



Habitat Protection

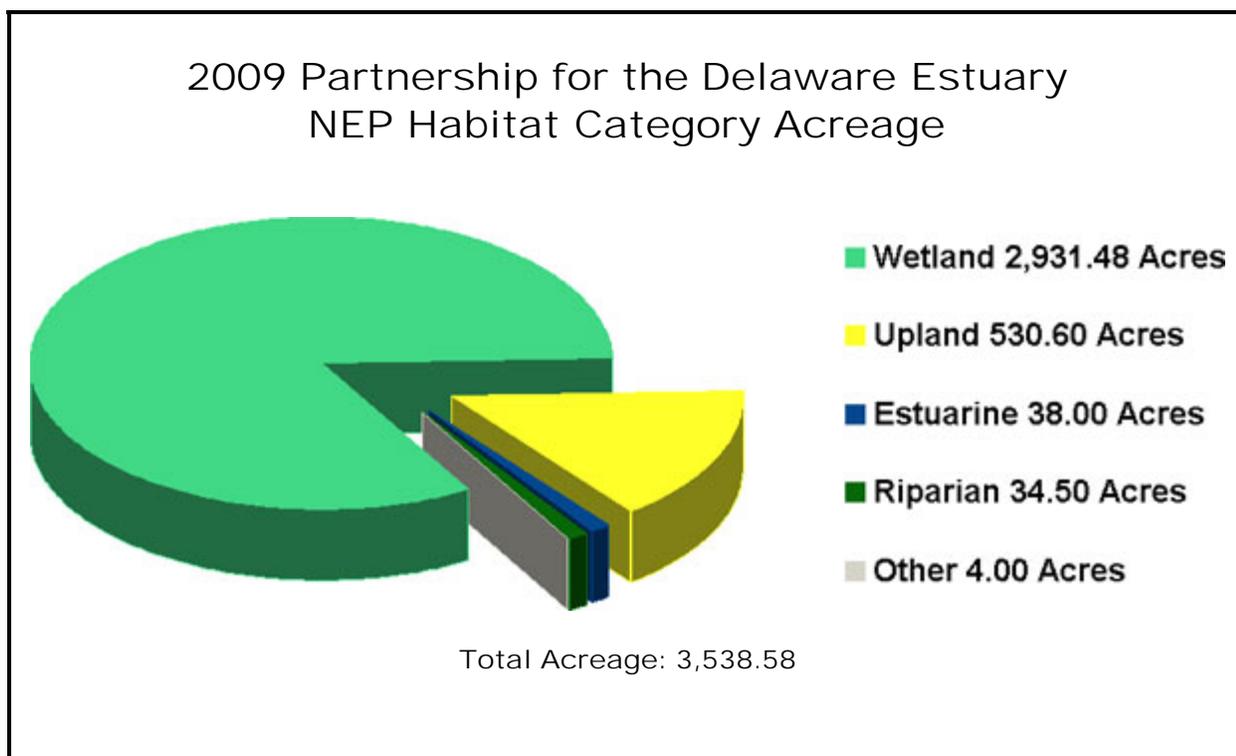
[Contact Us](#) | [Print Version](#) Search: [GO](#)

[EPA Home](#) > [Water](#) > [Wetlands, Oceans, & Watersheds](#) > [Oceans, Coasts, & Estuaries](#) > [Habitat Protection](#) > [Habitat Protection and Restoration Overview](#) > [Local NEP Projects & Regional Summary](#) > [NEP Sites in South Atlantic](#) > [Partnership for the Delaware Estuary - 2009 Report Summary by Habitat Category](#)

Partnership for the Delaware Estuary GPRA 2009 Report Summary by Habitat Category

[Return to Map](#)

Select the year you want to see the report for: 2009



The Partnership for the Delaware Estuary NEP has protected and/or restored a total of 3,538.58 acres of habitat in 2009. The pie chart shows the proportion of acreage devoted to each habitat-type, including 83% for Wetland habitat, 15% for Upland habitat, 1% each for Estuarine and Riparian habitats, and less than 1% for habitats categorized as Other.

The Table immediately below provides brief summary information about the protection and/or restoration projects completed and reported by the NEP in 2009.

