Six Lakes Park:

A Vision and Management Plan for the Olin Powder Farm Hamden, Connecticut



Cover photo: Moonrise across the southeastern pond, fall 2003

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Executive Summary

The Olin Powder Farm is a gem of open space currently hidden in a densely populated commercial and residential area of southern Hamden, Connecticut. It offers an ecologically valuable, relatively large, and uniquely diverse forested area, as well as significant water resources. Located between the Stop N' Shop and other stores on Dixwell Avenue to the west and Whitneyville and Highwood neighborhoods to the east, the Olin Powder Farm is a 102.5acre property. It is a place where local residents could walk meandering paths through majestic pines and mature oaks or around shallow ponds teeming with waterfowl, fish, and turtles. It is a place where wildlife can find refuge from the surrounding urban environment.

The site has been kept off limits to the public since the late 1800s when Winchester Repeating Arms Company purchased the land. Winchester later built ammunition bunkers and paved paths, remnants of which are found on the site today. In the 1930s, the Olin Corporation used the site for the storage of gunpowder and light industrial waste. The site is still owned by the Olin Corporation, but it has been unused for industrial operations since the 1970s. Some remediation of industrial waste sites has taken place over the last 15 years and the property could be on its way to becoming a public nature park.

The creation and preservation of open space in southern Hamden has recently become a priority for the Town and local neighborhood and greenspace organizations. The Farmington Canal Heritage Greenway trail has received substantial funding and completed trail sections are often busy with walkers, bikers, and rolllerbladers. The



Southeastern pond, early fall 2003

section of the Farmington Canal trail adjacent to the Olin Powder Farm is slated for construction in the near future.

The proposed Mill River Watershed Trail will also abut the Olin Powder Farm property before connecting to the Farmington Canal trail. If the Olin Powder Farm were open to the public and maintained as a park, it could contribute significantly to the greenspace network being developed in southern Hamden. Complementary to the Farmington Canal Greenway trail, the Mill River Watershed Trail, and general enthusiasm for green space in southern Hamden, the Olin Powder Farm could become a meeting point for neighbors and a focal area for passive recreation.

The site also has the potential to be a center for education on the industrial history of south central Connecticut, on the region's water supply system and on local ecology. The site offers unique conservation value and opportunities for education about the public drinking water supply, as the six ponds and several wetland areas on site serve as pretreatment basins for the Lake



White Pine plantation located in the northeast corner of the property, fall 2003

Whitney reservoir. There are nine schools with more than 6,000 students that are within walking distance of the property. The Olin Powder Farm's central location within southern Hamden makes it an excellent resource for teachers who seek nearby locations for fieldtrips. Due to the present enthusiasm for the adjacent trail projects, now is an opportune time to start planning for the purchase, remediation, and development and stewardship of the Olin Powder Farm as a permanently protected nature park.

This document was commissioned by the Hamden Land Conservation Trust and is the result of a six-month study on the potential future uses of the Olin Powder Farm conducted by four graduate students of the Yale School of Forestry & Environmental Studies, referred to as Crown Consulting. It presents a vision for park development that

draws upon the wishes of local residents and the Hamden Land Conservation Trust. The vision's focus is on public access, passive recreation opportunities, water quality preservation, and long-term natural resource conservation. Proposed is a park that protects the Lake Whitney reservoir water supply, enhances the site for native plant and wildlife species, provides opportunities for informal and formal education on the history and ecology of the region, and creates an inviting and safe space for passive recreation. The study specifically draws upon the findings of a comprehensive assessment of the biophysical characteristics of the site and the social context of the surrounding area.

The Olin Powder Farm's unique location within a matrix of urban development and a network of greenspace in southern Hamden has resulted in high public interest in seeing the site become a park. This document includes explicit recommendations for developing and managing the Olin Powder Farm as a passive recreation area with special focus on maintaining water quality and native species diversity and habitat.

