APPENDIX N: SNOWMOBILE PLAN BRIEFING DOCUMENT

I. VISION

To develop and maintain an integrated snowmobile trail system on public and increasingly on private land in the Adirondack Park that will provide snowmobilers with an experience that is consistent with the spirit and letter of Article XIV, Section 1 of the New York State Constitution, is respectful of the rights and interests of private landowners, and strives to enhance the vitality of the Park's citizens by providing trail linkages between local communities within the Park.

II. GOALS

1. **Protect natural and cultural resources and the wild forest character of public lands in the Park (as envisioned by the Constitution, APSLMP and appropriate laws, rules, regulations) by:**
   - considering underutilized trails for abandonment;
   - utilizing to the maximum extent possible routes on the periphery of Wild Forest Units or parallel and near to travel/transportation corridors for new trail development and, where appropriate, re-designating trails in the interior of Wild Forest Units or in the vicinity of private in-holdings for non-motorized use only;
   - focusing on opportunities to route trails on non-state lands wherever possible and encouraging long-term commitment of corridor trail systems on private lands through cooperative agreements with private landowners consistent with the provisions of the OSP;
   - establishing a clear set of standards for snowmobile trails and snowmobile related activities on public lands;
   - increasing law enforcement resources at all levels to address trespass and deter illegal activity on the trail system and in surrounding public and private areas; and
   - providing intelligent and resource protective trail system planning in an overall way rather than dealing with each trail segment individually.

2. **Providing a safe, enjoyable snowmobile experience by:**
   - avoiding unsafe trail conditions;
   - minimizing dependency on lake and road crossings;
   - encouraging partnerships with the private sector, state and local governments that will provide, maintain and operate snowmobile trails; and
   - establishing a clear set of standards for snowmobile trails and snowmobile related activities on public lands.

3. **Promoting tourism and economic opportunities for local communities by:**
   - connecting communities and major points of interest;
   - connecting trail systems from outside of the Park;
   - connecting to necessary support services (gas, food, lodging, etc.); and
   - identifying important snowmobile trail connections.

APPENDIX O: APSLMP WILD FOREST GUIDELINES

Definition

A wild forest area is an area where the resources permit a somewhat higher degree of human use than in wilderness, primitive or canoe areas, while retaining an essentially wild character. A wild forest area is further defined as an area that frequently lacks the sense of remoteness of wilderness, primitive or canoe areas and that permits a wide variety of outdoor recreation.

To the extent that state lands classified as wild forest were given or devised to the state for silvicultural or wildlife management purposes pursuant to statutory provisions specifying that these lands will not form part of the forest preserve (if such provisions are constitutional), the following guidelines are not to be interpreted to prevent silvicultural or wildlife management practices on these lands, provided that other guidelines for wild forest land are respected.

Guidelines for Management and Use

Those areas classified as wild forest are generally less fragile, ecologically, than the wilderness and primitive areas. Because the resources of these areas can withstand more human impact, these areas should accommodate much of the future use of the Adirondack forest preserve. The scenic attributes and the variety of uses to which these areas lend themselves provide a challenge to the recreation planner. Within constitutional constraints, those types of outdoor recreation that afford enjoyment without destroying the wild forest character or natural resource quality should be encouraged. Many of these areas are under-utilized. For example the crescent of wild forest areas from Lewis County south and east through Old Forge, southern Hamilton and northern Fulton Counties and north and east to the Lake George vicinity can and should afford extensive outdoor recreation readily accessible from the primary east-west transportation and population axis of New York State.

Basic guidelines

1. The primary wild forest management guideline will be to protect the natural wild forest setting and to provide those types of outdoor recreation that will afford public enjoyment without impairing the wild forest atmosphere.
2. In wild forest areas:
(a) No additions or expansions of non-conforming uses will be permitted.
(b) Any remaining non-conforming uses that were to have been removed by the December 31, 1975 deadline but have not yet been removed will be removed by March 3l, l987.
(c) Non-conforming uses resulting from newly classified wild forest areas will be removed as rapidly as possible and in any case by the end of the third year following classification.
(d) Primitive tent sites that do not conform to the separation distance guidelines will be brought into compliance on a phased basis and in any case by the third year following adoption of the unit management plan for the area.
3. Effective immediately, no new non-conforming uses will be permitted in any designated wild forest area.
4. Public use of motor vehicles will not be encouraged and there will not be any material increase in the mileage of roads and snowmobile trails open to motorized use by the public in

wild forest areas that conformed to the master plan at the time of its original adoption in 1972.
5. Care should be taken to designate separate areas for incompatible uses such as snowmobiling and ski touring or horseback riding and hiking.
6. When public access to and enjoyment of the wild forest areas are inadequate, appropriate measures may be undertaken to provide improved access to encourage public use consistent with the wild forest character.
7. No new structures or improvements in wild forest areas will be constructed except in conformity with a finally adopted unit management plan. This guideline will not prevent ordinary maintenance, rehabilitation or minor maintenance of conforming structures or improvements, or the removal of non-conforming uses.
8. All conforming structures and improvements will be designed and located so as to blend with the surrounding environment and to require only minimal maintenance.
9. All management and administrative actions and interior facilities in wild forest areas will be designed to emphasize the self-sufficiency of the user to assume a high degree of responsibility for environmentally sound use of such areas and for his or her own health, safety and welfare.
10. Any new, reconstructed or relocated lean-tos, primitive tent sites and other conforming buildings and structures located on shorelines of lakes, ponds, rivers or major streams, other than docks, fishing and waterway access sites and similar water-related facilities, will be located so as to be reasonably screened from the water body to avoid intruding on the natural character of the shoreline and the public enjoyment and use thereof. Any such lean-tos, ranger stations, storage sheds, horse barns and similar structures will be set back a minimum of 100 feet from the mean high water mark of lakes, ponds, rivers or major streams.
11. All pit privies, seepage pits or leach fields will be located a minimum of 150 feet from any lake, pond, river or stream.

Structures and improvements

1. All structures and improvements permitted under the guidelines covering wilderness areas will be allowed in wild forest areas. In addition, the structures and improvements listed below will be allowed and their maintenance, rehabilitation and construction permitted:
-- small groupings of primitive tent sites below 3,500 feet in elevation, subject to the guidelines set forth below;
-- nature and interpretive trails;
-- trailheads adjacent to public highways;
-- stream improvement structures for fishery management purposes;
-- fishing and waterway access sites adjacent to public highways and complying with the criteria set forth below;
-- horse trails; and,
-- picnic tables.
The maintenance and rehabilitation of the following structures and improvements will be allowed to the extent essential to the administration and/or protection of state lands or to reasonable public use thereof but new construction will not be encouraged:
-- horse barns;
-- small scale dams, constructed of natural materials wherever possible;
-- boat docks, constructed of natural materials wherever possible;

-- small fireplaces in fire-sensitive areas;
-- storage sheds and similar rustic buildings for use of administrative personnel;
-- small-scale electronic communication and relay facilities for official communications;
-- telephone and electrical lines to service permitted administrative structures;
-- buoys;
-- small-scale water supply facilities under permit from the Department of Environmental Conservation;
-- ranger stations as set forth below;
-- roads, and state truck trails as set forth below;
-- snowmobile trails as set forth below;
-- fire towers and observer cabins as set forth below; and,
-- wildlife management structures.

Ranger stations
Existing ranger stations may be retained and new ranger stations constructed, but only where absolutely essential for administration of the area, no feasible alternative exists, and no deterioration of the wild forest character or natural resource quality of the area will result.

Motor vehicles, motorized equipment and aircraft
1. All uses of motor vehicles, motorized equipment and aircraft permitted under wilderness guidelines will also be permitted in wild forest areas.
2. In addition, the use of motor vehicles, snowmobiles, motorized equipment and aircraft will be allowed as follows:
(a) by administrative personnel where necessary to reach, maintain or construct permitted structures and improvements, for appropriate law enforcement and general supervision of public use, or for appropriate purposes, including research, to preserve and enhance the fish and wildlife or other natural resources of the area;
(b) by the general public, subject to basic guideline 4 set forth above, but only on:
-- existing public roads;
-- Department of Environmental Conservation roads now or hereafter designated as open for public use by motor vehicles by the Department of Environmental Conservation; and,
-- on rivers, lakes and ponds now or hereafter designated by the Department of Environmental Conservation as suitable for such motorized uses; and,
(c) by snowmobiles on snowmobile trails now or hereafter designated by the Department of Environmental Conservation in accordance with basic guideline 4 set forth above, and with the special guidelines for such trails specified below.
(d) by all terrain vehicles but only on existing public roads or Department of Environmental Conservation roads open to such vehicles, as specified in (b) above.
3. The Department of Environmental Conservation may restrict, under existing law and pursuant to authority provided in this master plan, the use of motor vehicles, motorized equipment and aircraft by the public or administrative personnel where in its judgment the character of the natural resources in a particular area or other factors make such restrictions desirable.

Roads, jeep trails and state truck trails

1. Continued use of existing roads, snowmobile trails and state truck trails by administrative personnel in wild forest areas will be permitted, to the extent necessary, to reach, maintain and construct permitted structures and improvements.
2. Existing roads or snowmobile trails, now open to and used by the public for motor vehicle use in wild forest areas, may continue to be so used at the discretion of the Department of Environmental Conservation, provided such use is compatible with the wild forest character of an area.
3. Established roads or snowmobile trails in newly-acquired state lands classified as wild forest may be kept open to the public, subject to basic guideline 4 set forth above and in the case of snowmobile trails to the special guidelines for such trails set forth below, at the discretion of the Department of Environmental Conservation, provided such use is compatible with the wild forest character of the area.
4. No new roads will be constructed in wild forest areas nor will new state truck trails be constructed unless such construction is absolutely essential to the protection or administration of an area, no feasible alternative exists and no deterioration of the wild forest character or natural resource quality of the area will result.

Snowmobile trails
Snowmobile trails should be designed and located in a manner that will not adversely affect adjoining private landowners or the wild forest environment and in particular:
-- the mileage of snowmobile trails lost in the designation of wilderness, primitive and canoe areas may be replaced in wild forest areas with existing roads or abandoned wood roads as the basis of such new snowmobile trail construction, except in rare circumstances requiring the cutting of new trails;
-- wherever feasible such replacement mileage should be located in the general area as where mileage is lost due to wilderness, primitive or canoe classification;
-- appropriate opportunities to improve the snowmobile trail system may be pursued subject to basic guideline 4 set forth above, where the impact on the wild forest environment will be minimized, such as (I) provision for snowmobile trails adjacent to but screened from certain public highways within the Park to facilitate snowmobile access between communities where alternate routes on either state or private land are not available and topography permits and, (ii) designation of new snowmobile trails on established roads in newly acquired state lands classified as wild forest; and,
-- deer wintering yards and other important wildlife and resource areas should be avoided by such trails.

