





## **APPENDIX A: CONSULTATION AND COORDINATION**

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## APPENDIX A-1: AGENCY CONSULTATION LETTERS

### SECTION 7



IN REPLY REFER TO:

### United States Department of the Interior

#### NATIONAL PARK SERVICE

National Capital Parks-East  
1900 Anacostia Drive, S.E.  
Washington, D.C. 20020

December 22, 2009

Dr. Mary J. Ratnaswamy  
Program Supervisor, Threatened & Endangered Species  
U.S. Fish and Wildlife Service  
Chesapeake Bay Field Office  
177 Admiral Cochrane Drive  
Annapolis, MD 21401

RE: Request for Project Review for Environmental Impact Statement-- Anacostia Park Wetlands Management Plan with Resident Goose Management Strategies, Anacostia Park, Washington, D.C.

Dear Dr. Ratnaswamy:

The National Park Service (NPS) is in the process of developing an Environmental Impact Statement (EIS) for the Anacostia Park Wetlands Management Plan. This EIS will also contain Management Strategies for Resident Canada Geese. This EIS will address all of the Anacostia wetlands—remnant as well as reconstructed—in which the NPS has management responsibilities.

The focus of the Wetland Management Plan is nearly 100 acres of restored tidal wetlands in Anacostia Park, including Kenilworth Marsh, the Kingman Marshes, and the "Fringe Marshes." A number of obstacles to the success of these restored wetlands persist. Resident Canada geese consistently denude areas not protected by fencing, and questions and concerns about proper wetland elevations, invasive vegetation infestations, erosion, and sedimentation continue to arise.

The NPS initially started an Environmental Assessment (EA) to address these concerns. However, after considering comments received during public scoping, evaluating potential alternatives, and continuing to examine data, the NPS decided to complete an EIS rather than an EA for this plan.

The scope of the EIS includes management of resident Canada geese, hydrologic regimes, invasive species, and wetland vegetation. Additionally, issues such as the effect of urbanization and toxicity will be addressed. Stabilization methods used to address erosion and sedimentation, such as the sheet piling used at Fringe Marsh, will also be examined. The EIS may identify potential future wetland restoration sites, but will not analyze them in detail.

In order to comply with its obligations under the National Environmental Policy Act (NEPA) and NPS Director's Order #12, and in compliance with the Endangered Species Act and the Fish and Wildlife Coordination Act, the NPS respectfully requests any records your agency has for any Threatened, Rare, or Endangered Species located in the project area (see enclosed map), or that could be potentially affected by project activities.

Thank you for your assistance. Please direct any comments or follow-up information to me at the letterhead address, or you may contact me directly at (202) 690-5160.

Sincerely,

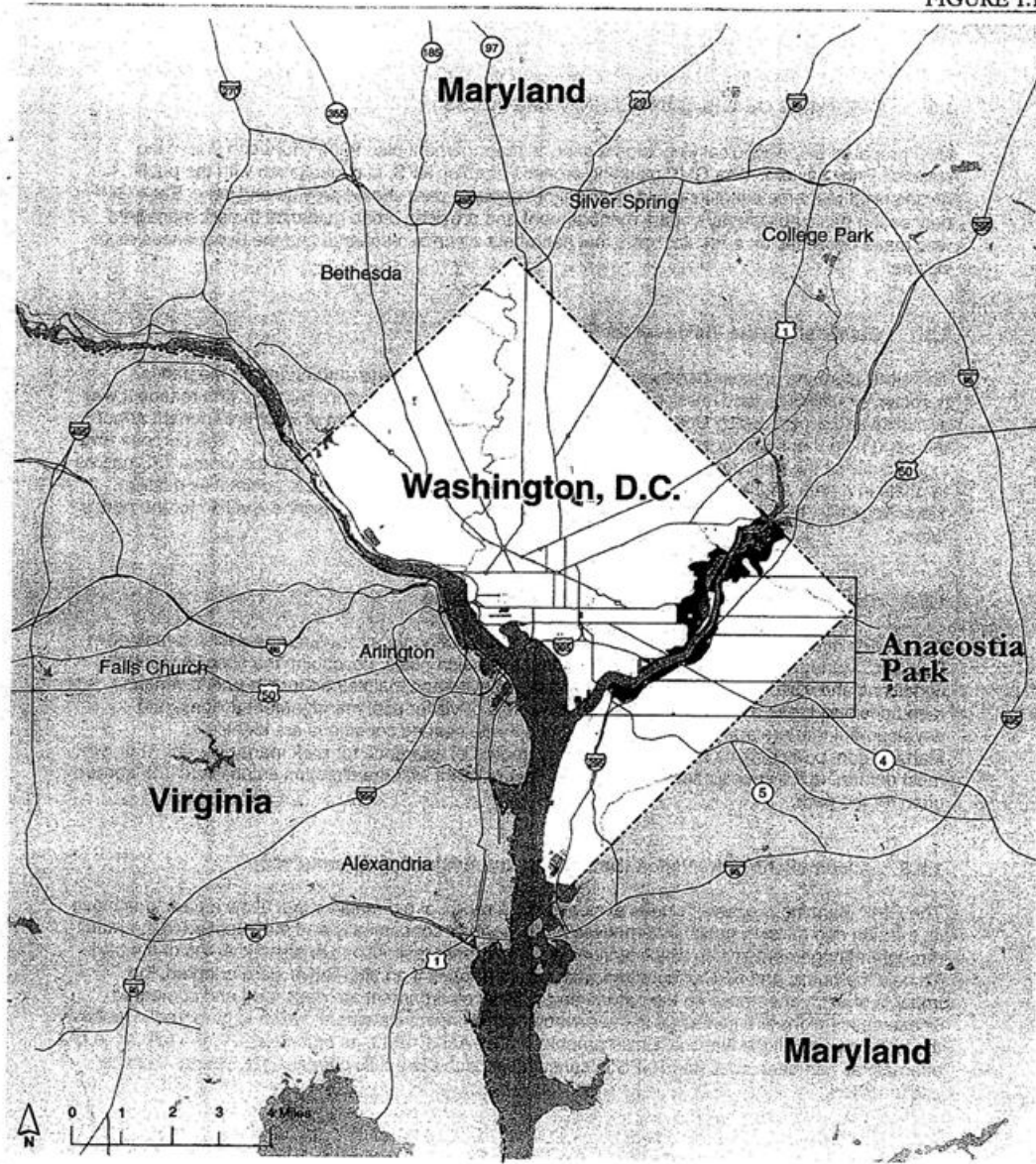
A handwritten signature in black ink, appearing to read "Stephen W. Syphax". The signature is fluid and cursive, with a long horizontal stroke at the end.

Stephen W. Syphax<sup>TS</sup>  
Chief, Resource Management Division

Enclosures



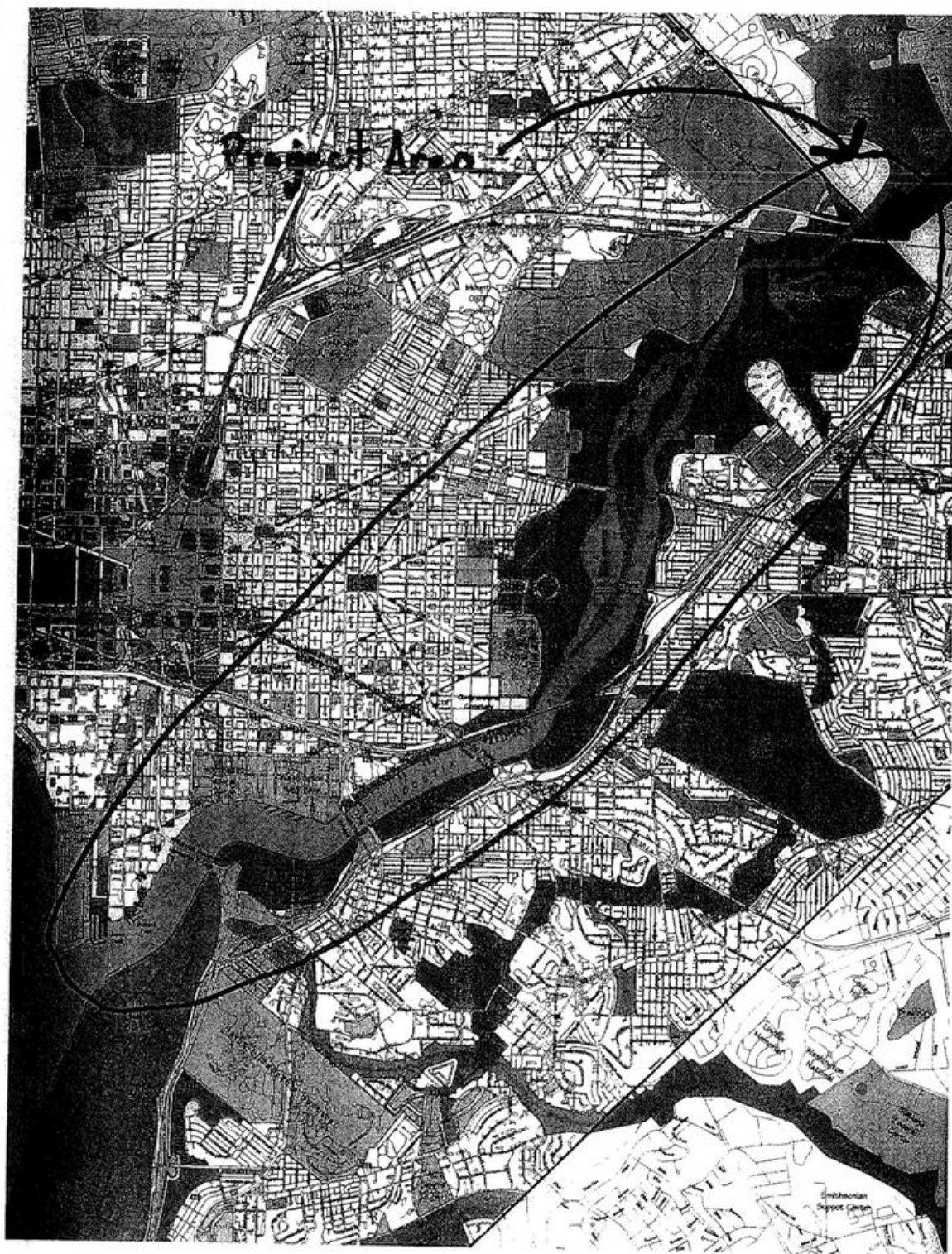
FIGURE 1.1



REGIONAL LOCATION



Anacostia Park -  
A Unit of National Capital Parks - East  
National Park Service  
U.S. Department of the Interior







## United States Department of the Interior

### NATIONAL PARK SERVICE

National Capital Region,  
Natural Resources & Science  
4598 MacArthur Boulevard, N.W.  
Washington, D.C. 20007-4227

NRS/N1621

19 September 2012

Andy Moser  
Biologist  
U.S. Fish & Wildlife Service, Chesapeake Bay Field Office  
177 Admiral Cochrane Drive  
Annapolis, MD 21401

Subject: National Park Service draft final Anacostia Park Wetlands and Resident Canada  
Goose Management Plan/EIS—Kenk's Amphipod

Dear Mr. Moser:

This letter is a follow up to our phone conversation on 18 September 2012 about federally listed amphipods (*Stygobromus* spp.). We discussed the "Anacostia Park Wetlands and Resident Canada Goose Management Plan/EIS" because Kenk's amphipod (*Stygobromus kenki*) was made a Candidate on 26 October 2011 but is not funded for listing until 2015. We understand that FWS does not consult on Candidates; however, it is the policy of the National Park Service to treat candidates as listed species, especially when a species will become listed during the life of a plan. Enclosed are a brief description and two maps of the project impact area.

National Capital Parks—East, administrative unit for Anacostia Park, received a letter from U.S. FWS on 6 January 2010 stating that the activities associated with the project would not affect any federally endangered species. We believe this to still be correct, despite Kenk's amphipod occurring in the Anacostia River watershed within the Northwest Branch drainage in Montgomery County, Maryland, approximately three miles from the District line. However, that population is north of and not within the Anacostia Park project action area.

Do you agree with our assessment that this project is not likely to adversely affect Kenk's amphipod?

If you have any questions, please contact me at 202/339-8309. Thank you for your assistance with this matter.

Sincerely,

A handwritten signature in cursive script, reading "Diane S. Pavak".

Diane S. Pavak  
T&E Species Coordinator

Enclosures

cc: Genevieve LaRouche, Field Administrator, Region 5, FWS

## Anacostia Park (NACE) Wetlands and Resident Canada Goose Management Plan/EIS

### Project Location—Action Areas

The study area for this plan/EIS includes the entire park. However, the primary focus of the plan/EIS is approximately 100 acres of restored tidal wetlands within Anacostia Park including Kenilworth Marsh, Kingman Marsh, and the Anacostia River Fringe Wetlands (Figure 4). Heritage Island Wetlands were included within the discussion of Kingman Marsh for the analysis presented in this plan/EIS. This plan/EIS includes only those lands that are managed by NPS within Anacostia Park.

Anacostia Park occupies 1,300 acres along 5 miles of the Anacostia River shoreline within Washington D.C. and Maryland. On the east bank of the Anacostia River, the park extends from the southernmost tip of the Baltimore-Washington Parkway in Maryland located approximately 0.5 mile northeast of the District/Maryland line and south to the mouth of the Anacostia River at Poplar Point (Figure 2). On the west bank of the Anacostia River, the park extends from the District/Maryland line, southward to the CSX Railroad Bridge (Figure 2). Anacostia Park also includes much of the Buzzard Point waterfront located in the southwest portion of the District.



Project Site Location

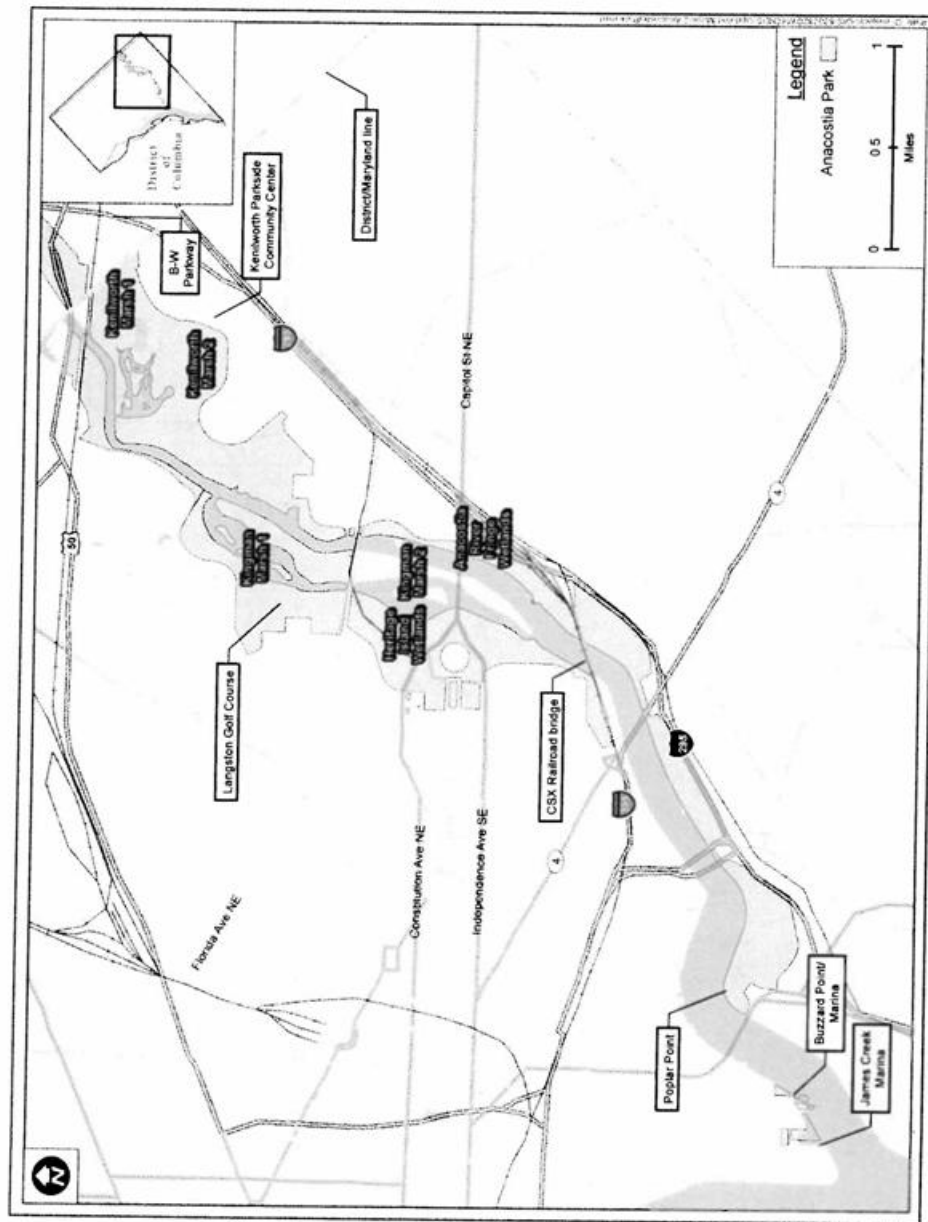


FIGURE 2: ANACOSTIA PARK

Final Anacostia Park Wetlands and Resident Canada Goose Management Plan/EIS





NRS/N1621

## United States Department of the Interior

### NATIONAL PARK SERVICE

National Capital Region,  
Natural Resources & Science  
4598 MacArthur Boulevard, N.W.  
Washington, D.C. 20007-4227

24 October 2012

Danielle Palmer  
Section 7 Biologist for the Shortnose & Atlantic Sturgeons  
NOAA Fisheries Service, Northeast Regional Office  
Protected Resources Division  
One Blackburn Drive  
Gloucester, MA 01930

Subject: Technical Assistance: National Park Service draft final Anacostia Park Wetlands  
and Resident Canada Goose Management Plan/EIS--Shortnose & Atlantic  
Sturgeons

Dear Ms. Palmer:

The National Park Service (NPS) is managing wetlands and geese in lands along the Anacostia River, Washington, DC. A range of alternatives have been considered during the Environmental Impact Statement process ("Anacostia Park Wetlands and Resident Canada Goose Management Plan/EIS"). The project area can be seen in the attached figure.

National Capital Parks—East, administrative unit for Anacostia Park, received a letter from NOAA Fisheries on 22 November 2005 stating that the activities associated with the project would not affect the federally endangered shortnose sturgeon. We request the assistance of NOAA Fisheries in identifying any other federally listed fisheries resources that may be in the project area.

The Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), Chesapeake Bay distinct population segment, was federally listed as endangered on 6 February 2012. Historically, Atlantic sturgeon have used the Potomac River with one capture and release reported in 1971 by a fisherman. The only project activity within the Anacostia River is monitoring vegetation plots, which are in shallow water on mud flats with emergent vegetation (see attached). No shellfish beds have been observed in the project area. This area is unlikely to serve as a foraging ground for sturgeon.

If you have any questions, please contact me at 202/339-8309. Thank you for your assistance with this matter.

Sincerely,

A handwritten signature in cursive script that reads "Diane S. Pavak".

Diane S. Pavak  
T&E Species Coordinator

cc: Patricia A. Kurkul, Regional Administrator, Northeast Region, NMFS

## Anacostia Park (NACE) Wetlands and Resident Canada Goose Management Plan/EIS

### Project Location—Action Areas

The study area for this plan/EIS includes the entire park. However, the primary focus of the plan/EIS is approximately 100 acres of restored tidal wetlands within Anacostia Park including Kenilworth Marsh, Kingman Marsh, and the Anacostia River Fringe Wetlands (Figure 4). Heritage Island Wetlands were included within the discussion of Kingman Marsh for the analysis presented in this plan/EIS. This plan/EIS includes only those lands that are managed by NPS within Anacostia Park.

Anacostia Park occupies 1,300 acres along 5 miles of the Anacostia River shoreline within Washington D.C. and Maryland. On the east bank of the Anacostia River, the park extends from the southernmost tip of the Baltimore-Washington Parkway in Maryland located approximately 0.5 mile northeast of the District/Maryland line and south to the mouth of the Anacostia River at Poplar Point (Figure 2). On the west bank of the Anacostia River, the park extends from the District/Maryland line, southward to the CSX Railroad Bridge (Figure 2). Anacostia Park also includes much of the Buzzard Point waterfront located in the southwest portion of the District.



Project Site Location

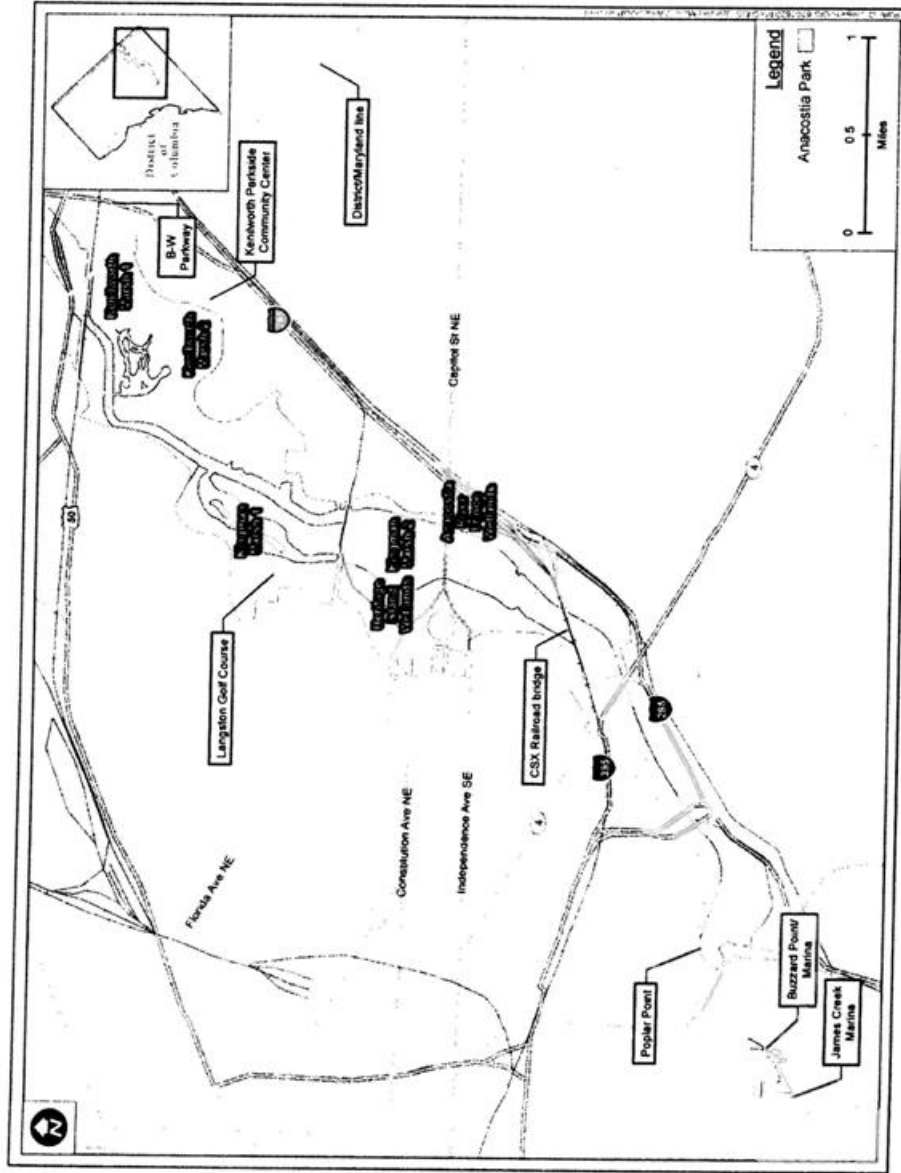


FIGURE 2: ANACOSTIA PARK

Final Anacostia Park Wetlands and Resident Canada Goose Management Plan/EIS



## SECTION 106



IN REPLY REFER TO:

### United States Department of the Interior

#### NATIONAL PARK SERVICE

National Capital Parks-East  
1900 Anacostia Drive, S.E.  
Washington, D.C. 20020

A3815(NCR-NACE)

December 22, 2009

Mr. David Maloney  
Associate Director  
Historic Preservation Office  
DC Office of Planning  
801 North Capitol Street  
Washington, DC 20002

Subject: Environmental Impact Statement-- Anacostia Park Wetlands Management Plan with Resident Goose Management Strategies, Anacostia Park, Washington, D.C.

Dear Mr. Maloney:

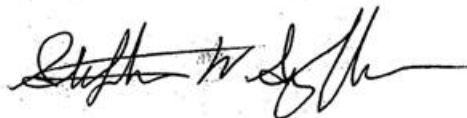
This letter is to inform you that the National Park Service (NPS), in compliance with the National Environmental Policy Act (NEPA), is developing an Environmental Impact Statement (EIS) for the Anacostia Park Wetlands Management Plan. This EIS will also contain Management Strategies for Resident Canada Geese. This EIS will address all of the Anacostia wetlands—remnant as well as reconstructed—in which the NPS has management responsibilities. In the months to come, we anticipate having an EIS containing management details and alternative actions proposed for your review and comment.

The focus of the EIS is nearly 100 acres of restored tidal wetlands in Anacostia Park, including Kenilworth Marsh, the Kingman Marshes, and the "Fringe Marshes." A number of obstacles to the success of these restored wetlands persist. Resident Canada geese consistently denude areas not protected by fencing, and questions and concerns about proper wetland elevations, invasive vegetation infestations, erosion, and sedimentation continue to arise.

The NPS initially started an Environmental Assessment (EA) to address these concerns. However, after considering comments received during public scoping, evaluating potential alternatives, and continuing to examine data, the NPS decided to complete an EIS rather than an EA for this plan. The scope of the EIS includes management of resident Canada geese, hydrologic regimes, invasive species, and wetland vegetation. Additionally, issues such as the effect of urbanization and toxicity will be addressed. Stabilization methods used to address erosion and sedimentation, such as the sheet piling used at Fringe Marsh, will also be examined. The EIS may identify potential future wetland restoration sites, but will not analyze them in detail.

Please contact Stephen Syphax in our Resource Management Division at (202) 690-5160 if you have any questions or require additional information.

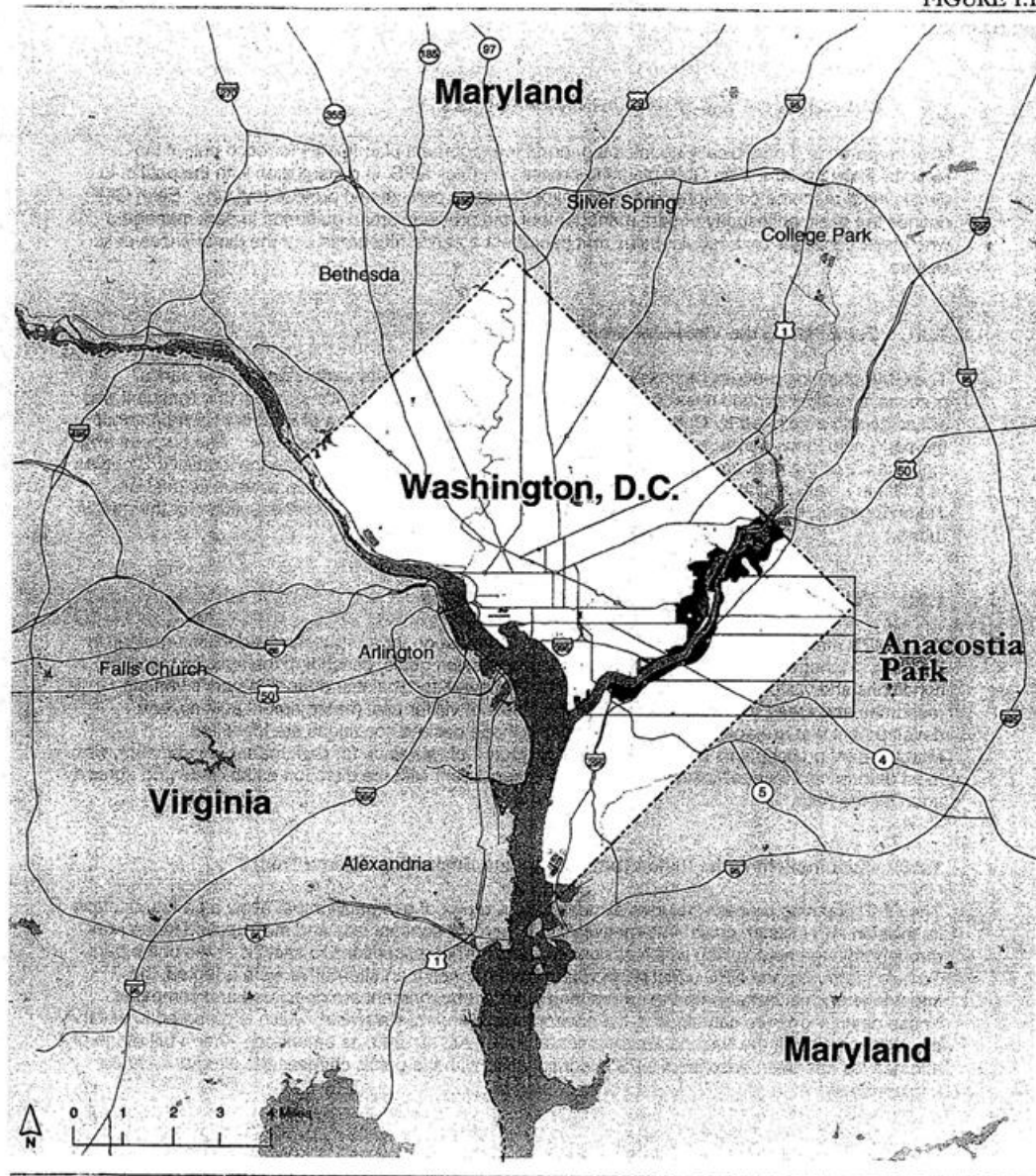
Sincerely,

A handwritten signature in black ink, appearing to read "Stephen W. Syphax", with a long horizontal flourish extending to the right.

Stephen W. Syphax  
Chief, Resource Management Division

Enclosures

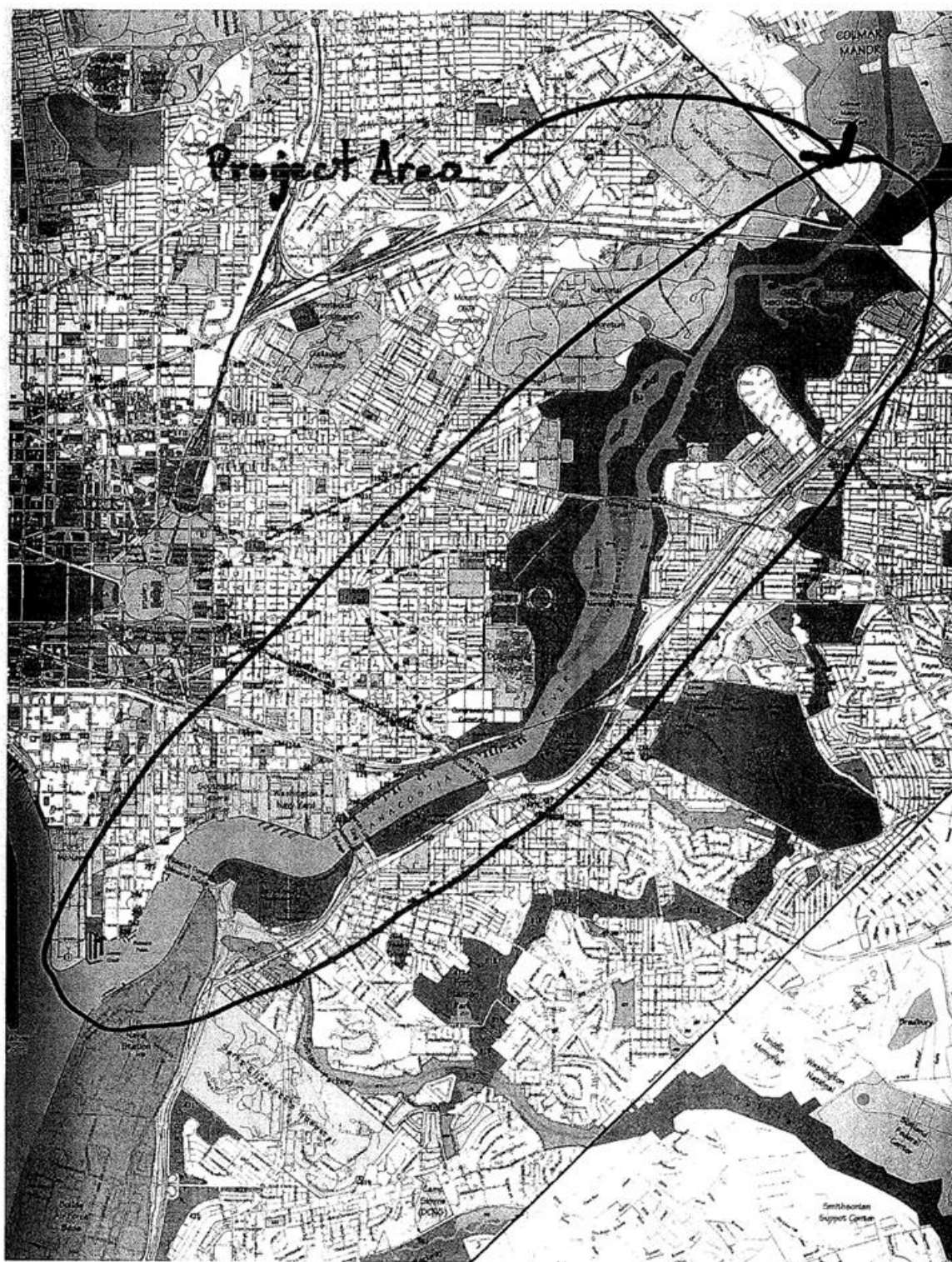
FIGURE 1.1



REGIONAL LOCATION



Anacostia Park -  
A Unit of National Capital Parks - East  
National Park Service  
U.S. Department of the Interior



## APPENDIX A-2: AGENCY RESPONSES

### SECTION 7



#### United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Chesapeake Bay Field Office  
177 Admiral Cochrane Drive  
Annapolis, MD 21401



November 10, 2005

Ms. Susan Rudy  
Natural Resources Program Manager  
NPS-East  
1900 Anacostia Dr., S.E.  
Washington, DC 20020

RE: Resident Canada Goose Mgmt. project/NPS/Anacostia Pk., Washington, DC

Dear Ms. Rudy:

This responds to your letter, received October 20, 2005, requesting information on the presence of species which are federally listed or proposed for listing as endangered or threatened in the above referenced project area. We have reviewed the information you enclosed and are providing comments in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Except for occasional transient individuals, no proposed or federally listed endangered or threatened species are known to exist within the project impact area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or should additional information on the distribution of listed or proposed species become available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. Limited information is currently available regarding the distribution of other rare species in the District of Columbia. However, the Nature Conservancy and National Park Service (NPS) have initiated an inventory of rare species within the District. For further information on such rare species, you should contact Marcus Koenen of the DC Natural Heritage Program at (202) 342-1443 ext. 216.

An additional concern of the Service is wetlands protection. Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the Basin's remaining wetlands, and the long term goal of increasing the quality and quantity of the Basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified, and if alterations of wetlands is proposed, the U.S. Army Corps of Engineers,





"Siemien, M. Jon  
(DOH)"  
<jon.siemien@dc.gov>

11/22/2005 02:24 PM EST

To: Susan\_Rudy@nps.gov  
cc: "Pfaffko, Mary (DOH)" <mary.pfaffko@dc.gov>  
Subject: RE: Goose Management EA/ Consultation w/ NMFS

Susan,

I received the information you wanted from NOAA I originally contacted Marta Nammack, who once upon a time worked for DC Fisheries, and she told me she wouldn't be the one to deal with the issue. Marta contacted Julie Crocker (julie.crocker@noaa.gov) at NOAA and she wrote:

Hi Jon.

There is a population of the endangered shortnose sturgeon in the Chesapeake Bay and individuals have been documented in the Potomac River. Transient shortnose sturgeon may also occur in the Anacostia River. Giving the information Marta passed on a quick read, the types of activities do not look like they would affect shortnose sturgeon in the rivers and as such section 7 consultation would not be necessary. Please let me know if you need additional information.

Julie

Looks like NPS is clear with NOAA. If you need any further information please let me know.

- Jon

M. Jon Siemien  
Chief, Fisheries Research Branch  
Acting Program Manager, Fisheries & Wildlife Division  
Acting Branch Chief, Wildlife Management Branch  
Fisheries & Wildlife Division  
DC Department of Health  
51 N Street, N.E., Room 5003  
Washington, DC 20002  
Phone: 202-535-2273  
Fax: 202-535-1373  
jon.siemien@dc.gov

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

From: Susan\_Rudy@nps.gov [mailto:Susan\_Rudy@nps.gov]  
Sent: Friday, October 21, 2005 10:08 AM  
To: jon.siemien@dc.gov  
Subject: Fw: Goose Management EA/ Consultation w/ NMFS

Hello Jon-

Just found out you're in charge over there now - congrats.

Please see the message below.

