

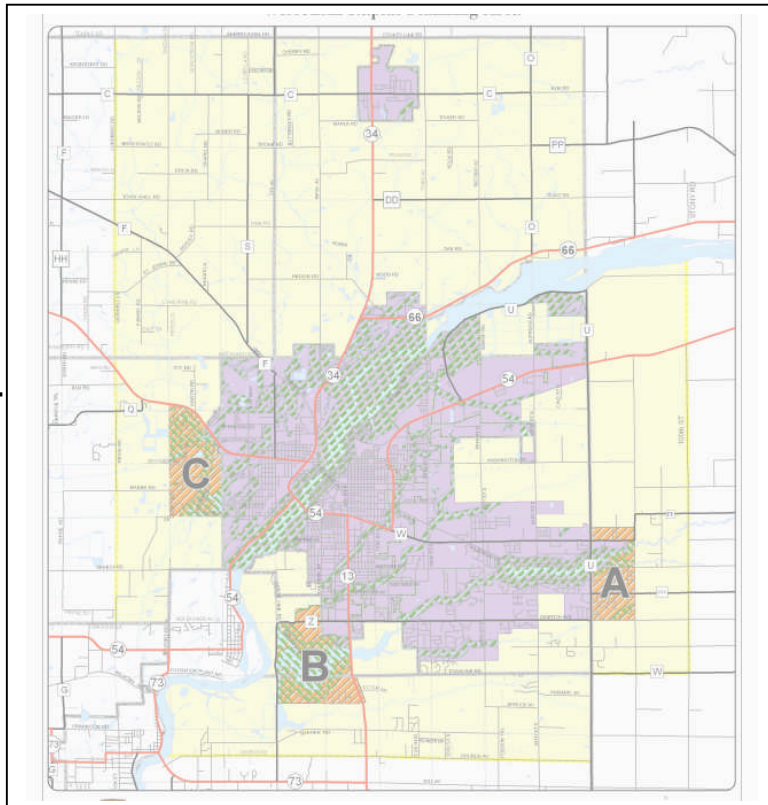
# WISCONSIN RAPIDS AREA

## WATER QUALITY MANAGEMENT PLAN

A sewer extension plan for the Wisconsin Rapids Urban Area  
to the year 2030

Prepared By:  
Wisconsin Rapids Area  
Water Quality Management Plan Policy Committee

March, 2012



*A publication of the Wood County Planning & Zoning Office  
Financed in part with a grant from the Wisconsin Department of Natural Resources*

## WISCONSIN RAPIDS AREA WATER QUALITY MANAGEMENT PLAN

### Policy Committee

James Schuerman, Chairman Chairman, Town of Seneca	Mayor Mary Jo Carson, Vice-Chair City of Wisconsin Rapids
Rick O'Keefe representing Jon Evenson Village of Biron	Mark Bade President, Village of Rudolph
Jeanne Fehrman representing Don Bohn Town of Grand Rapids	James Bushmaker Town of Rudolph
Tony Ruesch Town of Sigel	Sharon Schwab Town of Grant
Tim Karsheski Town of Plover	Tom Grygo representing Terry Rickaby Town of Saratoga

### Technical Committee

David Laspa, City Engineer City of Wisconsin Rapids	Rick O'Keefe, Public Works Director Village of Biron
Adam Tegen, Director of Planning & Economic Development City of Wisconsin Rapids	Jim Neitzel, Treatment Plant Operator City of Wisconsin Rapids
Dave Bluhm, MSA Professional Services Village of Rudolph	Larry Gilles, Building Inspector/ Zoning Administrator Town of Grand Rapids
Jason Grueneberg, Planner/Land Records Coordinator Wood County	Justin Conner, GIS Specialist Wood County
Scott Provost Water Resources Specialist WDNR - Wisconsin Rapids	

### Project Planner

Gary Popelka, AICP, EDFP, Director  
Wood County Planning & Zoning Office

### Acknowledgements

Fran Keally & Lisa Helmuth  
Water Quality Planning Section  
Wisconsin Department of Natural Resources

Todd Trader, MSA Professional Services

## TABLE OF CONTENTS

CHAPTER 1. INTRODUCTION .....	1
Background .....	1
NR 121 .....	1
Original Wisconsin Rapids Area Plan .....	1
Purpose of the 2012 Plan .....	2
Acknowledgements .....	3
CHAPTER 2. GOALS, OBJECTIVES AND POLICIES .....	5
Environmental Resources Goal. ....	5
Planned Community Growth Goal. ....	6
Promote Cost-Effective, Efficient, and Socially Responsible Utility Services Goal. ....	7
CHAPTER 3. DEFINING THE PLANNING AREA .....	9
Historic Overview .....	9
Interrelationships Between the Sewer Service Area Plan and Other Water Quality Plans .....	12
Central Wisconsin River Basin Plan.....	12
A. Wisconsin Rapids Watershed.....	14
B. Fourmile and Fivemile Creek Watershed.....	14
C. Sevenmile and Tenmile Creek Watershed .....	14
D. Mill Creek Watershed .....	14
Water Quality Management Plans .....	15
Facilities Plans .....	15
Sanitary District Plans .....	16
Water Quality Assessment .....	16
Non-Point Source Water Quality Impacts .....	16
Point Source Water Quality Impacts .....	17
Planning Area.....	17
Population .....	18
Population Projections.....	19
Population Density .....	20
Households and Household Projections .....	22
Development Densities.....	23
Future Land Use.....	24
City of Wisconsin Rapids .....	24
Village of Biron .....	26
Village of Rudolph .....	26
Town of Grand Rapids.....	26
Town of Grant.....	27
Town of Plover .....	27
Town of Rudolph .....	27
Town of Saratoga .....	27
Town of Seneca.....	28
Town of Sigel.....	28

CHAPTER 4. ENVIRONMENTALLY SENSITIVE AREAS (ESAs).....	39
Introduction .....	39
ESA Defined.....	39
Sewer Extensions.....	39
Surface Water .....	40
Lakes, Rivers and Streams.....	40
Surface Water Quality & TMDLs.....	41
Groundwater .....	43
Wetlands .....	43
Shorelands.....	45
Floodplains.....	45
Wellhead Protection Areas .....	49
Endangered/Threatened/Protected Plant & Animal Species & Natural Areas .....	51
Plant and Animal Species.....	51
Central Wisconsin Grassland Conservation Area (CWGCA) .....	52
Parks and Greenways .....	54
Soil Limitations for Shallow Excavations.....	54
Agricultural Land .....	56
Composite Environmentally Sensitive Areas .....	58
Conclusion .....	60
 CHAPTER 5. EXISTING FACILITIES.....	 61
General .....	61
City of Wisconsin Rapids.....	61
Village of Biron .....	62
Village of Rudolph .....	63
Village of Port Edwards .....	63
Unincorporated Towns .....	64
Designated Management Agencies.....	64
 CHAPTER 6. DELINEATION OF FUTURE SEWER SERVICE AREAS.....	 67
Land Use Projections & Allocations.....	67
 CHAPTER 7. PLAN IMPLEMENTATION & INSTITUTIONAL STRUCTURE .....	 71
General .....	71
Sewer Extension Review Process .....	71
Sewerage Treatment Facilities Review.....	73
Multi-Structure POWTS .....	73
Alternate Collection System - Low Pressure Sewers/Grinder Pump (LP/GP) Systems .....	73
Interim Treatment Facilities - NR 110.08 (5) (b).....	75
Plants for Isolated Nonresidential Development - NR 110.08 (5) (c) .....	75
Amendment Process .....	75
Amendment Standards.....	76
Amendment Procedures.....	77
Type I Amendment .....	77
Type II Amendment .....	78
Other Plan Amendments .....	80
Appeals .....	80
Plan Update .....	80

CHAPTER 8. PUBLIC PARTICIPATION PLAN .....	85
General .....	85
Purpose.....	85
Legal Requirement.....	85
Public Participation Methods and Opportunities.....	85
Meeting Notices and Minutes.....	85
Meeting Locations .....	85
Policy Committee.....	86
News Releases .....	86
Written Comments.....	86
Email Updates .....	86
Informational Presentations .....	86
Presentation to Councils & Boards .....	86
Informal Discussion .....	86
Youth Involvement.....	86
Status Reports to County Board .....	87
Public Hearing.....	87
Plan Distribution & Filing .....	87
8.6 Public Participation Plan is Available .....	87
APPENDIX A: Policy Committee Bylaws .....	89
APPENDIX B: Policy Committee Meeting Minutes .....	95
• June 9, 2011. Wood County Courthouse .....	95
• July 6, 2011. Biron Municipal Building .....	95
• August 8, 2011. Rudolph Village Hall.....	95
• October 5, 2011. Grand Rapids Municipal Building.....	95
• December 7, 2011. Seneca Town Hall .....	95
• January 25, 2012. Wisconsin Rapids City Hall.....	95
• March 21, 2012 Wisconsin Rapids City Hall (Public Hearing) .....	95
APPENDIX C: Natural Heritage Inventory .....	113
BIBLIOGRAPHY .....	115

List of Figures

Figure 1. Wood County Location in Relation to State of Wisconsin .....	9
Figure 2. Planning Area Location in Relation to Wood County .....	10
Figure 3. Central Wisconsin River Watershed. ....	13
Figure 4. Population Density in Planning Area: August 2011.....	21
Figure 5. Address Density in Planning Area: August 2011 .....	25
Figure 6. Wisconsin Rapids Future Land Use Map.....	29
Figure 7. Biron Future Land Use Map - DRAFT.....	30
Figure 8. Village of Rudolph Future Land Use Map .....	31
Figure 9. Town of Grand Rapids Future Land Use Map .....	32
Figure 10. Town of Grant Future Land Use Plan .....	33
Figure 11. Town of Plover Future Land Use Map .....	34
Figure 12. Town of Rudolph Future Land Use Map .....	35

Figure 13. Town of Saratoga Future Land Use Plan.....	36
Figure 14. Town of Seneca Future Land Use Map .....	37
Figure 15. Town of Sigel Future Land Use Map .....	38
Figure 16. Planning Area Wetlands .....	44
Figure 17. Planning Area Shorelands.....	46
Figure 18. FEMA Flood Hazard Areas.....	48
Figure 19. Wisconsin Rapids Water Tower.....	49
Figure 20. Wellhead Protection Areas.....	50
Figure 21. Examples of threatened/ endangered/protected species found in the Wisconsin Rapids WQM Planning Area. Top photo is a Greater Prairie Chicken. Bottom photo is Swamp Pink.....	51
Figure 22. Central Wisconsin Grassland Conservation Area.....	53
Figure 23. Limitations for Shallow Excavations.....	55
Figure 24. Prime Farmland.....	57
Figure 25. Environmentally Sensitive Areas.....	59
Figure 26. Sewer Service Area - 2030.....	70
Figure 27. Flow Diagram of Sewer Extension Review Process.....	72
Figure 28. Low Pressure/Grinder Pump System.....	74
Figure 29. Type I Amendment Flow Diagram.....	82
Figure 30. Type II Amendment Process Flow Diagram.....	83

### List of Tables

Table 1. Population Trends: 1990 - 2010.....	19
Table 2. Population Projections: 2010 - 2030 .....	20
Table 3. Household Projections: 2010 - 2030.....	22
Table 4. Projected Change in Average Persons/Household: 2010-2030 .....	23
Table 5. Future Residential, Commercial & Industrial Land Use Demands & Allocations to 2030.....	68
Table 6. Sewered Land Area Needs for Wisconsin Rapids Urban Area - 2030.....	69

<u>Table of Acronyms/Abbreviations/References</u>	
Code	Wisconsin Administrative Code
LP/GP	Low pressure/Grinder Pump System
POWTS	Private On-Site Waste Treatment System
SSA	Sewer Service Area
Stats./Statutes	Wisconsin Statutes
WDNR	Wisconsin Department of Natural Resources
WEDC	Wisconsin Economic Development Corporation
WPDES	Wisconsin Pollutant Discharge Elimination System
WWTP	Wastewater Treatment Plant
WQM	Water Quality Management



## **CHAPTER 1. INTRODUCTION**

---

### **Background**

In 1972, the U.S. Congress passed the amendments to the Federal Water Pollution Control Act Amendment (P. L. 92-500, known as the Clean Water Act). PL 92-500 set a national goal of fishable and swimmable waters through a comprehensive program of water quality planning, construction grants for municipal wastewater treatment facilities, and a national discharge permit program for municipal and industrial dischargers.

Section 208 of the Clean Water Act requires local agencies, designated by the Governor, or State Water Control Agency (the Department of Natural Resources, or WDNR, in Wisconsin) to prepare Areawide Water Quality Management Plans. State and federal regulations require that these plans identify the most cost-efficient and environmentally sound wastewater treatment configuration for a municipal sewage treatment facility for a 20-year planning period. This is accomplished with the preparation of a 208 Municipal Point Source Plan, more commonly known as a "Sewer Service Area (SSA) plan.

### **NR 121**

The State of Wisconsin has implemented the federal requirements through enactment of planning requirements in the Wisconsin Administrative Code. The Code establishes procedures and standards regarding how plans are prepared and implemented. Chapter NR121 describes water quality and areawide waste treatment planning and management.

The WDNR is responsible for working with regional planning commissions, county governments, municipalities, towns, and the public to develop SSA plans that guide publicly sewered growth and protect water quality.

### **Original Wisconsin Rapids Area Plan**

The original areawide water quality management plan was completed by the Wisconsin Department of Natural Resources (WDNR). That plan (Upper Wisconsin River Basin Plan) inventoried regional water quality from Rhinelander to the Petenwell Flowage to determine pollution problems, causes, and cures. Conclusions and recommendations from that plan focused on point source pollution, but recognized non-point source pollution as a growing problem. Several remedial actions were recommended in that plan.

In 1985, the Wood County Planning Office assisted the local policy committee in preparing the areawide plan for the Wisconsin Rapids area. The policy committee included the chief elected officials from the City of Wisconsin Rapids, Village of Biron, and Towns of Grand Rapids, Rudolph and Seneca. The Town of Grant (Portage County) was ultimately part of the sewer service area (SSA), but was not officially represented on the policy committee. Grant officials have been notified and consulted regarding amendments to the 1985 plan when land in Grant was impacted. The Town of Sigel was also part of initial planning meetings, but ultimately dropped out when town lands were not included in long-range sewer service areas.



The 1985 plan has been used since its adoption to review sanitary sewer extensions and additions of large multi-family, commercial and industrial structures that are proposed to have a large number of fixtures.

### **Purpose of the 2012 Plan**

The Wisconsin Rapids Water Quality Management Plan has not been updated since its initial adoption. There have, however, been a number of amendments to the SSA boundaries to accommodate areas that have been annexed by Wisconsin Rapids or Biron. The most recent amendment to the plan was the addition of the entire Village of Rudolph. The village will be connected to the Wisconsin Rapids treatment plant in 2012.

The 1985 plan recommended a comprehensive review and update in 1990. Physical and fiscal resources were not available to implement that recommendation. At a meeting of the policy committee in the early 2000s, members moved to complete mandatory comprehensive plans prior to updating the areawide water quality management plan. In 2010, the WDNR offered financial and staff assistance to the Wood County Planning & Zoning Office to update the plan.

This plan updates and amends the 1985 document. The update is important because SSA plans serve as a basis for WDNR approval of state and federal grants for planning and construction of wastewater treatment and sewerage facilities. It also serves as a basis for WDNR approval of locally proposed sanitary sewer extensions and the Wisconsin Department of Safety and Professional Services<sup>1</sup> approval of private sewer laterals. Also, because the service area plan identifies environmentally sensitive areas, it serves as a guide for environmental permit decisions by federal and state agencies and can serve as supporting documentation for area projects.

SSA plans are intended to be important planning and development guides for local communities. They support local comprehensive planning programs by serving the following purposes:

- Identify wastewater treatment and collection needs for sewer service areas for a 20-year planning period;
- Forecast the amount and location of future urban development areas and establish the geographic extent of the sewer service area to the year 2030.
- Identify environmentally sensitive areas that should be protected from development to improve the quality of surface and ground waters in the planning area.
- Contain land use development forecasts and recommendations for implementing wastewater treatment and collection plans for individual sewer service areas.
- Inform developers and property owners of community policies and restrictions before development is proposed.
- Serve as a guideline for government interaction and development of community plans.

---

<sup>1</sup> The Wisconsin Department of Safety and Professional Services had previously been part of the former Wisconsin Department of Commerce. Functions of the Department of Commerce were reorganized in 2011.

- Define procedures for reviewing boundary and plan amendments.

In addition to identifying areas that are suitable for sanitary sewer service, delineation of the SSA also identifies and protects environmentally sensitive areas from future development and indiscriminate urban growth. Environmentally sensitive areas include, but are not limited to, floodplains, shorelands, wetlands, and adjoining steep slopes. Natural areas that are home to protected or endangered species are also addressed in this plan. Wastewater treatment facilities can then be designed to provide adequate treatment capacity for the anticipated population growth within the sewer service area, while protecting sensitive natural areas and water quality.

The service area in this plan is delineated using the 20-year population projection, an acceptable residential structure density, and a forecast of non-residential (i.e. commercial and industrial) growth, all of which result in acreage demand and allocation. Developable land in the service area is simply deemed eligible to receive sewer service; the municipalities entities providing sewer service are not obligated to serve specific areas because they happen to be included in the service area.

This plan also provides a framework for changing the sewer service area boundary. Changes, or amendments, occur as physical and economic conditions change. The addition of the Village of Rudolph to the SSA is an example. The village was in need of upgrading their sanitary sewage system. It was determined that the most cost effective solution for the village would be to connect to the Wisconsin Rapids system. Consequently, the village was added and a like amount of land was deleted elsewhere within the SSA, thus changing the boundary of the service area. Boundary amendments are subject to WDNR approval.

### **Acknowledgements**

The Wood County Planning & Zoning Office was instrumental in drafting this plan. The work could not have been accomplished, however, without the guidance of the Policy Committee who take the recommendations to the decision-making councils and boards, and the Technical Committee who are the people who have the training and knowledge about municipal wastewater collection and treatment and provided their expertise to develop the technical aspects of this plan. The Wisconsin Department of Natural Resources provided funding to get the plan updated and technical assistance through their offices in Madison and Wisconsin Rapids. Their guidance helps assure the Wisconsin Rapids area that the plan meets the state and federal requirements and will be an effective tool for area development into the future.



## **CHAPTER 2. GOALS, OBJECTIVES AND POLICIES**

---

The formulation of goals and objectives provides the foundation on which the planning process is built. The 1985 plan listed four goals, supported by several objectives and policies. Goals are general statements aimed at directing the analysis of alternatives and implementation of the final plan. They represent common community ideals and provide the direction in which planning is aimed. Objectives are more specific statements outlining how the goals should be accomplished. Many objectives are measurable, which is to the community's advantage because they can see how they are progressing toward the goal. Policies are strategies for accomplishing the stated objectives. Specific policies can be used in the decision-making process.

Within the planning area, there are nine comprehensive plans, each developed to comply with Wisconsin's comprehensive planning law, Wisconsin Statute 66.1001. Development goals, objectives and policies of the comprehensive plans were reviewed and incorporated into this 20-year sewer service area plan to provide consistency through all the planning processes throughout the area. The ultimate intent is to strive for cost-effective sewer services that encourage good environmental management practices and responsible development that are consistent with the comprehensive plans.

### **Environmental Resources Goal.**

**Protect the area's environment and manage natural resources in an ecologically sound manner.**

**Objective:** Water quality protection. Preserve and protect the quality of the area's ground- and surface-water resources by delineating environmentally sensitive areas.

#### **Policies:**

- 1) Encourage development to occur in areas that can be served by public sewer in a cost-effective manner.
- 2) Restrict high density, urban-type development from occurring in or near environmentally sensitive areas such as wetlands, flood prone areas and high groundwater areas.
- 3) Control construction site erosion and reduce urban storm water runoff.
- 4) Reduce the risk of groundwater and surface water contamination by promoting good management practices of private onsite waste treatment systems (septic systems).
- 5) Identify and protect aquifer recharge areas.
- 6) Protect municipal water supplies through sound wellhead protection practices.
- 7) Protect groundwater recharge areas from development that may cause irreversible harm to the area's private and municipal water supply.

**Objective:** Protect environmentally sensitive areas. Preserve and protect environmentally sensitive areas, including wetlands, floodplains, steep slopes, wildlife habitat and other areas that are linked to the environmentally sensitive areas.

**Policies:**

- 1) Shoreland, floodplain and wetland areas have been identified and are protected under various federal, state and local regulations and restrictions for their use. They must be protected for the essential ecological role they play in the Wisconsin Rapids area's environment.
- 2) The disturbance of environmentally sensitive areas by utilities and transportation facilities should be minimized.
- 3) Critical natural and habitat areas should be preserved and protected from development and other adverse impacts. Threatened, endangered, protected, and rare species should be preserved and enhanced.
- 4) Land uses that are adjacent to critical natural areas and environmentally sensitive areas should be restricted or controlled so as not to create new adverse impacts.

**Objective:** Preserve and protect agricultural production areas from conversion to other uses that can be developed in non-agricultural production areas.

**Policies:**

- 1) Land in the planning area that is currently in productive agricultural use should be preserved through local zoning from conversion to other uses that cannot be readily converted to agricultural or forestry uses.
- 2) Recognize specialized agricultural practices that exist in the planning area and preserve those areas through local zoning and awareness programs.
- 3) Consult with the University of Wisconsin – Extension before amending boundaries of the 20-year sewer service area to learn of any agricultural practices that may be negatively impacted because of boundary changes.

**Planned Community Growth Goal.**

**Encourage an orderly and planned pattern of community growth and development.**

**Objective:** Promote good development review to accommodate current and future development needs and assist developers to plan projects where services are available to support their projects.

**Policies:**

- 1) Provide assistance during plat review to plan lot and street designs which will facilitate the installation of public sewer and water in the future, especially higher density residential subdivisions or where seasonal high groundwater levels may be a concern.
- 2) Reference community comprehensive plans when considering changes to the 20-year sewer service area boundary or when providing sewer extension reviews as required by this plan.

- 3) Direct new commercial or industrial development that will consume or dispose of substantial water supplies to areas with or closer to the sanitary sewer system.
- 4) Rural development should be limited to land with suitable physical characteristics and soils supporting on-site sewage disposal systems that treat waste, and not holding tanks.
- 5) Establish mid-lot setbacks on undeveloped lots that are within  $\frac{1}{4}$  mile of existing or planned sewer services to allow future splitting for additional residential structures when sewer service is provided.
- 6) Coordinate recommendations in future land use plans and the 20-year sewer service area plan to provide consistency in local planning programs.

**Promote Cost-Effective, Efficient, and Socially Responsible Utility Services Goal.**

**Objective:** Economical, well planned phasing of municipal utilities.

**Policies:**

- 1) The costs of providing municipal utility facilities and services should be minimized through higher density development and intergovernmental cooperation.
- 2) Provision of sewer services should be coordinated with the location and timing of new development.
- 3) The use of existing municipal facilities and services should be maximized by adding higher density areas that are near those facilities and services.
- 4) Consider establishing development fees to cover the costs associated with construction and maintenance of municipal facilities.
- 5) Utilize a capital improvements program to plan phased expansion of municipal facilities and services in a cost-effective, efficient manner.
- 6) Encourage infill development before expanding facilities into new areas.



**CHAPTER 3. DEFINING THE PLANNING AREA****Historic Overview**

The City of Wisconsin Rapids and vicinity is part of an urbanized area consisting of three villages (Biron, Port Edwards and Rudolph), two cities (Wisconsin Rapids and Nekoosa), and six towns (Saratoga, Grand Rapids, Rudolph, Sigel, Seneca and Port Edwards). The Portage County Town of Grant is also part of the urbanized area, with commercial and residential development, and an elementary school, near its border with Wood County. For purposes of this plan, a small portion of the Town of Plover (Portage County) is also considered to be part of the urbanized area. The Town of Plover is adjacent to and may be impacted by planned development in the eastern part of Biron. Figure 1 shows Wood County's central location in relation to the State of Wisconsin and Figure 2 shows the location of the greater Wisconsin Rapids urbanized area within Wood County.





There are four municipal sewage treatment systems in the Wood County communities that are situated along the Wisconsin River. The largest of these is the Wisconsin Rapids plant that is situated at the north end of the local airport at Pepper Avenue and 3<sup>rd</sup> Street South. That facility has just completed a substantial update. The Village of Port Edwards, which is located south of Wisconsin Rapids, has a sewage treatment plant on the west bank of the Wisconsin River. That facility has primary and secondary treatment. The City of Nekoosa also has a treatment plant on the west side of the river. Like the others, the Nekoosa plant has primary and secondary treatment. The Village of Rudolph has a municipal system with effluent being treated in a lagoon which is located south of the Village, but plans have been approved for Rudolph to be served by the Wisconsin Rapids treatment plant. More detail is offered regarding the treatment plants in the “Existing Facilities” chapter of this report.

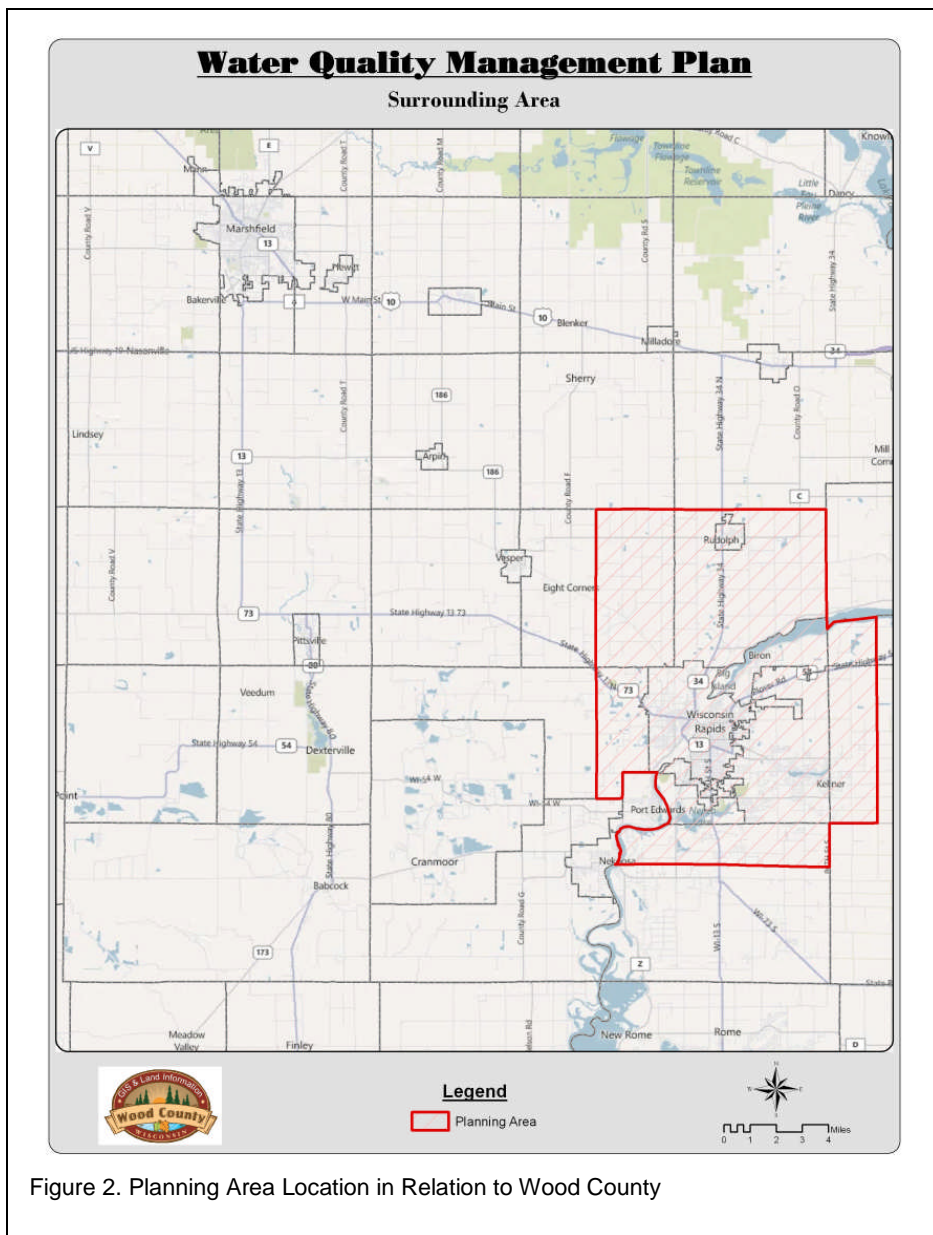


Figure 2. Planning Area Location in Relation to Wood County

With very few exceptions, the unincorporated portions of the greater Wisconsin Rapids area use private on-site waste treatment systems (POWTS) for the disposal of household wastes and commercial wastewater. The principal POWTS is a conventional septic tank and absorption field, but mound systems, systems in fill, and pressurized mounds are used in areas with higher seasonal groundwater conditions. There is little use of holding tanks in the area that is the subject of this plan.

Planning and engineering studies that have been conducted in the past have addressed municipal sewage disposal needs and have, in some cases, attempted to recommend the most cost-effective options for the Wisconsin River communities. The 1967 South Wood County Comprehensive Plan recommended a regional system for Biron, Wisconsin Rapids, Port Edwards and Nekoosa. Sometime after that plan was completed, the paper manufacturers determined that it would be more economical and in their best interest to treat their own waste. Consequently, Consolidated Papers, Inc. (CPI) – now known as NewPage Corporation – and Nekoosa Papers, Inc. (NPI) – now known as Domtar – constructed and operated their own treatment plants. The CPI, or NewPage, facility is in Wisconsin Rapids and the NPI, or Domtar, plant is in the Town of Saratoga, across the river from Nekoosa.

Other findings that followed the South Wood County 701 Plan revealed that bedrock conditions were such that the regional configuration would not be feasible and would be more costly than individual systems. The result was that separate treatment plants in Port Edwards and Nekoosa were upgraded and improved.

In 1973, the Wood County Planning Office concluded that the cost-effective system for Wisconsin Rapids, Biron and Grand Rapids would be joint treatment in a regional system – the Wisconsin Rapids system.<sup>2</sup> Other options considered in that study included separate plants in Wisconsin Rapids and Biron with Grand Rapids receiving service by each, or separate plants in Wisconsin Rapids and Biron, with Grand Rapids being served by the Wisconsin Rapids plant.

A 1976 study by Wood County recommended that the south portion of the Town of Rudolph be served by public sewers from Wisconsin Rapids.<sup>3</sup>

Most recently, the Village of Rudolph's need to upgrade their treatment system resulted in an agreement with Wisconsin Rapids allowing Rudolph to join the regional treatment plant.