All terrain bicycles
All terrain bicycles may be permitted, in the discretion of the Department of Environmental Conservation, on roads legally open to the public and on state truck trails, foot trails, snowmobile trails and horse trails deemed suitable for such use as specified in individual unit management plans.

Fire towers
The educational and informational aspects of certain fire towers should be encouraged and

wherever feasible these fire towers should be retained where consistent with their need from a fire control and communications standpoint.

Tent platforms

The Department of Environmental Conservation having removed all tent platforms previously existing under Department permit, erection of new tent platforms will be prohibited.

Small groupings of primitive tent sites designed to accommodate a maximum of 20 people per grouping under group camping conditions may be provided at carefully selected locations in wild forest areas, even though each individual site may be within sight or sound and less than approximately one-quarter mile from any other site within such grouping, subject to the following criteria:

-- such groupings will only be established or maintained on a site specific basis in conformity with a duly adopted unit management plan for the wild forest area in question;

-- such groupings will be widely dispersed (generally a mile apart) and located in a manner that will blend with the surrounding environment and have a minimum impact on the wild forest character and natural resource quality of the area;

-- all new, reconstructed or relocated tent sites in such groupings will be set back a minimum of 100 feet from the mean high water mark of lakes, ponds, rivers and major streams and will be located so as to be reasonably screened from the water body to avoid intruding on the natural character of the shoreline and the public enjoyment and use thereof.

Fishing and waterway access sites

Fishing and waterway access sites may be provided on any body of water irrespective of its size where the current or projected need for access clearly warrants such a site. Such sites will comply with the following management guidelines:

-- Adequate public hand launching facilities or private facilities open to the public are not available to meet a demonstrated need.

-- The physical, biological and social carrying capacity of the water body or other water bodies accessible from the site will not be exceeded.

-- The site and attendant water uses will be compatible with the state and private land use classifications and attendant management guidelines and land use controls surrounding the water body.

-- The site will be located in a manner to avoid adverse impact on adjacent or nearby state and private lands.

-- Motor size limitations or the prohibition of motorized use as appropriate to the carrying capacity of the water body are provided for.

-- There will be no adverse impacts on the physical, biological or scenic resources of the water body and surrounding land.

Any proposal to create a new fishing or waterway access site will be accompanied by an adequate demonstration that the above guidelines can be complied with.

Flora and fauna

The same guidelines will apply as in wilderness areas, although exceptions may be made by the Department of Environmental Conservation in accordance with sound biological management

practices, particularly where such practices will improve the wildlife resources.

Recreational use and overuse

1. All types of recreational uses considered appropriate for wilderness areas are compatible with wild forest and, in addition, snowmobiling, motorboating and travel by jeep or other motor vehicles on a limited and regulated basis that will not materially increase motorized uses that conformed to the Master Plan at the time of its adoption in 1972 and will not adversely affect the essentially wild character of the land are permitted.
2. Certain wild forest areas offer better opportunities for a more extensive horse trail system than in wilderness, primitive or canoe areas and horse trails and associated facilities in these areas.

APPENDIX P: UNIT MANAGEMENT PLANNING PROCESS

The development of unit management plans for classified public lands in the Forest Preserve should follow a stepwise process that will culminate in the preparation of a draft and final unit management plan UMP. The eight tasks in this process are:

1. Conduct a comprehensive ***Resource and Use Inventory and Analysis***.
2. Develop and implement a comprehensive ***Public Participation Plan***.
3. Prepare a ***Management and Policy Overview***.
4. Propose ***Goals, Objectives, and Management Actions*** for the Area.
5. Prepare a ***Draft Unit Management Plan For Public Review***.
6. Meet appropriate ***State Environmental Quality Review Act (SEQR)*** requirements.
7. Prepare a ***Draft Unit Management Plan for Determination of Master Plan Compliance by the Adirondack Park Agency***.
8. Prepare the ***Final Unit Management Plan***.

The activities associated with these eight tasks are described below.

Task 1 - Conduct a Comprehensive Resource and Use Inventory and Analysis

Conduct an inventory of the natural, scenic, cultural, wildlife (including game and non-game species) and other appropriate resources along with an analysis of the area's ecosystems. (See page 9 of the June 2001 version of the APSLMP for minimum necessary information to be contained in each section of the UMP as they relate to the inventories below).

1. Conduct an inventory of natural resources including an assessment of physical resources (geology, soils, topography, water, wetlands, air and climate), biological resources and ecological communities (plant life, wildlife and fish) and scenic resources (travel corridors, observation points, open space and other natural areas) and information, such as the occurrence of general vegetative community types.
2. Conduct an inventory of all existing man-made facilities for public or administrative use in the unit. Conduct an assessment of existing facilities to determine compliance with ADAAG and proposed ADAAG. Utilize the Maintenance Management System (MMS) format for the inventory of all man-made facilities in the unit. All point and line data will be gathered using global positioning system (GPS) technology and organized to be suitable for incorporation into NYSDEC's geographic information system (GIS).
3. Conduct an inventory of past influences and existing cultural and historic resources that are found in the unit.
4. Conduct an inventory of the types and extent of actual and projected public use within the unit. This inventory should involve a review of information gathered at trailhead and waterway access site registers and interviews with NYSDEC staff and the public.
5. Conduct an inventory and evaluation of existing recreational opportunities available to persons with disabilities within the unit.
6. Conduct an assessment of the relationship between public and private land in the vicinity of the unit. This assessment will include an examination of the impacts of public land ownership and use on adjacent private lands and nearby communities, and vice versa.
7. Conduct an assessment of the physical, biological, and social carrying capacity of the

resources of the unit, with particular attention to portions of the area threatened by overuse in light of its resource limitations and classification. Identify existing and potential resource concerns related to the impacts of present and projected use on the resources of the area.
8. Identify current activities related to the use of the area for education, interpretation and research.

Task 2 - Public Participation

Develop and implement a comprehensive public participation plan designed to assure participation in the planning process by all stakeholders including , but not limited to, local governments, tourist-oriented businesses, recreation advocates, people with disabilities, environmental groups, and neighboring landowners. At a minimum, the plan must involve:

1. The compilation of a mailing list of all identified stakeholders.
2. The development of a press release and the mailing of an announcement of the beginning of the planning process with a request for comments.
3. The holding of two public meetings at which the public comment will be effectively and efficiently received and recorded. One meeting shall be held early in the planning process to present information about the planning area to the public and to receive preliminary comments. Another meeting shall be held to present the draft UMP and receive public comments on the document. A third public meeting may be required as part of the SEQR process.
4. A description of the methods to be used to analyze oral and written public comments and incorporate them into the UMP. The analysis of public comments should include a review of the existing resources.
5. The preparation of a responsiveness survey which documents a summary of all public comments received.

Task 3 - Prepare a Management and Policy Overview for the Area

Prepare a management and policy overview of the area that identifies the following:

1. Past Management - Assess past management activities in the unit, including NYSDEC management activities, academic research projects and activities undertaken by organizations outside the NYSDEC, such as Americorps.
2. Management Guidelines - Identify existing guidelines for the management, development or other use of the area including provisions of the state constitution, the guidelines and criteria set forth in the APSLMP, the ECL and related rules and regulations, NYSDEC policies and other federal and state laws, rules, regulations, policies and plans that are relevant to the use and management of Forest Preserve lands in the Adirondack Park classified as wild forest. Identify any deed restrictions and deeded private rights that exist for the area.
3. Management Principles - Identify management policies and principles that exist to guide the NYSDEC in managing Forest Preserve units.
4. Issues - Prepare a list of the management issues to be addressed in the UMP that were identified in Task 1.

Task 4 - Propose Management Goals, Objectives, and Actions for the Area

Based on information gathered during the resource inventory, through public input and in

consultation with the UMP Team, propose management goals, objectives, and action for the unit.

1. Develop ***Goals and Objectives*** that will guide the management of the area for the next five years. Proposed goals and objectives must reflect existing legal requirements, such as the New York State Constitution, the Adirondack Park State Land Master Plan, and the Environmental Conservation Law, as well as NYSDEC policies and established management principles. They must be refined through an analysis of the area's natural resource characteristics and an assessment of the recommendations made to the NYSDEC by local governments, organizations, and individuals in the course of the public participation process.
2. Work with the UMP Team to identify the specific ***Management Actions*** needed to meet the goals and objectives of the plan. Each action or group of actions proposed to address major issues will be presented along with a complete analysis of alternatives.

Task 5 - Prepare Draft Unit Management Plan

Prepare a Draft Unit Management Plan after completion of Tasks 1-3 above:

1. Prepare an ***Executive Brief*** . The executive brief will list the major management issues identified during the planning process, describe the level of controversy associated with each issue, and describe the management actions proposed to address the issues, along with the alternatives considered.
2. Prepare a ***Preliminary Draft UMP***. The preliminary draft UMP will present the information gathered in Tasks 1 through 3 above and the management goals, objectives, and actions as described in Task 3. The content and organization of the preliminary draft UMP will correspond to the UMP template.
3. After review of the preliminary draft UMP, incorporate necessary modifications, and prepare a ***Draft UMP for Public Review***.
4. Complete a long environmental assessment form (EAF) if necessary. The long EAF is not required when writing an environmental impact statement (EIS).
5. Prepare a positive or negative declaration.
6. Prepare the draft UMP in the form of a draft environmental impact statement (DEIS) if required.

Task 6 - Public Participation - Implement the final steps of a Department-prescribed comprehensive public participation plan. This portion of the public participation plan will involve:

1. The holding of an open house style public meeting to present the draft UMP and receive public comments on the document. The meeting may also serve to meet SEQR requirements.
2. An analysis of oral and written public comments. The results of the comment analysis will be incorporated in the final draft UMP.
3. The preparation of a comment and response summary to be included as an appendix to the final draft UMP.

Task 7 -Prepare Final Draft UMP for Determination of Master Plan Compliance by the Adirondack Park Agency

After review of the draft UMP by the public, incorporate necessary modifications and prepare a final draft UMP for submission to the Adirondack Park Agency. The final draft UMP will be

subject to the requirements of the New York State Environmental Quality Review Act. The potential impacts of various, and presently unknown, proposals within the UMP will determine whether an environmental impact statement will be required. If actions recommended within the UMP are deemed to have a significant potential for negative impacts, then appropriate changes will be made in the UMP format to incorporate the required EIS content in to the UMP. The preparation of an EIS will not involve a separate process resulting in the production of a second document, but rather a single UMP/EIS document. The most significant feature of the EIS format will be an alternative analysis for key issues deemed to have a significant potential for adverse impacts. The alternative analysis will be placed under the appropriate issue area heading shown in Section IV, "Proposed Management."

Task 8 - Prepare Final Unit Management Plan

After review of the final draft UMP by the Adirondack Park Agency, incorporate necessary modifications and prepare a ***Final UMP*** for the NYSDEC Commissioner approval. The final UMP will meet the requirements of the State Environmental Quality and Review Act. Prepare a findings statement, if required.

