Public Waters Inventory (PWI) Maps

Public waters are all waterbasins and watercourses that meet the criteria set forth in <u>Minnesota Statutes</u>, <u>Section 103G.005</u>, subd. 15 that are identified on Public Water Inventory maps authorized by Minnesota Statutes, <u>Section 103G.201</u>. Public waters wetlands include all type 3, type 4, and type 5 wetlands (as defined in U.S. Fish and Wildlife Service Circular No. 39, 1971 edition) that are 10 acres or more in size in unincorporated areas or 2.5 acres or more in size in incorporated areas (see: <u>Minnesota Statutes Section</u> 103G.005, subd. 17b, Wetland Type). Currently, DNR Waters utilizes scanned mylar county-scale maps printed on paper to show the general location of the public waters and public waters wetlands (lakes, wetlands, and watercourses) under its regulatory jurisdiction. These maps are commonly known as Public Waters Inventory (PWI) maps. The regulatory "boundary" of these waters and wetlands is called the <u>ordinary high water level</u> (OHWL).

DNR Waters will release new GIS-based PWI maps in an electronic format (Portable Document Format - PDF) as they are updated as noted under "GISbased Maps" below. Each GIS-based PWI map will replace a scanned paper PWI map upon their release. Scanned paper PWI maps will only be available as historic and not working documents.

Map description

The original scanned paper PWI maps will still be available from the **Minnesota Bookstore** on a county-by-county basis until they are updated and replaced with a GIS-based PWI map. The baseline map used for the construction of the original PWI maps is the Minnesota Department of Transportation county highway map. Some maps are comprised of several sheets per county. During the inventory process, the public waters and public waters wetlands were drafted onto each county highway base map and are visibly darker than other "background" information on the base map. A map legend describes the waters that DNR Waters regulates. The public waters are identified with a number followed by a "P" (e.g., 85P) and the public waters wetlands are identified with a number followed by a "W" (e.g., 30W). Watercourses are not numbered, however they appear as bolded solid or dashed lines. The solid lines indicate watercourses over which DNR Waters always has permit authority. The dashed lines indicate watercourses where DNR Waters jurisdiction is subject to public ditch law procedures. In addition, the legend on several county PWI maps indicate the existence of more detailed maps (not available in hard copy or online) that depict additional waters that DNR Waters regulates. These maps more clearly show certain reaches of DNR-designated trout streams on 7.5-minute series topographic maps prepared by the U.S. Geological Survey. Finer detailed PWI maps are only available for viewing at applicable county auditors offices, DNR Waters regional and area offices, DNR area fisheries offices, county soil and water district offices, zoning and engineering offices, watershed district offices, and the DNR Waters Central Office in St. Paul.

The updated GIS-based PWI maps were originally constructed as file geodatabases using ArcGIS 9.3.1. Three map scales are used: (1) 1:50,000 for the seven TCMA counties, (2) 1:100,000 for the most of the state, and (3)

1:125,000 for the largest counties. Three papers are used: (1) ANSI D (22" x 34") covers most of the state, (2) ANSI E (34" x 44") covers most of the large counties and allows some of the TCMA counties to be shown at a 1:50,000 scale, and (3) a custom paper size for St. Louis County (36" x 84") allowing it to be mapped at scale of 1:125,000. The GIS-based PWI maps are available as PDF documents and best viewed using the latest version of **Adobe Acrobat Reader**.

Availability of Public Waters Inventory Maps

Paper Maps

The original scanned PWI paper maps will continue to be available until they are replaced with updated GIS-based PWI maps as they are completed. They continue to be available for viewing at county auditors offices; DNR Waters regional, area, and central offices; soil and water conservation district offices; and watershed district offices until they are replaced with a GIS-based version.

View original scanned/rectified paper public waters inventory maps:

- scanned paper maps view as historical data sources and metadata
- scanned county-based inventory lists view as historical data sources and metadata

Additionally, scanned paper maps will continue to be available for purchase from the Minnesota Bookstore until they are replaced with a GIS-based version:

Minnesota's Bookstore

660 Olive Street, St. Paul, MN 55155 tel. (651) 297-3000@ (metro area) or 1-800-657-3757@ (statewide)

GIS-based Maps

View updated GIS-based PWI maps in PDF format (as they become available):

- GIS-based maps
 - <u>Chisago County</u>
 - Cook County PDF
 - Isanti County PDF
 - Kanabec County PPF
 - Kittson County
 - Koochiching County PDF
 - Lake County PDF
 - Lyon County PDF
 - Pennington County PDF
 - Pine County PDF
 - Ramsey County PDF
 - Red Lake County PDF
 - Washington County PDF
 - Watonwan County PDF
- ArcGIS shapefiles used to construct these maps are available from the DNR Data Deli

For general program questions or assistance, contact: Tom Hovey, DNR Hydrologist (651) 259-5654@, tom.hovey@state.mn.us

For GIS PWI mapping related questions, contact: Glenn Radde, DNR Public Waters GIS Coordinator (651) 259-5690, glenn.radde@state.mn.us