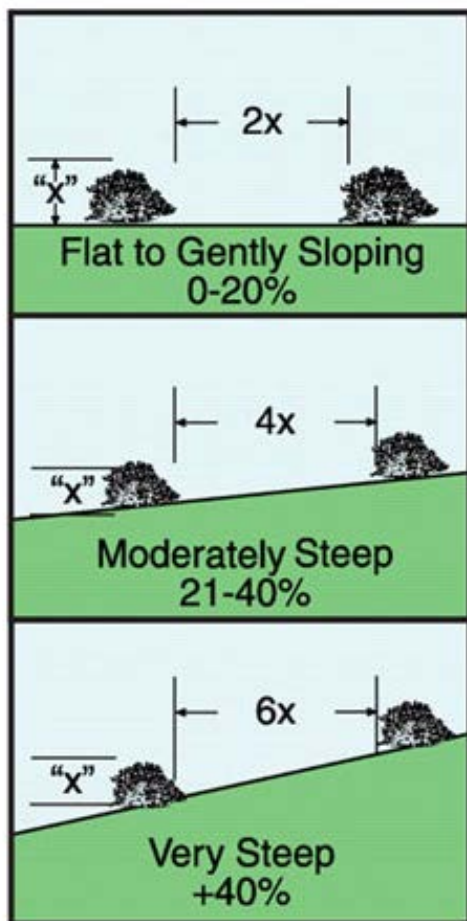
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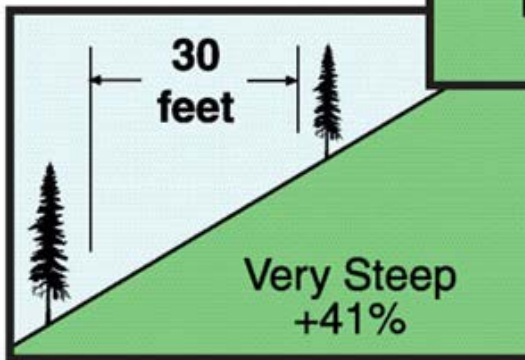
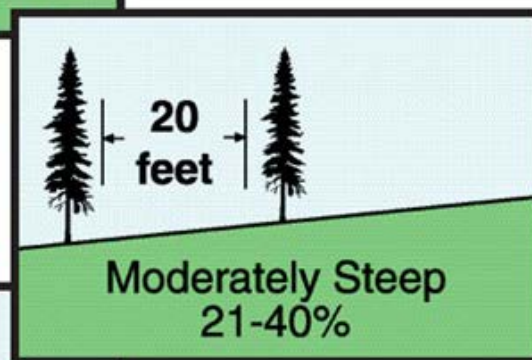
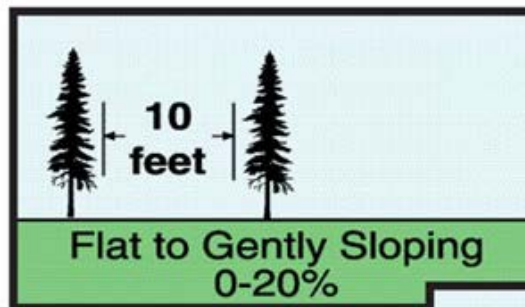
Recommended Separation Distances for Shrubs

For areas with dense brush, the recommended separation distance is dependent upon shrub height and steepness of slope. Specific recommendations are presented below.



Recommended Separation Distances Between Tree Canopies

For forested areas, the recommended amount of separation between tree canopies is determined by steepness of slope. The specific recommendations are presented here. Note: Separations are measured between canopies (outermost branches), not between trunks.



If your house is situated on a 30% slope, the separation of tree canopies within your defensible space should be 20 feet. Creating separation between tree canopies can be accomplished through tree removal.

DEFENSIBLE SPACE AGAINST WILDFIRE

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BEFORE:



*While clearing a defensible space zone is a lot like work,
a single individual with basic hand tools can accomplish a lot.*

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Fire Performance Plant Selector

www.fire.sref.info

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Firewise Zones

Getting Started

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- Personalizing Reports
- Using Reports

Plant
Selector

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Plant Height

Form

Native Plant

Growth Rate

Number of Trunks

Bark

Leaf Color

Leaf Surface

Leaf Arrangement

Leaf Type

Ignitable Leaf Characteristics

Leaf Persistence

Pest Resistance

Plant Search Results

Common

Scientific

Clear

Results

541 plants found

- allegheny serviceberry
- allegheny spurge
- alpine currant
- American beautyberry
- American beech
- American chestnut
- American devilwood
- American elm
- American hazelnut
- American holly
- American mountain-ash
- American plum
- American wisteria
- amur honeysuckle
- amur maackia
- amur maple
- Anglojapanese yew
- apple



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CREATING FIREWISE COMMUNITIES



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Wildfire Preparedness

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Action steps for homeowners

Wildfires don't have to burn everything in their path. Learn 7 tips that can help keep homes from igniting in a wildfire.



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TEACHING TOOLS



PROJECT IDEAS



SUCCESS STORIES



FOR ACTIVE FIREWISE
COMMUNITIES



Saving lives and property from wildfire

FROM OUR BLOG

Annual NFPA conference to feature wildland fire education sessions

Nevada, here I come! I'm heading out to Reno in the morning to participate in the annual IAFC WUI Conference, a great event geared toward the fire service and focused on wildland/urban interface fire safety. Pretty soon, I'll be back in the Silver State, a bit further south, in Las...