APPENDIX Q: ALL-TERRAIN BICYCLE (ATB) TRAIL STANDARDS AND GUIDELINES

– adapted from International Mountain Biking Association

- Look for and identify control points (i.e., wetlands, rock outcrops, scenic vistas).
- Avoid sensitive areas; wetlands and wherever water collects.
- Use existing roadways where possible that do not exceed grades of 10%
- Clear new trails to a maximum width of four feet to establish a single track route.
- Keep tread width less than 18" along a rolling grade.
- Remove vegetation at the root level - not at ground level.
- Keep routes close to the contour and avoid fall lines where water is likely to flow downhill.
- On side slopes, following the contour, cut full benches to construct the tread. Outsloping in this manner helps to remove water from the trail. Vegetate backslopes.
- Bench cuts on side slopes should be cut to a depth of the mineral soil.
- Build flow into the trail with open and flowing designs with broad sweeping turns.
- Streams should be crossed at ninety-degree angles, preferably across rock or gravel.
- Bridges may be used where steep banks prevent normal stream crossings. The latter may require an APA Wetlands Permit.
- Do not construct skid berms or extensive banked turns that may accelerate erosion.
- Avoid acute, sharp angle turns.
- Plan trails for beginners to intermediate levels of riders.
- Maintain and overall grade of 10% or less.
- Allow short changes in grade to avoid obstacles.
- Design grade dips to break up long, linear sections, and to help divert runoff from the tread.
- Monitor and inspect all trails semi-annually. Address water problems immediately.

APPENDIX R: STANDARD OPERATING PROCEDURE: TRAILHEAD REGISTER MAINTENANCE

Objective:
The following Standard Operating Procedures (SOP) is to provide a better system for collecting accurate state land user information. This information is imperative to; search and rescue activities, UMP planning, and state land user trends and also allows Forest Rangers to plan daily/seasonal activities. The procedures listed below are in place for guiding the activities of Forest Rangers and Foresters, in order to meet our objective. Please contact your chain of command when working outside of these parameters.

Guidelines:
Trailhead registers and kiosk information are the responsibility of the Forest Ranger and Lands and Forests Staff.

The Forest Ranger's duties will be to:
A. Maintain current/blank register sheets for users.
B. Maintain a working writing instrument (pencil) at the register.
C. Report any mechanical or aesthetic problems with the register or trail head kiosk to the Lands and Forests Staff utilizing an operations work request and copying appropriate Operations Staff.
D. Work in concert with Lands & Forests Staff to ensure that information at the trailhead is current and accurate.
E. Check trailhead registers and information kiosks on a frequent basis.
F. Sign trail registers, in user information fields, whenever an inspection of the register or an interior patrol is conducted, unless signing would jeopardize an enforcement action.

Trail register sheets will:
A. Be collected by the Forest Ranger who has the administrative responsibilities for such trailhead.
B. Be labeled by the Forest Ranger to show the trailhead at which they originated and the year
C. Be sent (original, photocopy, or statistically*) on a quarterly basis, to the appropriate Forester for the UMP to which the trail head belongs.
D. Be maintained by the Forestry Staff in such a manner that:
    1. Sheets are grouped by trailhead.
    2. Pages are consecutive (chronological order)
    3. Files can easily be accessed by Forest Ranger Staff at any time (day or night).
E. Be kept on record for 7 years.

*Completion of user information tallies are optional for the Forest Ranger. If tallies are kept Rangers will utilize an Excel Spreadsheet for data storage and send an electronic copy to the appropriate Forester on a quarterly basis.

Lands and Forests Staff will:
A. Send UMP user information back to Forest Rangers on a quarterly or yearly basis, depending on trail usage.

Conclusion:
Trailhead registers and kiosks are often the only interaction that state land users have with our department. For this reason it is imperative that we maintain these structures and show a routine presence in the register pages.

APPENDIX S: INITIAL PRESS RELEASE

For Release: IMMEDIATE **Contact:** David Winchell
April 1, 2002 518/897-1211

DEC TO PREPARE MANAGEMENT PLAN/EIS ON THE WILCOX LAKE WILD FOREST

The New York State Department of Environmental Conservation (DEC) today announced the initiation of management planning for the 140,000 acre Wilcox Lake Wild Forest located in Warren, Hamilton, Saratoga and Fulton Counties. "Preparation of the Unit Management Plan (UMP) for this popular piece of Adirondack Forest Preserve furthers our strategic plan to complete UMP's for all Forest Preserve Lands in the Adirondacks and Catskills within 5 years," said DEC Region Five Director Stuart Buchanan.

"Public involvement in development of UMP's is essential and interested parties can provide us valuable input right from the start," Buchanan said. "Persons who know the Wilcox Lake Wild Forest area are encouraged to contact DEC staff at the Warrensburg Office at any time with information they feel could be useful in the formation of the UMP. People don't need to wait until a public meeting is scheduled to talk to us about our planning efforts on this area."

A public scoping meeting for the Wilcox Lake Wild Forest is scheduled for Friday March 8, 2002 from 6 p.m. to 9 p.m. at the Town Hall in Thurman. This will be the first of many opportunities for the public to be involved in the planning process. There will be additional opportunities for review and comment provided through public meetings after a draft plan is prepared.

The Wilcox Lake Wild Forest is located in the southeastern area of the Adirondack Park and encompasses Forest Preserve lands and waters located in the Towns of Johnsburg, Stony Creek, Thurman, Wells, Hope, Corinth, Day, Edinburg, Greenfield, Hadley, Providence, Broadalbin, Mayfield, and Northampton. The unit is generally bounded on the north by State Route 8, on the west by State Route 30, on the south by the Adirondack Blueline, and on the east by the Hudson River.

The Wilcox Lake Wild Forest offers many recreational opportunities, including but not limited to hiking, snowmobiling, skiing, mountain biking, canoeing, hunting, and fishing. Scattered primitive tent sites offer camping opportunities adjacent to area waters and trails. With over forty-five miles of marked trails available, the public can easily reach a variety of natural attractions such as Crane Mountain, or popular fishing and camping locations at Wilcox Lake and Round Pond. Other large waterbodies including Garnet Lake provide for a greater variety of motorized recreational uses and are popular ice fishing locations. Other unit waterways including the Hudson River and East Stony Creek enable the public to experience a unique flatwater environment.

In September 1999, Governor Pataki announced a strategic plan to complete, within five years, unit management plans for all Forest Preserve lands in the Adirondack and Catskill Parks. In conjunction with the allocation of unprecedented resources for the stewardship of these lands through the Environmental Protection Fund and the Clean Water/Clean Air Bond Act, these plans will dramatically improve the State's ability to manage these lands for public recreation.

A UMP must be completed before significant new recreational facilities, such as trails, lean-tos, parking areas or boat launches can be constructed. The plans involve an extensive analysis of the natural features of an area and the ability of the land to accommodate public use. The planning process is designed to cover all environmental considerations for the unit and form the basis for all proposed management activities for a five year time period. Possible adverse impacts from the UMP may include temporary minor erosion, increased hiking traffic in certain areas, and minor noise impacts during the construction of new facilities.

The DEC has primary responsibility for developing management plans for the State owned lands in each Forest Preserve Unit as identified under the Adirondack Park State Land Master Plan (APSLMP). This APSLMP guides the Adirondack Park Agency (APA) in developing classifications for Forest Preserve lands in the Adirondack Park as Intensive Use, Wild Forest, Primitive, Canoe or Wilderness. These classifications define the range of facilities and uses allowed within each classification. With the exception of Department campgrounds, the Wild Forest classification allows for the widest range of uses including some motor vehicle use. The APSLMP establishes management guidelines on the allowable uses and these guidelines define the basis for developing management plans for each Forest Preserve unit.

In the Adirondacks, UMPs are developed by DEC staff in consultation with APA staff. A team of DEC staff from the divisions of Fish & Wildlife, Lands and Forests, Operations and Public Protection, assisted by a private planning consultant, will be responsible for developing the first draft of the plan. Draft plans are then widely distributed for public comment and review prior to being finalized by DEC. The plans must then be reviewed by the APA, which is responsible for ensuring that the plans are consistent with the APSLMP. Typically the overall planning process takes about two years with a public meeting scheduled after the draft UMP is published.

Any interested individual or organization wanting to be included on a mailing list, wishing to provide input or make recommendations, now or anytime during the development of this plan, is encouraged to contact:
Michael Curley, NYS Department of Environmental Conservation, PO Box 220, Warrensburg, NY 12885 or by telephone at (518) 623-1275. A special e-mail address has been established for receiving comments from the public on UMP's being developed by DEC in Region 5 which encompasses the central and eastern Adirondack counties. The address is:
r5ump@gw.dec.state.ny.us. Comments can also be mailed electronically to:
mccurley@gw.dec.state.ny.us.

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APPENDIX T: INTERESTED PARTY LETTER

New York State Department of Environmental Conservation
Division of Lands and Forests, Region 5
232 Hudson Street – P. O. Box 220, Warrensburg, New York 12885-0220
Phone: (518) 623-1265 • **FAX:** (518) 623-3603
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

February 13, 2002

Dear Interested Party:

Attached is a copy of the press release regarding the initiation of the unit management plan for the Wilcox Lake Wild Forest.

A public meeting regarding the Wilcox Lake Wild Forest will be held on **Friday, March 8, 2002 from 6 p.m. to 9 p.m. at the Thurman Town Hall in Athol**. This will be the first of many opportunities for the public to be involved in the planning process. The purpose of this initial meeting will be to provide an opportunity for the public to meet with DEC staff and share thoughts, ideas, and suggest improvements related to the State lands within this particular unit. There will be additional opportunities for review and comment provided through public meetings after a draft plan is prepared.

Any interested individual or organization wanting to be included on a mailing list, wishing to provide input or make recommendations, now or anytime during the development of this plan, is encouraged to contact Michael Curley, Senior Forester, NYS DEC, P.O. Box 220, Warrensburg, New York 12885 or by telephone at (518) 623-1275. Comments can also be mailed electronically to: mccurley@gw.dec.state.ny.us.

You may wish to attend this meeting to express you ideas related to the development of the Wilcox Lake Wild Forest Unit Management Plan. Furthermore, you may wish to share this information with other individuals within your organization.

Sincerely,

Michael Curley
Senior Forester

APPENDIX U: AGENDA FOR UMP OPEN HOUSE

Wilcox Lake Wild Forest
Unit Management Planning Public Meeting
March 8, 2002 Thurman Town Hall

Agenda

6:00 Open House - opportunity for one-on-one conversation between members of the public and DEC staff. Share your thoughts and ideas on how the Wilcox Lake Wild Forest area should be managed. Share your knowledge of the area with DEC Land Managers, Forest Rangers, and Biologists.

6:30 Welcome
Tom Martin, Regional Forester
Dave Winchell, Public Affairs

6:35 Brief overview of the Unit Management Planning process, the Wilcox Lake Wild Forest, and the Adirondack Park State Land Master Plan
Michael Curley, Senior Forester

7:00 Public Comments - Please limit your comments to 3 minutes, so that everyone has an opportunity to speak.