Thanks,

Susan

Susan Rudy  
Natural Resources Program Manager  
National Capital Parks-East  
1900 Anacostia Drive, S.E.  
Washington D.C. 20020

202.690.5167  
202.690.0862 (fax)  
susan\_rudy@nps.gov

"...the heritage of our lands is not a fact, but a responsibility, an obligation, a task. A pleasure."  
Wallace Stegner

----- Forwarded by Susan Rudy/NACE/NPS on 10/21/2005 10:06 AM -----

Susan Rudy

To: "Palmer, Ira (DOH)"  
<ira.palmer@dc.gov>  
10/21/2005 09:37 AM EDT cc: "Pfaffko, Mary  
(DOH)" <mary.pfaffko@dc.gov>, "Katju, Dhananjaya (DOH)"  
<dhananjaya.katju@dc.gov>, "Hill, Peter (DOH)" <peter.hill@dc.gov>, Stephen  
Syphax/NACE/NPS@NPS  
Subject: Goose Management  
EA/ Consultation w/ NMFS

Good morning Ira,

As you probably know, we (NPS & DC) are working w/USDA/Wildlife Services on an EA for Resident Canada Goose Management in Anacostia Park

As part of the NEPA process, we need to check w/ FWS and NMFS regarding the presence of RTE species (terrestrial & aquatic respectively) and ascertain from them if RTE species are present and if so do our proposed activities require consultation under Section 7 of the ESA.

I have already informally contacted the FWS regarding the terrestrial species on NPS land, and sent them a map & brief description of or proposed

project. We don't have jurisdiction over the waters of the Anacostia, and so would like you guys to deal w/ NMFS. I think that the same information sent to FWS would be appropriate for NMFS - and am sending it to you separately for your review.

My contact at NMFS is Marta Nammack, (301)713-1401 x180  
<Marta.Nammack@noaa.gov>.

Please keep me in the loop on correspondence w/ NMFS, as I am keeping the administrative record for this process.

Thanks,

Susan

Susan Rudy  
Natural Resources Program Manager  
National Capital Parks-East  
1900 Anacostia Drive, S.E.  
Washington D.C. 20020

202.690.5167  
202.690.0862 (fax)  
susan\_rudy@nps.gov

"...the heritage of our lands is not a fact, but a responsibility, an obligation, a task. A pleasure."  
Wallace Stegner



**United States Department of the Interior**

**FISH AND WILDLIFE SERVICE**  
Chesapeake Bay Field Office  
177 Admiral Cochrane Drive  
Annapolis, MD 21401  
410/573-4575



January 6, 2010

United States Department of the Interior  
National Park Service  
National Capital Parks East  
1900 Anacostia Drive, S. E.  
Washington, D.C. 20020

*RE: Anacostia Park Wetlands Management Plan with resident Goose Management Strategies,  
Anacostia Park Washington DC*

Dear: Stephen W. Syphax

This responds to your letter, received December 29, 2009, requesting information on the presence of species which are federally listed or proposed for listing as endangered or threatened in the above referenced project area. We have reviewed the information you enclosed and are providing comments in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Except for occasional transient individuals, no proposed or federally listed endangered or threatened species are known to exist within the project impact area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or should additional information on the distribution of listed or proposed species become available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. Limited information is currently available regarding the distribution of other rare species in the District of Columbia. However, the Nature Conservancy and National Park Service (NPS) have initiated an inventory of rare species within the District. For further information on such rare species, you should contact Mary Pfaffko of the National Park Service at (202)-535-1739.

Effective August 8, 2007, under the authority of the Endangered Species Act of 1973, as amended, the U.S. Fish and Wildlife Service (Service) removed (delist) the bald eagle in the lower 48 States of the United States from the Federal List of Endangered and Threatened Wildlife. However, the bald eagle will still be protected by the Bald and Golden Eagle Protection Act, Lacey Act and the Migratory Bird Treaty Act. As a result, starting on August 8,

2007, if your project may cause "disturbance" to the bald eagle, please consult the "National Bald Eagle Management Guidelines" dated May 2007.

If any planned or ongoing activities cannot be conducted in compliance with the National Bald Eagle Management Guidelines (Eagle Management Guidelines), please contact the Chesapeake Bay Ecological Services Field Office at 410-573-4573 for technical assistance. The Eagle Management Guidelines can be found at:  
<http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf>.

In the future, if your project can not avoid disturbance to the bald eagle by complying with the Eagle Management Guidelines, you will be able to apply for a permit that authorizes the take of bald and golden eagles under the Bald and Golden Eagle Protection Act, generally where the take to be authorized is associated with otherwise lawful activities. This proposed permit process will not be available until the Service issues a final rule for the issuance of these take permits under the Bald and Golden Eagle Protection Act.

An additional concern of the Service is wetlands protection. Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the Basin's remaining wetlands, and the long term goal of increasing the quality and quantity of the Basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified, and if alterations of wetlands is proposed, the U.S. Army Corps of Engineers, Baltimore District, should be contacted for permit requirements. They can be reached at (410) 962-3670.

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interests in these resources. If you have any questions or need further assistance, please contact Devin Ray at (410) 573-4531.

Sincerely,



Leopoldo Miranda  
Field Supervisor





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
NORTHEAST REGION  
55 Great Republic Drive  
Gloucester, MA 01930-2276

OCT 31 2012

Diane S. Pavék  
United States Department of the Interior  
National Park Service  
National Capital Region  
Natural Resources and Science  
4598 MacArthur Boulevard, N.W.  
Washington, D.C. 20007-4227

Re: Anacostia Park Wetlands and Resident Canada Goose Management Plan/EIS

Dear Ms. Pavék,

This is in response to your October 24, 2012, letter regarding the Anacostia Park Wetlands and Resident Canada Goose Management Plan/EIS. Based on NOAA's National Marine Fisheries (NMFS) Service Protected Resources review of the material you provided us, no federally listed or proposed threatened or endangered species and/or designated critical habitat for listed species under the jurisdiction of NMFS are known to exist in the vicinity of your proposed project. As such, no further coordination with NMFS Protected Resources Division is needed. Should project plans change or new information become available that changes the basis for this determination, further coordination should be pursued. If you have any questions regarding these comments, please contact Danielle Palmer at (978) 282-8468.

Sincerely,

Kimberly Damon-Randall  
Acting Assistant Regional Administrator  
for Protected Resources

EC: Palmer

File Code: Sec 7 No Species Present 2012\_ Anacostia Park Wetlands and Resident Canada Goose Management Plan/EIS



## SECTION 106

GOVERNMENT OF THE DISTRICT OF COLUMBIA  
HISTORIC PRESERVATION OFFICE  
OFFICE OF PLANNING



February 1, 2010

Mr. Stephen Syphax  
Chief, Resource Management Division  
National Park Service  
National Capital Parks-East  
1900 Anacostia Drive, SE  
Washington, DC 20020

RE: Environmental Impact Statement for Anacostia Park Wetlands Management Plan with  
Resident Goose Management Strategies, Anacostia Park

Dear Mr. Syphax:

Thank you for contacting the DC State Historic Preservation Office (SHPO) regarding the above-referenced undertaking. We have reviewed the project information in accordance with Section 106 of the National Historic Preservation Act and are writing to provide our initial comments regarding effects on historic properties.

As you are aware, Anacostia Park has been determined eligible for listing in the National Register of Historic Places and the DC Inventory of Historic Sites. Therefore, we look forward to reviewing the Environmental Impact Statement (EIS) and to assisting the National Park Service in its efforts to avoid, minimize or mitigate any adverse effects on historic properties that may result from the wetlands management plan and resident goose management strategies.

If you should have any questions or comments regarding this matter, please contact me at [andrew.lewis@dc.gov](mailto:andrew.lewis@dc.gov) or 202-442-8841. Otherwise, we thank you for providing this opportunity to comment and we look forward to receiving the EIS as soon as it becomes available.

Sincerely,

C. Andrew Lewis  
Senior Historic Preservation Specialist  
DC State Historic Preservation Office

09-412

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2000 14<sup>th</sup> Street NW, Fourth Floor, Washington, DC 20009  
202 442 8800 Fax 202 442 7638



United States Department of the Interior

NATIONAL PARK SERVICE  
National Capital Parks-East  
1900 Anacostia Drive SE  
Washington, D.C. 20020

RECEIVED  
JUL 25 2011  
BY: \_\_\_\_\_

Dear Sir or Madam:

The National Park Service (NPS), announces the availability of the Draft Anacostia Park Wetland and Resident Goose Management Plan and Draft Environmental Impact Statement (DEIS) for public review and comment.

The purpose of this Draft Plan/EIS is to guide and direct the actions of the NPS in the management of wetlands and resident Canada geese at Anacostia Park. It seeks to provide an integrated tool designed to allow for long-term planning and management for both wetlands and resident Canada geese, including strategies to facilitate the success and functionality wetland restoration activities at the park.

Five alternatives are analyzed in detail in the Draft Plan/EIS: the no action alternative, which represents the continuation of current management activities, and four action alternatives that range in the type, number, and intensity of wetland management techniques and goose management techniques. The no action alternative (alternative A), includes management techniques that are currently occurring in the park. Alternatives B through E offer combinations of high and low intensity techniques for wetland and goose management, which are described fully in the alternatives chapter (chapter 2). Low intensity wetland and goose management represent the least number of techniques and the fewest locations available for the park to implement. High wetland and goose management represents the maximum number of techniques available to the park to implement and would be applied at the maximum level of effort and at numerous locations.

This DEIS was prepared in accordance with National Environmental Policy Act (NEPA) of 1969, as amended, and implementing regulations 40 CFR Parts 1500-1508, and NPS Director's Order #12 and Handbook, Conservation Planning, Environmental Impact Analysis, and Decision-Making (DO-12). Compliance with Section 106 of the National Historic Preservation Act of 1966 is occurring in parallel with the NEPA process.

**Access to the Document:**

Public review copies of the DEIS will be available at the following locations:

Kenilworth Aquatic Gardens Visitor Center  
1550 Anacostia Avenue, NE  
Washington, D.C. 20019

Langston Golf Course Club House  
2600 Benning Road, NE  
Washington, D.C. 20002

The Maryland Historical Trust has determined that there are no historic properties affected by this undertaking.


*Jonathan Sayers* Date 8/24/11  
\*No HP in Maryland

Archeo: IBBC 8/12/2011

16 JES  
8/24/11

Thank you for your interest and participation in this process.

Sincerely,

  
for Alexcy Romero  
Superintendent  
National Capital Parks-East

GOVERNMENT OF THE DISTRICT OF COLUMBIA  
STATE HISTORIC PRESERVATION OFFICE



DC STATE HISTORIC PRESERVATION OFFICE  
SECTION 106 REVIEW FORM

TO: Mr. Alexcy Romero, Supt. National Capital Parks East (NACE), NPS  
Dr. Stephen Potter, Regional Archaeologist, National Capital Region, NPS  
Mr. Robert Mocko, Environmental Protection Specialist, NACE, NPS

PROJECT NAME/DESCRIPTION: Proposed Goose Management Plan EIS, Anacostia Park, NACE

PROJECT ADDRESS/LOCATION DESCRIPTION: Preferred Alternative (Alt. B) is in the northern section of Anacostia Park, in the Kenilworth area between Benning Road Bridge and Kenilworth Aquatic Gardens. The LOD will occur in a variety of locations and settings including Kingman Island, fringe wetlands, seawalls, and Kenilworth Park.

DC SHPO PROJECT NUMBER: 09-412

The DC State Historic Preservation Office (DC SHPO) has reviewed the above-referenced federal undertaking(s) in accordance with Section 106 of the National Historic Preservation Act and has determined that:

<input type="checkbox"/>	This project will have <b>no effect</b> on historic properties. No further DC SHPO review or comment will be necessary.
<input type="checkbox"/>	There are <b>no historic properties</b> that will be affected by this project. No further DC SHPO review or comment will be necessary.
<input type="checkbox"/>	This project will have <b>no adverse effect</b> on historic properties. No further DC SHPO review or comment will be necessary.
<input checked="" type="checkbox"/>	This project will have <b>no adverse effect</b> on historic properties <b>conditioned</b> upon fulfillment of the measures stipulated below.
<input checked="" type="checkbox"/>	Other Comments / Additional Comments (see below):

The goose management plan will not adversely affect the built environment, however, as the EIS describes the project, the Preferred Alternative (Alt. B) identified by the NPS includes ground-disturbing activities that have the potential to adversely affect ARCHAEOLOGICAL resources. These activities include installation of signposts, removal of steel sheeting, installation of water gardens, stream daylighting, etc. NPS indicated in the EIS that additional Section 106 consultation for archaeology would occur because of the prehistoric sensitivity of the original ground surface of Anacostia Park despite large areas mantled in fill or located on made land. Because horizontal and vertical LODs for the various ground-disturbing activities have yet to be identified, additional Section 106 consultation will be needed. For these reasons we have made a finding of *Conditional* No Adverse Effect on historic resources. The conditions are: 1) Continued Section 106 consultation on the proposed ground disturbing activities' effects on archaeological resources; 2) Archaeological identification survey, and /or geoarchaeological survey if warranted; 3) mitigation of adverse effects if such cannot be avoided; and 4) reporting of archaeological investigations following NPS and District guidelines. Should unanticipated archaeological discoveries be made during this undertaking, please contact the DC SHPO archaeologist immediately at 202-442.8836 or at [ruth.troccoli@dc.gov](mailto:ruth.troccoli@dc.gov).

*Ruth Troccoli*

BY: \_\_\_\_\_ DATE: 4 January 2013  
Ruth Troccoli, Ph.D., Archaeologist for the State Historic Preservation Office

1100 4<sup>th</sup> Street, S.W., Suite E650, Washington, D.C. 20024 202-442-7600, fax 202-442-7638

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## **APPENDIX B: VEGETATIVE MONITORING PLAN**



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# **PRELIMINARY MONITORING PROTOCOL FOR THE TIDAL FRESHWATER WETLAND RESTORATION HERBIVORY STUDY IN NATIONAL CAPITAL PARKS--EAST**

## **ABSTRACT**

Four tidal freshwater wetland restoration projects have been undertaken within Anacostia Park on lands managed by the National Park Service since 1993. Monitoring the impacts of Canada goose (*Branta canadensis*) herbivory on the wetland vegetation will play a key role in determining the long-term health of these tidal freshwater wetland restorations. This Implementation Plan lays out monitoring for impacts of herbivory on the vegetation in Kingman Area 1 and inferred to the other wetland areas.

## **BACKGROUND**

In the early to mid-1900's, dredging and filling operations combined with sea wall installation destroyed the extensive tidal freshwater marshes along the Anacostia River in Washington, D.C. In an effort to restore a portion of those once extensive wetlands, the U.S. Army Corps of Engineers (USACE) and the District Department of the Environment (DDOE), working in conjunction with National Park Service National Capital Parks-East (NPS), designed and implemented a series of four tidal freshwater wetland restoration projects along the tidal Anacostia, on lands managed by NPS. The US Geological Survey Patuxent Wildlife Research Center (Cooperator) has taken the lead on monitoring all four wetland restorations, working in conjunction with DDOE, NPS, USACE, and the University of Maryland.

## **HERBIVORY MONITORING**

### **BASIC APPROACH**

Effects of herbivory will be investigated through the use of experimental modules consisting of one unfenced control plot and one sampling plot. The elevated-fence enclosure is designed to exclude only (mature) Canada geese, while allowing access to fish, turtles, and other possible herbivores. This will not exclude goslings, and therefore, impacts from fish/turtle herbivory will include goslings.

The monitoring described here represents a strategic approach to the study of herbivory at the Anacostia Park wetland restorations. It builds on the following advantages of working at Kingman Area 1:

1. Extensive herbivory has already been observed at Kingman Area 1.
2. Kingman Area 1 is fairly large, providing approximately 6.6 ha of potential emergent marsh habitat. It is anticipated that there is sufficient acreage of both unvegetated (unfenced) habitat and vegetated (previously fenced) habitat with the desired elevation range to accommodate modules in both types of habitat. It is useful to know whether the outcome is influenced by the starting habitat or not, since Kingman Area 1 has fairly large areas of each type.
3. Kingman Area 1 has numerous previously fenced areas that have revegetated following the installation of enclosures by Anacostia Wetland Society. Existing herbivory protection will be removed from the areas targeted for vegetated modules fairly quickly and without the need for heavy machinery to provide vegetated habitat of appropriate elevation for experimental purposes.

While the herbivory monitoring described does not attempt to demonstrate impacts of herbivory on vegetation in wetland restorations adjacent to all of the areas where Canada goose management actions

might be implemented, we will be able to infer the effect to the vegetation of these areas. Since Canada geese are mobile and the distances separating these areas are relatively small (approximately 5 kilometers maximum), demonstrating herbivory impacts at Kingman Area 1 supports Canada goose management actions anywhere within Anacostia Park.

## **Study Modules**

The study will use 16 modules, designed to be divided evenly between the two habitat types.

A two-plot module consists of one unfenced control plot and one elevated-fenced enclosure plot. This keeps the design simple and the implementation as cost-effective as possible. Surveillance of elevated-fenced plots, either through motion sensor cameras or periodic on-the-ground surveillance by park staff for goose tracks inside elevated-fence enclosures could be used to help document the nature of any herbivory experienced at these plots. The use of elevated-fenced enclosures should also reduce the possibility that the enclosures themselves will trap sediment and alter elevations and nutrient levels within.

Modules will be placed in unvegetated habitat (unfenced) or vegetated habitat (large, previously fenced areas) in the required elevation range. For the vegetated modules it will be necessary to remove existing fencing in order for the control plots to function properly as controls. Modules will be allocated to random locations within the areas of adequate elevation, maintaining a minimum separation distance among modules of 5 m. Module locations will be recorded using GPS.

Vegetation is sampled within 1 m by 2 m plots (figure C-1), the sampling design used in recent monitoring of the River Fringe and Heritage Island Wetlands Restorations (Krafft et al. 2009). Two corners of the sampling plot are marked with 1.9 cm diameter PVC poles. The taller pole (total length of 3 m, with approximately 2.4 m projecting above-ground) aids in locating the plot visually from a distance. The shorter pole (total length of 1.4 m, with approximately 0.6 m projecting above-ground) provides a second corner for orienting the 1 m by 2 m PVC quadrat frame during sampling events.

Fenced enclosures measure approximately 3 m by 4 m, which should be small enough to deter Canada geese from flying into the enclosures from above, but large enough to provide an approximately 1-m buffer around the sample plot. The inclusion of a buffer protects the sample plot in the elevated-fence enclosure from possible edge effects from Canada geese stretching their necks under the elevated fencing at low tide to graze on plants within their reach. Equipping the enclosures with a gate and a buffer also allows closer examination of the sampling plot, which means that data can be collected at the species level and used to determine species richness in addition to the percent cover.

Enclosures are constructed using vinyl-wrapped wire mesh fence with a recommended mesh size of 5 cm by 10 cm and 1.4 m high. The wire fence is attached to metal t-posts using plastic cable ties. The metal t-posts are 2.4 m tall, allowing for approximately 1 m below ground to provide good stabilization. The taller height limits the possibility of Canada geese swimming over the tops of the enclosures at high tide. A lower elevated height of 0.2 m was chosen rather than the 0.25 m used in the previous studies on the Anacostia and Patuxent to provide additional deterrence to goose entry. This reduction would not be expected to act as a deterrent to most fish or turtles. Horizontal stringing and flagging will be attached to the enclosures on the diagonal to further deter geese from entering the enclosures from above, although the small size of the enclosures should make this method of entry unlikely.

Sampling plots will be arranged in a linear fashion within the modules, as shown in figure C-1. Allocation of the control and fenced-enclosure plot(s) to the available positions within each module will be random.

## Elevations

Given the important role elevation plays in determining percent cover, species richness, and species composition in the marsh, comparability of sample plots with respect to elevation will be maintained by limiting the placement of sample plots to an elevation range of 0.25 to 0.37 m NAVD 88. This range was chosen based on previous work in the Anacostia wetland restorations (Krafft et al. 2009, Hammerschlag et al. 2006, Neff 2002) that indicates this range (equivalent to 1.60 to 2.00 ft NGVD 29) is high enough to support native wetland vegetation, but low enough to reduce the probability of invasion by the non-native, common reed (*Phragmites australis*). Sampling plot elevations will be measured periodically to determine change over time. It is recommended that elevations be monitored in 2009 during the plot location process and again in 2011. Elevations should be obtained with a surveyor's level, a laser level, or other appropriate equipment, pegged to local benchmarks.

## Field Work Timeline

Exclosures should be installed in April/May, or as soon thereafter as is feasible, so that germinating annuals will not be decimated by herbivory before the exclosures are set up. Exclosures will be examined periodically by Park staff during the growing season to confirm that they are intact, especially following major storm events, and to confirm that goose tracks are not present within elevated-fenced exclosures. Baseline vegetation data will be collected for the study in early June, right after removal of the old protective fencing from the new experimental modules. Annual vegetation monitoring will be conducted in August, prior to the seasonal senescence of a number of the key dominant species (Krafft et al. 2009).

Since the purpose of this monitoring is to measure the general herbivory response rather than tracking individual species that may peak and senesce at different times, an annual August monitoring is sufficient. This plan anticipates, based on past experience that vegetation will volunteer within the exclosures, given appropriate elevation and protection from herbivory. This may take more than one growing season. In the event that Canada goose herbivory is documented by this study and management actions are undertaken, herbivory monitoring should continue after the management actions to provide quantitative statistical documentation of the recovery of vegetation in the unfenced control plots.

## Vegetation Sampling Methods

A 1 m by 2 m PVC quadrat frame will be hooked over the two PVC plot markers to delineate the boundaries of the sampling plot. Ocular estimation will be used to record percent cover by cover types consisting of species (or nearest known taxon) and the unvegetated cover type, if present. Percent cover numbers will total at least 100 %. Totals will exceed 100 % in cases where vertical layers of species overlap. Plants do not have to be rooted within the sampling plot to be included in the percent cover data. Cover will be recorded to the nearest percent for values between 1 and 15. Values less than 1 % will be recorded as 0.5 % or 1 %, whichever is closer. Values between 15 and 95 % will be recorded to the nearest 5 %. Values between 95 % and 100 % can be recorded to the nearest percent.

## Statistical Analysis

Total vegetative cover, species richness, and elevation data will be analyzed statistically. For data sets where the residuals are normally distributed and the variances are acceptable, analysis of variance (ANOVA) will be used to compare data among plot types (unfenced control plots and elevated-fenced exclosure plots), habitat type (vegetated or unvegetated), and their interaction. 'Module' will be included in the model as well, and we will investigate models that allow correlation between the plots within a module. Data may be transformed prior to analysis (e.g., using a natural log transformation) to improve normality. Post pairwise comparisons will be made using Tukey's Studentized Range Test of Least

Squares Means (family-wise error rate with  $\alpha = 0.05$ ). After the first year, data meeting the necessary normality and variance assumptions will be analyzed using a mixed model repeated measures analysis of variance (SAS, 2003, PROC MIXED). A variety of models will be tested to determine whether an unstructured model (which allows correlation between any two periods to be different) or compound symmetry model (which assumes the same correlation between any two time periods) produce better fit based on a lower value for Akaike's Information Criterion (AIC).

For data sets that do not meet adequate standards of normality and homogeneity of variance, we will consider using alternate statistical analyses such as loglinear models.

## CONCLUSIONS

The tidal freshwater wetland restorations located in Anacostia Park have the potential to provide Washington D.C. with environmental benefits through increased habitat for wetland wildlife and plants, increased ability to slow the pace of flood waters and filter pollutants, educational benefits by providing living laboratories in an inner-city setting where that is a rare commodity, and natural aesthetic benefits, also in short supply in the urban environment. Everyone benefits if these wetland restorations located on lands managed by NPS are well-managed and functioning to their optimal capability. Herbivory has limited the ability of these wetland restorations to function at their optimal capability. Data collected through this monitoring plan would provide the quantitative data needed to make sound management decisions regarding these wetlands.

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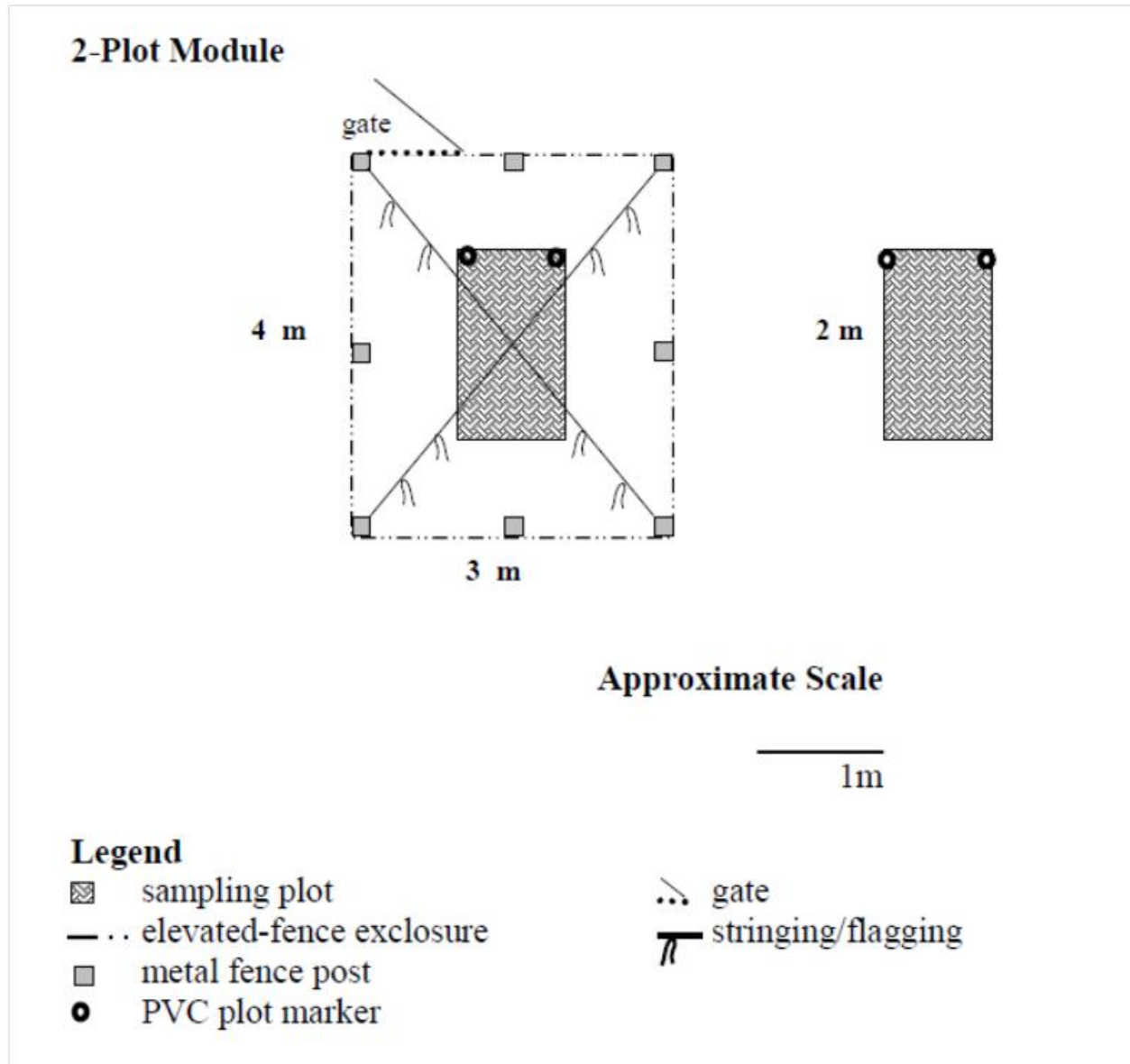
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**FIGURE C-1: SCHEMATIC DIAGRAM OF AN EXPERIMENTAL MODULE FROM AN AERIAL VIEW. THE MODULE CONSISTS OF ONE ELEVATED-FENCED ENCLOSURE PLOT AND ONE UNFENCED CONTROL PLOT.**

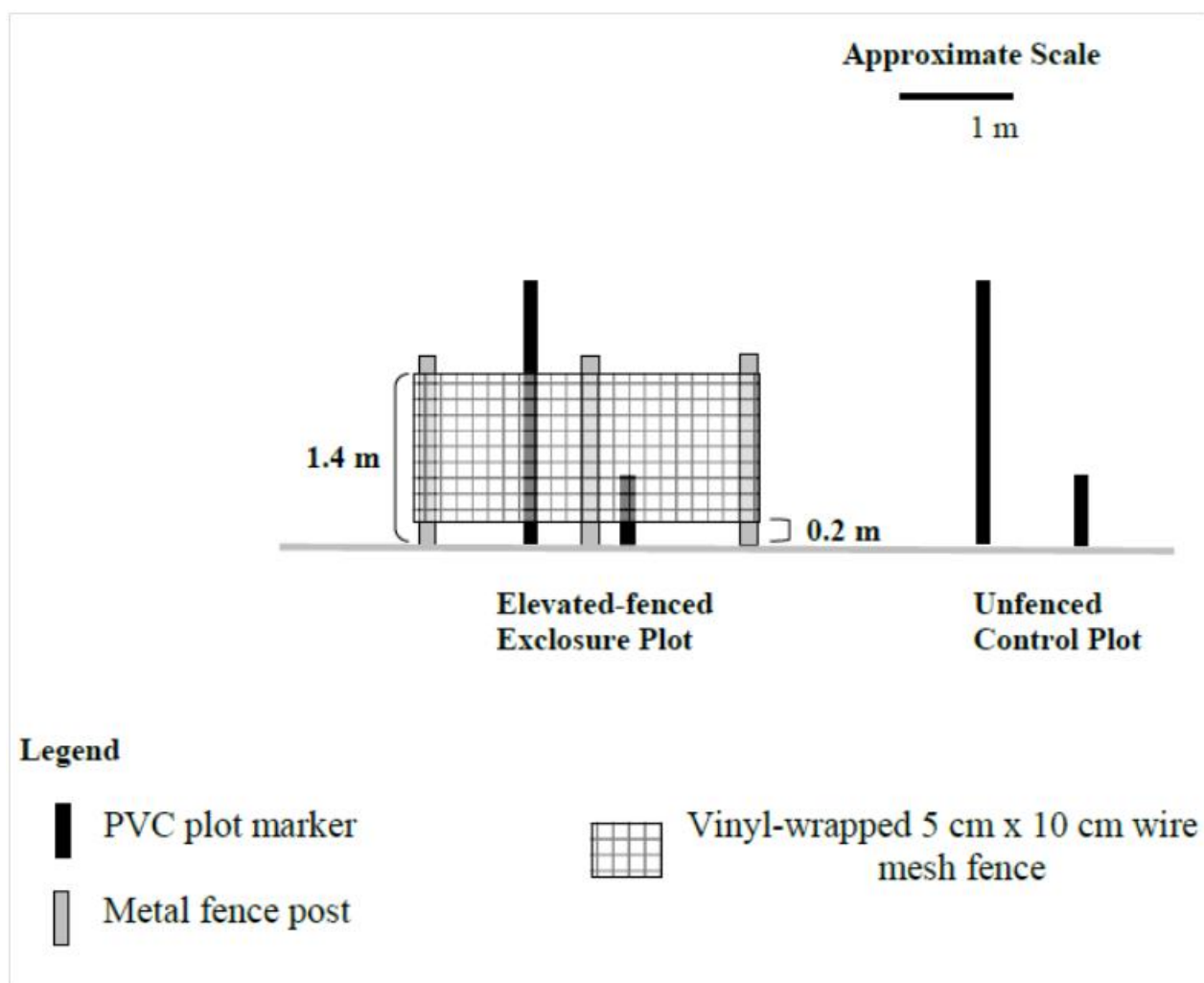


FIGURE C-2: SCHEMATIC DIAGRAM OF AN EXPERIMENTAL MODULE FROM A SIDE VIEW.



## **APPENDIX C: PLANT SPECIES LIST**

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TABLE C-1: LIST OF SPECIES PLANTED FOR ANACOSTIA MARSH RECONSTRUCTION

Common Name	Scientific Name	Notes
<b>High Marsh Plants</b>		
Buttonbush	<i>Cephalanthus occidentalis</i>	
Marsh hibiscus	<i>Hibiscus moscheutos</i>	
Rice cutgrass	<i>Leersia oryzoides</i>	Struggled initially; recovered later
Lizard's tail	<i>Saururus cernuus</i>	Did not survive for very long
<b>Mid-Marsh Plants</b>		
Water plantain	<i>Alisma plantago-aquatic</i>	Did not survive for very long
Tussock sedge	<i>Carex stricta</i>	
Blue flag	<i>Iris versicolor</i>	Did not survive for very long
Arrow arum	<i>Peltandra virginica</i>	
Smartweed species	<i>Polygonum</i> spp.	
Pickerelweed	<i>Pontedaria cordata</i>	
Duck potato	<i>Sagittaria latifolia</i>	
Common three-square	<i>Scirpus americanus</i>	Did not survive for very long
Soft-stem bulrush	<i>Scirpus validus</i>	
Lesser bur-reed	<i>Sparganium americanum</i>	Did not survive for very long
Giant bur-reed	<i>Sparganium eurycarpum</i>	Did not survive for very long
<b>Low Marsh Plants</b>		
Spatterdock	<i>Nuphar advena</i>	
<b>Volunteer Plants</b>		
Red maple	<i>Acer rubrum</i>	
Beggar-ticks	<i>Bidens</i> sp.	
Sedge species	<i>Carex</i> spp.	
Spike rush species	<i>Eleocharis</i> spp.	
Rice cutgrass	<i>Leersia oryzoides</i>	
Purple loosestrife	<i>Lythrum salicaria</i>	
Common reed grass	<i>Phragmites australis</i>	
Smartweed species	<i>Polygonum</i> spp.	
Cottonwood	<i>Populus deltoides</i>	
Duck potato	<i>Sagittaria latifolia</i>	
Willow species	<i>Salix</i> sp.	
Narrow-leaved cattail	<i>Typha angustifolia</i>	
Broad-leaved cattail	<i>Typha latifolia</i>	
Wild rice	<i>Zizania aquatica</i>	

**TABLE C-2: PLANT SPECIES USED FOR WETLAND AND GOOSE MANAGEMENT TECHNIQUES THAT ARE LESS PALATABLE TO CANADA GEESE**

Common Name	Scientific Name	Type of Plant
Yellow pond lily	<i>Nuphar advena</i>	Herbaceous
Arrow arum	<i>Peltandra virginica</i>	Herbaceous
Soft-stem bulrush	<i>Schoenoplectus tabermontanae</i>	Herbaceous
Soft rush	<i>Juncus effusus</i>	Herbaceous
Broad-leaved cattail	<i>Typha latifolia</i>	Herbaceous
Rice cutgrass	<i>Leersia oryzoides</i>	Herbaceous
Water purslane	<i>Ludwigia palustris</i>	Herbaceous
Swamp milkweed	<i>Asclepias incarnata</i>	Herbaceous
Common button bush	<i>Cephalanthus occidentalis</i>	Woody
Swamp rose	<i>Rosa palustris</i>	Woody
Crimson-eyed rosemallow	<i>Hibiscus moscheutos</i>	Woody
Southern arrowwood	<i>Viburnum spp.</i>	Woody
Shrub dogwood	<i>Cornus spp.</i>	Woody
Willow species	<i>Salix spp.</i>	Woody

## **APPENDIX D: SPECIES LISTS**

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TABLE D-1: PLANT AND ANIMAL LISTS

Scientific Name	Common Name	Federal Rank	Maryland Rank <sup>1</sup>	Maryland Status <sup>1,2</sup>
<b>PLANTS</b>				
<i>Acalypha rhomboidea</i>	Rhombic cooperleaf or three-seeded	--	--	--
<i>Acer negundo</i>	Box elder	--	--	--
<i>Acer rubrum</i>	Red maple	--	--	--
<i>Agrostis gigantea</i>	Redtop bentgrass	--	--	--
<i>Ailanthus altissima</i>	Tree-of-heaven	--	--	--
<i>Alisma plantago</i>	Water plantain	--	--	--
<i>Allium canadense</i>	Wild garlic	--	--	--
<i>Allium vineale</i>	Field garlic	--	--	--
<i>Alnus serrulata</i>	Smooth alder	--	--	--
<i>Alopecurus carolinianus</i>	Carolina foxtail	--	--	--
<i>Amaranthus hybridus</i>	smooth pigweed	--	--	--
<i>Amaranthus retroflexus</i>	rough pigweed	--	--	--
<i>Amaranthus sp.</i>	Water hemp	--	--	--
<i>Amorpha fruticosa</i>	False indigo	--	--	--
<i>Ampelamus albidus</i>	Sandvine or honeyvine	--	--	--
<i>Ampelopsis brevipedunculata</i>	Porcelain berry	--	--	--
<i>Anagallis arvensis</i>	Scarlet pimpernel	--	--	--
<i>Asclepias incarnata</i>	Swamp milkweed	--	--	--
<i>Asclepias syriaca</i>	Common milkweed	--	--	--
<i>Arabidopsis thaliana</i>	Mouse-ear cress	--	--	--
<i>Artemisia annua</i>	Annual wormwood	--	--	--
<i>Artemisia vulgaris</i>	Mugwort or wormwood	--	--	--
<i>Aster lanceolatus</i>	Eastern lined aster	--	--	--
<i>Betula nigra</i>	River birch	--	--	--
<i>Bidens frondosa</i>	Beggar-ticks	--	--	--
<i>Bidens spp.</i>	Stick-tight	--	--	--
<i>Boehmeria cylindrica</i>	False nettle	--	--	--
<i>Bromus japonicus</i>	Japanese chess	--	--	--
<i>Bromus willdenowii</i>	Rescue grass	--	--	--
<i>Calystegia sepium</i>	Hedge bindweed	--	--	--
<i>Carex shortiana</i>	Short's sedge	G5	S2	E
<i>Carex stipata</i>	Crowded sedge	--	--	--
<i>Carex stricta</i>	Tussock sedge	--	--	--
<i>Carex vulpinoidea</i>	Foxtail sedge	--	--	--
<i>Cedrus atlantica</i>	Atlas cedar	--	--	--
<i>Cephalanthus occidentalis</i>	Buttonbush	--	--	--
<i>Chaenorrhinum minus</i>	Lesser toadflax	--	--	--
<i>Chaerophyllum procumbens</i>	Spreading chervil	--	--	--
<i>Chenopodium album</i>	Lamb's quarters	--	--	--
<i>Chenopodium ambrosioides</i>	Mexican tea	--	--	--
<i>Cicuta maculata</i>	Common water hemlock	--	--	--
<i>Clematis terniflora</i>	Yarn-leaved clematis	--	--	--
<i>Cuscuta gronovii</i>	Common dodder	--	--	--



