National Bulletin: 450-10-2 **Date:** December 29, 2009

Subject: TCH - Filing Environmental Quality Incentives Program (EQIP) Conservation Activity Plans (CAP) in Field Office Technical Guides (FOTG)

Purpose. To provide instructions for filing EQIP CAPs in the FOTG.

Expiration Date. January 2, 2011

Background. The Food, Conservation, and Energy Act of 2008 (or 2008 Farm Bill) authorizes the use of financial assistance funds from EQIP to develop CAP. The Natural Resources Conservation Service has established 12 CAPs that State Conservationists may select from for use in their State.

Explanation. The National Technical Guide Committee has determined that CAP Technical Criteria shall be housed in Section III of the FOTG. The CAPs are conservation systems/plans designed to address specific resource concerns. This is the primary reason to place the CAPs into Section III of the FOTG. The State Technical Guide Committee (STGC) and FOTG Content Managers in each State, Pacific Islands, and Caribbean Areas must be involved in this action.

The STGC in each State or equivalent location shall coordinate with the State Content Manager to add a folder in Section III of the FOTG titled "Conservation Activity Plans Technical Criteria." States only need to add those CAPs they plan to make available in fiscal year 2010.

Contact. For more information, contact the eFOTG Help Desk at efotg@nrcs.usda.gov, or the National Technology Specialist in you support area: East – Anthony.burns@gnb.usda.gov, Central – Cheryl.simmons@ftw.usda.gov, or West – Russ.Hatz@por.usda.gov.

/s/ Richard D. Swenson for

ANTHONY J. KRAMER
Acting Deputy Chief for Science and Technology

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Comprehensive Nutrient Management Plan Criteria
Conservation Activity Plan Code (102) (No.)

1. Definition

A CNMP is a conservation plan that is unique to animal feeding operations. It is a grouping of conservation practices and management activities which, when implemented as part of a conservation system, will help to ensure that both production and natural resource protection goals are achieved. A CNMP incorporates practices to utilize animal manure and organic by-products as a beneficial resource. A CNMP addresses natural resource concerns dealing with soil erosion, manure, and organic by-products and their potential impacts on water quality, which may derive from an AFO. A CNMP is developed to assist an AFO owner/operator in meeting all applicable local, tribal, State, and Federal water quality goals or regulations. For nutrient impaired stream segments or water bodies, additional management activities or conservation practices may be required to meet local, tribal, State, or Federal water quality goals or regulations.

The conservation practices and management activities planned and implemented as part of a CNMP must meet NRCS technical standards. For those elements included by an owner and/or operator in a CNMP for which NRCS currently does not maintain technical standards (i.e., feed management, vector control, air quality), producers should meet criteria established by Land Grant Universities, industry, or other technically qualified entities. Within each state, the NRCS State Conservationist has the authority to approve non-NRCS criteria established for use in the planning and implementation of CNMP elements.

Technical Guidance, Criteria, and Content for the CNMP is found at the URL listed below.

General Manual - http://directives.sc.egov.usda.gov/
Navigate to:

- General Manual Title 190 Part 405 – Comprehensive Nutrient Management Plans
- Handbooks Title 190 Part 620 Comprehensive Nutrient Management Planning
- National Instructions Title 190 NI_190_304, Comprehensive Nutrient Management Plan Technical Criteria

2. CNMP Format and Content

CNMP planners and developers shall coordinate with the state NRCS office on the specific content and format for a CNMP and the specific use of nutrient planning and assessment tools.

Forest Management Plan Criteria
Practice/Activity Code (106) (No.)

1. Definition

A forest management plan is a site specific plan developed for a client, which addresses one or more resource concerns on land where forestry-related conservation activities or practices will be planned and applied. These criteria were developed to implement Section 1240 (A) of the Food, Conservation and Energy Act of 2008, which allows for the development of forest management plans as one of the purposes of the Environmental Quality Incentives Program (EQIP).The forest management plan will:

a) Meet Natural Resources Conservation Service (NRCS) quality criteria for the identified resource concern(s).

b) Comply with federal, state, tribal, and local laws, regulations, and permit requirements.

c) Meet the client's objectives.

2. Forest Management Plan Criteria

This section establishes the minimum criteria to be addressed in the development of Forest Management Plans.

A. General Criteria

1. An Environmental Evaluation (EE) (CPA 52) is to be prepared for all activity plans to demonstrate NRCS compliance with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, Air Quality, and other designated environmental concerns and environmental laws. The environmental effects from the activity plans on environmental resource concerns should be clearly documented on the EE (CPA-52 form). The following is abbreviated guidance for preparation of the EE:

   a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

   b. The EE describes the existing conditions for all applicable resource concerns.

   c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

   d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

   e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be tiered to a state, regional, or national programmatic EA or EIS because the proposed effects have been sufficiently analyzed in a state, regional, national programmatic EA or EIS.

   f. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to prepare any EE CPA 52.

2. A Forest Management Plan shall be developed by certified technical service providers. 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 Technical Service Providers (TSPs) for development a Forest Management Plan (FMP). The specific criteria required for each type of certification for TSP 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
3. Documentation of existing practices
4. Past harvest history
5. Identification of resource concerns

C. Client Objectives, which may include these considerations and others

1. Expected income
2. Forest stand improvement
3. Wildlife habitat/riparian areas
4. Recreation
5. Agroforestry
6. Pollinator Habitat and Protection

D. Existing Conditions

1. Identify resource concerns based on an inventory to assess these concerns and opportunity for treatment. The inventory will typically include forest management unit and stand boundaries, site index, basal area, species, size class, wood product potential, soil conditions, slopes, topography, aspect, natural and cultural features, roads, wildfire risk (surface and crown fires), risk of insect and disease infestation, fish and wildlife species and habitat elements, noxious and invasive species, water quality and other important features as applicable.

E. Desired Future Conditions

1. Goals such as stocking, basal area, species composition, wildlife, pollinator habitat and protection, recreation, etc. for stands where practices/activities are recommended to meet future goals.

F. Forest Management Plan Documentation

1. Forest management plan map – boundaries, fields, scale, north arrow, stand boundaries, appropriate map symbols

2. Soils map – legend, interpretations, suitability index for forest activities
3. A wetland delineation map and associated wetland compliance documentation (Food Security Act of 1985), if applicable.
4. Conservation plan (record of decisions) *(Utilizing Customer Service Toolkit – Plug-In or MsWord Document)* to include the planned practice(s), the amounts to be applied, the schedule for implementation, and the appropriate site specific specifications and/or job sheet for each practice. A Forest Management Plan may include, but is not limited to, the conservation practices listed below:
    - **Access Control** (472) plus site specific specifications or job sheet
    - **Forest Stand Improvement** (666) plus site specific specifications or job sheet
    - **Road/Trail/Landing Closure and Treatment** (654) plus site specific specifications or job sheet
    - **Forest Trails and Landings** (655) plus site specific specifications or job sheet
    - **Forest Slash Treatment** (384) plus site specific specifications or job sheet
    - **Firebreak** (394) plus site specific specifications or job sheet
    - **Fuel Break** (383) plus site specific specifications or job sheet
    - **Multi-Story Cropping** (379) plus site specific specifications or job sheet
    - **Prescribed Burning** (338) plus site specific specifications or job sheet
    - **Riparian Forest Buffer** (391) plus site specific specifications or job sheet
    - **Silvopasture Establishment** (791) plus site specific specifications or job sheet
    - **Tree/Shrub Site Preparation** (490) plus site specific specifications or job sheet
    - **Tree/Shrub Establishment** (612) plus site specific specifications or job sheet
    - **Tree/Shrub Pruning** (660) plus site specific specifications or job sheet
    - **Alley Cropping** (311) plus site specific specifications or job sheet
    - **Windbreak/Shelterbelt Establishment** (380) plus site specific specifications or job sheet

- **Windbreak/Shelterbelt Renovation** (650) plus site specific specifications or job sheet

3. 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, water availability, soil fertility, and others that may be needed)
- For management 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 located on the conservation plan map.

4. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the client's plan (MsWord copy).
- Digital Conservation Plan Map with fields, features, and structural practices located.
- Digital Soils Map.
- Completed CPA 52 and appropriate worksheets.

Coordination with State Forestry Agencies and U.S. Forest Service

In accordance with Section 2506 of the Food, Conservation and Energy Act of 2008, NRCS will accept as a qualifying EQIP plan of operations:

a) Forest Stewardship Plan, as described in Section 5 of the Cooperative Forestry Assistance Act of 1978, 16 U.S.C. 2103a; or

b) Another practice plan approved by the State Forester; or

c) Another plan determined appropriate by the Secretary.

Forest Stewardship Plans

Through the U.S. Forest Service's Forest Stewardship Program, State forestry agencies annually receive financial and technical assistance that allows them to help landowners develop Forest Stewardship Plans (FSP) for their nonindustrial private forest land. FSP are prepared by foresters employed by State forestry agencies or by private consulting foresters under the direction of those State agencies. FSP are developed for the landowner's entire forested ownership and/or any land that will be planted to forest vegetation.

Forest Stewardship Plans will continue to be developed for private landowners by State forestry agencies, with financial and technical assistance provided by the U.S. Forest Service through the Forest Stewardship Program. With the provisions in the new Farm Bill

there is an opportunity for NRCS to provide financial assistance through EQIP that increases the planning and application of forestry-related conservation practices. NRCS will coordinate and cooperate with State forestry agencies in the delivery of forestry assistance to private landowners.

Forest Management Plan

To complement the planning assistance provided by State forestry agencies (i.e., Forest Stewardship Plans), NRCS is using a different term to describe the planning assistance that will be provided to clients through EQIP. NRCS will use the term "Forest Management Plan (FMP)". The FMP criteria described above were developed in cooperation with the U.S. Forest Service to insure alignment with the national standards for a Forest Stewardship Plan. A few criteria were added to ensure compliance with NRCS requirements (e.g., National Environmental Policy Act). These criteria replace the Prescribed Forestry – 409 National Practice Standard, which will be rescinded and removed from the National Handbook of Conservation Practices (NPCH).

Grazing Management Plan
Practice Activity Code (110) (No.)

1. Definition

   A grazing management plan is a site specific conservation plan developed for a client which addresses one or more resource concerns on land where grazing related activities or practices will be planned and applied.

