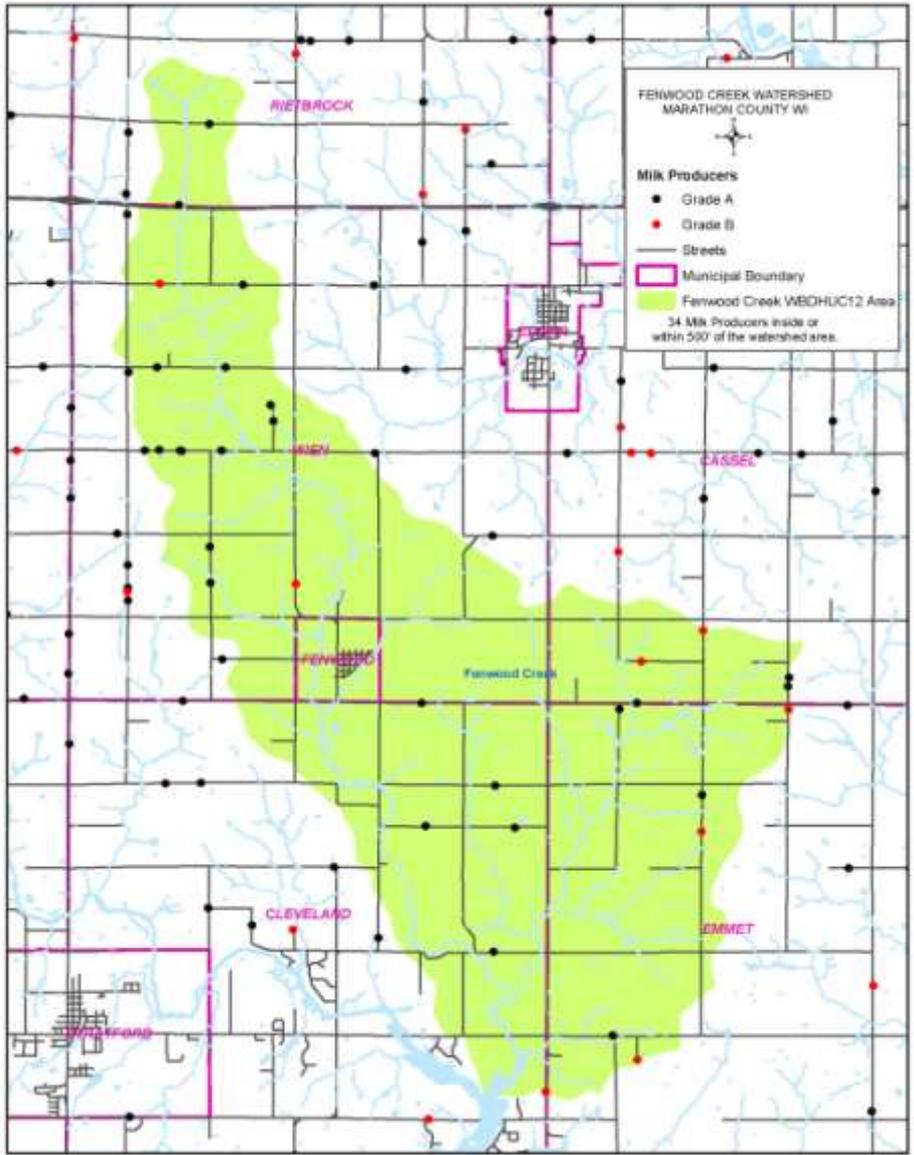


Big Eau Pleine River Task Force

Fenwood Creek Watershed





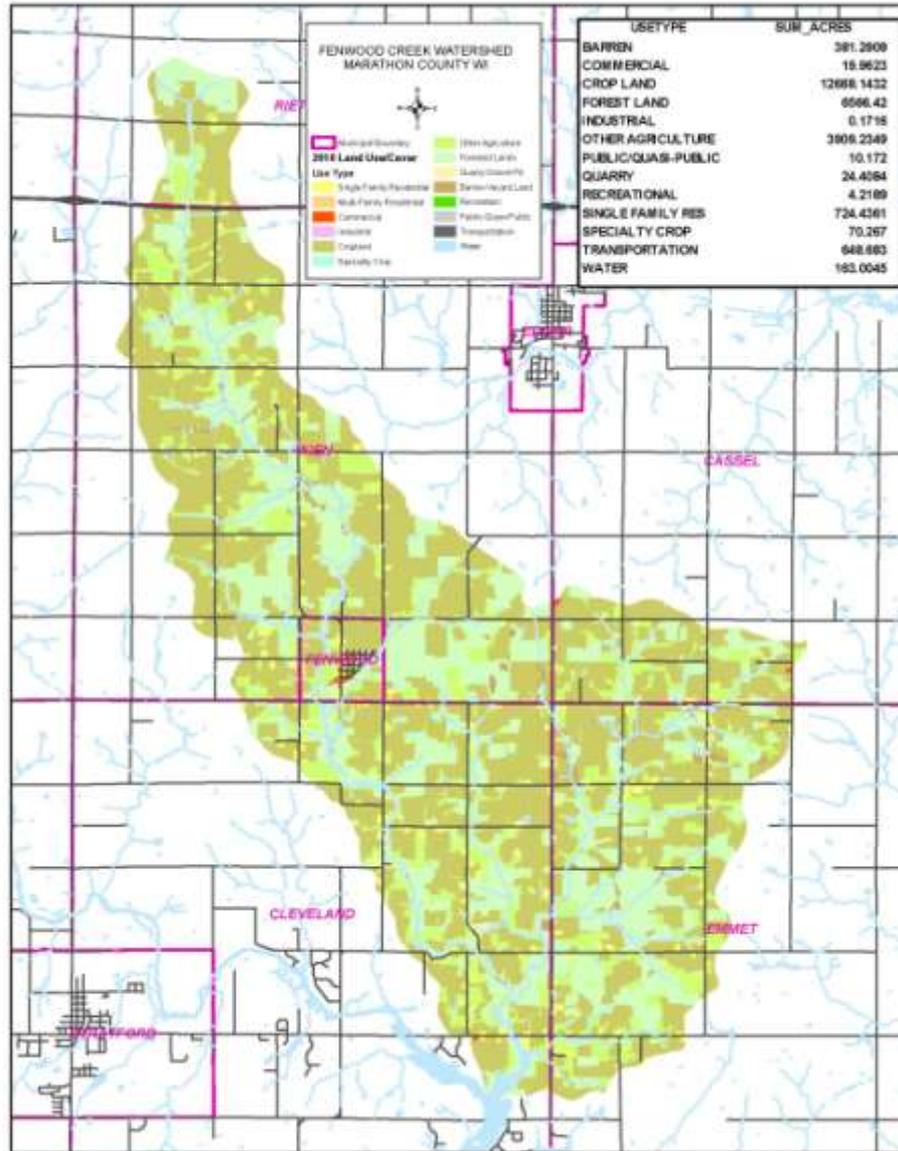
Farm Demographics

- 64 livestock operations
 - 43 dairies
 - Range is 40-125 cows
 - Total 1600-2000 cows
 - 9 heifer operations (5-60 head)
 - 9 beef (10-100 head)
 - 1 horse
 - 2 undetermined

Historical Inventory

LBEP Inventory (38% of Phosphorus load)

1. Groundwater sampling – Nitrates and triazine
2. Barnyards (19 installed) – performance results
3. Waste Storage Facilities – nutrient management plans and critical acres evaluation
 - 19 new installations w/ critical acre information
 - 15 unpermitted (pre 1985)
 - 8 Closed



