

Great Bay National Wildlife Refuge

Release of Draft Comprehensive Conservation Plan

Greetings from Great Bay Refuge!

The U.S. Fish and Wildlife Service (Service, we) has just released a draft Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA) for Great Bay National Wildlife Refuge (Great Bay Refuge, the refuge) for public comment and review. In this newsletter, we summarize the three different management alternatives we evaluated for the refuge. We also explain how to obtain and comment on the draft CCP/EA and provide details on our public meeting.

The Refuge

Great Bay Refuge is located in the town of Newington, New Hampshire, on the eastern shore of Great Bay Estuary. The 1,103-acre refuge is the largest parcel of protected land on the estuary. It includes a rich diversity of habitat types, including oak-hickory forests, grasslands, shrub thickets, freshwater and saltwater wetlands, and open water.

Great Bay Refuge was established in 1992 to protect the refuge lands' natural diversity of fish, wildlife, and plants; protect federally listed species; preserve and enhance water quality and aquatic habitats; and fulfill the U.S.'s international treaty obligations relating to fish and wildlife resources.

The refuge also includes the 29-acre Karner blue butterfly conservation easement in Concord, New Hampshire. The easement's pine barrens are managed for the



Upper Peverly Pond on Great Bay Refuge

USFWS

federally listed endangered Karner blue butterfly, as well as other rare butterfly and moth species.

Comprehensive Conservation Planning

In 1997, Congress passed the National Wildlife Refuge System Improvement Act. Its main components include a unifying mission for the National Wildlife Refuge System (Refuge System), a new process for determining compatible uses of refuges, and a requirement to prepare CCPs for each refuge in the Refuge System.

A CCP is a 15-year strategic plan guiding management for all refuge programs. Service policy requires that CCPs be revised at least every 15 years, or sooner if significant new information becomes available or conditions change.

Draft Plan Available for Public Review

We began preparing a CCP for Great Bay Refuge in 2009. Our core planning team includes refuge and regional Service staff and two representatives from the New Hampshire Department of Fish

and Game (NHFG). We have now completed the draft CCP/EA, which we are distributing for a 30-day public review and comment period, ending on March 19, 2012.

The draft CCP/EA describes in detail the three management alternatives we evaluated for Great Bay Refuge to achieve the refuge's purposes, vision, and goals (see highlights below). It also provides an analysis of the potential environmental effects from implementing each alternative.

Management Alternatives Considered

Below are brief descriptions of the three alternatives we evaluated for the refuge. These are followed by more detailed highlights in the table. Please refer to chapter 3 of the draft CCP/EA for complete descriptions of each alternative (see "How to Obtain a Draft Plan" below).

We have identified alternative B as the Service-preferred alternative.

Alternative A - Current Management

This alternative describes our current management priorities and activities for Great Bay Refuge and the Karner blue butterfly conservation



Shawn McCready/Flickr/Creative Commons

Upland sandpiper, a State-listed endangered species



American black duck

Great Bay Refuge Draft Goals

Goal 1: Perpetuate the biological integrity, diversity, and environmental health of estuarine and freshwater habitats on Great Bay Refuge to protect water quality and sustain native plant communities and wildlife, including species of conservation concern.

Goal 2: Perpetuate the biological integrity, diversity, and environmental health of upland and forested wetland habitats on Great Bay Refuge to sustain native plant communities and wildlife, including species of conservation concern.

Goal 3: Foster and maintain conservation, research, and management partnerships to promote protection and stewardship of the ecological resources of the Great Bay Estuary.

Goal 4: Promote enjoyment and awareness of Great Bay Refuge and Great Bay Estuary by providing high-quality, compatible wildlife-dependent public uses on refuge lands and on partner lands and waters around the refuge.

Goal 5: Contribute to the recovery of the federally listed endangered Karner blue butterfly and other rare Lepidoptera through the conservation, protection, and restoration of pine barrens habitat.

easement. It also serves as a baseline for comparing and contrasting alternatives B and C.

Alternative B - Habitat Diversity and Focal Species Emphasis (Service-preferred alternative)

This is the Service-preferred alternative because it combines the actions we believe would best achieve the refuge's purposes, vision, and goals; respond to key issues; and enhance habitat for focal species.

Under alternative B, we would manage a mix of forested, shrubland, grassland, wetland, and freshwater impoundment habitats to benefit a diversity of native wildlife and plant species, particularly waterfowl, breeding birds of concern, and migratory fish. With partners, we would also consider starting a captive rearing program for New England cottontail, a candidate for the Federal List of Threatened and Endangered Species, and modifying bunkers to create bat hibernacula. We would also improve our public use program by enhancing trails and evaluating expanding the hunt program.