   The grazing management plan will:

   a) Meet NRCS quality criteria for soil erosion control, water quality, fish and wildlife, rangeland/pasture/grazed woodland health and productivity, and other identified resource concerns.

   b) Will be developed following the principle provided in Chapter 11 of the National Range and Pasture Handbook.

   c) Comply with federal, state, tribal, and local laws, regulations, and permit requirements.

   c) Meet the client's objectives.

2. Grazing Management Plan Technical Criteria

This section establishes the minimum criteria to be addressed in the development of Grazing Management Plans.

A. General Criteria

1. An Environmental Evaluation (EE) (CPA 52) is to be prepared for all activity plans to demonstrate NRCS compliance with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, Air Quality, and other designated environmental concerns and environmental laws. The environmental effects from the activity plans on environmental resource concerns should be clearly documented on the EE (CPA-52 form). The following is abbreviated guidance for preparation of the EE:

   a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

   b. The EE describes the existing conditions for all applicable resource concerns.

   c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

   d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

   e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be tiered to a state, regional, or national programmatic EA or EIS because the proposed effects have been sufficiently analyzed in a state, regional, national programmatic EA or EIS.

   f. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to prepare any EE CPA 52.

2. A Grazing Management 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 Grazing Management Plans. The specific TSP criteria required for Grazing Management 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. Forage yield, quality, diversity, and persistence.
   2. Meet livestock nutritional needs.
   3. Maximize browse, forage and roughage pasture yields.
   4. Improve cost efficiency.
   5. Maintain or improve wildlife habitat.
   6. Maintain or improve water quality
   7. Prevent or reduce erosion
   8. Pollinator habitat and pollinator protection
   9. Others as appropriate

D. Existing Conditions

   1. Consult Ecological Site Description as reference condition
   2. Vegetative species, diversity, and condition by land use, ecological site and forage suitability group.
   3. Animal types, (breed and species including wildlife) and number
   4. Acres available
   5. Waste handling and storage
   6. Watering system
   7. Fencing
   8. Documentation of existing practices/history/grazing records
   9. Current forage and roughage conditions
   10. Current Animal demand/forage balance (livestock and wildlife)
   11. All Resource concerns (not meeting Quality Criteria)

E. Desired Future Conditions

   1. Record Keeping
   2. Monitoring Plan

3. O & M for practices
4. Nutrient Management as applicable
5. Fencing
6. Animal Demand / Forage/Roughage Balance
7. Adequate Water Source(s)
8. Plant species composition

F. Grazing Land Planning Documentation

1. Conservation plan map –scale, north arrow, planned and existing boundaries, fields, paddocks, watering systems, fence, land use, appropriate map symbols, identification of forage suitability groups and/or ecological sites by field
2. Grazing distribution and key grazing sites and species
3. Soils map – legend, interpretations, forage suitability index for grazing activities, ecological site descriptions
4. Resource Concerns addressed by the conservation plan
5. Contingency plans for winter, drought, fire, flood mud, mortality, bio-security, etc.
6. Planned Animal demand /forage balance (livestock and wildlife)
7. Conservation plan (record of decisions) *(Utilizing Customer Service Toolkit – Plug-In or MsWord Document)* to address the resource needs for the "Grazing Management 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 are not limited to the conservation practices listed below:

   * Essential practices

   - Brush Management (314)
   - Fencing (382)*
   - Firebreak (394)
   - Forage Harvest Management (511)
   - Grazing Land Mechanical Treatment (548)
   - Nutrient Management (590)
   - Pasture and Hay Planting (512)
   - Prescribed Grazing (528)*
   - Range Planting (550)
   - Use Exclusion (472)

- Watering Facility (614)*

8. Additional practices for consideration but not planned. Planning of these practices will be conducted by appropriately certified NRCS or TSP planners.

- Channel Bank Vegetation (322)
- Prescribed Burning (338)
- Critical Area Planting (342)
- Pond (378)
- Windbreak/Shelterbelt Establishment (380)
- Silvopasture Establishment (381)
- Riparian Herbaceous Cover (390)
- Stream Habitat Improvement and Management (395)
- Pipeline (516)
- Heavy Use Area Protection (561)
- Spring Development (574)
- Animal trails and Walkways (575)
- Streambank and Shoreline protection (580)
- Pest Management (595)
- Water Well (642)
- Wetland Wildlife Habitat Management (644)
- Upland Wildlife Habitat Management (645)
- Early Succession Habitat Development (647)
- Wetland restoration (657)
- Wetland Creation (658)
- Wetland Enhancement (659)

3. 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, water availability, soil fertility, and others that may be needed)
- For management 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 located on the conservation plan map.

4. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the client's plan (MsWord copy).
- Digital Conservation Plan Map with fields, features, and structural practices located.
- Digital Soils Map.
- Completed CPA 52 and appropriate worksheets.

Integrated Pest Management Plan Criteria
Practice/Activity Code (114) (No.)

1. Definition:

Integrated Pest Management (IPM) is an ecosystem-based strategy that is a sustainable approach to manage pests using a combination of techniques such as chemical tools biological control, habitat manipulation, and modification of cultural practices and use of resistant varieties. Methods of chemical applications are selected in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment. Integrated Pest Management:

- Manages pests economically;
- Minimizes the risk associated with pest suppression;
- Produces quality commodities;
- Meets NRCS quality criteria for soil, water, air and plant quality;
- Complies with federal, state, tribal, and local laws, regulations and permit requirements;
- Addresses operator's objectives

2. IPM Plan Criteria

This section establishes the minimum criteria to be addressed in the development and implementation of Integrated Pest Management Plans.

A. General Criteria

1. An Environmental Evaluation (EE) (CPA 52) is to be prepared for all activity plans to demonstrate NRCS compliance with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, Air Quality, and other designated environmental concerns and environmental laws. The environmental effects from the activity plans on environmental resource concerns should be clearly documented on the EE (CPA-52 form). The following is abbreviated guidance for preparation of the EE:

    a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

    b. The EE describes the existing conditions for all applicable resource concerns.

    c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

    d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

    e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be

tiered to a state, regional, or national programmatic EA or EIS because the proposed effects have been sufficiently analyzed in a state, regional, national programmatic EA or EIS.

f. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to prepare any EE CPA 52.

2. An Integrated Pest Management 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 Integrated Pest Management Plans. The specific TSP criteria required for Integrated Pest Management Plan development is located on the TSP registry (TechReg) web site at: http://techreg.usda.gov/

B. The planner shall address the following items during the IPM Conservation Plan development process:

1) Background and site information;

2) Site specific assessment of environmental risk associated with existing and alternative pest suppression system

3) Monitoring guidelines;

4) State University's IPM guidelines for specific crops (optional)

5) Record Keeping

6) Conservation plan (record of decisions) to address the identified environmental risks associated with pest suppression activities with implementation specifications and other resource concerns.

7) References, if needed.

C. **IPM Specific Element Criteria**

Each of the IPM elements will address the specific criteria below. The degree to which these criteria are addressed in the development of a site-specific IPM plan is determined by the General Criteria and the specific criteria provided for each element of the IPM plan below.

1. **Background and Site Information.** This element provides a brief description of:

a) Name of owner/operator;

b) Tract and field(s) location;

c) Soil map units;

d) Resource concerns;

e) Present site use and general management being applied;

f) History of pest management activities

2. **Site Specific Assessment of Environmental Risks Associated with Existing**

and Alternative Pest Management System. This element provides a brief description and maps including:

a) Conservation Plan Map;

b) Field locations of planned areas;

c) Soil type and characteristics; note potential for runoff or permeability;

d) Site conditions risk description;

e) Identification of pests, crop, plant community condition and degree of infestation;

f) Irrigation system and management (where appropriate);

g) Locations of sensitive resource areas identified on the plan map to include:

h) Streams, drains, surface waters, wetlands, wells, groundwater, drains, grassed waterways and existing buffer practices;

i) Sensitive wildlife habitat (on and off-site), food plots;

j) Potential off-target drift areas;

k) Identification of beneficial predators and parasites;

l) Consideration for pollinator habitat and pollinator protection;

m) Other risk mitigation practices in use.

3. **Monitoring Guidelines:** This element addresses monitoring strategies that utilize damage and economic thresholds to prevent pest resistance and potential harmful effects on human health and the environment. The monitoring should include:

   a) List of crops to be maintained

   b) Scouting for insects (both beneficial and pest), disease, weeds with dates and results;

   c) Soil test results;

   d) Weather forecasting;

   e) Degree-day prediction of pest life cycle events;

   f) Other methods of monitoring and results, such as pheromone traps

4. **State University IPM guidelines for specific crops**. This element addresses individual State University Year Round Integrated Pest Management Programs to be utilized by planners:

   a) Where available use State Agricultural University issued crop specific Integrated Pest Management guidance for individual crops that indicate activities to be undertaken throughout the year based on the crop production cycle. For example; monitoring may be prescribed for a particular pest or pests during pre-plant, pre-emergence, rapid growth, dormancy, bud-break, bloom, fruit set, maturation, harvesting,

postharvest and storage periods;

b) Where available, use State Agricultural University issued Integrated Pest Management guidance for individual crops, pests and diseases. These differ from year round programs in that they may only refer to management of a single pest

c) Note: There are non-state university organization that likewise provide credible guidelines (i.e. Rodale Institute, Kutztown, PA)

5. **Recordkeeping.** This element addresses list of records that shall be maintained detailing:

   a) Date of monitoring;

   b) Results of monitoring;

   c) Identification of both vertebrate and invertebrate pests;

   d) Identification of beneficial insects enlisted;

   e) Identification of specific raptors and/or bats enlisted;

   f) Identification of crop and/or plant community condition;

   g) Threshold of infestation;

   h) Strategies implemented with dates;

   i) All required records required by state and federal requirements;

   j) Records required or needed as part of the State University IPM guidelines being used

6. **Conservation plan** (record of decisions) *(Utilizing Customer Service Toolkit – Plug-In or MsWord Document)* to address the identified environmental risks associated with pest suppression activities with implementation specifications and other resource concerns. The record of decisions shall include the planned practice(s), schedule for implementation, and site specific specifications to apply the conservation practice. The site specific specifications for the non-engineering type practices can be on an NRCS Jobsheet available for the conservation practice or in a narrative form in a document.. Planned engineering type practices shall include the conservation practice, schedule of implementation, and identified on the plan map. The plan may include, but are not limited to the conservation practices listed below:

   a) Brush Management (314)

   b) Cover Crop (340)

   c) Conservation Cover (327)

   d) Early Successional Habitat Development/Management (647)

   e) Field Border (386)

   f) Filter Strip (393)

g) Forest Stand Improvement (666)

h) Hedgerow Planting (422)

i) Herbaceous Weed Control (315)

j) Irrigation System, Microirrigation (441)

k) Irrigation Water Management (449)

l) Land Smoothing (466)

m) Mulching (484)

n) Nutrient Management (590)

o) Pasture and Hayland Planting (512)

p) Prescribed Grazing (528)

q) Residue and Tillage Management, Mulch Till (345)

r) Residue Management, No Till/Strip Till/Direct Seed (329)

s) Residue Management, Ridge Till (346)

t) Residue Management, Seasonal (344)

u) Stripcropping (585)

v) Terrace (600)

w) Upland Wildlife Habitat Management (645)

x) Windbreak/Shelter Belt Establishment (380)

7. **References:** USDA NRCS Field Office Technical Guide

3. 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, water availability, soil fertility, and others that may be needed)
- For management 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 located on the conservation plan map.

4. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the client's plan (MsWord copy).
- Digital Conservation Plan Map with fields, features, and structural

practices located.

- Digital Soils Map.
- Completed CPA 52 and appropriate worksheets.

IRRIGATION WATER MANAGEMENT PLAN CRITERIA
PRACTICE / ACTIVITY CODE (118) (NO.)

1. Definition of an Irrigation Water Management Plan

The objective of Irrigation Water Management (IWM) is to control the volume, frequency, and rate of water for efficient irrigation, and for the following purposes:

- Promote desired crop response.
- Optimize the use of available water supplies.
- Improve water quality, by reducing irrigation sources of surface and ground water contamination.
- Minimize irrigation induced soil erosion.
- Improve soil environment for vegetative growth.
- Manage salts in the root zone.
- Improve air quality, by reducing movement of particulate matter.
- Provide appropriate and safe fertigation and chemigation.
- Reduce energy consumption.

The objective of an Irrigation Water Management Plan (IWMP) is to provide the producer a guide for the proper management and application of irrigation water resources. The potential benefits of IWM can be effectively determined by interviewing the producer to identify fields, soils, crops, climate, and available water supply; measuring the volumes of water withdrawn or applied; determining irrigation system uniformity, selecting a method to schedule irrigations, and then combining these components to produce an IWMP for the farm.

2. IWMP General Criteria

This section establishes the minimum criteria to be addressed in the development of Irrigation Water Management Plans.

A. General Criteria

1. An Environmental Evaluation CPA 52 is to be completed for all activity plans to comply with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, and Air Quality compliance in the Environmental Evaluation (EE). The following is abbreviated guidance for preparation of the EE:

    a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

    b. The EE describes the existing conditions for all applicable resource concerns.

    c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be tiered to a state, regional, national or other programmatic EA or EIS because the proposed effects have been sufficiently analyzed in a state or national programmatic EA or EIS.

f. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to prepare any EE CPA 52.

2. A Irrigation Water Management Plans 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 Irrigation Water Management Plans. The specific TSP criteria required for Irrigation Water Management Plan development is located on the TSP registry (TechReg) web site at: http://techreg.usda.gov/

B. The planner shall address the following items during the IPM Conservation Plan development process. The IWMP should address the resource concerns identified, and the conservation practices needed to comprise a conservation system for IWM. In addition, the IWMP should be based on the economics of water use, energy consumption, and crop yield. Management may be limited by water (deficit irrigation), or limited by land (unlimited water). The two general management schemes for irrigation water conservation in agriculture are: Demand Management (reducing withdrawals or reducing crop requirements), and Supply Management (increasing water storage, yield, or supplies).

The technologies available for Demand Management include:

- Irrigation scheduling
- Increased system uniformity
- Increased irrigation efficiency
- Reduced water evaporation
- Reduced soil evaporation (utilize crop residue or mulch)
- Reduced water use by non-beneficial vegetation
- Limited irrigation (applying less than maximum ET_c)
- Crop selection (lower ET_c or drought resistant strains)
- Decision-making models (optimize water, energy, and nutrient use)
- Conversion of irrigated cropland to dry land farming

The technologies available for Supply Management include:

- Increased water storage capacity
- Groundwater recharge
- Water harvesting
- Vegetative management for increased watershed runoff
- Reuse of waste or drainage water
- Water transfers

In addition to the information required in Conservation Practice Standard (CPS) 449, Irrigation Water Management, existing irrigation systems and conveyance facilities may require modification, augmentation, or replacement of components.

C. **IWMP Technical Criteria:** This section establishes the minimum criteria to be addressed in the development and implementation of Irrigation Water Management Plans. The IWMP should include, but not be limited to, the following components:

1. Farm and field information:
    a. Name of producer
    b. Farm number
    c. Field and/or tract number
    d. Crops grown, and planned rotation by field
    e. Name of employee or consultant developing plan
    f. Date of plan development
2. The objectives of the producer, which should involve one of the purposes listed in CPS 449, Irrigation Water Management.
3. A soils map that includes field boundaries, with the predominant soils listed and area quantified. If the qualifying acres for the plan are a subset of fields, the boundaries of the IWMP acreage should also be delineated.
4. An irrigation system map that includes the size, materials, and locations of the mains, laterals, and application systems.
5. Documentation of past water withdrawals and applications, by crop.
6. The methods planned to measure or quantify future water withdrawals and irrigation applications.
7. Planned water application volumes, on a seasonal and/or annual basis, and by crop.
8. Soil tests, to include nutrient levels and salinity. Water tests, to include nutrients, pathogens, salinity, pH, and trace elements.

9. Estimates of irrigation system uniformity, based on testing, evaluation, or observation. Distribution Uniformity (DU) should be based on the ratio of the average depth infiltrated in the low one-quarter of the field, to the average depth infiltrated over the entire field.
10. Documentation of the scientific method planned for scheduling the timing and amount of irrigation applications, based on the measurement or estimation of soil moisture, and the measurement or prediction of evapotranspiration (ET_c) of the crop(s). The proposed irrigation scheduling method should include:
    a. Estimated volume of water applied, by field, irrigation event, season, and/or year
    b. Estimated frequency or timing of irrigation applications, by field.
    c. Estimated application rates and depths of irrigation events
11. Conservation plan (record of decisions) *(Utilizing Customer Service Toolkit – Plug-In or MsWord Document)* to address the identified environmental risks associated with pest suppression activities with implementation specifications and other resource concerns. The record of decisions shall include the planned practice(s), 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 are not limited to the conservation practices listed below:
    a. Irrigation Water Management (449)
    b. Irrigation System, Micro (441)
    c. Irrigation System, Sprinkler (442)
    d. Irrigation System, Surface & Subsurface (443)
    e. Irrigation Pipeline (430)
    f. Above Ground Multi-Outlet Pipe (431)
    g. Irrigation Ditch (428)
    h. Irrigation Field Ditch (388)
    i. Irrigation Canal or Lateral (320)
    j. Structure for Water Control (587)
    k. Irrigation Reservoir (436)
    l. Irrigation Tailwater Recovery (447)
    m. Pumping Plant (533)

n. Irrigation Land Leveling (464)

o. Anionic Polyacrylamide (PAM) Application (450)

p. Salinity and Sodic Soil Management (610)

q. Nutrient Management (590)

r. Waste Utilization (633)

12. An Operation and Maintenance plan, to include a check list of items to eliminate non-beneficial system losses.
13. A signature page, with names, dates and signatures of all contract holders and the person who prepared the plan. The signature page should also contain a space for approval by NRCS.
14. The IWMP components shall be assembled into one complete plan.

Deliverables:

1. 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, water availability, soil fertility, and others that may be needed)
- For management 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 located on the conservation plan map.

2. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the client's plan (MsWord copy).
- Digital Conservation Plan Map with fields, features, and structural practices located.
- Digital Soils Map.
- Completed CPA 52 and appropriate worksheets.

Agricultural Energy Management Plan Criteria
Practice/Activity Code (122) (No.)

1. Definition

An Agricultural Energy Management Plan (AgEMP) contains the strategy by which the producer will explore and address his/her on-farm energy problems and opportunities.

2. AgEMP Criteria:

This section establishes the minimum criteria to be addressed in the development of AgEMP.

A. General Criteria

1. An Environmental Evaluation (EE) (CPA 52) is to be prepared for all activity plans to demonstrate NRCS compliance with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, Air Quality, and other designated environmental concerns and environmental laws. The environmental effects from the activity plans on environmental resource concerns should be clearly documented on the EE (CPA-52 form). The following is abbreviated guidance for preparation of the EE:

    a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

    b. The EE describes the existing conditions for all applicable resource concerns.

    c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

    d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

    e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be tiered to a state, regional, or national programmatic EA or EIS because the proposed effects have been sufficiently analyzed in a state, regional, national programmatic EA or EIS.

    f. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to prepare any EE CPA 52.

2. An AgEMP 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 AgEMP. The specific TSP criteria required for AgEMP development is located on the TSP registry (TechReg) web site at: http://techreg.usda.gov/

B. The AgEMP plan shall address and document the following elements:

1. Background and site information;
2. Energy audit for the Headquarters' Operation and the Landscape (Working Lands);
3. Energy conservation practices planned;
4. Reference documents.

C. AgEMP Element Specific Criteria

1. Each of the AgEMP elements will address specific criteria. The degree to which these elements are addressed in the development and implementation of a site-specific AgEMP is determined by the General Criteria in Section A and the specific criteria provided for each element of the AgEMP identified below.
2. Background and Site Information - This element provides a brief description of:
   a. Name of producer
   b. Facility location(s) and mailing address
   c. Type and size of the operation
   d. Resource Concerns and Special Environmental Concerns: Extract from State's current CPA-52, Environmental Evaluation Worksheet—in National Environmental Compliance Handbook—includes benchmark conditions for all resource concerns and special environmental concerns (e.g. soil, water, air, plants, animals, and social and economic concerns. This is just a checklist and the level of resolution for inventory of these resource concerns may vary depending upon the nature, size, and intensity of possible positive and negative effects to these resources.
   e. Producer concerns
3. On-farm Energy Audit: This element determines and documents current energy usage, over the past annual cycle, and provides cost-effective alternatives and recommendations for energy conservation of each farm enterprise. A field crop system and livestock production system on the same farm would be considered two separate enterprises. The evaluation of energy conservation activities shall include energy used in the cultivation, protection, harvesting, processing and storage of agricultural crops and in the feeding, housing, and processing of farm animals and animal products, and wildlife enhancement activities.
4. Definitions:
   a. Energy: Fuels (purchased propane, diesel and natural gas) and electricity used to perform stationary farm and ranch activities. This definition includes renewable energy sources.
   b. Energy Management: Optimization of energy use on farms and ranches to minimize non-renewable energy consumption.

c. Certified Energy Auditor: A person who has the technical qualifications to perform an agricultural energy audit.

d. Energy Source: The type of fuel (liquid or gas), electricity or renewable power used to perform farm and ranch activities.

e. Current Energy Usage: The annual usage of grid electricity and/or natural gas and purchased fuels (liquid or gas) for stationary farm or ranch operations.

f. Carbon Footprint: The total annual (net) emissions of greenhouse gases caused directly and indirectly by a farm or ranch operation and expressed in equivalent tons of Carbon Dioxide (CO2) per year.

