SAYLORVILLE LAKE MASTER PLAN

DES MOINES RIVER WATERSHED JOHNSTON, IOWA

APPENDIX G SUPPORTING INFORMATION

POLK, DALLAS, BOONE COUNTIES, IOWA

JANUARY 2015

Appendix G Supporting Information

G.1 Commander's Policy Memorandum #4, July 2007



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS 441 G STREET NW WASHINGTON, D.C. 20314-1000

CEMP/CECW/CELD/CEPR

3 0 JUL 2007

COMMANDER'S POLICY MEMORANDUM # 4

SUBJECT: Implementing Sustainability

- 1. The U.S. Army Corps of Engineers (USACE) is adapting to changing needs, practices and priorities to achieve sustainability in everything we do: supporting the Soldier and the Nation at home and abroad; responding to natural and manmade disasters; improving navigation; reducing flood damage; restoring damaged ecosystems; supplying hydropower and recreation; and protecting, restoring, and managing the environment, including protecting wetlands.
- 2. USACE has made significant advances in incorporating the Environmental Operating Principles (EOPs) into our planning and execution across all business lines. Our EOPs guide us in the search for sustainable solutions on a regional or watershed basis, in partnership with others. They also frame our approach to sustainable building design.
- 3. We work collaboratively to find balance between human, economic and natural systems in accordance with the EOPs, the Civil Works Strategic Plan, the 12 Actions for Change and the Army Strategy for the Environment as we seek to integrate the sustainability ethic in everything we do.
- 4. With nearly 12 million acres of land and water to manage, USACE makes an important contribution to stewardship of the Nation's environmental assets. We are using Environmental Management Systems effectively to integrate the EOPs into our operations and to achieve waste reduction, recycling, and energy efficiency goals.
- 5. With these principles as part of our USACE culture, we are positioned to implement the Energy Policy Act of 2005 and the President's Executive Order 13423 "Strengthening Federal Environmental, Energy, and Transportation Management." This order establishes goals for minimizing use of precious resources including petroleum, encouraging recycling, minimizing waste disposal, enhancing energy efficiency and permitting the use of environmentally friendly and less harmful materials. Collaboration will be required to develop implementation plans.
- 6. Our Communities of Practice help share information and tools to aid in identifying innovative and sustainable solutions. All team members have a responsibility not only to comply with environmental laws and regulations, but also to implement sustainable solutions that help achieve the mission and demonstrate our value to the Army and the Nation. Web links to helpful information are provided at the enclosure for your use.

Encl

Appendix G Supporting Information

CEMP/CECW/CELD/CEPR

SUBJECT: Implementing Sustainability

Commander's Policy Memo # 4

Web Links

Office of the Federal Environmental Executive: Executive Order 13423

Fact sheet

Implementing instructions

http://www.ofee.gov/whats/eo 13423.htm

U.S. Army Corps of Engineers, Logistics Activity:

Joint Army/USACE Petroleum Reduction Strategy for Non-tactical Vehicles (NTV)

https://ufc33-5.ufc.usace.army.mil/logistics/pubs/pubs.htm

Civil Works Environmental Compliance Programs:

Environmental Management System

http://corpslakes.usace.army.mil/employees/envcomp/envcomp.html

U.S. Army Corps of Engineers

Engineering and Construction Community of Practice

Sustainable Design and Development

http://www.usace.army.mil/cw/cecwe/index.html

U.S. Army Corps of Engineers:

Environmental Operating Principles

http://www.hq.usace.army.mil/cepa/envprinciples.htm

U.S. Army Corps of Engineers:

Environmental Community of Practice

https://eko.usace.army.mil/usacecop/pub/ecop/

ENCLOSURE

Appendix G Supporting Information

G.2 Emerald Ash Borer Policy, February 2014



DEPARTMENT OF THE ARMY

ROCK ISLAND DISTRICT, CORPS OF ENGINEERS SAYLORVILLE LAKE PROJECT, 5600 NW 78TH AVENUE JOHNSTON, IA 50131-1941 http://www.CorpsLakes.us/Saylorville

REPLY TO ATTENTION OF

CEMVR-OD-S 6 February 2014

MEMORANDUM FOR FILE

SUBJECT: Standard Operating Procedure (SOP) 31 for Emerald Ash Borer Policy (EAB)

1. <u>Purpose:</u> To provide the Saylorville Lake staff with a general scope of guidelines related to the Emerald Ash Borer (Argrilus planipennis, EAB) infestation impacting the project.

2. References:

- a. ER 1130-2-540 Chapter 2
- b. Attached: Insecticide Options for Protecting Ash Trees from Emerald Ash Borer
- 3. <u>Applicability</u>: This SOP applies to all actions and activities of Corps of Engineers Staff in regards to managing for EAB at Saylorville Lake.
- 4. <u>Goal:</u> The goal of the project is to manage the impacts of EAB throughout USACE managed lands; specifically as it relates to public safety within recreation areas.

5. Definitions:

Park Trees: Park Trees are defined as trees that exist within designated recreation areas, particularly mowed sections of the park or boundary trees that have the potential to cause a safety hazard in high use locations.

Woodland Trees: Woodland Trees are defined as trees that are located within project controlled lands designated for multiple uses and without developed recreational opportunities.

Appendix G Supporting Information

CEMVR-OD-S

SUBJECT: Standard Operating Procedure (SOP) 31 for Emerald Ash Borer Policy

6. Procedures for Pre - Polk County Confirmed Infestation:

- a. Park Trees: The Saylorville Natural Resource staff has determined that the most cost effective, economic, and practical way to prepare for the EAB infestation is to implement a four-step program. The first step includes a complete Park Tree survey program conducted internally to identify the number and conditions of ash trees within the recreation areas. This survey is ongoing and will be updated on a rolling basis. Certain trees will be identified for treatment to attempt to save them from EAB and preserve a few legacy ash trees. The next step will be to remove trees that are subject to "poor form" within adequately stocked areas of the park. The final step is to replant a variety of tree species.
 - (1) Survey: Conduct a survey of Park Trees. Trees are subjected to the rating system designed by Saylorville Lake. The rating system allows for a prioritized classification that determines what trees need to be removed first. Tree rating system:
 - 1- Low risk healthy tree with good form
 - 2- Some issues, not expected to be a problem for at least five years
 - 3-Well defined issues present, retain and monitor
 - 4- Probability of failure, schedule mitigation measures
 - 5- Imminent failure, immediate action required.
 - (2) Treatment: A number of premier trees will be selected for insecticide application. Chemical treatment descriptions are attached. The Saylorville Lake staff is currently evaluating treatment options to determine the best course. Insecticide application would occur yearly or every other year, depending on the chemical chosen. Cost is approximately \$100 per treatment, per tree.
 - (3) Removal: Trees will be removed when time and financial resources are made available. Trees may be removed by contract or by Saylorville maintenance/ranger staff. Trees that are given a higher rating from the initial survey are to be prioritized for removal. Trees with a lower rating from the initial survey will be monitored and potentially removed at a later date.
 - (4) Replacement: Trees that have been removed can be replaced as necessary with approved species off the attached list. Trees will be purchased through local nurseries and spayed into recreation areas.

Appendix G Supporting Information

CEMVR-OD-S

SUBJECT: Standard Operating Procedure (SOP) 31 for Emerald Ash Borer Policy

b. <u>Woodland Trees</u>: Saylorville Lake will not proactively remove ash trees from the natural woodland environment. The ash component of project woodland sites is not significant enough to warrant a timber sale. Safety hazards around access points will be addressed as needed.

7. Procedures for Post - Polk County Confirmed Infestation:

- a. <u>Park Trees</u>: After a confirmed detection of EAB within Polk County, Saylorville Lake will begin to aggressively address ash tree conditions within the recreational areas. All ash trees will be mapped by this time and an inspection schedule will be generated. Ash tree populations should be reduced to manageable numbers by this time and an aggressive replant will be underway in certain parks (Bob Shetler, Prairie Flower). The following actions will be taken within developed recreational areas.
 - Treatment: Legacy trees will have been identified and chemical treatment of these trees will commence.
 - (2) Removal: Removal of remaining ash trees within mowed areas of developed recreation sites will begin. All ash trees within these areas will be removed within three years. A triage system will be in place to remove infected trees first. All stumps within mowing boundaries will be ground down flush with the surrounding turf.
 - (3) Replant. Replant of approved tree species as necessary to acquire adequate canopy cover throughout the park. Trees of various age classes should be planted to increase structural diversity. Attached is a list of approved tree species suitable for replant.
 - (4) Felling: Start felling ash trees along the perimeter timber lands (outside of mowed areas) surrounding developed recreation site. Fell standing ash that could fall and impact mowed areas. Trees can be left on the forest floor or made available for firewood.
- b. Woodland Trees: Ash is a significant component of two common forest associations that dominate the 13000 acres of forest cover on project lands. Elm Ash and Cottonwood association systems are common and ash is a significant component. Loss of ash coupled with elm disease impacts will alter this forest cover but significant other species like hackberry, mulberry and cedar will fill the voids created by elm and ash loss. Oak Hickory associations have significant numbers of ash trees and are home to less common ash species in central lowa, Blue and Black Ash. While the diversity of our forests will be able to absorb the loss of ash component, impacts that occur may include the following:

Appendix G Supporting Information

CEMVR-OD-S

SUBJECT: Standard Operating Procedure (SOP) 31 for Emerald Ash Borer Policy

- (1) 282 species of arthropods rely on ash trees for food and shelter. 44 species feed exclusively on ash trees and are at risk of extinction.
- (2) Woodpeckers will temporarily respond positively to infestation sites as food source and nesting sites dramatically increase.
- (3) Generated dead wood on forest floor can significantly impact forest soil ecology including pH, soil moisture mineral content.
- (4) Significant changes to fire risks are anticipated with increased fuel loads complicating all fire issues in our urban interface environment.
- (5) Loss of large canopy trees and the corresponding additional sunlight hitting the forest floor will tend to favor invasive species which infect all of our forested lands. Invasive plants and native poison ivy will respond positively to loss of ash across the spectrum.
- (6) The impact to oaks is unknown. Project lands suffer from poor regeneration but anticipate oak not being able to take advantage of canopy changes. Ash is a primary pioneer species on naturally reforesting lands around the project and perhaps oak can become a more consistent pioneer through natural reproduction.

ROSE, JEFFREY. W. II. 60/n8/19/n4 by MOZ. #FFEY WILL 2000-9871
1730340214

3 Encls

1. Insecticide Options for Protecting Ash Trees from Emerald Ash Borer

- 2. Ash Alternate Shade Trees
- 3. Ash Alternate Small Stature Trees

JEFFREY W. ROSE, II Operations Project Manager

G.3	Final Report; The Tomorrow Plan, November 2013
	http://www.thetomorrowplan.com/documents/ttp-final.pdf

- G.4 Fish and Wildlife Service Urban Wildlife Refuge Initiative, April 2012
 - $\underline{http://www.fws.gov/refuges/vision/urbanwildliferefugeinitiative.html}$
- G.5 Iowa Lakes Survey 2009, May 2011

 http://www.card.iastate.edu/lakes/iowa-lakes-report-2009.pdf
- G.6 Iowa Survey for the State Comprehensive Outdoor Recreation Plan (SCORP), July 2012

 http://www.iowadnr.gov/InsideDNR/GrantsOtherFunding/StateConservationRecPlan.aspx

Appendix G
Supporting Information

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix G Supporting Information

G.7 Land Use Review Evaluation Process for Fee and Easement Lands, May 2014

Rock Island District Land Use Evaluation Process For Fee and Easement Lands Saylorville Lake

Decision Flow Chart

The following flow chart outlines a process used to identify and evaluate the relative merits of land use requests. These requests seek permission to use public lands for any number of private and public activities. Some uses are likely detrimental to the operation of federal projects, some have subtle long term implications, and still others may have significant benefits. Before we can accommodate requests, we are obligated as stewards of public lands, to carefully consider the implications.

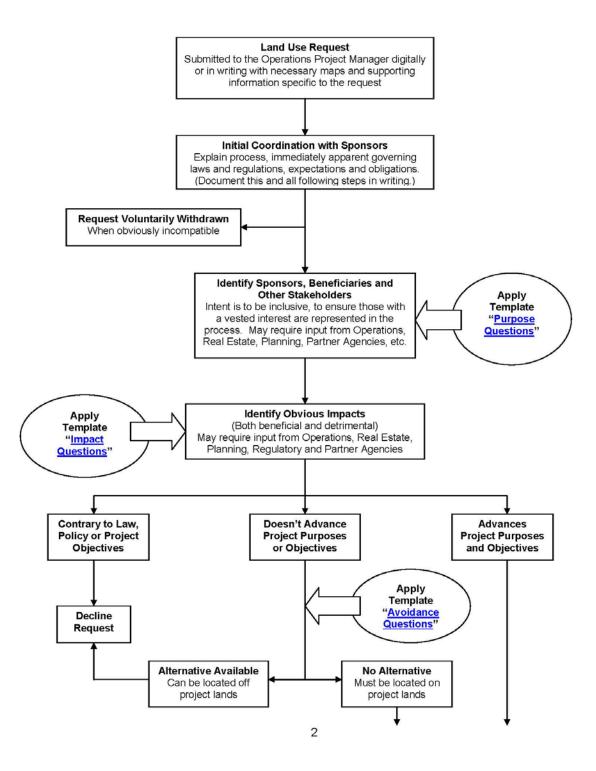
This evaluation process is the key in maintaining and demonstrating a long-term commitment to stewardship of each project's unique and limited resources. Our stewardship is focused on ensuring we can fully execute our Congressional mandates today and in years to come. Preserving our flood storage capacity, maintaining a steadily improving natural resource base, and providing sustainable, high quality, diverse, natural resource based outdoor recreation to our visitors are among our important considerations.

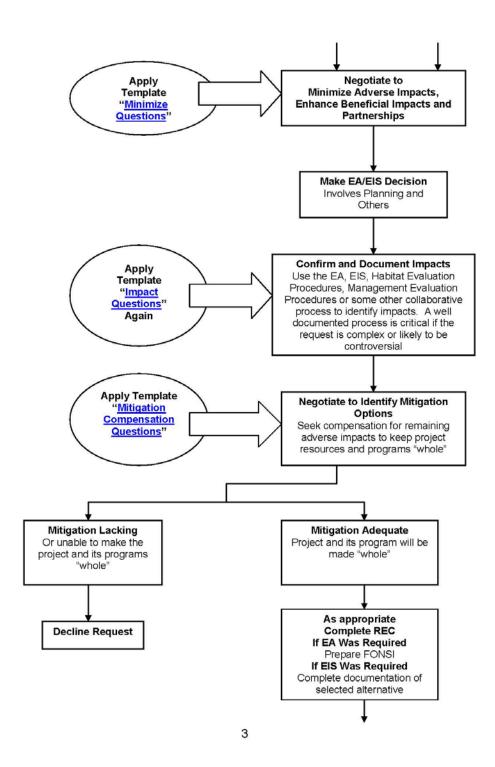
To be successful each evaluation must be thorough, consistent, transparent, inclusive, logically sound and well documented.

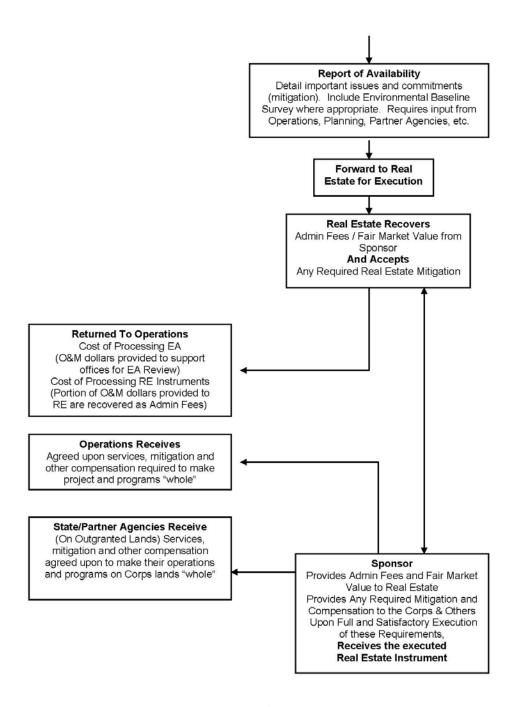
This process is well grounded in existing Corps regulations. Those regulations are outlined at the end of this document.

(Go to Reference Regulations)

(This Flow Chart contains active links highlighted in color that connect to more detailed information on the particular highlighted subject. Click on the colored link to go directly to that resource.)







Appendix G Supporting Information

Land Use Evaluation Template

Making public lands available for new or expanded private and public uses always requires careful and consistent consideration. The following categories and questions are intended to prompt such review. The template can be applied at different points in the evaluation process, provides consistent criteria and helps ensure a thorough review. The answers establish the relative merits of a proposed land use, and help provide a record of our decision process.

PURPOSE

Is proposed action:

Consistent with applicable laws, regulations and policies?

Consistent with the project's authorized purposes?

Consistent with the easement estates?

Who are the sponsors and beneficiaries?

IMPACTS

Identify and quantify (environmental, flood storage, water supply, recreational, etc.).

What are the public and private benefits and detriments (short and long term)?

What problems does the land-use solve or create?

Will the Corps, the project or the public we serve benefit from the proposed land use?

What's the scope and severity of impacts?

Are there likely to be cumulative impacts from similar land-use requests?

What are the implications for other projects? Is this action establishing a precedent or varying from established protocols, policies and project/agency goals and vision?

Is there likely to be significant public and/or political interest in the outcome?

Appendix G
Supporting Information

AVOIDANCE

What can be done to accomplish the purpose and avoid the impacts?

Are there alternatives that avoid using public lands?

Are there alternatives that avoid one or more of the identified impacts?

MINIMIZATION

What can be done to minimize the impacts?

Can the land-use proposal be modified to reduce the scope or severity of adverse impacts?

Can special conditions, considerations or requirements be incorporated into the proposal to reduce the impacts?

MITIGATION/COMPENSATION

What can be done to make the project whole for our resource, programs and our partners?

What actions, programs, access, lands, money or other considerations?

Do the considerations specifically address and resolve unavoidable adverse impacts?

Are those considerations consistent with Corps policies and regulations?

Appendix G Supporting Information

Supporting Regulations

1. ER 1130-2-540

1-2. Policy - Environmental stewardship shall include both passive and proactive management to sustain healthy ecosystems and biodiversity, and conserve natural resources, such that Corps lands and waters are left in a condition equal to or better than their condition when acquired, and such that those natural and cultural resources are available to serve the needs of present and future generations.

