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TO:

## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Michigan Field Office (ES)  
2651 Coolidge Road, Suite 101  
East Lansing, Michigan 48823-6316



October 19, 2020

FWS/AES-TE

### Memorandum

To: Assistant Regional Director  
Through: Ecological Services Program Manager, Endangered Species/Habitat Conservation  
From: Regional HCP Coordinator  
Subject: Set of Findings: Multi-state Habitat Conservation Plan for Mitchell's Satyr Butterfly and Poweshiek Skipperling in Michigan and Indiana

On February 20 and August 30, 2018, the U.S. Fish and Wildlife Service (Service) received applications for incidental take permits (ITP) under the Endangered Species Act of 1973, as amended (Act), from the Michigan Department of Natural Resources (Michigan DNR) and Indiana Department of Natural Resources (Indiana DNR), respectively. The ITP duration is 20 years and is intended to allow for incidental take of the Mitchell's satyr butterfly and Poweshiek skipperling resulting from activities related to habitat management in prairie fens on non-federal lands in Michigan and Indiana.

In accordance with the Act [16 U.S.C. 1539 (a)(2)(A)], a Habitat Conservation Plan (HCP) accompanied the permit applications. The Service prepared the Environmental Action Statement (EAS) for the ITP application requests. A Federal Register Notice announcing receipt of the permit application, and soliciting comments on the application, was published in the *Federal Register* on September 5, 2018. The notice opened a 30-day comment period ending October 5, 2018, prior to the Service's final decision. Comments were received by the Service during the comment period.

This memorandum constitutes a Set of Findings for processing the application and describes the Service's rationale for making its recommendation to issue an ITP to the applicant.

### I. DESCRIPTION OF PROPOSAL

The Michigan DNR has applied for an ITP for Mitchell's satyr butterfly (MSB) and Poweshiek skipperling (POSK), and the Indiana DNR has applied for an ITP for MSB under authority of section 10(a)(1)(B) of the Act. Under these two ITPs, habitat management will occur on State-owned land and on non-State land through issuance of Certificates of Inclusion to non-federal partners. The duration of each ITP is 20 years. All

activities included in the HCP are specifically related to MSB and POSK habitat evaluation, manipulation, restoration, or enhancement activities.

The habitat management techniques covered in this HCP are as follows: (1) methods to restore hydrology, such as removing berms, drainage tiles, wells, or ponds and installing new culverts or adjusting existing culvert heights; (2) prescribed fire; (3) mowing and hydro-axing; (4) removal of vegetation by manual removal, mechanical treatments, prescribed fire, and/or herbicide application; (5) biological control of invasive species; (6) livestock grazing where it currently occurs; and (7) seeding and planting in fens where the native seedbank has been exhausted.

The area covered under this HCP includes all occupied habitat for MSB in Michigan and Indiana and all occupied habitat for POSK in Michigan. Mitchell's satyr currently occupies 192 acres in Berrien, Cass, Jackson, Van Buren, and Washtenaw counties in southern Michigan and 5 acres in Lagrange County in northern Indiana. Poweshiek skipperling currently occupies approximately 50 acres in Oakland County in southeastern Michigan.

## **II. SECTION 10(a)(2)(A) HCP CRITERIA – ANALYSIS AND FINDINGS**

### **1. The impact that will likely result from such taking**

The Michigan and Indiana DNR prepared an HCP that addresses potential effects of the permitted activities. The HCP and EAS describe the proposed activities and the anticipated impacts to MSB and POSK and associated habitat within the project area. We have determined incidental take of both species would occur as a result of habitat management, which is expected to have short-term adverse impacts, but long-term benefits. Permanent loss of habitat will not occur under this HCP.

