



Michigan's  
Nonpoint Source  
Program

**Clean Michigan Initiative  
Clean Water Fund Grant**

Tracking code 2002-0220



Washtenaw County

Telephone: (734) 222-6860

Fax: (734) 222-6803

Email: drains@ewashtenaw.org

**Malletts Creek Wetland Detention**

September 1, 2004 through June 30, 2010

The eleven square mile drainage area of Malletts Creek conveys forty percent of the City of Ann Arbor's storm water runoff and discharges to the Huron River. Malletts Creek is within the contributing basin of Ford Lake, a water body located downstream on the Huron River. Ford Lake has a Total Maximum Daily Load (TMDL) established for phosphorus. Malletts Creek contributes the highest phosphorus load of all the urbanized creeksheds within the Ford Lake TMDL basin. Malletts Creek itself fails to meet water quality standards due to poor biota. A TMDL was established in 2004. This project converted a five-acre, in-stream detention facility into an 11-acre side stream wetland to reduce phosphorus loading. The site location is Doyle Park (formerly Brown Park) on Birch Hollow Road in Ann Arbor.



**Grant Amount: \$ 1,250,900**

**Match Funds: \$ 1,672,400**

**Total Amount: \$ 2,923,300**



**Best Management Practices:**

- Sediment Forebay
- 11 Acre Wetland Detention
- First Flush Treatment Basin for 8 sq. mi. of Malletts Creek (15 Million Gallons)
- Floodplain bioremediation



**Annual Load Reductions:**

- Total suspended solids 17%
- Total phosphorus 20%

**Partners involved:**

- City of Ann Arbor
- Pittsfield Township

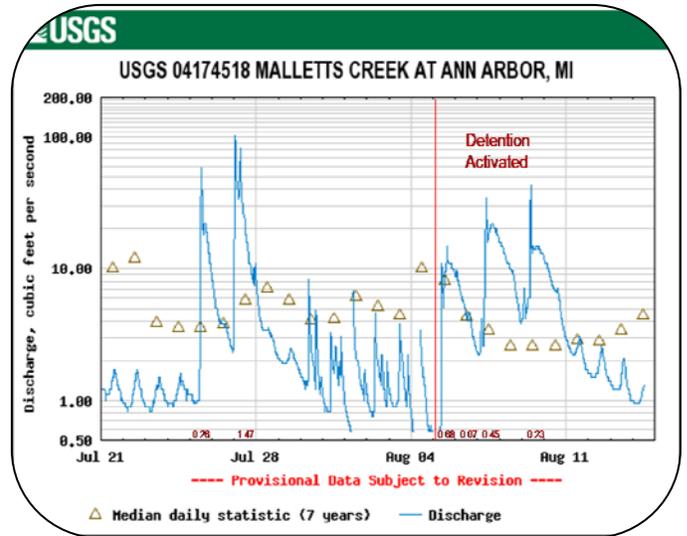
**I&E Activities:**

- Onsite Interpretive Signage
- Included in Ann Arbor Public Schools Hydrology Curriculum

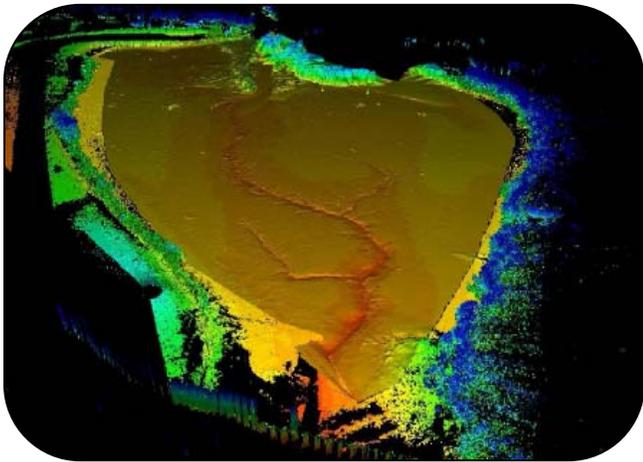




**Malletts Creek:** Flow mobilized sediment and phosphorus throughout the watershed, including stream banks. Urban development occurred prior to stormwater quality management.



**Malletts Creek:** Immediately following activation of Malletts Creek Wetland Detention (red line), the receding end of the hydrograph flattened as a result of first flush detention for an 8 square mile contributing area.



**Doyle Park:** The permanent pool of the flood control structure (1977) was full of sediment. It remained that way for 25 years, unable to store more.



**Doyle Park:** A maintainable sediment forebay now captures total suspended solids and total phosphorus loads, allowing routine removal during annual maintenance to the county drain (Malletts Creek).