5. Criteria for Headquarters Energy Audit - The Energy Audit is to be tailored to the individual farm and should cover the primary energy users such as irrigation pumping, heating and cooling of livestock production facilities, manure collection and transfer, grain drying and similar common on-farm activities.
   a. Current energy usage – describe activity and primary equipment involved with each headquarters operation.
   b. Recommended energy improvements and estimated cost.
   c. Expected energy savings from these improvements and estimated payback period in years.
   d. Document the type of energy resource used and current energy consumption by each major activity at the farm headquarters.
   e. Describe components of the major activities:
      - Manufacturer
      - Equipment component factory ratings (HP, efficiency, BTU use)
      - Management use efficiencies (ex. manual/automatic controls)
      - Estimated annual energy use
   f. Summary of energy use by energy resource
   g. Assessment - Alternatives Development
   h. Describe the planned energy saving actions
   i. Document energy savings for the major activities at the farm headquarters as BTU's, KW hours, etc. Document a simple payback period (in years) for the proposed changes.

6. NRCS Landscape (cropland, pastureland, forestland, etc.) farm energy audit content is an energy audit that is designed to (a) estimate energy use associated with current farming/ranching operations and (b) identify energy savings associated with alternative management activities. The Audit shall address energy use for the following elements (as applicable):
   a. Cropland field equipment operations - estimate energy use associated with the current field equipment operations (Compare in common units):
      - Field equipment operations

- Embedded energy in synthetic nitrogen used
- Irrigation
- Pasture management
- Forest operations

b. Specific Criteria: The Audit will address specific criteria for each element as identified below:

1) Cropland field equipment operations - Estimate energy use associated with current field equipment operations:

- Tillage
- Planting
- Harvesting
- Manure application
- Application of inorganic soil amendments and pesticides

2) Identify potential energy savings associated with alternative activities. As a minimum the analysis will address the following, as appropriate. Each item will be expressed in comparison to the existing situation with total savings expressed in common units:

- Number and type of field operations
- Trips to the field
- Trips across the field
- Precision farming practices
- Equipment maintenance and calibration
- Size of tractor relative to implement

3) Embedded energy in synthetic fertilizer, especially nitrogen. Estimate indirect energy use associated with synthetic fertilizer used in the operation. Identify potential indirect energy savings associated with alternative management activities. Analysis may include, for example:

- Presence of a professionally developed nutrient management plan that reduces the amount of fertilizers applied and minimizes losses.
- Potential adjustments to crop rotation such that the amount of nutrients is reduced by optimizing residual nutrient supplies to subsequent crop.
- Precision application techniques that minimize agrichemical needs and optimize the effectiveness of the chemicals used.

4) Irrigation: Estimate energy used in current irrigation system and identify energy savings associated with alternative equipment and management activities. Analysis may include, for example:
   - System type
   - System pressure
   - Irrigation water management techniques
   - Pumping plant evaluation
   - System maintenance
5) Pasture management: Estimate direct energy used in pasture management for example watering facilities and pasture maintenance/renovation and identify energy savings associated with alternative management and equipment. Examples include:
   - Impact of grazing management on reseeding requirements
   - Hauling distance for water/feed vs. water facility development
   - Other
6) Forest operations: Estimate current energy use associated with the forest management/harvest system and identifies energy savings associated with alternative management and equipment. Analysis might include (but not be limited to):
   - Forest trails and landings
   - Types of equipment used
   - Identify potential energy savings in other land uses associated with windbreaks/shelterbelts
   - Other

7. Conservation plan (record of decisions) *(Utilizing Customer Service Toolkit – Plug-In or MsWord Document)* conservation practices to address the energy management needs for the "AgEMP". 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 are not limited to the conservation practices listed below:

(a) Brush Management (314)

(b) Conservation Crop Rotation (328)

(c) Cover Crop (340)

(d) Conservation Cover (327)

(e) Fence (382)

(f) Herbaceous Weed Control (315)

(g) Irrigation System, Microirrigation (441)

(h) Irrigation Water Management (449)

(i) Land Smoothing (466)

(j) Mulching (484)

(k) Nutrient Management (590)

(l) Pasture and Hayland Planting (512)

(m) Pesticide Risk Mitigation (596)

(n) Pipeline (516)

(o) Prescribed Grazing (528)

(p) Residue and Tillage Management, Mulch Till (345)

(q) Residue Management, No Till/Strip Till/Direct Seed (329)

(r) Residue Management, Ridge Till (346)

(s) Residue Management, Seasonal (344)

(t) Stripcropping (585)

(u) Terrace (600)

(v) Watering Facility (614)

(w) Windbreak/Shelter Belt Establishment (380)

8. References: This element lists the technical documentation sources used for the AgEMP and may include the actual documents or web sites that contain the technical documentation useful for the producer.

9. **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 land use soil descriptions

- The completed energy audit report will include the following sections:
  a. Summary of the facility's location, production level, any unusual factors that affect energy use, and any energy efficiency measures already in use.
  b. Summary of the site's energy use over one year, broken down by type of usage and month.
  c. Summary of how much money the producer would save if the recommended measures were included, and how much money the producer would lose if no action were taken.
  d. A list of recommended measures to reduce energy use including their annual energy (kWh, propane, fuel oil, BTU,…) savings and an estimated payback in years.
  e. A narrative summary of the recommendations made through the audit including description of technology, how the technology would affect the site, and how much energy would be saved annually by installing the equipment.
- Resource assessment results (wind and water erosion, water availability, soil fertility, and others that may be needed)
- For management 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 located on the conservation plan map.

3. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the producer's plan (MsWord copy).
- Digital Conservation Plan Map with fields, features, and structural practices located.
- Digital Soils Map.
- Completed CPA 52 and appropriate worksheets.

Tools Needed

In addition to the completion of On-farm Energy Audit standard, one or more tools are needed to evaluate energy associated with tillage, agrichemicals, irrigation, pasture management and forest operations. Some tools already exist or can be made functional with minimal effort. Others will need to be developed.

Tools Available to Support the Landscape Audit

Audit Element	Tools Available or	Tool output	Already existing?

	needed		
Field Equipment Operation	• RUSLE2 • Cropland Energy Estimator (CLE). • Size of tractor relative to implement(s) used	• Fuel or BTU use per acre • Table to identify ideal tractor size for specific implements based on ASABE equipment standard	• Yes (RUSLE2 and CLE) • No
Embedded Energy in Agrichemicals	• CLE • CLE upgrade	Embedded energy in agrichemicals applied. (Current tool does not automatically adjust for management changes)	• Yes • (Upgrade needed)
Irrigation	• Energy Self-Assessment • CLE Upgrade	Fuel or Btu use per acre	• Yes • (Upgrade needed

*CLE = Cropland Energy Estimator

Comprehensive Air Quality Management Plan Criteria
Practice/Activity Code (126) (No.)

1. Definition

Comprehensive Air Quality Management Plans (CAQMPs) can be part of conservation plans applicable to many agricultural operations. These plans assess practices and strategies adopted by agricultural operations to address environmental concerns directly related to air quality and atmospheric change. Management options and structural alternatives are also recommended to address resource concerns identified during the assessment.

A Comprehensive Air Quality Management Plan (CAQMP):

a. Meets NRCS quality criteria or a measureable improvement for air quality and other identified resource concerns;

b. Complies with federal, state, tribal, and local laws, regulations and permit requirements;

c. Addresses the operator's objectives.

2. CAQMP Criteria

This section establishes the minimum criteria to be addressed in the development of CAQMP.

A. General Criteria

1. An Environmental Evaluation (EE) (CPA 52) is to be prepared for all activity plans to demonstrate NRCS compliance with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, Air Quality, and other designated environmental concerns and environmental laws. The environmental effects from the activity plans on environmental resource concerns should be clearly documented on the EE (CPA-52 form). The following is abbreviated guidance for preparation of the EE:

   a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

   b. The EE describes the existing conditions for all applicable resource concerns.

   c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

   d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

   e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be tiered to a state, regional, or national programmatic EA or EIS because the

proposed effects have been sufficiently analyzed in a state, regional, national programmatic EA or EIS.

2. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to prepare any EE CPA 52The CAQMP 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 CAQMP. The specific TSP criteria required for CAQMP development is located on the TSP registry (TechReg) web site at: http://techreg.usda.gov/

B. The planner shall address the following elements during the CAQMP development process:

- Background and Site Information;
- Documentation of the CAQMP Emissions of Concern;
- Documentation of the CAQMP components;
- References

C. CAQMP specific element criteria will offer conservation treatment practices related to the following air quality and atmospheric change resource concerns:

- Particulate Matter,
- Ozone Precursors,
- Odors, and
- Greenhouse Gases

Each of the CAQMP elements will address specific criteria. The degree to which these elements are addressed in the development and implementation of a site-specific CAQMP is determined by the General Criteria in Section 2.A and the specific criteria provided for each element of the CAQMP below.

D. Background and Site Information. This element provides a brief description of:

- Name of owner/operator;
- Facility location(s) and mailing address;
- Type and size of the operation;
- Air Quality resource concerns

E. Documentation of the CAQMP Emissions of Concern. This element documents the owner's/operator's consideration of the CAQMP emissions of concern. It is recognized that a CAQMP may not address all of these emissions; however each emission of concern needs to be considered by the planner and owner/operator during the development of the CAQMP, and the

owner's/operator's decisions regarding each must be documented. The following eight emissions contribute to the NRCS air quality and atmospheric change resource concerns (the applicable concern(s) are included in parentheses after the emission). Examples of practices and activities that can be used to address each emission are included below the emission.

