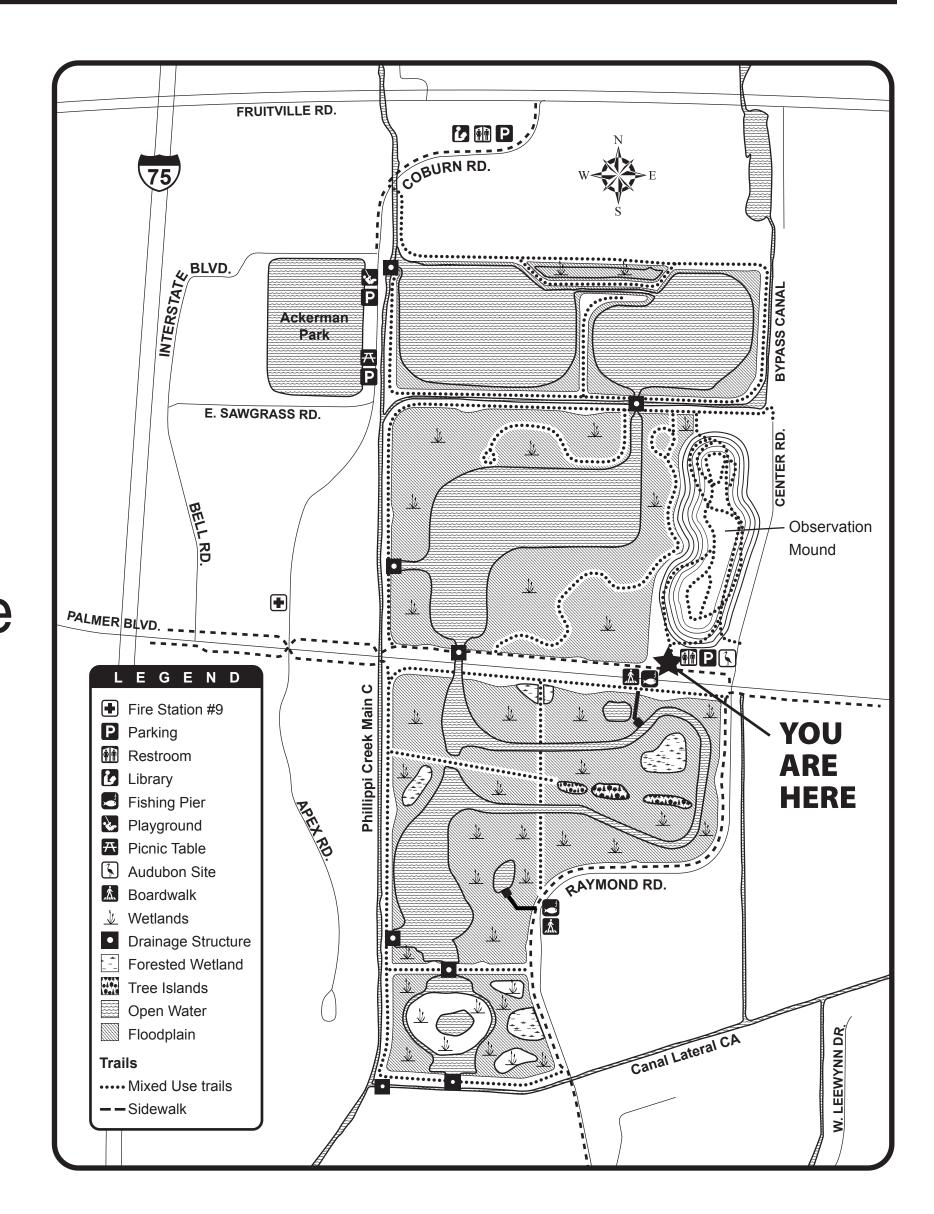
Why Was This Regional Stormwater Facility Created?

