

Appendix A

San Joaquin Valley Western Monarch Collaborative Work Plan 2025

This document is supplemental to the San Joaquin Valley Western Monarch Conservation Strategy and is intended to provide an annual update of work performed in the program, as well as current Collaborative structure and participation.

Program Update

The U.S. Fish and Wildlife Service (USFWS) released an initial draft of the San Joaquin Valley Western Monarch Conservation Strategy in 2024 (Strategy), and convened a wide variety of organizations and stakeholders to form the San Joaquin Valley Western Monarch Collaborative (Collaborative). The Collaborative convened a few times in 2024, and in April 2025, organized a joint meeting with the California Native Plant Society that included a field trip to the San Luis and Merced National Wildlife Refuges. In the interim, between full group meetings, the Collaborative has been organized into subgroups, or Action Teams, to leverage the various types of expertise among program partners, and to identify and execute key tasks and actionable items that support the Collaborative's goals. *Additional details about the mission statements, participants, and tasks for each Action Team are listed below.*

In May 2025, the USFWS contracted Valley Eco to assist with the facilitation of the Collaborative and development of the Strategy, with the intent of increasing program capacity and supporting sustained efforts on actionable elements of the Collaborative. Valley Eco will continue to work with USFWS to convene and facilitate working group meetings, develop products stemming from coordination efforts, and support on-the-ground adoption of Collaborative actions.

In September 2025, the USFWS hosted another full Collaborative meeting to confirm group consensus around the mission of the Collaborative and clarify how it relates to existing efforts. Each Action Team provided updates on their work, and the Collaborative established a timeline for finalizing the Strategy at the end of 2025. Additionally, the group clarified and established a mechanism through which participating organizations can indicate their commitment to the Collaborative. A Letter of Intent (LOI) will enable organizations to express their shared intent to work collaboratively as part of the Collaborative, a non-regulatory voluntary effort to facilitate, enable, and implement monarch and pollinator habitat restoration and conservation within the San Joaquin Valley. The Collaborative finalized

the LOI along with the Strategy at the end of 2025, with plans to collect organization's signatures in early 2026.

Current Collaborative Member Organizations

During the 2025 work period, collaborators include:

- Audubon California
- Bureau of Land Management (BLM)
- Bureau of Reclamation (USBR)
- California Association of Resource Conservation Districts (CARCD)
- California Department of Fish and Wildlife (CDFW)
- California Department of Food and Agriculture (CDFA)
- California Department of Transportation (CalTrans)
- California Native Plant Society (CNPS)
- California Native Seed Supply Collaborative (CNSSC)
- Environmental Defense Fund (EDF)
- Grassland Water District (GWD)
- Hedgerow Farms
- Heritage Growers
- Lockwood Seed and Grain
- Monarch Joint Venture (MJV)
- National Park Service (NPS)
- National Resources Conservation Service (NRCS)
- Native Seed Group (NSG)
- Pollinator Partnership (P2)
- River Partners (RP)
- S&S Seeds, Inc. (S&S)
- The Almond Board
- The Great Basin Institute (GBI)
- The Nature Conservancy (TNC)
- The Wine Institute
- The Xerces Society (Xerces)
- University of Illinois Chicago (UIC)
- University of the Pacific
- U.S. Fish and Wildlife Service (USFWS)
- Valley Eco (VECO)
- Velo Consulting

Action Teams Goals and Overview

The five action teams established to support the execution of the Strategy include: Habitat Implementation and Coordination, Research and Monitoring, Native Plant Materials, Landowner Incentives, and Communications. USFWS worked collaboratively with all program partners to establish a mission statement for each Action Team, as well as a set of specific tasks to focus on within the first two years. The work of the Action Teams ties directly to the Objectives laid out in the Strategy, reflected in the SJV Action Teams table ([Table 1](#) on **page 9**). Please see additional details and updates below for each Action Team during the 2025 work period.

