Attachment H: Report on Atlantic Coastal Regional Landscape Stakeholder Implementation Meeting (March 29, 2007)

DRAFT
Summary Report on the
Wildlife Action Plan
Atlantic Coastal Implementation Meeting

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

March 2007

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 March 29, 2007, local stakeholders associated with the Atlantic Coastal (Coastal) Regional Landscape convened for the Coastal Wildlife Action Plan Implementation Meeting held at the Richard Stockton College of New Jersey in Pomona, New Jersey. This was the third 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 Coastal Regional Landscape.

Background
On March 29, 2007, the Conserve Wildlife Foundation of New Jersey (CWF) convened the Coastal 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 held at the Richard Stockton College of New Jersey in Pomona, New Jersey.

The meeting was the third of five Wildlife Action Plan landscape-level prioritization meetings. Forty-one (41) attendees including twenty-nine (29) stakeholders (non-DFW personnel), who attended the meeting, worked to identify a set of fifty-one (51) priority conservation actions among the 100 conservation actions* identified in Atlantic Coastal portion of the New Jersey Wildlife Action Plan. These fifty-one (51) 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 Coastal Regional Landscape.

The New Jersey Wildlife Action Plan (Plan) is a proactive plan to conserve wildlife species 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 Coastal Implementation Meeting
The objectives of the Coastal Implementation Meeting were to:

- Provide stakeholders with a review the Coastal Regional Landscape conservation goals and actions;
- Provide opportunity for stakeholders to discuss and seek clarification on priority conservation actions; and
- Seek stakeholder input on and identify fifty-one (51) specific and broad-based* priority conservation actions for the Coastal Regional Landscape.

**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 or 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 Coastal Regional Landscape section of the New Jersey Wildlife Action Plan includes a number of goals, which focus on issues such as habitat conservation and protection, the conservation of populations of species of greatest conservation need, water quality, and public education and viewing opportunities. 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 (sub-regional level) within the Atlantic Coastal Regional Landscape. The implementation meeting was designed 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 to determine priority conservation actions for the Coastal Regional Landscape.

In preparation for the working meeting, DFW's Endangered and Nongame Species Program (ENSP) staff reviewed the 100 specific and broad-based* conservation actions associated with the Coastal Regional Landscape and indicate which actions the ENSP considered priorities. The invited stakeholders were asked to review *in advance* the goals and actions associated with the Coastal Region, as well as those actions pre-selected by the ENSP. The majority of the day was devoted to further discussion and clarification of conservation actions and final prioritization of the actions.

Introductory Sessions

Carol Slocum, an Associate Professor in Marine Sciences at the Richard Stockton College of New Jersey, gave welcoming remarks. She expressed enthusiasm for hosting the meeting given the college's commitment to the conservation of marine mammals and sea turtles.

Dave Jenkins, Chief of ENSP, welcomed stakeholders and provided attendees with background on the purpose of the New Jersey Wildlife Action Plan and its basis in the Landscape Project. Jenkins stated that the plan is designed to be a blueprint for wildlife conservation for the full array of traditional and non-traditional conservation partners in the state, and is not solely the Division of Fish and Wildlife. 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.

Jessica Wilkinson, a senior policy analyst with the Environmental Law Institute, served as the facilitator, and gave an overview of the meeting objectives and agenda.

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Todd Plover, a biologist with the Conserve Wildlife Foundation of New Jersey and manager of the Beach Nesting Bird Project, gave a presentation on the threats to the habitat and wildlife of the Coastal Regional Landscape.

Jeanette Bowers-Altman, a senior zoologist the with Endangered and Nongame Species Program, presented participants with an overview of the results of the New Jersey Marine Mammal and Sea Turtle Conservation Workshop, which was held at Richard Stockton College of New Jersey on April 17-19, 2006. The purpose of the workshop was to develop the knowledge base necessary to guide the state's marine endangered and nongame resource conservation and management programs by identifying which species the state should focus on and what actions it should take to conserve them. New Jersey is home to 11 endangered and threatened marine species; half of the federal listed species in New Jersey are marine species. The workshop brought together experts from 13 agencies and organizations. The workshop identified 16 focal species, identified information gaps, identified and ranked 39 threats to marine species, and developed recommendations, conservation actions, and projects that could be brought to bear in addressing the recommendations. The recommended actions fell into four categories: threat abatement; life history and ecological research; outreach and education; and protection and enforcement. As of this meeting, the report from the New Jersey Marine Mammal and Sea Turtle Conservation Workshop has not been posted for public access. The ENSP intends to post it on their website in the near future (www.njfishandwildlife.com/ensphome.htm).

Beth Brandreth, with the U.S. Army Corps of Engineers' Philadelphia District, discussed the Lower Cape May Meadows Restoration Project. The project is a demonstration of a restoration effort that supports the goals of the New Jersey Wildlife Action Plan. The project goals were to: protect and restore the Cape May beach and freshwater habitat; improve habitat for endangered species (i.e., piping plover and endangered plants); improve internal water quality; eliminate and control nuisance plant species; increase the availability of freshwater; and reduce storm damage vulnerability to Cape May and West Cape May. The selected plan for the project include restoring lost wetlands, beachfill with periodic nourishment, invasive plant control, and internal hydrology improvements.

Stephanie Egger, with the New Jersey Field Office of the U.S. Fish and Wildlife Service, presented another example of a collaborative project that supports the goals of the New Jersey Wildlife Action Plan. She spoke about beach management planning for federal- and state-listed species. The agency works closely with local municipalities to support beach management planning.

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 the ENSP in advance of the meeting. She stated that for the Coastal Region, the plan includes 8 broad-based* conservation goals and 100 specific and broad-based* conservation actions associated with those goals. In addition, Ms. Schantz informed participants that the actions not selected as priority will remain in the Plan as an integral part of the Plan's success to achieve the desired objectives, but that the priority list helps provide guidance to our stakeholders when allocating limited resources for future conservation projects. Ms. Schantz also informed participants that granting organizations such as the Geraldine Dodge Foundation and the Doris Duke Charitable Foundation will be more likely to fund projects that are addressed in the states' Wildlife Action Plans.