Known as the "Celery Fields," this Regional Stormwater Facility encompasses a total of 444 acres. This regional stormwater management project was constructed with funding from capital stormwater assessments in the Sarasota County Phillippi Creek basin, the cooperative funding program of the Southwest Florida Water Management District, and a Total Maximum Daily Load water quality grant from the Florida Department of Environmental Protection. The project converted historically drained and farmed lands into a surface-water management system of wetland, open water, and upland habitats. This system provides stormwater-runoff retention, flood protection, and a diverse environmental filtration system that delivers cleaner water to Phillippi Creek and ultimately to Roberts Bay North and Sarasota Bay.



From Wetlands to Celery and Back to Wetlands

Once locally known as "Big Camp Sawgrass" and "Tatum Sawgrass," the area of the current Celery Fields project was drained in the late 1880s and converted from sawgrass marsh to intensive agriculture in the early 1920s. Several



Photos courtesy of the Sarasota County History Center; Tom Bell Collection

different crops were tried before the decision was made to predominantly grow celery. Farming of celery continued until 1994, when the area was acquired by Sarasota County for floodwater storage and control.



Blanching Celery, 1920s. Blanching was the practice of pushing dirt up around the bases of the stalks to prevent sunlight from turning the stalks green. This process was used to produce a milder-flavored, lighter-colored vegetable.