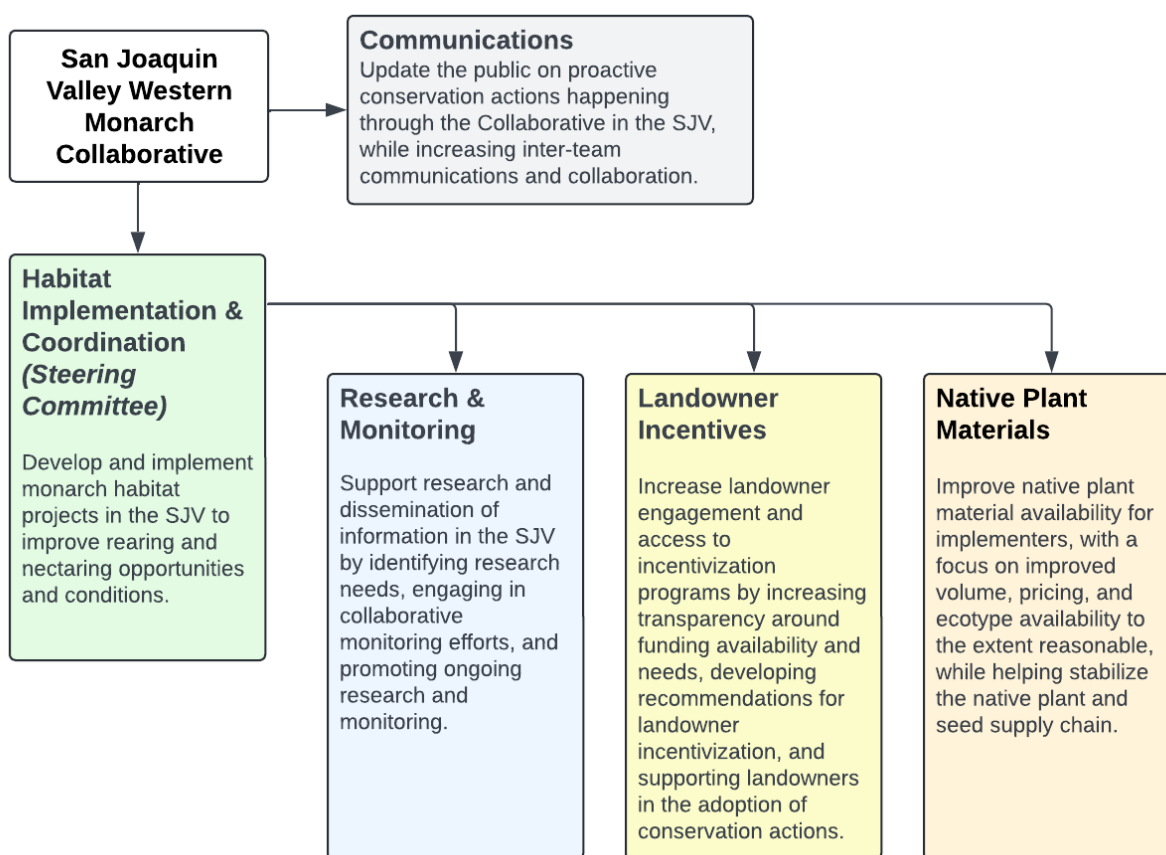


Figure 1. This diagram illustrates the structure and mission of the Action Teams within the SJVWMC.

Habitat Implementation and Coordination Action Team (*Steering Committee*)

Mission: Develop and implement monarch habitat projects in the San Joaquin Valley (SJV) to improve rearing and nectaring opportunities and conditions.

Participants: Erin Arnsteen (MJV), Julia Michaels (NSG), Kelly Bills (P2), Melissa Burns (USFWS), Michael Rogner (RP), Patricia Bohls (CDFA), Reyn Akiona (VECO), Wendy Caldwell (MJV)

Current Tasks:

1. Define what constitutes "habitat", i.e., what are the core habitat principles for SJV habitat sites
2. Develop immediate project list that could install habitat by Spring 2025
3. Develop near-term shared project list that could be implemented in Fall 2025 - Spring 2026
4. Facilitate the coordination of project implementation
5. Determine a goal number of acres to have habitat installed in 2025/2026
6. Lead the review of Strategy documents and provide recommendations to other Action Teams

Action Team Update:

A primary focus for the Collaborative and USFWS in the initial two years is to deliver on-ground habitat for the monarch butterfly within the San Joaquin Valley. Therefore, initial emphasis remains on mobilizing and convening the Habitat Implementation & Coordination Action Team (Steering Committee), which will collaborate with the Research and Monitoring, Native Plant Materials, and Landowner Incentives Action Teams to prioritize actions that accelerate pilot projects and programs that create monarch habitat. The Steering Committee also reviewed and updated the Strategy document as well as the Collaborative's Letter of Intent for participating organizations.

