NJ Wildlife Action Plan: 01/23/08

Attachment F: Report on Piedmont Plains Regional Landscape Stakeholder Implementation Meeting (September 7, 2006)

DRAFT Summary Report on the Wildlife Action Plan Piedmont Plains Implementation Meeting

Environmental Law Institute
to
New Jersey Department of Environmental Protection
Division of Fish and Wildlife
Endangered and Nongame Species Program

September 2006

Executive Summary

In February 2006, the Conserve Wildlife Foundation of New Jersey, in partnership with the New Jersey Department of Environmental Protection's Division of Fish and Wildlife, convened over 40 stakeholders from organizations that focus on statewide issues. The first statewide stakeholders' meeting was held at Duke Farms in Hillsboro, New Jersey. Their role was to discuss and select priority state-level goals from those identified in the New Jersey Wildlife Action Plan. Stakeholders identified 13 priority state-level goals, which can be found in Attachment A.

The second statewide Wildlife Action Plan Stakeholder Meeting was held on Thursday, April 6, 2006, at Duke Farms. The primary goal of the meeting was to solicit stakeholder input into prioritizing state-level conservation strategies (actions) associated with the 13 priority state-level conservation goals identified at the first meeting. Participants from organizations that focus on statewide issues discussed and debated the state-level conservation strategies and provided their input on refining and prioritizing them. Seventy-two conservation strategies were selected as priorities. These can also be found in Attachment A.

On Thursday, September 7, 2006, local stakeholders associated with the Piedmont Plains Regional Landscape were convened at the Piedmont Plains Wildlife Action Plan Implementation Meeting held at the D&R Greenway Land Trust's Princeton headquarters (Attachment B). This was the first of five regional landscape meetings to be held throughout the state. The goal of this meeting was to identify a set of priority conservation actions to drive implementation of the state's Wildlife Action Plan in the Piedmont Plains Regional Landscape.

Background

On Thursday, September 7, 2006, the Conserve Wildlife Foundation of New Jersey (CWF) convened the Piedmont Plains Wildlife Action Plan Implementation Meeting in partnership with the New Jersey Department of Environmental Protection's (DEP) Division of Fish and Wildlife (DFW). The meeting was hosted by the D&R Greenway Land Trust and held at the Greenway's Johnson Education Center in Princeton, New Jersey.

The meeting was the first of five Wildlife Action Plan landscape-level prioritization meetings. Approximately twenty-eight (28) stakeholders who attended the meeting worked to identify a subset of 57-60 priority conservation actions from those identified within the state's Wildlife Action Plan. This subset of priority conservation actions will be used by DFW and its conservation partners to guide conservation efforts and resources toward implementation of the state's Wildlife Action Plan in the Piedmont Plains Regional Landscape.

The New Jersey Wildlife Action Plan is a proactive plan to conserve wildlife before they become more rare and more costly to protect. The multi-scale plan identifies threats, conservation goals, and conservation actions at the state, landscape (5 regions; ocean is currently part of the Atlantic Coastal Regional Landscape), and sub-regional levels (identified as conservation zones within New Jersey's plan). New Jersey submitted its plan to the U.S. Fish and Wildlife Service on October 1, 2005, submitted its revised plan on July 26, 2006, and received final approval from the Service in September 2006.

The New Jersey Wildlife Action Plan is a living document and will undergo periodic revisions per comments and recommendations received by the public, through the regional stakeholder meetings, and as part of the adaptive management strategy outlined within the Plan. Digital copies of the Plan are available at the Division of Fish and Wildlife's Web site: www.state.nj.us/dep/fgw/ensp/waphome.htm

Summary of Piedmont Plains Implementation Meeting

The objectives of the Piedmont Plains Implementation Meeting were to convene regional leaders and stakeholders to:

- Review the Piedmont Plains Regional Landscape conservation goals and actions;
- Seek stakeholder input to determine priority conservation actions for the Piedmont Plains Regional Landscape; and
- Provide an opportunity for stakeholders to discuss and seek clarification on priority conservation actions for the Piedmont Plains Regional Landscape.

The Piedmont Plains Regional Landscape section of the New Jersey Wildlife Action Plan includes a number of goals, all of which are considered priorities. These goals focus on habitat conservation and protection, the conservation of populations of

species of greatest conservation need, water quality, public education and viewing opportunities, improving biodiversity, restoring natural processes, and more. Each of the goals has a varying number of conservation actions associated with them that were developed to address the specific needs of each conservation zone (subregional level) within the Piedmont Plains Regional Landscape. The desired outcomes of the prioritization exercise were to:

- Provide local leaders and stakeholders with background on the objectives of the Wildlife Action Plan and its implementation;
- Provide a foundation for potential partnerships to implement the Wildlife Action Plan; and
- Seek stakeholder input on and identify 57-60 specific and broad-based* priority conservation actions for the Piedmont Plains Regional Landscape.

In preparation for the working meeting, the invited stakeholders were asked to review *in advance* the Piedmont Plains' goals and actions and to prioritize the actions according to instructions provided. The majority of the day was devoted to further discussion and final prioritization of the conservation actions.

Introductory Sessions

Linda Mead, Executive Director of the D&R Greenway Land Trust, welcomed participants to the group's new headquarters' building.

Larry Niles, former Chief of DEP's Endangered and Nongame Program (ENSP), provided the attendees with background on the purpose of the New Jersey Wildlife Action Plan, its basis in the Landscape Project, and stated that the plan is designed to be a blueprint for wildlife conservation for the full array of non- traditional partners conservation partners in the state, not solely the Division of Fish and Wildlife.

Dave Jenkins, Acting Chief of ENSP, gave welcoming remarks. His presentation focused on the conservation potential in New Jersey and he discussed the role and importance of partnerships in achieving conservation objectives in New Jersey.

Kris Schantz, a senior biologist with ENSP and coordinator of the New Jersey Wildlife Action Plan, gave a summary of the priority actions selected by participants in advance of the meeting. She stated that for the Piedmont Plains

Region, the plan includes 12 broad-based* conservation goals and 128 specific and broad-based* conservation actions associated with those goals. She also provided participants with copies of the state-level Wildlife Action Plan brochure which highlights the state-level priority goals and strategies (actions) selected at the stakeholders' meetings in February and April, 2006, and solicited their feedback on the document.

*For the purpose of the prioritization exercise, conservation goals and conservation actions that were similar between conservation zones (sub-regional levels) were consolidated into one conservation goal <u>or</u> action. Such an action selected as a priority during the meeting would then affect all similar or related actions within the relevant conservation zones, making all of them priority actions.

Amanda Dey, a senior biologist with ENSP responsible for the Piedmont Plains Regional Landscape, briefly discussed the threats to the Piedmont Plains Landscape habitat and wildlife and DEP's role in conservation in the region.

Troy Ettel, Vice President for Conservation at New Jersey Audubon Society (NJAS) and Anne Heasly, coordinator of the Raritan Piedmont Wildlife Habitat Partnership, gave a presentation on the project. With seed money from the Doris Duke Charitable Foundation, NJAS co-founded the Partnership, which focuses on the protection and management of critical wildlife habitats within three closely associated grassland tracts in central New Jersey. The first phase of the project concentrates on grassland habitats since this geographic area historically included some of the largest grassland areas in the state and supported breeding populations of each of the State's threatened and endangered grassland birds. Duke Farms lies at the center of the first region, the second region is 6-Mile Run State Park in Franklin Township, and the third lies mostly within East Amwell in western Hunterdon County. NJAS wrote the conservation plan for the project and is currently working with a broad coalition of partners that includes the Conservation Resources, D&R Greenway, Duke Farms, New Jersey Conservation Foundation, and the New Jersey Endangered and Nongame Species Program to implement the conservation plan.

Jessica Wilkinson, Director of the Environmental Law Institute's State Biodiversity Program, served as the facilitator and gave the participants an overview of the meeting objectives.

Facilitated Discussion

The majority of the remainder of the day was devoted to a discussion of the conservation actions associated with each of the region's conservation goals. Wilkinson led the participants through a discussion of each of the goals in turn. She asked participants to offer their comments on which of the conservation actions they considered to be of particular importance and which they felt were of lesser importance. In addition, participants were able to seek clarification on any of the actions that were unclear.

After a thorough discussion of the actions associated with each goal, the participants were asked to select a predetermined number of conservation actions they considered the highest priority for implementation within that goal. The number of actions participants were asked to select for each goal are found in Chart 1 below. In addition, ENSP staff assured the stakeholders that the potential edits to the actions discussed at the meeting would be reviewed and incorporated where feasible, and the actions would also be revised to include measurable outcomes. The results of

^{*}For the purpose of the prioritization exercise, conservation goals and conservation actions that were similar between conservation zones (sub-regional levels) were consolidated into one conservation goal <u>or</u> action. Such an action selected as a priority during the meeting would then affect all similar or related actions within the relevant conservation zones, making all of them priority actions.

the participants' selection and the original and revised actions can be found in Attachment D.

•	All and an artist and are artists
	Number of conservation
	actions per goal
Goal 1	13
Goal 2	2
Goal 3	5
Goal 4	10
Goal 5	11
Goal 6	2
Goal 7	2
Goal 8	3
Goal 9	1
Goal 10	2
Goal 11	1
Goal 12	5
OL 4 N	L C

Chart 1: Number of conservation actions participants were asked to select for each of the conservation goals.