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 and add back in for further consideration actions not identified by ENSP as priorities.

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 be revised to include measurable outcomes. The results of the participants' selection

	Number of conservation actions per goal
Goal 1	10
Goal 2	2
Goal 3	9
Goal 4	18
Goal 5	4
Goal 6	2
Goal 7	6
Goal 8	N/A – 1 by default

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

**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 or 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.*

and the original actions with notes of revisions incorporated into the Plan can be found in Attachment D.

Concluding Remarks
Dave Jenkins gave closing remarks and thanked the participants for their time and contributions.

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

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

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

Goal: 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

Goal: 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 non-native or overabundant pests.

Goal: 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

Goal: 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

Goal: 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

Goal: 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

Goal: 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

Goal: 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

Goal: 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

Goal: 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.

1. 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

Goal: 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

Goal: 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 Atlantic Coastal Regional Landscape Invitees and Attendees

ATTACHMENT B

Atlantic Coastal Regional Landscape Stakeholder Meeting: Wildlife Action Plan

List of Attendees

First	Last	Organization	Invited	Attended
James	Applegate	ENSP Advisory Committee	X	
Steve	Atzert	USFWS-Edwin B. Forsythe NWR	X	X
Pete	Bacinski	NJ Audubon Society – Sandy Hook Bird Observatory	X	
Scott	Barnes	NJ Audubon Society – Sandy Hook Bird Observatory	X	X
Tom	Baum	NJDEP – Division of Fish and Wildlife, Bureau of Marine Fisheries	X	X
Gary	Bell	New Jersey Waterfowlers Association	X	
Matt	Blake	American Littoral Society	X	
Jeanette	Bowers-Altman	NJDEP-Division of Fish and Wildlife, ENSP	X	X
Beth	Brandreth	US Army Corps. of Engineers-PA District	X	X
Brian	Braudis	USFWS-Edwin B. Forsythe NWR	X	X
Barbara	Brummer	The Nature Conservancy-NJ Chapter	X	
Janet	Bucknall	USDA – APHIS Wildlife Services	X	
Joanna	Burger	ENSP Advisory Committee	X	X
Brent	Burke	The Nature Conservancy-NJ Chapter	X	X
Mark	Burlas	US Army Corps of Engineers – NY District	X	
Robert	Cartica	NJDEP-Division of Parks and Forestry, Natural Lands Management	X	
Paul	Castelli	NJDEP-Division of Fish and Wildlife, BWM	X	X
Dave	Chanda	NJDEP-Division of Fish and Wildlife, Director	X	
Kathy	Clark	NJDEP – Division of Fish and Wildlife, ENSP	X	X
Christopher	Claus	Cattus Island County Park	X	
Cindy	Claus	Jenkinson's Aquarium	X	
Robert	Connell, Jr.	NJDEP – Bureau of Marine Water Monitoring	X	
Amy	Cradic	NJDEP, Asst. Commissioner	X	
Michael	Davenport	Conserve Wildlife Foundation of NJ	X	X

First	Last	Organization	Invited	Attended
William	DeCamp	Save Barnegat Bay	X	
Jim	DiLollo	NJDEP – Office of Construction and Engineering	X	X
Michael	DeLuca	Jacques Cousteau National Estuarine Research Reserve	X	
Joe	DeMartino	Ducks Unlimited – New Jersey Chapter	X	
Emile	DeVito	The NJ Conservation Foundation-Bamboo Brook and ENSP Advisory Committee	X	
Amanda	Dey	NJDEP-Division of Fish and Wildlife, ENSP		
Tim	Dillingham	American Littoral Society	X	X
Bill	Dixon	NJDEP – Bureau of Coastal Engineering	X	
Mark	Dobelbower	NJDEP – Division of Fish and Wildlife, Bureau of Law Enforcement, Chief	X	
Chris	Dolphin	NJDEP – Division of Land Use Regulation, Bureau of Coastal Regulation	X	
Ilene	Eberly	The Wetlands Institute	X	X
Stephanie	Egger	USFWS – NJ Field Office	X	X
Ruth	Ehinger	NJDEP-Coastal Management Program	X	
Stewart	Farrell	Richard Stockton College of NJ	X	
Jose	Fernandez	NJDEP-Division of Parks and Forestry	X	X
Dan	Ferrigno	NJDEP – Division of Fish and Wildlife, Bureau of Land Management	X	X
Tom	Fote	Jersey Coast Anglers Association	X	
Cristina	Frank	NJ Audubon Society	X	X
Jane	Galetto	ENSP Advisory Committee	X	X
Michael	Gochfeld	North American Butterfly Association	X	X
J. Frederick	Grassle	Rutgers University – Institute of Marine and Coastal Sciences	X	
Kevin	Hassell	NJDEP – Coastal Management Program	X	X
Jeanne	Herb	NJDEP – Office of Policy, Planning, and Science	X	
Jean	Heuser	Gateway National Recreation Area, Sandy Hook Unit	X	
Peter	Himchak	NJDEP – Division of Fish and Wildlife, Bureau of Marine Fisheries	X	
Lisa	Jackson	NJDEP, Commissioner	X	

