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TO: Forest Practices Board

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The Forest Practices Board’s (Board) voluntary cooperative protection approach for the Taylor’s checkerspot butterfly (Euphydryas editha taylori) (TCB) is in its fifteenth year. The attached status report covers calendar years 2020 and 2021 for actions related to this Washington state- and federally-listed endangered species.

As background, the Board in 2007 approved a voluntary cooperative protection approach for the TCB that was recommended by the Department of Natural Resources and supported by the Washington Department of Fish and Wildlife (WDFW). In 2014, the Board expanded its protection approach to include the U.S. Fish and Wildlife Service’s new federally-designated critical habitat for TCB. In 2016, the Washington Fish and Wildlife Commission retained the state’s endangered listing based on WDFW’s status review for the butterfly, which concluded that the species remained threatened with extinction in Washington state.

At your August 2022 meeting, staff will be available for questions or comments on the report, the species, or the current biennial reporting schedule. Should you have questions in the meantime, please contact us: colleen.granberg@dnr.wa.gov or 360-902-1705; Darric.Lowery@dfw.wa.gov or 360-628-7137.


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Once common in the Pacific Northwest, the Taylor’s checkerspot butterfly (*Euphydryas editha taylori*; TCB) remains on only a handful of sites in the state of Washington. This butterfly was listed by the Washington Fish and Wildlife Commission (Commission) as State Endangered effective on March 2, 2006. On November 4, 2013, the U.S. Fish and Wildlife Service (USFWS) federally listed the butterfly as endangered and designated critical habitat under the Endangered Species Act (ESA). Based on recommendations from the state’s *Periodic Status Review for the Taylor’s Checkerspot* (July 2016), the Commission retained the species’ State Endangered status on August 5, 2016.

**SPECIES BACKGROUND**

In western Washington, TCB inhabits highly localized areas where the butterflies complete their year-round life cycle. Therefore, the species is always present on occupied sites.

Occupied sites within state and private forestland in eastern Clallam and southern Thurston counties, and in northeastern Olympic National Forest consist of small grassy balds, which are shallow-soiled openings situated within the forest matrix that do not support timber production. Occupied sites on federal land within Joint Base Lewis-McChord (JBLM) in southern Pierce County, and state and private lands in northern Thurston County are in native grassland (prairie). A non-forested, sandy, coastal private property in Clallam County also has an occupied site.

Unoccupied areas included in the federally designated critical habitat involve non-federal forestland in eastern Clallam, southern Thurston, west Skagit, and northern Island counties that meet the habitat needs of the species. These areas may have been historically occupied.

**FOREST PRACTICES BOARD RESPONSE**

**2006 STATE LISTING AS AN ENDANGERED SPECIES**

On May 10, 2006, the Forest Practices Board (Board) determined there was enough potential risk to TCB from certain forest practices activities to consider rule making and protection strategies. As part of that process, the Board authorized Department of Natural Resources (DNR) staff to provide the public formal notice of intent to consider rule making.

Following public notice and through August 2007, DNR led meetings attended by Washington Department of Fish and Wildlife (WDFW), forest landowners, and interested stakeholders, including Washington Butterfly Association and The Nature Conservancy. Discussions addressed the butterfly’s habitat requirements, potential effects of certain forest practices, and
protection strategies. In addition, WDFW staff met with individual landowners and land managers having TCB habitat to identify opportunities for voluntary protection and management options. During this process, the five large forest landowners who owned or managed lands containing occupied butterfly sites committed to the development of management plans with WDFW.

On September 11, 2007, the Board approved the voluntary protection approach recommended by DNR and supported by WDFW. This decision recognized the work of both agencies in coordination with stakeholders, as well as the commitments from landowners to develop management plans. In addition to voluntary management plans, DNR’s conditioning authority to protect public resources, including wildlife, provides a safety net for protection, which is key to the Board’s acceptance of a voluntary approach.

At the Board’s request, DNR and WDFW initiated a joint-agency screening process for Forest Practices Applications and Notifications (FPA/Ns) to identify proposed FPAs with the potential to impact the species. The Board also requested the agencies annually report on:

- butterfly protection issues associated with individual FPA/Ns; and
- the status of completing WDFW-approved large landowner management plans.

Once landowners who committed to develop management plans had successfully done so, subsequent reports would occur every five years. In any case, the agencies were to immediately report to the Board any protection issues that arose for the species.

2009 CO-AGENCY TRAINING
In March 2009, DNR and WDFW conducted a formal joint training for agency staff. This training highlighted the species life cycle, habitat requirements and sensitivities, and clarified the agencies’ roles and responsibilities for processing, reviewing, and conditioning FPA/Ns.