Concluding Presentations

Bill Rawlyk, Director of Land Preservation and Naturalist at D&R Greenway, gave a presentation on the wildlife and habitat restoration project implemented on his family's farm. Funding for the project has come from a wide variety of sources, including DEP, U.S. Department of Agriculture, and U.S. Fish and Wildlife Service. Fran Rapa, Chairman of the Woodstown/Pilesgrove Environmental Council, gave a presentation on how the town has incorporated recommendations from the Wildlife Action Plan into the municipality's comprehensive plan.

Dave Jenkins and Kris Schantz gave closing remarks and thanked the participants for their time and contributions.

ATTACHMENTS:

- A: Priority State-level Conservation Goals and Strategies (Actions)
- B: List of Piedmont Plains Regional Landscape Invitees and Attendees
- C: Piedmont Plains Wildlife Action Plan Stakeholder Meeting Final Agenda
- D: Piedmont Plains Priority Conservation Actions & Action-related Comments per the Stakeholders' Meeting

Attachment A: Priority State-level Conservation Goals and Strategies (Actions)

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New Jersey Wildlife Action Plan Priority State-level Goals and Strategies

Below you will find thirteen priority state-level goals identified at the First Wildlife Action Plan Stakeholder Meeting held on February 23, 2006, and the associated priority conservation strategies identified at the Second Wildlife Action Plan Stakeholder Meeting held on April 6, 2006. The goals have been categorized by the main topic and, where appropriate, the sub-topic as identified within the New Jersey Wildlife Action Plan. The goals and associated priorities have been arranged in categories and key words and concepts appear in bold to provide focus for the array of New Jersey partners in conservation, land managers and stewards, outreach initiatives, and residents interested in managing their lands to support native wildlife.

All of the goals and strategies have integrated public education and outreach and are to be implemented with an active adapted management strategy. The New Jersey Division of Fish and Wildlife hopes to receive continual feedback on implementation successes and failures that our state can integrate into the Wildlife Action Plan and implementation process.

Addressing National, Interstate, and Statewide Threats Suburban sprawl and large-acre zoning

<u>Goal:</u> Identify and **protect** breeding, migration, and wintering **habitats** and landscapes essential for long-term viability of wildlife and fish populations of species of conservation concern.

- 1. NJ Division of Fish and Wildlife (DFW) will collaborate with municipal and county planners to identify critical wildlife habitats for sensitive species and natural systems within their borders.
- 2. Increase the number of data sources to populate the Biotics database and work to improve data quality and decrease the time necessary to review and input the data.
- 3. Use geographic information systems (GIS) to create map products that guide land management, habitat conservation, restoration, land acquisition, and land planning at all levels of government and non-government organizations.
- 4. Mitigate impacts of existing development, particularly when adjacent to open space, through non-regulatory measures, (e.g., create and restore habitat on private lands through landowner incentive programs, backyard habitat initiatives, keeping cats indoors).
- 5. Increase the effective size and connectivity of public lands through the Landowner Incentive Program and targeted land acquisition.
- 6. Refine existing Landscape Project species occurrence areas through research and, where lacking, develop new species occurrence areas as data on species requirements become available. Develop, review and improve species-habitat associations as new land use/land cover data become available.
- 7. DEP will encourage New Jersey counties and/or municipalities to develop Regional Habitat Conservation Plans within the next 5 years as part of their smart growth plan by collaborating in the development of planning documents and zoning ordinances that consider the larger landscape region. Various methods to achieve this include

- clustering development and in-fill development to maximize infrastructure, avoiding large-acre zoning, and minimizing fragmentation of habitat.
- 8. Work with Division of Land Use Regulation to strengthen and enforce existing regulations to prevent illegal stream cleaning or snag removal activities.
- 9. Require that all lands purchased with Green Acres funds develop management plans consistent with the NJ Wildlife Action Plan.

Goal: Maintain **connectivity of habitats** at the landscape scale.

- 1. Develop smart-growth plans at the municipal and county level whereby development is clustered and in-fill development maximizes infrastructure efficiency and cost savings while minimizing loss of habitat with priority on counties not already included in other regional planning areas such as the Pinelands or Highlands. Create incentives to encourage inter-municipal planning.
- 2. DEP will create a staff internally to provide technical support to New Jersey counties and/or municipalities to develop wildlife conservation planning integrated with watershed planning and land use regulations, within the next 10 years, to benefit wildlife, habitat, and the quality of life for New Jersey citizens. Prioritize in areas outside of regional planning areas of the Highlands and Pinelands.
- 3. Counties and municipalities should collaborate in developing master planning documents and ordinances that implement Habitat Conservation Plans.
- 4. Identify and prioritize, for Green Acres, the habitat corridors for acquisition or other preservation to decrease isolation of public natural lands.

Invasive Terrestrial and Aquatic Species and Exotic Pathogens

<u>Goal:</u> Identify, restore, and protect **unique ecosystem processes** including the control and/or removal of non-native invasive species, fire management, and delayed and alternate patch mowing.

- 1. Reduce regulatory impediments to restoration and enhancement activities.
- 2. Develop management techniques that can safely be used to mimic the historic role of fire in shaping ecosystems.
- 3. Increase the area of habitat enhanced by controlled burning techniques that mimic natural wildfires and support legislation to facilitate increased prescribed burning where appropriate.
- 4. Using a regional approach, identify and prioritize areas where ecosystem processes are threatened by invasive plants, organisms, and diseases; prioritize the threats relative to the vulnerability of affected wildlife and plant communities.
- 5. Reduce the area of phragmites and maintain native vegetation by restoring natural tidal flow in coastal wetlands.
- 6. Develop techniques to mimic or replace natural coastal sediment transport processes and integrate into implementation of beach replenishment and other shore protection projects.

- 7. Increase area and seral-stage range of successional habitats on managed lands where appropriate as indicated by GIS analysis.
- 8. Develop species- and habitat- specific "Best Management Practices" (BMPs) for management of various communities dependent upon disturbance.
- 9. Develop and recommend BMPs for use of biological control agents to reduce nonnative or overabundant pests.

<u>Goal:</u> Reduce the adverse impacts of **non-native invasive species**, **subsidized predators**, **and over-abundant native species** on critical wildlife, natural communities, and habitat quality.

- 1. Create aggressive outreach programs for targeted groups (e.g., landscape designers, waterwatch groups, nurseries, etc) that reduce or eliminate the introduction and spread of invasive plants and animals.
- 2. Develop species- and habitat- specific "Best Management Practices" (BMPs) for controlling the most common and detrimental invasive species and incorporate that guidance into BMPs developed for other activities such as forestry, wildlife management, stream stabilization, dune stabilization, etc.
- 3. Educate the public about the negative impacts of free-roaming cats ("owned" and feral) on New Jersey's native wildlife and encourage responsible cat ownership and care through public service announcements, brochures, public presentations, etc.
- 4. Collaborate with animal rights/welfare groups, local municipalities and conservation organizations to develop and implement model ordinances, policies, and guidance documents to address the impacts of predators, including feral and free roaming cats, on native wildlife species, including:.
 - a. A model ordinance for municipalities that elect to implement or allow trap, neuter, and release (TNR) programs to attempt to reduce feral cat populations.
 - b. A guidance document/protocol for minimizing the impacts TNR on native wildlife.
 - c. A model ordinance for regulating feeding of wildlife.
 - d. A model pet licensing ordinance.
 - e. Mapping of colonies to evaluate impact on species of conservation concern.
- 5. Identify areas where predation is significantly diminishing reproductive success of wildlife species of conservation concern and apply appropriate integrated predation management techniques.
- 6. Create and implement a system for reporting and qualifying new locations of priority invasive species.
- 7. Develop and support research to provide better information on the impacts of feral and free-roaming cats on native wildlife populations.
- 8. Create implementation plan for Invasive Species Task Force recommendations when completed.

Unsustainable Land Management Practices on both Private and Conserved Lands and Water

<u>Goal:</u> Encourage farmers, foresters, and land stewards of private, local, state, and federal lands to develop **habitat management plans** that enhance habitats for species of conservation concern and maintain or improve the ecological integrity of the natural community.

- 1. Increase staff in the NJ Habitat Incentive Team (NJ HIT) to educate and provide technical assistance for landowners enrolling in Landowner Incentive Programs.
- 2. Increase number of landowners through NJ HIT that conduct delayed mowing of hayfields and fallow fields until after most ground nesting birds have fledged at least one brood; leave a minimum of 20% of grass fields standing during winter for cover; and/or plant and maintain native warm season grasses.
- 3. Develop best-management practices (BMPs) or management prescriptions for species of conservation concern to reduce negative impacts of various land management practices such as forestry, agriculture, dune stabilization, stream stabilization, aquaculture, DOT mowing, etc.
- 4. Through surveys, increase the number of Category 1 streams justified by endangered and threatened species data.
- 5. Dedicate staff in DFW to provide technical assistance to develop site-based management plans with forestry or wildlife production goals using GIS and principles of landscape ecology as the foundation.

Direct Human Impacts on Native Wildlife and Ecosystem Health

<u>Goal:</u> Identify, protect, and minimize human disturbance at sensitive locations (nests, hibernacula, breeding pools, critical concentration or feeding areas, etc.).

- 1. Create funding that will allow a minimum of one conservation officer for each landscape region dedicated to increase protection of sensitive habitats at risk from frequent human disturbance, collection/poaching, and at protective barriers such as gates restricting entry to bat hibernacula.
- 2. Design and implement protective measures to minimize deleterious impacts of direct human disturbance at osprey and colonial waterbird nest sites, shorebirds along Delaware Bay, rare reptile and amphibian denning, nesting/breeding, and gestation sites, as well as bat hibernacula.
- 3. Review all stream encroachment and other permit applications within the Division of Fish and Wildlife and apply restrictions on acoustic intrusions and other activities with deleterious effects on aquatic wildlife.
- 4. Investigate impacts of controlled water releases on aquatic organisms (e.g., freshwater mussels) through current and future research.