Scientific Name	Common Name	Federal Rank	Maryland Rank <sup>1</sup>	Maryland Status <sup>1,2</sup>
<i>Cuscuta pentagona</i>	Field-dodder or five-angled dodder	--	--	--
<i>Cynodon dactylon</i>	Bermuda grass	--	--	--
<i>Cyperus erythrorhizos</i>	Red-rooted galingale	--	--	--
<i>Cyperus esculentus</i>	Yellow nutsedge	--	--	--
<i>Cyperus iria</i>	Yellow cyperus	--	--	--
<i>Datura stramonium</i>	Jimson weed	--	--	--
<i>Daucus carota</i>	Queen anne's lace	--	--	--
<i>Desmanthus illinoensis</i>	Bundleflower or prairie mimosa	--	--	--
<i>Echinochloa crusgalli</i>	A barnyard grass	--	--	--
<i>Eclipta prostrata</i>	Yerba-de-tajo	--	--	--
<i>Eleocharis engelmannii</i>	Engelmann's spikerush	G4?	S3	--
<i>Eleocharis</i> sp.	Spike rush	--	--	--
<i>Elymus virginicus</i>	Virginia wild-rye	--	--	--
<i>Elytrigia repens</i>	Quackgrass	--	--	--
<i>Erianthus ravennae</i>	Ravenna plume grass	--	--	--
<i>Erigeron annuus</i>	Annual or daisy fleabane	--	--	--
<i>Eupatorium altissimum</i>	Tall eupatorium	G5	S3	--
<i>Euphorbia maculata</i>	Milk or spotted purslane	--	--	--
<i>Galium aparine</i>	Cleavers bedstraw	--	--	--
<i>Galium pedmontanum</i>	A bedstraw	--	--	--
<i>Geum canadense</i>	White avens	--	--	--
<i>Hemerocallis fulva</i>	Common day lily	--	--	--
<i>Helenium autumnale</i>	Yellow sneezeweed	--	--	--
<i>Hibiscus laevis</i>	Halberd-leaved rose mallow	G5	S3	--
<i>Hibiscus moscheutos</i>	Rose mallow	--	--	--
<i>Hibiscus syriacus</i>	Rose of Sharon	--	--	--
<i>Hordeum pusillum</i>	Little barley	--	--	--
<i>Humulus japonicus</i>	Japanese hop	--	--	--
<i>Impatiens capensis</i>	Jewelweed or orange touch-me-not	--	--	--
<i>Ipomoea coccinea</i>	Red morning glory	--	--	--
<i>Ipomoea hederacea</i>	Ivy-leaved morning-glory	--	--	--
<i>Ipomoea lacunosa</i>	Small-flowered morning-glory	--	--	--
<i>Ipomoea purpurea</i>	Common morning-glory	--	--	--
<i>Iris pseudacorus</i>	Yellow iris	--	--	--
<i>Iris versicolor</i>	Blue flag	--	--	--
<i>Juncus acuminatus</i>	Narrow-flowered rush	--	--	--
<i>Juncus effuses</i>	Soft rush	--	--	--
<i>Justica americana</i>	American water-willow	--	--	--
<i>Leersia oryzoides</i>	Rice cutgrass	--	--	--
<i>Lepidium campestre</i>	Field cress	--	--	--
<i>Lepidium virginicum</i>	Poor-man's pepper	--	--	--
<i>Lespedeza cuneata</i>	Chinese lespedeza	--	--	--
<i>Lespedeza stipulacea</i>	Korean bushclover	--	--	--
<i>Lonicera japonica</i>	Japanese honeysuckle	--	--	--
<i>Lycium barbarum</i>	Chinese matrimonyvine	--	--	--
<i>Lysimachia ciliata</i>	Fringed loosestrife	--	--	--
<i>Lythrum salicaria</i>	Purple loosestrife	--	--	--
<i>Malva neglecta</i>	Common mallow or chesses	--	--	--
<i>Matricaria recutita</i>	Wild chamomile	--	--	--
<i>Mazus pumilus</i>	Japanese mazus	--	--	--

Scientific Name	Common Name	Federal Rank	Maryland Rank <sup>1</sup>	Maryland Status <sup>1,2</sup>
<i>Medicago lupulina</i>	Black medick	--	--	--
<i>Melilotus alba</i>	White sweet clover	--	--	--
<i>Melilotus officinalis</i>	Yellow sweet clover	--	--	--
<i>Monarda fistulosa</i>	Wild bergamot	--	--	--
<i>Muhlenbergia schreberi</i>	Nimbleweed	--	--	--
<i>Nelumbo lutea</i>	American lotus	--	--	--
<i>Nuphar advena</i>	Spatterdock	--	--	--
<i>Oenothera biennis</i>	Common evening primrose	--	--	--
<i>Peltandra virginica</i>	Arrow arum	--	--	--
<i>Phleum pratense</i>	Timothy grass	--	--	--
<i>Phragmites australis</i>	Phragmites	--	--	--
<i>Phytolacca americana</i>	Pokeweed	--	--	--
<i>Pilea pumila</i>	Clearweed	--	--	--
<i>Plantago lanceolata</i>	English plantain	--	--	--
<i>Poa compressa</i>	Canada bluegrass	--	--	--
<i>Poa pratensis</i>	Kentucky bluegrass	--	--	--
<i>Polygonum aviculare</i>	Prostrate knotweed	--	--	--
<i>Polygonum convolvulus</i>	Black bindweed	--	--	--
<i>Polygonum hydropiper</i>	Water pepper	--	--	--
<i>Polygonum lapathifolium</i>	Dock-leaved smartweed	--	--	--
<i>Polygonum perfoliatum</i>	Mile-a-minute tearthumb	--	--	--
<i>Polygonum persicaria</i>	Lady's thumb smartweed	--	--	--
<i>Polygonum punctatum</i>	Dotted smartweed	--	--	--
<i>Pontederia cordata</i>	Pickeral-weed	--	--	--
<i>Populus deltoides</i>	Cottonwood	--	--	--
<i>Potentilla norvegica</i>	Rough cinquefoil or strawberry weed	--	--	--
<i>Pueraria lobata</i>	Kudzu	--	--	--
<i>Ranunculus sceleratus</i>	Cursed crowfoot	--	--	--
<i>Rorippa palustris</i>	Common yellow water-cress	--	--	--
<i>Rudbeckia laciniata</i>	Cutleaf or tall coneflower	--	--	--
<i>Rumex altissimus</i>	Tall dock	G5	S1	E
<i>Rumex crispus</i>	Curly dock	--	--	--
<i>Sagittaria latifolia</i>	Common or broad-leaved arrowhead	--	--	--
<i>Salix nigra</i>	Black willow	--	--	--
<i>Saururus cernuus</i>	Lizard tail	--	--	--
<i>Scirpus americanus</i>	Olney three-square	--	--	--
<i>Scirpus atrovirens</i>	Black bulrush	--	--	--
<i>Scleranthus annuus</i>	Annual knawel	--	--	--
<i>Scirpus validus</i>	Soft stem bulrush	--	--	--
<i>Scutellaria lateriflora</i>	Mad-dog skullcap	--	--	--
<i>Setaria glauca</i>	Yellow foxtail	--	--	--
<i>Setaria viridis</i>	Green foxtail	--	--	--
<i>Sibara virginica</i>	Virginia cress	--	--	--
<i>Sicyos angulatus</i>	Bur cucumber	--	--	--
<i>Silene latifolia</i>	White champion	--	--	--
<i>Sisymbrium officinale</i>	Hedge mustard	--	--	--
<i>Solanum carolinense</i>	Horse-nettle	--	--	--
<i>Solanum nigrum</i>	American or black nightshade	--	--	--
<i>Sophora japonica</i>	Japanese pagoda tree	--	--	--
<i>Sparganium americanum</i>	Lesser bur-reed	--	--	--

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<i>Sparganium eurycarpum</i>	Giant bur-reed	--	--	--
<i>Torilis arvensis</i>	Field hedge-parsley	--	--	--
<i>Tragopogon dublus</i>	Fistulous goat's beard	--	--	--
<i>Trifolium arvense</i>	Rabbitfoot clover	--	--	--
<i>Trifolium pratense</i>	Red clover	--	--	--
<i>Trifolium repens</i>	White clover	--	--	--
<i>Tripsacum dactyloides</i>	Gama grass	--	--	--
<i>Typha angustifolia</i>	Narrow-leaved cattail	--	--	--
<i>Typha latifolia</i>	Broad-leaved cattail	--	--	--
<i>Ulmus americana</i>	American elm	--	--	--
<i>Ulmus pumila</i>	Siberian elm	--	--	--
<i>Valerianaella locusta</i>	Blue corn-salad	--	--	--
<i>Veronica peregrina</i>	Purslane speedwell	--	--	--
<i>Vicia angustifolia</i>	Common vetch	--	--	--
<i>Vitis vulpina</i>	Winter grape	--	--	--
<i>Wisteria frutescens</i>	Atlantic wisteria	--	--	--
<i>Zizania aquatica</i>	Wild rice	--	--	--
<b>AMPHIBIANS</b>				
<i>Acris crepitans</i>	Northern cricket frog	--	--	--
<i>Ambystoma maculatum</i>	Spotted salamander	--	--	--
<i>Ambystoma opacum</i>	Marbled salamander	--	--	--
<i>Bufo americanus</i>	American toad	--	--	--
<i>Bufo woodhousii fowleri</i>	Fowler's toad	--	--	--
<i>Desmognathus fuscus</i>	Northern dusky salamander	--	--	--
<i>Eurycea bislineata bislineata</i>	Northern two-lined salamander	--	--	--
<i>Hemidactylium scutatum</i>	Four-toed salamander	--	--	--
<i>Notoththalmus viridescens</i>	Red spotted newt	--	--	--
<i>Plethodon cinereus</i>	Red-backed salamander	--	--	--
<i>Pseudacris crucifer</i>	Spring peeper	--	--	--
<i>Pseudacris triseriata</i>	Upland chorus frog	--	--	--
<i>Pseudotriton ruber</i>	Northern red salamander	--	--	--
<i>Rana catesbeiana</i>	Bullfrog	--	--	--
<i>Rana clamitans melanota</i>	Green frog	--	--	--
<i>Rana palustris</i>	Pickerel frog	--	--	--
<i>Rana sylvatica</i>	Wood frog	--	--	--
<i>Rana utricularia</i>	Southern leopard frog	--	--	--
	Gray treefrog	--	--	--
<b>BRYOZOA</b>				
<i>Pectinella magnifica</i>	Jelly-ball freshwater bryozoan	--	--	--
<b>FISH</b>				
<i>Anguilla rostrata</i>	American eel	--	--	--
<i>Dorosoma cepedianum</i>	Gizzard shad	--	--	--
<i>Fundulus diaphanus</i>	Banded killifish	--	--	--
<i>Ictalurus nebulosus</i>	Brown bullhead	--	--	--
<i>Ictalurus punctatus</i>	Channel catfish	--	--	--
<i>Lepomis gibbosus</i>	Pumpkinseed	--	--	--
<i>Lepomis macrochirus</i>	Bluegill	--	--	--
<i>Lepomis megalotis</i>	Longear sunfish	--	--	--
<i>Micropterus salmoides</i>	Largemouth bass	--	--	--
<i>Morone americanus</i>	White perch	--	--	--

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<i>Notropis hudsoninus</i>	Spottail shiner	--	--	--
	Mummichog	--	--	--
	Mosquito fish	--	--	--
	Carp	--	--	--
	Striped bass	--	--	--
<b>LEPIDOTERA</b>				
<i>Ancyloxypha numitor</i>	Least skipper	--	--	--
<i>Atalopedes campestris</i>	Sachem skipper	--	--	--
<i>Boloria bellona</i>	Meadow fritillary	--	--	--
<i>Calycopis cecrops</i>	Red-banded hairstreak	--	--	--
<i>Celastrina ladon pseudargi</i>	Spring azure	--	--	--
<i>Celastrina ladon</i>	Summer azure	--	--	--
<i>Cercyonis p. pegala</i>	Common wood nymph	--	--	--
<i>Colias eurytheme</i>	Orange sulphur	--	--	--
<i>Colias philodice</i>	Clouded sulphur	--	--	--
<i>Danaus p. plexippus</i>	Monarch	--	--	--
<i>Epargyreus clarus</i>	Silver-spotted skipper	--	--	--
<i>Euptoieta claudia</i>	Variegated fritillary	--	--	--
<i>Everes comyntas</i>	Eastern blue tailed	--	--	--
<i>Junonia coenia</i>	Common buckeye	--	--	--
<i>Limenitis archippus</i>	Viceroy	--	--	--
<i>Nymphalis a. antiopa</i>	Mourning cloak	--	--	--
<i>Papilio g. glaucus</i>	Eastern tiger swallowtail	--	--	--
<i>Papilio polyxenes</i>	Black swallowtail	--	--	--
<i>Papilio troilus</i>	Spicebush swallowtail	--	--	--
<i>Pholisora catullus</i>	Common sootywing	--	--	--
<i>Pieris rapae</i>	Cabbage white	--	--	--
<i>Poanes zabulon</i>	Zabulon skipper	--	--	--
<i>Polygonia interrogationis</i>	Question mark	--	--	--
<i>Pontia protodice</i>	Checkered white	--	--	--
<i>Psyciodes tharos</i>	Pearl crescent	--	--	--
<i>Satyroides appalachia</i>	Appalachian brown	--	--	--
<i>Vanessa atalanta</i>	Red admiral	--	--	--
<i>Vanessa cardui</i>	Painted lady	--	--	--
	Silvery checkerspot	--	--	--
	Eastern comma	--	--	--
	Horace's duskywing	--	--	--
	Juvenal's duskywing	--	--	--
	Wildindigo duskywing	--	--	--
	Hackberry emperor	--	--	--
	Great spangled fritillary	--	--	--
	Variegated fritillary	--	--	--
	Little glassywing	--	--	--
	Gray hairstreak	--	--	--
	Red-spotted purple	--	--	--
	Queen	--	--	--
	Little wood satyr	--	--	--
	Hayhurst's scallopedwing	--	--	--
	Broadwinged skipper	--	--	--
	Common-checkered skipper	--	--	--

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	Crossline skipper	--	--	--
	Dun skipper	--	--	--
	Fiery skipper	--	--	--
	Ocola skipper	--	--	--
	Peck's skipper	--	--	--
	Cloudless sulphur	--	--	--
	Zebra swallowtail	--	--	--
	Checkered white	--	--	--
<b>BIRDS</b>				
	Bittern, American	G4	S1S2B	I
	Bittern, least	G5	S1S3B	I
	Blackbird, red-winged	--	--	--
	Blackbird, rusty	--	--	--
	Bluebird, eastern	--	--	--
	Bobolink	--	--	--
	Bunting, indigo	--	--	--
	Cardinal, northern	--	--	--
	Catbird, gray	--	--	--
	Chat, yellow-breasted	--	--	--
	Chickadee, Carolina	--	--	--
	Coot, American	--	--	--
	Cormorant, double-crested	G5	S1B	--
	Cowbird, brown-headed	--	--	--
	Creeper, brown	--	--	--
	Crow, American	--	--	--
	Crow, fish	--	--	--
	Cuckoo, black-billed	--	--	--
	Cuckoo, yellow-billed	--	--	--
	Dickcissel	G5	S2B	--
	Dove, mourning	--	--	--
	Dove, rock	--	--	--
	Dowitcher, long-billed	--	--	--
	Dowitcher, short-billed	--	--	--
	Duck, black	--	--	--
	Duck, bufflehead	--	--	--
	Duck, canvasback	--	--	--
	Duck, gadwall	--	--	--
	Duck, common goldeneye	--	--	--
	Duck, hybrid domestic	--	--	--
	Duck, long-tailed	--	--	--
	Duck, mallard	--	--	--
	Duck, oldsquaw	--	--	--
	Duck, hybrid peking	--	--	--
	Duck, northern pintail	--	--	--
	Duck, ring-necked	--	--	--
	Duck, ruddy	--	--	--
	Duck, northern shoveler	--	--	--
	Duck, blue-winged teal	--	--	--
	Duck, green-winged teal	--	--	--
	Duck, American wigeon	--	--	--

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	Duck, wood	--	--	--
	Dunlin	--	--	--
	Eagle, American bald	G4	S2S3	T
	Egret, cattle	--	--	--
	Egret, great	--	--	--
	Egret, snowy	--	--	--
	Falcon, peregrine	G4	S1B	I
	Finch, house	--	--	--
	Finch, purple	G5	S3B	--
	Finch, yellow shafted	--	--	--
	Flicker, northern	--	--	--
	Flycatcher, acadian	--	--	--
	Flycatcher, great crested	--	--	--
	Flycatcher, least	G5	S3S4B	--
	Flycatcher, willow	--	--	--
	Flycatcher, yellow-bellied	--	--	--
	Gallinule, common	--	--	--
	Gnatcatcher, blue-gray	--	--	--
	Goldfinch, American	--	--	--
	Goose, Canada	--	--	--
	Goose, hybrid domestic	--	--	--
	Goose, greater white-fronted	--	--	--
	Goose, snow	--	--	--
	Grackle, common	--	--	--
	Grebe, eared	--	--	--
	Grebe, horned	--	--	--
	Grebe, pied-billed	G5	S2B	--
	Grebe, red-necked	--	--	--
	Grosbeak, blue	--	--	--
	Grosbeak, evening	--	--	--
	Grosbeak, rose-breasted	--	--	--
	Gull, bonaparte's	--	--	--
	Gull, franklin's	--	--	--
	Gull, greater black-backed	--	--	--
	Gull, herring	--	--	--
	Gull, laughing	G5	S1B	--
	Gull, lesser black-backed	--	--	--
	Gull, ring-billed	--	--	--
	Harrier, northern	G5	S2B	--
	Hawk, broad-winged	--	--	--
	Hawk, cooper's	--	--	--
	Hawk, red-shouldered	--	--	--
	Hawk, red-tailed	--	--	--
	Hawk, sharp-shinned	--	--	--
	Heron, back-crowned night	--	--	--
	Heron, great blue	--	--	--
	Heron, green	--	--	--
	Heron, little blue	--	--	--
	Heron, yellow-crowned night	G5	S3B	--
	Hummingbird, ruby-throated	--	--	--

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	Ibis, glossy	--	--	--
	Jay, blue	--	--	--
	Junco, dark-eyed	G5	S2B	--
	Kestrel, American	--	--	--
	Killdeer	--	--	--
	Kingbird, eastern	--	--	--
	Kingbird, western	--	--	--
	Kingfisher, belted	--	--	--
	Kinglet, golden-crowned	G5	S2B	--
	Kinglet, ruby-crowned	--	--	--
	Lark, horned	--	--	--
	Loon, common	--	--	--
	Loon, red-throated	--	--	--
	Martin, purple	--	--	--
	Meadowlark, eastern	--	--	--
	Merganser, common	--	--	--
	Merganser, hooded	G5	S1B	--
	Merganser, red-breasted	--	--	--
	Merlin	--	--	--
	Mockingbird, northern	--	--	--
	Nighthawk, common	G5	S3S4B	--
	Nuthatch, red-breasted	G5	S1B	--
	Nuthatch, white-breasted	--	--	--
	Oriole, northern Baltimore	--	--	--
	Oriole, orchard	--	--	--
	Osprey	--	--	--
	Owl, barred	--	--	--
	Owl, great horned	--	--	--
	Phalarope, northern	--	--	--
	Phalarope, red-necked	--	--	--
	Phoebe, eastern	--	--	--
	Pine siskin	--	--	--
	Pipit, american	--	--	--
	Pipit, water	--	--	--
	Plover, american golden	--	--	--
	Plover, semipalmated	--	--	--
	Quail, bobwhite common	--	--	--
	Rail, common moorhen	--	--	--
	Rail, sora	--	--	--
	Rail Virginia	--	--	--
	Robin, American	--	--	--
	Sanderling	--	--	--
	Sandpiper, least	--	--	--
	Sandpiper, pectoral	--	--	--
	Sandpiper, semipalmated	--	--	--
	Sandpiper, solitary	--	--	--
	Sandpiper, spotted	--	--	--
	Sandpiper, stilt	--	--	--
	Sandpiper, western	--	--	--
	Sandpiper, white-rumped	--	--	--



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	Sapsucker, yellow-bellied	G5	SHB	--
	Scaup, lesser	--	--	--
	Shoveler, northern	--	--	--
	Snipe, common	--	--	--
	Sparrow, American tree	--	--	--
	Sparrow, chipping	--	--	--
	Sparrow, field	--	--	--
	Sparrow, fox	--	--	--
	Sparrow, grasshopper	--	--	--
	Sparrow, house	--	--	--
	Sparrow, lincoln's	--	--	--
	Sparrow, savannah	G5	S3S4B	--
	Sparrow, song	--	--	--
	Sparrow, swamp	--	--	--
	Sparrow, vesper	G5	S3S4B	--
	Sparrow, white-crowned	--	--	--
	Sparrow, white-throated	--	--	--
	Starling, European	--	--	--
	Stilt, black-necked	--	--	--
	Swallow, bank	G5	S3S4B	--
	Swallow, barn	--	--	--
	Swallow, cliff	--	--	--
	Swallow, rough-winged	--	--	--
	Swallow, tree	--	--	--
	Swan, tundra	--	--	--
	Swift, chimney	--	--	--
	Tanager, scarlet	--	--	--
	Teal, green-winged	--	--	--
	Teal, blue-winged	--	--	--
	Tern, Caspian	--	--	--
	Tern forester's	--	--	--
	Tern, least	G4	S2B	--
	Thrasher, brown	--	--	--
	Thrush, gray-cheeked	--	--	--
	Thrush, hermit	--	--	--
	Thrush, swainson's	--	--	--
	Thrush, veery	--	--	--
	Thrush, wood	--	--	--
	Titmouse, tufted	--	--	--
	Towhee, eastern	--	--	--
	Towhee, rufous-sided	--	--	--
	Vireo, blue-headed	--	--	--
	Vireo, red-eyed	--	--	--
	Vireo, solitary	--	--	--
	Vireo, warbling	--	--	--
	Vireo, white-eyed	--	--	--
	Vireo, yellow-throated	--	--	--
	Vulture, black	--	--	--
	Vulture, turkey	--	--	--
	Warbler, american redstart	--	--	--

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	Warbler, bay-breasted	--	--	--
	Warbler, black-and-white	--	--	--
	Warbler, black-throated blue	G5	S3S4B	--
	Warbler, black-throated green	--	--	--
	Warbler, blackburnian	G5	S1S2B	--
	Warbler, blackpoll	--	--	--
	Warbler, blue-winged	--	--	--
	Warbler, canada	G5	S3B	--
	Warbler, cape may	--	--	--
	Warbler, cerulean	G4	S3S4B	--
	Warbler, chestnut-sided	--	--	--
	Warbler, common yellowthroat	--	--	--
	Warbler, connecticut	--	--	--
	Warbler, hooded	--	--	--
	Warbler, kentucky	--	--	--
	Warbler, magnolia	G5	S3S4B	--
	Warbler, nashville	G5	S1S2B	I
	Warbler, orange-crowned	--	--	--
	Warbler, ovenbird	--	--	--
	Warbler, palm	--	--	--
	Warbler, parula northern	--	--	--
	Warbler, prairie	--	--	--
	Warbler, prothonotary	--	--	--
	Warbler, wilson's	--	--	--
	Warbler, yellow	--	--	--
	Warbler, yellow-rumped	--	--	--
	Waterthrush, Louisiana	--	--	--
	Waterthrush, northern	G5	S2S3B	--
	Waxwing, cedar	--	--	--
	Wigeon, American	--	--	--
	Woodcock, American	--	--	--
	Woodpecker, downy	--	--	--
	Woodpecker, hairy	--	--	--
	Woodpecker, pileated	--	--	--
	Woodpecker, red-bellied	--	--	--
	Woodpecker, red-headed	--	--	--
	Wood-pewee, eastern	--	--	--
	Wren, carolina	--	--	--
	Wren, house	--	--	--
	Wren, marsh	--	--	--
	Wren, winter	G5	S2B	--
	Yellowlegs, greater	--	--	--
	Yellowlegs, lesser	--	--	--
<b>MAMMALS</b>				
<i>Blarina brevicauda</i>	Short-tail shrew	--	--	--
<i>Castor canadensis</i>	Beaver	--	--	--
<i>Condylura cristata</i>	Star-nose mole	--	--	--
<i>Didelphis marsupialis</i>	Opossum	--	--	--
<i>Eptesicus fuscus</i>	Big brown bat	--	--	--
<i>Lasiurus borealis</i>	Red bat	--	--	--

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<i>Lutra canadensis latrix</i>	River otter	--	--	--
<i>Marmota monax</i>	Woodchuck	--	--	--
<i>Microtus pennsylvanicus</i>	Meadow vole	--	--	--
<i>Mustela vison</i>	Mink	--	--	--
<i>Odocoileus virginiana</i>	White-tailed deer	--	--	--
<i>Ondatra zibethica</i>	Muskrat	--	--	--
<i>Peromyscus leucopus</i>	White-footed mouse	--	--	--
<i>Procyon lotor</i>	Raccoon	--	--	--
<i>Scalopus aquaticus</i>	Eastern mole	--	--	--
<i>Sciurus carolinensis</i>	Eastern gray squirrel	--	--	--
<i>Sylvilagus floridanus</i>	Eastern cottontail	--	--	--
<i>Tamias striatus</i>	Eastern chipmunk	--	--	--
<i>Urocyon cinereoargenteus</i>	Gray fox	--	--	--
<i>Vulpes vulpes</i>	Red fox	--	--	--
<b>MANTODEA</b>				
<i>Mantis religiosa</i>	Preying mantis	--	--	--
<b>MOLLUSKS</b>				
<i>Pyganodon cataracta</i>	Eastern floater mussel	--	--	--
<b>ODONATA</b>				
<i>Anax junius</i>	Common green darner dragonfly	--	--	--
<i>Perithemis tenera</i>	Eastern amberwing dragonfly	--	--	--
<i>Tramea lacerata hagen</i>	Black saddlebag dragonfly	--	--	--
	Blue dasher	--	--	--
	Spangled skimmer	--	--	--
	Common whitetail	--	--	--
	Lilypad forktail	--	--	--
	Eastern pondhawk	--	--	--
	Slaty skimmer	--	--	--
	Widow skimmer	--	--	--
	Swamp darner	--	--	--
	Familiar bluet	--	--	--
<b>REPTILES</b>				
<i>Carphophis amoenus</i>	Eastern worm snake	--	--	--
<i>Chelydra serpentina</i>	Snapping turtle	--	--	--
<i>Chrysemys p. picta</i>	Eastern painted turtle	--	--	--
<i>Clemmys guttata</i>	Spotted turtle	--	--	--
<i>Columba c. constrictor</i>	Northern black racer snake	--	--	--
<i>Chrysemys p. picta</i>	Eastern painted turtle	--	--	--
<i>Diadophis punctatus edwardsi</i>	Northern ringneck snake	--	--	--
<i>Elaphe o. obsoleta</i>	Black rat snake	--	--	--
<i>Eumeces fasciatus</i>	Five-lined skink	--	--	--
<i>Heterodon platyrhinos</i>	Eastern hognose snake	--	--	--
<i>Kinosternon s. subrubrum</i>	Eastern mud turtle	--	--	--
<i>Nerodia s. sipedon</i>	Northern water snake	--	--	--
<i>Ophedodrys aestivus</i>	Rough green snake	--	--	--
<i>Pseudemys rubriventris</i>	Red-bellied turtle	--	--	--
<i>Regina septemvittata</i>	Queen snake	--	--	--
<i>Sceloporus undulatus hyacinthinus</i>	Fence lizard	--	--	--
<i>Sternotherus odoratus</i>	Eastern mud turtle	--	--	--
<i>Sternotherus odoratus</i>	Common musk turtle	--	--	--

Scientific Name	Common Name	Federal Rank	Maryland Rank <sup>1</sup>	Maryland Status <sup>1,2</sup>
<i>Storeria d. dekayi</i>	Northern brown snake	--	--	--
<i>Terrapene c. carolina</i>	Eastern box turtle	--	--	--
<i>Thamnophis sauritis</i>	Ribbon snake	--	--	--
<i>Thamnophis sirtalis</i>	Eastern garter snake	--	--	--
<i>Trachemys scripta elegans</i>	Red-eared slider turtle	--	--	--

<sup>1</sup> The District of Columbia utilizes the species rankings adopted by the Maryland Wildlife and Heritage Service Natural Heritage Program.

<sup>2</sup> This is the status of a species as determined by the Maryland Department of Natural Resources, in accordance with the Nongame and Endangered Species Conservation Act. Definitions as shown below have been taken from Code of Maryland Regulations (COMAR) 08.03.08.

<b>Global Rank</b>	G2	Apparently secure globally, although it may be quite rare in parts of its range, especially at the periphery.
	G5	Demonstrably secure globally, although it may be quite rare in parts of its range, especially at the periphery.
	G?	The species has not yet been ranked.
<b>State Rank</b>	S1	Highly State rare. Critically imperiled in Maryland because of extreme rarity (typically 5 or fewer estimated occurrences or very few remaining individuals or acres in the State) or because of some factor(s) making it especially vulnerable to extirpation. Species with this rank are actively tracked by the Wildlife and Heritage Service.
	S2	State rare. Imperiled in Maryland because of rarity (typically 6 to 20 estimated occurrences or few remaining individuals or acres in the State) or because of some factor(s) making it vulnerable to becoming extirpated. Species with this rank are actively tracked by the Wildlife and Heritage Service.
	S3	Watch List. Rare to uncommon with the number of occurrences typically in the range of 21 to 100 in Maryland. It may have fewer occurrences but with a large number of individuals in some populations, and it may be susceptible to large-scale disturbances. Species with this rank are not actively tracked by the Wildlife and Heritage Service.
	S4	Apparently secure in Maryland with typically more than 100 occurrences in the State or may have fewer occurrences if they contain large numbers of individuals. It is apparently secure under present conditions, although it may be restricted to only a portion of the State.
	SH	Historically known from Maryland, but not verified for an extended period (usually 20 or more years), with the expectation that it may be rediscovered.
	_B	A qualifier at the end of a rank. This species is a migrant and the subrank refers only to the breeding status of the species in Maryland. This species may have a different subrank for non-breeding populations.
<b>State Status</b>	E	Endangered. A species whose continued existence as a viable component of the State's flora and fauna is determined to be in jeopardy.
	I	In Need of Conservation. An species whose population is limited or declining in the State such that it may become threatened in the foreseeable future if current trends or conditions persist.
	T	Threatened. A species of flora or fauna that appears likely, within the foreseeable future, to become endangered in the State.

