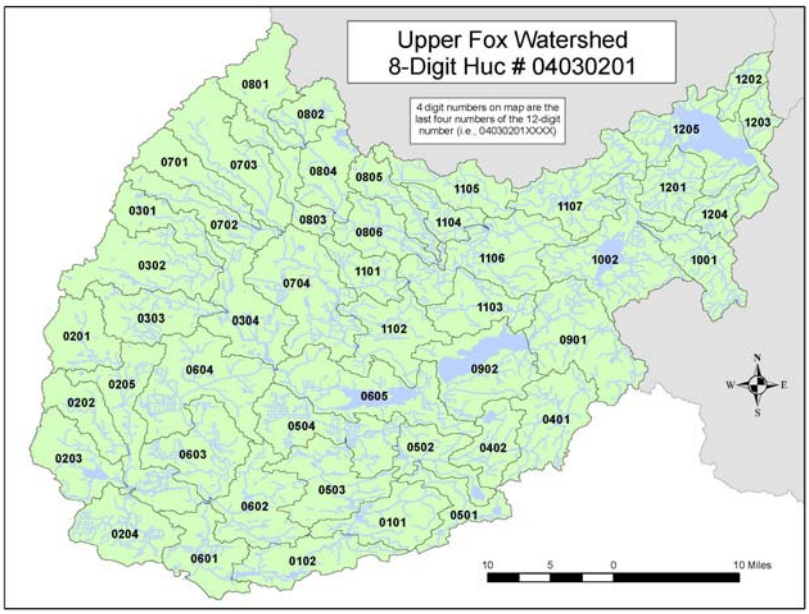
Upper Fox River Watershed

Hydrologic Unit Code: 04030201

For more information, see USEPA "Surf Your Watershed" website at cfpub.epa.gov/surf/huc.cfm?huc_code=04030201

The Upper Fox River basin is part of the Wisconsin DNR's Upper Fox River basin management area, which also includes the Lake Winnebago watershed. For more information, see the Wisconsin Department of Natural Resources' "Wisconsin's Basins" website at dnr.wi.gov/org/gmu/gmu.html.



Watershed Groups

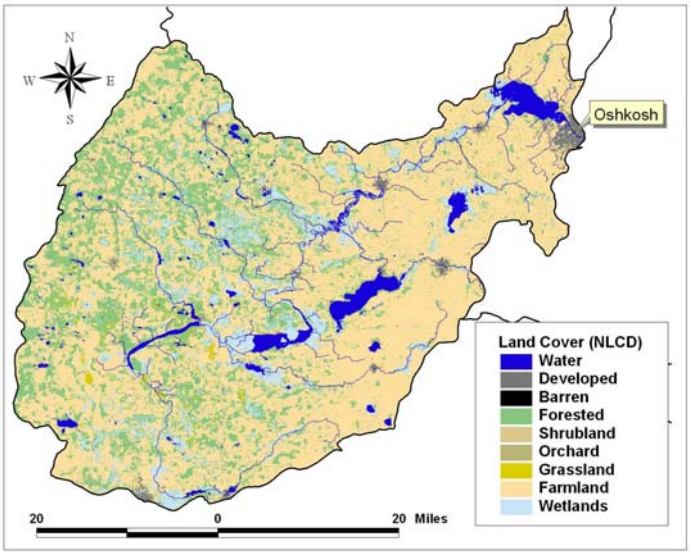
- Fox River Watch — www.foxriverwatch.com
- Fox Wolf Watershed Alliance — www.fwwa.org
- Lake Michigan Forum — www.lkmichiganforum.org
- Rivers Alliance of Wisconsin — www.wisconsinrivers.org
- Rob McLennan, the Upper Fox River Water Basin Team Leader — Robin.McLennan@dnr.state.wi.us
- Fox-Wolf Basins, The University of Wisconsin-Extension — basineducation.uwex.edu/foxwolf

Watershed Overview / Ecology / Biodiversity

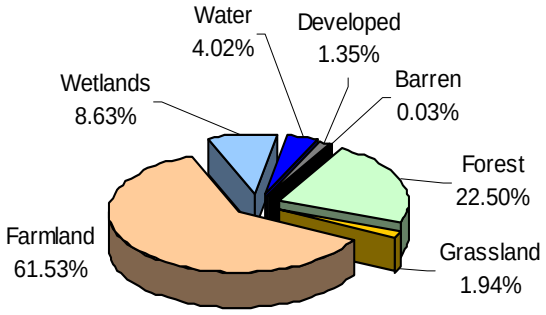
- Numerous endangered, threatened and otherwise rare species exist in the basin, including the threatened White Lady's Slipper, a species that needs fens and calcareous wet prairies, and Forster's Tern, which needs large marshes, estuaries and lake islands.
- Over 8% of the basin area is wetland greater than 40 acres in size, accounting for 145,428 acres. The total wetland area is actually much greater, as mapping identifies wetlands as small as 2 acres in size.
- There are over 55,678 acres of major public lands in the Upper Fox management basin including 51,311 acres of state wildlife, fisheries and park lands (not including the 11 state natural areas in the basin) and 4,367 acres of U.S. Fish and Wildlife Service wildlife refuge and waterfowl production acres.
- The Basin includes the Central Sand Ridges, Southeast Glacial Plains, and a small portion of the Central Sand Plains Ecological Landscapes.
- Most of the basin's cold water trout streams are located in the western portion of the basin near the Sandy Ridges ecosystem.

