

ENVIRONMENTAL LANDSCAPES

**PHOTOCOPY
PRESERVATION**

THE WHITE HOUSE
WASHINGTON

2/28/94

Brian -

Here is the information on landscaping.

(1) Out going letters from Katie asking for people to be appointed to a working group. Some people we asked for in particular - most were generic requests.

(2) Letter from me to representatives w/ the NPR paper as an attachment. The NPR paper contains an outline of basic components for the E.O. The portion re: landscaping at White House + VP's residence will be coordinated w/ staff at both places. The "Greening of the White House" has a small landscaping component to it already. I believe VP's house is undergoing similar landscaping changes already - or is planning

on it.

If you have any questions re: the qualifications of the drafting group, please contact Bonnie Harper - Lore at (202) 366-1057. She will be leading this group & coordinating w/us on progress. Also, see copy of memo from Brian Johnson & me to Katie - it will give you basic background on Bonnie's qualifications.

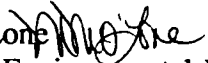
A discussion with Bonnie may save you having to attend drafting meetings

I have also enclosed a list of names & phone numbers of drafting group members. If you have any other questions, please call.

THE WHITE HOUSE
WASHINGTON

March 18, 1994

TO: Brian Burke, DPC ✓
Kumiki Gibson, OVP
T.J. Glauthier, OMB
Heather Ross, NEC
Alan Krupnick, CEA
Todd Stern, WHO
Mark Schaefer, OSTP
Steve Neuwirth, WHO
Steve Warnath, DPC

FROM: Mary O'Lone 
Office on Environmental Policy/
National Performance Review

On February 24, 1994, you were notified of the formation of an interagency work group to develop a preliminary draft of an executive order/directive to implement the recommendation from the Report of the National Performance Review (NPR) to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects. To give you an idea of the savings such changes can make, the U.S. National Arboretum has cut the costs of its pesticide purchases by over 70% since 1991 through the use of integrated pest management. In addition, it expects to cut dumpster tipping fees in half through a new green waste recycling program. Instead of paying a disposal company to haul away most of this waste, the Arboretum will compost the waste and generate its own mulch. As further background, I have attached the recent draft of the NPR landscaping paper.

It has been decided that the most appropriate vehicle for this directive is a Presidential memorandum. This memorandum is to be a part of Earth Day 1994 activities. To meet this deadline and allow adequate time for review, I am circulating this draft for informal White House review. Please provide comments by COB Thursday, March 24, 1994. You may fax them to me at 395-3744 or send them to Room 31, 722 Jackson Place. After reviewing and incorporating the comments, the memorandum will begin a formal White House and interagency review process. If you have any questions, please call me at 395-3706.

Attachment

cc: Elaine Kamarck, OVP

DETERMINED TO BE AN
ADMINISTRATIVE MARKING
INITIALS: JAM DATE: 9/18/13
2013-1074-5

DRAFT
~~CONFIDENTIAL~~

April 2X, 1994

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND
AGENCIES

SUBJECT: Environmentally and Economically Beneficial Landscaping

The Report of the National Performance Review contains recommendations for a series of environmental actions including one to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects. Environmentally beneficial landscaping entails utilizing techniques that complement and enhance the local environment and seek to minimize the adverse effects that the landscaping will have on it. In particular, this means giving preference to regionally native plants and employing other landscaping practices or technologies that conserve water and prevent pollution.

These landscaping practices not only benefit the environment, but also should result in long-term cost savings for the federal government. For example, the use of native plants protects our natural heritage and provides wildlife habitat, but because they are suited to the local environment and climate, their use can also reduce fertilizer, pesticide, and irrigation demands and their associated costs.

Because the federal government owns and landscapes vast acres of land, our stewardship presents a unique opportunity to provide leadership and to develop practical and cost-effective methods to preserve and protect that which has been entrusted to us. For these reasons, I direct that agencies shall, where cost-effective and to the extent practicable:

1. Use regionally native plants for landscaping on federal grounds and federally-funded projects.
2. Use construction practices that minimize impacts on natural habitat.
3. As part of agency landscaping practices and implementation of Executive Order 12846 "Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements," seek to prevent pollution by, among other things, reducing fertilizer and herbicide use, using integrated pest management techniques, recycling of green waste, and minimizing runoff.

4. Implement water-efficient practices, such as use of mulches, efficient irrigation systems, and recycled or reclaimed water and through the selection and siting of plants to conserve water and control soil erosion. As a part of efforts to implement Executive Order 12902 "Energy Efficiency and Water Conservation at Federal Facilities," agencies are encouraged to conduct audits to determine exact landscaping water-use needs, to pursue water utility conservation and rebate programs, and to plant regionally native shade trees around buildings to reduce air conditioning demands.

5. Create outdoor demonstrations incorporating the use of native plants, as well as pollution prevention and water conservation techniques to provide education and promote awareness on the environmental and economic benefits of implementation of this directive. Agencies are encouraged to develop other methods for sharing information on landscaping advances with interested non-federal parties.

In order to assist agencies in implementation of this directive, the Federal Environmental Executive shall:

1. Establish an interagency working group to develop recommendations for guidelines and training needs to implement this directive. The recommendations are to be developed by December 1994.
2. Issue the guidelines by February 1995. Agencies shall incorporate these guidelines into their landscaping programs and practices to the extent practicable by February 1996.

In addition, the Federal Environmental Executive shall establish annual awards to recognize outstanding efforts of agencies and individual employees. Agencies are encouraged to recognize exceptional performance in implementation of this directive through their awards programs.

To assess implementation efforts, agencies shall report on progress to the Federal Environmental Executive by March 1996. Other progress reports shall be required by the Federal Environmental Executive, as necessary.

The Department of Agriculture, through its Agricultural Research Service, shall conduct research on the suitability, production, and use of native plants as landscape materials. The Department shall make available to agencies and the public the research results.

William J. Clinton



ENV04: INCREASE ENVIRONMENTALLY AND ECONOMICALLY BENEFICIAL LANDSCAPING

BACKGROUND

The federal government makes landscaping and planting decisions for a wide variety of federal facilities, including military bases, park facilities, highway projects, and veterans' cemeteries.¹ These decisions significantly affect the health of the natural systems on which we depend.

Environmentally beneficial landscaping considers the make-up of the native ecosystem where the landscaping is done and strives to protect it. It is designed to minimize the effects that the landscaping will have on the surrounding environment by giving preference to regionally native plant species. It also emphasizes the use of water-conserving techniques such as efficient irrigation systems and drought-resistant plants; and the reduced use of chemical fertilizers, pesticides, and herbicides.

At every level of government environmentally beneficial landscaping policies and activities are being implemented. For example, the 1987 Wildflower Act requires that 25 cents out of every \$100 of landscape funding be used to plant wildflowers in federally financed highway projects.² This law, however, does not require the use of wildflower species native to the project area.

The Department of Veterans Affairs stresses the use of native plants in its National Cemetery System to reduce mowing and water costs.³

The federal government also has programs that combine educational and conservation opportunities. For example, the Department of Agriculture's Soil Conservation Service helps schools and communities develop outdoor learning centers.⁴ These centers provide opportunities to teach ~~mandatory~~ subjects, such as science, math or English using environmental and conservation examples. The local centers can satisfy traditional educational requirements while meeting specific conservation objectives. For example, children help design, plant, and maintain a row of trees near their school to reduce energy costs. Throughout the project, they learn the math and physics, for example, of energy conservation. At the same time, they learn how to choose environmentally appropriate tree species and how to care for them.

Several states and cities are also beginning to recognize the value of planting native species, and it is reflected in their laws and ordinances. For example, Minnesota recently passed a law to study the feasibility of requiring only native plants on public lands.

core ✓

In California, state law mandates cities to institute local ordinances that require citizens to use water conservation practices in their landscaping activities.⁵ The city of Austin, Texas has several ordinances that require city planners and developers to consider the environmental impacts of their actions.⁶ These ordinances include requiring the use of native species in plantings, the protection of trees on development sites, and the use of integrated pest management practices. They also require the use of water conservation techniques in plans, and the preservation of fragile ecosystems at development projects.

NEED FOR CHANGE

The federal government should serve as an example of how landscaping can incorporate environmentally beneficial practices and be both beautiful and economical.

Preserve Native Ecosystems. Native plants add value to the complex ecosystems of which they are a part. The right selection of plants provides appropriate habitat for wildlife, creating resources for food, shelter, and nesting areas. The use of native plants can also reduce landscaping costs and pollution. In many parts of the country, however, they are not used in landscaping: sometimes because exotic species have edged them out, sometimes because they are simply not commercially available, and sometimes because they are not deemed attractive.

The introduction of exotic plants can have costly environmental and economic consequences. Throughout the country, there are approximately 14 million acres of federal lands that are infested with exotic weed species (such as English ivy).⁷ For example, in California's Redwood National Forest biologists have identified 150 plant species as hazardous to the natural ecosystem. Their budget, however, provides only enough funding to do basic research on management strategies for 10 of these exotic species.⁸

Many native landscaping plants are not commercially available. Few nurseries maintain sufficient stocks of native trees, shrubs, grasses, and wildflowers in the size and quantity to meet the federal government's landscaping needs. Government specifications that require the use of native species do not always allow enough time for nurseries to develop stock. As a result, nurseries that are interested in developing a more diverse inventory of native plant species do not do so because they cannot grow them fast enough to satisfy the specifications. Therefore, few nurseries bid on the published proposals. In addition, nurseries are hesitant to enter the market because of uncertain demand, again reducing the selection of native species available to federal landscape architects.

