

Rochester Hills - Natural Features Stewardship Program



NISWANDER
ENVIRONMENTAL



Open Space Millage

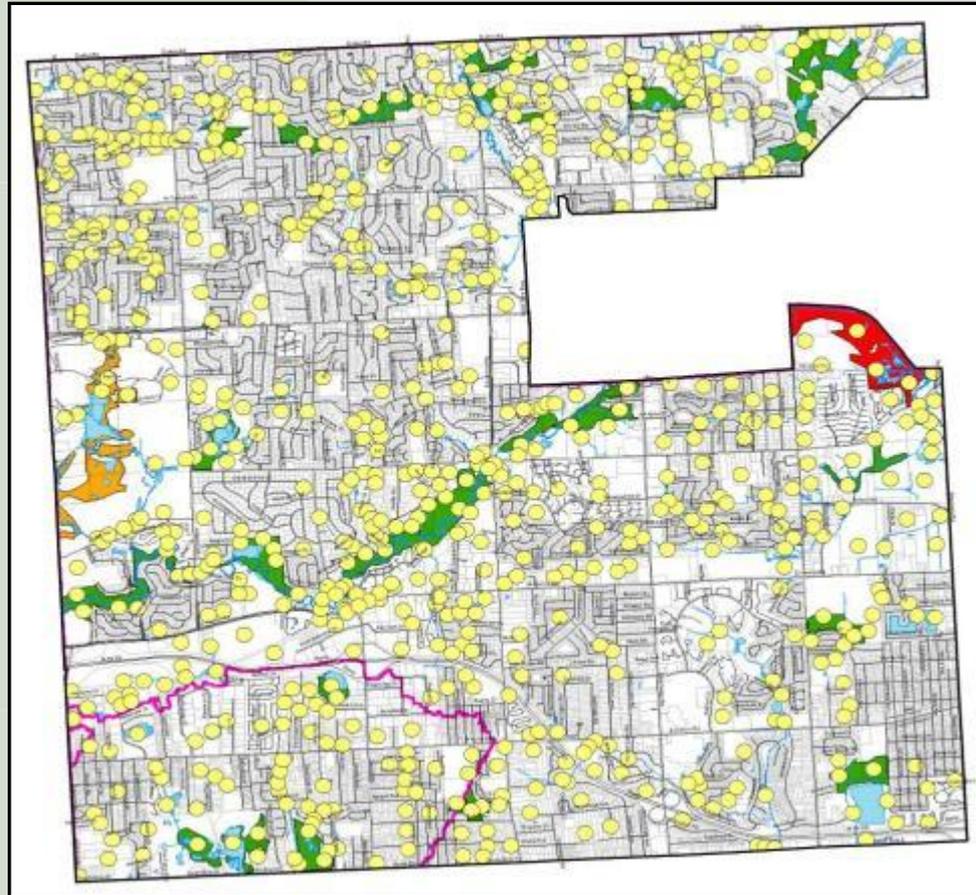
- In September 2005, a 0.3 mill 10-year Open Space Millage was passed to acquire and preserve natural green space in their community.
- The Rochester Hills [City Council](#) established the nine member [Green Space Advisory Board](#) (GSAB) for the purpose of developing strategies and making recommendations regarding the expenditure of millage funds to:
 - Permanently preserve natural green spaces, wildlife habitats and scenic views
 - Protect woodlands, wetlands, rivers and streams
 - Expand the Clinton River Greenway and other trail corridors



Niswander Environmental's NFI from 2005

- Determined what the community has
- Evaluated existing trends
- Identified priority natural areas
- Used as a basis for developing ordinances
- Provided a valuable tool for evaluating proposed development from a landscape perspective