First	Last	Organization	Invited	Attended
Dave	Jenkins	NJDEP-Division of Fish and Wildlife, ENSP, Acting Chief	X	X
Amanda	Johnson	National Marine Fisheries Service – Northeast Regional Office	X	
Jim	Joseph	NJDEP – Bureau of Shellfisheries	X	
Tom	Keck	NJDEP-Division of Parks and Forestry	X	X
Christina	Kisiel	NJDEP – Division of Fish and Wildlife, ENSP	X	X
Kim	Korth	NJDEP – Division of Fish and Wildlife, ENSP	X	X
Janet	Larson	ENSP Advisory Committee	X	
Rick	Lathrop	Rutgers University-CRSSA Lab and ENSP Advisory Committee	X	
Jay	Laubengeyer	The Nature Conservancy-NJ Chapter	X	
Julie	Lockwood	Rutgers University	X	
Tony	MacDonald	Monmouth University – Urban Coastal Institute	X	
Linda	Mack	Monmouth County Audubon Society	X	X
Stuart	Malmid	Monmouth County Audubon Society	X	
Michael	Mangum	Ocean County Dept. of Parks and Recreation	X	
Lisa	Manning	National Marine Fisheries Service – Office of Protected Resources	X	
Kari	Martin	Clean Ocean Action	X	X
Jenny	Mastantuono	USDA – APHIS Wildlife Services	X	X
Tom	McCloy	NJDEP – Division of Fish and Wildlife, Bureau of Marine Fisheries	X	
Joe	Meyer	NJDEP - Division of Fish and Wildlife, Bureau of Marine Law Enforcement	X	
Erica	Miller	Tri-State Bird Rescue	X	
David	Mizrahi	NJ Audubon Society	X	X
Ted	Nichols	NJDEP – Division of Fish and Wildlife, Bureau of Wildlife Management	X	X
Karl	Nordstrom	Rutgers University – Institute of Marine and Coastal Sciences	X	
Margaret	O'Gorman	Conserve Wildlife Foundation of NJ, Executive Director	X	X
Tony	Petrongolo	NJDEP-Division of Fish and Wildlife, Bureau of Land Management, Chief	X	

First	Last	Organization	Invited	Attended
Laurie	Pettigrew	NJDEP-Division of Fish and Wildlife, Bureau of Land Management	X	X
Todd	Pover	Conserve Wildlife Foundation of NJ	X	X
Lee	Rosensen	ENSP Advisory Committee	X	
Kris	Schantz	NJDEP-Division of Fish and Wildlife, ENSP	X	X
Annette	Scherer	USFWS – NJ Field Office	X	X
Howard	Schlegel	USFWS – Cape May & Supawna Refuges	X	X
Bob	Schoelkopf	Marine Mammal Stranding Center	X	
Dale	Schweitzer	ENSP Advisory Committee	X	
Bob	Scro	Barnegat Bay National Estuary Program	X	
Bill	Shadel	American Littoral Society	X	X
James	Shissias	ENSP Advisory Committee	X	
Carol	Slocum	Richard Stockton College of NJ	X	X
Eric	Stiles	NJ Audubon Society	X	
Terry	Terry	NJDEP-Division of Fish and Wildlife, ENSP	X	
Karen	Terwilliger	Terwilliger Consultants, Inc.	X	
Ken	Thoman	Monmouth County Park System	X	X
John	Tiedemann	Rutgers University Marine Field Station	X	
Tom	Virzi	Rutgers University	X	
Jay	Watson	NJDEP-Commissioner's Office, Deputy Commissioner	X	
John	Weber	Surfrider Foundation – Jersey Shore Chapter	X	
Michael	Weinstein	New Jersey Sea Grant	X	
Jessica	Wilkinson	Environmental Law Institute	X	X
Peter	Winkler	NJDEP-Division of Fish and Wildlife, ENSP	X	
Patrick	Woerner	NJDEP-Division of Fish and Wildlife, ENSP	X	X
Roger	Wood	Richard Stockton College of NJ	X	
Cindy	Zipf	Clean Ocean Action	X	

Attachment C: Atlantic Coastal Wildlife Action Plan Stakeholder Meeting Final Agenda

ConserveWildlife FOUNDATION OF NJ

Wildlife Action Plan
Atlantic Coastal Landscape Implementation Meeting
Thursday, March 29, 2007
9:00 a.m. to 4:30 p.m.
Richard Stockton College of New Jersey
Townsend Residential Life Center - TRLC

Meeting Objectives

- Review Coastal Landscape goals and conservation actions
- Provide opportunity for stakeholders to discuss and seek clarification on priority conservation actions
- Seek stakeholder input on selection of priority conservation actions

Meeting Agenda

8:30 a.m. Continental Breakfast

9:00 a.m. Welcome and Opening Remarks
- Carol Slocum, Richard Stockton College of New Jersey

9:10 a.m. Introduction to the New Jersey State Wildlife Action Plan (WAP)
- Dave Jenkins, Acting Chief, Endangered and Nongame Species Program Division of Fish and Wildlife, Department of Environmental Protection
- Questions and Answers (5 minutes)

9:40 a.m. Overview and Introductions
- Jessica Wilkinson, Environmental Law Institute

9:50 a.m. Threats to the Habitat and Wildlife of the Coastal Regional Landscape
- Todd Pover, Beach Nesting Bird Project Manager, Conserve Wildlife Foundation of New Jersey

10:05 a.m. Results of New Jersey Marine Mammal and Sea Turtle Conservation Workshop
- Jeanette Bowers-Altman, Senior Zoologist, Endangered and Nongame Species Program or Michael Davenport, GIS Specialist, Conserve Wildlife Foundation of New Jersey
- Questions and Answers (5 minutes)

10:30 a.m. Break

10:45 a.m. Lower Cape May Meadows Restoration Project
- Beth Brandreth, US Army Corps of Engineers - Philadelphia District

11:00 a.m. Beach Management Planning for Federal and State-listed Species
- Stephanie Egger, US Fish and Wildlife Service – New Jersey Field Office

11:15 a.m. Summary of WAP Prioritization Process
- Kris Schantz, Senior Zoologist, Endangered and Nongame Species Program

11:30 a.m. Facilitated Discussion of Priority Actions

12:30 – 1:30 p.m. Lunch

1:30 p.m. Facilitated Discussion of Priority Actions (continued)

3:15 p.m. Break

3:30 p.m. Selection of Priority Actions

4:00 p.m. Wrap-Up & Next Steps
- Dave Jenkins, Acting Chief, Endangered and Nongame Species Program

4:30 p.m. Meeting Adjourns

Attachment D: Atlantic Coastal Priority Conservation Actions
& Action-related Comments per the Stakeholders' Meeting