Year 2009 Projects						
Project Name	Lead Implementer	Project Description	Habitat Type	Acreage	Linear Miles	Linear Feet

2009 State of Delaware Oyster Revitalization Project	Delaware Fish and Wildlife	The Silver Bed Shell Plant site had 78,681 bushels of surf clam shell mixed with ocean quahog shell planted to provide clean shell for oyster spat to attach.	Shell Bottom	38	0	0
Abandoned mine reclamation project in Schuylkill Township, Schuylkill County	Abandoned Mine Reclamation Trust Fund, Appalachian Clean Stream Initiative, The Growing Greener Program	This project involves enlarging and creating a 2.5 acre (1 hectare) wetland to passively treat the Mary D Overflow Discharge. Excess material from the wetland enlargement will be used to reclaim 150 feet (46 meters) of dangerous highwall, 10 to 20 feet (3.3 to 6.1 meters) deep, located near the mine discharge. The proposed work is one part of a three phase plan near the Village of Mary D. The other phases include the relocation of the Mary D baseball fields to land donated by Blaschak Coal Co. and the construction of a passive mine drainage treatment system at the location of the old ball fields.	Freshwater Marsh	2.5	0	0
Alloways Creek Greenway	State of New Jersey Department of Environmental Protection	The New Jersey Department of Environmental Protection acquired this land because it is adjacent to the Thundergut Wildlife Management Area and has wetlands that will be restored.	Freshwater Marsh	250.46	0	0
Bells Mill Stream Restoration	Philadelphia Water Department - Office of Watersheds	Due to the volume and velocity of water being discharged to Bells Mill during wet weather events, the tributary is deeply entrenched and overwidened. The restoration of Bells Mill would include eliminating the scour pool below outfall W-084-02 by utilizing stone for energy dissipation. Additionally, the streambanks and bed downstream of the outfall would need to be stabilized using principles of natural stream channel design. High grades and the presence of Bells Mill road adjacent to the creek inhibit the creation of meanders. Instead, appropriate energy dissipating structures such as rock vanes and channel-spanning, keystone-anchored, and step structures are proposed for installation.	In-Stream	0	0	740
Brookside Country Club Stream Restoration	Brookside Country Club	Golf requires huge land parcels in the Schuylkill Watershed, where there are 79 courses covering 12,000 acres, with 21 miles of streams running through them. Inspired by fish struggling for survival in Sprogels Run, the supervisor at the Brookside Country Club took on a stream restoration project that challenged traditional land management and introduced club members, students, and other golf course managers to efficient and effective stormwater Best Management Practices.	Riparian	0	0	0
Capitol to the Coast	New Jersey Department of Fish and Wildlife	Priority acquisition for New Jersey Fish and Wildlife as an addition to Assunpink Wildlife Management Area. Land is adjacent to Assunpink Wildlife Management Area lands. The property consists of forested wetlands and a field area and preservation helps to lock up development along Windsor Road.	Forested Wetland	23.52	0	0
Cathedral Run Treatment Wetland	Philadelphia Water Department - Office of Watersheds	Cathedral Run is a small first order tributary to the Wissahickon Creek. The stream originates from springs. One stormwater outfall located at the headwaters of the tributary drains approximately 91 acres of residential and commercial property. PWD will design a stormwater treatment wetland just west of the current location of this outfall. The project proposes to divert most storm flow from the 48-inch storm sewer from its current outfall location and move it upstream along Cathedral Road. The diverted flow will then outfall into a stormwater treatment/sediment basin. This pool will then discharge through an outlet pipe into the lower pool which will provide further pollutant removal and flow reduction.	Other	1	0	0
CESP Mannington Mills	Mannington Mills Corporation	The Mannington Mills is a floor covering manufacturing company in Salem County, dating back to 1915. The company's environmental vision is to "exceed the	Riparian	12	0	0

