



STORMWATER ACTION CENTER FACT SHEET

Name of Project:

The Morton Arboretum:
Meadow Lake and
Permeable Main Parking
Lot

Location:

Lisle, Illinois

County:

DuPage County

Watershed:

East branch of DuPage
River

Website:

www.landscapeperformance.org/case-study-briefs/the-morton-arboretum-meadow-lake-and-permeable-main-parking-lot

THE MORTON ARBORETUM: MEADOW LAKE AND PERMEABLE MAIN PARKING LOT

OVERVIEW:



The Morton Arboretum Meadow Lake and Permeable Main Parking Lot replaced a former degraded retention pond and asphalt parking lot with a functioning wetland system and permeable lot whose stormwater flow is now integrated with aquatic ecology.

BENEFITS:

- Retains virtually 100% annual rainfall on the site
- Improved water quality in Meadow Lake by helping to reduce Total Suspended Solids (TSS) by 84% and Total Phosphorus by 39%
- Saves approximately 327,700 gallons of potable water for the peak month of July by using nonpotable lake water for irrigation
- Increased the Biomass Density Index — a measure of the density of plant layers covering the ground — by 10% around Meadow Lake and the parking lot
- Prevents the establishment of all invasive species around Meadow Lake through ongoing monitoring and integrated pest management
- Reused approximately 31,000 cu yd of excavated soil and fill materials from the parking lot site to create a portion of a berm to buffer the Arboretum from the adjacent highway
- Supplements the Arboretum topsoil production with nearly 100% or 138 cu yd of the site's plant debris and clippings composted annually
- Saves approximately \$3,300 annually and over 235 maintenance hours through efficient seasonal burning versus only hand weeding around Meadow Lake
- Reduces parking lot maintenance costs by approximately \$25,100 per year when averaged over 50 years by eliminating seal coating, striping and resurfacing.

FUNDING SOURCES:

- \$1.2 million EPA grant provided partial support for this construction project

-  - Water Storage
-  - Habitat Restoration
-  - Flood Mitigation
-  - Bio-Filtration/Green Infrastructure
-  - New/Improved Drainage Infrastructure