---

<sup>2</sup> Wood County Planning Office, *Wastewater Treatment Plan for Wisconsin Rapids, Biron and Grand Rapids*, March 1973.

<sup>3</sup> Becher-Hoppe Engineers, Inc., *Wood County Comprehensive Area-Wide Sewer and Storm Sewer Planning Report*, November 1976.

## **Interrelationships Between the Sewer Service Area Plan and Other Water Quality Plans**

### Central Wisconsin River Basin Plan

#### 1. River Basin Plan Background

Three types of water quality plans are required under the Federal Water Pollution Control Act: basin plans under Section 209 and 303; facilities plans under Section 201; and areawide water quality management, or sewer service area plans under Section 208.

The Central Wisconsin River Basin Plan is one of several major river basin plans in Wisconsin. The Central Wisconsin Basin extends south from the Merrill dam located on the Wisconsin River in Lincoln County to the Castle Rock Flowage Dam in Juneau and Adams Counties (Figure 3). This basin is comprised of 29 watersheds; a watershed being an area of land that is drained by a waterway that flows to a lake, reservoir or river. The watershed boundary line is defined as a topographic dividing line from which surface streams flow in two different directions. The Central Wisconsin River Basin is made up of 53,898 acres, 13 flowages and 15 dams (see Figure 3). The basin is divided up into 29 different watersheds. The basin encompasses the entire planning area of the Wisconsin Rapids Area Water Quality Management Plan.

As a whole, river basin plans provide a statewide analysis of water quality and a description of overall goals for protection and enhancement of the state's waters. Basin plans are used as a management guide for specific local governmental actions such as grant awards, establishing conditions in waste treatment discharge permits and the identification of needed specific local planning and action.

#### 2. River Basin Plan Conclusions and Recommendations – Municipal Point Source Pollution

The Central Wisconsin River Basin Plan outlines steps that are necessary for waters of the basin to meet the "fishable and swimmable" goal of the Federal Water Pollution Control Act. Specific action goals of the basin plan are:

- A. Identify water quality problems in the basin in order to set priorities and provide guidance for management activities for specific lakes and streams;
- B. Guide and direct the public, designated management agencies, state and federal agencies, and local governments in efforts to protect and improve Wisconsin's water resources;
- C. Anticipate future management activities necessary for water quality protection;
- D. Integrate and coordinate DNR programs for managing both surface and groundwater resources in Wisconsin; and
- E. Incorporate the public's concerns and increase public awareness of everyone's responsibilities to water quality protection and improvement.

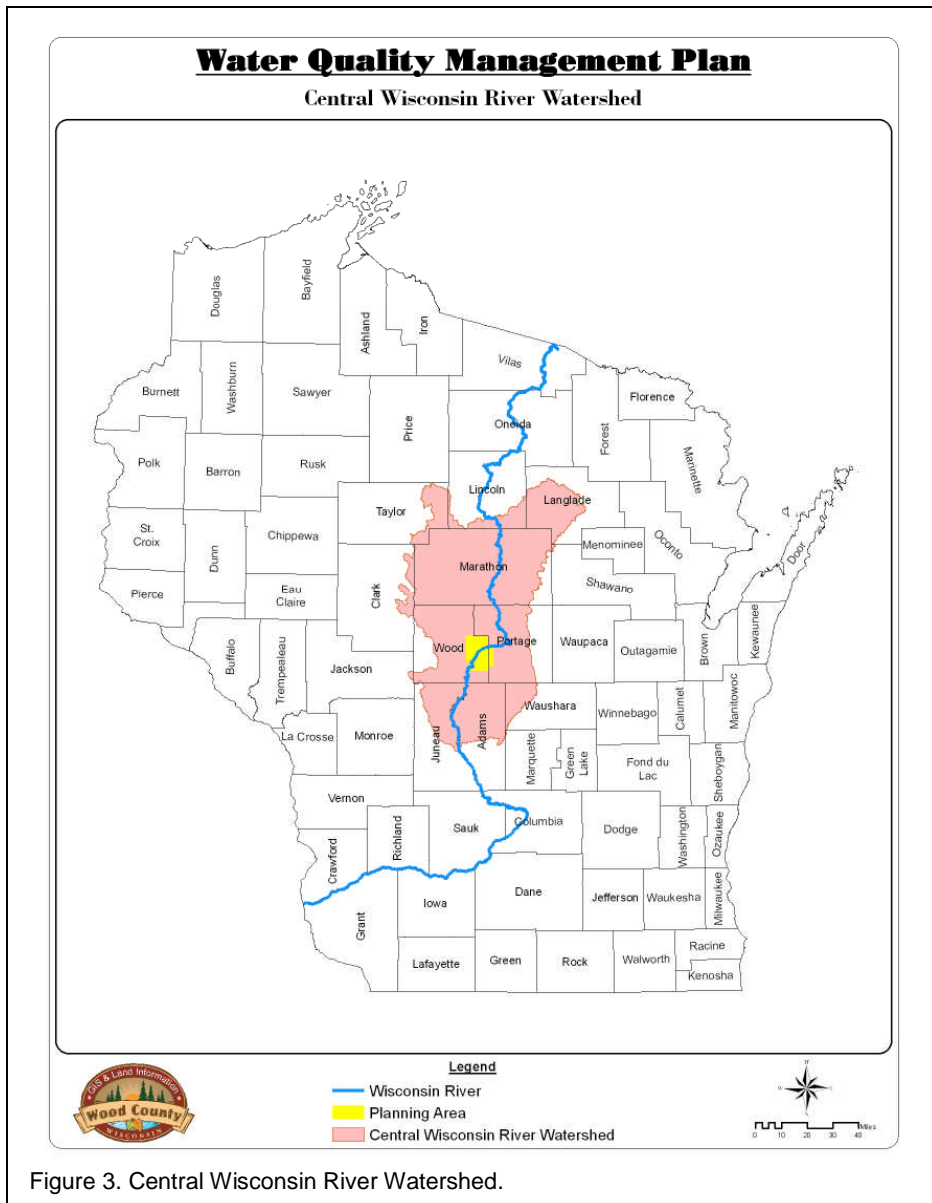


Figure 3. Central Wisconsin River Watershed.

### 3. Planning Area Watershed Recommendations – Non-Point Source

The planning area includes four watersheds: Wisconsin Rapids; Fourmile and Fivemile Creek; Seven and Tenmile Creek; and Mill Creek. Recommendations regarding both point source and non-point source pollution are included in the Central Wisconsin River Basin Plan for each of the watersheds. Some of the major recommendations to protect water quality and quantity in the watersheds are listed below. A complete list of recommendations can be reviewed on the DNR website at <http://dnr.wi.gov/water/basin/cwrp>.

## A. Wisconsin Rapids Watershed

- Watershed Management should conduct a water quality standards review on the unnamed creek that receives discharge from the Village of Rudolph and Wisconsin Dairy.
- Fish and Aquatic Habitat Staff should conduct baseline monitoring on watershed streams.

## B. Fourmile and Fivemile Creek Watershed

- Continue to work with the City of Wisconsin Rapids to minimize impacts from groundwater extraction on Bloody Run Creek.
- Fourmile / Fivemile Creek Watershed should be considered a priority for future grant eligibility under the State Nonpoint Source Pollution Abatement Program.
- Watershed staff, in cooperation with Portage County Land Conservation Department and Central Wisconsin Windshed Partnership, should continue to work with local farmers to encourage wind erosion best management practices.
- Basin staff will strive to improve fisheries and aquatic habitat within the Buena Vista Marsh area by furthering partnership efforts with landowners to limit livestock access within sensitive stream corridor areas.

## C. Sevenmile and Tenmile Creek Watershed

- Seven-mile/Ten-mile Creek Watershed should be considered a high priority for future grant eligibility under the State Nonpoint Source Pollution Abatement Program.
- Watershed staff, in cooperation with Portage County Land Conservation Department and Central Wisconsin Windshed Partnership, should continue to work with local farmers to encourage wind erosion best management practices.

## D. Mill Creek Watershed

This watershed begins in Marshfield, travels through Wood County and terminates at the Wisconsin River in the Town of Rudolph. The Marshfield and Hewitt waste treatment systems discharge to this stream. It is also subject to runoff from agricultural operations. Consequently, the following recommendations, among others:

- City of Marshfield should develop and implement an Erosion Control and Stormwater Management Ordinance to improve water quality and habitat within Mill Creek.

- Watershed staff should conduct a point/nonpoint source assessment on Mill Creek to include a nutrient loading study to assess the need for a wasteload allocation for point sources and a loading allocation for nonpoint sources.
- Junction City should be encouraged to operate the wastewater treatment plant for ammonia removal.
- Watershed staff should conduct a water quality standards review on Mill Creek.
- Mill Creek watershed should be considered a high priority for future grant eligibility under the Nonpoint Source Pollution Abatement Program grant program.
- District Water Resources Manager should conduct water quality standard attainment monitoring compliance monitoring near municipal point sources.
- The Mill Creek watershed should be considered a surface water priority watershed T candidate under the Nonpoint Source Pollution Abatement Program.

#### Water Quality Management Plans

Water Quality Management (WQM) Plans, also called sewer service area (SSA) plans or 208 Plans, provide an analysis of the long-range sanitary sewer needs for a smaller region than what is presented in river basin plans. Within river basin plans, there may be several water quality management plans. In the Central Wisconsin River Basin Plan, there are four areawide water quality management plans. In addition to the areawide plan for Wisconsin Rapids, plans have also been developed for Wausau, Marshfield and Stevens Point. The sewer service area plan relates directly to the DNR's sewer extension policy. Once the plan is approved by the DNR, all proposals for construction of wastewater treatment facilities, installation of interceptor sewers and all sewer line extensions must be in conformance with the sewer service area plan before DNR approval is granted.

#### Facilities Plans

Local facilities plans which are prepared under the guidelines of Section 201 of the Federal Water Pollution Control Act identify collection system and wastewater treatment plant infrastructure problems and needs, and identify a sewerage master plan to systematically and cost-effectively address the problems and needs. The facilities plans also establish funding strategies which maximize the use of grants, low interest loans and other financial contributions to finance capital improvements. Facilities plans provide the "nuts and bolts" for how to accomplish the goals and objectives of river basin plans and water quality management plans, as well as providing the detail about problems and needs in the areas identified by the higher level plans.

### Sanitary District Plans

Recognizing that there may be a future need for sanitary sewers in Grand Rapids, the Town created Grand Rapids Sanitary District No. 1 in December, 1972. The sanitary district was divided into several study areas to consider the design and construction of wastewater collection and transmission facilities to the Wisconsin Rapids wastewater treatment plant. Although the engineering studies that were conducted concluded that, “there are no technical obstacles facing the construction of municipal wastewater collection facilities to serve the residents of the Grand Rapids Sanitary District,” the cost estimate for the entire sanitary district was \$13 million.<sup>4</sup> In addition to the cost, the Wisconsin Department of Natural Resources’ requires municipalities to compare the cost feasibility of new collection and treatment systems to joining existing “regional” systems. Consequently, many of the small lot, more densely developed areas of the sanitary district – those immediately adjacent to Wisconsin Rapids and Biron – have been annexed since the sanitary district studies were completed.

The Sanitary District Commission now meets on an as needed basis. In a 2011 meeting between the Town Chairman and the Chairman of the Sanitary District, it was agreed that the sanitary district should not be abandoned. The District has a fund balance, but taxing of residents that live in the district was suspended several years ago and will probably not be reinstated unless and until a cooperative agreement can be reached with Wisconsin Rapids to provide needed sanitary sewer services. The Town’s establishment of larger lot sizes in recent years has helped to provide areas for replacement of failing septic systems, reducing the potential need for sanitary sewer services.

### **Water Quality Assessment**

Like all other urban areas its size, the Wisconsin Rapids area will have continued urban growth that will impact surface and groundwater resources. Surface water runoff and pollutant loadings are likely to increase and groundwater recharge is likely to decrease as more impermeable surfaces are created in the area. The level of the future impacts cannot be precisely determined because specific future development characteristics (location, type, density and site mitigation) are unknown at this time. Assumptions about the water quality impacts can be made, however, by applying assumptions that are relative to the nature of the future development.

### Non-Point Source Water Quality Impacts

Much of the planning area that is now served by sanitary sewer has sandy soils and groundwater levels ranging from 1 – 3 feet to greater than five feet. Parts of the planning area have older small lots and are heavily developed, each with its own septic system and private well. Lawn fertilizers and poorly maintained septic systems may be contributors to high nitrate levels in the groundwater. The Wood County Health Department has conducted studies of groundwater quality in Grand Rapids and can provide educational materials on the potential dangers to infants and toddlers. The Wood County Planning & Zoning Office has an extensive septic system maintenance program which has resulted in regular pumping and inspection of all septic systems and holding

---

<sup>4</sup> \$13 million in 1972 converts to nearly \$70.5 million in 2011 dollars  
([http://www.bls.gov/data/inflation\\_calculator.htm](http://www.bls.gov/data/inflation_calculator.htm))

tanks throughout the county. Numerous failing septic systems have been replaced as the result of the county's maintenance program.

Agricultural runoff is also a potential pollution source, especially from the Mill Creek and other tributaries that drain through farmland to the Wisconsin River. Wood County's Land Conservation Department and University of Wisconsin – Extension staff have worked closely with farm operators to reduce or eliminate as much of this pollution source as possible. Concrete-lined manure pits, stream bank stabilization, and runoff diversion projects are examples of their work.

#### Point Source Water Quality Impacts

Population growth and commercial and industrial development will increase wastewater flows and loadings to the treatment plant and, ultimately, to the Wisconsin River.

#### **Planning Area**

The communities that are part of the Wisconsin Rapids sanitary sewage collection system – Wisconsin Rapids, Biron and the Village of Rudolph – were the base or point of beginning in establishing the planning area for this study. Because of certain geological facts revealed in earlier engineering studies, the Village of Port Edwards and City of Nekoosa were not included and are not a major part of further discussions in this plan, with the exception of planned residential development around Lake NEPCO that lies partially in Port Edwards (discussed on the following page). Both have independent treatment plants and improvements were made to those plants during the last planning period (1985 to present). Residential and some commercial development has occurred in the Towns of Grand Rapids and Grant, primarily because of their proximity to Wisconsin Rapids (for jobs, shopping, schools and other services and facilities), Lake Wazeecha (for the desire to live near a lake or park), and State Highway 54 (for easy commuting purposes). Nearly all of the many annexations to Wisconsin Rapids over the past several decades has been land formerly in the Town of Grand Rapids. Portions of the Town of Grant were included in the earlier Wisconsin Rapids Water Quality Management Plan because of the density of residential buildings and the close ties with adjacent residential uses in Grand Rapids. Both of those towns are included in the planning area.

For the Village of Rudolph to be served by the Wisconsin Rapids treatment plant, lines have to be installed through several miles of the Town of Rudolph. Past discussions were held regarding servicing an area of the Town near the junction of Highways 34 and 66, known as the Greenfield Avenue area. Also, the Rudolph facilities plan considered future growth of the Village and areas adjacent to the Village that may need sanitary sewer service in the future. The Policy Committee recognizes that sanitary sewer service will not be warranted in most of the Town of Rudolph during the planning period, but felt it was important to include the entire town in the planning area for analysis purposes.

Recent development proposals in Biron for a business park and mixed residential area have triggered concern over traffic that is expected on Highway 54 and County Road U (80<sup>th</sup> Street). In addition to Biron, Grand Rapids, Grant and Town of Plover officials have held joint meetings regarding this issue. Because of that intergovernmental cooperation, the Policy Committee took action to add that portion of the Town of Plover that abuts Wood County to the planning area and as a member of the Policy Committee.



A proposal for a high-end residential development on the south side of NEPCO Lake moved the Policy Committee to include that portion of the Village of Port Edwards that lies east of the Wisconsin River in the planning area. When the residential development occurs and if municipal sewer service is needed, it may be cost-effective to join the regional treatment plant. Developers and Village representatives have already investigated this idea with Wisconsin Rapids city engineers. Until that time, each lot will be served by a septic system. When purchasing the property, the developer had to agree that septic systems will not be allowed near the lake. Structures will need to meet the standards of Ch. NR 115, Wis. Admin. Code and the Wood County Shoreland Zoning Ordinance.

Finally, commercial and residential development that exists in the northern tiers of the Town of Saratoga is at a level that the Policy Committee felt strongly that that area be part of the planning area for analysis purposes. Again, it is likely that Saratoga will not receive sanitary sewers during the planning period, but the density of development and potential for large-scale projects certainly warrants the northern tier of Saratoga to be included in the planning area.

Industrial wastes from paper mills in Wisconsin Rapids and Nekoosa are treated at sites in those two communities. The NewPage facility is on the northwest side of Wisconsin Rapids and the Domtar facility is located along the Wisconsin River in the Town of Saratoga, east of Nekoosa.

## **Population**

An important aspect of any planning program is an analysis of the population of the planning area. For the purposes of this plan, knowledge of the density of the planning area's population and housing – where the people live – helps establish a base for determining sanitary sewer needs that exist today. Projections of future population levels are used to determine how many households may exist at certain points of time in the future. Knowing how many households may exist, analyzing trends of housing types (i.e. single-family, apartments, condominiums, senior assisted living, nursing homes, etc.) and where various types of housing can be developed or are desired to be developed then leads officials to where sanitary sewers will need to be installed. Officials can also use this information to channel development to certain areas that are more suited for development or to where sewers can be extended most efficiently. This is done through comprehensive planning and zoning.

Table 1 describes the population trends of the Wisconsin Rapids urban area since 1990. Exactly half of the population of these communities lives in the incorporated cities and villages and the other half live in the towns. Because only small parts of the towns of Plover, Saratoga, Seneca, Sigel and Grant are in the study area, it is safe to say that a substantial majority of the planning area population lives in cities and villages and have sanitary sewer service. That is a fact that is not likely to change during the planning period. More to the point, the proportion of population that lives in incorporated cities and villages is likely to increase as the population ages and demands for senior housing, assisted living centers and nursing homes increase.

Table 1. Population Trends: 1990 - 2010						
	POPULATION			PERCENT CHANGE		
	1990	2000	2010	1990-2000	2000-2010	1990-2010
C. Wisconsin Rapids	18,245	18,435	18,367	1.04	-0.4	0.7
V. Biron	794	915	839	15.2	-8.3	5.7
V. Rudolph	451	423	439	-6.2	3.8	-2.7
Incorporated Area	19,490	19,773	19,645	1.5	-0.6	0.8
% of Total	50.3	48.4	50.0			
T. Grand Rapids	7,071	7,801	7,646	10.3	-2.0	8.1
T. Plover*	2,223	2,415	1,701	8.6	-29.6	-23.5
T. Rudolph	1,180	1,161	1,028	-1.6	-11.5	-12.9
T. Saratoga*	4,775	5,383	5,142	12.7	-4.5	7.7
T. Seneca*	1,133	1,202	1,120	6.09	-6.8	-1.1
T. Sigel*	1,192	1,130	1,051	-5.2	-7.0	-11.8
T. Grant*	1,673	2,020	1,906	20.7	-5.6	13.9
Unincorporated Area	19,247	21,112	19,594	9.7	-7.2	1.8
% of Total	49.7	51.6	50.0			
Area Total	38,737	40,885	39,239	5.5	-4.0	1.3
* Only portions of these towns is included in the planning area, not the entire population.						
SOURCE: U. S. Census of Population, Wood County Planning Office.						

The data in Table 1 illustrate the changing population of the area. When the 1985 edition of this plan was written, discussion centered on how the area had grown in population. The rate of growth was described as “steady, although not rapid.” A downturn in the economy since that time resulted in area plant closings, downsizing of manufacturing jobs, and out-migration of workers from the area. The 1985 plan showed a 20-year growth in the area’s population of over 18 percent (1960 – 1980). The current 20-year population change shows that the area held steady, increasing population by only 1.3 percent. We remain in the midst of an economic recession at this time and area officials are optimistic that the number of jobs, ergo the number of people living in the area, will increase as we pull out of the recession.

### Population Projections

Official population projections are prepared by the Wisconsin Department of Administration (WDOA). In their 2008 projections for municipalities, the WDOA projected a 2010 population of 41,842 for the area. The official 2010 census was 39,329, slightly more than six percent lower than the projections. Because new projections are several months away, it was necessary to modify the WDOA projections to 2030 for this plan. Modified projections suggest that the area will continue to grow albeit only very slowly. Caution should be used when using the population projections for this plan because changes in population of those towns that are only partially included in the planning area may tend to skew the results. Population projections are listed in Table 2. The official WDOA projections from their 2008 release are listed along with projections as modified by the Wood County Planning & Zoning Office for this study. The pre-2010 census WDOA

projections would have the area's population increase as a much faster pace than what's been previously experienced for several decades.

A linear regression method of projection was used to modify population projections of the area. Simple regression uses known data (population for 1990, 2000 and 2010) to determine a trend line which can then be used to forecast future data points (population levels). Although this projection method does not account for births, deaths and net migration like more sophisticated methods, the results are adequate for the purposes of this study. As shown in Table 2, the difference between WDOA's projections for 2030 and those calculated by the Wood County Planning & Zoning Office using simple linear regression is only 2,697. This is reasonable considering the facts that 1) the WDOA projections for 2010 were significantly higher than actual census figures, and 2) the populations that are projected include all of the towns of Grant, Plover (of which very little is included in the planning area), Saratoga, Seneca and Sigel. Only portions of these towns are included in the actual planning area.

Table 2. Population Projections: 2010 - 2030

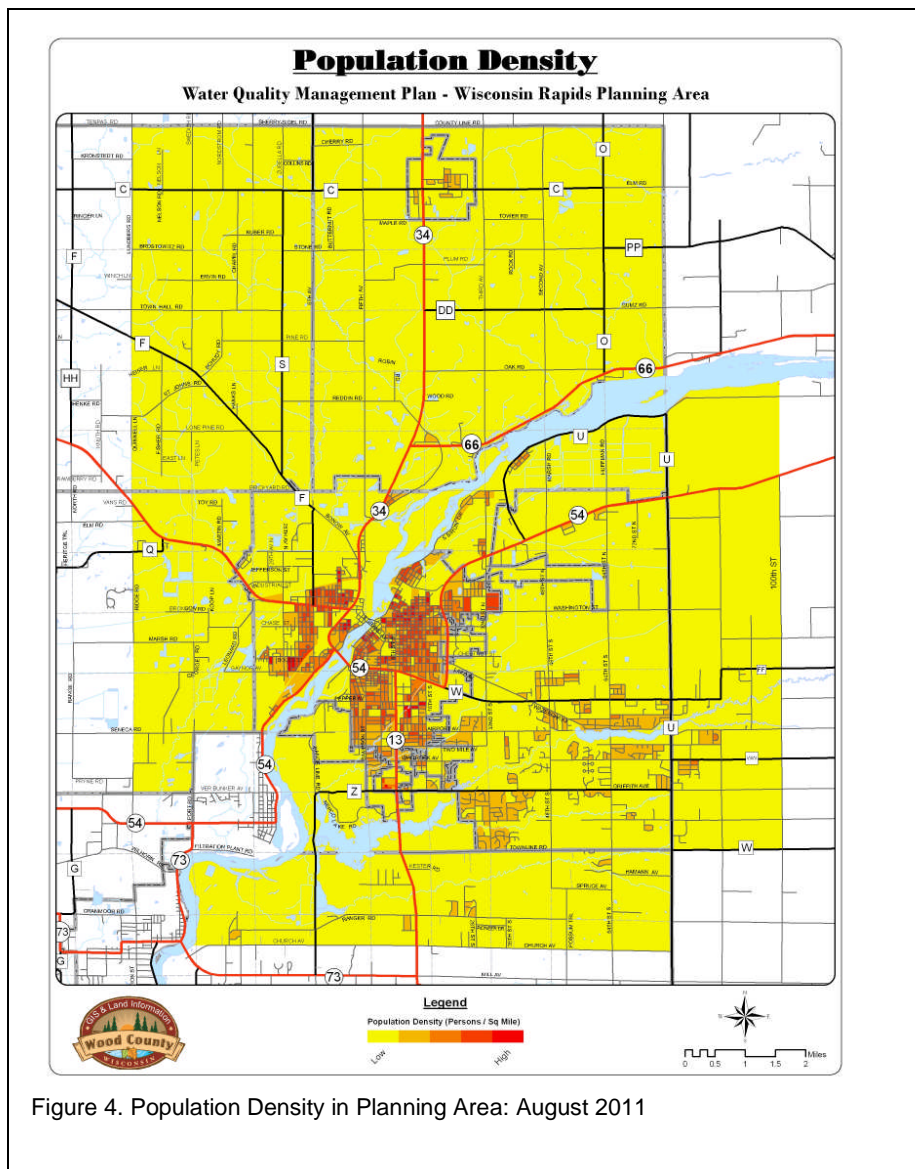
COMMUNITY	2010 Census	2015		2020		2025		2030	
		WDOA	WCPZ	WDOA	WCPZ	WDOA	WCPZ	WDOA	WCPZ
C. Wis. Rapids	18,367	18,799	18,419	18,913	18,471	18,947	18,502	18,872	18,532
V. Biron	839	975	867	1,017	894	1,054	906	1,084	917
V. Rudolph	439	427	433	425	426	423	423	418	420
T. Grand Rapids	7,646	8,171	7,864	8,249	8,081	8,293	8,225	8,287	8,369
T. Grant	1,906	2,273	2,003	2,369	2,099	2,459	2,158	2,538	2,216
T. Plover	1,701	2,428	1,646	2,423	1,591	2,413	1,461	2,394	1,330
T. Rudolph	1,028	1,132	1,000	1,113	971	1,090	933	1,061	895
T. Saratoga	5,142	5,850	5,305	6,018	5,467	6,161	5,559	6,264	5,651
T. Seneca	1,120	1,170	1,130	1,146	1,139	1,118	1,136	1,083	1,132
T. Sigel	1,051	1,127	1,017	1,113	983	1,094	948	1,071	913
Planning Area	39,239	42,352	39,681	42,786	40,122	43,052	40,249	43,072	40,375
WDOA = Wisconsin Department of Administration WCPZ = Wood County Planning & Zoning Office									
Source: U. S. Census of Population, Wisconsin Department of Administration, and Wood County Planning and Zoning Office.									

### Population Density

U. S. Census Bureau's TIGER file block data were used to determine the density of population and housing in the planning area communities. That information is useful to local officials in determining areas that will need sewer during the planning period. Areas that are projected to grow are identified so that, when sewer extensions are being planned, they can be sized appropriately to serve those existing and future areas. Figure 4 shows where in the planning area population levels are at low, medium and high levels. These categories were chosen versus an actual number of people per mile or acre because that latter method results in some extremely high numbers in the most densely

populated areas (i.e., the center of Wisconsin Rapids). The patterns on this map show how the area has grown to the south and east. It also shows a higher density of population in the area that was described earlier as the Greenfield Avenue area of the Town of Rudolph. Reference will be made to this map again as the 20-year sewer service area (SSA) is determined.

One caveat regarding the use of TIGER files is that census information is suppressed for some small blocks. In other cases, several blocks are combined, making block group data the smallest breakdown. When block group data was mapped, the results failed to adequately illustrate where higher densities of housing or population are located.



### Households and Household Projections

An estimate of how many households and housing units is necessary for determining the amount of additional land that will be needed for residential purposes during the planning period. The purpose of this section is to provide an analysis of the future number of households and the changes that can be expected in household sizes during the planning period.

As with the population projections, the Wisconsin Department of Administration also projects the number of households a community will have in the future. The most current projections were completed by WDOA in 2008 and were based on the 2000 census and 2005 estimates by that agency. Those estimates were high, like the population projections. The difference between the State's projections and the actual census count was caused, in part, by statistical error and, in part, by the downturn in the local economy and loss of population overall. The Wood County Planning & Zoning Office has modified the projections using simple regression (Table 3). The intent is to remain consistent with the standards developed by WDOA and not to challenge that agency's projections.

Table 3. Household Projections: 2010 - 2030

COMMUNITY	2010 Census	2015		2020		2025		2030	
		WDOA	WCPZ	WDOA	WCPZ	WDOA	WCPZ	WDOA	WCPZ
C. Wis. Rapids	8,296	8,812	8,491	8,992	8,685	9,102	8,872	9,151	9,059
V. Biron	366	444	380	469	394	491	403	510	411
V. Rudolph	179	186	182	188	185	189	189	189	192
T. Grand Rapids	2,978	3,171	3,157	3,247	3,335	3,299	3,493	3,327	3,650
T. Grant	758	875	821	925	883	969	934	1,004	984
T. Plover	639	927	643	939	647	944	623	940	598
T. Rudolph	418	448	431	447	444	442	454	434	463
T. Saratoga	2,085	2,373	2,230	2,476	2,375	2,562	2,493	2,629	2,611
T. Seneca	411	431	425	428	438	422	449	413	459
T. Sigel	423	444	437	445	450	442	462	436	474
Planning Area	16,553	22,737	17,195	18,556	17,836	18,862	18,369	19,033	18,901
WDOA = Wisconsin Department of Administration WCPZ = Wood County Planning & Zoning Office									
Source: U. S. Census of Population, Wisconsin Department of Administration, and Wood County Planning and Zoning Office.									

According to the projections, an additional 2,348 households can be expected to be added to the existing stock of 16,553 over the next 20-years. That is an addition of 14 percent between 2010 and 2030. About 35 percent of those will be in Wisconsin Rapids, Biron and the Village of Rudolph – communities that provide sanitary sewer services. Slightly more than 32 percent will be in Saratoga and Grant, towns that will likely not be served by municipal sewer during the planning period. The balance will be in unincorporated towns that may or may not require sanitary service between now and

2030. Not all of the growth outside the cities and villages will occur within the planning area.

The average number of persons occupying a household is calculated by dividing the population by the number of households in the community. Those who are institutionalized in nursing homes, correctional institutions, mental health facilities and similar facilities are not included in the household population. The segment of population that is institutionalized is generally small in relation to the total population. The national trend of fewer persons per household is the result, in part, to the aging population, smaller families and single-person households. That trend is also facing communities in our area. Table 4 shows how the projected population and projected number of households results in smaller households in the planning area communities.

Table 4. Projected Change in Average Persons/Household: 2010-2030					
COMMUNITY	2010 Census	2015	2020	2025	2030
C. Wis. Rapids	2.21	2.17	2.13	2.09	2.05
V. Biron	2.29	2.28	2.27	2.25	2.23
V. Rudolph	2.45	2.38	2.30	2.24	2.19
T. Grand Rapids	2.57	2.49	2.42	2.36	2.29
T. Grant	2.51	2.44	2.38	2.31	2.25
T. Plover	2.66	2.56	2.46	2.35	2.22
T. Rudolph	2.46	2.32	2.19	2.06	1.93
T. Saratoga	2.47	2.38	2.30	2.23	2.16
T. Seneca	2.73	2.66	2.60	2.53	2.47
T. Sigel	2.48	2.33	2.18	2.05	1.93
Planning Area	2.48	2.40	2.32	2.25	2.17

Source: U. S. Census of Population, Wisconsin Department of Administration, and Wood County Planning and Zoning Office.

