

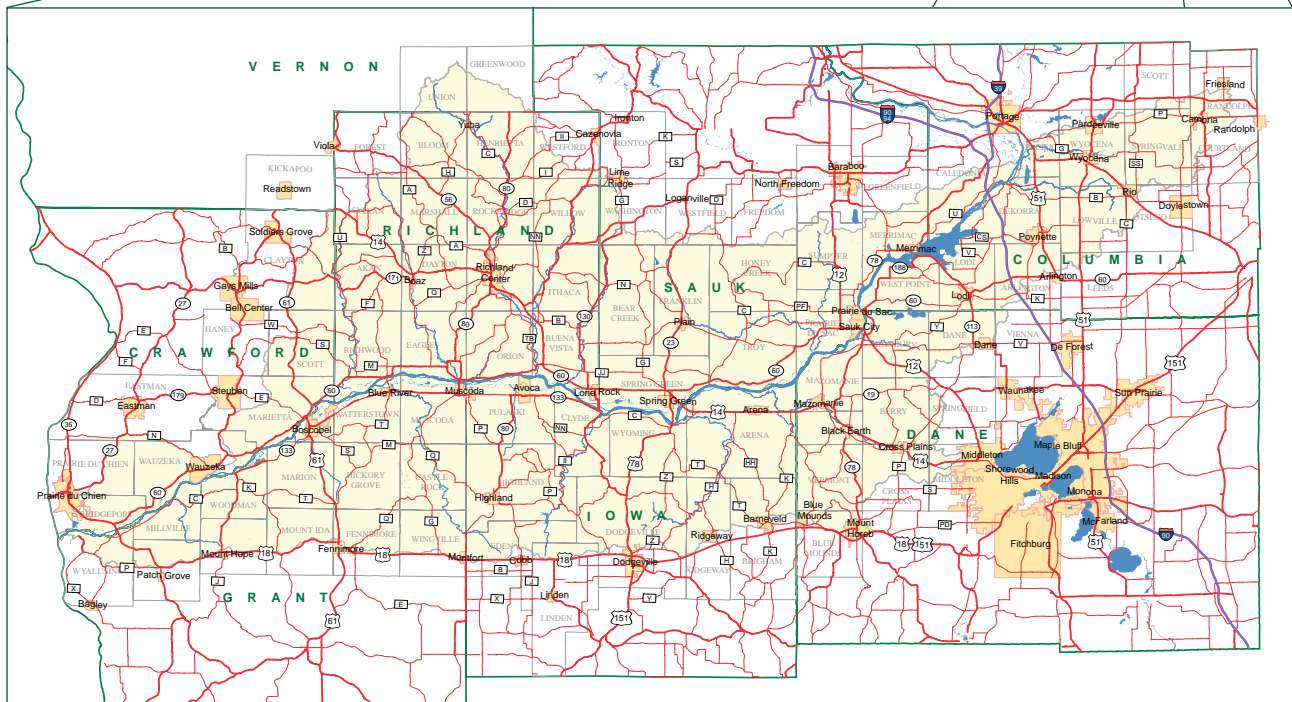


RAPID WATERSHED ASSESSMENT LOWER WISCONSIN RIVER WATERSHED

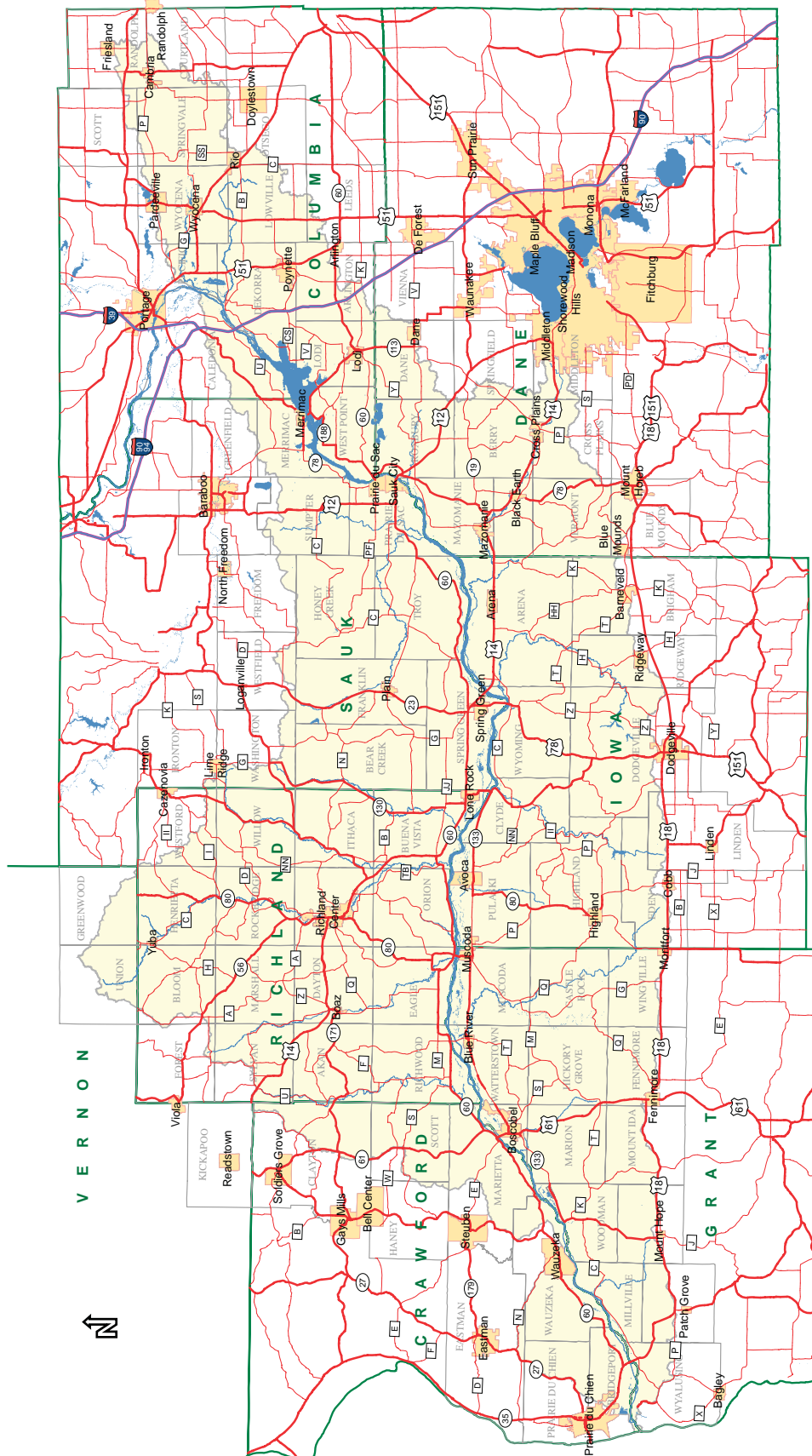
RAPID WATERSHED ASSESSMENTS PROVIDE INITIAL ESTIMATES OF WHERE CONSERVATION INVESTMENTS WOULD BEST ADDRESS THE CONCERNS OF LANDOWNERS, CONSERVATION DISTRICTS, AND OTHER COMMUNITY ORGANIZATIONS AND STAKEHOLDERS. THESE ASSESSMENTS HELP LAND-OWNERS AND LOCAL LEADERS SET PRIORITIES AND DETERMINE THE BEST ACTIONS TO ACHIEVE THEIR GOALS.