1) Direct Particulate Matter Emissions (Particulate Matter)
   - Paving or gravel application
   - Dust suppressant application
   - Mulch application
   - Speed or traffic reduction
   - Residue management
   - Wind management (e.g., vegetative barriers; wind breaks)
   - Irrigation management
   - Range management
   - Animal incineration
   - Manure/waste management and utilization (e.g., manure removal, manure scraping, and covered storage)
   - Sprinkler irrigation
   - Engine emissions management (e.g., engine replacement, filters, etc.)
2) Ammonia (Particulate Matter, Odors)
   - Manure/waste management and utilization
   - Incorporating/injecting manure
   - Fertilizer management
   - Feed management
   - Biofilter/scrubber installation
3) Volatile Organic Compounds/VOCs (Particulate Matter, Ozone Precursors, Odors)
   - Manure/waste management and utilization
   - Incorporating/injecting manure
   - Biofilter/scrubber installation
   - Feed management
   - Non-burning alternatives to prescribed burning of crop residue/waste

- Engine emissions management (e.g., engine replacement, engine retrofit, etc.)
- Pesticide management
- Non-burning alternatives to open burning
- Prescribed burning

4) Oxides of Nitrogen/NOx (Particulate Matter, Ozone Precursors)
   - Manure/waste management and utilization
   - Incorporating/injecting manure
   - Fertilizer management
   - Feed management
   - Engine emissions management (e.g., engine replacement, engine retrofit, etc.)
   - Non-burning alternatives to open burning
   - Prescribed burning
   - Soil management
5) Odorous sulfur compounds (Odors)
   - Manure/waste management
   - Feed management
   - Incorporating/injecting manure
   - Biofilter/scrubber installation
6) Carbon Dioxide/CO_2 (Greenhouse Gases)
   - Residue management
   - Carbon sequestration to offset CO_2 emissions
   - Soil management
   - Utilization of agricultural residues/wastes as renewable fuel feedstock
   - Engine emissions management (e.g., engine replacement, engine retrofit, etc.)
   - Non-burning alternatives to open burning
   - Prescribed burning
7) Methane/CH_4 (Greenhouse Gases)
   - Anaerobic digester power generation with animal waste feedstock

- Manure/waste management and utilization
- Feed management (e.g., amendments)

8) Nitrous Oxide/N_2O (Greenhouse Gases)
   - Manure/waste management and utilization
   - Incorporating/injecting manure
   - Fertilizer management
   - Feed management
   - Soil management

F. Documentation of the CAQMP Components. The CAQMP shall address the resource concerns identified. This element documents the owner's/operator's decisions as to what NRCS conservation practices are planned. Typical NRCS Conservation Practice Standards are included in the components below. It is recognized that a CAQMP may not contain all of these components; however each component needs to be considered by the planner and owner/operator during the development of the CAQMP, and the owner's/operator's decisions regarding each must be documented. CAQMP Components:

1) Land Treatment Practices for erosion control and air emissions management which could include irrigation, unpaved road and surface treatment, barriers and windbreaks, fertilizer management, incorporating/injecting manure, etc.
2) Land Treatment Practices for carbon sequestration which could include nutrient, fertilizer and pest management
3) Crop Residue Management for erosion control or to minimize emissions from prescribed burning which could include no-tilling, mulch till, chipping and mulching of orchard prunings, utilization of agricultural residues/wastes as renewable fuel feedstock, etc.
4) Manure Management Systems for odor and other air emissions management which could include manure and wastewater handling and storage practices such as the use of lagoon covers, solid-liquid separation, biofilters/scrubbers, anaerobic digesters, etc.
5) Livestock Feeding to manage nutrient content in feed to reduce emissions from animal agriculture that impact air quality
6) Livestock Housing and Feedlots to address dust, odors, and other air emissions from the confinement of animals which could include biofilters/scrubbers, cleaning up spilled materials, manure removal, irrigation sprays, etc.
7) Other Utilization Activities

G. References Element. This element lists the technical documentation sources used for the CAQMP and may include the actual documents or web sites that contain the technical documentation useful for the producer.

3. 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, water availability, soil fertility, and others that may be needed)
- For management 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 located on the conservation plan map.

4. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the client's plan (MsWord copy).
- Digital Conservation Plan Map with fields, features, and structural practices located.
- Digital Soils Map.
- Completed CPA 52 and appropriate worksheets.

Drainage Water Management Plan Criteria
Practice/Activity Code (130) (No.)

1. Definition

The objective of a Drainage Water Management (DWM) is to manage field water table elevations and the timing of water discharges from subsurface or surface agricultural drainage systems for the following purposes:

- Improve water quality.
- Improve the soil environment for vegetative growth.
- Reduce the rate of oxidation of organic soils.
- Prevent wind erosion.
- Enable seasonal shallow flooding or surface watercourse flows for fish and wildlife habitat.

The objective of a Drainage Water Management Plan (DWMP) is to provide the producer a framework for the implementation of DWM on existing artificially drained land. The desirability and potential benefits of a DWM system can be effectively determined by interviewing the producer, identifying field boundaries and soil types, obtaining a drain map, developing a topographic map, and then combining these components to produce a DWM Plan for the field or farm.

2. DWMP Technical Criteria

This section establishes the minimum criteria to be addressed in the development of DWMP.

A. General Criteria:

1. An Environmental Evaluation (EE) (CPA 52) is to be prepared for all activity plans to demonstrate NRCS compliance with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, Air Quality, and other designated environmental concerns and environmental laws. The environmental effects from the activity plans on environmental resource concerns should be clearly documented on the EE (CPA-52 form). The following is abbreviated guidance for preparation of the EE:

   a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

   b. The EE describes the existing conditions for all applicable resource concerns.

   c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

   d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be tiered to a state, regional, or national programmatic EA or EIS because the proposed effects have been sufficiently analyzed in a state, regional, national programmatic EA or EIS.

2. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to prepare any EE CPA 52A DWMP 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 DWMP. The specific TSP criteria required for DWMP development is located on the TSP registry (TechReg) web site at: http://techreg.usda.gov/

B. DWMP Specific Element Criteria. The DWMP should include, but not be limited to, the following components:

1. Farm and field information:
   a. Name of producer
   b. Farm number
   c. Tract number
   d. Crops grown
   e. Name of employee or contractor developing plan
   f. Date of plan development
2. The objectives of the producer, which should involve one of the purposes listed in Conservation Practice Standard (CPS) 554, Drainage Water Management.
3. A map that includes field boundaries, and a soils map with the predominant soils listed and area quantified. If the qualifying acres for the plan are a subset of field(s), the boundaries of the DWMP acreage should also be delineated.
4. A Drainage System Map that includes the materials, diameters or dimensions, and locations of the laterals and mains (depth and grade of tile or ditches not required for the DWMP).
5. A delineation of the area within the field drained by the system. The definition of the drained area is taken from the lateral spacing recommendations of the soil, as specified in the State Drainage Guide. The outer boundary of the drained area is delineated by a line around the drained area (tiled or ditched), at a distance of one-half of the tile or ditch lateral spacing.
6. A wetland delineation map, if applicable.

7. A Topographic Map on a maximum of 120-foot grid that shows elevation contours on a 6-inch increment (drainage system map and topographic map need to be the same scale). The topographic map should include, at a minimum, all of the drained area as defined above.
8. An overlay of the above maps (e.g., field boundaries, drain locations, contour map) with the location, size, and impacted area identified for each planned control structure.
    - If the control structures are set on a 2-foot elevation interval, the impacted area is defined as the drained area (from item 5) contained within the 2-foot contour above the control elevation.
    - If the control structures are set at an elevation interval less than 2 feet, then the impacted area is the drained area contained within the control elevation interval at which the control structures are set.
    - If the control structures are set at an elevation interval greater than 2 feet, then the impacted area is the drained area contained within the 2-foot contour above the control elevation.
    - The control elevation is the elevation of the soil surface at the lowest spot in the area of the field impacted by the operation of the water control structure.
9. The management instructions should follow the Operation and Maintenance section of CPS 554, which states that to reduce soil oxidation and to minimize wind erosion and nitrate transport, the outlet elevation at the water control structure shall be set to allow the water table to rise to within 6 inches or less of the ground surface at the designated control elevation during fallow periods and when practical. The DWMP also must include the following instructions:
    a. The time after harvest to replace boards and the designated outlet elevation during the winter months (or fallow season),
    b. The time in the spring to release water (this will vary depending on the crop: e.g. March for corn and April for soybeans), and
    c. Guidelines for the control of drainage and the management of the water table during the growing season (see CPS 554), and
    d. Evaluation of the DWMP's effect on wetlands and compliance with the National Food Security Act.
10. A summary sheet that lists the pipe diameter or dimensions of each water control structure and the area impacted by each structure.
11. A signature page, with names, dates and signatures of all contract holders and the person who prepared the plan. The signature page should also contain a space for approval by NRCS.
12. A District Conservationist checklist, covering each component of this statement of work, should also be included.

13. The DWMP should be packaged as one plan.

    A template of a DWMP is available on the Illinois Drainage Guide (Online), on the webpage "Related Information", http://www.wq.uiuc.edu/dg/ .

C. Associated Practice Standards. The DWMP should address the resource concerns identified, and the conservation practices needed to comprise a conservation system for DWM. In addition to the water control structures as described in Conservation Practice Standard (CPS) 554, Drainage Water Management, existing drainage systems may require augmentation, modification, or replacement of existing components. NRCS Conservation Practice Standards to be incorporated in a DWMP could include:

- Drainage Water Management (554)
- Subsurface Drain (606)
- Surface Drain, Field Ditch (607)
- Surface Drainage, Main or Lateral (608)
- Wetland Creation (658)
- Wetland Enhancement (659)
- Wetland Restoration (657)
- Nutrient Management (590)
- Waste Utilization (633)
- Shallow Water Development and Management (646)
- Wetland Wildlife Habitat Management (644)

D. References:

NRCS National Engineering Handbook, Part 624, Section 16, Drainage.

NRCS National Engineering Handbook, Part 650, Engineering Field Handbook, Chapter 14, Water Management (Drainage).

3. 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, water availability, soil fertility, and others that may be needed).
- For management 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 located on the conservation plan map.

4. Deliverables for NRCS Field Office:

- Electronic copy of the client's plan (MS-Word copy).
- Digital Conservation Plan Map with fields, features, and structural practices located.
- Digital Soils Map.
- Completed CPA 52 and appropriate worksheets.

Transition from Irrigated to Dryland Farming and Ranching Plan Criteria
Practice/Activity Code (134) (No.)

