

Invasive Species

On February 3, 1999, President Clinton issued Executive Order 13112 on Invasive Species. The order responded to a great emerging threat to the environment, economy, and human health. Species of animals, plants, and microorganisms were being transported by mankind from places where they occur naturally to those where they do not belong. Some were moved on purpose and some accidentally. The frequency of invasions was increasing, and so was the damage they caused. E.O. 13112 established the Federal Invasive Species Council and gave it marching orders to address the problem. Twelve of many documents leading up to the issuance of the order are provided under Tabs 1-12 as follows:

1. Letter to Vice President Gore dated April 25, 1997 from several hundred scientists requesting him to address the problem and to establish a commission for that purpose. Several U.S. Senators also wrote Vice President Gore supporting the scientists' request.
2. Letter from Vice President Gore dated June 17, 1997, to Senator Bob Graham stating that he was directing the Secretary of the Interior, Secretary of Agriculture, and Secretary of Commerce to develop a strategy for invasive alien species. The Department of the Interior draft of the letter dated June 9, 1997, is also enclosed. The Vice President sent similar letters to other Senators and to representatives of the scientists that signed the letter under Tab 1.
3. "Campaign Against Alien Invasive Species: An Action Plan for the Nation" dated October 7, 1997. This document was prepared in response to Vice President Gore's request for a strategy and, among other things, recommends issuance of an executive order.
4. Speech by Vice President Gore delivered at a meeting of the Wildlife Conservation Society in New York City on April 20, 1998. The speech addresses invasive species and the need for action on them.
5. Memorandum dated May 27, 1998, from Secretary of the Interior Bruce Babbitt to the Director of the Office of Management and Budget recommending processing of an executive order on invasive alien species. A draft executive order dated May 22, 1998, is attached to the memorandum.
6. Federal agency comments on the May 22, 1998, draft executive order recommended by Secretary Babbitt.
7. Department of the Interior revised draft executive order dated July 10, 1998, faxed to the Office of Management and Budget on that date by the Science Advisor to the Secretary of the Interior.
8. Federal agency comments on an Office of Management and Budget revised draft executive order dated September 8, 1998.

9. Office of Management and Budget revised draft executive order dated September 28, 1998, and Department of Defense comments sent to the Department of the Interior for review.
10. Department of the Interior response to the Office of Management and Budget dated September 28, 1998, on the Department of Defense comments, and comments on the draft executive order itself dated September 29, 1998.
11. Office of Management and Budget revised draft executive order dated January 25, 1999.
12. Executive Order 13112 of February 3, 1999.

The Honorable Albert Gore, Jr.
The Vice-President of the United States
Office of the Vice-President of the United States
Old Executive Office Building
Washington, D.C. 20501

April 25, 1997

Dear Vice-President Gore:

We write as a group of scientists, agricultural officials, and environmental experts to request your assistance in, and support for, the formation of a commission whose purpose would be to recommend new strategies to prevent and to manage invasions by harmful exotic species.

A rapidly spreading invasion of exotic plants and animals not only is destroying our nation's biological diversity but is costing the U.S. economy hundreds of millions of dollars annually. Biological invasions produce severe, often irreversible impacts on agriculture, recreation, and our natural resources. In some instances, they even have major human health consequences. The 21st century holds the clear threat of further devastating invasions unless a coordinated national effort is established.

In March 1993, twenty-five distinguished scientists and resource managers wrote to you identifying the need for an effective national program to combat invasions by nonindigenous plants and animals. You kindly replied that these issues indeed concern your office, and we were pleased to note that these problems had received your attention.

Since 1993, biological invasions by pest and nuisance species from foreign nations, and from one part of the United States to another, have continued almost unabated:

- Recent studies reveal, for example, that San Francisco Bay is invaded by a new exotic species on the average of once every twelve weeks.
- At least 1.5 million acres in Florida have been invaded by nonindigenous plants, leading to a severe reduction in available native habitat.
- Foreign weeds are spreading on Bureau of Land Management lands at over 2,300 acres per day and on all western public lands at approximately 4,600 acres per day.
- Approximately 250 plant species meeting the Federal Noxious Weed Act's definition of a noxious weed remain unlisted and can still be legally imported into the U.S.
- In the Mississippi drainage basin, native mussel species richness is expected to decline by 50% within a decade because of zebra mussel spread.
- Exotic species invasions have contributed to the decline of 42% of U.S. endangered and threatened species.

Although the National Invasive Species Act of 1996 was an important step forward, the overall national effort to confront this crisis remains inadequate; it is primarily piecemeal, ad hoc, and reactive. For example, more than 20 federal agencies deal with invasive exotic species, but their policies and actions are uncoordinated and largely ineffective. There is not even a comprehensive data base on the problem.

Innumerable state agencies and private organizations also operate in this arena, often entirely unaware of one another's problems and actions. Actions of various managers even inadvertently conflict with one another. Simply coordinating this effort would not only enhance its effectiveness but save millions of federal, state, and private dollars.

A commission could consider many potential ways of responding to this problem. One can imagine, for example, a center analogous to the Centers for Disease Control and Prevention (CDC), a high-level government office (like that of the Surgeon General) that might serve as a bully pulpit on this issue, a much-expanded and well-funded interagency task force, and numerous other possibilities. What is most urgent is to begin a high-level consideration of possible responses, as the situation is deteriorating every day. We are losing the war against invasive exotic species, and their economic impacts are soaring. We simply cannot allow this unacceptable degradation of our nation's public and agricultural lands to continue.

The cogent 1993 report of the Congressional Office of Technology Assessment, *Harmful Non-Indigenous Species in the United States*, on the extraordinary economic and health costs to this nation of exotic invasions, provides an excellent introduction to these issues. Please contact Don C. Schmitz (904-488-5631), James T. Carlton (860-572-5359), Daniel Simberloff (904-644-6739), or Phyllis N. Windle (301-345-8516) for more information about this growing environmental problem.

We look forward to your response to this critical matter, and we offer any assistance you may need in further developing a strong and committed response to this national problem.

(signatures are on file)

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OFFICE OF THE VICE PRESIDENT
WASHINGTON

June 17, 1997

The Honorable Bob Graham
United States Senate
Washington, D.C. 20510-0903

Dear Senator Graham:

Thank you for your letter expressing concern for the growing environmental threat posed by alien (non-indigenous) invasive species. I share your concern.

You are probably aware of efforts on this issue by this Administration through the Departments of Interior, Agriculture and Commerce. These focus on preventing infestation by alien species, controlling spread, and restoring lands and waters where species have become established. Coordination of these efforts is provided through the Aquatic Nuisance Species Task Force and the Federal Interagency Committee for Management of Noxious and Exotic Weeds.

Although these efforts have produced significant results, I support your call for increased priority and enhanced coordination on this matter, and I believe that a fresh look at authorities, funding needs, and cross-department coordination will reveal new opportunities for success.

The President's Committee of Advisors on Science and Technology recently has established a Biodiversity and Ecosystems Panel (chaired by Peter Raven) to recommend steps to improve understanding and management of our biological resources. The panel will be considering the issue of invasive species and will report their recommendations by the end of the year.

I am also asking the Departments of Interior, Agriculture and Commerce to work closely with the Council on Environmental Quality and the Office of Science and Technology Policy to craft a new cross-departmental strategy on alien invasive species. I expect that the strategy will include creative partnerships for leveraging dollars and for involving the scientific community and others that care and can help meet this challenge.

I look forward to your advice as development of the Administration strategy goes forward, and I thank you for recognizing the importance of this issue and calling it to our attention.

Sincerely,

Al Gore

AG/pgu

DRAFT June 9, 1997 WY Brewer

Dear Scientists:

Thank you for your letter expressing concern for the growing environmental threat posed by alien (non-indigenous) invasive species. I share your concern.

You are probably aware of efforts on this issue by the Executive Branch Departments, including Agriculture, Commerce, and Interior. These focus on preventing infestation by alien species, controlling spread, and restoring lands and waters where species have become established. Coordination of these efforts is provided through the Aquatic Nuisance Species Task Force and the Federal Interagency Committee for Management of Noxious and Exotic Weeds (FICMNEW).

Although these efforts have produced significant results, I support your call for increased priority and enhanced coordination on this matter, and I believe that a fresh look at authorities, funding needs, and cross-department coordination will reveal new opportunities for success.

I am asking the Departments of Agriculture, Commerce, and Interior to work closely with the Office of Science and Technology Policy and the Council on Environmental Quality to craft a new cross-departmental strategy on alien invasive species. I expect that the strategy will include concrete steps to move this issue forward as a national priority and will include creative partnerships for leveraging dollars and for involving the scientific community and others that care and can help.

I look forward to your advice as development of the Administration strategy goes forward, and I thank you for recognizing the importance of this issue and calling it to our attention.

Sincerely,

DRAFT

**Campaign Against Invasive Alien Species
An Action Plan for the Nation**

**Prepared by the Ad Hoc Federal
Invasive Alien Species Task Force**

October 7, 1997

Campaign Against Invasive Alien Species An Action Plan for the Nation

Overview

On June 17, 1997, Vice President Gore directed preparation of an Administration strategy to combat the introduction and spread of plants and animals that are not-native to ecosystems in the United States and which are causing great economic and ecological harm to our nation. The Vice President asked the Departments of Interior, Agriculture and Commerce to prepare the strategy in consultation with the Council on Environmental Quality and Office of Science and Technology Policy in the Executive Office of the President.

This draft Administration action plan ("Draft Action Plan") responds to the Vice President's request and recommends steps to address invasive alien species ("IAS"). The Draft Action Plan is the work product of the Administration's ad hoc Invasive Alien Species Task Force ("Task Force"). The Task Force members represent the federal agencies above and other federal agencies with an interest in invasive alien species. Most of the participants are already involved in one of two standing federal committees addressing invasive alien species: the Aquatic Nuisance Species (ANS) Task Force and the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW).

The Draft Action Plan has been prepared by the Task Force for public dissemination and comment. Once comments are received and evaluated, the Task Force will revise the draft as appropriate to make the plan final, and recommend action.

The Draft Action Plan briefly reviews the problems caused by IAS and sets forth goals, objectives and principles for the nation's response to them. Following that is a review of needs and shortcoming, combined with a review of key issues. Next are six core recommendations for change in institutions, policies and programs. An appendix is attached listing suggestions for improvement addressing (1) listings, (2) preventing entry, (3) detection, (4) rapid assessment and eradication, (5) control, restoration, and monitoring (6) cross-cutting research and technology, (7) national information needs, (8) partnerships, education and outreach, (9) international cooperation, and (10) fundraising and financial responsibility.

The Problem

Not all alien species cause harm. Non-native species provide food, fiber, health, and recreation. Exploration for new species and their uses in new locations underpins much of man's understanding of the planet. Breeding new strains of wild and cultivated species, often far removed from countries of origin, has become a fine art and provided a rapidly expanding world population with the basic needs for life.