Improve Conservation Education.

Current federal environmental and conservation educational programs do not fully exploit the opportunity for public-private partnerships in education and conservation. There are many opportunities the federal government can take to set an example and provide outreach activities to the public. The federal government is in the position to be a model for the preservation of our biological cultural heritage. Government grounds can be excellent examples of the diversity of native plant species in an area.

Reduce Landscaping Costs. Maintenance costs can be reduced because native grasses and wildflowers do not require frequent mowing, irrigation, or fertilization. Reduced mowing lowers costs of labor, tractor repair, and fuel. It also reduces pollution.

Chemical fertilizers, pesticides, and herbicides, and irrigated water expenditures can be reduced because native plants are better suited to the climate, and the local insect and animal population. Therefore, they require reduced quantities of irrigated water and chemical fertilizers, herbicides, and pesticides to thrive.

The use of integrated pest management (IPM) can further reduce agency expenditures for chemical fertilizers and pesticides.

**ENV04: INCREASE ENVIRONMENTALLY AND
ECONOMICALLY BENEFICIAL LANDSCAPING**

IPM is a method of pest control that uses biological methods to control damaging pests. For example, sterile insects can be introduced in an area to mate with the existing population thereby reducing their ability to reproduce and eventually their population size. This method of pest control also includes surveying infested areas and planning pesticide applications to coincide with the most vulnerable stage of the target insect population's development. This avoids blanket preventative spraying.

Implementation of effective IPM programs can reduce chemical usage and costs significantly. The National Arboretum, for example, reduced its expenditures for chemical pesticides by an estimated 75 percent when it switched to IPM.⁹ Purchasing chemicals only on an as-needed basis can achieve cost savings not only by requiring fewer purchases, but also by avoiding disposal costs for unused chemicals.

The use of chemicals to maintain grounds contributes to environmental, health, and safety problems. Reduced use of chemicals lowers the possibility of contaminated runoff into rivers and ground water. Chemical reductions can assist agencies in achieving compliance with the pollution prevention Executive Order, which calls for a 50 percent reduction in toxic substance use by federal agencies.¹⁰

Conserve Water. Water used to irrigate lawns and landscapes can account for significant proportions of total water use during peak watering season. The selection of native plants that are adapted to the particular climate can reduce water demand by requiring less irrigated water. Grasses and trees should be selected in part based on how much water they consume. Species that are particularly thirsty should not be used in arid areas where normal rainfall does not meet most of the plant's water needs. Reduced water use conserves the fresh water supply for both the natural environmental systems and the human population.

Accordingly, federal parks, golf courses, and cemeteries should select grass varieties carefully, install efficient irrigation technolo-

gies, and schedule irrigation times according to turf needs and weather conditions. All landscapes, especially large grassy areas, should have their water needs audited to ensure that plants are receiving the appropriate level of water. Overwatering results in additional water costs, as well as unnecessary use of energy.¹¹

ACTION

Issue a directive to require the use of environmentally beneficial landscaping at federal facilities and federally-funded projects, where appropriate. (2)

The President should issue a directive by May 1994 to:

- require agencies to use environmentally beneficial landscaping wherever appropriate, cost effective, and practical;
- stress the links between landscaping decisions, protection and enhancement of the environment, and cost-saving opportunities; and
- announce that the federal government will lead by example through the implementation of environmentally beneficial landscaping principles at the White House and the Vice President's residence at the Naval Observatory.

Increase the use of native plant species in all federal landscaping activities. The directive should also:

- encourage the use of native trees, shrubs, grasses, and wildflowers in landscaping;
- encourage agencies to develop specifications with enough flexibility to encourage nurseries to develop sufficient stocks of native plant species; and
- direct the Department of Agriculture, through its Agricultural Research Service and/or the Soil Conservation Service, to conduct research on the production and use of native species as landscape and conservation plants.

IMPROVE ENVIRONMENTAL PERFORMANCE AT FEDERAL BUILDINGS AND FACILITIES

Reduce the quantity of chemicals applied to federal landscapes. The directive should encourage agencies to:

- reduce their use of chemical fertilizers, pesticides, and herbicides; and
- use an IPM approach to pest control.

Use water-efficient technologies in federal landscaping projects. The directive should also:

- encourage agencies to use water-efficient technologies to the maximum extent practicable;
- encourage the use of water audits, where appropriate, to establish exact needs and assist in planning irrigation systems and scheduling; and
- encourage agencies to participate in water utility conservation and rebate programs.¹²

Provide educational and conservation opportunities to the public. The directive should encourage agencies to:

- sponsor and participate in activities that provide educational and conservation opportunities to the public, and
- prepare interpretive exhibits and signs explaining the plantings and the special techniques used in landscaping to enhance the environment.

Establish a governmentwide environmentally sound landscape program. The White House Office on Environmental Policy (OEP) should establish an interagency working group by July 1994 to develop recommendations for an Environmentally Sound Landscape Program that would:

- provide incentives to federal facility and landscape managers to consider the environmental implications of their landscaping plans;
- recognize the contributions and efforts of individual managers; and

- create an annual award to agencies that made significant strides in implementing the directive.

The actions should be reported to the Office on Environmental Policy by December 1994 and should include guidelines to federal facility managers on how to increase the use of native species, reduce the use of chemical fertilizers and pesticides, and implement water conservation techniques. These guidelines should allow for climactic and geographic differences, but should provide a framework for agencies to consider as they plan their landscape requirements. The working group should also establish criteria for agency recognition.

Endnotes

1. To provide an idea of the extent of federal landscaping efforts, note that the Federal Highway Administration spent over \$77.8 million on landscaping projects in 1992. The Department of Veterans Affairs maintains 114 cemeteries throughout the country encompassing 10,000 acres, and the Department of Defense manages 25 million acres of land some of which must be landscaped and maintained.
2. See *The Surface Transportation and Uniform Relocation Assistance Act of 1987*.
3. Telephone interview with Marty Rize, National Cemetery System, Veteran's Administration, July 14, 1993.
4. Interview with Tom Leverman, Head, Educational Relations, Soil Conservation Service, USDA. July 19, 1993.
5. Telephone interview with Marsha Prillwitz, Landscape Program Manager, Water Conservation Office, California Department of Water Resources, July 6, 1993.
6. Telephone interview with Susan Scallon, City of Austin, Texas, July 27, 1993.
7. The 1993 Federal Interdepartmental Weed Committee Report, estimated the extent of exotic species/weed infestations on federal lands as follows: Bureau of Land Management, 6 million acres; Forest Service, 4.9 million acres; Bureau of Indian Affairs, 1 million acres; Bureau of Reclamation, 1 million acres; National Park Service, 0.5 million acres; Fish and Wildlife Service, 0.5 million acres.
8. Telephone interview with Steve Harris, Vegetation Ecologist, Redwood National Forest, July 15, 1993.
9. Telephone interview with Dr. Garvey, National Arboretum, July 13, 1993.
10. Executive Order 12856, "Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements," August 3, 1993.
11. See discussion of the relationship between water and energy use in ENV03: Increase Energy and Water Efficiency.
12. See discussion of water conservation opportunities in federal facilities in ENV03: Increase Energy and Water Efficiency.

WHITE HOUSE OFFICE ON ENVIRONMENTAL POLICY

TO: Steve Harnath
FROM: Mary O'Leary
DATE: 3/14/94
FAX: _____

Number of pages including cover: 5

COMMENTS: Steve - here is draft I received
from work group on landscaping. It
still needs some help. Also, they
gave me a letter for Katie - but I
don't think Bonnie ever reviewed it &
I think it needs some help too - so I



315-3746
PHONE - (202) 456-6224 FAX - (202) 456-6220
OLD EXECUTIVE OFFICE BUILDING, ROOM 360
WASHINGTON, DC 20501

won't be
forwarding
it to
her. See
you at
10 -
I'm in Room
31 of
722 Jackson
Place.
Please forward
to Holly also.
Mary

Section 1: Objectives

all new Federal landscaping designs on fed. gds + projects.
Agencies
1. ~~Wherever appropriate~~, agencies shall use regionally appropriate native plants on Federal grounds and projects. Degraded or altered Federal grounds shall be restored with regionally appropriate native plants. Agencies shall use construction practices that minimize impacts on the natural habitat.

2. Agencies shall prevent pollution and practice maintenance techniques that preserve the landscape, such as reduced fertilizer and herbicide use, use of integrated pest management, recycle green waste, and minimize runoff.

3. Agencies shall implement efficient water-use practices *feasible* ~~where appropriate~~, such as selecting and siting appropriate plants; using mulches, efficient irrigation systems, and reclaimed/recycled water.

4. Guidance

a. The Federal Environmental Executive shall establish an interagency working group to develop recommended guidelines by December 1994 for implementation of this order.

b. The Federal Environmental Executive shall issue guidelines to implement this order by February 1995.

c. Federal agencies shall incorporate these guidelines into their landscaping programs by February 1997; Federal agencies shall conduct employee training to ensure all guidelines are implemented by February 1997.

5. Demonstrations

Agencies shall promote public education and awareness through demonstrations and information sharing. Where appropriate, demonstration projects on Federal grounds and projects shall include: native plants, resource-efficient technologies, and best management practices for environmental beneficial landscapes.

a. By the Spring of 1996, Federal agencies shall create outdoor demonstrations of environmentally beneficial landscaping.

b. By the Spring of 1997, Federal agencies shall provide ~~an~~ ^sevaluation of the demonstrations to the Federal Environmental Executive.

