



DEPARTMENT OF  
NATURAL  
RESOURCES

OFFICE OF THE  
COMMISSIONER OF  
PUBLIC LANDS  
1111 WASHINGTON  
STREET SE  
OLYMPIA WA 98504

360-902-1000  
WWW.DNR.WA.GOV

## MEMORANDUM

**January 24, 2024**

**To:** Forest Practices Board

**FROM:** Saboor Jawad, Forest Regulation Division Manager   
[Saboor.jawad@dnr.wa.gov](mailto:Saboor.jawad@dnr.wa.gov) / 360-742-7130

**SUBJECT:** Recommendation on Critical Habitat (state) for the western gray squirrel  
(*Sciurus griseus*)

On October 28, 2023, the Washington Fish and Wildlife Commission reclassified the western gray squirrel (WGS) from state threatened to state endangered. This action is in response to a continuing trend of habitat loss following the 1993 listing of the WGS as state threatened. A recent study by Washington Department of Fish and Wildlife (WDFW) in the north and south Cascades indicates that habitat loss and fragmentation has continued since 1993 (see attached WDFW recommendations memo for conservation of the western gray squirrel dated January 22, 2024). The continuing trend of habitat loss, combined with isolated subpopulations, limited ability to disperse due to habitat fragmentation, and road mortality prompted WDFW to recommend up listing the species to state endangered.

The Forest Practices Rules require the Department of Natural Resources (DNR), within 30-days of a species listing, to:

- (1) - Consult with the WDFW then
- (2) - Submit to the Forest Practices Board (Board) recommendations on whether to amend its current critical habitats (state) protections<sup>1</sup>

DNR, after consultation with WDFW, recommends the Board take the following actions:

Board to request WDFW to convene a western gray squirrel Wildlife Working Group involving landowners, tribes, agencies, and conservation partners potentially impacted by the uplisting to:

- (1) Evaluate the existing volunteer measures completed to date and determine if they were implemented successfully and/or provided adequate protection.

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<sup>1</sup> Critical habitats (state) are included in WAC 222-16-080 *Critical habitat (state) of threatened and endangered species*. Forest practices proposed in these critical habitats are Class IV-special applications under WAC 222-16-050 requiring review under the State Environmental Policy Act

- (2) Develop new alternatives to enhance or rebuild the existing volunteer measures as needed.
- (3) Consider the requirements for Critical habitat under WAC 222-16-80.
- (4) Develop recommendations on how to protect WGS habitat during timber harvesting and mitigation measures for land conversion by development. This could include conservation incentives and creating landscape approaches that encourage landowners to protect habitat.
- (5) Consider whether developing new rules would provide benefit to the species or whether revised volunteer measures would work.
- (6) Coordinate with DNR staff to ensure that all partners are represented in the evaluation process with a commitment to protect the western gray squirrel and its habitat through collaboration.

If you have any questions, please feel free to contact Maggie Franquemont, Policy Program Manager, Forest Regulation Division, at [maggie.franquemont@dnr.wa.gov](mailto:maggie.franquemont@dnr.wa.gov) / 564-233-8359, or Darrin Masters, WDFW Forest Habitats Section Manager, at [darrin.masters@dfw.wa.gov](mailto:darrin.masters@dfw.wa.gov) / 360-764-9942.

**Attachment:**

- WDFW Letter to DNR on WGS Up-listing and Recommendations



State of Washington  
DEPARTMENT OF FISH AND WILDLIFE

Mailing Address: PO Box 43200, Olympia, WA 98504-3200 · 360 902-2200 · TDD 360 902-2207  
Main Office Location: Natural Resources Building, 1111 Washington Street, Olympia, WA

**MEMORANDUM**

To: Saboor Jawad, Forest Regulation Division Manager, DNR  
From: Brandon Austin, Forest Habitats Section Manager, WDFW  
Cc: Chris Conklin, WDFW; Tom O'Brien, WDFW; Taylor Cotton, WDFW; Colleen Granberg, DNR; Marc Engel, DNR  
Date: January 22, 2024

**Subject: WDFW recommendations for conservation of the western gray squirrel in regard to the recent State uplisting to state endangered**

This memo is in response to the October 28, 2023, uplisting of the western gray squirrel (*Sciurus griseus*) to state endangered by the Washington State Fish and Wildlife Commission (Commission).