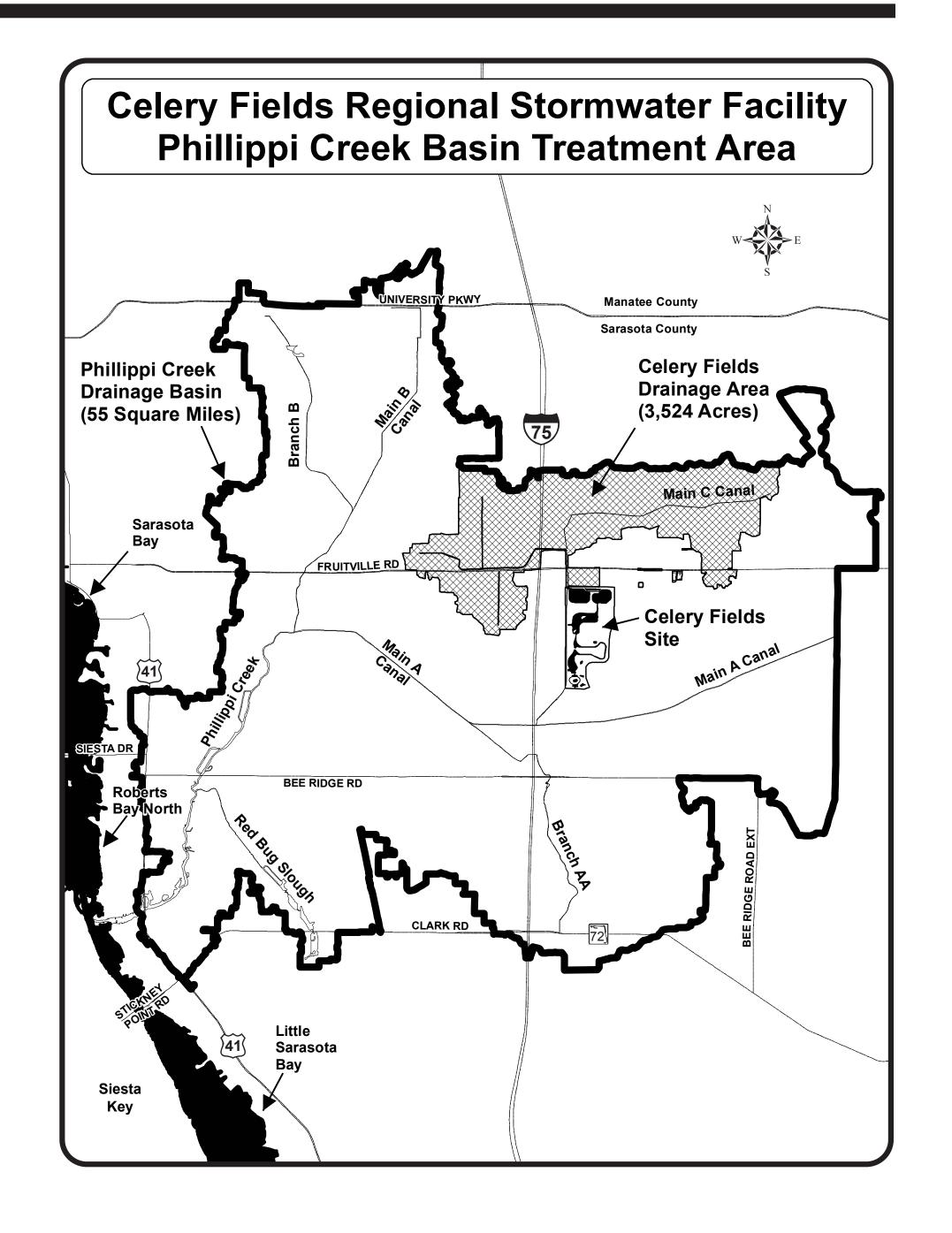


Loading a Bell Brother's truck with celery, 1940s

Celery harvesting packing machine, 1950

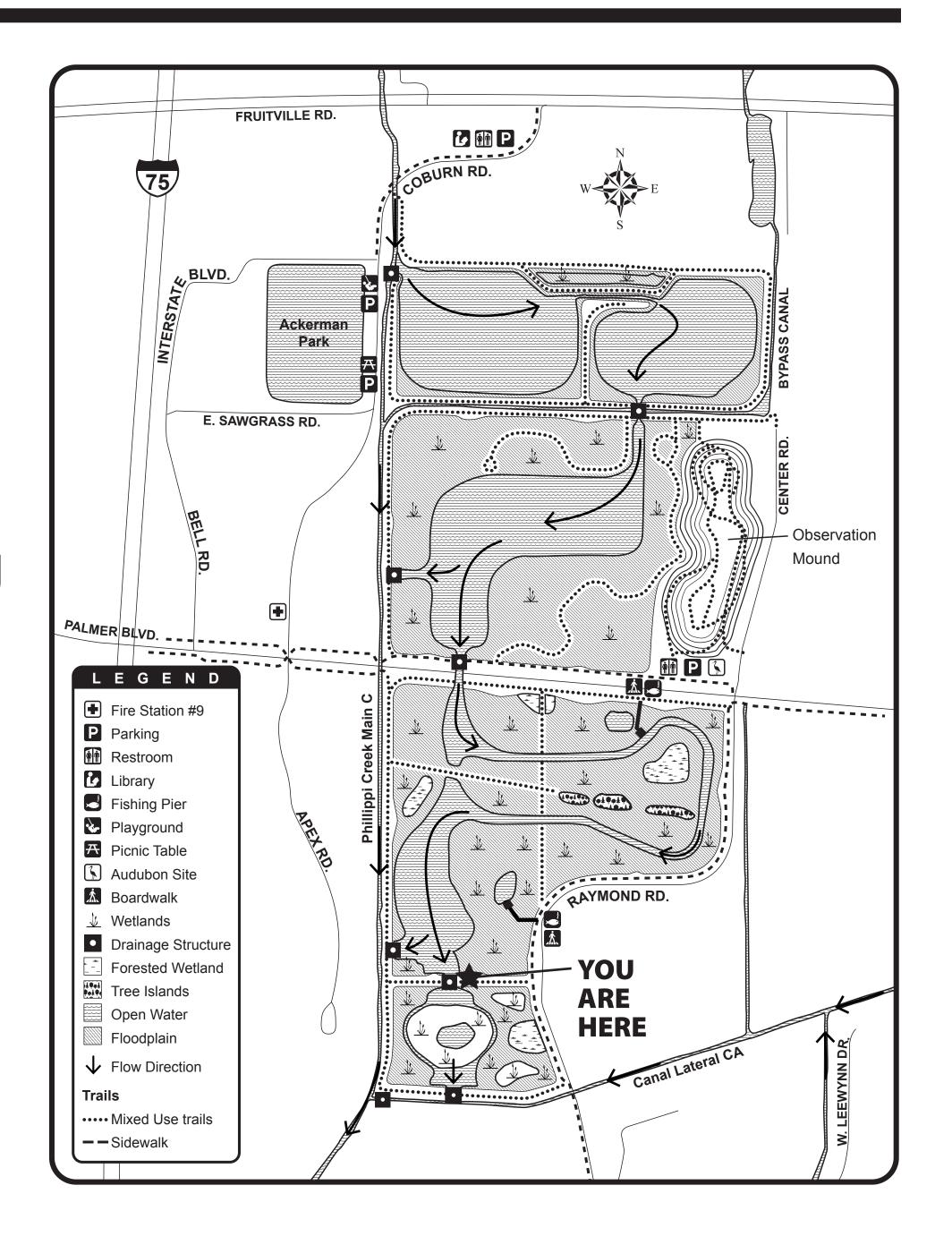
The Celery Fields Watershed

The marsh before you is a component of a much larger 55-square-mile watershed known as the Phillippi Creek Basin. A watershed captures and drains water through a network of natural and manmade channels and ditches to a common body of water. When it rains within the basin, pollutants are carried in stormwater runoff to the bay. Today, much of the natural creeks and marshes have been altered and replaced with canals for drainage. As