Goals (1-8)	Conservation Actions' Numbers		Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
1	**Identify, restore, enhance and/or protect important habitats to maintain viable populations of endangered, threatened, and species of conservation concern.**				
	1a	**Beach and Dune**			
		1a-1	Work with the U.S. Army Corps of Engineers (USACE) and the NJDEP Office of Construction and Engineering (OCE) to integrate designs into beach nourishment projects that increase availability of and access to nesting and foraging habitat for beach nesting birds.	***Priority***	
		1a-2	Investigate the efficacy of experimental techniques (e.g., restoration, enhancement) to improve foraging habitat for beach nesting birds.		
		1a-3	Develop, implement, and evaluate best management practices (BMPs), including dune management policies, to incorporate into beach nesting bird management agreements, through collaborative efforts with the U.S. Department of Agriculture (USDA) – Natural Resources Conservation Services (NRCS), U.S. Fish and Wildlife Service (USFWS), USACE, and NJDEP LURP.	***Priority***	Action revised to: "Develop, implement, and evaluate best management practices (BMPs), for dune management policies, to incorporate into beach nesting bird management agreements…"
		1a-4	Create and maintain additional nesting and foraging areas for the piping plover and other beach nesting bird species at Cape May NWR – Two Mile Beach Unit. Investigate if habitat restoration is appropriate at other beach nesting bird sites, including USCG – TRACEN and USCG – LSU.		
		1a-5	Develop and implement beach management agreements with municipalities. Update existing agreements. Where significant breeding populations of beach nesting birds are already present, ensure that a beach nesting bird component is included in management plans for their beach sites.	***Priority***	
		1a-6	Restore or enhance nesting and foraging habitat for beach nesting birds, including piping plovers, least terns, black skimmers, common terns, and American oystercatchers on the south side of the Barnegat Inlet. Restoration efforts include reduction of mature dunes and dense beach vegetation to create more suitable nesting habitat and the creation of tidally-flushed ponds for improving foraging habitat.		Stakeholders felt action 1a-6 is captured within action 1a-7 and requested they be combined or eliminate 1a-6. However, within the Wildlife Action Plan (Plan), actions 1a-6 and 1a-7 are not found within the same conservation zones. The actions were created specifically for different zones and will therefore, remain as is.
		1a-7	Work with federal and state agencies to enhance and/or restore critical beach and dune habitats for beach nesting birds of conservation concern.	***Priority***	
		1a-8	Restore natural beach and dune profile at the southern end of Brigantine Island where beach management practices have drastically reduced suitability of breeding habitat for beach nesting birds.		

Goals (1-8)	Conservation Actions' Numbers		Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	1b	**Coastal wetland habitat and waterways**			
		1b-1	Work with NJDEP-OCE, USACE, and other appropriate agencies to coordinate beneficial placement of dredge materials for creation, enhancement, or maintenance of colonial waterbird nesting, in particular with regards to Intercoastal Waterway restoration projects.	***Priority***	
		1b-2	Develop, implement, and evaluate best management practices for making dredge spoil deposition sites attractive to breeding, migrating, and wintering wildlife.		
		1b-3	Identify and protect critical areas of submerged aquatic vegetation to benefit waterfowl species through surveys, GIS measures and other remote sensing tools, expert opinion, and historical records. Restablish/retore historically important submerged aquatic vegetation beds to benefit waterfowl species.		
		1b-4	Investigate and improve marsh management techniques to benefit critical wildlife species, in particular high marsh nesting birds and waterfowl.	***Priority***	Action revised to: "Investigate and improve current marsh management techniques to benefit critical …"
		1b-5	Protect overwintering colonies and/or “haul out” areas for harbor seals by using GIS measures, other remote sensing tools, and surveys to identify important “haul-out” areas and post them to minimize human disturbance.		
		1b-6	Identify locations where undoing the effects of wetland ditching can benefit marsh species, especially high marsh or area-sensitive species, such as northern harriers. Implement restoration of these sites.		It was suggested to add "grid ditching" into this action as a method of restoration. However, grid ditching was a method used in the past in relation to human-related issues, it would not be appropriate for wildlife focused objectives. This action is about restoring habitats and therefore, remains as is.
	1c	**Forest/forested wetland (remaining parcels) & Scrub-shrub habitat (areas with >25% woody vegetation <15 feet in height, including late successional back dune vegetative communities, often characterized by presence of bayberry)**			
		1c-1	Use GIS measures, other remote sensing tools, and surveys to identify remaining parcels of scrub-shrub habitat and forest; protect and reduce incremental loss of these areas through either application of Coastal Zone Management (CZM) “critical wildlife habitat” designation or acquisition in order to benefit migratory songbirds, raptors, butterflies, and other species.	***Priority***	
	1d	Use GIS measures, other remote sensing tools, and surveys to identify critical beach/dune, coastal scrub-shrub, forest, and wetland habitats and assess their condition for nesting, migrating, and wintering birds, and other coastal species. Take action to minimize habitat loss by protecting, maintaining, enhancing, and/or restoring habitat on public and private lands through programs such as fee purchases, conservation easements, landowner incentives, and/or habitat management plans. Maintain information and incorporate all new survey and mapping data into the Landscape Project and Biotics database.		***Priority***	
	1e	Use GIS measures, other remote sensing tools, and surveys to identify areas where additional habitat-based regulatory measures or land acquisition would be appropriate to benefit wildlife species of conservation concern.			

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	1f	Incorporate sightings data from nominated and approved Important Bird Areas into the Biotics database and Landscape Project mapping.		
	1g	Use GIS measures, other remote sensing tools, and surveys to identify areas where habitat restoration or enhancement would benefit wildlife species of conservation concern.	***n/a***	Stakeholders commented that action 1g (focused on restoration) is captured within action 1d and therefore, action 1g should be eliminated. This action was removed from the Plan.
	1h	Protect habitat for fish by plotting distributions of special concern fish species, and integrate those data into the Biotics database.	***Priority***	
2	**Maintain ecological integrity of natural communities and regional biodiversity by controlling invasive species and overabundant wildlife.**			
	2a	Enhance or restore habitats for colonial waterbirds through the elimination or reduction of phragmites from dredge material sites to allow for the natural succession of woody habitats to benefit nesting long-legged wading birds or the creation of sandy substrate for ground nesting colonial waterbirds at selected sites. “Jump-start” natural vegetation (using nursery stock and seedlings) where appropriate.	***Priority***	Stakeholders recommended revising this action to clarify that the focus is on those sites currently not being used. The action has been revised to: "Enhance or restore habitats for colonial waterbirds...selected sites. Restoration efforts should focus on historic dredge material sites, so as to not further reduce the available locations for sediment deposit. If an active site is selected for restoration, efforts should be focused on areas that will not interfere with the sites’ capacity to accept sediment. “Jump-start” natural...where appropriate."