Source: Draft Anacostia Park GMP

TABLE D-2: INVASIVE PLANT SPECIES PREVIOUSLY TREATED AT ANACOSTIA PARK

Scientific Name	Common Name	Treatment Location
<i>Ailanthus altissima</i>	Tree-of-heaven	KAG, AC
<i>Alliaria petiolata</i>	Garlic mustard	KAG
<i>Ampelopsis brevipedunculata</i>	Amur peppervine	KAG, AP, AC
<i>Arctium minus</i>	Lesser burdock	AP
<i>Artemisia annua</i>	Sweet sagewort	AC
<i>Artemisia vulgaris</i>	Common wormwood	AP
<i>Celastrus orbiculatus</i>	Asian bittersweet	KAG
<i>Chenopodium album</i>	Lambsquarters	AP
<i>Cichorium intybus</i>	Chickory	AC
<i>Clematis terniflora</i>	Sweet autumn virginsbower	KAG, AP
<i>Glechoma hederacea</i>	Ground ivy	KAG, AC
<i>Hedera helix</i>	English ivy	KAG
<i>Lamium amplexicaule</i>	Henbit deadnettle	AP
<i>Lespedeza cuneata</i>	Sericea lespedeza	KAG
<i>Ligustrum vulgare</i>	European privet	KAG
<i>Lonicera japonica</i>	Japanese honeysuckle	KAG, AP, AC
<i>Lonicera spp.</i>	Honeysuckle species	KAG, AP, AC
<i>Lythrum salicaria</i>	Purple loeostripe	KAG, AP, AC
<i>Microstegium vimineum</i>	Nepalese browntop	KAG, AC
<i>Morus alba</i>	White mulberry	AP, AC
<i>Phragmites australis</i>	Common reed	KAG, AP
<i>Polygonum cuspidatum</i>	Japanese knotweed	AP, AC
<i>Persicaria perfoliata</i>	Asiatic tearthumb	KAG, AC
<i>Pueraria montana</i>	Kudzu	AP, AC
<i>Rosa multiflora</i>	Multiflora rose	KAG, AC
<i>Rumex crispus</i>	Curly dock	AP
<i>Setaria faberi</i>	Japanese bristlegrass	KAG
<i>Wisteria sinensis</i>	Chinese wisteria	KAG

Note: KAG = Kenilworth Aquatic Gardens, AP = Anacostia Park, AC = Arboretum Corridor, as defined in NPS 2006

TABLE D-3: AQUATIC BIRDS OCCURRING AT ANACOSTIA PARK

Common Name	Scientific Name	Feeding Habit
<b>Resident Over-winter Breeding Duck-Like Birds</b>		
Bufflehead	<i>Bucephala albeola</i>	Omnivore
Canvasback	<i>Aythya valisineria</i>	Grazer
Gadwall	<i>Anas strepera</i>	Omnivore
Goldeneye	<i>Bucephala clangula</i>	Invertebrates
Mallard	<i>Anas platyrhynchos</i>	Omnivore
Oldsquaw	<i>Clangula hyemalis</i>	Invertebrates
Pintail	<i>Anas acuta</i>	Omnivore
Ringneck duck	<i>Aythya collaris</i>	Grazer
Northern shoveler	<i>Anas clypeata</i>	Omnivore
Ruddy duck	<i>Oxyjura jamaicensis</i>	Grazer
Blue-winged teal	<i>Anas discors</i>	Omnivore
Green-winged teal	<i>Anas crecca</i>	Omnivore
American widgeon	<i>Anas Americana</i>	Grazer
Wood duck	<i>Aix sponsa</i>	Grazer
Canada goose	<i>Branta Canadensis</i>	Grazer
Snow goose	<i>Chen caerulescens</i>	Grazer
Common merganser	<i>Mergus merganser</i>	Piscivore
Hooded merganser	<i>Lophodytes cucullatus</i>	Invertebrates
Red-breasted merganser	<i>Mergus serrator</i>	Piscivore
American coot	<i>Fulica Americana</i>	Grazer
Eared grebe	<i>Podiceps nigricollis</i>	Piscivore
Horned grebe	<i>Podiceps auritus</i>	Piscivore
Pied-billed grebe	<i>Podilymbus podiceps</i>	Piscivore
Red-necked grebe	<i>Podiceps grisegena</i>	Piscivore
Common loon	<i>Gavia immer</i>	Piscivore
Red-throated loon	<i>Gavia stellata</i>	Piscivore
Sora rail	<i>Porzana Carolina</i>	Omnivore
Virginia rail	<i>Rallus limicola</i>	Omnivore
Common gallinule	<i>Gallinula chloropus</i>	Omnivore

Common Name	Scientific Name	Feeding Habit
<b>Wading Birds</b>		
American bittern	<i>Botaurus lentiginosus</i>	Piscivore/ Invertebrates
Least bittern	<i>Ixobrychus exilis</i>	Piscivore/ Invertebrates
Cattle egret	<i>Bubulcus ibis</i>	Invertebrates
Great egret	<i>Casmerodius albus</i>	Invertebrates
Snowy egret	<i>Egretta thula</i>	Invertebrates
Black-crowned night heron	<i>Nycticorax nycticorax</i>	Piscivore/ Invertebrates
Great blue heron	<i>Ardea herodias</i>	Piscivore
Green heron	<i>Butorides virescens</i>	Piscivore/ Invertebrates
Little blue heron	<i>Egretta caerulea</i>	Piscivore/ Invertebrates
<b>Gulls and Terns</b>		
Herring gull	<i>Larus argentatus</i>	Omnivore
Laughing gull	<i>Larus atricilla</i>	Piscivore
Ring-billed gull	<i>Larus delawarensis</i>	Omnivore
Caspian tern	<i>Sterna caspia</i>	Piscivore
Forsters tern	<i>Sterna forsteri</i>	Piscivore
Least tern	<i>Sterna antillarum</i>	Piscivore
<b>Sandpipers</b>		
Dunlin	<i>Calidris alpina</i>	Invertebrates
Sanderling	<i>Calidris alba</i>	Invertebrates
Least sandpiper	<i>Calidris minutilla</i>	Invertebrates
Pectoral sandpiper	<i>Calidris melanotos</i>	Invertebrates
Semipalmated sandpiper	<i>Calidris pusilla</i>	Invertebrates
Solitary sandpiper	<i>Tringa solitaria</i>	Invertebrates
Spotted sandpiper	<i>Actitis macularia</i>	Invertebrates
Stilt sandpiper	<i>Calidris himantopus</i>	Invertebrates
<b>Blackbirds</b>		
Red-ringed blackbird	<i>Agelaius phoeniceus</i>	Omnivore
Rusty blackbird	<i>Euphagus carolinus</i>	Omnivore
<b>Other Species</b>		
Double-crested cormorant	<i>Phalacrocorax auritus</i>	Piscivore
Belted kingfisher	<i>Ceryle alcyon</i>	Piscivore
Osprey	<i>Pandion haliaetus</i>	Piscivore

**TABLE D-4: LIST OF SPECIES OF GREATEST CONSERVATION NEED THROUGH THE DISTRICT WILDLIFE ACTION PLAN IN THE DISTRICT OF COLUMBIA**

Common Name	Scientific Name
<b>Birds</b>	
Acadian Flycatcher	<i>Empidonax virescens</i>
American Bittern	<i>Botaurus lentiginosus</i>
American Black Duck	<i>Anas rubripes</i>
American Woodcock	<i>Scolopax minor</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>
Bobolink	<i>Dolichonyx oryzivorus</i>
Broad-winged Hawk	<i>Buteo platypterus</i>
Brown Creeper	<i>Certhia americana</i>
Brown Thrasher	<i>Toxostoma rufum</i>
Cerulean Warbler	<i>Dendroica cerulean</i>
Chimney Swift	<i>Chaetura pelagica</i>
Eastern Meadowlark	<i>Sturnella magna</i>
Eastern Towhee	<i>Pipilo erythrophthalmus</i>
Field Sparrow	<i>Spizella pusilla</i>
Grasshopper Sparrow	<i>Ammodramus savannarum</i>
Great Horned Owl	<i>Bubo virginianus</i>
Hooded Warbler	<i>Wilsonia citrine</i>
Kentucky Warbler	<i>Oporornis formosus</i>
Least Bittern	<i>Ixobrychus exilis</i>
Louisiana Waterthrush	<i>Seiurus motacilla</i>
Marsh Wren	<i>Cistothorus palustris</i>
Northern Bobwhite	<i>Colinus virginianus</i>
Ovenbird	<i>Seiurus aurocapilla</i>
Prothonotary Warbler	<i>Protonotaria citrea</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
Scarlet Tanager	<i>Piranga olivacea</i>
Sora	<i>Porzana carolina</i>
Virginia Rail	<i>Rallus limicola</i>
White-eyed Vireo	<i>Vireo griseus</i>
Wilson's Snipe	<i>Gallinago delicata</i>
Wood Duck	<i>Aix sponsa</i>
Wood Thrush	<i>Hylocichla mustelina</i>



Common Name	Scientific Name
Worm-eating Warbler	<i>Helmitheros vermivorus</i>
Yellow-throated Vireo	<i>Vireo flavifrons</i>
<b>Mammals</b>	
Allegheny Woodrat	<i>Neotoma magister</i>
American Mink	<i>Mustela vison</i>
Eastern Chipmunk	<i>Tamias striatus</i>
Eastern Cottontail	<i>Sylvilagus floridanus</i>
Eastern Red Bat	<i>Lasiurus borealis</i>
Eastern Small-footed Myotis	<i>Myotis lebbii</i>
Gray Fox	<i>Urocyon cinereoargenteus</i>
Northern River Otter	<i>Lutra canadensis</i>
Southern Bog Lemming	<i>Synaptomys cooperi</i>
Southern Flying Squirrel	<i>Glaucomys volans</i>
Virginia Opossum	<i>Didelphis virginiana</i>
<b>Reptiles</b>	
Bog Turtle	<i>Clemmys muhlenbergii</i>
Common Musk Turtle	<i>Sternotherus odoratus</i>
Corn Snake	<i>Elaphe guttata guttata</i>
Eastern Box Turtle	<i>Terrapene carolina</i>
Eastern Fence Lizard	<i>Sceloporus undulates</i>
Eastern Garter Snake	<i>Thamnophis sirtalis</i>
Eastern Hognose Snake	<i>Heterodon platirhinos</i>
Eastern Mud Turtle	<i>Kinosternon subrubrum</i>
Eastern Painted Turtle	<i>Chrysemys picta picta</i>
Eastern Ribbon Snake	<i>Thamnophis sauritus</i>
Eastern Worm Snake	<i>Carphophis amoenus amoenus</i>
Five-lined Skink	<i>Eumeces fasciatus</i>
Northern Black Racer	<i>Coluber constrictor</i>
Northern Brown Snake	<i>Storeria dekayi</i>
Northern Copperhead	<i>Agkistrodon contortrix</i>
Northern Ringneck Snake	<i>Diadophis punctatus edwardsii</i>
Queen Snake	<i>Regina septemvittata</i>
Redbelly Turtle	<i>Pseudemys rubriventris</i>
Rough Green Snake	<i>Opheodrys aestivus</i>
Scarlet Snake	<i>Cemophora coccinea copei</i>
Spotted Turtle	<i>Chrysemys guttata</i>

Common Name	Scientific Name
Timber Rattlesnake	<i>Crotalus horridus</i>
Wood Turtle	<i>Clemmys insculpta</i>
<b>Amphibians</b>	
American Toad	<i>Bufo americanus</i>
Bullfrog	<i>Rana catesbeiana</i>
Fowler's Toad	<i>Bufo fowleri</i>
Marbled Salamander	<i>Ambystoma opacum</i>
Eastern Mud Salamander	<i>Pseudotriton m. montanus</i>
Northern Cricket Frog	<i>Acris crepitans</i>
Northern Dusky Salamander	<i>Desmognathus fuscus</i>
Northern Spring Peeper	<i>Pseudacris crucifer</i>
Northern Two-lined Salamander	<i>Eurycea bislineata</i>
Pickerel Frog	<i>Rana palustris</i>
Northern Red Salamander	<i>Pseudotriton ruber ruber</i>
Redback Salamander	<i>Plethodon cinereus</i>
Red Spotted Newt	<i>Notophthalmus viridescens</i>
Spotted Salamander	<i>Ambystoma maculatum</i>
Upland Chorus Frog	<i>Pseudacris feriarum feriarum</i>
Wood Frog	<i>Rana sylvatica</i>
<b>Fish</b>	
Alewife	<i>Alosa pseudoharengus</i>
American Eel	<i>Anguilla rostrata</i>
American Shad	<i>Alosa sapidissima</i>
Atlantic Sturgeon	<i>Acipenser oxyrinchus</i>
Blueback Herring	<i>Alosa aestivalis</i>
Bowfin	<i>Amia calva</i>
Central Stoneroller	<i>Campostoma anomalum</i>
Greenside Darter	<i>Etheostoma blennioides</i>
Hickory Shad	<i>Alosa mediocris</i>
Shortnosed Sturgeon	<i>Acipenser brevirostrum</i>
Silverjaw Minnow	<i>Ericymba buccata</i>
Warmouth	<i>Lepomis gulosus</i>
<b>Invertebrates</b>	
A Copepod	<i>Acanthocyclops columbiensis</i>
A Copepod	<i>Acanthocyclops villosipes</i>
A Copepod	<i>Attheyella (Canthocamptus) illinoisensis</i>

Common Name	Scientific Name
A Copepod	<i>Attheyella (Mrazekiella) illinoisensis</i>
A Copepod	<i>Attheyella (Mrazekiella) obaogamensis</i>
A Copepod	<i>Bryocamptus hutchinsoni</i>
A Copepod	<i>Bryocamptus minutus</i>
A Copepod	<i>Bryocamptus nivalis</i>
A Copepod	<i>Bryocamptus zschokkei</i>
A Copepod	<i>Diacyclops harryi</i>
A Copepod	<i>Diacyclops nearcticus</i>
A Copepod	<i>Eucyclops agilis</i>
A Copepod	<i>Macrocyclus albidus</i>
A Copepod	<i>Paracyclus fimbriatus chiltoni</i>
Alewife Floater	<i>Anodonta imbecilis</i>
Appalachian Grizzled Skipper	<i>Pyrgus wyandot</i>
Appalachian Spring Snail	<i>Fontigens bottimeri</i>
Brook Floater	<i>Alasmodonta varicosa</i>
Crossline Skipper Butterfly	<i>Polites origenes</i>
Dwarf Wedgemussel	<i>Alasmodonta heterodon</i>
Eastern Comma Butterfly	<i>Polygonia comma</i>
Eastern Pondmussel	<i>Ligumia nasuta</i>
Edward's Hairstreak	<i>Satyrion edwardsii fontigens bottimeri</i>
Emerald Spreadwing	<i>Lestes dryas</i>
Fine-lined Emerald	<i>Somatochlora filosa</i>
Frosted Elfin	<i>Callophrys irus</i>
Great Spangled Fritillary Butterfly	<i>Speyeria cybele</i>
Green Floater	<i>Lasmigona subviridis</i>
Grey Petaltail	<i>Tachopteryx thoreyi</i>
Hay's Spring Amphipod	<i>Sygobromus hayi</i>
Kenk's Amphipod	<i>Stygobromus kenki</i>
Lilypad Forktail Damselfly	<i>Ischnura kellicotti williamsoni</i>
Little Glassywing Butterfly	<i>Pompeius verna</i>
Mocha Emerald Dragonfly	<i>Somatochlora linearis</i>
Monarch Butterfly	<i>Danaus p. plexippus</i>
Mottled Duskywing	<i>Erynnis martialis</i>
Pizzini's Cave Amphipod	<i>Stygobromus pizzinii</i>
Potomac Groundwater Amphipod	<i>Stygobromus tenuis potomacus</i>
Question Mark Butterfly	<i>Polygonia interrogationis</i>

Common Name	Scientific Name
Red Admiral Butterfly	<i>Vanessa atalanta rubria</i>
Regal Fritillary Butterfly	<i>Speyeria idalia</i>
Sedge Sprite	<i>Nehalennia irene</i>
Sphagnum Sprite	<i>Nehalennia gracilis</i>
Spiny-foot Copepod	<i>Attheyella villosipes</i>
Tidewater Mucket	<i>Leptodea ochracea</i>
Tiger Spiketail Dragonfly	<i>Cordulegaster erroneus</i>
Triangle Floater	<i>Alasmodonta undulata</i>
Unicorn Clubtail Dragonfly	<i>Argomphus villosipes</i>
Variegated Fritillary Butterfly	<i>Euptoieta claudia</i>
Yellow Lampmussel	<i>Lampsilis cariosa</i>

## **APPENDIX E: COMMENTS AND RESPONSES ON THE DRAFT PLAN/ENVIRONMENTAL IMPACT STATEMENT**

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National Park Service  
U.S. Department of the Interior



Anacostia Park  
Washington, D.C.

# **PUBLIC COMMENT SUMMARY REPORT**

## **DRAFT ANACOSTIA PARK WETLANDS AND RESIDENT GOOSE MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT**



**December 2012**





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## INTRODUCTION AND GUIDE

### INTRODUCTION

Pursuant to the National Environmental Policy Act (NEPA), its implementing regulations, and NPS guidance on meeting NEPA obligations, Anacostia Park must assess and consider comments submitted by the public on the *Draft Anacostia Park Wetlands and Resident Canada Goose Management Plan and Environmental Impact Statement* (Draft plan/EIS), and provide responses to those considered substantive.

This report provides a summary of the public comment process, describes how the NPS considered public comments, and provides responses to those comments.

### PUBLIC COMMENT PROCESS SUMMARY

On July 21, 2011, the NPS released the *Draft Anacostia Park Wetlands and Resident Goose Management Plan/EIS* for public review and comment. The Draft plan/EIS was available for public review until September 26, 2011. This public comment period was announced in the Federal Register; through mailings sent to interested parties, elected officials, and appropriate local and state agencies; and by press releases. The plan/EIS was made available through several outlets, including the NPS Planning, Environment, and Public Comment (PEPC) website ([http://parkplanning.nps.gov/anacostia\\_wetland\\_and\\_goose\\_management\\_plan\\_DEIS](http://parkplanning.nps.gov/anacostia_wetland_and_goose_management_plan_DEIS)), local libraries and community centers, and on CD or in hardcopy by request.

During the scoping period, a public meeting was held at the U.S. Park Police Anacostia Operation Facility on September 7, 2011. The scoping meeting began at 6:30 pm with an open house, followed by a short presentation at 7:00 pm, and a hearing to take public comments occurred from 7:15 until 8:30 pm. NPS staff were on hand to visit with meeting attendees and to answer questions.

Three individuals attended the public meeting in Anacostia, and spoke at the public hearing.

The public were also able to submit their comments on the project electronically through the PEPC website and By mailing comments to the NPS.

### NATURE OF COMMENTS RECEIVED

During the comment period on the Draft plan/EIS, thirteen correspondences from 5 states (District of Columbia, Maryland, New Jersey, Pennsylvania, and Virginia) were received. Comments were received from individuals, as well as from organizations and state and federal government agencies. Commenters generally supported the Draft plan/EIS for goose and wetland management in Anacostia. However, some commenters felt that additional non-lethal options for goose management needed to be explored, and did not support lethal management of the goose population.

All comments, regardless of their topic, were carefully read and analyzed and are presented in this report. Commenters will continue to be notified of the project's progress, and are encouraged to visit the NPS PEPC website at [www.parkplanning.nps.gov/anac](http://www.parkplanning.nps.gov/anac) to view information pertaining to this project.

### THE COMMENT ANALYSIS PROCESS

Comment analysis is a process used to compile and combine similar public comments into a format that can be used by decision makers and the EIS Team. Comment analysis assists the team in organizing,

clarifying, and addressing technical information pursuant to National Environmental Policy Act (NEPA) regulations. It also aids in identifying the topics and issues to be evaluated and considered throughout the planning process.

The process includes five main components:

- Developing a coding structure
- Employing a comment database for comment management
- Reading and coding of public comments
- Interpreting and analyzing the comments to identify issues and themes
- Preparing a comment summary

A coding structure was developed to help sort comments into logical groups by topics and issues. The coding structure was derived from an analysis of the range of topics discussed during internal NPS scoping, past planning documents, and the comments themselves. The coding structure was designed to capture all comment content rather than to restrict or exclude any ideas.

The NPS PEPC database was used for management of the comments. The database stores the full text of all correspondence and allows each comment to be coded by topic and issue. Some outputs from the database include tallies of the total number of correspondence and comments received, sorting and reporting of comments by a particular topic or issue, and demographic information regarding the sources of the comments.

Analysis of the public comments involved the assignment of the codes to statements made by the public in their PEPC entries, letters, email messages, and at the public meeting. All comments were read and analyzed.

Although the analysis process attempts to capture the full range of public concerns, this content analysis report should be used with caution. Comments from people who chose to respond do not necessarily represent the sentiments of the entire public. Furthermore, this was not a vote-counting process, and the emphasis was on content of the comment rather than the number of times a comment was received. This report is intended to be a summary of the comments received, rather than a statistical analysis.

## DEFINITION OF TERMS

Primary terms used in this document are defined below.

**Correspondence:** A correspondence is the entire document received from a commenter. It can be in the form of a letter, email, written comment form, note card, open house transcript, or petition. Each piece of correspondence is assigned a unique identification number in the PEPC system.

**Comment:** A comment is a portion of the text within a correspondence that addresses a single subject. It should include information such as an expression of support or opposition to the use of a potential management tool, additional data regarding an existing condition, or an opinion debating the adequacy of the analysis.

**Code:** A grouping centered on a common subject. The codes were first developed during the initial scoping process for the plan/EIS and were refined based on the comments received.

**Concern:** Concerns are a written summary of all substantive comments received under a particular code. Some codes were further separated into several concern statements to provide a better focus on the content of the comments. A substantive comment is defined in the NPS Director’s Order 12 (DO-12) Handbook as one that does one or more of the following (Director’s Order 12 Handbook, Section 4.6A):

- Question, with a reasonable basis, the accuracy of information presented in the EIS;
- Question, with reasonable basis, the adequacy of the environmental analysis;
- Present reasonable alternatives other than those presented in the EIS; and/or
- Cause changes or revisions in the proposal.

As further stated in the handbook, substantive comments “raise, debate, or question a point of fact or policy. Comments in favor of or against the proposed action or alternatives, or comments that only agree or disagree with NPS policy, are not considered substantive.” While all comments were read and considered and will be used to help create the Final plan/EIS, only those determined to be substantive are typically analyzed for creation of concern statements for response from the NPS.

## GUIDE TO THIS DOCUMENT

This report is organized as follows:

**Content Analysis Report:** This is the basic report produced from PEPC that provides information on the numbers and types of comments received, organized by code. The first section of the report provides a summary of the number of comments that were coded under each topic. The second section provides general demographic information, such as the states where commenters live, the number of letters received from different categories of organizations, etc.

**Public Scoping Comment Summary:** This report summarizes the substantive comments received during the scoping process. These comments are organized by codes and further organized into concern statements. Below each concern statement are representative quotes, which have been taken directly from the text of the public’s comments and have not been edited; therefore some spelling and grammar errors were not corrected. Representative quotes further clarify the concern statements.

**Index by Organization Type:** This list identifies all codes that were assigned to each individual piece of correspondence and is arranged by organization type. In many instances, the organization type was not defined by the commenter; therefore, organizations were listed as “Unaffiliated Individuals”. Those correspondence identified as N/A represent individuals who did not submit their first or last name.

**Comment Index by Code:** This list identifies which commenters or authors (identified by PEPC organization type) commented on which topics, as identified by the codes used in this analysis. The report is organized by code, and under each code is a list of the authors who submitted comments that fell under that code, and their correspondence numbers. Those correspondences identified as N/A represent unaffiliated individuals.

## CONTENT ANALYSIS REPORT

### Comment Distribution by Code

Code	Description	# of Comments
AE12000	Affected Environment: Wildlife And Wildlife Habitat	2
AL1300	Alternatives: New Elements	11
AL1500	Alternative B: Supports Alternative	4
AL1900	Vegetative Buffers	1
AL2800	Alternative E: Supports Alternative	2
AL3900	Alternative D: Supports Alternative	1
AL4000	Alternative Elements: Supports Non-Lethal Measures	2
AL4200	Lethal Control	4
AL4210	Oppose Lethal Control	3
AL4300	Alternative Elements: Scare Tactics	1
AL4400	Alternative Elements: Fencing	1
AL4600	Egg Addling	1
AL4900	Goose Nest Destruction	1
AL5000	Goose Population Goal	2
CC1100	Effects of Climate Change	3
CR4000	Cultural Resources: Impact Of Proposal And Alternatives	3
DE1100	Document Edits	6
GA1000	Impact Analysis: Impact Analyses	2
LU1100	Land Use	1
MP1100	Monitoring Protocol	1
PC1100	Project Costs	4
PN1100	Purpose and Need: Methods and Assumptions	1
PN1600	Other Park Goals and Management Plans	1
PP1100	Public Participation	1
PSAE010	Wetland Restoration	1
PSAE040	Wetland functions	1
PSCA001	Non-goose impacts on water quality	2
PSCA010	Other stressors on restored wetlands	1
PSSM002	Need for Additional Data/Science	5
VE4000	Visitor Experience: Impact Of Proposal And Alternatives	2
WF1100	Wildlife Feeding	1
WH1100	Wildlife and Wildlife Habitat	1
WQ4000	Water Resources: Impact Of Proposal And Alternatives	1
<b>Total</b>		<b>74</b>

Note: Each comment may have multiple codes. As a result, the total number of comments may be different from the actual comment totals)

**Correspondence Signature Count by Organization Type**

<b>Organization Type</b>	<b># of Correspondences</b>
Federal Government	2
Conservation/Preservation	1
State Government	1
Unaffiliated Individual	9
<b>Total</b>	<b>13</b>

**Correspondence Signature Count by Correspondence Type**

<b>Type</b>	<b># of Correspondences</b>
Web Form	6
Letter	3
E-mail	1
Transcript	3
<b>Total</b>	<b>13</b>

**Correspondence Distribution by State**

<b>State</b>	<b>Percentage</b>	<b># of Correspondences</b>
District of Columbia	30.77	4
Maryland	23.08	3
New Jersey	7.69	1
Pennsylvania	7.69	1
Virginia	7.69	1
Unknown	23.08	3
<b>Total</b>		<b>13</b>

**Correspondence Distribution by Country**

<b>Country</b>	<b>Percent</b>	<b># of Correspondences</b>
United States	100%	13
<b>Total</b>		<b>13</b>

## PUBLIC COMMENT SUMMARY

### AE12000 - AFFECTED ENVIRONMENT: WILDLIFE AND WILDLIFE HABITAT

**Concern ID:**  
**CONCERN**  
**STATEMENT:**

34531

The classification and status of "Resident" Canada geese needs to be defined more clearly in the EIS. In addition, the NPS needs to explain in terms relevant to the NPS mission how resident Canada geese are treated as invasive species.

**Representative Quote(s):**

**Corr. ID:** 5

**Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 235708

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS fails to discuss fully what is meant by "resident" geese and "invasive" species.

The NPS has a strict protective mandate for native species of wildlife and does not intervene in their management except and where those species have, largely under anthropogenic influences, become so numerous that their control can be justified. Not only do the conditions articulated in the DEIS fail to warrant the killing proposed, but the argument(s) concerning the status of "resident" geese are not sufficient.

NPS describes migratory geese by commenting "Migratory geese are a natural part of the ecosystem, which play an important role in the system." (DEIS: 17). It then describes "resident" geese as a "nuisance" species (DEIS: 20) and by saying "Resident geese stay within Anacostia Park and the surrounding area year round, which ultimately disrupts the natural ecosystem." (DEIS: 17). NPS relegates the major description and discussion of "resident" geese to the section on "Invasive Wildlife Species" (pgs. 157ff) and makes further references to "resident" geese as an "invasive" species in a way that either demonstrates poor understanding of what "resident" and "invasive" mean (e.g., discussion on page 161) or suggest that NPS is simply accepting the perspectives of management agencies with wholly different charters and missions.

**Corr. ID:** 5

**Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 235709

**Organization Type:** Unaffiliated Individual

**Representative Quote:** NPS must be very careful in the argument it is attempting to make here, which is essentially that "resident" Canada geese lack the "value" of native (i.e., migratory) geese and are a "nuisance" (DEIS: 20) species. That argument may be made (however weakly) by those responsible for managing geese as a consumptive resource, but it should not be applied to species that are engaging in adaptive behavior. Beyond this, NPS must demonstrate how artificially engineered and planted wetlands can be identified as "native biodiversity" when "resident" geese cannot.

The Final EIS must explain in terms relevant to the NPS mission (as articulated in its Organic Act) how Canada geese can be treated as an "invasive" species. It must provide evidence that a service-wide standard can be applied with respect to other species of native wildlife throughout the parks as regards their classification and status. The perspective applied to "resident" geese in this DEIS is consistent with classifications that flow from agencies who manage these birds for consumptive purposes and do not go to the point, or heart, of NPS positions or policies governing native species.

**Response:**

In response to this comment, the NPS has added a discussion regarding the behavioral differences that distinguish resident Canada geese from migratory Canada geese in Chapter 3, "Resident Canada Geese" of the Final plan/EIS.

Resident migratory Canada geese are never referred to in the plan/EIS as “invasive” species. The NPS does not consider resident Canada geese an invasive species. The Draft plan/EIS discussion of resident Canada geese (on page 158) did follow a discussion of Invasive Wildlife Species on the previous page, which could have made it appear to be a sub-topic of the invasive wildlife discussion. To address this misunderstanding, the NPS has updated the formatting of the Final plan/EIS by changing the headings to make the division between the sections more clear and alleviate confusion. The term “invasive” is used in the plan/EIS to refer to plant species as well as certain wildlife species (mice and rats but not resident Canada geese), so the text regarding resident Canada geese was clarified and is clearly separated from the discussion of invasive wildlife species in the “Wildlife” section of Chapter 3 in the Final plan/EIS. Also, the text found in the “Invasive Wildlife Species” section of Chapter 3 of the Final plan/EIS has been re-written to reduce the confusion that NPS categorizes Canada geese as invasive, which they do not.

In response to **Comment ID: 235709**, NPS has broad authority to manage wildlife and other natural resources within the boundaries of units of the national park system. See, generally, 16 U.S.C. § 1 (NPS “shall promote and regulate the use of Federal areas known as national parks...by such mean and measures as conform with the fundamental purpose of the parks...to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations”) and 16 U.S.C. § 3 (“[The Secretary of the Interior] may... provide in his discretion for the destruction of such animals and of such plant life as may be detrimental to the use of any of [the parks, monuments, and reservations under the jurisdiction of the National Park Service]”).

*NPS Management Policies 2006* instruct park units to maintain as parts of the natural ecosystems of parks all native plants and animals. NPS would achieve this maintenance by “preserving and restoring the natural abundances, diversities, dynamics, distributions, habitats, and behaviors of native plant and animal populations and the communities and ecosystems in which they occur” (NPS 2006, sec. 4.4.1). Section 4.4.2 of the *NPS Management Policies 2006* (“Management of Native Plants and Animals”) provides that NPS may intervene to manage individuals or populations of native species under certain circumstances. This section also states that management may be necessary when a population occurs in unnaturally high or low concentrations as a result of human influences (such as loss of seasonal habitat, the extirpation of predators, the creation of highly productive habitat through agriculture or urban landscapes) and it is not possible to mitigate the effects of the human influences (NPS 2006a, sec. 4.4.2). Also, Section 4.4.2.1 of the *NPS Management Policies 2006* (“NPS Actions That Remove Native Plants and Animals”) states that where visitor use or other human activities cannot be modified or curtailed, the NPS may directly reduce the animal population by using several animal population management techniques, either separately or together.

Section 4.4.2 of the *NPS Management Policies 2006* also require that parks “assess the results of managing plant and animal populations by conducting follow-up monitoring or other studies to determine the impacts of the management methods on nontargeted and targeted components of the ecosystem.” This strategy is described in this plan including specific thresholds for taking action, goals of management actions, as well as adaptive management and associated monitoring. Whenever NPS identifies a possible need for reducing the size of a park plant or animal population, the decision would be based on scientifically valid resource information that has been obtained through consultation with technical experts, literature review, inventory, monitoring, or research (NPS 2006, sec. 4.4.2.1). The Science Team was assembled to complete this task. A new section titled “Authority



to Manage Resident Canada Geese” of the Final plan/EIS has been added to Chapter 1.

The NPS has thoroughly explained the reasoning why resident Canada geese at the park are acting as “nuisance” species. Both the *Atlantic Flyway Resident Goose Management Plan* (1999) and the USFWS *Final Environmental Impact Statement: Resident Canada Goose Management* (2005) have suggested to “manage” and “reduce” the resident Canada goose population and both reports refer to the nuisance problems or nuisance issues associated with resident Canada geese.

## AL1300 - ALTERNATIVES: NEW ELEMENTS

<b>Concern ID:</b>	34532
<b>CONCERN STATEMENT:</b>	Commenters suggested integrating the park's Resident Canada Goose Management Plan with other regional jurisdictions.
<b>Representative Quote(s):</b>	<p><b>Corr. ID:</b> 12      <b>Organization:</b> Anacostia Watershed Society</p> <p><b>Comment ID:</b> 235910      <b>Organization Type:</b> Conservation/Preservation</p> <p><b>Representative Quote:</b> I know that this is only for the Park, but it would be nice if this effort is integrated more regionally with other jurisdictions. Because, you know, we're going to be getting geese from, you know, north, south, east and west. Well, mostly north and south.</p>
<b>Response:</b>	<p>One of the specific objectives of this plan/EIS is to cooperate and coordinate with the District, USACE, and other government agencies, as well as other stakeholders currently implementing or interested in implementing a wetlands and resident Canada goose management strategy. This is explicitly stated in Chapter 2, Table 3, “The Degree to which Each Alternative Meets Objectives”. Chapter 2, “Adaptive Management”, was updated to state that adaptive management considers that other regional organizations (such as USDA APHIS Wildlife Services and Maryland-National Capital Park and Planning Commission) are currently conducting or have conducted wetland management and Canada goose management activities in the vicinity of ANAC and how the NPS is working regionally with these organizations to manage resident Canada geese along the Anacostia River. This information had been previously incorporated into the cumulative impacts analysis of Chapter 4 under the Resident Canada Geese topic as a result of resident Canada geese reductions through harvesting (hunting through MDNR program) in Maryland and other mid-Atlantic states in the Atlantic Flyway. Following the public comment period, this discussion was added to and enhanced in the “Resident Canada Geese” topic in Chapter 4 of the Final plan/EIS. Additionally in a larger sense, numerous efforts by various federal, local, and community organizations have been completed and are either currently underway or are scheduled for the restoration of the Anacostia River and its tributaries. NPS would continue to work with these agencies and organizations regarding wetland management in the Anacostia River Watershed and through adaptive management.</p>
<b>Concern ID:</b>	34533
<b>CONCERN STATEMENT:</b>	Commenters suggested additional goose management elements to be added to the management plan. Suggestions included purchasing a machine that cleans goose feces, allowing grass areas to be at least six inches in height to deter resident Canada geese, nest destruction, and applying goose repellent to grass areas.
<b>Representative Quote(s):</b>	<p><b>Corr. ID:</b> 1      <b>Organization:</b> Not Specified</p> <p><b>Comment ID:</b> 235684      <b>Organization Type:</b> Unaffiliated Individual</p> <p><b>Representative Quote:</b> we want you to buy a machine, as used on long island, to clean up the poop. it will pick it up off the ground for deposition to a waste facility.</p> <p><b>Corr. ID:</b> 4      <b>Organization:</b> People for the Ethical Treatment of Animals (PETA)</p>

**Comment ID:** 235700      **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Other successful goose deterrent methods include keeping grass at least 6" tall on lawns and spraying goose repellent (i.e., ReJeXiT Migrate) on lawns.

**Corr. ID:** 5      **Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 238776      **Organization Type:** Unaffiliated Individual

**Representative Quote:** In our many years of direct experience with Canada goose programs we have found that egg and nest destruction, combined with harassment such as by trained dogs (Castelli & Sleggs 2000), can be highly successful in eliminating Canada goose problems when timed and applied correctly.

**Response:**

The Draft plan/EIS did not originally consider purchasing a machine that removes Canada goose feces, but this option was explored in response to public comments. The premise is to use a machine to collect goose feces at appropriate locations such as Langston Golf Course, athletic playing fields, or other lawn areas at the park and then deposit the feces at a waste facility. While this is a useful suggestion, it would not fully address the goals and objectives of this plan/EIS, which includes the primary concern of wetland plant removal by resident Canada geese. The park has determined that a machine to collect and remove goose feces is not feasible at this time due to cost, unknown effectiveness, and operational needs associated with the machine. However, this option may be discussed further with the concessioner at Langston Golf Course in the future as a tool for removal of resident Canada geese feces at the golf course.

This plan/EIS provides the detailed techniques for wetland management and goose management which must be applied, in most cases, in combination with other techniques to meet the goals and objectives of this plan/EIS for the park. For example, habitat modification techniques are being considered to manage the resident Canada geese at the park. As part of the habitat modification techniques described in chapter 2 of the Final plan/EIS for the preferred alternative (alternative B), the NPS would plant new riparian buffers immediately along the shoreline, and increase the width of existing vegetated buffers, which would have a similar screening effect as allowing grassy areas to grow to a 6-inch height to deter resident Canada geese. For a detailed discussion of these habitat modification techniques and locations where they are proposed, please see Chapter 2, Alternative B, Figures 5 and 6 of the Final plan/EIS. NPS maintenance has a goal of managing grass height in recreational areas at 3 to 3.5 inches. Allowing grass to grow to heights of 6 inches in recreational areas would not be consistent with the purpose, significance and mission goals of the park as described in Chapter 1, "Anacostia's Park Purpose, Significance, and Mission Goals" of the Final plan/EIS.

As described in the plan/EIS, the NPS currently conducts egg oiling as part of its resident Canada goose management program; this may continue and be supplemented with egg addling under the preferred alternative (alternative B) as described in Chapter 2, Alternative B of the Final plan/EIS. Other reproductive control techniques were also considered to achieve the desired conditions for this plan/EIS but were dismissed as not feasible. In addition to oiling/addling, some eggs could be removed from the nest and replaced with wooden, plastic, or unfertilized eggs. This would result in resident Canada geese continuing to incubate the eggs and not re-nesting in a different area. Scare and harassment techniques designed to frighten resident Canada geese are also included as part of the preferred alternative as described in Chapter 2, Alternative B of the Final plan/EIS and may include using both visual deterrents and dogs to scare and harass the resident Canada geese. While these techniques are considered and are part of the preferred alternative, goose nest destruction was a technique that was dismissed from further analysis during the process of alternative formulation because when nests are destroyed resident Canada geese may re-nest in or near the first or original nest as described in Chapter 2,

“Techniques Dismissed From Further Consideration” of the Final plan/EIS.

In regards to goose repellent, the NPS has applied it to grass in the past at the park but it was expensive and ineffective in deterring resident Canada geese. However, the NPS is considering applying approved goose repellents such as GooseChase to prevent resident Canada geese from grazing within turf areas under alternative C, as described in Chapter 2, Alternative C of the Final plan/EIS. This plan/EIS presents the entire suite of possible techniques for wetland management and for goose management. Many of these techniques are not mutually exclusive, some of these techniques overlap, and many should be considered in conjunction with other measures to be most successful.

**Concern ID:**  
**CONCERN**  
**STATEMENT:**

34535

Commenters suggested additional wetland management elements to be added to the management plan. Suggestions included modifying large impervious areas such as the RFK Memorial Stadium parking lots to reduce runoff within the park, including Poplar Point, creating additional wetlands throughout the park, and re-examining the Barney Circle wetland project.

**Representative Quote(s):** **Corr. ID: 2**

**Organization:** USGS Patuxent Wildlife Research Center

**Comment ID:** 235686

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The third listed objective for wetlands (P. 3) should be more explicit and/or elements considered under wetland restoration should be more comprehensive. Implicit in that third objective should be:

The National Park Service (NPS) saw fit to include Wetland Management in this EIS as one of the two principal elements even though it is overtly directed toward goose management and its repercussions. As the primary manager of almost all the tidal wetlands along the Anacostia in Washington, D.C. and in fact the entire Anacostia estuary, the NPS MUST exert itself consistent with the wetland management responsibilities it is accepting, as the leader (i.e., utilize strong proactive LEADERSHIP) toward achieving restoration of the Anacostia estuary as an integrated system. This then goes beyond the current piecemeal locations of the few reconstructed wetlands and thus among other things needs to include overt support for additional reconstructed freshwater tidal wetlands in the Anacostia....Nowhere that I could find in the EIS in conjunction with wetland restoration was there mention of actively seeking creation of additional wetlands using placed sediments. (Hidden away p. 192 under Soils, Alternative B it does say....."Wetland management techniques are proposed to improve the existing wetlands and create new wetlands along the Anacostia River....thus stabilizing soils adjacent to the Anacostia River ". So, hardly a ringing call for restoration of the river and creating habitat.) For the Anacostia wetland system to be functional as a unit there needs to be a critical mass of interrelated/interconnected wetlands - especially to be able to attract and support wetland fauna that once flourished there. This important thrust is supported by:

(p. 29) Section 4.6 of NPS Policies 2006:

(1) Provide leadership and take action.....

(2) Preserve and enhance.....

(P. 28) NPS Management Policies 2006 , Sect. 4.41: NPS will achieve this (...maintain plants and animals) by "preserving and restoring the natural abundance, diversity, distribution, habitat and behavior....and ecosystem in which they occur.

(p. 29 and 30) NPS Management Policies 2006 ('Wetlands')..... In addition the NPS will strive (i.e. exert leadership!! - RSH) to achieve a longer term goal....through restoration of previously degraded or destroyed wetlands.....the Service will to the

extent practicable, restore them to pre disturbance conditions.  
(P.30 and 135) Under Director's Order #77-1 and Order # 12 (p.

**Corr. ID:** 6

**Organization:** *Not Specified*

**Comment ID:** 235723

**Organization Type:** Unaffiliated Individual

**Representative Quote:** 4. The RFK Memorial Stadium parking lots should be modified to reduce runoff into the Anacostia. Those parking lots are the largest impervious surfaces within the park, yet there are few measures discussed to control their runoff.

**Corr. ID:** 6

**Organization:** *Not Specified*

**Comment ID:** 235884

**Organization Type:** Unaffiliated Individual

**Representative Quote:** An analytical synthesis of those results would aid future efforts.

2. The wetlands at the Poplar Point Site should be included in the plan/EIS. The first sentence of the document states, "The purpose of this plan is to guide and direct the actions of the National Park Service (NPS) in the management of wetlands ... at Anacostia Park." (p. i) Clearly, the Poplar Point wetlands are within the park, but they have been omitted from the plan/EIS.

