




WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES




April 24, 2017

MEMORANDUM

TO: Forest Practices Board 

FROM: Brandon Austin, Forest Practices Region Support Manager, Department of Natural Resources

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

SUBJECT: 2016 Annual Report on the Board's Voluntary Cooperative Protection Approach for Western Gray Squirrel

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 management plans and the success of the voluntary protection approach for the western gray squirrel (WGS).

This report is the third annual report to the Board and covers the period from January 1, 2016 through December 31, 2016. It includes the results of WDFW's tracking data for FPAs and voluntary management plans, which help us to evaluate how well the voluntary protection approach is working. The report also includes WDFW's current and planned surveys for information on the population and habitat status of the squirrel, some other forest landowner efforts to help in conservation of the WGS, and protection by counties.

We look forward to discussing the 2016 report with you at your May 2017 meeting. In the meantime, please do not hesitate to contact us: brandon.austin@dnr.wa.gov or 360-902-1635; gary.bell@wdfw.wa.gov or 360-902-2412.

Attachment

cc. Joseph Shramek, Marc Engel, Donelle Mahan, Amy Windrope, Terry Jackson, Hannah Anderson



WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES



Washington
Department of
**FISH and
WILDLIFE**

2016 Annual Report to the Forest Practices Board

The Status of a Voluntary Protection Approach for the Western Gray Squirrel May 10, 2017

SPECIES BACKGROUND

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

In Washington State, the species occurs in three highly localized areas: the oak woodlands and conifer forests of Klickitat and southern Yakima counties; low to mid-elevation conifer forests in Okanogan and Chelan counties; and the oak woodlands 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 the lower number of oak species and degradation of pine and oak habitats. The cumulative effects of land conversion, logging, sheep grazing, and fire suppression largely eliminated the 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 twelve years ago (1994 to 2005 by Linders and Stinson, 2007). At that time the population was between 468 and 1,405 squirrels. Population size can fluctuate dramatically with disease and changes in food supply. Thus, WDFW is continuing to conduct surveys to assess population and habitat status for the WGS.

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 protection measures as part of approved Forest Practice Applications (FPA). DNR staff then incorporated these improvements into FPA processing which has since been applied to all FPAs containing WGS or their habitat. Key components of this guidance include the following:

- DNR notes the presence of WGS or their habitat on the DNR *Office Checklist* page 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 areas.
- DNR includes a “note” on the FPA *Notice of Decision* page acknowledging the presence of WGS or their habitat in the harvest vicinity, and refers them to WDFW staff for assistance. Though this note is not a condition of the application, it is expected to inform the FPA proponent of the potential occurrence of WGS or their habitat and to provide WDFW contact information, further improving communications and increasing the likelihood of voluntary WGS protection.

On November 12, 2013, the Board directed DNR and WDFW to annually report on the status of management plans and the success of the voluntary protection approach. At the May 2016 Board meeting, DNR and WDFW staff presented the 2015 WGS Annual Report. A rule making petition for the WGS had been submitted to the Board at their November 10, 2015 meeting, the Board moved that the petition be denied. However, the Board also moved that they would continue to annually revisit the status of their protection for the WGS. WDFW also presented their Periodic Status Review for WGS, which recommended retaining the squirrel’s state threatened status in Washington. This 2016 report marks the third annual report to the Board.

2016 FOREST PRACTICES APPLICATIONS/NOTIFICATIONS (FPA/Ns)

Revised in November 2013, the screening process continues for FPA/Ns with the potential to affect WGS. Using WDFW’s GIS data for documented WGS presence, nests, and/or potentially suitable habitat, WDFW and DNR both screen FPA/Ns for potential WGS impacts. DNR also notifies WDFW of all FPA/Ns within ¼-mile of these locations via email. WDFW then 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 options, and developing voluntary WGS management plans. These management plans incorporate conservation measures identified in WDFW’s *Priority Habitats and Species (PHS) Management Recommendations for WGS* (August 2010).

WDFW continues tracking detailed FPA/N information for potential WGS conflicts. Information collected includes FPA/N number, date of posting in the Forest Practice Application Review System (FPARS), applicant name, whether they are a large or small landowner, if a WGS nest survey was needed or completed, if a WGS Management Plan was necessary or developed, and any additional pertinent information.

The following provides a summary of FPA/Ns that triggered a WGS “hit” from January 1, 2016 through December 31, 2016:

- A total of 66 FPA/Ns were identified as potentially being associated with WGS.
- Of these 66 WGS-related FPA/Ns, 63 FPA/Ns were located in Klickitat County and 3 were located in Clark County.
- Of the total 66 FPA/Ns, 41 were associated with large/industrial landowners, and 25 were associated with small forest landowners.

WESTERN GRAY SQUIRREL SITE MANAGEMENT PLANS

Throughout 2016, WDFW continued its WGS conservation efforts with landowners, conducting WGS nest surveys and coordinating with landowners to develop and implement WGS management plans. The following is a summary of management plan development and implementation activity for the time period of January 1 through December 31, 2016.