However, invasive alien species are reducing the economic productivity and the ecological integrity of our nation's lands and waters. The rate of introduction of such species rose markedly in the last century as world travel increased and modes of transportation proliferated. The costs to society are growing also, with harm to native fish and wildlife and their habitats, renewable natural resources, agriculture, and a wide array of human activities and needs, including health.

Economic impacts to agriculture exceed \$5 billion per year for noxious weed control alone. Fisheries, waterways, and utilities have spent \$3.1 billion over the last ten years to control IAS. Indirect costs in losses to crop and rangeland productivity are estimated at \$7.4 billion per year.

As IAS diminish and, in some cases, cause the extinction of native flora and fauna, the number of species on earth decreases. This worldwide homogenization and reduced biodiversity impoverishes the planet as a whole and limits mankind's future development of new crops and medicines for sustained growth and prosperity. Scientists have yet to put a price tag on the losses to be incurred by future generations if worldwide genetic diversity is reduced by IAS.

Conservation experts have tracked IAS plant infestations and found that they cover 100 million acres in the United States and are spreading at the rate of up to 20 percent per year—an area twice the size of Delaware. Aquatic species spread unseen through waterways and can expand in range explosively. Technical reviews estimate that between 35 and 46 percent of endangered and threatened species in the United States have been listed because of harm from IAS.

No place on earth is immune to threats from IAS. The problem is global. As people speed from country to country, opening new routes for commerce and pleasure, biological stowaways and new products for trade spread far beyond their native ranges. Epidemiologists have noted the proliferation of disease vectors and the increased speed with which new organisms spread. In fact, flu vaccinations blend mixes based on computer projections of which strains will erupt in regions of the US. Agricultural and forestry interests have long combated the siege of imported pests and blights to this and other countries.

Agreement is widespread on the need to combat the harm caused by these non-native invaders. Participants in local community-based weed management areas are linked in purpose with the many nations subscribing to international agreements such as the Convention on Biological Diversity; the Cattlemen's Association and the Wilderness Society have both subscribed to action on the problem.

Goals, Objectives and Principles

This Draft Action Plan is based on the following goals, objectives and principles in managing invasive alien species:

Goals.

1. Protect and preserve biodiversity;
2. Maintain ecosystem structure and function;
3. Reduce adverse economic and social impacts;
4. Protect human health.

Objectives.

1. Prevent entry of invasive alien species into the United States;
2. Detect and eradicate newly introduced invasive alien species;
3. Manage established invasive alien species to minimize ecological and economic impacts;
4. Monitor the distribution and impact of established invasive alien species;
5. Ensure that native U.S. species do not become invasive alien species in other countries.

Principles

1. Non-native species should be imported into the United States only after demonstration that they will not harm native ecosystems, crops, and pasturelands.
2. Persons responsible for introducing non-native species should be responsible for demonstrating acceptable risk and for bearing management costs if such species become invasive.
3. Preventing introduction and initial spread is the best way to avoid harm from IAS.
4. Potential IAS and pathways for introduction should whenever possible be identified and evaluated before invasion and harm occur.

5. Early detection is the foundation for any good system to safeguard against IAS.
6. Early and appropriate action can reduce harm from established IAS.
7. Effective IAS management requires public awareness and participation and partnerships with stakeholders through legislation, education and action.
8. Effective IAS management is integral to sustainable management of living resources and requires an integrated, multidisciplinary approach.

Needs and Shortcomings

Fundamentals

Introductions of invasive alien species can be "unintentional" or "intentional." Unintentional introductions occur as an adjunct to human activities such as trade and tourism. Intentional introductions characteristically link to production industries such as agriculture, horticulture, forestry, and aquaculture. They include the importation of non-native organisms for biological control purposes.

Pre-introduction screening is needed before alien species are introduced intentionally, although risk assessments may not be cost effective or feasible for all intentional introductions of IAS. The right balance must be struck between the benefits of using the species and the costs involved, including long-term impacts, with due regard for uncertainty. A tiered process should target the greatest accountability for the riskiest introductions. Some species should enter freely ("white list"), some should be prohibited ("black list"), and the remainder should be subject to assessments of risk ("gray" list). A "biosafety" authority is needed to list species and conduct assessments.

The costs of biosafety assessments (including any necessary trials in the field or controlled environments) should be borne by the importer. Final decisions on release should be made by the biosafety authority, after public notice and opportunity for comment from interested parties.

Unintentional introductions having economic impact can be more effectively controlled than at present by adopting more stringent quarantine regulations and penalties, and by improving transportation and handling standards. Registration of goods (such as a 'biosafety declaration') would help to identify those exporters and importers responsible for harmful introductions, and assure that penalties can be applied when warranted.

Voluntary standards and self-enforcement are needed to complement and, in some instances, stand in lieu of regulation. Another priority is educating exporters, importers, and travelers on the risks of biological invasions.

Monitoring introductions and their impacts after release is essential. Entry of IAS is generally detected by federal agency staff (APHIS for plants and insects; Fish and Wildlife Service for wildlife and fish; Coast Guard for ballast water; Customs for general shipments; and the US Postal Service for shipments by mail), state eradication boards, and state or local agency scientists. Analyses indicate that IAS import are rising despite increased efforts to stop them.

Where a new introduction (intentional or unintentional) may threaten crops, pasture or biological diversity, lack of full scientific certainty should not be used to justify time-wasting inaction. Local expertise is often key in detecting and responding to new invasions quickly, effectively and cheaply.

Where possible, eradication is the most cost-effective and ecologically sound solution to an invasive species problem. It is most feasible in the early stages of invasion, or on islands of manageable size. Where eradication is impossible, containment and control are the next best options. Integrated control methods must be chosen with care. National and regional interagency action committees are needed in the United States, and these institutions should develop IAS management plans, with methods and approaches chosen according to individual cases.

International cooperation is essential to prevent harm from biological invasions. Our nation is both exposed to harm from beyond it borders and is a source of harm to other countries. Our foreign aid program should assist developing countries in implementing domestic action plans similar to our own. The International Plant Protection Convention should be implemented vigorously to prevent importation of species that may cause economic harm to plants. We should in addition take the steps needed to implement an international regime preventing introductions of IAS that may cause environmental or economic harm to any native form of life. The apparent vehicle for such a regime is a protocol under article 8(h) of the Convention on Biological Diversity.

A concerted worldwide effort for sharing of information and technology should be encouraged in tandem with regulatory initiatives. Web-based approaches should be implemented, supplemented with newsletters and other communications tools to reach those without access to the Internet.

The United States has adopted various laws to address IAS. However current efforts have not reduced the increasing rate of infestations and spread to new locations. Cooperative ventures must be extended across jurisdictional lines and diverse stakeholders must be engaged. Local community involvement is a potent opportunity to create new understanding and urgency for a sustained campaign against invasive alien species.

Issue Review

Exclusion (or prevention of entry) of IAS into US ecosystems relies upon widespread monitoring and detection activities as much as it depends upon satisfactory technologies to intercept biological agents and propagules. Thousands of IAS have already entered the US, but

many thousands more could be imported intentionally or unintentionally as contaminants in commodity shipments, as personal property, as ornamentals, in ballast water and dunnage, and by accidental means. Once an invasive species has been established, expensive and difficult control activities must begin.

Public understanding and resources have not kept pace with the multiple pathways available for organisms to be transported into new habitats. Infestations are frequently invisible (aquatic populations) or not appreciated for what they are (the 'silent green invasion' of plants). Although rigorous screening and risk analysis can limit harmful introductions of IAS, pathway interdiction to stop unintentional transport will provide the greatest protection where specific species cannot be identified. Screening can then offer higher levels of insurance for species proposed for intentional introduction.

Eradication of established populations and control of spread of IAS have always been underfunded and represent a second-rate strategy at best, since proper exclusion could save the substantial costs for after-the-fact control efforts. Control technologies have been elaborated over the past 50 years, however, incorporating the basic methods of selective chemical poisons (pesticides), release of biological control agents (usually host-specific predatory organisms from the country of origin), and various physical restraints or mechanical removal (fences, electric dispersal barriers, hand-removal, burning, mowing, etc.) Appropriate technologies exist, but they have not been deployed widely.

Restoration and remediation techniques have improved markedly. Today, terrestrial systems can be recovered to near-natural states with the proper mix of site preparation, provision of natural hydrology and nutrient cycling, and judicious application of native seed mixes followed by watchful management until self-sustaining populations stabilize under natural disturbance regimes, such as fire and flooding). Aquatic systems are not so easily studied or controlled. Consequently, few aquatic restoration efforts have yet been declared a full success, and most require long-term monitoring to detect population imbalances and continuing control efforts.

Research and technology development efforts have focused primarily on IAS that have already become significant economic or ecological threats, rather than on preventing problems from occurring. The various pathways for introduction of IAS are inadequately monitored. Federal reporting on the status and trends in IAS covers only a handful of species of particular ecological or economic importance. Improved methods for long-term monitoring of established IAS, especially on public lands, and for predicting the ecological and economic risks of IAS and the use of control technologies are urgently needed. Better understanding of the relationships between biological invasions, natural and anthropogenic disturbances, and changing trade patterns, life styles, institutional relationships, and political conditions is needed to provide the basis for informed policy choices. Increased international scientific cooperation is needed to characterize the global distribution and ecology of IAS, monitor and assess pathways for the spread of IAS, identify potential biological control agents, and develop and assess management and control methods. At least 15 Federal agencies and bureaus fund or conduct research on one or more major groups of invasive organisms. The Departments of Agriculture, Commerce, and

the Interior have the largest programs. Research supports the missions of particular agencies and needs of their public constituencies.

National Information Systems have not tracked the full range of aquatic and terrestrial species and pathways, and lag far behind systems for native species. This information is particularly needed for notorious IAS and pathways and should be provided on a regional basis, using academic, NGO or governmental research institutions as a base of operations. Several existing institutions and databases provide information on IAS. For example, the Florida Caribbean Science Center of the USGS Biological Resources Division (<http://nas.nfrcg.gov>) has established a useful and developing data base on the Web for aquatic nuisance species. APHIS maintains the CAPS database, and IAS are included in the fixed-site monitoring network databases under the Forest Service's National Forest Health Monitoring Program and the NRCS National Resources Inventory. Information to support management and control of invasive weeds is provided in the FICMNEW Home Page, the Corps of Engineers' Plant Information System, and the Agricultural Research Service database on biological control agents.

In general, however, existing resources, including declassified computing capability and the State Natural Heritage Database Network, have not been well coordinated or sufficiently exploited to allow quick deployment and reduced costs. Lack of directed funding and the absence of robust regional centers have greatly hampered information accumulation and dissemination.

Engaging Partners. IAS know no boundary and honor no barrier; whether state line or river's edge. Federal, state, tribal, and private lands, protected or developed, all harbor the potential for significant harm by IAS.

Coalitions exist. For example, the National Fish and Wildlife Foundation's "Pulling Together" partnership and the Invasive Weed Awareness Coalition (IWAC) which joins over 50 organizations in raising the profile for weed management. More like this is needed: efforts to combat IAS must bring together a growing complex of interests and stakeholders including private landowners, industry, environmentalists, and government or tribal agencies at all levels.