2014 FEDERAL DESIGNATION OF CRITICAL HABITAT
On February 11, 2014, the Board accepted DNR’s recommendation supported by WDFW to:

- include the federally designated critical habitat in the FPA screening process and continue implementing the voluntary protection approach; and
- continue annual reporting, recognizing that all WDFW-approved large landowner management plans had been completed.

Federally designated critical habitat areas were incorporated into DNR’s Geographic Information System (GIS), effectively extending FPA/N screening and landowner outreach to additional non-federal forestlands in Clallam, Thurston, Island, and Skagit counties.

2018-2019 BIENNIAL REPORT
On August 8, 2018, DNR and WDFW recommended biennial reporting given success of the protection approach, incorporation of federal critical habitat data in the screening process, and the fact that there had been no FPA-associated issues. The recommendation was accepted by the Board with the stipulation that DNR and WDFW provide immediate notification of any issues if they arose with the voluntary cooperative approach adopted for the species.

FOREST PRACTICES APPLICATIONS AND NOTIFICATIONS (FPA/Ns)
SCREENING PROCESS
FPAs are screened by DNR for proximity to TCB-occupied habitat identified by WDFW and for federally designated TCB critical habitat. When an FPA/N is in or within one mile of any of these areas, DNR notifies WDFW. WDFW reviews these FPAs for potential impacts from proposed forest practices activities. If necessary, WDFW then consults with the landowner to protect the site and species. If voluntary landowner action is not adequate, WDFW may request protective conditioning by DNR. To date, there have been no issues or concerns associated with individual FPA/Ns during the cooperative protection approach. Because of this, WDFW is confident that the screening process is working well and the potential risk to the species from forest practices remains low.

2020-2021 BIENNIUM
2021 marks the Fourteenth year since the Board’s 2007 approval of the voluntary cooperative protection approach for the TCB. This is the seventh report to include the 2013 federally designated critical habitat for the species, and second biennial report.

For calendar years 2020 and 2021, a total of thirty (30) FPAs were proposed and approved within the one-mile butterfly screening buffer:

- Eleven (11) FPAs were within ½ mile of state and/or federally designated TCB habitat.
- Nineteen (19) FPAs were within 1.0 mile of state and/or federally designated TCB habitat.

These FPAs were located within Island, Clallam, and Thurston counties, and reviewed through DNR’s Northwest, Olympic, and South Puget Sound regions, respectively. None of these forest practices activities were determined by WDFW to pose a risk to the species.

BIENNIAL SPECIFICS
Of the Eleven (11) FPAs located within one-half mile from a habitat edge:

- Seven (7) FPAs were approved for even-aged timber harvest activities.
- One (1) FPA was approved for even-aged and salvage harvest activities.
- One (1) FPA was approved for even-aged timber harvest activities with stream crossings.
- One (1) FPA was approved for even-aged and right-of-way harvest, road construction, and rock pit/spoils area activities.
- One (1) FPA was approved for even-aged and right-of-way harvest, road construction, stream crossings, and rock pit/spoils area activities.
- One (1) FPA was approved for even-aged timber harvest activities with stream crossings.

Nineteen (19) FPAs were located between one-half to one mile from a habitat edge:

- Seven (7) FPAs were approved for even-aged or uneven-aged harvest activities.
- One (1) FPA was approved for even-aged and salvage harvest with road construction activities.
- One (1) FPA was approved for even-aged harvest with road construction activities.
- One (1) FPA was approved for even-aged or uneven-aged harvest with right-of-way activities.
- Two (2) FPAs were approved for even-aged or uneven-aged harvest with road construction, right-of-way activities and stream crossings.
- Three (3) FPAs were approved to replace a stream crossing.
- One (1) FPA was approved for even-aged timber and right-of-way harvest, road construction, stream crossings, and rock pit/spoils area activities.
- One (1) FPA was approved stream crossings and rock pit/spoils area activities.
- Two (2) FPAs were approved for aerial chemical application.

**BUTTERFLY SITE MANAGEMENT PLANS AND LANDOWNER STATUS**

With information developed during stakeholder involvement, WDFW produced general guidance on what types of activities should be addressed by management plans in order to protect the habitat of occupied sites. In late 2006, this guidance was distributed to the five large forest landowners who owned or managed sites occupied by the butterfly at the time.

WDFW subsequently incorporated landowner input. This guidance may see future updates to provide clarity or incorporate knowledge gained relative to protection and management of occupied sites.