1. **Definition**

Dryland systems are those which describe production techniques under limited precipitation and usually severe resource concern constraints. The resource constraints include soil erosion by both wind and water; periods of water stress of significant duration; and limited production inputs. A transition from irrigated to dryland farming and ranching conservation activity plan is a conservation system that focuses on crop yield sustainability and water conservation/water harvesting techniques. A Transition to Dryland conservation activity plan must:

a. Meet NRCS quality criteria for soil quality, water quality and quantity, and other identified resource concerns;

b. Comply with federal, state, tribal, and local laws, regulations and permit requirements; and

c. Satisfy the operator's objectives.

Producers may choose to transition from irrigated to dryland farming and/or ranching for reasons that include, but are not limited to:

a. Reducing water use;

b. Protecting threatened or endangered species;

c. Restoring flow to streams and improving fisheries;

d. Improving irrigation water management on other land not in dryland system;

e. Protecting or securing present water rights; and

f. Continuing farming/ranching in drought conditions or if water rights are reduced or lost.

2. Transition from Irrigated to Dryland Plan Technical Criteria

This section establishes the minimum criteria to be addressed in the development of Transition from Irrigated to Dryland Plans.

A. General Criteria

1. An Environmental Evaluation (EE) (CPA 52) is to be prepared for all activity plans to demonstrate NRCS compliance with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, Air Quality, and other designated environmental concerns and environmental laws. The environmental effects from the activity plans on environmental resource concerns should be clearly documented on the EE (CPA-52 form). The following is abbreviated guidance for preparation of the EE:

   a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

b. The EE describes the existing conditions for all applicable resource concerns.

c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be tiered to a state, regional, or national programmatic EA or EIS because the proposed effects have been sufficiently analyzed in a state, regional, national programmatic EA or EIS.

2. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to prepare any EE CPA 52A Transition from Irrigated to Dryland 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 Transition from Irrigated to Dryland Plans. The specific TSP criteria required for Transition from Irrigated to Dryland Plan development is located on the TSP registry (TechReg) web site at: http://techreg.usda.gov/

B. Transition from Irrigated to Dryland Plan Specific Element Criteria

The Transition to Dryland Plan shall include, but not be limited to, the following components:

1. Background and Site Information Element

- Name of owner/operator;
- Farm location and mailing address;
- Soil map units;
- Conservation plan map;
- Total acres to be transitioned to dryland;
- Field names or codes;
- Date producer began management of parcel;
- List of crops grown on the parcel, with acreage for each crop
- Description of the water right for the property
- Description of the current state of affairs concerning water, Endangered Species Act, Clean Water Act, fish re-introduction, local concerns, etc.

2. Current Fertility, Soil Quality and Erosion Control Element

- Crop rotation plan;
- List of cover crops, hedgerows or other diversified plantings in annual and perennial crops;
- List of nutrients applied (incorporated, foliar, soil inoculants, compost);
- Results of soil tests, tissue tests, microbiological tests, crop quality testing;
- Cover crop management;
- Method and frequency of fertility management monitoring;
- Methods of erosion control and documentation:
    - Soil map units used for erosion prediction and predicted soil erosion from wind and/or water as a result of planned using approved prediction tools such as RUSLE2 and/or WEQ when applicable

3. Factors to Consider in Transition from Irrigated to Dryland Plan - Cropping System Element
    - Historic precipitation patterns and rainfall probabilities
    - Crop marketability and potential profitability.
    - Insect cycles and potential disease organisms.
    - Crop water use patterns.
    - Snow management.
    - Weed control options and evaluation of ability to rotate herbicide types.
    - Optimum row widths.
    - Potential phytotoxicity.
    - Equipment needs.
    - Pollinator habitat and pollinator protection.
4. Planned Sustainable Dryland Cropping System. The underlying principles directed at the development of a sustainable dryland cropping system should include four elements:
    a. Rotation intensity
        - Must plan for a crop succession of sufficient intensity to assure maximum use of effective precipitation.
    b. Rotation diversity
        - Promotes greater stability and diminished external input requirements. Diversity minimizes the fluctuation in crop yields,

ability to spread out workload and fixed costs, and the reduction in weather and price risks.

c. Management.

- Using tillage and planting methods that reduce soil disturbance and renew dependence on cultural practices that will reduce reliance on costly technology.

d. Transition plan

- Length of transition (e.g. one – ten years) for switching from irrigated to dryland for any particular part of the operation

5. Livestock (when applicable to operation)

- Description of livestock and livestock products, processing;
- Crop production activities if growing livestock feed;
- Source of water.
- Drought plan.
- Prescribed grazing plan without irrigation.

C. Associated Practice Standards

The Transition from Irrigated to Dryland Plan shall address the resource concerns identified and the conservation practices needed to comprise a dryland conservation system. Document the planned conservation practices, the site specific specifications for the practice, the amount to be applied, and schedule of application. Typical NRCS Conservation Practice Standards to be incorporated in a Transition from Irrigated to Dryland Plan may include one or more of the following:

- Conservation Crop Rotation (328)
- Cover Crop (340)
- Contour Farming (330)
- Field Border (386)
- Filter Strip (393)
- Hedgerow Planting (422)
- Mulching (484)
- Nutrient Management (590)
- Pasture and Hayland Planting (512)
- Pest Management (595)
- Prescribed Grazing (528)
- Residue and Tillage Management, Mulch Till (345)

- Residue Management, No Till/Strip Till/Direct Seed (329)
- Residue Management, Ridge Till (346)
- Residue Management, Seasonal (344)
- Stripcropping (585)
- Terrace (600)
- Water Harvesting Catchment (636)
- Windbreak/Shelter Belt Establishment (380)

D. References

- USDA Natural Resource Conservation Service National Agronomy Manual, Part 507.

3. 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, water availability, soil fertility, and others that may be needed)
- For management 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 located on the conservation plan map.

4. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the client's plan (MsWord copy).
- Digital Conservation Plan Map with fields, features, and structural practices located.
- Digital Soils Map.
- Completed CPA 52 and appropriate worksheets.

Conservation Plan Supporting Organic Transition Plan Criteria Practice/Activity Code (138) (No.)

1. Definition

A Transition to Organic System Plan is a conservation activity plan documenting decisions by producers who agree to implement a system of conservation practices which assist the producer to transition from conventional farming or ranching systems to an organic production system:

a. Meets NRCS quality criteria for soil erosion, water quality, and other identified natural resource concerns;

b. Addresses elements of a Organic System Plan (OSP) as defined in the USDA National Organic Program (NOP) Standards (www.ams.usda.gov/nop);

c. Complies with federal, state, tribal, and local laws, regulations and permit requirements;

d. Documents the producer's objectives and decisions for practice implementation during the transition period.

Note: The conservation activity plan may be used by producers to help support their efforts to become a certified operation, but this plan may not be used as a replacement for an Organic System Plan (OSP) as required by the National Organic Program.

2. Transition to Organic Farming Plan Criteria

This section establishes the minimum criteria to be addressed in the development of Transition to Organic System Plan.

A. General Criteria and Plan Requirements

1. An Environmental Evaluation (EE) (CPA 52) is to be prepared for all activity plans to demonstrate NRCS compliance with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, Air Quality, and other designated environmental concerns and environmental laws. The environmental effects from the activity plans on environmental resource concerns should be clearly documented on the EE (CPA-52 form). The following is abbreviated guidance for preparation of the EE:

   a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

   b. The EE describes the existing conditions for all applicable resource concerns.

   c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

   d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

   e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be tiered to a state, regional, or national programmatic EA or EIS because the

proposed effects have been sufficiently analyzed in a state, regional, national programmatic EA or EIS.

f. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to prepare any EE CPA 52.

2. A Transition to Organic System Activity Plan must be developed by certified Technical Service Providers (TSPs). The Food, Conservation, and Energy Act of 2008 (FCEA) provides authority to NRCS for practice payments through EQIP which include:

> "conservation activities involving the development of plans appropriate for the eligible land of the producer, including – comprehensive nutrient management planning; and other plans that the Secretary determines would further the purposes of the program…"

This provides NRCS with the legal authority for use of financial assistance payments to producers through Environmental Quality Incentives Program (EQIP) for development of conservation activity plans prepared by certified TSPs. The specific TSP certification requirements for Transition to Organic Farming Activity Plan is located on the TSP registry (TechReg) web site at: http://techreg.usda.gov/

B. The planner shall consider the following applicable items during the conservation plan development process in support of the OSP:

1. Background and Site Information
2. Identification of natural resource concerns to be addressed
3. Producers objectives and goals related to organic production
4. Site History and transition period (NOP Part 205.202)
5. Seeds and Planting Stock (NOP Part 205.204)

- Type of seed used: organic, non-organic, untreated, treated or inoculated; if non-organic, untreated seed used must document "good faith effort" seed search for organic seed;
- Annual seedlings: organic with certificate;
- Perennial stock: organic, non-organic;
- Other planting stock: organic, non-organic: rhizomes, shoots, tubers, cuttings or roots;
- Non-Genetically Modified Organism (GMO) documentation (only needed for crops that have commercially available GM seed).
- Seed treatment: pelletized, coated, primed, fungicide, insecticide, inoculated.

6. Production of Seedlings, Transplants, Greenhouse Crops (NOP Part 205.204)
   - Soil mix used to grow crops;
   - Method used to separate and identify organic and non-organic areas;
   - Method used to prevent commingling of organic and non-organic plants;
   - Labeling;
   - Prevention of prohibited materials drift/contact through ventilation or irrigation system;
   - Prevention of prohibited materials contact into sensitive areas, through streams, surface water, or irrigation system;
   - Method of cleaning seedling containers, equipment used for both organic and prohibited substances;
   - Method of cleaning and insuring materials stay on site (not airborne or waterborne).
7. Fertility, Soil Quality and Erosion Control (NOP Part 205.203 and 205.205)
   - Crop rotation plan;
   - List of cover crops, hedgerows, and/or artificial structures for beneficial insects, pollinators, bats, and raptors or other diversified plantings in annual and perennial crops;
   - Consideration of wildlife-friendly cover crops;
   - List of nutrients applied (incorporated, foliar, soil inoculants, compost);
   - Results of soil tests, tissue tests, microbiological tests, crop quality testing;
   - Cover crop management;
   - Side dressing, drip applications;
   - Method and frequency of fertility management monitoring;
   - Methods of erosion control and documentation:
     - Soil map units used for erosion prediction and predicted soil erosion from wind and/or water as a result of planned using approved prediction tools such as RUSLE2 and/or WEQ when applicable
8. Production of Compost (NOP Part 205.203)
   - Method of producing compost;
   - Compost that contains manure;
   - Addition of pelleted manure to compost;
   - Uncomposted manure application
9. Crop rotation (NOP Part 205.205)
   - Practices to maintain or improve soil organic matter content;
   - Practices to manage deficient or excess land nutrients;
   - Provide for pest management in annual and perennial crops;
   - Practices to address erosion control.