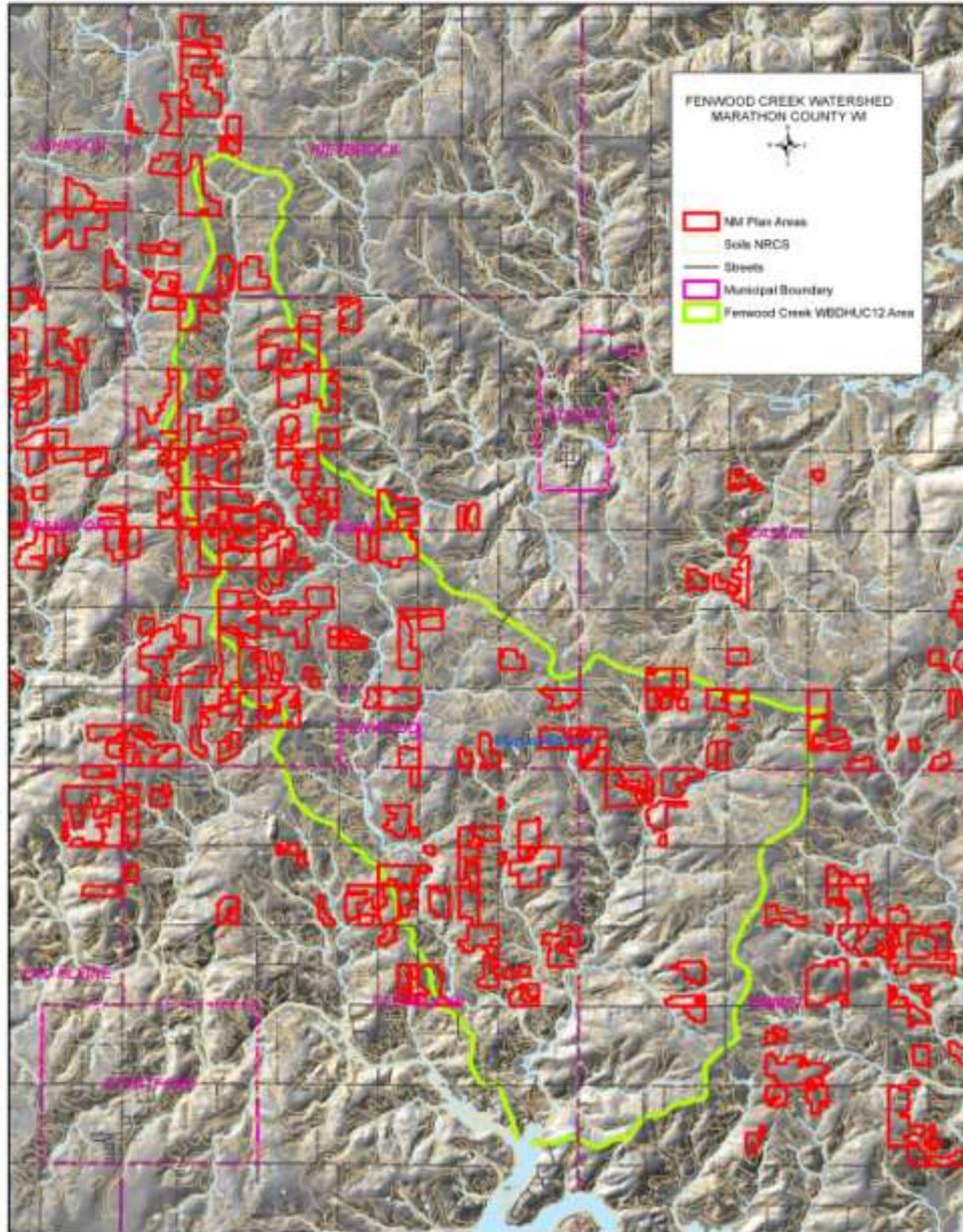
Land Use Classification – 2008