Development and Long-term Monitoring

<u>Goal:</u> Conduct **long-term monitoring** to evaluate **population viability** through statewide surveys and atlases to determine the **effectiveness of protection and restoration** efforts of both wildlife and their habitats.

- 1. Maintain monitoring programs that collect data on species, suites of species, and habitats statewide, including but not limited to the following:
 - o Breeding Bird Atlas
 - o Breeding Bird Survey
 - o Delaware Bay Migratory Shorebird Survey
 - o Bald Eagle Midwinter Survey
 - o Herptile Atlas
 - o Calling Amphibian Monitoring Program
 - o Fish Monitoring-Streams and Ponds
 - o Freshwater Mussel Atlas
 - o Mid-Winter Waterfowl Survey
 - o Atlantic Flyway Breeding Waterfowl Survey
 - o DFW Bobwhite Call-Count Survey
 - o Woodcock Call-Count Survey
 - o DFW Beaver-Otter Survey
 - o Migratory Game Bird Banding Programs
 - o Colonial Waterbird Survey
 - o Beach Nesting Bird Survey
 - o Site-specific Fish Monitoring Programs
- 2. Complete the Coordinated Bird Monitoring Plan to increase the efficiency and effectiveness of regional and national bird surveys.
- 3. Develop GIS measures to evaluate the effectiveness of habitat conservation programs including acquisition, restoration, and connectivity.
- 4. Measure the enrollment acreage and effectiveness of backyard habitat management.
- 5. Through GIS, track the acreage and management of land enrolled in habitat enhancement programs administered by NJ HIT; monitor each site and evaluate the effectiveness of the management technique.
- 6. Where appropriate, install and monitor fish ladders to assist passage of anadromous fish in areas with dams; prioritize by waterways with fish species of conservation concern.

High Deer Densities

<u>Goal:</u> Identify, maintain, and restore natural vegetative communities through sustainable, **area-specific deer densities**.

- 1. Conduct forest health surveys and use forest health indices as a main factor in developing deer management goals with priority areas being contiguous forest blocks on public and private lands within Skylands, Delaware Bay, Piedmont Plains, and Pinelands Landscape Regions.
- 2. Amend regulation or legislation to implement programs that support increased hunter access and hunting opportunities like reduction of safety zone for bow hunting,

- Sunday bow hunting, and providing economic incentives for hunters to spend more time in the field.
- 3. Institute measures to require addressing deer management for any property that receives state or federal funding. The land or agricultural management plans must include harvest quotas and mechanisms to insure implementation.
- 4. Fully fund the Hunters Helping the Hungry venison donation program, which allows hunters to donate venison to food kitchens. Many hunters are reluctant to harvest deer that would be wasted because they have no need of or an outlet for the venison. Full funding of this program will expand the program and help provide an incentive for hunters to continue harvesting deer and therefore help meet harvest quotas.
- 5. Expand the DFW community-based deer management program to work with private landowners and public land stewards to achieve deer densities compatible with the NJ Wildlife Action Plan's habitat management goals.
- 6. Develop and implement, through regulation or legislation, programs that require anyone receiving preferential tax treatment based on land-management practices to achieve deer management goals, including harvest quotas, to qualify for farm tax assessment or farmland preservation programs.

Contaminants

<u>Goal:</u> Restore and maintain wildlife and fish populations and critical habitats by eliminating or reducing **exposure to point and nonpoint source contamination**.

- 1. Reduce contaminants of concern (e.g., PCBs, DDT, mercury, petroleum products) to "No Adverse Effects" levels in areas where they are currently significantly affecting wildlife populations, such as the lower Delaware River, NY-NJ Harbor, and portions of the Atlantic coast.
- 2. Analyze tissues of raptors and waterbirds on a regular basis using 1) failed eggs, 2) nestling blood, 3) adults found dead, and 4) living adults, where appropriate, to assess contaminant levels and determine causes of mortality and nest failures. Analyze tissues of actual or typical prey items in nest areas to assess the level of contaminants and determine the threat within the food web; repeated measures may be used to indicate trend of contaminants in local prey.
- 3. Following the Meadowlands model, where contaminants are impacting wildlife populations and/or restoration efforts, develop a working group of experts to, 1) identify data gaps, 2) design study methodologies to measure existing ecosystem effects on wildlife (food chain studies), and 3) evaluate post restoration/clean-up effects on wildlife populations.

Motorized Recreation Vehicles

<u>Goal:</u> Identify and actively **protect public natural lands and water** with wildlife species of conservation concern **from off-road vehicle and personal watercraft use**.

1. Identify areas where off-road vehicle (ORV) or personal watercraft (PWC) use occurs in critical wildlife habitats and direct law enforcement to concentrate on those areas to enforce seasonal restrictions and posted/restricted areas. Obtain additional funding for additional officers to assist with enforcement.

- 2. Investigate the impacts that personal watercraft and off-road vehicles have on those species whose breeding, roosting, haul-out, and migratory stopover areas' requirements make them vulnerable to injury, mortality, or disturbance. Use Natural Resource Damage Assessment (NRDA) and economic methods to quantify benefits and losses relative to these resources and ORV/PWC damages.
- 3. Identify appropriate areas for establishing off-road vehicle use in accordance with local and/or regional Habitat Conservation Plans to minimize impact to important wildlife habitat. Concurrently, increase the legal and financial penalties for illegal off-road vehicle use.
- 4. Enact legislation to require registration of all all-terrain vehicles (ATVs) at time of purchase and annually thereafter.
- 5. Collaborate with off-road organizations and state and non-government agencies to address the problem of unlawful use of public and private natural lands by off-road vehicles. Develop and disseminate educational materials to all riders via registration, public areas and public service announcements, and investigate mentoring programs by off-road organizations.

Endangered, Threatened and Rare Wildlife

<u>Goal:</u> Restore populations of **endangered and threatened wildlife** to stable levels that allow their **delisting** through population management, protection of critical habitat, and habitat restoration and enhancement.

- Develop recovery plans for species of greatest priority that are based on reliable assessment and monitoring of population levels and the identification of limiting factors. Species recovery plans should establish clear and specific strategies for reducing threats and improving habitat conditions and lead to recovery and maintenance of populations at viable levels that complement complete, viable, functioning ecosystems.
- 2. Reevaluate the status of listed and non-listed nongame wildlife every five years using the Delphi review process.
- 3. Conduct surveys to identify migratory corridors for bats, marine mammals, anadromous fish, Lepidoptera, and Odonata.

Migratory Stopover and Important Bird Areas Planning

<u>Goal:</u> Identify, monitor, and conserve key migratory corridors and stopover locations for migratory birds.

- 1. Conduct surveys of migrating passerines and raptors at major stopover areas, primarily the Cape May Peninsula, every five years.
- 2. Annually monitor shorebird populations along the Delaware Bayshore stopover.
- 3. Prioritize land acquisition, conservation easements, private landowner incentive programs, and mitigation funding, and develop management plans to conserve stopover habitat.
- 4. Identify a network of locations that will help sustain migratory bird populations by producing a set of recommendations for the conservation of Important Bird Areas (IBA) statewide.

- 5. Conduct studies and create models to identify migratory bird routes and assess the potential risks to avifauna from wind turbines, tall buildings, radio towers, and other "human-made" tall structures.
- 6. Conduct baseline surveys of other stopover areas such as Sandy Hook, Island Beach, and inland habitats important to migrating birds.

Review of Wildlife Action Plan

<u>Goal:</u> Ensure that **conservation activities** of federal, state, county, municipal, and private (non-government organizations and utility companies) lands affecting species of conservation concern are **consistent** with the NJ Wildlife Action Plan (Plan).

- 1. The most current version of the Plan will be continually available for review on the Division of Fish and Wildlife's Web site with an open invitation to submit comments.
- 2. Every five years, the Division of Fish and Wildlife's Endangered and Nongame Species Program will initiate review of the Plan beginning with Division and Department biologists in a process that includes DEP staff, the Endangered and Nongame Species Advisory Committee (ENSAC), and a wildlife summit in which adaptive management will be built into the revision.
- 3. DFW will work with federal, state, county, municipal, and private (NGOs) land managers to incorporate the goals and strategies of the Plan into current management plans by the first formal review in 2011.
- 4. Dedicate one meeting per year to reviewing the progress and soliciting input on the Plan, participants to include representatives of the ENSAC, the Fish and Game Council, and the Marine Fisheries Council.