This group initially focused on projects that were implemented in Spring of 2025, including the following milkweed plantings at strategic sites:

- Valley Eco and the Greater Valley Conservation Corps worked with River Partners to plant milkweed and other native perennial pollinator species at multiple River Partners sites, including [Dos Rios and Crow's Landing](#).
 - Dos Rios State Park - 3286 goldenrod, assorted milkweed and nectar species
 - Crow's Landing - 1500 assorted milkweed and nectar species
- Participants of the [SJVWMC meeting and Field Trip on April 10th, 2025](#) planted milkweed plugs at the Cottonwood Creek Trail at the Merced National Wildlife Refuge.
 - 4000 milkweed and 6144 nectar species

The Habitat Implementation & Coordination continues to develop and coordinate on-ground work through projects and programs such as the following examples:

- The Xerces Society [Monarch Habitat Kit Program](#) - Xerces provides carefully selected, native, and regionally appropriate plant material directly to partners for shovel-ready projects that support monarch butterflies.

- [The Pollinator Alliance](#) - Valley Eco is working with the Almond Alliance to support farmers to establish pollinator habitat on their working lands through the CDFA Pollinator Habitat grant.

Additionally, this Action Team will work to populate the following spreadsheet, which links projects that are happening with anticipated plant materials needs:

- [Project & Plant inventory Spreadsheet](#)

Research and Monitoring Action Team

Mission: Support research and dissemination of information in the SJV by identifying research needs, engaging in collaborative monitoring efforts, and promoting ongoing research and monitoring.

Participants: Caroline Hernandez (UIC), Melissa Burns (USFWS), Reyn Akiona (VECO), Sarah Gaffney (RP), Sarah Gomes (MJV), Staci Cibotti (Xerces)

Current Tasks:

1. Develop core habitat principles (composition, distribution, patch size, etc.).
2. Catalogue critical information needs (both known and unknown) to inform SJV habitat work.
 - a. Build a list of study questions and determine if they've been answered or not.
 - b. Catalogue the constraints that farmers and restorationists encounter. Is it solved? If not - queue up a team to address the issue.
3. Elevate broader research questions (beyond the SJV) to other coalitions and research forums for resolution.
4. Confirm appropriate monitoring protocol(s) to be adopted regionally for uniform data collection and improved contribution to analysis/science.
5. Set up a process for aggregating/summarizing data.

Action Team Update:

The Research and Monitoring Action Team focused on inviting additional members into this subgroup with a wide range of expertise, and clarifying how the work of the Collaborative is aligned with existing efforts such as WAFWA, recurring Western Monarch Summits, and Western Monarch Breeding Science objectives. This team is developing a list of research questions and cataloguing information gaps, listed in the following document:

- [Research and Monitoring Questions](#)

Landowner Incentives Action Team

Mission: Increase landowner engagement and access to incentivization programs by increasing transparency around funding availability and needs, developing recommendations for landowner incentivization, and supporting landowners in the adoption of conservation actions.

Participants: Doug Iten (Lockwood Seed), Emma MacInnes (VECO), Erin Arnsteen (MJV), Jeff Quiter (NSG), Jessa Kay-Cruz (Xerces), Maggie Sepulveda (USFWS), Melissa Burns (USFWS), Miles Dakin (P2), Patricia Bohls (CDFA), Reyn Akiona (VECO)

Current Tasks:

1. Support and respond to landowner concerns following monarch listing decision.
2. Support landowner navigation of the federal and monarch regulatory landscape.
3. Set up meeting(s) for SJV regional stakeholders to determine what is needed for landowners (coordinate with the Communications team).
4. Coordinate with the Communications team to connect interested landowners with habitat incentives programs.
5. Create a questionnaire to assess what additional information landowners need when contemplating adding habitat to their properties.

Action Team Update:

The Landowner Incentives Action Team focused on the development of a landowner survey to help the Collaborative better understand perspectives and experiences of landowners regarding monarch conservation. Additionally, this team created an inventory of available funding sources and programs available to help support landowners to adopt monarch conservation actions on their land. This Action Team produced the following documents:

- [Landowner Questionnaire](#)
- [Monarch Landowner Incentive Programs](#)

Native Plant Materials Action Team

Mission: Improve native plant material availability for implementers, with a focus on improved volume, pricing, and ecotype availability to the extent reasonable, while helping stabilize the native plant and seed supply chain.

Participants: Angela Laws (Xerces), Carolyn Kolstad (USFWS), Haleigh Holgate (Heritage Growers), Jody Miller (NSG), Julia Michaels (NSG), Karina Mudd (VECO), Maggie Sepulveda (USFWS), Melissa Burns (USFWS), Monica Depies (GBI)

Current Tasks:

1. Inventory existing material (species, ecotypes) and existing development efforts. Identify how they can be used to support restoration actions.
2. Help producers project USFWS/partner demand for specific species and ecotypes over time, with the goal of reducing cost and gaps in availability.
3. Connect to and amplify efforts of existing groups.
4. Identify additional ways to support the development and growth of the native plant and seed industry in California.

