



WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES



August 12, 2020

MEMORANDUM

TO: Forest Practices Board

FROM: Teresa Ann Ciapusci, Region/Operations Outreach Manager, Washington State Department of Natural Resources

Gary Bell, Forest Habitats Wildlife Biologist, Washington State Department of Fish and Wildlife

SUBJECT: 2019 Annual Report on the Board's Voluntary Cooperative Protection Approach for Western Gray Squirrel (WGS)

On November 12, 2013, the Board directed the Washington Department of Natural Resources (DNR) and Washington Department of Fish and Wildlife (WDFW) to annually report on the status of Forest Practice Applications (FPAs) that may need WGS management plans, and the success of the voluntary protection approach. DNR and WDFW will present this report at the August 12, 2020, board meeting.

This report is the sixth annual report to the board and covers the period from January 1, 2019 through December 31, 2019. It includes the results of WDFW's tracking data for FPAs and voluntary WGS conservation actions, which help with evaluation of how well the voluntary protection approach for WGS is working. The report also includes WDFW's current and planned surveys for information on the distribution and habitat status of the squirrel, other forest landowner activities addressing WGS conservation, and protection by counties.

We look forward to discussing the 2019 report with you at your August 2020 meeting. In the meantime, please do not hesitate to contact us: Teresa.Ciapusci@dnr.wa.gov or 360-902-1635; Gary.Bell@dfw.wa.gov or 360-902-2412.

Attachment

Cc: Joseph Shramek, Marc Engel, Donelle Mahan, Marc Ratcliff
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2019 Annual Report to the Forest Practices Board

The Status of a Voluntary Protection Approach for the Western Gray Squirrel August 12, 2020

SPECIES BACKGROUND

The western gray squirrel (WGS) was listed as State Threatened by the Washington Fish and Wildlife Commission effective November 14, 1993.

In Washington State, the species occurs in three primary areas: oak and conifer forests of Klickitat and southern Yakima counties; low to mid-elevation dry conifer forests in Okanogan and Chelan counties; and oak and conifer forests on Joint Base Lewis-McChord in Pierce and Thurston counties.

The WGS inhabits transitional forests of mature Oregon white oak, Ponderosa pine, Douglas-fir, and various riparian tree species (Linders and Stinson 2007). Habitat quality in Washington is assumed to be relatively poor compared to other parts of the species' range due to lower number of oak species and degradation of pine and oak habitats. Cumulative effects of land conversion, logging, sheep grazing, and fire suppression largely eliminated open-grown stands of mature and old growth pine and have degraded oak woodlands (Linders and Stinson 2007). The most recent population estimate for Washington was based on data gathered over fifteen years ago (1994 to 2005 by Linders and Stinson, 2007). At that time, the population was estimated to be between 468 and 1,405 squirrels. Population size can fluctuate dramatically with disease and changes in food supply and is extremely difficult to assess range wide. Thus, WDFW is in the process conducting surveys to assess WGS occupancy within available habitat in core areas. The proportion of occupied habitat will be used as a surrogate for population size. WDFW is also conducting a comprehensive assessment of habitat change in the north and south Cascades using updated Geographic Information System (GIS) information and high-resolution change detection techniques.

HISTORY OF FOREST PRACTICES BOARD ACTIONS

In 2013 staff from the Department of Natural Resources (DNR) and Washington Department of Fish and Wildlife (WDFW) collaborated on administrative and operational improvements to provide WGS conservation measures as part of approved Forest Practice Applications (FPA). DNR staff incorporated these improvements into FPA processing which has since been applied to all FPAs potentially having WGS present or possessing suitable WGS habitat. Key components of this guidance include:

- DNR notes the presence of WGS or their habitat on the DNR *Office Checklist* page #2 which becomes part of the FPA.
- DNR provides WDFW a courtesy email that an FPA has triggered a “hit” for potential WGS presence within the vicinity of the FPA. This provides notification on all new FPAs sent out for review to DNR forest practices foresters, WDFW biologists, and interested stakeholders that WGS or their habitat may be present within the proposed forest practices activity area.
- DNR includes a “note” on the FPA *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.

On November 12, 2013, the Board directed DNR and WDFW to annually report on the number of FPAs that might involve WGS conservations needs, and the effectiveness of the voluntary protection approach. At the May 2019 Board meeting, DNR and WDFW staff presented the 2018 WGS Annual Report. This report for 2019 marks the sixth annual report to the Board.

2019 FOREST PRACTICES APPLICATIONS/NOTIFICATIONS (FPA/NS)

WDFW and DNR continue screening FPA/NS for potential WGS impacts using WDFW’s GIS data for documented WGS presence, nests, and/or potentially suitable habitat. DNR notifies WDFW via email for all FPA/NS with documented WGS presence, WGS nests, or suitable habitat, as well as FPA/NS that are within ¼-mile of these locations. Then, WDFW further evaluates the FPA/NS for potential WGS conflicts, working with the landowner/land manager to conduct WGS nest surveys (as needed), discussing forest management goals, and developing voluntary measures to help protect WGS. Typically, forest management strategies incorporate conservation measures identified in WDFW’s *Priority Habitats and Species (PHS) Management Recommendations for Western Gray Squirrel* (August 2010).

WDFW tracks FPA/N information for potential impacts to WGS. Information collected includes FPA/N number, proponent name, forest practice location (county), whether the applicant is a large or small landowner, results of a WGS nest survey (presence/absence), WGS conservation measures, and any additional pertinent information.

