

Upper Grand River Watershed

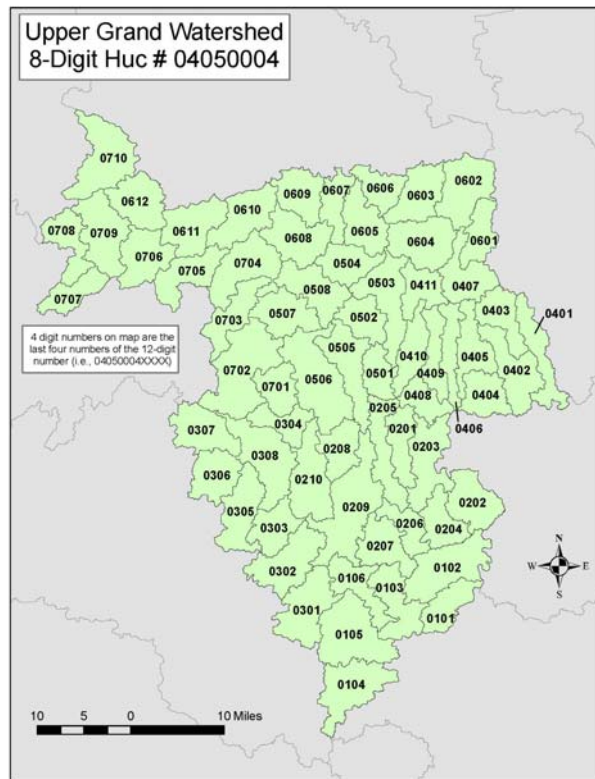
Hydrologic Unit Code: 04050004

For more information, see the USEPA website at cfpub.epa.gov/surf/huc.cfm?huc_code=04050004 or contact the Michigan Department of Environmental Quality at 517-335-6969 to request a copy of the following reports:

- Upper Grand: Report #07/072 "A biological survey of the Upper Grand River Watershed"
- Red Cedar (2001): MI/DEQ/WD-03/025
- Looking Glass (2002): MI/DEQ/WD-03/120

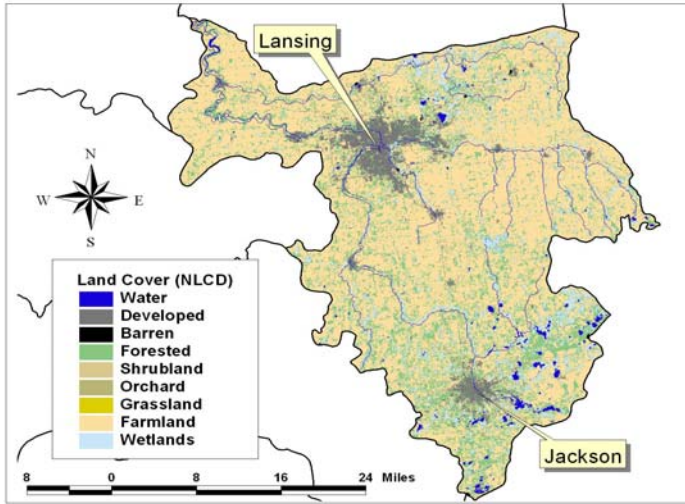
Watershed Organizations

- Carrier Creek Stormwater Management and Restoration Project — www.carriercreek.com
- Eaton County Drain Commission — www.eatoncounty.org/Drain/Drain.htm
- The Upper Grand River Watershed Council — www.uppergrandriver.org
- Friends of the Looking Glass -- www.lookingglassriverfriends.org