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	2b	Develop, implement, and evaluate best management practices to address adverse effects of invasive plant and wildlife species (e.g. phragmites, mute swan) and over-abundant native wildlife (e.g. resident Canada geese, greater snow geese) on the quality of coastal wetland habitat.	***Priority***	For actions 2b and 2c, there was some dispute regarding whether or not these gulls are "invasive" or "overabundant" species. While disagreement continues, the species within action 2b are provided as examples and not a definitive list. It was also suggested that their presence, whether causing no impact or a negative impact, may be dictated by the location and the presence of wildlfe species of conservation concern. These actions will remain as is, but those wishing to implement these actions should consider the impact and role of gulls in the natural system.
	2c	Assess impacts of gull populations (laughing gull, greater black-back gull, herring gull) on the breeding success of beach nesting birds, colonial waterbirds, and other species to determine if integrated wildlife damage management of gulls is necessary.		
	2d	Monitor encroachment of Japanese sedge in beach/dune habitat, assess impacts on habitat quality, implement control efforts (e.g., herbicide and physical removal of plants) where appropriate, and research additional control methods.		
3	**Inventory, determine distribution, and monitor all endangered, threatened, special concern wildlife and fish species.**			
	3a	Conduct surveys and review existing databases to better identify the migratory songbird species using coastal habitat and the distribution of the species.	***Priority***	
	3b	Conduct surveys to determine distribution, population, and habitat use of coastal marsh birds, in particular high marsh specialists, such as northern harriers, black rails, and salt marsh sharp-tailed sparrows.	***Priority***	
	3c	Conduct mid-winter and breeding waterfowl surveys annually to monitor population trends.		
	3d	Research population distribution of northern diamondback terrapin to determine critical areas for protection. Use GIS measures, other remote sensing tools, and surveys to identify northern diamondback terrapin key crossing areas and work with local or state transportation agencies to erect turtle barriers.	***Priority***	Stakeholders requested the action be revised to include studies on reproductive success of the terrapins. However, this action focuses on distribution and critical locations. Action 4c, a more appropriate location for this addition, has been revised to address this request.

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	3e	Conduct baseline inventory of coastal mammal species, including the marsh rice rat and southern bog lemming and develop long-term monitoring plans to determine each species' population trend .		There was some confusion over the word "including" within the statement given only one other species (seals) would be targeted by this action. As such, the action has been revised: "Conduct baseline inventory of the marsh rice rat, southern bog lemming, and seals and develop long-term monitoring plans to determine each species' population trend."
	3f	Investigate home ranges of wintering Atlantic brant in relation to carrying capacity of back bay habitat for Atlantic brant.		
	3g	Use GIS measures, other remote sensing tools, and surveys to identify important staging areas for red knots and other migratory shorebirds and determine and enforce the necessary restrictions on human activities to minimize disturbance at and destruction of these sites. Obtain necessary approvals from New Jersey Tidelands Council for management actions.	***Priority***	
	3h	Continue volunteer-based summer bat concentration surveys to locate important maternity sites and determine roost characteristics. Trap and band bats at summer concentration sites to identify bat species; apply colored, plastic bands to Indiana bats to aid in recognition during hibernation surveys.		
	3i	Assess significance of coastal region as an important travel corridor and concentration site for migratory tree-roosting bats through comparative surveys of their distribution through radio-telemetry, acoustical monitoring, mist-netting, and field searches during the migratory season.		It was suggested that butterflies be incorporated into this action. While the DFW agrees that migrant butterflies are in need of research and conservation, this action was specifically developed to focus on bat research and therefore, will remain as it. However, it should be noted that within the State-level Objectives (Section F of the Plan) under the Endangered, Threatened, and Rare Wildlife section is a priority action to, "Conduct surveys to identify migratory corridors for bats, marine mammals, anadromous fish, Lepidoptera, and Odonata."
	3J	Continue monitoring all known pairs of peregrine falcons and selective pairs of osprey at targeted locations, including assessment of productivity and threats and coast wide survey of osprey population and nesting success on biannual basis. Track other regularly observed peregrine falcons to determine new nesting pairs/sites.	***Priority***	
	3k	Continue intensive monitoring of populations and reproductive success of beach nesting birds, including piping plover, least tern, black skimmer, common tern, and American oystercatcher, to determine population trends. Continue surveys of wintering population of American oystercatchers to determine abundance, distribution, and population trends.	***Priority***	

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	3L	Research and monitor comparative reproductive success of American oystercatcher and common terns on beach- vs. marsh-nesting habitat at selected sites, including identification of specific threats.		
	3m	Use existing survey data (NJAS SeaWatch, SeaNet Beach Bird Surveys) to develop a database of seabird species (near-shore migrants and pelagic birds) presence and their distribution and initiate additional survey efforts to gain a better understanding of usage patterns/distribution. Develop and implement a reliable survey for measuring pelagic bird populations and/or trends of near-shore water birds of conservation need.	***Priority***	
	3n	Investigate habitat selection of breeding colonial waterbirds, including use of phragmites.		
	3o	Determine reproductive success of colonial waterbirds at targeted nesting colonies. Identify factors limiting success (e.g., predators and possible effects of contaminants).		
	3p	Identify distribution of whales (particularly right whale) during seasonal migrations. Methods include but are not limited to a) conducting surveys in shipping lane vicinities and along the coast during whale migration to determine the seasonal distribution, b) developing a predictive GIS model (based on available species occurrence information and habitat data) to predict right whale migration routes off the NJ coast and conduct surveys to validate the model, and c) identifying whale distribution and right whale migration routes through the participation in the East Coast's Sightings Advisory System for mariners.	***Priority***	
	3Q	Increase or initiate monitoring programs for marine species of conservation concern where present data is insufficient.	***Priority***	There was some confusion regarding the lack of specificity within this statement regarding marine species. This action has been revised to focus on those species identified within the Plan; "Increase or initiate monitoring programs for marine species of conservation concern as identified within NJ's Wildlife Action Plan where present data is insufficient."
	3r	Use existing data to develop a database of the Atlantic bottlenose dolphin and harbor porpoise populations' abundance and distribution and initiate regular surveying and/or monitoring, if deemed necessary.		
4	**Prevent, stabilize and/or reverse declines of endangered, threatened, and special concern species.**			
	4a	Reduce deleterious effects of pesticides on coastal species and ecosytems by conducting investigations that assess the impacts of pesticides and biological controls on coastal species, in particular those species dependent on coastal marshes and wetlands. Evaluate and modify best management practices as appropriate.	***Priority***	
	4b	Provide the NJ Division of Fish and Wildlife's Bureau of Law Enforcement with a map of critical sites to implement stringent enforcement of endangered species laws including harassment and human disturbance; update map as additional data become available.	***Priority***	

