

An aerial photograph of a mountain valley. The valley floor is covered in dense evergreen forests, with a small, clear lake in the center. The surrounding mountains are steep and also covered in forest, with some rocky outcrops and patches of snow or light-colored rock visible. The overall scene is a lush, green mountain landscape.

# Science and Public Policy

## Solutions and Challenges

# Toward Ensuring Scientific Integrity in Public Policy

The science used in the formation of public policy should always be independently verified by a rigorous peer review process.

The regulated community deserves no less.

HB 1307 was introduced in the Washington Legislature to set scientific integrity and peer review standards in statute.

# Independent Peer Review

Independent peer review should be performed by qualified scientists who are not funded or supported by agencies with interests in the policy being developed.

The Environmental Sciences Independent Peer Review Institute (ESIPRI) is a non-profit organization providing such review services.

[www.esipri.org](http://www.esipri.org)

# Current Example



On March 18<sup>th</sup>, the USFWS announced an evaluation to determine whether four ESA candidate species should be listed as either threatened or endangered.

All four are resident in western Washington.

U.S. Fish & Wildlife Service

Department of the Interior  
U.S. Fish & Wildlife Service  
Washington Fish and Wildlife Office  
510 Desmond Dr., SE  
Suite 502  
Lacey, WA 98503-1263

**News Release**



Contact: Doug Zimmer 360-753-4370  
For Release: March 18, 2011

11-036

### USFWS to Review ESA Status of Four Candidate Prairie Species

The U.S. Fish and Wildlife Service is initiating an evaluation to determine whether to list four prairie species as threatened or endangered under the Endangered Species Act (ESA). All four species are currently candidates for listing under the ESA. To assist in this analysis, the Service is requesting information related to the four prairie species known to occur in Washington, Oregon and in Del Norte County, California. The agency is particularly interested in collaborating with local, regional and tribal partners to gather status information and consider potential conservation actions affecting each species.

The four species (two butterflies, a bird and a burrowing mammal) are all residents of Washington's fastest-disappearing ecosystem type, the Puget Prairie. Since the mid-1800s over 90 percent of Washington's Puget Prairie habitat has been developed or converted to agriculture.

The species are:

Mazama pocket gophers (*Thomomys mazama*) are most abundant on the prairies of south Puget Sound in Thurston and Pierce Counties, Washington, although subspecies are found on subalpine meadows of the northern Olympic Peninsula and in reduced numbers on low-land prairies in Mason and Clark counties. The Mazama pocket gopher lives most of its life below ground, coming to the surface to find food that is then stored in cheek pouches and carried to their burrows.

Streaked horned lark (*Eremophila alpestris strigata*) is a subspecies of the horned lark found exclusively in western Washington and Oregon. The streaked horned lark is a ground-nesting bird that finds optimum habitat in prairie or open coastal conditions.

Taylor's checkerspot (*Euphydryas editha taylori*) is a subspecies of a widespread western butterfly. It requires specific host plants (native plantain or paintbrush) for its survival. Its distribution in Oregon and Washington is open prairie habitat or thin-soiled bald habitat, dominated by native grasses and forbs.

Mardon skipper (*Polites mardon*) is a small tawny brown butterfly that finds suitable habitat in prairie and subalpine meadow habitat from the Puget Prairies of Washington, the southern Cascades of Washington and Oregon and in meadows in the coast range of Del Norte County, California. Of the four species under consideration, the Mardon skipper is the most widely distributed.

To ensure this information gathering is comprehensive, the agency is requesting scientific and commercial data and other information regarding these species and their habitats. Anyone with information should send it to: Jodi Bush, Manager, Division of Listing and Recovery, USFWS, 510 Desmond Drive, Lacey, WA 98503 or [jodi\\_bush@fws.gov](mailto:jodi_bush@fws.gov).

# Current Example



The key to look for:

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The species are:

*Mazama rickettsi* (Thomomys rickettsi) are most abundant on the prairies of south Puget.

Taylor's checkerspot (*Xiphiobryas celtica taylori*) is a subspecies of a widespread western butterfly. It requires specific host plants (native plantain or paintbrush) for its survival. Its distribution in Oregon and Washington is open prairie habitat or thin-soiled bald habitat, dominated by native grasses and forbs.