6. The Department of Agriculture, through its Agricultural Research Service, shall conduct research on the suitability, production, and use of native species as landscape plants. The Department will publicize the research results.

EXECUTIVE ORDER**ENCOURAGING THE USE OF ENVIRONMENTALLY BENEFICIAL
LANDSCAPING ON FEDERAL GROUNDS OR PROJECTS.**

WHEREAS, a unique opportunity exists to lead by example in the use of environmentally beneficial landscaping on Federal grounds or projects;

WHEREAS, the use of native plants enhances naturally occurring habitats by providing species ~~naturally occurring habitats by providing species~~ naturally adapted to existing conditions;

WHEREAS, the use of integrated pest management, native plants, and reduced water, fertilizers, herbicides, pesticides, and energy will enable the Federal government to become a leader in protecting the environment and pursuing economically beneficial solutions;

WHEREAS, the use of environmentally beneficial landscaping enhances wildlife habitat, improves erosion control, proves hardy to a region, reduces water runoff and pollutants, and limits the use of energy, and reduces maintenance costs and requirements for chemicals, irrigation, and mowing;

WHEREAS, the use of environmentally beneficial landscaping will provide additional educational opportunities for citizens to better understand their region of the United States which they have inherited and within which they live;

WHEREAS, the development and promotion of research, scientific knowledge, and technologies will identify options in environmentally beneficial landscaping and suitable sources of plant materials, so that existing native plant populations are not exploited.

NOW, THEREFORE, I, WILLIAM JEFFERSON CLINTON, by the authority vested in me as President by the Constitution and the laws of the United States of America, direct that, effective immediately landscaping accomplished on Federal grounds and projects shall be environmentally beneficial.



United States
Department of
Agriculture

Agricultural
Research
Service

Beltsville Area
United States
National Arboretum

3501 New York Ave., N.E.
Washington, D.C.
20002

FACSIMILE TRANSMISSION

TO: Stephen Warnath
Domestic Policy Council
456-7028

FAX NUMBER: _____

FROM: Thomas S. Elias
Director

FAX NUMBER: 202-475-5252 TELEPHONE NUMBER: 202-245-4539

MESSAGE: For your information.

DATE: March 8, 1994 PAGES SENT: 4

IF ALL PAGES ARE NOT RECEIVED CALL: 202-245-4539



United States
Department of
Agriculture

Agricultural
Research
Service

Beltsville Area
United States
National Arboretum

3501 New York Ave., N.E.
Washington, D.C.
20002

March 7, 1994

SUBJECT: Executive Order\

TO: Landscaping Executive Order Drafting Group

FROM: Thomas S. Elias *TSE*
Director

I thought the enclosed Executive Order relating to exotic organisms would be of interest to you in light of our discussion last Friday. This Executive Order dealt very effectively and concisely with the subject.

Enclosure

Title 3 - The President

Executive Order 11987

May 24, 1977

EXOTIC ORGANISMS

By virtue of the authority vested in me by the Constitution and statutes of the United States of America, and as President of the United States of America, in furtherance of the purposes and policies of the Lacey Act (18 U.S.C. 42) and the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.), it is hereby ordered as follows:

Section 1. As used in this Order:

(a) "United States" means all of the several States, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, the Virgin Islands, Guam, and the Trust Territory of the Pacific Islands.

(b) "Introduction" means the release, escape, or establishment of an exotic species into a natural ecosystem.

(c) "Exotic species" means all species of plants and animals not naturally occurring, either presently or historically, in any ecosystem of the United States.

(d) "Native species" means all species of plants and animals naturally occurring, either presently or historically, in any ecosystem of the United States.

Sec. 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 purposes of introducing such species into ecosystems outside the United States where they do not naturally occur.

(d) This 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.

Sec. 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.

/s/ Jimmy Carter

THE WHITE HOUSE

May 24, 1977

[FR Doc.77-15120 Filed 5-24-11; 1:41 pm]

(from Federal Register, vol 42, No 101 Wed. May 25, 1977;
page 26949-26950)

DRAFT

EXECUTIVE ORDER

- - - - -

USE OF NATIVE PLANTS FOR LANDSCAPING FEDERAL PROPERTIES OR
FEDERALLY SUPPORTED PROJECTS

①

WHEREAS a unique opportunity exists to lead by example in the use of ~~native plants for landscaping Federal property or Federal projects;~~
environmentally beneficial grounds and projects;

move
to M. Rize
draft

WHEREAS the use of native plants, those known to naturally exist as elements of the ecoregion within which the planting will occur, provide the best opportunity to provide economical and subtainable plantings;

WHEREAS the technologies and practices such as Xeriscape Landscaping and integrated pest management are available;

WHEREAS the use of native plants reduces maintenance costs due to lower requiraments for chemicals, irrigation, and mowing;

② WHEREAS the use of native plants enhances naturally occurring habitats by providing species naturally adapted to existing conditions;

⑤

WHEREAS the use of ~~naturally occurring plants~~ *enviro. benef. landscaping* will provide additional educational opportunities for citizens to better understand the ecoregion which they have inhereted and within which they live;

NOW, THEREFORE, I, WILLIAM J CLINTON, by the authority vested in me as President by the Constitution and the laws of the United States of America, direct that, effective immediately, landscaping accomplished on Federal properties and on Federally supported projects will be done with native plants.

DRAFT

EXECUTIVE ORDER

ENCOURAGING THE USE OF ENVIRONMENTALLY BENEFICIAL LANDSCAPING AND REQUIRING FEDERAL DEMONSTRATIONS

~~WHEREAS, the use of native plants is beneficial to increasing biodiversity and drawing attention to the value and protection of our natural heritage.~~

active voice: (3) WHEREAS, the federal government should become a leader in environmental solutions which are economically beneficial, such as integrated pest management, use of native plants, reducing the use of water, chemical fertilizers, herbicides, pesticides, and energy. ^{protect} ^{protecting the} ^{and pursuing} ^{will enable the Fed govt}

(4) WHEREAS, the federal government should use landscaping that enhances wildlife habitat, improves erosion control, proves hardy to a region, reduces water runoff and pollutants, and limits the use of energy.

(5) WHEREAS, the federal government should seek esthetically pleasing solutions that reflect character and local identity of each region of the United States, and develop by using or reintroducing native American plant species and materials.

combining (6) WHEREAS, the federal government should ^{development + promotion of} ^{develop + promote} ^{research} ^{will be done} share scientific knowledge, and technologies that result in environmentally beneficial landscaping with agency personnel, the public, and the school systems.

WHEREAS, the federal government should lead in research efforts to identify options in environmentally beneficial landscaping and suitable sources of plant materials, so that existing native plant populations are not exploited.

NOW, THEREFORE, I, WILLIAM JEFFERSON CLINTON, by the authority vested in me as President by the Constitution and the laws of the United States of America, direct that, effective immediately landscaping accomplished on Federal ^{grounds} ~~properties~~ and on Federally supported ^{or funded} ~~projects~~ will be ^{done} ~~done with~~ native plants, ^{best management} ~~practices (planning) and resource-saving technologies.~~ ^{environmentally benef} ^{landscaping} ^{methods} ?

1. Merge guidance & requirements sections
2. Need to define the federal property you are talking about (Federal lands includes BLM etc. which is bigger than we are addressing) - Maybe federal grounds is a better term
3. Need to use consistent terms "resource-saving technologies" vs. resource-efficient

SECTION 1 - OBJECTIVES

1. Agencies shall use regionally appropriate native plants in all new federal landscape designs and federally-funded projects, where ~~feasible~~. Degraded or altered ~~lands on federal property~~ shall be restored ~~to~~ regionally appropriate native plants.

2. Agencies shall prevent pollution and practice maintenance techniques that preserve the landscape, ~~reduce~~ ^{such as} fertilizer and herbicide use, ~~employ~~ ^{use of} integrated pest management (IPM), ~~recycle~~ ^{jargon} green waste, and irrigate only as necessary.

3. Agencies shall implement efficient water-use practices where ~~practical~~, such as selecting and siting appropriate plants; using efficient irrigation systems, reclaimed/recycled water and mulches; and limiting use of turf to practical areas.

4. ~~Agencies shall promote~~
Public education and awareness shall be promoted through demonstrations and shared information. Wherever possible, demonstration projects on federal ~~property~~ and federally-funded projects shall include: native plants, best management practices and resource-efficient technologies.

5. ~~Direct~~ the Department of Agriculture, through its Agricultural Research Service, ~~to~~ ^{shall} conduct research on the suitability, production and use of native species as landscape plants.

SECTION 2 - GUIDANCE

~~The Federal Environment Executive, in consultation with all agencies, will provide guidance by the spring of 1995 to implement the objectives. The representatives from all agencies should have a background in either Landscape Architecture, Horticulture, Soil Conservation, Irrigation, Entomology or plant materials and turf.~~

SECTION 3 - REQUIREMENTS

a. By the Spring of 1996, Federal agencies shall create ^(number) outdoor demonstrations of environmentally beneficial landscaping using native plants and long-term environmental maintenance technologies.

Intrusive construction practices not in here.

Need to define

what is the difference between recycled green waste and reclaimed/recycled mulch. Is use of mulch an efficient H2O use practice - is it more important to have it in 2 or 3?

Move under new Section 1 #5

do you want to say something like

federal grounds? efficient irrigation is in both - redundant?

What is a practical area - we'll need to clarify

- define

DRAFT
8-Mar-94
M.L. RIZE

under new #5

— b. By the spring of 1996, Federal agencies shall provide a preliminary review of what worked and what did not. — with the demonstrations?