NPS has stated that "NPS acknowledges that community involvement activities relating to the development of the Poplar Point Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) are on-going. CERCLA and the NCP also require community relations activities to be conducted. NPS and the District will use their best efforts to coordinate the community relations activities for the RI/FS, EIS and other Site processes." (NPS and District of Columbia, Poplar Point Settlement Agreement, September 19, 2008, Appendix B, p. 7, available at <http://www.nps.gov/nace/parkmgmt/upload/2008-Administrative-Order-on-Consent.pdf>)

NPS appears to have stopped work on its earlier Poplar Point EIS. No notices or documents have been added to the NPS's "Planning, Environment and Public Comment" website (<http://parkplanning.nps.gov/projectHome.cfm?projectID=22344>) for that EIS for the last three years. This wetland/geese plan/EIS states that "The NPS and the District Government have partnered to initiate the [Poplar Point] EIS, which is currently in the planning stages; an EIS is proposed for release to the public in winter 2009/2010." (p. 189) However, no such EIS on Poplar Point has ever been released.

3. The Barney Circle wetland projects should be re-examined. Barney Circle was a proposed highway project to be built where Pennsylvania Avenue, S.E. crosses the Anacostia. New wetland projects were planned, but never implemented, for environmental remediation. Those project plans may have useful ideas for this plan/EIS.

**Corr. ID:** 12

**Organization:** Anacostia Watershed Society

**Comment ID:** 235908

**Organization Type:** Conservation/Preservation

**Representative Quote:** We want to see more area of wetlands. We want to see, you know, a healthier wetland ecosystem with a nice diversity of plant species which provides a lot of ecosystem services that this river really needs.

**Corr. ID:** 13

**Organization:** *Not Specified*

**Comment ID:** 235903

**Organization Type:** Unaffiliated Individual

**Representative Quote:** You talk about at several different points in the plan impervious surfaces and yes, those are important, but the biggest impervious surface you can talk about or you're not addressing and that's the parking lots around the stadium and if you're going to come up -- these little rain gardens are nice and you ought to be doing them, but, I mean you've got huge imperious surfaces and you don't address that at all.

**Corr. ID:** 13**Organization:** *Not Specified***Comment ID:** 235905**Organization Type:** Unaffiliated Individual

**Representative Quote:** In the alternative, you don't mention restoration and opening up of the wetlands at Poplar Point. So, this is an EIS, the wetlands in the Anacostia Park, but there's really no discussion of the wetlands at Poplar Point and you're going to tell me well, something else is going on about that. Something else has been going on for 20 years. I've been following this for a very long time and so, I would like to see the wetlands at Poplar Point restoration and opening them to the public as an alternative. It fits in the goals of this EIS and why you're leaving it out is a mystery to me.

**Response:**

As stated in Chapter 1, the purpose of this plan is to guide and direct the actions of the NPS in the management of wetlands and resident Canada geese at Anacostia Park. This plan would be an integrated tool for the long-term planning and management of restored wetlands and resident Canada geese at the park. While the creation of new wetlands is outside the scope of this plan/EIS and would require additional NEPA compliance, the concepts presented in this plan/EIS would apply to previously restored wetlands and any wetland restored in the future at Anacostia Park.

To clarify properties included in this plan/EIS, the NPS has updated the Chapter 1, "Project Location" description in the Final plan/EIS.

**Concern ID:**

34537

**CONCERN  
STATEMENT:**

[The DEIS should follow the Integrated Pest Management conditions with the NPS's eleven step procedure to determine management objectives and actions for addressing resident Canada geese within the park.](#)

**Representative Quote(s):****Corr. ID:** 5**Organization:** The HSUS, ASPCA, & City Wildlife**Comment ID:** 235710**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS fails to follow IPM policies and practices. The DEIS fails to establish a plan for managing conflicts with Canada geese that follows NPS IPM policies. In employing an IPM approach it would be incumbent on NPS to determine management objectives, then set action thresholds, monitor, and choose action based on selection of least- to most-invasive approaches in order (McShea & DiSalvo 2001). It is consistent with an IPM approach as well that actions be coordinated and integrated in regional approaches, something we have attempted to emphasize in both initial scoping (Brasted to Hazlewood, 8/9/07) and alternatives drafting (Brasted to Syphax, 10/3/08) comments we have submitted. Further, the DEIS' preferred alternative calls for the lethal control of a vertebrate species, raising additional concerns and setting a high bar for how management is planned and implemented. The Final EIS must, therefore, meet the IPM conditions included in the NPS' own 11-step procedure (DiSalvo 2009) as well in the stepwise approach codified in contemporary vertebrate pest management (see summary in Hadidian 2010).

The DEIS does not examine nonlethal management options sufficiently and demonstrates a general lack of understanding concerning how conflicts with Canada geese can be addressed and resolved that is disconcerting. This is especially at issue given the apparent restriction of most, or all, concerns for goose herbivory to the Kingman Marsh site-activities that are likely tied directly to the concentration of geese at the adjacent golf course (Paul et al. 2004). The attraction of geese to sites such as golf courses is well known and the presence of both resident and migratory Canada geese can be successfully addressed with nonlethal means (e.g., Woodruff & Green 1995). Yet, the DEIS (pg. 167) mentions that course managers had only once tried to use a trained dog to deter geese from the site. The Final EIS must present a plan that follows an IPM approach consistent with NPS policies and that demonstrates a systematically integrated series of actions that proceed from least- to most-invasive for the species being managed.

**Response:**

Although the current resident Canada goose population could in some ways arguably be regarded as “pests”, NPS does not believe that they fully fit within the regular understanding of that term. We do not believe our authority to manage wildlife in Anacostia Park and to avoid damage to natural resources requires strict adherence to an Integrated Pest Management (IPM) approach.

Nonetheless, after reviewing the NPS Management Policies 2006 (section 4.4.5.2) and the required 11-step process, we feel this plan essentially followed the recommended approach. We feel the intent of these IPM policies has been followed but did add text to clarify some differences. For example, we added text in Chapter 2 of the Final plan/EIS to note that although the preferred alternative includes the use of lethal control and other techniques that would result in a substantial reduction in resident Canada geese in the first 5 years to address resource management concerns, subsequent (future) management may not require lethal control, as discussed in Chapter 2, under the description of “Resident Canada Goose Management” in Alternative B. Also in Chapter 2, under the description of “Resident Canada Goose Management” in Alternative C and Alternative D, the statement was added that subsequent management may not require lethal control if population goals are being met under other non-lethal methods and tools. Once the initial reduction is achieved, less invasive methods may be effective in maintaining desired population levels. The NPS believes it has presented and fully analyzed a suite of options, including non-lethal tools, both in the context of the preferred alternative as well as the other action alternatives. For example, both Alternative A (No Action Alternative) and Alternative E provide non-lethal options that the NPS considered in detail, and the remaining alternatives include a combination of both non-lethal and lethal measures. Non-lethal options are also an important tool available throughout the life of the plan/EIS under the preferred alternative, as described in Chapter 2 of the Final plan/EIS under the description of “Resident Canada Goose Management” in Alternative B. Ultimately, the techniques used to meet the objectives of the plan and desired conditions would be guided by the results of monitoring and adaptive management as described in Chapter 2, “Adaptive Management” of the Final plan/EIS. Also, the authority of NPS to manage wildlife and other natural resources within the boundaries of units of the national park system is described in Chapter 1, under the “Authority of NPS to Manage Resident Canada Geese” section.

**AL1900 - VEGETATIVE BUFFERS****Concern ID:**

34539

**CONCERN****STATEMENT:**

Vegetation should be allowed to grow along banks, which will restrict resident Canada geese nesting and hinder movement.

**Representative Quote(s):****Corr. ID:** 4**Organization:** People for the Ethical Treatment of Animals (PETA)**Comment ID:** 235697**Organization Type:** Unaffiliated Individual

**Representative Quote:** Allow vegetation to flourish on banks to impede the movement of geese (birds will refrain from nesting in areas where predators will be an issue)

**Response:**

Allowing vegetation to grow along the shoreline of the Anacostia River is part of the Preferred Alternative (alternative B) and is described in Chapter 2, Alternative B of the Final plan/EIS under “Habitat Modification”.

## AL4000 - ALTERNATIVE ELEMENTS: SUPPORTS NON-LETHAL MEASURES

**Concern ID:** 34542  
**CONCERN STATEMENT:** More humane population control should be an option in resolving conflicts with resident Canada geese.  
**Representative Quote(s):** **Corr. ID:** 5 **Organization:** The HSUS, ASPCA, & City Wildlife  
**Comment ID:** 235883 **Organization Type:** Unaffiliated Individual  
**Representative Quote:** The Humane Society of the United States, American Society for the Prevention of Cruelty to Animals, and City Wildlife would be delighted, and offers here, to explore the nonlethal options further with you and to commit time and resources from our organization to a trial program to fully test the efficacy of resolving conflicts with geese in a holistic, integrated, and environmentally responsible manner.  
**Corr. ID:** 10 **Organization:** Not Specified  
**Comment ID:** 235737 **Organization Type:** Unaffiliated Individual  
**Representative Quote:** As a citizen of this area, I would strongly urge the park service to consider more humane, and more ecologically sound options for population control and/or to make the areas a bit less appealing to a nesting goose.  
**Response:** NPS has limited success in using solely non-lethal methods to control the resident Canada goose population, both with and without volunteers (though NPS acknowledges the benefits of volunteer support). Alternative A (No Action Alternative) and Alternative E both involve non-lethal options and the remaining alternatives include a combination of both non-lethal and lethal measures. Due to damage to natural resources and the large size of the resident Canada goose population, the park has determined that lethal control is necessary to reduce the population of resident Canada geese and is therefore proposed as part of the Preferred Alternative (alternative B). The primary tool to be used would be round-up, capture, and euthanasia, which would be conducted as humanely as possible in accordance with guidance from the American Veterinary Medicine Association, as described in Chapter 2, Alternative B of the Final plan/EIS. Non-lethal options are also an important tool available for use throughout the life of the plan/EIS, as described in Chapter 2, Alternative B of the Final plan/EIS. Ultimately, monitoring and adaptive management would be used to assess the appropriate combination of techniques to meet the objectives and desired conditions, as described in numerous sections of the plan/EIS (see also response to concern ID 34537).

## AL4200 - LETHAL CONTROL

**Concern ID:** 34543  
**CONCERN STATEMENT:** Commenters stated that using lethal control in the park should not be practiced because it is not an effective long-term management tool, it is cruel for the animals, and any use of firearms within Washington DC is likely to be a controversial issue.  
**Representative Quote(s):** **Corr. ID:** 4 **Organization:** People for the Ethical Treatment of Animals (PETA)  
**Comment ID:** 235695 **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Respectfully, lethal methods never work in the long run to control geese populations, and will actually backfire. When animals are killed/removed from the area, a spike in the food supply results. This causes survivors and newcomers to breed at an accelerated rate, and populations can actually increase. Lethal measures are also very cruel. Setting aside the mode of killing (and the trauma that goes with), when adults are removed, families are torn apart, flock dynamics are disrupted, and vulnerable young are left to starve.



**Corr. ID: 5**                      **Organization:** The HSUS, ASPCA, & City Wildlife  
**Comment ID: 235882**        **Organization Type:** Unaffiliated Individual  
**Representative Quote:** We have great respect and pride as Americans in NPS and its mission which, put in the vernacular, is to protect and preserve our nation's natural resources. You should not be in the business of killing wild animals except under the most compelling, justifiable, and urgent need. Nothing of the sort is identified here.

**Corr. ID: 6**                      **Organization:** *Not Specified*  
**Comment ID: 235726**        **Organization Type:** Unaffiliated Individual  
**Representative Quote:** Shooting geese in the District of Columbia is not a reasonable option. In fact, it is a really bad idea. Guns are a controversial subject in Washington. The park is in the middle of a major urban area. This is not rural Maryland, like Jug Bay. Shooting geese within the District threatens to jeopardize your whole plan by public controversy.

**Corr. ID: 13**                      **Organization:** *Not Specified*  
**Comment ID: 235900**        **Organization Type:** Unaffiliated Individual  
**Representative Quote:** I think that shooting the geese is just not a viable option in the District of Columbia. Guns period are a very controversial issue and I think you're going to just torpedo this whole plan by shooting ducks or the geese and yes, it works over at Patuxent, but it's a completely different kind of atmosphere.

**Response:** Due to damage to natural resources and the large size of the goose population as described in this plan/EIS, the NPS feels lethal control is necessary to reduce the population of resident Canada geese and it is therefore proposed as part of the preferred alternative (alternative B). The primary method the NPS anticipates using includes round-up, capture, and euthanasia, which would be conducted in the most humane way possible, in accordance with American Veterinary Medicine Association guidance (see Chapter 2, Alternative B, Resident Canada Goose Management Lethal Control of the Final plan/EIS). While the other possible lethal control method does include shooting, this would only be used in isolated incidences and in a controlled manner as described in the "Lethal Control" section of Chapter 2, Alternative B, and "Resident Canada Goose Management" of the Final plan/EIS. If shooting is required for isolated incidences, this activity would only be undertaken by qualified federal employees that are trained, experienced, and licensed to use a firearm. The NPS discussed eliminating the use of firearms (shooting) in limited instances as part of lethal control. We feel this is an effective tool for resident Canada goose management and it is used by other agencies in the vicinity of the park. The USDA APHIS Wildlife Service uses firearms during goose operation activities associated with National Airport (at Roaches Run, a waterbody located adjacent to the airport) along the Potomac River in Virginia and the Maryland-National Capital Park and Planning Commission allows a waterfowl hunting program (including Canada geese) at their Jug Bay facility on the Patuxent River. Therefore, the NPS believes shooting should be retained as a tool available for use in limited instances under the preferred alternative (alternative B).

The plan/EIS acknowledges that relocating or removing resident Canada geese would be a stop-gap effort because the site must also be modified to make it less attractive to resident Canada geese, or the removed geese would be replaced with new geese (Gosser et al. (1997)). Additionally, Dr. Allan (1999) states that a cull (gathering and removing) of breeding Canada geese may simply create vacant territories for other birds to move into and repeat culls may be necessary for a number of years before the problem is finally brought under control (Allan 1999). As a result, this plan/EIS integrates wetland management techniques along with goose management techniques and integrates adaptive management as well. Habitat modification techniques are proposed as part of the preferred alternative (alternative B) to make the sites less attractive to resident Canada geese, including planting buffers, applying goose repellents, installing and maintaining exclusion



fencing, and making new plantings less desirable to resident Canada geese through plant species selection. These techniques could be employed in conjunction with population reduction techniques. Adaptive management would also be integrated throughout the process to monitor the population and any correlation with increased food supplies as a result of a decreased resident Canada geese population.

In response to concerns over the impacts of lethal removal, the NPS could not locate scientific sources of information to substantiate the comments assertions. However, we have updated the text of the “Lethal Control” section in Chapter 2, Alternative B, Alternative C, and Alternative D, “Resident Canada Goose Management” of the Final plan/EIS to state that the resident Canada geese captured during the round-ups would only include mature geese and self-sufficient young-of-the-year geese. Goose round-ups would occur during the summer months when adult geese are molting and flightless (starting June 15 in the Mid-Atlantic) and when young-of-the-year (juveniles less than 1 year old) are considered self-sufficient but unable to fly. Therefore, young-of-the-year geese that remain in the park after the roundups would be expected to survive on their own.

## AL4210 - OPPOSE LETHAL CONTROL

**Concern ID:**  
**CONCERN**  
**STATEMENT:**

34545

Commenters are opposed to using lethal control of resident Canada geese within the park because they feel the park has not fully examined other management options and they find the presence of the resident Canada geese within the park enjoyable.

**Representative Quote(s):**

**Corr. ID:** 5

**Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 235703

**Organization Type:** Unaffiliated Individual

**Representative Quote:** However, the plan by NPS to kill hundreds of Canada geese as part of its larger wetlands restoration initiative along the Anacostia River is wrong at a number of levels, and it certainly does not rise to the standards necessary to justify lethal control. We are gravely concerned that geese have been targeted for management within this complex system that is impacted by so many anthropogenic factors. We have questions concerning the identification and delineation of impacts, the documentary basis from which statements about geese and their ecological relationships are made, and the effort made to fully consider alternative means of conflict resolution that are more reasonable and more consistent with an integrated pest management (IPM) approach. We argue, with all respect, that NPS has not seriously considered, researched, or evaluated alternatives to killing and has moved on a decision to use lethal control on the basis of incomplete information and misunderstandings about geese. The decision to proceed with lethal control as the preferred alternative has, as we see it, been made prematurely and recklessly.

**Corr. ID:** 10

**Organization:** Not Specified

**Comment ID:** 235736

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Please reconsidering using lethal methods to control the Canadian Geese populations along the wetlands of our Anacostia River. As a local resident of Southeast, Washington DC, I enjoy the presence of ALL area wildlife, and consider the geese to be a symbol of just how far the river's recovery has come from years past. Surely then, the park service must recognize that the killing of mass numbers of these beautiful creatures is not only inhumane, but moreover a poorly contrived method for the management of a perhaps out of balance ecological system.

**Response:**

As a result of damage to natural resources and the large size of the resident Canada goose population, the NPS feels that lethal control is necessary to reduce the population of resident Canada geese and it is therefore proposed as part of the preferred alternative (alternative B).

Additionally, the NPS believes it has presented and fully analyzed a suite of options, including non-lethal tools, both in the context of the preferred alternative as well as the other action alternatives. For example, both Alternative A (No Action Alternative) and Alternative E provide non-lethal options that the NPS considered in detail, and the remaining alternatives include a combination of both non-lethal and lethal measures. Non-lethal options are also an important tool available throughout the life of the plan/EIS under the preferred alternative, as described in Chapter 2, Alternative B of the Final plan/EIS. Ultimately, monitoring and adaptive management would be used to assess the appropriate combination of techniques to meet the objectives and desired conditions throughout the life of the plan/EIS.

Also, in regards to the enjoyment of resident Canada geese, the NPS has made it clear in several sections of the plan/EIS that the intent is to manage a population of, and not eradicate, the resident Canada geese, and recognizes the Canada goose population as beneficial to visitor experience and aesthetics. This is noted in the discussion of objectives (see Chapter 1, “Objectives in Taking Action” of the Final plan/EIS), desired conditions (see Chapter 1, “Anacostia Park Purpose, Significance, and Mission Goals” of the Final plan/EIS), and in the analysis of impacts to resident Canada geese.

In Chapter 4 of the Final plan/EIS it is stated, it is important to note that although a percentage of the resident Canada goose population would be removed as a result of this plan/EIS, some Canada geese would remain in the park and would include both resident and migratory Canada geese. The effort to help restore the freshwater tidal ecosystem and manage the resident Canada goose population would allow wetlands to reach the desired condition of predominantly self-sustaining systems (containing advanced seral-stage habitat conditions) and would enhance habitat for migratory Canada geese that use the park on a seasonal basis. This would have benefits for migratory Canada geese which are a natural part of this ecosystem, and for visitors who wish to experience more natural fluctuations of geese populations at the park.

See response to Concern ID: 34537 regarding incorporating an IPM approach. NPS has the authority to manage wildlife in Anacostia Park to avoid damage to natural resources and does not require strict adherence to an IPM approach. NPS Management Policies 2006 (section 4.4.5.2) requires an approved park management or IPM plan when dealing with pests and after reviewing the 11-step process, the NPS feels this plan essentially followed this recommended approach.

## **AL4300 - ALTERNATIVE ELEMENTS: SCARE TACTICS**

**Concern ID:**

34546

**CONCERN****STATEMENT:**

Scare tactics including objects that move in wind, noise deterrents, and dogs should be implemented in the spring to deter nesting of resident Canada geese.

**Representative Quote(s):****Corr. ID:** 4**Organization:** People for the Ethical Treatment of Animals (PETA)**Comment ID:** 235699**Organization Type:** Unaffiliated Individual

**Representative Quote:** Employ scare tactics (i.e., kites shaped like predators, remote control boats/planes, flashing lights) in the spring to deter nesting. Statues of dogs/coyotes and flags, Mylar streamers, and other items that move in the wind,

**Response:**

as well as noise/sonic deterrents (i.e., air horns, Bird-X GooseBuster), also work great to keep geese away.

This plan/EIS provides detailed techniques for wetland management and goose management that can be applied, in most cases, in combination to meet the goals and objectives of this plan/EIS for the park. Scare and harassment techniques to manage resident Canada geese at the park are included under the preferred alternative (alternative B), as well as alternatives C and E as described in the Response to Concern ID 34533. Detailed discussions of these techniques, which include visual deterrents such as mylar tape, flags, balloons, and dogs to scare and harass the resident Canada geese can be found in Chapter 2, Alternative B of the Final plan/EIS. The Draft plan/EIS described that dogs could be used both on land and in the water in late spring and summer for scare and harassment but other techniques did not specifically mention a season for implementation. The text in the plan/EIS was updated to describe that scare and harassment techniques would be implemented in the spring to deter resident Canada geese from nesting at the park. Additional scare and harassment techniques may be implemented as new innovative technologies become available. In Chapter 2 of the Final plan/EIS, other harassment techniques that were considered for the alternatives but were dismissed during the process of alternative formulation are discussed and include the use of pyrotechnics, propane cannons, distress calls, and lasers. Pyrotechnics, propane canons, and distress calls were dismissed because they conflict with an existing park plan, statement or purpose and significance, or other policy, such that a major change in the plan or policy would be required to implement the elements. Specifically, the use of soundmaking devices does not assist the park in protecting natural sounds and the use of lasers and hazing with water spray would cause unnecessary environmental impacts.

**AL4600 - EGG ADDLING****Concern ID:**

34548

**CONCERN  
STATEMENT:**

Commenters recommended using trained professionals to oil eggs.

**Representative Quote(s):****Corr. ID:** 4**Organization:** People for the Ethical Treatment of Animals (PETA)**Comment ID:** 235701**Organization Type:** Unaffiliated Individual**Representative Quote:** Eggs should be oiled by trained professional.**Response:**

The use of trained professionals for egg oiling was acknowledged in the Draft plan/EIS. The relevant text, which reads as follows, can be found in Chapter 2, Alternative A of the Final plan/EIS: "Egg oiling has been performed according to a protocol specified by the Humane Society and under permit by the USFWS (HSUS 2004a). There have been a number of partners involved in this management activity, including the District, USGS Patuxent Wildlife Research Center, the Prince George's Maryland -National Capital Park and Planning Commission, and the AWS. All the groups, including the NPS, were trained by Wildlife Services branch of the USDA, and all groups are included under the USFWS permit."

**AL4900 - GOOSE NEST DESTRUCTION****Concern ID:**

34549

**CONCERN  
STATEMENT:**

The NPS should be aware that a Federal permit for nest destruction is no longer required; however, treatment locations do have to be registered with the US Fish and Wildlife Service.

**Representative Quote(s):****Corr. ID:** 5**Organization:** The HSUS, ASPCA, & City Wildlife**Comment ID:** 235717**Organization Type:** Unaffiliated Individual**Representative Quote:** NPS is still under the impression that it is necessary to

**Response:**

obtain Federal permits for nest destruction and removal (DEIS: 106) something which is not the case any longer, and which we attempted to bring to your attention in previous comments. You should be aware that effective in September 2006 the federal US Fish and Wildlife Service removed the permit requirement for resident Canada goose nest and egg treatment. The NPS must merely register locations where it will treat nests and/or eggs online at the Service's website.

The NPS contacted the USFWS Branch of Permits and Coordination, and confirmed there is no longer a permit requirement for resident Canada goose nest and egg treatment. However, landowners and local governments who intend to oil eggs or destroy nests must register and log these activities on the USFWS website, and registration must be completed before egg oiling and nest destruction activities are undertaken. Egg oiling and nest destruction can only be completed after registration between March 1 and June 30. Additionally, participants in the program must return to the USFWS website by October 31 to report the number of nests and eggs destroyed, even if no eggs or nests were destroyed. Registration is only valid for one season, and must be renewed each year before nests and eggs may be destroyed. The NPS has revised the text to document the current requirements (see Chapter 2, "Techniques Dismissed From Further Consideration" of the Final plan/EIS.

## AL5000 - GOOSE POPULATION GOAL

**Concern ID:**

34550

**CONCERN****STATEMENT:**

The park's resident Canada Goose density goals should be based on more than one data point collected at Jug Bay Regional Park.

**Representative Quote(s):****Corr. ID:** 6**Organization:** *Not Specified***Comment ID:** 235725**Organization Type:** Unaffiliated Individual

**Representative Quote:** The goal for the goose population should be based on more than one data point. Greg Kearns of the Jug Bay Regional Park is the source for your density goal. I have heard Greg speak on goose management and have met him several other times. I am sure he is a good wildlife biologist and that Jug Bay is a similar habitat to the park. However, a multimillion plan needs to be built on more than one data point.

**Response:**

Section 4.4.2 of NPS Management Policies 2006 states that whenever NPS identifies a possible need for reducing the size of a park plant or animal population, the decision would be based on scientifically valid resource information that has been obtained through consultation with technical experts, literature review, inventory, monitoring, or research (NPS 2006, sec. 4.4.2.1). The Science Team, described in Chapter 1, "Successful Management of Resident Canada Geese" of the Final plan/EIS, was assembled to complete this task. As described in the Final plan/EIS, the resident Canada goose population goal is an initial goal recommended for Anacostia Park by members of the Science Team convened for this project. As described in Chapter 1, "Successful Management of Resident Canada Geese" of the Final plan/EIS, the Science Team, which was made up of university professors, wildlife biologists, wetland specialists, Canada goose experts, and resource management specialists was engaged to provide technical information on wetland and resident Canada goose management. Team members reviewed and provided available research and data pertaining to wetland and resident Canada goose management and provided technical and scientific input on resident Canada goose management and monitoring. Based on information from the Science Team, the park intends to manage the resident Canada goose population based on the thresholds related to vegetative monitoring as well as adaptive management.

Although data may have been limited for setting an initial resident Canada goose population goal to meet the vegetative thresholds, the Science Team

recommendation of 54 resident Canada geese was developed specifically for Anacostia Park, taking into account the unique conditions at the park. The details of how this goal was identified are available in Chapter 1, "Successful Management of Resident Canada Geese" of the Final plan/EIS. It is important to note that this goal may be adjusted to meet management goals based on the results of vegetation and goose population monitoring that would be conducted as part of implementing this plan/EIS.

## CC1100 - EFFECTS OF CLIMATE CHANGE

**Concern ID:** 34551

**CONCERN  
STATEMENT:**

The EIS needs to include long-term planning of reconstructed wetlands including how sea level rise would impact the wetlands and be managed in the future.

**Representative Quote(s):**

**Corr. ID:** 2

**Organization:** USGS Patuxent Wildlife Research Center

**Comment ID:** 235690

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Should I suspect that 'non-mention' of the impacts from sea level rise was deliberate? Thinking long term - As part of Wetland Management responsibility I believe the reconstructed wetlands, or portions thereof, should be part of a long term monitoring program (including the Sediment Elevation Tables = SETs). These reconstructed wetlands present the opportunity to track a habitat from scratch (its beginnings) which is not a prevalent situation (and data has been collected from the beginning, even before.....)

**Corr. ID:** 3

**Organization:** former Anacostia Watershed Society staff

**Comment ID:** 235693

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Oceans rising will have an effect on our tidal river. Long-time Patuxent River naturalist Greg Kearns believes the tidal Patuxent in Prince George's County is rising at the rate of one-eighth of an inch per year. If that is true, it makes sense to assume that the Anacostia should be rising at about the same rate--and will rise about 2 inches during the 15-year life of this plan.

Since tidal elevations matter---and matter in terms of inches---long-term planning for this scenario would seem to be prudent. I may have missed it, but I didn't see this addressed in the plan/EIS.

**Response:**

The Final plan/EIS was updated to incorporate climate change in accordance with NPS draft interim guidance (April 2009) on climate change for NEPA documents, specifically how climate change affects resources impacted by this project and how impacts to those resources may be influenced by climate change. In Chapter 1, the effects of climate change on applicable resources (hydrology, wetlands, and resident Canada geese) are considered and discussed under these resources (see Chapter 1, "Impact Topics Included in Detailed Analysis" of the Final plan/EIS). Also in Chapter 1 under the topic "Energy Resources and Climate Change", the contribution of wetland and goose management actions to climate change through greenhouse gas emissions was dismissed from further analysis. The known and predicted effects of climate change on park resources (hydrology, wetlands, and resident Canada geese) cannot be avoided and were considered in the plan/EIS. Issues associated with the impact of climate change on some physical/natural resources (hydrology, wetlands, resident Canada geese) are addressed in applicable sections of Chapters 3 and 4. Finally, a discussion concerning how Adaptive Management would be used to manage impacts from climate change was also added to Chapter 2 to describe estimates for future climatic change in the Mid-Atlantic Region.

## CR4000 - CULTURAL RESOURCES: IMPACT OF PROPOSAL AND ALTERNATIVES

**Concern ID:** 34553

**CONCERN STATEMENT:** Depending on the alternative selected, the potential exists for 'adverse effects' to archeological resources and built environments under Section 106 of the National Historic Preservation Act.

**Representative Quote(s):** **Corr. ID:** 7 **Organization:** DC State Historic Preservation Office

**Comment ID:** 235732 **Organization Type:** State Government

**Representative Quote:** Historic Built Environment:

Based upon our review of the various alternatives described in DEIS, we agree with the National Park Service (NPS) that there is potential for some of the actions currently being evaluated to constitute an "adverse effect" on the historic built environment. Most notably, installing "seawall breaks" in the National Register-eligible Anacostia Seawall could diminish the integrity of this resource. If one of the alternatives that propose this type of action is selected, the NPS should notify our office and provide additional information about the exact location of the proposed breaks and the existing conditions of the seawall in these specific areas. Once that information is provided, we will consult further with the NPS to make a determination of effect and to continue the Section 106 process.

**Corr. ID:** 7 **Organization:** DC State Historic Preservation Office

**Comment ID:** 235733 **Organization Type:** State Government

**Representative Quote:** Archaeology:

Based upon our review of the various alternatives described in DEIS, we agree with the National Park Service (NPS) that there is potential for some of the actions currently being evaluated to constitute an "adverse effect" on potential archeological resources. Once an alternative is selected, the NPS should notify our office and provide the proposed locations of ground-disturbing activities. After that information is provided, we will consult further with the NPS to make a determination of effect and to continue the Section 106 process as described on page 261.

**Response:** The NPS agrees some actions called for in the plan/EIS have the potential for "adverse effects" and has noted the need for additional planning and compliance, including consultation and coordination under section 106, prior to undertaking any such actions. However, in regard to those actions where NPS has determined "no adverse effect," the NPS has continued coordination with the State Historic Preservation Office (SHPO) to get their concurrence. The SHPO has agreed on a Conditional No Adverse Effect on historic resources with the following conditions: 1) continued Section 106 consultation on the proposed ground disturbing activities' effects on archeological resources; 2) archeological identification survey, and /or geoarcheological survey if warranted; 3) mitigation of adverse effects if such cannot be avoided; and 4) reporting of archeological investigations following NPS and District guidelines. Record of this consultation has been included in appendix A and the Final EIS has been updated accordingly.



## DE1100 - DOCUMENT EDITS

**Concern ID:** 34554

**CONCERN  
STATEMENT:**

Discussion on the New York City airplane crash should be omitted from the document since migratory Canada geese were responsible for the incident not resident Canada geese.

**Representative Quote(s):** **Corr. ID:** 6

**Organization:** Not Specified

**Comment ID:** 235728

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The section about the jet crash in the Hudson River in 2009 should be omitted. The Smithsonian Institution determined that crash was caused by migratory Canada geese (<http://smithsonianscience.org/2009/07/scientists-determine-geese-involved-in-hudson-river-plane-crash-were-migratory/>). The plan/EIS acknowledges that fact (p. 28), but has a long discussion of the crash and geese, which appears designed to scare people. Do resident geese in the park really fly at 2,900 feet? This section should be removed

**Corr. ID:** 13

**Organization:** Not Specified

**Comment ID:** 235902

**Organization Type:** Unaffiliated Individual

**Representative Quote:** This is pretty minor, but you had talked once about the airplane crash in New York City. Well, I spent about two minutes on Google and it turns out the Smithsonian found out that those were not resident geese. Those were migratory geese. So, all this concern about airplane crashes I think is not relevant. The NPS agrees and removed the discussion concerning the New York City airplane crash from the Final plan/EIS. The park has also confirmed that although the U.S. Park Police Aviation Unit is located within the park, resident Canada geese are not a concern for helicopter flight operations. The downwash of the blades, overall noise, and hovering ability causes resident Canada geese to retreat from the immediate area occupied by a helicopter. The "Visitor and Employee Health and Safety" discussion of Chapter 1 was updated to reflect this statement.

**Response:**

**Concern ID:**

34555

**CONCERN  
STATEMENT:**

Commenters would like the DEIS to be more consistent with nomenclature, acreages, maps, tables, and photograph identifications and labels.

**Representative Quote(s):** **Corr. ID:** 2

**Organization:** USGS Patuxent Wildlife Research Center

**Comment ID:** 235688

**Organization Type:** Unaffiliated Individual

**Representative Quote:** A major area of inconsistency has to do with the nomenclature, acreages, maps and photograph identifications/labels. For example, in some places Kingman Area 1 and 2 are used, while others mention Kingman North and South. Some maps include Heritage Marsh, Fringe Marsh, PEPCO Marsh, others don't. Some places use the term Kingman Marsh inclusively with Heritage Marsh as a unit. The photograph on p. 41 is labeled Kingman Marsh but is really mostly Heritage Marsh. I would lay the responsibility on NACE to provide a better set of nomenclature that would be satisfactory to NPS. After all, the current situation is confusing. Just like Kenilworth is comprised of two major separate pieces (Mass Fill 1 and 2 - oy!!), so is Kingman. The northern piece (Kingman Area 1) and the southern piece (Kingman Area 2) were reconstructed in 2000. Kingman Area 2 is comprised of 8 acres and lies against the west bank of Heritage Island. However, Heritage Marsh was reconstructed (different authorization) in 2006 and occurs within the same piece of water as Kingman Area 2 BUT is separated from Area 2 by the dredged channel and lies along the east bank of RFK Stadium in three separate pieces (separated by design by two pre-existing stormwater outfall runs). So, technically Heritage Marsh is NOT part of Kingman Marsh (and.....Heritage Marsh is NOT connected to Heritage Island). Point remains there is terrible inconsistency throughout the EIS especially in the section of marsh descriptions with acreages (Chapt. 3: Affected Environment....and e.g. p 214 PP3). There is

even other confusion on p. 4 #1 where it should say Kingman Island instead of Kingman Marsh. To take this in the extreme (ultimate nit pic just to make the point) it doesn't look to me like the Fringe Marsh or Heritage Marsh (this time labeled BUT doesn't show Kingman Area 2 as part of Kingman Marsh) or Kingman Marsh Area 2 shaded.....By the way (p. 145) highlights RFK shoreline without mentioning Heritage Marsh and claims it is within Kingman Marsh. Also, where from did the notion of cattail planting come? It (they = 2-3 types of Typha there) is purely a volunteer, i.e., not planted. And perhaps Typha angustifolia is not native (presumably came from Europe).....

**Corr. ID:** 3 **Organization:** former Anacostia Watershed Society staff

**Comment ID:** 236291 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 2-The photo caption, I believe, is erroneous. The "denuded" wetland landscape is due to the time of year---early Spring. Only a few of the trees have leafed out in this photo. The perennial and annual wetland plants have not emerged from the mud yet because it hasn't warmed up enough, not due to goose herbivory. Goose herbivory follows when there's something to eat.

Page 296---Unless I have a long-lost brother, separated at birth, I think the third citation from the top should be Steve, not "Tom" McKindley-Ward.

**Corr. ID:** 6 **Organization:** *Not Specified*

**Comment ID:** 235730 **Organization Type:** Unaffiliated Individual

**Representative Quote:** 2. The plan/EIS would be greatly improved if it had more analysis and less repetitive verbiage.

3. The plan/EIS needs to be better proofread. As an example, the tables are not consecutively numbered and don't match the "List of Tables" on p. ix.

**Response:**

The NPS has updated the Final plan/EIS to resolve issues associated with naming inconsistencies. The other editorial changes suggested in this comment have also been made.

**Concern ID:**

34556

**CONCERN  
STATEMENT:**

[The 2006 DC Comprehensive Plan, and Action E-1.5A: Implementation of the Wildlife Conservation Plan should be considered as a related document in chapter 1 of the plan/DEIS.](#)

**Representative Quote(s):** **Corr. ID:** 3 **Organization:** former Anacostia Watershed Society staff

**Comment ID:** 235692 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Page 31---This page has a list of relevant District of Columbia documents and policies. Left out, however, is the 2006 DC Comprehensive Plan. Under its broad category "Citywide Elements" is an "Environmental Elements" section, and inside this section, at the top of page 6-13, there is a specific mention of the need to control Canada geese. (Action E-1.5.A: Implementation of the Wildlife Conservation Plan. Implement the 2005 Wildlife Management Plan for the District of Columbia, including programs to control the white-tailed deer and Canada goose population, and to improve water quality and habitat in the Anacostia River.) This might be helpful to include.