Raising the profile on IAS requires use of conventional print and electronic media markets as well as educational channels in schools, museums, visitor centers, and public transportation centers -- especially airports. This has not happened significantly to date. The outreach programs of the public land management and natural resources agencies could be advantageously redirected to build awareness and understanding of ecosystem and economic costs posed by IAS. Similarly, environmental education syllabuses have not kept pace so that control of IAS is presented as a crucial component of an ecosystem or landscape level approach to conservation.

Resources have been scant for exclusion, control, and restoration efforts. Many different organizations now are demanding action to reduce the costs for production (agriculture, livestock, and forestry enterprises) and increase opportunities for recreation and sustainable growth (conservation, environmental, and professional groups). Seldom has an environmental

issue found such widespread support among industrial and non-industrial concerns. Partnerships are spreading, and funds are being leveraged to maximize action across jurisdictions. However, without continued building of financial support by institutions such as the National Fish and Wildlife Foundation, the need will not be met. Historically, federal, state, and tribal agencies have cooperated on wildlife-related issues. Past alliances, joint action, and shared spending have not increased fast enough to combat IAS and achieve significant improvements in land and water condition.

Federal authorities require review to assure that all IAS -- plants, animals and other, both terrestrial and aquatic -- receive systematic recognition and action. The existing ANS and FICMNEW committees work closely with tribal and state organizations on raising awareness, developing IAS management plans, and mobilizing resources to combat local infestations and reward innovative stewardship responses. However, unless elevated, these committees will continue to be frustrated in advancing the campaign's major goals and objectives.

A key mandate is Executive Order 11987 concerning exotic (alien) species, issued by President Jimmy Carter on May 24, 1977. Sections 2 and 3 of that Order state:

Section 2. (a) Executive agencies shall, to the extent permitted by law, restrict the introduction of exotic species into the natural ecosystems on lands and waters which they own, lease, or hold for purposes of administration; and, shall encourage the States, local governments, and private citizens to prevent the introduction of exotic species into natural ecosystems of the United States.

(b) Executive agencies, to the extent they have been authorized by statute to restrict the importation of exotic species, shall restrict the introduction of exotic species into any natural ecosystem of the United States.

(c) Executive agencies shall, to the extent permitted by law, restrict the use of Federal funds, programs, or authorities used to export native species for the purpose of introducing such species into ecosystems outside the United States where they do not naturally occur.

(d) The Order does not apply to the introduction of any exotic species, or the export of any native species, if the Secretary of Agriculture or the Secretary of the Interior finds that such introduction or exportation will not have an adverse effect on natural ecosystems.

Section 3. The Secretary of the Interior, in consultation with the Secretary of Agriculture and the heads of other appropriate agencies, shall develop and implement, by rule or regulation, a system to standardize and simplify the requirements, procedures and other activities appropriate for implementing the provisions of this Order. The Secretary of the Interior shall ensure that such rules or regulations are in accord with the performance by other agencies of those functions vested by law, including this Order, in such agencies.

Executive Order 11987 warrants, if not requires, the kinds of actions contemplated in this Draft Action Plan. However for practical purposes it has not yet been implemented.

Action Plan

Core Initiatives

Six core initiatives are recommended to raise the level of our national response to invasive alien species. The United States should (1) establish a national IAS council; (2) establish regional councils charged with coordination, planning and action on the ground; (3) set in place a system for comprehensive domestic import regulation based on the white-gray-black list model; (4) seek adoption of an invasive alien species protocol under Article 8(h) of the Convention on Biological Diversity; (5) develop an expanded, Web-based network for information management; and (6) consult with Congress to determine whether new legislation and funding authority would help achieve the goals and objectives of this Draft Action Plan.

Recommendation 1: A National Invasive Alien Species Council should be established by executive order.

A National IAS Council should be established by executive order of the President and charged with achievement of the goals and objectives set forth in this document, as well as conformity with the principles enunciated.

Reference
ANSI
FERNALD

Specific functions of the National Council should be to --

- a. Prepare a National Invasive Alien Species Management Plan for achievement of national goals and objectives and update the plan at least every two years, taking into account approaches for response to fire and infectious disease implemented by the interagency fire management program and the Centers for Disease Control;
- b. Measure and report every two years on success in achieving invasive alien species policy goals and objectives under the Management Plan and in advancing the national research and monitoring program described in paragraph c.;
- c. Organize, refine and oversee a comprehensive national program to study the resource impacts of invasive alien species and monitor the status and trends of such impacts. This national program would emphasize efficient collection and management of geo-spatial data and integration with data bases and systems used by other federal agencies and non-federal agencies and organizations;
- d. Organize, refine and oversee a program implemented by council member agencies that will support the listing and assessment of alien species, and serve as the biosafety authority of the United States if called for by international agreement concerning IAS;

tab. 1

- e. Provide on-going coordination for other relevant federal regulatory activity, including use and procurement requirements for native plants;
- f. Establish and facilitate the work of Regional Invasive Alien Species Councils described below.

The National IAS Council would be co-chaired by the Secretary of Interior, the Secretary of Agriculture, and the Secretary of Commerce. Policy coordination would provided by an individual from one of these Departments agreed on by the co-chairs. The members of the Council will be representatives of the Bureau of Land Management, U.S. Fish and Wildlife Service, National Park Service, U.S. Geological Survey, U.S. Forest Service, Animal and Plant Health Inspection Service, National Marine Fisheries Service, Coast Guard, and State Department. The Council would appoint an Executive Director, and Council members would designate one or more staff for work of the Council.

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Recommendation 2: Regional Invasive Alien Species Councils should be mandated by executive order and individually established by the National Council

Regional IAS Councils should be established by the National Council working closely with state and local governments. These are the key to action on the ground. The geographical extent of regions should reflect ecosystem demarcation and management needs. The members of Regional Councils should include --

- a. Appropriate regional representatives of each member of the National IAS Council
- b. Individuals appointed by each governor of any state within the defined region, representing the state agencies responsible for (1) fish and wildlife, (2) parks, (3) forestry, (4) agricultural pest and weed control; and
- c. No less than four individuals representing units of local government within the region.

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Each Regional IAS Council should establish a Citizen's Advisory Committee with representatives from all major stakeholders. In consultation with its Citizen's Advisory Committee, each Regional Council would prepare an IAS management plan, to include:

② Reference
Substantive
Recommendation

- a. Objectives and targets for implementing the goals and objectives of the Draft Action Plan and assuring consistency with the Aquatic Nuisance Species Control Act, Federal Seed Act, Federal Noxious Weed Act, Federal Plant Pest Act, Plant Quarantine Act, Lacey Act, NEPA, and the Endangered Species Act.

- b. A blueprint for implementing IAS management which covers a period no less than three years and contains the following --
 - i. Assignment of lead responsibility for each objective and target;
 - ii. A process to maximizes cooperation between all involved landowners;
 - iii. A schedule of actions with deadlines, emphasizing multi-disciplinary application of diverse control techniques, research and monitoring;
 - iv. Identification of resources needed to complete actions, including assessment of availability and access on short notice for rapid response;
 - v. A process for monitoring and revising the plan as needed to achieve the goals and objective of the Draft Action Plan.

Recommendation 3: The Secretaries of Interior and Agriculture should jointly promulgate a white-black-gray list of alien animal and plant species, developed in consultation with the Secretary of Commerce for marine species.

The most effective model for IAS import regulation is a list based on three categories of species. A "white" list would include alien species considered non-invasive. For example, non-native crop species are in this category along with many other plants such as iris, forsythia, and weeping willow. White list species could be imported without a permit. A "black" list would include alien species whose import would be prohibited subject only to very special circumstances, such as research in controlled environments. Hawaii give us poster children for this category including the brown tree snake and the tree Miconia. A gray list would include everything else, and importation would be subject to assessment for potential to cause environmental and economic harm.

Executive Order 11987 gives responsibility for implementing such a system to the Secretary of the Interior, in consultation with the Secretary of Agriculture and other appropriate agencies. The Lacey Act authorizes the Secretary of the Interior to prohibit import of any species of --

wild mammals, wild birds, fish (including mollusks and crustacea), amphibians, reptiles, or the offspring or eggs of any of the foregoing which the Secretary of the Interior may prescribe by regulation to be injurious to human beings, to the interests of agriculture, horticulture, forestry, or to wildlife or the wildlife resources of the United States . . . 18 USC 42 (a) (1).

The U.S. Fish and Wildlife Service has issued a black or "dirty" list under this authority including various mammals, birds, reptiles, mollusks, and fish pathogens. The FWS has twice proposed to issue a white or "clean" list under the Lacey Act (1973 and 1975) and has proposed extensive additions to the existing black list (1977). These proposals were opposed by the hobby fish industry, pet trade, zoos, game ranches and other interests, and none was made final.

The Secretary of Agriculture, through the Animal and Plant Health Inspection Service or APHIS, has parallel responsibility for stopping importation of plants under the Federal Noxious Weed Act. The Noxious Weed Act is complemented by other statutes including the Federal Plant Pest Act (7 USC 147a) and the Plant Quarantine Act (7 USC 151; 46 USC 103 *et seq.*). However APHIS programs under the statutes other than the Noxious Weed Act address economic harm to crops and timber and do not extend to natural ecosystems and ecological damage.

A "noxious weed" is defined under the Noxious Weed Act to mean --

any living stage (including but not limited to, seeds and reproductive parts) of any parasitic or other plant of a kind, or subdivision of a kind, which is of foreign origin, is new to or not widely prevalent in the United States, and can directly or indirectly injure crops, other useful plants, livestock, or poultry or other interests of agriculture, including irrigation, or navigation or the fish and wildlife resources of the United States or the public health. 7 USC 2802 (c).

The Secretary of Agriculture has broad authority under the Act. Among other things --

No person shall import or enter any noxious weed identified in a regulation promulgated by the Secretary into or through the United States or move any noxious weed interstate, unless the movement is in accordance with such conditions as the Secretary may prescribe by regulation under this chapter to prevent the dissemination into the United States, or interstate, of such noxious weeds. 7 USC 2803.(a).

Unfortunately, the listing process under the Noxious Weed Act has problems. A number of plant species considered harmful are not on the list currently, and listed species may be transported interstate without federal restrictions. Only one pest of natural areas is listed. Adding new species to the list takes too long. The current practice is not to list until a quarantine is completed and an eradication program is in place. Emergency listing has not been made.

The Secretaries of Interior and Agriculture should jointly promulgate a white-black-gray list of alien animal and plant species, in consultation with the Secretary of Commerce for marine species. Animals and plants currently listed under the Lacey Act and Federal Noxious Weed Act could serve as the initial black list. This would leave as the main task for these agencies the identification of white list species and the development and implementation of an assessment and permit system to accommodate the gray list. The IAS Task Force believes that existing statutory authorities are sufficient to authorize issuance of such a list. However new authority should be sought if an opposite conclusion is reached.

Recommendation 4: The United States Government should seek adoption of an invasive alien species protocol under article 8(h) of the Convention on Biological Diversity and work with the Senate to secure early ratification of the treaty.