~~a. By the year 2000, Federal agencies shall establish government-wide environmentally sound landscape practices using native plants and environmentally beneficial landscaping where appropriate, in all federal agencies and federally-funded projects.~~

2

SECTION 2 - JUDICIAL REVIEW

OBJECTIVES

1. Native

2. Pollution prevention

3. H₂O efficient

4. GUIDANCE

a. The FEE shall establish an interagency working group to develop recommended guidelines for implementation of this order. by Dec. 1994

b. The FEE shall issue guidelines to implement this order by Feb. 1995.

c. Federal agencies shall incorporate these guidelines into their landscaping programs by Feb. 1996; by 2/97 all personnel shall be trained in these techniques.

5. Demonstrations (what you have in #4)

a.

b.

6. USDA research

timeline?
more time to
incorp. into
all landscaping

Department of
Veterans Affairs

National Cemetery System
Washington, DC 20420

Facsimile Cover Sheet

To: STEPHEN WARWATTA
Organization: DOMESTIC POLICE COUNCIL
Phone: 202 456 7117
Fax: 456 7028

From: MARTY RIZE
Organization: Technical Support Service (401B)
Phone: 202-275-1486/87
Fax: 202-275-0253

Sent By: MARTY RIZE
Date: 3-9-94

Pages including this cover
page: 4

Remarks:
PLEASE REVIEW AND PREPARE
AOT COMMENTS FOR FRIDAY'S
3/11 MEETING, AT WHICH TIME
WE WILL FINALIZE THIS
DOCUMENT.

Marty

DRAFT
8-Mar-94
M.L. RIZE

EXECUTIVE ORDER

.....
ENCOURAGING THE USE OF
ENVIRONMENTALLY BENEFICIAL
LANDSCAPING AND REQUIRING
FEDERAL DEMONSTRATIONS

WHEREAS, the use of native plants is beneficial to increasing biodiversity and drawing attention to the value and protection of our natural heritage.

WHEREAS, the federal government should become a leader in environmental solutions which are economically beneficial such as integrated pest management, use of native plants, reducing the use of water, chemical fertilizers herbicides, pesticides, and energy.

WHEREAS, the federal government should use landscaping that enhances wildlife habitat, improves erosion control, proves hardy to a region, reduces water runoff and pollutants, and limits the use of energy.

WHEREAS, the federal government should seek esthetically pleasing solutions that reflect character and local identity of each region of the United States, and develop by using or reintroducing native American plant species and materials.

WHEREAS, the federal government should share scientific knowledge and technologies that result in environmentally beneficial landscaping with agency personnel, the public, and the school systems.

WHEREAS, the federal government should lead in research efforts to identify options in environmentally beneficial landscaping and suitable sources of plant materials, so that existing native plant populations are not exploited.

NOW, THEREFORE, I, WILLIAM JEFFERSON CLINTON, by the authority vested in me as President by the Constitution and the laws of the United States of America, direct that, effective immediately landscaping accomplished on Federal properties and on Federally supported projects will be done with native plants, best management practices (planning) and resource-saving technologies.

Issues w/DOD?
Issues w/fed land abroad

DRAFT
8-Mar-94
M.L. RIZE

SECTION 1 - OBJECTIVES

1. Agencies shall use regionally appropriate native plants in all new federal landscape designs and federally-funded projects, where feasible. ^{Red. grass} ~~Degraded or altered lands on~~ federal property shall be restored to regionally appropriate native plants. ^{where appropriate?} Such as? What would this affect?

Agencies shall use ^{construction} practices which minimize impact on ~~existing habitat~~ natural habitat.

2. Agencies shall prevent pollution and practice maintenance techniques that preserve the landscape, reduce fertilizer and herbicide use, employ integrated pest management (IPM), recycle green waste, and ~~irrigate only as necessary.~~ minimize run-off.

3. Agencies shall implement efficient water-use practices where ^{appropriate} practical, such as selecting and siting appropriate plants; using ^{mulches,} efficient irrigation systems, reclaimed/recycled water and mulches; and limiting use of turf to practical areas.

^{Agencies shall promote} 4. Public education and awareness shall be promoted through demonstrations and shared information. Wherever ^{appropriate} possible, demonstration projects on federal property and federally-funded projects shall include: native plants, best management practices, and resource-efficient technologies. ^{explanations?}

5. ^{shall} Direct the Department of Agriculture, through its Agricultural Research Service to conduct research on the suitability, production and use of native species as landscape plants. Add something about regularly sharing this info. Publishing + circulating Suggested list of publishing.

SECTION 2 - GUIDANCE

^{taking need to define who this is.} The Federal Environment Executive, in consultation with all agencies, will provide guidance by the spring of 1995 to implement the objectives. The representatives from all agencies should have a background in either Landscape Architecture, Horticulture, Soil Conservation, Irrigation, Entomology or plant materials and turf.

SECTION 3 - REQUIREMENTS

a. By the Spring of 1996, Federal agencies shall create ^{regional?} outdoor demonstrations of environmentally beneficial landscaping using native plants and long-term environmental maintenance technologies.

? How would they know? Spring 1997 **DRAFT**
~~Winter 1996~~ **8-Mar-94**
M.L. RIZE

b. By the spring of 1996, Federal agencies shall provide a preliminary review of what worked and what did not.

c. By the year 2000, Federal agencies shall establish government-wide environmentally sound landscape practices using native plants and environmentally beneficial landscaping, where appropriate, in all federal agencies and federally-funded projects.

SECTION 4 - JUDICIAL REVIEW

Enviro Landscaping

- OEP will coordinate a working grp?

- rep fr every A which has demo project to produce guidance

→ OEP to provide guidance to implement goals

→ No - fed enviro exec.

Report to WG on demo's

Not recommending prospective or retrospective landscaping
- up to the A. Not talking about relandscaping.

Landscaping contra to Historic Preservation? Lots of DC bldgs ~~which~~ have historic ~~plant~~ landscaping assoc. w/ it which aren't indigenous. ~~Not going~~

- Not going to tear up lawns & replace w/ native grass.

"in-ground demos" - not in pots, not interior → outdoor ~~not~~

☑ No law on this - filling a void. Guidance to contracting area - - poll'n prevention

Do we want the Pres. def'g "native plant" esp b/c ~~controversy~~
- what does "Greening of W.H.H." EO say? Announcement of it haven't been made

Should cultivated forms ~~developed fr. native~~ ~~indigenous~~ plants be included?

If we don't allow them, do we severely limit choices; run into ESA problems; maintenance prob's b/c hybrids are harder, salt-resistant, etc.

Better adapted to urb./suburb enviro.

Barford pears.

→ use native plants w/o defining

SW - pb. ID the contriv. areas + who will be upset.

Changes:

for guidance

Date: fed enviro exec. @ EPA mor approp.

- so long as Interagency grp.

Take "xeriscape" out b/c trademark → use ^{enviro} ben ef landmk.

→ EO vs Pres. memo? Wouldn't make a diff for Earth Day announcement.

Debra + Joan on objectives §
Tom + Marty on whereas

→ March 11 ~~on~~ Friday ~~at 11:30~~ 1-3pm ←
722 Jackson

⑧ Send comments in to Marty by Tues.

March 7, 1994

MEMORANDUM FOR BRIAN BURKE

FROM: HOPE SCHMELTZER

SUBJECT: ENVIRONMENTAL LANDSCAPING MEETING

The proposed environmental landscaping executive order will direct agencies to create outdoor, in-ground demonstrations of environmental landscaping by 1996. In addition, it encourages the use of native plants on all new landscapes and environmental techniques wherever possible. Agencies have discretion in selecting the site for the demonstration projects. The Federal Environmental Executive at EPA will coordinate a working group which will provide agencies with guidance for the demonstration projects, by Spring, 1995.

There is no current law requiring any particular methods of gardening or of plant selection. Inertia and lack of knowledge seem to be the primary reasons why agencies aren't doing this on their own. Agencies also have long-standing relationships with various nurseries and maintenance suppliers which add to difficulties in changing old habits. The NPR observed that the National Cemetery System and the National Arboretum¹ already use these methods.

Steve Warnath suggested that the group abstain from providing definitions in the order to avoid controversies. For example, the draft order included a definition of "native plants". There is a large debate over whether cultivated versions of native plants should be included in the definition. Omitting definitions would allow use of the term while side-stepping the controversy.

There is no reason why agency heads could not issue analogous orders to accomplish the same thing as the proposed executive order. As noted above, no laws or regulations mandate vegetation choice or pesticide use on federal lands. An executive order would cover all agencies at once, however, rather than the piecemeal coverage that would result from encouraging agency heads to take care of it themselves. In addition, agency heads may adopt different approaches. Uniformity would be another benefit to an executive order.

¹This assertion does not explain why the Interior Department representative said that the head of the Park Service couldn't wait to get started on this.

Native is ~~not~~
not defined in the order
and may be an area of
concern.

combine

e.g.?

maybe
define?
Fed!
Environmental
Executive

Why do
we need
it? What
is the
problem?

What?

What
methods?

What is
wrong
w/ old
habits?

One
issue
is
concern
is...
Why is
that
concern.

THE WHITE HOUSE
Office of the Press Secretary

For Immediate Release

April 22, 1994

EXECUTIVE ORDER

Requiring Agencies to Use Environmentally Beneficial Landscape Design to Meet Ecological Principles.