### Development Densities

Factors which influence the average number of dwelling units constructed on an acre of residential land in a community are quite varied and include such things as zoning ordinances (minimum lot size, building setback requirements and the number of multi-family units per acre); style of dwelling units; development costs (sanitary and storm sewer, water and paved roads); availability of land; availability of sanitary sewer connections; capability of soils to accommodate private onsite waste treatment systems (POWTS) in unsewered areas; and lot size preferences of the housing market population (sometimes driven by the state of the economy).

Over a period of time, changes in a community's average number of housing units per acre will be influenced primarily by the development density of new residential construction. In communities that anticipate substantial growth during the planning period, the likelihood of new residential development changing the community's overall average residential density is greater than in a community that is expected to experience little

population growth. The aging population often will want smaller homes, possibly apartment-style living, or they may need the services of an assisted living center or nursing home. Those type of facilities have more units per acre than do detached, single-family homes. Also, those type housing units tend to locate where sewer and water services are available and municipal offerings are readily available.

Current housing densities are shown in the map in Figure 5. There is a ripple effect from the center of Wisconsin Rapids outward in all directions. The map clearly shows that there has been more growth to the east and south than to the north and west. The coloration on the map also supports the 20-year sewer service area boundary as adopted in the 1985 edition of this plan.

### **Future Land Use**

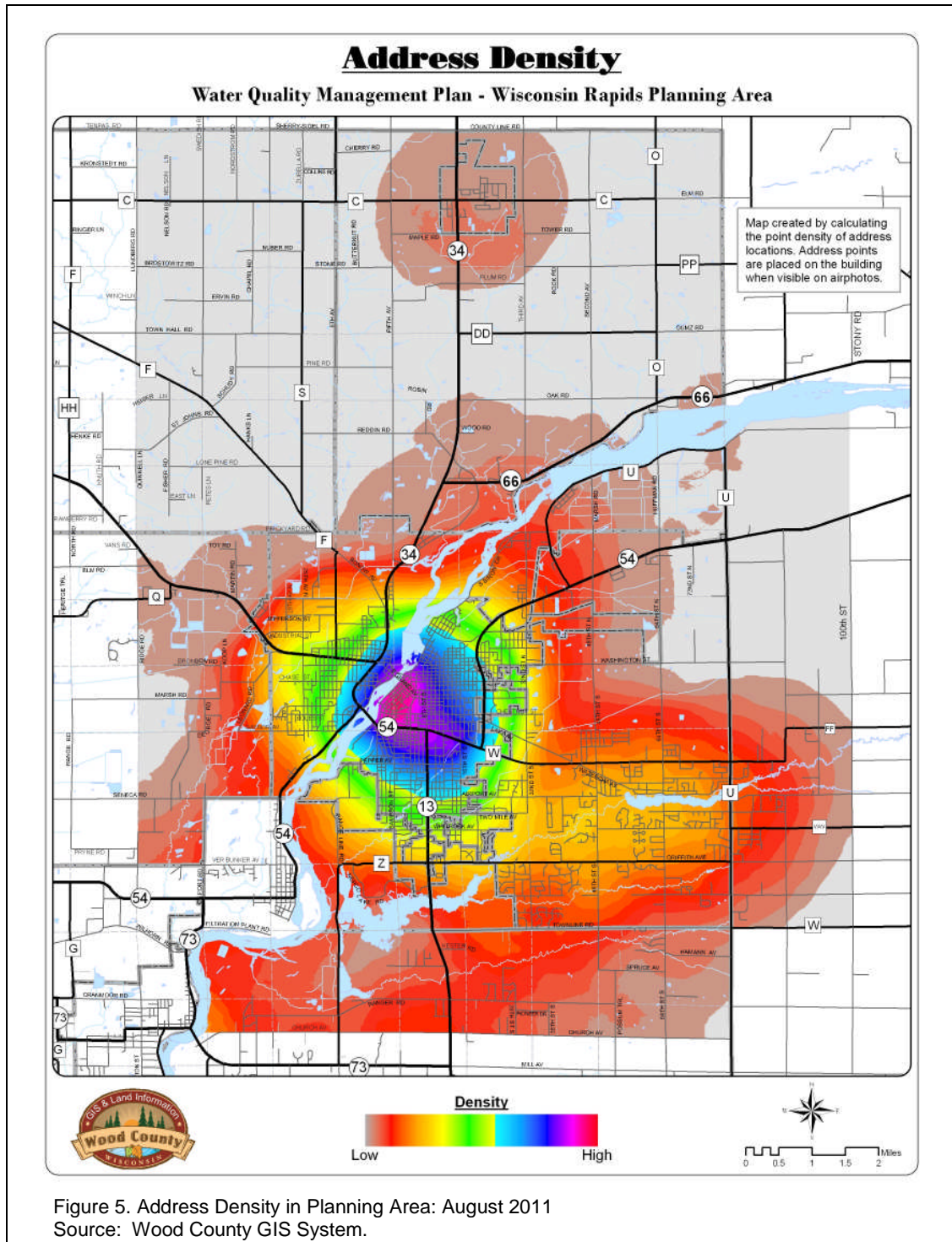
During the planning period, although growth is anticipated to be slow, it is likely that new development will consist of some infill in Grand Rapids and northern Saratoga, possibly some new development near the City's western boundary, and additional growth in the Village of Rudolph. There is also potential in the Greenfield Avenue area if sanitary sewer and municipal water is provided. A recent proposal to develop residential lots on the south shore of NEPCO Lake will not create an immediate need for municipal sewer, but expansion of that development, if it is successful, could result in a demand for sanitary sewers toward the end of the planning period. The Towns of Grant and Saratoga will also realize some infill, although changes in overall densities of development should be minimal. A brief description of the future land use of each of the planning area communities is presented below with their future land use plan maps from their comprehensive plans. More detail about future development can be found in the individual comprehensive plans, most of which are available online.

#### City of Wisconsin Rapids

The City has a total of about 9,415 acres within its borders. Approximately 2,978 of those are zoned for residential housing. There were 8,296 households reported in the 2010 census. The residential density, then, is 3.2 units/acre. As was anticipated in the 1985 plan, more senior housing has been constructed in Wisconsin Rapids with additional units anticipated as the population continues to age, increasing demand for this type of housing. There will also be some replacement housing constructed, but there is little room for infill in the City. The City's comprehensive plan suggests that the downtown and older residential districts in the city are beginning to show some signs of deterioration. It goes on to recommend that "as new development occurs on the fringes of the community, it is important that the city focus its efforts to maintain the vitality of the existing commercial and residential areas of the community."<sup>5</sup> Small parcels on the periphery of the city will likely annex as septic systems fail with no room for replacement systems. Other annexations will be required to accommodate the 763 additional housing units that are projected to be needed during the planning period (see Table 3). The future land use plan map for Wisconsin Rapids appears in Figure 6.

---

<sup>5</sup> *City of Wisconsin Rapids Comprehensive Plan*, Chapter 7, page 11, January 5, 2010.





### Village of Biron

The residential density of the Village is expected to increase slightly during the planning period, primarily due to the proposed residential development on the Village's northeast quadrant along the Wisconsin River. The developer proposes a mix of housing types, including single-family detached, duplexes and condominiums. Most new housing will continue to be the single-family type. Soils conditions restrict where new development can occur. Many areas have high groundwater conditions, some having been identified as wetlands. The residential density of 1.56 households per acre that existed in 1985 has not changed much even with the annexation of the residential area north of Highway 54 and east of Kahoun Road. The comprehensive plan was being completed as this plan was being completed. A draft of the Biron future land use map (Figure 7) shows the new residential, commercial and industrial growth on the villages southeast and northeast quadrants.

### Village of Rudolph

As this plan was being developed, the Village of Rudolph had not yet connected to the Wisconsin Rapids collection and treatment infrastructure. Agreements between the two communities were in place and plans were proceeding for the village's connection, which should be complete in 2012.

The village has an existing treatment system that has been deemed inadequate for the village's needs. Some new development can be expected during the planning period. Rudolph is situated in a convenient location on Highway 34 within easy commuting distance to Wisconsin Rapids. Commuting is also convenient on Highway 66, just south of the village. Highway 13 will be located on the same roadway as Highway 34 as a new U. S. Highway 10 is completed to the north. Even with the changes in the transportation system, Rudolph's growth will not be such to create an issue with the Wisconsin Rapids treatment system. The village future land use map is illustrated as Figure 8.

### Town of Grand Rapids

Grand Rapids has many subdivisions with undeveloped lots. Some of those are cases where two lots were purchased; one was developed and the other has been kept for privacy purposes. Nevertheless, there is room for infill in existing subdivisions. The map in Figure 5 shows the medium-density development pattern south of County Road W, extending south toward the Grand Rapids–Saratoga town line. High groundwater conditions north of County Road W toward Highway 54 somewhat limit development, so most new residential development can be expected south of County Road W. The vast majority of new units will continue to be single-family, with some two-family structures, because of the need to utilize septic systems. There is considerable infill that needs to take place in Grand Rapids, according to the comprehensive plan, and it is in those areas that it is expected that new subdivisions will be platted. The comprehensive plan suggests that retail shops will continue to locate in the Highway 54 corridor, with home-based businesses being established as a result of the status of the economy. Grand Rapids' future land use map is presented in Figure 9.

### Town of Grant

That part of the Town of Grant that is in the planning area has experienced only a small amount of growth since the 1985 plan was completed. The map in Figure 5 shows how rapidly the density of structures drops as it gets further away from Wisconsin Rapids into the Town. Much of the area that is colored in on Figure 4 was originally included in the 1985 sewer service area only to be removed as part of the amendment process when other areas closer to Wisconsin Rapids and Biron were added. Due to the amount of residential and commercial development in and around the Kellner area of the Town of Grant, including an elementary school, this area can expect more residential construction during the planning period and should be considered to be added back into the 20-year SSA as part of this plan. The future land use plan (Figure 10) identifies the two classes of residential, institutional, commercial and limited agricultural areas that were included in the 20-year SSA in the previous water quality management plan.

### Town of Plover

A very small part of the Town of Plover is included in the planning area. It is undeveloped at this time, but could experience some very low density growth as Biron's new residential and business park developments become reality. The future land use plan from the Portage County Comprehensive Plan (Figure 11) has identified this area of the Town of Plover as General Agriculture, Exclusive Agriculture and two categories of natural areas. Plover has worked with the neighboring communities of Biron, Grand Rapids, Grant and Wood County to monitor growth in the area and its impact on the volume of traffic and safety of Highway 54 and that highway's intersection with County Road U (80<sup>th</sup> Street).

### Town of Rudolph

The Policy Committee included the entire Town of Rudolph in the planning area, recognizing that only a small portion of the town, if any, will be served by sanitary sewers during the next 20-years. The Greenfield Avenue area is the most densely developed of the unincorporated town. That area has dealt with water problems and sewage disposal issues for many years. Now that the Village of Rudolph will be connected to the Wisconsin Rapids system, it may become more of an issue to serve the Greenfield Avenue area as well. The Greenfield Avenue area is identified in the Town's future land use plan (Figure 12) as an area of concentrated development. The immediate area surrounding the Village of Rudolph is also an area of concentrated development and an area that could develop further if sanitary sewers are available.

### Town of Saratoga

Saratoga is unique among the towns because of its size and location in relation to Nekoosa to the west and Wisconsin Rapids to the north. Saratoga is separated from Nekoosa's treatment plant by the Wisconsin River and is separated from Wisconsin Rapids and that treatment plant by NEPCO Lake. The town has had residential and commercial development along Highway 73 near Nekoosa and along Highway 13 south of Wisconsin Rapids. The map in Figure 4 illustrates how growth has spread into Saratoga from both directions. Development in the Town of Rome to the south has impacted the land uses along both highways in Saratoga.

Saratoga's development along Highway 13 is mainly commercial, including restaurants, convenience stores, home accessory retail outlets, drinking establishments, and more. Fanning out from the highway, there have been a few residential subdivisions, but not in recent years. That pattern is likely to continue as shown on the Town's future land use plan in Figure 13. A new residential development is proposed on the south side of NEPCO Lake in Saratoga and the Village of Port Edwards. Although land uses are not changing quickly, Saratoga has soils that are very conducive to new development, which could be residential, commercial and even small industrial.

#### Town of Seneca

Only a very small portion of the Town of Seneca is in the planning area. Development is at a very low density because of soil conditions. Soils in this area of Seneca will dictate that lots be larger if no sewer service is available. The area will probably not experience much change between now and 2030. The future land use plan for Seneca shows the area continuing to be comprised of a residential with some commercial along Highway 13. Further to the west, low density development may occur although much of the area has environmental constraints to development (Figure 14).

#### Town of Sigel

The map in Figure 5 shows a very low development density in the Town of Sigel adjacent to Wisconsin Rapids. Soil conditions are such that new development will likely continue to be large lot single-family certified survey maps versus multi-lot residential subdivisions. The Town's future land use plan (Figure 15) also calls for continued forestry and agriculture uses immediately adjacent to Wisconsin Rapids.

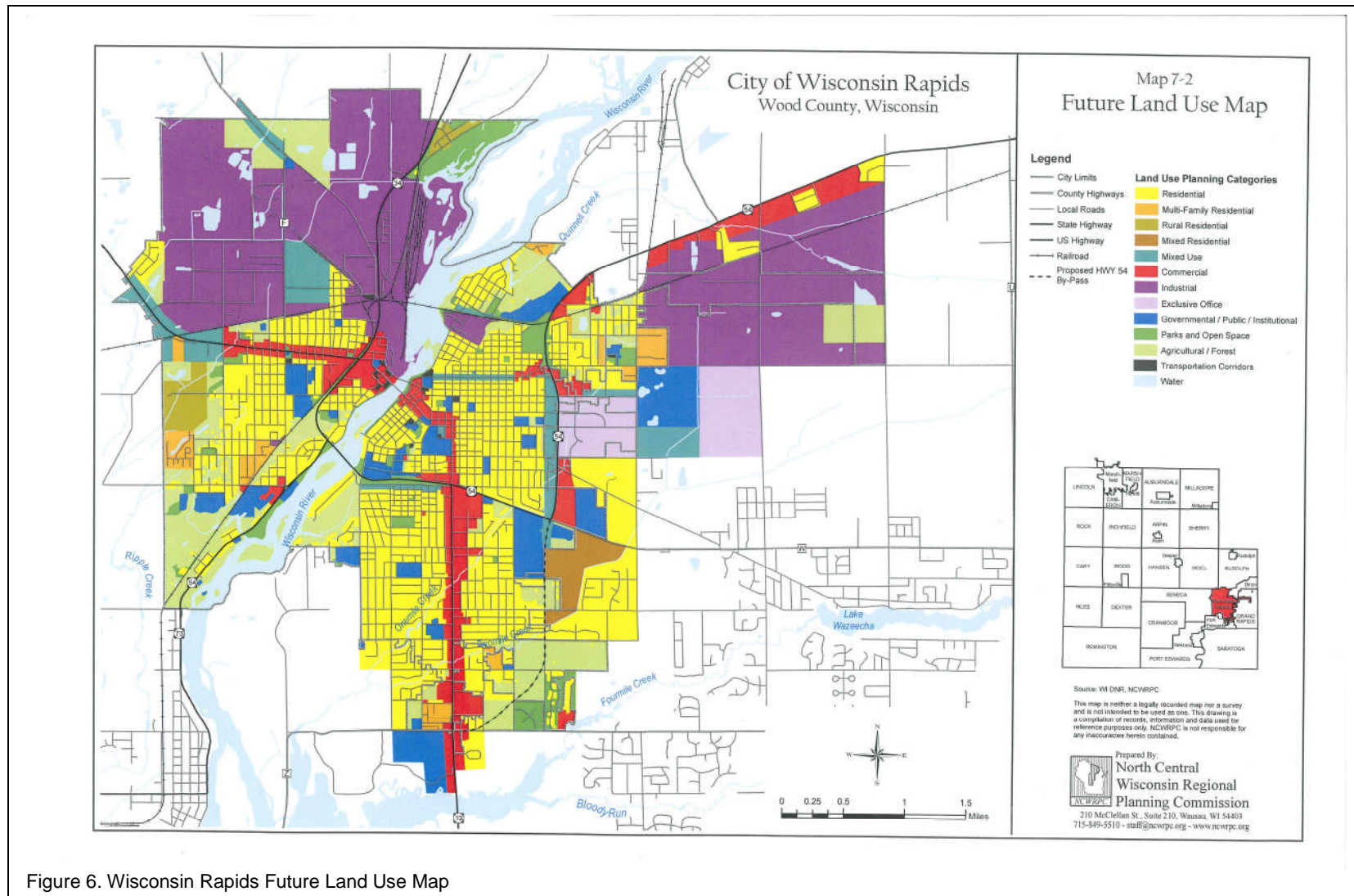


Figure 6. Wisconsin Rapids Future Land Use Map

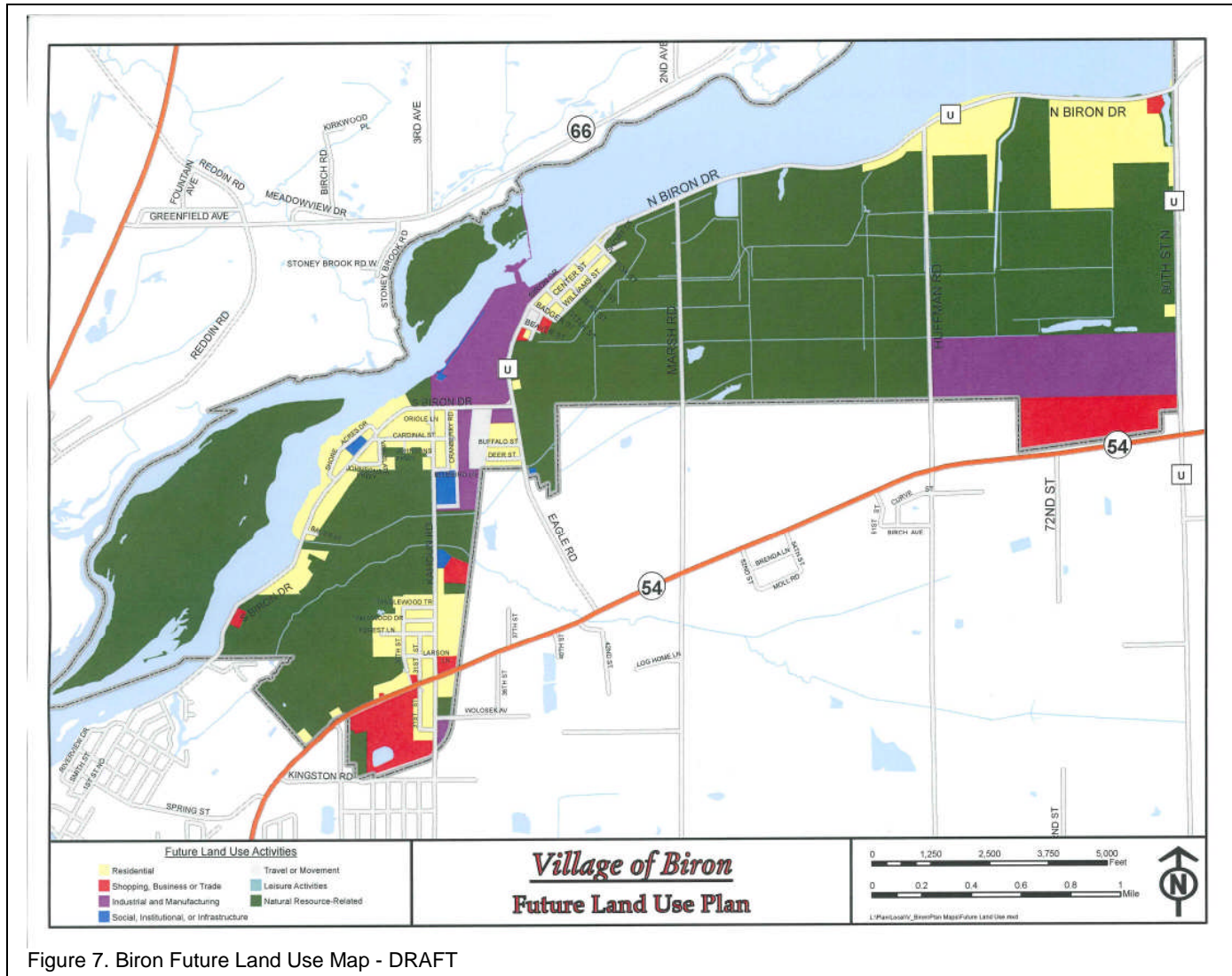
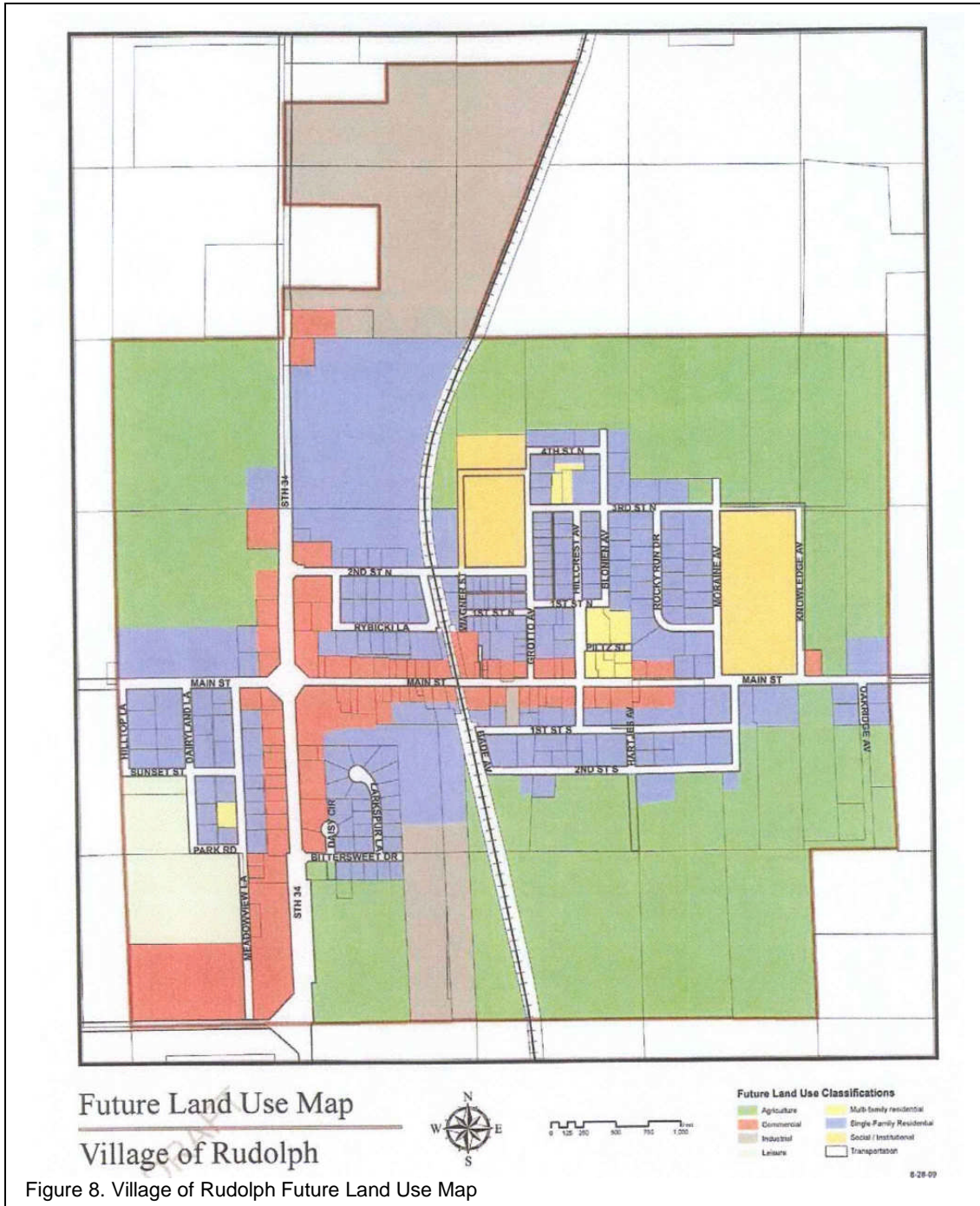
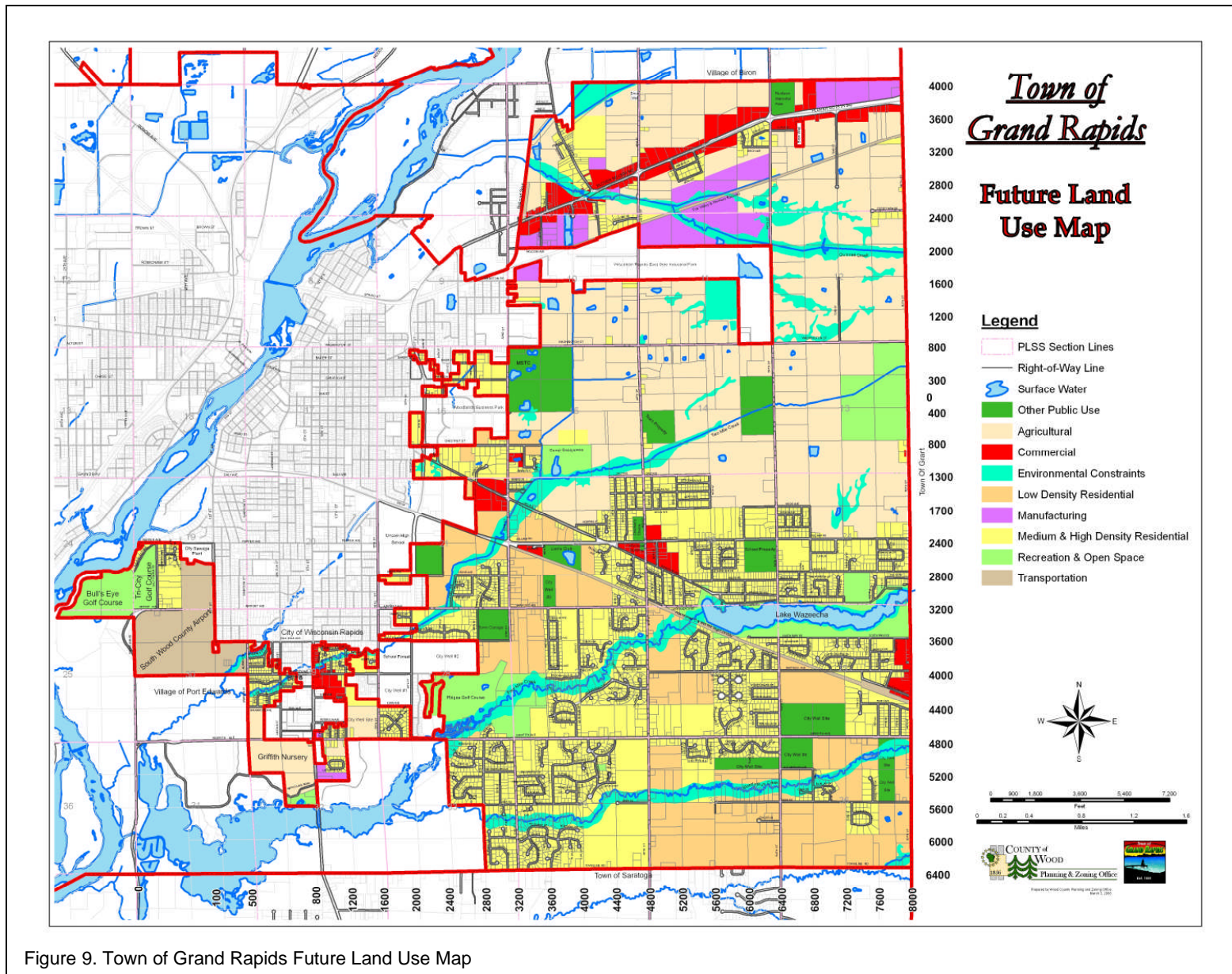


