

Community Wildfire Resilience on Whidbey Island

An Introduction to
Firewise

Collin McAvinchey, Stewardship Forester
Whidbey Island Conservation District





Road Map

- Intro to Conservation Districts
- Wildfire in Western Washington
- Fire on Whidbey Island
- Firewise Whidbey
- Home Ignition Zones
- Fire Resistant Planting



Introduction to Me

- Who am I?
- Work history
 - Post-fire work
- Academic history
 - Climate & wildlife
- Life history
 - New Mexico
- Biases and attitudes

Conservation Districts 101

- Born out of the Soil Conservation Service (now Natural Resource Conservation Service under USDA), which was a response to the Dust Bowl.
- For an interesting history on this, check out *The Worst Hard Times* by Timothy Egan.
- Act as implementers of NRCS' resource technical assistance program.
- 3,000 across U.S.
- 45 in Washington




National Association of
Conservation Districts

Whidbey Island Conservation District

- Our mission: *Promoting natural resource stewardship and resilient ecosystems for present and future generations.*
- Our Technical Assistance Programs:
 - Agriculture
 - Forest and Fire
 - Habitat
 - Water & Shoreline
- What is Technical Assistance?
- Cost Share & Financial Aid:
 - State
 - Federal Financial Aid
 - EQIP and CSP





Wildfire in Western Washington

- I'm sure you've noticed...
- Climate trends
 - Hotter, drier summers
 - Wetter, warmer winters
 - Implications?
- Tough on streams..
- And Forests
- Goodell Fire, Paradise Fire, etc
- Pioneer Fire near Stehekin:
38,000 acres as of 8/15/24
- Jupiter Fire near Brinnon – ~400
acres as of 8/21/24



U.S. Global Change Research Program

National Climate Assessment

- Check out the **Fifth National Climate Assessment** online
- The headline of the Northwest Chapter:
- ***“Extreme heat, flooding, wildfires, and other climate hazards threaten human health, sense of place, ecosystems, infrastructure, and industries in the Northwest. Impacts across sectors will have cascading effects on livelihoods and well-being, with Tribes and other frontline communities facing disproportionate risks. Adaptation actions that prioritize social equity and utilize local and Indigenous Knowledge can support regional resilience.”***



Fire on Whidbey Island

- Fires Past and Present
 - Indigenous burning
 - Promote desired vegetation
 - *Land Use, Environment, and Social Change* by Richard White
 - Prescribed burns
 - Promote desired vegetation!
 - Whidbey Camano Land Trust, Pacific Rim Institute, Center for Natural Lands Management
 - San Juan Island Conservation District
 - Evidence on the landscape
 - South Whidbey State Park
- Fire is a natural part of this landscape, but the **scale** and **intensity** might be changing
- So, what's to be done?



Firewise Whidbey

- Shoutout to our Firewise communities!
 - Do we have any residents here...?
- Firewise USA
 - What is it, what's it for?
 - Community-based
 - Minimum of 8 homes
 - The benefits
 - Recognition and grant opportunities
 - Drawbacks?
 - Requires 1 hour per dwelling unit per year
 - Wildfire Action Plan – needs to be updated every 3 years
- How to become a Firewise community
 - Organize it
 - Form a committee!
 - Plan it
 - Community Wildfire Assessment
 - Do it
 - Education
 - Fuel reduction
- Partnerships
 - WICD HIZ assessments
 - Community Firewise Days with DNR