2. ER 200-2-2 Procedures for Implementing NEPA

Guidance on application of NEPA on Corps projects

3. ER 405-1-12 Real Estate Handbook Chapter 8 Real Property Management

8-53. Compliance with NEPA

a. Depending on the impacts of the proposed action, the environmental review required by NEPA will be result in either: (i) A Record of Environmental Consideration (REC); (ii) An Environmental Assessment (EA) with a Finding of No Significant Impact (FONSI); or (iii) an Environmental Impact Statement (EIS). There may also be cases where both an EA and an EIS are prepared.

8-57 protection and enhancement

- a. " AR 405-80, "... Department of Army will not authorize use of real estate, water or natural resources when the use conflicts with the goals and intent of Federal policy and legislation on overall environmental quality."
- b. ...the District Engineer will carefully consider the proposed use of the property by the grantee and the report of availability conditions and will supplement the general conditions to assure adequate protection of the environment.
- 8-170. General. Generally, Army and Air Force real property should not be made available for non-governmental facilities such as power lines, pipelines or roads if suitable privately owned land is available.

Appendix G Supporting Information

4. DOT Act of 1966 Section 4(f)

"After the effective date of the Federal-Aid Highway Act of 1968, the Secretary shall not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, States, or local significance as determined by the Federal, State, or local officials having Jurisdiction therefore any land from an historic site of national, State, or local significance as so determined by such officials unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreation areas, wildlife and waterfowl refuge, or historic sites resulting from such use."

5. FHWA Section 4(f) Policy Paper June 7, 1989

"When Federal lands, which are needed for highway projects are not subject to Section 4(f), there is still a need for close coordination with the Federal agency owning or administering the land in order to develop a mitigation plan that would satisfy any other requirements for a land transfer."

Appendix G Supporting Information

G.8 Multiple Species Inventory and Monitoring Final Report

Evaluate Indicators of Environmental Sensitivity with Respect to Native Flora and Fauna Saylorville Project, Iowa

Final Report – 2013

Tyler M. Harms¹, Stephen J. Dinsmore^{1,3}, and Karen E. Kinkead²

¹Department of Natural Resource Ecology and Management, Iowa State University, 339 Science Hall II, Ames, Iowa, 50011

²Iowa Department of Natural Resources, 1436 255th Street, Boone, Iowa, 50036

³Corresponding email: cootir@iastate.edu

INTRODUCTION

The purpose of the Multiple Species Inventory and Monitoring (MSIM) program is to collect data on as many species as possible within the bird, mammal, herpetofauna, fish, butterfly, mussel, dragonfly and damselfly orders (Kinkead 2009). While emphasis is placed on Species of Greatest Conservation Need (SGCN), all species encountered within the focal taxa are recorded during site visits. The design of Iowa's MSIM program has many characteristics in common with the U.S.D.A. Forest Service MSIM program. One of the assumptions of this approach is that the more species-specific information collected from a given area, the more likely the information will represent the site or habitat as a whole. Manley et al. (2004) note that the indicator species approach has 3 'risks'. Two of these risks are the similar to assumptions discussed in the Landres et al. (1988) paper, but the third risk (species chosen as indicators today may or may not be viable indicators of future threats) is also a very important one that deserves further consideration. No one can predict which species will be common and which rare in the future with any degree of certainty. It is, therefore, prudent to collect as much information now on as many species as possible to give future generations knowledge of our landscapes.

Early in the design portion of Iowa's MSIM program, it became evident that a multiple species approach would be the best choice due to problems with using indicator species and to costs associated with designing species-specific monitoring programs. As early as 1988, critiques on using indicator species were being published. Landres et al. (1988) defined an indicator species as "an organism whose characteristics....are used as an index of attributes that are too difficult, inconvenient, or expensive to measure for other species or environmental conditions of interest." The Landres et al. (1988) essay further discussed federal programs using indicator species and their assumptions. Assumptions necessary for the use of indicator species include that they provide a "reliable assessment of the habitat quality" and that therefore, if the habitat is preserved for the indicator species, the associated species will survive as well. However, this assumption would mean that all aspects of the life cycle between species would need to be the same, with no differences in species responses to diet preferences, to habitat requirements for breeding, or to competition between species. Landres et al. (1988) further discussed the unrealistic assumptions of monitoring habitats and assuming that if the habitat is present, so are the vertebrate species associated with it. They concluded the essay with a discussion of what attributes should be used and justified if a program has no other choice but to use

Appendix G Supporting Information

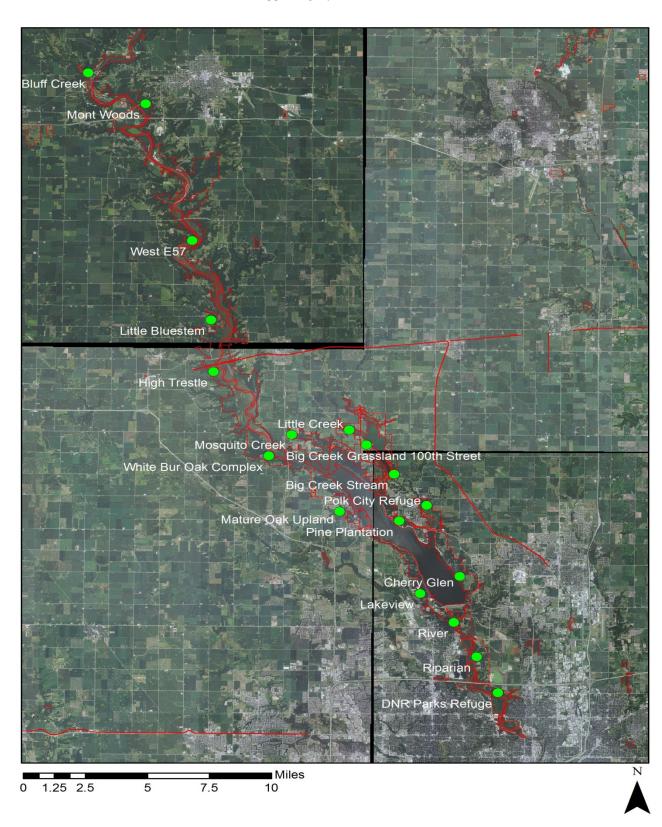
an indicator species in the monitoring efforts. Two additional papers to evaluate the usefulness of indicator species arrived at similar conclusions (Neimi et al. 1997, Lindenmayer et al. 2002).

This background led to the development of Iowa's MSIM protocols as an efficient method for monitoring species and their associated habitats (Kinkead 2009). An advantage of Iowa's MSIM program is that in addition to acquiring knowledge on SGCN, it will also accumulate information on all species encountered, including ones currently deemed to be common, secure, or apparently secure within the state. Furthermore, the use of standardized protocols across >300 sites in Iowa provides a wealth of information about species and their habitat associations. Data collected at the Saylorville Project will become part of the larger database, thus strengthening our understanding of species and their habitats in Iowa. No one can predict the future; what is rare today may be common in 25 years, but what is common today may become rare.

STUDY SITES

Saylorville Project staff identified 17 sites of interest on which surveys were conducted in accordance with the Iowa MSIM protocols (Figure 1). These sites included a variety of habitat types represented on the Project.

In accordance with the design of the MSIM program, we established a hexagon for implementation of specific survey protocols at each site. The hexagon had six points along the periphery plus a center point for a total of seven points. This arrangement promoted traveling efficiency and the points are the sampling sites for many of the protocols. A hexagon encompasses 26 acres (10 ha). On sites larger than 10 ha in size, we identified other habitats to be targeted during certain survey efforts (e.g., wetlands for herptile and odonate surveys).



Appendix G Supporting Information

Figure 1: Map of survey sites within the Saylorville Project, Iowa, 2013. Green dots represent survey sites and red line represents the public property boundary.

FIELD METHODS

All MSIM sites are surveyed over a 7 month period (April through October) that is designed to meet the life history needs of surveyed taxa. Briefly, birds are surveyed with standardized bird point counts and timed visual encounter surveys (VES); mammals are surveyed using trail cameras (large mammals), timed VES for tracks (medium mammals), and trapping using Sherman traps (small mammals); amphibians and reptiles are surveyed using timed VES, aquatic trapping, and coverboards; butterflies are surveyed with timed VES and walking transects (flagged using bamboo poles and wire flags); odonates are surveyed using timed VES; and fish are surveyed using a backpack electroshocking device or seine in wadeable areas. If surveyed, our protocols entail quadrat and timed searches for mussels and coverboards for terrestrial snails. In addition, given known locations of crayfish populations at Saylorville, we would like to pilot a protocol for monitoring crayfish. Crayfish are believed to be a keystone species in that they provide habitat for other native species which cannot occur without said habitat.

At each site, field sampling will adhere to the specific protocols for the taxa to be monitored. For the Saylorville Project, we recommend monitoring all taxa covered by MSIM except land snails (Table 1). This table illustrates the general approach to sampling at each site, with some flexibility allowed for weather and logistical problems. Crews work together for some activities (e.g., vegetation sampling) but may work separately for other activities (e.g., bird point counts). We strive to hire crew members with specific skill sets (e.g., bird identification, knowledge of Midwest plants, etc.) that complement each other, which helps maintain quality data collection and minimizes the need for extra training.

RESULTS

The number of bird species observed on the Saylorville Project ranged from 70 species at Big Creek Grassland to 109 species at Cherry Glen. Appendix 1 lists the bird species found at each site.

The number of mammal species observed on the Saylorville Project ranged from 8 species at Bluff Creek, Little Creek, and White Bur Oak Complex to 14 species at Mont Woods. We observed 3 SGCN mammals at sites; Southern Short-tailed Shrew (*Blarina carolinensis*), River Otter (*Lontra canadensis*), and Bobcat (*Lynx rufus*). Appendix 2 lists the mammal species found at each site.

Mont Woods had the most amphibian and reptile species found with 14. Mosquito Creek and Riparian had the fewest amphibian and reptile species found with 8. We found 3 SGCN reptile and amphibians on the Saylorville Project including Northern Cricket Frog (*Acris crepitans*), Smooth Earth Snake (*Virgina valeriae*), and Bullsnake (*Pituophis melanoleucus*). Appendix 3 lists the reptile and amphibian species found at each site.

The number of odonate species observed on the Saylorville Project ranged from 11 species at Bluff Creek to 23 species at Big Creek Stream. We observed 1 SGCN odonate (Sweetflag Speadwing [Lestes forcipatus]). Appendix 4 lists the odonate species found at each site.

Appendix G Supporting Information

The number of butterfly species observed on the Saylorville Project ranged from 9 species at Bluff Creek to 22 species at Big Creek Grassland, River, and West E57. We didn't' observe any (one in table listed Olympia marble) SGCN butterflies on the Saylorville Project. Appendix 5 list the butterfly species found at each site.

We conducted surveys for freshwater mussels at one site on the Saylorville Project (Polk City Refuge) and were unable to detect any mussel species.

We also tested survey protocols for crayfish that included two trapping methods; the Burrowing Crayfish Net (BCN) and cylindrical minnow traps. The protocol was tested at Lakeview. We captured 3 species of crayfish including Devil Crayfish (*Cambarus diogenes*), Papershell Crayfish (*Orconectes immunis*), and Prairie Crayfish (*Procambarus gracilis*).

We were unable to conduct fish surveys in 2013 due to an equipment malfunction.

We intended to implement surveys for terrestrial snails in 2013, but were unable to do so due to logistical difficulties.

Appendix G Supporting Information

LITERATURE CITED

- Buckland, ST, DR Anderson, KP Burnham, JL Laake, DL Borchers, and L Thomas. 2001. Introduction to distance sampling. Oxford University Press, New York.
- Kinkead, KE. 2009. Iowa's Multiple Species Inventory & Monitoring Technical Guide. http://www.iowadnr.gov/Portals/idnr/uploads/wildlife/MSIM%20Manual/msim_tech_manual.pdf. Accessed 1/7/2013.
- Landres, PB, J Verner, and JW Thomas. 1988. Ecological uses of vertebrate species a critique. Conservation Biology 2:316-328.
- Lindenmayer, DB, AD Manning, PL Smith, HP Possingham, J Fisher, I Oliver, and MA McCarthy. 2002. The focal-species approach and landscape restoration: A critique. Conservation Biology 16:338-345.
- MacKenzie, DI, JD Nichols, GB Lachman, S Droege, JA Royle, and CA Langtimm. 2002. Estimating site occupancy rates when detection probabilities are less than one. Ecology 83:2248-2255.
- Manley. PN, WJ Zielinksi, MD Schlesinger, and SR Mori. 2004. Evaluation of multiple species approach to monitoring species at the ecoregional scale. Ecological Applications 14:296-310.
- Niemi, GJ, JM Hanowski, AR Lima, T Nicholls, and N Weiland. 1997. A critical analysis on the use of indicator species in management. Journal of Wildlife Management 61:1240-1252.
- White, GC, and KP Burnham. 1999. Program MARK: survival estimation from populations of marked animals. Bird Study 46:120-139.

Appendix 1: List of all bird species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Common Name	ream	100th Street)k	en	efuge	V	tem	e k	pland	ds	tion	fuge		illway	7	Complex	reek	tle
Horned grebe		1						1										
Pied-billed grebe				1				1										
American white pelican*	1	1		1	1			1					1	1		1		1
Double-crested cormorant		1		1	1			1		1	1	1	1	1	1	1	1	
Great blue heron	1	1	1	1		1	1	1				1	1	1	1	1		1
Great egret						1								1				1
Green heron	1				1	1	1	1				1	1	1		1	1	
Black-crowned night-heron*												1	1					
Turkey vulture	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1
Canada goose	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Wood duck	1	1		1	1	1	1	1	1			1	1	1	1	1		1
Green-winged teal																1		
Mallard	1	1			1		1	1				1	1	1		1		1
Blue-winged teal	1			1	1			1				1	1	1		1		1
Northern shoveler		1		1				1				1						
Bufflehead	1			1														
Hooded merganser					1								1			1		
Common merganser														1				
Red-breasted merganser														1				
Ruddy duck								1										
Osprey*		1	1	1	1	1		1			1	1	1	1	1	1		1
Bald eagle*		1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1
Northern harrier*		1	1					1							1	1		
Sharp-shinned hawk		1		1		1	1	1	1		1			1	1			1
Cooper's hawk	1		1	1	1	1	1	1		1	1			1	1	1		1
Red-shouldered hawk*							1								1			
Broad-winged hawk*					1						1	1			1	1		1
Red-tailed hawk	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1

Appendix G Supporting Information

Appendix 1 (cont.): List of all bird species found on sites surveyed within the Saylorville Project, Iowa, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Common Name																		
American kestrel				1														
Merlin		1													1			
Peregrine falcon*			1	1												1		1
Ring-necked pheasant	1	1					1	1							1	1		1
Wild turkey	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Virginia rail		1																
Sora		1				1		1			1							
American coot				1	1			1				1						
Sandhill crane*								1										
Killdeer	1	1	1	1	1		1	1	1		1	1	1	1	1	1	1	1
Greater yellowlegs*								1					1				1	
Lesser yellowlegs*						1		1								1	1	
Solitary sandpiper*						1		1	1			1						
Semipalmated sandpiper												1					1	
Pectoral sandpiper																	1	
Spotted sandpiper																1		
Wilson's snipe						1	1											
American woodcock*				1		1	1	1				1						
Wilson's phalarope*								1										
Franklin's gull				1	1		1	1					1	1	1			
Ring-billed gull	1	1		1	1			1		1	1	1	1	1	1	1	1	1
Herring gull				1														
Black tern*						1		1				1						
Caspian tern	1									1								
Rock pigeon	1				1				1									1

Appendix 1 (cont.): List of all bird species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Common Name	ream	1 100th Street	ek	len	Refuge	W	stem	ek	Upland	ods	ition	efuge	n	pillway	7	Complex	reek	stle
Mourning dove	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Black-billed cuckoo*	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Yellow-billed cuckoo*			1							1		1	1	1	1		1	1
Eastern screech-owl			-							-		-	-	-	1	1	1	1
Great horned owl							1			1	1					1		1
Barred owl				1		1	1	1	1	1	1	1	1	1	1	1		1
Common nighthawk*		1					1					1						
Chimney swift	1	1		1	1	1			1	1	1	1		1	1	1	1	1
Ruby-throated hummingbird			1	1	1	1	1	1	1	1		1	1	1		1		1
Belted kingfisher	1	1	1	1	1		1	1		1	1	1	1	1	1	1		1
Red-headed woodpecker*	1		1	1	1		1	1		1		1	1	1	1	1	1	
Red-bellied woodpecker	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Yellow-bellied sapsucker	1			1	1	1			1						1	1	1	
Downy woodpecker	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hairy woodpecker	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Northern flicker	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pileated woodpecker	1		1			1								1	1	1		
Eastern wood-pewee	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Olive-sided flycatcher										1		1						
Alder flycatcher		1		1		1	1		1		1	1	1	1	1			1
Acadian flycatcher*			1			1				1				1				1
Willow flycatcher*		1		1				1				1						
Least flycatcher*			1	1	1			1		1					1			
Eastern phoebe	1		1	1		1		1			1	1	1	1		1	1	
Great crested flycatcher	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1	1
Western kingbird				1														

Appendix G Supporting Information

Appendix 1 (cont.): List of all bird species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Common Name		th Street			76				ıd					ay		plex		
Eastern kingbird	1	1		1	1		1	1	1	1	1	1	1	1	1	1	1	
Scissor-tailed flycatcher		1		-	-		-	-		-	-	-				-	-	
Purple martin	1					1			1							1		
Tree swallow	1	1		1			1	1	1		1	1		1	1		1	1
N. Rough-winged swallow	1			1			1	1					1					
Bank swallow	1	1	1		1		1	1					1				1	1
Cliff swallow	1	1	1	1			1	1	1		1	1	1	1	1			1
Barn swallow	1	1		1	1	1	1	1	1			1	1	1	1	1	1	1
Blue jay	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
American crow	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1
Black-capped chickadee	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tufted titmouse	1		1	1	1	1	1		1	1				1	1	1		1
Red-breasted nuthatch				1	1													1
White-breasted nuthatch	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Brown creeper*				1											1	1		
Carolina wren			1									1	1					1
House wren	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Winter wren	1		1		1				1				1	1		1	1	1
Sedge wren*	1	1		1			1	1				1	1					
Marsh wren		1			1			1										
Golden-crowned kinglet				1				1				1	1					
Ruby-crowned kinglet	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Blue-gray gnatcatcher	1		1	1	1	1	1		1				1	1	1	1	1	1
Eastern bluebird	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gray-cheeked thrush												1		1				
Swainson's thrush			1	1	1					1	1	1		1				
Hermit thrush	1		1	1	1	1				1		1	1	1		1		1

