WASHINGTON STATE DEPARTMENT OF
Natural Resources

Washington Department of
FISH and WILDLIFE

April 26, 2014

MEMORANDUM

TO: Forest Practices Board

FROM: Sherri Felix, Forest Practices Policy Analyst, Washington State Department of Natural Resources

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

SUBJECT: 2013 Annual Report on the Board's Voluntary Cooperative Protection Approach for Taylor's Checkerspot Butterfly (*Euphydryas editha taylori*)

The sixth annual report on the status of the Forest Practices Board's (Board) voluntary protection approach for the Taylor's checkerspot butterfly is attached. This report covers the 2013 calendar year.

On September 11, 2007, the Board approved the voluntary cooperative protection approach for the state listed Taylor's checkerspot butterfly recommended by the Department of Natural Resources (department) and supported by the Department of Fish and Wildlife (WDFW). At that time, the Board also directed staff of the two departments to annually report to the Board on the status of the voluntary cooperative protection approach.

On February 11, 2014, the Board accepted the department's recommendation, supported by WDFW, to expand its protection approach based on the U.S. Fish and Wildlife Service's recently designated critical habitat for this butterfly under the Endangered Species Act. Beginning with the 2014 annual report you receive for your May 2015 meeting, Taylor's checkerspot annual reports will include this expanded protection approach.

We look forward to discussing the 2013 report with you at your May 2014 meeting.

In the meantime, please do not hesitate to contact us: sherri.felix@dnr.wa.gov or 360-902-1446; gary.bell@wdfw.wa.gov or 360-902-2412.

Attachment

cc. Chris Hanlon-Meyer, Marc Engel, Marc Ratcliff
Margen Carlson, Terry Jackson, Eric Gardner, Bruce Thompson, Ann Potter

2013 Annual Report to the Forest Practices Board

The Status of a Voluntary Cooperative Approach for the Taylor's Checkerspot Butterfly
May 13, 2013

SPECIES BACKGROUND

The Taylor's checkerspot butterfly was listed by the Washington Fish and Wildlife Commission as State Endangered effective March 2, 2006. The U.S. Fish and Wildlife Service listed the species as endangered and designated critical habitat under the Endangered Species Act (ESA) effective November 4, 2013.

In Washington State, the species occurs in highly localized areas in Clallam, Pierce and Thurston Counties. Occupied sites occur on non-federal forestland in Clallam and Thurston Counties. These sites consist of small grassy "balds" within the forest matrix, which have thin soils and generally are not conducive to efficient timber production. The species occupies their habitat throughout the year in various life stages, and are thus always present on occupied sites.

HISTORY OF FOREST PRACTICES BOARD ACTIONS

On May 10, 2006, the Forest Practices Board (Board) determined there is sufficient potential risk to the Taylor's checkerspot butterfly from certain forest practices activities to consider rule making and other protection strategies. The Board directed Department of Natural Resources (DNR) staff to notify the public of its intention to consider rule making.

From April 2006 to August 2007, DNR held meetings attended by Washington Department of Fish and Wildlife (WDFW) experts, forest landowners and other interested stakeholders, including the Washington Butterfly Association and The Nature Conservancy. Discussions focused on the butterfly's habitat requirements, potential effects of certain forest practices, and protection strategy options. Additionally, WDFW staff met with individual landowners and land managers to further discuss voluntary protection and management options. During this process, the handful of large forest landowners who own or manage occupied butterfly sites committed to develop 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 DNR and WDFW in conjunction with stakeholders, the commitments from many landowners to develop management plans, as well as DNR's conditioning authority to protect public resources. In light of the precarious status of the species and the related need for protection and

management assistance from forest landowners, the Board directed DNR and WDFW to annually report on the status of management plans, and any butterfly protection issues associated with individual Forest Practices Applications or Notifications. Once those landowners who committed to develop management plans with WDFW have successfully done so, staff will report every 5 years.

WORKSHOPS AND TRAINING

On March 26, 2009, DNR and WDFW conducted co-agency training for staff from both agencies who are involved in reviewing and conditioning Forest Practices Applications and Notifications, developing and reviewing Taylor's checkerspot butterfly management plans, etc. This training built upon a basic understanding of the species' life cycle and habitat requirements, and the potential positive and negative effects from forest practices, and highlighted the sensitivity of the species to possible impacts. It also clarified each agency's roles and responsibilities for processing, reviewing, and conditioning FPA/Ns that may have an effect on the butterfly. The training had the added benefits of creating ownership in protecting the species, as well as strengthening interagency working relationships.

2013 FOREST PRACTICES APPLICATIONS/NOTIFICATIONS (FPA/NS)

In the fall of 2006, DNR and WDFW initiated an interagency screening process for FPA/Ns with the potential to impact the Taylor's checkerspot butterfly. Using WDFW's GIS location data for occupied Taylor's checkerspot sites, DNR notifies WDFW of all FPA/Ns within one mile of, or within, a WDFW identified occupied site. WDFW reviews these FPA/Ns for potential impacts to the butterfly, and if necessary, works with the landowner/land manager to protect the site and species. Short of landowner action, WDFW requests protective FPA/N conditioning by DNR. This process continues today, and provides a safety net of protection.

