



**Clean Michigan Initiative
Nonpoint Source Grant**
1999-0033



City of Southfield

Contact: Tom Vukonich
Telephone: (248) 354-4841
Fax: (248) 354-9174

Section 34 Swale BMP Project

October 1, 2000 through March 30, 2002

Section 34 in the City of Southfield is located in the Main 1-2 sub-watershed of the Rouge river watershed. The River Rouge watershed itself is comprised of approximately 300,000 acres. The area drains 64 acres and is made up primarily of single family homes. Stormwater was conveyed from the area by a series of ditches to a storm sewer at Lahser Road, which passed the drainage district at its west boundary. Residents had complained about flooding in the area, and the City evaluated installation of an enclosed drain system to convey stormwater from the area to eliminate the flooding. The City chose to reconstruct the ditches to form a swale system. This decision was made to prevent excessive flow in the Rouge River, which would occur if enclosed drains were allowed to freely empty into the river with no prior detention. Excessive flow destroys aquatic and riparian habitat, increases streambank erosion, and causes flooding in downstream sections of the river.



This vegetated swale decreases the volume and rate of stormwater discharged from the road and into the Rouge River.



Grant Amount: \$ 206,250
Match Funds: \$ 68,750

Total Amount: \$ 275,000

Best Management Practices:

- 6,453 Linear Feet of grassed swale draining 64 acres
- 355 feet of existing swale re-graded
- 1,064 linear feet of dry swales created



Annual Load Reductions:

- Peak Flow reduced by 0.697 cfs.

I&E Activities: (concurrent but outside the scope of the grant)

- Survey of Residents' Satisfaction
- Two Fact Sheets
- Log of Citizens' Complaints



Another section of completed swale, helping to control runoff and water flow rates.