INTRODUCTION

The Lower Wisconsin River Watershed is located in south central and southwest Wisconsin. The highly agricultural watershed is 1.52 million acres in size and slightly over 70% of that area is associated with agriculture. Farms are a mix of dairy, beef and cash grain enterprises. Corn, soybeans and alfalfa are the dominant crops. Specialty crops include potatoes, sweet corn and canning crops in the irrigated fields of the Wisconsin River valley. Development pressure is moderate with farms commonly being parceled out for recreation and country homes.



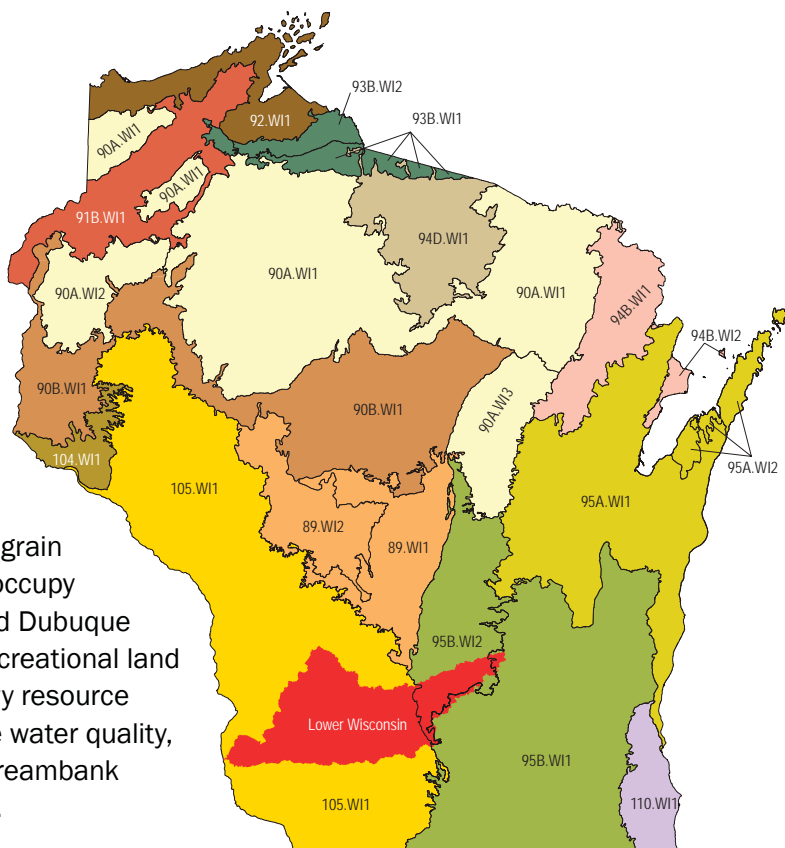
	COUNTY ACRES	ACRES IN HUC	% ACRES IN HUC
RICHLAND	377,170	332,037	22
IOWA	491,887	262,859	17
SAUK	543,498	237,115	16
GRANT	755,904	219,774	15
COLUMBIA	510,190	195,421	13
DANE	793,467	141,982	9
CRAWFORD	383,377	105,711	7
VERNON	522,597	17,182	1



COMMON RESOURCE AREAS

105.WI1 Description

The Grant–Little Maquoketa watershed is located entirely within CRA 105.WI1. This CRA is made up of highly dissected hills and valleys including the Mississippi, Chippewa, and Wisconsin River valleys and the western Baraboo Hills. Soils are well drained and moderately well drained silty soils over bedrock residuum. Land use is predominantly cropland and grazing land on ridge tops and valley bottoms with a mix of dairy, beef and cash grain agricultural enterprises. Deciduous forest occupy steep side slopes. Eau Claire, LaCrosse and Dubuque urban areas, and increasing demand for recreational land are influencing land use in the area. Primary resource concerns are cropland soil erosion, surface water quality, grazing land and forestland productivity, streambank erosion, and erosion during timber harvest.



