

Chapter 1

Purpose and Need

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Introduction

Chapter 1 introduces the Purpose and Need for activities the Forest Service is proposing, the relevant issues surrounding them, and other issues and management concerns for the Marilla Too Project. The Marilla Too Project proposes the following activities on National Forest System lands within the Marilla Too Project Area (Project Area): wildlife habitat improvement projects, including upland opening maintenance and snag creation; aspen and red pine timber harvest treatments; white pine planting; and non-native invasive plant species control.

Project Location

The Marilla Too Project Area is located on National Forest System (NFS) lands within the Cadillac-Manistee Ranger District of the Huron-Manistee National Forests (HMNF) in T22N, R 13W, Sections 2-9, 15-17, 19-22, and 28-32, Dickson Township; and T22N, R14W, Sections 1-4, 9-12, 16, 19-22, 25, and 27-30, Dickson Township; and T23N, R13W, Sections 31-35, Marilla Township; Manistee County, Michigan. The Marilla Too Project Area is divided into Compartments, including Compartments 404, 407, 409-413, 415, 416, 418, and 419. The Project Area contains approximately 19,757 acres, which includes approximately 13,147 acres of National Forest System lands and 6,610 acres of private land. The Project Area size and project activity acreages were estimated using Geographic Information System (GIS) acreage. The towns of Brethren, Marilla, Dublin, Mesick and Harrietta occur within 10 miles of the Project Area. Figure 1 at the end of Chapter 2 shows the Project Area boundary, project vicinity, open public roads and trails, Management Areas on NFS land within the Project Area, and NFS land within the Project Area in the HMNF's old growth design.

Management Direction

The Huron-Manistee National Forests' revised Land and Resource Management Plan (Forest Plan), provides a programmatic framework regarding allocation of land and the measures necessary to protect National Forest resources. The Forest Plan identifies goals, objectives, standards, and guidelines designed to accomplish the desired future condition for each Management Area (MA). The Marilla Too Project occurs within MAs 2.1, 2.1 G, 4.2, 4.2 G, 4.4, 6.1, and 8.1. The majority of the Project Area is located within MA 4.2 G and 2.1 G within the Marilla Grouse Emphasis Area. Management directions for these areas are described in the Forest Plan standards and guidelines. The objectives of this project are that management activities would implement Forest Plan standards and guidelines along with addressing land management issues.

The Purpose of these MAs as described in the Forest Plan includes the following:

- MA 2.1 – Roaded Natural Rolling Plains and Morainal Hills - Management activities provide high volumes of quality hardwood timber products and firewood with special consideration for enhancing wildlife habitats. Emphasis is given to managing deer,

grouse and wildlife emphasis areas, and fish habitat. A broad variety of recreational opportunities is available and visual diversity is high.

MA 2.1 G is a grouse emphasis area within MA 2.1 with an objective to manage intensively to provide quality grouse habitat and maintain or increase the acres of aspen/birch in grouse management areas. A portion of this project is located within the Marilla Grouse Emphasis Area.

- MA 4.2 – Roaded Natural Sandy Plains and Hills - Management activities enhance and increase the variety of wildlife habitats with emphasis given to managing deer, grouse, wildlife and Kirtland's warbler essential habitat. High volumes of timber products are produced. Emphasis includes reducing life-threatening and property damaging wildfire potential and providing a variety of recreational opportunities.

MA 4.2 G is a grouse emphasis area within MA 4.2 with an objective to manage intensively to provide quality grouse habitat. A portion of this project is located within the Marilla Grouse Emphasis Area.

- MA 4.4 – Rural - Management activities provide recreational opportunities, sources of firewood close to users, and moderate to high volumes of softwood timber products. Emphasis includes reducing life-threatening and property-damaging wildfire potential. Wildlife management is coordinated with adjacent non-National Forest land management with emphasis on deer, grouse, and wildlife management. Some small blocks will be managed to protect isolated, essential areas for endangered, threatened, or sensitive species.
- MA 6.1 – Semiprimitive Nonmotorized Areas – Management activities in these areas provide for semiprimitive, nonmotorized recreational experiences and will reduce life-threatening and property-damaging wildfire potential. Areas support a wide variety of fish and wildlife species. Management enhances and improves habitats for species which avoid human activity.