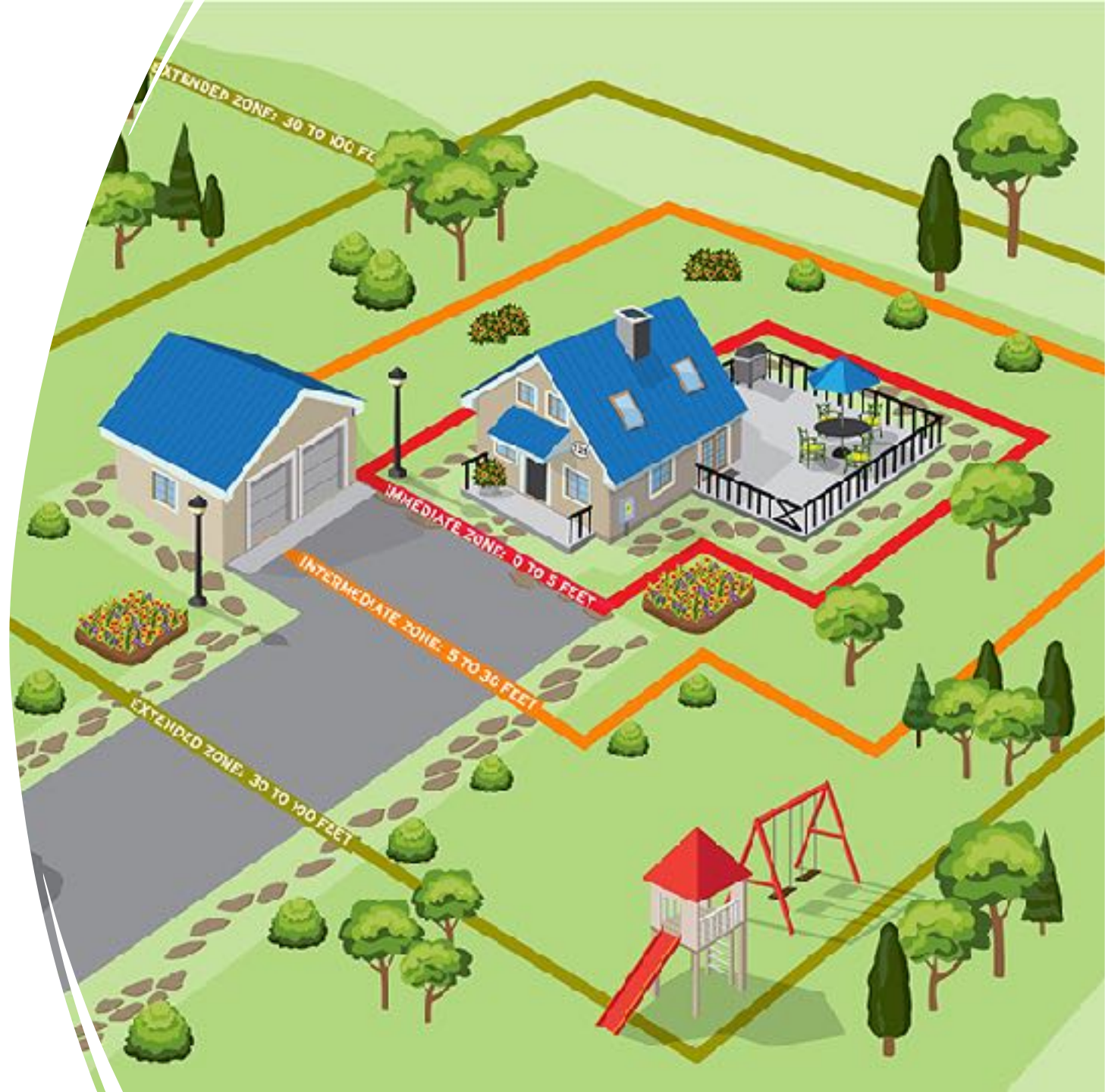


FIREWISE USA™
Residents reducing wildfire risks



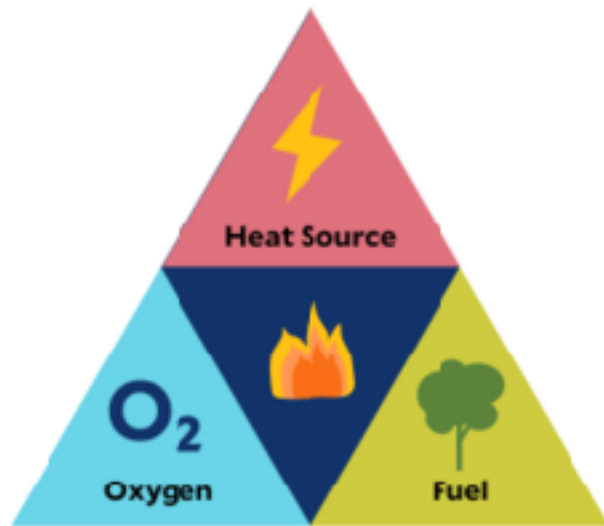
The Home Ignition Zone

- HIZ has 3 components:
 - **Extended Zone** – 30-100 feet from the home
 - **Intermediate Zone** – 5-30 feet from the home
 - **Immediate Zone** – Home and 5 feet out
- **Your home can survive a wildfire**
- Unlike other natural disasters...