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	4c	Enhance northern diamondback terrapin populations by: a) closing the harvest season until sustainable population levels are reached. Work with experts to determine the sustainable population goal, b) enforcing compliance with current crab trap regulations (e.g. turtle excluder devices), and c) evaluating if current regulations are sufficient, in conjunction with naturally occurring survivorship rates, to protect and reduce mortality of northern diamondback terrapin populations.		For the purpose of this prioritization worksheet, action 4c is a combination of three actions from the Plan. Only one of these actions will address the request to incorporate studies of reproductive success. The action within the Plan has been revised to: "Enhance northern diamondback terrapin populations by closing the harvest season until sustainable population levels are reached. Determine if protective regulations are sufficient, in conjunction with naturally occurring survivorship rates, to reduce mortality in northern diamondback terrapin populations."
	4d	Improve marsh management techniques to benefit critical wildlife species by conducting critical assessments of the effects of Open Marsh Water Management on wildlife species, in particular high marsh nesting birds and waterfowl. Evaluate and modify best management practices as appropriate.	***Priority***	
	4e	Develop, implement, and evaluate management actions to enhance populations of special concern and rare fish, and implement adaptive management strategies.	***Priority***	
	4f	Investigate impacts of aquaculture on waterfowl and other wildlife. Determine relative effects of locations and aquaculture techniques. If possible, develop management actions or aquaculture techniques to minimize impacts.		
	4g	Investigate carrying capacity of coastal salt marshes for wintering American black ducks and Atlantic brant to help inform management actions and priorities.		For clarification, this action has been revised to: "Determine carrying capacity of coastal salt marshes for wintering American black ducks and Atlantic brant to inform decisions in setting Atlantic Flyway population objectives and to guide management actions. "

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	4h	Investigate crab dredging impacts on back-bay habitats and wildlife. Determine if any restrictions are necessary to protect wildlife or habitats. If needed, determine the nature of restrictions on dredging activities that will achieve protection.		The concern at the stakeholders' meeting focused on whether this action is appropriate within the Coastal Region portion of the Plan or if it should be located within the Piedmont under the Raritan Bay area. Given the focus of the Piedmont's Raritan Bay conservation zone is the terrestrial landscape and the issues outlined within this action are related to the back-bay areas of the Coastal Region in addition to the Delaware and Raritan Bays, it will remain in this section of the Plan.
	4i	Develop Indiana bat recovery plan in accordance with federal guidelines and strategies set forth in the USFWS Indiana Bat Recovery. Plan (U.S. Fish and Wildlife Service, 1999). Develop a GIS model of Indiana bat habitat to incorporate into the Biotics database. Identify appropriate protection strategies to maintain and enhance habitat (landowner incentives for protecting summer habitat, public education regarding importance of bat conservation, development of best management practices).		
	4J	Maintain osprey nesting opportunities through repair and replacement of existing man-made structures. Identify where additional nesting structures would be appropriate.	***Priority***	
	4k	Continue to monitor fish stocks, in particular menhaden, to determine the effects of reduced or changing prey base on the reproductive success of osprey.		
	4L	Continue existing management practices that minimize impacts of human disturbance (e.g., fence, post, and patrol nesting sites) on beach nesting birds. Obtain necessary approvals from New Jersey Tidelands Council for management actions.	***Priority***	
	4m	Incorporate enforcement of pet restriction regulations into beach nesting bird plans and agreements and increase regular presence of state and federal (where appropriate) conservation officers and park rangers at beach nesting bird sites during the nesting season to enforce no-pet restrictions (e.g., dog ordinances)		
	4n	Protect beach nesting birds and minimize impacts on their reproductive success by incorporating limits on beach raking practices into beach nesting bird management agreements.	***Priority***	
	4o	Reduce and mitigate impacts of human activities on beach nesting birds through the development and implementation of beach management agreements with municipalities. Update existing agreements and continue to monitor and evaluate the success of the agreements and modify as appropriate.	***Priority***	
	4p	Reduce the impacts of human disturbance on red knots and other migratory shorebirds that use the intertidal zone of beaches and inlets by posting and/or fencing critical migratory sites, and developing management plans or policies that minimize human impacts.	***Priority***	
	4Q	Conduct investigations to establish appropriate buffer sizes to minimize disturbance from watercraft and pedestrians at colonial bird nesting sites.		

