

SKOKIE RIVER STREAM DAYLIGHTING PROJECT

Project Type: Stormwater Best Management Practices (BMPs)

Location: **Commonwealth Edison/Chalet Nursery Property (ComEd):** South of Foss Park Golf Course in North Chicago

Proctor & Gamble Property (P&G): North of Foss Park to Casmir Pulaski Drive in North Chicago

Watershed: North Branch of Chicago River, Skokie River Subwatershed

Project Owner: East Skokie Drainage District

Funded By: East Skokie Drainage District
Illinois Environmental Protection Agency Section 319 of the Clean Water Act Grant
Lake County Corporate Capital Improvement Program

Project Benefits:

- Reduce pollutant loadings to the river
- Reduce flow rates
- Restore and enhance the natural functions of the Skokie River
- Additional storage of flood waters
- Benefits water quality in the Skokie River of the North Branch of the Chicago River
- Benefits are consistent with the objectives in the North Branch Chicago River Watershed Plan

ComEd: 984 feet of 2-stage vegetated channel



ComEd Site

BMPs:

1. Two-stage channel

The District replaced nearly a quarter mile of existing 30-inch storm sewer pipe (original use as agriculture drain tile) that conveys the Skokie River with a naturalized drainage channel.

The new channel was designed to provide a stable conveyance of the flows resulting from moderate-to-large storm events occurring within the 2,400 acre watershed located upstream of the Project site.

The channel was constructed between 50 and 85 feet wide and between 6 and 10 feet deep, with maximum 3:1 side slopes planted with native vegetation. The toe of the slope is protected with a coir roll and the banks stabilized with native vegetation seed and erosion control blanket.

2. Wet detention basin

The wet detention basin was created by converting an existing irrigation pond (previously used by a landscape company) into a stormwater management pond. The project design for the conversion of the irrigation pond to a wet detention pond included grading the side slopes to 10:1 and planting with native plant seed.

The wet detention basin was designed to have a permanent pool of water that will detain and treat in-stream flows over an extended period of time, primarily through gravitational settling and biological uptake, until it is displaced by stormwater runoff during the next rain event

P&G Site

BMP:

1. Two-stage channel

The District replaced nearly a quarter mile of existing 24-inch and 30-inch storm sewer pipe that conveys the Skokie River with a naturalized drainage channel.

The new channel was designed to provide a stable conveyance of the flows resulting from moderate-to-large storm events occurring within the 1,600 acre watershed located upstream of the Project site.

The channel was constructed between 40 and 80 feet wide and between 8 and 11 feet deep, with maximum 4:1 side slopes planted with native vegetation. The toe of the slope is protected with a coir roll and the banks stabilized with native vegetation seed and erosion control blanket.

DAYLIGHTING THE SKOKIE RIVER AT P&G PROPERTY

South aspect at north channel



South channel



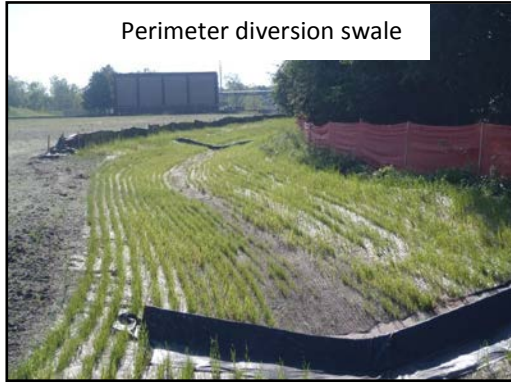
View of north channel following high flow



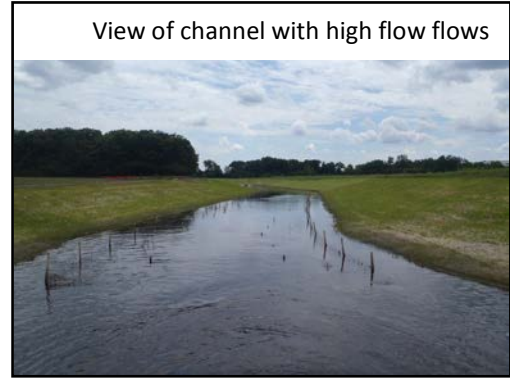
Shelf Planting



Perimeter diversion swale



View of channel with high flow flows



DAYLIGHTING THE SKOKIE RIVER AT ComEd PROPERTY

View upstream with thick vegetation



View of basin



Outfall from the site



Inlet flow into wet detention basin