		<p>environmental expectations of the people we care deeply about..." To that end, the company has joined the US Green Building Council and is manufacturing products for use in green buildings. As part of the company's environmental initiative, Mannington is interested in developing habitat improvement projects on the Salem County property. To provide early successional/shrub-scrub habitat, 12 acres of the farmland portion of the property were planted with native vegetation. To advance the successional stage of site from an annually tilled agricultural field to the old field stage that characterizes shrub-scrub habitat, an understory of native warm season grasses with diversity of trees and shrubs forming the midstory was established. The benefits of establishing a native grass understory are multiple: the grasses will compete with other vegetation to reduce colonization of the site by woody species and maintain the site in an early successional stage for a greater length of time; grasses will reduce the potential for invasive species encroachment; grasses have a greater filtering capacity than woody vegetation, improving the quality of water that moves through the site into Fenwick Creek; finally, the clumping nature of native grasses form the appropriate understory structure necessary for species such as bobwhite quail.</p>				
Cohansey River Greenway	State of New Jersey Department of Environmental Protection	The State of New Jersey Department of Environmental Protection acquired this land to preserve because of its abundant natural resources. The property represents a mosaic of forest and wetland habitat. The man-made lake was once a working cranberry bog, and the lake is spring fed with one main ephemeral stream. The property also contains an Atlantic white cedar forest surrounding a 2 acre bog. Orchids and carnivorous plants have been identified on site. Also, the upland forest is oak and pitch pine with a healthy species understory.	Forest/Woodland	50.99	0	0
Corporate Environmental Stewardship Program- Logan Generating	Logan Generating and Partnership for the Delaware Estuary	The Corporate Environmental Stewardship Program (CESP) is an ongoing PDE program that works with corporations to improve habitat value on their properties. CESP is a voluntary program and each corporation joins and receives staff PDE support to conduct various restoration related projects at their sites. Logan Generating has been a CESP member for 10 years and annually working on restoration projects at their site. In 2009, Logan worked with PDE to plant native trees and shrubs throughout 10 acres of riparian buffer on their property. These plantings added to an earlier seeding project to establish a meadow in the open space.	Riparian	10	0	0
Delaware Estuary Living Shorelines Phase II	Partnership for the Delaware Estuary	This project uses a technique that may help marshes keep pace with nature to enhance or restore shellfish reefs that line the edges of wetlands. Such communities are often capable of buffering marshes from wave action, slowing erosion, and buying more time for marshes to accumulate in place (vertical accretion) or move inland (horizontal relocation). The Delaware Estuary Living Shoreline Initiative (DELSI) is a pilot project designed to stabilize eroding shorelines of tidal marshes. We are developing tactics where intertidal shellfish such as ribbed mussels are used to form a natural breakwater. This "living shoreline" traps sediment and absorbs waves that would otherwise wash away plants. The goal of this project is to provide an economical approach to communities in the Delaware Estuary that are struggling to combat the erosion of their tidal marshes. The PDE is collaborating with Rutgers University and other non-governmental organizations, academic institutions, and volunteers to carry out the DELSI. Support for this work has been generously provided by the National Fish and	Tidal Wetland	0	0	2500

		Wildlife Foundation, New Jersey Department of Environmental Protection, New Jersey Sea Grant, and the U.S. Environmental Protection Agency's Region 2 Office.				
Delaware Phragmites 1- Port Penn	Delaware Fish and Wildlife	Aerial herbicide application by the State of Delaware to control invasive non-native phragmites in tidal wetlands along Delaware Bay.	Tidal Wetland	80	0	0
Delaware Phragmites 12-Faella Tract	Delaware Fish and Wildlife	Aerial herbicide application by the State of Delaware to control invasive non-native phragmites in tidal wetlands along Delaware Bay.	Tidal Wetland	20	0	0
Delaware Phragmites 13-Milford Neck	Delaware Fish and Wildlife	Aerial herbicide application by the State of Delaware to control invasive non-native phragmites in tidal wetlands along Delaware Bay.	Tidal Wetland	113	0	0
Delaware Phragmites 2-C&D Canal Wildlife Area	Delaware Fish and Wildlife	Aerial herbicide application by the State of Delaware to control invasive non-native phragmites in tidal wetlands along Delaware Bay.	Tidal Wetland	397	0	0
Delaware Phragmites 4-Augustine Wildlife Area	Delaware Fish and Wildlife	Aerial herbicide application by the State of Delaware to control invasive non-native phragmites in tidal wetlands along Delaware Bay.	Tidal Wetland	586	0	0
Delaware Phragmites 5-Cedar Swamp Wildlife Area	Delaware Fish and Wildlife	Aerial herbicide application by the State of Delaware to control invasive non-native phragmites in tidal wetlands along Delaware Bay.	Tidal Wetland	214	0	0
Delaware Phragmites 6-Woodland Beach Wildlife Area	Delaware Fish and Wildlife	Aerial herbicide application by the State of Delaware to control invasive non-native phragmites in tidal wetlands along Delaware Bay.	Tidal Wetland	800	0	0
Delaware Phragmites 7-Little Creek Wildlife Area	Delaware Fish and Wildlife	Aerial herbicide application by the State of Delaware to control invasive non-native phragmites in tidal wetlands along Delaware Bay.	Tidal Wetland	234	0	0
Delaware Phragmites 8-Ted Harvey Wildlife Area	Delaware Fish and Wildlife	Aerial herbicide application by the State of Delaware to control invasive non-native phragmites in tidal wetlands along Delaware Bay.	Tidal Wetland	100	0	0
Delaware River Greenway	State of New Jersey Coastal Zone Management Program	The New Jersey Coastal Zone Management staff worked with the Delaware River Greenway to restore 120 miles of coast starting at Trenton, NJ and added to the Delaware Water Trail which is also on the Pennsylvania side of the Delaware River from Morrisville to Marcus Hook.	Riparian	0	120	0
Duck Stamp Land Acquisition	State of New Jersey	The State of New Jersey acquired this coastal marsh area near Townsend Sound, near other State-owned, Department of Fish and Wildlife managed properties. The wetland provides habitat for shorebirds, waterfowl, and other coastal species. Purchase of this property will preserve this habitat in perpetuity.	Tidal Wetland	31.3	0	0
Eagle Manor Land Acquisition	State of New Jersey	The Coastal and Estuarine Land Conservation Program in the State of New Jersey acquired Eagle Manor to put into preserved agricultural land.	Agricultural Land	11.7	0	0
Identify and Support Greenspace Programs	State of Delaware, Dept. of Natural Resources and Environmental Control, Division of Parks and	Property donated in fee simple to State for educational and recreational purposes. This donation will also be used to maintain public open space in the Red Clay Valley.	Field/Meadow	4.3	0	0