95B.WI1 Description

Nearly level to strongly sloping till plain with prominent drumlins. Well drained silty and loamy soils with poorly drained organic soils in the depressions. Mostly cropland with a mix of livestock and cash grain enterprises. Grazing land and scattered deciduous forest, lakes, and marshes are also present. Primary resource concerns include cropland and construction site erosion, surface water quality, storm water management, and wetland habitat protection and restoration.

Wisconsin MLRA

89	94D
90A	95A
90B	95B
91B	104
92	105
93B	110
94B	

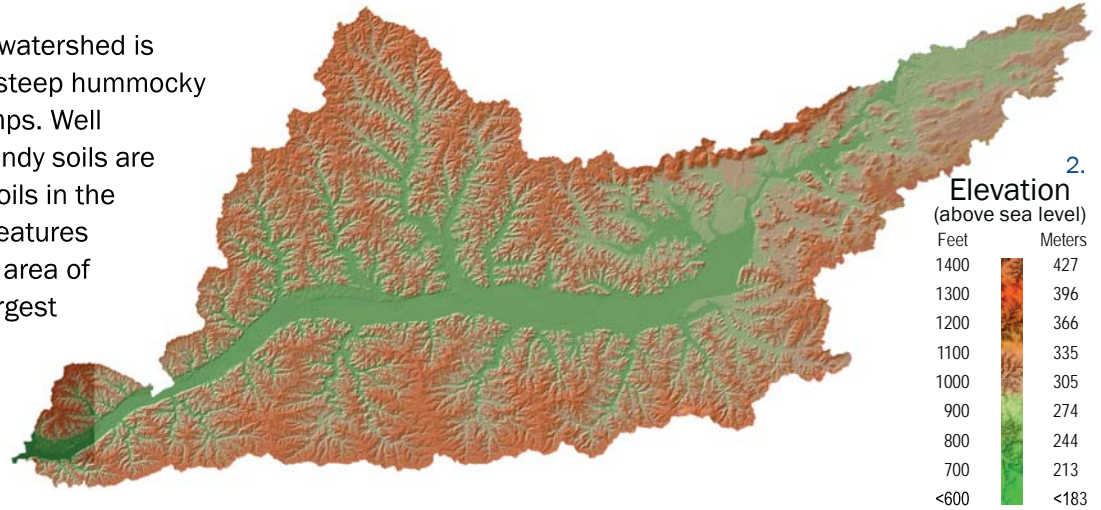
95B.WI2 Description

Gently sloping to moderately steep hummocky moraine with scattered swamps. Mostly well drained loamy, clayey, and sandy soils with organic soils in the depressional areas. Major land uses are cash grain cropland and livestock agricultural enterprises, with significant grazing land and deciduous forest. Includes the Wisconsin River valley and eastern Baraboo Hills. Primary resource concerns are cropland soil erosion, surface water quality and wetland habitat protection and restoration.

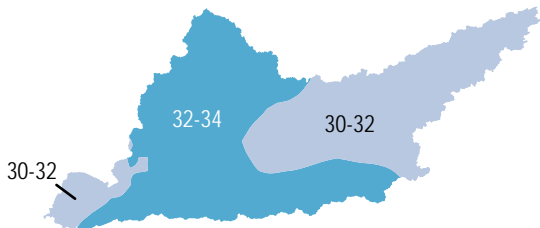
PHYSICAL DESCRIPTION

The majority of the watershed consists of unglaciated, highly dissected hills and valleys. Soils are mainly loess-derived, well drained and moderately well drained silt loams over bedrock residuum. Land use is predominantly cropland and grazing land on ridge tops and valley bottoms. Deciduous forests are found on steep side slopes.

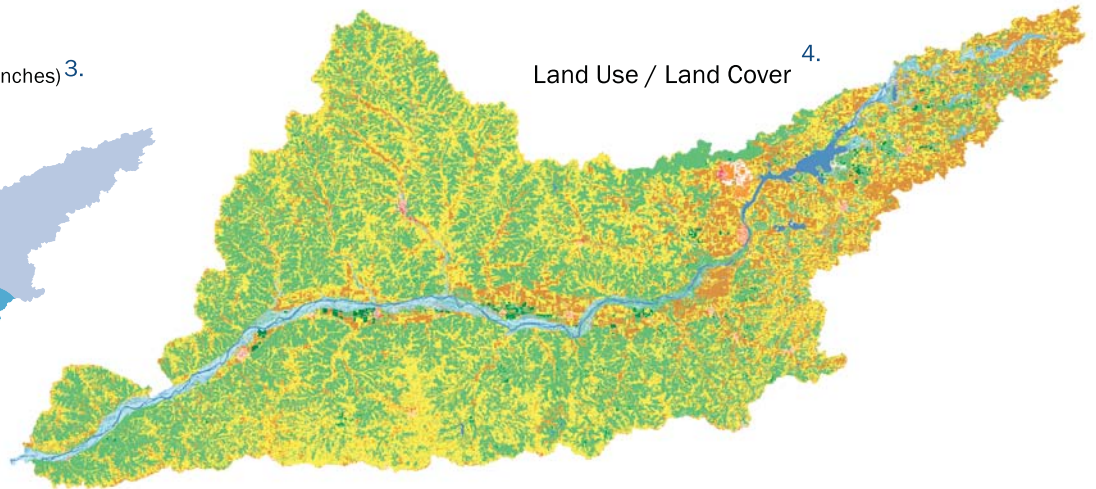
The northeast portion of the watershed is gently sloping to moderately steep hummocky moraine with scattered swamps. Well drained loamy, clayey, and sandy soils are most common with organic soils in the depressional areas. Unique features include the Baraboo Hills, an area of quartzite bedrock with the largest deciduous forest in southern Wisconsin.