Management of invasive alien species is a global endeavor. Efforts to stop IAS imports to the United States based on lists of regulated species such as recommended above would be aided by attention to the issue in the countries from which these species will come. Moreover, import controls in other countries are essential to give real assurances that species native to the United States will not become invasive alien species there. Everyone will be better off to the extent that species of global concern can be identified and addressed multilaterally.

No international regime currently addresses the issue from an ecological perspective or a comprehensive economic point of view. The International Plant Protection Convention (IPPC), for example, regulates import of animal and plant "pests" which may cause economic harm to plants. However the IPPC does not address non-economic harm or harm to animals. At their 10th meeting in June 1997, the Conference of the Parties to the Convention on International Trade in Endangered Species (CITES) considered IAS management. The United States delegation submitted a statement highlighting the issue and encouraging cooperation between CITES and the Convention on Biological Diversity. The U.S. submission was met with enthusiasm. However CITES is fundamentally limited to preventing threats to survival caused by international trade in the species whose survival is at stake. Other international agreements address import of pathogens that may harm animals and plants in agriculture or harm human health. However, the fact is that imports are occurring and causing great environmental and economic harm in the face of and consistent with these agreements.

The Convention on Biological Diversity (CBD) is the apparent umbrella under which invasive alien species should be addressed on a global basis. Article 8 (h) of the Convention states that the parties to the CBD "as far as possible and appropriate" shall "[p]revent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species . . ."

The parties to the CBD, and observer non-parties such as the United States, have already initiated discussions on whether and in what form action might be taken under article 8 (h). Negotiation of a protocol is one option under discussion. Furthermore, related negotiations in which the U.S. is involved are well underway on a "biosafety" protocol concerning genetically engineered "living modified organisms" or LMOs. Article 8 (g) provides that the CBD parties will -

Establish or maintain means to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology which are likely to have adverse environmental impacts that could affect the conservation and sustainable use of biological diversity, taking also into account the risks to human health . . .

The United States Government should take an active role in pursuing an IAS protocol under the aegis of Article 8 (h), in parallel to the effort now underway for modified living organisms. We should seek a protocol implementing the white-black-gray list recommended for domestic law.

The Administration should also redouble on-going consultation with the Senate in seeking ratification of the Convention on Biological Diversity. Our influence in an initiative on invasive alien species under the CBD would be strengthened greatly, as would influence in negotiation of the LMO protocol and other matters. Furthermore, the CBD is built on the foundation of sustainable development -- including use and conservation -- and is more consistent with current thinking than to limit international conservation regimes to those like CITES which are focused on limits to use alone.

Recommendation 5: An expanded, Web-based network should be developed for IAS information management and a workshop should be convened to organize and advance the endeavor.

A coordinated National Information System for alien species is urgently needed to facilitate research, education, and coordinated action on the threats from biological invasions.

Native species in the United States are described by many databases and centers for information storage and retrieval. These include networks established by federal and state agencies, natural history institutions, universities, and NGOs such as the Nature Conservancy. These information sources are far from complete or coordinated, and not all are accessible on the Worldwide Web. However information on invasive alien species is far less developed.

Information on invasive alien species should be included with native species as Web-based systems develop for storage and sharing information on the distribution, abundance and natural history of living organisms. IAS are known to endanger many native species, and information on both is needed to appreciate the trends and causes involved.

The Nature Conservancy is suggesting formation of such an integrated database in Hawaii. The University of Tennessee is considering establishing a center on IAS issues, with an Internet node and database including IAS information. The Smithsonian Environmental Research Center maintains a database on aquatic nuisance species transported by ballast water. Others are beginning to move forward on similar paths.

We should support as a priority the development and coordination of initiatives like these to form an expanded, integrated Web-based network for IAS information management. Because various, geographically dispersed players have experience and interests, a workshop should be convened in the next quarter to organize and advance this endeavor. Participants should include the lead agencies in the IAS Task Force, along with other governmental and NGO stakeholders. Primary stakeholders and implementing institutions should sponsor the workshop.

Recommendation 6: Consultation with Congress should be undertaken to determine whether new legislation and funding authority would help achieve the goals and objectives of this Draft Action Plan.

The core recommendations of the Draft Action Plan can for the most part be implemented with existing authorities. Ratification of the CBD is an exception. However it is clear that Congress could do much to support achievement of the goals and objectives in the Plan. For example, the principle that importers should pay for risk assessment would require legislation to implement. One basic question is whether enactment is due for a truly comprehensive new organic statute on invasive alien species. The existing statutes deal with pieces of the issue -- weeds, wildlife, aquatic species of both -- but not the whole collection of plants, animals and other life forms wherever they live. A comprehensive "Invasive Alien Species Act" could add new authorities and authorize funding at levels and through mechanisms not currently available. Furthermore, having a unified statute could help to raise the profile of this critically important issue to the level it deserves.

Consultation with Congress is timely not only because the importance of this issue is becoming recognized but in addition because it affects diverse economic and environmental interests and finds support in stakeholders traditionally at loggerheads. Furthermore, the consensus of stakeholders is reflected in support from elected representatives across a broad spectrum often having divergent views.

We should initiate consultation using the Draft Action Plan as a starting point even while moving forward to implement the Plan.

Campaign Against Invasive Alien Species

An Action Plan for the Nation

Appendix: Suggestions for Improvement

Listed below are various suggestions for improvement in addressing invasive alien species which are not addressed explicitly by the core recommendations of the Draft Action Plan. These are the products of extensive discussions among federal professionals with long experience in IAS. The suggestions are organized as follows: (1) listing, (2) preventing entry, (3) detection, (4) rapid assessment and eradication, (5) control, restoration, and monitoring (6) research and technology, (7) national information systems, and (8) partnerships, education and outreach, (9) international cooperation, and (10) funding and financial responsibility.

The Draft Action Plan's core recommendations are the vehicle through which the Task Force seeks to move the campaign against invasive alien species to a new level. The suggestions for improvement are presented to assure that the many ideas developed in these discussion are recorded for future consideration.

Listings

1. USDA should develop a policy for 'emergency listing' under the Federal Noxious Weed Act (FNWA).
2. Listing as a "noxious weed" should be authorized even if an IAS is not a "widespread species."
3. The Office of General Counsel at USDA should resolve whether listing under the FNWA can occur without first requiring both a quarantine and an eradication program. In addition, prohibitions should be sought on interstate movement and sale of listed species without requiring a quarantine or eradication program.
4. By Secretarial directive, all FNWA weed species should be designated as noxious weed seeds under the interstate provisions of the Federal Seed Act. This action will prohibit all interstate shipment of agricultural seed containing any FNWA weed seeds.
5. Expert evaluation teams for IAS import risk assessments should establish a process for evaluating the order in which assessments should proceed, targeting the most noxious pathways and groups of related noxious organisms, and incorporating risk assessment results in the listing process for IAS.

Preventing Entry

6. Federal agencies should convene an expert panel to establish a list of notorious invasive species and pathways (e.g., snakes into Hawaii or New Zealand; untreated ballast water into the Great Lakes).
7. Pathways by which IAS arrive and spread should be described and evaluated, including risk posed and the behavioral and economic factors affecting use. The evaluation should be followed by development of appropriate technologies for controlling these pathways (e.g., ballast water, dunnage, baggage, motor vehicles, pet trade, intentional introductions for horticulture). Priority should be given to high risk pathways (considering economic and ecological costs) and pathways where interdiction would be relatively easy or inexpensive. For example, efforts should be increased to interdict IAS introductions on key pathways such as ballast water and the horticultural trade.
8. The ballast water provisions of the Non-indigenous Aquatic Nuisance Prevention and Control Act should be fully implemented. The Coast Guard should seek agreements with APHIS and the U.S. Customs Service to (1) improve inspection coverage of more vessels and (2) collect information from logs on ballast management to increase surveillance and improve ballast management recommendations in the future.
9. Publicity should be increased for excluding IAS at ports of entry. High risk vectors for unintentional introductions should be identified and widely publicized. Publicity should include informational brochures on prohibited IAS for travelers and importers and a video program explaining ecosystem and economic impacts of IAS for showing on air flights entering the US. An 'amnesty' disposal box for discarding prohibited products should be placed before customs check points.

Detection

10. Current rapid ID systems should be evaluated and improved, and should encompass pathogens and parasites in addition to other IAS.
11. Tools (e.g., field guide) and incentives (e.g., bounty systems) should be considered to promote public reporting of IAS.
12. Use of new technologies for detection should be explored (e.g., satellite imaging).

Rapid Assessment and Eradication

13. Emergency response authorities should be clarified to assure control of incipient populations before substantial spread and widespread establishment (naturalization).
14. Funding authority should be put in place to permit bill-back of costs for emergency response (cf., fire control model) and to provide multi-year spending authority for large-area and emergency efforts, including restoration where possible.
15. Development and field testing of rapid control technologies should be expedited.

Control, Restoration and Monitoring

16. In addition to recommendations on import regulation in the Draft Action Plan, interstate commerce in IAS should be reviewed with a view to improved use of management tools such as permits, declarations, inspection, shipment tracking, and enforcement.
17. Federal agencies should work with states to prevent movement of invasive species such as purple loosestrife and water hyacinth from one area to other areas of the country.
18. Federal agencies should use native species on public lands and on grounds of federal buildings and should promote use of native plants in revegetation through procurement requirements. The USDA Seed Regulatory and Testing Branch should take steps to assure that all federal rehabilitation and restoration seed sources contain no noxious weed seeds. USDA should develop guidelines for collection and propagation of native species.
19. IAS-free practices should be implemented on federal lands, beginning with wilderness. Practices include weed-free forage, weed-free sources of road materials, and decontamination of vehicles, boats, and equipment before they move from IAS-infested areas into uninfested areas.
20. The Federal Grants and Cooperative Agreements Act (1977) should be examined and amended if needed to promote cooperative private/public conservation agreements on and off of federal lands. This would increase shared funding opportunities for projects to control spread of IAS.
21. Federal restoration incentive programs for agriculture, forestry and wildlife should include guidance on identification, control, and monitoring of IAS. Such programs should reward landowners who make a commitment to carefully planned and executed control and restoration efforts for IAS, include use of native plants for revegetation.

Criteria on IAS should be included for restoration activities in USDA programs, such as the CRP, WRP, WHIP, EQIP.

22. Endangered Species Act "safe harbor" agreements should be emphasized in IAS management on private lands.
23. Transportation modes should contribute to IAS control based upon their relative contribution to the spread of invasives. For example, federal highway construction funds should be authorized for management and control of IAS, and this approach should be extended to other federal projects such as utilities, pipelines, and railroads.
24. Development, testing, and transfer of biological control agents and techniques should be accelerated, including protocols for post-release long-term monitoring of effects on target and related non-target species. Support should be increased for overseas laboratories to study IAS in native habitats and test for host-specificity testing for natural enemies.
25. Restoration research should receive greater priority, including development of protocols for research and the dissemination of findings.
26. IAS research and management plans should be put in place for priority ecosystems.
27. Improved methods should be developed to enhance the competitiveness of native species in ecosystem management and restoration efforts.
28. Land management which reduces the need for managed restoration should be promoted, such as more cattle grazing in short grass prairie.