We would work more closely with NHRF to manage the Karner blue butterfly easement, as well as enhancing the existing trail and onsite interpretive information.

Alternative C - Emphasis on Natural Processes

Alternative C would rely primarily on ecosystem processes and natural disturbances to restore the biological integrity, diversity, and ecological health of the refuge, to the extent possible. We would not actively manage any grasslands or shrublands and they would transition to forest over the long term. Under this alternative, we would expand our visitor services program and public access more than alternatives A and B. Our management of the Karner blue butterfly easement would be the same as alternative B.

How to Obtain a Draft Plan

You may view and download the draft CCP/EA online: <http://www.fws.gov/northeast/planning/great%20bay/ccphome.html>

You may also request a hard copy or CD-ROM of the draft plan from the Parker River Refuge staff.

Email: fw5rw_prnwr@fws.gov

Mail: Parker River Refuge
6 Plum Island Drive
Newburyport, MA 01950

Phone: 978/465-5753

Fax: 978/465-2807

How to Provide Comments

We invite you to share your comments about the draft plan in writing or in person at our public meeting (see below). We will accept letters, faxes, phone calls, and emails. To be considered, all comments must be received or postmarked by March 19, 2012. Please put "Great Bay Refuge CCP" in the subject line of your email.

Email: northeastplanning@fws.gov

Mail: Nancy McGarigal
U.S. Fish and Wildlife Service
300 Westgate Center Drive
Hadley, MA 01035

Phone: 413/253-8562

Fax: 413/253-8468

Public Meeting

You may also wish to participate in our public meeting at Newington Town Hall on Thursday, March 8, 2012. We will have both an afternoon and evening session. At each session, there will be a short presentation on the draft plan, followed by an open house with refuge and planning staff. We will record all of the comments and suggestions from the meeting.

March 8, 2012 - Newington, NH

Afternoon Session: 2:00-4:00 pm

Evening Session: 6:30-8:30 pm

Newington Town Hall
205 Nimble Hill Road
Newington, NH 03801

People with disabilities who need special assistance to participate in this meeting, please contact refuge staff at 978/465-5753 or the Federal Relay Service at 1-866-377-8642. Requests for accommodations should be made at least 5 days in advance.