the water moves through the Celery Fields Regional Stormwater Facility, it passes through a series of control structures and ecosystems that provide the lost essential functions, including control of erosion, settling of pollutants, and biological uptake of nutrients. The result is cleaner water from the 3,525-acre drainage area flowing downstream to Phillippi Creek and ultimately Roberts Bay North.



Helping Minimize Damaging Floods!

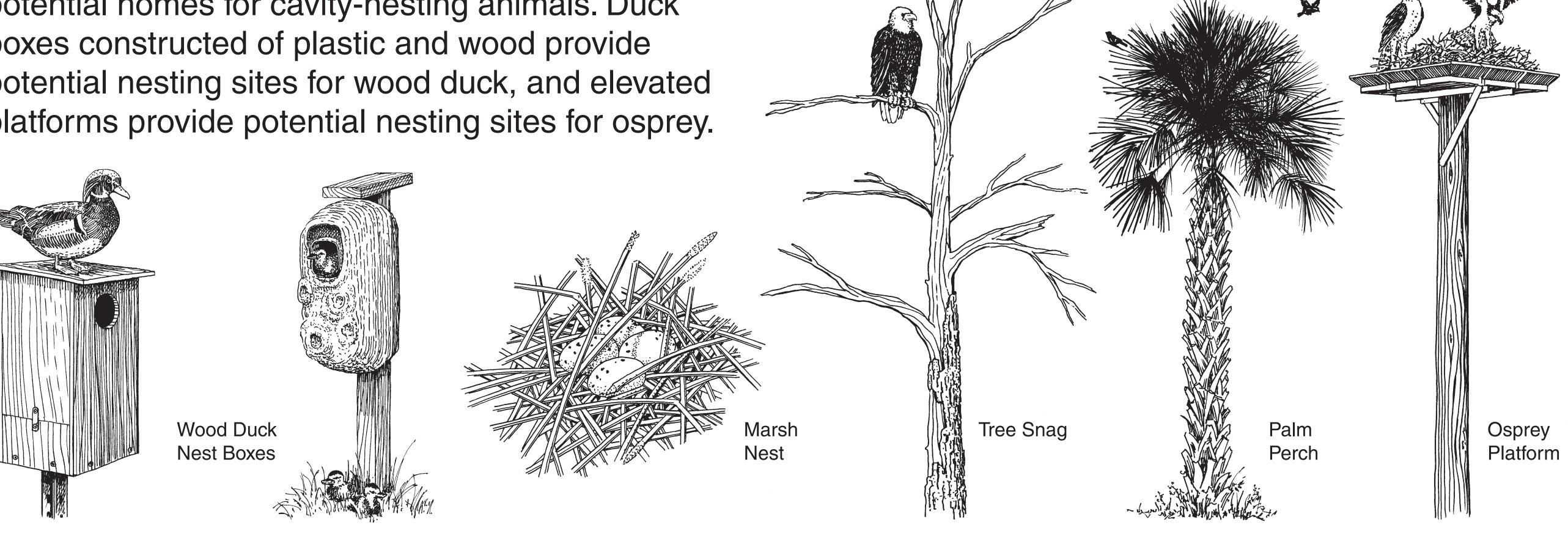
The Celery Fields Regional Stormwater Facility manages flow from over 3,500 acres of the Phillippi Creek Basin. Flow enters the Celery Fields from the northwest and flows south under Palmer Boulevard into the southern 150-acre area. To excavate the necessary flood control area, over one million cubic yards of fill were relocated to create an observation mound, which affords a great view of the Celery Fields and surrounding area. Three structures regulate flow and water level by controlling the release of water into the adjacent canal network. Overflow elevations are designed for compatibility with natural systems and to regulate discharges in times of heavy rainfall. This system has minimized flooding of homesites and provides a regulated release of flow to downstream areas.