8:30 Open House - more one-on-one conversation

If you wish to speak during the Public Comment portion of the meeting, please sign in at the front door and indicate whether you would like to submit oral comments. During the Public Comment portion of the meeting, please limit your comments to 3 minutes, so that everyone has an equal opportunity to speak.

You may also submit any written comments at the meeting or mail them to:

NYS DEC
Attn: Michael Curley
PO Box 220
Warrensburg, NY 12885
mccurley@gw.dec.state.ny.us
623-1275

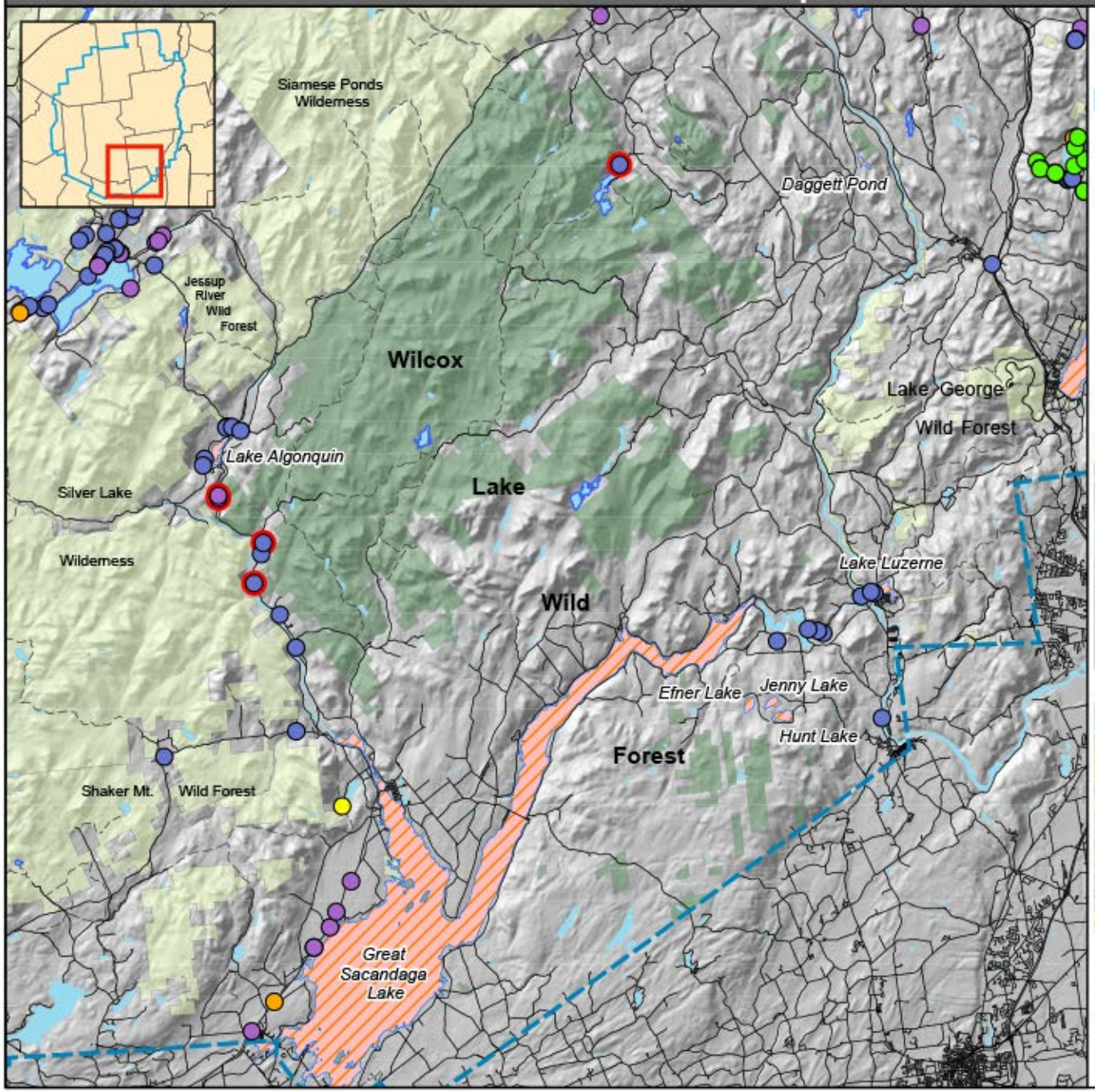
For more information about Wilcox Lake Wild Forest and other Forest Preserve lands, check out the DEC website at: http://www.dec.state.ny.us/

APPENDIX V: INVASIVE PLANT LOCATION MAP

Wilcox Lake Wild Forest

Documented Terrestrial & Aquatic Invasive Plant Species

New York State Department of Environmental Conservation



Legend

- Trails
- APA Blueline
- Wilcox Lake Wild Forest
- Other Public Lands

Terrestrial Invasive Plants*

- Garlic Mustard
- Japanese Knotweed
- Phragmites
- Purple Loosestrife
- Shrubby Honesuckle

Aquatic Invasive Plants

- No Infestation Found
- Infested Lake
- No Data

**Occurrences highlighted in red are of immediate concern to Wilcox Lake Wild Forest.*


Shrubby Honeysuckle


Purple Loosestrife


Phragmites


Garlic Mustard


Japanese Knotweed


Eurasian Watermilfoil

N

0 1 2 4 6 8 Miles

Scale 1:340,000
1 inch = 5.37 Miles

Map produced by the SUNY-ESF Adirondack Ecological Center under the auspices of the UMP-GIS consortium.
Photos used with permission of The Nature Conservancy.
Ownership boundaries are not for legal use.
5/9/06

APPENDIX W: INVASIVE PLANTS BEST MANAGEMENT PRACTICES

APPLICABILITY

These Best Management Practices (BMP's) are intended for use by those applying for and implementing terrestrial invasive plant species management activities on State Lands under an Adopt-A-Natural-Resource Agreement (AANR). The following document contains acceptable practices for control of the following terrestrial invasive species: purple loosestrife *(Lythrum salicaria),* Japanese, giant and bohemian knotweed *(Fallopia japonica* ssp. *japonica, F. sachalinensis,* and *F.* x. *bohemica),* common reed *(Phragmites australis* ssp. *australis),* garlic mustard *(Alliaria petiolata*), Japaneses, Morrow's, tatarian, Amur and Bell's honeysuckles *(Lonicera japonica, L. morrowii, L. tatarica, L. maackii, L.* x. *bella),* and yellow iris *(Iris pseudacorus).*

The following management options, should be selected with consideration for the location and size of the infestations, the age of the plants, past control methods used at the site, time of year, weather conditions and adjoining and nearby land uses.

Other management approaches not identified here may be appropriate but must be approved by the Regional Land Manager of the DEC in the region where the proposed invasive plant control activity will take place.

Within the Park there are several geographic and geophysical settings (at the location of the target plant(s)) that need to be considered when determining appropriate BMP's and the regulatory instruments needed prior to their implementation. These settings and relevant action are:

1. In or within 100' of a wetland on private or public lands -- requires a general permit from the Adirondack Park Agency.
2. In wetlands with standing water -- only the Rodeo® glyphosate formulation may be used.
3. In wetlands with no standing water -- either the Rodeo®, Roundup® or the Aquamaster® formulation may be used.
4. In uplands either Roundup®, Aquamaster® or Glypro may be used.
5. Forest Preserve lands -- requires an AANR from the Department of Environmental Conservation and, if wetlands are involved, an Adirondack Park Agency permit.

GENERAL PRACTICES

1. ***Erosion Control*** - Some of the methods described below require actual digging or pulling of plants from the soil. In all cases they require removal of vegetation whether or not there is actual soil disturbance. Each situation must be studied to determine if the proposed control method and extent of the action will destabilize soils to the point where erosion is threatened. Generally if more than 25 square feet of soil surface is cleared or plant removal occurs on steep slopes staked silt fencing should be installed and maintained.

2. ***Revegetation*** - Although not a specific condition, replanting or reseeding with native species is highly desired. All of the control methods below are aimed at reducing or eliminating invasive species so that natives are encouraged to grow and re-establish stable conditions that are not conducive to invasive colonization. In most cases removal or reduction of invasive populations will be enough to release native species and re-establish their dominance on a site.

3. ***Herbiciding*** - The only herbicide application allowed is spot treatment to individual plants using a back pack or hand sprayer, wick applicator, cloth glove applicator, stem injection or herbicide clippers. *No broadcast herbicide applications using, for example, a truck-mounted sprayer, are allowed.* The only herbicides contemplated and approved for use are glyphosate which is marketed under the trade names Roundup®, Rodeo®, Glypro or Aquamaster® and triclopyr marketed under the trade name Garlon®. Roundup® may be used only in situations where there is no standing water including wetlands, whereas Rodeo® may be used where standing water is present. Garlon® is to be used only in upland situations. *In all cases all herbicide directions for use and restrictions found on the label must and shall be followed by a New York State Certified Applicator or Technician in an appropriate category.* Glyphosate and triclopyris are non-selective herbicides that are applied to plant foliage or cut stems and are then translocated to the roots. The application methods described and allowed are designed to reduce or eliminate the possibility that non-target species will be impacted by the herbicide use. All herbicide spot treatments require follow-up inspection later in the growing season or the following year to re-treat any individuals that were missed.

4. ***Equipment Sanitation*** - All equipment used for invasive species control, whether it be hand or power driven, must be cleaned prior to entering onto a control site and prior to leaving the site. This is an effort to reduce transport of invasive plant seeds or plant propagules and reduce the potential for new invasive introductions. Use steam or hot water to clean equipment.

5. ***Material Collection and Transportation*** - While on the control site place all cut plant material in heavy duty, 3 mil or thicker, black contractor quality plastic clean-up bags. Securely tie the bags and transport from the site in a truck with a topper or cap in order to prevent spread or loss of the plant material during transport from the control work site to the appropriate staging or disposal location. The main root structure, root fragments and/or horizontal rhizomes from harvested controlled Japanese, giant or bohemian knotweed infestation should be bagged only to facilitate transport to an appropriate staging area. All knotweed root structure, root fragments and rhizome propagules should be separately bagged from any cut, aerial canes and crowns. Over an open bag, remove as much adherent soil as possible from the root/rhizome structure prior to spreading the root/rhizome parts out onto a secure, impervious surface. Once completely dried out the root/rhizome structure may be burned or disposed of in an approved landfill.

The mature, upright stems and canes of common reed and the knotweeds can be cut, formed into bundles and securely bound with rope or twine. The bundles may then be transported to an appropriate staging or disposal location that has an impervious or near-impervious surfaced area. After the bundles have completely dried out they may be burned at an approved incinerator or burn pit with appropriate permit.