Average Annual Precipitation (inches)^{3.}



Land Use / Land Cover^{4.}



	Acres	Percent		Acres	Percent
Deciduous Forest	598,712.94	40%	Low Intensity Residential	4,243.74	0%
Pasture / Hay	547,613.05	36%	Mixed Forest	4,000.88	0%
Row Crops	254,935.43	17%	Urban / Recreational Grasses	3,818.74	0%
Woody Wetlands	34,513.90	2%	High Intensity Residential	1,750.47	0%
Open Water	19,361.70	1%	Quarries / Strip Mines, Gravel Pits	564.88	0%
Emergent Herbaceous Wetlands	18,526.38	1%	Small Grains	174.14	0%
Evergreen Forest	9,903.69	1%	Bare Rock / Sand / Clay	148.56	0%
Commercial / Industrial / Transportation	7,113.74	0%	Orchards / Vineyards	4.67	0%
Grasslands / Herbaceous	6,686.30	0%	Total	1,512,073.21	

ASSESSMENT OF WATERS

Section 303(d) of the Clean Water Act states that water bodies that are not meeting their designated uses (fishing, swimming), due to pollutants, must be placed on this list. The 303(d) impaired Waters List is updated every two years. Wisconsin is required to develop TMDLs, Total Maximum Daily Loads, for water bodies on this list. ERW Surface waters (exceptional resource waters), which provide valuable fisheries, hydrologically or geologically unique features, outstanding recreational opportunities, unique environmental settings, and which are not significantly impacted by human activities may be classified as exceptional resource waters. ORW waters (outstanding resource waters), and ERW differ in that ORW do not have an associated point source discharge, where ERW do.



For information on specific sub-watersheds, 303d, TMDL or Exceptional/Outstanding Resource Waters (ERW/ORW):
<http://dnr.wi.gov/org/water/wm/wqs/303d/faqs.html>
<http://dnr.wi.gov/org/gmu/gps/gbasin/>
<http://www.epa.gov/owow/tmdl/>



	Sediment	Degraded Habitat	Dissolved Oxygen	Ammonia	Mercury	Temperature
Blue River	X	X				
Fennimore Fork	X	X				
Grubers Grove Bay					X	
Gunderson Valley Creek	X					
Halfway Prairie Creek	X	X				
Little Willow Creek	X	X				
Melancthon Creek	X	X				
Otter Creek		X				
Rush Creek	X	X				
Shannahan Valley Creek			X	X		X
Wendt Creek		X				

SOILS⁶

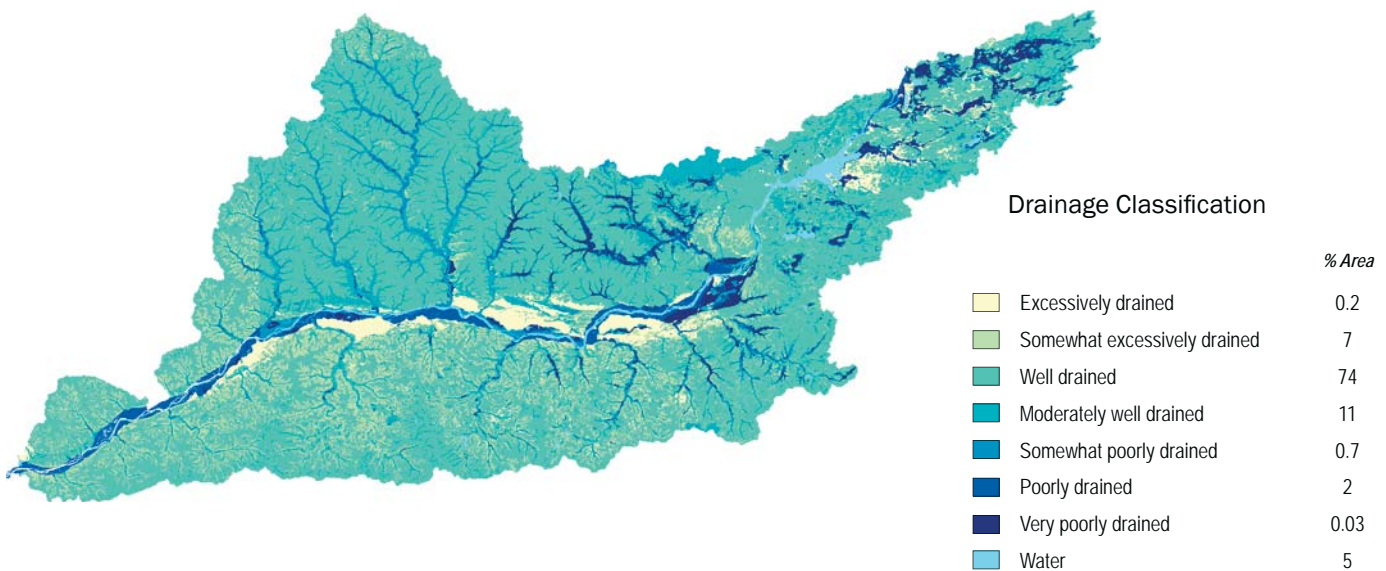
The soils in this watershed have formed in a silty, wind blown covering. The deepest deposits are along the bluffs of the Mississippi River, but they thin towards the Northeast. The soils of the upland ridges have formed in the silty covering, but are underlain by bedrock at some depth. The valleys contain silty material that has been moved down the slope, following the drainage patterns. Higher benches along major rivers have reddish-brown lake clays. On the lowest area, next to the river, sandy outwash is exposed.



DRAINAGE CLASSIFICATION

Drainage class (natural) refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the “Soil Survey Manual.”

Visit the Soil Data Mart at <http://soildatamart.usda.gov> to download SSURGO certified soil tabular and spatial data.