Appendix 1 (cont.): List of all bird species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Common Name		Street												7		lex		
Veery*													1				1	
Wood thrush*						1	1		1	1						1		1
American robin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gray catbird	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Northern mockingbird*												1						
Brown thrasher	1	1		1	1	1		1	1	1		1			1	1	1	1
Cedar waxwing	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1
European starling	1		1	1	1	1	1	1	1			1	1	1			1	
Blue-headed vireo			1	1	1				1	1	1	1	1	1		1	1	1
Philadelphia vireo									1			1					1	1
Bell's vireo*	1	1		1				1									1	
Yellow-throated vireo	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Warbling vireo	1	1	1	1	1		1	1	1	1	1	1	1	1	1		1	1
Red-eyed vireo	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Blue-winged warbler*				1						1			1		1			
Golden-winged warbler*											1	1			1	1		
Tennessee warbler	1			1	1	1			1		1	1		1		1	1	1
Orange-crowned warbler	1			1	1	1	1			1		1	1	1		1	1	1
Nashville warbler				1	1						1		1			1		1
Magnolia warbler				1	1		1	1		1								
Cape may warbler	1																	
Yellow-rumped warbler	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Black-throated green warbler	<u> </u>				1						1							
Blackburnian warbler					1						1			1				
Palm warbler	1						1	1			1							
Bay-breasted warbler					1													

Appendix G Supporting Information

Appendix 1 (cont.): List of all bird species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Common Name		et																
Blackpoll warbler					1			1			1		1					
Northern waterthrush					1	1		1			1	1	1				1	
Connecticut warbler					-	-		-				-	1					
Canada warbler*				1							1		1					
Mourning warbler											1							
Wilson's warbler	1		1	1							1	1				1		
Northern parula	1		1	1	1						1	1	1	1		1		
Yellow warbler	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1
Chestnut-sided warbler	-	-	-	-	1	-	-	-			-	-	-	-	-		1	1
Yellow-throated warbler					1												1	
Cerulean warbler*					1			1					1					
Black-and-white warbler*				1	1		1	-		1	1	1	1	1			1	
American redstart	1		1	1	1	1	1	1	1	1	1	1	1	1	1		1	1
Prothonotary warbler*	-		-	-	1	-	-	-	-		-		1	1	1		-	
Ovenbird	1		1	1	1		1		1	1	1		1			1	1	1
Louisiana waterthrush*			1							-								
Common yellowthroat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Summer tanager						1				-								1
Scarlet tanager			1	1	1	1	1			1	1			1	1	1		1
Northern cardinal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rose-breasted grosbeak	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Indigo bunting	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dickcissel*	1	1		1				1				1	1	1		1	1	
Eastern towhee*	1	1	1	1	1		1	1	1	1	1	1	1		1	1	1	1
Chipping sparrow	1			1		1	1	1	1	1	1	1	1	1	1	1	1	1
Clay-colored sparrow	1											1						

Appendix G Supporting Information

Appendix 1 (cont.): List of all bird species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
	tream	1 100th Street	ek	len	Refuge	W	stem	ek	Upland	ods	ıtion	efuge	n	pillway	77	Complex	reek	stle
Common Name																		
Field sparrow*	1	1	1	1			1	1	1		1	1	1	1	1	1	1	
Vesper sparrow	1	1	1					1										
Lark sparrow*				1								1						1
Savannah sparrow		1		1				1										
Henslow's sparrow*																1		
Song sparrow	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1
Swamp sparrow			1				1	1	1			1	1	1	1			1
Fox sparrow			1	1	1			1	1	1			1	1	1	1		
Lincoln's sparrow			1		1		1	1							1	1		1
White-throated sparrow	1		1	1	1	1	1	1	1	1	1		1	1	1	1	1	1
Harris's sparrow								1							1			
White-crowned sparrow				1				1										
Dark-eyed junco	1		1	1			1	1	1			1	1	1	1	1	1	1
Bobolink*								1		1					1	1	1	
Red-winged blackbird	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rusty blackbird*							1											
Eastern meadowlark*	1	1		1			1	1		1				1	1		1	
Western meadowlark				1														
Great-tailed grackle												1						
Common grackle		1		1	1	1	1	1	1			1	1	1			1	
Brown-headed cowbird	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Orchard oriole	1	1		1					1	1	1	1			1	1		
Baltimore oriole	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1
Purple finch			1							1								
House finch	1				1	1			1	1		1	1	1	1		1	
American goldfinch	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
House sparrow	1			1		1				1				1	1			

Appendix 2: List of all mammal species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

Common Name	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Virginia opossum	1	1	1	1	1	1	1	1	1	1		1	1	1	1		1	1
Northern short-tailed shrew	1	1	1	1	1	1	1	1	1	1		1	1	1	1		1	1
Southern short-tailed shrew*				1	1					1		1						
Eastern mole	1				-	1	1		1	1	1				1	1	1	
Eastern cottontail	1	1		1		1	-		1	1	1			1	-	1	1	1
Eastern chipmunk	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Woodchuck		1	1		1		1			1	1		1	1				1
Fox squirrel	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1
Plains pocket gopher		1						1										
Beaver	1	1		1	1	1	1	1	1	1		1	1		1			1
Meadow vole													1		1			
Muskrat			1	1	1					1								
Meadow jumping mouse												1						
Coyote						1	1		1	1	1			1	1			1
Red fox	1									1				1				
Raccoon	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
River otter*							1	1				1						
Striped skunk					1	1			1		1			1	1	1		
Long-tailed weasel							1											1
Mink	1	1		1			1		1								1	
Bobcat*															1			
White-tailed deer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Appendix G Supporting Information

Appendix 3: List of all reptile and amphibian species found on sites surveyed within the Saylorville Project, IA, 2013

"*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Common Name		et																
Northern leopard																		
frog	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1
Plains leopard frog				1		1				1					1			1
Bullfrog	1		1	1	1	1	1	1	1	1	1	1		1	1	1		1
Cope's gray treefrog			1	1												1	1	
Eastern gray treefrog	1	1	1		1	1	1	1		1	1	1	1	1	1	1	1	1
Western chorus frog	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Northern cricket	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
frog*	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
American toad	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Painted turtle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1
Snapping turtle	1		1	1		1	1	1	1	1	1			1	1	1		
Spiny softshell turtle					1								1					
Smooth softshell turtle															1			
Northern water															1			
snake			1		1			1		1						1		1
Brown snake	1	1	1			1		1	1	1	1	1	1	1	1	1		1
Smooth earth snake*						1			1		1						1	
Eastern garter snake	1	1	1		1	1	1	1		1	1	1	1	1	1			1
Plains garter snake Prairie ringneck snake		1		1	1	1		1		1		1				1		
Racer		1		1							1					-		1
Bullsnake*								1										
Fox snake			1						1	1							1	1

Appendix 4: List of all odonate species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
	Stream	nd 100th Street	eek	Glen	Refuge	ew	estem	reek	Upland	oods	tation	Refuge	an	Spillway	:57	k Complex	Creek	estle
Common Name																		1
Ebony Jewelwing	1		1				1		1	1		1		1	1			1
American Rubyspot												1						
Southern Spreadwing										1								
Amber-winged Spreadwing					1					1		1						
Sweetflag Spreadwing*				1														
Slender Spreadwing					1	1			1			1					1	1
Lyre-tipped Spreadwing		1		1	1													
Blue-fronted Dancer	1	1	1	1	1		1	1		1	1	1	1	1	1	1	1	1
Violet Dancer						1				1		1		1				
Powdered Dancer					1								1					
Springwater Dancer															1			
Blue-tipped Dancer							1									1		
River Bluet						1												
Rainbow Bluet	1		1		1	1										1		1
Azure Bluet	1			1				1			1					1	1	
Familiar Bluet	1	1		1		1	1	1		1	1				1			1
Skimming Bluet								1			1							
Orange Bluet								1						1				
Citrine Forktail						1				1		1						1
Fragile Forktail	1	1				1		1	1									
Eastern Forktail	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lance-tipped Darner												1						
Common Green Darner	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fawn Darner															1			
Flag-tailed Spinyleg																	1	
Plains Clubtail															1			
Cobra Clubtail	1														1		1	

Appendix G Supporting Information

Appendix 4 (cont.): List of all odonate species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Common Name	Stream	and 100th Street	Creek	Glen	s Refuge	view	uestem	Creek	ık Upland	Voods	ntation	Refuge	rian	v Spillway	E57	ak Complex) Creek	restle
Common Sanddragon							1											
Riverine Clubtail			1															
Common Baskettail												1				1		
Prince Baskettail	1	1		1	1	1		1		1	1		1	1	1	1		1
Calico Pennant															1			
Halloween Pennant	1	1		1		1	1	1		1					1			
Eastern Pondhawk	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1		1
Dot-tailed Whiteface	1						1	1		1								
Widow Skimmer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Twelve-spotted Skimmer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Blue Dasher	1	1		1	1		1	1		1	1	1		1		1		1
Wandering Glider	1	1		1	1	1	1		1	1	1	1	1	1	1	1	1	1
Eastern Amberwing	1	1		1		1	1	1		1	1	1	1	1		1	1	1
Common Whitetail	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1
Variegated Meadowhawk	1			1		1		1	1		1				1			1
Cherry-faced Meadowhawk											1							
White-faced Meadowhawk	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1
Black Saddlebags	1	1		1	1	1	1	1	1	1	1	1	1	1		1	1	1
Red Saddlebags	1	1		1				1	1	1	1					1	1	

Appendix 5: List of all butterfly species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Common Name	eam	100th Street	K	'n	efuge	,	em	k	pland	ds	ion	luge		illway		Complex	eek	le
Delaware Skipper								1	1							1		
Least Skipper	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1
Sachem				1														
Silver spotted Skipper		1				1		1						1		1		
Fiery Skipper										1				1	1			1
Common Sootywing	1					1								1				
Tawny edged Skipper														1				
Little Glassywing		1									1						1	
Common Checkered-Skipper						1	1									1		1
Eastern Tiger Swallowtail	1	1		1	1		1				1		1	1	1	1		1
Black Swallowtail		1	1	1	1	1		1	1	1			1	1	1	1	1	1
Checkered White		1												1				
Cabbage White	1	1	1			1	1	1	1	1	1	1	1	1	1	1	1	1
Clouded Sulphur	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1
Cloudless Sulphur		1																
Dainty Sulphur						1					1	1		1	1	1	1	1
Little yellow		1								1								
Olympia Marble*															1			
Orange Sulphur	1	1	1	1		1	1	1	1	1	1			1	1	1	1	1
Summer Azure	1			1		1		1	1				1				1	1
Eastern Tailed-Blue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Harvester										1								
Gray Copper	1	1							1		1							
Hackberry Emperor					1					1				1	1		1	1
Common Wood-Nymph				1					1		1	1	1		1		1	
Silvery Checkerspot								1										

Appendix G Supporting Information

Appendix 5 (cont.): List of all butterfly species found on sites surveyed within the Saylorville Project, IA, 2013 "*" denotes Species of Greatest Conservation Need (SGCN). "1" denotes species present on the site.

Common Name	Big Creek Stream	Big Creek Grassland 100th Street	Bluff Creek	Cherry Glen	DNR Parks Refuge	Lakeview	Little Bluestem	Little Creek	Mature Oak Upland	Mont Woods	Pine Plantation	Polk City Refuge	Riparian	River below Spillway	West E57	White Bur Oak Complex	Mosquito Creek	High Trestle
Monarch	1	1		1	1	1	1	1	1	1	1	1	1		1	1	1	
Buckeye		1	1		1		1	1	1	1	1		1	1	1	1	1	1
Viceroy	1	1		1		1	1	1	1	1	1	1		1	1		1	1
Red-spotted Purple	1	1						1							1	1	1	1
Little Wood-Satyr					1	1	1		1		1			1	1	1	1	1
Mourning Cloak	1	1		1	1		1	1	1	1	1			1	1	1	1	1
Pearl Crescent	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1
Eastern Comma															1			
Question Mark									1	1								1
Great Spangled Fritillary	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Red Admiral	1	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1
Painted Lady														1		1	1	
American Lady		1																

Appendix G
Supporting Information

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix G Supporting Information

G.9 Non-Recreational Outgrant Policy, March 2009



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS WASHINGTON, D.C. 20314-1000

CECW-CO/CEMP-CR

MAR 3 0 2009

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Non-Recreational Outgrant Policy

- 1. Background. In executing the U.S. Army Corps of Engineers mission, districts receive numerous and diverse proposals for use of lands and waters at Civil Works water resources projects. Nationwide guidance specifically for recreation development on outgranted land was issued on 6 December 2005. No similar nationwide criteria exist to evaluate proposals for nonrecreation purposes. Districts have taken different approaches in evaluating these proposals. This has created inconsistencies in the type and scope of use authorized and other conditions related to authorizations, such as mitigation and long term affects on public resources. Past proposals have included a wide variety of activities involving the utilization of public lands and waters, such as roadways, public utilities (power lines, waterlines, intakes and outfalls, natural gas and fuel pipelines, etc.), commercial navigation activities (harbors, barge terminals, mooring cells, etc.), flood risk management or hydropower generation structures, public facilities such as schools, fire houses, police stations, and private residential subdivisions. At times, there may be an interrelationship between recreation and other real estate outgrant proposals (e.g. leases, licenses, easements). In those cases, the intent and philosophy of both policies will be evaluated, along with other applicable statutes, regulations, and guidelines, such as the Corps Environmental Operating Principles. This policy was developed jointly by the Real Estate and Operations Communities of Practice.
- 2. **Purpose**. The purpose of this guidance is to establish a consistent, nationwide policy that will be applied to evaluate non-recreational real estate outgrant requests for use of Civil Works lands and waters. The Corps intent is to meet legitimate needs for the use of project lands and waters while sustaining our natural resources and protecting authorized project purposes. Depending on specific project legislation, project purposes may include navigation, hydropower, flood risk management, recreation, water supply, and low flow augmentation. Additional statutes can assign mission responsibilities, such as fish and wildlife and endangered species management.
- 3. **Applicability**. This policy applies to all new non-recreational outgrant requests for use of Corps fee owned lands and waters by the public (Federal, State and local), Indian Tribes, private sector, quasi-public entities, or individuals at Civil Works water resources projects. All requests submitted prior to the effective date of this policy will be processed in accordance with current District policies. Existing outgrants are grandfathered under this policy. Proposals to modify or renew existing outgrants will also be evaluated for policy compliance under this guidance.

Appendix G Supporting Information

CECW-CO/CEMP-CR

SUBJECT: Non-Recreational Outgrant Development Policy

All new proposals must comply with Section 9 - Evaluation Criteria, Enclosure 1 - General Outgrant Application Information, and as applicable, Enclosure 2 - National Environmental Policy Act Guidance, Enclosure 3 - Mitigation Guidance, and Enclosure 4 - Additional Guidance For Specific Outgrant Applications. It is recommended that designated corridors be established in Project Master Plans where feasible and new proposals should utilize these corridors where they exist. This policy is not applicable to oil, gas, or mineral exploration or extraction. This policy is also not applicable to the licensing of hydropower facilities by non-federal interests on Corps administered Civil Works Projects. That program is regulated by the Federal Energy Regulatory Commission. However, full compliance with the associated non-federal hydropower requirements defined in ER 1110-1-1454 (Corps Responsibilities for Non-federal Hydroelectric Power Development under the Federal Power Act) is required. Specific guidance for evaluating antenna sitting requests is contained in 41 CFR 102-79.70-79.100. A license, lease, or easement will be issued in association with the request depending on proposed use of the Federal property (i.e. whether a tower or other facilities will be constructed on Federal property; or solely placement of an antenna).

- 4. Policy. The primary rationale for authorizing any future non-recreational outgrant request for use on Corps lands or waters will be one of two reasons: there is no viable alternative to the activity or structure being located on Civil Works land or waters; or, there is a direct benefit to the government. Examples of instances of no viable alternative include but are not limited to: cross-country utilities, pipelines, or roadways that must cross projects, public water intakes, or commercial mooring cells in a navigable waterway. If a proposal meets one of these two criteria, it must be evaluated in light of compatibility with authorized project purposes, compliance with statutory and regulatory requirements, including environmental and cultural resource laws, cumulative impacts, and overall long-term public interest factors. The impacts associated with an individual action or the accumulated impact of a series of actions must not adversely impact the capability of the project to generate the benefits for which the project was congressionally authorized, constructed, and is operated. The Corps shall coordinate and/or consult with American Indian/Alaska Native Governments when reservation lands are involved. Public or private structures or activities that are not dependent on use of, or location on, Civil Works lands and waters, such as schools, fire houses, and hospitals are prohibited unless no viable alternative is proven available. Permanent commercial ventures and private residences are prohibited. Any private exclusive use of Civil Works lands and waters not specifically authorized by ER 1130-2-406 is prohibited.
- 5. **Consideration.** In most instances, an applicant will be required to pay the fair market value or consideration for use of Civil Works lands and or waters. This consideration may be monetary or non-monetary. However, in-kind consideration is not authorized for leases or licenses granted under 16 USC 460d.
- 6. Mitigation. Mitigation guidelines can be found in Enclosure 3. Wherever possible, applicants requesting use of Corps fee-owned lands or waters generally will be required to mitigate for adverse impacts to ensure that public resources suffer no net loss of value, post-construction. This may include statutory and/or non statutory mitigation actions. However, only

Appendix G Supporting Information

CECW-CO/CEMP-CR

SUBJECT: Non-Recreational Outgrant Development Policy

non-statutory mitigation may be waived as defined in Enclosure 3, paragraph 4. Where required, a Mitigation Plan must be prepared and approved by the District Engineer prior to issuance of the outgrant instrument. Approved mitigation plans shall become a condition of and added as an addendum to the applicable real estate instrument.

- 7. Administrative Expense. In addition to consideration and mitigation, the applicant will be required to pay administrative expenses for the outgrant. Administrative cost for the evaluation of any application documents (preliminary, detailed, supporting) will be paid up front and prior to the start of the review process by project and district personnel in accordance with Civil Works Policy Memorandum, "Collection of Civil Works Appropriations," dated 2 October 2008.
- 8 Storage Capacity. By law, every Corps water resource project has designated missions (e.g., flood risk management reduction, hydropower, navigation, water supply, etc). To ensure compliance with law, the Corps is required to maintain the ability to store water to support these missions. The amount of water storage availability for each mission is identified in a congressionally approved Water Allocation Report. Changes to these amounts may not be done without a re-allocation study and an approved amended Water Allocation Report. Proposals that impact water storage availability for any mission will be required to offset the impact. This includes impacts up to the maximum storage of the reservoir (see Definitions Section 8d.).