6. ***Composting*** - Because of the extremely robust nature of invasive species, composting in a typical backyard compost pile or composting bin is not appropriate. However, methods can be used whereby sun-generated heat can be used to destroy the harvested plant materials. For instance, storage in a sealed 3 mil thickness (minimum) black plastic garbage bags on blacktop in the sun until the plant materials liquefy is effective. If a larger section of blacktop is available, make a black plastic (4 mil thickness minimum) envelope sealed on the edges with sand bags. The plant material left exposed to the sun will liquefy in the sealed envelope without danger of dispersal by wind. The bags or envelopes must be monitored to make sure the plants do not escape through rips, tears or seams in the plastic. *When composting is suggested later in the text it is understood that liquefying the plant material in or under plastic is the desired action; not disposal in backyard composters or open landfill composting piles.*

CONTROL METHODS FOR PURPLE LOOSESTRIFE (*Lythrum salicaria*)

Plant Description

Purple loosestrife is a wetland perennial native to Eurasia that forms large, monotypic stands throughout the temperate regions of the U.S. and Canada. It has a vigorous rootstock that serves as a storage organ, providing resources for growth in spring and re-growth if the plant has been damaged from cuttings. New stems emerge from the perennial roots enabling the plant to establish dense stands within a few years. Seedling densities can approach 10,000-20,000 plants/m² with growth rates exceeding 1 cm/day. A single, mature plant can produce more than 2.5 million seeds annually which can remain viable after 20 months of submergence in water. In addition, plant fragments produced by animals and mechanical clipping can contribute to the spread of purple loosestrife through rivers and lakes.

Management Options

1. Digging/pulling

Effectiveness:

Can be effective in small stands i.e.,<100 plants, low-medium density(1-75% cover of the area), and <3 acres, especially on younger plants.

Methods:

Hand-pull plants <2 years old. Use mini-tiller for plants >2 years - gets most of roots w/minimum soil disturbance, has 3 heavy duty prongs on 1 side that are pushed under base of plant, then pry back on handle to leverage plant out of ground. Tamp down all disturbed soil surfaces. Use weed wrench for plants >2 years old - good with minimal soil disturbance. In mucky conditions, put base of wrench on small piece of wood (e.g. piece of 2x4) to keep wrench from sinking into mud. Use shovel for plants >2 years old - dig up plant, then replace soil and any existing cover.

Cautions:

May increase habitat disturbance & increase spread of loosestrife. Requires follow-up treatments of sites for 3 years to eliminate re-sprouting from rhizome fragments left behind. Must pull/dig ENTIRE rootstock or re-rooting will occur. Must pull/dig before the plants begin setting seed or must remove flower/seed heads first (cut and place into bags) to prevent spread of seeds. Also remove previous year's dry seed heads. Erosion control may be necessary if greater than 25 square feet of soil surface is disturbed.

Disposal:
Bag all plant parts & remove from site. Compost at DOT Residency, dispose of in a approved landfill or incinerate with appropriate permits.

Sanitation:
Clean all clothing, boots, tools, equipment and transport vehicle to prevent spread of seed.

2. Cutting

Effectiveness:
Can be effective in small stands, i.e. <100 plants, low-medium density (1-75% cover of the area), and <3 acres, especially on younger plants.

Methods:
Remove flower heads before they go to seed so seed isn't spread during the cutting or mowing activity. Must do repeated cutting & mulching to permit growth of grasses.

Cautions:
Need to repeat for several years to reduce spread of plants. Doesn't affect rootstalk & thus, cut pieces can be spread that will re-sprout. Once severed, stems are buoyant and may disperse to other areas and re-sprout. Removal of seed heads should be done as late in the growing season as possible yet before seed set. Early cutting without additional seed head harvest could allow re-sprouting with greater subsequent seed production.

Disposal:
Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

Sanitation:
Clean all clothing, boots, & equipment to prevent spread of seed.

3. Herbicide

Effectiveness:
Use when >100 plants and <3-4 acres in size.

Methods:

Use glyphosate formulations only. If possible spray seedlings before they reach 12" in height. Cut and bag flower heads before applying herbicide. Apply prior to or when in flower (late July/Aug) so plants are actively growing.

For spot application use:
- sponge tip applicator w/wick.
- injection into stem(w/large gauge needle).
- 32 oz. commercial-grade spray bottle with adjustable nozzle.

Cautions:
This herbicide is not selective (kills both monocots & dicots), thus should be applied carefully to prevent killing of non-target species. All treatment mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants.

Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast within 12 hours because herbicide will be washed away before it can act. Choose Rodeo® formulation for applications in standing water or along a shoreline.

4. Biocontrol

Two species of leaf-feeding beetle, *Galerucella calmariensis* and *G. pusilla*, have been shown to be effective in controlling purple loosestrife. Over five million of these beetles have been released in 30 states including New York, the northeastern and midwestern states as well as all of the Canadian Provinces. The beetles have shown dramatic decreases in purple loosestrife populations with subsequent increases in populations of native species. The scientific literature indicates that the beetles are very specific to purple loosestrife with only minor "spillover" effects that do not compromise non-target plant populations.

Effectiveness:
Use if site has at least a half acre of purple loosestrife of medium to thick density.
Best type of control for large patches of loosestrife, i.e. >3-4 acres.

Methods:
The number of beetles released per site should be based on the size of the site, the density of loosestrife and the economics of purchase. More beetles are generally better than fewer.

Cautions:
Use only if mowing, pesticide and herbicide use are not active practices on the site.
The site must not be permanently flooded and should be sunny. Use only if winged loosestrife, *(Lythrum alatum)* and waterwillow *(Decodon verticillatus)* are not major components of the plant community on the release site.

CONTROL METHODS FOR COMMON REED (*Phragmites australis* ssp. *australis*)

Plant Description
Phragmites is a perennial grass that can grow to 14 feet in height. Flowering and seed set occur between July and September, resulting in a large feathery inflorescence, purple-hued turning to tan. Phragmites is capable of vigorous vegetative reproduction and often forms dense, virtually monospecific stands. It is unclear what proportion of the many seeds that Phragmites produces are viable. *Please note that identification of phragmites should be done by a professional botanist prior to treatment to distinguish the invasive non-native race from the non-invasive native.*

Management Options

1. Cutting / Mulching

Effectiveness:
Need to repeat annually for several years to reduce spread of plants. Hand-pulling, though labor intensive, is an effective technique for controlling common reed in small areas with sandy soils. Can be effective in small stands, i.e.<100 plants, low-medium density (1-75% cover of the area), and less than three acres. The cutting of larger stands having high stem densities is not an effective control method unless coupled with an immediate application of glyphosate to the freshly-cut, stem cross sections or with a cut-stem injection of glyphosate.

Methods:
The best time to cut common reed is when most of food reserves are in aerial portion of plant when close to tassel stage, e.g. at end of July/early August to decrease plant's vigor. Some patches may be too large to cut by hand, but repeated cutting of the perimeter of a stand can prevent vegetative expansion. Common reed stems should be cut below the lowest leaf, leaving a 6" or shorter stump.

Hand-held cutters and gas-powered hedge trimmers work well. Weed whackers with a circular blade were found to be particularly efficient, though dangerous.

Cut and mulch dead stems in winter to remove them and promote germination of other species. Repeat in second year and then every 3-5 years.

Cautions:
Since common reed is a grass, cutting several times during a season, at the wrong times, may increase stand density. However, if cut in late July/early August, most of the food reserves produced that season are removed with the aerial portion of the plant, reducing the plant's vigor. This cutting regime may eliminate smaller colonies if carried out annually for several years. Manual or mechanical cuttings of larger, high density, monospecific common reed stands without the application of glyphosate, is not recommended.

Disposal:

Cut material should be removed from the site and composted or allowed to decay on the upland to prevent sprouting and formation of rhizomes. Do not attempt to compost rhizomes.

Sanitation:
Clean all clothing, boots, and equipment to prevent spread of seed.

2. Herbicide

Effectiveness:
Herbicide use is a two-year, two-step process because the plants may need a "touch-up" application, especially in dense stands since subdominant plants are protected by thick canopy & may not receive adequate herbicide in the first application.

Methods:
Use glyphosate formulations only. Apply after tasseling stage when nutrients going back to rhizome and will translocate herbicide into roots. After 2 to 3 weeks following application of glyphosate, cut or mow down the stalks to stimulate the emergence and growth of other plants previously suppressed. If the plants are too tall to spray, cut back in mid summer and apply glyphosate using a spray bottle for individual foliar spot treatments or swab, syringe w/large gauge needle or Nalgene wide-mouth, Unitary wash bottle to apply 1-2 drops of 50% glyphosate solution directly into each cut stem.

Cautions:
This herbicide is not selective (kills both monocots and dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants. Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast within 12 hours because herbicide will be washed away before it can act. Choose Rodeo® formulation for applications in standing water or along a shoreline.

3. Black Plastic

Effectiveness:
Can be effective in small stands, i.e. <100 plants, low-medium density (1-75% cover of the area). Plants die off within 3-10 days, depending on sun exposure.

Methods:
Cut plants first to 6-8" (hand-pushed bush hog or week whacker w/blade). After cutting a stand of common reed, anchor a sheet of black plastic or dark tarp over the cut area using sand bags or rocks. High temperatures under the plastic will eventually kill off the plants. This technique works best when the treated area is in direct sunlight. Plastic should be at least 6 millimeters thick. Hold plastic in place with sandbags, rocks, biodegradable stakes, etc. Can treat runners along the plastic edges with a spot application of Rodeo® or Roundup®. The plastic can be

removed the following year when the covered plants have been killed. A few common reed shoots may return. These can be cut, hand-pulled or re-treated with appropriate herbicide.

Cautions:
Must monitor to determine if shoots are extending out from under the plastic.

Disposal:
Can leave cut material under plastic or bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits.

Sanitation:
Clean all clothing, boots, & equipment to prevent spread of seed.

4. Pulling

Effectiveness:
Can be effective in small stands, i.e. <100 plants. Very labor intensive control method, best results when infestation occurs in sandy soils.

Methods:
Hand-pull plants <2 years old. Use shovel for plants >2 years old-dig up plant, then replace soil and any existing cover.

Disposal:
Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

Sanitation:
Clean all clothing, boots, & equipment to prevent spread of seed.

6. Excavation

Effectiveness:
Can be effective for patches up to ½ acre. Cost is the limiting factor.

Methods:
When working in wetlands only tracked equipment shall be used. Rubber-tired excavators can operate from adjacent pavement or upland areas.

Cautions:
The patch should be excavated to below the depth of rhizome development. Follow-ups later in the season or the following year must be conducted to verify that all the plants have been removed

Disposal:
Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

Sanitation:
Clean all clothing, boots, & equipment to prevent spread of seed.

CONTROL METHODS FOR GARLIC MUSTARD (*Alliaria petiolata*)

Plant Description
Garlic mustard is a naturalized European biennial herb that typically invades partially shaded forested and roadside areas. It is capable of dominating the ground layer and excluding other herbaceous species. Its seeds germinate in early spring and develops a basal rosette of leaves during the first year. Garlic mustard produces white, cross-shaped flowers between late April and June of the following spring. Plants die after producing seeds, which typically mature and disperse in August. Normally its seeds are dormant for 20 months and germinate the second spring after being formed. Seeds remain viable for up to 7 years.