New England cottontail

Great Bay National Wildlife Refuge: Comparison of Alternatives

Alternative A <i>Current Management</i>	Alternative B <i>Habitat Diversity & Focal Species Emphasis</i> <i>(Service-preferred Alternative)</i>	Alternative C <i>Emphasis on Natural Processes</i>
Estuarine Habitats and Freshwater Impoundments		
Continue to: <ul style="list-style-type: none"> Maintain 36 acres of salt marsh habitat for salt marsh sparrows, black ducks, wading birds, fish, and shellfish. Maintain and manage 62 acres of freshwater impoundments for migratory waterfowl and fish. Control invasive species. 	In addition to alternative A: <ul style="list-style-type: none"> Develop a baseline index of ecological integrity for the refuge's salt marsh and monitor to ensure no decline in integrity. Collaborate with partners to protect Great Bay Estuary's water quality and restore oyster and eelgrass beds. Remove Lower Peverly Pond Dam and restore to stream habitat to benefit migratory fish, including American eel. 	Similar to alternative B, except: <ul style="list-style-type: none"> Also remove Upper Peverly Pond and Stubbs Pond Dams, and restore areas to stream habitat. Except for beaver dams, no infrastructure in Peverly Brook.
Forest, Shrubland, and Grassland Habitats, Including Forested and Scrub-shrub Wetlands		
Continue to: <ul style="list-style-type: none"> Manage 659 acres of forest to provide habitat for breeding birds. Maintain 149 acres of forested and scrub-shrub wetlands to benefit amphibians and migratory birds. Manage 26 acres of shrub habitat to provide nesting, foraging, and migrating habitat for bird species of conservation concern. Manage 169 acres of grassland habitat for nesting grassland birds. Control, inventory, and map invasive species. 	<ul style="list-style-type: none"> Allow 41 acres of grassland and shrubland to naturally transition to forest to provide habitat for forest-dependent birds and bats. With partners, explore the feasibility of a New England cottontail captive rearing program on shrublands in the former Weapons Storage Area. With partners, explore modifying one or two bunkers in the former Weapons Storage Area for use as bat hibernacula. Manage remaining 98 acres of grassland for upland sandpipers. After removing Lower Peverly Pond Dam, maintain 158 acres of forested and scrub-shrub wetlands. 	<ul style="list-style-type: none"> Allow all grassland and shrubland habitats to naturally transition to forest, resulting in a total of 852 acres of forest. Establish and maintain 169 acres of forested and scrub-shrub wetlands after removing Upper Peverly, Lower Peverly, and Stubbs Ponds' Dams. Restore to native vegetation those refuge roads that are no longer necessary for management.
Refuge Administration, Facilities, and Visitor Services		
Continue to: <ul style="list-style-type: none"> Maintain unstaffed refuge and existing headquarters; Parker River Refuge staff will continue to administer refuge. Maintain the two existing trails, parking lot, interpretive kiosk, and observation deck. Provide limited, volunteer-led environmental education and interpretive programs, upon request. Offer a 2-day white-tailed deer hunt. 	In addition to alternative A: <ul style="list-style-type: none"> As funding allows, hire four new staff stationed at Great Bay Refuge: assistant refuge manager, wildlife biologist, visitor services specialist, and maintenance worker. Build a new visitor contact station/refuge headquarters to better serve public and to accommodate new staff. Enhance existing wildlife observation and photography opportunities by rerouting the Peverly Pond Trail; adding additional benches, interpretive signs, and observation platforms; updating the refuge Web site; and pursuing public access to Fabyan Point. Evaluate the opportunity to expand the existing hunt program to include a wild turkey hunt and/or a fall archery season for deer. 	<ul style="list-style-type: none"> Similar to alternative B, hire four new staff stationed at Great Bay Refuge and build new visitor contact station/refuge headquarters. Create a new trail to Woodman Point and a new trail and observation deck at Fabyan Point. Update refuge Web site. Evaluate the opportunity to expand the existing hunt program to include a wild turkey hunt and/or fall archery season for deer.
Karner Blue Butterfly Conservation Easement		
Continue to: <ul style="list-style-type: none"> Support NHRG's management activities on the easement (e.g., prescribed burns, planting wild lupine, butterfly captive rearing and translocation). Maintain existing trail and kiosk. Partner with "Kids for Karners" and the New England Zoo and Aquarium Association. 	In addition to alternative A: <ul style="list-style-type: none"> Support NHRG and the Service's Ecological Services efforts to protect and manage additional acres of habitat. Develop a memorandum of understanding with NHRG to guide future cooperative management. Extend existing trail and add interpretive panels and second kiosk. Develop brochure, and update existing kiosk and Web site. Provide interpretive materials and onsite tours and programs. 	Same as alternative B. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;">U.S. Fish & Wildlife Service http://www.fws.gov February 2012</p> <div style="display: flex; justify-content: space-around;">   </div> </div>

Great Bay National Wildlife Refuge Vision Statement

Great Bay National Wildlife Refuge will be a treasured cornerstone in protecting and restoring the Great Bay Estuary's unique and significant ecological and cultural resources, which are unparalleled in New England. The estuary's shallow tidal waters will teem with a rich diversity of aquatic resources, from oysters and eelgrass beds, to healthy populations of migratory fish. The refuge's oak-hickory forests, grasslands, shrublands, and freshwater ponds will support a bounty of wildlife throughout the year. During winter, bald eagles will thrill refuge visitors as they taunt the many and diverse flocks of waterfowl and waterbirds foraging and resting in its quiet, protected waters. In spring, the refuge's forests, fields, and wetlands will fill with a symphony of bird songs and frog calls. The summer will reward visitors with the opportunity to view native fledgling birds, fawns, and other young of the year. During the fall, the refuge will host hundreds of migrating species ranging from waterfowl, to songbirds, bats, and butterflies, all needing safe haven in an increasingly urbanized landscape.

Visitors from throughout New England will travel to Great Bay Refuge to become immersed in the sights and sounds of nature. The refuge will showcase innovative, science-based, adaptive management techniques and, coupled with exceptional outreach, education, and interpretive programs, help raise awareness and appreciation of the natural world and uphold the mission of the National Wildlife Refuge System. The refuge, in collaboration with partners, will work tirelessly to expand the protection and conservation of the Great Bay Estuary and its native habitats and wildlife for the benefit of the American people.

The Karner blue butterfly easement lands in Concord, New Hampshire, will contribute to the recovery of the federally endangered Karner blue butterfly. Each spring, the flowers of native lupine plants growing among pitch pine on the easement lands will attract thousands of adult Karner blue butterflies to feed on nectar. During the summer, an abundance of Karner blue caterpillars will feed on the lupine leaves. As part of an extraordinarily dedicated partnership, the easement will be a key link in the network of lands in the Concord area managed to help reverse the butterfly's decline and bring the species back from the brink of extirpation.



U.S. Fish and Wildlife Service
National Wildlife Refuge System
Refuge Planning
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Hadley, MA 01035