**Response:**

NPS added a discussion of The Comprehensive Plan of the National Capital to the Final plan/EIS (see Chapter 1, "Other Related Documents, Policies, and Actions" of the Final plan/EIS). The District Elements that are part of this plan provide goals, objectives and policies for land use issues that impact the city, including the relevant "Environmental Elements" section. This section specifically mentions the need to control Canada geese under Action E-1.5.A: Implementation of the Wildlife Conservation Plan (2005), which states that the District of Columbia implement programs to control the white-tailed deer and Canada goose population and to improve water quality and habitat in the Anacostia River (DC OP 2006).



Also, the NPS did discuss the District of Columbia Wildlife Action Plan (dated 2006) in the Draft plan/EIS under the heading “Other Related Documents and Policies”. The NPS has added a statement from the 2006 Wildlife Action Plan for the District of Columbia in the Final plan/EIS (see Chapter 1, “Other Related Documents, Policies, and Actions” of the Final plan/EIS) which specifically notes that programs would be implemented to control the Canada goose population, since it has been determined that “locally, one of the top five threats to emergent tidal wetlands is overbrowsing by resident Canada Goose populations; the geese eat the wild rice and other native vegetation, which diminishes the habitat for other animal species and increases opportunities for non-native invasive plant species.”

## GA1000 - IMPACT ANALYSIS: IMPACT ANALYSES

**Concern ID:** 34557

**CONCERN STATEMENT:** Commenters feel the potential risks of human exposure to resident Canada geese used for consumption must be addressed in the final EIS.

**Representative Quote(s):** **Corr. ID:** 5 **Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 237692 **Organization Type:** Unaffiliated Individual

**Representative Quote:** The issue of potential human exposure (e.g. Amundson 1988) to environmental hazards should geese by processed for food must also be addressed in the Final EIS.

**Response:** The Draft plan/EIS discussed donating the meat from captured resident Canada geese and the toxicity testing that would be required prior to consumption. This text can be found in the “Resident Canada Goose Management” Section of Chapter 2 of the Final plan/EIS:

“The meat from the resident Canada geese captured during the round-ups would be donated to local food banks in the District area. Only the breast meat would be donated which reduce the chances of contamination. Toxicity tests would be performed on approximately 10 percent of the captured birds prior to donating the meat to the local food banks. Toxicity testing would follow APHIS standard operating procedures. If donation were not possible, the euthanized birds would be deposited in a landfill.”

**Concern ID:** 34697

**CONCERN STATEMENT:** The analysis in the Final EIS must address how fragmentary remnants of the original tidal marsh will function as a system, and how restored fragments will withstand compromising environmental events.

**Representative Quote(s):** **Corr. ID:** 5 **Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 237712 **Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS fails to adequately address issues of scale and land use

NPS notes (DEIS: 214) that originally the area of concern along the Anacostia River was flanked by 2500 acres of tidal marsh, of which less than 100 are involved in the current restoration effort at four locations (DEIS: 8). Thus approximately 4% of the original system is being retained, in parcels that range in relative sizes from 0.02% to 1.6% of what formerly existed within this system. The Final EIS must address how such fragmentary remnants of the original tidal marsh can function as it argues wetlands in the Anacostia will, especially to "...improve water quality in the Anacostia River..."(DEIS: 8). It must also demonstrate that restored fragments of this order can sustainably withstand any of the potentially compromising environmental events (e.g., floods, sewage discharge, pollution from runoff, herbivory by geese or other animals, etc.) that can be expected to occur into the future.

**Response:**

The NPS feels the plan/EIS addresses both concerns raised by the commenter. In regards to concerns about fragmentary remnants functioning as a system, it is important to note that the desired conditions of the plan/EIS as stated in Chapter 1, "Desired Conditions" of the Final plan/EIS, do not include undertaking wetland restoration of the Anacostia to pre-development conditions, but rather include "Wetland systems that are maintained, in a pre-dominantly self-sustaining condition to deliver the best quality and quantity of wetland functions that reflect park goals and strategies." The functionality of fragmented wetlands is not discussed in one place, but rather is included in discussions of wetland areas under each alternative. The Draft plan/EIS included a discussion of how the implementation of proposed measures under each alternative would aid in lessening issues that currently limit the functionality of various wetland areas; this discussion can be found in Chapter 4, "Wetlands" of the Final plan/EIS.

In regards to impacts from other environmental events, a detailed discussion of impacts related to wetlands was included in the Draft plan/EIS, and can be found in Chapter 4, "Wetlands" of the Final plan/EIS. This analysis includes an assessment of cumulative impacts, which are those impacts to wetlands from other sources, including many noted by the commenter. These cumulative impacts are discussed in detail after the impacts analysis for each alternative in Chapter 4 of the Final plan/EIS.

**Concern ID:****CONCERN  
STATEMENT:****Representative Quote(s):**

39634

Commenters felt potential risks to health and safety (both human and wildlife) from resident Canada geese are overstated or incorrect.

**Corr. ID:** 5**Organization:** The HSUS, ASPCA, & City Wildlife**Comment ID:** 235712**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS makes claims concerning health and safety that are incomplete and could be misleading

The claims made in the DEIS that geese will affect the water quality of the Anacostia River (e.g., "The water quality of the Anacostia River is being affected by the resident Canada geese due to herbivory on wetland plants and as a result of fecal droppings." DEIS: 128 and "The water quality of the Anacostia River is being affected by the resident Canada geese due to fecal droppings..." DEIS: 202) are not substantiated. These statements set up inappropriately negative imagery concerning geese and their impacts that is not mitigated by NPS also saying that impacts from goose feces are almost certainly negligible. If an impact is negligible, then why is it mentioned at all?

The fact is that (at a minimum, by estimates in the DEIS) hundreds of millions of gallons [our emphasis] of combined human sewage and runoff affect the Potomac and Anacostia rivers 75 times a year (on average). It does no honor to NPS' credibility that statements about goose feces and the pathogens that might or might be harbored in their droppings are being made in this document. No credible sourcing is mentioned. With respect to the laundry list of pathogens enumerated, it is not mentioned that they are seldom, if ever, all found in the same population of geese (cf. Bedard, & Gauthier 1986, Converse et al. 2001). NPS also argues that resident geese "may threaten" (DEIS: 235) other wildlife, especially waterfowl through influenza A viruses and avian tuberculosis, but presents nothing by way of evidence that such events have ever happened, much less happened on the Anacostia River. Finally, NPS brings the question of aircraft safety obliquely into the discussion (DEIS 27-28) before suggesting that it is probably not an issue along the Anacostia River at all. The Final EIS must establish exactly what the public health and safety, as well as wildlife health, risks are including how they are measured, estimated, evaluated, and determined. Documentation of the presence and/or potential for risk must be presented rather than vague and oblique comments

**Response:**

about how various risks might present themselves.

In regards to concerns that potential health and safety risks are overstated, it should be noted that the NPS did dismiss the resource Visitor and Employee Health and Safety from further analysis because: “Although fecal droppings from resident Canada geese have been mentioned as a public safety issue (MDNR 2009), this has not been demonstrated as a safety concern at Anacostia Park, but rather a public nuisance issue (NPS 2010a). Disease transmission between resident Canada geese and visitors or employees at Anacostia Park has not been documented, and therefore, these impacts cannot be quantified and are considered negligible for all alternatives.” (see Chapter 1, “Other Issues Considered But Dismissed From Further Consideration Following Detailed Analysis” of the Final plan/EIS).

Review of scientific literature sources such as USFWS (2005) and McCoy (2000) indicates that concentrated resident Canada geese populations may threaten the health of other wildlife, especially waterfowl and that influenza A viruses and avian tuberculosis outbreaks are exacerbated by dense populations of waterfowl, including Canada geese (McCoy 2000). In addition, fecal droppings from Canada geese concentrate in pools of water created during impoundment drawdowns, and thereby degrade overall water quality and increase the potential for human and avian diseases transmitted by fecal material (USFWS 1999). Other studies (as suggested by the commenter) show that the low frequency of positive cultures indicates that the risk of humans to disease through contact with Canada goose feces appeared to be minimal at sites studied by Converse et al. (2000). Therefore, some literature has demonstrated that disease transmission from Canada geese is possible under certain conditions, but this correlation has not been measured at Anacostia Park. Specific effects to health and safety as a result of resident Canada geese have not been demonstrated or studied at Anacostia Park and this is openly stated in the plan/EIS. This resource was dropped from further analysis due to negligible impacts. The impacts of fecal matter on water quality are discussed under cumulative impacts in chapter 4 “Water Quality”.

To address specific comments made on health and safety, the NPS has added information to the affected environment discussion where pathogens are noted (see the Water Quality Section in Chapter 3 of the Final plan/EIS). Upon review of the suggested sources Bedard and Gauthier (1986) and Converse et al. (2001) additional text was added to explain that fecal matter from geese has not been demonstrated to affect water quality or human health at Anacostia Park. Fecal matter is described as a contributing factor to water quality in combination with other factors such as effects of goose herbivory. Additionally, the impact of this fecal matter has not been studied at Anacostia Park, and it is likely that the contribution of fecal droppings from resident Canada geese is small when compared to other sources of pollution. The text regarding potential avian diseases in the analysis of impacts to other wildlife (see Chapter 4, “Wildlife” of the Final plan/EIS), has also been further clarified to indicate that such effects have not been documented at Anacostia Park.

## LU1100 - LAND USE

**Concern ID:**

34558

**CONCERN  
STATEMENT:**

Changes to existing recreational land uses should be considered in alternatives for achieving the objectives of the plan/EIS.

**Representative Quote(s):****Corr. ID:** 5**Organization:** The HSUS, ASPCA, & City Wildlife**Comment ID:** 235713**Organization Type:** Unaffiliated Individual

**Representative Quote:** As we noted in our comments of August 9, 2007, on the scope of the analysis, land use is both a potentially effected element of the

environment and a significant contributor to the issues this Plan/EIS seeks to address. The Plan/EIS Alternatives must include consideration of land use because these uses play a significant role in attracting resident geese to the area around the artificial wetlands. This is particularly true at the Kingman Island site; right next to a golf course and other open grassy public areas. The Park's goal of creating artificial wetlands, admirable as it is, is in serious conflict with the Park's goal of providing the specific recreation opportunities that constitute a magnet for Canada geese. It may simply not be realistic to expect any management concept to work in such an environment without a significant and coordinated effort that occurred across different land management units.

The Final EIS should explicitly include steps to examine land use and consider changes to current and planned land use that could achieve the objectives of the DEIS. Both Council on Environmental Quality (CEQ) regulations (§1502.14(c)) and judicial review have long made it clear that the entire range of reasonable alternative ways to substantially achieve the stated project objectives, including actions the responsible agency itself cannot implement alone as well as action it may not prefer, must be analyzed

**Response:**

The Purpose Statement for Anacostia Park was developed from the establishing legislation for the park as described in Chapter 1, "Anacostia Park's Purpose, Significance, and Mission Goals" of the Final plan/EIS: "Anacostia Park was created when the banks of the Anacostia River were reclaimed for park purposes. It is part of the comprehensive, systematic, and continuous development of the park system of the national capital, and provides waterfront recreation and access for public enjoyment. Within this system, the park provides opportunities for a variety of recreational activities that are compatible with the resources of the Anacostia River." Therefore, providing recreation opportunities has been and would continue to be an important purpose of Anacostia Park. As a result, changing the existing land use of the park was not considered as part of the alternatives.

Land Use as an impact topic was analyzed in detail while developing the Draft plan/EIS, and was ultimately dismissed from further consideration because the alternatives proposed would not alter land use (see Chapter 1, "Other Issues Considered But Dismissed from Further Consideration Following Detailed Analysis" of the Final plan/EIS for additional information). Additionally, because the NPS recognizes the challenges created by mixed land uses, the Draft plan/EIS took into account the land use and habitat types in the development of the desired conditions and population objectives, as described in Chapter 1, "Other Issues Considered But Dismissed from Further Consideration Following Detailed Analysis" of the Final plan/EIS.

## MP1100 - MONITORING PROTOCOL

**Concern ID:**

34559

**CONCERN**

**STATEMENT:**

Monitoring protocols and their purpose, as described in Appendix C, are unclear and should be clarified.

**Representative Quote(s):**

**Corr. ID:** 2

**Organization:** USGS Patuxent Wildlife Research Center

**Comment ID:** 235689

**Organization Type:** Unaffiliated Individual

**Representative Quote:** Appendix C: Preliminary Monitoring Protocol.....

It was really unclear to me whether this was a projected protocol for future monitoring or whether it refers to the one that is already in place and has been used for two years, OR maybe both!!! The indicated purpose was also fuzzy or even incorrect - or was this component written awhile ago and just not made current. At

**Response:**

any rate the protocol pretty much as described was designed not so much to monitor the impacts of herbivory at Kingman Area 1 (p. 339) but to document and try to single out that the primary herbivory was due to resident Canada geese that were to be excluded from the fenced treatment plots (should sustain vegetation even when letting in other herbivores than the geese) as opposed to the exposed control plots which likely would be grazed. Whereas, and this is important, the selection of Alternate B mandates/essentially requires monitoring (of various types) for a number of indicators (especially vegetation) to determine to what extent the elected goose management actions allowed the wetlands to respond/restore. It would seem that this same plot design/set-up of 16 modules randomly located could be used with the primary determination being how well over time the exposed control plots become statistically similar to the exclosed plots. In other words there would be a switch with the current exclosed plots effectively becoming the control while the 'old' /prior exposed control plots become in effect the treatment..... Current monitoring is based on the Preliminary Monitoring Protocol, included as Appendix C of the plan/EIS. Subsequent monitoring reports would document any changes resulting from adaptive management decisions made over the course of the study. The Anacostia Park Wetlands and Resident Goose Management Plan/Environmental Impact Statement requires monitoring of the impacts of herbivory on vegetation at Kingman Area 1. The experimental design described in the Preliminary Monitoring Protocol was chosen as the best way to accomplish this. The chosen design provides quantitative data showing how the vegetation is being impacted by herbivory, addresses what is causing the impacts, and provides the ability to determine to what extent the elected goose management actions allow the wetlands to recover over time. The plot design/set-up of 16 modules randomly located would be used to determine how well over time the exposed (unfenced) control plots become statistically similar to the exclosed (fenced) plots. The paired plot design looks at the difference between a control and a treatment plot. Statistically, it does not matter which of the plots are the control and which are the treatment plots because it is the differences between the two that would be documented through data collection.

## PC1100 - PROJECT COSTS

**Concern ID:**

34560

**CONCERN****STATEMENT:**

Commenters are concerned the National Park Service will not obtain all the funds described in the plan/DEIS. Budget priorities need to be established along with explanation of one-year cost estimates.

**Representative Quote(s):****Corr. ID:** 5**Organization:** The HSUS, ASPCA, & City Wildlife**Comment ID:** 235716**Organization Type:** Unaffiliated Individual**Representative Quote:** Economic projections need to be better explained

The lethal control of geese is cost-estimated for only one year under all alternatives presented, creating a potentially misleading impression that expenses will not be great. The Final EIS should explain and defend why one-year estimators are used here but not for other actions.

**Corr. ID:** 6**Organization:** Not Specified**Comment ID:** 235729**Organization Type:** Unaffiliated Individual

**Representative Quote:** The cost of \$16.3 million for Alternative B is unrealistic, given the tough budget climate for federal agencies for the next few years. NPS is likely to have flat budgets, at least in real terms, for the next five years. The plan/EIS should set clear budget priorities within Alternative B.

**Corr. ID:** 12**Organization:** Anacostia Watershed Society**Comment ID:** 235909**Organization Type:** Conservation/Preservation

**Representative Quote:** Only one concern that we have is the cost. How, you know, the National Park Service is going to, you know, get this money? This \$60 million.



**Response:** Right. Fifteen years.  
The plan/EIS attempts to present the entire suite of possible techniques for wetland management and for goose management regardless of constraints such as costs as stated in Chapter 2, "Alternatives Development Process" of the Final plan/EIS. Once the plan is approved for implementation (i.e., a Record of Decision is signed), the NPS would not necessarily be required to implement each of the techniques presented; techniques listed under each alternative would be implemented on an "as needed" basis and as funds are available.

## PN1100 - PURPOSE AND NEED: METHODS AND ASSUMPTIONS

**Concern ID:** 34561  
**CONCERN STATEMENT:** [The need for the wetland and resident Canada goose management plan needs to be strengthened by better describing the current conditions in the DEIS.](#)  
**Representative Quote(s):** **Corr. ID:** 5 **Organization:** The HSUS, ASPCA, & City Wildlife  
**Comment ID:** 235705 **Organization Type:** Unaffiliated Individual  
**Representative Quote:** The DEIS fails to document current conditions well enough to establish a need for action. Damage to aquatic plants and other environmental impacts not sufficiently described.  
The DEIS does not rise to the level of documentation required to establish a need to kill geese—a native, protected species of bird for whom the NPS has a strict protective mandate. The shortcomings are numerous. Perhaps most significantly the DEIS notes (pg. 13) that study began in 2009 to "...determine the impact of herbivory by resident Canada geese on Kingman Marsh," citing a report from that first year that indicates that geese are "inflicting damage" to wetland vegetation there. Following this highly vague and casual problem identification and delineation, NPS goes on to note that the second year of study will be included [our emphasis] in the Final EIS. This is a tacit admission that NPS is proposing to manage geese first and then ask questions about properly documenting their impacts later.  
**Response:** The "Need for Action" section in Chapter 1 was also enhanced to communicate the necessity for resident Canada goose management at the park. Conclusions from the 2009-2011 herbivory studies were added to the "Need for Action" section and to the "Background on Wetlands Restoration and Resident Canada Goose Management" section in Chapter 1 of the Final plan/EIS to demonstrate the need for reducing the population of resident Canada geese within the park. Additional data on existing conditions have been added to the plan/EIS. Specifically, the 2010 and 2011 goose count data have been added to the plan/EIS to further describe current conditions at the park. Please see the "Resident Canada Geese" section of Chapter 3, Affected Environment of the Final plan/EIS.

## PN1600 - OTHER PARK GOALS AND MANAGEMENT PLANS

**Concern ID:** 34562  
**CONCERN STATEMENT:** [Commenters are concerned about management of resident Canada geese in the absence of an approved General Management Plan for Anacostia Park, and that "Desired Conditions" are not fully articulated management goals and objectives.](#)  
**Representative Quote(s):** **Corr. ID:** 5 **Organization:** The HSUS, ASPCA, & City Wildlife  
**Comment ID:** 235707 **Organization Type:** Unaffiliated Individual  
**Representative Quote:** The DEIS fails to adequately articulate park goals. The DEIS notes that the park has yet to settle on its management goals through approval of a General Management Plan (GMP) (DEIS: 8-9). This is not an appropriate point of departure for any management program, much less one that calls for killing hundreds of wild, native animals. The vagueness inherent in statements such as "The park staff believes that park wetlands are integral to the

functioning of all wetlands within the watershed." (DEIS: 17) and "For this plan, a manageable resident Canada goose population is defined as one that allows restored wetlands within the park to function as wetlands systems." (DEIS: 17) further dilute the credibility NPS must establish to justify any management program.

**Response:**

The "Desired Conditions" articulated by NPS (DEIS: 17) are an apparent place holder for fully articulated management goals and objectives. They are not well explained or defended with respect to other objectives statements scattered throughout the document. The desired conditions further do not relate well to the six articulated priority watershed goals. Nor are they explained well with respect to their standing as NPS policy formulations that would endow authority to manage either wetlands or geese. The Final EIS must explain how, in the absence of an approved GMP, the "Desired Conditions" can assume the power of a mandate to manage Canada geese, especially to manage resident but not migratory geese. Although the General Management Plan for Anacostia Park has been dropped in favor of a Park Foundation Document, the NPS has full discretion to prepare and implement plans such as this one in the absence of a Final GMP. A new section titled "Authority to Manage Resident Canada Geese" of the Final plan/EIS has been added to Chapter 1. Additionally in Chapter 1, "A Functional Wetland System", the six priority watershed goals are referred to and integrated into the plan/EIS: "The park staff believes that park wetlands are integral to the functioning of all wetlands within the watershed. In order to achieve desired wetland conditions in the wetland systems at Anacostia Park, this plan/EIS reflects the park's understanding of the watershed conditions that affect the wetland systems. Therefore, the wetlands should be managed in such a way as to contribute to achieving the six priority watershed goals as defined in the Anacostia Watershed Restoration Indicators and Targets for Period 2001-2010: (1) reducing pollutant loads, (2) restoring ecological integrity, (3) improving fish passage, (4) increasing wetland acreage, (5) expanding forest coverage, and (6) increasing public and private participation (DEP 2001)."

## PSAE010 - WETLAND RESTORATION

**Concern ID:**

34564

**CONCERN  
STATEMENT:**

Previous wetland restoration along the Anacostia River should be analyzed in the final EIS.

**Representative Quote(s):**

**Corr. ID:** 6

**Organization:** Not Specified

**Comment ID:** 235722

**Organization Type:** Unaffiliated Individual

**Representative Quote:** An analysis of previous wetland restoration efforts in the park should be included in the final plan/EIS. NPS and other government agencies have spent a great deal of time, effort and money on wetland projects along the Anacostia River. A number of studies have been done of those projects.

**Response:**

Previous wetland restoration activities were described in detail in the Draft plan/EIS, beginning in Chapter 3 under the section titled "Wetland Restoration Efforts." However, this section may have been hard to find in that location and was renamed "Previous Wetland Restoration Efforts" and moved to follow the section titled "History of Anacostia Wetlands" in Chapter 3, "Affected Environment", of the Final plan/EIS.

**PSAE040 - WETLAND FUNCTIONS**

**Concern ID:** 34565

**CONCERN STATEMENT:** Commenters would like more characterization of the freshwater tidal wetlands and more emphasis on submersed aquatic vegetation.

**Representative Quote(s):** **Corr. ID:** 2 **Organization:** USGS Patuxent Wildlife Research Center

**Comment ID:** 235687 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Besides quoting the classic definitions of wetlands (Cowardin, USACE) the EIS does not do full justice to the characterizations of the tidal wetlands. It should be clearly noted:

Freshwater tidal wetlands are an integrated system containing a balance of relatively deep open water, shallow waters (sufficient to support submersed aquatic vegetation = SAV), intertidal mudflats, emergent wetlands, wet meadows, swamp forest, etc. All these components are especially valid for the Anacostia. (Thus the description of General Vegetation and Habitat on p. 150 is incomplete). Therefore, while emphasis on emergent wetlands (vegetation) is fine, the roles of other components should be brought out along with the need for NPS to manage them correctly. The whole interrelated/integrated system needs to be protected, maintained and enhanced (involves significant restoration). This is particularly true now when open water systems predominate. It is also important that zeal for restoring wetlands does not just focus on emergent vegetation but also, for example, includes mud flats. Yes, there is a paragraph on SAV (p. 25). It should be noted there how important a component SAV was in the mid 1800s. SAV needs emphasis (leadership) as part of restoring the Anacostia. Even small efforts, despite excess turbidity, can promote 'mini pools' in which pockets of SAV can survive in the Anacostia. Also, for the record I/we have noted limited SAV at Kingman Marsh Area 1 over the past several years. The point is SAV restoration should not be written off as a poor bet.

**Response:** In response to this comment, text has been added to the “Tidally-influenced Freshwater Wetlands” section in chapter 3 to describe the interrelated/integrated nature of these wetlands, including submerged aquatic vegetation (SAV) and mudflats (see Chapter 3, “Tidally-influenced Freshwater Wetlands” of the Final plan/EIS). This section also now references back to the discussion of SAV in chapter 1, which has been updated to note the small areas of SAV in Kingman Lake per the comment received (see Chapter 1, “Other Issues Considered but Dismissed From Further Consideration Following Detailed Analysis” of the Final plan/EIS). However, as noted in the dismissal of SAV as an impact topic (see Chapter 1), the NPS does not believe that removal of resident Canada geese and improvements to wetlands and thus water quality (expected from both alternatives B and C) would cause a perceptible or observable change in extent or distribution of SAV.

While the commenter expressed concerns the NPS has focused only on management of the emergent wetland vegetation and not the other components of freshwater tidal wetlands, including SAV, it should be noted that the focus of this plan/EIS is on protecting and managing previously and future restored wetlands in the park. The creation of any new wetlands, including those which support SAV, is outside the scope of this plan/EIS and would require additional NEPA compliance; however, as appropriate, the concepts presented in this plan/EIS would apply to previously restored wetlands and any wetlands restored in the future at Anacostia Park. The NPS updated the Final EIS to be clearer about the scope of this plan (see Chapter 1, “Purpose Of and Need For Action” of the Final plan/EIS), and new text was added to clarify this in the “Tidally Influenced Freshwater Wetlands” of Chapter 3 of the Final plan/EIS.



## PSCA001 - NON-GOOSE IMPACTS ON WATER QUALITY

**Concern ID:** 34566

**CONCERN**

**STATEMENT:**

Commenters feel resident Canada geese herbivory and goose droppings are not the problem for poor water quality within the Anacostia River, and the final EIS should discuss how human sewage, runoff, and chemical loads from chicken farms impact water quality.

**Representative Quote(s):**

**Corr. ID:** 1

**Organization:** Not Specified

**Comment ID:** 235683

**Organization Type:** Unaffiliated Individual

**Representative Quote:** it is clear that the problem in the river water is far more about mans toxic chicken farms in the area than the geese. it is about man's toxic chemical load.

**Response:**

The NPS agrees with the commenters with respect to concerns that other pollution sources contribute greater impacts to water quality than resident Canada geese, as evidenced by the information presented in chapters 3 and 4 (cumulative impacts analysis) of the Draft plan/EIS. For example, chapter 4 of the plan/EIS acknowledges that the combination of resident Canada goose herbivory plus goose fecal matter can contribute to water quality impacts in one paragraph compared to more than 2 pages of discussion regarding other sources of pollution that cumulatively contribute to water quality impacts of the Anacostia River, including the Blue Plains Wastewater Treatment Plant (see Chapter 4, "Water Quality" of the Final plan/EIS). Also in chapter 4, other pollution sources were described in the initial description of actions contributing to cumulative impacts on water quality under the no action alternative in chapter 4 (see Chapter 4, "Water Quality" of the Final plan/EIS), and were also incorporated in the analysis of cumulative impacts under other alternatives. In this analysis of cumulative impacts, the NPS acknowledges that the impacts from resident Canada geese fecal droppings and overgrazing (which are not exactly known) are small when compared to other pollutant sources. Additional language has been added to the cumulative impacts water quality section to refine this point.

The text in the plan/EIS was clarified to state that fecal matter from resident Canada geese generally influences water quality in situations where the waterbodies are characterized as stagnant or standing water as cited by such sources as (USFWS 1999) and Rutgers (2004). Canada goose fecal matter can also lead to eutrophication (excessive richness of nutrients in a body of water) of small water bodies, especially those that have restricted circulation and flow-through, which in turn may stimulate algae and weed growth (French 2001). Even though the Anacostia River does have backwater conditions that could be considered stagnant during certain tidal cycles, fecal matter from resident Canada geese at Anacostia Park has not been demonstrated to affect water quality or human health. Fecal matter is described as a contributing factor to water quality in combination with other factors such as effects of goose herbivory. It is known and stated that resident Canada goose herbivory reduces areal coverage of wetland vegetation. This reduces the potential for wetland areas to trap sediment (and associated pollutants binding to sediment), and creates bare areas in the wetlands.

NPS Director's Order 12 Handbook: Conservation Planning, Environmental Impact Analysis, and Decision Making, states that it is appropriate to include qualitative impact analyses with experts' testimony. Specific effects to water quality as a result of fecal contamination by resident Canada geese have not been studied at Anacostia Park and this is openly stated in the plan/EIS. It is unknown whether the water quality in the Anacostia River is measurably affected by fecal droppings from the resident Canada goose population in the park due to the large size of the Anacostia River. The lack of site-specific data is acknowledged as required in CEQ (1502.22)

and NPS Director's Order 12 Handbook, Conservation Planning, Environmental Impact Analysis, and Decision Making (NPS 2001). In chapter 4 of the Draft plan/EIS, under the analysis of the impacts on water quality from the no action alternative, the NPS cites sources such as USFWS 2005 when describing impacts from fecal contamination or erosion from overgrazing by geese, notes that exact contributions to water quality impacts are unknown at Anacostia Park, but that they contribute, along with increased erosion from excessive grazing, to minor adverse impacts on water quality (i.e., impacts that would be detectable but not large enough to cause substantial local changes). Additional information has been updated and provided in Chapter 4, "Water Quality" of the Final plan/EIS as discussed in the text above.

## PSCA010 - OTHER STRESSORS ON RESTORED WETLANDS

**Concern ID:** 34567

**CONCERN  
STATEMENT:**

Commenters stated that the DEIS does not adequately relate impacts from anthropogenic factors in Anacostia wetlands to impacts from resident Canada geese. Influences such as fluctuating water level, mechanical erosion, sedimentation, pollution, and other factors on wetland restoration need to be compared to the relative impacts on wetlands from goose herbivory.

**Representative Quote(s):**

**Corr. ID:** 5

**Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 235704

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS conflates management strategies and fails to clearly delineate management alternatives.

The DEIS conflates information about anthropogenic impacts with impacts attributed to geese in a manner that submerges the relatively minor issues associated with geese within a much larger domain of human-caused problems. Thus, it tends to overstate the case it tries to make against geese and understate the case for hydrogeomorphic and other influences on the potential for wetlands restoration. We feel by combining these two very different management issues into this DEIS, NPS implicitly acknowledges that the case against geese is too weak to stand on its own. NPS itself notes the complex hydrological and ecological factors that go in to the establishment and maintenance of artificial wetlands and the dominant role hydrology plays in plant survival (DEIS: 16). The Final EIS must clearly relate the impacts from anthropogenic factors in Anacostia wetlands to impacts from Canada geese. NPS must demonstrate the role that anthropogenic influences such as fluctuating water level, mechanical erosion, sedimentation, pollution, and other factors play with respect to wetland planting success and failure, and then compare these relative to the potential impact from goose herbivory.

**Response:**

The NPS feels the Draft plan/EIS includes discussion of other factors potentially impacting resources, particularly wetlands, as a result of human actions. For example, the use of sheet piling in the Fringe Wetlands, and the presence of impervious surfaces in upland areas, are two human related issues discussed as challenges to wetland restoration (see Chapter 3, "Water Quality" of the Final plan/EIS). In the wetlands impacts analysis section (see Chapter 4, "Wetlands" of the Final plan/EIS), other factors impacting successful wetland restoration are described, including planting at incorrect hydrologic regimes, engineered marsh soils, and issues with invasive plant species. In addition, the impacts analysis includes an assessment of cumulative impacts, which are those impacts to resources, including wetlands, from other sources. The NPS feels this analysis addresses many of the past, present, and future actions that have anthropogenic influences on wetlands noted by the commenter, including issues associated with combined sewer overflows (CSOs) and the effluent from Blue Plains Advanced Wastewater Treatment Plant, located less than one mile downstream from

Anacostia Park. See Chapter 4, “Cumulative Impact Analysis Method” of the Final plan/EIS for the initial discussion of cumulative impacts under the no action alternative, which were also incorporated in the analysis of cumulative impacts under other alternatives. In addition, in response to other comments received, a more detailed section on “Climate Change” has been added to both Chapters 3 and 4 of the plan/EIS to address the potential for pressures exerted by sea level rise, increased storm events, and increased drought events (see Chapter 3 and 4, “Climate Change” of the Final plan/EIS).

## PSSM002 - NEED FOR ADDITIONAL DATA/SCIENCE

**Concern ID:** 34568

**CONCERN  
STATEMENT:**

Commenters feel that more science and data on the biology and ecology of resident Canada geese, as well as effective management strategies, should be incorporated into the wetland and resident Canada goose management plan. The plan/EIS should also include an analysis of where the resident Canada geese congregate within the park to guide habitat modification in these areas.

**Representative Quote(s):** **Corr. ID: 5** **Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 235711 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Lack of good science and incomplete consideration of available information

The DEIS relies on information contained in reports, technical brochures, and unpublished materials (and even omits from the bibliography authorities cited in text, such as Bates 2010a) that suggest it was prepared with only casual scholarship. It misses or ignores important factors relating to both the biology and ecology of Canada geese as well as effective nuisance abatement strategies that call to question whether the understanding of goose biology or ecology is sufficient to have planned for management at all. We can only conclude that it was not.

The DEIS (pg. 245) claims that resident geese stay within a 5 to 10 miles radius during non-breeding and 0.25 to 0.50 mile radius during the breeding season, citing itself (NPS 2010a) again with a source that does not appear in the bibliography. No mention is made of the phenomenon of molt migration, despite literature demonstrating that significant proportions of "resident" goose populations will undertake migratory movements when their nests fail (Luukkonen et al. 2008, Dieter & Anderson 2009). In our many years of direct experience with Canada goose programs we have found that egg and nest destruction, combined with harassment such as by trained dogs (Castelli & Sleggs 2000), can be highly successful in eliminating Canada goose problems when timed and applied correctly.

Beyond the previously mentioned study of goose herbivory on wild rice (Haramis & Kearns 2007), the DEIS contains only one mention of a peer review article on goose herbivory (Conover 1991; cited in the DEIS as Conover 1999), where numerous others (e.g., Bushbaum et al. 1987, Buchsbaum & Valiela 1987) would have been within range of even a modest literature review. The same holds for nuisance abatement strategies (e.g., Aguliera et al. 1999, Conover 1985, 1992, Fairaizl 1992, Heinrich & Craven 1990, Whitford 2002, 2008). They simply are not reviewed or analyzed sufficiently and the literature covered is almost wholly from secondary rather than primary sources, with little useful information incorporated into the development of alternatives.

**Corr. ID: 5** **Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 235706 **Organization Type:** Unaffiliated Individual

**Representative Quote:** There is little evidence established in the DEIS for goose impacts, other than the anecdotal visual monitoring and preliminary exclusion studies cited. Beyond that, the DEIS fails to establish sufficiently the extent, timing, nature, and variability in damage caused or said to be caused by Canada geese throughout the Anacostia restored wetlands. It does say that "...some wetland planting areas in Kingman March....have been nearly destroyed..." [emphasis added], but this hardly suffices as justification to kill hundreds of geese and then kill even more (DEIS: 43) if as-yet-to-be-defined objectives are not met.

A single peer-review research paper is cited about goose impacts to aquatic plantings, this concerning the effects of goose herbivory on wild rice (*Zizania aquatica*) in the Patuxent River (Haramis & Kearns 2007). This is suggestive of the potential for geese to impact aquatic plantings, but the DEIS itself and supporting literature (e.g., Buschbaum et al. 1984, Buschbaum & Valiela 1987, Conover 1991) note there is considerable variability in the palatability of plants to geese and other herbivores. The DEIS repeatedly makes vague (e.g., reduction of the goose population would "...result in indirect improvements to wetland vegetation as well as terrestrial vegetation." DEIS: 193) and unsubstantiated ("Currently, resident Canada goose herbivory is reducing aerial coverage of wetland vegetation." DEIS: 191) claims. The Final EIS must deal with the many inconsistencies inherent in such statements as well as address the issue of preference and palatability by examining thoroughly the option of wetlands plantings that would naturally resist goose herbivory while functionally serving the purposes NPS seeks. This is especially critical in light of the many other factors that would tend to impede wetlands sustainability in this system.

**Corr. ID:** 6

**Organization:** *Not Specified*

**Comment ID:** 235724

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The plan/EIS should include an analysis of where the resident geese congregate within the park and the factors that makes those habitats attractive to geese. NPS has records of the location of goose nests (p. 45). That data along with the goose count data in the tables on pp. 162-163 should be analyzed to identify where the geese are. Those habitats should be evaluated to identify the key factors that make them desirable to geese. Wildlife biologists have extensively studied the habitat factors that affect resident goose populations. A summary of that literature should be a part of the management plan. More discussion of habitat modification at goose congregation sites within the park should be in the plan.

**Response:** The NPS obtained and reviewed the suggested data/resources and incorporated information from these sources into the Final plan/EIS, where applicable (see the "Resident Canada Geese" section of Chapter 3 and 4 in the Final plan/EIS). The Conover 1999 reference was changed to Conover 1991 and the Bates 2010a and NPS 2010a references were resolved. The NPS acknowledges that more data are available every year and there is some uncertainty since impacts are observational, but the integration of Adaptive Management as part of the plan/EIS aims to resolve these uncertainties in the future. Also, in response to Concern ID 34531, the NPS has added a discussion regarding the behavioral differences that distinguish resident Canada geese from migratory Canada geese in Chapter 3, "Resident Canada Geese" of the Final plan/EIS.

Additional data on existing conditions have been added to the Final plan/EIS. Specifically, the 2010 and 2011 goose count data have been added to the "Resident Canada Geese" section of Chapter 3 of the Final plan/EIS to further describe current conditions at the park. The "Need for Action" section in Chapter 1 was also enhanced to communicate the necessity for resident Canada goose management at the park. The results of the most recent herbivory studies were added to the Final plan/EIS to demonstrate the need for reducing the population of resident Canada

geese within the park. This information was also added to the “Background on Wetlands Restoration and Resident Canada Goose Management” section in Chapter 1.

Information on the location of resident Canada geese within the park was included in the Draft plan/EIS, and can be found in Chapter 3, “Resident Canada Geese”, as well as in Tables 5 and 6, of the Final plan/EIS. In response to the comments, the reasoning behind why geese prefer certain areas of the park was enhanced in this section, however, habitat modification to address impacts from resident Canada geese is already addressed in the plan where it would be consistent with park purpose, significance, and mission goals (see response to concern ID 34533).

