

Lardner's Point Park

Levick Street, Philadelphia

Site Photos



Interpretive sign about habitats, species and Living Shoreline restoration



Live branch layering after construction



Educational sign with composting restroom in the background



Volunteer Work Day

Site Context

Lardner's Point Park was previously a brownfield site serving as a ferry terminal before the construction of the Tacony Palmyra Bridge. More recently it was a boat launch and marina. The existing site condition was one of a hard armored river edge with extensive concrete bulkheads and a good deal of concrete paving.

Project Overview

The design and construction removed the concrete bulkheads and boat ramp and replaced them with a re-graded riverbank with contours modeled after naturally occurring stable riparian areas elsewhere along the Delaware River. A rock marsh toe sill was constructed at one end of the site to provide proper topography for the intertidal marsh area. The only stand of native riparian trees along the riverfront was preserved for its habitat value and to stabilize the riverbank. Soil contamination was minimal and was addressed through the permitting process. In situ soils were largely non-existent, so new soil was brought into the site.

Sustainable Practices

Water- The park design and construction promotes groundwater infiltration and elimination of runoff through the use of natural storm water management features including meadows, bio-swales, wetlands, a pond vernal pools, permeable surfacing on plazas and walkways and site grading that retains the water on-site. A Coastal Plain Forest habitat was created as a riparian buffer to filter runoff, stabilize soils, control erosion at the river's edge, and provide wildlife corridors and habitat. A bio-swale planted with moist meadow species captures runoff on the uphill side of the soft surface walking path, recharging the runoff and protecting the path from erosion. Live branch layering was installed to stabilize the toe of slope at the high tide line. It has been extremely successful as the

stoloniferous shrubs spread to form a dense mat of underground roots that resist the erosive forces of floods and seven-foot tides on the Delaware River. There is no turf in the park and native landscaping eliminates the need for irrigation. The site design and construction protects and enhances wetlands and floodplain functions with appropriate native landscaping.

Natural Landscaping- The existing vegetation at the site was characterized by one of several invasive species. As part of the design and construction, these invasive species were removed and a 12-month monitoring period by the contractor was instituted. Delaware River City Corporation (DRCC) continues to monitor and control invasive species in concert with Philadelphia Parks and Recreation and the Philadelphia Wooden Boat Factory. In the 4.5 acre park, seven landscape habitats were created, including Moist Scrub-shrub, Moist Meadow, Dry Scrub-shrub, Dry Meadow, Freshwater Intertidal Low Marsh, Freshwater Intertidal High Marsh and Coastal Plain Forest. The seven habitats include approximately 100 native species of trees, shrubs, forbs and warm season grasses. In addition to monitoring the invasive species on site, DRCC continues to supplement the park landscape with additional indigenous plant species, improving habitat for the many species of bird, butterflies and insects that inhabit the park.

Materials Selection and Construction-

The park includes a combination of green building amenities such as solar lighting, permeable pavement and ecologically-sensitive restoration. Park features include: a restored pier for fishing and river overlook; restoration of the riparian buffer and riverbank forest, new meadow plantings, dry and moist scrub-shrubs; creation of new freshwater high marsh and low marsh intertidal wetlands and marsh meadows, a loop trail system and creation of three accessible picnic areas. The rock marsh toe sill constructed at the south end of the site utilized much of the

Sustainable Practices Cont.

demolished bulkhead concrete along with natural stone boulders. The bike trail, part of the K&T Trail, occupies the right-of-way of an abandoned rail line. Additional amenities include a drinking fountain, sitting area with seat walls around the overlook, a pedestrian walking path, a large trail map and a Native Plant Entrance Garden. Picnic tables are constructed of recycled plastics. A composting restroom was installed in the spring of 2015. The restroom building, permeable pavers, crushed stone for pathways, wall stone and plant material were all obtained from local sources within 50 miles.

Connect People to Nature- Lardner's Point Park provides the first public access to the Delaware River in the Tacony neighborhood of Philadelphia. The K&T Trail traverses the site (part of the East Coast Greenway trail and bi-state Delaware River Heritage Trail) and is part of the main spine of the North Delaware Riverfront Greenway. It will be extended north and south of the park in 2015. Interpretive signage was recently installed to educate visitors of both historical and environmental facts and features of the Park. These features encourage multiple passive recreational activities such as bird and butterfly watching, nature observance, fishing, walking, picnicking, dog walking and bicycling and generally exploring the habitats. The recent formation of the Friends of Lardner's Point Park will formalize and expand the role of the community in ongoing stewardship activities at the park. DRCC works with the Philadelphia Wooden Boat Factory Riverguides, an after-school and summer program focused on ecology, to foster the establishment of the intertidal marsh areas, with opportunities for hands on learning, performing invasives control and other stewardship projects.

Operations and Maintenance- The park utilizes solar light fixtures. The only other use of electricity at the site is the lights and fan for the composting restroom. Park and DRCC staff monitor the lights. The lighting has little impact on outdoor light pollution; the fixtures are low wattage Compact Fluorescent cutoff fixtures on timers to be shut off at night after the park closes. All vegetation trimmed or removed is

composted in place or elsewhere onsite. The meadows have been left natural, with no mowing, burning or other means to control woody. Woody materials colonizing open meadow areas will be removed by hand. This has not been an issue to date in the three years the habitats have been maturing. The newly created Friends Group and other community organizations assist DRCC staff in park maintenance activities that supplement the basic maintenance provided by Philadelphia Parks and Recreation through multiple volunteer work days throughout the year and through additional monitoring activities.

Environmental Stewardship

Messaging- Since the opening of the park in May 2012, DRCC has conducted a number of Stewardship activities. In addition to working with the Philadelphia Wooden Boat Factory, DRCC has projects with the Youth Volunteer Corps and Franklin Towne Charter High School, as well as a work training program with the Center for Employment Opportunities that have increased the number of volunteer work days at the park from 4-6 per year to approximately 20-25+ volunteer work days each year. Recently a volunteer planting day resulted in the installation of 1500 native shrubs, forbs and grasses to enhance the habitats at the park. Interpretive signs illustrate the habitats in the park; describe the construction of the park and creation of a Living Shoreline; and educate on invasive plants. More interpretive signs highlighting the history and culture of the site will be installed in 2015. DRCC hired a Friends Outreach Coordinator in 2014 to create a friends group that will be instrumental in the future maintenance and monitoring of the park. DRCC's Facebook page has been used as a means to promote the Park, inform the public about work days, what is currently of interest at the Park, ecological information, the formation of the Friends group and other information contributing to the long term stewardship of the site.

Information provided by: James Fries, RLA, Project Manager, Delaware River City Corporation (2015)



Native plantings



Walkway through native meadow



Wooden Boat Factory Students with Goose Enclosure Prototype and intertidal Marsh plantings, Fall 2013

Project Partners/ Consultants

Delaware River City Corporation

Friends of Lardner's Point Park

Philadelphia Department of Parks and Recreation

Pennsylvania Environmental Council

http://www.dcnr.state.pa.us/cs/groups/public/documents/document/d_000644.pdf



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