WHEREAS, the use of environmentally beneficial landscaping meets ecological, cultural, economical, functional, aesthetic, and educational principles;

WHEREAS, the Federal Government should set an example in the landscape design of facilities and the procurement of landscape design and maintenance services on federally-owned sites;

WHEREAS, the Federal Government will lead by example, beginning with the application of these principles to the White House and the Vice President's Residence;

NOW, THEREFORE, by the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Ecological and Environmental Values through the use of Native Plants.

- (a) Ecological.
- (b) Preservation. Agencies shall recognize the value of native habitats by minimizing intrusive construction practices which is destructive to the original habitat during construction and restore habitats following construction on all federal sites.
- (c) Economical.
- (d) Functional.
- (e) Aesthetic.
- (f) Education. Agencies shall promote environmental education and public awareness about natural heritage and environmentally beneficial practices, and shall train maintenance staff in their long-term benefits.
- (g) Research.
- (h) Cultural.

Section 2. Requirements.

- (a) Demonstrations. By the Spring of 1995, all agencies are required to create in-ground demonstrations of environmentally beneficial landscaping using native plants and long-term environmental maintenance technologies.
- (b) Review Sites. By Spring of 1996, agencies are required to provide a preliminary review of what worked and what did not.
- (c) Conversion. By the Year 2000, agencies are required to establish government-wide environmentally sound landscape practices using environmentally beneficial landscaping, where appropriate, in all federal agencies and funded projects.

Section 3. Definitions.

- (a) Environmentally-beneficial.
- (b) Zeriscape.
- (c) Native Plants.
- (d) Integrated Pest Management.
- (e) Natural Heritage.
- (f) Sustainable Design.

2B
strengthen
start: Fed. Enviro exec. to provide guidance w/w.G. by Spring 1995.

LANDSCAPING EXECUTIVE ORDER DRAFTING GROUP

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~~Environmental Protection Agency~~
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~~fax: 260-9437~~

MARCH 1, 1994

Changes to the rough, rough draft

Landscaping Executive Order

Assignments made as noted for 3-04-94

REQUIRING AGENCIES TO USE ENVIRONMENTALLY BENEFICIAL LANDSCAPING WHEREVER APPROPRIATE. (We agreed that appropriate appears to be a loophole. Counsel says it was purposeful after the original assessment of what would be possible in reality. This will encourage, not require desirable behavior.)

WHEREAS (We added objectives to be further defined by members)

- 1a. use native plants in landscaping to teach value of natural heritage. (Marty)
- 1b. preserve native habitat. (Allen)
2. landscaping will use less irrigation, mowing and chemicals. It will use IPM planning and reduce maintenance, conserve water, and incorporate green recycling. (Al)
3. landscaping will address erosion control, wildlife habitat needs, harsh environmental conditions, and plant hardiness to region. (Tom)
4. landscaping will address regional character, identity, natural beauty, enhancement and perhaps a more subtle esthetic. (Bonnie)
5. understanding such landscaping will be done through public awareness strategies, as well as training of involved staff, plus environmental education within our schools. (Allen)
6. strengthening the state of the art and science will continue through research accompanying such landscaping. Evaluations will be critical to future success. (Tom)

NOW, THEREFORE (the statement of action will be clarified on Friday)
(We want to bullet action items, and write them very simply.)

SECTIONS (these action statements must reflect objectives in WHEREAS)
(we must look at this more closely)

1. use of native plants (Bob & Bonnie)
2. reduce herbicides and promote IPM (Al & Marty)
3. use water efficient plants and technologies (Debra & Joan)
4. provide education (Bob)
5. establish a government-wide landscape approach/demonstrations (Allen)
6. DEFINITIONS: native plant, appropriate, natural heritage, xeriscape, environmentally beneficial.....
7. Judicial Review: boiler plate

EXECUTIVE ORDER

REQUIRING AGENCIES TO USE ENVIRONMENTALLY BENEFICIAL LANDSCAPING WHEREVER APPROPRIATE (cost effective, and practical) TO MEET ECOLOGICAL ECONOMICAL, FUNCTIONAL, ESTHETIC, AND EDUCATIONAL PRINCIPLES. ALL FEDERAL GOVERNMENT WILL LEAD BY EXAMPLE, BEGINNING WITH THE APPLICATION OF THESE PRINCIPLES TO THE WHITE HOUSE AND THE VICE PRESIDENT'S RESIDENCE.

WHEREAS (objectives of E.O.) a need for change

1. ecological/environmental.....value biodiversity of natural heritage by using native plants in landscaping and preserving (and restoring) native ecosystems
2. economical.....less irrigation, less mowing, less chemicals sustainable, self-reliant landscape, **reduce landscaping costs, conserve water**
3. functional.....needs of erosion control, wildlife habitat, drought tolerant, hardy to region
4. esthetic.....regional character and identity, a new, more subtle esthetic, natural beauty
5. educational....**improve conservation education** and public awareness about natural heritage

NOW, THEREFORE (the plan or statement of action)

.....require in-ground demonstrations of environmentally beneficial landscaping using native plants and environmental technologies by every agency by the spring of 1995.
.....by the spring of 1996 provide a preliminary review of what worked and what did not to determine "where appropriate"
.....convert to beneficial landscaping where appropriate in all federal agencies and funded projects by the year 2000.
(includes reference to existing statutes)

SECTIONS (implementation of action)

- 1.increase the use of native plant species (Bob & Bonnie)
- 2.reduce quantity of chemicals (Al & Marty)
- 3.use water-efficient technologies (Debra & Joan)
- 4.provide educational and conservation opportunities to public (?)
- 5.establish a government wide environmentally sound landscape program (?)
- 6.DEFINITION of "native plant", maybe "appropriate" (successful)
- 7.JUDICIAL REVIEW

////////////////////////////////////

TIMELINE:

One sentence for each "whereas" by Friday
Brainstorm "now, therefore" today
Rough draft each "section" regarding implementation by Friday
Definitions: brainstorm today

March 4, 1994

EXECUTIVE ORDER

ENCOURAGING THE USE OF
ENVIRONMENTALLY BENEFICIAL LANDSCAPING *and*
(requiring ~~the use~~ of environmentally
beneficial ~~landscape design to meet~~
ecological principles) *✓ demos*

WHEREAS, the use of native plants is beneficial to increasing biodiversity and drawing attention to the value and protection of our natural heritage.

WHEREAS, the federal government should become a leader in environmental solutions which are economically beneficial such as integrated pest management, xeriscaping, use of native plants, reducing the use of water, chemical fertilizers, herbicides, pesticides, and energy.

WHEREAS, the federal government should use landscaping that enhances wildlife habitat, improves erosion control, proves hardy to a region, reduces introduced species, reduces water runoff and pollutants, and limits the use of energy.

WHEREAS, the federal government should seek esthetically pleasing solutions that reflect character and local identity of each region of the United States, and develop a new esthetic based on natural beauty that is America.

WHEREAS, the federal government should share scientific knowledge and technologies that result in environmentally beneficial landscaping with agency personnel, the public, and the school systems.

WHEREAS, the federal government should lead in research efforts to identify options in environmentally beneficial landscaping and provide suitable sources of plant materials, so that existing native plant populations are not exploited.

NOW, THEREFORE, I, WILLIAM JEFFERSON CLINTON, by the authority vested in me as President by the Constitution and the laws of the United States of America, direct that, effective immediately (as soon as practicable), landscaping accomplished on Federal properties and on Federally supported projects will be done with native plants, best management practices (planning) and resource-saving technologies. To demonstrate my support, I am asking the National Park Service today to develop an environmentally beneficial landscape plan for the White House grounds and the residence of the Vice President, to be on my desk by _____ (date) *ⓧ*.

*Mary + Steve will investigate
whether good idea*

SECTION 2A Obj's

- a 1. Agencies shall encourage the use of native plants on all federal grounds new landscape and federally-funded projects. Every effort shall be made to restore regionally appropriate native plants to all degraded or altered lands on federal property.
- b 2. Agencies shall reduce herbicide use and apply technologies like integrated pest management, environmentally sensitive irrigation systems with gray water, green recycling wherever practicable.
→ reclaimed, recycled H₂O - avoid contr. v.
- c 3. Agencies shall implement practices that reduce water use, such as xeriscaping, gray water reuse, native plants adapted to regional precipitation, limiting use of turf to functions like recreation, and mulching of plants.
- d 4. Agencies shall help the public utilize environmentally beneficial landscaping through demonstrations and shared information.
- e 5. Agencies shall make every effort to use native plants, best management practices, and resource-saving technologies in demonstrations on federal property and federally-funded projects. Following an evaluation, effort should be made to apply this knowledge nationwide.

see Int. fax for 2B

6. DEFINITIONS:

NATIVE PLANT - a plant species known to occur in an area at the time of human settlement (an herbaceous plant, vine, shrub or tree that is indigenous to an area and known to have existed in that area before significant human influence.)

~~take word out.~~
~~take word out.~~
XERISCAPING - landscaping that protects the environment through planning and design, soil analysis and improvements, appropriate plant selection, practical turf areas, efficient irrigation, mulching, and appropriate maintenance.

NATURAL HERITAGE - the soils, water, and vegetation that existed before human development.

APPROPRIATE - suitable or compatible with a site based on analysis of existing and historical conditions, as well as future human use.