Attachment B: List of Piedmont Plains Regional Landscape Invitees and Attende	ees

Piedmont Plains Regional Landscape Stakeholder Meeting: Wildlife Action Plan

List of Attendees

First	Last	Organization	Invited	Attended
Thom	Almendinger	Doris Duke Charitable Foundation, Duke Farms	X	
Jim	Amon	D & R Greenway Land Trust	X	X
Chris	s Aquila Doris Duke Charitable Foundation, Duke Farms		X	
Naomi	mi Avissar Conserve Wildlife Foundation of NJ		X	X
Francis	Banisch	Banisch Associates	X	
Sandy	Batty	ANJEC	X	
Matt	Blake	American Littoral Society	X	
Frances	Blanco	Dir. Recreation, Natural Resources & Culture	X	
Andrew	Bowman	Doris Duke Charitable Foundation	X	X
Barbara	Brummer	The Nature Conservancy-NJ Chapter	X	
Jennifer	Jennifer Bryson Sourlands Planning Council		X	
Michele	Byers	New Jersey Conservation Foundation	X	
Tracey	Carluccio	Delaware Riverkeepers	X	
Marion	Cartwright	D & R Greenway Land Trust	X	X
Tara	Casella	Essex County Parks	X	
Michael	Catania	Conservation Resources Inc	X	X
Robert	Ceberio	Hackensack Meadowlands Commission	X	
Nichole	Ciccaglione	USDA/NRCS - Freehold Service Ctr.	X	
Kathy	Clark	NJ DEP, DFW, ENSP	X	
Angela	Clerico	Banisch Associates	X	X
Maria	Collazo	USDA/NRCS - Hainesport Service Ctr.	X	
Phillip	hillip Collins NJ DEP, Green Acres		X	
Ellen			X	X
Dennis	Davidson	D & R Greenway Land Trust	X	X
Debra	Davidson	Tenafly Nature Center	X	

ATTACHMENT B (continued)

First	Last	Organization	Invited	Attended
Dave	Dendler	Somerset County Park Commission	X	
Emile	DeVito	NJ Conservation Foundation	X	X
Mandy	Dey	ENSP	X	X
Timothy	Dey	USDA/FSA - Freehold Service Ctr.		
Joe	DiVincenzo	Essex County Executive	X	
Donna	Drewes	Municipal Land Use Center	X	
Miriam	Dunne	NRCS/USDA	X	X
Tim	Dunne	NRCS/USDA	X	X
Cynthia	Ehrenclou	Upper Raritan Watershed Association	X	
David	Epstein	Morris Land Conservancy	X	
Troy	Ettel	New Jersey Audubon Society	X	X
Craig	Evans	Hunterdon-Dept. Parks & Recreation	X	
Caren	Fishman	Camden County Parks	X	
John	Flynn	NJ DEP, Green Acres	X	
Thomas	Gilmore	New Jersey Audubon Society	X	
Amy	Goldsmith	NJ Environmental Federation/Clean Water Action	X	
Rodney	Groff	Gloucester County Parks	X	
Ernie	Hahn	D&R Canal Commission	X	
Jim	Hall	Palisades Interstate Park Commission	X	
Anne	Heasley	Conservation Resources Inc.	X	X
Susan	Herron	D&R Canal State Park, Kingston Office	X	
Harriet	Honigfeld	Monmouth County Planning Board	X	
Gene	Huntington	Doris Duke Charitable Foundation, Duke Farms	X	
Dave	Jenkins			X
Rob	Jennings	Morris County Park Commission	X	
Kenneth	Jennings	-		
Andrew	Johnson The William Penn Foundation		X	
Jeffrey	Kerchner	Burlington County Parks	X	

ATTACHMENT B (continued)

First	Last	Organization	Invited	Attended
Bill	Kibler	South Branch Watershed Association	X	
Kathy	Klein	Partnership for the Delaware Estuary	X	
William	Koch	Great Swamp National Wildlife Refuge	X	X
Kim	Korth	NJ DEP, DFW, ENSP	X	X
Rick	Lear	Middlesex County Parks	X	
Ed	· ·			X
Anthony	McCracken	Somerset County Planning Board	X	
Fawn	McGee	NJ DEP, Green Acres	X	
Steve	Mars	US Fish and Wildlife Service	X	X
Linda	Mead	D & R Greenway Land Trust	X	
Kevin	Moore	Weequaic Park Association	X	
Nick	Morolda	USDA/FSA - Hainesport Service Ctr.	X	
Susan	•		X	
Larry	Niles	Former Chief, ENSP – NJ DEP, DFW	X	X
Terrence	Nolan	Trust for Public Land	X	
Margaret	O'Gorman	Conserve Wildlife Foundation of NJ	X	X
Sharon	(DeFalco) Petzinger	ENSP	X	X
Fran	Rapa	Woodstown/Pilesgrove Environmental Council, Chairman	X	X
Bill	Rawlyk	D & R Greenway Land Trust	X	X
Greg	Remaud	NY-NJ Baykeeper	X	
Barbara	Rich	Rancocas Conservancy	X	
Steven	Sacks-Wilner	Sourlands Planning Council	X	
Kris	Schantz	NJ DEP, DFW, ENSP	X	X
Tina			X	
Julia	Somers	Great Swamp Watershed Association	X	
John	Staples	•		
Eric	Stiles	^		
Ted	Stiles	Friends of Hopewell Valley Open Space	X	

ATTACHMENT B (continued)

First	Last	Organization		Attended
Patricia	Sziber	Friends of Hopewell Valley Open Space	X	X
Timothy	Taylor	Doris Duke Charitable Foundation, Duke Farms	X	
Kenneth	Thoman	Monmouth County Parks System	X	X
Celeste	Tracy	Delaware River Greenway Partnership	X	X
John	Trontis	Hunterdon Co. Dept. of Parks & Recreation	X	
Bob	Tudor	Tudor Delaware River Basin Commission		
Mike	ike VanClef -		X	X
Mick	Valent	NJ DEP, DFW, ENSP	X	X
Nora	Wagner	Doris Duke Charitable Foundation, Duke Farms	X	
Jim	Waltman	Stony-Brook Millstone Watershed Assoc.	X	
Jay	Watson	NJ DEP, Deputy Commissioner	X	
Tom	Wells	The Nature Conservancy – NJ Chapter	X	
Jessica	Wilkinson	Environmental Law Institute	X	X

Attachment C: Piedmont Plains Wildlife Action Plan Stakeholder Meeting Final Agend



Wildlife Action Plan Piedmont Plains Regional Landscape Implementation Meeting Thursday September 7th 9:00 a.m. to 4:30 p.m.

8:30 - 9:00 a.m. Coffee and Introductions

9:00 a.m. Welcome Linda Mead, Executive Director, D&R Greenway Land Trust

9:15 a.m. Introduction (Larry Niles and Dave Jenkins)

9:35 a.m. Overview of the day (Jessica Wilkinson)

9:45 a.m. Threats to wildlife in the Piedmont (Amanda Dey)

9:50 a.m. Summary of high priority actions per pre-meeting exercise (Kris Schantz)

10:00 a.m Raritan Piedmont Wildlife Habitat Partnership (Troy Ettel and Anne Heasly)

10:30 a.m. Break

10:45 a.m. Discussion of priority actions (Jessica Wilkinson)

11:55 a.m. Introduction to State Level Brochure for feedback (Kris Schantz)

Noon - Lunch

1:00 p.m. Discussion of priority actions (Jessica Wilkinson)

2:50 p.m. Question: Partnership Ideas and Ongoing Projects (Kris Schantz)

3:00 p.m. Break

3:15 p.m. Presentation - Habitat Restoration Project (Bill Rawlyk)

3:30 p.m. Presentation - Incorporating WAP into Local Plans (Fran Rapa)

3:45 p.m. Next Steps and Presentation and vote on final Prioritized List (Kris Schantz)

<u>Attachment D: Piedmont Plains Priority Conservation Actions</u> <u>& Action-related Comments per the Stakeholders' Meeting</u>