Visit the online Web Soil Survey at <http://websoilsurvey.nrcs.usda.gov> for official and current USDA soil information as viewable maps and tables. Visit the Soil Data Mart at <http://soildatamart.usda.gov> to download SSURGO certified soil tabular and spatial data.

FARMLAND CLASSIFICATION

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. Farmland classification identifies the location and extent of the most suitable land for producing food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the Federal Register, Vol. 43, No 21, January 31, 1978.



HYDRIC SOILS

This rating provides an indication of the proportion of the map unit that meets criteria for hydric soils. Map units that are dominantly made up of hydric soils may have small areas, or inclusions of nonhydric soils in the higher positions on the landform, and map units dominantly made up of non-hydric soils may have inclusions of hydric soils in the lower positions on the landform.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

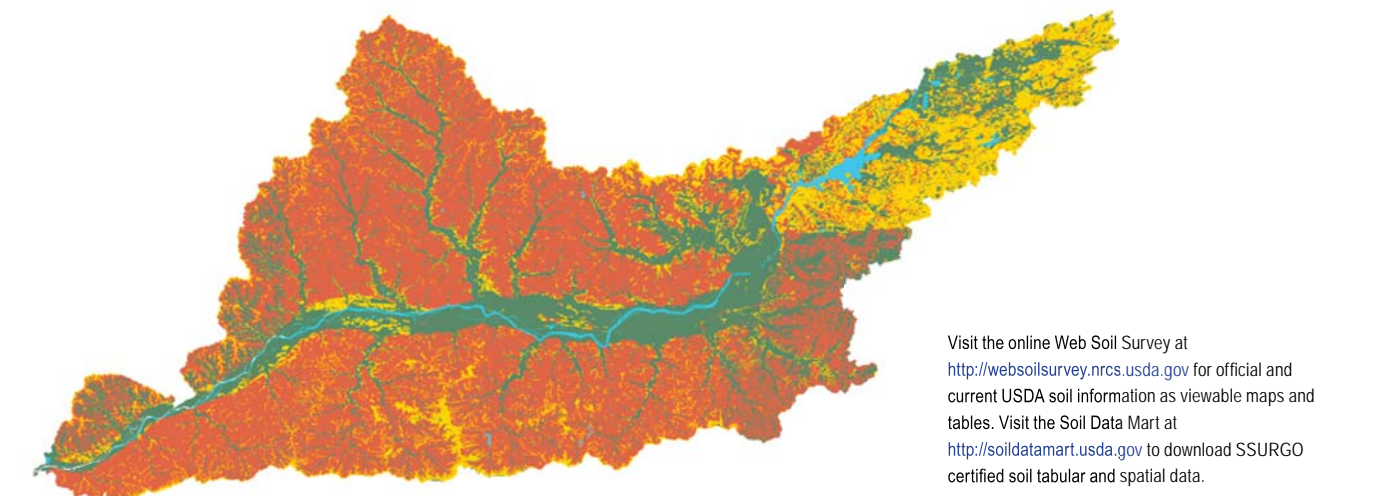
Visit the online Web Soil Survey at <http://websoilsurvey.nrcs.usda.gov> for official and current USDA soil information as viewable maps and tables. Visit the Soil Data Mart at <http://soildatamart.usda.gov> to download SSURGO certified soil tabular and spatial data.

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make on site determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 2002).



Erosion Classification

A soil map unit with an erodibility index (EI) of 8 or greater is considered to be highly erodible land (HEL). The EI for a soil map unit is determined by dividing the potential erodibility for the soil map unit by the soil loss tolerance (T) value established for the soil in the FOTG as of January 1, 1990. Potential erodibility is based on default values for rainfall amount and intensity, percent and length of slope, surface texture and organic matter, permeability, and plant cover. Actual erodibility and EI for any specific map unit depends on the actual values for these properties.



Visit the online Web Soil Survey at <http://websoilsurvey.nrcs.usda.gov> for official and current USDA soil information as viewable maps and tables. Visit the Soil Data Mart at <http://soildatamart.usda.gov> to download SSURGO certified soil tabular and spatial data.

LAND CAPABILITY CLASSIFICATION

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive land forming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.



Visit the online Web Soil Survey at <http://websoilsurvey.nrcs.usda.gov> for official and current USDA soil information as viewable maps and tables. Visit the Soil Data Mart at <http://soildatamart.usda.gov> to download SSURGO certified soil tabular and spatial data.



RESOURCE CONCERNS

Primary resource concerns are cropland soil erosion, surface water quality, grazing land and forestland productivity, stream bank erosion, erosion during timber harvest and wetland habitat protection and restoration. Groundwater quality is a concern in the irrigated, sandy outwash terraces of the Wisconsin River valley. The proposed additional resource concern for the Lower Wisconsin River watershed is stream bank soil erosion.

WATERSHED ASSESSMENT

To assess a watershed's agricultural nonpoint pollution potential, a model was used to generate a watershed assessment score relative to other 8-digit watersheds in Wisconsin. Factors used in the model include acres of cropland, acres of highly erodible land (HEL), and the number of animal units in the watershed. Scores ranged from 0.0 (lowest conservation need) to 24.2 (highest conservation need). The scores may be useful in determining funding allocations on a watershed basis for agricultural nonpoint pollution control initiatives. The model does not attempt to measure pollution levels and does not reflect pollution potential from point sources of pollution or other nonpoint pollution sources beyond the above criteria.

The watershed assessment score for the Lower Wisconsin River Watershed is 24.2

WATERSHED PROJECTS, STUDIES, MONITORING, ETC

The Black Earth Creek and Dunlap Creek watersheds were Wisconsin Priority Watershed completed in the last two decades. The projects focused on improving soil quality, water quality and stream habitat through cost-share contracts with farmers who implemented best management practices. The Wisconsin Department of Natural Resources conducts and citizen groups conduct ongoing monitoring of streams, rivers and lakes in the watershed each year.



