Alaska Region

National Park Service
Department of the Interior

Invasive Plant Management Plan for Alaska Parks / Environmental Assessment Scoping Summary, Update & Progress Report, January 2007

The National Park Service (NPS) conducted public scoping efforts for this plan:

- mailed a scoping newsletter out to about 250 stakeholders around the state;
- posted the proposed action and scoping newsletter on the NPS planning website;
- conducted three public scoping meetings in key regions of the state; and
- obtained additional comments from key stakeholders.

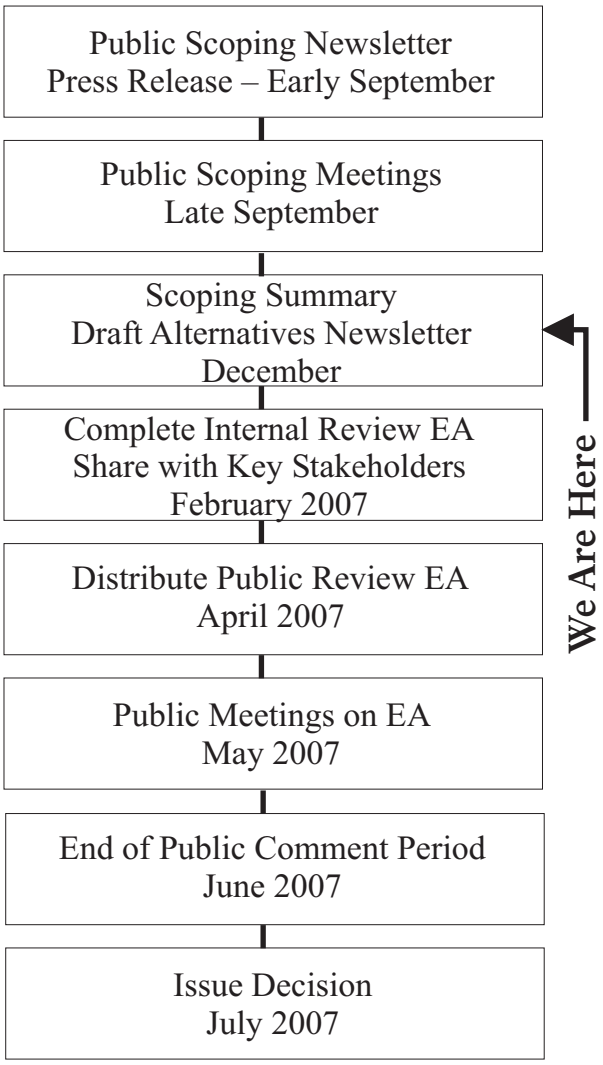
This newsletter summarizes issues we heard, identifies impact topics for the environmental assessment (EA), and poses revised alternatives for the EA.

The NPS has renamed the plan from the "Exotic" to the "Invasive" Plant Management Plan because most exotic non-native plants found within these mostly remote park units are invasive because they are self-perpetuating and will cause harm to natural ecosystems. The NPS has chosen to address this plan with an EA instead of an environmental impact statement (EIS) because the contemplated level of herbicide use, if any, would be minor. Broadcast and aerial spraying are not being contemplated at this time, nor is the use of biological control agents, because the existing invasive plant infestations are small in scale and scope.

A public review EA is expected in April 2007 for a minimum 30-day comment period. The NPS plans to hold public meetings to invite comment on the EA during that time. The NPS will consider comments, and a decision is anticipated in July 2007.

The following graphic shows where we are in the process.

EA Process
Approximate Schedule
(NEPA public involvement process)



Planning Issues

Representative scoping issue statements are grouped below under basic impact topics and alternatives options. A complete set of comments are available upon request. As might be expected, the greatest number of comments fell under the topic headings for management and operations options and effects on vegetation and wetlands.

Aquatic Resources and Fisheries

- Invasive plant infestations pose risks to park aquatic ecosystems and fish and their habitat.
- If herbicides are contemplated, consider potential detrimental effects on aquatic species and fish such as changes in equilibrium, feeding habits, ability to migrate successfully, and possible adverse effects on essential fish habitat.