	Recreation					
Lansdale Borough Riparian Buffer and Stormwater Retrofit	Lansdale Borough	Implementation of riparian buffers and stormwater retrofits on public parkland at the headwaters of the Wissahickon Creek.	Riparian	7.5	0	0
Mill Dam Fish Passage Restoration Project	Mount Holly Township	The goals of the project are to restore historic fish passage in the Rancocas River for native migratory fish species, specifically alewife (<i>Alosa pseudoharengus</i>) and American shad (<i>Alosa sapidissima</i>). The Rancocas River is located within an important ecosystem for many types of fisheries and wildlife, including anadromous and catadromous fish populations, migratory birds, and other wildlife. Improving fish access will directly benefit anadromous fish and will indirectly benefit piscivorous fish and migratory birds. Mill Dam is located approximately 11 miles upstream from the confluence of the Rancocas River and the Delaware River. The Mill Dam, which is owned, operated and maintained by the Township of Mount Holly for scenic and recreational purposes, consists of a concrete spillway and a concrete apron with a gate allowing control of water levels upstream of the dam. The Township of Mount Holly has identified that dam removal or breaching is the preferred option for creating fish passage. Upon completing the installation of the fish ladder, this river will provide access to approximately 11 miles of continuous habitat to migratory fish and other aquatic species. The project installs a permanent 30-foot-long aluminum Model A Alaska Steeppass fishway and a concrete open flume to the upstream areas of Mill Dam to allow migratory fish to proceed unimpeded to historic spawning and foraging areas upstream.	In-Stream	0	11	0
Perkiomen Watershed Planting Projects	Perkiomen Watershed Conservancy	The Green Lane Reservoir supplies drinking water to the town of East Greenville, but increased upstream development intensified stormwater runoff, and threatened to increase water quality impairment. A reforestation project took place to slow the destructive force and filter pollutants from the runoff. Located in Montgomery County, the Green Lane Reservoir provides drinking water to the town of East Greenville through the smallest privately owned water treatment plant in the state of Pennsylvania. Aqua Pennsylvania, a public water utility, draws water from the Perkiomen Creek just downstream from the reservoir. A growing population and increased development upstream from the reservoir has intensified stormwater runoff, and the Green Lane Reservoir is considered impaired by the Pennsylvania Department of Environmental Protection. In the interest of protecting drinking water resources and improving the health of the watershed, the Perkiomen Watershed Conservancy (PWC) teamed up with the Borough of East Greenville and Aqua Pennsylvania to restore several acres of forest upstream from the reservoir, utilizing funds from the Schuylkill Watershed Initiative Grant.	Riparian	5	0	0
Pidcock Creek Streambank Stabilization	Bucks County Conservation District	Project would stabilize and restore eroded streambanks on Curl's Run, a tributary to Pidcock Creek. 800 feet of stream bank would be restored using bioengineering techniques and Best Management Practices.	In-Stream	0	0	800
Pine Knot Wheeler Run	Schuylkill Headwaters Association, INC.	The primary goal of the project is to reduce recharge to the Pine Knot Mine Pool, and in turn its discharge to the West Branch Schuylkill River, thereby reducing non-point source pollution, improving water quality, and improving wildlife and fisheries habitats.	In-Stream	0	0	230
Pineland II	State of New	The New Jersey Department of Environmental Protection	Forest/Woodland	17	0	0

