

**MCD's Aquifer Preservation
Subdistrict Liaison Committee
Presentation – 4.22.10**



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Importance of prairies & preserves for Tipp & Vandalia




- Tipp City & Vandalia through a joint venture created the Northern Area Water Authority (NAWA).
- NAWA issued over \$24M in debt to construct a state-of-the-art water plant, make line improvements & develop the well fields.
- NAWA provides potable water to both Tipp City and Vandalia (over 25,000 population)

Tipp City's well fields

- Well fields for NAWA are located in Tipp City, in the Great Miami River buried aquifer which is also in the MCD Taylorsville Dam retarding basin.
- Tipp's preservation efforts focused on 1-year (primarily) and 5-year time of travel zones for NAWA's wells.
- Tipp City & Miami County have adopted well field protection overlay zoning districts.

Map 3 Groundwater Resources

Comprehensive Plan Update Tipp City, Ohio

-  Well Field
-  Priority 1 Drinking Water Protection Area
-  Priority 2 Drinking Water Protection Area

Yield in Gallons Per Minute (GPM)

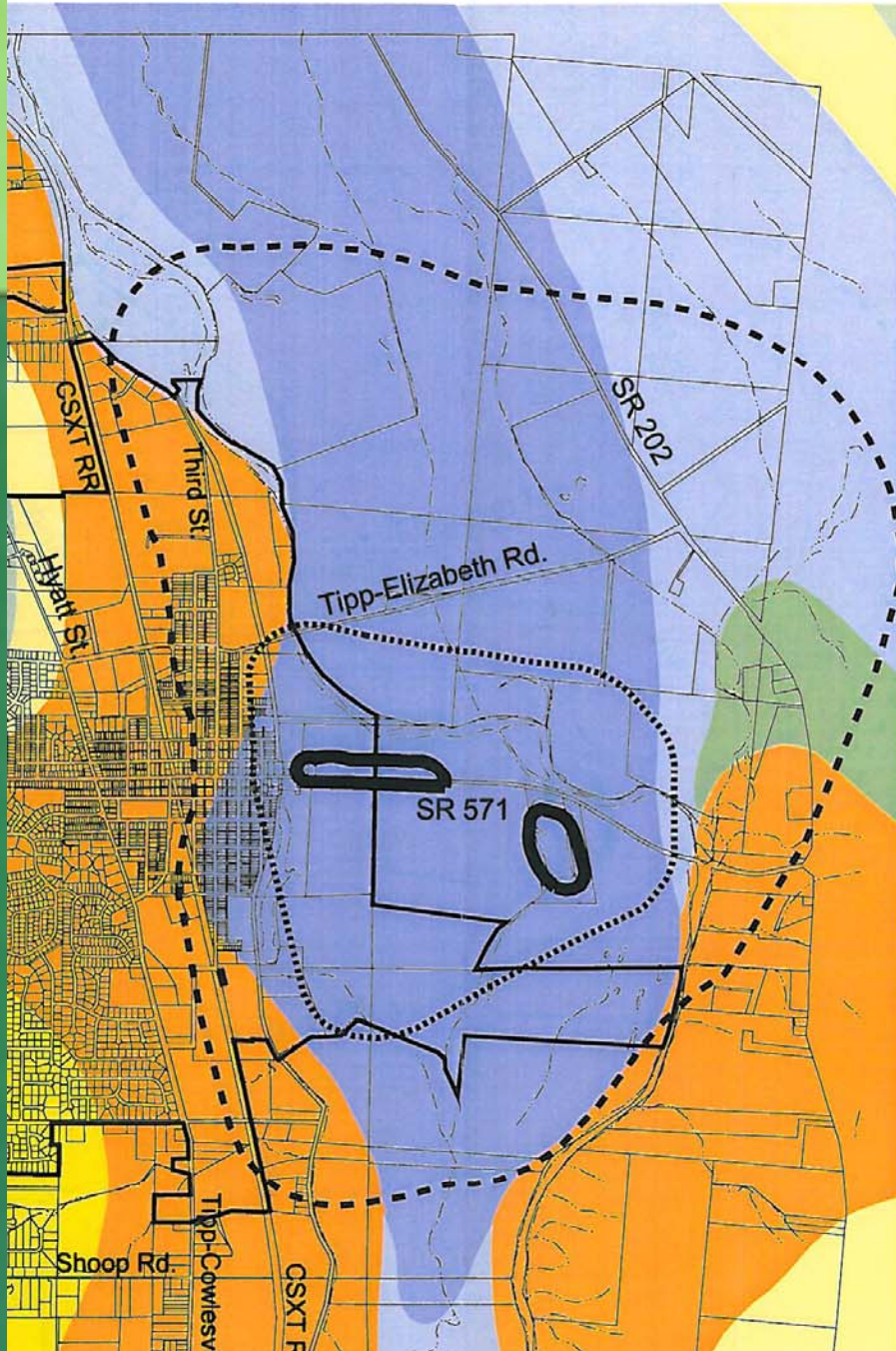
-  500 to 1,000+ GPM
-  100 to 500 GPM (Thick)
-  Up to 75 GPM
-  5 to 25 GPM (Bedrock)
-  5 to 25 GPM (Sand & Gravel)
-  3 to 10 GPM (Till)
-  3 to 10 GPM (Sand & Gravel)
-  Less Than 2 GPM

SOURCE: Ohio Department of Natural Resources,
Ground Water Resources of Miami, County, Ohio, 1984.

