

Pollinator Habitat Enhancement Plan Practice Activity Code (146) (No.)

1. Definition

A pollinator habitat enhancement plan is a site-specific conservation plan developed for a client that addresses the improvement, restoration, enhancement, expansion of flower-rich habitat that supports native and/or managed pollinators.

The pollinator habitat enhancement plan will:

- a) Meet NRCS quality criteria for soil erosion control, water quality, soil quality, plant condition, fish and wildlife, rangeland/pasture/grazed woodland health and productivity, and other identified resource concerns.
- b) Comply with federal, state, tribal, and local laws, regulations, and permit requirements.
- c) Meet the client's objectives.

2. Pollinator Habitat Enhancement Plan Technical Criteria

This section establishes the minimum criteria to be addressed in the development of Pollinator Habitat Enhancement Plans.

A. General Criteria

1. A Pollinator Habitat Enhancement Plan shall be developed by certified Technical Service Providers (TSPs). In accordance with Section 1240 (A), the Environmental Quality Incentive Program (EQIP) program provides funding support through contracts with eligible producers to obtain services of certified TSPs for development of Pollinator Habitat Enhancement Plans. The specific TSP criteria required for Pollinator Habitat Enhancement Plan development is located on the TSP registry (TechReg) web site at: <http://techreg.usda.gov/>

B. Background and site information

1. Landowner information – name, address, operation, size
2. Location and plan map of parcel

C. Identify Client Objectives such as:

1. Improve pollination service provided by wild (unmanaged) bees by:
 - a. Increasing floral diversity and ensuring continuous and diverse bloom.
 - b. Increasing undisturbed habitat/ground (including the creation of alkali or other ground-nesting bee beds),
 - c. Increasing nesting opportunities for tunnel-nesting bees, and
 - d. Providing pollinator refugia.
2. Improve pollen diversity and nectar availability for managed bees kept on-site.
3. Increase diversity and availability of butterfly host plants.

4. Increase abundance of beneficial insects important for pest management.
5. Improve cost efficiency (e.g. removal of marginal crop land from production and/or improvement of produce quality from enhanced pollination).
6. Maintain or improve wildlife habitat.
7. Maintain or improve water quality.
8. Prevent or reduce erosion.
9. Beautify the landscape.
10. Provide pollinator populations with refuge from pesticides.
11. Change or adjust pesticide use to reduce hazards for native pollinator populations.

D. Existing Conditions

1. Create the conservation plan map including field boundaries, streams, surface waters, wetlands, fences, and land uses.
2. Acquire a soils map and appropriate soil descriptions for the land use and resource concerns.
3. Identify the number of acres available.
4. Use an appropriate habitat assessment, evaluation, or Habitat Suitability Index model and (when available) the Ecological Site Description to define the existing conditions for wildlife.
5. Document the existing management practices and activities on cropped and non-cropped portions of the property.

E. Desired Future Conditions/Goals

1. The plant species composition benefits a diverse pollinator community (i.e., at least 12 species of flowering plants, three of which are in bloom at any one time from early fall to late spring). Note: if planting is designed to support adjacent insect-pollinated agriculture, then:
 - a) Minimize bloom competition with insect-pollinated crops, and
 - b) Take care to avoid plants that may serve as crop pest or disease hosts.
2. There is minimal weed competition, but the inclusion, where appropriate, of beneficial “weeds” (e.g., milkweed as Monarch butterfly host plants).
3. Large areas of undisturbed pollinator habitat are available:
 - a) No tillage in areas appropriate for ground-nesting bees
 - b) Overgrown bunch grasses for bumble bee nest sites
 - c) Host plants for butterflies
 - d) Tree cavities, standing dead trees, exfoliating bark (e.g., in riparian or adjacent land) for wood-nesting bees

4. Record Keeping
 - a) Dates of first flowering for each of the pollinator-friendly forage plant species
 - b) Specific pollinators, plants visited, and time-frame (date range) of visits
 - c) Evidence of ground-nesting and wood-nesting bee activity
 - d) If providing crop pollination services, record crop yields
5. Monitoring Plan
 - a) Identify specific dates and data to be recorded.
6. O & M for practices
 - a) Ensure that these are followed
7. Adequate clean water source(s) for honey bees

F. Pollinator Habitat Enhancement Planning Documentation

1. Conservation plan map –scale, north arrow, planned and existing boundaries, fields, land use, appropriate map symbols, and where available the identification of ecological sites by field.
2. Soils map – legend, appropriate interpretations, and where available the ecological site descriptions
3. Resource Concerns addressed by the conservation plan
4. Contingency plans for harsh winter conditions, drought, fire, flooding, and other extraordinary events
5. Conservation plan (record of decisions) (*Utilizing Customer Service Toolkit – Plug-In or MsWord Document*) to address the resource needs for the “Pollinator Habitat Enhancement Plan”. The record of decisions shall include the planned practice, schedule for implementation, and site specific specifications to apply the conservation practice. The site specific specifications can be on an NRCS Jobsheet available for the conservation practice or in a narrative form for the non-engineering type practices. Planned engineering type practices shall include the conservation practice, schedule of implementation, and identified on the plan map. The plan may include, but is not limited to, the conservation practices listed below:

“*” Indicates the most appropriate practices

- Alley Cropping 311
- Conservation Cover 327
- Conservation Crop Rotation 328
- Constructed Wetland 656
- Contour Buffer Strips 332

- Cover Crop 340 *
- Critical Area Planting 342 *
- Early Successional Habitat Development/Management 647 *
- Field Border 386 *
- Filter Strip 393
- Grassed Waterway 412
- Hedgerow Planting 422 *
- Herbaceous Wind Barriers 603
- Forage and Biomass Planting 512
- Integrated Pest Management 595 *
- Prescribed Burning 338
- Prescribed Grazing 528
- Range Planting 550 *
- Residue and Tillage Management, No-Till/Strip Till/Direct Seed 329 *
- Restoration and Management of Declining Habitats 643 *
- Riparian Forest Buffer 391 *
- Riparian Herbaceous Cover 390 *
- Silvopasture Establishment 381
- Stream Habitat Improvement and Management 395 *
- Streambank and Shoreline Protection 580
- Stripcropping 585
- Tree/Shrub Establishment 612 *
- Upland Wildlife Habitat Management 645 *
- Vegetative Barriers 601 *
- Wetland Enhancement 659 *
- Wetland Restoration 657
- Wetland Wildlife Habitat Management 644
- Windbreak/Shelterbelt Establishment 380 *
- Windbreak/Shelterbelt Renovation 650 *

2. Deliverables for the Client – a hardcopy of the plan that includes:

- Cover page – name, address, phone of client and TSP; Total Acres of the Plan, signature blocks for the TSP, producer, and a signature block for the NRCS acceptance.
- Soils map and appropriate soil descriptions
- Resource assessment results (wind and water erosion, habitat assessments, soil fertility, soil quality, and others that may be needed)
- For enhancement practices. The planned practices and the site-specific specifications on how each practice will be applied; when the practice will be applied, and the extent (acres or number) that will be applied.
- For engineering/structural practices. The planned practice when it will be applied and extent, and location on the conservation plan map.

3. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the client's plan (MsWord copy). **Optional:** If a Conservation Plug-in version is provided to NRCS a Hardcopy of the plan, conservation plan map and soils map is not required.
- Digital Conservation Plan Map with fields, features, and structural practices located.
- Digital Soils Map.