**Background**

The western gray squirrel (*Sciurus griseus*) (WGS) is one of four tree squirrel species native to the state of Washington. Others include Douglas' squirrel (*Tamiasciurus douglasii*), American red squirrel (*Tamiasciurus hudsonicus*), and the northern flying squirrel (*Glaucomys sabrinus*). The western gray squirrel is the largest native tree squirrel in the Pacific Northwest. It prefers low to mid elevation conifer forests with moderately closed canopy and an open understory. In the southern part of their range, populations are commonly associated with Oregon white oak (*Quercus garryana*) woodlands, which are transitional between conifer forests and prairie ecosystems. The cooler environment provided by the closed canopy and relatively open understory of their preferred habitat also promotes the growth of hypogeous (below ground) fungi (truffles), which can make up a large part of their diet. While they tend to avoid open areas, they spend a lot of time foraging on the ground as long as there are opportunities for escape.

A closed, multi-layered canopy is important to the survival of this species. The canopy is where they spend most of their time travelling and moving around the forest. It is a place of protection from predators and where they forage, rest, sleep, and raise their young. Western gray squirrels are prolific nest builders and sleep in a nest every night. In Klickitat County, they build an average of 14 nests each where they rest and sleep throughout the day. Some nests are platforms that provide resting spots, while others are more elaborate for overnight stays, rearing young, and winter use. Tree cavities are often used for natal nests because they provide the most protection. When cavities are not available, they construct very large spherical nests (dreys) composed of sticks, leaves, moss, grass, and other debris.

Even though some nests may be difficult to observe, a number of large nests clustered in an area is a good indicator of their presence. Historically, the western gray squirrel's range in Washington extended from Pierce County south through the Columbia gorge and then north along the eastern Cascades from Klickitat to Okanogan Counties. However, the squirrel's population has declined across the state since the early 20<sup>th</sup> century. It is now restricted to three areas centered in the north Cascades, south Cascades, and Pierce County.

### **Reason for uplisting**

In 1993, reasons for listing the species as state threatened included a trend in habitat loss and fragmentation among other factors (Washington Department of Fish and Wildlife - WDFW 1993). A recent study by WDFW (Vander Haegen and others 2022) in the north and south Cascades indicates that habitat loss and fragmentation has continued since that time. The study concludes that primary habitat (closed canopy conifer) had decreased by 21% between 1993 and 2017. The primary causes of habitat loss were wildfire and timber harvest activities. In the north Cascades wildfire was identified in 81% of sample plots whereas timber harvest (all thinning prescriptions) was 15%. The results were reversed in the south Cascades with 23% attributed to wildfire and 76% to timber harvest. Harvest activities were divided into two prescriptions; thinning and clearcut. Thinning prescriptions were ascribed to 34% of the sample plots and 42% were attributed to clearcut prescriptions.

This continuing trend of habitat loss, combined with isolated subpopulations, limited ability to disperse due to habitat fragmentation, and road mortality prompted WDFW to recommend uplisting the species to state endangered (WDFW 2023). Subsequently, the Commission up-listed the western gray squirrel to state endangered on December 28, 2023.