**PROTECTION BY COUNTIES**

WDFW’s Priority Habitats and Species (PHS) database with TCB GIS data is available for use by counties to identify known occupied butterfly sites for local land use planning. Counties (and the public) access this data via WDFW’s PHS on the Web. This is the same data WDFW biologists use to screen FPA/Ns and proposals being reviewed under the State Environmental Policy Act that might affect TCBs.

Thurston County receives regularly updated PHS data from WDFW digitally. The county is developing a Habitat Conservation Plan for prairie and oak woodland species, including TCB conservation strategies. Clallam, Island, and Skagit counties also receive PHS data upon request in support of specific plans or projects.

**2020-2021 BIENNIUM SURVEYS AND CONSERVATION ACTIONS**

**BUTTERFLY SURVEYS**

During spring and summer of 2020 and 2021, biologists from WDFW, Olympic National Forest (ONF), and JBLM conducted monitoring surveys in one or both years on all eight existing native TCB sites and four of six reintroduction sites in Washington. Monitoring was suspended at two reintroduction sites when populations failed to establish. The distribution of the twelve TCB populations currently known to occur in Washington are discussed below.

*South Puget Sound (Thurston and Pierce counties.* TCB populations were monitored at one native site on JBLM in Pierce County in 2020 but not 2021, and on four (2020), and three (2021) south Puget Sound prairies where WDFW has reintroduced captive-reared butterflies. Access restrictions on JBLM prevented monitoring of two sites in 2021. Sampling data for 2020 and showed flat or declining populations on three sites in 2020, with one reintroduction site increasing in abundance. In 2021 the three reintroduction sites monitored all showed declines of about 50 percent based on single day abundance estimates for adult butterflies; two of these had met criteria for established populations. Two sites that has failed to recruit butterflies despite significant effort are no longer being monitored.
North Puget Sound (Clallam County). Populations were monitored by ONF on three sites in 2020 and four sites in 2021, WDFW monitored two sites located on state land in both years, and one site on private land was monitored in 2021. WDFW initiated a new TCB monitoring methodology in 2018 to improve the accuracy of monitoring data and allow for better comparisons of butterfly numbers between visits and years. Butterfly occurrence data were within the range of variation observed in recent years at the two sites monitored by WDFW and within Olympic National Forest, with some sites increasing and others decreasing between years.

CONSERVATION ACTIONS
Ongoing conservation activities include efforts by WDFW, DNR, Center for Natural Lands Management (CNLM), USFWS, JBLM, Washington State Recreation and Conservation Office (RCO), and U.S. Department of Defense (DOD). Actions include continuing restoration and enhancement of habitat and large-scale captive rearing and reintroduction efforts. The county governments of Thurston, Clallam, Island, and Skagit continue to utilize WDFW’s GIS data as they conduct local land use planning. This committed group of collaborators has made significant progress to address threats and promote recovery of TCB in Washington. However, species’ persistence likely remains dependent upon continuation of these conservation efforts.

South Puget Sound (Thurston and Pierce counties). On-going TCB conservation actions in 2020-2021 were achieved by WDFW, DNR’s Natural Areas Program, and the CNLM in partnership with USFWS, JBLM, and RCO. USFWS Recovery Funds have become the sole source of support for WDFW’s efforts to re-establish TCB populations in south Puget Sound, although some money is available to monitor populations on JBLM through March 2023. DNR and WDFW also received grant monies for south Puget Sound prairie restoration from RCO’s Washington Wildlife and Recreation Program. Using these funding sources, the following activities were conducted:

- WDFW continued restoration and enhancement of habitat on three sites in Thurston County.
- WDFW oversaw continuing large-scale captive-rearing and reintroduction efforts with 7,000+ checkerspot larvae released at two butterfly translocation sites in 2020 and 3,700+ larvae released at one site in 2021. All releases were in Pierce County.
- DNR restored and enhanced additional habitat at the Bald Hill Natural Area Preserve.
- The CNLM restored and enhanced additional habitat on several Thurston County sites in preparation for ongoing and future butterfly reintroductions.

Additional Conservation Actions. Taylor’s checkerspot is one of twenty-one Oregon and Washington rare and/or declining prairie and oak woodland species that received support from multi-year USFWS Competitive State Wildlife Grants awarded in 2012-2022. The grants funded Prairie-Oak conservation work for TCB on south and north Puget Sound sites. WDFW was the lead entity for the grants and many partners cooperated to develop the project and have received funding, including WDFW, DNR, Oregon Department of Forestry, CNLM, the American Bird Conservancy, local land banks, additional public land managers, and private landowners from both states.