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	4r	Increase frequency of coast-wide aerial colonial waterbirds' surveys to once every other year to better determine population trends and distribution. Continue critical investigation of aerial survey technique through selected “ground truthing” and literature and peer review in order to increase efficacy of survey, minimize surveyor bias and error, and increase accuracy of trend data.	***Priority***	
	4s	Conduct pilot study and/or collaborate study with USFWS to reintroduce the northeastern beach tiger beetle at Holgate Unit of Edwin B. Forsythe NWR, to identify Island Beach State Park appropriate for a reintroduction and gauge likelihood of success of the reintroduction effort, and work with both the USFWS and National Park Service to implement reintroduction of northeastern beach tiger beetles at Sandy Hook Unit of Gateway National Recreation Area.		
	4T	Investigate carrying capacity of back-bay habitats for wintering greater and lesser scaup to help inform management actions and priorities.		
	4u	Investigate the role of locally available contaminants in the ecology of greater and lesser scaup to help inform management actions and priorities..		
	4V	Incorporate the recommendations and needs identified through the Marine Mammal Workshop (held April 17-19, 2006) for the conservation of NJ’s marine mammals and sea turtles.	***Priority***	
	4W	Develop and implement conservation plans specific to New Jersey waters for whales, pinnipeds, seabirds (consistent with the North American Waterbird Conservation Plan), and sea turtles. Work with experts and and other government agencies to establish criteria to protect seabird species (near-shore migrants and pelagic birds) through regulatory measures.	***Priority***	
	4x	Conduct literature searches, surveys, and work with marine species researchers along the eastern coast to identify the threats facing whales, pinnipeds, porpoises, and sea turtles including ship strikes and commercial fishing gear. Assess the threats and determine the health of the Atlantic bottlenose dolphin and harbor porpoise populations through research and from expert opinion.		
	4Y	Investigate sound sources off the NJ coast to determine the potential acoustical threats to marine mammals. Develop and incorporate a plan into a marine mammal protection strategy, as recommended through the Marine Mammal Workshop (held April 17-19, 2006), to minimize the impacts off the NJ Coast within NJ state waters (3 nautical miles from the coastline).		
	4Z	Develop and implement management actions to enhance populations of special concern and rare fish.	***n/a***	Action deleted from meeting worksheet (repeat of action 4e). Action was a stakeholder priority, action 4e now priority.
	4aa	Reduce “by-catch” of listed and other critical species through regulatory or volunteer measures.	***Priority***	
	4bb	Investigate impacts to Atlantic sturgeon from commercial fishing practices and recommend restrictions on fishing gear and locational and/or seasonal restrictions.		
	4cc	Prevent declines in marine and estuarine fishes and pelagic bird populations by utilizing the NOAA Proactive Conservation Program's Species of Concern list to inform NJ's Delphi process when determining species that may warrant a state listing of endangered, threatened, or special concern.	***Priority***	

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	4dd	Work with other agencies or organizations to identify migratory routes and research, evaluate, and assess the effects of offshore energy projects (wind turbines) on avian and bat species and marine mammals, and the effects of wind turbines, tall buildings, radio towers and other "human-made" tall structures on avifauna and bats.	***Priority***	
	4ee	Reduce excessive predation on beach nesting birds through current management techniques (i.e. predator exclosures, electric fence), and on both beach and colonial nesting birds by implementing integrated wildlife damage management at important nesting sites. In addition, work with local municipalities and other landowners to develop policies and/or establish regulations that minimize the impacts of predators (e.g., raccoons, gulls, red fox, feral and free-roaming cats) on beach nesting birds.	***Priority***	
	4ff	Reduce watercraft impacts on colonial waterbirds. Use GIS measures, other remote sensing tools, and surveys to identify important foraging areas and habitats and establish, post, and enforce buffers to restrict watercraft and pedestrian use around nesting areas. Obtain necessary approvals from New Jersey Tidelands Council for management actions.	***Priority***	
	4gg	Establish a protected (fenced) nesting area on the oceanfront portion of the southern end of Island Beach State Park. Regulate off-road vehicle usage as necessary to protect birds that nest in the area.		Action was deleted from the Plan as biologists agreed it is specific and could be captured, if necessary, under other beach management actions.
	4hh	Conduct investigations of healthy and stranded marine mammals and sea turtles to determine diet, contaminat loads, general health, and parasite load.		
	4ii	Identify regulations per the Marine Mammal Protection Act (MMPA) currently not being enforced and enforce them. These regulations include but are not limited to restrictions on approach distance to right whales (a minimum 500 yards or 457.2 meters) and all other marine mammals (a minimum of 50 yards or 45.72 meters), and prohibits the harassment, hunting, capturing, and killing of marine mammals.	***Priority***	
	4JJ	Identify coastal marsh islands within Barnegat Bay where the lack of sufficient wrack mats limits nesting for black skimmer and common terns. Create “artificial” nesting mats through raking and redistribution of wrack material.		Action required clarification of when this management is appropriate (e.g., years when there were no or few winter storms and/or storms of minimal intensity). The action was revised to: "Identify coastal marsh islands within Barnegat...Create “artificial” nesting mats, <u>in years when needed,</u> through raking and redistribution of wrack material."

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
5	**Protect and enhance important and unique natural communities.**			
	5a	Protect and restore critical habitats and their associated wildife in Hereford Inlet , including at Stone Harbor Point, Champagne Island, and adjacent marsh islands and wetlands through athe development of a comprehensive management plan(s), by investigating the feasibility of incorporating Champagne Island into Cape May Wetlands Wildlife Management Area (WMA). and/or through the creation of a state regulated Marine Conservation Zone similar to the existing model used for Sedge Islands WMA to restrict human activities detrimental to wildlife or habitat.	***Priority***	
	5b	Protect and preserve critical habitats and their associated wildlife at Gateway National Recreation Area - Sandy Hook Unit from pressures of heavy recreational usage and redevelopement plans through close coordination with National Park Service and other agencies (i.e. USFWS) or partners in the developement of a comprehensive natural resource management plan and other policies that promote the significant importance of this site for wildlife.	***Priority***	
	5c	Continue stringent protection of Sedge Islands WMA through enforcement of existing state regulated marine conservation zone designation. Assess effectiveness of current designation of and determine if additional measures or regulations are needed to insure adequate protection of its wildlife and habitat. Implement appropriate changes.	***Priority***	
	5d	Monitor and maintain restored nesting and foraging areas (back dune ponds) created for piping plover and other beach nesting bird species at the South Cape May Meadows beach.		
	5e	Identify species, such as colonial waterbirds, peregrine, and osprey that would benefit from habitat restoration at the “Fish Factory” site. Work with appropriate agencies to develop and implement a habitat restoration plan.		
	5f	Determine species of priority for Malibu Beach WMA to help guide habitat restoration or management.		
	5g	Protect areas adjacent to and inclusive of to Edwin B. Forsythe NWR, Absecon WMA, Manahawkin WMA , and Great Bay WMA by acquiring (or facilitatating acquisition of) critical gaps in public land holdings and/or to buffer existing holdings; pursue acquisition or landowner agreements/easements to protect remaining private marsh islands within the Barnegat-Little Egg Harbor conservation zone, and by proposing the creation of a state regulated Marine Conservation Zone (in critical areas of the Brigantine-Great Bay zone) similar to the existing model used for Sedge Islands WMA to restrict human activities detrimental to wildlife or habitat.	***Priority***	
6	**Protect water quality.**			
	6a	Wetlands used as breeding sites should be protected from chemical contamination, siltation, eutrophication, and other forms of pollution/contamination that could directly harm breeding species or their food supply (including birds, amphibians, and invertebrates). Evaluate protection efforts through regular monitoring of water quality.	***Priority***	Stakeholders requested the action be revised to address protecting wetland habitats for wildlife whether used for breeding or not. The action was revised to: "Wetlands <u>used as wildlife habitat especially for breeding should</u> be…"
	6b	Protect water quality and aquatic-dependent species by appropriately designating Category 1 waters.		