### **Forest Practice Rules and current conservation strategy**

In response to the 1993 listing to state threatened, the Forest Practices Board (Board) accepted recommendations to implement a volunteer strategy for protecting WGS habitat. Subsequently in 2013, staff from DNR and WDFW collaborated on administrative and operational improvements to facilitate voluntary WGS conservation measures as part of approved Forest Practice Applications/Notifications (FPA/N). DNR staff incorporated these improvements into FPA/N processing, which has since been applied to all FPA/Ns with potential for having WGS presence within the proposal area or within proximity to areas exhibiting suitable WGS habitat characteristics. Key components of this guidance include:

- DNR notes the presence of WGS or their habitat on the *DNR Office Checklist Page #2* and notifies the landowner, which becomes part of the FPA/N.
- DNR provides WDFW a courtesy email that an FPA/N has triggered a "hit" for potential WGS presence within the vicinity of the FPA/N. This provides notification on all new FPA/Ns sent out for review to DNR forest practices foresters, WDFW biologists, and interested conservation partners that WGS, or their habitat may be present within the proposed forest practices activity area.
- DNR includes a "note" on the FPA/N *Notice of Decision* page acknowledging the presence of WGS or their habitat within the harvest vicinity and refers applicants to WDFW staff for assistance. Though this note is not a condition of the application, it is

expected to inform the proponent of the potential occurrence of WGS and/or their habitat and to provide WDFW contact information. This note further improves communication and increases the likelihood of voluntary WGS protection during forest practices.

In November 2015, the Forest Practices Board (Board) denied a petition for rule making pertaining to the Western gray squirrel; and recommended the Board revisit next steps for protection of the species in May 2016, when the WDFW status review would be final and the WGS Annual Report presented to the Board.

In January 2016, WDFW presented the status review to the Commission for action. The status review stipulated that in addition to the voluntary efforts, additional funding and resources were needed for data on distribution and abundance. The Commission determined at that time that the WGS status remain state threatened.

In May 2016, the results of the 2015 status review were presented to the Board. The presentation re-stated needs moving forward for additional data on distribution and abundance.

As of the end of 2022, 594 western gray squirrel surveys have been completed on private lands (mostly in Klickitat County) and 119 voluntary management plans have been developed since 2014 (WDFW unpubl. data). However, the efficacy of these plans and the volunteer approach in general has yet to be determined because there is no standard procedure for post-harvest evaluations and there is a lack of personnel resources available to conduct the surveys.

## **Recommendations**

In light of the recent state uplisting to endangered along with the substantial research completed for this species since 1993, WDFW offers the following recommendations:

We understand that recovery of this species cannot happen without support from the landowners, tribes, agencies, and conservation partners potentially impacted by the uplisting. Therefore, we recommend that the Board support WDFW's initiation of a western gray squirrel Wildlife Working Group to:

1. Evaluate the existing volunteer measures completed to date and determine if they were implemented successfully and/or provided adequate protection.
2. Develop new alternatives to enhance or rebuild the existing volunteer measures as needed.
3. Consider the requirements for Critical habitat under WAC 222-16-80.
4. Develop recommendations on how to protect WGS habitat during timber harvesting and mitigation measures for land conversion by development. This could include conservation incentives and creating landscape approaches that encourage landowners to protect habitat.
5. Consider whether developing new rules would provide benefit to the species or whether revised volunteer measures would work.

WDFW is dedicated to our continued coordination efforts with DNR staff to ensure that all partners are represented in the evaluation process. We are also committed to protecting the western gray squirrel and its habitat through collaboration. We appreciate your consideration of the recommendations herein.

### **Literature cited**

- Vander Haegen, W. M., B. L. Cosentino, I. N. Keren, M. J. Linders, and G. W. Bell. 2022. Assessment of habitat change for western gray squirrels in the eastside Cascades of Washington, 1993-2017. Final report. Washington Department of Fish and Wildlife, Olympia.
- Washington Department of Wildlife. 1993. Status of the western gray squirrel (*Sciurus griseus*) in Washington. Unpubl. Rep. Wash. Dept. Wildl., Olympia, Washington.
- Wiles, G. J, D. W. Stinson, and AM. J. Linders. 2023. Periodic status review for the Western Gray Squirrel. Washington Department of Fish and Wildlife, Olympia, Washington.