Figure 7. Biron Future Land Use Map - DRAFT





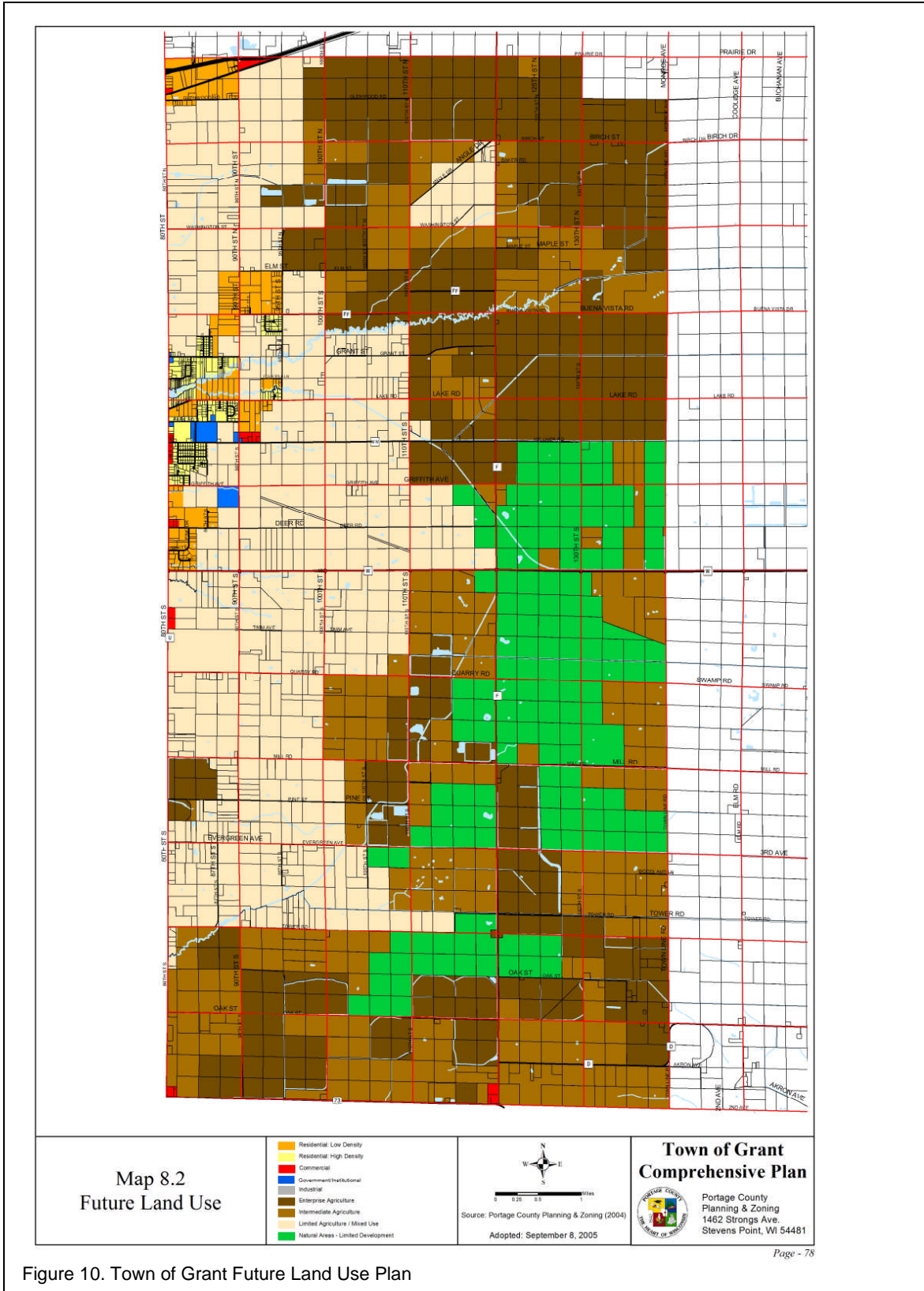


Figure 10. Town of Grant Future Land Use Plan



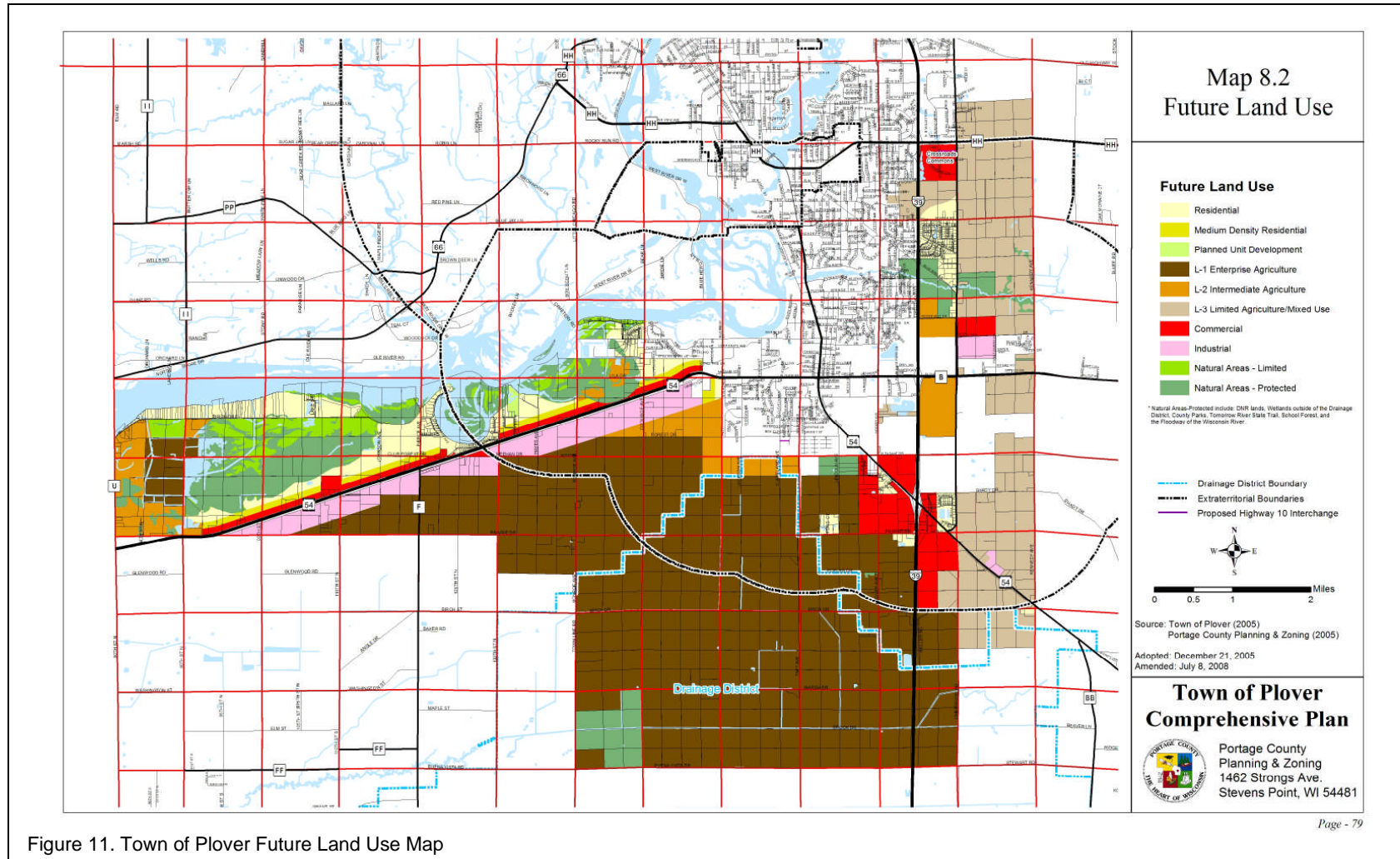


Figure 11. Town of Plover Future Land Use Map

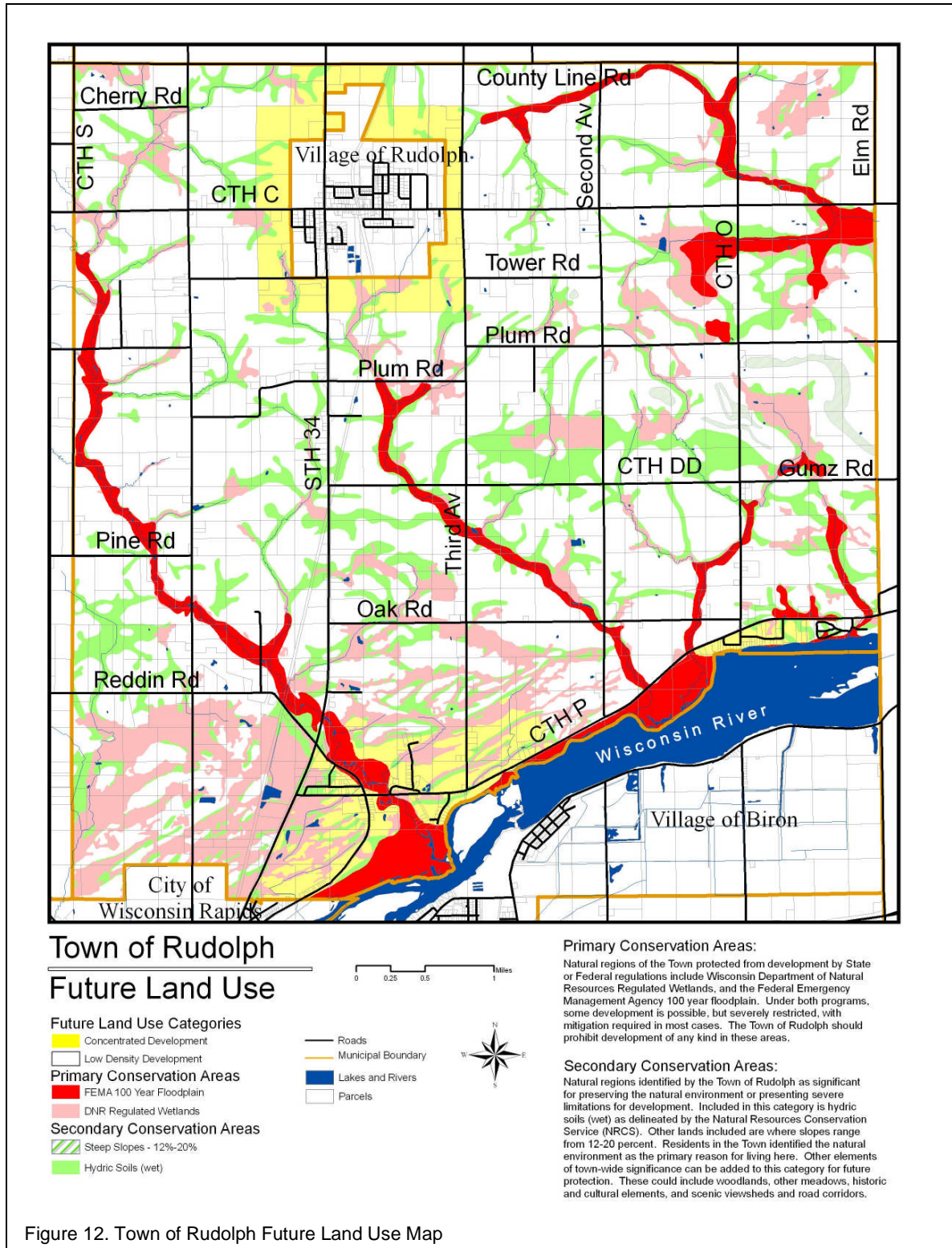


Figure 12. Town of Rudolph Future Land Use Map

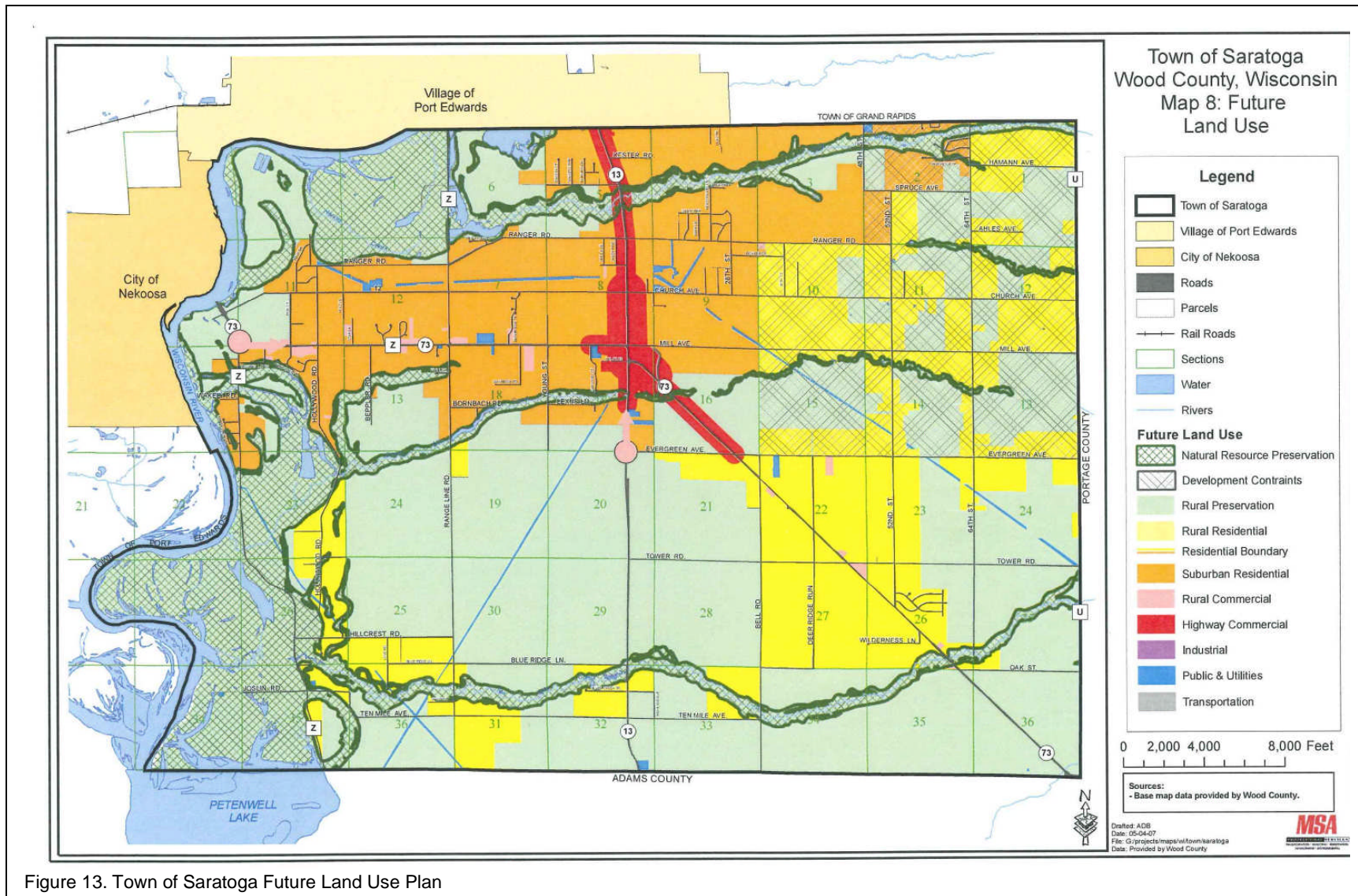


Figure 13. Town of Saratoga Future Land Use Plan

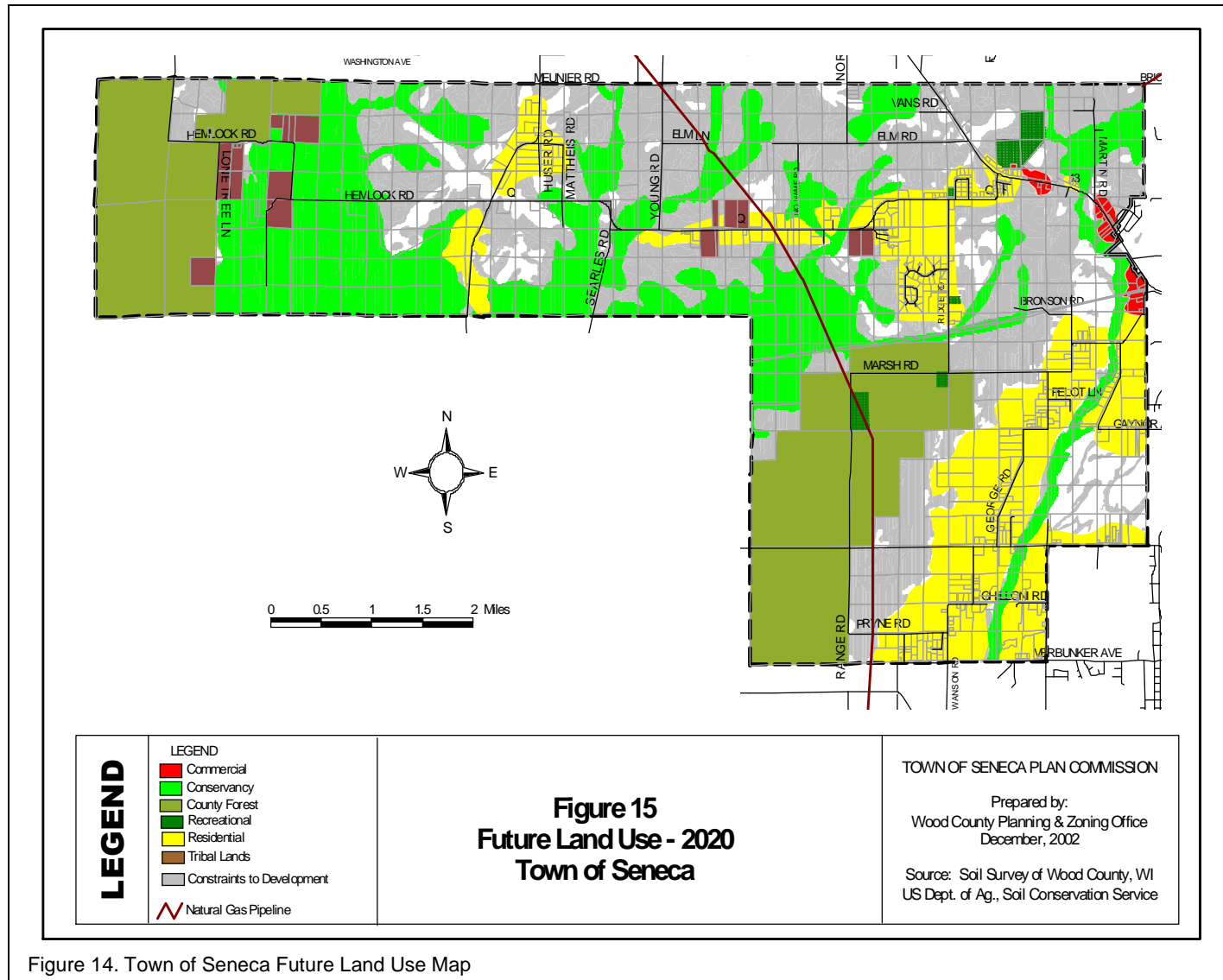


Figure 14. Town of Seneca Future Land Use Map

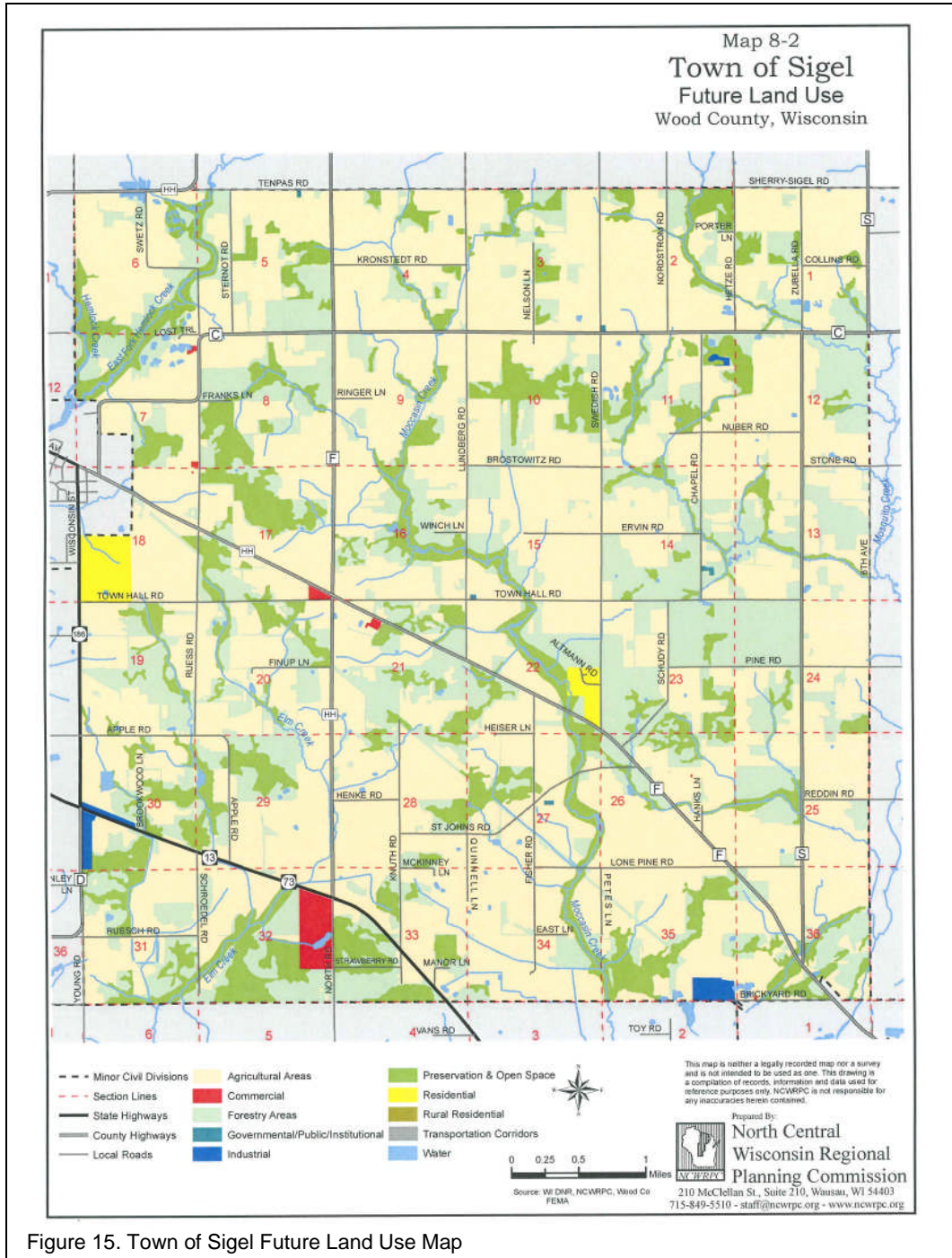


Figure 15. Town of Sigel Future Land Use Map

## **CHAPTER 4. ENVIRONMENTALLY SENSITIVE AREAS (ESAs)**

### **Introduction**

Environmentally sensitive areas, or ESAs, are defined by Chapter 121.05 of the Wisconsin Administrative Code as those areas that are unsuitable for sewered development because of the potential significant adverse impact on water quality – both groundwater and surface water. The delineated environmentally sensitive areas do not count in acreage allocations for sewered development. The term “environmentally sensitive areas” is used in this plan instead of “environmental corridors.” The term “environmental corridors” implies that the environmentally sensitive area is linear, such might be found along streams, or contiguous to other environmentally sensitive areas forming a linear pattern. In reality, many wetlands, steep slopes and groundwater recharge areas, even floodplains in Wood County, are not necessarily linear.

A sewer service plan only regulates sewered development. Its authority does not prohibit unsewered development from occurring in environmentally sensitive areas (although these areas may be regulated by the U.S. Army Corps of Engineers or other agencies). Rarely, updates or amendments are proposed which would remove land from the environmentally sensitive area designation.

The exact boundaries of environmentally sensitive areas are located through field surveys by the appropriate agencies, such as the DNR or Army Corps of Engineers at the time development is proposed.

### **ESA Defined**

NR 121.05(1)(g)2.c., Wisconsin Administrative Code, defines environmentally sensitive areas as including, but not being limited to wetlands, shorelands, floodways and floodplains, steep slopes, highly erodible soils and other limiting soil types, groundwater recharge areas, and other such physical constraints. The Policy Committee for this plan has identified additional significant environmental areas, including wellhead protection areas; identification of soils that have limitations for shallow excavations (i.e., basements); prime farmlands because of their importance to the area and state; established parks and greenways; areas known as habitats for endangered, threatened or protected plant and animal species; and established conservation areas, specifically the Central Wisconsin Grassland Conservation Area. Maps of the ESAs follow throughout this chapter.

### **Sewer Extensions**

Sewer extensions for development within designated ESAs are generally prohibited. An exception to this exclusion may be allowed when it is necessary to construct sanitary sewers across and through an identified ESA to serve developments that are across the ESA, or to serve compatible land uses such as parks and other outdoor recreation facilities. Additionally, mapping detail may not portray exact boundaries of physical features because of small map scales. In these cases, an onsite inspection would need to be conducted to properly identify the exact boundaries of the ESA.

For the purpose of this plan, Environmentally Sensitive Areas (ESAs) include those features as required by Ch. NR 121.05(1)(g)2.c., Wis. Admin. Code, plus features identified by the Wisconsin Rapids Area Water Quality Management Plan Policy Committee as being ecologically significant to our area. ESAs include the following:

- All lakes, ponds, flowages, rivers and navigable streams identified on the 7.5 minute U.S.G.S. quadrangle maps.
- Shoreland buffers of lakes, ponds and flowages, measured 75-feet from the ordinary high water mark.
- FEMA 100-year floodplains.
- WDNR-mapped wetlands.
- Areas of steep slope (12% or greater).
- Publically-owned scientific and natural areas.
- Areas with identified archaeological sites.
- Wellhead protection areas.
- Prime farmlands.
- Areas with limitations for shallow excavations (basements).
- Parks and greenways.

Intensive uses to be considered for exclusion from within ESAs include, but are not limited to, permanent structures such as residential, commercial, or industrial buildings; impervious surfaces such as parking lots and concrete or asphalt surfaced storage areas; and site disturbing activities such as clearing, grubbing, grading and filling. Any consideration of development within or adjacent to an ESA must be in conformance with all applicable federal, state, and local rules and regulations including the provisions and requirements of the Federal Clean Water Act; Wisconsin Administrative Codes NR 103, 115, 116, 117, 121, 216, and 299; and county and local zoning ordinances.

Uses which may be compatible with the protection and preservation of ESAs include nonintensive recreational facilities such as trails and picnic areas; and in some instances, utility facilities such as sewer and water lines, detention basins and stormwater drainageways; and limited clearing, grubbing, grading, and filling.

If there is any doubt as to the location of, or infringement on ESAs at the time of sewer extension or boundary amendment

requests (as delineated on the review maps), the Wood County Planning & Zoning Office will consult with and request site specific information (including proposed building footprints) from the local municipality and/or the petitioner. This information, along with the ESA criteria from this plan, will be used to make a recommendation on the proposal.

Application of the above ESA definition will not apply to those areas currently developed or platted at the time of plan publication, but will apply to those areas not yet developed or platted at the time of publication. When it is deemed necessary to cross or go through an ESA with sanitary sewer, preference will be given to the option that causes the least disturbance to the ESA.

## **Surface Water**

### Lakes, Rivers and Streams

Three of Wood County's major water bodies are located in the planning area. The Wisconsin River literally bisects the planning area from northeast to southwest, flowing through the Town of Rudolph, Village of Biron, City of Wisconsin Rapids and Village of Port Edwards. The river also flows through a short stretch of Grand Rapids. The reach of the Wisconsin River that flows through Wood County (and the planning area) is used for a variety of purposes. First valued for its industrial uses, industry still

uses the power of the river to generate electricity to run machinery and to provide power to homes in the area. The river is also valued for its scenic beauty. Parks and homes overlook the river for that beauty. With the cleaner water that has been provided over the past few decades, recreationists have flocked to the river. Fishing, pleasure boating, and water skiing are just a few of the recreational pastimes that are enjoyed on the Wisconsin River.

Lake Wazeecha is the second major water body in the planning area. This manmade lake is totally encompassed in a county park. The park is long and narrow, like the lake itself. Because of the lack of depth between the lake and the park boundary, heavy residential development occurred around the lake during its early life because the lake can be seen from the homes. This is particularly true for the homes on the north side of the lake and it is that side that is most heavily developed. The homes around the lake are, in many cases, on very small lots and use septic systems for waste disposal. Failure of aging systems can be (and has been) a problem in the area.

Nepco Lake was named for the Nekoosa Edwards Paper Company. That company developed the lake to have an adequate water supply for the paper industry uses. Nearly all of the land surrounding the lake was owned by the paper company, with only a handful of homes having been built on the shores of the lake. Wood County has a county park on the north shore of the lake, east of Highway 13. Very recently, the most recent owner of the paper company – Domtar, Inc. – sold all of their Nepco Lake land to a private developer. That developer is proposing high-end residential development on the south shore of the lake. Nepco Lake has a history of high use for all water sports.

There are several tributaries to the Wisconsin River in the planning area. The One-, Two-, Four-, Five-, Seven-, and Ten-Mile Creeks, several man-made ditches and a number of smaller tributaries to these creeks and ditches serve important ecological and environmental functions. Some are classified as trout streams and others contain a variety of aquatic plant and animal species. It should be a priority to protect the quality of these streams. A description of the watersheds is contained in Chapter 3.

### Surface Water Quality & TMDLs

Clean surface water is important to a community. In our area, recreational use of the waters plays an important role for the local economy. The Wisconsin State Water Ski Show Team tournament is held on Lake Wazeecha every summer. Fishing and recreational boating are popular pastimes on the Wisconsin River, Lake Wazeecha and Nepco Lake. Trout fishing has been popular on area streams. Several parks have been developed on the banks of lakes and streams, used by residents and for community events.

Under section 303(d) of the Clean Water Act, the WDNR is required to develop a list of “impaired” waters. Impaired waters are those that are too polluted or otherwise degraded to meet the state water quality standards. The law requires the establishment of priority rankings for waters on the lists and development of Total Maximum Daily Loads, or TMDLs, for impaired waters. A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards. It is a tool that can be used by watershed managers to improve impaired lakes and streams. The TMDL is based on a simple equation:



$$\text{TMDL} = \text{WLA} + \text{LA} + \text{MOS}$$

Where :

WLA = Wasteload Allocation from point sources

LA = load allocations from non-point sources (eg. runoff)

MOS = margin of safety built into the model

A TMDL plan is developed by the WDNR for the impaired waters. Wood County has a number of impaired waters, including the Wisconsin River and Mill Creek. The pollutant listed for the Wisconsin River is total phosphorus. The impairment caused by that pollutant is listed as algae and contaminated fish tissue. Current status is TMDL development. The pollutants listed for Mill Creek are total phosphorus, PCBs, and Mercury. The impairment is low dissolved oxygen and the status is TMDL development.

The TMDL for a body of water is calculated using predetermined goals, or water quality standards, for the body of water and its tributaries. These standards are usually what is needed to achieve the desired outcome. In some cases, narrative standards, such as reducing the number of days algae blooms persist or reducing the number of days bacteria counts are high at a beach are used in combination with numerical standards.

Water quality is measured next to determine the current load (amount) of a pollutant that is in the watershed. Sources of pollutants may be identified during this process. The difference between the actual load and the goal load is the amount the pollutant needs to be reduced. After the plan has been reviewed by the public and approved by the Environmental Protection Agency and the State, the WDNR will work collaboratively with other state and county agencies to strive toward the water quality goal. This will usually also require the cooperation and partnership of point source facilities and land owners on whose land pollutant sources have been identified.

Non-point source pollutants are also contributors to surface and ground water contamination. Unlike pollution from industrial and sewage treatment plants, or identifiable agricultural operations, non-point source pollution comes from many diffuse sources. It is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters and ground waters.

Urbanization increases the variety and amount of pollutants carried into surface and ground waters. In urban and suburban areas, much of the land surface is covered by buildings, pavement and compacted landscapes with impaired drainage. These surfaces do not allow rain and snowmelt to soak into the ground which greatly increases the volume and velocity of storm water runoff. In addition to these habitat-destroying impacts, pollutants from urban runoff include sediment; oil, grease and toxic chemicals from motor vehicles; pesticides and nutrients from lawns and gardens; viruses, bacteria and nutrients from pet waste and failing septic systems; road salts; heavy metals from roof shingles, motor vehicles and other sources; and thermal pollution from dark impervious surfaces such as streets and rooftops. These pollutants can harm fish and wildlife populations, kill native vegetation, contaminate drinking water, and make recreational areas unsafe and unpleasant. Community programs and individual

responsibility can go a long way in preventing and cleaning up non-point source pollution.

### **Groundwater**

The water table from which we get our drinking water is often susceptible to pollution from non-point source pollution as described in the preceding paragraph. Lawn fertilizers and pest controls, and road salts and petroleum road films are pointed to as being a potential threat to the groundwater. Barnyard runoff is not a major concern as there are few farms in the planning area. The use of agricultural fertilizers and pest controls contribute to concerns about the groundwater.