The Discovery Farm Program has an active on-farm BMP and water quality Monitoring research program in the watershed. In addition, the watershed is part of the larger, multi-state Driftless Initiative to restore streams and rivers in the region. The Southwest Badger Resource Conservation and Development Council and Trout Unlimited are local leaders in this effort.

PERFORMANCE RESULTS SYSTEM AND OTHER DATA

Based on PRS data, it is estimated that in 2004, new nutrient management plans were implemented on 5,400 acres in the watershed and 24 acres of grassed waterways were installed. Other surveys indicate that a nutrient management plan is followed on approximately 6.2% of cropland acres in southwest Wisconsin. On a 100 point scale developed at the national level, current conservation in this watershed scores 36.96.

7.

PRS PERFORMANCE

MEASURES	FY99	FY00	FY01	FY02	FY03	FY04	FY05	TOTAL
Total Conservation Systems Planned (acres)	3,480	16,272	22,838	37,086	27,466	N/A	35,674	142,816
Total Conservation Systems Applied (acres)	4,450	11,889	18,943	27,972	33,549	N/A	26,775	123,578
C o n s e r v a t i o n P r a c t i c e s								
Total Waste Management (313) (numbers)	0	0	0	3	2	2	3	10
Riparian Forest Buffers (391) (acres)	18	332	331	418	270	189	30	1,588
Erosion Control Total Soil Saved (tons/year)	18,710	62,843	45,039	60,666	45,826	N/A	N/A	233,084
Total Nutrient Management (590) (Acres)	0	1,937	2,955	4,804	11,809	3,904	7,538	32,947
Pest Management Systems Applied (595A) (Acres)	0	185	448	296	1,388	0	65	2,382
Prescribed Grazing 528a (acres)	0	31	1,025	858	868	722	505	4,009
Tree & Shrub Establishment (612) (acres)	118	1,274	963	869	806	1,190	139	5,359
Residue Management (329A-C) (acres)	0	3,056	8,316	6,020	4,256	7,715	9,865	39,228
Total Wildlife Habitat (644 - 645) (acres)	1,251	887	3,132	13,627	8,088	1,612	1,520	30,117
Total Wetlands Created, Restored, or Enhanced (acres)	75	176	156	489	294	123	55	1,368
A c r e s e n r o l l e d i n F a r m b i l l P r o g r a m s								
Conservation Reserve Program	4,368	8,630	8,753	12,726	6,967	N/A	81	41,444
Wetlands Reserve Program	0	567	543	378	150	N/A	0	1,638
Environmental Quality Incentives Program	0	567	3,135	2,687	6,650	N/A	84	13,039
Wildlife Habitat Incentive Program	13	567	2,356	160	208	N/A	8	3,304
Farmland Protection Program	0	0	0	18	176	N/A	2	194

CENSUS AND SOCIAL DATA (RELEVANT) ^{8.}

There are 5,045 farms in the watershed that average 209 acres in size. The 2002 average gross farm income of counties in the watershed was approximately \$65,000, about 10.8% below the statewide average. It is estimated that less than 25% of watershed farmers meet the limited resource producer criteria.



	County								
	Iowa	Grant	Dane	Crawford	Richland	Columbia	Sauk	Vernon	Total
Farms (number)	894	722	520	358	1195	580	736	41	5045
Land in farms (acres)	194708	175692	92786	71331	226870	132380	155366	41	1049174
Farms by size - 1 to 9 acres	22	30	55	12	19	42	31	15	227
Farms by size - 10 to 49 acres	184	115	155	57	214	126	135	18	1003
Farms by size - 50 to 179 acres	325	242	171	149	546	213	302	3	1951
Farms by size - 180 to 499 acres	273	261	99	115	345	133	199	2	1427
Farms by size - 500 to 999 acres	66	56	26	20	55	41	51	1259	1573
Farms by size - 1,000 acres or more	22	17	14	6	17	25	18	1	119
Total cropland (acres)	114947	108745	74756	36331	117342	100537	98328	1469	652456
Irrigated land (acres)	3508	84	949	38	2140	594	5487	406	13205
Principal operator by primary occupation - Farming (number)	462	461	290	196	643	353	414	20	2839
Livestock and poultry - Cattle and calves inventory (farms)	443	446	184	191	618	239	384	18	2521
Livestock and poultry - Cattle and calves inventory - Beef cows (farms)	179	189	51	91	257	86	150	2	1005
Livestock and poultry - Cattle and calves inventory - Milk cows (farms)	183	193	78	62	219	80	155	185	1155
Livestock and poultry - Hogs and pigs inventory (farms)	28	42	15	14	35	30	36	16	217
Livestock and poultry - Sheep and lambs inventory (farms)	24	21	19	4	41	34	28	630	803
Livestock and poultry - Layers 20 weeks old and older inventory (number)	0	1717	8173	523	3664	0	0	2344	16421
Livestock and poultry - Broilers and other meat-type chickens sold (farms)	3	8	5	4	6	13	12	5	57
Selected crops harvested - Corn for grain (acres)	27515	34979	28507	7782	22530	45926	30624	3	197865
Selected crops harvested - Corn for silage or greenchop (acres)	6297	5034	4571	1219	6299	3745	6013	0	33177
Selected crops harvested - Wheat for grain, all (acres)	263	197	1217	97	204	2397	791	0	5166
Selected crops harvested - Wheat for grain, all - Winter wheat for grain (acres)	0	197	0	0	0	2370	791	0	3358
Selected crops harvested - Wheat for grain, all - Spring wheat for grain (acres)	0	0	0	0	0	26	0	0	26
Selected crops harvested - Oats for grain (acres)	1990	3499	893	957	1790	1250	2012	0	12391
Selected crops harvested - Barley for grain (acres)	319	154	41	49	191	67	145	0	966
Selected crops harvested - Soybeans for beans (acres)	13340	14035	15693	3335	8298	19651	12651	0	87002
Selected crops harvested - Forage - land used for all hay and all haylage, grass silage, and greenchop (see text) (acres)	31451	30121	14088	11633	44703	15906	30719	0	178622
Selected crops harvested - Vegetables harvested for sale (see text) (acres)	600	12	451	23	426	1702	468	0	3683
Selected crops harvested - Land in orchards (acres)	41	13	31	198	339	16	73	0	711