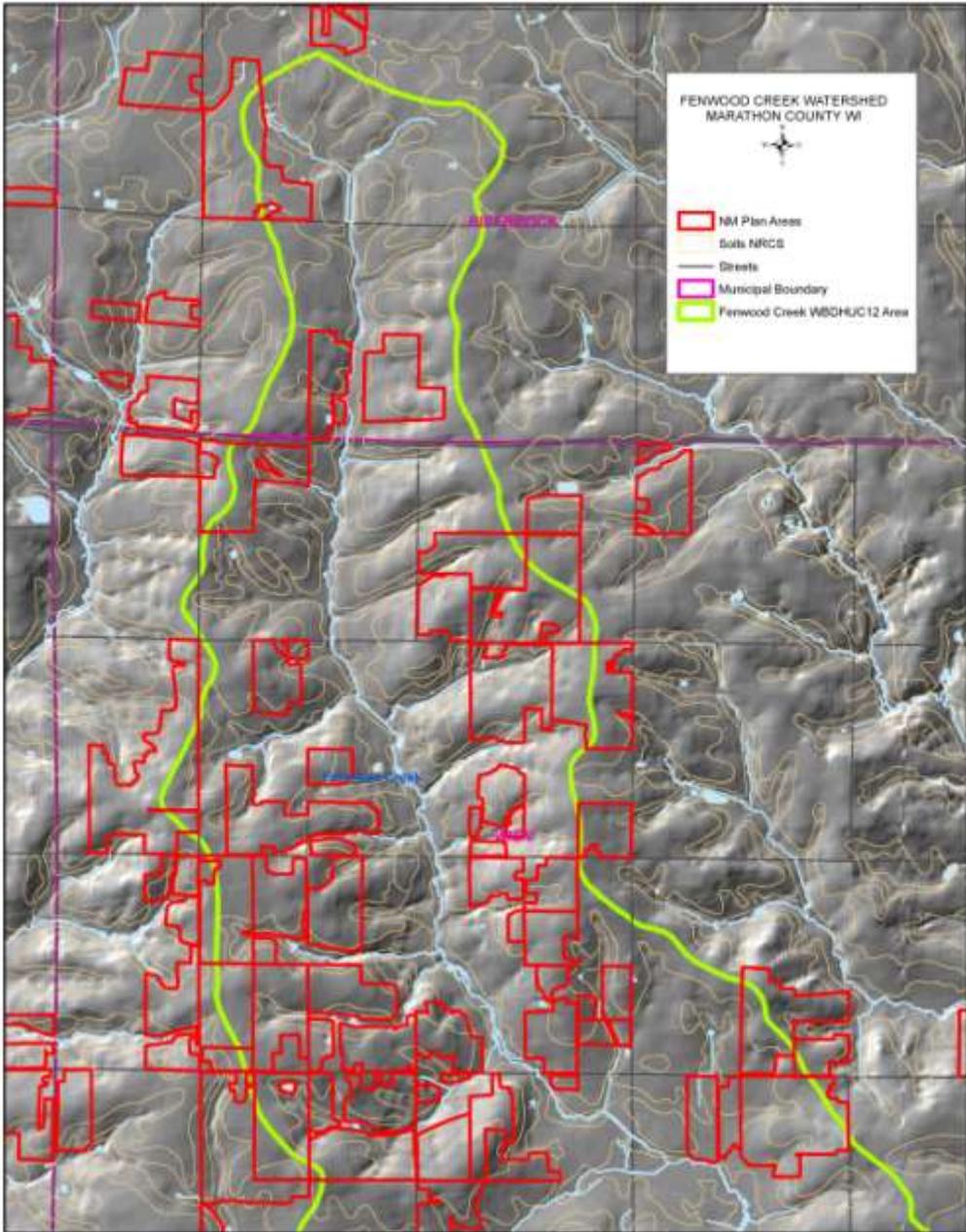
(25,190 acres)