A portion of this project is located within the Manistee River Semiprimitive Nonmotorized Area; however, none of the proposed activities occur within the Semiprimitive Nonmotorized Area.

- MA 8.1 – Wild and Scenic Rivers - Management of the Congressionally-designated wild and scenic river corridors will protect unique areas that have outstandingly remarkable values such as scientific, biological, geological, historic or recreational characteristics of local, regional or national significance.

A portion of this project is located within the Manistee National Recreational River; however, none of the proposed activities occur within the Wild and Scenic River.

A portion of the Project Area is located within the HMNF's old growth design; however, none of the proposed activities are in old growth stands. A portion the North Country National Scenic Trail and designated snowmobile trails are located within the Project Area; however, there are no trail projects proposed in this project. The proposed project activities described in the Proposed Action are consistent with the Forest Plan's management direction.

Purpose and Need

The Purpose and Need for a project is arrived at by addressing the differences between the existing condition and the desired condition. The Purpose and Need of the Marilla Too Project is to accomplish the following project objectives while meeting the goals and objectives of the Forest Plan for Management Areas 2.1, 2.1 G, 4.2, 4.2 G, 4.4, and 8.1:

❖ Provide early successional habitat, maintain the aspen forest type, and improve aspen age-class diversity

Existing Condition: Many of the aspen stands in the Project Area are over-mature and are gradually converting towards later successional species, such as maple, beech, and white ash. A variety of tree species are encroaching on the existing upland openings within the Project Area, contributing to the gradual loss of shrubs and grasses needed for viability of many game and non-game wildlife species.

Desired Condition: The aspen forest type and the early successional habitat it represents is sustained, and aspen age-class diversity is provided within the Project Area. The vegetative composition of upland openings consists primarily of grasses, forbs, and berry-producing shrubs.

Need: There is a need to maintain the aspen forest type and improve aspen age-class diversity and early successional habitat in the Project Area, especially for ruffed grouse habitat needs. There is a need to maintain upland openings to prevent the encroachment of tree species, and stimulate the growth of opening vegetation, berry-producing shrubs, and mast producing trees for wildlife habitat diversity.

❖ Sustain forest and ecosystem health

Existing Condition: The trees in overstocked red pine stands are exhibiting reduced growth rates and are susceptible to insect and disease infestations. The overall vegetative and structural diversity in these stands is limited. Competition for sunlight, water, and nutrients is reducing the growth of the trees. Pine plantation stands are unnatural appearing and contain little horizontal and vertical diversity. Non-native, invasive plants, such as Japanese barberry, Canada thistle, autumn olive, leafy spurge, non-native bush honeysuckles, wild parsley, and Scots pine have been identified in various locations within the Project Area.

Desired Condition: Red pine stands contain vegetative and structural diversity and grow near maximum rates, and native vegetation is established in the understory. The pine plantations are healthy, have a more natural appearance, and native herbaceous and shrub vegetation occurs in the understory. The presence and spread of non-native, invasive plants is limited.

Need: There is a need to open the canopy in the red pine stands in the Project Area to sustain forest health, concentrate growth on larger trees, minimize insect and disease attacks, improve wildlife habitat, enhance vegetative diversity, and improve stand vigor and visual quality. There is a need to reduce current infestations and future spread of non-native, invasive plants.

Proposed Action

The Proposed Action identifies specific management activities that would be implemented to achieve the Purpose and Need objectives. The following lists the proposed actions to accomplish each project objective.