The following is a summary of the January 1, 2013 through December 31, 2013 FPA/Ns:

- No FPA/Ns were proposed for operations within WDFW identified occupied Taylor's checkerspot butterfly habitat.
- A total of eleven FPA/Ns were within one-mile of a WDFW identified occupied Taylor's checkerspot butterfly site:
    - Seven FPA/Ns (64%) were within one-half to one-mile from a site.
    - Four FPA/Ns (36%) were within one-half mile from a site.
- Nine FPA/Ns (82%) were to conduct Class III forest practices activities.
- Two FPA/Ns (18) were Class II renewals of even-aged harvests, one with road construction.
- Large forest landowners conducted even-aged, uneven-aged, and salvage harvests, road construction work, and a pesticide application on four FPA/Ns (36%).
- Small forest landowners conducted a culvert replacement and even and uneven-aged harvests on seven FPA/Ns (64%).

None of these forest practices were determined by WDFW to pose a risk to the species and therefore, none were conditioned by DNR with protective measures.

BUTTERFLY SITE MANAGEMENT PLANS AND OTHER LANDOWNER EFFORTS

WDFW, utilizing information developed during the stakeholder process on rules and other protection approaches, developed 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 large forest landowners who own or manage sites occupied by the butterfly, and WDFW subsequently modified the document based on landowner input. The document may be updated in the future to provide clarity or to incorporate knowledge gained relative to protection and management of occupied sites.

There were previously five large forest landowners that owned or managed all or portions of occupied Taylor's checkerspot butterfly sites. Two changes in ownership occurred in 2013. The number of large forest landowners is now three, with each having an approved TCB management plan, and one forested parcel is now owned by a conservation organization. The following describes the change in landownership and site management plans over the past year:

- Merrill & Ring Company and WDFW collaboratively developed a management plan covering the company's ownership at one Clallam county butterfly site. The plan was approved and signed on February 10, 2010.
- The Department of Natural Resources (DNR) manages four occupied butterfly sites in Clallam County. Their management plan was developed jointly by the two agencies, and approved November 1, 2010.
- Weyerhaeuser and WDFW finalized a management plan covering approximately 1,100 acres and 11 occupied or formerly occupied sites within their ownership effective September 9, 2013.
- Green Crow completed a land exchange for their Taylor's checkerspot habitat near occupied habitat at Dan Kelly ridge (Clallam County). This land is now managed by DNR according to their butterfly management plan. The exchange was finalized near the end of 2013.
- Aloha sold their parcel near Dan Kelly Ridge to the Center for Natural Lands Management (CNLM, formerly The Nature Conservancy of Washington). This property is now protected under conservation ownership in perpetuity. Given the conservation focus of CNLM's management activities, WDFW has determined there is no need to develop a management plan for this ownership.

There are eight small forest landowners who own small portions of sites occupied by the Taylor's checkerspot, or who own property immediately adjacent to occupied sites. Due to high staff workloads, these landowners have not been contacted by WDFW to ascertain the possibility of developing plans to protect and restore Taylor's checkerspot habitat. Since late 2006, there have been no FPA/Ns issues or concerns associated with these sites, leaving WDFW confident that the resource risk from forest management is low. WDFW will work with these landowners to ensure protection of these sites if FPA/Ns are submitted that could have negative impacts.

PROTECTION BY COUNTIES

WDFW's Priority Habitats and Species (PHS) database with GIS location data for Taylor's checkerspot butterflies is regularly available to, and requested by, counties in order to identify known occupied butterfly sites as they conduct local land use planning. Thurston County receives PHS data from WDFW digitally, updated on a regular basis. Clallam County receives this data upon request (e.g., WDFW responds to requests from Clallam County for PHS data related to public works projects). 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 Taylor's checkerspot butterfly.

2013 Surveys and Conservation Actions

Butterfly Surveys

In the spring/summer of 2013, WDFW, as well as the U.S. Forest Service (USFS) and a private landowner, cooperatively conducted butterfly surveys to monitor current and recently occupied Taylor's checkerspot populations in Washington. In the south Puget Sound region, several of the historically occupied sites in the Bald Hill landscape (Thurston County) were de facto surveyed during efforts to monitor other butterfly species of concern occurring during the same season. No Taylor's checkerspots were detected. From 2008-2011, WDFW made intensive survey efforts in this area resulting in no butterfly detections. It is unlikely that Taylor's checkerspot persists on any previously occupied sites in the Bald Hill area. Taylor's checkerspot populations were monitored at one site on Joint Base Lewis-McChord (JBLM) in Pierce County as well as on four south Puget Sound prairies where WDFW has reintroduced captive-reared butterflies. Formal sampling data have not yet been analyzed for 2013, however raw numbers of butterflies counted at the site on JBLM were similar to numbers observed in 2007, which is slightly lower than 2012 numbers. Raw counts at the four reintroduction sites provided contrasting results with a notable increase in numbers at one site and similar or reduced numbers at the others.