Subwatersheds of the Upper Grand River Watershed

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| 0101 Wolf Lake | 0411 Squaw Creek-Red Cedar River |
| 0102 Grass Lake Drain | 0501 Deer Creek |
| 0103 Center Lake | 0502 Sloan Creek |
| 0104 Headwaters Grand River | 0503 Coon Creek-Red Cedar River |
| 0105 Booth Drain-Grand River | 0504 Pine Lake Outlet |
| 0106 Hurd Narvin Drain-Grand River | 0505 Mud Creek |
| 0201 Cahoogan Creek | 0506 Headwaters Sycamore Creek |
| 0202 Headwaters Portage River | 0507 Sycamore Creek |
| 0203 Orchard Creek | 0508 Red Cedar River |
| 0204 Portage Lake-Portage River | 0601 Headwaters Looking Glass River |
| 0205 Batteese Creek | 0602 Howard Drain-Looking Glass River |
| 0206 White Lake-Portage River | 0603 Kellog Drain-Looking Glass River |
| 0207 Portage River | 0604 Buck Branch-Vermillion Creek |
| 0208 Huntoon Creek | 0605 Vermillion Creek |
| 0209 Western Creek-Grand River | 0606 Leisure Lakes-Looking Glass River |
| 0210 Perry Creek-Grand River | 0607 Mud Creek-Looking Glass River |
| 0301 Indian Brook-Sandstone Creek | 0608 Remy Chandler Drain |
| 0302 Mackey Brook-Sandstone Creek | 0609 Turkey Creek Drain-Looking Glass River |
| 0303 Sandstone Creek | 0610 Summers Drain-Looking Glass River |
| 0304 Willow Creek | 0611 Husted and Landenburg Drain-Looking Glass River |
| 0305 Otter Creek-Spring Brook | 0612 Looking Glass River |
| 0306 Peacock Extension-Spring Brook | 0701 Columbia Creek |
| 0307 Spring Brook | 0702 Skinner Extension Drain-Grand River |
| 0308 Kettler and Norris Drain-Grand River | 0703 Silver Creek-Grand River |
| 0401 Handy Howell Drain-Red Cedar River | 0704 Carrier Creek-Grand River |
| 0402 Middle Branch Red Cedar River | 0705 Sandstone Creek-Grand River |
| 0403 Handy Drain No 5-Red Cedar River | 0706 Frayer Creek-Grand River |
| 0404 Headwaters West Branch Red Cedar River | 0707 Winchell and Union Drain-Sebewa Creek |
| 0405 West Branch Red Cedar River | 0708 Sebewa Creek |
| 0406 Kalamink Creek | 0709 Cryderman Lake Drain-Grand River |
| 0407 Wolf Creek-Red Cedar River | 0710 Goose Creek-Grand River |
| 0408 Hayhoe Drain-Doan Creek | |
| 0409 Dietz Creek | |
| 0410 Doan Creek | |



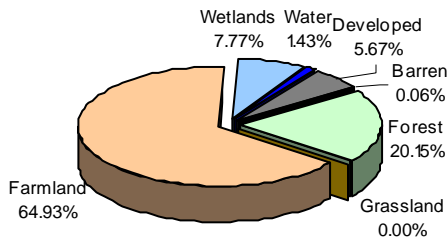
Watershed Management Plans

- Carrier Creek — Eaton County Drain Commission
- Upper and Lower Grand River — Grand Valley State University Annis Water Resources Institute
- Upper Looking Glass River

Watershed Overview

- The Upper Grand River watershed is almost 1750 square miles.
- Almost 65% of the land is in agricultural use.
- There are three urban areas in the watershed: Lansing, East Lansing, and Jackson, Michigan.
- The watershed has 8 listed impaired waters.
- There are 958 miles of river and streams in the watershed.
- The Upper Grand watershed flows into the Lower Grand River watershed, where it then flows into Lake Michigan

Land Cover: Upper Grand River Watershed



Watershed size: 1750 sq. miles

Between 1996 and 2001, there has been a slight increase in developed land, wetlands, and farmland and a slightly larger decrease in grassland.

Watershed Priorities

- A 319 grant was awarded to the Jackson County Drain Commission Office to develop an Upper and Lower Grand River watershed management plan. Goals of the plan include:
 - Maintain and improve water quality by promoting sound land management decisions.
 - Assess relationships between water quality and storm water runoff by developing guidelines for stormwater management to reduce impacts of urbanization.
 - Preserve and restore, coldwater fisheries, and reintroduce indigenous game fish species where possible.
 - Provide for flood protection, minimize risk of flooding, and assess necessity of flood control improvements.
 - Ensure public safety in recreational opportunities in surface waters.
 - Protect healthy habitats for native aquatic life and wildlife.
- Development has significantly changed the areas in the watershed
- An increase in the amount of impervious surface area (i.e., rooftops and parking lots) has caused an increase in the amount of rainwater draining into such waterways as Carrier Creek.
- The increase in development and the use of drain tiles in agricultural areas has led to flashier streams.

Impaired (303d) Waters

Waterbody Name	Impairment
Grand River	Pathogens, Mercury
Grand River and Red Cedar River	PCB Fish Consumption Advisory, Mercury (Fish Tissue), Dissolved Oxygen, Fish Kills, Pathogens
Moore's Park Impoundment (Grand River)	Mercury (Fish Tissue)
Portage Lake	Mercury (Fish Tissue)
Red Cedar River	Pathogens Fish Community Rated Poor Macroinvertebrate Community Rate Poor
Sycamore Creek	Dissolved Oxygen
Vermillion Creek	Untreated Sewage Discharges, Pathogens

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)