- Survey Locations
- ▲ Photo Locations



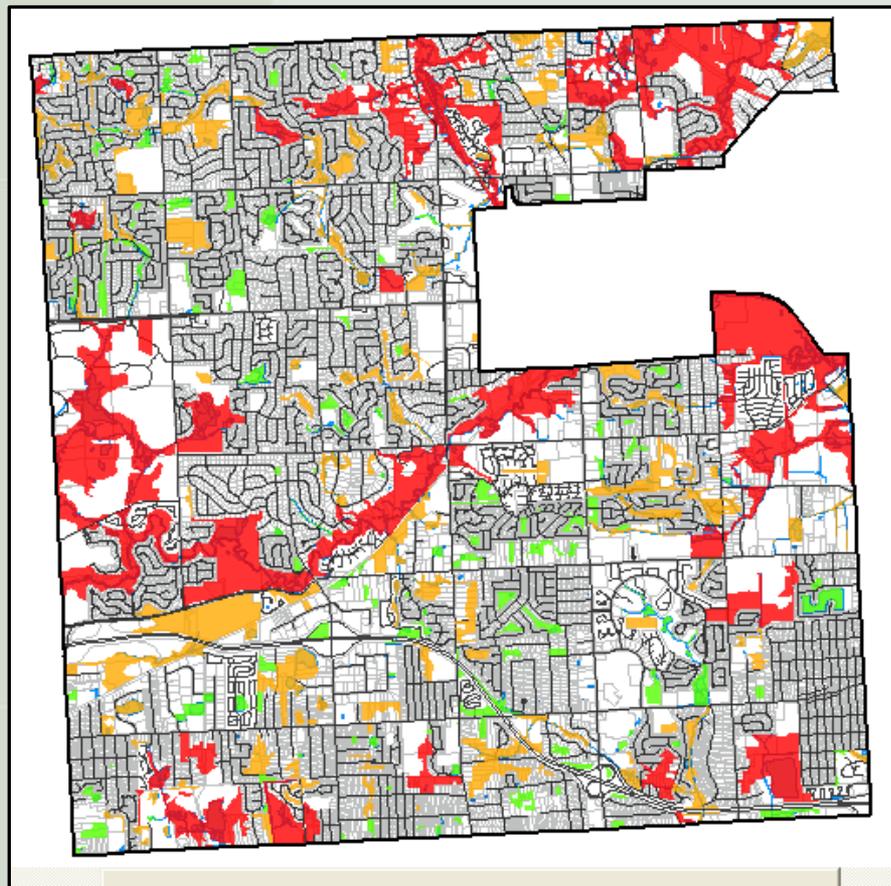
Natural Areas

- **Ranking Criteria**
(based on 2004 Oakland County Potential Conservation/Natural Areas Report)
- **Includes Field Data**

Natural Areas 2005

(identified by Niswander Environmental)

- Priority One
- Priority Two
- Priority Three



Natural Areas with Land Use



Green Space Properties Acquired



Sheldon-Mead Parcel



- Priority 1 Natural Area
- ~19 acres
- 80% forested property
- Diverse in terms of vegetation, habitat type and age class
- On-site wetlands buffer clear creek
- Provides a continuous green corridor with adjacent properties
- Invasive *Phragmites*



Childress / Cloverport Parcels



- Priority I Natural Area
- ~13 ac (including both sites)
- Mature, diverse upland hardwood forest, but portions dominated by invasives
- A lot of artificial debris scattered in southern area
- Excellent wildlife habitat
- Significant bank erosion in areas



Harding Parcel



- Priority 1 Natural Area
- ~27 ac
- Locally rare wet meadow with fen characteristics
- Forested wetlands featuring vernal pools
- Invasives are common, particularly honeysuckle, buckthorn, and bittersweet



Rivercrest Parcel



- Priority I Natural Area
- ~2 ac
- Natural buffer to the Clinton River
- Moderately High Quality Scrub-Shrub Wetland Habitat
- Degraded Old Field dominated by invasive shrubs





Environmental Stewardship

“... is the responsibility for environmental quality shared by all those whose actions affect the environment.”

