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:

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

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

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

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

   5) 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.

   6) 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 (stand type) map of parcel
3. Documentation of existing practices
4. Past harvest history
5. Identification of resource concerns (see eFOTG, Section III or EE (CPA-52) for list of resource concerns)

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

6. Expected income
7. Forest stand improvement
8. Wildlife habitat/riparian areas
9. Recreation
10. Agroforestry
11. Pollinator Habitat and Protection

D. Existing Conditions

3. 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. A general description of the forest management unit is required that includes items from B. and C. above, general property information, acreage of cover types (SAF), and non-timber resource planning considerations, if they are not a landowner objective. Individual stand descriptions are required on all the area within the forest management unit planned. If a stand description requires a detailed inventory, it will meet the standards for field work as defined in Appendix 1. Where no detailed inventory is required, field observations and ocular estimates are acceptable as a basis for required general stand descriptions. Need and extent of resource inventories is based on landowner objectives, resource concerns, and

recommended conservation practices and are described in Appendix 2. Some of the landowner objectives, resource concerns, and recommended conservation practices that require a detailed plant resource inventory in order to describe the stand are:

i. Expected income/timber quantity and quality

Forest Stand Improvement (666)

Tree/Shrub Pruning (660)

ii. Wildlife habitat/riparian areas (if primary landowner objective)

Upland Wildlife Habitat Management (645)

Early Successional Habitat Development/Management (647)

Riparian Forest Buffer (391)

(NOTE: Wildlife habitat/riparian areas inventory and planning may be completed under a CAP-Fish and Wildlife Habitat Plan (Program Code 142))

2. Appendix 2 contains a more complete list of landowner objectives, resource concerns, and recommended conservation practices and the minimum inventory required.

3. Accuracy of estimates will be appropriate to the landowner's objectives for the plan and to document the need for treatment.

4. A detailed overstory inventory is not required where no harvest or silvicultural practices are planned or likely within ten years due to:

- Young age (<5 yrs old) of the stand (by ocular estimate)
- Legal restriction, or
- Terrain that is inoperable with conventional equipment (Lack of existing access does not exempt stands from this requirement)

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. See Appendix 2 for more guidance.

F. Forest Management Plan Documentation

1. Forest management plan map – plan and stand boundaries, field (stand) labels and legend including stand type (SAF) and acres, scale, north arrow, 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
- **Forest Trails and Landings** (655) plus site specific specifications or job sheet
- **Firebreak** (394) plus site specific specifications or job sheet
- **Riparian Forest Buffer** (391) 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
- **Windbreak/Shelterbelt Establishment** (380) 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, TSP Certification Statement, and 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 (stands), 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).

APPENDIX 1.

Detailed Inventory Standards for Field Work

a. Use fixed area plots or variable radius points in all stands where a detailed inventory is required and plots will include all primary plant species or habitats.

b. If required to be inventoried as indicated in Appendix 2, field plots/points must include the following data, at a minimum:

    1. Overstory – species, plant type, and diameter (trees at breast height, <= 2 inch classes), canopy position, and percent canopy cover

    2. Understory – species, plant type, and percent canopy cover (ocular estimate)

    3. Ground Cover – species and plant type, or material type (i.e. rocks, bare ground, slash, down woody debris) and percent cover (ocular estimate)

4. Field Inventory must meet **one** of the following standards for sampling intensity:

For small to medium-size acreage, 10 to 5000 acres with uniformly distributed trees:

1. Fixed area plots: a minimum 3% sample by area (distributed randomly or systematically); **or**
2. Variable radius plots: an average minimum intensity of 1 sample point (10 BAF) per 3 acres, or 1 sample point (20 BAF) per 1.5 acres (distributed randomly or systematically); **or**
3. Estimated total stand basal area inventoried is within a sampling error of 30% with a probability (confidence interval) of 68% or greater. For statistical purposes individual stands of 10 acres or less may be grouped with another stand of similar type and structure to produce a single statistical estimate/error; **or**
4. Estimated total management unit basal area for all inventoried stands is within a sampling error of less than 15% with a probability (confidence interval) of 90% or greater. For statistical purposes (e.g. stratified sampling) individual stands of 10 acres or less may be grouped with another stand of similar type and structure to produce a statistical estimate/error.

In areas where trees are of irregular distribution, the percentage of area sampled may need to be increased to give adequate results.

For very small (< 10 acres) or very large acreage (> 5000 acres), NRCS will approve the sampling method. Refer to Inventory Sampling Design in the Society of American Forester's Forestry Handbook.

APPENDIX 2.

Specific Resource Inventory Standards

1. All assessments of existing conditions and resource concerns must be based on adequate fieldwork to provide accurate and useful information. If needed, NRCS will assist the landowner in determining what inventories are needed on a case-by-case basis.

2. Assessments must be provided for all forest/habitat types (stands) within the Forest Management Unit planned. Soil, water, air, plant, animal and human (SWAPA+H) resource concerns must be described in the general stand descriptions, at a minimum, by field observation and/or ocular estimation, when a detailed inventory is not required.

3. A Forest Management Plan may have multiple types of resource inventories depending on the landowner's objectives, the resource concerns that need to be addressed, and the recommended conservation practices that will be implemented.