USETYPE	SUM_ACRES
BARREN	381.2909
COMMERCIAL	19.9623
CROP LAND	12668.1432
FOREST LAND	6566.42
INDUSTRIAL	0.1716
OTHER AGRICULTURE	3909.2349
PUBLIC/QUASI-PUBLIC	10.172
QUARRY	24.4084
RECREATIONAL	4.2189
SINGLE FAMILY RES	724.4361
SPECIALTY CROP	70.267
TRANSPORTATION	648.683
WATER	163.0045

Nutrient Management Plan

- 34 Operations
 - 27 landowners w/ farmsteads and primary cropland land base in Fn (5,083 acres)
 - 7 landowners w/o farmsteads not in Fn but have a cropland land base (1,000-1,500 acres)
 - Rented acres
 - Sorting of Management and Biophysical Characteristics





NM Plan Data

- Average Values
 - Phosphorus Index – rotation (CCSbA4)
 - Soil Erosion – Sheet and rill erosion
- Chasing the Disproportionality
 - Ephemeral erosion
 - Manure runoff event

Cropland Scenario

Owner: Farmer 1

Field: 33 acres

Distance to surface water: 750'

Soil Type: Withee silt loam



Rotation	Tillage	Nutrient Plan	Ave. Soil Loss	Ave. P.I.	
Continuous Corn Silage	Fall Chisel	11,000/ac Incorporated	4.0	6	
Rotational Grazing	NA	8 ton/ac Livestock	0.2	2	
"Actual" A-A-A-A-CS- CG-CS-Sb	Sp -M Sp -Ch	P-based + Fertilizer	1.5	2	

Cropland Scenario – Annual P.I.

Owner: Farmer 1

Field: 33 acres

Distance to surface water: 750'

Soil Type: Withee silt loam



Rotation	2007	2008	2009	2010	2011
Continuous Corn Silage	6	6	6	6	6
Rotational Grazing	0	1	11 Winter Outlot	1	1
“Actual” A-CS-CG- CS-Sb	1	3	3	3	4