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Complete school community service requirements with risk reduction projects

As the school year starts to wind down and edges closer to semester's end - students, parents and school administrators everywhere, are stepping into that frenzied time zone where they're scrambling to wrap-up those required community service credit hours. If your middle and high school students are like my kids...

HEADLINES

Fight Brews Over Federal Wildfire Funding After Devastating Year

Air Force Academy is Firewise

Was 2015 a record year for wildfires?

Alaska sees most of acres burned in record year for US wildfires

Colorado's new wildfire prediction system ready for 2016

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www.firewise.org/wildfire-preparedness.aspx

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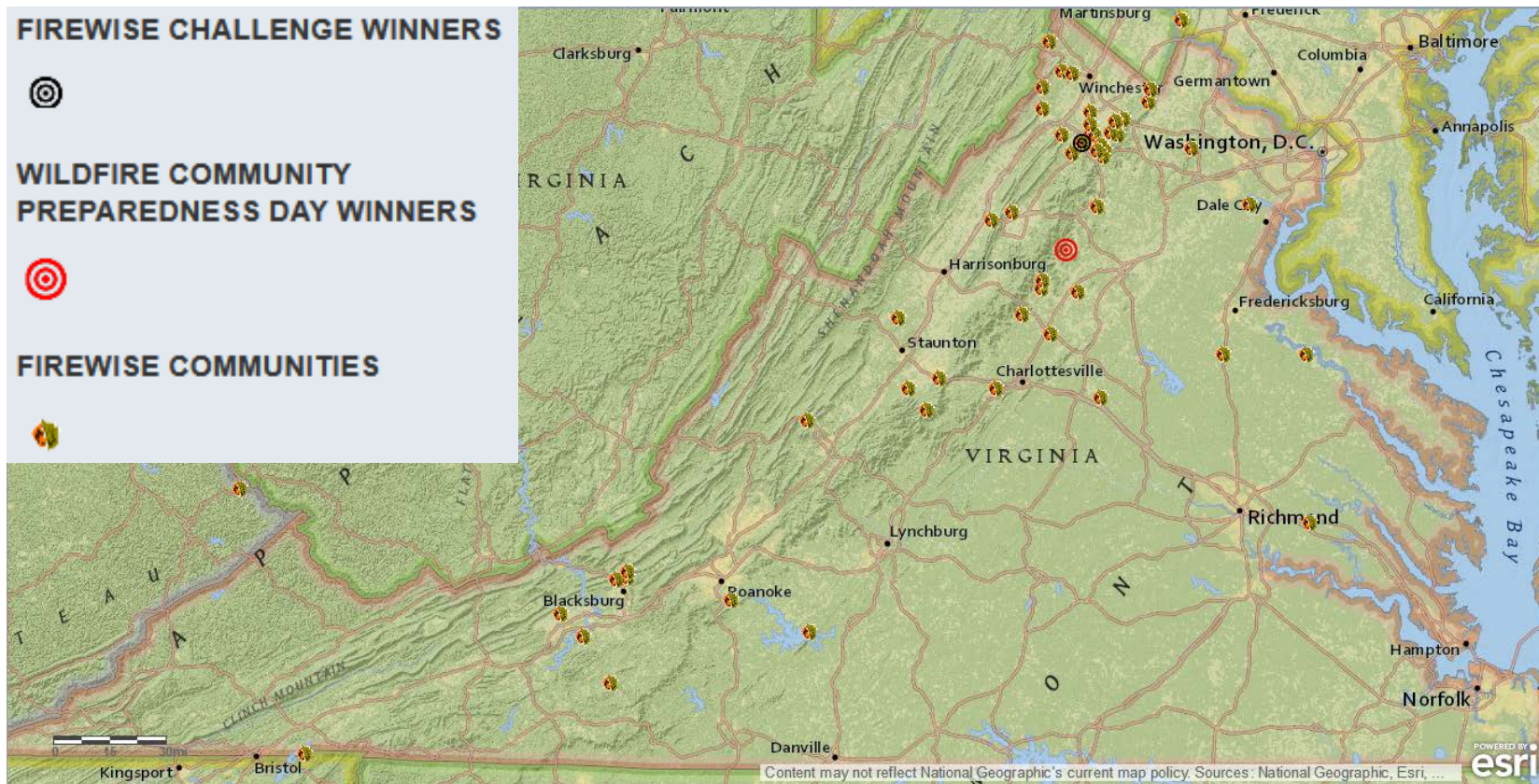
FIREWISE CHALLENGE WINNERS



WILDFIRE COMMUNITY PREPAREDNESS DAY WINNERS



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www.firewise.org/wildfire-preparedness.aspx

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2016 Wildfire Community Preparedness Day

Join the National Fire Protection Association and communities on Saturday, May 7, 2016 for Wildfire Community Preparedness Day!

Commit a couple of hours, or the entire day, and watch as your actions positively contribute to reducing your community's wildfire risk. Challenge your friends, your family, relatives, faith-based group or youth organization to develop a project and join others throughout the nation in making big changes. Your efforts will help raise wildfire awareness, promote collaboration and bring neighbors together to work on projects that can help protect homes, neighborhoods and entire communities from future wildfire risk or current post-fire impacts.



To learn more about 2016 Wildfire Community Preparedness Day, visit WildfirePrepDay.org.

TAKE HOME MESSAGES

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- **Virginia's native forests are adapted to frequent, low-intensity fires**
- **Fire suppression, invasive pests/plants, demographic shifts, and climate change have altered the fire risk equation**
- **Individual property owners should employ the practice of defensible and space and use fire wise landscaping**
- **Fire Wise Communities is a national program for safeguarding landscapes holistically at larger geographic scale**



QUESTIONS & COMMENTS

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