9. Definitions.

- a. **Consideration** The fair market value received for the outgrant (monetary and non monetary, such as in-kind improvements or services). Administrative expenses and mitigation requirements cannot be applied towards consideration. Administrative expenses and mitigation cost are considered as an additional expense to the fair market value of the outgrant.
- b. **Designated Corridors** A parcel of land with fixed boundaries that has been identified in the Project Master Plan or operational management plan as being the preferred location for future outgrants (e.g., public utilities, roadways, pipelines, etc) or proposed modifications to existing outgrants suitable to accommodate compatible types of outgrants.
- c. **Freeway** A road that has controlled access and is designed to link urban areas. Freeways are designed for high volumes of traffic, use grade separations at all intersections, have design speeds of 50-65 miles per hour, and no median access. Freeways include expressways, interstates, and toll-roads.
- d. **Maximum Storage** The total storage space in a reservoir (in acre feet) below the maximum attainable water surface elevation (crest of the dam or top of the flood pool), including any surcharge storage (capacity above the maximum operating level of reservoir).

Appendix G

CECW-CO/CEMP-CR

SUBJECT: Non-Recreational Outgrant Development Policy

- e. **Operational Management Plan** A separate document from the Project Master Plan that outlines in detail the specific operation and administration requirements for natural resources and park management consistent with the approved Project Master Plan. Management strategies consistent with authorized project purposes, approved resource use objectives, and land designations will be established in the document. The document will be used as a working tool for the overall management of the project on a day to day basis.
- f. **Non-Statutory Mitigation** The definition of mitigation is broadened to include "all measures necessary to make the Corps project whole." No specific statute may address these actions, yet damages are incurred and appropriate mitigation should be provided. Non statutory mitigation actions may take the form of actions to restore project value, such as replacing trees, soil stabilization, and providing new, relocated, or replacement facilities.
- g. **Outgrant** A document which authorizes the right to use Civil Works lands and waters. It is a written legal document which conveys the right to use Army controlled real property. For the purposes of this policy, an outgrant is typically a lease, license, or easement generally authorized by 16 USC 460d, 10 USC 2667 or 10 USC 2668, and the general administrative authority of the Secretary of the Army (reference ER 405-1-12, Chapter 8 (Real Property Management), AR 405-80 (Management of Title and Granting Use of Real Property), and the forthcoming EC 405-1-80 (Management and Outgrant Programs).
- h. **Project Level Representative** Person responsible for operations at a project or area level, such as lake manager, operations project manager, park manager, resource manager, etc.
- i. **Project Master Plan** A conceptual document guiding Corps responsibilities pursuant to Federal laws and regulations to preserve, conserve, develop, restore, maintain, and manage project lands, waters, and associated resources. The primary goals of a Master Plan are to prescribe an overall land and water management plan, resource use objectives, land use classifications, and associated design and management concepts. The plan addresses all resources including, but not limited to, fish and wildlife, vegetation, cultural, aesthetic, interpretive, recreational, mineral, water, and commercial.
- j. **Regional Arterial Road** A road that links multiple communities within two or more counties, and provides continuous and mostly uninterrupted traffic flow. Regional arterial roads are designed for high volumes of traffic, design speeds of 45-50 miles per hour, and use partially controlled access, grade separation at isolated intersections and limited curb and median access controls to facilitate traffic flow.
- k. **Statutory Mitigation** Statutory mitigation is driven by regulations that require mitigation to correct negative impacts to the environment based on a proposed action. For example, § 33 CFR 320.4(r) and 33 CFR 332 detail the required mitigative actions when wetlands or navigable waterways (e.g., discharge of dredged or fill material into the water) are impacted.

Appendix G Supporting Information

CECW-CO/CEMP-CR

SUBJECT: Non-Recreational Outgrant Development Policy

- l. Viable Alternative Other lands or waters not under Corps management that meet the intended objective of the proposal. Factors such as cost or the appearance of unused Corps lands or waters will not affect the determination of viability.
- 10. Evaluation Criteria. All new requests for use or revisions to existing outgrants must be in writing and reviewed by a district team. Generally, the team will at a minimum consist of a Project Level Representative, Real Estate, Operations, and other legal/technical elements as appropriate (Counsel, Engineering, Planning, Regulatory, etc.). Final approval rests with the District Engineer unless such authority is specifically delegated to an appropriate subordinate level to accommodate a minor request. In the rare circumstance that exceptions to this policy may be warranted, proposals for non-recreational use will first be forwarded to the Division Commander. If the review for these exceptions is not resolved at the Division level, as a last resort, the request will be forwarded to Headquarters (CECW-CO-N, CEMP-CR, applicable headquarters Regional Integration Team, and the Director of Civil Works (if needed)) for resolution.
- a. Although these evaluation criteria are integral to any land availability determination, the preparation of the Report of Availability (ROA) will follow the processes established in ER 405-1-12, Chapter 8 (Real Property Management), AR 405-80 (Management of Title and Granting Use of Real Property), the forthcoming EC 405-1-80 (Management and Outgrant Programs), ER 200-2-2 (Procedures for Implementing NEPA) and ER 200-2-3 (Environmental Quality-Environmental Compliance Policies). In addition, the evaluation will be consistent with ER 1130-2-540 (Environmental Stewardship Operations and Maintenance Policies), ER 1130-2-550 (Recreation Operations and Maintenance Policies), and ER 1130-2-406 (Shoreline Management at Civil Works Projects).
 - b. The team will evaluate requests using all of the following criteria:
 - Consistent with project purposes
 - Viable alternatives to utilization of public lands and waters
 - Consistent with complete land use classifications and resource management objectives identified in the approved Project Master Plan (or supplement thereto)
 - Consistent with applicable evaluation contained in the enclosures
 - In the public interest
 - Demonstrated need
 - Technical capabilities
 - Financial capabilities (consideration, mitigation and administrative expenses)

Appendix G Supporting Information

CECW-CO/CEMP-CR

SUBJECT: Non-Recreational Outgrant Development Policy

11. Implementation. This policy is effective immediately and supersedes any existing project, district, or MSC policy on evaluating proposed outgrants. This policy will remain in effect until incorporated into appropriate Engineer Regulations. District policies may be developed that supplement this policy in order to further define evaluation roles and responsibilities within the district. However, district policies will not be in conflict with this policy.

FOR THE COMMANDER:

Encls

MANN Semple MERDITH W. B. TEMPLE

Major General, USA

Deputy Commanding General

for Civil and Emergency Operations

Appendix G Supporting Information

GENERAL OUTGRANT APPLICATION INFORMATION ENCLOSURE 1

- 1. Preliminary Information The applicant must provide the preliminary information requested below (a-h) to the Project Level Representative. The initial submission will be evaluated by the Project Level Representative and district team to determine if a proposal is appropriate for location on Government property. Administrative cost for the evaluation of any application documents (preliminary, detailed, supporting) will be paid by the applicant prior to the start (up front) of the review process by project and District personnel, in accordance with Civil Works Policy Memorandum, "Collection of Civil Works Appropriations" dated 2 October, 2008.
 - a. Identify Applicant:
 - (1) Name, address, and phone number of applicant. The application must be submitted by the entity to whom the outgrant will be assigned.
 - (2) Point of contact for processing (e.g. City Manager, Mayor, Commissioner, etc)
 - b. Describe the structure or facility.
- c. Identify the purpose, need and objective (benefits, enhancements, statutory requirements) for the structure or facility.
- d. Justify placement of structure or facility on government property. The justification should include a description of all alternative locations and routes that were investigated, including routes and locations off of project lands. The description will also include rationale for why the other alternatives were not selected. Cost factors alone will not affect the determination of viability.
- e. State the duration for which the proposed outgrant is requested. Include the duration of the temporary license if one is needed (usually 1 year).
- f. Generally describe the location and dimensions of the requested outgrant area to include a preliminary site plan. NOTE: Outgrants should be placed in the footprint of existing project outgrants or within designated corridors where possible.
 - g. Provide basic construction methods and timeline.
 - h. Anticipated impacts (environmental, cultural resource, social, etc.).

Appendix G Supporting Information

2. Detailed Information - If upon review of an initial request, the Corps determines that the requested activity may be feasible and will be considered further, the information below must be provided as required. This information will be provided to the Project Level Representative and be evaluated by the district team. Additional information may be requested based on the nature of the proposed activity. A Corps determination will be made as to what environmental documentation is required for the proposed action. Preliminary information concerning administrative fees, consideration and mitigation will be provided to the applicant.

a. Coordination

- (1) Provide concurrence from third parties who may be affected by the structure or facility (e.g. other existing outgrants)
- (2) Provide other agency concurrence regarding legal or regulatory requirements where necessary (e.g. responsible State natural resources and utility entities).
- NOTE A temporary real estate instrument will be required prior to conducting any on-the-ground activities (for surveys, ground disturbance, soil and groundwater testing). An Archeological Resources Protection Act (ARPA) permit may also be required.

b. Description of Proposal

- (1) Provide preliminary plans and specifications for the proposed outgrant. Include construction areas, if applicable.
- (2) Provide a map(s) which includes the following:
 - (a) A legal description (location, identification of parcel) of the proposal. (reference to a known Corps of Engineers property monument is encouraged). This description can also be provided separately;
 - (b) The upper guide contours and elevation intervals appropriate to the terrain as applicable, if available;
 - (c) Identification of the project property line (Federal government property line) in relation to the proposal;
 - (d) Any structures that will be affected (e.g.: fences, roads, monuments, gates, intake structures, natural and environmental resources, etc.); and
 - (e) The estimated acreage of the proposed outgrant.
- (3) Stake/flag the boundary or centerline of the outgrant if requested
- c. NEPA If NEPA documentation is required from the applicant, see Enclosure 2.

Appendix G Supporting Information

- d. **Mitigation** Non-statutory mitigation is generally required for impacted public resources. Mitigation often requires, but is not limited to, wildlife habitat improvement and vegetative plantings on the area of actual disturbance and on additional areas or other forms of restitution. Statutory mitigation may also be required if the proposed work involves applicable statutes, regulations, and guidance concerning impacts of a proposed action. For example, a discharge of dredged or fill material into waters of the U.S typically requires a Section 404 permit (Clean Water Act) and associated mitigation. See Enclosure 3 for additional mitigation guidance.
- e. Storm Water Requirements In accordance with State, County and/or local laws, various Districts within the Corps do not allow outgrants for storm water facilities. For those Districts that allow outgrants for storm water facilities, the applicant must also contact the applicable State, County and/or local agency responsible for storm water permits. The applicant must provide documentation of the contact, a Notice of Intent and evidence that a permit is being pursued (if required). In addition, the applicant shall provide a Storm Water Pollution Prevention Plan when required if earth-disturbing activities are to be performed. This plan shall include the means by which erosion and sedimentation will be controlled and monitored to protect the drainage courses.
- f. **Storage Capacity** In general, Corps policy is no net loss of maximum storage capacity. This generally includes calculating amounts of cut and fill which could impact storage capacity.
- **g.** Landscaping and Revegetation As part of site stabilization and restoration, the applicant in most cases will be required to reestablish vegetation after construction. The applicant must demonstrate that the seed and vegetative plantings proposed for revegetation are native species to the area and not listed as an invasive species on a Federal or applicable State list.

NOTE: Applicants, please review Enclosure 4 for guidance addressing additional requirements for specific types of outgrants.

Appendix G Supporting Information

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) GUIDANCE ENCLOSURE 2

For outgrant proposals requiring an Environmental Assessment (EA) the following information is generally required by NEPA. Additional information may be requested depending on the nature of the proposal. An EA facilitates the decision process regarding the proposed action and alternatives. Additional information concerning NEPA can be found at http://ceq.hss.doe.gov/.

NEPA documents may be completed by the Corps or the applicant. If completed by the Corps, the applicant must pay for the expenses incurred prior to the work being initiated. If completed by the applicant, the applicant must pay for the expenses to be incurred by the Corps prior to the Corps review in accordance with Civil Works Policy Memorandum, "Collection of Civil Works Appropriations" dated 2 October 2008.

a. SECTION 1	AUTHORITY, PURPOSE, AND SCOPE provides the authority for the proposed action, summarizes the project purpose, provides relevant background information, and describes the scope of the EA.
b. SECTION 2	ALTERNATIVES examines alternatives for implementing the proposed action.
c. SECTION 3	PROPOSED ACTION describes the recommended action.
d. SECTION 4	AFFECTED ENVIRONMENT describes the existing environmental and socioeconomic setting.
e. SECTION 5	ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION identifies the potential environmental and socioeconomic effects of implementing the proposed action and alternatives.
f. SECTION 6	MITIGATION PLAN summarizes mitigation actions required to enable a Finding of No Significant Impact for the proposed alternative.
g. SECTION 7	FEDERAL, TRIBAL, STATE, AND LOCAL AGENCY COORDINATION provides a listing of individuals and agencies consulted during preparation of the EA.
h. SECTION 8	REFERENCES provides bibliographical information for cited sources.
i. SECTION 9	APPLICABLE ENVIRONMENTAL LAWS AND REGULATIONS provides a listing of environmental protection statutes and other environmental requirements.

Appendix G Supporting Information

j. SECTION 10		OF PREPARERS identifies persons who prepared the ment and their areas of expertise.
k. APPENDICES	Α	Correspondence
	В	Section 404 Permit (if required)
	C	Fish and Wildlife Coordination/Correspondence
	D	Cultural Resources Coordination/Correspondence
	\mathbf{E}	Public Comments (if applicable)
	F	Newspaper Public Notice (if applicable)
	G	Other
	D E F	Cultural Resources Coordination/Correspondence Public Comments (if applicable) Newspaper Public Notice (if applicable)

Appendix G Supporting Information

MITIGATION GUIDANCE ENCLOSURE 3

- 1. **Statutory Mitigation.** Statutory mitigation must be done in accordance with applicable statutes, regulations and guidance. Statutory mitigation is generally defined as actions that reduce the severity or intensity of adverse impacts of other actions, to include:
- a. Avoiding the impact by not taking a certain action or parts of an action or by moving the project location. Applicants are encouraged to consider avoidance as the preferred mitigation measure.
- b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, for example, by adjusting site layout.
- c. Rectifying the impact by repairing, rehabilitating, relocating, or restoring the affected public resources.
- d. Reducing or eliminating the impact over time by monitoring, maintaining, and/or replacing equipment or structures to prevent future degradation from equipment or structural failure over the life of the action.
- e. Compensating for the impact by replacing or providing substitute resources or environments. With the exception of unique habitats under imminent threat of destruction, a mere change in ownership of existing habitat is generally not considered mitigation. Habitat improvement must be implemented in addition to long-term protection of the habitat.

Statutory Mitigation requirements vary somewhat under the environmental laws, regulations, and executive orders. For Corps of Engineers Regulatory Program mitigation guidance see 40 CFR Part 230 "Compensatory Mitigation for Losses of Aquatic Resources", 33 CFR 320.4 paragraph R, and 33 CFR 332. It is recommended that for actions on Civil Works lands and waters that require mitigation under these regulations, the mitigation occur on site where feasible.

2. **Non-Statutory Mitigation**: The definition of mitigation is broadened to include "all measures necessary to make the Corps project whole". Not all of the adverse impacts to a site will be required to be mitigated by a federal statute or regulation, but for outgrants, all adverse impacts must be mitigated unless a waiver is issued (see paragraph 4). The applicant for the outgrant will be advised of the impact and required mitigation. An example of impacts that may not be covered by existing authorities is a proposal that is categorically excluded from NEPA documentation but may still result in the destruction of a small wooded area containing twenty trees. There are no threatened or endangered species or any wetlands involved. Another instance may entail the destruction of 20 campsites resulting from a road expansion. In each case, the impacted resources must be restored or otherwise mitigated.

Appendix G Supporting Information

3. Real Estate Outgrant Documentation.

- a. Where mitigation is required as a result of an outgrant, it will be addressed as a condition of the real estate instrument. A copy of the mitigation plan, use restrictions, and/or Memorandum of Agreement (MOA) will be included as an attachment to the outgrant document. If a mitigation plan, restrictions or an MOA is required, the outgrant instrument must be modified to incorporate compliance with the terms of the plan, restrictions or MOA as a condition of the outgrant. The outgrant instrument must be modified to incorporate a specific termination clause to address failure to comply with mitigation requirements.
- b. In addition, action may also be required under the specific statute(s) that required the mitigation. A clear timetable must also be provided if mitigation requirements extend beyond the execution date of the outgrant agreement. Coordination with the office(s) which are responsible for these requirements must be completed to ensure the requirements are in place before the outgrant document is executed.
- 4. Waiver of Non-Statutory Mitigation Requirements. When only "Non-Statutory Mitigation" is required, the Corps may choose to waive this mitigation requirement in cases where the requested activity will further an authorized project purpose and/or meet a public demand that the Corps is unable to meet. However, the Corps does not have the authority to waive mitigation requirements when such mitigation is required by a law, regulation, or statute.
- 5. **Responsibility for Expenses.** In most cases, all costs associated with processing the mitigation aspect of the outgrant and initiating and maintaining mitigation requirements over the life of the mitigation action are the responsibility of the outgrant applicant and will be agreed upon and documented in the real estate outgrant instrument. These administrative costs are in addition to the fair market value consideration, if applicable, of the property to be outgranted and any other purely administrative expenses incurred as a result of this outgrant request in accordance with Civil Works Policy Memorandum, "Collection of Civil Works Appropriations" dated 2 October 2008.
- 6. **Future Ownership and Management of Mitigation Properties**. On-site mitigation should be achieved wherever possible. If on-site mitigation is not possible, off-site mitigation should be undertaken, as follows:
- a. Acquisition of Real Property. To the maximum extent possible, any additional lands or other real property interest required to be purchased by the applicant for mitigation purposes will be contiguous with existing project lands or waters. The NEPA decision document will clearly address any requirement for the acquisition of non-statutory mitigation lands. In no instance will the Corps take title to real property prior to receiving approval of the Director of Civil Works. Management of mitigation properties will be accomplished in accordance with 33 CFR 332.7. Typically, a Real Estate Plan (REP) will be prepared to support this type of action. However, there may be circumstances that require the preparation and approval of a Real Estate Design Memorandum (REDM) where acquisition of the land is tantamount to implementation of the project and approval of a decision document is required prior to commencement of the acquisition effort (e.g., some fish and wildlife mitigation projects). In addition, an REDM may

Appendix G Supporting Information

be appropriate when there is a new acquisition requirement for an existing project for which a REDM was previously utilized.

b. Other Mitigation Services.

