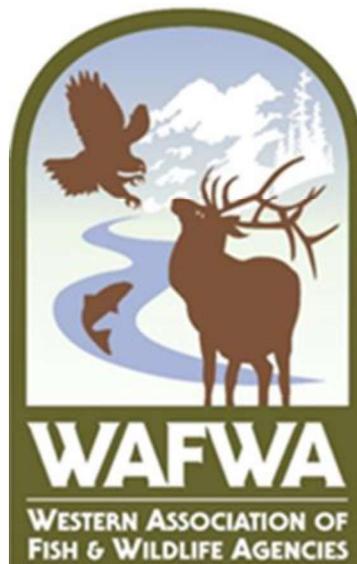


WAFWA Western Monarch and Native Insect Pollinator Working Group 2023-2026 Work Plan

(Corresponding Working Group 2022 Charter Objectives Listed)



The goal and purpose of the Western Association of Fish and Wildlife Agencies (WAFWA) Western Monarch and Native Insect Pollinator (WMNIP) working group is to identify and prioritize voluntary strategies and actions with landscape-level benefits to declining populations of insect pollinators. In particular, the 2023 Work Plan aims to benefit wide-ranging species through multistate and agency coordination, to facilitate species recoveries and thereby preclude the need for federal listing actions.

This work plan provides WAFWA WMNIP working group state members and partners with a near-term (less than 3 years) direction and strategies for identifying shared priorities, best management practices, and partnership opportunities to facilitate voluntary conservation actions for at-risk, native insect pollinators and their habitat.

To accomplish this, the work plan outlines criteria for determining shared priority species and habitats, optional blueprint language to include in conservation planning documents based on management authority, landscape-level actions to benefit insect pollinators, a summary of resources, partnerships, and key challenges to address, and next steps for communicating this process with partners.

Working Group Conservation Targets

A two- to three-year work plan will be developed and reviewed as necessary to document current and planned on-the-ground actions. The work plan will include a list of focal species as defined by the working group and research or monitoring work needed to support conservation targets. A short list of focal pollinator species will be selected by this group based on the following criteria and upon consultation with taxon experts.

I. Identifying Proactive Conservation Actions for Pollinator Species

A. Maintain Current Compilation of Shared Priority Species

1. Select focal insect pollinator species according to the following criteria:

- a) *US Endangered Species Act (ESA) listing status of petitioned, under review, candidate, threatened or endangered;*
- b) *Ranked as S1 (critically endangered), S2 (imperiled), or S3 (vulnerable) by state natural heritage programs and/or species ranked as T1/G1 or T2/G2 by NatureServe;*
- c) *Ranked as Threatened, Endangered, or Critically Endangered on the International Union for the Conservation of Nature Red List;*
- d) *Insect pollinator species recommended as priority concerns by:*
 - (1) Xerces Society
 - (2) Bureau of Land Management (BLM)
 - (3) US Forest Service
 - (4) Taxon experts

- e) *Species with a special status within one or more of the WMNIP member states*
- f) *Documented range in at least 2 Western states (at least 1 WMNIP member state + adjacent states)*

B. Final short-list of Key Shared High Priority Species

1. Tiered priority groups:
 - a) *Species with determined distribution, range, and threats for which habitat-level actions can be developed (wide-ranging and declining)*
 - b) *Data-deficient species of conservation concern where survey efforts and monitoring work can be directed*
2. Ranking criteria for short-list of key shared priority species
 - a) *Occurs in at least 3 Western states (WMNIP and adjacent)*
 - b) *ESA listing status of petitioned, under review, candidate, threatened or endangered*
 - c) *Included on the US Fish and Wildlife Service (USFWS) Listing Workplan (2022-2027)*
 - d) *Global status of G1 or T1 (NatureServe)*
 - e) *Listed as a State Species of Greatest Conservation Need (SGCN), Species of Greatest Information Need (SGIN), or otherwise indicated in State Wildlife Action Plans (SWAPs) as data deficient*
 - f) **ADDITIONAL ASSESSMENT CRITERIA BY TAXA:**
 - (1) If butterfly (Leptidoptera) species → meets the Forister, *et al.* Risk Index of 0.54 or higher
 - (2) Western Habitat of Conservation Concern
 - (a) Key and suitable habitat(s) can be defined and identified by ecoregion(s) through planning processes

II. Promoting Language for States to Consider for Planning Documents

A. Based on management authority, states may opt to include language in conservation planning documents that:

1. Explains that SWAPs are developed and revised by state wildlife agencies and are meant to be inclusive state plans for all partners working on native species and habitats. These partners can assist or contribute information to states through their SWAP revision process related to inclusion of insect pollinators. Conservation efforts implemented by states, land management agencies, and NGO partners could have the ability to enhance populations of native insect pollinators.

2. Discuss the vast array of ecological roles played by insects (Animalia; Arthropoda; Insecta), and mention some states classify them as wildlife.