**Concern ID:**

**CONCERN  
STATEMENT:**

**Representative Quote(s):**

The plan/EIS should include results from water quality tests within the Anacostia River.

**Corr. ID:** 1

**Organization:** Not Specified

**Comment ID:** 235685

**Organization Type:** Unaffiliated Individual

**Representative Quote:** where are the water quality tests and why are they not part of the eis?

**Response:**

Water quality sampling and data collection were not conducted for this plan/EIS. A general discussion of Anacostia River water quality had already been included in the plan/EIS from previous studies that collected water quality data in the vicinity of the park. Please see Chapter 3, “Water Quality” of the Final plan/EIS for a discussion of water quality and Chapter 4, “Water Quality” of the Final plan/EIS for a cumulative impacts analysis of water quality.

## VE4000 - VISITOR EXPERIENCE: IMPACT OF PROPOSAL AND ALTERNATIVES

**Concern ID:**

34570

**CONCERN  
STATEMENT:**

Commenters feel that the experiences of losing resident Canada geese from the park and the humaneness of the action have not been addressed thoroughly in the document.

**Representative Quote(s):**

**Corr. ID:** 5

**Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 235714

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The DEIS does not adequately address the human environment. Humaneness not considered.

One of the objectives of the NEPA process is to address concerns emanating from the values and beliefs people hold concerning the environment, and to take into account how the public at large regards proposed federal actions. The DEIS addresses what it calls the “visitor experience” or “natural recreation experience” in several places, but largely in a way that dismisses any notion that individuals or groups will experience any sense of loss if geese are killed. The controversies surrounding lethal control of resident geese are well known and have been addressed (e.g., Loker et al. 1999, Swift 2000) in ways that should have made it clear to the preparers of this DEIS that a close look at the issue of valuation of geese was mandatory. The FEIS must fully account for the human dimension in managing conflicts with geese, addressing this issue far more substantively than has been done.

**Corr. ID:** 5

**Organization:** The HSUS, ASPCA, & City Wildlife

**Comment ID:** 235715

**Organization Type:** Unaffiliated Individual

**Representative Quote:** The methodologies NPS proposes for lethal removal of geese must also be critically examined and their humaneness evaluated. Where geese are frequently referred to as a nuisance (e.g. DEIS: 62) virtually no mention,

**Response:**

and clearly no analysis, is made concerning the value they may have for individuals or groups. The Final EIS must address these factors and it must describe in far greater detail the extent to which geese will suffer during the process of removal and killing and the humaneness of the killing methods.

In regards to concerns over the impact that the loss of resident Canada geese would have on park visitors, the NPS feels it has adequately addressed this concern in the discussion of objectives, desired conditions, and in the analysis of impacts to resident Canada geese, as well as the “Visitor Experience” and “Aesthetics” sections of Chapter 4 (see Chapter 4, “Visitor Use and Experience” of the Final plan/EIS for a discussion of these benefits). As noted in response to **concern ID 34545**, the NPS made it clear in several sections of the plan/EIS that the park would manage a population of, and not eradicate Canada geese. Even though a percentage of the resident Canada goose population would be removed as a result of implementing this plan/EIS, some Canada geese would remain in the park, including both resident and migratory Canada geese. The combined wetland and resident Canada goose management would allow wetlands to reach the desired condition of predominantly self-sustaining wetland systems and would enhance habitat for migratory Canada geese that use the park on a seasonal basis. This would have benefits for migratory Canada geese which are a natural part of this ecosystem, and for the aesthetics of the park and experience of visitors who enjoy more natural fluctuations of geese populations.

The “Visitor Use and Experience” section of the plan/EIS thoroughly analyzed three groups of users at the park to equally consider the feelings of all visitors, including not only visitors who enjoy seeing resident Canada geese at the park, but also visitors who do not enjoy resident Canada geese at the park, and visitors who do not care whether resident Canada geese are at the park. Each of the different users of the park had varying expectations and impacts as a result of the no action alternative and management alternatives. For some users, resident Canada geese are recognized as providing a number of public benefits and these benefits are adequately described in the plan/EIS. For example, the benefits of a resident Canada goose population in urban areas such as Anacostia Park include the aesthetic value of the presence of these birds. For some park users, the resident Canada goose population at Anacostia Park may mark the only opportunity to view wildlife. The presence of these geese therefore, provides a positive park experience for this group of users. These visitors would be pleased to see and observe goslings and adult resident Canada geese year round in large numbers. Impacts to this user group would continue to be beneficial since visitors could continue to view goslings and adult resident Canada geese year round within the park, but the population would be reduced under the preferred alternative (alternative B).

The NPS also believes humaneness was thoroughly considered and addressed in the Draft plan/EIS. As was stated, the NPS would conduct any lethal management actions in accordance with the American Veterinary Medicine Association guidance (AVMA 2007), to ensure actions are conducted as humanely as possible to minimize goose suffering (see Chapter 2, “Resident Canada Goose Management” of the Final plan/EIS). Additionally, the NPS would conduct population reduction strategies in a controlled manner and mitigation is described in detail and would be employed to minimize goose suffering (see Chapter 2, “Resident Canada Goose Management” of the Final plan/EIS). As stated in the plan/EIS, sedated resident Canada geese would only be captured by trained wildlife officials and would be taken off-site to be euthanized. If shooting is required for isolated incidences only, this activity would only be undertaken by qualified federal employees that are trained, experienced, and licensed to use a firearm. Additional text was incorporated into the Final plan/EIS concerning impacts of lethal removal (see Chapter 2, “Resident Canada Goose Management” of the Final plan/EIS). Text



was updated to state that the captured resident Canada geese during round-ups would only include mature geese and self-sufficient young-of-the-year geese. Goose round-ups would occur during the summer months when adult geese are molting and flightless (starting June 15 in the Mid-Atlantic) and when young-of-the-year (juveniles less than 1 year old) are considered self-sufficient but unable to fly. Therefore, young-of-the-year geese that remain in the park after the roundups would be expected to survive on their own.

## WF1100 - WILDLIFE FEEDING

**Concern ID:** 34571

**CONCERN STATEMENT:** [Wildlife feeding should be prohibited and enforced at Anacostia Park.](#)

**Representative Quote(s):** **Corr. ID:** 4 **Organization:** People for the Ethical Treatment of Animals (PETA)

**Comment ID:** 235702 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Most importantly, implement and enforce a wildlife feeding prohibition.

**Response:** As noted in the “Management Techniques Common to all Action Alternatives (B through E)” in the Final plan/EIS, wildlife feeding in National Park Units is prohibited under 36 CFR 2.2. Additionally, this section notes the specific steps the NPS has committed to for communicating and enforcing this prohibition. See Chapter 2, “Management Techniques Common to all Action Alternatives (B through E)” of the Final plan/EIS for a detailed discussion.

## WH1100 - WILDLIFE AND WILDLIFE HABITAT

**Concern ID:** 34572

**CONCERN STATEMENT:** [The impacts on other wildlife throughout the park from implementing visual deterrents as a control measure for resident Canada geese should be analyzed in the plan/EIS.](#)

**Representative Quote(s):** **Corr. ID:** 6 **Organization:** Not Specified

**Comment ID:** 235727 **Organization Type:** Unaffiliated Individual

**Representative Quote:** Visual deterrents such as Mylar tape, flags, balloons and dogs are mentioned as control measures (p. 65). What would be the impact on other wildlife, such as ospreys and bald eagles?

**Response:** The NPS has updated the Final plan/EIS to address this concern under the Vegetation and Wildlife Impacts section of Chapter 4. Although the bald eagle was removed from the list of threatened and endangered species in 2007, the eagle is still protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act (as are ospreys). The use of scare and harassment techniques to manage resident Canada geese at the park would not be likely to affect either the bald eagle or the osprey, that utilize the shorelines of the Anacostia River. Visual deterrents such as mylar tape, flags, balloons, and dogs may cause bald eagles or ospreys to temporarily avoid that particular area during the use of these scare and harassment techniques. However, both the bald eagle and osprey are using “airspace” over or immediately adjacent to the shorelines which would not be expected to overlap with the areas where scare/harassment techniques are being applied. These techniques would have a negligible impact on bald eagles and ospreys at the immediate area disturbed, but only during the period of scare/harassment activities. There are bald eagle nests along the Anacostia River in the park (along Shepherd Parkway), but this area is not proposed for visual deterrents. If necessary in the future, coordination with the USFWS would occur prior to implementing scare/harassment techniques.

## WQ4000 - WATER RESOURCES: IMPACT OF PROPOSAL AND ALTERNATIVES

**Concern ID:** 34573  
**CONCERN STATEMENT:** Commenters suggested avoiding impacts to existing wetlands and if wetland impacts cannot be avoided, proper permits must be obtained.  
**Representative Quote(s):** **Corr. ID:** 8 **Organization:** USEPA Region III  
**Comment ID:** 235734 **Organization Type:** Federal Government  
**Representative Quote:** EPA recommends avoiding and minimizing impacts to existing wetlands. If impacts to aquatic resources are to occur the proper permits must be obtained.  
**Response:** The NPS would obtain any required permits, as stated in Chapter 4 of the Draft plan/EIS (please see Chapter 4, “Wetlands” of the Final plan/EIS for these discussions).



## INDEX BY ORGANIZATIONS

Note: In many instances, the organization type was not defined by the commenter; therefore, organizations were listed as "Unaffiliated Individuals". N/A represents individuals who did not submit their first or last name.

Organization	Corr. ID	Code	Description
Conservation/Preservation			
Anacostia Watershed Society\	12	AL1300	Alternatives: New Elements
		AL1500	Alternative B: Supports Alternative
		PC1100	Project Costs
Federal Government			
DC State Historic Preservation Office	7	CR4000	Cultural Resources: Impact Of Proposal And Alternatives
USEPA Region III	8	WQ4000	Water Resources: Impact Of Proposal And Alternatives
State Government			
Maryland Historical Trust	9	CR4000	Cultural Resources: Impact Of Proposal And Alternatives
Unaffiliated Individual			
People for the Ethical Treatment of Animals (PETA)	4	AL1300	Alternatives: New Elements
		AL1900	Vegetative Buffers
		AL2800	Alternative E: Supports Alternative
		AL4200	Lethal Control
		AL4300	Alternative Elements: Scare Tactics
		AL4600	Egg Addling
		WF1100	Wildlife Feeding
The HSUS, ASPCA, & City Wildlife	5	AE12000	Affected Environment: Wildlife And Wildlife Habitat
		AL1300	Alternatives: New Elements
		AL3900	Alternative D: Supports Alternative
		AL4000	Alternative Elements: Supports Non-Lethal Measures
		AL4200	Lethal Control
		AL4210	Oppose Lethal Control
		AL4900	Goose Nest Destruction
		GA1000	Impact Analysis: Impact Analyses
		LU1100	Land Use
		PC1100	Project Costs
		PN1100	Purpose and Need: Methods and Assumptions
		PN1600	Other Park Goals and Management Plans
The HSUS, ASPCA, & City Wildlife (continued)		PSCA001	Non-goose impacts on water quality
		PSCA010	Other stressors on restored wetlands
		PSSM002	Need for Additional Data/Science

Organization	Corr. ID	Code	Description
		VE4000	Visitor Experience: Impact Of Proposal And Alternatives
USGS Patuxent Wildlife Research Center	2	AL1300	Alternatives: New Elements
		CC1100	Effects of Climate Change
		DE1100	Document Edits
		MP1100	Monitoring Protocol
		PSAE040	Wetland functions
former Anacostia Watershed Society staff	3	AL1500	Alternative B: Supports Alternative
		CC1100	Effects of Climate Change
		DE1100	Document Edits
N/A	1	AL1300	Alternatives: New Elements
		AL4210	Oppose Lethal Control
		PSCA001	Non-goose impacts on water quality
		PSSM002	Need for Additional Data/Science
	6	AL1300	Alternatives: New Elements
		AL1500	Alternative B: Supports Alternative
		AL4200	Lethal Control
		AL5000	Goose Population Goal
		DE1100	Document Edits
		PC1100	Project Costs
		PP1100	Public Participation
		PSAE010	wetland restoration
		PSSM002	Need for Additional Data/Science
		WH1100	Wildlife and Wildlife Habitat
	10	AL4000	Alternative Elements: Supports Non-Lethal Measures
		AL4210	Oppose Lethal Control
	11	CC1100	Effects of Climate Change
	13	AL1300	Alternatives: New Elements
		AL1500	Alternative B: Supports Alternative
		AL4200	Lethal Control
		AL5000	Goose Population Goal
		DE1100	Document Edits
		PC1100	Project Costs
		PSAE010	wetland restoration
		PSSM002	Need for Additional Data/Science

## INDEX BY CODE

Note: Those correspondences identified as N/A represent unaffiliated individuals.

Code	Description	Organization	Corr. ID
AE12000	Affected Environment: Wildlife And Wildlife Habitat	The HSUS, ASPCA, & City Wildlife	5
AL1300	Alternatives: New Elements	Anacostia Watershed Society	12
		People for the Ethical Treatment of Animals (PETA)	4
		The HSUS, ASPCA, & City Wildlife	5
		USGS Patuxent Wildlife Research Center	2
		N/A	1
			6
			13
AL1500	Alternative B: Supports Alternative	Anacostia Watershed Society	12
		former Anacostia Watershed Society staff	3
		N/A	6
			13
AL1900	Vegetative Buffers	People for the Ethical Treatment of Animals (PETA)	4
AL2800	Alternative E: Supports Alternative	People for the Ethical Treatment of Animals (PETA)	4
AL3900	Alternative D: Supports Alternative	The HSUS, ASPCA, & City Wildlife	5
AL4000	Alternative Elements: Supports Non-Lethal Measures	The HSUS, ASPCA, & City Wildlife	5
		N/A	10
AL4200	Lethal Control	People for the Ethical Treatment of Animals (PETA)	4
		The HSUS, ASPCA, & City Wildlife	5
		N/A	6
			13
AL4210	Oppose Lethal Control	The HSUS, ASPCA, & City Wildlife	5
		N/A	1
			10
AL4300	Alternative Elements: Scare Tactics	People for the Ethical Treatment of Animals (PETA)	4
AL4600	Egg Addling	People for the Ethical Treatment of Animals (PETA)	4
AL4900	Goose Nest Destruction	The HSUS, ASPCA, & City Wildlife	5
AL5000	Goose Population Goal	N/A	6
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Code	Description	Organization	Corr. ID
CC1100	Effects of Climate Change	USGS Patuxent Wildlife Research Center	2
		former Anacostia Watershed Society staff	3
		N/A	11
CR4000	Cultural Resources: Impact Of Proposal And Alternatives	DC State Historic Preservation Office	7
		Maryland Historical Trust	9
DE1100	Document Edits	USGS Patuxent Wildlife Research Center	2
		former Anacostia Watershed Society staff	3
		N/A	6
			13
GA1000	Impact Analysis: Impact Analyses	The HSUS, ASPCA, & City Wildlife	5
LU1100	Land Use	The HSUS, ASPCA, & City Wildlife	5
MP1100	Monitoring Protocol	USGS Patuxent Wildlife Research Center	2
PC1100	Project Costs	Anacostia Watershed Society	12
		The HSUS, ASPCA, & City Wildlife	5
		N/A	6
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PN1100	Purpose and Need: Methods and Assumptions	The HSUS, ASPCA, & City Wildlife	5
PN1600	Other Park Goals and Management Plans	The HSUS, ASPCA, & City Wildlife	5
PP1100	Public Participation	N/A	6
PSAE010	wetland restoration	N/A	6
PSAE040	Wetland functions	USGS Patuxent Wildlife Research Center	2
PSCA001	Non-goose impacts on water quality	The HSUS, ASPCA, & City Wildlife	5
		N/A	1
PSCA010	Other stressors on restored wetlands	The HSUS, ASPCA, & City Wildlife	5
PSSM002	Need for Additional Data/Science	The HSUS, ASPCA, & City Wildlife	5
		N/A	1
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VE4000	Visitor Experience: Impact Of Proposal And Alternatives	The HSUS, ASPCA, & City Wildlife	5
WF1100	Wildlife Feeding	People for the Ethical Treatment of Animals (PETA)	4
WH1100	Wildlife and Wildlife Habitat	N/A	6
WQ4000	Water Resources: Impact Of Proposal And Alternatives	USEPA Region III	8

## COMMENT LETTERS

GOVERNMENT OF THE DISTRICT OF COLUMBIA  
STATE HISTORIC PRESERVATION OFFICER



September 27, 2011

Mr. Alexcy Romero  
Superintendent, National Capital Parks-East  
National Park Service  
1900 Anacostia Drive, SE  
Washington, DC 20020

RE: Draft Environmental Impact Statement (DEIS) for Anacostia Park Wetlands Management Plan with Resident Goose Management Strategies, Anacostia Park

Dear Mr. Romero:

Thank you for providing the DC State Historic Preservation Office (SHPO) with the above-referenced document. We have reviewed the DEIS information in accordance with Section 106 of the National Historic Preservation Act and are writing to provide our comments regarding effects on historic properties.

### Historic Built Environment:

Based upon our review of the various alternatives described in DEIS, we agree with the National Park Service (NPS) that there is potential for some of the actions currently being evaluated to constitute an "adverse effect" on the historic built environment. Most notably, installing "seawall breaks" in the National Register-eligible Anacostia Seawall could diminish the integrity of this resource. If one of the alternatives that propose this type of action is selected, the NPS should notify our office and provide additional information about the exact location of the proposed breaks and the existing conditions of the seawall in these specific areas. Once that information is provided, we will consult further with the NPS to make a determination of effect and to continue the Section 106 process.

### Archaeology:

Based upon our review of the various alternatives described in DEIS, we agree with the National Park Service (NPS) that there is potential for some of the actions currently being evaluated to constitute an "adverse effect" on potential archeological resources. Once an alternative is selected, the NPS should notify our office and provide the proposed locations of ground-disturbing activities. After that information is provided, we will consult further with the NPS to make a determination of effect and to continue the Section 106 process as described on page 261.

If you should have any questions or comments regarding this matter, please contact me (for historic built environment) at [andrew.lewis@dc.gov](mailto:andrew.lewis@dc.gov) or 202-442-8841 or Ruth Troccoli (for archaeology) at [ruth.troccoli@dc.gov](mailto:ruth.troccoli@dc.gov) or 202-442-8836. Otherwise, thank you for providing this opportunity to review and comment. We look forward to consulting further with the NPS on this project.

Sincerely,

C. Andrew Lewis  
Senior Historic Preservation Specialist  
DC State Historic Preservation Office

09-412

1100 4<sup>th</sup> Street, SW, Suite E650, Washington, DC 20024 Phone: 202-442-7600, Fax: 202-442-7638



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

September 26, 2011

Alexcy Romero, Superintendant  
National Capitol Parks-East  
1900 Anacostia Drive, SE  
Washington D. C. 20020

09/30/11 [signature]

RE: Wetlands and Resident Canada Geese Management Plan/ Draft Environmental Impact Statement, Anacostia Park, June 2011 CEQ # 20110238

Dear Superintendent Romero:

In accordance with the National Environmental Policy Act (NEPA) of 1969, and Section 309 of the Clean Air Act, the Environmental Protection Agency (EPA) has reviewed the Wetland and Resident Canada Geese Management Plan Draft Environmental Impact Statement (DEIS), Anacostia Park. The park occupies 1,300 acres along 5 miles of the Anacostia River shoreline within Washington D.C. and Maryland. According to the DEIS, the purpose of this plan is to guide and direct the actions of the NPS in the management of wetlands and resident Canada geese at Anacostia Park. Currently, some restored wetlands at the park are being damaged by grazing resident Canada geese resulting in: adverse change to the emergent vegetation and submerged aquatic vegetation structure and composition; erosion and sedimentation problems in the Anacostia River that have negatively impacted the water quality in the river; and potential adverse effects on wildlife and fisheries habitat and the natural distribution, abundance, and diversity of native plant species. A population goal of 54 geese has been established for Anacostia Park.

According to the DEIS, the alternatives evaluated in this document rely on adaptive management to guide the implementation of the preferred alternative. This document is a general plan for the management of wetlands and resident geese within the park and evaluates the impacts at a programmatic level. Additional NEPA analysis may be required for some future management projects prior to construction or implementation of these projects. Should the evaluation of monitoring data indicate the need for action, NPS will select a management option from those available within the preferred alternative that best responds to the conditions documented by monitoring. The Alternatives evaluated in the DEIS include:

- Alternative A (No action)
- Alternative B (Preferred Alternative) - provides the highest level of wetlands and goose management. Also considers new wetland restoration options (lethal and non lethal controls).

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-Alternative C - includes moderate wetlands management with moderate goose management. This alternative assumes that more intensive wetland management would be needed to counteract the resident goose population that would remain in the area.

-Alternative D - low wetlands management and low goose management. Lethal goose management only one time during the plan and only as a last resort.

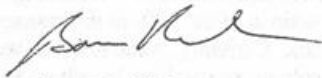
-Alternative E - most aggressive wetlands management techniques with intensive non-lethal goose management. This alternative would consider new wetland restoration options as well.

Based on our review, this DEIS is rated "LO" (Lack of Objections). A description of our rating system can be found at: <http://www.epa.gov/compliance/nepa/comments/ratings.html>.


EPA recommends avoiding and minimizing impacts to existing wetlands. If impacts to aquatic resources are to occur the proper permits must be obtained. We look forward to working with you as the project continues to move forward through any additional potential NEPA and Clean Water Act Section 404 permit process.

Thank you for the opportunity to offer these comments. If you have any questions, please contact Ms. Barbara Okorn at (215) 814-3330.

Sincerely,



Barbara Rudnick  
NEPA Team Leader  
Office of Environmental Programs

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201102942

United States Department of the Interior

NATIONAL PARK SERVICE  
National Capital Parks-East  
1900 Anacostia Drive SE  
Washington, D.C. 20020

F  
NPS  
ESZ/JES

RECEIVED  
JUL 25 2011  
BY: \_\_\_\_\_

Dear Sir or Madam:

The National Park Service (NPS), announces the availability of the Draft Anacostia Park Wetland and Resident Goose Management Plan and Draft Environmental Impact Statement (DEIS) for public review and comment. PR Co.

The purpose of this Draft Plan/EIS is to guide and direct the actions of the NPS in the management of wetlands and resident Canada geese at Anacostia Park. It seeks to provide an integrated tool designed to allow for long-term planning and management for both wetlands and resident Canada geese, including strategies to facilitate the success and functionality wetland restoration activities at the park.

Five alternatives are analyzed in detail in the Draft Plan/EIS: the no action alternative, which represents the continuation of current management activities, and four action alternatives that range in the type, number, and intensity of wetland management techniques and goose management techniques. The no action alternative (alternative A), includes management techniques that are currently occurring in the park. Alternatives B through E offer combinations of high and low intensity techniques for wetland and goose management, which are described fully in the alternatives chapter (chapter 2). Low intensity wetland and goose management represent the least number of techniques and the fewest locations available for the park to implement. High wetland and goose management represents the maximum number of techniques available to the park to implement and would be applied at the maximum level of effort and at numerous locations.

This DEIS was prepared in accordance with National Environmental Policy Act (NEPA) of 1969, as amended, and implementing regulations 40 CFR Parts 1500-1508, and NPS Director's Order #12 and Handbook, Conservation Planning, Environmental Impact Analysis, and Decision-Making (DO-12). Compliance with Section 106 of the National Historic Preservation Act of 1966 is occurring in parallel with the NEPA process.

**Access to the Document:**

Public review copies of the DEIS will be available at the following locations:

Kenilworth Aquatic Gardens Visitor Center  
1550 Anacostia Avenue, NE  
Washington, D.C. 20019

Langston Golf Course Club House  
2600 Benning Road, NE  
Washington, D.C. 20002

The Maryland Historical Trust has determined that there are no historic properties affected by this undertaking.

*Jonathan Sayers* Date 8/24/11  
\*No HP in Maryland

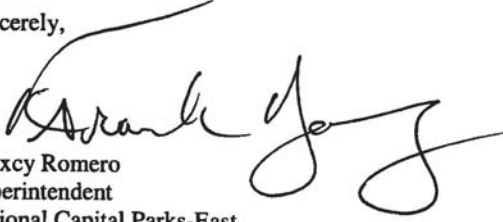
Archeo: IBBC 8/12/2011

16  
JES  
8/24/11



Thank you for your interest and participation in this process.

Sincerely,

  
for Alexcy Romero  
Superintendent  
National Capital Parks-East

## Correspondence (1)

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## Author Information

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## Correspondence Information

**Status:** Reviewed **Park Correspondence Log:**  
**Date Sent:** 07/29/2011 **Date Received:** 07/29/2011 12:35 PM  
**Number of Signatures:** 1 **Form Letter:** No  
**Contains Request(s):** No **Type:** Web Form  
**Notes:**

## Correspondence Text

i do not favor any lethal actions against the geese at this park. it is clear that the problem in the river water is far more about mans toxic chicken farms in the area than the geese. it is about man's toxic chemical load. where are the water quality tests and why are they not part of the eis? eis 20111-0238 needs a new focus. we all like the wildlife. we want it encouraged. we want you to buy a machine, as used on long island, to clean up the pooop. it willpick it up off the ground for deposition to a waste facility. it is time to allow god's creatures to continue to live. i aand a majority of american citizens are sick and tired of the venal, vicious, actions against god's creatures here on earth. co existence is what we need to do. dont you guys in nps have brains so we can find ways to co exist or are you all so brain dead from lead shot that you have no brains left? i know you seem to work for gun mfrs and gunw ackos who murder all species more than the american pubilc these days. i need paper copies of all further actions or public comments on this issue.

## Correspondence (2)

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## Author Information

**Keep Private:** No  
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 USA  
**E-mail:** peachnfrog66@comcast.net

## Correspondence Information

**Status:** Reviewed      **Park Correspondence Log:**  
**Date Sent:** 08/23/2011      **Date Received:** 08/23/2011 7:48 AM  
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**Notes:**

## Correspondence Text

In this extensive DRAFT EIS (EIS) document there are many strong points and information drawing to a reasonable determination of Alternative B as the best management option. However, there are some egregious omissions, inconsistencies and outright errors that need to be considered/dealt with in producing the working/FINAL EIS.

Before getting to details I feel compelled to mention, as an obvious concerned party, that the Science Team (P. 287) failed to include any scientists with good familiarity with the Anacostia wetland system. I will be on travel through September 19, 2011 but would gladly make myself available thereafter to go through the EIS with a member(s) of the preparation team in the interest of cleaning up the document. There are far too many items for me to list at this time, but I will mention some of the more important issues.

The third listed objective for wetlands (P. 3) should be more explicit and/or elements considered under wetland restoration should be more comprehensive. Implicit in that third objective should be: The National Park Service (NPS) saw fit to include Wetland Management in this EIS as one of the two principal elements even though it is overtly directed toward goose management and its repercussions. As the primary manager of almost all the tidal wetlands along the Anacostia in Washington, D.C. and in fact the entire Anacostia estuary, the NPS MUST exert itself consistent with the wetland management responsibilities it is accepting, as the leader (i.e., utilize strong proactive LEADERSHIP) toward achieving restoration of the Anacostia estuary as an integrated system. This then goes beyond the current piecemeal locations of the few reconstructed wetlands and thus among other things needs to include overt support for additional reconstructed freshwater tidal wetlands in the Anacostia.....Nowhere that I could find in the EIS in conjunction with wetland restoration was there mention of actively seeking creation of additional wetlands using placed sediments. (Hidden away p. 192 under Soils, Alternative B it does say....."Wetland management techniques are proposed to improve the existing wetlands and create new wetlands along the Anacostia River....thus stabilizing soils adjacent to the Anacostia River ". So, hardly a ringing call for restoration of the river and creating habitat.) For the Anacostia wetland system to be functional as a unit there needs to be a critical mass of

interrelated/interconnected wetlands – especially to be able to attract and support wetland fauna that once flourished there. This important thrust is supported by:

(p. 29) Section 4.6 of NPS Policies 2006:

(1) Provide leadership and take action.....

(2) Preserve and enhance.....

(P. 28) NPS Management Policies 2006 , Sect. 4.41: NPS will achieve this (...maintain plants and animals) by "preserving and restoring the natural abundance, diversity, distribution, habitat and behavior.....and ecosystem in which they occur.

(p. 29 and 30) NPS Management Policies 2006 ('Wetlands').... In addition the NPS will strive (i.e. exert leadership!! – RSH) to achieve a longer term goal.....through restoration of previously degraded or destroyed wetlands.....the Service will to the extent practicable, restore them to pre disturbance conditions.

(P.30 and 135) Under Director's Order #77-1 and Order # 12 (p. 185): 'Where appropriate and practical, the NPS will not simply protect (i.e., maintain – RSH) but will seek to enhance natural wetland values.....

The above (a-d) is essentially repeated and emphasized on p. 211

Aspects of the above should also be included under Impact Topics, etc.....Wetlands (restoration includes striving to make the Anacostia a functional system including significant additional wetlands), as well as Park Management Operations (leadership responsibilities)

The above are also consistent with and supported by (P. 31 and 32) the District of Columbia Wetland Conservation Plan, the Anacostia Waterfront Initiative, the Anacostia Watershed Restoration Agreement, the USFWS Wetlands Action Plan; (p.12) USACE study (2005). Also see p.17 A Functional Wetland System #s 2 and 4. Also see Aquatic Resources P. 222 and 223, as well as Vegetation p.228.

Besides quoting the classic definitions of wetlands (Cowardin, USACE) the EIS does not do full justice to the characterizations of the tidal wetlands. It should be clearly noted:

Freshwater tidal wetlands are an integrated system containing a balance of relatively deep open water, shallow waters (sufficient to support submersed aquatic vegetation = SAV), intertidal mudflats, emergent wetlands, wet meadows, swamp forest, etc. All these components are especially valid for the Anacostia. (Thus the description of General Vegetation and Habitat on p. 150 is incomplete). Therefore, while emphasis on emergent wetlands (vegetation) is fine, the roles of other components should be brought out along with the need for NPS to manage them correctly. The whole interrelated/integrated system needs to be protected, maintained and enhanced (involves significant restoration). This is particularly true now when open water systems predominate. It is also important that zeal for restoring wetlands does not just focus on emergent vegetation but also, for example, includes mud flats. Yes, there is a paragraph on SAV (p. 25). It should be noted there how important a component SAV was in the mid 1800s. SAV needs emphasis (leadership) as part of restoring the Anacostia. Even small efforts, despite excess turbidity, can promote 'mini pools' in which pockets of SAV can survive in the Anacostia. Also, for the record I/we have noted limited SAV at Kingman Marsh Area 1 over the past several years. The point is SAV restoration should not be written off as a poor bet.

A major area of inconsistency has to do with the nomenclature, acreages, maps and photograph identifications/labels. For example, in some places Kingman Area 1 and 2 are used, while others mention Kingman North and South. Some maps include Heritage Marsh, Fringe Marsh, PEPCO Marsh, others don't. Some places use the term Kingman Marsh inclusively with Heritage Marsh as a unit. The photograph on p. 41 is labeled Kingman Marsh but is really mostly Heritage Marsh. I would lay the responsibility on NACE to provide a better set of nomenclature that would be satisfactory to NPS. After all, the current situation is confusing. Just like Kenilworth is comprised of two major separate pieces (Mass Fill 1 and 2 – oy!!), so is Kingman. The northern piece (Kingman Area 1) and the southern piece (Kingman Area 2) were reconstructed in 2000. Kingman Area 2 is comprised of 8 acres and lies against the west bank of Heritage Island. However, Heritage Marsh was reconstructed (different authorization) in

2006 and occurs within the same piece of water as Kingman Area 2 BUT is separated from Area 2 by the dredged channel and lies along the east bank of RFK Stadium in three separate pieces (separated by design by two pre-existing stormwater outfall runs). So, technically Heritage Marsh is NOT part of Kingman Marsh (and....Heritage Marsh is NOT connected to Heritage Island). Point remains there is terrible inconsistency throughout the EIS especially in the section of marsh descriptions with acreages (Chapt. 3: Affected Environment....and e.g. p 214 PP3). There is even other confusion on p. 4 #1 where it should say Kingman Island instead of Kingman Marsh. To take this in the extreme (ultimate nit pic just to make the point) it doesn't look to me like the Fringe Marsh or Heritage Marsh (this time labeled BUT doesn't show Kingman Area 2 as part of Kingman Marsh) or Kingman Marsh Area 2 shaded.....By the way (p. 145) highlights RFK shoreline without mentioning Heritage Marsh and claims it is within Kingman Marsh. Also, where from did the notion of cattail planting come? It (they = 2-3 types of Typha there) is purely a volunteer, i.e., not planted. And perhaps Typha angustifolia is not native (presumably came from Europe).....

#### Appendix C: Preliminary Monitoring Protocol.....

It was really unclear to me whether this was a projected protocol for future monitoring or whether it refers to the one that is already in place and has been used for two years, OR maybe both!!! The indicated purpose was also fuzzy or even incorrect – or was this component written awhile ago and just not made current. At any rate the protocol pretty much as described was designed not so much to monitor the impacts of herbivory at Kingman Area 1 (p. 339) but to document and try to single out that the primary herbivory was due to resident Canada geese that were to be excluded from the fenced treatment plots (should sustain vegetation even when letting in other herbivores than the geese) as opposed to the exposed control plots which likely would be grazed. Whereas, and this is important, the selection of Alternate B mandates/essentially requires monitoring (of various types) for a number of indicators (especially vegetation) to determine to what extent the elected goose management actions allowed the wetlands to respond/restore. It would seem that this same plot design/set-up of 16 modules randomly located could be used with the primary determination being how well over time the exposed control plots become statistically similar to the exclosed plots. In other words there would be a switch with the current exclosed plots effectively becoming the control while the 'old' /prior exposed control plots become in effect the treatment.....

5. Should I suspect that 'non-mention' of the impacts from sea level rise was deliberate? Thinking long term - As part of Wetland Management responsibility I believe the reconstructed wetlands, or portions thereof, should be part of a long term monitoring program (including the Sediment Elevation Tables = SETs). These reconstructed wetlands present the opportunity to track a habitat from scratch (its beginnings) which is not a prevalent situation (and data has been collected from the beginning, even before.....)

Thanks for the opportunity to provide comments at this time. As stated earlier there are many, many other 'adjustment'/suggested changes that I'd be glad to go over with somebody later on when convenient.

Dr. Richard S. Hammerschlag  
Scientist Emeritus  
USGS Patuxent Wildlife Research Center

## Correspondence (3)

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## Author Information

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## Correspondence Information

<b>Status:</b> Reviewed	<b>Park Correspondence Log:</b>
<b>Date Sent:</b> 09/07/2011	<b>Date Received:</b> 09/07/2011 11:30 AM
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<b>Contains Request(s):</b> No	<b>Type:</b> Web Form
<b>Notes:</b>	

## Correspondence Text

September 7, 2011

Alex Romero, Superintendent  
National Capitol Parks-East  
1900 Anacostia Drive, SE  
Washington, DC 20020

Testimony of Steve McKindley-Ward  
on the Draft Wetlands and Resident Canada Goose Management Plan/EIS

I was glad to learn in July that this draft plan/EIS had been completed. I must say that I was not certain this day would come. But I'm glad it has. My thanks to the National Park Service for seeing the process through.

I like Alternative B, which is the alternative with the most wetland and goose management measures.

I don't have any big comments that would significantly adjust the essential thrust of this document, or Alternative B. It seems good to me. And I'm pleased that Alternative B is NPS's environmentally preferred alternative.

Though I no longer work for the Anacostia Watershed Society, if NPS sees fit to reduce and more closely manage the resident goose population, this will create more incentive, I believe, for public involvement in helping to rebuild DC's largest tidal wetland complex.

If you do so, a feeling I've had will be diminished---the feeling of one step forward/one step backward---that undercutting feeling you get when doing plant restoration work that is likely to be eaten by geese---a feeling I often had while waiting for the NPS decisionmaking process to gear up, and now enter the home stretch. I hope, with aggressive goose management measures, more kids will get an opportunity to transplant arrow arum and pickerelweed plants into the mud (they love it!) and their nonprofit field trip

leaders will feel their work has more of a shot of accomplishing something for our home river.

I said I don't have any big comments to recommend. But I do have a few small suggestions---edits really:

Page 2-The photo caption, I believe, is erroneous. The "denuded" wetland landscape is due to the time of year---early Spring. Only a few of the trees have leafed out in this photo. The perennial and annual wetland plants have not emerged from the mud yet because it hasn't warmed up enough, not due to goose herbivory. Goose herbivory follows when there's something to eat.

Page 31---This page has a list of relevant District of Columbia documents and policies. Left out, however, is the 2006 DC Comprehensive Plan. Under its broad category "Citywide Elements" is an "Environmental Elements" section, and inside this section, at the top of page 6-13, there is a specific mention of the need to control Canada geese. (Action E-1.5.A: Implementation of the Wildlife Conservation Plan. Implement the 2005 Wildlife Management Plan for the District of Columbia, including programs to control the white-tailed deer and Canada goose population, and to improve water quality and habitat in the Anacostia River.) This might be helpful to include.

Page 296---Unless I have a long-lost brother, separated at birth, I think the third citation from the top should be Steve, not "Tom" McKindley-Ward.