Subwatersheds of the Upper Fox River Watershed

0101 Sand Spring Creek-Fox River
0102 Swan Lake-Fox River
0201 Neenah Lake-Neenah Creek
0202 Green Creek
0203 South Branch Neenah Creek
0204 Big Slough
0205 Neenah Creek
0301 Tagatz Creek
0302 Westfield Creek
0303 Klawitter Creek
0304 Montello River
0401 Headwaters Grand River
0402 Little Green Lake-Grand River
0501 Lake Emily
0502 Grand Lake-Grand River
0503 Belle Fountain Creek
0504 Grand River
0601 Portage Canal-Fox River
0602 French Creek
0603 Good Earth Creek-Fox River
0604 Buffalo Lake-Fox River
0605 Puckaway Lake-Fox River
0701 Weddle Creek
0702 Chafee Creek
0703 Little Pine Creek-Mecan River
0704 Mecan River
0801 West Branch White River
0802 Soules Creek-White River
0803 Lunch Creek
0804 Little Lunch Creek-White River
0805 Sucker Creek
0806 White River
0901 Silver Creek
0902 Big Green Lake
1001 Eightmile Creek
1002 Rush Creek
1101 Black Creek
1102 Mill Race-Fox River
1103 Puchyan River
1104 Town Ditch
1105 Barnes Creek
1106 City of Berlin-Fox River
1107 Hogars Bayou-Fox River
1201 Spring Brook
1202 Daggetts Creek
1203 Brooks Cemetary
1204 Sawyer Creek
1205 Lake Butte des Mortes-Fox River



Land Cover: Upper Fox River Watershed



Watershed size: 1637 sq. miles

Between 1996 and 2001, there has been an increase in developed land and grassland and a decrease in farmland and forest.

Warm water rivers, streams and lakes support various game and non- game species including large and small mouth bass, walleye, northern pike, catfish and sturgeon.

- Common woodland wildlife include White- tailed Deer, Turkey, Ruffed Grouse; upland/ grassland wildlife includes Ring-necked Pheasant, non- game songbirds (Vesper Sparrow, Bobolink, Meadowlark); grassland nesting waterfowl include Mallards and Blue- winged Teal. Wetland species include various waterfowl, amphibians and reptiles.
- Oak- hickory is the most common forest type and the tree species with the greatest volume in the Upper Fox Basin is White Oak followed by Black and Pin Oak, White and Red Pine, Aspen and Soft Maple.
- The Nature Conservancy identified Eightmile-Waukau Creek as a critical ecological system .
- The Upper Fox watershed is home to the state's largest Wetland Reserve Restoration Program (WRP). Duffy's Marsh is a 1,732 acre wetland restoration project in Marquette County.

Watershed Activities

- Several dams have been removed, with fish species returning and the population of exotic species declining.
- The Upper Fox Basin Partnership identified three major priorities affecting the natural resources of the basin and the uses of those resources by the public: wetland filling/ loss; habitat loss and fragmentation; and nutrient loading/ Nonpoint Source Pollution
- Other environmental concerns include:
  - ◊ Water quality problems from contaminated sediments, runoff in urban and agricultural areas, floodplain development and overuse of groundwater supplies.
  - ◊ Riparian/wetland, woodland, and grassland habitat loss, deterioration, and fragmentation from rapid development and conversion of rural lands.
  - ◊ Grassland restoration is a major initiative, with virtually the entire historic prairie, sedge meadows and oak savannas having been converted to agriculture.
  - ◊ Exotic species such as plant species such as reed canary grass, purple loosestrife, buckthorn, garlic mustard, and Eurasian water milfoil are a continuing problem. Zebra mussels and rusty crayfish are spreading to basin waterways, disrupting stream and lake ecology.
  - ◊ Monitoring of wildlife populations, water quality, and ecosystem function are needed to understand the status and trends of resources.

Data Sources. Land cover map and percentages: National Land Cover database, 1992 (edc.usgs.gov/products/landcover/nlcd.html; Land use change: NOAA Coastal Change Analysis Program, 1996 and 2001 (www.csc.noaa.gov/crs/lca/ccap.html); Total Maximum Daily Load (TMDL) Impaired Waters: Surf Your Watershed (www.epa.gov/surf)

Impaired 303(d) Waters

Waterbody Name	Impairment
Big Green Lake	PCB Fish Consumption Advisory
Buffalo Lake	Mercury Fish Consumption Advisory
Fox River (From Portage North To, But Not Including Buffalo Lake)	PCB Fish Consumption Advisory
Fox River (Swan Lake Downstream to Portage)	PCB Fish Consumption Advisory
Fox River At Buffalo Lake	PCB Fish Consumption Advisory
Fox River near immediately Upstream of Lake Winnebago	Aquatic Toxicity, Coal Tar
Fox River, Oshkosh	Aquatic Toxicity
Hill Creek	Degraded Habitat, Sediment
Lake Butte Des Morts	PCB Fish Consumption Advisory, Dissolved Oxygen, Sediment, Phosphorous, Mercury Fish Consumption Advisory, Eutrophication
Little Green Lake	Degraded Habitat, Dissolved Oxygen, Eutrophication, PH, Phosphorous
Mason Lake	Eutrophication, PH, Phosphorous
Park Lake	Eutrophication, Phosphorous, Sediment
Peppermill Creek	Degraded Habitat, Sediment, Temperature
Poygan Lake	Dissolved Oxygen, PCB Fish Consumption Advisory, Phosphorous, Sediment
Roy Creek (All)	Degraded Habitat, Sediment
Silver Creek (2)	Degraded Habitat, Sediment, Temperature
Silver Lake (Big) , Waushara Co.	Aquatic Toxicity
Un. Trib To Mason Lake	Loss Of Instream Habitat, Sediment
Wurchs Creek	Loss Of Instream Habitat, Sediment