Examples of roles include:

- a) *Crucial base of food webs for many ecosystems; pollination; nutrient cycling and decomposition; carbon sequestration and soil stabilization; pest control; maintenance of biological community structure and composition.*
- b) *Species diversity and density of insect pollinators indicate diversity of plants and overall habitat quality.*
- c) *Vital to the livelihood and survival of other wildlife species including many species of upland game and big game.*

3. Acknowledges the declines in insect diversity and abundance, common and widespread threats to insect pollinators, and the need for mitigating action to preclude federal threatened or endangered listing

- a) *Drivers of insect declines may include habitat loss and fragmentation, pollution, industrial farming practices, introduced and non-native species, and climate change.*
- b) *Losses in insect abundance and diversity may be driving declines in insectivorous vertebrate species (birds, amphibians, reptiles, small mammals).*
- c) *ESA listings of insects could influence or impact a variety of projects, including wildlife habitat projects, especially on federal and state lands. Therefore, acknowledging pollinator conservation and working with conservation partners to keep pollinator populations healthy and preclude the need to list under the ESA will benefit all.*

4. Recognizes the value of pollination services to ecological and agricultural systems

- a) *Pollinating animals support the reproduction of 80% of wild plants and 75% of crop species (35% pollinator-dependent).*
- b) *Animal pollinators can include birds, bats, and even small mammals and lizards, but the vast majority of pollinators are insect species, and bees are the primary pollinators of most flowering plants.*
- c) *Declines in bee species diversity and abundance poses a threat to both natural ecosystems and agricultural communities.*
- d) *Pollinators ensure the resilience and diversity of biological communities in the face of climate change by facilitating seed set and reproduction within plant populations that sequester carbon in woody stems, roots, bulbs, and tubers; pollinators also support vegetation that stabilize soils via root systems, which then capture three quarters of terrestrial carbon accumulation.*

III. Developing a Native Insect Pollinator Conservation Plan

- A. Promote WAFWA's Western Monarch Butterfly Conservation Plan (WMCP) implementation as a model framework
1. Outreach and messaging
 2. Reporting platform [e.g., Monarch Crucial Habitat Assessment Tool (CHAT)]
 3. Partnerships and collaborations
 4. Monarch Candidate Conservation Agreement with Assurances (CCAA) in rights-of-way (ROWS)
- B. Outline landscape-level actions to benefit native insect pollinators
1. Align regional conservation strategies that benefit multiple species with overlapping ranges
 2. Species with determined distribution, range, threats, and conservation status, where habitat-level actions can be determined (wide-ranging and declining)
 - a) *Grassland habitat restoration to benefit western skipper species*
 - b) *Include specialist-associated host plant species in restoration and mitigation seed mixes (e.g., post-burn)*
 - c) *Recovery targets, assessment methods, success indicators*
 - (1) E.g., Rapid Assessment of the Functional Condition of Stream-Riparian Ecosystems in the American Southwest (RSRA), Stacy, et al; quantitative evaluation of indicator variables in significant ecological categories identified by landscape type
 3. Data-deficient species of conservation concern
 - a) *Identify data gaps and direct survey efforts and monitoring work to address them*
 - (1) Formalize monitoring methodology
 - (a) Also consider how monitoring results might factor into overall ecological assessments as a success indicator
 - b) *Determine threats and impacts*
 - c) *Assist in generation of current conservation status (e.g., S-rank)*
 4. Actions that also have benefits to other at-risk wildlife/habitats and climate adaptability
 - a) *Pesticide reduction/integrated pest management plans*

- b) *Conservation of beneficial insect biodiversity on working lands through increased native habitat*
- c) *Maximizing native floral diversity on public lands, and emphasizing habitat connectivity via corridors*

C. Summarize current projects for at-risk pollinator species (bees, butterflies, flies, beetles, etc.)

1. Lessons learned about effectiveness of these projects on species recovery
2. Future/anticipated projects
3. Shovel-ready projects with implementation obstacles

IV. Partnerships, Resources, and Additional Needs

A. Participate in partnerships that can facilitate defined WMNIP actions

1. State & Federal:
 - a) *WMCP, BLM's Strategic Plan for Pollinator Conservation, US Department of Interior (DOI) Pollinator Task Force, USFWS Center for Pollinator Conservation, USFWS Plant Materials working group, state-based collaborative groups*
2. Non-governmental Organizations:
 - a) *Xerces Society, Monarch Joint Venture (MJV), National Wildlife Federation (NWF), Pollinator Partnership, The Nature Conservancy, etc.*
3. Advocates:
 - a) *Western Monarch Advocates, community science projects*

B. Highlight resources/programs/funding that would facilitate WMNIP defined actions

1. Funding opportunities
 - a) *Competitive State Wildlife Grants (cSWG), Section 6 Grants, National Fish and Wildlife Foundation (NFWF), MJV, etc.*
 - (1) Collaborate on cSWGs and other grants when appropriate and help meet WMNIP defined priorities/actions
2. Restoration-focused programs
 - a) *BLM Plant Conservation, Natural Resources Conservation Service (NRCS) habitat restoration, Monarch ROW CCAA, Bumble bee CCAA in development, etc.*

C. Emphasize that conservation actions by state wildlife agencies to recover vulnerable pollinating insect species can effectively support other native wildlife species and their habitats