ENVIRONMENTALLY BENEFICIAL - ecologically, economically and functionally sound decision-making

INTEGRATED PEST MANAGEMENT -

7. JUDICIAL REVIEW: boiler plate by Stephen Warnath

TO: Katie McGinty
FROM: Brian Johnson
Mary O'Lone

Mary,
from KM

DATE: February 10, 1994

RE: National Performance Review Landscaping Executive Order

Attached for your review are three versions, with minor variations, of letters we would like to send to Secretaries requesting a representative for the landscaping executive order drafting group. There are a variety of agencies that will be involved in implementing the executive order, so the lead agency in the drafting process is not apparent. During the issue development stage of the NPR, the two people most enthusiastic about the executive order were Bonnie Harper-Lore of the Federal Highway Administration's Wildflower Program and Marty Rize of the Veteran's Administration's National Cemetery System. We would like Bonnie to lead the drafting group.

Mary spoke with Bonnie this week and she is excited to work on the executive order. Bonnie is a landscape architect, has taught landscape architecture at the University of Minnesota, and is DOT's landscaping expert. She has an extensive background working with native plant species. Before US DOT, she worked for the Minnesota Department of Transportation and with the National Wildflower Research Center (Lady Bird Johnson's organization). Bonnie pointed out that Minnesota and Texas have both recently enacted legislation directing their agencies to use only native plant species and that many municipalities have ordinances on water use and plant species in landscaping.

We do not expect the drafting to take long and are trying to have the executive order signed as part of the Earth Day package. As Brian told you in your meeting, we plan to host the initial meeting of the drafting group by the end of this month. We will give them a month or so to develop a good draft, ready for White House and interagency review.

THE WHITE HOUSE
WASHINGTON

February 14, 1994

TO: Jesse Brown
Secretary of Veterans Affairs

FROM: Katie McGinty *BMG*
Director
White House Office on Environmental Policy

SUBJECT: National Performance Review Landscaping Executive Order

Vice President Gore presented the Report of the National Performance Review to President Clinton on September 7, 1993, which contained recommendations for a series of environmental actions including ones on landscaping. Now it is time to begin work to fulfill the President's commitment to issue an executive order to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects.

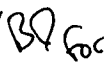
The Office on Environmental Policy is forming an interagency work group to draft the landscaping executive order. Marty Rize of your National Cemetery System, proved an excellent source of information and technical knowledge for the staff of the National Performance Review that developed the landscaping recommendation. The efforts of the National Cemetery System to use native plants and reduce landscaping maintenance costs provides a positive example for the rest of the federal government and the nation.

It is important that the drafting group have the benefit of your department's expertise in this area, which is why I request that you appoint Mr. Rize to our drafting group. Please direct your representative to contact Mary O'Lone by February 22, 1994, at (202) 395-3706. I very much appreciate your assistance in this endeavor.

THE WHITE HOUSE
WASHINGTON

February 14, 1994

TO: Mike Espy
Secretary of Agriculture

FROM: Katie McGinty 
Director
White House Office on Environmental Policy

SUBJECT: National Performance Review Landscaping Executive Order

Vice President Gore presented the Report of the National Performance Review to President Clinton on September 7, 1993, which contained recommendations for a series of environmental actions including ones on landscaping. Now it is time to begin work to fulfill the President's commitment to issue an executive order to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects.

The Office on Environmental Policy is forming an interagency work group to draft the landscaping executive order. The efforts of the National Arboretum to use integrated pest management techniques and reduce landscaping maintenance costs provides a positive example for the rest of the federal government and the nation. It is important that the drafting group have the benefit of your department's expertise in this area, which is why I request that you appoint a representative from your department to our drafting group. Please direct your representative to contact Mary O'Lone by February 22, 1994, at (202) 395-3706. I very much appreciate your assistance in this endeavor.

THE WHITE HOUSE
WASHINGTON

February 14, 1994

TO: Federico Pena
Secretary of Transportation

FROM: Katie McGinty 
Director
White House Office on Environmental Policy

SUBJECT: National Performance Review Landscaping Executive Order

Vice President Gore presented the Report of the National Performance Review to President Clinton on September 7, 1993, which contained recommendations for a series of environmental actions including ones on landscaping. Now it is time to begin work to fulfill the President's commitment to issue an executive order to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects.

The Office on Environmental Policy is forming an interagency work group to draft the landscaping executive order. Bonnie Harper-Lore, your Wildflower/Treeways Coordinator, proved an excellent source of information and technical knowledge for the staff of the National Performance Review that developed the landscaping recommendation. It is important that the drafting group have the benefit of your department's expertise in this area, which is why I request that you appoint Ms. Harper-Lore to our drafting group. Please direct your representative to contact Mary O'Lone by February 22, 1994, at (202) 395-3706. I very much appreciate your assistance in this endeavor.

THE WHITE HOUSE
WASHINGTON

February 14, 1994

TO: Sherri Goodman
Deputy Under Secretary for Environmental Security

FROM: Katie McGinty 
Director
White House Office on Environmental Policy

SUBJECT: National Performance Review Landscaping Executive Order

Vice President Gore presented the Report of the National Performance Review to President Clinton on September 7, 1993, which contained recommendations for a series of environmental actions including ones on landscaping. Now it is time to begin work to fulfill the President's commitment to issue an executive order to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects.

The Office on Environmental Policy is forming an interagency work group to draft the landscaping executive order. It is important that the drafting group have the benefit of your department's expertise in this area, which is why I request that you appoint a representative from your department to our drafting group. Please direct your representative to contact Mary O'Lone by February 22, 1994, at (202) 395-3706. I very much appreciate your assistance in this endeavor.

THE WHITE HOUSE
WASHINGTON

February 14, 1994

TO: Carol Browner
Administrator, Environmental Protection Agency

FROM: Katie McGinty *BM*
Director
White House Office on Environmental Policy

SUBJECT: National Performance Review Landscaping Executive Order

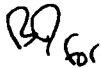
Vice President Gore presented the Report of the National Performance Review to President Clinton on September 7, 1993, which contained recommendations for a series of environmental actions including ones on landscaping. Now it is time to begin work to fulfill the President's commitment to issue an executive order to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects.

The Office on Environmental Policy is forming an interagency work group to draft the landscaping executive order. It is important that the drafting group have the benefit of your agency's expertise in this area, which is why I request that you appoint a representative from your agency to our drafting group. Please direct your representative to contact Mary O'Lone by February 22, 1994, at (202) 395-3706. I very much appreciate your assistance in this endeavor.

THE WHITE HOUSE
WASHINGTON

February 14, 1994

TO: Roger Johnson
Administrator, General Services Administration

FROM: Katie McGinty 
Director
White House Office on Environmental Policy

SUBJECT: National Performance Review Landscaping Executive Order

Vice President Gore presented the Report of the National Performance Review to President Clinton on September 7, 1993, which contained recommendations for a series of environmental actions including ones on landscaping. Now it is time to begin work to fulfill the President's commitment to issue an executive order to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects.

The Office on Environmental Policy is forming an interagency work group to draft the landscaping executive order. It is important that the drafting group have the benefit of your agency's expertise in this area, which is why I request that you appoint a representative from your agency to our drafting group. Please direct your representative to contact Mary O'Lone by February 22, 1994, at (202) 395-3706. I very much appreciate your assistance in this endeavor.

THE WHITE HOUSE
WASHINGTON

February 14, 1994

TO: Bruce Babbitt
Secretary of the Interior

FROM: Katie McGinty *BMG*
Director
White House Office on Environmental Policy

SUBJECT: National Performance Review Landscaping Executive Order

Vice President Gore presented the Report of the National Performance Review to President Clinton on September 7, 1993, which contained recommendations for a series of environmental actions including ones on landscaping. Now it is time to begin work to fulfill the President's commitment to issue an executive order to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects.

The Office on Environmental Policy is forming an interagency work group to draft the landscaping executive order. It is important that the drafting group have the benefit of your department's expertise in this area, which is why I request that you appoint a representative from your department to our drafting group. Please direct your representative to contact Mary O'Lone by February 22, 1994, at (202) 395-3706. I very much appreciate your assistance in this endeavor.

LANDSCAPING EXECUTIVE ORDER DRAFTING GROUP

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~~Rich Gold~~ JOAN WARREN
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✓ John Stanberry
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Allen Kraft
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fax: — 9437

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fax: (202) 501-3296

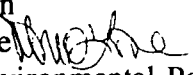
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N^o Department of Agriculture
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fax: ✓
Director of National
Laboratory

THE WHITE HOUSE
WASHINGTON

TO: Bonnie Harper-Lore, Department of Transportation
Marty Rize, Department of Veterans Affairs
Allen McReynolds, Department of the Interior
John Stanberry, General Services Administration
Debra Yap, General Services Administration
Peter Boice, Department of Defense
Rich Gold, Environmental Protection Agency

FROM: Brian Johnson
Mary O'Lone 
Office on Environmental Policy

DATE: February 23, 1994

RE: First Meeting of Landscaping Executive Order Drafting Group

Vice President Gore's National Performance Review contained recommendations for a series of environmental actions including issuing an executive order to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects. Katie McGinty, the Director of the Office on Environmental Policy, asked the heads of several departments and agencies to nominate representatives to an interagency work group to draft the landscaping executive order. You have been selected by your department or agency to participate on the drafting group. The Department of Agriculture has not yet named its representative.

The initial meeting of the group will be held from 2:30 - 4:00 p.m. on Friday, February 25th in the Jackson Room of the White House Conference Center, located at 726 Jackson Place, NW. Attached is a recent draft of the landscaping Accompanying Report from the National Performance Review which outlines major provisions of the executive order. Please review it prior to the meeting.