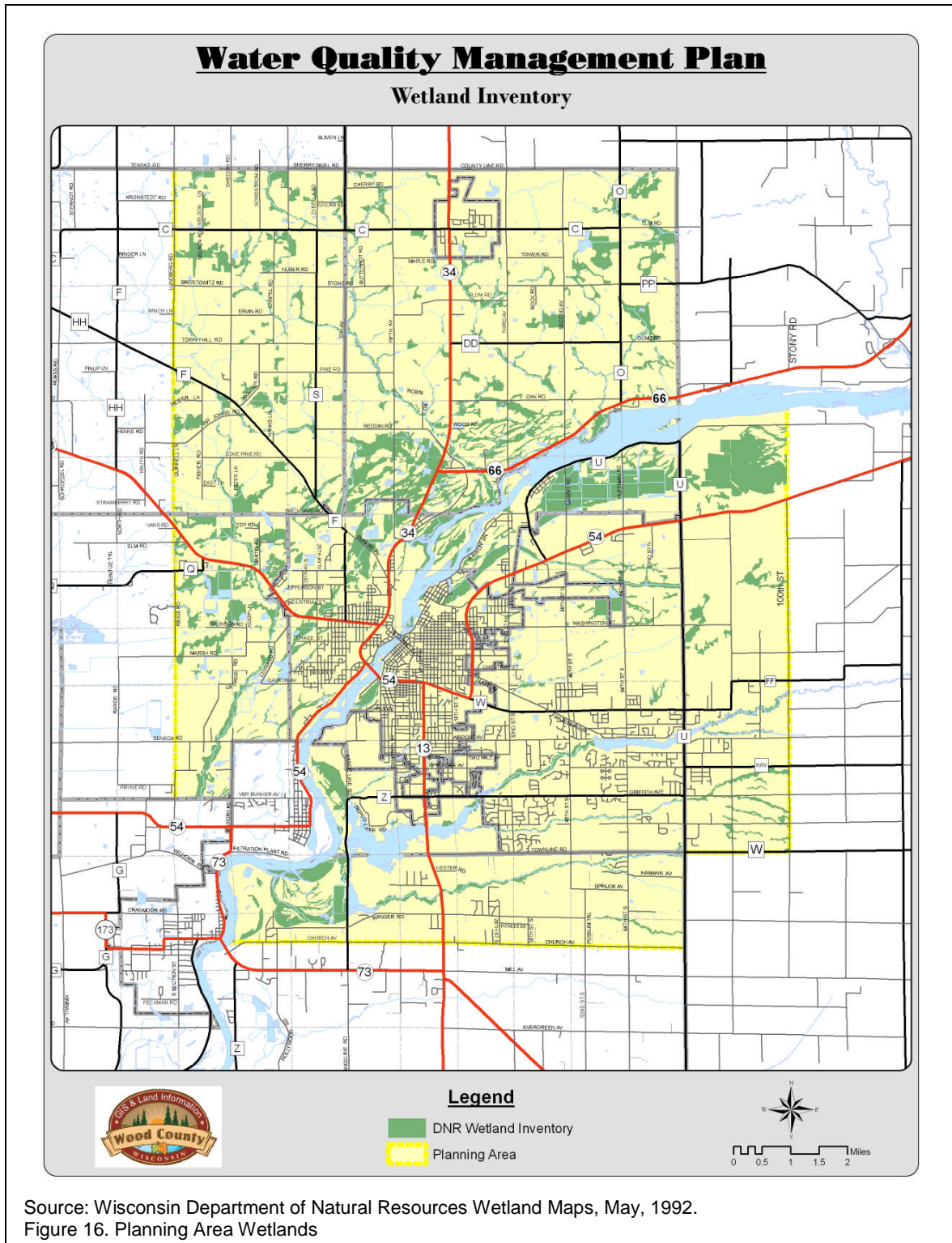
Municipal wells are located on Wisconsin Rapids' far east side and in Grand Rapids. Private wells, many being hand-driven sand points, are the source of water for homes and businesses outside the corporate limits of Wisconsin Rapids and Biron. The planning area for the Wisconsin Rapids Area WQM Plan has a large groundwater recharge area within its boundary. That recharge area is in the north and northeast part of Grand Rapids. Development on the ground above that recharge area is fairly sparse because of shallow groundwater in much of the area. Potential point source pollution threats to the groundwater include the Wisconsin Rapids East Side Commerce Park, which has manufacturing businesses now and can accommodate more in the future, and a large cranberry growing operation that uses fertilizers and chemicals. While these businesses are important to the area's economy, it is also important that one of the area's major sources of drinking water is protected. The communities should maintain good communication with land owners in the recharge area and work together to ensure that our water supply is not threatened.

### **Wetlands**

Wetlands play an important role since they serve as a filter system of pollutants, and are invaluable in controlling flood waters, recharging groundwater, and retaining water during drought. They may also provide valuable habitat for waterfowl and other wildlife, excellent cover and migration corridors for wildlife, and may support spawning and nursery habitat for fish and sanctuaries for rare and endangered species. Wetlands also offer education, recreational, and aesthetic benefits and opportunities.

Wisconsin Administrative Codes NR 115 and NR 117 mandate that wetlands be protected in both the rural and urban areas of the state. In the unincorporated areas, NR 115 protects wetlands or portions of wetlands within the shoreland zone that are designated on Wisconsin Wetland Inventory maps prepared by WDNR. To protect wetlands in incorporated areas, NR 117 was enacted in 1983 and requires that all wetlands and portions of 5 acres or more in size located in the shoreland zone be protected, and outlines minimum shoreland zoning standards for Wisconsin cities and villages. In addition to NR 115 and 117, NR 103 outlines water quality standards for wetlands and requires that all practicable alternatives be considered to avoid and minimize wetland disturbance and to ensure preservation, protection, restoration, and management of wetlands.

Any alternations that are to be made to any wetland, regardless of size, need to be reviewed and approved by the U.S. Army Corps of Engineers and the WDNR before any action can be taken.



Wetlands that are in the planning area are shown in Figure 16. Significant concentrations of wetlands are located east of the Wisconsin River in Biron and the Town of Plover. Other significant wetlands exist west of the river with concentrations in Seneca, Sigel and Rudolph. In the balance of the planning area, wetlands are isolated or extensions of those larger wetlands.

### **Shorelands**

Shorelands include all land that lie within 1,000 feet above the ordinary high water mark (OHWM) of a navigable lake, pond or flowage, and 300 feet above the OHWM of a navigable river or stream, or to the landward side of the floodplain, whichever distance is greater. This includes both perennial and intermittent waterways. Because of their importance to the environment, shorelands should be given a high priority for protection from development, especially when the shoreland area coincides with DNR-mapped wetlands. The DNR will not approve any sewer service area plan or amendment that is not consistent with an approved shoreland zoning ordinance. Shorelands in the planning area are shown in Figure 17.

Shoreland areas are often highly valuable real estate. This is especially true for those lands that provide developable frontage along the Wisconsin River. Although NewPage Corporation owns most of the frontage in the Town of Rudolph, the land they don't own is developed with residential uses. A planned residential development in Biron will be marketed based on its proximity to the river's Biron Flowage. Downstream throughout Biron, into Wisconsin Rapids, Grand Rapids and Port Edwards, residential development has occurred along the river where the shoreland is not in the floodplain. Where flooding is possible, the municipalities have created passive activity parks and greenways. The Bull's Eye Country Club's golf course also has considerable frontage along the river.

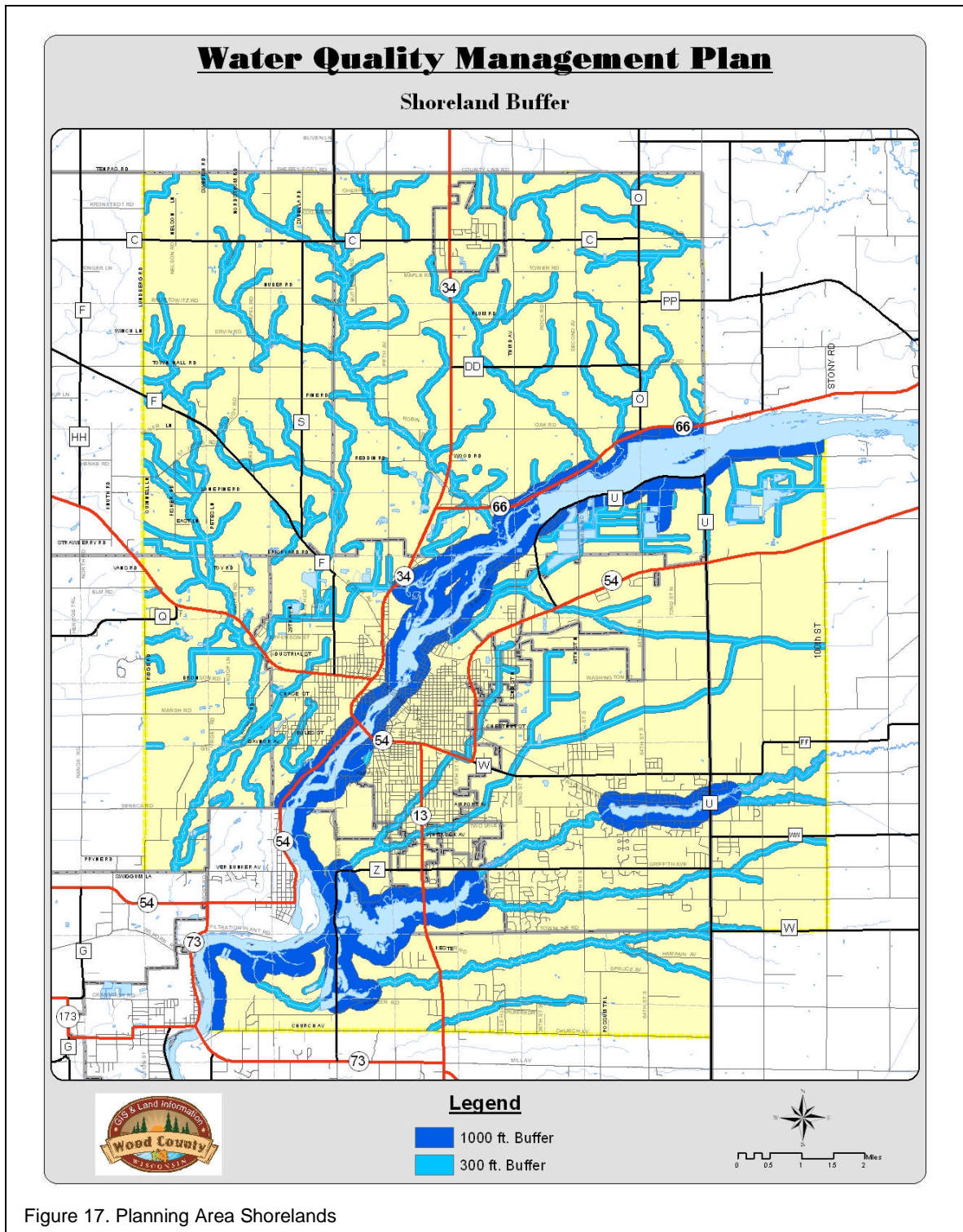
Lake Wazeecha is surrounded by a county park. Within the shoreland area of that lake, however, small lot residential development has existed since the lake's creation.

Lake NEPCO's shoreland areas have remained relatively undeveloped, except for a few residences that were developed many years ago. A private development company has recently purchased the land that surrounds Lake NEPCO and they have proposed a residential development on the south shore of that lake. The sellers of that property have taken precautions to protect the shoreland to the greatest extent possible.

Wisconsin Rapids and Biron have shoreland-wetland zoning ordinances, adopted pursuant to Ch. NR 117, Wisconsin Administrative Code. Those ordinances establish standards under which shoreland/wetlands are to be protected. Wood County and Portage County have shoreland zoning ordinances, pursuant to Ch. NR 115, that set the standards for shoreland development in unincorporated areas.

### **Floodplains**

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP). FEMA Flood Insurance Rate Maps (FIRMs) were updated most recently in 2010. Areas that are susceptible to flooding are considered unsuitable for any type development due to the potential safety and health risks and property damage. The 2010 FIRMs identify designated 100-year floodplains.



Floodplains are comprised of the floodway and the flood fringe. The floodway is typically the channel of a river or stream and those portions of the floodplain adjoining the channel that are required to carry the regional (100-year flood discharge). The flood fringe is that portion of the floodplain outside of the floodway, which is covered by flood waters during the regional flood and is associated with standing water rather than rapidly flowing water – the backwater areas that store flood water until the channel can handle it.

As shown on the map in Figure 18, the floodplains in the planning area are typically associated directly with rivers and streams. A couple of larger floodplain areas stand out, however. Much of the Village of Biron is included in the floodplain as is an oxbow area in the Town of Saratoga. A smaller, yet substantial, floodplain area is located in the Town of Seneca just west of the Wisconsin Rapids city limits.

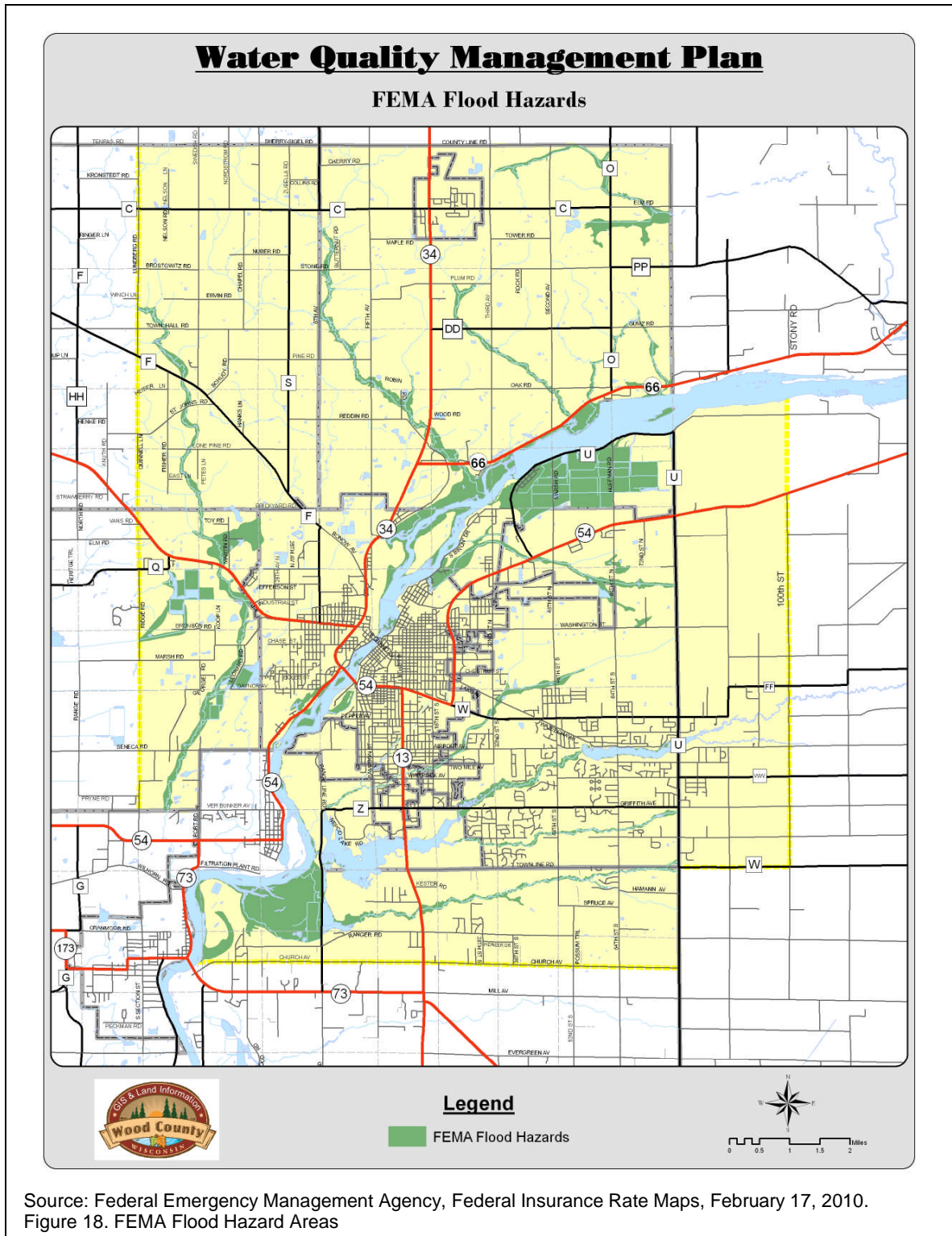
The primary value of floodplains to the planning area is their value for natural flood control. Floodplains represent areas where excess water can be accommodated either through the drainage capabilities of rivers and streams, or through the storage capabilities of the wetlands and other high groundwater soils. Specific areas that will be inundated will depend upon the amount of water, the distance and speed that water travels, and the topography of the area. If uninterrupted by development, the areas shown on the map as flood hazard areas should be able to handle the severest of floods that have a probability of occurring once in every one hundred years. The Wisconsin Rapids area experienced a 100-year flood in September, 2010. Because of the controls that have been in place for many years, the area experienced only minimal damage. There was only one residential structure in Wisconsin Rapids that had what is defined as “substantial damage.”

To prevent development in a high hazard area, floodplains should be excluded from sewer service areas. This is especially important for the floodway portions of the floodplain. The Department of Natural Resources will not approve any sewer service area plan or amendment that is not consistent with an approved floodplain zoning ordinance or which allows new service to new development in the floodway.

Plans or amendments that would result in a reduction of storm or flood water conveyance or storage capacity should be denied unless remedial actions that conform to Ch. NR 116, Wis. Admin. Code are identified and approved prior. When there is an existing, lawful development within the floodway, a plan or amendment may include the development within the boundaries of the proposed service area.

Lands that have been officially determined to be out of the mapped floodplain, based on FEMA standards, can be considered removed from the ESA unless other factors dictate. These areas are typically documented with a Letter of Map Revision (LOMR) or Letter of Map Amendment issued by FEMA. However, property is not considered "removed from the floodplain" under NR116 unless it is filled to two feet above the base flood elevation and has dry land access. This is a higher standard than FEMA.

There are several streams in the planning area that have floodplains associated with them. The main one, of course, is the Wisconsin River. The Wisconsin River bisects the planning area from northeast to southwest and all other streams in the planning area flow to the Wisconsin River. Alder, Flick and Mosquito Creeks all flow through the Town of Rudolph to the river.



Streams in Wisconsin Rapids include Boles Creek on the City's west side. Streams on the City's east side include Quinnet Creek, which is also present in Grand Rapids and Biron, and One-Mile and Two-Mile Creeks that flow through Grant and Grand Rapids. The Four-Mile (Duck) Creek flows through Grant and Grand Rapids, where it empties into Lake NEPCO in the Village of Port Edwards, finally emptying into the Wisconsin River. The Bloody Run Creek does the same and the Four-Mile Creek, emptying into Lake NEPCO. Finally, the Five-Mile Creek flows from Grant, through the northern part of Saratoga that is in the planning area, and on to the Wisconsin River.

### Wellhead Protection Areas

Municipal water suppliers are required by state administrative code, NR 811 to establish wellhead protection plans for new public water supply wells constructed after May 1, 1992. It is also appropriate to establish protection measures for existing public water supply wells to protect the public health, safety and welfare, and to reduce public costs should a pollution event occur. Because it is difficult to adequately react to a pollution event which occurs in proximity to a well, strict prohibitions of certain high-risk land uses should be established for that area (within the 30-day time of travel of contributing groundwater to a well). Certain high-risk land uses should be limited, and best management practices and monitoring established in the area between the 30-day and 5-year time of travel of contributing groundwater to a public water supply well.



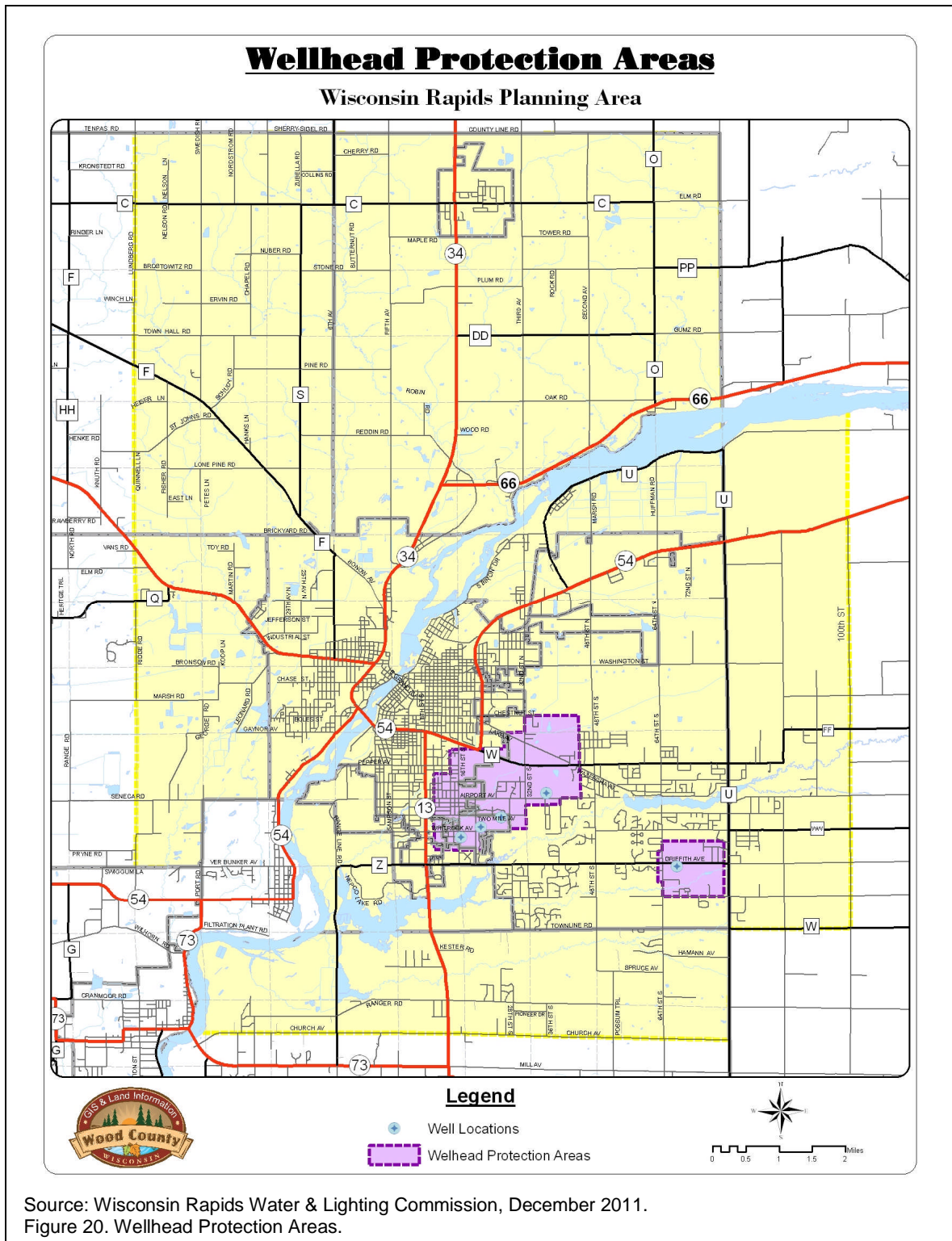
Figure 19. Wisconsin Rapids Water Tower

Wisconsin Rapids and Biron have municipal wells to provide drinking water to residents and businesses. The Village of Rudolph does not have municipal water service and when asked in a 2006 survey if they wanted municipal water, residents overwhelmingly stated their opposition to it.

The municipal wells in Wisconsin Rapids and Biron draw water from groundwater aquifers. Wisconsin Rapids has five ground water wells. The wells pump an average of 3,500 gallons per minute (gpm). Water is stored in three water towers that are located around the city. Together, the towers have a storage capacity of about 2.8 million gallons.

Biron's municipal water system includes two wells and one water tower. Each of the wells can pump up to 500 gpm. The village switches between wells it uses on alternating months. At this time, approximately 138,000 gallons of water is pumped each day. Water is stored in the one water tower, the capacity of which is 250,000 gallons. The village has plenty of capacity for today's needs, but has and will continue to investigate new sites for future wells. One of the existing wells is located south of Highway 54 in a small island of village that is surrounded by the Town of Grand Rapids. It is likely that future wells will also be located in what is now Grand Rapids. In the spirit of intergovernmental cooperation and to protect both water quantity and water quality for both private wells and future municipal wells, Biron should take a proactive position in





reviewing potential well sites with Grand Rapids officials invited to reviews and discussions.

The portion of the village east of 48<sup>th</sup> Street does not have access to the water system at this time. That may change in the future, however, as the planned development of new housing in the northeast part of the Village, and the new business park in the southeast part of the Village are developed.

Wisconsin Rapids is the only community in the planning area that has enacted a wellhead protection ordinance. That ordinance creates a groundwater protection overlay district aimed at protecting groundwater recharge areas for the existing and future municipal water supplies (Figure 20).

Chapter NR 811, updated in December 2010, codifies the Requirements for the Operation and Design of Community Water Systems and specifically addresses the requirements for separation distances between wells and sanitary sewer mains and other sources of contaminants. Contamination of the groundwater sources would create health and safety issues and would create financial hardships for the communities, so protection of the aquifers is of paramount importance. Well recharge areas can, in some cases, cover areas of significant size. Often, there may be no other limiting factors associated with much of the land in the recharge zone. In these cases, such lands may be perfectly suitable for uses that pose low risk to groundwater supplies. For purposes of this plan, municipal well recharge areas are considered to be conditional environmentally sensitive areas rather than primary ESAs because they can, oftentimes, be developed with only minimal potential for damaging the groundwater beneath them.

## Endangered/Threatened/Protected Plant & Animal Species & Natural Areas

### Plant and Animal Species

There are several occurrences of endangered or threatened animal species in the planning area communities, according to a Department of Natural Resources inventory (current as of October 6, 2009). Animals on the DNR's Natural Heritage Inventory include seven kinds of birds, five kinds of butterflies and various beetles, fish, lizards, salamanders, turtles and mammals. Some of the better known and more recognizable animal species include the Bald Eagle, Red-Shouldered Hawk, Greater Prairie Chicken, Barn Owl, Karner Blue butterfly, Blanding's Turtle, and Gray Wolf.

The Natural Heritage Inventory list also includes nine plant species and eight natural communities. Examples of plant species included in this list are Deam's Rockcress, Swamp Pink, and Bushy Aster. Communities included in the Natural



Figure 21. Examples of threatened/endangered/protected species found in the Wisconsin Rapids WQM Planning Area. Top photo is a Greater Prairie Chicken. Bottom photo is Swamp Pink.

Heritage Inventory include floodplain forest, northern mesic forest, northern sedge meadow, and sand prairie.

The Natural Heritage Inventory for the municipalities that are included, either in whole or in part, can be found in Appendix C.

While the species that are listed in the inventory are found in the municipalities that are entirely or partially in the water quality management planning area, those species may or may not actually be found in the planning area. This is because only parts of the towns of Sigel, Seneca, Saratoga, Grant and Plover are included in the planning area. Many, if not all, of the species listed in the Natural Heritage Inventory, however, are associated with the forests, wetlands, and surface water areas in the planning area.

#### Central Wisconsin Grassland Conservation Area (CWGCA)

The Central Wisconsin Grassland Conservation Area (CWGCA) stretches in an “S” shape from southeastern Taylor County, through parts of Clark and Marathon Counties, between Stevens Point and Wisconsin Rapids, and south to northeastern Adams County (Figure 22). Nearly all of the Wisconsin Rapids WQM Planning Area is encompassed by this conservation area. Within this area, the WDNR proposes to protect up to 15,000 acres of additional grassland habitat, primarily through acquisition and easements.

Due to the size, quality and distribution of the existing public and private grasslands, this area is particularly attractive to a diverse community of grassland birds. The state’s largest populations of Greater Prairie Chicken (GPC), short-eared owl, and possibly Henslow’s sparrow are found here. A great diversity of other declining or rare grassland birds, including sedge wren, Wilson’s phalarope, blue-winged teal, bobolink, upland sandpiper, Brewer’s blackbird, Eastern and Western meadowlarks, northern harrier, and several rare sparrows (including grasshopper, field, and clay-colored) are found locally. In addition, the regal fritillary butterfly, a State-Endangered species, is common at Buena Vista Grasslands in Portage County, including the Town of Grant.

Currently, several State Wildlife Areas and other protected lands nested within the Central Wisconsin Grassland Conservation Area (CWGCA) are managed to benefit grassland-dependent species, particularly the Greater Prairie Chicken. Despite the establishment of over 22,000 acres of permanent grassland habitat in this large project area, populations of the prairie chicken and many other grassland-dependent species continue to decline here. Although a combination of factors is likely at work, it is believed that the population declines are primarily related to the loss and fragmentation of critical habitat and the shifting of farming operations to “higher-intensity” practices. In addition, there has been an increase in forest cover in the area, both a function of active planting and passive succession.