- 1) Mitigation services generally consists of restoration, creation, relocation, or improvements of the same type (i.e., three acres of existing wildlife habitat destroyed and replaced with three or more acres of new wildlife habitat lands) to offset the damaged resource base. In other circumstances, it may be more appropriate to accept other types of services (i.e., three acres of existing wildlife habitat destroyed and mitigated by rip rapping 1,000 linear feet of shoreline to protect nearby wildlife habitat). Entering into agreements for the replacement of impacted wildlife habitat with recreation facilities is generally not appropriate.
- 2) In the absence of specific authority, the Corps may not accept cash in lieu of mitigation services. In some limited instances, however, it is possible for the Corps to directly perform the mitigation work by entering into agreements with states or others and then to be reimbursed by the state or others for such work. Approval from the Assistant Secretary of the Army (Civil Works) (ASA-CW) may be necessary prior to entering into such an agreement. In some cases, a real estate instrument or a management plan may be required in accordance with 33 CFR 332.7 if a land acquisition is part of the mitigation service.

Appendix G Supporting Information

ADDITIONAL GUIDANCE FOR SPECIFIC OUTGRANT APPLICATIONS ENCLOSURE 4

1. Requirements for Specific Structures and Applicable Legal Compliance - In addition to the requirements listed in Enclosures 1 through 3, the following information may be required as appropriate for specific types of outgrants. This list is not intended to be all inclusive but an illustrative example of additional requirements that exist for specific types of outgrants. The construction, operation and safety of these outgrants will require compliance with all applicable Federal, state, and local laws, codes, and standards. While it is not the responsibility of the Corps to inspect these facilities for safety compliance, the Corps reserves the right to halt the construction and or operation of the structure if a safety issue creates a danger to the life of project visitors or the ability of the Corps to carry out project missions. All of these specific outgrant applications must include a safety point of contact. Also note that the application must be submitted by the entity to whom the outgrant will be assigned.

a. Electric Power and Communication Lines, and Structures and Facilities for Radio, Television, and other Communication Services

- (1) Specify line heights, voltage, cutoff locations and elevations
- (2) Submitted plans must be certified by a state certified professional engineer as being in compliance with the National Electric Safety Code requirements, ER-1110-2-4401, 30 May 97 (Clearances For Electric Power Supply Lines and Communication Lines Over Reservoirs), American National Standard ANSIC2, National Electric Safety Code (NESC), American National Standard ANSI/NFPA 70, and the National Electric Code NEC.

b. Sewer and Water Lines

- (1) A state certified professional engineer must certify plans as being in compliance with all applicable Federal, State, and local government regulations.
- (2) Additional requirements may apply pertaining to flood-proofing and impacts to public resources.
- (3) Submit documentation demonstrating coordination with the applicable Corps of Engineers District Real Estate Office concerning the format for water pipeline easements contained in Real Estate Policy Guidance Letter No. 26, Easements to Support Water Supply Storage Agreements and Surplus Water Agreements, 10 June 2008.

c. Water Intake Structure

- (1) Submit plans and specifications showing any effects on Corps facilities, as well as current and future water volume needs that may impact water storage/surplus water contracts, etc.
- (2) Submit documentation demonstrating coordination with the applicable Corps of Engineers District Real Estate Office concerning requirements contained in Real Estate Policy Guidance Letter No. 26, Easements to Support Water Supply Storage Agreements and Surplus Water Agreements, 10 June 2008.
- (3) Provide written documentation showing permission has been procured from the water contract holder if required.
- (4) Provide approval/permit from appropriate regulatory agency (state/local) if applicable. Also provide water supply contract, authorizing document, or decision document based on statute, for authorizing a water supply intake.

Appendix G Supporting Information

(5) Provide documentation of review and approval from Corps of Engineers Dam Safety Committee

d. Outfalls (e.g. stormwater, sewage, etc.)

- (1) A copy of the National Pollutant Discharge Elimination System (NPDES) permit must be provided for approval of any outfall that is placed on Corps administered lands and waters. Also furnish any other state/local approvals as applicable.
- (2) A plan to prevent erosion, and to prevent litter, trash, and pollutants from being deposited on Corps administered lands and waters must be provided.
 - (3) Submitted plans must be certified by a state certified professional engineer.
- (4) Submitted plans must be in compliance with Project Shoreline Management Plan if applicable.

e. Major Oil, Natural Gas and Fuel Carrying Pipelines (Under USC 30 Section 185 for pipelines 24"and greater in diameter)

- (1) Disclosure of Ownership If a partnership, corporation, association, or other business entity applies for an easement, the application shall disclose, where applicable:
 - (a) Name and address of each partner
- (b) Name and address of each shareholder owning 3 percent or more of the shares; the number and percentage of any class of voting shares of the entity; and
- (c) Name and address of each affiliate of the entity. If the entity controls the affiliate, include the number of shares and percentage of any class of voting stock of that affiliate; if, however, the affiliate controls the entity, include the number of shares and percentage of any class of voting stock of the entity.
- (2) If this information is already on file, and current, in the District Engineer's office, or local Bureau of Land Management or Federal Energy Regulatory Commission offices, references may be made to it; the applicant need not file repetitious disclosure documents with successive applications.
- (3) Submit documentation demonstrating coordination with the applicable Corps of Engineers District Real Estate Office concerning requirements contained in Real Estate Policy Guidance Letter No. 27, Issuance of Fuel Carrying Pipelines that are 24 inches or more in diameter, 29 October 2008.

NOTE: For oil, natural gas and fuel pipelines smaller than 24" in diameter, please refer to requirements contained in General Outgrant Application Information (Enclosure 1).

f. Roads

- (1) Generally, Civil Works lands will only be made available for roads that are considered regional arteries or freeways (See Definitions in the Guidance). All other types of roads, including driveways and alleys, are generally not permitted on these lands. The expansion of existing roads on Civil Works lands will be considered on a case by case basis.
- (2) Indicate whether or not Federal Highway Administration funds are being used for this road.
- (3) A state certified professional engineer must certify plans as being in compliance with all applicable Federal, State, and local government Regulations.

Appendix G Supporting Information

- g. **Telecommunications.** Authorities applicable to issuing outgrants for telecommunication purposes depending on the type of instruments desired are referenced in the Telecommunications Act of 1996, which is codified at 47 USC 332 and implementing regulations are provided in 41 CFR 102-79.70 to 79.100. In addition the applications must be in compliance with forthcoming Engineering Circular 405-1-80 (Management and Outgrant Programs), Section XIX, Procedures for Sitting of Communications Facilities on Army Controlled Lands. Proposals must include documentation to ensure the outgrant would not create the following problems:
 - (1) Impair, interfere, or degrade the Federal missions of the project or its operations.
 - (2) Interfere with existing radio frequency (RF) activities.
- (3) Documentation of coordination with Federal Aviation Administration (FAA) and/or Department of Defense (DoD) and sitting approval for any proposed telecommunication facility that will be located within proximity to an existing FAA facility or DoD system.
- h. **Hydropower facilities.** Any request to construct/develop hydropower facilities will be an unusual request that will be handled on a case by case basis per ER 1110-2-1454 as amended.

Appendix G
Supporting Information

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix G Supporting Information

G.10 Outdoor Recreation Trends and Futures: A Technical Document Supporting the Forest Service 2010 RPA Assessment, March 2012.

http://www.srs.fs.usda.gov/pubs/gtr/gtr srs150.pdf

G.11 Polk County, Iowa: 2012 Survey on Outdoor Recreation, July 2012.

http://www.responsivemanagement.com/download/reports/IA SCORP PolkCo Report.pdf

Appendix G
Supporting Information

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix G Supporting Information

G.12 Presidential Executive Order 13423, January 2007



3919

Federal Register

Vol. 72, No. 17

Friday, January 26, 2007

Presidential Documents

Title 3-

Executive Order 13423 of January 24, 2007

The President

Strengthening Federal Environmental, Energy, and Transportation Management

By the authority vested in me as President by the Constitution and the laws of the United States of America, and to strengthen the environmental, energy, and transportation management of Federal agencies, it is hereby ordered as follows:

Section 1. Policy. It is the policy of the United States that Federal agencies conduct their environmental, transportation, and energy-related activities under the law in support of their respective missions in an environmentally, economically and fiscally sound, integrated, continuously improving, efficient, and sustainable manner.

Sec. 2. Goals for Agencies. In implementing the policy set forth in section 1 of this order, the head of each agency shall:

- (a) improve energy efficiency and reduce greenhouse gas emissions of the agency, through reduction of energy intensity by (i) 3 percent annually through the end of fiscal year 2015, or (ii) 30 percent by the end of fiscal year 2015, relative to the baseline of the agency's energy use in fiscal year 2003;
- (b) ensure that (i) at least half of the statutorily required renewable energy consumed by the agency in a fiscal year comes from new renewable sources, and (ii) to the extent feasible, the agency implements renewable energy generation projects on agency property for agency use;
- (c) beginning in FY 2008, reduce water consumption intensity, relative to the baseline of the agency's water consumption in fiscal year 2007, through life-cycle cost-effective measures by 2 percent annually through the end of fiscal year 2015 or 16 percent by the end of fiscal year 2015;
- (d) require in agency acquisitions of goods and services (i) use of sustainable environmental practices, including acquisition of biobased, environmentally preferable, energy-efficient, water-efficient, and recycled-content products, and (ii) use of paper of at least 30 percent post-consumer fiber content;
- (e) ensure that the agency (i) reduces the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of by the agency, (ii) increases diversion of solid waste as appropriate, and (iii) maintains cost-effective waste prevention and recycling programs in its facilities;
- (f) ensure that (i) new construction and major renovation of agency buildings comply with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings set forth in the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding (2006), and (ii) 15 percent of the existing Federal capital asset building inventory of the agency as of the end of fiscal year 2015 incorporates the sustainable practices in the Guiding Principles;
- (g) ensure that, if the agency operates a fleet of at least 20 motor vehicles, the agency, relative to agency baselines for fiscal year 2005, (i) reduces the fleet's total consumption of petroleum products by 2 percent annually through the end of fiscal year 2015, (ii) increases the total fuel consumption that is non-petroleum-based by 10 percent annually, and (iii) uses plugin hybrid (PIH) vehicles when PIH vehicles are commercially available at

Appendix G Supporting Information

3920 Federal Register/Vol. 72, No. 17/Friday, January 26, 2007/Presidential Documents

- a cost reasonably comparable, on the basis of life-cycle cost, to non-PIH vehicles; and
- (h) ensure that the agency (i) when acquiring an electronic product to meet its requirements, meets at least 95 percent of those requirements with an Electronic Product Environmental Assessment Tool (EPEAT)-registered electronic product, unless there is no EPEAT standard for such product, (ii) enables the Energy Star feature on agency computers and monitors, (iii) establishes and implements policies to extend the useful life of agency electronic equipment, and (iv) uses environmentally sound practices with respect to disposition of agency electronic equipment that has reached the end of its useful life.
- Sec. 3. Duties of Heads of Agencies. In implementing the policy set forth in section 1 of this order, the head of each agency shall:
- (a) implement within the agency sustainable practices for (i) energy efficiency, greenhouse gas emissions avoidance or reduction, and petroleum products use reduction, (ii) renewable energy, including bioenergy, (iii) water conservation, (iv) acquisition, (v) pollution and waste prevention and recycling, (vi) reduction or elimination of acquisition and use of toxic or hazardous chemicals, (vii) high performance construction, lease, operation, and maintenance of buildings, (viii) vehicle fleet management, and (ix) electronic equipment management;
- (b) implement within the agency environmental management systems (EMS) at all appropriate organizational levels to ensure (i) use of EMS as the primary management approach for addressing environmental aspects of internal agency operations and activities, including environmental aspects of energy and transportation functions, (ii) establishment of agency objectives and targets to ensure implementation of this order, and (iii) collection, analysis, and reporting of information to measure performance in the implementation of this order;
- (c) establish within the agency programs for (i) environmental management training, (ii) environmental compliance review and audit, and (iii) leadership awards to recognize outstanding environmental, energy, or transportation management performance in the agency;
- (d) within 30 days after the date of this order (i) designate a senior civilian officer of the United States, compensated annually in an amount at or above the amount payable at level IV of the Executive Schedule, to be responsible for implementation of this order within the agency, (ii) report such designation to the Director of the Office of Management and Budget and the Chairman of the Council on Environmental Quality, and (iii) assign the designated official the authority and duty to (A) monitor and report to the head of the agency on agency activities to carry out subsections (a) and (b) of this section, and (B) perform such other duties relating to the implementation of this order within the agency as the head of the agency deems appropriate;
- (e) ensure that contracts entered into after the date of this order for contractor operation of government-owned facilities or vehicles require the contractor to comply with the provisions of this order with respect to such facilities or vehicles to the same extent as the agency would be required to comply if the agency operated the facilities or vehicles;
- (f) ensure that agreements, permits, leases, licenses, or other legally-binding obligations between the agency and a tenant or concessionaire entered into after the date of this order require, to the extent the head of the agency determines appropriate, that the tenant or concessionaire take actions relating to matters within the scope of the contract that facilitate the agency's compliance with this order:
- (g) provide reports on agency implementation of this order to the Chairman of the Council on such schedule and in such format as the Chairman of the Council may require; and

Appendix G Supporting Information

Federal Register/Vol. 72, No. 17/Friday, January 26, 2007/Presidential Documents

3921

- (h) provide information and assistance to the Director of the Office of Management and Budget, the Chairman of the Council, and the Federal Environmental Executive.
- Sec. 4. Additional Duties of the Chairman of the Council on Environmental Quality. In implementing the policy set forth in section 1 of this order, the Chairman of the Council on Environmental Quality:
- (a) (i) shall establish a Steering Committee on Strengthening Federal Environmental, Energy, and Transportation Management to advise the Director of the Office of Management and Budget and the Chairman of the Council on the performance of their functions under this order that shall consist exclusively of (A) the Federal Environmental Executive, who shall chair, convene and preside at meetings of, determine the agenda of, and direct the work of, the Steering Committee, and (B) the senior officials designated under section 3(d)(i) of this order, and (ii) may establish subcommittees of the Steering Committee, to assist the Steering Committee in developing the advice of the Steering Committee on particular subjects;
- (b) may, after consultation with the Director of the Office of Management and Budget and the Steering Committee, issue instructions to implement this order, other than instructions within the authority of the Director to issue under section 5 of this order; and
- (c) shall administer a presidential leadership award program to recognize exceptional and outstanding environmental, energy, or transportation management performance and excellence in agency efforts to implement this order.
- Sec. 5. Duties of the Director of the Office of Management and Budget. In implementing the policy set forth in section 1 of this order, the Director of the Office of Management and Budget shall, after consultation with the Chairman of the Council and the Steering Committee, issue instructions to the heads of agencies concerning:
- (a) periodic evaluation of agency implementation of this order;
- (b) budget and appropriations matters relating to implementation of this order:
- (c) implementation of section 2(d) of this order; and
- (d) amendments of the Federal Acquisition Regulation as necessary to implement this order.
- Sec. 6. Duties of the Federal Environmental Executive. A Federal Environmental Executive designated by the President shall head the Office of the Federal Environmental Executive, which shall be maintained in the Environmental Protection Agency for funding and administrative purposes. In implementing the policy set forth in section 1 of this order, the Federal Environmental Executive shall:
- (a) monitor, and advise the Chairman of the Council on, performance by agencies of functions assigned by sections 2 and 3 of this order;
- (b) submit a report to the President, through the Chairman of the Council, not less often than once every 2 years, on the activities of agencies to implement this order; and
- (c) advise the Chairman of the Council on the Chairman's exercise of authority granted by subsection 4(c) of this order.
- **Sec. 7.** Limitations. (a) This order shall apply to an agency with respect to the activities, personnel, resources, and facilities of the agency that are located within the United States. The head of an agency may provide that this order shall apply in whole or in part with respect to the activities, personnel, resources, and facilities of the agency that are not located within the United States, if the head of the agency determines that such application is in the interest of the United States.

Appendix G Supporting Information

3922

Federal Register / Vol. 72, No. 17 / Friday, January 26, 2007 / Presidential Documents

- (b) The head of an agency shall manage activities, personnel, resources, and facilities of the agency that are not located within the United States, and with respect to which the head of the agency has not made a determination under subsection (a) of this section, in a manner consistent with the policy set forth in section 1 of this order to the extent the head of the agency determines practicable.
- Sec. 8. Exemption Authority. (a) The Director of National Intelligence may exempt an intelligence activity of the United States, and related personnel, resources, and facilities, from the provisions of this order, other than this subsection and section 10, to the extent the Director determines necessary to protect intelligence sources and methods from unauthorized disclosure.
- (b) The head of an agency may exempt law enforcement activities of that agency, and related personnel, resources, and facilities, from the provisions of this order, other than this subsection and section 10, to the extent the head of an agency determines necessary to protect undercover operations from unauthorized disclosure.
- (c) (i) The head of an agency may exempt law enforcement, protective, emergency response, or military tactical vehicle fleets of that agency from the provisions of this order, other than this subsection and section 10.
- (ii) Heads of agencies shall manage fleets to which paragraph (i) of this subsection refers in a manner consistent with the policy set forth in section 1 of this order to the extent they determine practicable.
- (d) The head of an agency may submit to the President, through the Chairman of the Council, a request for an exemption of an agency activity, and related personnel, resources, and facilities, from this order.

Sec. 9. Definitions. As used in this order:

- (a) "agency" means an executive agency as defined in section 105 of title5. United States Code, excluding the Government Accountability Office;
- (b) "Chairman of the Council" means the Chairman of the Council on Environmental Quality, including in the Chairman's capacity as Director of the Office of Environmental Quality;
- (c) "Council" means the Council on Environmental Quality;
- (d) "environmental" means environmental aspects of internal agency operations and activities, including those environmental aspects related to energy and transportation functions;
- (e) "greenhouse gases" means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride;
- (f) "life-cycle cost-effective" means the life-cycle costs of a product, project, or measure are estimated to be equal to or less than the base case (i.e., current or standard practice or product);
- (g) "new renewable sources" means sources of renewable energy placed into service after January 1, 1999;
- (h) "renewable energy" means energy produced by solar, wind, biomass, landfill gas, ocean (including tidal, wave, current and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project;
- (i) "energy intensity" means energy consumption per square foot of building space, including industrial or laboratory facilities;
- (j) "Steering Committee" means the Steering Committee on Strengthening Federal Environmental, Energy, and Transportation Management established under subsection 4(b) of this order;
- (k) "sustainable" means to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling

Appendix G Supporting Information

Federal Register/Vol. 72, No. 17/Friday, January 26, 2007/Presidential Documents

3923

the social, economic, and other requirements of present and future generations of Americans: and

(l) "United States" when used in a geographical sense, means the fifty states, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, and the Northern Mariana Islands, and associated territorial waters and airspace.