We are planning to issue the executive order as a part of the Earth Day 1994 announcements, which means the drafting group will need to begin work immediately. We have asked Bonnie Harper-Lore of the Department of Transportation to chair the drafting group. Bonnie plans to use a portion of Friday's meeting as a working session. We look forward to working with you on this project.

Attachment

ENV04: INCREASE ENVIRONMENTALLY AND ECONOMICALLY BENEFICIAL LANDSCAPING



BACKGROUND

The federal government makes landscaping and planting decisions for a wide variety of federal facilities, including military bases, park facilities, highway projects, and veterans' cemeteries.¹ These decisions significantly affect the health of the natural systems on which we depend.

Environmentally beneficial landscaping considers the make-up of the native ecosystem where the landscaping is done and strives to protect it. It is designed to minimize the effects that the landscaping will have on the surrounding environment by giving preference to regionally native plant species. It also emphasizes the use of water-conserving techniques such as efficient irrigation systems and drought-resistant plants; and the reduced use of chemical fertilizers, pesticides, and herbicides.

At every level of government environmentally beneficial landscaping policies and activities are being implemented. For example, the 1987 Wildflower Act requires that 25 cents out of every \$100 of landscape funding be used to plant wildflowers in federally financed highway projects.² This law, however, does not require the use of wildflower species native to the project area.

The Department of Veterans Affairs stresses the use of native plants in its National Cemetery System to reduce mowing and water costs.³

The federal government also has programs that combine educational and conservation opportunities. For example, the Department of Agriculture's Soil Conservation Service helps schools and communities develop outdoor learning centers.⁴ These centers provide opportunities to teach mandatory subjects, such as science, math or English using environmental and conservation examples. The local centers can satisfy traditional educational requirements while meeting specific conservation objectives. For example, children help design, plant, and maintain a row of trees near their school to reduce energy costs. Throughout the project, they learn the math and physics, for example, of energy conservation. At the same time, they learn how to choose environmentally appropriate tree species and how to care for them.

Several states and cities are also beginning to recognize the value of planting native species, and it is reflected in their laws and ordinances. For example, Minnesota recently passed a law to study the feasibility of requiring only native plants on public lands.

In California, state law mandates cities to institute local ordinances that require citizens to use water conservation practices in their landscaping activities.⁵ The city of Austin, Texas has several ordinances that require city planners and developers to consider the environmental impacts of their actions.⁶ These ordinances include requiring the use of native species in plantings, the protection of trees on development sites, and the use of integrated pest management practices. They also require the use of water conservation techniques in plans, and the preservation of fragile ecosystems at development projects.

NEED FOR CHANGE

The federal government should serve as an example of how landscaping can incorporate environmentally beneficial practices and be both beautiful and economical.

Preserve Native Ecosystems. Native plants add value to the complex ecosystems of which they are a part. The right selection of plants provides appropriate habitat for wildlife, creating resources for food, shelter, and nesting areas. The use of native plants can also reduce landscaping costs and pollution. In many parts of the country, however, they are not used in landscaping: sometimes because exotic species have edged them out, sometimes because they are simply not commercially available, and sometimes because they are not deemed attractive.

The introduction of exotic plants can have costly environmental and economic consequences. Throughout the country, there are approximately 14 million acres of federal lands that are infested with exotic weed species (such as English ivy).⁷ For example, in California's Redwood National Forest biologists have identified 150 plant species as hazardous to the natural ecosystem. Their budget, however, provides only enough funding to do basic research on management strategies for 10 of these exotic species.⁸

Many native landscaping plants are not commercially available. Few nurseries maintain sufficient stocks of native trees, shrubs, grasses, and wildflowers in the size and quantity to meet the federal government's landscaping needs. Government specifications that require the use of native species do not always allow enough time for nurseries to develop stock. As a result, nurseries that are interested in developing a more diverse inventory of native plant species do not do so because they cannot grow them fast enough to satisfy the specifications. Therefore, few nurseries bid on the published proposals. In addition, nurseries are hesitant to enter the market because of uncertain demand, again reducing the selection of native species available to federal landscape architects.

Improve Conservation Education.

Current federal environmental and conservation educational programs do not fully exploit the opportunity for public-private partnerships in education and conservation. There are many opportunities the federal government can take to set an example and provide outreach activities to the public. The federal government is in the position to be a model for the preservation of our biological cultural heritage. Government grounds can be excellent examples of the diversity of native plant species in an area.

Reduce Landscaping Costs. Maintenance costs can be reduced because native grasses and wildflowers do not require frequent mowing, irrigation, or fertilization. Reduced mowing lowers costs of labor, tractor repair, and fuel. It also reduces pollution.

Chemical fertilizers, pesticides, and herbicides, and irrigated water expenditures can be reduced because native plants are better suited to the climate, and the local insect and animal population. Therefore, they require reduced quantities of irrigated water and chemical fertilizers, herbicides, and pesticides to thrive.

The use of integrated pest management (IPM) can further reduce agency expenditures for chemical fertilizers and pesticides.

IPM is a method of pest control that uses biological methods to control damaging pests. For example, sterile insects can be introduced in an area to mate with the existing population thereby reducing their ability to reproduce and eventually their population size. This method of pest control also includes surveying infested areas and planning pesticide applications to coincide with the most vulnerable stage of the target insect population's development. This avoids blanket preventative spraying.

Implementation of effective IPM programs can reduce chemical usage and costs significantly. The National Arboretum, for example, reduced its expenditures for chemical pesticides by an estimated 75 percent when it switched to IPM.⁹ Purchasing chemicals only on an as-needed basis can achieve cost savings not only by requiring fewer purchases, but also by avoiding disposal costs for unused chemicals.

The use of chemicals to maintain grounds contributes to environmental, health, and safety problems. Reduced use of chemicals lowers the possibility of contaminated runoff into rivers and ground water. Chemical reductions can assist agencies in achieving compliance with the pollution prevention Executive Order, which calls for a 50 percent reduction in toxic substance use by federal agencies.¹⁰

Conserve Water. Water used to irrigate lawns and landscapes can account for significant proportions of total water use during peak watering season. The selection of native plants that are adapted to the particular climate can reduce water demand by requiring less irrigated water. Grasses and trees should be selected in part based on how much water they consume. Species that are particularly thirsty should not be used in arid areas where normal rainfall does not meet most of the plant's water needs. Reduced water use conserves the fresh water supply for both the natural environmental systems and the human population.

Accordingly, federal parks, golf courses, and cemeteries should select grass varieties carefully, install efficient irrigation technolo-

gies, and schedule irrigation times according to turf needs and weather conditions. All landscapes, especially large grassy areas, should have their water needs audited to ensure that plants are receiving the appropriate level of water. Overwatering results in additional water costs, as well as unnecessary use of energy.¹¹

ACTION

Issue a directive to require the use of environmentally beneficial landscaping at federal facilities and federally-funded projects, where appropriate. (2)

The President should issue a directive by May 1994 to:

- require agencies to use environmentally beneficial landscaping wherever appropriate, cost effective, and practical;
- stress the links between landscaping decisions, protection and enhancement of the environment, and cost-saving opportunities; and
- announce that the federal government will lead by example through the implementation of environmentally beneficial landscaping principles at the White House and the Vice President's residence at the Naval Observatory.

Increase the use of native plant species in all federal landscaping activities. The directive should also:

- encourage the use of native trees, shrubs, grasses, and wildflowers in landscaping;
- encourage agencies to develop specifications with enough flexibility to encourage nurseries to develop sufficient stocks of native plant species; and
- direct the Department of Agriculture, through its Agricultural Research Service and/or the Soil Conservation Service, to conduct research on the production and use of native species as landscape and conservation plants.

Reduce the quantity of chemicals applied to federal landscapes. The directive should encourage agencies to:

- reduce their use of chemical fertilizers, pesticides, and herbicides; and
- use an IPM approach to pest control.

Use water-efficient technologies in federal landscaping projects. The directive should also:

- encourage agencies to use water-efficient technologies to the maximum extent practicable;
- encourage the use of water audits, where appropriate, to establish exact needs and assist in planning irrigation systems and scheduling; and
- encourage agencies to participate in water utility conservation and rebate programs.¹²

Provide educational and conservation opportunities to the public. The directive should encourage agencies to:

- sponsor and participate in activities that provide educational and conservation opportunities to the public, and
- prepare interpretive exhibits and signs explaining the plantings and the special techniques used in landscaping to enhance the environment.

Establish a governmentwide environmentally sound landscape program. The White House Office on Environmental Policy (OEP) should establish an interagency working group by July 1994 to develop recommendations for an Environmentally Sound Landscape Program that would:

- provide incentives to federal facility and landscape managers to consider the environmental implications of their landscaping plans;
- recognize the contributions and efforts of individual managers; and

- create an annual award to agencies that made significant strides in implementing the directive.

The actions should be reported to the Office on Environmental Policy by December 1994 and should include guidelines to federal facility managers on how to increase the use of native species, reduce the use of chemical fertilizers and pesticides, and implement water conservation techniques. These guidelines should allow for climactic and geographic differences, but should provide a framework for agencies to consider as they plan their landscape requirements. The working group should also establish criteria for agency recognition.