- EPA Office of Strategic Environmental Management



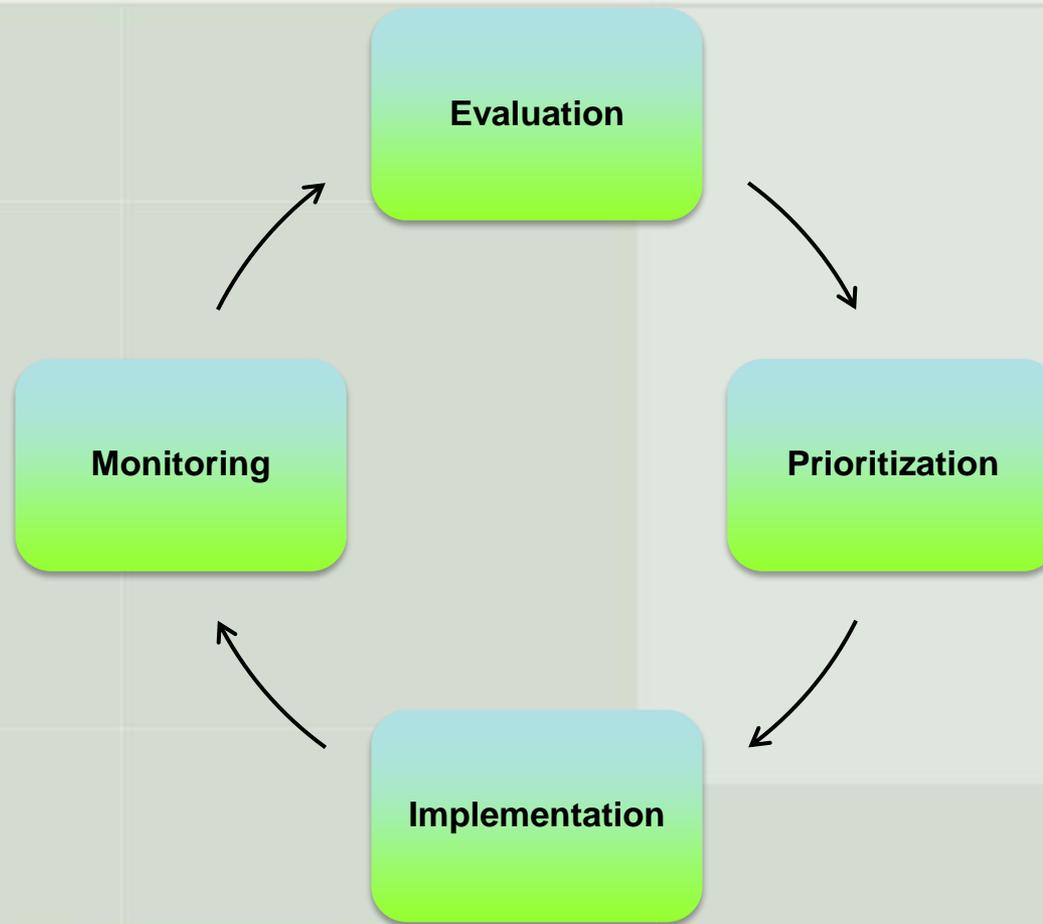


Environmental Stewardship

- Permanently preserve natural green spaces, wildlife habitats and scenic views
- Protect woodlands, wetlands, rivers and streams

It is not enough to just purchase open space, it must also be managed to ensure the preservation of the functions and values!

The Stewardship Process





What is Adaptive Management?

“... is a structured management approach for addressing uncertainties by testing hypotheses, linking science to decision making, and adjusting implementation, as necessary, to improve the probability of restoration success”.

- *The Comprehensive Everglades Restoration Plan*



Steps

- Year 1 – Evaluation and Prioritization
- Years 2 -5: Implementation
- Year 6 and beyond- Maintenance & Monitoring



Long Term Stewardship Goals

Year 1: \$100,000 - \$200,000

- Detailed site assessments & prioritization = \$40,000-\$75,000
- Develop long-term plan for each Green Space property = \$40,000-\$75,000
- Demonstration Areas (i.e., invasive species control, prescribed burns, etc.) = \$20,000-\$50,000



Stewardship

Years 2-5: \$150,000 - \$235,000

- Preservation (treat high-quality areas) = \$25,000-\$50,000
- Restoration (treat degraded areas)= \$50,000 - \$70,000
- Enhancement (seeding and native plantings) = \$50,000 - \$70,000
- Monitoring & Evaluation = \$10,000-\$20,000
- Education = \$15,000-\$25,000



Maintenance & Monitoring Period

Years 6 and beyond: \$150,000 - \$200,000

- Preservation (maintain high-quality areas) = \$5,000-\$10,000
- Restoration (treat degraded areas)= \$20,000 - \$40,000
- Enhancement (native seeding and plantings, bank stabilization)
= \$50,000 - \$100,000
- Monitoring = \$5,000 - \$10,000
- Education = \$10,000



Successful Long Term Management

Relies Upon:

- Site Assessment & Prioritization
- Preservation and Restoration
- Maintenance & Monitoring
- Education
- Involvement
- Ownership
- Commitment



Community Involvement

- Teamwork
- Engaging Citizens
- Corporation involvement
- Non-Profit Agencies





Examples

- Wayne Co. Grow Zones
- “you can scale your expenditures to match your budget. Based on our evaluation, we anticipate annual expenditures to be \$200k per year”
- Adaptive management



Mike Hartner

- Projected / Remaining Budgets
- Anticipated Acquisition Costs
- Goals of stewardship



Questions