Appendix D		Wildlife Action Plan: Piedmont Plains Regional Landscape Implementation P	rioritization - Conservation Goals a	nd Actions	
	Column E shows Species Program attending stakeho	as provided to the Piedmont Plains Regional Landscape stakeholders prior to and during the meeting held on Sthe recommendations and comments voiced at the meeting regarding the Wildlife Action Plan's (Plan) goals are supposed to the comments or revisions to the Plan per the recommendations. Column Gidentifies the action lders. It is important to note that some of the actions identified below are compilations of multiple actions within ization process and meeting discussion.	September 7, 2006, at the D&R Greenway Lad actions for the Piedmont Region. Column s selected as priority actions per the final pri	and Trust's Princeton headquarters. F shows the Endangered and Nongame oritization exercise completed by the	
		zones exist within the Piedmont Plains Landscape Region: the Northern Piedmont Plains (N), the Raritan Bay and Northes the conservation zones that address the specific conservation action.	l ern Atlantic (RB), the Central Piedmont Plains (C), and the Southern Piedmont Plains (S). The far	
Goals (1-12) & the Conservation Zone(s) addressing the action.	Conservation Actions' Identification Numbers	Conservation Actions	Summarization of meeting notes obtained at Piedmont Plains Regional Landscape Stakeholders' meeting, Sept. 7, 2006	ENSP response (Note: In addition to responding to the comments/ recommendations, ENSP has revised all actions to include measurable outcomes.)	PRIORITY ACTIONS
1	• .	enhance and/or protect important habitats to maintain viable populations of endangered, threatened, ecies and species of conservation concern.			
	1a Forest	Identify critical core forests and assess their condition for forest dwelling bats, red-shouldered hawk, barred owl, bobcat, timber rattlesnake, long-eared owl, wood turtle, northern pine snake, forest-interior songbirds, waterfowl, and cavity-nesters. Take action to protect, restore, maintain, create, and/or enhance forest habitat as appropriate: Preserve forests with > 10 hectares (24.7 acres) of forest core area, especially forests that are not near major highways; allow riparian areas to re-vegetate; avoid activities that result	bats require 17 acres, while neotropical migrant songbirds require a larger area. This opens the door	species and the potential forest sizes that are suitable agreeing that by helping these particular species, other species will benefit (interior forest	
ALL	1a-1	in fragmentation (roads, development, certain forestry practices); Retain old-growth forest, with complex forest structure, and abundant standing and fallen dead biomass. Manage forests for larger, more mature woodlands with large trees for cavity-nesters and with a canopy closure of > 80%. Old-growth forested wetlands must be preserved for barred owls and red-shouldered hawks. Second-growth forested wetlands of moderate wildlife value should be allowed to mature into an old-growth condition to create future barred owl and red-shouldered hawk habitat.	for destruction of smaller patches. There is also a concern for managing at > 80% canopy; seems exclusive of less dense forests such as cedar swamps in the southbe either more specific or more general.	passerines, interior forest raptors, bobcats, timber rattlesnakes, Indiana bats and bats in general).	Priority
ALL	1a-2	Identify, protect, and maintain coniferous and hemlock forests with >70% forest cover for priority bird species (black-throated green warbler, blue-headed vireo), reptiles and amphibians.			
ALL	1a-3	Identify and assess large core forest and forested wetland habitat and take action to restore, enhance and/or protect habitat on public and private lands through fee purchase, conservation easement, landowner incentives, and/or management plans. Establish or restore forested corridors between core forest patches and allow riparian areas to become reforested.		Actions 1a-3, 1a-4, 1a-5, and 1a-6, in general have been merged into a single action, although with some variation between conservation zones.	
N	1a-4	Act to identify, protect, maintain, enhance, restore, and/or create habitat, as appropriate. Work with land managers and private landowners to maintain old growth forest stands with large trees and large contiguous tracts of forest suitable for forest-interior species of raptors and passerines, and bobcats.	Action is repetitive (similarities between 1a-3, 1a-4, 1a-5, 1a-6). Action should also include forest managers and planners, and forest stewardships. Dave Jenkins, ENSP, stated that ENSP would make it explicit that this action would focus on forest assessment that focuses on non-commodity resources.		Priority
N - EXPAND TO ALL ZONES	1a-5	Maintain connectivity and/or restore forested habitats and corridors within and connecting adjacent conservation zones. Identify important corridors that connect large, contiguous tracts of forest. Target these areas for acquisition to maintain a system of large, connected tracts of forest.	One stakeholder pointed out that areas within the southern Piedmont are heavy agricultural area with fragmented forested habitat and that such habitat is important.		
RB, C	1a-6	Enhance and restore habitat on permanently protected natural lands and surrounding private lands (landowner incentive programs): Public natural lands serve as conservation centers for forest species; surrounding landowners are enlisted to manage their land to increase overall habitat size and connectivity to other suitable habitats.			

Goals (1-12) & the Conservation Zone(s) addressing the action.	Conservation Actions' Identification Numbers	Conservation Actions	Summarization of meeting notes obtained at Piedmont Plains Regional Landscape Stakeholders' meeting, Sept. 7, 2006	ENSP response (Note: In addition to responding to the comments/ recommendations, ENSP has revised all actions to include measurable outcomes.)	PRIORITY ACTIONS
1-CONT'D		ify, restore, enhance and/or protect important habitats to maintain viable populations of endangered, d nongame species and species of conservation concern.			
	1b Gras	ssland and early-successional fields			
ALL	1b-	Identify and assess large core grassland habitat and take action to restore, enhance and/or protect habitat through fee purchase, conservation easement, landowner incentives, and/or management plans. Develop and guide implementation of best management practices to improve habitat quality for grassland and scrub-shrub communities and prevent destruction of nests and young, eggs and larvae by early mowing. Convert existing hay and/or row crops to warm season grass fields, where appropriate, using landowner incentive programs. Evaluate effectiveness of delayed mowing between warm season grass fields and cool season hay fields for grassland-dependent species including birds, invertebrates, reptiles, and amphibians. Research different management techniques to understand the appropriateness of prescribed burning, mowing, and other methods for maintaining suitable habitat for northeastern grassland-dependent species.			Priority
ALL	1b-	Maintain grassland and early-successional habitats where they occur; do not expand or create grassland and early-successional habitat at the expense of large forests and forested riparian areas. Acquire grassland habitat through direct purchase or easements; enlist private lands in preservation and management programs that offer long-term stability of a matrix of grassland schemes.			
ALL	1b-	Identify, protect, and enhance existing grasslands important for endangered, threatened and special concern species; enhance large grasslands with potential to support a source population of grassland birds and American kestrels. Where appropriate create large grasslands areas by eliminating hedgerows, fences, or tree lines in areas where open land occupies a considerable amount of the surrounding landscape and grassland management is a reasonable management alternative. Identify adjacent habitats that can be managed to enhance the total size of suitable grassland habitat.			
N & RB	1b-	Collaborate with large landfill operations to promote planting and management of capped landfills for grassland-dependent birds.	This action is important for urban areas, but also along the Delaware River and dredge sites. We may need to add this action to additional conservation zones.	ENSP considered these recommendations but ultimately determined that it is not relevant to the Delaware River dredge sites. Therefore, this comment was not incorporated.	
N, RB, C	1b-	Develop best management practices (BMPs) for utility rights-of-way (ROWs) to reduce impacts of vegetation management practices on wildlife and enhance early-successional habitats.	This action should focus on implementing best management practices rather than developing them. We need long-term efforts & support to encourage utility companies to work with the state wildlife agency and partners in conservation.	Action was revised to, "Continue to develop, implement, and evaluate best management practices"	
ALL	1b-	Identify areas where scrub-shrub habitat can be created and/or maintained with little impact to forested, wetland, and grassland habitats to maintain populations of shrub-dependent butterflies and moths, reptiles, amphibians, and scrub-shrub birds such as the yellow-breasted chat, American woodcock and northern bobwhite quail.	Isn't this the same as action 1b-5?	No, this action focuses on scrub-shrub habitat outside of rights-of-way. ENSP will clarify to identify the difference.	Priority
	1c Aqu	atic, Wetland, riparian, and floodplain			
N, RB, C	1c-	Maintain and enhance forested riparian and floodplain areas for breeding bald eagles, forest raptors, long-legged wading birds,	Can we combine this action with action 1c-4?	No, these actions (1c-1 and 1c-4) refer to distinct populations in distinct areas.	
C & S	10-	Preserve and enhance riparian habitats to protect aquatic ecosystems for dwarf wedgemussels, tidewater muckets, and shortnose sturgeon. Incorporate freshwater mussel survey results into Riparian Landscape Project and determine critical areas for listed species and assess impact of aquatic invasive species on freshwater mussels.			
N & RB	1c-	North: Develop a landscape-scale plan to restore degraded emergent wetlands adjacent to existing protected lands, such as the Meadowlands, for colonial waterbirds, freshwater marsh birds and other wildlife relying on emergent wetlands. RB: Since emergent wetlands such as the Meadowlands serve as source habitats, develop and implement proactive habitat management/conservation plans for colonial waterbirds that focus on habitat protection and restoration and population recovery.			

Goals (1-12) & the Conservation Zone(s) addressing the action.	Conservation Actions' Identification Numbers	Conservation Actions	Summarization of meeting notes obtained a Piedmont Plains Regional Landscape Stakeholders' meeting, Sept. 7, 2006	ENSP response (Note: In addition to responding to the comments/ recommendations, ENSP has revised all actions to include measurable outcomes.)	PRIORITY ACTIONS
		ty, restore, enhance and/or protect important habitats to maintain viable populations of endangered, nongame species and species of conservation concern.			
ALL	1c-4	Maintain, protect, and enhance freshwater and coastal riparian areas and emergent wetlands for viable populations of pied-billed grebe, American bittern, sedge wrens, rails, osprey, bog turtles, songbirds, raptors, long-legged wading birds, riparian reptiles and amphibians and invertebrates. Restrict human activity from nesting sites and encourage larger buffers for riparian areas and wetlands in permits as appropriate to provide egress for wildlife in developed regions and prevent degradation of riparian habitats. Maintain snags of dead trees within wetlands for red-headed woodpeckers and other cavity nesters.	Can we combine this action with action 1c-1?	No, these actions (1c-1 and 1c-4) refer to distinct populations in distinct areas.	Priority
ALL	1c-5	Identify and assess large core wetland and riparian habitat and take action to preserve all large (> 4.9 hectares, 12.1 acres) freshwater wetlands from development, draining, and other forms of habitat loss, and restore, enhance and/or protect habitat through fee purchase, conservation easement, landowner incentives, and/or management plans. Manage freshwater wetlands for wetland dependent species; create impoundments, maintain stable water levels during nesting season, restrict recreational activity, monitor contaminant levels; maintain hemi-marsh conditions by periodic reversal of vegetation succession to open up some of the extensive stands of emergent vegetation. Suitable habitat for nesting needs to be maintained in nearby areas during wetland management.	This action should also address isolated wetlands & vernal pools.	No, vernal pools are smaller areas than the focal areas of this action.	Priority
N, C, S	1c-6	Restore and maintain bog turtle habitat; provide incentives to landowners for long-term management of wet meadows by implementing prescribed grazing.	Can't this be combined with another action?	No, this is specific to incentive program-based management practices approved by the USFWS.	Priority
N	1c-7	Restore and enhance forest, emergent, riparian, and coastal wetlands (Hackensack Meadowlands) on permanently protected natural lands and surrounding private lands.			
ALL	1c-8	Perform QA/QC of the NJDEP - DFW, Bureau of Freshwater Fisheries' FishTrack Database and write queries to determine distributions of fishes identified as special concern by the Delphi process.			
ALL	1c-9	Protect habitat for fish by plotting distributions of special concern fish species, and integrate those data into the Landscape Project' habitat mapping.	ç		
N, C, S	1c-10	Enhance aquatic habitats by improving water quality through Category 1 antidegradation designations in waterbodies where listed or special concern species occur.			
ALL	1c-11	Encourage stream bank stabilization using native plants.			
N	1c-12	Maintain and enhance floodplain habitats for wildlife and storm water control.			
N, RB, & S	1c-13	Locate potential vernal pools and integrate certified vernal pools into the DEP regulations database and Landscape Project.	This action should be combined with action 1c-5.	No, vernal pools are smaller areas than the focal areas of action 1c-5.	
ALL	1c-14	Identify threats to vernal pools and devise strategies to protect species dependent upon vernal pool habitat.	ENSP needs to decide if this is a water quality action (2d) OR a habitat action - for placement and prioritization purpose only.	ENSP decided this action is focused on the habitat surrounding pools and is not a water quality focused action.	Priority
s	1d Provid	e long-term protection for bald eagle habitats, including land acquisition and protection from human disturbance.			
N		orate with other agencies and conservation groups that collect data on breeding and wintering wildlife populations (New Jersey wlands Commission, Hackensack and Hudson Riverkeepers, etc.) to identify and protect important habitats.			
ALL	1f Incorp	orate Important Bird Areas into Landscape Project mapping when nominations are finalized.			
ALL	availab	wand improve Landscape Project species habitat models as new land use/land cover data and data on species habitat requirements are ole and provide technical assistance and promote use of Landscape Project mapping in state land-use regulation, municipal planning, equisition priorities, and development of management strategies for permanently protected lands.			Priority
N, C, S	1	orate all baseline data for endangered, threatened, and special concern wildlife on permanently protected natural lands into Landscape and Biotics database.			
s		op and implement proactive species recovery plans for all endangered and threatened species in this zone. Implement innovative and we habitat conservation plans to meet and maintain recovery goals.			Priority
RB, C		songbird migration and develop appropriate management strategies for important stopover areas including collaboration with nding private landowners.			