The following provides a summary of FPA/NS that triggered a WGS “hit” from January 1, 2019 through December 31, 2019:

- A total of 69 FPA/NS were identified as potentially being associated with WGS.
- Of these 69 WGS-related FPA/NS, 65 FPA/NS were in Klickitat County, two were in Skamania County, and two were in Thurston County.
- Of the total FPA/NS, 27 were associated with large/industrial landowners, and 42 were associated with small forest landowners.

WESTERN GRAY SQUIRREL CONSERVATION

As in previous years, WDFW continued WGS conservation efforts with landowners in 2019, conducting WGS nest surveys and coordinating with proponents to implement voluntary WGS conservation measures. Industrial timber management companies implement WGS conservation on their lands by following guidance in WDFW's *Management Recommendations for Washington's Priority Habitats and Species for Western Gray Squirrel (2010)* (PHS). They incorporate WGS surveys and habitat retention strategies into harvest planning and layout. Due to the large volume of FPAs they may file each year, WGS nest surveys are not conducted by WDFW staff for every industrial landowner FPA. Rather, WDFW relies on each company to voluntarily conduct surveys and incorporate management strategies into harvest plans.

WDFW staff frequently work with small forest landowners, conducting WGS nest surveys and developing conservation strategies with them when WGS presence is confirmed on their land. The goal is to develop voluntary management strategies that meet landowner needs while also providing protection for WGS and their habitat, which can be challenging depending on the type of harvest, the intended post-harvest forest conditions (thinning versus a clear-cut), and/or the economic interests of the landowner.

The following is a summary of WGS management strategy development and implementation activity for the time period of January 1 through December 31, 2019.

Of the total 69 WGS-related FPA/Ns:

- All 69 FPA/Ns involved the need for additional review, including such tasks as confirming WGS presence or absence (i.e. conducting a WGS nest survey), and/or confirming appropriate WGS habitat protection measures to be implemented during forest practice activities:
 - 45 FPA/Ns resulted in no WGS nests detected during survey and no need for WGS management considerations.
 - 24 FPA/Ns required implementation of WGS management strategies:
 - Five FPA/Ns were associated with small landowners.
 - 19 FPA/Ns were associated with large or industrial landowners.
 - Of the 24 FPA/Ns in need of WGS management considerations, all of them incorporated adequate WGS conservation strategies.

Due to limited staff resources, WDFW has not been able to conduct post-harvest FPA/N compliance or effectiveness monitoring regarding implementation of the voluntary WGS management strategies that incorporate WDFW's current PHS recommendations. Ultimately, knowing more about how the PHS management recommendations may be influencing continued WGS occupancy of sites after harvests are completed would allow WDFW to enhance its adaptive management approach for WGS conservation.

2019 WDFW SURVEYS AND CONSERVATION EFFORTS

In 2019, WDFW continued work on a state-wide survey effort for WGS with the goal of estimating the extent of suitable habitat occupied by the species within each of the three known extant populations. During summer and fall 2019, WDFW surveyed 56 sites, bringing the total number of sites surveyed to 130. Occupancy rates for the first two years combined ranged from 26 to 41% across the three areas. Current plans are to complete the state-wide survey in 2020.

WDFW continued work on a project aimed at assessing the change in extent of WGS habitat from 1993 (state-threatened listing year) to 2017 (the latest year suitable data were available). The assessment will focus on lands comprising North and South Cascades populations; areas where extensive forestlands have changed as the result of wildfire and timber extraction. Preliminary work accomplished in 2017 included: defining discrete focus areas for the assessment, compilation and assessment of all existing land cover layers, and development of an approach to use orthophotographs to aid in detecting habitat change. Analysis of habitat change began in 2018 and will be completed in 2020.

WDFW continued to work with Joint Base Lewis-McChord (JBLM) to conserve WGS habitat on the base. WDFW Science staff consulted with JBLM forestry and wildlife staff when timber harvests were planned in areas occupied by WGS, helping them accommodate for WGS habitat in their prescriptions.

PROTECTION BY COUNTIES

Washington's Growth Management Act (chapter 36.70A RCW) requires that local jurisdictions protect critical areas, including fish and wildlife habitat conservation areas. Regulations (WAC 365-190-130(4)(a)) specify that counties should identify and classify habitat for federal and state listed and sensitive species and should utilize WDFW's Priority Habitats and Species (PHS) database when doing so. The PHS database contains GIS location data for WGS and is routinely requested by counties to support land use planning. This is the same data that WDFW and DNR staff use to screen FPA/Ns, as well as other proposals going through the State Environmental Policy Act (SEPA) process, for potential project impacts to WGS.

SUMMARY

Throughout 2019, all proposed forest practice activities identified as potentially affecting WGS were screened by WDFW and DNR. WDFW, DNR, and/or Yakima Tribal staff conducted nest surveys as needed and worked with proponents to conserve WGS when present within a harvest area. FPA/N-associated WGS nest surveys, combined with continued screening of FPA/Ns, allows WDFW and DNR to continue evaluating the effectiveness of the voluntary protection approach in achieving WGS conservation. Updated information on effectiveness can be useful for refining the voluntary forest practices protection strategies for WGS in Washington.

As a state threatened species, WGS remain a high priority for conservation by WDFW. Given the species' relatively small population size overall, and limited information on the extent and distribution of the three core populations, WDFW continues conducting surveys to confirm current WGS distribution, occupancy of available suitable habitat, and further assess the species' status and habitat conditions. These collective efforts will inform the next scheduled WDFW periodic status review for WGS in 2021.