The amount of occupied MSB habitat that may be impacted in any given year ranges from zero to 64 acres (1/3 of 192 acres of occupied habitat) and from zero to 16 acres (1/3 of 50 acres of occupied habitat) for POSK. These numbers may be adjusted as the occupied acreage changes. The HCP provided sufficient information for the Service to evaluate the impacts of the proposed activities. The Service's analysis of the project impact is described in a May 27, 2020, Biological Opinion,

### **2. Steps that will be taken to monitor, minimize, and mitigate such impacts, the funding that will be available to implement such steps, and the procedures to be used to deal with unforeseen circumstances**

Michigan and Indiana DNR are responsible for ensuring implementation and compliance with the terms and conditions of the ITP and minimization measures within the HCP. The minimization measures support the long-term viability of MSB and POSK, and does not provide for any permanent take of habitat. It also provides information on funding to implement the proposed actions and procedures to address changed and unforeseen circumstances.

Michigan and Indiana DNR will utilize an adaptive management approach, which includes monitoring, to evaluate MSB and POSK distribution, assess the effects of certain

management activities on populations and habitat, and modify those activities, when appropriate. All entities working under the ITP and HCP will follow the below conservation measures to minimize adverse effects on the butterflies and habitat.

General measures to minimize trampling within occupied habitats include a limit of 10 individuals at any given time in occupied habitat, use of existing trails when available, and travel of more than 3m from woody vegetation through open fen.

For restoration activities involving prescribed fire, flooding to restore hydrology, mowing/hydro-axing, and moderate to intense vegetation management, no more than 1/3 of occupied habitat at each contiguous site will be treated in any one year, and the same patch will not be burned in consecutive years. Refugia from prescribed fires will be established in occupied habitat, and a detailed management plan and monitoring protocol must be completed prior to implementing a prescribed burn. Mowing or hydro-axing will occur when the soil is frozen and can support equipment, and decks will be elevated such that sedge tussocks are not shortened or damaged.

Installation of new culverts or adjusting existing culverts must be engineered such that groundwater can pass through the surface of the fen. Hydrological restoration activities that cause drying of the substrate during the month of July will be prohibited.

Seeding and planting should be done with seed collected in other parts of the same fen, or from another nearby fen (within 100 miles), or with local genotype seed (within 100 miles north/ south or 200 miles east/west). Plantings and seed mixes must include significant amounts of short-statured plants, and tussock sedge clumps from occupied habitat will not be used as source material for plantings.

Biological controls targeted at any non-native invertebrate will not be released within occupied habitat unless USDA testing indicates no direct risk to Lepidoptera or to members of the subfamily Satyrinae and/or Hesperidae. Biological control using native species (e.g., praying mantis releases) to control invertebrates will not occur in occupied habitat. Biological controls found to feed on plant species critical to MSB or POSK for food or egg-laying will not be released.

Because the only activities covered under this HCP are actions taken to manage habitat for the benefit of MSB and POSK while minimizing incidental take, additional mitigation measures are not required.

The treatment of unforeseen circumstances in the HCP (section A10) is consistent with the Service's Habitat Conservation Plan Assurances ("No Surprises") Rule, dated February 23, 1998. Unforeseen circumstances relevant to this HCP might include the introduction of harmful diseases or additional exotic species that could have significant detrimental effects on the MSB. If this occurs, the HCP states the Michigan DNR and the Service will consider potential measures to address the changed conditions.

### **3. Alternative actions to the taking the applicant considered and the reasons such alternatives are not proposed to be utilized**

A Public-lands HCP and Status Quo or No Actions are the two alternatives that were not proposed for implementation.

*Public-lands HCP:* Similar to the proposed HCP, with the exception of occurring only on public lands. This HCP would be restricted to public agencies and would miss opportunities for coordinating and working with knowledgeable private landowners and stewards in a coordinated fashion. The Service did not select this alternative because it much more restrictive in scope and omits most sites currently and previously occupied by MSB and POSK.

*Status Quo or No New Action:* The Service would not issue an incidental take permit for MSB and POSK to the Michigan and Indiana DNR, and existing management programs and techniques would continue under current permits. Management currently occurs at most MSB and POSK sites, usually outside of occupied habitat in efforts to restore adjacent fen to suitable habitat. These management techniques result in take and are therefore authorized under existing section 10(a)(1)(A) permits on a site-by-site, project-by-project basis pursuant to section 7 consultation. We expect this work would continue because the Michigan and Indiana DNR both value fen conservation; however, at lower efficiency and with poorer coordination among agencies. The quantity and quality of conservation would likely be lower under the status quo, compared to the other alternatives.