Sec. 10. General Provisions. (a) This order shall be implemented in a manner consistent with applicable law and subject to the availability of appropriations.

(b) Nothing in this order shall be construed to impair or otherwise affect the functions of the Director of the Office of Management and Budget relating to budget, administrative, or legislative proposals.

(c) This order is intended only to improve the internal management of the Federal Government and is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by a party against the United States, its departments, agencies, instrumentalities, entities, officers, employees or agents, or any other person.

Sec. 11. Revocations; Conforming Provisions. (a) The following are revoked:

- (i) Executive Order 13101 of September 14, 1998;
- (ii) Executive Order 13123 of June 3, 1999;
- (iii) Executive Order 13134 of August 12, 1999, as amended;
- (iv) Executive Order 13148 of April 21, 2000; and
- (v) Executive Order 13149 of April 21, 2000.
- (b) In light of subsection 317(e) of the National Defense Authorization Act for Fiscal Year 2002 (Public Law 107–107), not later than January 1 of each year through and including 2010, the Secretary of Defense shall submit to the Senate and the House of Representatives a report regarding progress made toward achieving the energy efficiency goals of the Department of Defense.
- (c) Section 3(b)(vi) of Executive Order 13327 of February 4, 2004, is amended by striking "Executive Order 13148 of April 21, 2000" and inserting in lieu thereof "other executive orders".

/guze

THE WHITE HOUSE, January 24, 2007.

[FR Doc. 07-374

Appendix G
Supporting Information

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix G Supporting Information

G.13 Presidential Executive Order 13514, October 2009

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release

October 5, 2009

EXECUTIVE ORDER

FEDERAL LEADERSHIP IN ENVIRONMENTAL, ENERGY, AND ECONOMIC PERFORMANCE

By the authority vested in me as President by the Constitution and the laws of the United States of America, and to establish an integrated strategy towards sustainability in the Federal Government and to make reduction of greenhouse gas emissions a priority for Federal agencies, it is hereby ordered as follows:

Section 1. Policy. In order to create a clean energy economy that will increase our Nation's prosperity, promote energy security, protect the interests of taxpayers, and safeguard the health of our environment, the Federal Government must lead by example. It is therefore the policy of the United States that Federal agencies shall increase energy efficiency; measure, report, and reduce their greenhouse gas emissions from direct and indirect activities; conserve and protect water resources through efficiency, reuse, and stormwater management; eliminate waste, recycle, and prevent pollution; leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products, and services; design, construct, maintain, and operate high performance sustainable buildings in sustainable locations; strengthen the vitality and livability of the communities in which Federal facilities are located; and inform Federal employees about and involve them in the achievement of these goals.

It is further the policy of the United States that to achieve these goals and support their respective missions, agencies shall prioritize actions based on a full accounting of both economic and social benefits and costs and shall drive continuous improvement by annually evaluating performance, extending or expanding projects that have net benefits, and reassessing or discontinuing under-performing projects.

Finally, it is also the policy of the United States that agencies' efforts and outcomes in implementing this order shall be transparent and that agencies shall therefore disclose results associated with the actions taken pursuant to this order on publicly available Federal websites.

 $\underline{\text{Sec. 2.}}$ $\underline{\text{Goals for Agencies}}$. In implementing the policy set forth in section 1 of this order, and preparing and implementing the Strategic Sustainability Performance Plan called for in section 8 of this order, the head of each agency shall:

(a) within 90 days of the date of this order, establish and report to the Chair of the Council on Environmental Quality (CEQ Chair) and the Director of the Office of Management and Budget (OMB Director) a percentage reduction target for agency-wide

more

(OVER)

Appendix G Supporting Information

9

reductions of scope 1 and 2 greenhouse gas emissions in absolute terms by fiscal year 2020, relative to a fiscal year 2008 baseline of the agency's scope 1 and 2 greenhouse gas emissions. Where appropriate, the target shall exclude direct emissions from excluded vehicles and equipment and from electric power produced and sold commercially to other parties in the course of regular business. This target shall be subject to review and approval by the CEQ Chair in consultation with the OMB Director under section 5 of this order. In establishing the target, the agency head shall consider reductions associated with:

- (i) reducing energy intensity in agency buildings;
- (ii) increasing agency use of renewable energy and implementing renewable energy generation projects on agency property; and
- (iii) reducing the use of fossil fuels by:
 - (A) using low greenhouse gas emitting vehicles including alternative fuel vehicles;
 - (B) optimizing the number of vehicles in the agency fleet; and
 - (C) reducing, if the agency operates a fleet of at least 20 motor vehicles, the agency fleet's total consumption of petroleum products by a minimum of 2 percent annually through the end of fiscal year 2020, relative to a baseline of fiscal year 2005;
- (b) within 240 days of the date of this order and concurrent with submission of the Strategic Sustainability Performance Plan as described in section 8 of this order, establish and report to the CEQ Chair and the OMB Director a percentage reduction target for reducing agency-wide scope 3 greenhouse gas emissions in absolute terms by fiscal year 2020, relative to a fiscal year 2008 baseline of agency scope 3 emissions. This target shall be subject to review and approval by the CEQ Chair in consultation with the OMB Director under section 5 of this order. In establishing the target, the agency head shall consider reductions associated with:
 - (i) pursuing opportunities with vendors and contractors to address and incorporate incentives to reduce greenhouse gas emissions (such as changes to manufacturing, utility or delivery services, modes of transportation used, or other changes in supply chain activities);
 - (ii) implementing strategies and accommodations for transit, travel, training, and conferencing that actively support lower-carbon commuting and travel by agency staff;
 - (iii) greenhouse gas emission reductions associated with pursuing other relevant goals in this section; and
 - (iv) developing and implementing innovative policies and practices to address scope 3 greenhouse gas emissions unique to agency operations;

more

Appendix G Supporting Information

3

- (c) establish and report to the CEQ Chair and OMB Director a comprehensive inventory of absolute greenhouse gas emissions, including scope 1, scope 2, and specified scope 3 emissions
 (i) within 15 months of the date of this order for fiscal year 2010, and (ii) thereafter, annually at the end of January, for the preceding fiscal year.
 - (d) improve water use efficiency and management by:
 - (i) reducing potable water consumption intensity by 2 percent annually through fiscal year 2020, or 26 percent by the end of fiscal year 2020, relative to a baseline of the agency's water consumption in fiscal year 2007, by implementing water management strategies including water-efficient and low-flow fixtures and efficient cooling towers;
 - (ii) reducing agency industrial, landscaping, and agricultural water consumption by 2 percent annually or 20 percent by the end of fiscal year 2020 relative to a baseline of the agency's industrial, landscaping, and agricultural water consumption in fiscal year 2010:
 - (iii) consistent with State law, identifying, promoting, and implementing water reuse strategies that reduce potable water consumption; and
 - (iv) implementing and achieving the objectives identified in the stormwater management guidance referenced in section 14 of this order;
 - (e) promote pollution prevention and eliminate waste by:
 - (i) minimizing the generation of waste and pollutants through source reduction;
 - (ii) diverting at least 50 percent of non-hazardous solid waste, excluding construction and demolition debris, by the end of fiscal year 2015;
 - (iii) diverting at least 50 percent of construction and demolition materials and debris by the end of fiscal year 2015;
 - (iv) reducing printing paper use and acquiring uncoated printing and writing paper containing at least 30 percent postconsumer fiber;
 - (v) reducing and minimizing the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of;
 - (vi) increasing diversion of compostable and organic material from the waste stream;
 - (vii) implementing integrated pest management and other appropriate landscape management practices;

more

(OVER)

Appendix G Supporting Information

4

- (viii) increasing agency use of acceptable alternative chemicals and processes in keeping with the agency's procurement policies;
- (ix) decreasing agency use of chemicals where such decrease will assist the agency in achieving greenhouse gas emission reduction targets under section 2(a) and (b) of this order; and
- (x) reporting in accordance with the requirements of sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11001 et seq.);
- (f) advance regional and local integrated planning by:
 - (i) participating in regional transportation planning and recognizing existing community transportation infrastructure;
 - (ii) aligning Federal policies to increase the effectiveness of local planning for energy choices such as locally generated renewable energy;
 - (iii) ensuring that planning for new Federal facilities or new leases includes consideration of sites that are pedestrian friendly, near existing employment centers, and accessible to public transit, and emphasizes existing central cities and, in rural communities, existing or planned town centers:
 - (iv) identifying and analyzing impacts from energy usage and alternative energy sources in all Environmental Impact Statements and Environmental Assessments for proposals for new or expanded Federal facilities under the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.); and
 - (v) coordinating with regional programs for Federal, State, tribal, and local ecosystem, watershed, and environmental management;
- (g) implement high performance sustainable Federal building design, construction, operation and management, maintenance, and deconstruction including by:
 - beginning in 2020 and thereafter, ensuring that all new Federal buildings that enter the planning process are designed to achieve zeronet-energy by 2030;
 - (ii) ensuring that all new construction, major renovation, or repair and alteration of Federal buildings complies with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles);
 - (iii) ensuring that at least 15 percent of the agency's existing buildings (above 5,000 gross square feet) and building leases (above 5,000

more

Appendix G Supporting Information

5

gross square feet) meet the Guiding Principles by fiscal year 2015 and that the agency makes annual progress toward 100-percent conformance with the Guiding Principles for its building inventory;

- (iv) pursuing cost-effective, innovative strategies, such as highly reflective and vegetated roofs, to minimize consumption of energy, water, and materials;
- (v) managing existing building systems to reduce the consumption of energy, water, and materials, and identifying alternatives to renovation that reduce existing assets' deferred maintenance costs;
- (vi) when adding assets to the agency's real property inventory, identifying opportunities to consolidate and dispose of existing assets, optimize the performance of the agency's realproperty portfolio, and reduce associated environmental impacts; and
- (vii) ensuring that rehabilitation of federally owned historic buildings utilizes best practices and technologies in retrofitting to promote longterm viability of the buildings;
- (h) advance sustainable acquisition to ensure that 95 percent of new contract actions including task and delivery orders, for products and services with the exception of acquisition of weapon systems, are energy-efficient (Energy Star or Federal Energy Management Program (FEMP) designated), water-efficient, biobased, environmentally preferable (e.g., Electronic Product Environmental Assessment Tool (EPEAT) certified), non-ozone depleting, contain recycled content, or are non-toxic or less-toxic alternatives, where such products and services meet agency performance requirements;
 - (i) promote electronics stewardship, in particular by:
 - ensuring procurement preference for EPEATregistered electronic products;
 - (ii) establishing and implementing policies to enable power management, duplex printing, and other energy-efficient or environmentally preferable features on all eligible agency electronic products;
 - (iii) employing environmentally sound practices with respect to the agency's disposition of all agency excess or surplus electronic products;
 - (iv) ensuring the procurement of Energy Star and FEMP designated electronic equipment;
 - (v) implementing best management practices for energy-efficient management of servers and Federal data centers; and

more

(OVER)

Appendix G Supporting Information

6

- (j) sustain environmental management, including by:
 - (i) continuing implementation of formal environmental management systems at all appropriate organizational levels; and
 - (ii) ensuring these formal systems are appropriately implemented and maintained to achieve the performance necessary to meet the goals of this order.

Sec. 3. Steering Committee on Federal Sustainability. The OMB Director and the CEQ Chair shall:

- (a) establish an interagency Steering Committee (Steering Committee) on Federal Sustainability composed of the Federal Environmental Executive, designated under section 6 of Executive Order 13423 of January 24, 2007, and Agency Senior Sustainability Officers, designated under section 7 of this order, and that shall:
 - (i) serve in the dual capacity of the Steering Committee on Strengthening Federal Environmental, Energy, and Transportation Management designated by the CEQ Chair pursuant to section 4 of Executive Order 13423;
 - (ii) advise the OMB Director and the CEQ Chair on implementation of this order;

 - (iv) share information and promote progress towards
 the goals of this order;
- (b) enlist the support of other organizations within the Federal Government to assist the Steering Committee in addressing the goals of this order;
- (c) establish and disband, as appropriate, interagency subcommittees of the Steering Committee, to assist the Steering Committee in carrying out its responsibilities;
- (d) determine appropriate Federal actions to achieve the policy of section 1 and the goals of section 2 of this order;
- (e) ensure that Federal agencies are held accountable for conformance with the requirements of this order; and
- (f) in coordination with the Department of Energy's Federal Energy Management Program and the Office of the Federal Environmental Executive designated under section 6 of Executive Order 13423, provide guidance and assistance to facilitate the development of agency targets for greenhouse gas emission reductions required under subsections 2(a) and (b) of this order.
- Sec. 4. Additional Duties of the Director of the Office of Management and Budget. In addition to the duties of the OMB Director specified elsewhere in this order, the OMB Director shall:

more

Appendix G Supporting Information

7

- (a) review and approve each agency's multi-year Strategic Sustainability Performance Plan under section 8 of this order and each update of the Plan. The Director shall, where feasible, review each agency's Plan concurrently with OMB's review and evaluation of the agency's budget request;
- (b) prepare scorecards providing periodic evaluation of Federal agency performance in implementing this order and publish scorecard results on a publicly available website; and
- (c) approve and issue instructions to the heads of agencies concerning budget and appropriations matters relating to implementation of this order.
- Sec. 5. Additional Duties of the Chair of the Council on Environmental Quality. In addition to the duties of the CEQ Chair specified elsewhere in this order, the CEQ Chair shall:
- (a) issue guidance for greenhouse gas accounting and reporting required under section 2 of this order;
- (b) issue instructions to implement this order, in addition to instructions within the authority of the OMB Director to issue under subsection 4(c) of this order;
- (c) review and approve each agency's targets, in consultation with the OMB Director, for agency-wide reductions of greenhouse gas emissions under section 2 of this order;
- (d) prepare, in coordination with the OMB Director, streamlined reporting metrics to determine each agency's progress under section 2 of this order;
- (e) review and evaluate each agency's multi-year Strategic Sustainability Performance Plan under section 8 of this order and each update of the Plan;
- (f) assess agency progress toward achieving the goals and policies of this order, and provide its assessment of the agency's progress to the OMB Director;
- (g) within 120 days of the date of this order, provide the President with an aggregate Federal Government-wide target for reducing scope 1 and 2 greenhouse gas emissions in absolute terms by fiscal year 2020 relative to a fiscal year 2008 baseline;
- (h) within 270 days of the date of this order, provide the President with an aggregate Federal Government-wide target for reducing scope 3 greenhouse gas emissions in absolute terms by fiscal year 2020 relative to a fiscal year 2008 baseline;
- (i) establish and disband, as appropriate, interagency working groups to provide recommendations to the CEQ for areas of Federal agency operational and managerial improvement associated with the goals of this order; and
- (j) administer the Presidential leadership awards program, established under subsection 4(c) of Executive Order 13423, to recognize exceptional and outstanding agency performance with respect to achieving the goals of this order and to recognize extraordinary innovation, technologies, and practices employed to achieve the goals of this order.

more

(OVER)

Appendix G Supporting Information

8

- Sec. 6. Duties of the Federal Environmental Executive. The Federal Environmental Executive designated by the President to head the Office of the Federal Environmental Executive, pursuant to section 6 of Executive Order 13423, shall:
- (a) identify strategies and tools to assist Federal implementation efforts under this order, including through the sharing of best practices from successful Federal sustainability efforts; and
- (b) monitor and advise the CEQ Chair and the OMB Director on the agencies' implementation of this order and their progress in achieving the order's policies and goals.
- Sec. 7. Agency Senior Sustainability Officers. (a) Within 30 days of the date of this order, the head of each agency shall designate from among the agency's senior management officials a Senior Sustainability Officer who shall be accountable for agency conformance with the requirements of this order; and shall report such designation to the OMB Director and the CEQ Chair.
- (b) The Senior Sustainability Officer for each agency shall perform the functions of the senior agency official designated by the head of each agency pursuant to section 3(d)(i) of Executive Order 13423 and shall be responsible for:
 - (i) preparing the targets for agency-wide reductions and the inventory of greenhouse gas emissions required under subsections 2(a), (b), and (c) of this order;
 - (ii) within 240 days of the date of this order, and annually thereafter, preparing and submitting to the CEQ Chair and the OMB Director, for their review and approval, a multi-year Strategic Sustainability Performance Plan (Sustainability Plan or Plan) as described in section 8 of this order;
 - (iii) preparing and implementing the approved Plan in coordination with appropriate offices and organizations within the agency including the General Counsel, Chief Information Officer, Chief Acquisition Officer, Chief Financial Officer, and Senior Real Property Officers, and in coordination with other agency plans, policies, and activities;
 - (iv) monitoring the agency's performance and progress in implementing the Plan, and reporting the performance and progress to the CEQ Chair and the OMB Director, on such schedule and in such format as the Chair and the Director may require; and
 - (v) reporting annually to the head of the agency on the adequacy and effectiveness of the agency's Plan in implementing this order.
- Sec. 8. Agency Strategic Sustainability Performance Plan. Each agency shall develop, implement, and annually update an integrated Strategic Sustainability Performance Plan that will prioritize agency actions based on lifecycle return

more

Appendix G Supporting Information

9

on investment. Each agency Plan and update shall be subject to approval by the OMB Director under section 4 of this order. With respect to the period beginning in fiscal year 2011 and continuing through the end of fiscal year 2021, each agency Plan shall:

- (a) include a policy statement committing the agency to compliance with environmental and energy statutes, regulations, and Executive Orders;
- (b) achieve the sustainability goals and targets, including greenhouse gas reduction targets, established under section 2 of this order;
- (c) be integrated into the agency's strategic planning and budget process, including the agency's strategic plan under section 3 of the Government Performance and Results Act of 1993, as amended (5 U.S.C. 306);
- (d) identify agency activities, policies, plans, procedures, and practices that are relevant to the agency's implementation of this order, and where necessary, provide for development and implementation of new or revised policies, plans, procedures, and practices;
- (e) identify specific agency goals, a schedule, milestones, and approaches for achieving results, and quantifiable metrics for agency implementation of this order;
- (f) take into consideration environmental measures as well as economic and social benefits and costs in evaluating projects and activities based on lifecycle return on investment;
- (g) outline planned actions to provide information about agency progress and performance with respect to achieving the goals of this order on a publicly available Federal website;
- (h) incorporate actions for achieving progress metrics identified by the OMB Director and the CEQ Chair;
- (i) evaluate agency climate-change risks and vulnerabilities to manage the effects of climate change on the agency's operations and mission in both the short and long term; and
- (j) identify in annual updates opportunities for improvement and evaluation of past performance in order to extend or expand projects that have net lifecycle benefits, and reassess or discontinue under-performing projects.
- Sec. 9. Recommendations for Greenhouse Gas Accounting and Reporting. The Department of Energy, through its Federal Energy Management Program, and in coordination with the Environmental Protection Agency, the Department of Defense, the General Services Administration, the Department of the Interior, the Department of Commerce, and other agencies as appropriate, shall:
- (a) within 180 days of the date of this order develop and provide to the CEQ Chair recommended Federal greenhouse gas reporting and accounting procedures for agencies to use in carrying out their obligations under subsections 2(a), (b), and (c) of this order, including procedures that will ensure that agencies:

more

(OVER)