10. Pest Management (NOP Part 205.206)
    - Substances used for controlling insects or disease;
    - Biological controls including encouraging and managing bats and raptors);
    - Pest control materials and reason for use;
    - Synthetic pesticides used in or around facilities where organic products are stored;
    - Beneficial predators and parasites;
    - Pollinator habitat and pollinator protection.
11. Locations of sensitive resource areas to include:
    a) Rivers, streams, drains, surface waters, coastal waters, wetlands, wells, groundwater, drains, grassed waterways and buffers;
    b) Sensitive plant species and/or essential fish and wildlife 9including invertebrates)habitat (on and off-site), and food plots;
    c) Drinking water sources.
12. Prevention of Contamination by Contact (NOP Part 205.201)
    - Adjoining land use;
    - Width and type of riparian and other vegetative buffers;
    - Width;
    - Separation of organic, non-organic at harvest;
    - Safeguard methods to prevent contamination from drift;
    - Use of lumber treated with prohibited substances;
    - Application equipment, type, and cleaning method documented that is used for both organic and non-organic crops;
    - Water source;
    - Storage of any prohibited materials on farm;
    - Methods of crop storage
13. Livestock (NOP Part 205.236 to 205.239)
    - Livestock, poultry, breeds, gender, numbers, hatch or purchase dates;
    - Livestock products, processing;
    - Crops grown for organic livestock feed;
    - Origin of Livestock - Type, flock ID, date of purchase, whether certified organic, age at purchase, source, projected date of egg-laying, slaughter
    - Livestock Feed - access to pasture for all ruminants
    - Drinking Water Source
    - Operations Producing both Organic and Non-organic livestock. Separation between organic and non-organic livestock.
    - Manure Management - Storage and application techniques, application rates, number of acres manure applied to, and when applied

14. Biodiversity - conservation plants, habitat for birds, pollinators, bats, beneficial insects, natural areas restored or protected, wildlife friendly farm practices

C. Transition to Organic System Plan Specific Element Criteria.

Each of the Transition to Organic System Plan elements will address specific criteria. The degree to which these elements are addressed in the development and implementation of a site-specific Transition to Organic System Plan is determined by the General Criteria in Section 2.A and 2.B and the detailed specific criteria provided for each element of the CPSOT below.

1. Background and Site Information Element. This element provides a brief description of:
    - Name of owner/operator;
    - Farm location and mailing address;
    - Soil map units;
    - Map of streams, surface waters, wetlands on or adjacent to site
    - Conservation plan map;
    - Total acres to be transitioned to organic;
    - Field names or codes;
    - Date producer began management of parcel;
    - Date producer plans to harvest certified organic crops from the parcel;
    - List of crops grown on the parcel, with acreage for each crop
2. Assessment of the natural resource concerns to be addressed. The plan shall identify those natural resource concerns which will need to be addressed by the producer in order to meet requirements of the NOP.
    - Air Quality
    - Domestic Animals
    - Fish and Wildlife
    - Plant Condition
    - Soil Condition
    - Soil Erosion
    - Water Quality
    - Water Quantity
3. Producer's objectives and goals related to organic production.
4. Planned NRCS practice standards. This element includes NRCS Field Office Technical Guide (FOTG) approved conservation practices that may be needed to assist producers during the transition to an organic production system. The "Conservation Plan Supporting Organic Transition" may include but is not limited to the conservation practices listed below. (Note: Additional mitigation measures or activities which are not NRCS approved conservation

practices may need to included in this plan to assist the producer meet NOP requirements (e.g., setbacks, animal traps/repellents, animal medications, etc.). Although these activities may be needed by the producer to achieve organic production certification and can be included in this plan as valuable information, these measures are not required as part of this conservation activity plan.)

- Alley Cropping (311)
- Cover Crop (340)
- Conservation Cover (327)
- Conservation Crop Rotation (328)
- Early Successional Habitat Development/Management (647)
- Field Border (386)
- Filter Strip (393)
- Forest Stand Improvement (666)
- Hayland Management (512)
- Hedgerow Planting (422)
- Herbaceous Wind Barriers (603)
- Irrigation System, Microirrigation (441)
- Irrigation Water Management (449)
- Land Smoothing (466)
- Mulching (484)
- Nutrient Management (590)
- Pasture and Hayland Planting (512)
- Pest Management (595)
- Prescribed Grazing (528)
- Residue and Tillage Management, Mulch Till (345)
- Residue Management, No Till/Strip Till/Direct Seed (329)
- Residue Management, Ridge Till (346)
- Residue Management, Seasonal (344)
- Restoration and Management of Rare and Declining Habitats (643)
- Stream Habitat Improvement and Management (395)
- Stripcropping (585)
- Terrace (600)
- Upland Wildlife Habitat Management (645)
- Windbreak/Shelter Belt Establishment (380)

D. References

- USDA National Organic Program (NOP - www.ams.usda.gov/nop)
- California Certified Organic Farmers (http://www.ccof.org/)

- USDA NRCS Field Office Technical Guide (http://www.nrcs.usda.gov/technical/efotg/)
- ATTRA Organic Documentation Forms, Organic Crop and Livestock Workbooks (http://www.attra.org/)

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, water availability, soil fertility, and others that may be needed)
- For management 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 located on the conservation plan map.

3. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the client's plan (MsWord copy).
- Digital Conservation Plan Map showing locations of fields, natural and other human installed features, and all planned conservation practices.
- Digital Soils Map.
- Completed CPA 52 and appropriate worksheets.
- Conservation plan schedule of operations

Fish and Wildlife Habitat Plan Criteria
Practice/Activity Code (142) (No.)

1. Definition

A fish and wildlife habitat plan is a site specific plan developed for a client who is ready to plan and implement decisions with consideration for fish and wildlife habitat and other biological resources. A Fish and Wildlife Habitat Plan:

a. Meets Natural Resource Conservation Service (NRCS) quality criteria for fish and wildlife habitat and other identified resource concerns;

b. Complies with federal, state, tribal and local laws, regulations and permit requirements;

c. Addresses the client's objectives.

2. Fish and Wildlife Habitat Conservation Plan Criteria

This section establishes the minimum criteria to be addressed in the development of Fish and Wildlife Habitat Plans.

A. General Criteria

1. An Environmental Evaluation (EE) (CPA 52) is to be prepared for all activity plans to demonstrate NRCS compliance with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, Air Quality, and other designated environmental concerns and environmental laws. The environmental effects from the activity plans on environmental resource concerns should be clearly documented on the EE (CPA-52 form). The following is abbreviated guidance for preparation of the EE:

   a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

   b. The EE describes the existing conditions for all applicable resource concerns.

   c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

   d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

   e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be tiered to a state, regional, or national programmatic EA or EIS because the proposed effects have been sufficiently analyzed in a state, regional, national programmatic EA or EIS.

   f. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to prepare any EE CPA 52.

2. A Fish and Wildlife Habitat 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 Fish and Wildlife

Habitat Plans. The specific TSP criteria required for Fish and Wildlife Habitat Plan development is located on the TSP registry (TechReg) web site at: http://techreg.usda.gov/

B. Fish and Wildlife Plan Criteria

a) A fish and wildlife activity conservation plan will address related NRCS quality criteria for soil erosion, water quality, and other identified habitat resource concerns.

b) The plan will comply with Federal, State, Tribal, and local laws, regulations, and permit requirements.

c) Satisfy the participant's goals and objectives in regard to fish and wildlife resources.

C. Background and Site Information

a) Landowner information – name, address, operation, size

b) Location and plan map of parcel

c) Documentation of existing practices/history

d) Resource inventory

e) Fish and wildlife resource concerns

D. Client Objectives

a) Manage working lands for fish and wildlife habitat

b) Increase populations of selected species or groups

c) Maintain populations of selected species or groups

d) Improve habitat for aquatic, wetland, and terrestrial species

e) Considerations for pollinator habitat and pollinator protection

E. Document Existing Conditions

a) Conservation plan map – boundaries, fields, scale, streams, surface waters, wetlands, fences, riparian areas, land uses, etc.

b) Soils map – legend, interpretations for fish and wildlife resources

c) Client's decisions – conservation practices needed to achieve objectives

d) Habitat assessment, evaluations, or Habitat Suitability Index (HSI) models

e) Current management activities

f) Carrying capacity for selected species/resources

F. Desired Future Conditions/Goals

a) Fish and wildlife population levels

b) Restoration of fish and wildlife species or habitat types

c) Sustainability of fish and wildlife populations/habitat

d) Indices of Biological Integrity

G. Assessing/Monitoring of fish and wildlife populations using state specific habitat assessment guides. Habitat evaluations and Habitat Suitability Index (HSI) models for many fish and wildlife species are available to guide the planner in formulating alternatives for the land owner/participant. The alternative(s) selected are implemented through one or more conservation practices that provide or improve needed habitat elements.

H. Conservation Practices and/or Activities and Support Documents

a) Fish and wildlife-related Conservation Practice Standards. The National Handbook of Conservation Practices lists more than 170 practices. Virtually every conservation practice impacts fish and wildlife resources in some manner. The practices listed in Attachment 1 are specifically related to fish and wildlife resources. These practices will, when properly implemented and/or managed, positively affect biological resources. Attachment 2 relates conservation practices to groupings of biological resources.

b) Habitat assessment guides (State specific).

c) Stream Visual Assessment Protocol 2 (SVAP2) assists the planner with determining current stream and riparian conditions, identifying specific features potentially affecting habitat quality, and determination of quality criteria for stream and riparian habitat.

d) Requirements from State-specific Field Office Technical Guide

I. References

a) National Planning Procedures Handbook
b) Field Office Technical Guide
c) National Biology Handbook
d) National Biology Manual
e) National Forestry Manual
f) National Forestry Handbook
g) National Environmental Compliance Handbook
h) TechReg Technical Service Provider Registry

3. 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, water availability, habitat assessments/evaluations, soil fertility, and others that may be applicable)
- For management practices, the planned practices and the site specific specifications on how each practice will be applied, when the practice will be applied, the extent (acres or number) that will be applied, and operation and maintenance required.