Cross-Cutting Research and Technology

29. The ecology of invasive species needs more investigation, including their potential for establishment, spread, and displacement of native species, particularly rare, threatened and endangered species; and the role of IAS in ecosystem interactions and functions (e.g., clean water, nutrient cycling, biodiversity).
30. Research activities in the land management agencies should be examined to assure that innovative science and management techniques are developed and disseminated to employees and non-governmental organizations for use in local communities.
31. The National Science Foundation should enhance support for research and scholarship in areas germane to IAS management, including detection, assessment of invasiveness, monitoring, data sharing, and cost-effective control techniques. The NSF should attempt to bridge the existing gap between academic scientists and land and water managers.

32. Research should be conducted to determine the invasiveness of alien species not yet a problem in the U.S.
33. A review should be done of the use and effectiveness of existing technologies for removing biological contaminants in trade items, especially in living material, and needed improvements should be made.
34. Filter technologies for collecting IAS should be assessed.
35. Existing methods for determining the extent of IAS populations should be assessed and improvements developed (e.g., remote sensing, laboratory analysis, and field observations).
36. Methods for determining the ecological, economic, and human health risks of known and potential IAS should be assessed.
37. An assessment should be made of risks in spreading IAS through existing resource use and management practices.
38. The "lag phase" phenomenon should be studied (i.e., the often long latent period before an introduced species becomes invasive)
39. The Administration's Committee on Environment and Natural Resources (CENR) should survey existing research efforts and capabilities on IAS and develop a plan for future efforts. Furthermore, IAS should be integrated into the National Environmental Monitoring Framework being coordinated through CENR.
40. The basic population biology of priority invasive species should be investigated to target control at the most susceptible life history stages.
41. Disturbance regime experimentation should be conducted to identify the most cost-effective control strategies. Such experimentation may, for example, involve sequences of mechanical, fire, chemical, and biological treatment, restoration planting, post-control treatment during restoration, and disturbance control after restoration.
42. Each agency responsible for research on IAS should develop a plan identifying research issues and priorities, opportunities for cooperation, multi-year funding requirements, and responsive to the concerns of constituents in addressing the threats from IAS.
43. IAS should be identified as a focus of cooperation in bilateral science and technology agreements. Priority should be given to countries that are potential sources of IAS by virtue of biogeographical similarities with the U.S. or importance of bilateral trade. Research on the ecology of IAS in areas of invasion and areas of origin (with particular emphasis on natural agents of control) merits particular attention.

44. Establishment of an intergovernmental scientific panel on IAS should be considered to facilitate cooperation in research and technology for IAS management. The panel could also provide a suitable framework for preparation of a global assessment of risks posed by IAS, and could be established under the Convention on Biological Diversity.

National Information Needs

45. A coordinated National Information System for alien species is urgently needed to facilitate research, education, and coordinated action on the threats from biological invasions. Such a system would provide electronic access to domestic and international sources of expertise and information on IAS. Such information could include: bibliographies, case studies of control and restoration projects, decision aids such as taxonomic checklists, "black lists" (e.g., Federal and state noxious weed lists), and "white lists" (when developed). It could provide a clearinghouse for descriptive information about available databases and relevant technologies (i.e., metadata), including methodologies for control of IAS and restoration of affected areas. It could provide access to actual monitoring data, distribution maps, research data, impact analyses and assessments, and other databases developed and managed by many participants who will contribute to and help coordinate the system. It could provide cost/benefit analyses for prevention, control and restoration programs. It could enable users to integrate data and information from many sources to characterize problems, identify research needs, assess threats, and develop effective responses. In particular, it could provide access to useful tools for facilitating local action, such as photographs and electronic keys to enable individuals to accurately and easily identify IAS, and methodologies to help select appropriate control methods.
46. An integrated reporting framework should be developed, using the Internet and expert systems, that enables broad public participation in identifying and reporting infestations of IAS, incorporates verification to ensure reliability, and assures timely notification of responsible management agencies.
47. Redeployed Defense Department computer capability should be tapped for storage and management of IAS information.
48. A guide to IAS-related research should become a part of the USGS/BRD National Biological Information Infrastructure.

Partnership, Education and Outreach

49. Federal and non-federal partners should make special use of the National Fish and Wildlife Foundation to promote outreach and broad involvement in combating IAS. The Foundation should establish a high-profile partnership program covering the full range of IAS and build public support through sponsorship of on-the-ground prevention, control, and restoration grants and cooperative agreements. Joint ventures with industry and academic institutions should be encouraged to promote IAS environmental education and outreach. A 'stewardship incentives' award program should be established under the auspices of the Foundation to reward notable achievements in IAS management. This award should benefit local community efforts, especially those involving multiple jurisdictions.
50. A Keystone Dialogue should be convened to focus public attention on IAS and the scientific and jurisdictional issues confronting local communities when they decide to combat IAS.
51. An outreach capability should be developed linked with American Online, the Discovery Channel, public broadcasting stations, and other high-use educational outlets for building public awareness.
52. Outreach efforts should include media alerts when NBII data contribute significantly to a successful local or regional IAS campaign effort -- for example, documenting trends in combat of *Melaleuca* in the Florida everglades and providing long-term projections.
53. Industry leaders should join The Nature Conservancy and other environmental leadership organizations to raise public awareness of how science and management efforts for combating IAS benefit society and protect future efforts to sustain productivity and conserve natural areas worldwide.

International Cooperation

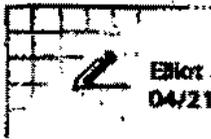
54. Support for addressing IAS in U.S. foreign assistance programs should be reviewed and enhanced.
55. The USDA Foreign Agricultural Service and the Natural Resources Conservation Service should provide international technical information exchanges on IAS.
56. Opportunities should be explored for using and harmonizing existing international agreements to more effectively monitor pathways, interdict IAS at points of entry, and

facilitate sharing of control and restoration technologies (e.g., CBD, CITES, Law of the Sea Convention, IPPC, WTO SPS Agreement). Special attention is needed to address the effects of increasing international exchange of horticultural materials.

57. Coordinated action by intergovernmental organizations should be promoted to reduce risks of introductions of IAS. Areas include IMO and disposal of ballast water and ship solid waste; FAO and IAS threats to food security, including plant and animal diseases; WHO and IAS threats to human health; WTO and trade policies.
58. The United States should encourage increased intergovernmental donor agencies support for addressing IAS (for example, through national strategies, demonstration projects, and training in prevention, monitoring and control methodologies).

Funding and Financial Responsibility

59. Funding mechanisms for the interagency fire management program and CDC responses to infectious diseases should be reviewed and applied as appropriate to IAS management. One useful feature would be a pre-authorized account.
60. A fee system should be developed to assess alien species importers with a appropriate charge based on the costs of scientific review to assess invasiveness.
61. Tax incentives should be considered to promote stewardship activities supporting restoration with native species.
62. Federal agencies should engage in partnership programs for leveraging government IAS funding with private dollars.
63. A percentage of federal highway construction funding should be applied to IAS vegetation management.



Elliot J. Diringar
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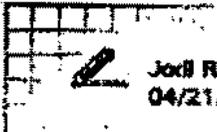
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To: Dinah Bear/CEQ/EOP

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Subject: WCS speech

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Jodi R. Sakol @ OVP
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Record Type: Record

To: Elliot J. Diringar/CEQ/EOP

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Subject: Re: paper

THE WHITE HOUSE

Office of the Vice President

**Remarks for Vice President Al Gore
Wildlife Conservation Society
Monday, April 20, 1998
(As prepared for delivery)**

It's a pleasure for me to be here tonight -- with family and with so many friends -- to accept this very generous honor from the Wildlife Conservation Society. I know that past WCS Gold Medal recipients include Rachel Carson and Jacques Cousteau. In all honesty, I must confess that my achievements, compared with theirs, leave me unworthy of this award. On the other hand, I do like the idea of my name listed alongside theirs. So -- to take an example -- in the same way it is customary to take possession of a house for a down payment of a as little as ten or twenty percent, I was hoping that, under similar arrangements, you'll permit me to keep the award, and pay it off over the next thirty years -- with interest. Thank you.

I want also to thank you for your extraordinary work over more than a century to sustain wildlife, to teach ecology, and to inspire care for nature — world-wide. After being founded here in New York in 1895, you have spent much of the last century concentrating your conservation efforts in Africa, Asia, and Latin America. Now, I am delighted to note, you have resumed your North American operations. Congratulations, and as many have said so gratefully in the past few years, welcome home.

Let me begin by assuring you that President Clinton and I are committed to working with you to protect and restore the great diversity of life on this planet — and the web of critical habitats that sustains it. I'd like to describe some of the actions we have already taken in this area, and share some thoughts about what we must do to respond to troubling new threats.

As you know, our last and best line of defense against the many threats to wildlife in this country is the Endangered Species Act. This administration has vigorously fought off the assaults of those who would dismantle it. At the same time, we have pioneered creative ways to make it more effective. For many years, conservation was seen largely as a matter of protecting public land. But, outside Alaska, seventy percent of America's land is in private hands. That's why it is imperative that we forge partnerships with private landowners, and help them protect critical habitat on their own lands.

In that spirit, we have crafted habitat conservation plans to help assure the survival of species while providing landowners with greater certainty — so they can plan the future use of their own lands. Toward that end, we have developed both a "no surprises" policy and a "safe harbor" policy. And we are working to make sure these flexible tools become a permanent part of a strengthened Endangered Species Act.

I know some of you have reservations about these new approaches. But what worked yesterday may not work today or tomorrow. The proof, ultimately, is on the ground. We are committed to higher environmental standards, and we believe strongly that we must forge partnerships in order to meet them. Be assured, however, that while we will be flexible on methods, we will never compromise on goals: we are committed to clean water, healthy lands, and abundant species — now and forever.

Regrettably, it is no longer enough to protect what is left. We must restore, rebuild, and recover what we have lost. Few things give me greater pleasure than knowing that the bald eagle, the peregrine falcon, the grey whale — all once endangered — are thriving again today. One day soon, I hope we will say the same of the grey wolf, whose piercing call — silenced for too long — once again echoes through the Yellowstone night. With the wolf's reintroduction, we are restoring the wilds, and reweaving one of the most magnificent ecosystems on Earth. The wolf has stared down extinction, and no court ruling will imperil its return. We will make sure of that.

Unfortunately, our stories are not all successes. From all over the world, we now hear disturbing reports about our amphibians. Whole populations are disappearing. Others are

suffering deformities at alarming rates. There are quite a few theories -- chemical pollution, virulent pathogens, increased levels of ultraviolet radiation, the stresses of climate change; researchers are still struggling to pin down the causes. It is plain, though, that something is terribly wrong. Never have we have seen so many amphibian extinctions and declines in such a short time.