1000 0 1000 2000 Feet



August, 2002



Tipp's Preservation Efforts

- Kyle Park – 268 ac., donated in mid-1980's
- Lost Creek Prairie – 138 ac., south of Tipp-Elizabeth Road – WRRSP grant \$512,424
- Freemans Prairie – 118 ac., north of SR571 & south of Kyle Park – Clean Ohio, ODOT, WRRSP, MCD & Local \$584,000
- Senseman Prairie – 23 ac., north of SR571 – donation by Meijers for mitigation, \$92,000

Protection!

- 31,000' of stream banks protected by MCD's efforts
- 664 ac. Owned by Tipp City protected
- 163 ac. Owned by Miami County Park District protected



Senseman +/-117.7 ac Project

- Clean Ohio Round 4 Project (2009)
- City and MCD partnered early (2007) on this project, Sarah Hippensteel wrote the application, although the City was the applicant to Clean Ohio.
- MCD assisted with funding (cash & in-kind).
- City incurred early preliminary expenses: in-kind staff time, survey, appraisal, Phase 1, etc.

Habitat Stewards, LLC

6623 Medford Rd.
Vandalia, OH 45380
(937) 417-1085

Planning Map

Tipp City Well Field Conservation Areas

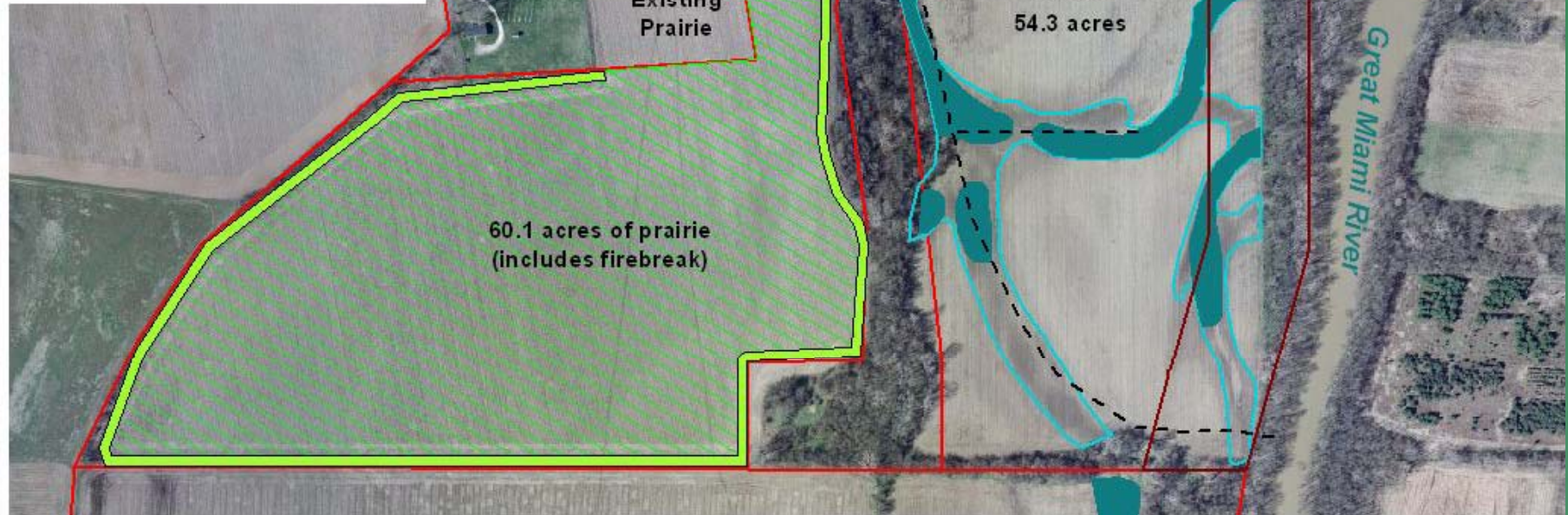


Legend

-  Conservation Easement - Mitigation Site
-  Drainage Tile
-  Flooded Areas on 3-12-10
-  Potential Wetland Pool
-  Firebreak (30' wide)
-  Grassland (Prairie)
-  Well Field Conservation Properties

Source: Habitat Stewards, LLC
Date: 3-18-10

100 0 100 200 300 400 500 Feet



Senseman – Funding Mix

- Total Costs were \$522,200
 - Clean Ohio grant \$385,399
 - Private mitigation monies \$ 90,400
 - City of Tipp (cash & in-kind) \$ 30,000
 - MCD (cash & in-kind) \$ 16,401

City took title to property on 12.09.2009

Property currently being annexed and rezoned.

Continuing Efforts.....

- Tipp City Water Department is working on crafting a comprehensive prairie preservation planting and maintenance plan for the 400 acres of prairies owned by the City.
- +/-117.7 Senseman property is being planted this spring.
- City continues to seek funding sources for additional property acquisitions for preservation efforts.

Summary of Protection Efforts

- Since 2002, over 400 acres has been acquired for preservation at a total cost of \$1,710,000 (equates to \$4,275/acre)
- Over 95% of these costs has been grants and donations from non-Tipp City sources.
- “Thank you” to MCD and the Aquifer Preservation Subdistrict for their continuing support of Tipp City preservation efforts.