Finally, a word about global warming and likely rising tides on the Anacostia:

Oceans rising will have an effect on our tidal river. Long-time Patuxent River naturalist Greg Kearns believes the tidal Patuxent in Prince George's County is rising at the rate of one-eighth of an inch per year. If that is true, it makes sense to assume that the Anacostia should be rising at about the same rate---and will rise about 2 inches during the 15-year life of this plan.

Since tidal elevations matter---and matter in terms of inches---long-term planning for this scenario would seem to be prudent. I may have missed it, but I didn't see this addressed in the plan/EIS.

Finally, a word of encouragement for all of us to get more involved in slowing our use of fossil fuels to mitigate the worst outcomes of climate change.

One specific step we can take this fall is to encourage President Obama to live up to his campaign promises for turning to renewable energy and to rebuff the momentum toward building the Keystone XL pipeline from the north Alberta "tar sands" 1,700 miles south to Texas refineries. He will be able to decide the fate of this environmentally disastrous pipeline himself---without Congress. Dr. James Hansen, noted NASA climate scientist, said this summer: "Phase out of emissions from coal is itself an enormous challenge. However, if the tar sands are thrown into the mix, it is essentially game over" for a stable climate.

So, three additional measures for the long-term success of the Anacostia wetlands are:

- 1.) ride your bike as much as you can,
- 2.) use clothespins instead of the dryer,
- 3.) Those two thing and some activism. Demand the change we were promised by Barack Obama.

Thank you.

Steve McKindley-Ward  
4112 30th Street  
Mount Rainier, MD 20712  
s.mckindley.ward@gmail.com

## Correspondence (4)

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## Author Information

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## Correspondence Information

**Status:** Reviewed **Park Correspondence Log:**  
**Date Sent:** 09/19/2011 **Date Received:** 09/19/2011 3:49 PM  
**Number of Signatures:** 1 **Form Letter:** No  
**Contains Request(s):** No **Type:** Web Form  
**Notes:**

## Correspondence Text

September 19, 2011

Stephen Syphax  
Supervisory Resource Management Specialist  
Anacostia Park  
1900 Anacostia Dr. SE  
Washington, DC 20020

Dear Mr. Syphax:

PETA is an international animal protection organization with more than 2 million members and supporters globally. We understand that the U.S. National Park Service in its "Draft Anacostia Park Wetland and Resident Goose Management Plan and Draft Environmental Impact Statement" (DEIS) is considering the use of lethal methods to control unwanted geese at Anacostia Park. We urge the Service to reject alternatives B, C, and D for this reason and to implement effective humane wildlife control methods instead, as described in Alternative E.

Respectfully, lethal methods never work in the long run to control geese populations, and will actually backfire. When animals are killed/removed from the area, a spike in the food supply results. This causes survivors and newcomers to breed at an accelerated rate, and populations can actually increase. Lethal measures are also very cruel. Setting aside the mode of killing (and the trauma that goes with), when adults are removed, families are torn apart, flock dynamics are disrupted, and vulnerable young are left to starve.

An integrated management program involving habitat modification, exclusion, and repellents as proscribed in Alternative E is vital to meet Service goals. Allow vegetation to flourish on banks to impede the movement of geese (birds will refrain from nesting in areas where predators will be an issue). 18-



inch wire, nylon, or plastic fencing will have a similar effect. Employ scare tactics (i.e., kites shaped like predators, remote control boats/planes, flashing lights) in the spring to deter nesting. Statues of dogs/coyotes and flags, Mylar streamers, and other items that move in the wind, as well as noise/sonic deterrents (i.e., air horns, Bird-X GooseBuster), also work great to keep geese away. Other successful goose deterrent methods include keeping grass at least 6" tall on lawns and spraying goose repellent (i.e., ReJeXiT Migrate) on lawns. Eggs should be oiled by trained professional. Most importantly, implement and enforce a wildlife feeding prohibition.

On behalf of our thousands of members in the District of Columbia, we hope to hear that lethal methods will be taken off the table.

Thank you for your consideration.

Sincerely,

Jodi Minion, Wildlife Biologist  
Cruelty Investigations Department  
PETA

## Correspondence (5)

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## Author Information

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## Correspondence Information

**Status:** Reviewed **Park Correspondence Log:**  
**Date Sent:** 09/26/2011 **Date Received:** 09/26/2011 9:56 AM  
**Number of Signatures:** 1 **Form Letter:** No  
**Contains Request(s):** No **Type:** Web Form  
**Notes:**

## Correspondence Text

Alexcy Romero  
Superintendent  
Re: Anacostia Wetland and Canada Goose Management Plan DEIS  
National Capital Parks-East  
1900 Anacostia Drive SE  
Washington, DC 20020

Dear Superintendent Romero:

I am writing on behalf of The Humane Society of the United States (HSUS) and our more than 12 million supporters, including more than 32,000 in the District of Columbia and more than 283,000 in Maryland, The American Society for the Prevention of Cruelty to Animals (ASPCA) and our more than 2.5 million supports nationwide, and City Wildlife, an animal-welfare organization committed to helping urban wildlife in Washington, DC. The HSUS, ASPCA, and City Wildlife appreciate this opportunity to comment on the Draft Anacostia Park Wetland and Resident Canada Goose Management Plan/Environmental Impact Statement (DEIS) dated June 2011. As part of the animal welfare and protection community, our organizations have a long history of involvement in human-wildlife conflict resolution. We promote humane, integrated, and comprehensive conflict resolution strategies and oppose the killing of wild animals as solutions to conflicts, most especially prior to the exhaustion of all other feasible means, efforts, and alternatives.

We are happy to have this opportunity to express our admiration for the National Park Service (NPS) and their partners' efforts to restore viable and vital wetlands to the Anacostia River system. We join with you and others in valuing wetlands for the variety of ecological purposes they serve-that benefit both people and wildlife-and agree that wetlands loss is an issue of urgent national concern. Clearly our understanding of the value of wetlands has changed with time. They are no longer considered breeding grounds of pestilence worthy of elimination. Their destruction is no longer defensible; their restoration is an admirable goal.

However, the plan by NPS to kill hundreds of Canada geese as part of its larger wetlands restoration initiative along the Anacostia River is wrong at a number of levels, and it certainly does not rise to the standards necessary to justify lethal control. We are gravely concerned that geese have been targeted for management within this complex system that is impacted by so many anthropogenic factors. We have questions concerning the identification and delineation of impacts, the documentary basis from which statements about geese and their ecological relationships are made, and the effort made to fully consider alternative means of conflict resolution that are more reasonable and more consistent with an integrated pest management (IPM) approach. We argue, with all respect, that NPS has not seriously considered, researched, or evaluated alternatives to killing and has moved on a decision to use lethal control on the basis of incomplete information and misunderstandings about geese. The decision to proceed with lethal control as the preferred alternative has, as we see it, been made prematurely and recklessly. The following explains further our concerns and offers specific comments on the DEIS.

The DEIS conflates management strategies and fails to clearly delineate management alternatives. The DEIS conflates information about anthropogenic impacts with impacts attributed to geese in a manner that submerges the relatively minor issues associated with geese within a much larger domain of human-caused problems. Thus, it tends to overstate the case it tries to make against geese and understate the case for hydrogeomorphic and other influences on the potential for wetlands restoration. We feel by combining these two very different management issues into this DEIS, NPS implicitly acknowledges that the case against geese is too weak to stand on its own. NPS itself notes the complex hydrological and ecological factors that go in to the establishment and maintenance of artificial wetlands and the dominant role hydrology plays in plant survival (DEIS: 16). The Final EIS must clearly relate the impacts from anthropogenic factors in Anacostia wetlands to impacts from Canada geese. NPS must demonstrate the role that anthropogenic influences such as fluctuating water level, mechanical erosion, sedimentation, pollution, and other factors play with respect to wetland planting success and failure, and then compare these relative to the potential impact from goose herbivory.

The DEIS fails to document current conditions well enough to establish a need for action. Damage to aquatic plants and other environmental impacts not sufficiently described.

The DEIS does not rise to the level of documentation required to establish a need to kill geese—a native, protected species of bird for whom the NPS has a strict protective mandate. The shortcomings are numerous. Perhaps most significantly the DEIS notes (pg. 13) that study began in 2009 to "...determine the impact of herbivory by resident Canada geese on Kingman Marsh," citing a report from that first year that indicates that geese are "inflicting damage" to wetland vegetation there. Following this highly vague and casual problem identification and delineation, NPS goes on to note that the second year of study will be included [our emphasis] in the Final EIS. This is a tacit admission that NPS is proposing to manage geese first and then ask questions about properly documenting their impacts later.

There is little evidence established in the DEIS for goose impacts, other than the anecdotal visual monitoring and preliminary exclusion studies cited. Beyond that, the DEIS fails to establish sufficiently the extent, timing, nature, and variability in damage caused or said to be caused by Canada geese throughout the Anacostia restored wetlands. It does say that "...some wetland planting areas in Kingman March...have been nearly destroyed..." [emphasis added], but this hardly suffices as justification to kill hundreds of geese and then kill even more (DEIS: 43) if as-yet-to-be-defined objectives are not met.

A single peer-review research paper is cited about goose impacts to aquatic plantings, this concerning the effects of goose herbivory on wild rice (*Zizania aquatica*) in the Patuxent River (Haramis & Kearns 2007). This is suggestive of the potential for geese to impact aquatic plantings, but the DEIS itself and supporting literature (e.g., Buschbaum et al. 1984, Buschbaum & Valiela 1987, Connover 1991) note there is considerable variability in the palatability of plants to geese and other herbivores. The DEIS repeatedly makes vague (e.g., reduction of the goose population would "...result in indirect improvements to wetland vegetation as well as terrestrial vegetation." DEIS: 193) and unsubstantiated ("Currently, resident Canada goose herbivory is reducing aerial coverage of wetland vegetation." DEIS:

191) claims. The Final EIS must deal with the many inconsistencies inherent in such statements as well as address the issue of preference and palatability by examining thoroughly the option of wetlands plantings that would naturally resist goose herbivory while functionally serving the purposes NPS seeks. This is especially critical in light of the many other factors that would tend to impede wetlands sustainability in this system.

The DEIS fails to adequately articulate park goals.

The DEIS notes that the park has yet to settle on its management goals through approval of a General Management Plan (GMP) (DEIS: 8-9). This is not an appropriate point of departure for any management program, much less one that calls for killing hundreds of wild, native animals. The vagueness inherent in statements such as "The park staff believes that park wetlands are integral to the functioning of all wetlands within the watershed." (DEIS: 17) and "For this plan, a manageable resident Canada goose population is defined as one that allows restored wetlands within the park to function as wetlands systems." (DEIS: 17) further dilute the credibility NPS must establish to justify any management program.

The "Desired Conditions" articulated by NPS (DEIS: 17) are an apparent place holder for fully articulated management goals and objectives. They are not well explained or defended with respect to other objectives statements scattered throughout the document. The desired conditions further do not relate well to the six articulated priority watershed goals. Nor are they explained well with respect to their standing as NPS policy formulations that would endow authority to manage either wetlands or geese. The Final EIS must explain how, in the absence of an approved GMP, the "Desired Conditions" can assume the power of a mandate to manage Canada geese, especially to manage resident but not migratory geese.

The DEIS fails to discuss fully what is meant by "resident" geese and "invasive" species.

The NPS has a strict protective mandate for native species of wildlife and does not intervene in their management except and where those species have, largely under anthropogenic influences, become so numerous that their control can be justified. Not only do the conditions articulated in the DEIS fail to warrant the killing proposed, but the argument(s) concerning the status of "resident" geese are not sufficient.

NPS describes migratory geese by commenting "Migratory geese are a natural part of the ecosystem, which play an important role in the system." (DEIS: 17). It then describes "resident" geese as a "nuisance" species (DEIS: 20) and by saying "Resident geese stay within Anacostia Park and the surrounding area year round, which ultimately disrupts the natural ecosystem." (DEIS: 17). NPS relegates the major description and discussion of "resident" geese to the section on "Invasive Wildlife Species" (pgs. 157ff) and makes further references to "resident" geese as an "invasive" species in a way that either demonstrates poor understanding of what "resident" and "invasive" mean (e.g., discussion on page 161) or suggest that NPS is simply accepting the perspectives of management agencies with wholly different charters and missions.

The definition that the DEIS gives ("Invasive species can include both plant and animal species that are not native to the area and are likely to threaten the native biodiversity of the habitat." (DEIS:157)) is fraught with questionable meaning and potentially opens the door to reclassifying any species of wild animal that might have made a range adjustment following European settlement. For example, mockingbirds (*Mimus polyglottos*) have significantly expanded their wintering range northward within the last fifty years (e.g., Stiles 1982). Are they "native" to the new areas they occupy or not? If NPS is going to define "resident" geese as a nonnative species then it should be ready to follow a similar practice with respect to many other bird and mammal species that have benefited from human development of landscapes and settlements that encourage range expansions.

NPS must be very careful in the argument it is attempting to make here, which is essentially that "resident" Canada geese lack the "value" of native (i.e., migratory) geese and are a "nuisance" (DEIS: 20) species. That argument may be made (however weakly) by those responsible for managing geese as a consumptive resource, but it should not be applied to species that are engaging in adaptive

behavior. Beyond this, NPS must demonstrate how artificially engineered and planted wetlands can be identified as "native biodiversity" when "resident" geese cannot.

The Final EIS must explain in terms relevant to the NPS mission (as articulated in its Organic Act) how Canada geese can be treated as an "invasive" species. It must provide evidence that a service-wide standard can be applied with respect to other species of native wildlife throughout the parks as regards their classification and status. The perspective applied to "resident" geese in this DEIS is consistent with classifications that flow from agencies who manage these birds for consumptive purposes and do not go to the point, or heart, of NPS positions or policies governing native species.

The DEIS fails to follow IPM policies and practices

The DEIS fails to establish a plan for managing conflicts with Canada geese that follows NPS IPM policies. In employing an IPM approach it would be incumbent on NPS to determine management objectives, then set action thresholds, monitor, and choose action based on selection of least- to most-invasive approaches in order (McShea & DiSalvo 2001). It is consistent with an IPM approach as well that actions be coordinated and integrated in regional approaches, something we have attempted to emphasize in both initial scoping (Brasted to Hazlewood, 8/9/07) and alternatives drafting (Brasted to Syphax, 10/3/08) comments we have submitted. Further, the DEIS' preferred alternative calls for the lethal control of a vertebrate species, raising additional concerns and setting a high bar for how management is planned and implemented. The Final EIS must, therefore, meet the IPM conditions included in the NPS' own 11-step procedure (DiSalvo 2009) as well in the stepwise approach codified in contemporary vertebrate pest management (see summary in Hadidian 2010).

The DEIS does not examine nonlethal management options sufficiently and demonstrates a general lack of understanding concerning how conflicts with Canada geese can be addressed and resolved that is disconcerting. This is especially at issue given the apparent restriction of most, or all, concerns for goose herbivory to the Kingman Marsh site-activities that are likely tied directly to the concentration of geese at the adjacent golf course (Paul et al. 2004). The attraction of geese to sites such as golf courses is well known and the presence of both resident and migratory Canada geese can be successfully addressed with nonlethal means (e.g., Woodruff & Green 1995). Yet, the DEIS (pg. 167) mentions that course managers had only once tried to use a trained dog to deter geese from the site. The Final EIS must present a plan that follows an IPM approach consistent with NPS policies and that demonstrates a systematically integrated series of actions that proceed from least- to most-invasive for the species being managed.

Lack of good science and incomplete consideration of available information

The DEIS relies on information contained in reports, technical brochures, and unpublished materials (and even omits from the bibliography authorities cited in text, such as Bates 2010a) that suggest it was prepared with only casual scholarship. It misses or ignores important factors relating to both the biology and ecology of Canada geese as well as effective nuisance abatement strategies that call to question whether the understanding of goose biology or ecology is sufficient to have planned for management at all. We can only conclude that it was not.

The DEIS (pg. 245) claims that resident geese stay within a 5 to 10 miles radius during non-breeding and 0.25 to 0.50 mile radius during the breeding season, citing itself (NPS 2010a) again with a source that does not appear in the bibliography. No mention is made of the phenomenon of molt migration, despite literature demonstrating that significant proportions of "resident" goose populations will undertake migratory movements when their nests fail (Luukkonen et al. 2008, Dieter & Anderson 2009). In our many years of direct experience with Canada goose programs we have found that egg and nest destruction, combined with harassment such as by trained dogs (Castelli & Sleggs 2000), can be highly successful in eliminating Canada goose problems when timed and applied correctly.

Beyond the previously mentioned study of goose herbivory on wild rice (Haramis & Kearns 2007), the DEIS contains only one mention of a peer review article on goose herbivory (Conover 1991; cited in the DEIS as Conover 1999), where numerous others (e.g., Bushbaum et al. 1987, Buchsbaum & Valiela



1987) would have been within range of even a modest literature review. The same holds for nuisance abatement strategies (e.g., Aguilera et al. 1999, Conover 1985, 1992, Fairaizl 1992, Heinrich & Craven 1990, Whitford 2002, 2008). They simply are not reviewed or analyzed sufficiently and the literature covered is almost wholly from secondary rather than primary sources, with little useful information incorporated into the development of alternatives.

The DEIS makes claims concerning health and safety that are incomplete and could be misleading. The claims made in the DEIS that geese will affect the water quality of the Anacostia River (e.g., "The water quality of the Anacostia River is being affected by the resident Canada geese due to herbivory on wetland plants and as a result of fecal droppings." DEIS: 128 and "The water quality of the Anacostia River is being affected by the resident Canada geese due to fecal droppings..." DEIS: 202) are not substantiated. These statements set up inappropriately negative imagery concerning geese and their impacts that is not mitigated by NPS also saying that impacts from goose feces are almost certainly negligible. If an impact is negligible, then why is it mentioned at all?

The fact is that (at a minimum, by estimates in the DEIS) hundreds of millions of gallons [our emphasis] of combined human sewage and runoff affect the Potomac and Anacostia rivers 75 times a year (on average). It does no honor to NPS' credibility that statements about goose feces and the pathogens that might or might be harbored in their droppings are being made in this document. No credible sourcing is mentioned. With respect to the laundry list of pathogens enumerated, it is not mentioned that they are seldom, if ever, all found in the same population of geese (cf. Bedard, & Gauthier 1986, Converse et al. 2001). NPS also argues that resident geese "may threaten" (DEIS: 235) other wildlife, especially waterfowl through influenza A viruses and avian tuberculosis, but presents nothing by way of evidence that such events have ever happened, much less happened on the Anacostia River. Finally, NPS brings the question of aircraft safety obliquely into the discussion (DEIS 27-28) before suggesting that it is probably not an issue along the Anacostia River at all. The Final EIS must establish exactly what the public health and safety, as well as wildlife health, risks are including how they are measured, estimated, evaluated, and determined. Documentation of the presence and/or potential for risk must be presented rather than vague and oblique comments about how various risks might present themselves.

The DEIS fails to adequately address issues of scale and land use. NPS notes (DEIS: 214) that originally the area of concern along the Anacostia River was flanked by 2500 acres of tidal marsh, of which less than 100 are involved in the current restoration effort at four locations (DEIS: 8). Thus approximately 4% of the original system is being retained, in parcels that range in relative sizes from 0.02% to 1.6% of what formerly existed within this system. The Final EIS must address how such fragmentary remnants of the original tidal marsh can function as it argues wetlands in the Anacostia will, especially to "...improve water quality in the Anacostia River..." (DEIS: 8). It must also demonstrate that restored fragments of this order can sustainably withstand any of the potentially compromising environmental events (e.g., floods, sewage discharge, pollution from runoff, herbivory by geese or other animals, etc.) that can be expected to occur into the future.

As we noted in our comments of August 9, 2007, on the scope of the analysis, land use is both a potentially effected element of the environment and a significant contributor to the issues this Plan/EIS seeks to address. The Plan/EIS Alternatives must include consideration of land use because these uses play a significant role in attracting resident geese to the area around the artificial wetlands. This is particularly true at the Kingman Island site; right next to a golf course and other open grassy public areas. The Park's goal of creating artificial wetlands, admirable as it is, is in serious conflict with the Park's goal of providing the specific recreation opportunities that constitute a magnet for Canada geese. It may simply not be realistic to expect any management concept to work in such an environment without a significant and coordinated effort that occurred across different land management units.

The Final EIS should explicitly include steps to examine land use and consider changes to current and planned land use that could achieve the objectives of the DEIS. Both Council on Environmental Quality (CEQ) regulations (§1502.14(c)) and judicial review have long made it clear that the entire range of reasonable alternative ways to substantially achieve the stated project objectives, including actions the

responsible agency itself cannot implement alone as well as action it may not prefer, must be analyzed

The DEIS does not adequately address the human environment. Humaneness not considered. One of the objectives of the NEPA process is to address concerns emanating from the values and beliefs people hold concerning the environment, and to take into account how the public at large regards proposed federal actions. The DEIS addresses what it calls the "visitor experience" or "natural recreation experience" in several places, but largely in a way that dismisses any notion that individuals or groups will experience any sense of loss if geese are killed. The controversies surrounding lethal control of resident geese are well known and have been addressed (e.g., Loker et al. 1999, Swift 2000) in ways that should have made it clear to the preparers of this DEIS that a close look at the issue of valuation of geese was mandatory. The FEIS must fully account for the human dimension in managing conflicts with geese, addressing this issue far more substantively than has been done.

The methodologies NPS proposes for lethal removal of geese must also be critically examined and their humaneness evaluated. Where geese are frequently referred to as a nuisance (e.g. DEIS: 62) virtually no mention, and clearly no analysis, is made concerning the value they may have for individuals or groups. The Final EIS must address these factors and it must describe in far greater detail the extent to which geese will suffer during the process of removal and killing and the humaneness of the killing methods. The issue of potential human exposure (e.g. Amundson 1988) to environmental hazards should geese be processed for food must also be addressed in the Final EIS.

Economic projections need to be better explained

The lethal control of geese is cost-estimated for only one year under all alternatives presented, creating a potentially misleading impression that expenses will not be great. The Final EIS should explain and defend why one-year estimators are used here but not for other actions.

#### Specific Comments

NPS is still under the impression that it is necessary to obtain Federal permits for nest destruction and removal (DEIS: 106) something which is not the case any longer, and which we attempted to bring to your attention in previous comments. You should be aware that effective in September 2006 the federal US Fish and Wildlife Service removed the permit requirement for resident Canada goose nest and egg treatment. The NPS must merely register locations where it will treat nests and/or eggs online at the Service's website.

#### Summary

NPS does not have a credible or defensible case for the lethal control of Canada geese in Anacostia Parks and should choose Alternative D as its preferred alternative. We have great respect and pride as Americans in NPS and its mission which, put in the vernacular, is to protect and preserve our nation's natural resources. You should not be in the business of killing wild animals except under the most compelling, justifiable, and urgent need. Nothing of the sort is identified here. The Humane Society of the United States, American Society for the Prevention of Cruelty to Animals, and City Wildlife would be delighted, and offers here, to explore the nonlethal options further with you and to commit time and resources from our organization to a trial program to fully test the efficacy of resolving conflicts with geese in a holistic, integrated, and environmentally responsible manner.

Sincerely,

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## Correspondence (6)

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## Correspondence Text

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September 26, 2011

Alex Romero, Superintendent  
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Re: Draft Anacostia Park Wetland and Resident Goose Management Plan and Draft Environmental Impact Statement

Dear Mr. Romero:

I am commenting on the Draft Anacostia Park Wetland and Resident Canada Goose Management Plan and Environmental Impact Statement (plan/EIS).

I live on Capitol Hill and regularly hike in the National Park Service (NPS) parks in the District of Columbia on the weekends. I am a member of Audubon Naturalist Society; Maryland Native Plant Society, Washington, D.C. Chapter; National Audubon Society, District of Columbia Chapter; and Sierra Club, Washington, D.C. Chapter. I am a lobbyist on Capitol Hill for the Friends Committee on National Legislation (Quakers), working on defense and foreign policy issues. However, these comments are my own views.

In general, I support Alternative B-Very High Level of Wetland and Goose Management. I believe the

overpopulation of resident Canada geese in Anacostia Park causes extensive damage to the wetlands in the park.

#### Wetlands

1. An analysis of previous wetland restoration efforts in the park should be included in the final plan/EIS. NPS and other government agencies have spent a great deal of time, effort and money on wetland projects along the Anacostia River. A number of studies have been done of those projects. An analytical synthesis of those results would aid future efforts.

2. The wetlands at the Poplar Point Site should be included in the plan/EIS. The first sentence of the document states, "The purpose of this plan is to guide and direct the actions of the National Park Service (NPS) in the management of wetlands ... at Anacostia Park." (p. i) Clearly, the Poplar Point wetlands are within the park, but they have been omitted from the plan/EIS.

NPS has stated that "NPS acknowledges that community involvement activities relating to the development of the Poplar Point Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) are on-going. CERCLA and the NCP also require community relations activities to be conducted. NPS and the District will use their best efforts to coordinate the community relations activities for the RI/FS, EIS and other Site processes." (NPS and District of Columbia, Poplar Point Settlement Agreement, September 19, 2008, Appendix B, p. 7, available at <http://www.nps.gov/nace/parkmgmt/upload/2008-Administrative-Order-on-Consent.pdf>)

NPS appears to have stopped work on its earlier Poplar Point EIS. No notices or documents have been added to the NPS's "Planning, Environment and Public Comment" website (<http://parkplanning.nps.gov/projectHome.cfm?projectId=22344>) for that EIS for the last three years. This wetland/geese plan/EIS states that "The NPS and the District Government have partnered to initiate the [Poplar Point] EIS, which is currently in the planning stages; an EIS is proposed for release to the public in winter 2009/2010." (p. 189) However, no such EIS on Poplar Point has ever been released.

3. The Barney Circle wetland projects should be re-examined. Barney Circle was a proposed highway project to be built where Pennsylvania Avenue, S.E. crosses the Anacostia. New wetland projects were planned, but never implemented, for environmental remediation. Those project plans may have useful ideas for this plan/EIS.

4. The RFK Memorial Stadium parking lots should be modified to reduce runoff into the Anacostia. Those parking lots are the largest impervious surfaces within the park, yet there are few measures discussed to control their runoff.

#### Geese

1. The plan/EIS should include an analysis of where the resident geese congregate within the park and the factors that makes those habitats attractive to geese. NPS has records of the location of goose nests (p. 45). That data along with the goose count data in the tables on pp. 162-163 should be analyzed to identify where the geese are. Those habitats should be evaluated to identify the key factors that make them desirable to geese. Wildlife biologists have extensively studied the habitat factors that affect resident geese populations. A summary of that literature should be a part of the management plan. More discussion of habitat modification at goose congregation sites within the park should be in the plan.

2. The goal for the goose population should be based on more than one data point. Greg Kearns of the Jug Bay Regional Park is the source for your density goal. I have heard Greg speak on goose management and have met him several other times. I am sure he is a good wildlife biologist and that Jug Bay is a similar habitat to the park. However, a multimillion plan needs to be built on more than one data point.

3. Shooting geese in the District of Columbia is not a reasonable option. In fact, it is a really bad idea. Guns are a controversial subject in Washington. The park is in the middle of a major urban area. This is not rural Maryland, like Jug Bay. Shooting geese within the District threatens to jeopardize your whole plan by public controversy.

4. Visual deterrents such as Mylar tape, flags, balloons and dogs are mentioned as control measures (p. 65). What would be the impact on other wildlife, such as ospreys and bald eagles?

5. The section about the jet crash in the Hudson River in 2009 should be omitted. The Smithsonian Institution determined that crash was caused by migratory Canada geese (<http://smithsonianscience.org/2009/07/scientists-determine-geese-involved-in-hudson-river-plane-crash-were-migratory/>). The plan/EIS acknowledges that fact (p. 28), but has a long discussion of the crash and geese, which appears designed to scare people. Do resident geese in the park really fly at 2,900 feet? This section should be removed

#### General

1. The cost of \$16.3 million for Alternative B is unrealistic, given the tough budget climate for federal agencies for the next few years. NPS is likely to have flat budgets, at least in real terms, for the next five years. The plan/EIS should set clear budget priorities within Alternative B.

2. The plan/EIS would be greatly improved if it had more analysis and less repetitive verbiage.

3. The plan/EIS needs to be better proofread. As an example, the tables are not consecutively numbered and don't match the "List of Tables" on p. ix.

4. The public participation plan needs to be better planned. Only three people attended the public meeting on the draft plan/EIS on September 7.

Thank you for your consideration.

Sincerely,

/David Culp/

David Culp

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**Correspondence (10)**[Enter More](#) [Edit](#) [Print](#) [Back To List](#) **Author Information**

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**Status:** Reviewed **Park Correspondence Log:**  
**Date Sent:** **Date Received:** 09/27/2011  
**Number of Signatures:** 1 **Form Letter:** No  
**Contains Request(s):** No **Type:** E-mail  
**Notes:**

**Correspondence Text**

Dear Superintendent Alex Romero, Please reconsidering using lethal methods to control the Canadian Geese populations along the wetlands of our Anacostia River. As a local resident of Southeast, Washington DC, I enjoy the presence of ALL area wildlife, and consider the geese to be a symbol of just how far the river's recovery has come from years past. Surely then, the park service must recognize that the killing of mass numbers of these beautiful creatures is not only inhumane, but moreover a poorly contrived method for the management of a perhaps out of balance ecological system. As a citizen of this area, I would strongly urge the park service to consider more humane, and more ecologically sound options for population control and/or to make the areas a bit less appealing to a nesting goose. Thank you in advance for your consideration. Sincerely, Jennifer Turner Mattioli 1375 Massachusetts Ave, SE Washington, DC 20003 freedlcrft@aol.com

## Correspondence (11)

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## Author Information

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## Correspondence Information

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**Number of Signatures:** 1 **Form Letter:** No  
**Contains Request(s):** No **Type:** Transcript  
**Notes:**

## Correspondence Text

I'm Steve McKinley-Ward. I live in Mt. Ranier, Maryland. A former worker at the Anacostia Watershed Society for most of the last decade and was active in the mud of the Anacostia River doing what we could, as a citizen group, trying to help the wetlands be a success.

And I am gratified to learn just in recent weeks with the issuing of this plan/ EIS that the preferred alternative is taking pretty aggressive measures to try to curb the population of Canada geese. I think that's right on target.

That's what my former organization and I really believed needed to happen. I'm glad to see Park Service is heading in that direction. And I have submitted already some written comments through the website and I'll drop the same thing off here tonight. These sheets right here.

I got a couple of kind of small comments and suggestions. The one thing that I'd like to raise here that might be something out of left field, but let me just read it and see if I can have enough time to read this to you.

Finally, a word about global warming and likely rising tides on the Anacostia. Oceans rising will have an effect on our tidal river. Long time Patuxent River Naturalist Greg Kearns believes the tide in Prince George's County is rising at the rate of 1/8th of an inch per year. If that is true, it makes sense to assume that the Anacostia should be rising at about the same rate and will rise about two inches during the 15-year life of this plan.

Since tidal elevations matter and matter in terms of inches for how wetland plans are successful or not, long-term planning for this scenario would seem to me to be prudent. I may have missed it, but I didn't see this addressed in the plan.

I think I'm going to broach. This is more on the lines of a little -- I'll just say it because it's something I believe.

Finally, a word of encouragement for all of us who -- all of us to get more involved in slowing our use of fossil fuels to mitigate the worst outcomes of the, you guessed it, climate change.

One specific step we can take this -- all this to encourage President Obama to live up to his campaign promises for turning to renewable energy and to rebuff, on the other hand, the momentum for building the Keystone XL pipeline from the North Alberta Tar Sands 1700 miles south to the Texas refineries. He will be able to decide the fate of this pipeline himself without Congress.

Dr. James Hanson, noted NASA climate scientist, said this this summer. "Phase out of the emissions from coal is itself an enormous challenge. However, if the Tar Sands are thrown into the mix, it is essentially game over for a stable climate."

This is something that I don't think many of us are aware of. This pipeline being built from Northern Alberta down to Texas.


So, three additional measures for the long-term success of the Anacostia wetlands would be: Number 1, ride your bike as much as you can; number 2, use clothes pins instead of the dryer and number 3, activism, demand the change we were promised by President Obama.

Thank you and I look forward to the rest of the process.

## Correspondence (12)

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## Author Information

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## Correspondence Information

**Status:** Reviewed **Park Correspondence Log:**  
**Date Sent:** **Date Received:** 10/21/2011  
**Number of Signatures:** 1 **Form Letter:** No  
**Contains Request(s):** No **Type:** Transcript  
**Notes:**

## Correspondence Text

Hello. My name is Jorge Bogantes. I'm from the Anacostia Watershed Society. I am the Staff Conservation Biologist.

The Anacostia Watershed Society supports Alternative B and again, like to see -- we're glad to see that that's the NPS's choice.

We've been working on the wetlands for nine years. Steve was a big part of it and we really want to see the big wetlands recovered. We want to see more area of wetlands. We want to see, you know, a healthier wetland ecosystem with a nice diversity of plant species which provides a lot of ecosystem services that this river really needs.

This is still an impaired river. So, we need those wetlands to do their, you know, job and I think this Alternative B is headed in the right direction.

Only one concern that we have is the cost. How, you know, the National Park Service is going to, you know, get this money? This \$60 million. Right. Fifteen years.

And the other one is how -- I know that this is only for the Park, but it would be nice if this effort is integrated more regionally with other jurisdictions. Because, you know, we're going to be getting geese from, you know, north, south, east and west. Well, mostly north and south.

So, yes, that's pretty much it.



## Correspondence (13)

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## Author Information

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## Correspondence Information

**Status:** Reviewed **Park Correspondence Log:**  
**Date Sent:** **Date Received:** 10/21/2011  
**Number of Signatures:** 1 **Form Letter:** No  
**Contains Request(s):** No **Type:** Transcript  
**Notes:**

## Correspondence Text

I'm sorry to upset the apple cart. My name is David Culp C-U-L-P. We're here in Washington, D.C. and I was hoping we were going to have a more informal session where we could ask questions.

So, I'm still going to ask my questions and hopefully, somebody will take some notes and may or may not ever get any answers.

So, here's my comments and I'm going to write up some more formal ones and get them in there by the deadline.

One, I do support in general Alternative B. I do think the geese are a big problem. But, I've got some problems with what you've come up with and I will go through that.

I'm sort of just going through in the order of the plan. I would like you guys to dig up the old remediation project from the Barney Circle Freeway. There were a bunch of plans that involved -- for additional wetlands in connection with the Barney Circle Project. I have no idea if those are good plans or bad plans, but there was a lot of money spent on developing wetland plans and so, I think you ought to at least take a look at whether some of those can be pulled up and used.

Second, and this is a major point for me, I think that shooting the geese is just not a viable option in the District of Columbia. Guns period are a very controversial issue and I think you're going to just torpedo this whole plan by shooting ducks or the geese and yes, it works over at Patuxent, but it's a completely different kind of atmosphere.

A big concern that I've got is you used Greg Kearns' data, but that's the only data that you used and yes, I know him and I think he's a good wildlife biologist, but you've constructed this whole plan off of one data point in terms of how many geese were -- how many geese is for the park and you've extrapolated that all just from him and maybe that's the right number. Maybe it's too high. Maybe it's too low. But, you have to have some more data points than just one data point.

I kept looking in the plan and maybe it's in there, but I could not find it. Really -- some real analysis as to where the geese are in the Anacostia Park. I mean a couple of places. One back towards the end you say that they're hanging around the golf course, but it seems to me if we got to come up with a management plan, you need to do a little more work as to where the geese are.

You've got a big park and why are the geese there? Is it food? Is it the water? Is it the habitat? If you're trying to -- what is it you need to change or you can change to reduce the numbers and so, highly committed to a little more sophisticated analysis as to where the geese are in this very large park and why are they there.

This is pretty minor, but you had talked once about the airplane crash in New York City. Well, I spent about two minutes on Google and it turns out the Smithsonian found out that those were not resident geese. Those were migratory geese. So, all this concern about airplane crashes I think is not relevant.

You talk about at several different points in the plan impervious surfaces and yes, those are important, but the biggest impervious surface you can talk about or you're not addressing and that's the parking lots around the stadium and if you're going to come up -- these little rain gardens are nice and you ought to be doing them, but, I mean you've got huge impervious surfaces and you don't address that at all.

I'm not a wildlife biologist, but it just seems to me that there ought to be a lot more discussion about modifying -- okay, modifying the golf course landscape somehow. I mean that seems to be where the geese summer.

As was mentioned earlier, when I looked at the cost estimate for Alternative B, I just shook my head. I mean basically the Park Service has got a flat budget for the next couple of years and I think you need to prioritize exactly what you'd be doing in Alternative B. Because I don't believe you're ever going to get all that money.

Okay. So, this is a major point of mine. In the alternative, you don't mention restoration and opening up of the wetlands at Poplar Point. So, this is an EIS, the wetlands in the Anacostia Park, but there's really no discussion of the wetlands at Poplar Point and you're going to tell me well, something else is going on about that. Something else has been going on for 20 years. I've been following this for a very long time and so, I would like to see the wetlands at Poplar Point restoration and opening them to the public as an alternative. It fits in the goals of this EIS and why you're leaving it out is a mystery to me.

But, in general, this session, frankly, would have been a lot more productive if you'd opened it up to discussion.

So, that's my two cents.





As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historic places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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