Providing Wildlife a Little Help!

The Celery Fields Regional Stormwater Facility provides a number of benefits to wildlife. Cabbage palms provide food, resting perches, and nesting places for a variety of bird and other wildlife species. Standing "snags" serve as vantage points for birds to scan the area for food and predators and provide potential homes for cavity-nesting animals. Duck boxes constructed of plastic and wood provide potential nesting sites for wood duck, and elevated platforms provide potential nesting sites for osprey.

Various constructed upland and wetland habitats provide desirable nesting sites for a variety of wildlife, including birds, mammals, reptiles, and amphibians. All of these areas may be particularly active during respective nesting seasons.



Keeping Our Bays Healthy

Treating stormwater with facilities like the Celery Fields helps to protect mangrove and seagrass habitats downstream within the bays. These habitats are critical to endemic wildlife like manatees, sportfish like snook, and shellfish such as scallops. Known as "nature's kidneys," wetlands like those restored in the Celery Fields help purify and filter water that passes through them.

Stormwater runoff from residential, business, golf course, and agricultural land uses conveys a variety of pollutants to receiving waters. The primary pollutants of concern include suspended solids, nitrogen, and phosphorus. Within the Celery Fields, the series of large lakes and the long meandering open water slow the velocity of incoming water, allowing the settling of suspended materials. Further treatment is provided by the large vegetated wetlands, created in the southern portion of this regional facility, prior to discharge of flow downstream and ultimately to Roberts Bay North. From the stormwater runoff each year, the Celery Fields Regional Stormwater Facility is estimated to remove approximately 52,000 pounds of suspended solids, 1,500 pounds of nitrogen, and 725 pounds of phosphorus.