The primary goal of the Central Wisconsin Grassland Conservation Area is to improve the existing protected lands’ ability to harbor viable populations of grassland-dependent species, particularly the Greater Prairie Chicken. To achieve this goal, the CWGCA’s primary objectives are to 1) establish more permanent grassland habitat, primarily focused on lands within 1 mile of active, or recently active, GPC booming grounds, and 2) maintain a predominantly open, unforested, undeveloped landscape where agriculture is the dominant land use, particularly in areas critical to the life history

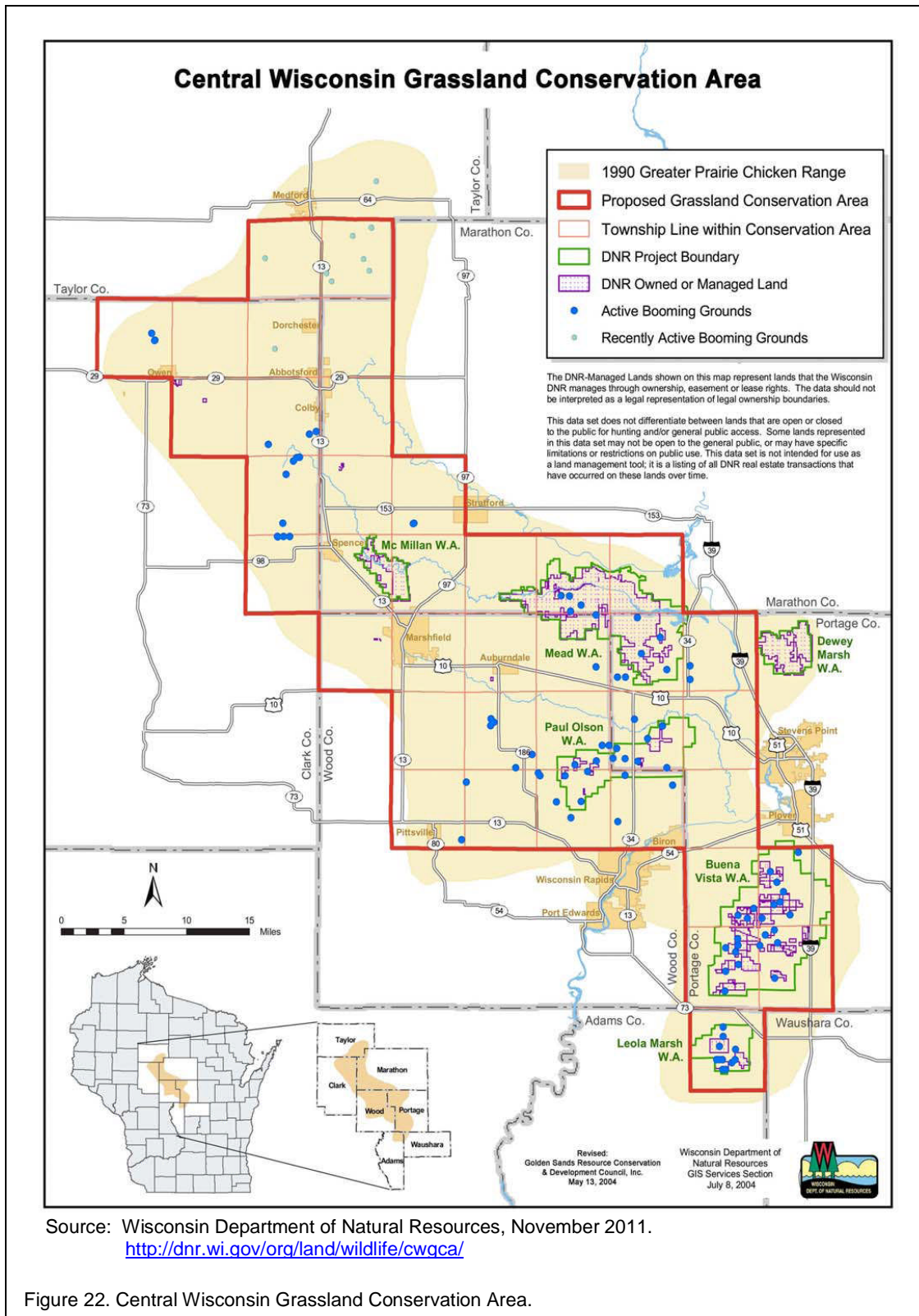


Figure 22. Central Wisconsin Grassland Conservation Area.

needs of grassland species. A secondary goal of the project is to provide a limited amount of low-impact recreation opportunities, primarily wildlife watching and hunting.

While it is not necessary, nor practical, for this plan to recommend restricting development in the CWGCA boundary, it is important to recognize that the WDNR will be acquiring additional land within the Paul Olson and the nearby Buena Vista Wildlife Areas, both of which are partially within the Wisconsin Rapids Area WQM Planning Area. Future sanitary sewer proposals are not likely in these areas during the planning period, but local officials and the Policy Committee should remain aware of the significance of these areas into the future.

### **Parks and Greenways**

While there are several public and private parks in the planning area, they are not all automatically considered to be environmentally sensitive. Indeed, many municipal parks do not even contain any environmentally sensitive areas within their boundaries. In terms of sewer service area planning, many parks have sewered facilities, or may have in the future. Others may be considered to be an ESA in part or in their entirety. A discussion of some of the major parks helps to identify ESAs.

Veteran's Park, Lyon Park, Ben Hansen Park, Gaynor Park, and Henry Demitz Park are all located in Wisconsin Rapids along the Wisconsin River and can be considered to be ESAs. During regional floods, each of these parks is subject to flooding. Two County parks – Lake NEPCO County Park and South Wood County Park at Lake Wazeecha – are partially or entirely within the shoreland areas. Each also has some environmentally sensitive areas (i.e., wetlands), although the ESAs are only a small part of these parks. The same can be said of the private park that is owned by NewPage Corporation along Highway 66 in the Town of Rudolph. Portions of that park are in the floodplain and shoreland areas, with some wetlands contained therein.

Two privately owned golf courses in the planning area also have small amounts of environmentally sensitive areas. The Bull's Eye County Club is on the Wisconsin River and The Ridges Golf Course has the Four-Mile Creek running through it. There are some wetlands on each golf course and some shoreland areas. Those areas, however, remain undeveloped as part of the golf course property, thus protected.

### **Soil Limitations for Shallow Excavations**

The Soil Conservation Service's "Soil Survey of Wood County" provides engineering interpretations of soils for certain listed uses, including shallow excavations such as those made for sanitary and storm sewer installation. The map in Figure 23 defines the soil limitations in the planning area as "very limited," "somewhat limited," and "not limited." The "not limited" category means that the soil properties are generally favorable for conventional sanitary sewers or septic systems in unsewered areas. "Somewhat limited" soils have some environmental issues that may constrain development. In the planning area, the constraints are generally related to shallow groundwater conditions at some time of the year. The limitations can, in many cases be overcome or modified by special planning and design to accommodate development on the site. "Very limited" soils include those areas where soil properties are so unfavorable for a particular use that overcoming the limitations is not technically or economically practical.

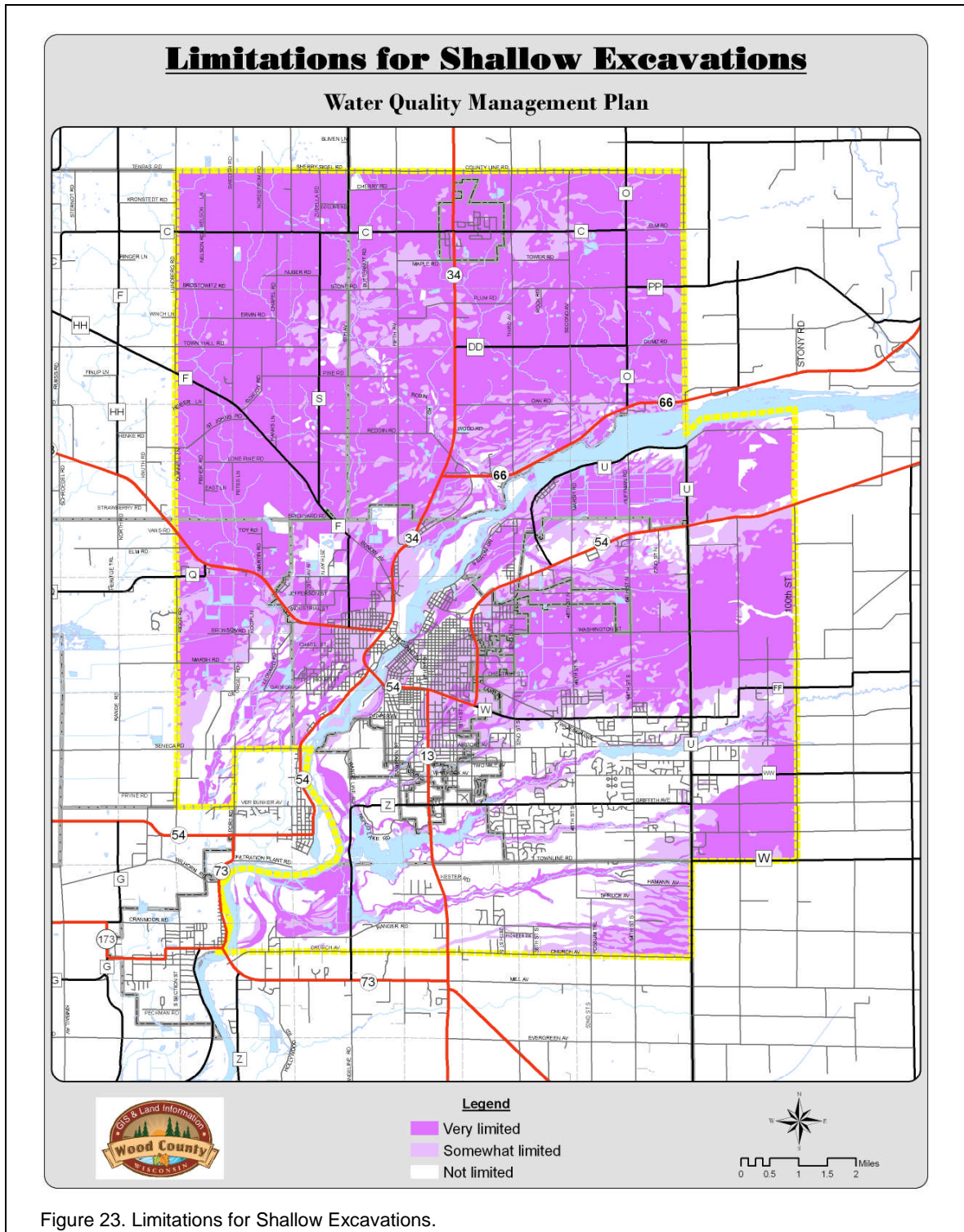


Figure 23. Limitations for Shallow Excavations.

Desirable soil properties for installation of public sewer are good workability, moderate resistance to sloughing (caving in of side walls), gentle slopes, absence of rock outcrops, and freedom from flooding or high water table. Because of the very nature of the geological conditions in the planning area, one or more of these properties is usually absent in area soils.

The map shows that soils with the fewest limitations for shallow excavations are in the southern half and Highway 54 area of Grand Rapids, the Kellner area of Grant, most of that part of Saratoga that is in the planning area, and southeastern sections of Seneca. It is in these areas that the majority of new residential development has occurred in recent years.

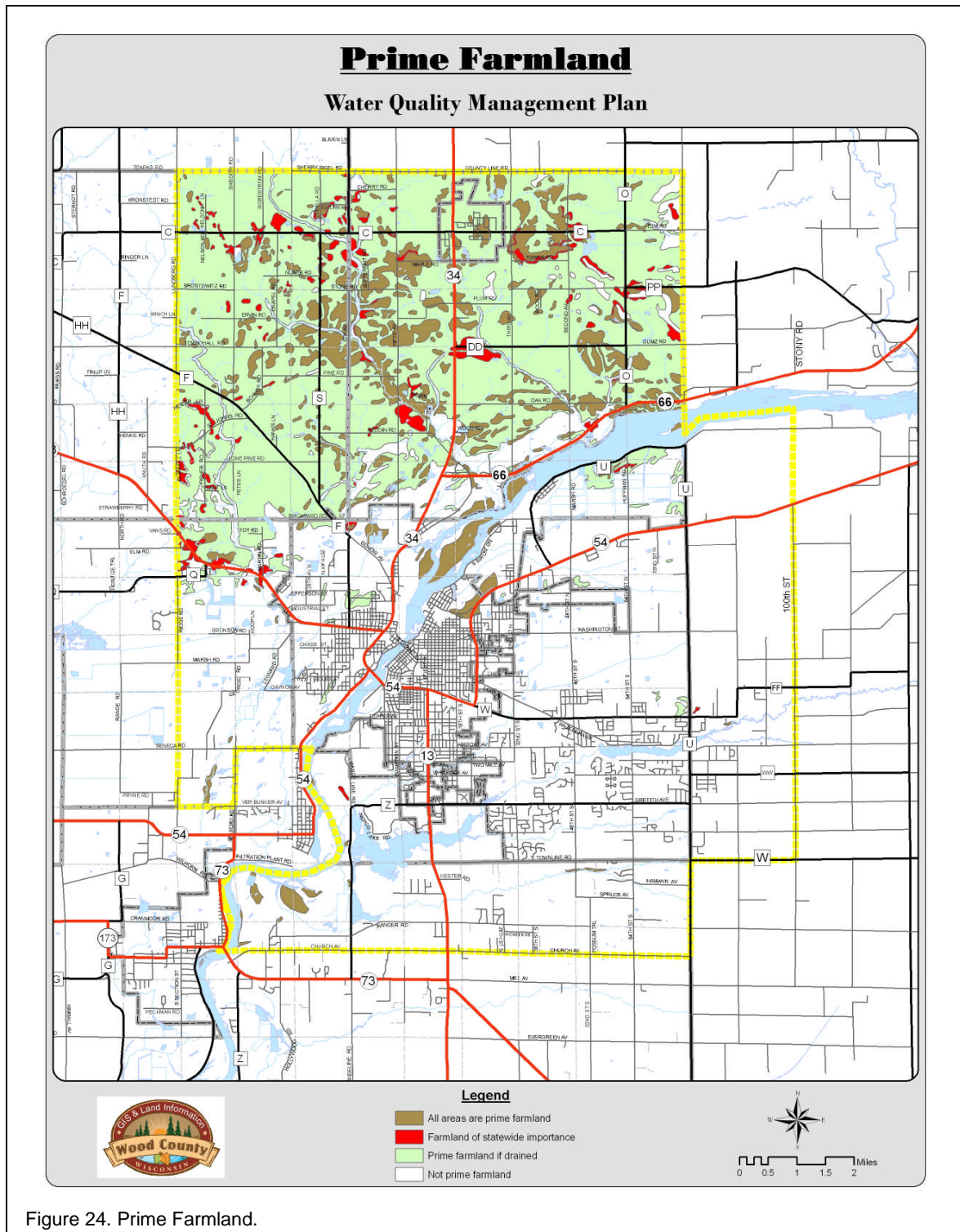
As a disclaimer, the map in Figure 23 should be used only as a very general guideline for determining future sewer service areas. While the map suggests that a majority of the planning area has limitations, many of those limitations can be overcome with proper engineering and modern equipment.

### **Agricultural Land**

Although not classified as environmentally sensitive, prime agricultural lands can create development issues in some areas. It goes without saying that the best lands for traditional agricultural uses are usually also the best locations for development. They typically are well drained, don't have seasonally high groundwater issues, are not located in floodplains or wetlands, and are utility friendly, that is, they can be easily excavated for sanitary and storm sewers and municipal water distribution systems. It is worthwhile, then, to consider the location and amount of prime agricultural soils in the planning area.

Nearly all of the prime agricultural land that is present in the planning area is located in the Towns of Rudolph and Sigel (Figure 24). Much more land is classified by the USDA's Natural Resource Conservation Service as "prime if drained" and nearly all of that land is located in the same two towns. It is in those loamy soil areas where there still exist a number of small farms. With few exceptions, the balance of the planning area is void of any prime or prime-if-drained agricultural soils. Those areas have sandy soils that are conducive to higher density development that use private onsite waste treatment systems, or POWTS. Organic and alluvial soils are present in lowland areas near the Wisconsin River and its tributaries.

Prime agricultural lands are represented by those soils with the highest productivity for conventional crops associated with central Wisconsin. These soils require the smallest capital investments to obtain maximum yields. Wood County does not have a current farmland preservation plan to protect and preserve the county's farmland, but will be developing such a plan as part of the State's Working Lands Initiative. A modern farmland preservation plan will, among other things, help meet any challenges between farm and non-farm land uses and improve consistency between local comprehensive plans. Wood County does not have comprehensive zoning to use to preserve prime agricultural lands. The only protection currently offered to prime agricultural lands is through local zoning provisions. Each town in the planning area has its own zoning ordinance, or is in the process of developing one, and its own enforcement procedure. For example, in the Town of Rudolph, one- and two-family residences are permitted in the agricultural district provided they meet certain density provisions.





In Sigel, the other town with the greatest amount of prime agriculture lands in the planning area, low density development standards are provided for in the town zoning ordinance to allow some residential uses to occur in the “agricultural district”. If a minimum separation between residences is met, new homes are allowed to develop. Again, this opens up the option to convert prime agricultural soils to non-agricultural uses.

Seneca also has some prime and prime-if-drained soils. The Seneca zoning ordinance treats one- and two-family dwellings the same as Rudolph and Sigel. That is, one- and two-family dwellings are allowed as a permitted use in the agricultural districts.

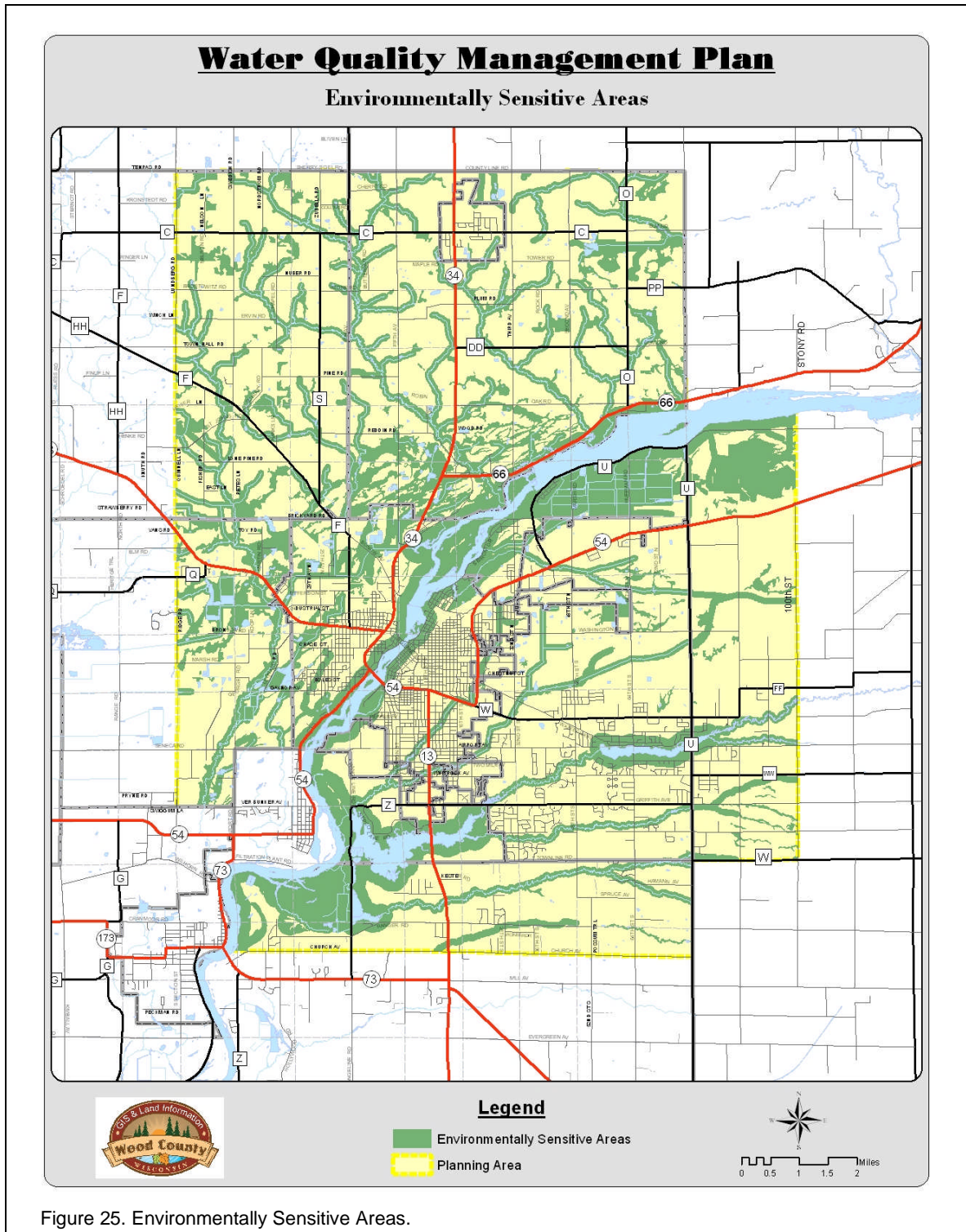
Each of these three towns allow the conversion of the prime agricultural land to other uses provided certain conditions are met, specifically density standards and State POWTS regulations. The conversion of prime agricultural soils from agriculture to other uses results in increased investment of capital to produce an equal amount of agricultural product on lower class soils. Each of the three towns has plan commissions or zoning boards that consider the changing agricultural needs and the changes within their communities that have been brought on by the sagging economy (i.e., the loss of small farms) when determining the future land uses and zoning districts in their communities.

### **Composite Environmentally Sensitive Areas**

The environmentally sensitive areas that have been discussed in this chapter are shown on a composite map in Figure 25. Because of the small scale of the map, field survey work would be required to determine exact locations of wetlands, navigable waters, floodplains, and other ESAs. DNR staff will assist in determining navigability of streams and the U.S. Army Corps of Engineers will conduct wetland surveys. The Wood County Planning & Zoning Office is available for floodplain information and to provide guidance regarding obtaining LOMRs and LOMAs.

If questions or controversy arise regarding an ESA delineation on a specific site, the DNR water resource specialist will be requested to participate in field work with the other agencies listed. Findings and conclusions of site inspections and field surveys take precedence over maps in this planning document. Maps that appear in this report have been prepared using the best available data at the time of preparation.

Many of the ESAs are already protected under current federal, state and local laws and ordinances. Floodplains are an example. Floodplains come under the strict regulations of the Federal Emergency Management Agency. Wetlands are another example. The Wisconsin DNR has officially mapped wetlands across the state. All wetlands in Wisconsin are protected under state laws and administrative codes. It may be appropriate for local communities to zone ESAs as conservancy or, where appropriate, for low-density development. Some local zoning may already have done so. Intensive urban development requiring public sewer should be precluded by local zoning ordinances in the ESAs. Public sewerage of existing intensive development may be required to protect the ground and surface water of nearby environmentally sensitive areas, specifically nearby wetlands and streams, but extension of public sewer for further development in these areas should not be allowed. Development may occur in ESAs provided public sewer is not involved and provided that the proposed development complies with state, federal and local laws, ordinances and regulations.



## Conclusion

This chapter has inventoried the natural resource and environmental constraints to development and has examined the value of natural conditions to the study area as opposed to altering those conditions for more intensive development. Some environmentally sensitive areas, it has been pointed out, are protected from encroachment through state and local legislation.

In general, public sewers within the service boundary are prohibited in all floodplain areas and in those wetlands that are included within ESAs. Areas with groundwater and bedrock near the surface, as well as the few areas with steep slopes, should be carefully scrutinized before development plans are approved to ensure that such plans are compatible with the public interest. The factors of concern that require review by potential developers and local units of government include the increased costs of development and maintenance that may be associated with housing, streets, and public sewer and water systems in environmentally sensitive areas. Such costs arise when structures are required to be flood proofed, and for higher cost repair and maintenance to damaged structures, roads and infrastructure that is installed in unsuitable soil conditions.

A large portion of the service area is comprised of land which has limitations for shallow excavations. Although the greatest development demands are projected to occur outside such areas, there will be some development pressure in areas that have certain limitations for shallow excavations. Except for such specific sites that are also classified as wetlands or floodplains, those areas that have shallow excavation limitations will require dewatering and some rock removal if public sewer is to be installed. There is existing development in the shallow excavation limit areas that need municipal sewers now or will during the planning period.

Finally, environmentally sensitive areas are or will be protected from development in the service area through local zoning, sewer extension review procedures under state codes, county ordinances and state laws. Encroachment of ESAs straddle the service area boundary line will also be discouraged through local and county planning and zoning programs. It's important to note that environmentally sensitive areas that are protected by Ch. NR 121, Wisconsin Administrative Code are precluded from development.

## **CHAPTER 5. EXISTING FACILITIES**

---

### **General**

Within the planning area that was established at the outset of this report, there are two municipal systems. The service areas of those systems, shown in Map 16, are restricted to the incorporated limits of Wisconsin Rapids and Biron, with few exceptions as discussed below. The balance of the area is dependent upon private on-site waste treatment systems, or POWTS (commonly called “septic systems”). The following paragraphs provide detail regarding existing treatment facilities in the 20-year sewer service boundary of the Wisconsin Rapids urban area.

### **City of Wisconsin Rapids<sup>6</sup>**

#### **Collection System**

The City of Wisconsin Rapids sewage system includes a collection system that includes four main lift stations and a wastewater treatment plant. Additional collection of wastewater is provided to recreation vehicles and septic and holding tank wastes from haulers who pump out of tanks that serve residential and some commercial structures and deposit that waste into concrete holding tanks. From those holding tanks, the waste is gradually introduced into the waste stream from the collection system.

The four main lift stations are located on Dewey Street, Pepper Avenue, Two Mile Avenue and on the west side. The combined capacity of the three east side lift stations is 12.28 MGD. They have a combined storage of 77,500 gallons available in wet wells, interceptor sewers and manholes. Over 9,000 feet of force main discharge to these lift stations.

The West Side lift station has a design capacity of 4.32 MGD. It has approximately 22,500 gallons of storage in the wet well, interceptor and manholes. About 5,200 feet of 20-inch diameter force main is discharged to the wastewater treatment plant.

The collection system was described in the 2007 facilities plan as “generally in good condition.”

#### **Treatment System**

The Wisconsin Rapids Treatment Plant went into operation in 1969. The west side treatment plant, which supplied primary treatment, was connected to the new plant in 1974 with a river crossing across the Wisconsin River.

The treatment plant is designed for a population of 19,257 through the year 2030. The plant is designed for an average annual flow of 3.54 MGD and a peak monthly flow of 5.27 MGD. The designed peak hour flow is 12.10 MGD. The loading design of the plant is 17.826 pounds of BOD per day.

Treatment at this plant includes mechanical screening, grit removal, primary clarification, secondary treatment- activated sludge process, final clarification, ultraviolet disinfection, chemical

---

<sup>6</sup> The information presented in this section has been extracted from the “Facilities Plan for Wastewater Treatment Plant Modifications” for the City of Wisconsin Rapids. That plan was completed by Foth Infrastructure & Environment, LLC in 2007. Additional detail can be found in that report.

phosphorus removal system, backup polymer feed system, and backup chlorination system. Sludge handling operations consist of gravity belt sludge thickener, anaerobic sludge digestion, methane gas utilization, and liquid sludge storage and land-spreading. Gas that is generated by the anaerobic decomposition process is burned. Treated effluent is discharged from the plant to the Wisconsin River under a WPDES permit.

The Wisconsin Rapids treatment plant was built to comply with the Department of Natural Resources minimum requirements of secondary treatment and chemical chlorination of all municipal wastewaters. A detailed description of the treatment system and how it works can be found in Section 2.7.2 (page 11) and Table 2-2 (page 14) of the June, 2007 facilities report.

In the 2007 facilities plan, the treatment plant facilities, including structures and equipment were described as having been “well maintained and, in general, are in reasonably good condition.” That plan noted that the facilities that were not rehabilitated in the 1993 modifications are now past their design and useful productivity service life of 20 – 30 years. The 1993 modifications were completed to replace much of the original equipment and refurbish some existing buildings.

In the years 2009-2011, a \$28 million upgrade was done to the Wisconsin Rapids treatment plant converting it to thermophilic phase anaerobic digestion (TPAD). This has enabled the plant to produce class (a) or high quality sludge. The upgrade also included: new bearingless turbo compressors for aeration housed in a new building, new SCADA system; new primary scum and sludge pumps housed in a new building; a new moving bed bio-reactor (MBBR) for higher capacity and efficiency of soluble waste treatment; a new UV light disinfection system housed in a new structure, new mesophilic digester with gas holder cover; a new solids process building and tankage that includes new rotary drum thickeners to thicken sludge, new rotary fan presses to dewater sludge; and a new activated sludge tank and a 4 acre sludge drying pad. There is also a bio/natural gas generator that generates supplemental electricity and has its waste heat captured to heat the hot water loop that will heat the digesters and the building.

### **Village of Biron**

The Village of Biron had a primary treatment facility consisting of a primary settling tank with chlorination and an anaerobic digester. Combined sanitary and storm sewers and aging, deteriorating infrastructure throughout Biron allowed a high amount of clearwater infiltration, which created several problems including overloading of the treatment plant, bypassing of raw sewage around the plant and discharging of inadequately treated sewage into the Wisconsin River. Because of these problems, the Wisconsin Department of Natural Resources ordered secondary treatment facilities to be provided by the Village. Construction plans for a secondary treatment plant were given State approval, but before necessary grants could be obtained, State and Federal funding requirements were revised and the nonproliferation of discharge points policy established.

Because of the changes in requirements and the poor physical condition of the Biron sewage collection and treatment system, the Department of Natural Resources ordered a feasibility plan to be prepared, which would analyze alternate treatment system configurations for Biron, Wisconsin Rapids and Grand Rapids and recommend the configuration that calculated out to be the most cost-effective. The result of that 1972 study was that the “cost-effective” system was determined to be a regional system whereby wastes from Biron, Grand Rapids and Wisconsin Rapids would be treated in Wisconsin Rapids treatment plant. It was recommended

that the City begin planning immediately for orderly expansion to accommodate the additional daily load. That study also recommended the consideration of a metropolitan sewage commission to review sewer extensions and rates. The physical plant has undergone expansion and upgrading on several occasions since that plan was published, but a metropolitan sewage commission was never created. Discussion of the treatment plant is presented in the previous section of this chapter.

### **Village of Rudolph<sup>7</sup>**

Wastewater in the Village of Rudolph is presently treated in a lagoon system that was constructed in 1981. The Village system consists of two aerated lagoons operated in series for treating domestic wastewater generated in the Village. New effluent ammonia limits were enacted in 2005, limits that the existing treatment facility could not meet. A follow-up facilities plan concluded that it is not feasible to upgrade the existing lagoons for inclusion in a new treatment system for the Village. Options were studied for possible upgrades to the system, but it was determined that regionalization with the Wisconsin Rapids treatment system was the best alternative for treatment and disposal from both an environmental and cost perspective.

Improvements to the Village of Rudolph wastewater facilities are being assisted with funding from the USDA Rural Development program. Rudolph and Wisconsin Rapids have an intergovernmental agreement for the transmission and treatment of the Village's sewer effluent. The improvements will include the construction of a new wastewater pump station at the Village's current treatment facilities site, and approximately five miles of sanitary force main along the right-of-way of State Highway 34 between the Village and the City of Wisconsin Rapids. Sewer flows will discharge into the existing Wisconsin Rapids sewer infrastructure for transport and treatment at the Wisconsin Rapids treatment plant.

Mechanical equipment will be removed from the existing mechanical building at the Rudolph site. The lagoons will eventually be converted to wetlands. Rudolph will retain ownership of the site on which the existing treatment facilities are located.

Construction of the sewer lines from Rudolph to Wisconsin Rapids is planned to begin in the fall of 2011, with completion early in 2012. The improvements will be online early in 2012.

### **Village of Port Edwards<sup>8</sup>**

The current wastewater treatment in the Village of Port Edwards was designed in 2003 with construction completed in 2006. The oxidation ditch plant is the third plant that has served Port Edwards and replaced a trickling filter plant built in 1969 operating through 2005.