Of the total 66 WGS-related FPA/Ns:

- All 66 FPA/Ns involved the need for further review, including such tasks as confirming WGS presence or absence, conducting a WGS nest survey, and/or confirming appropriate WGS protection measures to be implemented during forest practice activities:
 - 27 FPA/Ns resulted in no WGS nests and no need for WGS management plans.
 - 39 FPA/Ns required development and/or implementation of WGS management plans:
 - § 5 FPA/Ns were associated with small landowners.
 - § 34 FPA/Ns were associated with large or industrial landowners.
 - § Of the 39 WGS management plans, 4 included less than ideal WGS protection measures (e.g. leaving nest trees only, etc.); the remaining 35 FPA/Ns incorporated adequate WGS management plans. The 4 inadequate plans were associated with three small forest landowners in Klickitat County.

Due to on-going staff/resource limitations, WDFW has not been able to conduct compliance and/or effectiveness monitoring.

OTHER LANDOWNER EFFORTS

In 2015, WDFW began collaborative discussions with SDS Lumber Company about development of a landscape-level management approach for some SDS ownership in the Klickitat region. The goal of this landscape plan would be to formally incorporate WDFW's *Priority Habitats and Species Management Recommendations for Western Gray Squirrel (August 2010)* into a Habitat Management Plan (HMP) for SDS lands. Due to on-going workload factors and competing priorities for both SDS and WDFW, progress has been gradual, but both parties remain committed to continuing development of a landscape-level HMP during 2017.

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 Western Gray Squirrels and is routinely requested by counties to support their land use planning. This is the same data that WDFW biologists use to screen FPA/Ns and other proposals going through the State Environmental Policy Act process for potential project impacts to the Western Gray Squirrel.

2016 WDFW SURVEYS AND CONSERVATION EFFORTS

Population/Habitat Surveys

In 2015, WDFW initiated a survey effort for western gray squirrels with the goal of estimating the extent of area occupied by the species as well as estimating their relative abundance in different forest communities. The survey was designed to be state-wide in scope, incorporating the 3 known existing populations (Puget Trough, north and south Cascade Mountains (Cascades)) as well as that part of the east slope of the Cascades that likely provides connection between the 2 Cascade populations but where observations have been few. After surveying 136 transects over 2 years, WDFW confirmed occupancy at only 7 sites. Detectability in areas known to be occupied by WGS was unrealistically low, a result that would lead to misinformed estimates of occupancy and range extent. Current efforts are reevaluating the methods used in the survey and modified techniques will be tested in spring/summer 2017. New techniques that provide a higher detection rate will be employed in 2018 and 2019 with the goal of completing sampling in the 3 known existing populations.

U.S. Department of Defense funding cuts ended pilot research pertaining to forestry effects on WGS at Joint Base Lewis-McChord (JBLM). WDFW continues to consult with their forestry and wildlife staff when timber harvests are planned in areas occupied by WGS, helping them accommodate for WGS habitat in their prescriptions.

Additionally, WDFW (along with other partners) intends to accomplish the following within the next 2-3 years: (1) conduct an evaluation of habitat change in Klickitat County, and (2) conduct an evaluation of the impacts of recent wildfires on WGS habitat in the north Cascades.

Conservation Actions

WGS recovery and management actions by WDFW include: (1) the review of FPAs that may impact the species and its habitat, and preparation of management plans for willing landowners, including WDFW's Western Gray Squirrel PHS Management Recommendations on a site-specific basis; (2) the thinning of forest understory vegetation on the Klickitat Wildlife Area to enhance WGS habitat and reduce the threat of large wildfires; (3) advising DNR staff on measures for enhancing WGS habitat on DNR lands; (4) advising JBLM forest land management staff on habitat management activities affecting the species; and (5) as time and resources allow, the preparation of professional scientific manuscripts describing the ecology and conservation of WGSs, competition with eastern gray squirrels, and population modeling.

SUMMARY

All proposed forest practice activities identified as potentially having an impact to WGS were screened by WDFW and DNR. WDFW staff conducted nest surveys and worked with all landowners having WGS or WGS nests within their harvest unit to develop or implement voluntary management plans.

In January of 2016, WDFW completed a formal periodic status review of the species. Because of the species' relatively small total population size, continuing threats, and a lack of information suggesting that any of the three populations have either reached the down-listing goals of the recovery plan or substantially declined since 2005, the Washington State Fish

and Wildlife Commission took action that the WGS remain a state threatened species in the state of Washington.

Ongoing surveys by WDFW are intended to provide information to better clarify current WGS population levels and further assess the status of the species and their habitat for the next scheduled periodic status review. These surveys, combined with continued tracking of FPAs and management plans, will allow WDFW and DNR to monitor and evaluate the effectiveness of the voluntary protection approach. All information will be used to provide recommendations, as needed, on any possible changes or improvements to the forest practices protection strategies for WGS.