Appendix G Supporting Information

10

- (i) accurately and consistently quantify and account for greenhouse gas emissions from all scope 1, 2, and 3 sources, using accepted greenhouse gas accounting and reporting principles, and identify appropriate opportunities to revise the fiscal year 2008 baseline to address significant changes in factors affecting agency emissions such as reorganization and improvements in accuracy of data collection and estimation procedures or other major changes that would otherwise render the initial baseline information unsuitable;
- (ii) consider past Federal agency efforts to reduce greenhouse gas emissions; and
- (iii) consider and account for sequestration and emissions of greenhouse gases resulting from Federal land management practices;
- (b) within 1 year of the date of this order, to ensure consistent and accurate reporting under this section, provide electronic accounting and reporting capability for the Federal greenhouse gas reporting procedures developed under subsection (a) of this section, and to the extent practicable, ensure compatibility between this capability and existing Federal agency reporting systems; and
- (c) every 3 years from the date of the CEQ Chair's issuance of the initial version of the reporting guidance, and as otherwise necessary, develop and provide recommendations to the CEQ Chair for revised Federal greenhouse gas reporting procedures for agencies to use in implementing subsections 2(a), (b), and (c) of this order.
- Sec. 10. Recommendations for Sustainable Locations for Federal Facilities. Within 180 days of the date of this order, the Department of Transportation, in accordance with its Sustainable Partnership Agreement with the Department of Housing and Urban Development and the Environmental Protection Agency, and in coordination with the General Services Administration, the Department of Homeland Security, the Department of Defense, and other agencies as appropriate, shall:
- (a) review existing policies and practices associated with site selection for Federal facilities; and
- (b) provide recommendations to the CEQ Chair regarding sustainable location strategies for consideration in Sustainability Plans. The recommendations shall be consistent with principles of sustainable development including prioritizing central business district and rural town center locations, prioritizing sites well served by transit, including site design elements that ensure safe and convenient pedestrian access, consideration of transit access and proximity to housing affordable to a wide range of Federal employees, adaptive reuse or renovation of buildings, avoidance of development of sensitive land resources, and evaluation of parking management strategies.
- Sec. 11. Recommendations for Federal Local Transportation Logistics. Within 180 days of the date of this order, the General Services Administration, in coordination with the Department of Transportation, the Department of the Treasury, the Department of Energy, the Office of Personnel Management,

more

Appendix G Supporting Information

11

and other agencies as appropriate, shall review current policies and practices associated with use of public transportation by Federal personnel, Federal shuttle bus and vehicle transportation routes supported by multiple Federal agencies, and use of alternative fuel vehicles in Federal shuttle bus fleets, and shall provide recommendations to the CEQ Chair on how these policies and practices could be revised to support the implementation of this order and the achievement of its policies and goals.

- Sec. 12. Guidance for Federal Fleet Management. Within 180 days of the date of this order, the Department of Energy, in coordination with the General Services Administration, shall issue guidance on Federal fleet management that addresses the acquisition of alternative fuel vehicles and use of alternative fuels; the use of biodiesel blends in diesel vehicles; the acquisition of electric vehicles for appropriate functions; improvement of fleet fuel economy; the optimizing of fleets to the agency mission; petroleum reduction strategies, such as the acquisition of low greenhouse gas emitting vehicles and the reduction of vehicle miles traveled; and the installation of renewable fuel pumps at Federal fleet fueling centers.
- Sec. 13. Recommendations for Vendor and Contractor Emissions. Within 180 days of the date of this order, the General Services Administration, in coordination with the Department of Defense, the Environmental Protection Agency, and other agencies as appropriate, shall review and provide recommendations to the CEQ Chair and the Administrator of OMB's Office of Federal Procurement Policy regarding the feasibility of working with the Federal vendor and contractor community to provide information that will assist Federal agencies in tracking and reducing scope 3 greenhouse gas emissions related to the supply of products and services to the Government. These recommendations should consider the potential impacts on the procurement process, and the Federal vendor and contractor community including small businesses and other socioeconomic procurement programs. Recommendations should also explore the feasibility of:
- (a) requiring vendors and contractors to register with a voluntary registry or organization for reporting greenhouse gas emissions;
- (b) requiring contractors, as part of a new or revised registration under the Central Contractor Registration or other tracking system, to develop and make available its greenhouse gas inventory and description of efforts to mitigate greenhouse gas emissions;
- (c) using Federal Government purchasing preferences or other incentives for products manufactured using processes that minimize greenhouse gas emissions; and
- (d) other options for encouraging sustainable practices and reducing greenhouse gas emissions.
- Sec. 14. Stormwater Guidance for Federal Facilities. Within 60 days of the date of this order, the Environmental Protection Agency, in coordination with other Federal agencies as appropriate, shall issue guidance on the implementation of section 438 of the Energy Independence and Security Act of 2007 (42 U.S.C. 17094).

more

(OVER)

Appendix G Supporting Information

12

Sec. 15. Regional Coordination. Within 180 days of the date of this order, the Federal Environmental Executive shall develop and implement a regional implementation plan to support the goals of this order taking into account energy and environmental priorities of particular regions of the United States.

Sec. 16. Agency Roles in Support of Federal Adaptation Strategy. In addition to other roles and responsibilities of agencies with respect to environmental leadership as specified in this order, the agencies shall participate actively in the interagency Climate Change Adaptation Task Force, which is already engaged in developing the domestic and international dimensions of a U.S. strategy for adaptation to climate change, and shall develop approaches through which the policies and practices of the agencies can be made compatible with and reinforce that strategy. Within 1 year of the date of this order the CEQ Chair shall provide to the President, following consultation with the agencies and the Climate Change Adaptation Task Force, as appropriate, a progress report on agency actions in support of the national adaptation strategy and recommendations for any further such measures as the CEQ Chair may deem necessary.

Sec. 17. Limitations. (a) This order shall apply to an agency with respect to the activities, personnel, resources, and facilities of the agency that are located within the United States. The head of an agency may provide that this order shall apply in whole or in part with respect to the activities, personnel, resources, and facilities of the agency that are not located within the United States, if the head of the agency determines that such application is in the interest of the United States.

(b) The head of an agency shall manage activities, personnel, resources, and facilities of the agency that are not located within the United States, and with respect to which the head of the agency has not made a determination under subsection (a) of this section, in a manner consistent with the policy set forth in section 1 of this order to the extent the head of the agency determines practicable.

Sec. 18. Exemption Authority.

(a) The Director of National Intelligence may exempt an intelligence activity of the United States, and related personnel, resources, and facilities, from the provisions of this order, other than this subsection and section 20, to the extent the Director determines necessary to protect intelligence sources and methods from unauthorized disclosure.

(b) The head of an agency may exempt law enforcement activities of that agency, and related personnel, resources, and facilities, from the provisions of this order, other than this subsection and section 20, to the extent the head of an agency determines necessary to protect undercover operations from unauthorized disclosure.

(c) (i) The head of an agency may exempt law enforcement, protective, emergency response, or military tactical vehicle fleets of that agency from the provisions of this order, other than this subsection and section 20.

more

Appendix G Supporting Information

13

- (ii) Heads of agencies shall manage fleets to which paragraph (i) of this subsection refers in a manner consistent with the policy set forth in section 1 of this order to the extent they determine practicable.
- (d) The head of an agency may exempt particular agency activities and facilities from the provisions of this order, other than this subsection and section 20, where it is in the interest of national security. If the head of an agency issues an exemption under this section, the agency must notify the CEQ Chair in writing within 30 days of issuance of the exemption under this subsection. To the maximum extent practicable, and without compromising national security, each agency shall strive to comply with the purposes, goals, and implementation steps in this order.
- (e) The head of an agency may submit to the President, through the CEQ Chair, a request for an exemption of an agency activity, and related personnel, resources, and facilities, from this order.
 - Sec. 19. Definitions. As used in this order:
- (a) "absolute greenhouse gas emissions" means total greenhouse gas emissions without normalization for activity levels and includes any allowable consideration of sequestration;
- (b) "agency" means an executive agency as defined in section 105 of title 5, United States Code, excluding the Government Accountability Office;
- (c) "alternative fuel vehicle" means vehicles defined by section 301 of the Energy Policy Act of 1992, as amended (42 U.S.C. 13211), and otherwise includes electric fueled vehicles, hybrid electric vehicles, plug-in hybrid electric vehicles, dedicated alternative fuel vehicles, dual fueled alternative fuel vehicles, qualified fuel cell motor vehicles, advanced lean burn technology motor vehicles, self-propelled vehicles such as bicycles and any other alternative fuel vehicles that are defined by statute;
- (d) "construction and demolition materials and debris" means materials and debris generated during construction, renovation, demolition, or dismantling of all structures and buildings and associated infrastructure;
- (e) "divert" and "diverting" means redirecting materials that might otherwise be placed in the waste stream to recycling or recovery, excluding diversion to waste-to-energy facilities;
- (f) "energy intensity" means energy consumption per square foot of building space, including industrial or laboratory facilities;
- (g) "environmental" means environmental aspects of internal agency operations and activities, including those aspects related to energy and transportation functions;
- (h) "excluded vehicles and equipment" means any vehicle, vessel, aircraft, or non-road equipment owned or operated by an agency of the Federal Government that is used in:

more

(OVER)

Appendix G Supporting Information

14

- (i) combat support, combat service support, tactical or relief operations, or training for such operations;
- (ii) Federal law enforcement (including protective service and investigation);
- (iii) emergency response (including fire and rescue);
 or
- (iv) spaceflight vehicles (including associated ground-support equipment);
- (i) "greenhouse gases" means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride;
- (j) "renewable energy" means energy produced by solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project;
 - (k) "scope 1, 2, and 3" mean;
 - (i) scope 1: direct greenhouse gas emissions from sources that are owned or controlled by the Federal agency;
 - (ii) scope 2: direct greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by a Federal agency; and
 - (iii) scope 3: greenhouse gas emissions from sources not owned or directly controlled by a Federal agency but related to agency activities such as vendor supply chains, delivery services, and employee travel and commuting;
- (1) "sustainability" and "sustainable" mean to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations;
- (m) "United States" means the fifty States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, and the Northern Mariana Islands, and associated territorial waters and airspace;
- (n) "water consumption intensity" means water consumption per square foot of building space; and
- (o) "zero-net-energy building" means a building that is designed, constructed, and operated to require a greatly reduced quantity of energy to operate, meet the balance of energy needs from sources of energy that do not produce greenhouse gases, and therefore result in no net emissions of greenhouse gases and be economically viable.

Sec. 20. General Provisions.

(a) This order shall be implemented in a manner consistent with applicable law and subject to the availability of appropriations.

more

Appendix G Supporting Information

15

- (b) Nothing in this order shall be construed to impair or otherwise affect the functions of the OMB Director relating to budgetary, administrative, or legislative proposals.
- (c) This order is intended only to improve the internal management of the Federal Government and is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

BARACK OBAMA

THE WHITE HOUSE, October 5, 2009.

#

Appendix G
Supporting Information

Appendix G Supporting Information

G.14 Saylorville Lake 1984 Master Plan, September 1984

http://www.mvr.usace.army.mil/Portals/48/docs/Recreation/ODS/Master%20Plan/84MP/Sept %2084%20Saylorville%20Master%20Plan1.pdf

G.15 State of the Region Greater Des Moines; The Tomorrow Plan, March 2012

http://www.thetomorrowplan.com/StateoftheRegion.pdf

G.16 Iowa Wildlife Action Plan

http://www.iowadnr.gov/Environment/WildlifeStewardship/IowaWildlifeActionPlan.aspx

Appendix G
Supporting Information

Appendix G Supporting Information

G.17 U.S. Army Corps of Engineers Invasive Species Policy, June 2009



U.S. ARMY CORPS OF ENGINEERS WASHINGTON, D.C. 20314-1000

CECW-ZA

JUN - 2 2009

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: U.S. Army Corps of Engineers Invasive Species Policy

- 1. BACKGROUND. In executing U.S. Army Corps of Engineers missions, districts are faced with numerous and diverse issues concerning invasive species. These problems occur on Corps managed and/or administered lands and waters, lands and waters being proposed for Federal Civil Works projects, and Corps lands utilized for outgrants and permits. No Corps nationwide policy currently exists for the prevention, control, and assessment of invasive species. The lack of policy has created inconsistencies concerning the prevention and control of invasive species across Corps districts.
- 2. PURPOSE. This policy memorandum establishes a consistent, nationwide policy that will be applied to all Civil Works projects and programs. It compliments the National Invasive Species Act. Measures to either prevent or reduce establishment of invasive and non-native species will be a component of all Corps Operations and Maintenance (O&M) at project sites as well as a part of implementation of a Civil Works project.
- 3. POLICY APPLICABILITY. This policy memorandum is applicable to the entire spectrum of Civil Works programs and projects and meets the spirit of the National Invasive Species Management Plan. It supports the USACE Environmental Operating Principals and will be applied to invasive species issues in the execution of all Civil Works Programs as follows:
- a. Operations. Operating projects will include strategies for invasive species management in their project Operations and Maintenance responsibilities. These strategies will be coordinated with other Federal, State, and local agencies.
- b. Civil Works Planning Activities. Civil Works planning documents will address invasive species concerns in their analysis of project impacts. Collaboration with Federal, State and local agencies will be maintained in developing those analyses.
- c. Regulatory Actions. The evaluation process for Department of the Army permits may address, through the appropriate public interest review factors (e.g., conservation, general environmental concerns), invasive species concerns in their analysis of impacts at the project site and associated compensatory mitigation projects. An appropriate level of coordination with Federal, State and local agencies will be used to develop those analyses. A Department of the Army permit may include special conditions to require the permittee to control the introduction or spread of invasive species at these sites.

Appendix G Supporting Information

CECW-CO

SUBJECT: U.S. Army Corps of Engineers Invasive Species Policy

- d. Engineering Research and Development Center. The Engineering Research and Development Center (ERDC) will serve as the research lead for the Invasive Species Program. ERDC will have representatives on the Invasive Species Leadership Team to support the team and USACE decisions concerning invasive species. ERDC will also share information concerning their activities and solicit input for future research and development work units.
- e. Invasive Species Leadership Team (ISLT). The ISLT will provide oversight of the Corps Invasive Species Program established by this policy. In support of the National Invasive Species Management Plan, the ISLT will also provide direction to achieve goals and objectives that compliment the plan that are applicable to Corps Civil Works programs and projects (See Enclosure 1). The ISLT will also provide support for the exchange and sharing of information and to develop and provide strategic recommendations to the Corps and ERDC. Applicable regulations and authorities will be updated as needed. Team members are encouraged to attend their respective Aquatic Nuisance Species (ANS) Regional Panel meetings as schedules and budgets allow. Information concerning ISLT team members, responsibilities, and activities can be found at http://corpslakes.usace.army.mil/employees/islt/islt.html.
- 4. FOCUS. The National Invasive Species Management Plan (the Plan) will serve as a blueprint for Corps action on both aquatic and terrestrial invasive species. Information concerning the Plan and the latest invasive species developments can be found at www.invasivespeciesinfo.gov. The Plan is also posted on the Corps Gateway site, http://corpslakes.usace.army.mil/sitemap.html, under Invasive Species. Actions proposed, permitted or submitted for authorization, either within existing authorities or by way of Congressional action, will follow the concepts promulgated by the Plan. In addition, all such actions will be coordinated with other agencies, States, Non-Governmental Organizations and the public, as appropriate, to prevent and/or control the introduction of invasive species and to minimize their economic, environmental, ecological, and human health impacts.

5. DEFINITIONS AND AUTHORITIES. Refer to Enclosures 2 and 3 respectively.

Close collaboration
with partners and
stabeholder will be
customers will be
customers this
pay to this
program a success!

MERDITH W. B. TEMPLE

Major General, USA

Deputy Commanding General

for Civil and Emergency Operations

Appendix G Supporting Information

CORPS GOALS AND OBJECTIVES TO ACHIEVE THE INTENT OF THE NATIONAL INVASIVE SPECIES MANAGEMENT PLAN ENCLOSURE 1

a. Leadership and Coordination Goal: Work strategically, using all Corps scientific, management, and partnership resources in unison to manage invasive species.

Objectives

- Partner/coordinate with local, State, and Federal agencies and NGO's to manage invasive species at the project, regional, and national levels; examples include the Cooperative Weed Management Areas; Aquatic Nuisance Species Task Force; Federal Interagency Committee on the Management of Noxious and Exotic Weeds, and the 100th Meridian Initiative.
- b. Prevention Goal: Prevent introduction and establishment of invasive species to reduce their impact on the environment, economy, and health of the United States.

Objectives

- Identify pathways by which invasive species could potentially invade Corps managed projects.
- Take steps to interdict pathways that are recognized as significant sources for the unintentional introduction of invasive species.
- Implement a process for identifying high priority invasive species that are likely to be introduced unintentionally.
- Develop a communication plan to share information about invasive species infestations on Corps projects (Natural Resources Management Gateway).
- c. Early Detection and Rapid Response Goal: Develop and enhance the capacity to identify, report, and effectively respond to newly discovered/localized invasive species.

Objectives

- · Develop monitoring plans for Corps managed projects.
- Take steps to improve detection and identification of introduced invasive species.
- Each district and project should assess how their current management may be contributing to invasive species problems.

Appendix G Supporting Information

- Develop a program for coordinating rapid response to incipient invasions on Corps projects.
- d. Control and Management Goal: Contain and reduce the spread and populations of established invasive species to minimize their harmful impacts.

