IV. FIRE MANAGEMENT GOALS AND OBJECTIVES

In the following discussion of fire specific goals and objectives, goals are considered to be general, long-range
aspirations of the Refuge; objectives are specific, field-observable conditions that specific fire plans are designed to achieve in order to enhance the goals. The goals and objectives have been created within the context of the "Vision Statement" for Seney NWR:

Maintain a complex mosaic of habitats that supports an array of both wetland and upland wildlife species. Plant succession will be actively managed to maintain a wide range of conditions.

A. Fire Management Goals

- Protect life, property, and other identified resources in need of protection.
- Use fire as a tool to accomplish resource management objectives of restoring environmental health and ecological integrity.
- Restore and maintain fire-dependent early successional communities that existed historically.
- Improve the status of priority wildlife species that benefit from naturally occurring wildland fire.
- Maintain Wilderness Area standards.

B. Fire Management Objectives
(See Section IX for Objectives for Each Fire Management Unit)

- Protect important scientific, cultural, historic, prehistoric, and scenic resources, private lands, and visitor, administrative, and other facilities/structures by reducing fuel load levels in adjacent areas. This work will be integrated into an ecological approach to habitat management with the consideration of spatial aspects (e.g., connectivity).
- Maintain and restore historic vegetation structure, composition, and biodiversity through the use of prescribed fire and a Fire Use Program. This involves maintaining and restoring sedge-dominated conditions and reducing encroaching woody vegetation by Fire Use or prescribed fire. In forested areas, fire will also be used (in conjunction with other forest management techniques) to restore structure and composition. In sandy outwash, fire will be used as a disturbance to stimulate vegetation community regeneration and promote blueberry production.
- Use prescribed fire to thwart invasive exotic species such as glossy buckthorn (*Rhamnus frangula*).
- Educate the public regarding the role of fire as a natural disturbance mechanism that regulates vegetation composition and structure. Devise education programs at the Visitor Center specific to fire.
- Promote Fire Use in the Wilderness Area and investigate future use of prescribe fire.
- Complete a Minimum Tool Analysis before any actions are taken in the Wilderness Area.

V. FIRE MANAGEMENT STRATEGIES

A. Strategies to Meet Fire Management Goals

1. Develop expertise and techniques for the use of prescribe fire in roadless areas and other sensitive sites outside the Wilderness Area. These techniques should involve Minimum Tools.
2. Apply the expertise and techniques developed above and then incorporate them into the Wilderness Area.
3. Promote a Fire Use program in a safe and cost-effective manner consistent with resources and ecological values.

4. Develop an eastern Upper Peninsula Fire Use Team qualified to national standards that can respond to local needs for expertise in managing fire within roadless and Wilderness areas. Due to a lack of Fire Use Teams experienced with local conditions (as well as problems associated with travel to Seney NWR and availability) a local team will enhance the

probability of actually implementing a Fire Use Plan when conditions are appropriate.
5. Enhance cooperation and coordination between all local wildfire management agencies by conducting prescribed burns utilizing personnel from the Refuge, the Michigan Department of Natural Resources, the U. S. Forest Service, and the U. S. National Park Service both on and off the Refuge.
6. When and where used, suppression strategies and tactics will be unique to each incident dependent on safety considerations, weather conditions, cost of suppression, fuel conditions, availability of resources and location of the fire in relation to structures and cultural resource sites.
7. Minimum Impact Suppression Techniques (MIST) and Minimum Tool Analysis will be used whenever possible outside of the Wilderness Area and always within the Wilderness Area.
8. Prescribed fire will be utilized to replace the effects of wildfire in shaping the structure and composition of vegetative communities for wildlife habitat, control of invasive, exotic, or noxious weed control, and hazard fuel reduction.
9. Create and maintain firebreaks so as to minimize the adverse affects of fire upon property and lands not owned or managed by the Refuge (see **Appendix N**).
10. Strive to emulate the effects of naturally occurring wildfire in the application of prescribe fire by varying the intensity, duration, timing, environmental conditions, and spatial aspects of burns.
11. Increase the vegetation structure complexity by producing snags of varying size across the landscape.

B. Fire Use Strategies

- Provide increased wildfire protection by constructing fuel breaks around all exterior boundaries and increasing patrols during periods of high fire danger.
- Establish long-term monitoring transects / plots in all major upland habitat types to detect change in vegetation structure and composition between pre and post-burn conditions.
- Prescribed fire may be used to restore and maintain wildlife habitat and to reduce hazardous fuel accumulations, provided resource objectives are also achieved.
- Determine the effects different retardants and foams have on wetland patterns and processes.
- Install and monitor a network of groundwater monitoring wells throughout the Refuge. Evaluate groundwater levels in terms of the impact they have on ground fires during fire events.

C. Limits to Strategies

Because wetlands and watercourses are so intermingled on the Refuge, retardants and foams will only be used on upland areas 300’ or more from any water body (including wetlands) or when life and property are in immediate danger. Environmental guidelines for foam or retardant use, taken from a paper published by the Forest Service’s Missoula Technology and Development Center, are found in **Appendix M**.