Management Options

1. Pulling.

Effectiveness:
Hand pulling is an effective method for removing small populations of garlic mustard, since plants pull up easily in most forested habitats. It is best to pull plants when seed pods are not yet mature, but they can be pulled during most of the year.

Methods:
Soil should be tamped down firmly after removing the plant. Soil disturbance can bring existing garlic mustard seed bank to the surface, thus creating a favorable environment for additional germination within the control site.

Cautions:
Care should be taken to minimize soil disturbance but to remove all root tissues. Re-sprouting may occur from mature plants root systems if not entirely removed. Cutting is preferred to pulling when garlic mustard infestations are interspersed amongst native grasses/forbs or other sensitive or rare flora.

Disposal:
If plants have capsules present, they should be bagged and disposed of to prevent seed dispersal. Bag all plant parts & remove from site (compost at DOT Residency, dispose of in approved landfill or incinerate with appropriate permits).

Sanitation:

Clean all clothing, boots, & equipment to prevent spread of seed.

2. Cutting

Effectiveness:
Cutting is effective for medium-to large-sized populations depending on available time and labor resources. Dormant seeds in the soil seed bank are unaffected by this technique due to minimal disturbance of the soil.

Methods:
Cut stems when in flower (late spring/early summer) at ground level either manually (with clippers or a scythe) or with a motorized string trimmer. This technique will result in almost total mortality of existing plants and will minimize re-sprouting.

Cautions:
Cuttings should be conducted annually for 5 to 7 years or until the seed bank is depleted.

Disposal:
Cut stems should be removed from the site when possible since they may produce viable seed even when cut. Bag all plant parts & remove from site (compost at DOT Residency, dispose in approved landfill or incinerate with appropriate permits).

Sanitation:
Clean all clothing, boots, & equipment to prevent spread of seed.

3. Herbicide

Effectiveness:
Roundup will not affect subsequent seedling emergence of garlic mustard or other plants.

Methods:
Use glyphosate formulations only. Should be applied after seedlings have emerged, but prior to flowering of second-year plants. Application should be by spray bottle or wick applicator for individual spot treatments.

Cautions:
This herbicide is not selective (kills both monocots and dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants.

Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast within 12 hours because herbicide will be washed away before it can act. Choose Rodeo® formulation for applications in standing water or along a shoreline.

CONTROL METHODS FOR JAPANESE, GIANT AND BOHEMIAN KNOTWEED (*Fallopia japonica* ssp. *japonica, F. sachalinensis,* and *F.* x. *bohemica)*

Plant Description

The knotweeds are herbaceous perennials which forms dense clumps 1-3 meters (3-10 feet) high. Its broad leaves are somewhat triangular and pointed at the tip. Clusters of tiny greenish-white flowers are borne in upper leaf axils during August and September. The fruit is a small, brown triangular achene. Knotweed reproduces via seed and by vegetative growth through stout, aggressive rhizomes. It spreads rapidly to form dense thickets that can alter natural ecosystems. Japanese knotweed can tolerate a variety of adverse conditions including full shade, high temperatures, high salinity, and drought. It is found near water sources, in low-lying areas, waste places, and utility rights of way. It poses a significant threat to riparian areas, where it can survive severe floods.

Management Options

1. Digging

Effectiveness:
This method is appropriate for very small populations.

Methods:
Remove the entire plant including all roots and runners using a digging tool. Juvenile plants can be hand-pulled depending on soil conditions and root development.

Cautions:
Care must be taken not to spread rhizome or stem fragments. Any portions of the root system or the plant stem not removed will potentially re-sprout.

Disposal:
All plant parts, including mature fruit, should be bagged and disposed of in the trash to prevent re-establishment (stockpile at DOT Residency, dispose of in an approved landfill or incinerate with appropriate permits).

Sanitation:
Clean all clothing, boots, & equipment to prevent spread of seed.

2. Cutting

Effectiveness:
Repeated cutting may be effective in eliminating Japanese knotweed. Manual control is labor intensive, but is a good option where populations are small and isolated or in environmentally sensitive areas.

Methods:
Cut the knotweed close to the ground at least 3 times a year. Plant native species as competitors as an alternative to continued treatment.

Cautions:
This strategy must be carried out for several years to obtain success. Both mechanical and herbicidal control methods require continued treatment to prevent reestablishment of knotweed.

Disposal:
Bag all plant parts and remove from site (stockpile at DOT Residency, dispose of in an approved landfill or incinerate with appropriate permits).

Sanitation:
Clean all clothing, boots, and equipment to prevent spread of seed.

3. Herbicide

Effectiveness:
Glyphosate treatments in late summer or early fall are much more effective in preventing re-growth of Japanese knotweed the following year.

Methods:
Use glyphosate formulations only. In late June/early July cleanly cut or mow down existing stalks/canes. Allow the knotweed to re-grow. After August 1, spray knotweed all re-growth with Roundup® or Rodeo®.

A cut-stem treatment utilizing glyphosate formulations can be an effective control for smaller colonies of knotweed. In early to mid-July cut the existing stems just below the 2nd or 3rd node above the soil surface. Immediately after cutting apply by swab or small spray bottle a 50% solution of glyphosate to the freshly-cut cross section and into the internodal cavity of each stalk/cane. Monitor treatment area by early to mid-August and repeat cut-stem treatment to any residual stems.

Stem injection is another promising control method for smaller colonies of knotweeds. Currently, a supplemental label for Aquamaster® (glyphosate) herbicide exists for this stem injection method. In late June/early July inject 5 mls of Aquamaster® below the second node above the ground of each stem in the clump. Use suitable equipment that must penetrate into the internode region. JKInternational manufactures a stem injection tool that is suitable and recommended for this control method.

Cautions:
Established stands of Japanese knotweed are difficult to eradicate even with repeated herbicide treatments. However, herbicide treatments will greatly weaken the plant and prevent it from

dominating a site. Adequate control is usually not possible unless the entire stand of knotweed is treated (otherwise, it will re-invade via creeping rootstocks from untreated areas).
These herbicides are not selective (kills both monocots and dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants.

Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast within 12 hours because herbicide will be washed away before it can act. Choose Rodeo® formulation for applications in standing water or along a shoreline.

CONTROL METHODS FOR JAPANESE, MORROW'S, TATARIAN, AMUR AND BELL'S HONEYSUCKLES (*Lonicera morrowii, L. tatarica, L. japonica, L. maackii, L. x. bella*)

Plant Description - Japanese Honeysuckle
Japanese honeysuckle *(Lonicera japonica)* is a perennial trailing or climbing woody vine of the honeysuckle family (Caprifoliaceae) that spreads by seeds, underground rhizomes, and aboveground runners. It has opposite leaves that are ovate, entire (young leaves often lobed), 4-8 cm long, with a short petiole, and variable pubescence. In the southern part of the range the leaves are evergreen, while in more northern locales the leaves are semi-evergreen and fall off in midwinter. Young stems are reddish brown to light brown, usually pubescent, and about 3 mm in diameter. Older stems are glabrous, hollow, with brownish bark that peels in long strips. The woody stems are usually 2-3 m long, (less often to 10 m). *Lonicera japonica* creates dense tangled thickets by a combination of stem branching, nodal rooting, and vegetative spread from rhizomes.

Lonicera japonica (including the varieties) is easily distinguished from native honeysuckle vines by its upper leaves and by its berries. The uppermost pairs of leaves of *Lonicera japonica* are distinctly separate, while those of native honeysuckle vines are connate, or fused to form a single leaf through which the stem grows. *Lonicera japonica* has black berries, in contrast to the red to orange berries of native honeysuckle vines. The fruits are produced September through November. Each contains 2-3 ovate to oblong seeds that are 2-3 mm long, dark-brown to black, ridged on one side and flat to concave on the other.

The fragrant white (fading to yellow) flowers of *Lonicera japonica* are borne in pairs on solitary, axillary peduncles 5-10 mm long, supported by leaflike bracts. The species has white flowers tinged with pink and purple. Individual flowers are tubular, with a fused two-lipped corolla 3-4(-5) cm long, pubescent on the outside. Flowers are produced late April through July, and sometimes through October.

Management Options

1. Mowing and Pulling

Effectiveness
Removing the above-ground portion of *Lonicera japonica* reduces current-year growth but does not kill the plant, and generally stimulates dense regrowth. Cut material can take root and should therefore be removed from the site (not practical with most infestations).

Methods
Hand pulling is highly effective. Pull out Japanese honeysuckle by the roots in winter wherever it climbs, aim the roots upward and tie them in place. The absence of light energy causes the trailing vines to decline precipitously next year. This method greatly reduces spraying requirements.

Cautions
Mowing is an ineffective control method, stimulating growth and encouraging formation of dense, albeit shorter, mats. Bush-hogging is an ineffective control, as *Lonicera japonica* re-invades within one growing season.

2. Herbicide

Effectiveness
In northern states, *Lonicera japonica* retains some leaves through all or most of the winter (semi-evergreen or evergreen), when most native plants have dropped their leaves. This provides a window of opportunity from mid-autumn through early spring when it is easier to spot and treat with herbicides, fire or other methods without damaging native species.

Controls
A foliar application of 1.5% glyphosate shortly after the first frost appears to be the most effective treatment, applied after native vegetation is dormant and when temperatures are near and preferably above freezing. Applications within 2 days of the first killing frost are more effective than applications later in the winter. *Lonicera japonica* is less susceptible to herbicides after the first hard frost (-4^{o}C).

Cautions
Soil disturbance should be avoided in infested areas to minimize germination of seed in the seedbank. Treated plants should be re-examined at the end of the second growing season, as plants can recover from herbicide application.

These herbicides are not selective (kills both monocots and dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants.

Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast within 12 hours because herbicide will be washed away before it can act.

Plant Descriptions - Bush Honeysuckles

Exotic bush honeysuckles (Morrow's, Bell's, Amur and tatarian) are upright, multi-stemmed, oppositely branched, deciduous shrubs that range in height from 2 m to 6 m. The opposite leaves are simple and entire, and paired, axillary flowers are showy with white, pink, or yellow corollas. The fruits of *Lonicera* spp. are red, or rarely yellow, fleshy berries (Gleason and Cronquist 1991).

In flower, exotic bush honeysuckles can be distinguished from all native bush honeysuckles except swamp fly-honeysuckle (*L. oblongifolia*) by their hirsute (hairy) styles. In fruit, the red or rarely yellow berries of the exotics separate them from the blue- or black-berried natives waterberry (*L. caerulea*) and bearberry honeysuckle (*L. involucrata*). The exotic bush honeysuckles also generally leaf-out earlier and retain their leaves longer than the native shrub honeysuckles.