Objectives

- Develop and issue a protocol for ranking priority of invasive species control projects at local, regional, and ecosystem-based levels.
- Develop and implement control measures for invasive species in accordance with budget appropriations.
 - · Develop partnerships to leverage funding.
- Develop budget packages through the annual budgetary process to acquire funding to complete control measures.
- Develop exclusion and sanitation methods for preventing spread of invasive species.
- Develop assessment and monitoring plans for invasive species management areas.
- For compensatory mitigation projects required by Department of the Army permits, include performance standards that involve monitoring for introduction or spread of invasive species at the mitigation site, and require the removal of invasive species if those performance standards are not being met.
- e. Restoration Goal: Restore native species and habitat conditions and rehabilitate high-value ecosystems and key ecological processes that have been impacted by invasive species to meet desired future conditions.

Objectives

- Pursue Continuing Authorities Program restoration projects to control invasive species.
- Implement appropriate measures to restore areas where invasive species management activities have occurred to prevent re-colonization.
- Promote eradication and control measures of exotics related to the aquatic environment as a viable contributive element to DA permit mitigation plans.
- Promote exclusive use of native species in mitigation plantings associated with Regulatory permits.

Appendix G Supporting Information

- Promote exclusive use of native species in plantings associated with construction/restoration activities for Real Estate Outgrants.
- f. Research Goal. Conduct appropriate research and development activities to ensure management programs are effective and science based. Sound scientific information is critical in guiding management activities, determining the magnitude of invasive species problems, planning future research and management programs, and improving intervention efforts.

Objectives

- Develop priorities for invasive species research needs. Participate in the research field review.
- g. Information Management Goal: Implement management actions to track invasive species data.

Objectives

- Input invasive species data into the Operations and Maintenance Business Information Link (OMBIL).
- Input invasive species data into Project Geographic Information Systems, to the extent practical.
- h. Education and Public Awareness Goal: Education, communication, and interpretation programs can convey how the public can help prevent, identify, detect, and control invasive species and gather public input into program plans and promote partnerships in their implementation.

Objectives

- · Partner, develop, and implement a national public awareness campaign.
- Partner, develop, and implement a model public awareness program on Corps projects that incorporates national, regional, state, and local level invasive species public education activities.

Appendix G Supporting Information

DEFINITIONS * ENCLOSURE 2

- a. Control as appropriate, eradicating, suppressing, reducing, or managing invasive species populations; preventing spread of invasive species from areas where they are present; and taking steps such as restoration of native species and habitats to reduce the effects of invasive species and to prevent further invasions.
- **b. Federal action** any activity authorized by a Department of the Army permit under Section 10 of the River and Harbor Act of 1899 or Section 404 of the Clean Water Act, actions authorized by continuing authorities or Congressional Action, or operation and or maintenance of Corps properties.
- c. Introduction the intentional or unintentional escape, release, dissemination, or placement of a species into an ecosystem as a result of human activity.
- d. Invasive species An alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health. A species that is non-native to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.
- e. Native species with respect to a particular ecosystem, a species that other than as a result of an introduction historically occurred or currently occurs in that ecosystem.
- f. Non-native species with respect to a particular ecosystem, any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem.
- g. Species a group of organisms all of which have a high degree of physical and genetic similarity, generally interbreed only among themselves, and show persistent differences from members of allied groups of organisms.
- h. Steward a Natural Resources Manager or Civil Works Planner whose actions impact Federal lands and waters or those lands that may become or be subjected to Federal actions. The definition is not applicable to the Corps Regulatory program since the stewardship responsibility is held by a private entity or another Federal, state, or local government agency.

*(As defined by EO 13112).

Appendix G Supporting Information

AUTHORITIES AND REGULATIONS ENCLOSURE 3

- a. River and Harbor Act of 1899.
- b. River and Harbor Act of 1958 as amended (PL 85-500), Aquatic Plant Control.
- c. Non-indigenous Aquatic Nuisance Species Prevention and Control Act of 1990. [As Amended Through P.L. 106–580, 29 December 2000].
 - d. National Invasive Species Act of 1996, P.L. 104-332.
 - e. Invasive Species Executive Order 13112, 3 February 1999.
 - f. Salt Cedar and Russian Olive Control Demonstration Act, P.L. 109-320, 11 October 2006.
- g. ER 1130-2-540 1-1, Environmental Stewardship and Operations and Maintenance Policies, 15 November 1996.
 - h. ER 200-2-3, Environmental Compliance Policy, 30 October 1996.
 - i. ER 1105-2-100, Appendix F Continuing Authorities Program.
 - j. ER 1130-2-500, Chapter 14 Aquatic Plant Control Program.

Appendix G
Supporting Information

Appendix G Supporting Information

G.18 Public Review Correspondence: Email from Mr. Steve Espland, Natural Resources Tech, Iowa DNR, to Mr. Scott Rolfes, MVR Natural Resource Manager, Saylorville Lake, dated November 25, 2014

----Original Message-----

From: Espeland, Steve [DNR] [mailto:Steve.Espeland@dnr.iowa.gov]

Sent: Tuesday, November 25, 2014 9:10 AM

To: Rolfes, Scott F MVR

Subject: [EXTERNAL] Water Zoning

I was looking at your Master Plan on the CD and saw the section addressing the Water Surface Zoning (5.1.5.). "During periods of flood storage of elevation 840' NGVD elevation and rising, this motorized vessel restriction may be lifted until the lake returns to conservation pool of 836' NGVD." Would it make more sense to word it as "During periods of flood storage of elevation 840' NGVD elevation and rising, this motorized vessel restriction may be lifted until the lake returns to elevation 840' NGVD and falling."

It doesn't seem like the lake elevation is brought back down to a flat 836.00 very often after flooding and the way it is worded would technically negate your restriction until it again was brought back down to a flat 836.00 during the April 1 -Aug 31 time period.

Just a thought, but may not be what you had in mind.

STEVE ESPELAND NATURAL RESOURCES TECHNICIAN II

Iowa Department of Natural Resources

Office 515.432.2545 | Cell 712-330-5673 | Fax 515-432-2835 | Steve.Espeland@dnr.iowa.gov

Saylorville Wildlife Unit | 1436-255th Street | Boone, IA 50036



Leading Iowans in Caring for Our Natural Resources.

Appendix G
Supporting Information

Appendix G Supporting Information

G.19 Public Review Correspondence: Phone Conversation Record between Mr. Jonathon Wuebker, MVR Natural Resource Specialist, Saylorville Lake, and Mr. Bob Coulson dated December 2, 2014

CEMVR-OD-S 2 December 2014

MEMORANDUM FOR FILE

SUBJECT: Statement of received phone call from Bob Coulson 16 November 2014

- At approximately 1400 hrs I received a phone call from Bob Coulson regarding a letter he received from Mr. Jeff Rose and his submitted comments on the master plan.
- 2. Mr. Coulson appeared to be upset on the phone but stated several times that he was not upset and that the response he received contradicted itself. He stated several times how he couldn't understand why we wouldn't allow boaters up in an area because of wildlife and then allow that same protected wildlife to be hunted and shot. He stated there was no difference in harassment between his boat making noise and a shotgun killing the birds. There were other instances and examples Mr. Coulson gave to this line that what we were doing to stop one thing was no different from something else we were allowing in the same zone.
- 3. Mr. Coulson commented he could purchase a helicopter and bowfish from a helicopter as there is no height regulation for a helicopter as there is for an airplane that he could just shoot fish from his helicopter then. He also stated he was investigating the definition of an airboat because in other states they do not carry the same regulations as a traditional boat with outboard motor.
- 4. The last comment Mr. Coulson left me with was he had plans to purchase a farm In Louisiana and leave his boat there and just fly down during the weekends. He was frustrated with the new planned policy but stated there was nothing he could do about it and then hung up with me after about 40 minutes on the phone.

WUEBKER.JONATHAN

ORGANISATION OF THE PROPERTY OF THE PROPERTY

JONATHAN D. WUEBKER Natural Resource Specialist

Appendix G
Supporting Information

Appendix G Supporting Information

G.20 Public Review Correspondence: Email from Mr. Ken Miller to Mr. Jeffrey Rose, MVR Operations Manager, Saylorville Lake, dated December 9, 2014

-----Original Message-----

From:

Sent: Tuesday, December 09, 2014 5:27 PM

To: Rose, Jeffrey W MVR

Subject: [EXTERNAL] Proposed Saylorville Wildlife Sanctuary

Jeffrey,

I am writting with regard to the proposed Wildlife Sanctuary at the North end of Saylorville Reservoir on the Des Moines River at Johnston, Iowa.

As I understand it, the proposed plan is to close all access by motorized (boats) vehicles at the North end of Saylorville Reservoir for a Wildlife Sanctuary. I believe this is a rather extreme step. I have heard that the Iowa DNR has been complaining about power boater using this shallow area and getting stuck in the mud when they power down. I can understand that complaint. However, closing the area is just too extreme of a measure to take.

I would suggest simply placing a No Wake zone through the shallows. This will allow for the Wildlife to still live relatively undisturbed as large power boats won't travel into the area knowing they will get stuck (and the fact that they can't "go fast"). And it allows fishermen to still utilize the area. As a matter of fact, fishermen would applaud that option. It would give fishermen a sort of sanctuary from the normal uncontrolled power boat traffic that raises havock and creates many dangerous situations for most fishermen.

I know I am not alone on this option as I have discussed this with many of my fishermen friends. I just hope they will all express their ideas and feeling to you as well.

Saylorville is a great body of water. I know it was not created specifically for recreation, but being so close to the mentro Des Moines area, that is exactly what it hasbecome...a water recreation area for thousands of people. With the current proposal, you will be elliminating about 1/3 of the lake to those people. That would be a great loss for the community.

So please reconsider the option and consider the people that currently use the area, that they would be losing if you closed it.

Sincerely, Ken Miller

Cedar Rapids, Iowa 52404

Appendix G
Supporting Information

Appendix G Supporting Information

G.21 Public Review Correspondence: Email from Mr. Jeff Rose, MVR Operations Manager, Saylorville Lake, to Mr. Ken Miller, dated December 11, 2014

Email sent 12/11/2014

From: Mr. Jeffery Rose, Operations Project Manager, Saylorville Lake

To: Mr. Ken Miller

Mr. Miller,

Thank you for taking the time to comment on the Saylorville Lake Master Plan revision. The proposed sanctuary you mentioned is a category defined within water zoning guidance provided by Corps headquarters on Master Plan development. This category allows for the protection of sensitive water areas that may have intensive or unique shallow water fish spawning sites, contain mussel beds of rare species or some aquatic characteristic that needs protection from disturbance. In this instance, the shallow water mud flat complex is very attractive to water birds, sometimes in great numbers. This area was designated as a sensitive area among many sites identified at Saylorville Lake. Identifying such sites is a requirement of the master plan process. The sanctuary is seasonal in that the motorized vessel restriction only applies from April 1 through the end of August each year. This area is a popular waterfowl hunting area that through measured pool increases attracts significant waterfowl numbers in the fall. The American Bird Conservancy (ABC) ranked Saylorville Lake and adjacent land holding as Globally Significant for birds. This is the highest rating in their important bird areas program. Most of the species identified in their analysis were water birds who are attracted to this large mudflat complex. Some of the largest numbers of white pelicans in North America congregate here in August as they migrate to the warm south. Both least terns and piping plovers are federally endangered species that are routinely found on these sites. Part of the responsibility of managing these sensitive sites is to minimize disturbance. Power boats and their disturbance on water birds is well documented. This area is important to several species that rely on undisturbed loafing, feeding and nesting areas to thrive. We understand the urban nature of Saylorville Lake and the high amount of boating use it receives. We will allow non-motorized craft such as canoes and kayaks to use the area and enjoy the wildlife resources.

If you are familiar with the north end of the reservoir, we currently use shallow water buoys to mark waters that are 3 feet deep or less. The shallow water buoys are currently placed approximately 2,000 yards north of the Mile Long bridge and will remain in place. Our proposal is to restrict motorized vessels from waters that are on average approximately 2 feet deep or less. Our restricted zone will be north of the shallow water buoy line. We have allowed for motorized vessel access to the Big Creek Spillway to keep access open to fishermen. Some misinformation has been circulating, that the wildlife sanctuary zoning includes all waters north of the mile long bridge and this is not the case. The proposed zone represents about 600 acres of shallow islands and 800 acres of very shallow waters surrounding these islands. This silt deposition continues to be a chronic problem shortening the life of recreational use of the reservoir. This vessel restriction is only during times of near conservation pool elevation 836 mean sea level. When the reservoir rises above 840 msl with projected higher elevations the restriction is lifted until conditions begin to return to near normal levels. I have included a bathymetric/LiDAR survey which was completed last summer that shows the increasing shallow waters on the upper end of the reservoir. The link

Appendix G Supporting Information

below will take you to the draft master plan revision and specifically appendix H where you find maps of the mud flats and the approximate seasonal restricted motorized vessel zoning.

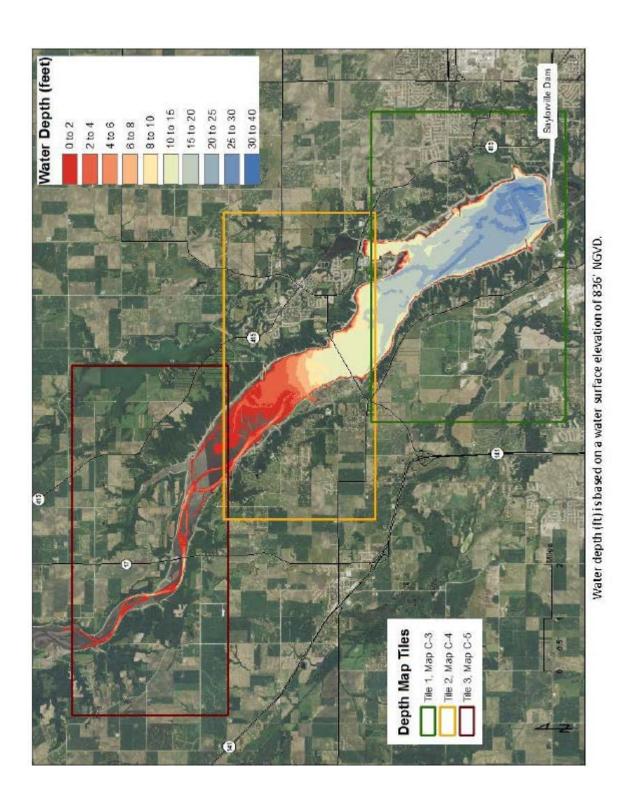
http://www.mvr.usace.army.mil/Portals/48/docs/Recreation/ODS/Master%20Plan/Draft% 20Master%20Plan/Appendix%20H.pdf

I hope this information helps better explain our arrival at this policy. Unless siltation rates drastically reduce, this area will grow in size and scope over time. The Master Plan is to provide guidance for the next 20 years and siltation continues to be a chronic threat.

Again, I appreciate you taking the time to send me your comment.

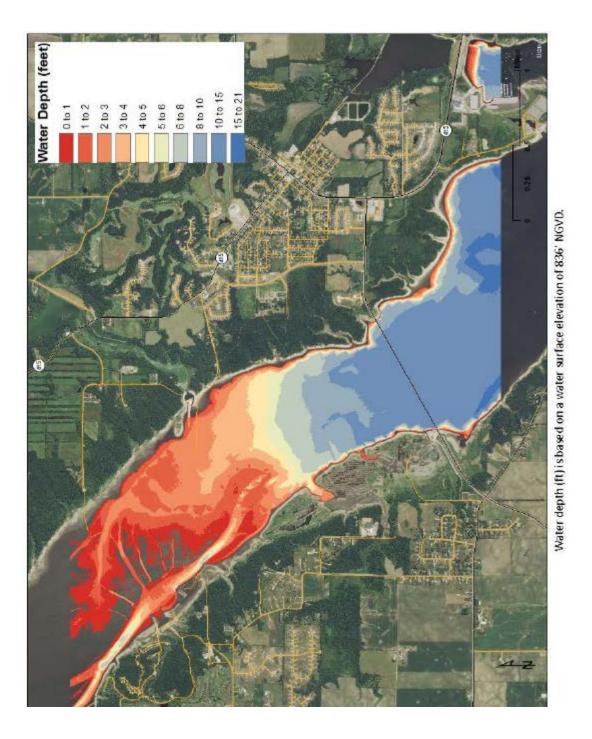
Jeff Rose Operations Project Manager Saylorville Lake

Appendix G Supporting Information



G-97

Appendix G Supporting Information



Appendix G Supporting Information

G.22 Public Review Correspondence: Letter from Mr. Kraig McPeek, Field Supervisor, USFWS, to Col Mark Deschenes, MVR Commander & District Engineer, dated December 15, 2014



United States Department of the Interior

FISH AND WILDLIFE SERVICE Rock Island Field Office 1511 47th Avenue Moline, Illinois 61265 Phone: (309) 757-5800 Fax: (309) 757-5807



IN REPLY REFER TO: FWS/RIFO

December 15, 2014

Colonel Mark J. Deschenes
District Engineer
U.S. Army Corps of Engineers
Rock Island District
Attn: Wendy Frolich RPEDN
Clock Tower Building, P.O. Box 2004
Rock Island, Illinois 61204-2004

Dear Colonel Deschenes:

Thank you for the opportunity to review the Saylorville Master Plan and Environmental Assessment (EA) dated November 19, 2014. Given the high recreational demand at Saylorville lands, we commend your efforts to balance the needs of public recreation with fish and wildlife resources.

We support the recommendation to classify 3,120 acres of downstream riparian lands as an Urban Wildlife Refuge. This will provide protection for numerous species using riparian corridors, but especially for the Indiana bat (*Myotis sodalis*) and the Northern long-eared bat (*Myotis septentrionalis*). We also support the recommendation to create a 1,433 acre water protection zone near the Highway 17 Bridge. Such a zone will improve habitat suitability for all migratory birds, and especially for the Least tern (*Sterna antillarum*) which may use the area. Additionally, we support your effort to confine future utility corridors to those already in existence. This will help avoid impacts to other wildlife habitats and may reduce bird collisions with aerial utility lines.

With respect to the six proposed/endangered species listed in the EA, I concur that the proposed plan is not likely to adversely affect any listed species that may occur on Saylorville lands. We understand that any future actions potentially affecting habitat for these species will be addressed on an individual basis.

Appendix G Supporting Information

Colonel Mark J. Deschenes, District Engineer

2

Please contact us if we can be of further support in your Master Plan efforts. This letter provides comments under the authority of and in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.); and the Endangered Species Act of 1973, as amended. Questions concerning this letter should be directed to Mr. Jon Duyvejonck (telephone 309.757-5800, ext. 207).

Sincerely,

Kraig McPeek Field Supervisor

cc: IADNR (Poole)

s:\office users\jon\permits\SAYMP.doex