- a. Develop a process/mechanism to increase public-private partnerships to increase access for seed collections on public lands.
 - i. Consider doing a proof of concept with USFWS that can act as a template/example protocol.
- 5. Review existing guidance to create a suggested plant list for monarch habitat work in the SJV, noting key plant species that are widely commercially available and key plants that also support other imperiled pollinators.
 - a. Coordinate with the Great Central Valley regional working group led by CNPS to review potential overlaps with their priority species list

Action Team Update:

The Native Plant Materials Action Team has been focused on taking inventory of existing native seed development efforts and discussing possible mechanisms to reduce barriers for seed collections on public lands.

The team collaborated to review and/or develop the following documents:

- [Project & Plant inventory Spreadsheet](#) that links projects that are happening with anticipated plant materials needs.
- [A memo](#) on native plants as a 'public good,' which makes the case for public-private partnerships that increase access to public lands for responsible native seed collections.

Communications Action Team

Mission: Update the public on proactive conservation actions happening through the Collaborative in the SJV, while increasing inter-team communications and collaboration.

Participants: Clarissa Ortega (MJV), Emma Pelton (Xerces), Joanna Gilkeson (USFWS), Julia Michaels (NSG), Karina Mudd (VECO), Melissa Burns (USFWS)

Current Tasks:

1. Develop platform for cross-team communications
2. Refine action team statements and collaboration guidelines
3. Set up a meeting for SJV regional stakeholders on what is needed for landowners (coordinate with the Landowner Incentives Team)
4. Solicit landowner engagement and participation in habitat projects
5. Communicate habitat definitions and parameters for monarch habitat to other agencies and organizations
6. Disseminate information and data from the Research & Monitoring Team

Action Team Update:

An article highlighting the work of the Collaborative was published on June 16, 2025 by USFWS: [Seeds of change: A Central Valley collaboration for people and pollinators](#). Additional work from the

Communications Action team has been paused while the Collaborative focused on getting pilot projects on the ground and building momentum with the other Action Teams. This team will reconvene in early 2026 to assess communications strategies moving forward.

In the meantime, each Action Team reviewed its mission statement and current task list to update and refine them as needed. Valley Eco also set up a shared google drive for the Collaborative, so that all documents are saved and shared on one platform.

Table 1: Action Team and Collaborative Objectives

Objective	Term	Obj. #	Action Team
Solidify connections with key partners and stakeholders	Near-Term	1	<i>All</i>
Establish estimates for habitat conservation quantity and quality targets	Near-Term	2	Habitat & Implementation
Create a private landowner outreach and incentivization toolbox	Near-Term	3	Landowner Incentives
Establish and implement appropriate monitoring, data collection, and data sharing process	Near-Term	4	Research & Monitoring
Identify communication needs and develop and implement a Communications Action Plan	Near-Term	5	Communications
Work collaboratively to plan monarch habitat restoration activities for Spring 2025 & 2026	Near-Term	6	Habitat & Implementation
Estimate funding needs and secure and leverage funds to support Strategy Implementation	Near-Term	7	<i>All</i>
Maintain and strengthen connections with key partners and stakeholders	Mid-Term	1	<i>All</i>
Work toward identified habitat goals with a focus on increasing connectivity	Mid-Term	2	Research & Monitoring
Secure consistent funding to support increasing the availability of native plant materials while simultaneously reducing their costs	Mid-Term	3	Native Plant Materials
Work to implement actions identified in the Communications Strategy	Mid-Term	4	Communications
Establish and implement appropriate monitoring, data collection, and data sharing protocols	Mid-Term	5	Research & Monitoring
Implement the partnership's planned annual project(s)	Mid-Term	6	Habitat & Implementation
Ensure adaptive management of the Strategy	Mid-Term	7	<i>All</i>
Confirm continued engagement with partners and stakeholders	Long-Term	1	<i>All</i>
Ensure commitments to data sharing and long-term access to data, as appropriate	Long-Term	2	Research & Monitoring
Ensure the Strategy's longevity	Long-Term	3	<i>All</i>
Ensure adaptive management of the Strategy	Long-Term	4	<i>All</i>
Apply the exportable recovery model developed by the partnership beyond the San Joaquin Valley	Long-Term	5	Communications