Goals (1-12) & the Conservation Zone(s) addressing the action.	Conserv Action Identific Numb	ns' ation	Conservation Actions	Summarization of meeting notes obtained at Piedmont Plains Regional Landscape Stakeholders' meeting, Sept. 7, 2006	ENSP response (Note: In addition to responding to the comments/ recommendations, ENSP has revised all actions to include measurable outcomes.)	PRIORITY ACTIONS
		•	, restore, enhance and/or protect important habitats to maintain viable populations of endangered, nongame species and species of conservation concern.			
N, C, & S	1k	survival,	rate with local NGOs to carry out wildlife surveys including birds and invertebrates and conduct demographic studies (productivity, dispersal) of priority species to provide information needed for determining causes of population declines and understanding pulation dynamics.			Priority
N, RB, & S	1L	Act to pr	rotect, maintain, and/or restore habitat as appropriate for bald eagles, ospreys (S only), and peregrine falcons.			
N, S	1m	Identify a	and protect coldwater fish species' habitats and ecosystems.			
2	Protect wa	ater qua	ality and the availability of wetland habitats.			
ALL	2a	Maintain	n optimal buffers around wetlands, riparian and floodplain areas and minimize destruction. Encourage native plantings to stabilize banks and prevent erosion.	ENSP needs to clarify that this action pertains to wetlands regulations.	ENSP changed "stream banks" to "wetland banks or buffers" to clarify this action focuses on wetlands.	Priority
N, RB, S	2b	chemical	runoff and sedimentation by maintaining riparian areas through stream bank restoration efforts, protect known breeding sites from a contamination, siltation, eutrophication, and other forms of pollution/contamination that could directly harm species or their food including birds, amphibians, and invertebrates).	Can actions 2a and 2b be combined?	No, 2a focuses on wetlands, 2b focuses on streams and riparian areas.	Priority
s	2c	Seek app	propriate classifications for stream segments based on IBI results; some may result in upgrades of stream classification to Category			
ALL	2d	Identify t	threats to vernal pool-dependent amphibians, reptiles and invertebrates.	ENSP needs to decide if this is a water quality action (1c-14) OR a habitat action - for placement and prioritization purpose only.	ENSP decided this action is focused on the habitat surrounding pools and is not a water quality focused action, therefore is found under 1c-14 (habitat-focused goal).	
	Maintain e	_	cal integrity of natural communities and regional biodiversity by controlling invasive species and Idlife.			
ALL	3а	-	areas where invasive, non-indigenous plants and animals are either already established or are becoming established through surveys lic participation. Develop and implement invasive species management strategies in critical wildlife habitats.	This action should focus on creating a priority system for identifying the areas or sites where invasive species exist and management strategies should be focused. The second statement should be deleted from here and considered part of action 3c.	This action was revised and language added: "Identifying areas where invasiveestablishedthrough the creation of a system for reporting and qualifying new locations of invasive species."	Priority
ALL	3b	primary o	ith land management agencies to monitor for the spread of invasive insect species that jeopardize forest health. The species of concern include the Asian longhorned beetle and gypsy moth. Collaborate on appropriate control options for these pests and use iate control methods to reduce tree damage and limit the spread of infestations.			
ALL	3с	that are i	ith public and private landowners to employ physical, chemical or biological control measures, or a combination of these, in areas identified as providing critical habitat for endangered, threatened or priority wildlife species and are being threatened by invasive no bus plants. Control measures often cause soil disturbance that increases the chance of invasion by the same or other non-indigenous	Incorporate second sentence from 3a and add or incorporate the statement from 3g to the end of this statement.	Incorporated second sentence from 3a. ENSP did not incorporate 3g into this action as it would basically "waters down" this action.	Priority
ALL	3d		nd manage woodlots to maintain dead trees, reduce understory, and thin tree stands for open-woodland species and cavity-nesters red-headed woodpeckers and nightjars.		This action should have been placed under the habitat goal (1). It has been corrected within the Wildlife Action Plan.	

Goals (1-12) & the Conservation Zone(s) addressing the action.	Conserv Action Identific Number	ns' ation	Conservation Actions	Summarization of meeting notes obtained a Piedmont Plains Regional Landscape Stakeholders' meeting, Sept. 7, 2006	ENSP response (Note: In addition to responding to the comments/ recommendations, ENSP has revised all actions to include measurable outcomes.)	PRIORITY ACTIONS
3-CONT'D	(CONT'D) and overa		in ecological integrity of natural communities and regional biodiversity by controlling invasive species nt wildlife.			
ALL	3e	in respondevel who legislation		Recommend a potential word change to, "critical habitats on public lands to evaluate" and "programs that require owners to achieve deer" Also recommend changing "farmers" to "landowners." There is a concern that this action will be tied to the use of exclosures which can be costly and the idea of this added cost could stall the effort. When available, we should use floristic quality assessment and plant stewardship index (currently only available for parts of the Piedmont Plains Region).	ENSP reworded this action to, "Develop and implement, through regulation or legislation, programs that require anyone receiving preferential tax treatment should be required to achieve deer management goals, including harvest quotas, in order to obtain farm tax assessment or to qualify for farmland preservation programs."	Priority
ALL	3f	plots. Th	permission from private landowners (both those who allow hunting and do not allow hunting) to establish vegetation monitoring his will allow greater surveillance of deer impacts on private lands, provide landowners direct information about the health of their d provide greater data input into the deer harvest formula.			
N, C, S	3g		nd manage woodlots to maintain structural forest diversity, esp. shrub understory for forest passerines (Kentucky warblers, Louisian rushes, wood thrushes) and priority reptiles, amphibians, and invertebrate species.	Incorporate this action into action 3c.	Did not incorporate this action with action 3c as this action (3g) was incorrectly placed under this goal and should have been under the habitat goal (1). In addition, action 3g is focused on specific habitat types and species.	
N & S	3h			Combine actions 3h and 3i. Add rivers and streams to the action. How are we addressing other aquatic habitats (e.g., lakes and ponds)??? Mussels need to be addressed.	include "aquatic habitats" and specifically identified	Priority
C & S	3i	Impleme	ent management strategy to eliminate aquatic invasive species in sensitive or important habitats containing listed freshwater mussels			
4	Inventory,	, determ	nine distribution, and monitor all endangered, threatened, special concern wildlife and fish species.			
ALL	4a	Acquire	data in areas where species data and monitoring gaps exist. (Gaps to be identified through Landscape Map.)			Priority
С	4b		t searches for triangle floaters, frosted elfins, Henslow's sparrows, long-tailed salamanders, eastern mud salamanders, queen snakes, ordered fritillaries, clubtail dragonflies, scarlet bluets, and pink streaks.			
s	4c	freshwat	t surveys in Delaware River tributaries and in suitable, previously unsurveyed areas to determine if listed or special concern ter mussel species are present and map distribution of eastern pondmussels, tidewater muckets and yellow lampmussels to determin or special concern freshwater mussel species are present. Repeat surveys every four years to monitor populations.			Priority
C & S	4d	Conduct	t surveys to find more information about the species and management requirements of rails and sedge wrens.			

