

PHS' New Map of Shrubsteppe and Eastside Steppe

Statement of intended use

WDFW's "Shrubsteppe and Eastside Steppe General Locations" map shows the general location of shrubsteppe and Eastside steppe as defined by WDFW's [Priority Habitats and Species](#) (PHS) program.

The map shows where WDFW recommends counties and cities require site-specific information be gathered to inform site-scale land use decisions. It is the [best available science](#) regarding the general location of shrubsteppe and Eastside steppe in Washington.

Mapping limitations

- This map's primary purpose is to identify where site-specific data should be gathered to inform site-scale decisions. It is not intended for other uses, especially at parcel-scale.
- It is expected that on-the-ground conditions will vary from this map. For example, the square pixelated boundaries are due to the underlying data and do not reflect the actual boundary. Where there is variation in pixels (smaller patches or a more pixelated appearance), there is a higher likelihood of errors compared to uniform places.
- Site-scale information from a reliable source indicating a certain place *does* or *does not* contain shrubsteppe or Eastside steppe, should be trusted over this general location map.

Map Design and Mapping Errors

This map is designed to be a flagging tool. By design, if this map errs, it is more likely to *over*-identify shrubsteppe and Eastside steppe than *under*-identify. This is because errors of over-identification will be corrected with site-scale data, whereas no additional site-scale data will be gathered for places that are not mapped.

Errors of over-identification are minimized by carefully selecting reliable sources of information and eliminating places that are known to not be shrubsteppe and Eastside steppe such as crops, roads, and buildings.

WDFW has a high degree of certainty that errors are acceptably small, however, no formal accuracy assessment has been completed.

Frequently Asked Questions

General Audience

Q What is the purpose of the “Shrubsteppe and Eastside Steppe General Locations” map?

A This map is designed to convey WDFW’s [best available science](#) regarding the general locations of PHS-defined shrubsteppe and Eastside steppe throughout Washington. It reflects [WDFW’s values](#) and policies in support of the [agency’s conservation goals](#).

Q What is this map’s primary intended use?

A This map is intended to be used to identify areas where site-scale information regarding the presence of PHS-defined shrubsteppe or Eastside steppe should be gathered to inform decisions regarding land use changes. Think of it as a flagging tool – if this map indicates one of these important habitat types is present, it is appropriate to investigate to confirm (or refute) its presence, delineate its extent, and assess its quality before investing in preparing a site development plan.

Q Why does this map show much more shrubsteppe and Eastside steppe than previous PHS maps?

A WDFW’s previous map of shrubsteppe and Eastside steppe was not comprehensive, as it was based solely on places WDFW staff had verified that shrubsteppe or Eastside steppe is present (either on-the-ground or through aerial imagery analysis). Because we did not have resources to look for shrubsteppe and Eastside steppe in many places, the map failed to show a substantial amount of these habitats. This new methodology – which leverages [satellite imagery](#) and advanced processing capabilities – provides a consistent, high-quality, statewide-wide assessment.

Q Does this map reflect the quality of shrubsteppe and Eastside steppe?

A No. A site-scale assessment is needed to determine the quality of shrubsteppe and Eastside steppe on a site. PHS offers [site-scale assessment methods](#) for doing this.

Q What datasets are used to create this map?

A This map’s primary data comes from the USGS [Landfire Existing Vegetation Types](#) dataset. The Landfire data is refined with [crop data](#) from Washington State Department of Agriculture (WSDA), road data from Washington State Department of Transportation ([WSDOT](#)) and the Department of Natural Resources (DNR), airport and railroad data from WSDOT, [building footprints](#) from Microsoft, and waterbody data from the [National Hydrography Dataset](#).

Q What is the definition of “shrubsteppe” and “Eastside steppe”?

A This map shows the general location of shrubsteppe and Eastside steppe as defined in WDFW’s PHS program. See the [PHS List](#) for precise definitions (“performance standards”) of these Priority Habitats.

Q Where can I see this map?

A You can readily see the “Shrubsteppe and Eastside Steppe General Locations” data through PHS on the Web (<https://geodataservices.wdfw.wa.gov/hp/phs/>). The data layer is also available from the Washington State Geospatial Portal (<https://geo.wa.gov>).

Local Government Land Use Planners

Q How should counties and cities use this map?