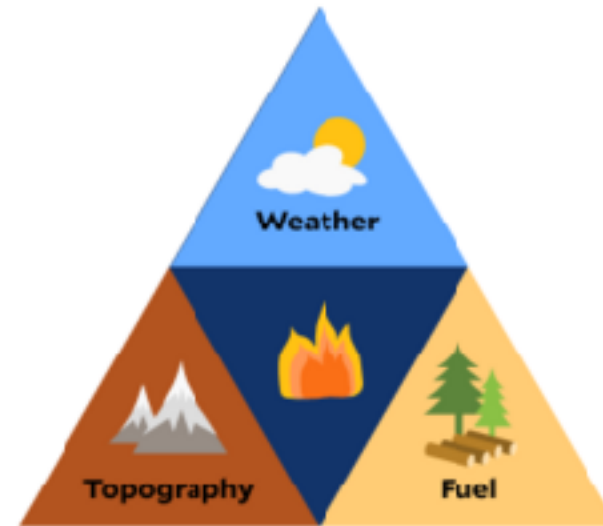
Characteristics of Fire

- Fire triangles:



General Fire Triangle

The three basic components necessary to start and sustain a fire



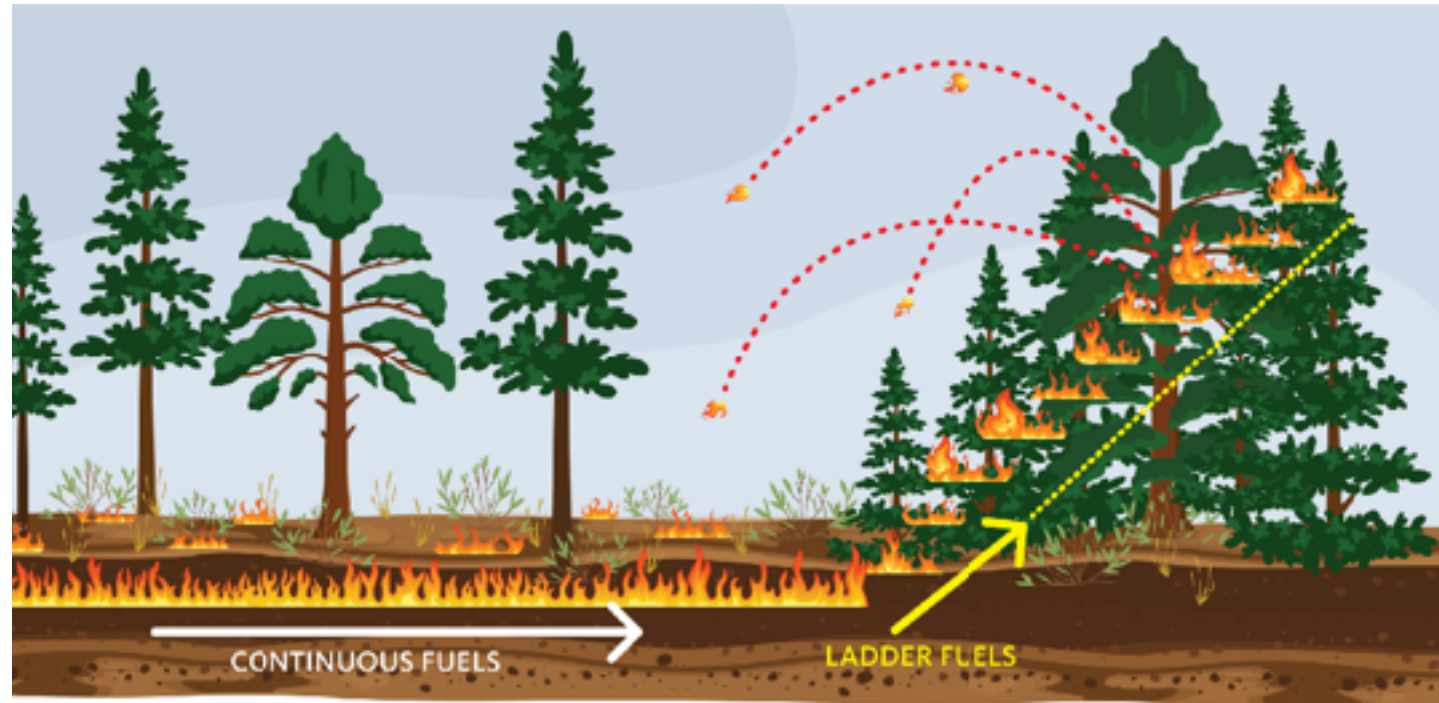
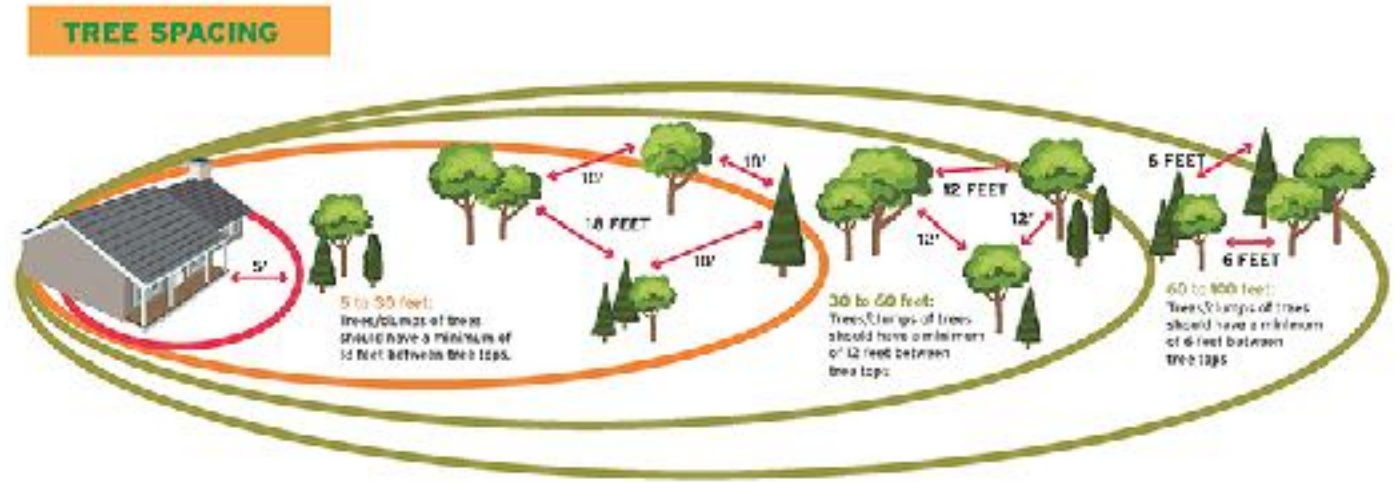
Fire Behavior Triangle