In the north Puget Sound region (Clallam County), Taylor's checkerspot was monitored by the USFS on four sites, and by WDFW and a private landowner on one site. Butterfly numbers were slightly higher than 2012 on these five sites. Persistent fog and poor spring weather significantly reduced monitoring on the two additional Taylor's checkerspot sites in this region.

In total, 12 populations of Taylor's checkerspot are currently known to persist in Washington. The distribution of those populations is:

- five in South Puget Sound (multiple ownerships described below; four of which are nascent experimental translocations),
- four on the Olympic National Forest, and
- three on state or private land in Clallam County.

Conservation Actions

South Puget Sound Region

Significant Taylor's checkerspot conservation actions were achieved by WDFW, the DNR Natural Areas Program, and Center for Natural Lands Management in partnership with the U.S. Fish and Wildlife Service (USFWS), JBLM, and the Washington Recreation and Conservation Office (RCO). The Department of Defense's Army Compatible Use Buffer program funds checkerspot conservation actions outside JBLM. USFWS Recovery Funds supported WDFW's efforts to re-establish Taylor's checkerspot populations in south Puget Sound. DNR and WDFW also received grant monies for south Puget Sound prairie restoration from the RCO's Washington Wildlife and Recreation Program. Using these funding sources:

1) WDFW restored and enhanced habitat for Taylor's checkerspot on three sites in Thurston County, and oversaw a large-scale captive-rearing and reintroduction effort on two Thurston County and two Pierce County butterfly translocation sites;
2) DNR restored and enhanced habitat in the Bald Hill Natural Area Preserve, and;
3) The Center for Natural Lands Management restored and enhanced habitat on several Thurston County sites in preparation for ongoing and future reintroductions of the butterfly.

North Puget Sound Region (Clallam County)
In partnership with the USFS, WDFW was funded to continue development of a management plan for three USFS Taylor's checkerspot occupied sites as well as restore and enhance habitat at one site. Working together, DNR and WDFW restored and enhanced habitat at two Taylor's checkerspot sites located on DNR lands.

Taylor's checkerspot is one of 21 Oregon and Washington rare and/or declining prairie and oak woodland species that will receive support from a 2012 USFWS State Wildlife Grant. Many partners cooperated to develop this project and will receive funding, including WDFW, DNR, Oregon Department of Natural Resources, The Center for Natural Lands Management, The American Bird Conservancy, local land banks, public land managers, and private landowners from both states. Weyerhaeuser is a participant and the project will enhance and restore Taylor's checkerspot habitat on their lands in the Bald Hill area. WDFW is the project lead for Washington.

WDFW continues working cooperatively with USFS, USFWS, and private researchers on a project to evaluate the population genetics of extant populations range-wide as well as captive-reared individuals (i.e. to evaluate evidence of inbreeding, relatedness to other populations, within subspecies genetic diversity, etc.). This effort also seeks to address phylogenetic questions (i.e. is the subspecies *taylori* made up of multiple taxa, and what is the relationship to neighboring subspecies?). WDFW coordinated genetic sample collection throughout the butterfly's range (Washington, Oregon, and British Columbia) and completed collection for Washington populations. Funding and support for this project was provided by all the above cooperators.

SUMMARY

All known occupied Taylor's checkerspot sites in Washington were monitored in 2013 by WDFW and partners. Overall butterfly numbers were relatively high throughout all of the occupied sites within monitored populations. No Taylor's checkerspots were observed on Thurston County sites except where WDFW has translocated butterflies in an attempt to re-establish populations. Butterfly numbers appear to be consistent over the last few years on the six occupied Clallam County sites. Currently, there are twelve Taylor's checkerspot populations in the state, three of which are experimental reintroductions. WDFW has not identified any additional Taylor's checkerspot occupied sites on state or private lands.

In the sixth year since the Board approved a voluntary, cooperative protection approach for the Taylor's checkerspot butterfly, there were eleven FPA/Ns within one mile of an occupied butterfly site. This makes a total of sixty-nine FPA/Ns within one mile of an occupied site in the first six years of the Board's voluntary protection approach for this species. There has not

been any butterfly protection issues associated with these individual forest practices activities. There was one issue associated with an FPA just prior to the 2007 Board action.

Regarding butterfly management plans, of the original five large forest landowners owning or managing occupied butterfly habitat, two sold their affected parcels this year. Merrill & Ring, DNR, and Weyerhaeuser continue to protect and manage for Taylor's checkerspot according to their approved management plans. One landowner, Green Crow, exchanged their parcel with DNR and so the parcel is covered by DNR's management plan. The other landowner, Aloha, sold their affected parcel to the Center for Natural Lands Management, resulting in conservation of this land in perpetuity.

The Thurston County and Clallam County governments continue to utilize WDFW's GIS locational data as they conduct their local land use planning.