The primary foci of the document are:

1. Biophysical Features

The natural features of the Olin Powder Farm include: hilly glacial kettle and kame topography that provides many natural scenic overlooks, six ponds, a cattail marsh, a red maple swamp, and a 130-year-old oakpine forest. The diversity of habitat types and the proximity of water features and wetlands to uplands help to support an impressive number of animal and plant species, including waterfowl, reptiles, amphibians, and fish, and mammals, such as deer, squirrel, and raccoon. The forests and wetlands of the property also moderate water flow and filter stormwater runoff before it enters the ponds.

2. Park Development

We propose a two-stage park development process in which areas deemed safe for public use are opened to the public for passive recreation, while areas of the property in need of remediation are closed to the public until remediation is completed.

Recommendations for the development of the site as a park include:

- Regional Water Authority ownership
- Form a park development coalition and long-term Olin Powder Farm task force
- Educate the public about the Olin Powder Farm, including creating a web site and presenting at public meetings
- Connect trails on the property to the Farmington Canal Heritage Greenway and the Mill River Watershed Trail
- Develop an official trail network on-site that highlights natural features on, uses existing informal trails and desire lines, and minimizes habitat disturbance and erosion (see map of proposed trails on page 6)
- Allow for passive recreation, such as walking, hiking, running, cross-country skiing, and snowshoeing on all trails, and prohibit potentially destructive activities such as biking, swimming, motorized vehicles, and off-trail use
- Utilize parking facilities and sites for access points



Adult and juvenile mute swans on Pond A, winter 2003

3. Park Stewardship

Recommendations for stewardship are organized by stakeholder-identified goals and values, including diversity of native species and habitats, water quality, and safety. This structure emphasizes the interdisciplinary nature of park management, and focuses mangers' attention on the values that have driven the park vision.

Recommendations for park stewardship include:

 Adopt a passive forest management regime that allows shifting species composition within stands as they mature, and aims to maintain diversity of species, forest structure, and habitat types across the site over time

- Maintain standing dead trees for wildlife habitat, unless they interfere with visitor safety
- Promote native species and controlling the spread of invasive plants
- Maintain wildlife habitat while at the same time opening up the land for recreation
- Create wildlife habitat, including regenerating white pine for nonmigratory songbird species and building artificial nesting platforms for osprey
- Reconstruct drainage pipes and aqueducts to improve stormwater management

"Six Lakes Park: A Vision and Management Plan for the Olin Powder Farm" fosters a vision of an accessible and safe urban open space where visitors can find respite, explore and learn, and have meaningful experiences with the natural world. This management plan may also serve as an inspiration for the cleanup and funding needed to turn this vision into a reality. We have enjoyed working with the Hamden Land Conservation Trust and look forward to seeing this vision come to fruition.



Map of Proposed Trail System for the Olin Powder Farm Site

The dark blue lines are proposed new foot trails, and the light blue lines are proposed new paved trails, one of which completes a loop around Pond A (once remediation is complete), and one of which could eventually provide handicap access to the Olin Powder Farm from the Farmington Canal trail.

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Methodology

We conducted an assessment of both the biophysical characteristics of the site and the social aspects of open space development in southern Hamden. For more details on our assessment methodologies, please see **Appendices A and B**.

In summary, we completed the following:

- A biophysical assessment using randomized fixed area plots to quantitatively assess natural resource attributes and characterize forest structure and floristic composition of the property
- > A qualitative assessment of riparian habitats
- Creation of plant and wildlife species lists
- Surveys of local residents and visitors to the site
- Focus groups with teachers and with residents of the Whitney Center retirement home, which is the closest neighbor to the site
- Discussions with local neighborhood associations and environmental organizations
- > Interviews with city officials and community leaders

Exclusions

As part of our agreement with the Olin Corporation, we were not able to dig soil pits to confirm soil types. We were also unable to assess the biophysical characteristics of contaminated areas. The time scope of our plan allowed us to only assess vegetation present in late fall and winter, and restricted assessment of spring and summer fauna and flora.

In the social assessment, due to time and seasonal limitations, we were unable to access two user-groups of the site; current illegal users, and younger local residents who, as an age group, are not commonly represented in neighborhood associations. These groups were indirectly assessed through observation of evidence of illegal site use during the biophysical assessment, and information gathered on Farmington Canal trail use, which includes use by younger local residents.