## 15. South Navy Ditch (Map K)

Site number: K-5 Ownership: Varies, with 60 ft. Village Easement Overall size: 5.44 acres Subwatershed: West Fork of North Branch of Chicago River

## Mapped Land Cover on Site:

River/Stream/Ditch (0.77 acre): South Navy Ditch extends from a culvert at Lehigh Road to its confluence with the West Fork River.

Unassociated Woody Growth (3.55 acres): Buckthorn, box elder, and other aggressive vegetation flanks the ditch on both banks.

Wet/Wet-Mesic Forest/Unassociated Woody Growth (1.04 acres): Disturbed forest borders the upper half of South Navy Ditch on its north side.



South Navy Ditch.

## Developed (0.08 acre):

On the eastern half of the ditch, paved roads cross over it in two places.

Existing Ecological Conditions: South Navy Ditch is one of the last remaining "natural" conveyance channels tributary to the West Fork that is not enclosed in a pipe. Residential development flanks both sides of the downstream, eastern half of the ditch. At the upstream end, open space to the south contains a jogging path and natural area for employees of the Pearson Scott Foresman Company. A 60-foot drainage easement (30 feet either direction from the centerline) allows the use of public funds for maintenance.



Overgrown unassociated woodland banks along South Navy Ditch.

Spoil piles along the stream are evidence that most of South Navy Ditch is channelized. The immediate riparian corridor to the north and south of the stream is degraded and overgrown unassociated woodland (buckthorn, cottonwood, cherry, box elder, and crack willow) that narrows as the downstream end of the ditch flows between residential lots toward the West Fork. Woody growth along banks of the upstream half of South Navy Ditch is contiguous with wooded areas, trails, and open space on the Pearson Scott Foresman Company property. Farther north of South Navy Ditch is privately owned property with disturbed mesic woodland containing a mix of mature native canopy trees and invasive understory shrubs.

Site specific erosion is occurring along South Navy Ditch due to shade suppression and lack of deep rooted understory herbaceous vegetation, and also occasionally due to bank treatments, inappropriate landscaping, or drainage features in place by private landowners.

Restoration and Management Recommendations: The Village is not currently managing South Navy Ditch except to remove blockages as necessary. Management objectives for South Navy Ditch therefore include improving water quality, wildlife habitat, and ecological diversity. Ecological restoration along the easement, especially in cooperation with Pearson Scott Foresman Company and private ownership to the north is recommended to rid the ditch and surrounding riparian habitat of invasive brush and improve conditions for wildlife habitat. The Village should also encourage and educate adjacent private landowners to use native landscaping and best management practices for stormwater management on their properties in order to benefit the South Navy Ditch.



Drainage pipe from adjacent homeowner along South Navy Ditch.

Higher quality riparian habitat and water quality within South Navy Ditch is possible through selective removal of non-native trees and brush, overseeding of native grasses, sedges and forbs, site specific bank repairs (to prevent failure and further erosion of streambanks), homeowner education including where and how to extend drainage pipes such that erosion is prevented, and ongoing maintenance to continuously control invasive plants.