Goals (1-12) & the Conservation Zone(s) addressing the action.	Conserv Actio Identific Numb	ons' cation	Conservation Actions	Summarization of meeting notes obtained at Piedmont Plains Regional Landscape Stakeholders' meeting, Sept. 7, 2006	ENSP response (Note: In addition to responding to the comments/ recommendations, ENSP has revised all actions to include measurable outcomes.)	PRIORITY ACTIONS
4-CONT'D	CONT'D: species.	Inventor	ry, determine distribution, and monitor all endangered, threatened, special concern wildlife and fish			
ALL	4e	data (pro	national, standardized survey protocols, utilizing citizen scientists, continue long-term monitoring and survey to collect baseline steeted lands) of raptors, songbirds, reptiles and amphibians, colonial waterbirds, and aquatic invertebrate populations, and ate new information into Landscape Project mapping. Promote coordination of species monitoring and management efforts among tion groups and state agencies in New Jersey.			Priority
RB	4f	Survey al	Il salt marshes for breeding seaside and saltmarsh sharp-tailed sparrows.			
s	4g		uitable habitats to determine distribution and trends of the shortnose sturgeon, dwarf wedgemussel, blue-spotted salamander, queen conze copper, frosted elfin, bobcat and other species with little known distribution patterns in this zone.			Priority
С	4h		uitable habitats to determine distribution of barn owls, American kestrels, northern copperheads, and other wildlife of greatest tion need and establish baseline information for monitoring.			Priority
N	4i	Identify l	key breeding locations for cliff swallows and common nighthawks for immediate conservation efforts.	Revise all text regarding "wild trout" to "native wild trout."	All text revised in this and other landscape regions.	
N & S	4j	problems	y monitor fish populations, including wild trout, in order to keep management strategies current, aid in the identification of resources and issues, and demonstrate agency commitment to the management of aquatic resources. Monitor and develop management s for coldwater fisheries in large reservoirs.			
RB	4k	and devel	and survey suitable habitat for northern spring salamanders, northern copperheads, and checkered whites. Research survey methods dop a plan for the survey and long-term monitoring of colonial waterbird populations on the Raritan Bay coast and songbird ons throughout the zone.			
N	41	coastal ar	protocol to monitor abundance and distribution of colonial waterbirds north of the Coastal Landscape. Identify and inventory nd inland wetlands important for colonial waterbirds, long-legged waders, marsh-nesting birds, and waterfowl for which we have a; incorporate these data and other data from the area into Landscape Project mapping.			Priority
S	4m	Determin	ne carrying capacity of freshwater tidal marshes for spring staging waterfowl of conservation concern.			
N	4n		and inventory areas suitable for American burying beetles, Harris' checkerspots, ringed boghaunters, long-tailed salamanders, h sharp-tailed sparrows, seaside sparrows, and purple finches.			
ALL	40	Routinely	Conduct field sampling for listed or special concern species at areas indicated by Fish Track Database queries. N: y monitor fish populations, including wild trout, in order to keep management strategies current, aid in the identification of resources and issues, and demonstrate agency commitment to the management of aquatic resources.			
N, C, S	4p	Survey su	uitable habitats to determine distribution and trends of grassland and early-succession dependent species annually.			Priority
ALL	4q		and research water quality parameters for various species' populations including but not limited to bald eagle, wood turtle, and oncern amphibian populations.	Can 4q and 4t be combined?	No, 4q is focused on identifying what the species need, while 4t is focused on evaluating a management practice/ strategy.	Priority
ALL	4r	Long-teri	m acoustical sampling of forest dwelling bats should be conducted to determine population trends and species response to changes ts.	Can 4r be eliminated and incorporated into bat goal (8)?	Yes, all of the bat actions will be integrated under the appropriate goals (1, 4, or 5).	Priority
N	4s	and areas	tically survey the Northern Piedmont Plains zone, particularly Teterboro Airport, Hackensack Meadowlands, Great Swamp NWR, s in Piscataway, South Plainfield, Warren, Harding, Hanover, West Caldwell, and Bergen County for songbirds, raptors, colonial ds, grassland/open-field and wetland butterflies, and waterfowl.			

Goals (1-12) & the Conservation Zone(s) addressing the action.	Conserv Actio Identific Numb	ns' cation	Conservation Actions	Summarization of meeting notes obtained at Piedmont Plains Regional Landscape Stakeholders' meeting, Sept. 7, 2006	ENSP response (Note: In addition to responding to the comments/ recommendations, ENSP has revised all actions to include measurable outcomes.)	PRIORITY ACTIONS
4-CONT'D	CONT'D: species.	Inventor	y, determine distribution, and monitor all endangered, threatened, special concern wildlife and fish			
ALL	4t		and evaluate effectiveness of water quality management practices on water-dependent species (e.g. marsh nesting birds, eastern manders, bog turtles, and aquatic invertebrates).	Can 4q and 4t be combined?	No, 4q is focused on identifying what the species need, while 4t is focused on evaluating a management practice/ strategy.	Priority
5	Prevent, s	stabilize	and/or reverse declines of endangered, threatened, and special concern species.			
ALL	5a			There is confusion about this action as it would seem the Dept. of Agriculture would take lead on this issue, but in this case, DFW is "leading" the process of assigning priority to areas and then reach out to Dept. of Agriculture. This needs clarification	Action has been revised for clarification: "DFW will collaborate with USDA to identify and prioritize, based upon species of greatest conservation need, areas where rapid response to an exotic pathogen introduction or incident is needed."	
ALL	5b	Research	effects of parasites and diseases on special concern fish species' populations.			
N, C, S	5c	Identify a	areas with known wildlife mortality issues (breeding amphibians) and high densities of wildlife prone to road mortality (snakes, rge mammals).			Priority
N, C	5d		line and population trend data to develop management strategies for endangered, threatened and special concern wildlife on ntly protected natural lands.			Priority
N, C, S	5e	(bog and near road	and enhance reptile and amphibian populations, particularly those that are endangered because of illegal collection for the pet trade wood turtles, pine and corn snakes) and those populations most susceptible to road mortality (known box turtle breeding locations is). Secure bog turtle and wood turtle populations threatened by collection; identify sources of funding for enforcement of ed species laws and protection of wildlife from illegal collection.			Priority
N	5f	longevity	better life history information on urban species, such as the kinds of nest predators and levels of nest depredation, breeding and reproductive effort over time, preferred nesting requirements, fidelity to breeding and wintering sites, and better assessment of a routes and destinations.			Priority
N	5g	Continue	research and monitoring of Allegheny woodrat populations in the Palisades, including control of impact from disease.			Priority
N	5h		an appropriate survey method for tracking populations of chimney swifts and common nighthawks and conduct a thorough status nt of these species.			Priority
ALL	5i	_	and implement management actions to enhance populations of special concern and rare fish, especially the state's valuable wild r fisheries in large reservoirs.			
N	5j		hreats to groundwater-fed pools to protect vernal pool invertebrates and amphibians and groundwater recharge areas for blue- alamander breeding sites.			
N & S - EXPAND TO ALL ZONES	5k		ish declines by utilizing the Delphi process initiated by the Division of Fish and Wildlife in 2003 to determine fish species that may special concern status."			Priority
RB	51		protect, monitor, and manage bald eagle nests and foraging areas, including posting signs in waterways to prevent disturbance by nal water-users and cooperation with private landowners.			
RB	5m	Continue disturban	to monitor reproductive success of eagles, osprey, peregrine falcons and northern harriers and protect nesting areas from human ce.			
RB	5n	Assess in	npacts of coastal and offshore wind turbines on breeding, migrating, and wintering bird and bat populations.			
s	50		npact of aquatic invasive species on freshwater mussels. Implement management strategy to eliminate aquatic invasive species in or important habitats containing listed freshwater mussels.			
RB	5p	concern.	the habitat needs, limiting factors, and contaminant burdens in wintering greater and lesser scaup and sea ducks of conservation			
RB	5q		Il remaining habitat for saltmarsh sharp-tailed sparrows (high marsh with buffer, stable water levels) and identify areas for on f snowy egret, saltmarsh sharp-tailed sparrow, seaside sparrow, and rail populations.			Priority

Goals (1-12) & the Conservation Zone(s) addressing the action.	Conserv Action Identific Number	ns' ation	Conservation Actions	Summarization of meeting notes obtained a Piedmont Plains Regional Landscape Stakeholders' meeting, Sept. 7, 2006	ENSP response (Note: In addition to responding to the comments/ recommendations, ENSP has revised all actions to include measurable outcomes.)	PRIORITY ACTIONS
5-CONT'D	CONT'D: Prevent, stabilize and/or reverse declines of endangered, threatened, and special concern species.					
ALL		foraging	C): Work with managers to manage impoundments to benefit bitterns, rails, ducks and some invertebrates by providing suitable habitat and encouraging dense stands of emergent vegetation for nesting. (RB, S): Study how land use practices such as ditching, ing, dredging, open marsh water management, burning, and marsh restoration impact species in this suite.			Priority
N, C, S	5s	Encourage concrete :	sides).	There is a concern about "widening" stream flows with regards to potential flood issues further down stream.	Action revised: "Work with DOTs and other appropriate federal, state, and local agencies to increase the number of sites where road crossing are improved to maintain and avoid disturbance to the natural streambeds and riparian habitat, to permit high volumes of water to flow freely, and to provide adequate travel corridors for terrestrial wildlife, while maintain stream flow for fish passage. Bridges that span rivers and streambeds and include floodplain habitat on either side of the span to provide travel corridors for terrestrial wildlife are preferred over culverts."	
С	5t		te causes for decline and develop models based on habitat requirements of American kestrel and barn owl; identify most effective to restore and enhance habitat and provide nest cavities (standing dead biomass and nest boxes).			Priority
RB & S	5u	-	w land use practices such as ditching, impounding, dredging, open marsh water management, burning, and marsh restoration impact this suite.	ELIMINATEEXACT SENTENCE REPEATED IN 5R		
ALL	5v		egory One classifications in stream segments with high levels of biological integrity based on fish assemblages and with listed er mussels. Protect water quality in occupied waterways to preserve populations of nongame fish species.			Priority
6	A seess le	raa aaal	la habitat ahanga (ayaw fiya ta 10 yaara)			
6	ASSESS IS		le habitat change (every five to 10 years). ate with NJ DEP's Bureau of Geographic Information and Analysis and Rutgers Center for Remote Sensing and Spatial Analysis to	6h can't be performed without 6a	Actions 6a and 6b have been combined.	
ALL	6a	develop r	nethods to update DEP's land use/land cover data every five years.	ob can t be performed without oa.	rectors of and so have been combined.	Priority
ALL	6b	Perform o	critical habitat change analysis to assess trend in habitat loss and conversion.			
7	Protect on	nd anhar	nce important and unique natural communities.			
ALL	7a		th state agencies and local governments to map significant natural communities in Piedmont Plains.			
N & S (specific)	7b	communi National		Should we make a reference to woodrat habitat here?	No, we would have to identify species for all identified areas.	Priority
ALL	7c		lands, Sourland Mountains, Princeton Woods, Assunpink WMA, Atlantic Highlands, Manasquan Naval Depot, and Tom's River.	There is confusion between 7c and 7d, having to choose between different areas. Action 7c focuses on migratory habitats and 7d on unique habitats for other reasons.	Actions have been revised to include the phrase "including by not limited to" so there is potential for additional unique communities to be addressed.	Priority