Endnotes

1. To provide an idea of the extent of federal landscaping efforts, note that the Federal Highway Administration spent over \$77.8 million on landscaping projects in 1992. The Department of Veterans Affairs maintains 114 cemeteries throughout the country encompassing 10,000 acres, and the Department of Defense manages 25 million acres of land some of which must be landscaped and maintained.
2. See *The Surface Transportation and Uniform Relocation Assistance Act of 1987*.
3. Telephone interview with Marty Rize, National Cemetery System, Veteran's Administration, July 14, 1993.
4. Interview with Tom Leverman, Head, Educational Relations, Soil Conservation Service, USDA, July 19, 1993.
5. Telephone interview with Marsha Prillwitz, Landscape Program Manager, Water Conservation Office, California Department of Water Resources, July 6, 1993.
6. Telephone interview with Susan Scallon, City of Austin, Texas, July 27, 1993.
7. The 1993 Federal Interdepartmental Weed Committee Report, estimated the extent of exotic species/weed infestations on federal lands as follows: Bureau of Land Management, 6 million acres; Forest Service, 4.9 million acres; Bureau of Indian Affairs, 1 million acres; Bureau of Reclamation, 1 million acres; National Park Service, 0.5 million acres; Fish and Wildlife Service, 0.5 million acres.
8. Telephone interview with Steve Harris, Vegetation Ecologist, Redwood National Forest, July 15, 1993.
9. Telephone interview with Dr. Garvey, National Arboretum, July 13, 1993.
10. Executive Order 12856, "Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements," August 3, 1993.
11. See discussion of the relationship between water and energy use in ENV03: Increase Energy and Water Efficiency.
12. See discussion of water conservation opportunities in federal facilities in ENV03: Increase Energy and Water Efficiency.

THE WHITE HOUSE
WASHINGTON

February 24, 1994

TO: Steve Warnath, DPC
Brian Burke, DPC
Kumiki Gibson, OVP
T.J. Glauthier, OMB
Heather Ross, NEC
Alan Krupnick, CEA
Todd Stern, WHO
Mark Schaefer, OSTP
Steve Neuwirth, WHO

FROM: Mary O'Lone 
Office on Environmental Policy/
National Performance Review

- Tues
1-3 CEO
- Feb 14
1-3 CEO

The Report of the National Performance contained recommendations for a series of environmental actions including one for an executive order to increase environmentally and economically beneficial landscaping at federal facilities and federally-funded projects. The Office on Environmental Policy is forming an interagency work group to assist in drafting the landscaping executive order. The first meeting of this drafting group will be held tomorrow, Friday, February 25, 1994 from 2:30 - 4:00 p.m. in the Jackson Room of the White House Conference Center located at 726 Jackson Place. All interested are invited to attend.

We plan to issue this executive order as a part of Earth Day 1994 activities. To meet this deadline and allow adequate time for review, we will ask the drafting group to prepare a first draft of the executive order for informal White House review by March 14th. We plan to start formal White House and interagency review the week of March 21, 1994. If you have any questions, please feel free to call me at 395-3706.

cc: Elaine Kamarck, OVP

Brian:
Read it and weep!

**INCREASE ENVIRONMENTALLY
AND ECONOMICALLY BENEFICIAL
LANDSCAPES**

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INCREASE ENVIRONMENTALLY AND ECONOMICALLY BENEFICIAL LANDSCAPING

BACKGROUND

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traditional educational requirements while meeting specific conservation objectives. For example, children help design, plant, and maintain a row of trees near their school to reduce energy costs. Throughout the project, they learn the math and physics, for example, of energy conservation. At the same time, they learn how to choose environmentally appropriate tree species and how to care for them.

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IMPROVE ENVIRONMENTAL PERFORMANCE AT FEDERAL BUILDINGS AND FACILITIES

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only reduces labor costs, but also reduces costs for tractor repair and fuel as well as reducing pollution.

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The use of chemicals to maintain grounds contributes to environmental, health, and safety problems. Reduced use of chemicals lowers the possibility of contamination run-off into rivers and ground water. Chemical reductions can assist agencies in achieving compliance with the Executive Order, issued August 3, 1993, on toxic substance use by federal agencies.¹⁰

Conserve Water. Water used to irrigate lawns and landscapes can account for significant proportions of total water use during peak watering season. The selection of native plants that are adapted to the particular climate can reduce water demand by requiring less irrigated water. Grasses and trees should be selected based on how much water they consume. Species that are particularly thirsty should not be used in arid

areas where normal rainfall does not meet most of the plant's water needs. The use of less water conserves the fresh water supply for both the natural environmental systems and the human population.

Accordingly, federal parks, golf courses, and cemeteries should select grass varieties carefully, install efficient irrigation technologies, and schedule irrigation times according to turf needs and weather conditions. All landscapes, especially large grassy areas, should have their water needs audited to ensure that plants are receiving the appropriate level of water. Overwatering results in additional water costs, as well as unnecessary use of energy.¹¹

RECOMMENDATIONS

1. The President should issue an Executive Order to require the use of environmentally beneficial landscaping for federal lands and facilities, and federally-funded projects, where appropriate. The President should issue an Executive Order on Earth Day, April 21, 1994 to:

- require agencies to use environmentally beneficial landscaping wherever appropriate, cost effective, and practical;
- stress the links between landscaping decisions, protection and enhancement of the environment, and cost-saving opportunities; and
- announce that the federal government will lead by example through the implementation of environmentally beneficial landscaping principles at the White House and the Vice President's residence at the Naval Observatory.

—Increase the use of native plant species in all federal landscaping activities. The Executive Order should also:

- encourage the use of native trees, shrubs, grasses, and wildflowers in landscaping;
- direct representatives of federal agencies involved in natural resource management and plant research and development to define the terms native species and regionally native species;

- encourage agencies to develop specifications with enough flexibility to encourage nurseries to develop sufficient stocks of native plant species; and

- direct the U.S. Department of Agriculture, through its Agricultural Research Service and/or the Soil Conservation Service, to conduct research on the production and use of native species as landscape and conservation plants.

—Reduce the quantity of chemicals applied to federal landscapes. The Executive Order should encourage agencies to:

- reduce their use of chemical fertilizers, pesticides, and herbicides; and
- use an IPM approach to pest control.

—Use water-efficient technologies in federal landscaping projects. The Executive Order should also:

- encourage agencies to use water-efficient technologies to the maximum extent practicable;
- encourage the use of water audits, where appropriate, to establish exact needs and assist in planning irrigation systems and scheduling; and
- encourage agencies to participate in water utility conservation and rebate programs.¹²

—Provide educational and conservation opportunities to the public. The Executive Order should encourage agencies to:

- sponsor and participate in activities that provide educational and conservation opportunities to the public, and
- prepare interpretive exhibits and signs explaining the plantings and the special techniques used in landscaping to enhance the environment.

—Establish a government-wide Environmentally Sound Landscape Program. The White House Office on Environmental Policy (OEP) will establish an interagency working group by July 1994 to develop recommendations for an Environmentally Sound Landscape Program that would:

IMPROVE ENVIRONMENTAL PERFORMANCE AT FEDERAL BUILDINGS AND FACILITIES

- provide incentives to federal facility and landscape managers to consider the environmental implications of their landscaping plans;
- recognize the contributions and efforts of individual managers; and
- create an annual award to agencies that made significant strides in implementing the Executive Order.

The recommendations will be reported to the Office on Environmental Policy by December 1994 and will present guidelines to federal facility managers on how to increase the use of na-

tive species, reduce the use of chemical fertilizers and pesticides, and implement water conservation techniques. These guidelines should allow for climatic and geographic differences, but should provide a framework for agencies to consider as they plan their landscape requirements. The working group will also establish criteria for agency recognition.

CROSS-REFERENCES TO OTHER NPR REPORTS

Reinventing Environmental Management,
ENV04: Increase Environmentally and Economically Beneficial Landscaping

ENDNOTES

¹ To provide an idea of the extent of federal landscaping efforts, note that the Federal Highway Administration spent over \$77.8 million on landscaping projects in 1992. Telephone interview with Dan Corbett, Budget Examiner, Office of Management and Budget, July 15, 1993. The Department of Veterans Affairs maintains 114 cemeteries throughout the country encompassing 10,000 acres. Telephone interview with Marty Rize, National Cemetery Division, Department of Veterans Affairs, July 14, 1993. The Department of Defense manages 25 million acres of land some of which must be landscaped and maintained. Personal correspondence from Dr. Gerald Kauver, Deputy Director of Defense Performance Review, Department of Defense, August 9, 1993.

² The Surface Transportation and Uniform Relocation Assistance Act of 1987.

³ Telephone interview with Marty Rize, National Cemetery System, Veteran's Administration, July 14, 1993.

⁴ Interview with Tom Leverman, Head, Educational Relations, Soil Conservation Service, USDA. July 19, 1993.

⁵ Telephone interview with Marsha Prillwitz, Landscape Program Manager, Water Conservation Office, California Department of Water Resources, July 6, 1993.

⁶ Telephone interview with Susan Scallon, City of Austin, Texas, July 27, 1993.

⁷ The *Federal Interdepartmental Weed Committee Report* (1993), estimated the extent of exotic species/weed infestations on federal lands as follows: Bureau of Land Management, 6 million acres; Forest Service, 4.9 million acres; Bureau of Indian Affairs, 1 million acres; Bureau of Reclamation, 1 million acres; National Park Service, 0.5 million acres; Fish and Wildlife Service, 0.5 million acres.

⁸ Telephone interview with Steve Harris, Vegetation Ecologist, Redwood National Forest, July 15, 1993.

⁹ Telephone interview with Dr. Garvey, National Arboretum July 13, 1993.

¹⁰ Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, (August 3, 1993).

¹¹ See discussion of the relationship between water and energy use in *Reinventing Environmental Management*, ENV03: Increase Energy and Water Efficiency.

¹² See discussion of water conservation opportunities in federal facilities in *Reinventing Environmental Management*, ENV03: Energy and Water Efficiency.