Cultural Resources and Cultural Landscapes

- Some exotic non-native plants may have historical significance, and digging or herbicide use could adversely affect archeological resources.

Human Health and Safety

- Ensure proper training for personnel in the safe use, storage, transport, and disposal of pesticides/herbicides, and assure weed pull volunteers are trained on safe travel methods in remote areas, including aircraft operations.
- Pre-notify the public of all planned herbicide applications and post on-site notices for any restricted-entry areas, including notification of those who cannot read English, and communicate how quickly the applied herbicides break down.

Park Management and Operations

- Consider best management practices in Alaska NPS units to reduce the introduction and spread of invasive plants.
- Consider working with partners, neighbors, and gateway communities to control the introduction of invasive plants into parks.
- Consider repeated events to teach NPS employees, volunteers, visitors, and neighbors about invasive plants in Alaska, including how to identify and report sightings of the worst invasive plants, and use control events as opportunities for outreach and public education.
- Consider pilot studies and monitoring of treated areas (e.g. water quality) to test various control methods on infestations to evaluate the economics, efficiency, and potential effects before undertaking larger scale removal operations.

Recreational and Visitor Use

- Consider the toxic and adverse effects of invasive plants on livestock and draft animals in NPS units.
- Evaluate livestock feed and dog straw as vectors for introducing invasive plants into parks, and educate visitors, guides, and outfitters on best management practices to

reduce or eliminate invasive plant introductions before entering parks or issuing backcountry permits.
- Consider the effects of herbicides on chemical-sensitive individuals and consider the time visitors would be denied access to park areas due to treatments.

Soils and Productivity

- Consider the residence time and detrimental effects of herbicides on soils with regards to chemistry, micro-fauna, and plant habitat.
- Consider the translocation of herbicides through plant roots to soils, sediments, and areas not treated on the surface.

Subsistence

- Address the effects to subsistence uses from both the uses of herbicides and the impacts of uncontrolled invasive plants.

Vegetation and Wetlands

- Consider the best and worst periods of time, environmental conditions, and methods to control invasive plants with respect to risk rankings, life-cycles, and effectiveness.
- Evaluate the effects of early detection and rapid response to invasive plants or lack of timely response to protect native species and biodiversity in natural communities.
- Consider planting or seeding native plants to compete with invasive plants, and actively restore native vegetation where invasive species are removed.
- Consider the natural evolution of plant communities and climate change models in assessing whether non-native plants pose a high or low risk of spreading and becoming invasive.

Water Resources (flow, groundwater, quality)

- Evaluate the effects on water flow and availability to other organisms where invasive plants are not controlled.
- Consider the accumulation and contamination of streams, rivers, and wells in the 48 states where EPA approved herbicides have been used, and explain effects in Alaska.

Wilderness

- Consider which mechanical and chemical control methods would be appropriate in designated Wilderness, and which are the best ways to protect remote natural systems from invasive species?

Wildlife and Habitat

- Evaluate the toxic and adverse effects of invasive plants on wildlife in NPS units.
- Consider the risks to wildlife eating plants sprayed with herbicides and how to keep wildlife from feeding in treated areas.
- Consider the damaging effects of herbicides on insect species, endangered species, and bioaccumulation in higher trophic level animals.