Most troubling of all, perhaps, is that these declines are taking place in protected areas -- our refuges and parks. They have been particularly pronounced at high altitudes, places one would think are far removed from the ravages of man. For instance, we've seen major declines in the parks of the Sierra Nevada. Over the past 70 years, frog numbers in Lassen National Park have plunged 90 percent.

Herpetologists are working worldwide to understand and stem this disturbing trend. Many are asking us for help, and we certainly will provide it. I am asking our environmental agencies to lend their research expertise. We must expand basic monitoring and research, studying both populations that are declining and those that continue to thrive. We must look at the biochemical mechanisms that may be key to unlocking this puzzle. We must coordinate our research to make sure we are filling critical gaps.

These creatures are very ecologically important, not only for their own sake, but also because their unique biology may make them important indicators of broader threats. Their permeable skin and their dual life cycles -- aquatic when young, terrestrial as adults -- make them sensitive indicators of the health of our environment. In other words, we had better pay attention.

At the same time, we face another problem, one that is transforming our ecosystems, wreaking havoc with native species and, in many cases, with local economies. I'm talking about invasive alien species -- plants or animals that, either deliberately or by accident, have been introduced where they do not belong.

This is not the X-Files. These are real creatures creating real problems. The most infamous of late is the zebra mussel, a native of the Caspian and Black seas that was first spotted in this country 10 years ago. It has now spread from the Great Lakes through the Mississippi River watershed, clogging water intakes, squeezing out native mollusks, and threatening the survival of scores of native species. The U.S. Fish and Wildlife Service estimates that by 2002, this thumb-nail-sized mollusk will have caused \$5 billion in damage.

There are plenty of other examples. The green crab threatens the shellfish industry and fisheries in the Pacific Northwest. The leafy spurge is the nemesis of ranchers in 11 states, infesting three million acres of rangeland and crowding out native grasses. The Brown Tree Snake, accidentally introduced to Guam a half century ago, has eliminated nine of Guam's eleven land bird species, and poses an imminent threat to the Hawaiian Islands.

A year ago, more than 100 scientists wrote me urging a coordinated federal response to this growing threat, and I could see they were right. I directed the Departments of Interior,

Agriculture and Commerce to develop a comprehensive strategy to contain these invasive species. The agencies have been hard at work, and soon will be inviting stakeholders across the country to help assess their recommendations. As soon as that is done, we will launch a coordinated strategy to help farmers and communities and our native flora and fauna fend off these attacks. This is a vital environmental concern of our Administration, and I want to thank you for your role in building public knowledge and understanding of the challenge. Our success in meeting this threat will be owed in part to your efforts.

In closing, let me emphasize that problems facing the world in the 21st century are different in kind from any that have ever beset human beings. We can look to our past for solutions to many social, financial, and international dilemmas. But there is no clearly marked path or precedent for the kind of wisdom and cooperation it will take to retain and restore the environmental health of the planet in the 21st century. And yet, if we succeed in building a network of cooperation for the cause of a clean environment, we can then draw on that same network to heal so many human ills.

Your work really does have, at its heart, the seeds of a broader salvation. That's why I am so grateful for the work you do. It is why I am so proud to reaffirm my own lifelong commitment to the goals we share. And it is why I am humbled not just by your recognition of me, but by the strength and passion you bring to the unfinished agenda before us. Thank you.



THE SECRETARY OF THE INTERIOR
WASHINGTON

Memorandum

To: Director, Office of Management and Budget

From: Secretary *[Signature]* MAY 27 1998

Subject: Executive Order on Invasive Alien Species

I request that you process the attached draft executive order on invasive alien species pursuant to Executive Order 11032, as amended.

The draft order has been developed by an interagency task force working on this issue at the direction of Vice President Gore. The draft order reflects a consensus of task force representatives from the Departments of Agriculture, Commerce and Interior, and also addresses comments provided by other agencies, including the Department of State, Environmental Protection Agency, Office of the U.S. Trade Representative, Office of Science and Technology Policy, and Council on Environmental Quality. The Department of Justice has reviewed the draft order and indicated that it has no comment on it. The interagency task force has briefed the Chairman of CEQ, who has requested that the draft order be submitted to the clearance process. The task force has also briefed the OMB Associate Director for Natural Resources, Energy and Science.

We anticipate that the executive order will be signed at an event occurring late in June. An effort is now underway to identify and define the event, which we expect will be in the western United States and will involve and receive the support of diverse economic and environmental interests and bipartisan support from Congress. The Vice President has already given a speech touching on the subject (copy enclosed).

Background

The Problem

Invasive alien species are transforming America's landscape. Foreign animal and plant species are replacing native wildlife and wreaking enormous financial and ecological damage. Alien species invasions are second only to habitat destruction in causing species to be endangered, and estimates of economic harm from these biological invaders run as high as \$123 billion annually. Among other things, invasive alien species crowd out nutritious native forage, create fire hazards, limit recreation, clog lakes and waterways, undermine fisheries, and corrupt water pipes.

Alien species causing harm include weeds like thistles and leafy spurge, which cattle cannot eat; purple loosestrife, which chokes wetlands; miconia, which may destroy the Hawaiian rainforest; and melaleuca trees now expanding across the Everglades. Animals are also problems, such as the zebra mussel, corrupting water supply facilities, the brown tree snake, which has extirpated forests birds on Guam, and the Asian tiger mosquito.

Diverse stakeholders such as the Cattlemen's Association and the Wilderness Society are united in the need to address this problem. Those affected recognize that the problem is bad and getting worse. Global pathways for invasion are multiplying rapidly. Federal authorities and programs are an incomplete patchwork. Action is needed.

Administration Initiative

On June 17, 1997, Vice President Gore directed preparation of an Administration strategy to combat introduction and spread of plants and animals that are not native to ecosystems in the United States and which are now causing or could potentially cause great economic and ecological harm to our nation. The Vice President asked the Departments of Interior, Agriculture and Commerce to prepare the strategy in consultation with the Council on Environmental Quality and Office of Science and Technology Policy in the Executive Office of the President.

An ad hoc Invasive Alien Species Task Force ("Task Force") was formed in response to the Vice President's request and prepared a Draft Action Plan. The Plan briefly describes the problems caused by alien species and reviews needs, shortcomings and key issues. It sets forth goals, objectives, and principles for actions followed by recommendations on institutional arrangements and specific actions including (1) listings, (2) preventing entry, (3) detection, (4) rapid assessment and eradication, (5) control, restoration, and monitoring (6) cross-cutting research and technology, (7) national information needs, (8) partnerships, education and outreach, (9) international cooperation, and (10) fund raising and financial responsibility. A summary of legal authorities is appended to the Draft Action Plan.

Executive Order on Invasive Alien Species

In the course of its work, the Task Force reached a consensus on the need for an executive order on invasive alien species to create a framework for planning and coordination involving all stakeholders. The attached draft order was then developed. The order will (1) specify federal agency responsibilities, (2) establish a federal invasive species council and advisory committee, (3) direct the council to develop and update a comprehensive management plan, (4) require the council by a date certain to take concrete steps for preventing introductions, and (5) task the council to facilitate and support existing regional activities.

Please call on me or Bill Brown, my Science Advisor, to help as needed as this moves forward.

Attachments

cc: Dan Glickman, Secretary of Agriculture
Bill Daley, Secretary of Commerce
Katie McGinty, Chair, Council on Environmental Quality
Kerri-Ann Jones, Acting Director, Office of Science and Technology Policy

Invasive Alien Species

Draft 5-22-98

By the authority vested in me as President, by the Constitution, and the laws of the United States of America and in furtherance of the purposes of the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, as amended (16 U.S.C. 4701 et seq.), the Lacey Act (18 U.S.C. 42), Federal Plant Pest Act (7 U.S.C. 150aa et seq.), Federal Noxious Weed Act (7 U.S.C. 2801 et seq.), Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) and other pertinent statutes, and to prevent the introduction and spread and provide control of invasive alien species, and to eliminate or minimize the economic, ecological, and human health impacts thereof, it is ordered as follows:

Section 1. Definitions.

- (a) "Alien species" means, with respect to a particular ecosystem, any species or viable biological material derived from a species that is not a native species in that ecosystem.
- (b) "Control" means eradication of infestations, reductions of populations, adapting human activities and public facilities to accommodate infestations, preventing spread from infested areas, and conducting restoration activities to prevent further invasions.
- (c) "Ecosystem" means a biological community together with its physical environments.
- (d) "Introduction" means the intentional or unintentional transportation, establishment, release, escape or of an alien species into an ecosystem, as a result of human activity.
- (e) "Invasive alien species" means an alien species that does or could harm the economy, ecology, or human health of the United States if introduced.
- (f) "Native species" means, with respect to a particular ecosystem, a species that historically occurred or presently occurs in that ecosystem, other than as a result of an introduction.
- (g) "Species" means a group of organisms all of which have a high degree of physical and genetic similarity, can generally interbreed only among themselves, and show persistent differences from members of allied species.
- (h) "United States" means all the 50 States, the District of Columbia, Puerto Rico, Guam, and all possessions and territories.

Section 2. Federal Agency Duties. Federal agencies shall, to the extent permitted by law, and in cooperation with States, Tribes, and local governments, prevent the introduction and spread of invasive alien species into ecosystems and control them by:

- (a) reducing the risk of introductions of alien species that are or could become invasive, and reducing the likelihood that such organisms will spread from one location to another within the United States;
- (b) ensuring rapid detection and monitoring of changes in the distribution of invasive alien species; and when warranted, controlling them, in a manner that avoids or minimizes harm to non-target organisms and ecosystems;

(c) restricting the use of Federal funds, programs, or authorities used to introduce into ecosystems within the United States invasive alien species unless the potential benefits of such introductions outweigh the potential adverse impacts and to export native species for the purpose of introducing such species into ecosystems outside the United States where they are not native and could become invasive;

(d) developing and implementing agency specific actions that prevent the introduction, spread, and provide control of, invasive alien species;

(e) encouraging and facilitating efforts to inform and educate a wide range of audiences about potential problems associated with the introduction and spread of invasive alien species, ways to prevent such introductions and spread, and ways to control them;

(f) ensuring the coordinated application of existing Federal agency capabilities;

(g) reducing the risk of U.S. species becoming invasive species in other countries; and

(h) pursuing international cooperation in addressing invasive alien species.

Section 3. National Invasive Alien Species Council. A National Invasive Alien Species Council ("Invasive Species Council") of Federal agency representatives is hereby established to provide National leadership regarding invasive alien species, ensure ongoing coordination of Federal activities concerning invasive alien species, and ensure full implementation of the requirements of this order. The Invasive Species Council will consist of, but not be limited to, the Departments of Interior, Commerce, Agriculture, Defense, State, Transportation, Treasury, and the Environmental Protection Agency and be co-chaired by the Secretaries of Interior, Commerce, and Agriculture. Membership will include one representative from each Federal bureau or office having responsibility for, involvement with, or affected by invasive alien species. An Executive Director, agreed upon by the co-chairs, will be appointed, and required staffing and funding will be provided by the membership as appropriate. The Invasive Species Council shall:

(a) establish a subcommittee under the Federal Advisory Committee Act consisting of representatives from State, Tribal, and local government agencies, academic institutions, the scientific community, non-governmental entities including environmental and conservation organizations, and commercial interests to advance issues and actions and provide recommendations for consideration by the Invasive Species Council;

(b) develop and implement the National Invasive Alien Species Management Plan (Management Plan) identified in Section 4, and, after its completion, assess and report annually on the success in achieving its goals and objectives; provide the report to the Office of Management and Budget for consideration in the budget process; and update the Management Plan after each report.