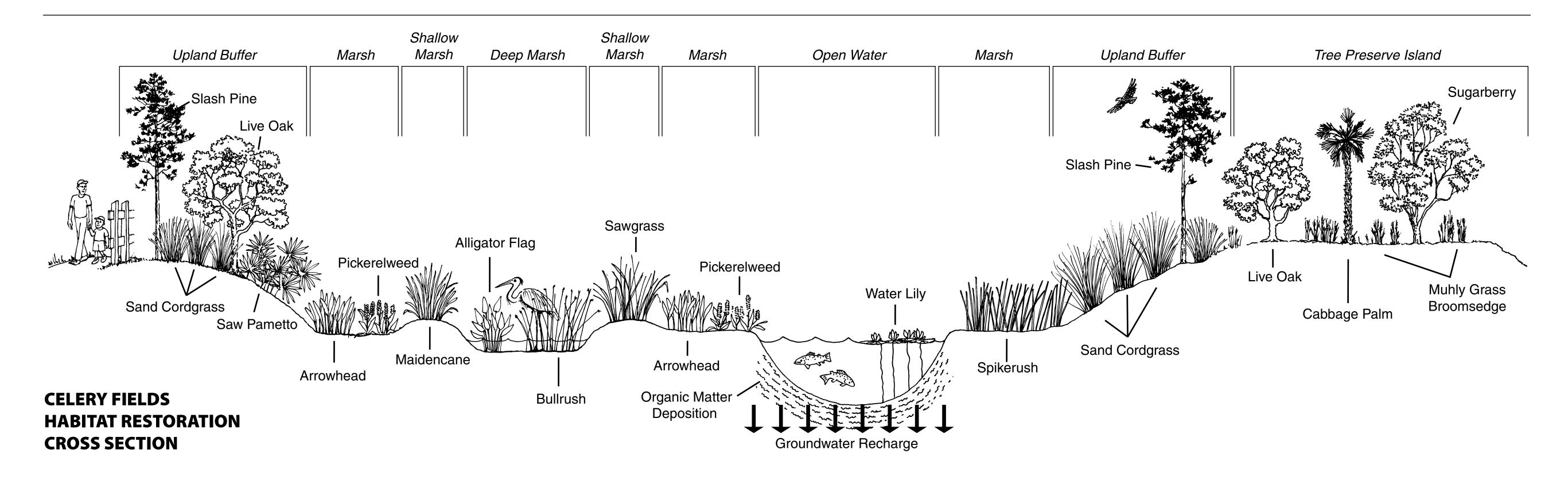
gen,

You can help by keeping pollutants out of water that flows to storm drains.

What Is a Wetland Ecosystem?

A variety of wetland communities exist throughout the Celery Fields. The characteristic vegetation of a wetland depends on the depth of the water and length of time a wetland holds water, which is known as the "hydroperiod." The deeper water zones may have floating, broad-leaved plants such as water lilies. As the water becomes shallower, there may be

a distinct change to alligator flag plants or bulrush. The next shallower zone will typically support such species as pickerelweed, arrowhead, or spike rush meadows. In still shallower areas, you may observe maidencane, sawgrass, and cordgrass. For wildlife, these "zones" provide a diversity of vegetation for shelter, a variety of food sources, and the environments necessary for different stages of their life cycle. These communities also remove nutrients from the surface water, control flow to receiving streams, provide input to the groundwater, contribute organic material for future plant growth, and introduce oxygen to the water column, all of which are essential for healthy ecosystems.



Nuisance Plant Species Can Be a Real Drag for Native Habitats

A critical component in the maintenance of natural communities is the control of non-native, invasive species. Non-native invasive species, often referred to as "exotics," may alter native communities by displacing native species or changing community structure or ecological functions. The Celery Fields are regularly inspected for nuisance and exotic species, such as Brazilian pepper, primrose willow,

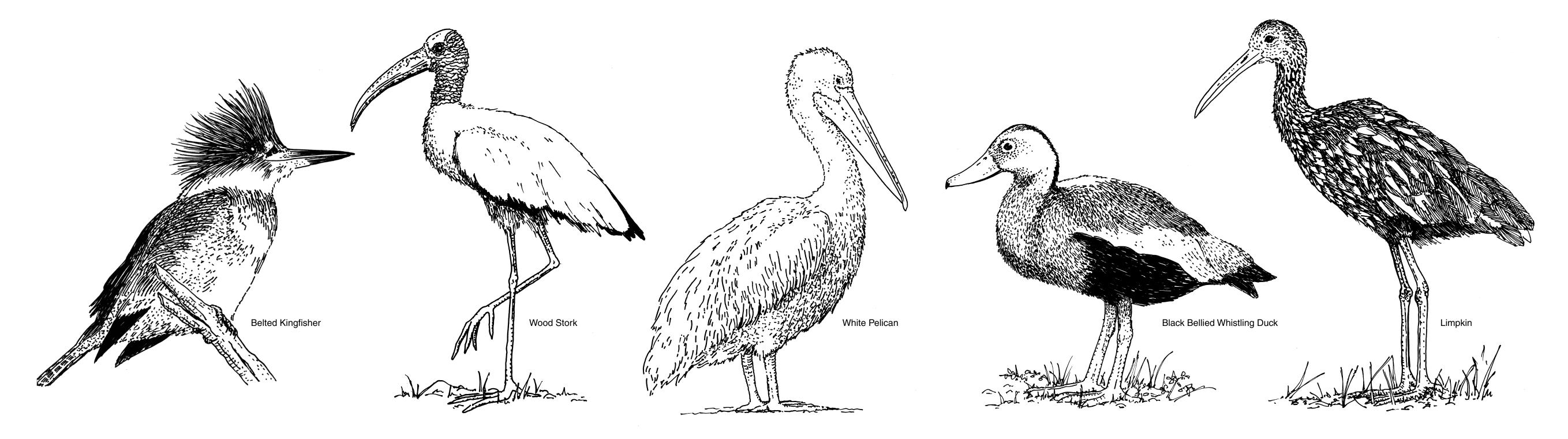
cattail, torpedo grass, alligator weed, West Indian marsh grass, and water hyacinth. If present, exotic invasive species are controlled by specifically targeted herbicide applications, water level control, manual removal, or biological control. In other areas, burning may be used to control undesirable species as well as to regulate competing species.