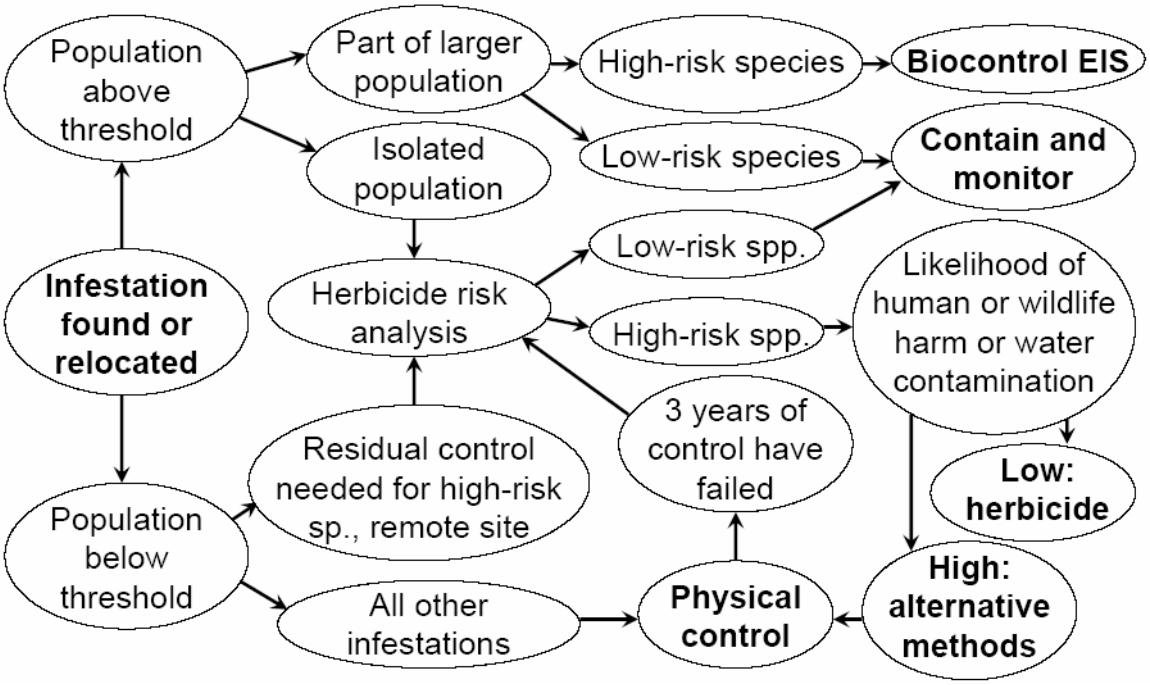
Potential Alternatives

Overall Comment: Specify the estimated control costs per acre for each alternative.

1. **No Action (Status Quo) - Management actions to control exotic plants would continue on a case-by-case and a park-by-park basis. Most control measures would continue to be limited to present manual and mechanical means to eradicate, control, and contain invasive exotic plants.**

   Comments:
   How effective are manual removal efforts to control invasive plants in AK NPS? What is working and what is not working with this alternative?

2. **Proposed IPMP (with Decision Tree) – An adaptive management approach would use a decision tree to determine how to control invasive exotic plant species in Alaska national parks, while posing the least possible risk to people, resources, and the environment. Management measures would include avoidance of introductions and manual, mechanical, thermal, and chemical treatments. Herbicide use could be allowed under careful stipulations when other methods would be ineffective or cost-prohibitive. Biological control would not be considered as a part of this alternative.**



   Comments:
   - Consider a broad array of control methods such as hand pulling, cutting, thermal treatments, burial, seeding or planting competitive native species, and other biological control methods not involving introductions.

- Monitor control methods for at least 5 years to ascertain if an infestation has been eradicated or reduced, and include in a monitoring program data on soil chemistry, water quality, plants, animal tissues, and animal population trends.
- In addition to USFS risk ranking for herbicides, consider the Alaska Natural Heritage Program rankings to set threshold scores for management actions to address invasive species.
- Where herbicides may be needed to control invasives, use least risk methods for non-target species (e.g. cut-stump application on woody species, hand-held foliar applications for herbaceous species), and show how application techniques of herbicides would vary with species, degree of infestation, nature of the environment, and/or proximity to water.
- Review and revise the decision tree to ensure a new control method is specified where a species with a high risk of harm to humans or wildlife persists after three years of unsuccessful manual/mechanical controls and define all terms such as "larger population."

3. Consider a third alternative emphasizing partnership and leadership with adjacent landowners, concession and business operators in park areas and volunteer groups.

At this point in time the NPS plans to merge concepts in alternatives 2 and 3 into one best action alternative.

How to Stay Involved

This scoping summary is also posted on the NPS planning website: http://parkplanning.nps.gov/ where you can select the link "Plans/Documents Open for Comment" located at the lower left corner of the page. From this list select the link "Invasive Plant Management Plan for Alaska Parks". To register a comment, select the link "Comment on Document" in the menu on the left side of the page. You may also call or write to us directly at:

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