(c) ensure that the activities of the Invasive Species Council will be coordinated with and not duplicate the existing programs, authorities, and activities of on-going government and non-government activities addressing invasive alien species, including but not limited to, the Aquatic Nuisance Species Task Force (ANSTF), and the Federal Interagency Committee for the Management of Noxious and Exotic Weed (FICMNEW).

(d) ensure that programs, research, and other activities among Federal agencies involved in the prevention, monitoring, and control of invasive alien species are not duplicative or cost inefficient.

(e) develop and establish a coordinated web-based information network for invasive alien species;

(f) provide ongoing coordination for relevant Federal regulatory activity as appropriate, including, but not limited to the development and implementation of guidance, in consultation with the Council on Environmental Quality, for addressing invasive alien species through the National Environmental Policy Act and development and implementation of use and procurement requirements for native species;

(g) encourage the development of regional approaches for addressing invasive alien species as called for under Section 5 of this order;

(h) share the latest resource information and management technologies to assist in the prevention and control of invasive alien species;

Section 4. National Invasive Alien Species Management Plan. Within eighteen months of the date of this order, the Invasive Species Council, utilizing a public process and in consultation with Federal agencies, state, tribal, and local governments, academic institutions, the scientific community, non-governmental entities including environmental and conservation organizations, commercial interests, and other stakeholders, shall prepare a National Invasive Alien Species Management Plan that addresses Federal efforts related to invasive alien species and establishes measurable outcomes and performance-oriented goals for their prevention and control. The Management Plan shall, to the extent permitted by law and where feasible:

(a) review existing and potential new approaches and authorities for preventing introduction of invasive alien species, including those for identifying pathways by which invasive alien species are introduced and minimizing the risk of introductions via those pathways, and recommend measures required to reduce the risk of introductions occurring. If the measures are not authorized by law, the Invasive Species Council shall develop and recommend legislative proposals for necessary changes in authority;

(b) establish a science-based process to evaluate all alien species introductions for risks posed and a coordinated and systematic risk-based process to identify, monitor, and interdict pathways that may be involved in the introduction of invasive alien species;

(c) ensure that the presence of invasive alien species is promptly detected and that changes in their distribution are monitored;

(d) identify the measures to control established invasive alien species in a cost-effective, environmentally-sound manner;

(e) identify personnel, other resources, and additional levels of coordination needed to achieve the Management Plan's identified goals and objectives;

(f) develop a process to document the ecological, human health, and other impacts from invasive alien species, and to monitor the status and trends of such impacts; and

(g) identify a comprehensive approach for gaining international cooperation in addressing invasive alien species.

Within thirty-six months of the date of this order and to the extent permitted by law, the applicable Invasive Species Council member agencies shall implement the measures identified in the Management Plan. If an agency concludes that it cannot implement the recommended measures, the agency shall provide to the Invasive Species Council the reasons why it is unable to do so.

Section 5. Regional Coordination. The Invasive Species Council, in cooperation with State, local, and Tribal governments and established invasive alien species programs and groups shall encourage the development of regional entities to address invasive alien species issues by implementing applicable goals and objectives of the Management Plan at the regional level, and by taking other actions such as:

(a) identifying regional priorities with respect to invasive alien species, and making recommendations to the Invasive Species Council;

(b) preparing regional plans that assign responsibility for action, identify processes for monitoring, and provide opportunity for review and revision;

(c) coordinating, where possible, on-going regional programs and activities addressing invasive alien species;

(d) developing an emergency response strategy for new invasive alien species in the region; and

(e) providing advice to public and private entities concerning methods of preventing and controlling invasive alien species.

Section 6. Judicial Review. This order is intended only to improve the internal management of the Executive Branch and is not intended to create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any other person.

7/1 Copy to Gordon. 1 July 98
Rill

Attached in the order as it was
circulated and the agencies' comments.

Let's meet the week of the 13th - 17th
and talk about changes.

Shank you. Mac

A. (395-3563)

F. (395-7294)

500-552-4567



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

June 16, 1998

MEMORANDUM FOR DESIGNATED AGENCY HEADS
(SEE ATTACHED DISTRIBUTION LIST)

FROM: Robert G. Damus *RGD*
General Counsel

SUBJECT: Proposed Executive Order Entitled "Invasive Alien
Species"

Attached is a proposed Executive order entitled "Invasive
Alien Species."

It was prepared by the Department of the Interior, in
accordance with the provisions of Executive Order No. 11030, as
amended.

On behalf of the Director of the Office of Management and
Budget, I would appreciate receiving any comments you may have
concerning this proposal. If you have any comments or
objections, they should be received no later than close of
business Tuesday, June 23, 1998. Please be advised that agencies
that do not respond by the deadline will be recorded as not
objecting to the proposal.

Comments or inquiries may be submitted by telephone to Mr.
Mac Reed of this office (Phone: 395-3563; Fax: 395-7294).

Thank you.

Attachments - Distribution List
Proposed Executive Order

cc: Jack Lew
Josh Gotbaum
T.J. Glauthier
Joe Minarik
Don Arbuckle
Barbara Chow
Danny Mendelson
Ed DeSeve
Michael Deich
Linda Ricci
Bill Halter
Jill Blickstein
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Secretary
Department of the Interior

Honorable Bruce Reed
Assistant to the President for
Domestic Policy

Honorable Kathleen McGinty
Chair
Council on Environmental Quality

Honorable John Gibbons
Assistant to the President and Director
Office of Science and Technology Policy

Honorable Samuel R. Berger
Assistant to the President for
National Security Affairs

Honorable Carol M. Browner
Administrator
Environmental Protection Agency

Honorable Charles Ruff
Counsel to the President

Honorable Todd Stern
Assistant to the President
and Staff Secretary

Honorable Ron Klain
Chief of Staff to the Vice President

Invasive Alien Species

Draft 5-22-98

By the authority vested in me as President, by the Constitution, and the laws of the United States of America and in furtherance of the purposes of the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, as amended (16 U.S.C. 4701 et seq.), the Lacey Act (18 U.S.C. 42), Federal Plant Pest Act (7 U.S.C. 150aa et seq.), Federal Noxious Weed Act (7 U.S.C. 2801 et seq.), Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) and other pertinent statutes, and to prevent the introduction and spread and provide control of invasive alien species, and to eliminate or minimize the economic, ecological, and human health impacts thereof, it is ordered as follows:

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(b) develop and implement the National Invasive Alien Species Management Plan (Management Plan) identified in Section 4, and, after its completion, assess and report annually on the success in achieving its goals and objectives; provide the report to the Office of Management and Budget for consideration in the budget process; and update the Management Plan after each report.

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(g) encourage the development of regional approaches for addressing invasive alien species as called for under Section 5 of this order;

(h) share the latest resource information and management technologies to assist in the prevention and control of invasive alien species;

Section 4. National Invasive Alien Species Management Plan. Within eighteen months of the date of this order, the Invasive Species Council, utilizing a public process and in consultation with Federal agencies, state, tribal, and local governments, academic institutions, the scientific community, non-governmental entities including environmental and conservation organizations, commercial interests, and other stakeholders, shall prepare a National Invasive Alien Species Management Plan that addresses Federal efforts related to invasive alien species and establishes measurable outcomes and performance-oriented goals for their prevention and control. The Management Plan shall, to the extent permitted by law and where feasible:

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(c) ensure that the presence of invasive alien species is promptly detected and that changes in their distribution are monitored;

(d) identify the measures to control established invasive alien species in a cost-effective, environmentally-sound manner;

(e) identify personnel, other resources, and additional levels of coordination needed to achieve the Management Plan's identified goals and objectives;

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- (b) preparing regional plans that assign responsibility for action, identify processes for monitoring, and provide opportunity for review and revision;
- (c) coordinating, where possible, on-going regional programs and activities addressing invasive alien species;
- (d) developing an emergency response strategy for new invasive alien species in the region; and
- (e) providing advice to public and private entities concerning methods of preventing and controlling invasive alien species.

Section 6. Judicial Review. This order is intended only to improve the internal management of the Executive Branch and is not intended to create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by a party against the United States, its agencies, its officers, or any other person.



FAX TRANSMITTAL

DATE: 6/26
TIME: 4:35p.m.

TO: Mac Reed, OMB-50P

FROM: Michael Poe
USDA, OBPA RM 118-E

TOTAL NUMBER OF PAGES INCLUDING THIS COVER SHEET: 3

RECIPIENT'S FAX NO.: 395-7294

RECIPIENT'S TELEPHONE NO.: 395-3563

COMMENTS: Re: Invasive Alien Species

NOTE: IF YOU DONT RECEIVE ALL OF THE PAGES PLEASE CALL AS SOON AS POSSIBLE

OUR TELEPHONE NO.: (202) 720-1272
OUR FAX NO.: (202) 690-3673

Summary of informal USDA comments

Alien Invasive Species - title of the initiative

Recommendation: Replace the term "alien" with the term "non-native" such that the title, definition and all references be to Invasive Non-Native Species.

The terminology of the issue has been listed as Alien Invasive Species (AIS). All parties agreed that a common term should be used; however, there is considerable controversy on this terminology. In the past, terms such as exotic, alien, undesirable, non-indigenous, non-native, and foreign have been used interchangeably. Because of the controversy, the task force agreed to use AIS temporarily, while polling the agencies during the comments of the executive order. Because of the nature of the issue, prevention and control of invasive species will take a higher level of public education and support than many other national issue, such as preventing wildfire and encouraging recycling. The term alien is viewed as judgmental, for example when talking about the illegal alien problem, and can have a humorous and derogatory connotation when linked to outerspace aliens. The linkage to international treaties with the word alien does not outweigh it's negative connotations domestically. The term exotic also has mental images associated with actually being desirable, yet out of reach. In examining the issue over the last three years, USDA, DOD and DOT have used the term non-native. Invasive non-native more accurately portrays what we intend to prevent or control, without any judgmental values attached. The alternative word, non-indigenous, is not recognized and understood by a high enough proportion of the American public to be useful in public education programs.

Section 1. Definitions

(a) *Alien species means, with respect to a particular ecosystem, any species or viable biological material derived from a species that is not a native species in that ecosystem.*

Recommendation: Change the last two words *that ecosystem*, to read *the United States*.