Project Objective - Provide early successional habitat, maintain the aspen forest type, and improve aspen age-class diversity

- ❖ Harvest aspen stands by clearcutting to optimize aspen regeneration, maintain the aspen forest type, provide aspen age-class diversity, and improve wildlife habitat for early successional species. Approximately 387 acres of aspen in 29 treatment units is proposed for clearcutting. Approximately 25 acres of red pine/hardwood stands in 4 treatment units and 13 acres of hardwood/aspen stands in 2 units with aspen inclusions are proposed for clearcutting. These treatments would convert these stands to aspen forest type to increase the amount of aspen forest type and early successional habitat.
- ❖ Maintain existing upland openings by brushing, mowing, prescribed burning, apple tree pruning, and shrub planting to provide vegetative diversity, promote plant and animal species viability and habitat diversity, and promote native species. Approximately 235 acres of upland opening improvement is proposed.

Photo 1-1

Marilla Wildlife Habitat Management Area Cooperative Partnership Sign



The majority of the Marilla Too Project is located within the Marilla Grouse Emphasis Area.

Project Objective - Sustain forest and ecosystem health

- ❖ Thin and/or regenerate red pine stands to provide current and future wood products, sustain forest health, reduce competition for sunlight, water, and soil nutrients, promote the establishment of hardwood regeneration, and improve wildlife habitat and visual diversity. The following treatments are proposed: approximately 567 acres of red pine thinning, 40 acres of red pine overstory removal, and 4 acres of snag creation in a red pine stand to improve cavity nester habitat.
- ❖ Treat non-native, invasive plant populations or individuals to reduce current infestations and future spread in order to sustain forest productivity. Non-native, invasive plant species are located in stands scattered across the Project Area. Proposed invasive plant control methods include manual and mechanical removal, and spot treatment with herbicide. Approximately nine invasive plant species in 30 stands totaling about ten acres (40 occurrences) are proposed for treatment.
- ❖ Improve species diversity in three hardwood stands by underplanting additional white pine trees in the hardwood understory. Approximately 88 acres of white pine underplanting is proposed in three hardwood stands.

Additional stands occur within the Project Area; however, this project has been limited to the activities that would be reasonable to complete in the next three to five years.

Scoping and Public Involvement

The Forest Service uses public involvement and an Interdisciplinary Team (ID Team) of resource specialists to determine issues of concern and develop possible solutions. Scoping is a process for gathering comments about a site-specific proposed federal action to determine the scope of issues to be addressed and for identifying unresolved issues related to the proposed action (40 CFR 1501.7). Opportunities for comments enable concerned citizens, resource specialists from other agencies, and local governments to express their ideas and views.

Public involvement for the project included listing in the HMNFs' Schedule of Proposed Actions and the HMNF website, and a direct mailing of a scoping letter on December 15, 2009 to individuals, organizations, adjacent landowners, and potentially affected tribes (Planning Record). This project was also routed within the local Forest Service office to solicit comments and resource specialist input. During the scoping period, about 41 individuals responded. Table 1-1 below summarizes the general comments. Some responses contained more than one comment.

Table 1-1: Summary of Scoping Comments

Comments	Number of Comments
Supports project	18
*** Clearcut less, does not support clearcutting; higher priority aspen elsewhere; - wants mature woods - no clearcutting in Comp 404, unit 404/22-A; - units too small - 413/5A, 413/5B, 413/13, 413/14, 413/25, 411/2; - stands too young – 404/20, 404/22, 404/24 (higher priority elsewhere)	4
** Clearcut red pine unit 418/43-B for plant diversity	1
***Does not support overstory removal harvest (412/37), white pine planting (404/25, 404/26, 410/35), opening maintenance project (LSC change) (410/53)	1
*** Does not support snag creation or prescribed burning openings	1
Supports invasive plant treatments; individual interested in helping treat invasive plants	4
** Disagrees with NNIP program, especially killing Scots pine, autumn olive, and honeysuckle	2
Supports planting additional white pine, red pine, oaks, and hardwood	5
** Supports closing roads after the timber sale completed	1
Supports closing unnecessary trails for quiet recreation	1
** Supports aspen clearcuts, but leave tops for wildlife habitat	1
** Concerned about soil erosion if stumps removed after timber sale	1
* Wants to know if they can have woodchips after the timber is cut to use in their campground	1
* Wants more areas open to firewood cutting, especially in Pole Road area	1
** Watershed impacts should be detailed and monitored	1
* More timber cutting should be done on Upper River Road and in cedar swamps for deer	1
** Pole Road not shown as open road	1
** Where does the funding come from for these projects?	1
* Wants food plots on NFS land	1
Questioned the status of certain roads in the project area, requested misc. information	1
* Recommended motorized and nonmotorized trail, wildlife, and energy projects	1