A Haven for Hundreds of Species!

The habitats within the Celery Fields Regional Stormwater Facility provide an excellent opportunity for observing numerous wildlife and plant species. Commonly observed bird species include great egret, limpkin, red-shouldered hawk, bald eagle, little blue heron, snowy egret, black-necked stilt, white ibis, wood stork, and a variety of duck species, including blue-winged teal, mottled duck, and black-bellied whistling duck. Potential mammal sightings include otter, red fox, raccoon, cotton rat, and bobcat. Amphibians and reptiles that may be seen or heard include green tree frog, leopard frog, alligator, Florida cooter turtle, Florida snapping turtle,

banded water snake, and black racer. The primary wetland plant species you may see include spikerush, sawgrass, alligator flag, bulrush, arrowhead, and pickerelweed. Note the cordgrass and occasional tree and shrub species along the bank or transitional zone. The transitional zone or "ecotone" includes native slash pine, Walter's viburnum, sugarberry, wax myrtle, sweet bay, American elm, and live oak. In the Celery Fields setting, the transitional zone also provides a buffer between developed features such as roadways, sidewalks, urban grasses, and the other native habitats before you.

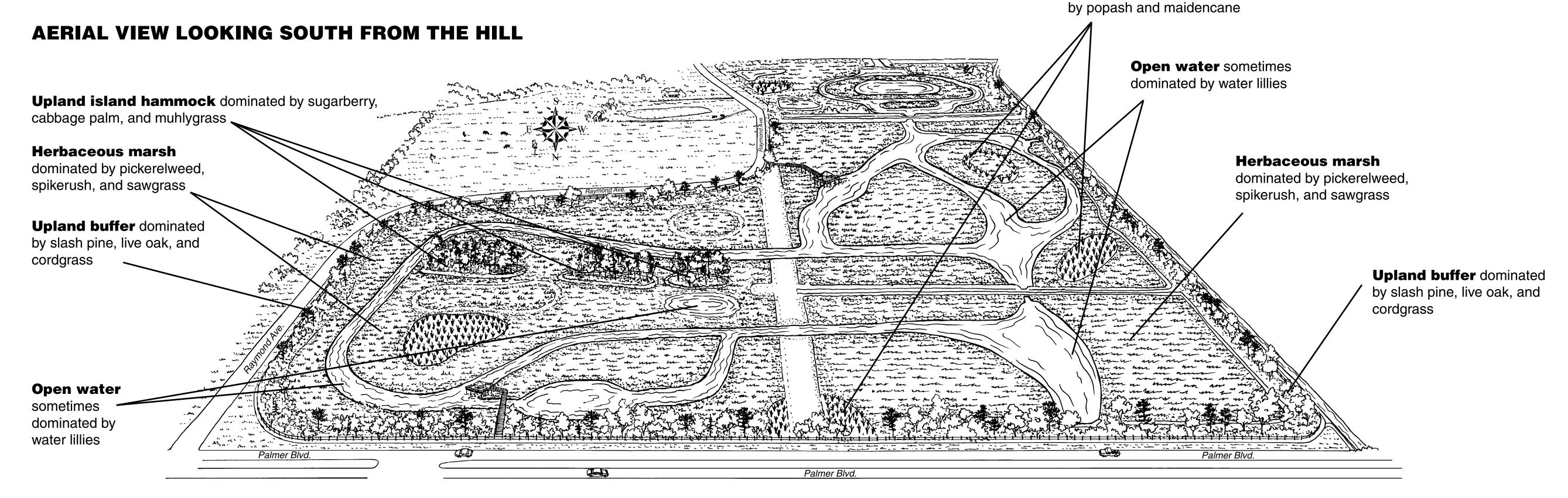


Habitat Complexity Equals Wildlife Diversity

The construction of the Celery Fields Regional Stormwater Facility included the creation of freshwater marsh, forested wetlands, open water, and an upland buffer zone, as well as the enhancement of upland island hammock communities. All five habitats can be observed from this location. The diversity of habitat provided by an assemblage of uplands with trees, shallow and deep open water,

vegetated wetlands, aquatic community, and a transitional zone is the key to the diversity of wildlife that we may observe here. For wildlife, this facility provides protection, a variety of food sources, and the environments necessary for different stages of their life cycle.

Forested swamp dominated



Habitat Restoration Integrates Engineering and Science

This location offers a panorama of a variety of habitats created and restored throughout the Celery Fields. With the exception of upland hammock islands, all of the habitats you see have been constructed by the careful design of biologists and engineers. The wetland system was designed with channels through the open water areas, enabling water to be conveyed through its length and overflow into adjacent shallower areas of vegetation. Deeper pools, surrounded by a shallow zone, create

isolated pond areas that concentrate

aquatic prey for wildlife and provide a water source during periods of drought.

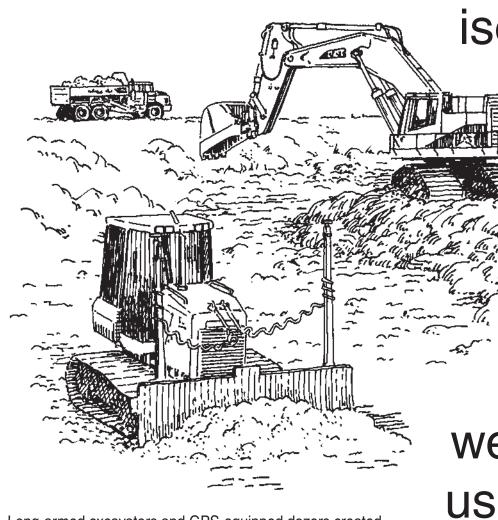
Historic soils, high in organics needed for successful establishment of a

successful establishment of a wetland system, were preserved and used in the construction of the wetland communities. Wetland plant

species were selected based on their individual tolerances to various water depths and duration of standing water and dry periods.

Natural wetland systems may be restored by

removing or correcting those factors that resulted in their deterioration. Wetlands may be constructed or "created" by converting an existing land use into a functional wetland community. Within the Celery Fields, maintenance of restored and created wetlands includes the use of water control structures to regulate water levels and a nuisance plant management program to minimize impacts on native plants.



Long-armed excavators and GPS-equipped dozers created 37 planting zones at specific elevations throughout the site.

Celery Fields Site Designed for Multiple Users

As agricultural activities declined in the late 1990s, the Celery Fields area became wetter. Foraging by both migratory and non-migratory bird species began to increase. As this increase became more evident, Sarasota County, in conjunction with the Sarasota Audubon Society, worked to further enhance the Celery Fields stormwater design by including a flow-through system with shallow marsh and forested wetland habitats. Construction of these habitats has resulted in a dramatic increase in the diversity of birds in the area, with over 200 species identified throughout the year. On any given day, numerous species of birds can be identified, and the Celery Fields has become nationally recognized as a top spot for birding.

The multi-use trails at the Celery Fields provide an excellent opportunity for recreation and wildlife viewing. Varied topography and the combination of paved and unpaved paths allow for a broad range of individual activities—from walkers with strollers to runners and cyclists. The pedestrian and bike paths offer learning opportunities for all ages and up close encounter with a variety of habitats and wildlife. The lakes and open water areas also provide an opportunity for fishing.