- For engineering/structural practices; The planned practice when it will be applied and extent, operation and maintenance requirements, and location on the conservation plan map.

4. **Deliverables for NRCS Field Office:**
   - Electronic copy of the client's plan (MSWord copy)
   - Digital Conservation Plan Map with fields, features, and structural practices located
   - Digital Soils Map
   - Completed Environmental Evaluation (CPA 52) and appropriate worksheets, including reports to the field office on the results of any inventory and identification they carry out for the plan

Attachment 1 - Typical Conservation Practices/Fish and Wildlife Resources

National Conservation Practice Standards Specific to Fish and Wildlife Resources
Aquaculture Ponds (397)—A water impoundment constructed and managed for commercial aquaculture production. To provide suitable aquatic environment for producing, growing, and harvesting commercial aquaculture products.
Constructed Wetland (656)—A wetland constructed for the primary purpose of water quality improvement; i.e., treatment of wastewater, sewage, surface runoff, milk-house wastewater, silage leachate, and mine drainage. Practice treats wastewater by the biological and mechanical activities of the constructed wetland.
Early Successional Habitat Development/Management (647)—Manage early plant succession to benefit desired fish, wildlife or natural communities. Increase plant community diversity, provide wildlife habitat for early successional species and provide habitat for declining species.
Field Border (386)—A strip of perennial grass or shrubs established at or around the edge of a field. Field borders provide productive habitat for wildlife that favor early successional habitats on agricultural landscapes.
Fish Passage (396)—Eliminating or mitigating the effects of natural or artificial barriers, such as dams, culverts, or cross-channel structures to fish and other aquatic organisms. Allows for the unimpeded movement of aquatic organisms.
Fishpond Management (399)—Developing or improving impounded water to produce fish and other aquatic organisms for domestic use or recreation. Provides a suitable aquatic environment for producing, growing, and harvesting fish or other aquatic organisms.
Restoration and Management of Declining Habitats (643)—Restoring and conserving rare or declining native vegetated communities and associated fish and wildlife species to restore and manage habitats degraded by human activity, increase native plant community diversity, or manage unique or declining native habitats.
Riparian Forest Buffer (391) –Consists of predominantly trees and/or shrubs located adjacent to and up-gradient from watercourses or water bodies. Creates shade to lower or maintain water temperatures to improve habitat for aquatic organisms, provides a source of detritus and large wood to the stream corridor, reduces excess amounts of sediment, organic material, nutrients and pesticides in surface runoff and reduces excess nutrients and other chemicals in shallow ground water flow, reduces pesticide drift entering the water body, and improves riparian plant communities for fish and wildlife habitats..

Riparian Herbaceous Cover (390)—Consists of grasses, grass-like plants, and forbs at the fringe of the water along watercourses. Provides habitat for aquatic and terrestrial organisms, improves and protects water quality, stabilizes the channel bed and streambanks, establishes corridors to provide landscape linkages among existing habitats, and fosters management of existing riparian herbaceous habitat to improve or maintain desired plant communities.
Shallow Water Management for Wildlife (646)—Managing shallow water on agricultural lands and moist soil areas for wildlife habitat. Areas provide open water areas to facilitate waterfowl resting and feeding, and habitat for amphibians and reptiles that serve as important prey species for other wildlife.
Stream Habitat Improvement and Management (395)—Create, restore, maintain, or enhance physical, chemical, and biological functions of a stream system to provide desired quality and quantity of water, fish and wildlife habitat, channel morphology and stability, and aesthetics and recreation opportunities.
Upland Wildlife Habitat Management (645)—Creating, restoring, maintaining, or enhancing areas for food, cover, and water for upland wildlife and species that use upland habitat for part of their life cycle. Provide all of the habitat elements in the proper amounts and distribution, and manage the species to achieve a viable wildlife population within the species home range.
Wetland Creation (658)—A wetland created on a site location that historically was not a wetland or was a wetland but with a different hydrology, vegetation type, or function than naturally occurred on the site. Create wetlands that have wetland hydrology, hydrophytic plant communities, hydric soil conditions, and wetland functions and/or values.
Wetland Enhancement (659)—The modification or rehabilitation of an existing or degraded wetland where specific function and/or values are improved for the purpose of meeting specific project objectives. For example, managing site hydrology for waterfowl or amphibian use, or managing plant community composition for native wetland hay production.
Wetland Restoration (657)—A rehabilitation of a degraded wetland where soils, hydrology, vegetative community, and biological habitat are returned to the original condition to the extent practicable. To restore wetland conditions and functions that occurred on the disturbed wetland site prior to modification to the extent practicable.
Wetland Wildlife Habitat Management (644)—Retaining, developing, or managing habitat for wetland wildlife. To maintain, develop, or improve habitat for waterfowl, furbearers, or other wetland-associated wildlife.
Wildlife Watering Facility (648)—Constructing, improving, or modifying watering facilities or places for wildlife to obtain drinking water.

Attachment 2 - Conservation Practices and Affected Biological Resources

Biological Resource	Relevant Practices
Aquatic Invertebrates—crayfish, snails, stoneflies, mayflies, riffle beetles	Stream Habitat Improvement and Management , Riparian Forest Buffer, Wetland Restoration
Terrestrial Invertebrates—earthworms, nematodes, dung beetles	Conservation Cover, Forest Stand Improvement, Prescribed Grazing
Pollinators—bees, butterflies, moths, birds, bats	Alley Cropping, Conservation Crop Rotation, Tree/Shrub Establishment, Early Successional Habitat Development/Management
Fish	Nutrient Management, Irrigation Water Management, Riparian Forest Buffer, Stream Habitat Improvement and Management, Wetland Restoration, Fish Passage
Amphibians	Pond, Stream Habitat Improvement and Management, Wetland Restoration
Reptiles	Wetland Wildlife Habitat Management, Wetland Restoration, Restoration and Management of Declining Habitats
Birds	Hedgerow Planting, Early Successional Habitat Development/Management, Prescribed Burning, Wetland Wildlife Habitat Management, Shallow Water Management for Wildlife, Prescribed Grazing, Irrigation Water Management, Restoration and Management of Declining Habitats, Wetland Restoration, Field Border, Residue Management, No-Till and Strip Till, Windbreak/Shelterbelt Establishment, Riparian Buffer, Filter Strip, Forest Harvest Management,
Mammals	Brush Management, Prescribed Grazing, Wildlife Watering Facility, Fence, Forest Stand Improvement, Riparian Forest Buffer, Tree/Shrub Establishment, Conservation Cover, Stream Habitat Improvement and Management, Windbreak/Shelterbelt Establishment; Early Successional Habitat Development and Management, Prescribed Grazing, Structure for Water Control, Mine Shaft & Audit Closing, Forest Harvest Management, Pond

Pollinator Habitat Plan
Practice Activity Code No. 146

1. Definition

   A pollinator habitat 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 plan will:

   a) Comply with all federal, state, tribal, and local laws, regulations, and permit requirements.

   b) Meet the client's objectives.

2. Pollinator Habitat Plan Technical Criteria

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

   A. General Criteria

      1. An Environmental Evaluation (EE) (CPA 52) is to be prepared for all activity plans to demonstrate NRCS compliance with the National Environmental Policy Act, National Historic Preservation Act, Endangered Species Act, Environmental Justice, Air Quality, and other designated environmental concerns and environmental laws. The environmental effects from the activity plans on environmental resource concerns should be clearly documented on the EE (CPA-52 form). The following is abbreviated guidance for preparation of the EE:

         a. Planners and TSPs should follow the EE guidance delineated in the National Environmental Compliance Handbook.

         b. The EE describes the existing conditions for all applicable resource concerns.

         c. The EE will assess the resources potentially impacted by the no action, proposed action and any reasonable alternatives.

         d. Guide sheets will accompany the EE, as needed, to provide information on how to assess and deal with special environmental concerns.

         e. The findings section of the EE is to identify whether NRCS has determined based on the analysis of the EE: (1) that a site specific environmental assessment (EA) or an environmental impact statement (EIS) should be prepared based on the significance of potential impacts, or (2) the EE can be tiered to a state, regional, or national programmatic EA or EIS because the proposed effects have been sufficiently analyzed in a state, regional, national programmatic EA or EIS.

         f. TSP and planners are required to complete NRCS' Level I Environmental Compliance training prior to the preparation of any EE CPA 52.

      2. A Pollinator Habitat 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 Plans. The specific TSP

criteria required for Pollinator Habitat 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. (See the National Planning Procedures Handbook for requirements of the Conservation Plan Map)
2. Acquire a soils map (Web Soil Survey is one source) and appropriate soil descriptions and interpretations for the land use, plant community, and resource concerns.
3. Identify the number of acres available.
4. Use an appropriate State or NRCS/approved habitat assessment, evaluation, or Habitat Suitability Index model and the Ecological Site Description (where available) 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. Planning Considerations for Desired Future Conditions/Goals

1. Consider a composition of 9-12 species of native flowering plants, three of which are in bloom at any one time during the growing season for the specific geographical location. 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. Minimize weed competition, with inclusion, where appropriate, of beneficial "weeds" (e.g., milkweed as Monarch butterfly host plants).
3. Consider availability of areas of undisturbed pollinator habitat:
    a) Areas appropriate for ground-nesting bees that are not tilled.
    b) Overgrown bunch grasses for bumble bee nest sites
    c) Host plants for butterflies
    d) Tree cavities, standing dead trees, exfoliating bark, pithy or hollow stems such as elderberry and *rubus* spp. (e.g., in riparian or adjacent land) for wood-nesting bees
4. Adequate clean water source(s) are available for honey bees

F. Pollinator Habitat 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 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 for individual practices can be documented on available NRCS Jobsheets or included in the plan in a narrative form where jobsheets are not available. Planned engineering practices shall include the conservation practice, schedule of implementation, and be 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
- Channel Bank Vegetation 322
- 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
- Multi-Story Cropping 379
- Pasture and Hay Planting 512
- 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 Rare and 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 *

3. 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 management practices. The planned practices and the site-specific specifications, on how each practice will be applied, pollinator monitoring; 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 the extent and location on the conservation plan map.

4. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the client's plan (MsWord copy)
- Digital Conservation Plan Map with fields, features, and structural practices located
- Digital Soils Map
- Completed CPA 52 and appropriate worksheets