*** = Issue;

** = Concerns resolved through mitigation or design, or explained in the analysis of the project activities;

* = Comments outside scope of project, or already addressed in Forest Plan, laws, and regulations

Relevant Issues

Issues result from discussion, debate, or disagreement regarding the effects of the proposed activities. They are developed from comments received from within and outside the Forest Service. In order to provide a concise analysis, the agency distinguished between those issues that were used in the analysis for formulating alternatives, developing mitigation, and tracking effects. Issues that drove the development of alternatives were identified as relevant issues. Other issues and management concerns are addressed in the Environmental Effects section in Chapter 3 of the EA, but were not used to develop alternatives. Alternatives considered but eliminated from detailed study are addressed in Chapter 2 of the EA. The relevant issues identified for this project are described below.

Creation of Large Openings

Issue: This issue reflects the concern about the creation or maintenance of large openings as a result of some of the aspen clearcuts and opening prescribed burn projects.

Measurement: Acres and location of Aspen Clearcut Units; Acres and Number of Opening Maintenance Prescribed Burning Units

Conversion of Forest Types

Issue: This issue reflects the concern over the change in forest types presently occurring to a different forest type as a result of the proposed treatments; especially the overstory removal, white pine underplanting, and red pine or hardwood stands being converted to aspen.

Measurement: Acres of Overstory Removal Units; Acres and Number of White Pine Underplanting Units; Acres and Number of Red Pine or Hardwood Stands Converted to Aspen

Other Issues and Management Concerns

The following issues and resources have been discussed and/or evaluated in recent similar projects. Some may be determined to be minor because they would not be affected by the project design. Only issues and resources that would be impacted by an action alternative or vary greatly between alternatives would be used to evaluate the alternatives for this project.

Wildlife and Management Indicator Species

The effects of the proposed activities on wildlife and Management Indicator Species will be evaluated as part of the analysis.

Vegetative Composition

The current vegetative composition and the expected changes as a result of implementing the proposed treatments will be evaluated as part of the analysis.

Soil, Watershed, and Air

Potential impacts to soil, watershed, and air resources will be evaluated as part of the analysis. Measures to minimize impacts to soil, watershed, and air resources will be incorporated into the project.

Heritage Resources and Endangered, Threatened, and Sensitive Species

Heritage resource sites and endangered, threatened and sensitive plant and animal species have been identified in the Project Area. Recommended protection measures for these resources will be incorporated into the design of the project.

Recreation and Visual Quality

Recreation within the Project Area includes hunting, hiking, skiing, snowmobiling, driving for pleasure, horseback riding, camping, and berry/mushroom picking. The analysis will evaluate how the proposed activities and the time of year they occur affect recreation activities, and the aesthetic quality in the Project Area.

Social Economics

The environmental analysis addresses the effects of the proposed activities on social economics and evaluates the cost-revenue of the alternatives.

Decision to be Made

Based on the analysis of the environmental effects in the EA, the Responsible Official (the District Ranger), must decide whether or not to implement the proposed management activities and decide on the amount, type, and location of these activities.

Implementation

The selected alternative would be implemented within approximately ten years of the Responsible Official signing the Decision Notice for this project. Timber sales would likely be completed within three to five years and the remaining projects within five years after the timber sale activities are completed.

Availability of the Planning Record

The Planning Record contains detailed information used in the analysis and is on file at the Manistee Ranger Station.