



DEFINING THE WILDLAND-URBAN INTERFACE

The wildland-urban interface (WUI) is where human development meets or mixes with natural vegetation. In the context of Community Wildfire Protection Plans (CWPP), the Healthy Forest Restoration Act provides maximum flexibility for communities to determine the substance and detail of their plans and the procedures they use to develop them. **One of the benefits to communities in the CWPP planning process is the opportunity to establish a localized definition and boundary for the wildland-urban interface.** In addition, National plans and initiatives place priority on working collaboratively with communities in the WUI to reduce the impacts of wildfire.

Defining the WUI involves assessing conditions regarding the closeness of vegetation to structures, alongside utilizing various maps and datasets. Defining the set of conditions as a community not only aids in identifying areas prone to wildfire risk but also plays a pivotal role in prioritizing locations for future wildfire mitigation strategies and project implementation.

LEARN MORE

A must watch:
Defining the WUI



A must read:
The WUI is Dead. Long Live the WUI.



DEFINING THE WUI

Defining the WUI is a required component when collaboratively developing CWPPs and can have various implications beyond just a map.

How to define a WUI

Although communities may delineate the WUI differently, each community will still need to go through a collaborative decision-making process to define and categorize a set of conditions for the WUI: *human presence, wildland vegetation, and proximity to wildlands.*

Wildland Vegetation

Often quantified by vegetation cover and/or patch size

Human Presence

Often quantified by house or population density, may also include infrastructure and watershed health

Proximity to Wildlands

Often quantified by some measure of distance, may also incorporate risk factors such as heat transfer and ember cast

Implications of Defining the WUI

Defining the WUI may have several implications in CWPP planning:

- Qualification for grant funding
- Prioritization of risk mitigation
- Environmental analysis required for fuel treatments
- Communication of wildfire risk and inspiring resident action
- Wildfire pre-planning and operational decision making
- The ability of federal partners to complete fuel reduction work on federal lands adjacent to private lands (i.e., Federal entities are required to utilize the WUI definitions in CWPP. Where applicable, if the WUI extends onto private lands, federal partners may be able to access certain funds to complete fuel reduction projects adjacent to communities at risk.



WUI zones and the spatial relationship between vegetation and development change along a continuum from wildland to urban. (Image courtesy of Community wildfire Planning Center)

STATE AND LOCAL WUI MAPS

While the Washington Department of Natural Resources has a statewide WUI map, this map delineates where building codes will be enforced in accordance with requirements set by the Washington State Building Code Council. This map **is not** required to be used in a CWPP or used for CWPP planning purposes. A locally defined WUI map for CWPPs is encouraged to be developed for planning purposes and can be used to focus and prioritize fuel reduction and other wildfire preparedness actions to help a community better live with wildfire.

Map Type	Purpose	Geographic Area	Benefits	Frequency of Updates	Created By	Adopted By
Local CWPP WUI Map (Local Entities)						
Planning and Prevention WUI	WUI map developed for fuel reduction project planning. Used for CWPPs and other similar planning documents.	Usually at the county level Can include private, state, and federal lands	<ul style="list-style-type: none"> No legal obligation – not tied to state building codes Can be used to show need for funding in grant applications If federal lands are included in the WUI, federal agencies can apply for categorical exclusion to conduct fuel reduction treatments for community protection 	CWPPs are only updated every 10 years (typically), so updates can take time	CWPP planning committee	CWPPs must be approved by local authority (city or county), local fire district, and state Forester
Washington State WUI Map (WA Department of Natural Resources)						
Building Code WUI	WUI outlining where WUI-related state building code regulations are enforced for all new and large (more than 50%) renovations of existing buildings	All of Washington state Includes all structures in Washington As a statewide map, it does not have the same level of detail for boundaries as a more localized map would.	<ul style="list-style-type: none"> Helps to standardize WUI map updates with the building code updates. Each county or jurisdiction has the ability to ask for edits and re-projections for the building code WUI based on more localized knowledge 	Map only updated every 3 years with the building code updates.	WA Dept of Natural Resources	WA State Building Code Council

Courtesy of Ashley Blazina, Washington Department of Natural Resources and Hilary Lundgren, WRCD

Using the WUI to Determine Wildfire Risk

A WUI map on its own does not necessarily incorporate wildfire risk. It can be viewed as a tool to determine wildfire risk, but should not be considered the entire toolkit. To use a WUI map to determine wildfire risk, a community should consider incorporating variables such as fuel loading, slope, and critical fire weather days.

CONSIDERATIONS FOR DELINEATING THE WUI

Defining and delineating the WUI can be a complex process that should be undertaken with a clear purpose in mind and always documented for accountability. Here are a few questions to discuss with your planning team to ensure all necessary and important elements are considered.

- What is your purpose (e.g., planning, fuel mitigation, etc.) in mapping the WUI for the CWPP?
- What local or site-specific factors do you need to take into consideration when defining the WUI? Are there areas excluded from the WUI boundaries that you would consider WUI based on your perceptions and experiences? Why? Are there areas included in the WUI boundaries that you would not consider WUI based on your perceptions and experiences? Why?
- Do the available WUI maps meet your needs?
- What considerations (e.g., watershed health, infrastructure, evacuation routes) are missing from the existing WUI maps?
- How many WUI categories do you need?
- How will wildfire mitigation recommendations differ between different WUI categories?

MORE RESOURCES

Preparing a Community Wildfire Plan

A Handbook for Wildland Urban Interface Communities

CWPP Portal and Data Library

Interactive map of CWPPs and vast resource library

Blog Post: Revisiting CWPP's

A summary of lessons learned and key resources

Community Wildfire Planning Center

Key resources for planning the wildland urban interface

Forests to Faucets

Understanding how to incorporate watersheds into WUI planning

SILVIS Lab

Publicly accessible global WUI map and dataset

Washington DNR

Information on the statewide WUI map

An Exploration of the Next Generation of CWPPs

Summary of considerations for developing CWPPs