As this subsection currently reads, it is too restrictive and will not permit recommendations, use or development of plants or other organisms unless they are endemic to an ecosystem in which it occurs. This has major implications for all Federal land management agencies which work with revegetation of damaged or impacted lands. Answers to land management concerns would necessarily be ecosystem limited. In many instances, for example with fires or floods, ground cover must be established immediately, native seed is not available at an affordable cost, thus non-native species may be the most cost-effective, least harmful option. Additionally, native seed sources are not yet at a level to satisfy even the Federal agencies needs. Many successful management practices which include plants with a mildly invasive nature would need to be discontinued or modified.

(b) *"Control" means eradication of infestations, reductions of populations, adapting human activities and public facilities to accommodate infestations, preventing spread from infested areas and conducting restoration activities to prevent further invasions.*

Recommendation: Change the word *accommodate* to the word *manage*.

The word *accommodate* means to "adapt" or "serve", which in this context would imply the human activities and public facilities would adapt or work around the infestations. We assume this is not what was meant, rather that the invasive species infestations which would arise from human activities or public facilities would be managed or controlled. Additionally, "manage" is used little elsewhere in the document, and this would emphasize the on-the-ground management of invasive alien species that is certainly the intent of this document.

(d) Recommendation: remove the extra "or" so it reads *escape of an alien species*. Assumed to be a typo.

Section 2. Federal Agency Duties.

Recommendation: the addition of a new bullet - 2(f) *Facilitating research and development of technologies for prevention, control and beneficial uses of invasive alien species.*

Research wasn't really addressed as a Federal agency duty when in fact, research is the primary mission of some Federal agencies and a secondary mission on a number of others. Additionally, all Federal agencies rely on research to provide science-based direction to their programs.

Section 3. National Invasive Alien Species Council

(c) *ensure that the activities of the Invasive species council will be coordinated with and not duplicate the existing programs, authorities.....*

Recommendation: Add the phrase "or impede" after "duplicate" to read *....will coordinate with and not duplicate or impede the authorities*

This language should be clarified so that it will help ensure that the Council can work with agencies to coordinate with agencies to improve programs and authorities where appropriate or identify problems not already being addressed.

Section 4. National Invasive Alien Species Management Plan.

(d) *identify the measures to control established invasive alien species in a cost-effective, environmentally-sound manner.*

Recommendation: Add wording as follows: *Identify research and other measures needed to control established invasive alien species in a cost-effective environmentally-sound manner, with emphasis on IPM and biologically based technologies.*

SUMMARY:

We recommend the following changes to the draft Executive Order for Invasive Alien Species:

1. Change from the term *invasive alien* to the term *invasive non-native* throughout the document;
2. Change the last two words *that ecosystem*, to read *the United States*, in Section 1 (a);
3. Change the word *accommodate* to the word *manage* in Section 1 (b);
4. Correct typo in Section 1 (d);
5. Add a new bullet to Section 2 (f) *Facilitating research and development of technologies for prevention, control and beneficial uses of invasive alien species;*
6. Addition to Section 4(d) to: *Identify research and other measures needed to control established invasive alien species in a cost-effective environmentally-sound manner, with emphasis on integrated pest management and biologically-based technologies.*



United States Department of the Interior

OFFICE OF THE SECRETARY

Washington, D.C. 20240

June 26, 1998

Memorandum

To: Office of Management and Budget
Attention: Mac Reed

From: Department of the Interior
Hazel Wilson

Subject: Proposed Executive Order - Invasive Alien Species

The following statements were omitted from the comments sent yesterday on the subject Executive Order.

Section 4. National Invasive Alien species Management Plan

(a) The review should examine authorities relating to import/export activities, interstate transportation, and possession of invasive species, as well as the feasibility and appropriateness of civil/criminal penalties and fines for intentional and unintentional introductions.

Add a new paragraph (b), as follows:

Develop a national education effort for all age groups that instructs the public on problems associated with invasive alien species introductions and methods for prevention.

Please accept my apologies for the delay and any confusion caused by this delay. If you have questions, please call me on (202)208-6193.



U.S. Department of
Transportation

Office of the Secretary
of Transportation

To: Mac Reid

GENERAL COUNSEL

400 Seventh St., S.W.
Washington, D.C. 20590

The Honorable Jacob J. Lew
Acting Director
Office of Management and Budget
Washington DC 20503

Dear Mr. Lew:

This is in response to your request for the views of the Department of Transportation (DOT) on the proposed Executive order on invasive alien species. The Department supports the proposed order's objectives of reducing the risk of introduction and spread of invasive alien species through a coordinated program of Federal, state and local activities. The Coast Guard has responsibilities to help control invasive aquatic species, and is a key member of the Aquatic Nuisance Task Force. The Federal Highway Administration assists states in controlling the spread of nonnative species and noxious weeds along highway rights of way, and is a member of the Federal Interagency Committee for Management of Noxious and Exotic Weeds. The Federal Aviation Administration and the Office of the Secretary of Transportation are participating in an interagency effort to develop an alien species action plan to reduce risk of alien species introductions via aircraft at Maui, Hawaii. However, DOT has identified several serious concerns with the order's broad imposition of duties on Federal agencies. We believe these concerns should be addressed before the Executive order is signed.

DOT is especially concerned about section 2(c), which would impose a duty on Federal agencies to prevent the introduction and spread of invasive alien species by restricting the use of funds, programs and authorities. The legal authorities in the preamble do not appear to support such restrictions by all Federal agencies. Many Federal programs have very specific eligibility requirements, and discretion to deny funds or approval may be limited. Section 2(c) would be particularly burdensome if it is interpreted to require agencies to restrict Federal funds, programs and authorities if the proposed action might unintentionally enable introduction of invasive alien species.

Section 2 lists Federal agency duties to prevent the introduction and spread of alien invasive species. These duties appear to take effect immediately upon issuance of the order. Before a list of covered species is developed, different agencies might identify different species as invasive. DOT believes that a more effective approach would be to combine the proposed Federal agency

duties of section 2 with the requirements of section 4. Most Federal responsibilities would then come into effect after the plan is developed and adopted and species of concern are identified. Imposing these duties after an accepted list of species is adopted for all agencies and the invasive species management plan is developed and adopted will ensure that agency efforts are coordinated and therefore more effective. This will also ensure that different agencies identify invasive alien species consistently.

DOT recommends that under revised section 4, after the plan is adopted, agencies be required to restrict the use of programs, funding and authorities which intentionally introduce or export species identified as invasive. Agencies should be encouraged to take actions within their authorities to prevent the unintentional introduction and spread of such species.

To permit action prior to adoption of the management plan, revised section 2 of the Executive order should encourage all agencies to examine their authorities to identify programs that might enable introduction and spread of invasive species and determine what measures agencies can reasonably undertake to prevent introduction and spread of invasive species. Agencies might use the NEPA process to identify appropriate mitigation for actions that are likely to result in introduction of invasive species.

DOT also notes that participation on the proposed Invasive Species Council and developing and implementing the plan could result in new or expanded duties requiring additional resources. The proposal calls for appointment by the Council co-chairs of an Executive Director of the Council, to be funded by the membership as appropriate. Creation and operation of a new Federal Advisory Committee Act (FACA) committee will also require budget resources. Such details will need to be addressed as the Executive order is implemented.

Detailed comments are provided in an enclosure. We appreciate the opportunity to review the proposed Executive order.

Sincerely,

Nancy E. McFadden

Enclosure

Enclosure

Department of Transportation Detailed Comments
Draft of Invasive Alien Species Executive orderPreamble

The EO should clarify how this EO relates to the May 24, 1977 EO 11987 on introduction and export of exotic organisms. The proposed EO appears to incorporate several elements of the 1977 EO.

The last sentence of the introduction states that a purpose of the EO is to eliminate or minimize human health impacts. As separate authorities enable the Centers for Disease Control and Prevention to address disease, we suggest a clarification to the EO which notes that preventing the introduction and spread of disease from outside the U.S. is not covered. The term "human environment" may be less confusing.

Section 1. Definitions

Subsection (a). It is not clear what viable biological material is intended to cover. We recommend that this be clarified.

Subsection (b). To clarify that not all means of control apply in a specific instance, we suggest that the paragraph read, "Control means, *as appropriate,* ..."

Subsection (e). DOT prefers the term "nonnative invasive species" to apply to species not native to ecosystems which could be harmful if introduced. The draft definition of "invasive alien species" contains elements that are vague and likely subject to any number of interpretations. For example, an invasive alien species becomes "invasive" if it could or does harm the economy, ecology or human health of the U.S. Guidance will be needed on how to judge harm to the economy or ecosystems. The proposed definition should recognize the ability of a species to out-compete native species, decimate native populations, or reproduce unchecked. We suggest that if the term invasive alien species is retained, the definition be revised to read:

"means an alien species that does or is likely to harm the economy or ecosystems of the U.S. if introduced, because it lacks natural predators, out-competes or over-preys on natural species or lacks checks on reproduction."

Subsection (f). The definition of native species raises similar questions. If a "native species" can be one that currently occurs in an ecosystem other than the result of an introduction, we believe there is the possibility that a

nonnative species introduced into the U.S. many years ago could be considered native under the current wording of the definition.

Section 2. Federal Agency Duties

As noted in our letter, we believe that section 2 needs to be restructured to make agency duties subject to section 4, so that they follow the National Invasive Species Plan development and adoption. A redrafted section 2 should be limited to actions that agencies could reasonably take under their existing authority, prior to preparation of the management plan. It should encourage agencies to examine their authorities to identify programs which might intentionally or unintentionally enable introduction of invasive species, and determine types of measures agencies could undertake within existing authority to reduce risk of such introduction and spread. Such measures could, for example, include use of the NEPA process to identify appropriate mitigation measures for such actions, such as measures designed to monitor action-induced changes in species.

Section 3. Council

The order should provide more guidance on the procedures under which the Council and its subcommittee will function.

Subsection (c). To ensure continuation of current efforts, we recommend that the subsection be revised to read "coordinate with and not duplicate or *diminish* existing programs and activities..."

Subsection (e). To ensure that the most current known information on known species is available to agencies, we recommend a revision to read: "establish, develop and maintain a coordinated up-to-date internet web-based information network for invasive alien species."

Section 4. Management Plan

As noted above, section 4 should incorporate the Federal duties listed in section 2. Responsibilities placed on agencies should reflect various degrees of Federal control over actions. We recommend that the order distinguish between responsibilities for addressing intentional and unintentional introductions and that restrictions apply only to intentional introduction. Finally, it is important to have a common list of species (which would be periodically updated) to guide agencies in exercising these responsibilities. DOT would be pleased to help develop language for section 4 that accomplishes these objectives. The provision in section 2(c) should restrict funding for intentional introductions, and if language on finding how benefits of introductions outweigh impacts is retained, guidance on how that evaluation will be made should be provided. A new provision should be

added to encourage grantees and permittees to take actions within their authorities that prevent introduction and spread of invasive species, and provide control of invasive alien and nonnative species.

The redrafted section 2 could also encourage Federal agencies to use assessments under the National Environmental Policy Act to identify actions that increase the probability of spreading known invasive species and potential appropriate mitigation measures for such actions, such as measures designed to monitor action-induced changes in species.