Within the exotic bush honeysuckles, *L. maackii* alone has acuminate, lightly pubescent leaves that range in size from 3.5 to 8.5 cm long and peduncles generally shorter than 6 mm. Its flowers are white to pink, fading to yellow, 15-20 mm long. Its berries are red or with an orange cast. Height ranges to 6 m.

In North America, there has been considerable confusion regarding the correct identification of *L. morrowii, L. tatarica,* and *L.* x *bella,* their hybrid. The literature contains a number of references to plants called by the name of one of the parents, but described as having characters more like those of the hybrid. *L.* x *bella*. The hybrid therefore, may be more common than the literature would indicate, and accurate field identification may be similarly problematic.

The two parent species of *L.* x *bella,* however, are dissimilar. *L. morrowii* has leaves that are elliptic to oblong gray-green, soft-pubescent beneath, and are 3-6 cm long. Its flowers are pubescent, white fading to yellow, 1.5-2 cm long, on densely hairy peduncles 5-15 mm long. The fruits are red. The height ranges to 2 m. *L. tatarica* has leaves that are ovate to oblong, glabrous, and are 3-6 cm long. Its flowers are glabrous, white to pink, 1.5-2 cm long, on peduncles 15-25 mm long. The fruits are red or rarely yellow. Height ranges to 3 m.

L. x *bella* has intermediate characteristics. The leaves are slightly hairy beneath. Flowers are pink fading to yellow, on sparsely hairy peduncles 5-15 mm. long. Fruits are red or rarely yellow. Height ranges to 6 m.

Management Options

1. Grubbing, Pulling, Cutting

Effectiveness

Mechanical controls include grubbing or pulling seedlings and mature shrubs, and repeated clipping of shrubs. Effective mechanical management requires a commitment to cut or pull plants at least once a year for a period of three to five years.

Methods
Grubbing or pulling by hand (using a Weed Wrench or a similar tool) is appropriate for small populations or where herbicides cannot be used. Mature *L. maackii* shrubs growing in shaded forest settings can be eradicated by clipping once a year, during the growing season, until control is achieved. Other bush honeysuckles growing in more open settings can be managed by clipping twice yearly, once in early spring and again in late summer or early autumn.

Cautions
Any portions of the root system not removed can resprout. Because open soil can support rapid re-invasion, managers must monitor their efforts at least once per year and repeat control measures as needed. Winter clipping should be avoided as it encourages vigorous re-sprouting.

2. Herbicides

Effectiveness
Most managers report that treatment with herbicides is necessary for the control of *L. maackii* populations growing in full sun and may be necessary for all large bush honeysuckle populations.

Controls
Use formulations of glyphosate (brand names Roundup®, and for use near waterbodies, Rodeo®) as foliar sprays or cut stump sprays and paints with varying degrees of success. Glyphosate is a non-selective herbicide which kills both grasses and broad-leaved plants. For cut stump treatments, 20-25% solutions of glyphosate can be applied to the outer ring (phloem) of the cut stem. A 2% solutions of glyphosate can be used for foliar treatments. Glyphosate should be applied to the foliage late in the growing season, and to the cut stumps from late summer through the dormant season.

Cautions
The subsequent flush of seedlings following all herbicide treatments must also be controlled. These herbicides are not selective (kills both monocots & dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants.

Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast within 12 hours because herbicide will be washed away before it can act.

CONTROL METHODS FOR YELLOW IRIS (*Iris pseudacorus*)

Plant Description
Yellow iris *(Iris pseudacorus)* is a robust, clumping perennial herb in the Iridaceae (Iris family). *Iris pseudacorus* is easy to identify in flower, since it is the only totally yellow-flowered *Iris* in wildlands in the United States (Ramey 2001). At maturity, *I. pseudacorus* grows to a height of 0.40-1.5 meters (1.3-4.9 ft) tall. Its thick fleshy rhizomes often form dense horizontal mats, with each rhizome measuring 1 to 4 cm in diameter with roots that may extend vertically 10-20 (30) cm deep. The stiff, sword-like leaves are glaucous, number approximately 10 per ramet, are about 50-100 cm long by 10-30 mm wide, have raised midribs, and are arranged with sheathing and overlapping leaf bases (Crawford 2000; Jepson 1993; Sutherland 1990; Hitchcock and Cronquist 1973; Bailey 1949).

Flowers of *I. pseudacorus* are borne on tall erect peduncles. Each inflorescence may have one to several large, showy flowers (Hitchcock and Cronquist 1973). The flowers measure 8-10 cm in diameter and vary from pale yellow to almost orange in color (Sutherland 1990; Bailey 1949). The flowers are bisexual. The perianth segments (3 sepals and 3 petals) are fused at the base, and form a flaring tube with the sepals spreading and reflexed. The 3 stamens are each individually fused by their filaments to the sepals, and the showy tongue-shaped sepals are often adorned with brown spots or purple veins, and are generally less than 6 cm long. The petals are erect and less conspicuous, and are narrower than the sepals. The 3 style branches are petal-like with two-lobed lips, are mostly <25 mm long, and are opposite and curved over the sepals (Jepson 1993; Hitchcock and Cronquist 1973). *I. pseudacorus* has an inferior, 3-chambered ovary. Fruits are elongated capsules.

Seeds of *I. pseudacorus* are pitted, pale brown, disc-shaped (roughly circular and flattened), and measure approximately 2.0-5.0 mm in diameter and 0.5-3.0 mm tall (Crawford 2000; Jepson 1993; Bailey 1949). Seeds are arranged in three densely packed vertical rows within the seed pod or capsule (Sutherland 1990). These erect capsules at maturity are a glossy green color and measure 4-8 cm in length, 5.0-8.0 mm in width, and are 3-angled and cylindrical (Jepson 1993; Hitchcock and Cronquist 1973).

Management Options

1. Digging, Pulling, Cutting

Effectiveness
Manual or mechanical methods that remove the entire *I. pseudacorus* rhizome mass can successfully control small, isolated patches.

Methods
Pulling or cutting *I. pseudacorus* plants may provide adequate control, but only if it is repeated every year for several years to weaken and eventually kill the plant. Dead-heading (removing the flowers and/or fruits) from plants every year can prevent seed development and seed dispersal, but will not kill those plants.

Cutting the foliage, followed by a herbicide application (see below for details), can provide good control with minimal off-target effects.

Cautions
These methods, however, are very time and labor-intensive, since even small rhizome fragments can resprout. Additionally, digging disturbs the soil, may fragment rhizomes, and promote germination of *I. pseudacorus* and other undesirable species from the soil seed bank.
Care should be taken when pulling, cutting, or digging *I. pseudacorus*, since resinous substances in the leaves and rhizomes can cause skin irritation.

2. Herbicide

Effectiveness
Iris pseudacorus can be effectively controlled by herbicides. Since it usually grows in or adjacent to water, an aquatic-labeled herbicide and adjuvant must be used. Glyphosate (for example, tradenames Rodeo®, Aquamaster® or Glypro®) applied in a 25% solution (13% a.i.) using a dripless wick/wiper applicator, or applied in a 5-8% solution if sprayed, when used with the appropriate non-ionic surfactant adjuvant, can effectively kill *I. pseudacorus*. *I. pseudacorus* can be effectively controlled by stem injection utilizing Aquamaster® applied at 0.5 to 0.7 ml of product per flowering stem.

Controls
The timing and choice of application technique will determine control efficacy and should work to minimize off-target effects. *Iris pseudacorus* can be controlled by either directly applying the herbicide to foliage, or by immediately applying herbicide to freshly cut leaf and stem surfaces. Herbicides can be directly applied to *I. pseudacorus* foliage or cut stems by a dripless wick system or using a backpack sprayer.

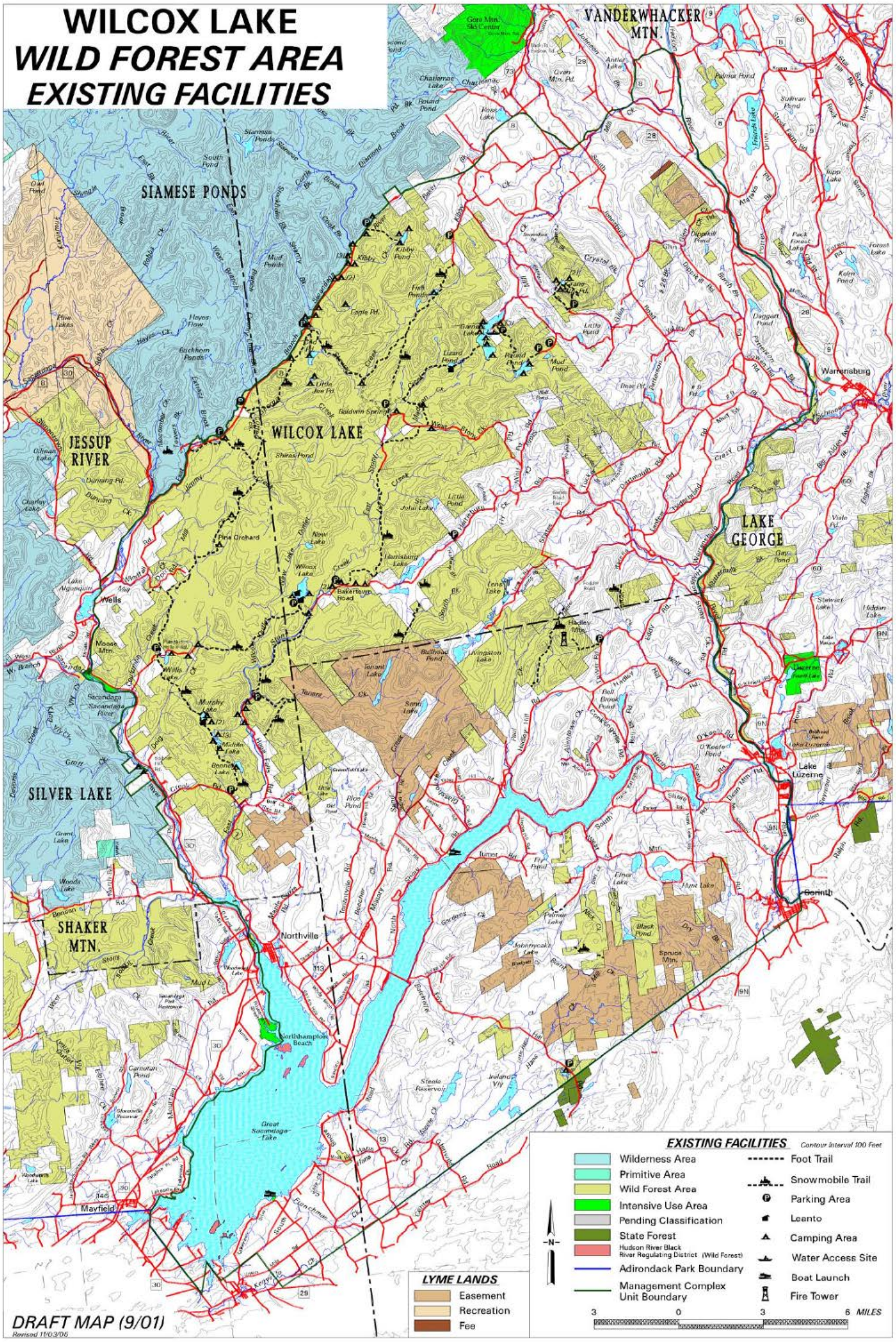
Cautions
These herbicides are not selective (kills both monocots & dicots), thus should be applied carefully to prevent killing of non-target species. All tank mixes should be mixed with clean (ideally distilled) water because glyphosate binds tightly to sediments, which reduces toxicity to plants.