4. Types and extent of resource inventories needed, sorted by landowner objectives/ resource concerns, and recommended conservation practices in plan:

Landowner Objective/Resource Concerns for Stand	Typical Recommended Practices*	Minimum Inventory Needs
Expected Income/Forest Stand Improvement/Forest Productivity	Forest Stand Improvement (Thinning sapling stands, Crop Tree Release)/Tree and Shrub Pruning/Tree and Shrub Site Preparation/Tree and Shrub Establishment	Inventory and assess the type and extent of productivity concerns. A detailed plant resource inventory of the overstory (typically trees > 5.0 inches DBH) is required as described in Appendix 1. Inventory and assessment must indicate specific resource concerns such as existing and future individual stand stocking (BA or Stem/Ac) and quality problems, as well as crop trees to be released/ pruned, and potential regeneration conditions. If one of the landowner's objective is to increase carbon sequestration, an accurate estimate of growth and yield, especially one that documents the changes in volume and stocking, is needed for carbon reporting and trading
Forest Health	Forest Stand Improvement (Sanitation Cutting, Invasive Species Control)/Tree and Shrub Pruning/Firebreak	Inventory and assess the type and extent of health and vigor problems, including pests, diseases, and windthrow/ice/fire hazards. This may include invasive species problems. If Forest Stand Improvement, Sanitation Cutting, will be recommended, a detailed plant resource inventory of

		the overstory and understory is required as described in Appendix 1. If not, a general stand description is acceptable.
Plant Diversity	Upland Wildlife Habitat Management/Forest Stand Improvement (Thinning for wildlife, Invasive Species Control)	Inventory and assess all the plant species in order to accurately manage for plant diversity. A detailed plant resource inventory of overstory, understory and ground cover is required as described in Appendix 1. Delineate forest management unit by native plant communities using Maine Natural Areas Program, Natural Plant Communities Classification System. Identify natural disturbance regimes for each plant community.
Agroforestry	Understory Forest Products/Forest Stand Improvement (Thinning)/Tree and Shrub Pruning	Inventory and assess the type and extent of the problems in achieving or maintaining a desired understory plant community for forest products. At a minimum, inventory and assess the condition of existing understory and ground cover for desirable forest products to be maintained in addition to general stand descriptions.
Wildlife Habitat/Riparian Areas/Pollinator Habitat and Protection NOTE: A fish and wildlife habitat plan (142) might be needed instead of or in addition to the forest management plan (106)	Upland Wildlife Habitat Management/Forest Stand Improvement (Thinning for Wildlife, Mast Tree Release/Wild Apple Tree Release)/Tree and Shrub and Wild Apple Pruning/Early Successional Habitat Development/Management/Tree and Shrub Site Preparation/Tree and Shrub Establishment	Inventory and assess the targeted species biological and ecological needs. At a minimum, a detailed inventory of the habitat components for the targeted species and their condition will be required in order to accurately manage for that species. Inventory may include the species and abundance of mast trees and shrubs, standing dead trees and snags, and down woody debris, depending on the targeted species. If Forest Stand Improvement (Thinning for Wildlife, Mast Tree Release, Wild Apple Tree Release), or Wild Apple Pruning is recommended, see Appendix 1 for detailed inventory standard. Assess fish and wildlife populations using state specific habitat assessment guides such as Habitat Evaluation Procedures (HEPs) and Habitat Suitability Index (HSI) models. When specific wildlife species are not

		"targeted" consider management for "umbrella" or "indicator" species. Umbrella species (e.g., American marten, Canada lynx, American woodcock) are those species to which management is directed and benefits will extend to a wide range of co-existing species in the same habitat, which may be lesser known and difficult to manage for otherwise. Indicator species are those whose status provides information on the overall condition of an ecosystem and are sensitive to changes in habitat conditions (e.g., salmonids, Canada lynx). Depending on landowner's objectives, an inventory of forested riparian areas, including vernal pools, may be needed along with quantity and quality of understory and ground covering plants that provide food and shelter. See Appendix 1 for Understory and Ground Cover Inventory standard. Depending on landowner's objectives, an inventory of pollinator habitat may be needed including an inventory of dead standing or hollow trees, tree cavities, and slash piles for nesting. Wildlife habitat assessments and treatments should be reviewed by the NRCS biologist or other professional wildlife habitat specialist for completeness.
Soil Quality and Condition	Access Road/Forest Trails and Landings/Access Control/Critical Area Planting	Inventory and assess the type and extent of soil quality and condition problems, especially on roads, trails and landings. If Access Road and/or Forest Trails and Landings are recommended, at a minimum, an inventory of the roads, trails and landings system on the management unit and their condition is required in addition to general stand descriptions. Describe existing Forestry BMPs and need for new measures.

Water Quality and Quantity	Access Road/Forest Trails and Landings/Stream Crossing/Riparian Forest Buffer/Access Control	Inventory and assess the type and extent of water quality and quantity problems, especially on ephemeral streams. At a minimum, an inventory of riparian areas and any buffers on the management unit and their condition is required to address these resource concerns in addition to general stand descriptions. Describe existing Forestry BMPs and need for new measures.
Aesthetics and Recreation	Windbreak and Shelterbelt Establishment/Riparian Forest Buffer/Forest Trails and Landings/Forest Stand Improvement/Tree and Shrub Establishment/Access Control	Inventory and assess the type and extent of aesthetic and recreational value problems, including viewscapes, access, and access control in addition to general stand descriptions. At a minimum, an inventory of existing and future viewscapes and the condition of their access (or recreational trails) is required.

*This list of Typical Recommended Practices is not all inclusive and one, several, all, or some other conservation practices may be recommended depending on the forest management and conservation work needed. **NOTE: Not all recommended practices in a FMP have to be eligible for financial assistance.**