POPULATION ETHNICITY ^{9.}

Total Population	Urban Population	Rural Population	White Alone	Hispanic or Latino	Two or more races	Black or African American Alone	Some other race alone	American Indian and Alaska Native Alone	Asian Alone	Native Hawaiian and Other Pacific Islander alone
95,398	23,600	71,797	93,603	1,212	586	294	346	268	290	5

URBAN POPULATION^{10.}

MEDIAN HOUSEHOLD INCOME (1999)



	1990	2000	2004	Median Income*
Cross Plains	1,320	1,419	1,523	66,055
Dane	921	968	1,085	61,250
Mazomanie	982	1,185	1,279	60,298
Prairie du Sac	1,271	1,138	1,117	56,667
Black Earth	1,248	1,320	1,283	51,548
Lodi	2,093	2,882	3,030	51,357
Arena	1,301	1,444	1,477	51,042
Spring Green	1,329	1,585	1,579	49,028
Merrimac	737	868	944	47,115
Wycocena	1,228	1,543	1,581	45,150
Poynette	1,662	2,266	2,563	45,000
Plain	691	792	768	44,028
Rio	768	938	998	42,292
Wauzeka	595	768	795	40,556
Pardeeville	1,630	1,982	2,125	40,139
Cambria	768	792	789	38,750
Highland	756	797	828	37,868
Sauk City	3,019	3,109	3,006	36,378
Blue River	438	429	428	34,250
Yuba	77	92	89	34,063
Prairie du Chien	5,659	6,018	5,880	34,038
Lone Rock	641	929	911	33,060
Boscobel	2,706	3,047	3,373	32,698
Boaz	131	137	141	31,563
Muscoda	1,287	1,453	1,408	30,903
Avoca	474	608	582	28,625
Richland Center	5,018	5,114	51,77	27,129

*The median household income for the U.S. in 1999 was \$41,994.

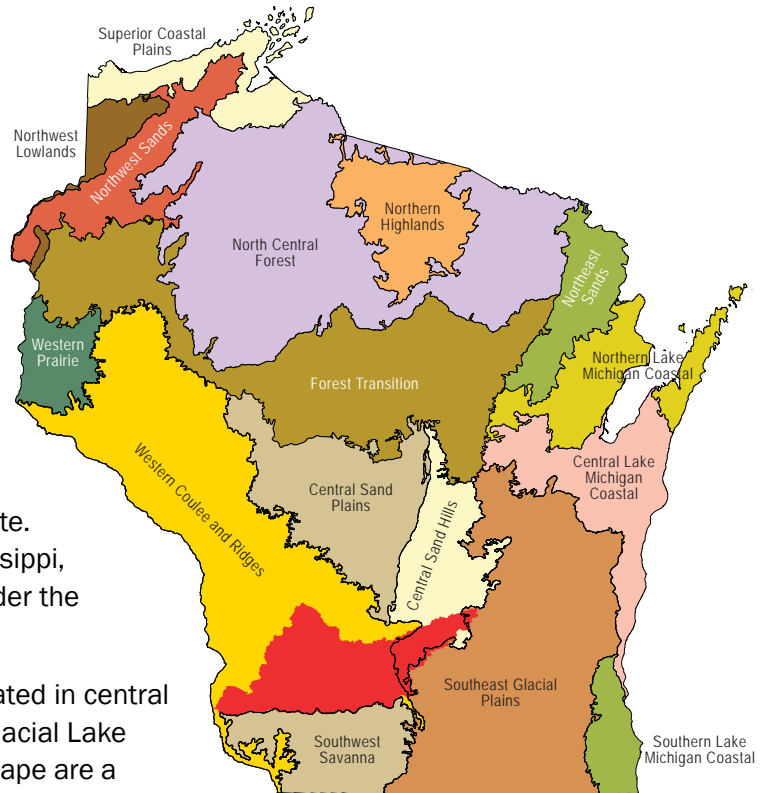
ECOLOGICAL LANDSCAPE

GENERAL DESCRIPTION

The Lower Wisconsin watershed is located predominantly in the Western Coulee and Ridges Ecological Landscape. A portion of the watershed runs into the Central Sand Hills.

The Western Coulee and Ridges Ecological Landscape in southwestern and west central Wisconsin is characterized by its highly eroded, driftless topography and relatively extensive forested landscape. Soils are silt loams (loess) and sandy loams over sandstone residuum over dolomite. Several large rivers including the Wisconsin, Mississippi, Chippewa, Kickapoo and Black flow through or border the Ecological Landscape.

The Central Sand Hills Ecological Landscape is located in central Wisconsin at the eastern edge of what was once Glacial Lake Wisconsin. The landforms in this Ecological Landscape are a series of glacial moraines that were later partially covered by glacial outwash. The area is characterized by a mixture of farmland, woodlots, wetlands, small kettle lakes, and cold water streams, all on sandy soils. The mosaic of glacial moraine and pitted outwash throughout this Ecological Landscape has given rise to extensive wetlands in the outwash areas, and the headwaters of coldwater streams that originate in glacial moraines. The growing season is long enough for agriculture but the sandy soils limit agricultural productivity somewhat.