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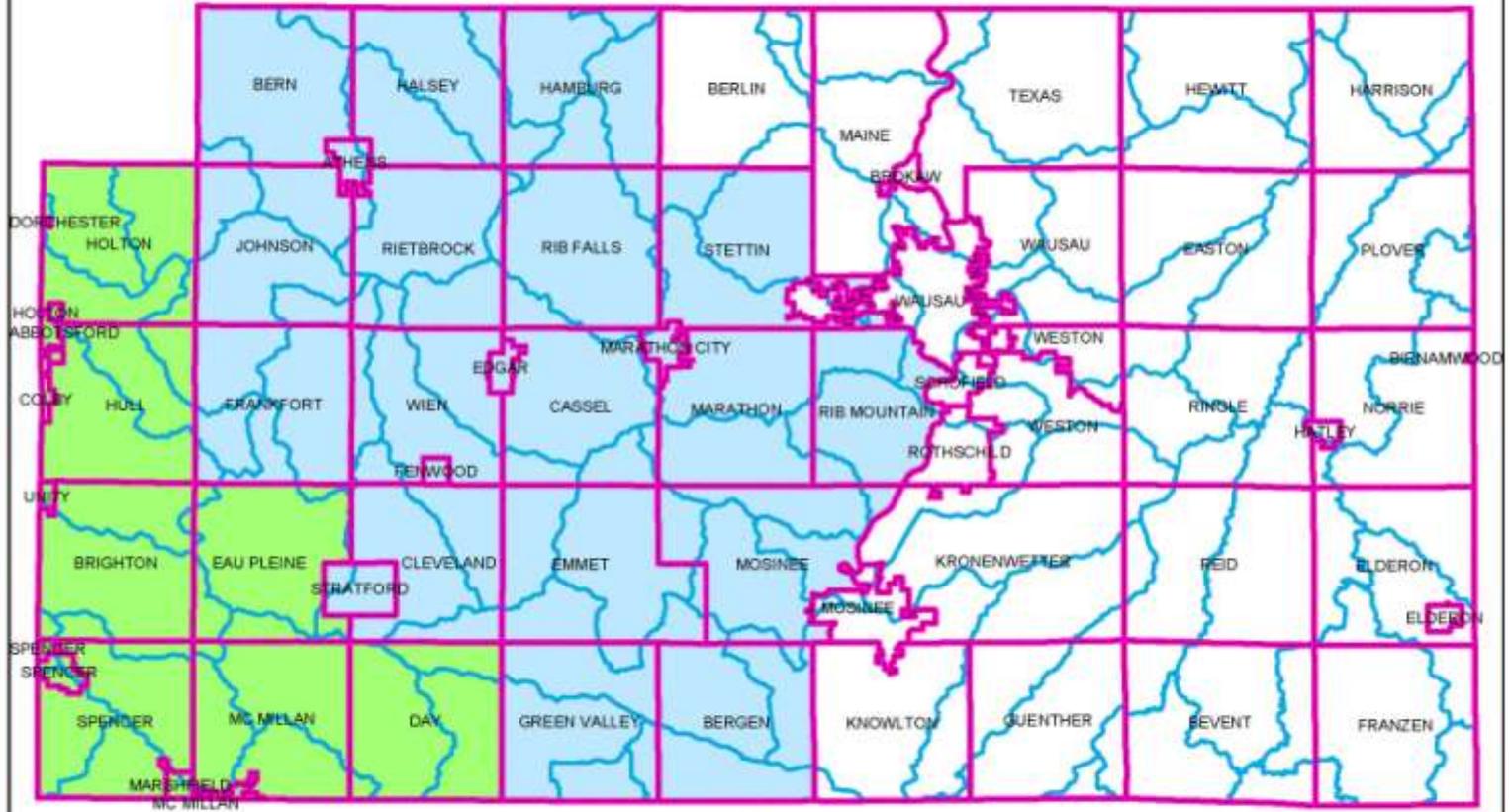
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Land Use Alternatives

- NC Conservancy Trust (NCCT) - \$28,000.
- Conservation Reserve Program (CRP)
- Conservation Reserve “Enhancement” Program (CREP) - \$380,000.
- Purchase Agriculture Conservation Easement (PACE)

CONSERVATION RESERVE ENHANCEMENT PROJECT AREA



- CREP Areas**
 - Grassland
 - Riparian
- Municipal Boundary**
- WBDHUC12 Watershed Areas**

Fenwood Creek Project Design

1. Community Engagement – ACES
2. Water Quality and BMP Monitoring
3. Land and Management Inventory
4. Water Quality Goals – Field Level
5. Landowner and Producer Planning
6. BMP Implementation
7. Adaptive Management

Best Management Practices

1. Residue Management

2. “Edge of field” vegetated filters, wetlands and sediment basins

3. Manure and commercial fertilizer management and distribution

4. Waste treatment technologies

Residue Management



Wetlands



Manure Distribution



Waste Treatment Technologies



Monitoring

- Wisconsin Buffer Initiative (WBI)
- UW-Agricultural Research Station/USGS
- Discovery Farms
- WI Valley Improvement Company (WVIC)
- Total Maximum Daily Loading (TMDL)

Conclusions

- Land Use Inventory
- BMP Inventory – Participation, Pollutant Reductions, and Ordinance Compliance
- NM Plan Coverage and Analysis of Averages
- Strategies: Land Use, BMP's and Events
- Landowner & Agronomist Meetings – Winter 2013