### **III. PUBLIC COMMENT**

The Service prepared an Environmental Action Statement for this ITP application. The Service published a Notice of Availability (NOA) in the *Federal Register* on September 5, 2018, notifying the public of the availability of the permit application and HCP. Public comments were accepted through October 5, 2018. Twelve comments were received following the publication of the NOA. All comments expressed general support of the HCP and/or butterfly conservation efforts.

### **IV. SECTION 10(a)(2)(B) PERMIT ISSUANCE CRITERIA – ANALYSIS AND FINDINGS**

#### **1. The taking will be incidental.**

The Service finds the take will be incidental to the otherwise lawful activities occurring as a result of proposed management, maintenance, and recovery activities in occupied MSB and POSK habitat by the Michigan and Indiana DNRs and their implementation partners under the HCP. Permanent take of habitat will not occur in the HCP.

#### **2. The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of the taking.**

The Service finds that Michigan and Indiana DNR developed the HCP pursuant to the requirements provided in the Act and its implementing regulations and have provided for minimization of take to the maximum extent practicable. Because the only activities covered under this HCP are actions taken to manage habitat for the benefit of MSB and POSK while minimizing incidental take, additional mitigation measures will not be

required.

**3. The applicant will ensure that adequate funding for the conservation plan and procedures to deal with unforeseen circumstances will be provided.**

Through execution of the Certificate of Inclusion, the applicants ensure funding is available to meet their obligations under this Agreement, the Permits, and the HCP throughout the 20-year term of the HCP. The Service's HCP Assurances ("No Surprises") rule is discussed in the HCP and measures to address changed and unforeseen circumstances have been identified. Unforeseen circumstances would necessitate coordination between the Service and the Applicants. The Applicants have committed to a coordination process to address such circumstances. The Service has therefore determined the financial commitment, along with the willingness to address changed and unforeseen circumstances in a cooperative fashion, is sufficient to meet this criterion.

**4. The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.**

The Service has reviewed issuance of an ITP to the applicants in accord with section 7 of the Act to cover activities associated with the proposed activities and HCP/Permit maintenance. As concluded in the biological opinion, the ITP will not appreciably reduce the likelihood of survival and recovery of MSB and POSK.

**5. Additional measures as required by the Director of the Service will be implemented.**

The Service finds that all additional measures required by the Service as necessary or appropriate for the HCP are included in the HCP, the Permit, and by extension the Biological Opinion.

**6. The Director of the Service has received the necessary assurances that the plan will be implemented.**

The permits will be valid only if the minimization measures have been carried out in accordance with the HCP and the terms and conditions of the permits. Failure to perform the obligations outlined by the conditions of the section 10(a)(1)(B) permits may be grounds for suspension or revocation of the permits.

**V. GENERAL CRITERIA AND DISQUALIFYING FACTORS**

The Service has no evidence the permit application should be denied on the basis of criteria and conditions set forth in 50 CFR § 13.21(b) and (c). Michigan and Indiana DNR have met the criteria for the issuance of the permits and does not have any disqualifying factors that would prevent the permits from being issued under current regulations.

**VI. RECOMMENDATIONS ON ISSUANCE OF PERMIT**

Based on the findings of the Regional Office and the Michigan Field Office staff, and with

respect to the ITP application, HCP, EAS, and biological opinion, we concur the issuance of section 10(a)(1)(B) ITP to the Michigan and Indiana DNR proposing the *Multi-state Habitat Conservation Plan for Mitchell's Satyr Butterfly and Poweshiek Skipperling in Michigan and Indiana* is recommended.

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Alisa Shull  
Chief, Division of Endangered Species

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Andrew Horton  
Regional HCP Coordinator