MANAGEMENT OPPORTUNITIES

The Wisconsin DNR has created a list of management opportunities for use in the ecological landscape units. View these and the entire ecological landscape description at: <http://dnr.wi.gov/landscapes>

PARTNER GROUPS

- Wisconsin Department of Natural Resources <http://dnr.wi.gov/>
- Wisconsin Department of Agriculture, Trade, and Consumer Protection <http://www.datcp.state.wi.us>
- County Land Conservation Departments (Directory Link = http://www.datcp.state.wi.us/arm/agriculture/land-water/conservation/pdf/ar-pub-119web_dec2005.pdf)
- River Alliance <http://www.wisconsinrivers.org/>
- UW Cooperative Extension <http://www.uwex.edu/ces/>
- US Fish and Wildlife Service <http://www.fws.gov/midwest/maps/wisconsin.htm>
- USDA Farm Service Agency <http://www.fsa.usda.gov/wi/news/default.asp>
- Wisconsin Trout Unlimited

FOOTNOTES/BIBLIOGRAPHY

All data is provided “as is.” There are no warranties, express or implied, including the warranty of fitness for a

particular purpose, accompanying this document. Use for general planning purposes only.

1. Common Resource Area (CRA) Map delineations are defined as a geographical areas where resource concerns, problems, or treatment needs are similar. It is considered a subdivision of an existing Major Land Resource Area (MLRA) map delineation or polygon. Landscape conditions, soil, climate, human considerations, and other natural resource information are used to determine the geographic boundaries of a CRA. For more information about a CRA visit <http://soils.usda.gov/survey/geography/cra.html>.
2. The relief map was created using the National Elevation Dataset (NED) 1 arc second, approximately 30 meters, digital elevation model (DEM) raster product assembled by the U.S. Geological Survey (USGS). A hillshade grid was derived from the 30m DEM and draped over the DEM to symbolize the map and create a 3-D effect. For more information about NED visit <http://ned.usgs.gov/>. The data was downloaded from the NRCS Geospatial Data Gateway <http://datagateway.nrcs.usda.gov/>.
3. Average Annual Precipitation data was originated by Chris Daly of Oregon State University and George Taylor of the Oregon Climate Service at Oregon State University and published by the Water and Climate Center of the Natural Resources Conservation Service in 1998. Annual precipitation data was derived from the climatological period of 1961-1990. Parameter-elevation Regressions on Independent Slopes Model (PRISM) derived raster data is the underlying data set from which the polygons and vectors were created. For more information about PRISM visit http://www.ocs.orst.edu/prism/prism_new.html. Precipitation data was downloaded from the NRCS Geospatial Data Gateway <http://datagateway.nrcs.usda.gov/>.
4. The Land Use/Land Cover data was generated from the National Land Cover Dataset (NLCD) compiled from Landsat satellite TM imagery (circa 1992) with a spatial resolution of 30 meters and supplemented by various ancillary data (where available). The data was assembled by the USGS and published in June of 1999. The analysis and interpretation of the satellite imagery was conducted using very large, sometimes multi-state image mosaics. For more information about NLCD visit <http://edcwww.cr.usgs.gov/programs/lccp/nationallandcover.html>. The data was downloaded from the NRCS Geospatial Data Gateway <http://datagateway.nrcs.usda.gov/>.
5. 303d listed streams were derived from the 2004 Section 303(d) of the U.S. Environment Protection Agency website: http://oaspub.epa.gov/tmdl/huc_rept.control?p_huc=07070005&p_huc_desc=LOWER%20WISCONSIN. Preliminary level 5, 10- digit watersheds were obtained from USGS, NRCS, EPA and Forest Service that will eventually become the official certified 24k WBD dataset. For a list and explanation of Outstanding and Exception Resource Waters visit: <http://dnr.wi.gov/org/water/wm/wqs/orwerw>.

6. Soil Survey Geographic Database (SSURGO) tabular and spatial data were downloaded for the following surveys:

- Crawford Co., WI (WI043) Published 20060124
- Grant Co., WI (WI049) Published 20060301
- Richland Co., WI (WI065) Published 20060123
- Vernon Co., WI (IA043) Published 20060124
- Sauk Co., WI (IA061) Published 20050913
- Columbia Co., WI (WI021) 20060123
- Dane Co., WI (WI025) 20060123
- Iowa Co., WI (WI049) 20060123

Metadata and SSURGO data for the aforementioned surveys were downloaded from the NRCS Soil Data Mart at <http://soildatamart.nrcs.usda.gov>. Component and layer tables from the tabular data were linked to the spatial data to derive the soil classifications found in this section. Visit the online Web Soil Survey at <http://websoilsurvey.nrcs.usda.gov> for official and current USDA soil information as viewable maps and tables.

7. Performance Results System (PRS) data was extracted from the PRS homepage by year, conservation systems and practices and Hydrologic Unit Code (HUC) level. HUC level reporting was not available where N/A is listed. For more information on these and other performance reports visit <http://ias.sc.egov.usda.gov/prshome/>.
8. Ag Census data were downloaded from the National Agricultural Statistics Service (NASS) Website and the data were adjusted by percent of HUC in the county. For more information on individual census queries visit the NASS website at <http://www.nass.usda.gov/>.
9. Population ethnicity data were extracted from the Census 2000 Summary File 3 compiled by the U.S. Census Bureau. The data were adjusted by Block Group percentage in the HUC. Population items were selected from the SF30001 table. For more information on census data and definitions visit <http://www.census.gov/Press-Release/www/2002/sumfile3.html>.
10. Urban population and median household income data were derived from the American FactFinder assembled by the U.S. Census Bureau. American FactFinder is a quick source for population, housing, income and geographic data. For other census items and trends visit http://factfinder.census.gov/home/saff/main.html?_lan