Land Acquisition	Jersey	purchased this forested Pinelands parcel which is located in the Southern Medford/Evesham Greenway Area. There is a small stream with a mixed Cedar forest area as well as Pine/Oak forested uplands. This area is of high interest to the State to preserve for recreation as well as protection of Threatened & Endangered species including Rattle Snakes and Pine Snakes. It's acquisition will make an important addition to Wharton State Forest and provide a connection for a future proposed trail.				
Pinelands I Land Acquisition	State of New Jersey Department of Environmental Protection	The State of New Jersey acquired this property to preserve and add to the Bear Swamp Preserve in Southampton Township, Burlington, New Jersey. This forested wetlands parcel located along a stream in the Pinelands would make an excellent addition to Bear Swamp Preserve. There is a mixed Cedar/Hardwood swamp and some Pine upland forest on this property which would provide watershed protection and habitat protection for several Threatened & Endangered species. The property may provide road front access from Rt. 70.	Forested Wetland	78.4	0	0
Rancocas Phase 1 Shoreline Restoration at Mill Creek Park (NJ)	Rutgers Foundation	The Rancocas Watershed is a special place within the tidal reach of the Delaware Estuary where salt waters of the Atlantic Ocean and fresh waters of the Delaware River mix. The Rancocas Creek extends west from a primarily rural agricultural and forested edge of the Pinelands Region through the heavily developed areas of Burlington County to the Delaware River. Breeding pairs of state-endangered Bald eagles and Pied-billed grebes make their home there. The open waters of Rancocas Creek near the Delaware River provide habitat for significant congregations of waterfowl throughout the winter.	Tidal Wetland	1.3	0	200
Salem River Mannington Greenway	State of New Jersey Departmental of Environmental Protection	Seabrook Farms is a property in Mannington Township comprising approximately 2000 acres. The Seabrook family has assembled an almost two square mile area over many years, and has continuously farmed the land over that time. The property lies along the Salem River in an area known as Mannington Meadows. It is a mosaic of active agricultural land, forested wetlands, and emergent wetlands. Mannington Meadows has been identified by other New Jersey state entities as significant for migratory and resident bird populations. Both Federal and State Threatened and Endangered Species inhabit parts of the property, and suitable habitat exists for a variety of other priority species. There are at least two active Bald Eagle nests on or near the property, along with Coopers Hawk and Osprey.	Agricultural Land	41.8	0	0
Schuylkill River Watershed Priority Farm Riparian Buffers	Berks County Conservancy	123.86 acres of riparian and wetland areas were protected from livestock access with streambank fencing, plantings, and crossings on 19 priority farms in the Schuylkill River Watershed.	Agricultural Land	123.86	0	0
Scioto Creek Stormwater Demonstration Project	Montgomery County Lands Trust	The property exhibits a stream bank erosion problem that is exacerbated by stormwater runoff and high volume discharge during times of moderate and heavy rain. By constructing a stormwater mitigation system, the project restores and enhances the stream bank riparian vegetation, increase stormwater storage, desynchronize floodflow, and serve as a model project for the residents and municipalities throughout Montgomery County.	Field/Meadow	17.5	0	0
Stow Creek Land Acquisition	State of New Jersey	The State of New Jersey acquired this land to preserve it and protect Stow Creek and Mad Horse Creek in Lower Alloway Township, Salem, NJ. This land is adjoining the Mad Horse Creek Wildlife Management Area and is waterfront property.	Forest/Woodland	151.35	0	0