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## Current Example

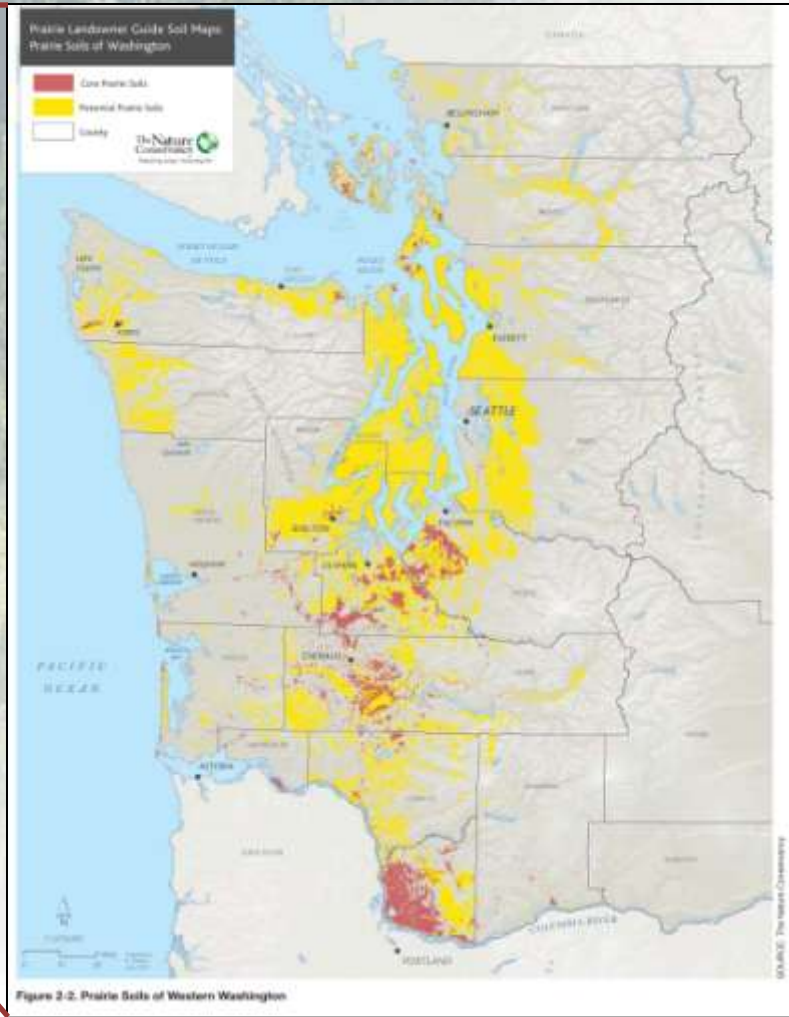
### Prairie Landowner Guide FOR WESTERN WASHINGTON



Written by  
Sara Hobard and Laura Carter

#### Major Contributors

The Nature Conservancy  
Natural Resources Conservation Service  
Jill Fair and Wildlife Service  
Thurston County Conservation District  
San Juan County Land Bank  
Washington Department of Natural Resources  
Etc.



Version 1  
Announced May 25<sup>th</sup>

## Current Example

### Prairie Landowner Guide FOR WESTERN WASHINGTON



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Washington Department of Natural Resources  
EBC

Version 2  
Announced July 12<sup>th</sup>

### Prairie Landowner Guide Soil Maps: Prairie Soils of Washington



Figure 2-2. Prairie Soils of Washington

## Current Example

In response to a question on the reason for the changes to the guide:

**“The soils table was incomplete and the potential soils delineated on the maps gave a false impression of prairie extent.”**

## Building on the Current Example

On May 10<sup>th</sup>, the USFWS announced a six year work plan to address the needs of the 251 species on the ESA candidate list as part of a settlement agreement with WildEarth Guardians.

The four western Washington species are included.

## Building on the Current Example

On July 12<sup>th</sup>, USFWS made another announcement, building on the May plan as part of a settlement with the Center for Biological Diversity.

They will now evaluate 757 species (36 in Washington) for ESA listing consideration by the end of 2018.

# Building on the Current Example

## 36 Washington species under ESA consideration

American wolverine  
Basalt juga  
Black-footed albatross  
Brush prairie pocket gopher  
Burrington jumping-slug  
Cathlamet pocket gopher  
Chelan mountainsnail  
Columbia basin sage grouse  
Columbia dusksnail  
Columbia Oregonian  
Dalles sideband  
Evening fieldslug

Greater sage grouse  
Hoko vertigo  
Lake Sammamish kokanee  
Mardon skipper butterfly  
Masked dusksnail  
Northern leopard frog  
Northern wormwood  
Olympia pocket gopher  
Olympic pocket gopher  
Oregon spotted frog  
Pacific fisher  
Puget Oregonian

Roy Prairie pocket gopher  
Shelton pocket gopher  
Streaked horned lark  
Tacoma pocket gopher  
Taylor's checkerspot butterfly  
Tenino pocket gopher  
Umtunum desert-buckwheat  
Washington ground squirrel  
Western yellow-billed cuckoo  
White bluffs bladderpod  
White-tailed ptarmigan  
Yelm pocket gopher

As listed at [http://www.biologicaldiversity.org/programs/biodiversity/species\\_agreement/map.html](http://www.biologicaldiversity.org/programs/biodiversity/species_agreement/map.html)

## Science in Public Policy

Each of these listing processes and their resulting policies will be science driven.

Will that science be complete, fully accurate, and independently reviewed?

Clearly articulated scientific integrity and peer review statutes will provide the tools the regulated community needs.

# Questions



# Getting in Touch

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