A This map shows places that WDFW recommends local governments require additional site-scale data be gathered whenever a project permit application is received or when the jurisdiction considers other land use actions such as rezones or expanding urban growth areas. WDFW recommends each affected local government use this map to show the location of lands it designates as a [Fish and Wildlife Habitat Conservation Area](#) for the Priority Habitats of shrubsteppe and Eastside steppe. For advice about how to identify and manage shrubsteppe, please see [PHS Shrubsteppe Management Recommendations](#).

Q Does WDFW recommend counties and cities regulate areas shown on this map?

A Yes and no. WDFW recommends these areas be designated as critical areas under the Growth Management Act to trigger a requirement to gather additional site-scale information to inform land use decisions at that scale. WDFW does *not* recommend this coarse data be used for making site-scale land use decisions. It is appropriate to use this [map as a flagging tool](#), but not as a map to guide a site-scale land use decision.

Q Is this map best available science?

A Yes. This map provides WDFW’s [best available science](#) regarding the general location of shrubsteppe and Eastside steppe in Washington State. It has been reviewed by subject matter experts, who each concluded that in their best professional judgment, this map reflects the best available information.

Q What type of review has this map had?

A This information was assembled and reviewed by a multi-disciplinary team of biologists, ecologists, data experts, and environmental planners –12 staff with a combined 289 years of professional experience. The team included 10 biologists; eight of whom have a master’s degree and one of whom has a PhD. It included 10 people from WDFW and two from DNR. The review team evaluated the sources of information used, the methodology used to create the map, the resulting outcome, and the statement of intended use.

Q This map shows a parcel has shrubsteppe but a developer has a consultant’s report that says there is no shrubsteppe there. Which should I believe?

A If the consultant was qualified to assess shrubsteppe, if the report reflects current conditions, and if they used appropriate assessment methods, you should trust the consultant’s report. If you have questions, please contact your [local WDFW habitat biologist](#).

Voluntary Stewardship Program Work Groups

Q How should VSP Work Groups use this map?

- A This map shows places that WDFW recommends counties designate as [Fish and Wildlife Habitat Conservation Areas](#) for the Priority Habitats of shrubsteppe and Eastside steppe. Where these areas overlap with agricultural lands, WDFW recommends work groups maintain no net loss of ecological functions and values – essentially, maintaining the acreage and quality of shrubsteppe and Eastside steppe within overlap areas. This map shows shrubsteppe and Eastside steppe as of 2016; work groups will need to apply local information to determine overlap areas as of 2011 (VSP's no net loss start year). WDFW's [High Resolution Change Detection](#) dataset can help with that task.

Landowners and Developers

Q How should landowners and developers use this information?

- A If you want to develop your property, and this map shows your property contains shrubsteppe or Eastside steppe habitat, you should contact a qualified expert to evaluate the extent and quality of that habitat as part of the county or city land use permitting process. Your [local WDFW habitat biologists](#) may be able to help with evaluation of your property.

Q Why does this map show shrubsteppe on my property with squared off edges?

- A This map uses data from several sources. One source is [satellite images](#) that have a resolution of 30-meter pixels (0.22 acres). The map is indicating that it is very likely your property has shrubsteppe, but this map is not sufficiently precise to show the exact boundary of the shrubsteppe habitat. Site-scale information is needed to delineate the boundary.

Q How does this map affect my private property rights?

- A This map is intended to *influence* land use decisions, not *make* land use decisions. It is intended to provide WDFW's "best available science" (BAS) regarding the general location of shrubsteppe and Eastside steppe. In the most extreme example, if your property is shown as 100% shrubsteppe – and subsequent parcel-scale analysis confirms that – this map advises that if you decide to develop your property, then you should (a) design your development to minimize shrubsteppe harm, and (b) provide offsetting compensatory mitigation for unavoidable harm. Under the Growth Management Act (GMA) this requirement is known as "[no net loss of ecological function](#)" (NNL). The GMA also contains a "[reasonable use](#)" requirement that ensures land use regulations not deprive the property owner of all use of their land. This means that requirements for proportional compensatory mitigation are allowed, but "takings" of private property are not. Finally, the GMA provides clear "lanes" for state agencies like WDFW and local governments. WDFW advises local governments and provides BAS. Local governments determine how to apply GMA's requirements (BAS, NNL, reasonable use, etc.) in their development regulations.