Trout Run Mushroom Wetlands	Chester County Conservation District	Project includes the creation of 7 passive treatment wetlands adjacent to Trout Run in the shape of mushrooms as the final water quality improvement project completing 3 years of mushroom resource conservation BMP installations in the Trout Run subwatershed	Freshwater Marsh	0	0	840
West Branch Chester Creek Unnamed Lower Dam Removal	American River, Inc.	The removal of the Unnamed (Lower) dam on the West Branch of Chester Creek will restore and additional 0.3 miles of habitat for American Shad, alewife, blueback herring, hickory shad, American eel, brown trout, fallfish, swallowtail shiner, white sucker, tessellated darter, satinfish shiner, blacknose dace, and other fish species. Migratory fish passage has not been secured at the only downstream dam, the Rockdale Dam on the mainstem of Chester Creek. However, the dam removal project will also improve public safety, water quality and instream habitat in the West Branch of Chester Creek. Additionally, the Chester-Ridley-Crum Watersheds Association is partnering with American Rivers to organize and implement a tree planting event following the removal of the dam and restoration of free-flowing conditions. The Unnamed (Lower) dam is a 10-ft high, 90-ft long stone and concrete structure build in 1917 for water power and supply at the site of an earlier dam from 1839. This project meets the objectives for the CCMP for the Delaware Estuary. This dam removal will remove a manmade obstruction to fish passage and will reestablish rivering habitat in the current impoundment area. Citizen monitoring data already exists and will continue, along with a riparian planting.	In-Stream	0	0.3	0
Whitby Meadows Habitat Creation Project	Fairmount Park Commission	The Whitby Meadows Habitat Creation Project involves converting two nearby fields, one 5 acre field and one 6 acre field, into functional meadows. The surrounding edge will also be enhanced through the planting of high-quality native trees and shrubs. The fields have been mowed lawn. After the fields were released from mowing, invasive non-native and undesirable trees began recolonizing the fields. The fields consist primarily of non-native grasses resulting fro years of turf management. Fairmount Park is proposing to aggressively remove the undesirable plants through mechanical and chemical control in order to seed and then plant a variety of native meadow and edge plants. These plants will provide habitat for a variety of wildlife, particularly, birds and invertebrates. Meadows are under-represented habitat type in the park system and in Southeast Pennsylvania in general. These meadows provide valuable habitat for migratory birds as a stopover point during spring and fall migration. In addition, the meadows will provide critical habitat for a large suite of invertebrates, including butterflies, moths, and native bees. The Fairmount Park system has been identified by the Audubon Society as an Important Bird Area because of it value to neotropical migratory birds. For this reason, the Audubon Society has agreed to monitor both meadows annually beginning in spring 2009.	Field/Meadow	11	0	0
Wises Mill Stream Restoration	Philadelphia Water Department - Office of Watersheds	Wises Mill Run consists of a 92 acre southern portion and a 169 acre northern portion that merge just north of Wises Mill Road before meeting the Wissahickon Creek. Both branches are hindered by urbanization and large storm events. As a result, severe entrenchment occurred in both branches and excessive amounts of sediment has been added to the Wissahickon Creek. This project proposes the restoration and stablization of the two branches via improvement of the channel and banks. Overall, sediment and erosion will be reduced, and aquatic and macroinvertebrate life will be improved.	In-Stream	0	0	1500
Wises Mill	Philadelphia	Wises Mill Run consists of a 92 acre southern portion	Other	3	0	0

Treatment Wetland	Water Department - Office of Watersheds	and a 169 acre northern portion that merge just north of Wises Mill Road before meeting the Wissahickon Creek. Both branches are hindered by urbanization and large storm events. As a result, severe entrenchment occurred in both branches and excessive amounts of sediment has been added to the Wissahickon Creek. This project proposes to reduce flows prior to entering the southern branch by the creation of a stormwater treatment wetland. The wetland would discharge into approximately 1300 linear feet of restored stream prior to its confluence.				
Youth Camp Land Acquisition	State of New Jersey Department of Environmental Protection	The State of New Jersey acquired a non-profit youth camp, Appel Farm Arts and Music Center. The center wants to protect a buffer around their existing facilities and expand the camp.	Forest/Woodland	101.1	0	0
Total				3538.58	131.3	6810

[Top of page](#)

Can't find what you want? Try our [A-Z Index](#) 

[General Information & Resources](#)

[En Español](#)

[EPA Home](#) | [Privacy and Security Notice](#) | [Contact Us](#)

Last updated on Thursday, November 12th, 2009
 URL: http://www.epa.gov/owow_keep/estuaries/pivot/2009del_charts.html