The wastewater plant is designed to service a population of up to 2,168 as well as commercial and industrial loadings in Port Edwards. Average and design loadings are as follows:

---

<sup>7</sup> Material in this section was provided by MSA Professional Services, August 2010.

<sup>8</sup> Material in this section was provided by the Port Edwards Village Administrator/Engineer, August, 2010.

	2010 data	Design Capacity	Reserve Capacity
Average Daily Flow (mgd)	.293	.538	.245
BOD (lbs/day)	190	440	250
TSS (lbs/day)	11.4	416	404

Physical features include a headworks building, oxidation ditches, final clarifiers, control building, digester, sludge storage tank, effluent flume, and two storage buildings.

Treatment includes screening and grit removal at the headworks building, aeration in the oxidation ditches, final settling in the clarifiers, return activated sludge, sludge management, and overall system control in the control building, sludge consolidation in the digester and sludge storage tanks, and ultra-violet disinfection at the effluent flume.

Treated wastewater is discharged to the Wisconsin River and processed sludge is used as soil conditioning.

In 2011, the Port Edwards wastewater treatment plant has reserve capacity for residential, commercial, and industrial development while maintaining a competitive rate structure.

### **Unincorporated Towns**

There are all or portions of seven unincorporated towns in the planning area: Grand Rapids, Rudolph, Saratoga, Seneca, Sigel, Grant, and Plover. With very few exceptions, the only sewage disposal systems are private, on-site systems, primarily conventional septic systems. Holding tanks, pressurized mound systems and area fill systems are also common, mostly in heavier soils and soils that have high groundwater conditions. The few exceptions mentioned are cases where public buildings lie just outside the Wisconsin Rapids city limits and are of such size that public sewer is necessary. The Mid-State Technical College campus is served by public sewer. Lincoln High School and Alexander Field (South Wood County Airport) are other examples. In all cases, the facilities served by public sewer that are in unincorporated areas are public buildings.

### **Designated Management Agencies**

Chapter NR 121.03(8) of the Wisconsin Administrative Code defines a “designated management agency” as “any agency designated in an areawide water quality management plan having responsibility for implementing specific plan recommendations”. Designated management agencies for this areawide plan and the services for which they are recommended to be responsible for are as follows:

1. City of Wisconsin Rapids is recommended to be responsible for providing sanitary sewer and public water service within the corporate limits of the city and outlying unincorporated areas that are in need of sewer services.
2. Village of Biron is recommended to be responsible for providing sanitary sewer and public water service within the corporate limits of the village. Sanitary sewers are to be part of the areawide system with treatment to be provided by the Wisconsin Rapids treatment plant.

3. Village of Rudolph is recommended to be responsible for providing sanitary sewer and public water service within the corporate limits of the village. Sanitary sewers are to be part of the areawide system with treatment to be provided by the Wisconsin Rapids treatment plant.
4. Grand Rapids Sanitary District is recommended to be responsible for providing sewer and public water within the boundaries of the sanitary district, with sewage treatment to be provided by the Wisconsin Rapids treatment plant whenever feasible.





## **CHAPTER 6. DELINEATION OF FUTURE SEWER SERVICE AREAS**

Preceding chapters of this plan have documented several physical and demographic factors that can be used to describe a community's current size and its potential for future growth. Several individual analyses were conducted including current and projected population densities, and barriers to development such as wetlands; floodplains and shoreland areas; soils with high groundwater conditions; natural areas and habitat for endangered, threatened or protected plants and animals; and more. This chapter uses those earlier analyses, coupled with projections of how much land is needed to accommodate the projected future land uses, to determine the future Sewer Service Area (SSA) boundary for the Wisconsin Rapids area.

### **Land Use Projections & Allocations**

Each of the municipalities that are a partner in this plan has completed a comprehensive plan pursuant to Chapter 66.1001, Wis. Stats.<sup>9</sup> Each has adopted their visions for the future of their respective communities. Those plans contain projections of how much additional land will be needed to accommodate future residential, commercial, industrial and other needs. Several types of land uses are created as a community develops. The main uses that normally come to mind, however, are residential, commercial and industrial. Residential uses included several types of housing that are constructed at different densities and consume various amounts of land. Single-family dwellings remain the most common in the planning area and certainly dominate the unincorporated areas. In the cities and villages, it is not uncommon to find multiple-family structures, including apartment buildings, condominiums, and various senior housing projects. Commercial areas included everything from zero lot line downtown buildings, retail malls and small shopping centers, and stand-alone stores from small retail establishments to big box stores. Industrial areas included industrial and business parks, and individual manufacturers ranging from small to very large.

In the 1985 plan, there were 21,681 acres. During the time between 1985 and this update, the acreage in the SSA has remained the same although the boundary has changed shape with Type I Amendments. Amendments were made to the SSA boundary in the years 1991, 2002 (2 amendments), 2005, 2008, and 2011. The amendments impacted from as little as about 3 acres to 827 acres.<sup>10</sup> The last and largest amendment added the Village of Rudolph to the Wisconsin Rapids SSA, including land between the village and city that serves as a connection to the sanitary sewer system. That amendment, likewise, required removal of a substantial portion of the southeast portions of the previous SSA. Much of the area that was removed has been added back into the SSA under this plan. It is identified as Area A in Figure 26.

Table 5 provides an estimate of future land use needs for these three major land use categories to the year 2030, with the allocation to each community in the planning area. Some explanation is needed, however, to clarify the numbers that appear in the table for some

---

<sup>9</sup> The Village of Biron Comprehensive Plan has not been adopted, but is in final draft form at the time this plan was drafted.

<sup>10</sup> The 827-acre amendment added the Village of Rudolph. In an email to the Wood County Planning & Zoning Director, WDNR Wastewater Facility Planning Coordinator Tom Gilbert said, "I might point out that we could have accepted this [amendment] without the proposed area being removed from the sewer service area (to offset the added area). ...this is a case of adding an entirely separate community with an existing service population, so the deletion of the service area wasn't necessary from our viewpoint." The Policy Committee and area WDNR representatives felt it important to add the previously deleted back into the SSA with this plan update.

communities. Only small portions of the towns of Grant, Plover, Saratoga, Seneca and Sigel are in the planning area and, thus, in the sewer service area. The highest concentration of development in the Town of Grant is in the planning area and proposed SSA. For purposes of this study, it is assumed that 80 percent of the residential development (160 acres) and all of the commercial and industrial development will occur in the Kellner area, which the Policy Committee determined should be in the SSA. That area is identified as Area A on Figure 26.

	Land Use Type			Total Allocation
	Residential	Commercial	Industrial	
C. Wisconsin Rapids	70	150	200	420
V. Biron	180	15	25	220
V. Rudolph	5	0	0	5
T. Grand Rapids	455	11	35	501
T. Grant	160	10	10	180
T. Plover	0	0	0	0
T. Rudolph	0	0	0	0
T. Saratoga	410	39	0	449
T. Seneca	88	25	0	113
T. Sigel	100	0	0	100
Totals	1,468	250	270	1,988

Source: Comprehensive Plans and Wood County Planning & Zoning Office

That portion of the Town of Plover that is in the planning area and SSA is not likely to experience a great deal of development until the business park in adjacent Biron develops. While it is not likely that there will be much development, the Policy Committee directed that portions be included in the Planning Area in anticipation of development during the planning period.

The Town of Saratoga has two development cores; one in the northern tier that includes residential and commercial development along the Highway 13 corridor, and the other closer to the City of Nekoosa on the west side of the Town along the Highway 73 corridor. The northern core is, by far, the more densely developed and, it is expected that trend will continue. For this plan, it is assumed that 70% of the new residential acreage and all of the commercial acreage will be in the northern tier of the Town. The SSA includes an area around Nepco Lake, identified as Area B on Figure 26. That area has recently been proposed for high-end residential development, including over 100 single-family and condominium units. Construction of roads and some units is slated for 2012.

In the Town of Seneca; most of the new residential and commercial development is expected to take place in the eastern tier of the town and it is that area that is included in the SSA. As one goes further west in Seneca, soil conditions make development more difficult. For purposes of this plan, it is assumed that 90 percent of the Town's projected residential needs will be in the proposed SSA, identifies as Area C on Figure 26.

The NCWRPC projected future residential needs in Sigel to be 250 acres, commercial to be 15 acres and industrial development to consume 40 acres. That development will likely be closer to the Village of Vesper, with little near Wisconsin Rapids. Only a fragment of the projected needs are included in the planning area for this study.

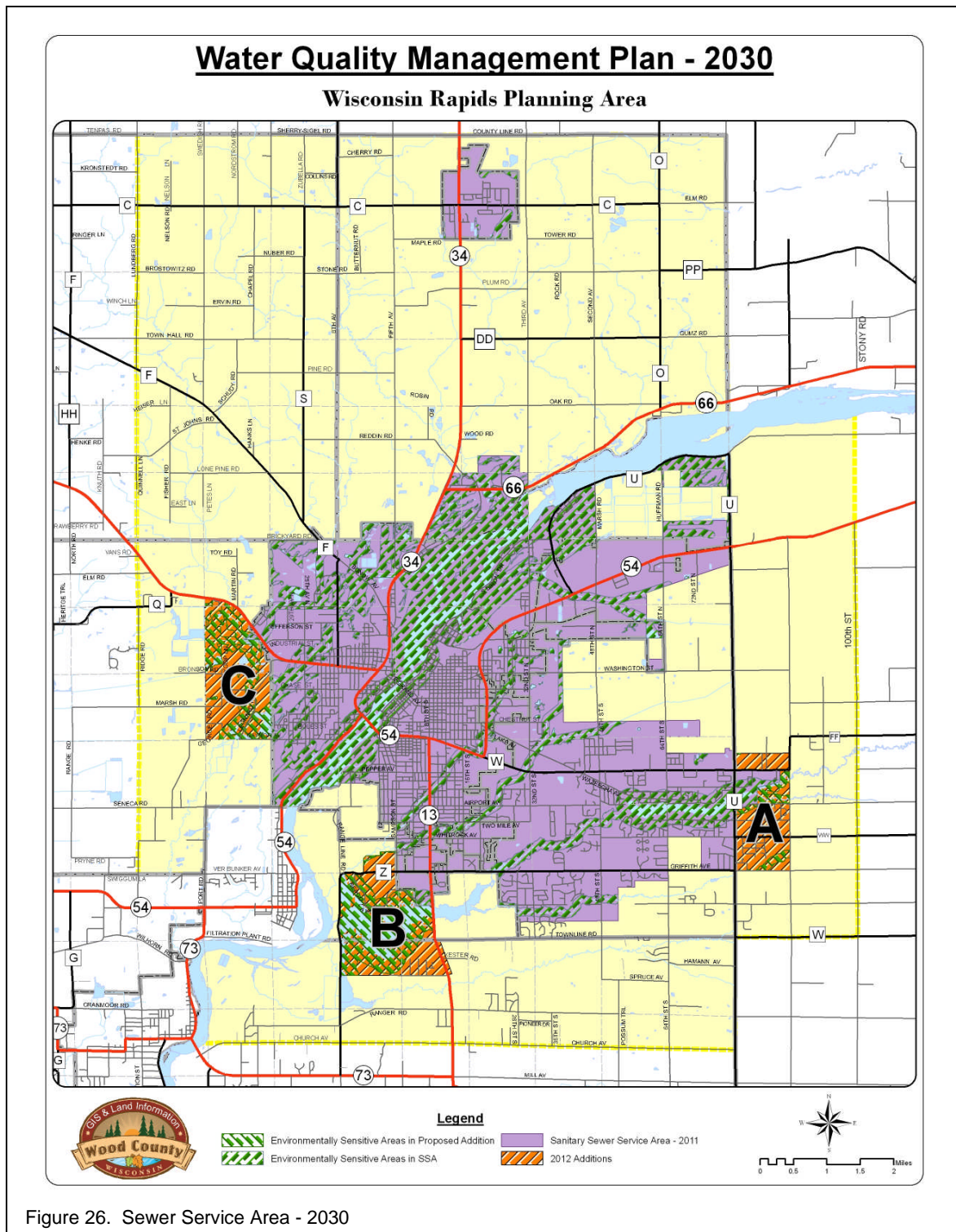
Although residential, commercial and industrial land uses consume most of the developed land in communities, other land uses are necessary and common. Transportation is one. Traditional right-of-way for streets and highways consume as much as 25 percent of the developed land area in Wisconsin communities. That number is lower in Wisconsin Rapids, due in part by the low number of four-lane streets and highways. It is closer to 20 percent, adding another 605 acres in the planning area to the year 2030.

Parks and open spaces is another supportive land use. The North Central Wisconsin Regional Planning Commission (NCWRPC) recommends that communities plan for 10.5 acres per 1,000 population. This standard does not include specialized outdoor recreational facilities like nature preserves, hunting grounds, public utility lands, golf courses, athletic fields, private facilities or school lands. The NCWRPC suggests that their recommended standard may be conservative in meeting current and future needs in the region. Using that standard, though, results in an additional 108 acres of developed parks and recreation areas by 2030.

The total land area requirements for the Wisconsin Rapids urban area are listed in Table 6. Using the land use requirements that were calculated in Tables 5 and 6, the Policy Committee established the future sewer service area boundary to be that as displayed in Figure 26. The SSA for 2030 includes 25,018 acres (see Footnote 10 on previous page). About 5,325 acres are environmentally sensitive areas.

<u>Land Use</u>	<u>Acreage Demand</u>
Residential	1,468
Commercial	250
Industrial	270
Parks and Open Spaces	108
Road Right-of-Way	605
Total	2,701

Source: Community Comprehensive Plans and Wood County Planning & Zoning Office, 2012.



## **CHAPTER 7. PLAN IMPLEMENTATION & INSTITUTIONAL STRUCTURE**

### **General**

The purpose of this chapter is to establish simple, complete guidelines for putting the plan to use. Specific topics addressed in this chapter include the local review of sewage treatment facility proposals, the allowable use of interim solutions, how the plan can be amended and by whom, and when and how the plan will be subject to comprehensive updating processes.

### **Sewer Extension Review Process**

This plan provides guidelines for local review of applications for extension of public and private sanitary sewers in the Wisconsin Rapids urban area. The local review will be conducted to determine whether or not the proposed sewer extension is in conformance with this plan. The determination will focus on the location of the proposed extension; that is, does the extension lie within the delineated sewer service boundaries and does it encroach on environmental corridors or environmentally sensitive areas? Figure 27 and the following paragraphs outline the local review process.

1. The community or their engineers are to submit a written request (letter or email) and simple plan map of the locations of proposed sanitary sewer extension(s), along with any review fees to the Wood County Planning & Zoning Office. The submittal shall also include a brief description of size, beginning and ending points and type of structures to be served. To avoid unnecessary project delays this submittal should be made early in the planning process, prior to completing detailed plans and specifications for the project. Submitting the plans early will ensure that local review is made prior to submittal of the plans to the State and that costly detailed sewer design and specification documents are not prepared for areas that do not conform to the plan and/or areas subsequently rejected by the State.

2. The staff of the Wood County Planning & Zoning Office will review all submissions and will provide the applicant with a review letter within 15 days of receipt of the plan map. The review period will not begin until review fees have been paid in full. If the proposed sewer extension is in conformance with the plan, the letter (known as the 208 letter, conformance letter or WQM review letter) from the Wood County Planning & Zoning Office should be attached to the sewer extension plans which are submitted to the State by the applicant.

3. If the proposed sewer extension is not in conformance with the plan or if there are questions about consistency, the applicant will be notified by letter from the Wood County Planning & Zoning Office within 15 working days after receipt of the proposal.

4. If the proposed extension is not in conformance with the approved plan, the municipality should determine if it wishes to further pursue the sewer extension proposal. If not, no further action is necessary.

5. If the proposal is pursued, the Wisconsin Rapids Area Water Quality Management Plan must be amended in order for the proposed extension to be in conformance. The process for amending the plan appears later in this chapter.

6. After this plan is amended, the applicant municipality should restart the sewer extension review process for its proposed extension, beginning with Step #1, above.

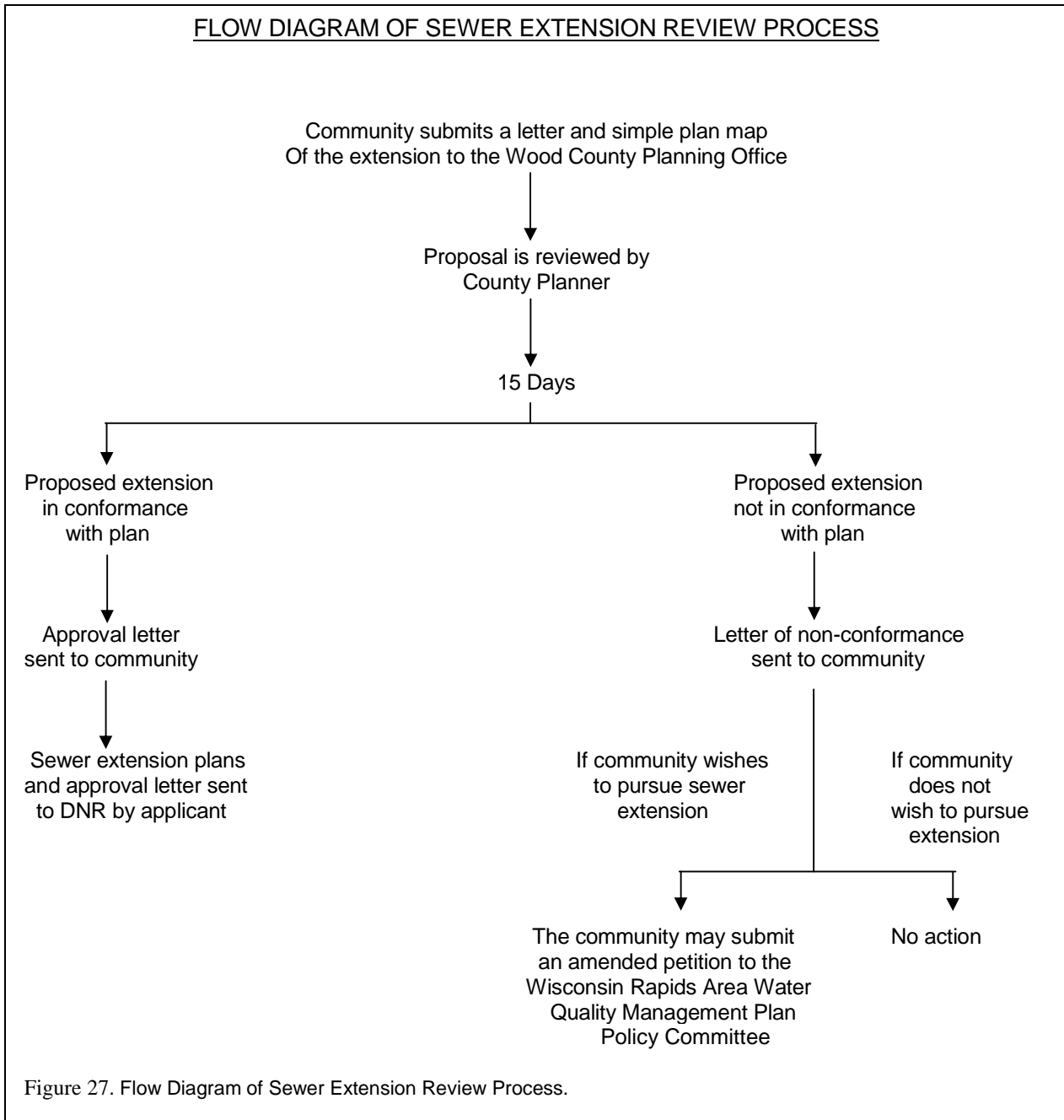


Figure 27. Flow Diagram of Sewer Extension Review Process.

## **Sewerage Treatment Facilities Review**

Each of the planning area municipalities has adopted comprehensive plans pursuant to Chapter 66.1001, Wisconsin Statutes. In addition to comprehensive plans, sewage treatment facility plans have been developed for Wisconsin Rapids and the Village of Rudolph. There also exists a very dated engineering study of the Grand Rapids sanitary district's needs for public sewer facilities. The earlier plans concluded that portions of the towns of Grand Rapids, Seneca and Rudolph that lie adjacent to Wisconsin Rapids will need public sewer and that that service should be provided by the Wisconsin Rapids system (Note: some of those areas have since been annexed to Wisconsin Rapids and now have sanitary sewer service).

It is not always feasible or cost-effective for existing or proposed developments to connect to an existing treatment facility. Such is the case in the planning area where sewer service needs can be justified for higher density developments, but where those developments lie too far from the sanitary sewer collection system and it may not be cost-effective to extend sanitary sewer through lower density areas to reach those areas that are in need. In some instances the areas of need are interrupted by lower density areas that will not require attention during the planning period. The residential developments north of Lake Wazeecha, or the commercial and residential developments in the Kellner area, are examples. There are several viable solutions for the disconnected higher density areas.

### Multi-Structure POWTS

Private on-site waste treatment systems (POWTS) are the only option available in unincorporated areas where a municipal sewer system is not available without annexation to a city or village. In the planning area, commonly used POWTS include conventional, in-ground pressure, and above ground mound systems. In a few instances, holding tanks are used in place of a "treatment" system. It is possible that multiple residential units can be served by one POWTS in areas where a high density of small lots exists, and old on-site septic systems reach the end of their lives and begin failing. Different permitting requirements apply to the multi-structure POWTS depending on the number of structures served, the volume of waste generated daily, or the number of bedrooms served. If the volume of waste exceeds 12,000 gallons per day or an equivalent of 85 bedrooms for residential dwellings, a Wisconsin Pollutant Discharge Elimination System (WPDES) permit from the WDNR is required.<sup>11</sup> One multi-structure POWTS is in the planning area. That POWTS serves several units in a manufactured housing development in the Town of Saratoga.

### Alternate Collection System - Low Pressure Sewers/Grinder Pump (LP/GP) Systems

The use of low pressure sewers and individual site grinder pumps can be a cost effective alternative to conventional gravity collection systems for the collection and transportation of sewerage flows to public treatment facilities. This has been shown in areas of hilly or rolling terrain where deep sewers or lift/pump stations would be required for gravity sewers. These systems can also be cost effective in areas where high rock elevations exist to avoid installation costs of rock blasting or area with high groundwater tables exist to avoid dewatering for installation and inflow/infiltration over time. Often times LP/GP systems are installed around lake areas to avoid these very issues. This type of collection system can also be cost effective in areas where development is remote from the wastewater treatment plant. Small diameter low

---

<sup>11</sup> Chapter SPS 383.22, Wisconsin Administrative Code, December 2011.



pressure sewers have been shown to be less expensive to install, can be installed using horizontal directional drilling (HDD) in many areas, and are independent of slope as they are pressure sewer systems.

Low pressure sewers are the transportation lines for flows collected and pumped by grinder pumps located at individual properties. A grinder pump “system” consists of a sealed tank that collects the building drain flows from residential or non-residential buildings. One or two positive displacement pumps (simplex or duplex) contained within the sealed tank discharges effluent by pressure into a small diameter sewer (typically 1” to 1.5”) which in turn discharges to the low pressure sewer collection pipes. The sealed grinder pump system does not require pumping and is less obtrusive than a septic tank.

A single grinder pump system can serve multiple structures. Multiple grinder pumps are typically connected to the low pressure sewers to provide the pressurized flow through the sewers. The sewer collection pipes transport these flows using the pressure of the multiple grinder pumps to the treatment facilities. Figure 28 shows a typical grinder pump application.

The advantage of these systems is that they replace the POWTS on the individual homeowner’s lot.

HDD is often the method of choice for low pressure sewer installation as these sewers are typically small in size (1”-4” diameter) as compared to conventional gravity sewers. Using HDD the pipe is bored underground which results in reduced restoration costs when compared to conventional gravity systems. Low pressure systems can be designed to cover long distances of a mile or more. Factors to consider when determining cost effectiveness of LP/GP collection systems include:

- Soil Conditions
- Material Costs
- Private System Replacement Costs

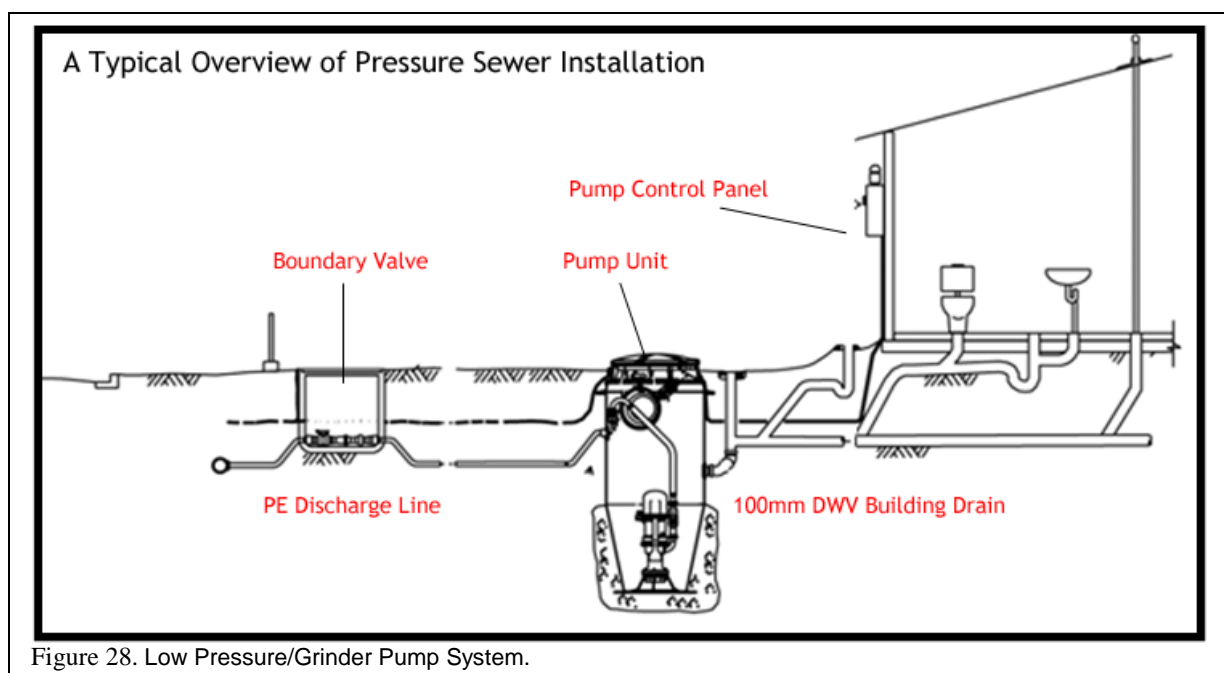


Figure 28. Low Pressure/Grinder Pump System.

- Number of Connections
- Operation & Maintenance Costs
- Life of the System

#### Interim Treatment Facilities - NR 110.08 (5) (b)

One rationale for constructing a small wastewater treatment facility to serve a specific area or development is to provide interim, or temporary, sewage treatment solution until sewers can be extended to the area in need. At such time as permanent sanitary sewers are extended, the treatment plant is usually phased out. This approach can also be used to provide public sewage service to isolated developments where orderly extension of municipal sewer systems cannot be accomplished. Interim treatment facilities may include lagoon systems or small treatment plants like those used in small cities and villages. Although an option for disconnected higher density developments, it may not be as cost effective as the low pressure/grinder pump technology discussed above.

If an interim plant is needed in a particular circumstance, it must meet the criteria set out in Chapter NR 121.05(1)(g) and Chapter NR 110.08(5) of the Wisconsin Administrative Code. Specifically, it must be determined that (a) the plant is necessary to solve a documented and severe water quality (groundwater or surface water) or public health problem related to inadequate existing residential sewage disposal; or is needed to replace an existing treatment facility which is not in compliance with its WPDES permit; (b) the facilities plan for the interim plant demonstrates that the construction and abandonment of the interim plant is more cost-effective than connection to the Wisconsin Rapids system or than the replacement or rehabilitation of the failing POWTS; (c) the plant is municipally owned, operated and maintained; (d) the sewage collection system is designed so that it can be easily connected to the Wisconsin Rapids system in the future; (e) the service area of the proposed system lies entirely within the planned service area of the Wisconsin Rapids system as delineated in this approved WQM plan; and (f) an agreement is signed by all involved municipalities which provides for a specified date of abandonment and connection. The Wisconsin Pollution Discharge Elimination System (WPDES) permits may contain a compliance schedule for the proposal.

#### Plants for Isolated Nonresidential Development - NR 110.08 (5) (c)

The Wisconsin Administrative Code lists criteria to be used where treatment facilities are proposed to serve isolated non-residential development, such as parks and recreational facilities, airports, business and industrial parks, and highway-oriented commercial facilities. Before being approved, it must be found that (a) joint treatment with adjacent wastewater treatment systems is not feasible, (c) the proposed facilities are designed to handle only the waste generated by the proposed nonresidential development, and (d) the WPDES (discharge) permit limits service to the proposed nonresidential development.

### **Amendment Process**

The purpose of this section is to detail the process to be followed by the Policy Committee in amending this planning document. Amendments provide member communities and private developers with the needed flexibility to incorporate changing community trends and continuous public input into the sewer service planning process. Amendments also allow changes that may be necessary to provide consistency between this plan and area comprehensive plans that have been developed pursuant to Section 66.1001, Wis. Stats. The Wood County Planning & Zoning

Office will maintain the records of boundary amendments and incorporate those amendments on the service area map and in the text of the plan during the updating process.

There are two types of amendments that can be used to modify service area boundaries. The first, a "Type I Amendment", involves a situation where the sewer service area (SSA) boundaries are changed, but the SSA acreage remains the same. This rubber band effect allows for acreage to be taken away from one area of the SSA and the same amount of new acreage added in another area. The Policy Committee would generally not become involved in a Type I Amendment. Instead, the administrative procedure for acting on local service area boundary changes would be quite similar to that used for local zoning ordinance amendments.

The second type of boundary agreement, a "Type II Amendment", would increase a community's service area acreage. A Type II Amendment might be justified when a community experiences unanticipated new population growth, or has large new development proposals that will require sanitary sewer service. In all likelihood, if the plan is updated every five years, there will not be any amendments of this type. However, if there is a need for this type of amendment, the Policy Committee would hear and take action on the proposed boundary expansion.

Both types of amendment procedures were developed to provide a fair and reasonable means of reviewing service area boundary changes. These procedures include public notice, public hearings and public records of the hearing proceedings.

Service area boundary amendment standards were established to provide a broad framework for analyzing the merits of proposed amendments and to identify basic parameters for the two types of amendments. These amendment standards are presented below and the detailed procedures for both types of amendment follow.

### **Amendment Standards**

In order to provide an equitable and uniform basis for revising the sewer service boundaries, all proposed amendments that would add territory to the service area should meet standards 1 through 3 below, as well as standard 4 or 5. Annexations or detachments of territory, as defined in Chapter 66, Wis. Stats., within the boundaries of the sewer service area do not constitute amendments to the service boundaries and are therefore not subject to the amendment procedures.

