

## *Appendix: Wastewater Discharge*

A large number of communities dispose of treated wastewater effluent into the rivers and streams that feed the Pool lakes. The two major watersheds that drain into Lake Winnebago are the Upper Fox River Basin and the Wolf River Basin. Below is a list of municipal wastewater discharges with a Wisconsin Pollution Discharge Elimination System (WPDES) permit from the DNR. The numbers below are based on reported flows for the year 2000. Some of the discharges vary over the year so the number is an average value.

There are a total of 62 permitted municipal wastewater discharges to the Lake Winnebago Pool averaging a total of 34.24 million gallons per day. An average of 2.87 billion gallons of water per day enters Lake Winnebago from the Fox River at Oshkosh. This amount includes the Upper Fox River, the Wolf River, and all of the smaller streams and rivers that enter the Upriver Lakes. The amount of wastewater discharged to the Pool equals slightly more than 1% of this total flow entering Lake Winnebago at Oshkosh.

<b>Upper Fox River Basin WPDES Permitted Municipal Discharges</b>		<b>Avg. Flow (million gallons per day)</b>
1	Berlin Wastewater Treatment Facility	0.878
2	Butte des Morts Consolidated Sanitary District #1	0.080
3	Eden Wastewater Treatment Facility	0.181
4	Edison Estates Mobile Home Park Wastewater Treatment Facility	0.024
5	Fairwater Wastewater Treatment Facility	0.042
6	Fond du Lac Wastewater Treatment Facility	7.186
7	Friesland Wastewater Treatment Facility	0.008
8	Green Lake Sanitary District	0.080
9	Green Lake Wastewater Treatment Facility	0.193
10	Kingston Village	0.020
11	Markesan Wastewater Treatment Facility	0.307
12	Montello Wastewater Treatment Facility	0.154
13	Neshkoro Wastewater Treatment Facility	0.031
14	Oakfield Village Wastewater Treatment Facility	0.161
15	Omro Wastewater Treatment Facility	0.561
16	Oshkosh Wastewater Treatment Facility	12.032
17	Oxford Village Wastewater Treatment Facility	0.048
18	Pardeeville Wastewater Treatment Facility	0.276
19	Princeton Wastewater Treatment Facility	0.182
20	Ripon Wastewater Treatment Facility	1.676
21	Rosendale Wastewater Treatment Facility	0.111
22	Stockbridge Wastewater Treatment Facility	0.049
23	Westfield Wastewater Treatment Facility	0.220
24	Wisconsin Corp Seventh Day Adventist	0.014
<b>Total per day discharge (million gallons)</b>		<b>24.511</b>

<b>Wolf River Basin WPDES Permitted Municipal Discharges</b>		<b>Avg. Flow (million gallons per day)</b>
1	Almond Wastewater Treatment Facility	0.027
2	Amherst Wastewater Treatment Facility	0.100
3	Bear Creek Wastewater Treatment Facility	0.048
4	Birnamwood Wastewater Treatment Facility	0.090
5	Black Creek Wastewater Treatment Facility	0.336
6	Bowler Wastewater Treatment Facility	0.022
7	Caroline Sanitary District #1 Wastewater Treatment Facility	0.020
8	Clintonville Wastewater Treatment Facility	0.611
9	Dale Sanitary District #1 Wastewater Treatment Facility	0.034
10	Embarrass/Cloverleaf Lake Wastewater Treatment Facility	0.102
11	Fremont Orihula Wolf River Joint Sanitary District	0.111
12	Gresham Wastewater Treatment Facility	0.077
13	Hortonville Wastewater Treatment Facility	0.251
14	Iola Wastewater Treatment Facility	0.135
15	Larsen Winchester Sanitary District Wastewater Treatment Facility	0.046
16	Manawa Wastewater Treatment Facility	0.166
17	Maple Lane Health Care Center Wastewater Treatment Facility	0.010
18	Marion Wastewater Treatment Facility	0.235
19	New London Wastewater Treatment Facility	1.211
20	Nichols Wastewater Treatment Facility	0.030
21	North Lake Poygan Sanitary District Wastewater Treatment Facility	0.033
22	Poy Sippi Sanitary District Wastewater Treatment Facility	0.037
23	Poygan Poy Sippi Sanitary District Wastewater Treatment Facility	0.037
24	Redgranite Wastewater Treatment Facility	0.167
25	Ridgeway Country Club Wastewater Treatment Facility	0.003
26	Scandinavia Wastewater Treatment Facility	0.060
27	Seymour Wastewater Treatment Facility	0.547
28	Shiocton Wastewater Treatment Facility	0.088
29	Silver Lake Sanitary District	0.507
30	Stephensville Sanitary District #	0.015
31	Tigerton Wastewater Treatment Facility	0.067
32	Waupaca Wastewater Treatment Facility	1.070
33	Weyauwega Wastewater Treatment Facility	0.423
34	White Lake, Village of	0.036
35	Wild Rose Wastewater Treatment Facility	0.080
36	Winneconne Wastewater Treatment Facility	0.451
37	Wittenberg Wastewater Treatment Facility	0.198
38	Wolf Treatment Plant	2.245
<b>Total per day discharge (million gallons)</b>		<b>9.729</b>

# Appendix: Sensitive Areas

Sensitive areas, as defined in section NR107.05 (3)(i)(1.), Wisconsin Administrative Code, are areas of aquatic vegetation identified by the DNR as offering critical or unique fish and wildlife habitat, including seasonal or lifestage requirements, or offering water quality or erosion control benefits to the body of water.

A study undertaken by the University of Wisconsin—Oshkosh and funded the Wisconsin DNR, examined the Upriver lakes and identified approximately 40 sensitive areas. These sensitive areas are critical in providing many of the functions listed above. The primary goal of the project was to develop a means to identify these sensitive areas and ecologically characterize them.

One product of this project was the creation of a multimedia CD-ROM that provides much information about each site. For each site, the user can view aerial photos of the site, including historical photos that date back to the 1930's; digital maps that identify land cover and use types; tables that list wetland plants; graphs and charts that detail fish populations, water quality, substrate type, and water depths. Photos and videos are also available for some sites.