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	6c	Maintain optimal biological buffers beyond regulatory requirements around wetlands, riparian, and floodplain areas and minimize destruction per the Wetland Buffer Guidelines for Species of Conservation Concern in New Jersey. Encourage native plantings through public education, volunteer programs, and land managers to stabilize wetland buffers and stream banks and prevent erosion.	***Priority***	
7	**Promote public education, awareness, and wildlife conservation.**			
	7a	Develop and maintain educational brochures and posters and viewing opportunities for the public consistent with species recovery goals to enhance public awareness of wildlife conservation and environmental issues by cooperating with federal, state, and local government, and non-governmental organization partners.		Stakeholders requested that marine mammals and sea turtles be included in "wildlife." As such, a revised version of this action has been added to the Ocean conservation zone: "Develop and maintain educational brochures and posters and potential viewing opportunities of marine mammals and sea turtles for the public consistent with species recovery goals to enhance public awareness of wildlife conservation and environmental issues by cooperating with federal, state, and local government, and non-governmental organization partners."
	7b	Create viewing opportunities for beach nesting birds at Cape May Point SP, Stone Harbor Point, Strathmere NA, Barnegat Lighthouse State Park , Island Beach State Park, and Corson's Inlet SP, beach nesting birds and shorebirds at North Brigantine Natural Area, colonial water birds at selected appropriate locations, such as the Ocean City Visitor's Center, and bayside street ends in Ventnor/Margate and Brigantine. Develop and install interpretive signage at wildlife viewing locations.	***Priority***	
	7c	Develop and encourage opportunities for eco-tourism in the coastal zone.		Revised to: Develop….coastal zone, including but not limited to the creation of viewing opportunities for [see action 7b for specific locations per zone], the creation of interpretive trails, and other wildlife viewing experiences."

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	7d	Present educational programs to local environmental organizations and community groups to promote understanding of threats to beach nesting birds, colonial water birds, osprey, and for other coastal species as needed, and to increase environmental stewardship.	***Priority***	Action needed clarification, as to whether it was about developing a curriculum or presenting it. As such, it has been revised to: "Develop and present educational programs to local environmental organizations, community groups, and schools to promote…"
	7e	Work with New Jersey Division of Parks and Forestry (NJDPF) to develop and enhance outreach opportunities with regards to beach nesting birds at state parks and natural areas, such as Cape May Point SP, Strathmere NA and Corson's Inlet SP.		
	7f	Preventing establishment of non-indigenous species is the simplest and most cost-effective means of stopping invasions. Encourage native plant use in landscaping through public awareness and discouraging sales of non-native ornamental plants which are a major source of non-indigenous species that invade natural plant communities.	***Priority***	Stakeholders requested that an action be developed to prevent the sale of invasive plants by landscapers/ nurseries. Within the State-level Objectives (Section F of the Plan), an action exists regarding enacting legislation and the sale of ornamentals. Due the improbability of preventing sales, the action focuses on regulating sales. It has been revised to: "Enact legislation to regulate the sale of invasive plants (both native and exotic-native) for ornamental or restoration use. A list of NJ's invasive plants can be found within the appendix of the following web site..."
	7g	Develop targeted outreach brochures for pet owners to reduce the negative impacts to beach nesters and migratory and breeding shorebirds from domestic dog activity and free-roaming cats.	***Priority***	
	7h	Develop brochures and posters to educate the public and increase awareness of New Jersey's indigenous nongame fish species.		
	7i	Develop an outreach brochure about northern diamondback terrapin biology, behavior, and threats, specifically targeting recreational (crab pot) crabbers.		Revised to: "Develop an outreach brochure about northern diamondback terrapin biology, behavior, and threats, specifically targeting recreational (crab pot) crabbers that can be distributed when they are applying for their crabbing licenses."

Goals (1-8)	Conservation Actions' Numbers	Atlantic Coastal Regional Landscape Conservation Actions	Status per stakeholders' meeting	Edits made per comments and recommendations received at Stakeholders' meeting on March 29, 2007.
	7J	Develop brochures for and posters targeting watercraft users, including a mapping component to identify critical feeding and nesting habitats to avoid.	***Priority***	Revised to: Develop a brochure and/or poster which targets boat and jet-ski operators in order to help minimize their impact on wildlife. The outreach materials should include general information about what wildlife may be encountered, and the proper etiquette and appropriate practices for operating watercraft in the vicinity of wildlife and/or areas posted to protect wildlife.
	7k	Develop educational brochures, posters, and programs (targeted at both children and adults) that convey the threat posed by contaminants and persistent marine debris to marine life.	***Priority***	
8	**Assess large-scale habitat change every five years**			
	8a	Collaborate with NJ DEP's Bureau of Geographic Information and Analysis and Rutgers Center for Remote Sensing and Spatial Analysis to develop methods to update DEP's land use/land cover data every five years and perform critical habitat change analysis to assess trend in habitat loss and conversion. Focus within this region should be on beach erosion and and loss of coastal marshes and coastal bay islands.	***Priority***	