Goals (1-12) & the Conservation Zone(s) addressing the action.	Conservation Actions' Identification Numbers	Conservation Actions	Summarization of meeting notes obtained at Piedmont Plains Regional Landscape Stakeholders' meeting, Sept. 7, 2006	ENSP response (Note: In addition to responding to the comments/ recommendations, ENSP has revised all actions to include measurable outcomes.)	PRIORITY ACTIONS
7-CONT'D		ect and enhance important and unique natural communities.			
ALL	natur Rive comp 7d enda Ave,	k with local governments and NJ DEP's Natural Heritage Program (NHP) to protect and enhance the high quality floodplain forest all community at Walnford Floodplain, the tidal freshwater swamp and sandy bluff natural community and rare plant species at the Sour Marshes, the traprock glade natural community and endangered plant species at Chimney Rock, the pine barren upland/wetland plex and rare plant species at Shark River Station, the open farmlands at East Amwell Grasslands Macrosite, the natural community and nagered plant species at Seeleys Pond, the hardwood swamp natural community and federal threatened plant species at United States Hidden Lake, Toms Branch, and Campus Swamp sites, the globally imperiled natural community at the Preakness Mountain macrosite he forest at Sourland Mountain Preserve.			
8	Identify and pr	otect summer habitat for Indiana bats and other forest-dwelling bat species.			
ALL	8a Cond	duct statewide acoustical sampling to determine distribution, range, and habitat use of summer bats.			
ALL	8b and b	inue volunteer-based summer bat concentration surveys to locate important maternity sites and determine roost characteristics. Trap and bats at summer concentration sites to identify bat species; apply plastic colored bands to Indiana bats to aid in recognition during nation surveys.	Can we combine 8b and 8c?	No, 8b focuses on all bat species through the volunteer-based roost sites' counts and specifically Indiana bat with regards to trapping. Action 8c focuses on Indiana bat only. We have revised the	Priority
ALL	8c Cond	duct telemetry study during summer months to determine roost characteristics and habitat requirements for maternity colonies.	Can we combine 8b and 8c?	text in both 8b and 8c to clarify that banding and telemetry activities are focused on Indiana bats only.	Priority
ALL	8d Eval	uate and assess impacts of wind turbines to populations of bats.			
ALL	8e and 6	clop a GIS model of Indiana bat habitat to incorporate into the Landscape Project. Identify appropriate protection strategies to maintain enhance habitat (landowner incentives for protecting summer habitat, public education regarding importance of bat conservation, lopment of best management practices).			Priority
ALL		elop Indiana bat recovery plan in accordance with federal guidelines and strategies set forth in the USFWS Indiana Bat Recovery Plan Fish and Wildlife Service, 1999).			
9		ce, and restore coldwater fish habitat and ecosystemsHABITAT FOCUS	Revise all text regarding "wild trout" to "native wild trout."		
N & S	9a the Γ	Department of Environmental Protection.	Revise all text regarding "wild trout" to "native wild trout."		
N & S	90	slop and implement a habitat improvement and restoration program.	Revise all text regarding "wild trout" to "native wild trout."		Priority
N & S	9c Mon	itor changes in water quality on specific waterways where summer trout habitat may be in jeopardy due to declining water quality.	Revise all text regarding "wild trout" to "native wild trout."	Revised as recommended.	Priority
10	Conserve and	enhance wild trout populations at optimal levelsPOPULATION FOCUS	Revise all text regarding "wild trout" to "native wild trout."	Revised as recommended.	
N & S		inely monitor wild trout populations to revise management strategies when appropriate, aid in the identification of resource problems ssues, and demonstrate agency commitment to the management of aquatic resources.	Revise all text regarding "wild trout" to "native wild trout."	Revised as recommended.	Priority
N & S	10b Eval	uate current management practices that may negatively impact wild trout populations.	Revise all text regarding "wild trout" to "native wild trout."	Revised as recommended.	
N&S	10c	elop management strategies to assure the protection of NJ's valuable wild coldwater fisheries populations.	Revise all text regarding "wild trout" to "native wild trout." Also, rewordremove/revise the term "valuable"	Revised as recommended.	Priority
N & S	10d Prote	ect wild trout populations through the use of established fishing regulations.	Revise all text regarding "wild trout" to "native wild trout."	Revised as recommended.	
11	Prevent illegal	collection of rare reptiles and amphibian.			
- ''		fy the NJ Division of Fish and Wildlife's Bureau of Law Enforcement of critical sites (nesting, basking, gestation, dens) to implement	Add USFWS Special Agents to identified list of	Revised as recommended.	
ALL	string	gent enforcement of endangered species laws, including protection of wildlife from illegal collection (including bog and wood turtles, and pine snakes), persecution (snakes) (timber rattlesnakes), and human disturbance (off-road-vehicles).	partners.	Terrised to recommended.	

Goals (1-12) & the Conservation Zone(s) addressing the action.	Conserv Action Identific Numb	ons' cation	Conservation Actions	Summarization of meeting notes obtained at Piedmont Plains Regional Landscape Stakeholders' meeting, Sept. 7, 2006	ENSP response (Note: In addition to responding to the comments/ recommendations, ENSP has revised all actions to include measurable outcomes.)	PRIORITY ACTIONS
11-CONT'D	(CONT'D)) Prevent	illegal collection of rare reptiles and amphibian.			
ALL	11b	and Wildli	nd educate local law enforcement of endangered species laws. Develop a partnership between them and the NJ Division of Fish life's Bureau of Law Enforcement to enforce protection of native wildlife from illegal collection (including bog and wood turtles, pine snakes), persecution (timber rattlesnakes and other native snake species), and human disturbance (off-road-vehicles).			Priority
12	Promote pland.	public ed	lucation, awareness, wildlife conservation, and participation in habitat restoration efforts on private			
ALL	12a	Educate he maternity	nomeowners on proper eviction of house-dwelling bat populations and importance of providing alternative roosting structures for colonies.			
ALL	12b		public education materials regarding the most aggressive, invasive non-indigenous plants and fish to involve the public in detecting treas early while they are still manageable. Early recognition of the establishment of new populations is the key to successful	Can we combine 12b and 12c? We should include insects such as Asian long-horned beetle.	No, there are two "tools" identified in these actions that involve the public. The first is to "identify" the problems, the second is to "not be a part of the problem." ENSP has kept these two actions separate. In addition, action 12c will not include regulation or legislation regarding invasives as this is more appropriate and exists as an action within	
ALL	12c		s as introduced ornamental plants are a major source of non-indigenous species that invade natural plant communities.	Can we combine 12b and 12c? We should revise to include the implementation of statewide regulations or legislation on the sale of invasive species.	the state-level section of the Wildlife Action Plan.	Priority
ALL	12d	to enhance	and maintain educational materials, and viewing and recreational opportunities for the public consistent with species recovery goals e public awareness of wildlife conservation and environmental issues by cooperating with federal, state and non-governmental ion partners.			Priority
ALL	12e		levelop a statewide policy for local communities to discourage managed cat colonies and trap, neuter and release programs. public about keeping cats indoors.			Priority
ALL	12f	Develop a	and maintain educational materials about nongame and coldwater fish for dissemination to the public.			
N,C, RB, S	12g	partners to	andowners in protection efforts for endangered species through programs like the Citizen Science program. Collaborate with o develop innovative outreach educational programs to protect these important habitats. Promote incentive programs to encourage al landowners to actively manage for grassland dependent species.			Priority
C & RB	12h		oublic on threats to wildlife, and develop management guidelines for private landowners with significant bald eagle, wood turtle, or wetland bird, grassland bird, woodland raptor, or scrub-shrub/open field bird populations.			Priority
N	12i	Educate ho	nomeowners about habitat requirements of chimney swifts and discourage use of chimney caps where possible.			
s	12j		a field guide to NJ's freshwater mussel species to assist in promoting public education and increase awareness of New Jersey's shwater mussel fauna.			