Do not apply in windy conditions because spray will drift and kill other plants. Do not apply if rain is forecast within 12 hours because herbicide will be washed away before it can act.

Be sure to always take appropriate precautions and wear suitable clothing and equipment, and follow all instructions on the herbicide label. Use a biodegradable tracer dye in the herbicide mix so you can watch for accidental contact or spill of the herbicide.

APPENDIX X: EXISTING FACILITIES MAP

WILCOX LAKE
WILD FOREST AREA
EXISTING FACILITIES



LYME LANDS
- Easement
- Recreation
- Fee

EXISTING FACILITIES *Contour Interval 100 Feet*
- Wilderness Area
- Primitive Area
- Wild Forest Area
- Intensive Use Area
- Pending Classification
- State Forest
- Hudson River Black River Regulating District (Wild Forest)
- Adirondack Park Boundary
- Management Complex Unit Boundary
- Foot Trail
- Snowmobile Trail
- Parking Area
- Leanto
- Camping Area
- Water Access Site
- Boat Launch
- Fire Tower

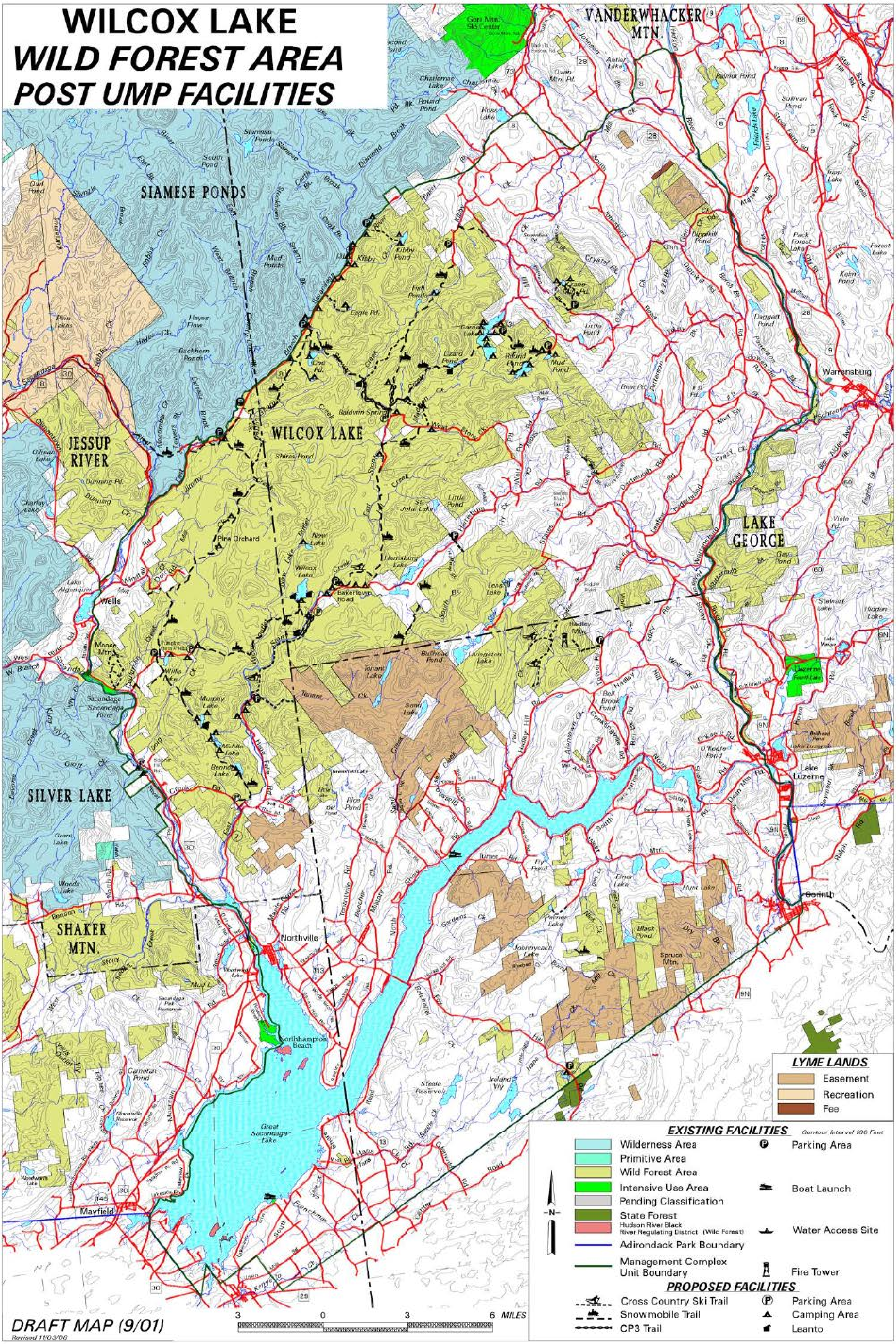
-N-

3 0 3 6 *MILES*

DRAFT MAP (9/01)
Revised 11/03/06

APPENDIX Y: POST-UMP FACILITIES MAP

WILCOX LAKE
WILD FOREST AREA
POST UMP FACILITIES

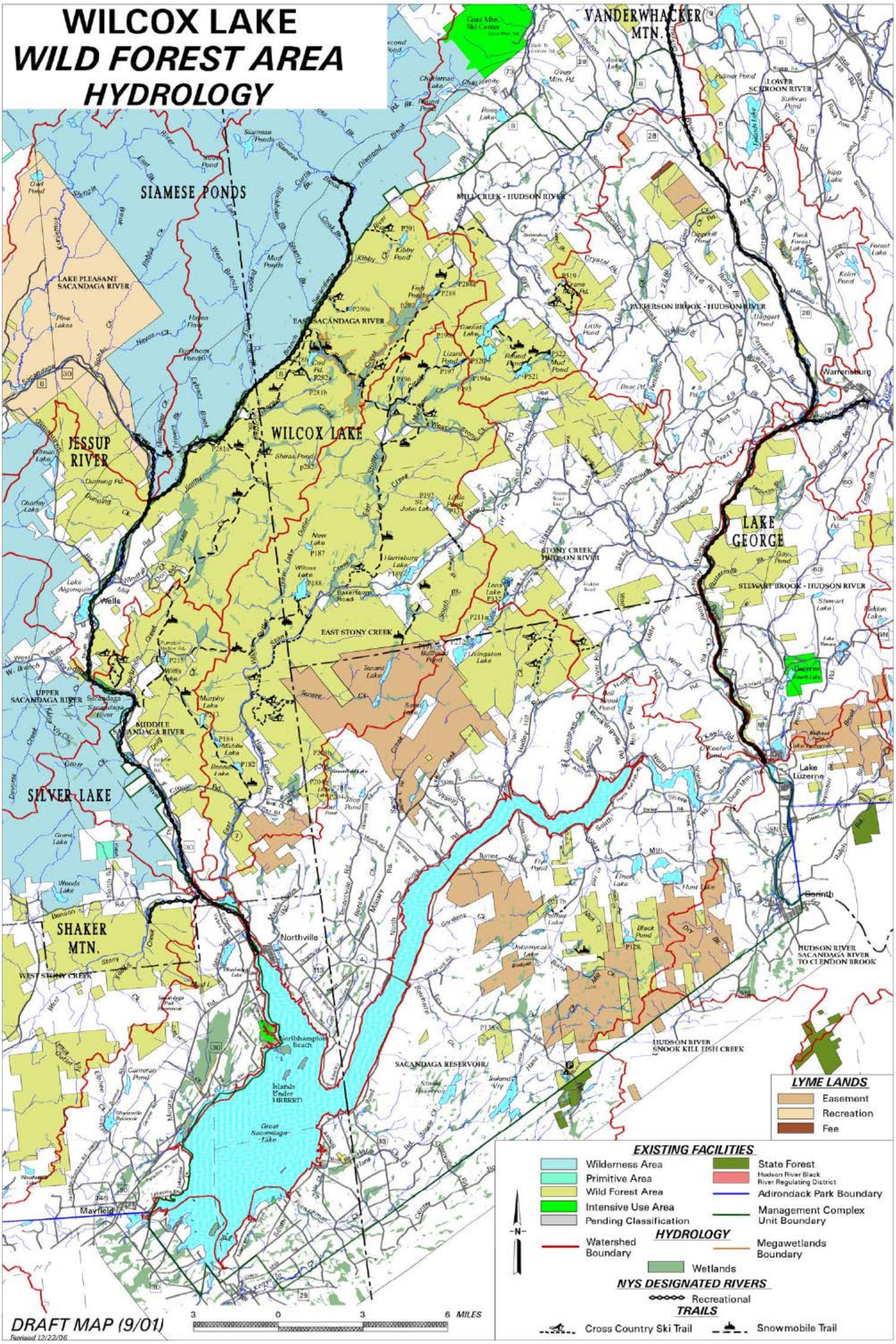


DRAFT MAP (9/01)

Revised 11/03/06

APPENDIX Z: HYDROLOGY AND WETLANDS MAPS

WILCOX LAKE
WILD FOREST AREA
HYDROLOGY



Wetlands Map for the Wilcox Lake Wild Forest

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Map Legend

Wetland Types

- Lacustrine (Limnetic) - Open Water, Unknown Bottom
- Palustrine - Aquatic Bed
- Palustrine - Emergent
- Palustrine - Forested, Broad-leaved Deciduous
- Palustrine - Forested, Needle-leaved Deciduous
- Palustrine - Forested, Needle-leaved Evergreen
- Palustrine - Forested, Dead
- Palustrine - Open Water, Unknown Bottom
- Palustrine - Scrub-Shrub, Broad-leaved Deciduous
- Palustrine - Scrub-Shrub, Needle-leaved Deciduous
- Palustrine - Scrub-Shrub, Broad-leaved Evergreen
- Palustrine - Scrub-Shrub, Needle-leaved Evergreen
- Palustrine - Scrub-Shrub, Dead
- Palustrine - Unconsolidated Bottom, Cobble-Gravel
- Palustrine - Unconsolidated Bottom, Sand
- Palustrine - Unconsolidated Shore, Cobble-Gravel
- Palustrine - Unconsolidated Shore, Sand
- Riverine (Lower Perennial) - Open Water
- Riverine (Upper Perennial) - Open Water
- Planning Area Boundary
- Streams
- Forest Preserve

0 10 20 Miles