The factors involved in the severity, intensity, duration, size, and season of wildfires

- Fuel is where most of our influence can happen

The Extended Zone

- 30-100 feet out
- Light forestry, landscaping
- Clean, lean, and green
- Spacing
 - Horizontal and vertical spacing
- Ladder fuels



IMMEDIATE ZONE

INTERMEDIATE ZONE

EXTENDED ZONE

The Intermediate Zone

- 5-30 feet from the home
- Landscaping, gardening
 - Spacing - interrupting the flow of fire
- Lawns – keep them mowed in summer! 4-6”
- Fences as wicks
- Treat outbuildings as their own structure
 - Propane tanks
 - Woodsheds



Immediate Zone

- The home
- **Embers!**
- Vents
 - NFPA testing
- Woodpiles
 - Away!
- Siding
 - Not wooden
- Decks
 - Screening underneath
- Vegetation
 - Away from the home!



HOME IGNITION ZONE CHECKLIST

SIMPLE STEPS FROM ROOF TO FOUNDATION TO MAKE A HOME SAFER FROM EMBERS AND RADIANT HEAT

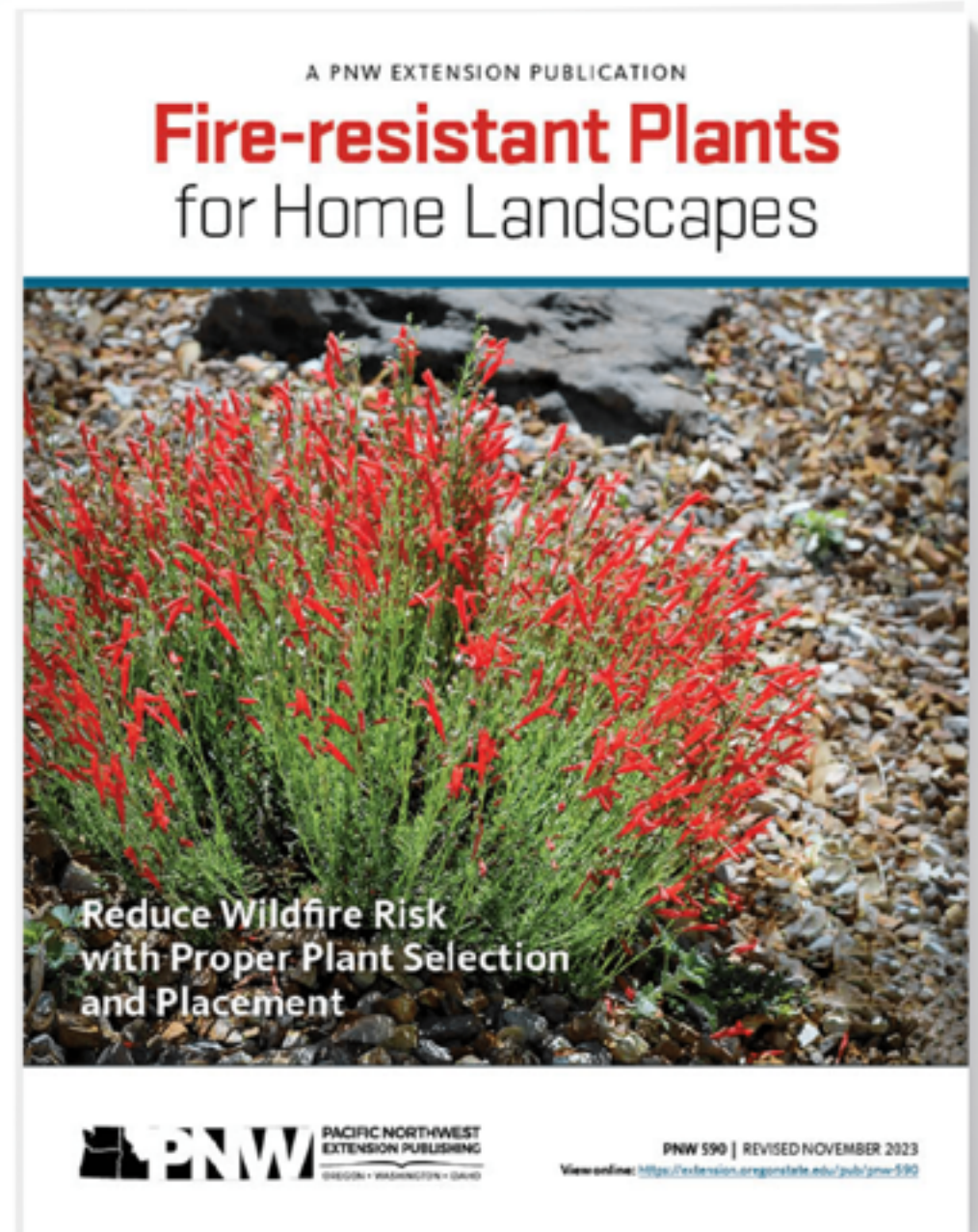
- Clean roofs and gutters of dead leaves, debris and pine needles that could catch embers
- Replace or repair any loose or missing shingles or roof tiles to prevent ember penetration
- Reduce embers that could pass through vents in the eaves by installing 1/8 inch metal mesh screening
- Clean debris from exterior attic vents and install 1/8 inch metal mesh screening to reduce embers
- Repair or replace damaged or loose window screens and any broken windows
- Screen or box-in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating
- Move any flammable material away from wall exteriors – mulch, flammable plants, leaves and needles, firewood piles – anything that can burn
- Remove anything stored underneath decks or porches

VISIT [FIREWISE.ORG](https://www.firewise.org) FOR MORE DETAILS

Image by NFPA, with funding from USDA Forest Service

Firewise Gardening, briefly

- Disclaimer: **all plants can burn**
- Characteristics of highly flammable plants
 - Oily, waxy, aromatic (generally)
 - Some examples
 - Invasives (!)
- Characteristics of fire-resistant plants
 - High moisture content
 - Generally slower growing
 - Native (mostly)
 - A few examples
 - Check out this book →



Thank you!

- Questions?
- Scan this QR code to request assistance right now!
- Email me at collin@whidbeycd.org