1. There will be minimal adverse impacts on water quality as a result of development stimulated by the amendment.
2. Existing or planned sewage facilities and interceptors must have sufficient capacity to treat the projected wastewater flows generated by the added territory.
3. The boundary amendment must be in general conformance with adopted county or local community development or land use plans and the established goals and objectives of this plan.
4. The configuration of sewer service area boundaries may be modified provided there is no increase in the total acreage projected in the plan for the service area and modifications of the boundary promote cost-effective, orderly and a logical extension of sewer development. This type of amendment would most likely occur where development in a particular location abuts the current limits of a community's service area; a developer or municipality proposes additional development beyond this boundary in conformance with the adopted County or local plans; and

there are adequate existing or planned sewer facilities to serve the needs of the area added. Since this type of boundary amendment does not involve an increase in the community's total service area acreage, an area which is equal to the amount of land added must be removed from the community's service area.

5. The established acreage of the service area may be increased by amending the service boundary only when it can be demonstrated to meet one of the following criteria:

a. There is documented need for sanitary sewer collection system for areas of existing development.

b. There is a documented need for sanitary sewer to serve a proposed unique facility or development.

c. There is a documented need for flexibility to accommodate unanticipated short-term development required for reasonable community growth that is consistent with adopted community comprehensive plans.

d. An environmentally sensitive area is re-designated provided there are no significant adverse water quality impacts.

e. There is an error in the maps, data, projections or allocations of the adopted plan.

## **Amendment Procedures**

### Type I Amendment

Amendment of service area boundaries without increasing the land area that the community has within its sewer service area boundary. For every acre added to the community's service area, an area of equal size is removed. For this type of change, the following procedures should be used (a flow diagram of this procedure is shown in Figure 29):

1. A petition to include or exclude a particular area is filed with the Wood County Planning & Zoning Office. The petition should include:

- a. a map showing the location of the property, with reference to the existing SSA boundary;
- b. general development plans for the area including land use proposals, environmentally sensitive areas to be excluded, and a preliminary timetable for implementing the development plan;
- c. estimates of existing and anticipated population, wastewater generation and means of collection from the area; and
- d. other information deemed relevant to the application or to help the reviewers to make a determination.

2. The Wood County Planning & Zoning Office shall transmit a copy of the petition to the City of Wisconsin Rapids Engineering Department and to the governing body of the municipality(ies) where it is proposed to add and subtract acreage from the SSA for their review and comment.

3. If the petition proposes an addition to the SSA, the Wood County Planning & Zoning Office will propose an area of equal size for removal. All changes will be forwarded to the impacted

municipalities for their review and comment. Generally, land that is recommended for removal from the service area will have a low potential for development during the planning period because of recent development trends in the community, inadequate urban services, unique environmental features, or poor site conditions due to slopes, soils or groundwater.

4. The governing board of the municipality from which the petition originated, or at their discretion, their local planning committee, shall hold a public hearing on the proposed amendment following publication of a Class I Notice in accordance with Chapter 985, Wis. Stats. In formulating a recommendation, the body which is holding the public hearing should consider:

- a. testimony received at the public hearing;
- b. comments from other local committees and the DNR;
- c. information on the impact the amendment would have on sewer line and treatment plant capacity, water supply facilities and other needed services;
- d. conformance with community plans;
- e. development trends in the area;
- f. features of the physical environment; and
- g. conformance with the adopted Sewer Service Area Plan goals and objectives and the amendment standards.

A record of the public hearing proceedings and testimony shall be kept by the body that conducts the public hearing. A copy of the public hearing minutes and follow-up action shall be forwarded to the Wood County Planning & Zoning Office.

5. Following the public hearing, the recommendations of the planning committees and other local committees and agencies should be submitted to the governing body within 60 days after the petition is received.

6. The governing body shall review the recommendations and take final action on the amendment. All or any part of the petitioned land may be added to the service area.

7. Amendments approved by the local governing body shall be submitted to the Wood County Planning & Zoning Office within 30 days of approval. The Planning & Zoning Director shall transmit the amendment to the DNR for final approval.

8. The DNR will review the amendment and notify the community and County Planning & Zoning Director of their decision. If the DNR rejects the amendment, the local community may appeal the decision as provided below.

9. Where the proposal for a Type I amendment is to add an area of 10 acres or less in size and to remove an area of equal size, and neither the area to be added nor the area to be removed contain any ESA lands, the final decision to approve the amendment may be made by the Policy Committee. These amendments do not require WDNR review and approval, but formal notification, including a map and background information, will be forwarded to the WDNR.

#### Type II Amendment

Amends the sewer service area boundary and increases the total service area acreage.

It is anticipated that Type II Amendments will be relatively infrequent because the SSA boundaries will be periodically re-evaluated during the plan update process. This update will,

among other things, propose modifications to the service boundary based upon unanticipated growth occurrences. The following procedure and the flow chart shown in Figure 30 should be used for a Type II Amendment.

1. The community seeking to expand its service area acreage submits a petition to the Policy Committee via the Wood County Planning & Zoning Office. The petition should:
  - a. Include a map showing the location of the properties in question and any environmentally sensitive areas to be excluded, with reference to the existing SSA boundary;
  - b. compare the population projections of the plan with actual population increases in the community;
  - c. compare vacant land projections in the plan with the actual amount of land vacant and anticipated population in the amendment area;
  - d. provide data on the current development density of the community; and
  - e. supply information on the capacity of existing sewer lines and treatment facilities to serve the area.

The Wood County Planning & Zoning Office shall also submit the petition and related information to the DNR for review and comment.

2. Within 60 days after receiving the petition, the Policy Committee shall hold a public hearing and make a recommendation on the proposed amendment following publication of a Class 1 Notice in accordance with Chapter 985, Wis. Stats. In formulating a recommendation, the Policy Committee should consider:
  - a. testimony received at the public hearing;
  - b. comments from other communities, the Wood County Planning & Zoning Office and the DNR.
  - c. information on the impact the amendment would have on sewer line and treatment plant capacity, water supply facilities and other needed services;
  - d. consistency with comprehensive plans;
  - e. development trends in the area;
  - f. features of the physical environment; and
  - g. conformance with the adopted SSA plan goals and objectives and the amendment standards.

A record of the public hearing procedures and testimony shall be maintained by the Policy Committee in the Wood County Planning & Zoning Office.

3. The recommendation of the Policy Committee shall be submitted to the Wisconsin Rapids Planning Commission for review and comment. The Policy Committee recommendation and Planning Commission comments are to be submitted to the Common Council within seven days of the Planning Commission meeting.
4. The Council shall review the recommendations and take final action on the amendment. All or any parts of the petitioned land may be added to the service area by Common Council action.
5. Amendments approved by the Wisconsin Rapids Common Council shall be transmitted by the Wood County Planning & Zoning Office within seven days of approval. The Planning & Zoning Director shall transmit the amendment to the DNR for final approval.

6. The DNR will review the amendment and notify the City and Wood County Planning & Zoning Office of their decision. If the DNR rejects the amendment, the City may appeal the decision as provided below.

### **Other Plan Amendments**

Except for service area boundary changes that follow the specific procedures above, any other amendments to this planning document will require approval of the Policy Committee.

Proposed amendments should be submitted to members of the Policy Committee at least one week prior to the meeting at which action on the amendment is expected to be taken. Amendments approved by the Policy Committee will be transmitted by the Wood County Planning & Zoning Office to the DNR for review and final approval.

### **Appeals**

Any person aggrieved by a DNR water quality management plan decision has a right to file a judicial appeal of the decision. Wisconsin Statutes and Administrative Code establish time periods within which requests to review department decisions must be filed. For judicial review of a decision pursuant to s.227.52 and s.227.53, Wis. Stats., a petition for review must be filed within 30 days after service of the decision. The respondent in an action for judicial appeal is the DNR.

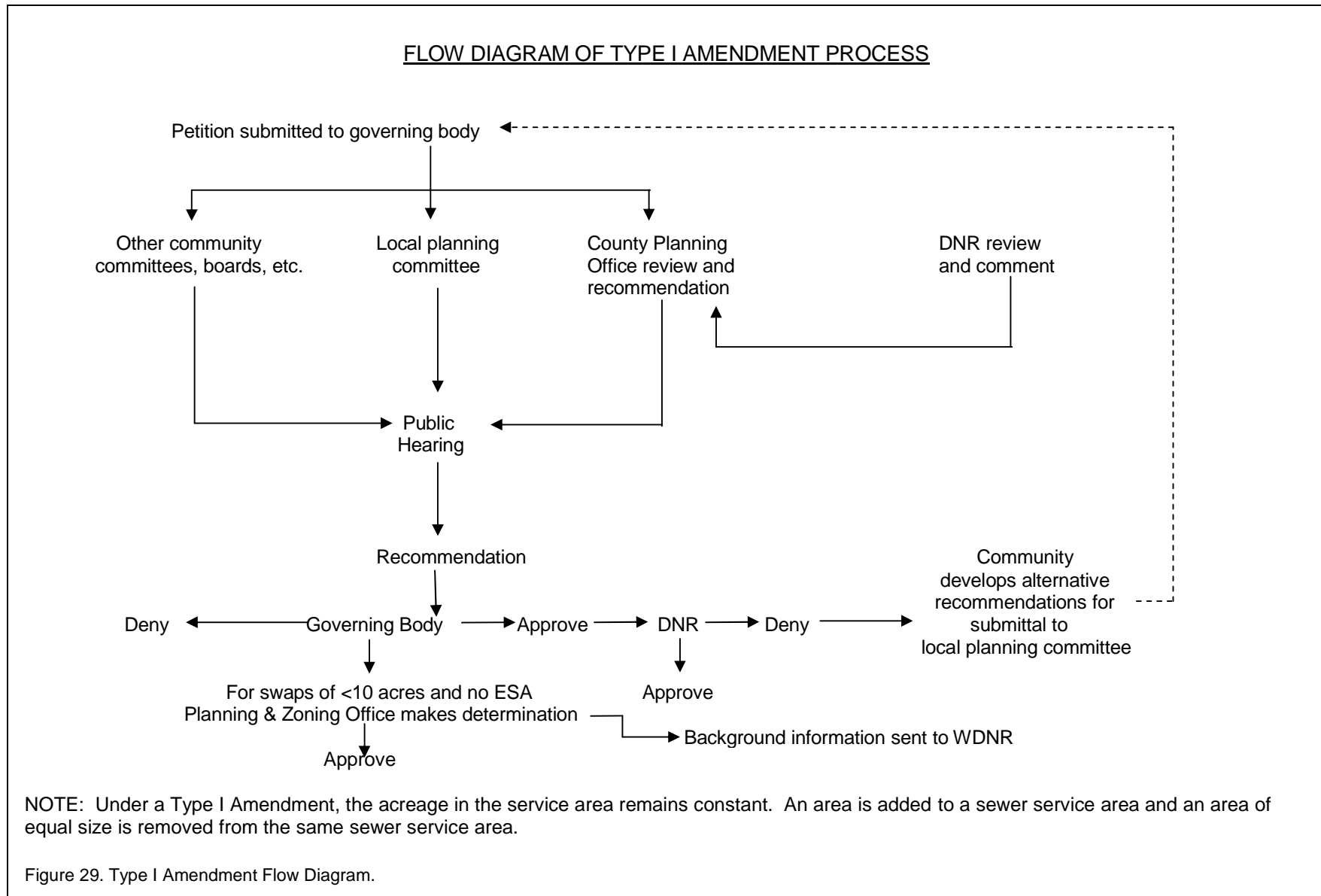
### **Plan Update**

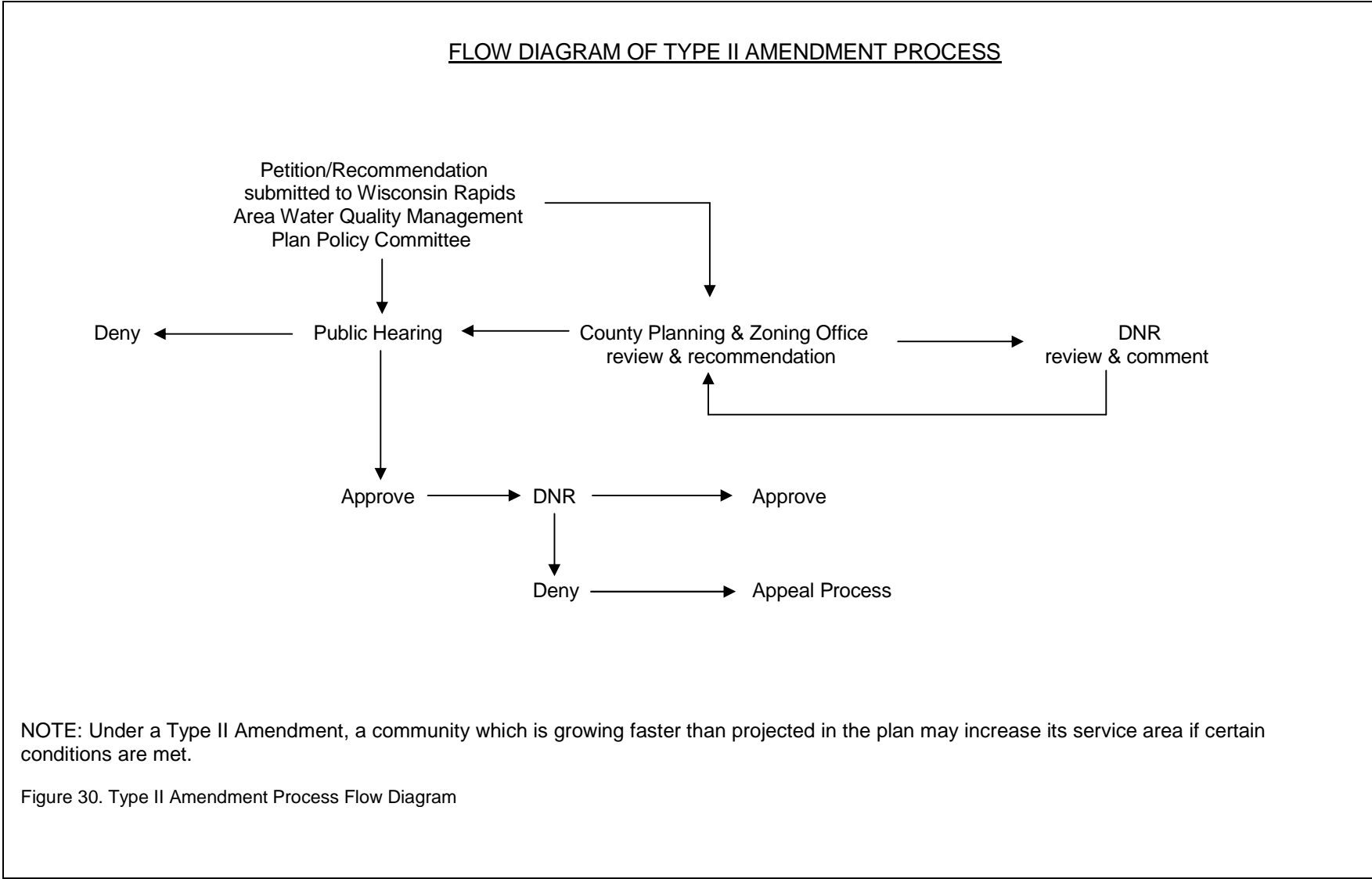
A comprehensive review and update of this plan should be undertaken at least once every five years. If it is determined that a major update is required, the update should include the following as a minimum:

1. a review and update of population and the demographic projections;
2. a review of population densities, household size changes and urban development trends in the area;
3. the impact of major land use changes or developments in the urban area should be assessed;
4. a review of any significant changes to environmentally important lands in the area;
5. revisions to the goals and objectives of the plan to reflect changing conditions, trends and socio-economic atmosphere;
6. a brief description of relevant events occurring during the preceding years which impact on area-wide water quality management planning;
7. a brief description of amendments to the plan and service area boundaries which were made since the last update;
8. a revised service area boundary extended to accommodate the urban area's anticipated population;
9. a review of housing starts since the last update; and

10. a review of changes in the institutional structure for plan review and implementation.









## **CHAPTER 8. PUBLIC PARTICIPATION PLAN**

### **General**

Public participation elements have always been an important component of the planning process in Wood County and this plan's participating municipalities. The Wood County Board of Supervisors adopted a public participation plan on December 20, 2005 in advance of the comprehensive planning process prescribed by Chapter 66.1001, Wisconsin Statutes.<sup>12</sup> The elements of that public participation plan are outlined in the following paragraphs and used together as the public participation element for this plan.

### **Purpose**

The Public Participation Plan serves as a reference for planning staff, policy committee member municipalities and the general public. The plan will be referred to on a regular basis to ensure that the public is given every opportunity to be involved in the planning process. The public can reference the plan to ensure that adequate public participation opportunities have been and are being made available to them as promised.

### **Legal Requirement**

Wisconsin law has, for several decades, set forth required standards for municipalities to make every opportunity for the public to participate in government, including the process of developing and implementing various plans. In the case of the water quality management plans, Wisconsin Administrative Code, Chapter NR 121.04(2)(c)6., requires that the water quality management plan include procedures for public participation.

### **Public Participation Methods and Opportunities**

#### **Meeting Notices and Minutes**

All policy committee planning meetings are open to the public and will be posted in compliance with Wisconsin's open meetings law. Meeting times and locations, and agendas and minutes will be made available to the public upon request. Each meeting agenda will set aside time for public comment. Members of the public who wish to receive a copy of the agenda and meeting packet will be provided .pdf copies via email upon their request. Hard copies will be available for viewing in the Wood County Planning & Zoning Office during regular office hours. Hard copies of the agenda will be available free of charge. Hard copies of the meeting packet will be available for a nominal fee.

#### **Meeting Locations**

During the initial drafting of the WQM plan, policy committee meetings will be held at various municipal buildings throughout the planning area to allow greater opportunity for public attendance.

---

<sup>12</sup> Wood County Board Resolution #05-12-15, December 20, 2005.

### Policy Committee

The Wisconsin Rapids Area Water Quality Plan Policy Committee membership and functions are described in detail in the bylaws in Appendix A. It is that committee, along with the technical committee, that will participate in the planning process, provide guidance and direction to the planning staff in the preparation of the planning document, review and approve the final planning document, and present the comprehensive planning document to the appropriate boards and councils for adoption.

### News Releases

News releases are a way to inform a large segment of the area's population on the plan's progress. Releases will be used when appropriate to create public awareness and encourage public participation.

### Written Comments

Comments will be accepted throughout the planning process in either written or electronic format. Either can be submitted to the Wood County Planning & Zoning Office. For consideration they need to include the name, address and phone number of the person writing the comment.

### Email Updates

WQM plan drafts and updates will be provided to the public in a .pdf format upon request.

### Informational Presentations

Upon request, county planning staff will attend meetings of local organizations to talk about the WQM plan and planning process. These opportunities will serve to educate the public on the legal requirements and impact on new land development, as well as provide insight on the process, and promote meaningful discussion.

### Presentation to Councils & Boards

Upon request of the policy committee representative of the member municipalities, the planning staff will present the final plan, as recommended for adoption by the policy committee, to the respective city council or village and town boards prior to their vote for adoption.

### Informal Discussion

The planning staff realizes that educational materials and structured means of public participation may not be sufficient to address certain issues, or replace meaningful discussion. Staff is available during regular County business hours or by appointment to talk with residents about the plan, and address any question or concerns in person.

### Youth Involvement

Youth can offer fresh perspectives and creative ideas when looking at the future of the planning area. The area's youth are welcome to attend policy committee meetings and provide their ideas, concerns and perspectives. Upon request, the planning staff will be available to present the plan and planning process at area schools, churches or youth groups.

#### Status Reports to County Board

The Wood County Planning & Zoning Office is acting as staff to the Policy Committee on this project. That office is directly responsible to a five-member committee of the County Board. Therefore, staff activity reports are presented by the Project Planner to the County Conservation, Education & Economic Development Committee on a monthly basis. That committee notifies the County Board of the status of the Wisconsin Rapids Area Water Quality Management Plan by way of their minutes to the Board. This procedure provides yet another opportunity for these elected officials to comment on this planning process or the plan document itself.

#### Public Hearing

As prescribed by Chapter NR 121.07, Wisconsin Administrative Code, a public hearing will be conducted at the conclusion of the planning process and prior to presentation to member municipalities for adoption. All interested persons will be welcome to testify at the hearing to present their thoughts or concerns with the plan.

#### **Plan Distribution & Filing**

Following adoption of the Wisconsin Rapids Area Water Quality Management Plan by the member municipalities, copies of the plan will be filed with each member municipality, planning area libraries and the Wisconsin Department of Natural Resources. In addition, the adopted plan will be posted on the Wood County Planning & Zoning Office website.

#### **8.6 Public Participation Plan is Available**

Copies of this public participation element are available to anyone who requests copies from the Wood County Planning & Zoning Office by mail, email, phone call, or at the office during regular office hours.



**APPENDIX A: Policy Committee Bylaws**  
**Wisconsin Rapids Area Water Quality Management Plan**

**PREAMBLE**

In accordance with provisions of the grant for the “Wisconsin Rapids Area Water Quality Management Plan” by the Wisconsin Department of Natural Resources, the Wisconsin Rapids Area Water Quality Management Plan Policy Committee may adopt bylaws to govern its committee operation. It is the intent of the Wisconsin Rapids Area Water Quality Management Plan Policy Committee to enact these bylaws, consistent with the laws of the State of Wisconsin, to further define and regulate the Wisconsin Rapids Area Water Quality Management Plan Policy Committee and those committees and offices established by and responsible to it.

**ARTICLE I – NAME**

**Section 1:** The name of this committee shall be the Wisconsin Rapids Area Water Quality Management Plan Policy Committee and, hereafter, shall be referred to as the Policy Committee.

**ARTICLE II – PURPOSE AND GOALS**

**Section 1:** In accordance with the Wisconsin Administrative Code, Section NR 121.05(1)(g)(4)(b), the purpose of the Policy Committee shall be to assist the Wisconsin Department of Natural Resources in the preparation of an areawide waste treatment management plan and to act in an advisory role to the Department in matters concerning the implementation of the plan. The Policy Committee reflects and recognizes the responsibilities and concern for wastewater treatment issues which are confronting the local units of government in the Wisconsin Rapids area and seeks to recommend solutions to these issues which recognize the regional interdependencies of the local units of government.

**Section 2:** The Policy Committee members shall also serve as a two-way communication vehicle with the public. Each Policy Committee member will report regularly to the municipality they have been appointed to represent.

**Section 3:** The objective of the Policy Committee will be to develop an areawide waste treatment management plan which will assure that state and federally mandated water quality goals concerning the waters of the State in the Wisconsin Rapids area will be achieved and maintained and to act as a continuing advisory body to the Wisconsin Department of Natural Resources.



### **ARTICLE III – COMPOSTION OF POLICY COMMITTEE**

**Section 1 – General:** The membership of the Policy Committee shall consist of the chief elected official of each unit of government or their designee. The designee may be an official or citizen from the general purpose units of government within the urban area. Proof of such designation shall be in such form as is acceptable to the Policy Committee, such as a phone call, letter, or other form of communication.

**Section 2 – Term of Appointment:** Per term of office of the chief elected official.

### **ARTICLE IV – MANAGEMENT**

**Section 1 – Authority:** The government and management of the Policy Committee is vested in the voting membership of the Committee. The Policy Committee may assign its administrative responsibilities to their staff in accordance with Article IX, Section 2.

**Section 2 – Guidance:** The officers, members and staff of the Policy Committee shall be guided and bound in the performance of their functions by the regulations and guidelines of relevant federal agencies; but the laws enacted by states participating herein and by regulations and guidelines promulgated by agencies thereof. Goals and objectives, comprehensive plans, and similar guidelines and documents prepared and adopted by the participating communities shall be recognized and considered by the Policy Committee and its staff wherever appropriate.

**Section 3 – Quorum:** Five (5) voting municipalities of the Policy Committee who are in good standing and are in attendance at any meeting shall constitute a quorum for the purpose of carrying on any business of the Policy Committee at any duly called meeting thereof. No proxies may be allowed in the conduct of affairs of the Policy Committee.

**Section 4 – Voting and Membership:** Policy Committee members or their designated representatives shall be entitled to full voting and membership privileges on all planning issues and studies.

All members shall vote or abstain on all matters. All of the voting requirements shall only apply to those representatives who are in attendance at the meetings and who represent communities which are members of the Policy Committee.

Non-voting ex-officio members of the Policy Committee shall be entitled to hold any office but shall not be entitled to vote.

The format for voting and membership privileges for members shall be allotted in the following matter:

Wisconsin Rapids	8 votes	Rudolph Village	2 votes
Grand Rapids	3 votes	Rudolph (Town of)	1 vote
Biron	2 vote	Saratoga	1 vote
Grant	1 vote	Seneca	1 vote
Plover (Town of)	1 vote	Sigel	1 vote

## ARTICLE V – OFFICERS

**Section 1 – Number:** The officers of the Policy Committee shall be a Chairman, Vice-Chairman and Secretary.

**Section 2 – Vacancies:** Should any office become vacant for any cause, the Policy Committee may select a successor from the Policy Committee members who may serve until the next meeting of the Policy Committee, at which time the Policy Committee shall elect a replacement.

**Section 3 – Removal:** Any of the officers may be removed for cause or if incapacitated or unable to participate in Policy Committee meetings or be able to attend to the affairs of their office. Removal from office shall require a two-thirds (2/3) vote of the Policy Committee present, voting at a legal meeting but in no event less than a majority of the Policy Committee members.

**Section 4 – Chairman:** The Chairman of the Policy Committee shall preside at all meetings of the Policy Committee. He may present to the Policy Committee such matters as, in his judgment require attention, and shall perform such other duties as are entrusted to the Chairman by law or by these bylaws.

**Section 5 – Vice-Chairman:** The Vice-Chairman shall preside in the absence of the Chairman or in the event that the Chairman is incapacitated or unable to serve, and in the absence or disability of the Chairman, his duties shall be performed by the Vice-Chairman.

**Section 6 – Secretary:** The staff shall perform the duties of Secretary of the Policy Committee and shall keep and distribute minutes of all meetings of the Policy Committee, and shall keep and preserve all resolutions, transactions, findings and determinations of the Policy Committee.

**Section 7 – Additional Officers:** The Policy Committee, at any meeting, may create such additional officers as it may deem advisable and prescribe their duties.

## ARTICLE VI – SUBCOMMITTEES

**Section 1:** The Chairman may appoint such subcommittees made up of Policy Committee members only as may be necessary to carry out the purposes of the Policy Committee, and shall designate the Chairman of the subcommittee(s).

**Section 2:** To add technical expertise to Policy Committee decisions, Committee members may ask their perspective community officials to attend meetings. These officials may include, but are not limited to: Directors of Public Works, Engineers, Attorneys, Planners, etc.

**Section 3:** Such other subcommittees may be appointed on a temporary basis by the Chairman upon concurrence with the Policy Committee which are deemed necessary to carry out functions and responsibilities of the Policy Committee.

**Section 4:** No subcommittee shall have the authority to act on behalf of the Policy Committee.

**Section 5:** Each subcommittee to the Policy Committee shall operate under the bylaws as prescribed in Article VI of these bylaws.

## **ARTICLE VII – MEETINGS**

**Section 1:** It is recommended that the Policy Committee meet, at a minimum, biannually. Special meetings may be called by the Chairman or by five Policy Committee municipalities at more frequent intervals.

**Section 2:** The recording Secretary of the Policy Committee shall mail or deliver written notice of each regular meeting to each member of the Committee at least one week prior to such meeting.

**Section 3:** Policy Committee meetings shall be conducted in accordance with Robert's Rules of Order.

**Section 4:** Policy Committee meetings shall be open to the public as prescribed by Section 19.84. Wisconsin Statutes ("Wisconsin Open Meetings Law").

## **ARTICLE VIII – DUTIES**

**Section 1:** To oversee and guide the preparation of an area wide waste treatment management plan for the Wisconsin Rapids urban area in accordance with Wisconsin Administrative Code, Section NR 121.05(1)(g).

**Section 2:** To direct a public participation and information program within the Wisconsin Rapids urban area consistent with the Wisconsin Administrative Code, Section NR 121.08(1)(a).

**Section 3:** To establish institutional mechanisms and procedures to assure prompt review and consideration of all wastewater treatment proposals within the Wisconsin Rapids urban area.

**Section 4:** To establish procedures for plan amendments and updates consistent with Wisconsin Administrative Code, Section NR 121.08(2).

## **ARTICLE IX – GENERAL**

**Section 1:** The Policy Committee may cooperate with, and contribute or accept services from federal, state or local agencies, public or semi-public agencies, private individuals or corporations and may carry out such cooperative undertaking.

**Section 2:** The Wood County Planning & Zoning Office shall be designated as the official planning body for the Policy Committee. Staff assistance provided by the Wood County

Planning & Zoning Office shall be determined and agreed upon in writing setting forth conditions, and, if necessary, such compensation as may be required to complete said work.

## **ARTICLE X – AMENDMENTS**

**Section 1:** A two-thirds (2/3) majority of all votes shall be required to amend these bylaws.

**Section 2:** Proposed amendments to these bylaws shall be mailed to the members at least ten (10) days prior to the meetings scheduled for proposed amending of these bylaws.

## **ARTICLE XI – COMPLIANCE WITH WISCONSIN LAW**

**Section 1 – Inconsistencies:** In the event that these bylaws, or any provisions herein contained, should in any manner be contrary to, or violative of the provisions of the Wisconsin law, the provisions of the Wisconsin law shall prevail.



**APPENDIX B: Policy Committee Meeting Minutes**

- June 9, 2011. Wood County Courthouse
- July 6, 2011. Biron Municipal Building
- August 8, 2011. Rudolph Village Hall
- October 5, 2011. Grand Rapids Municipal Building
- December 7, 2011. Seneca Town Hall
- January 25, 2012. Wisconsin Rapids City Hall
- March 21, 2012 Wisconsin Rapids City Hall (Public Hearing)

## MINUTES

Wisconsin Rapids Area Water Quality Management Plan Policy Committee  
Thursday, June 9, 2011, 8:30 a.m.  
Wood County Courthouse Auditorium, Wisconsin Rapids

Present: Wisconsin Rapids - Mayor Mary Jo Carson, Joe Eichsteadt and Adam Tegen  
Biron – Rick O’Keefe  
Village of Rudolph – President Mark Bade and David Bluhm  
Town of Grand Rapids – Jeanne Fehrman  
Town of Grant – Sharon Schwab  
Town of Rudolph – James Bushmaker  
Town of Seneca – Gary W. Krause  
Town of Sigel – Tony Ruesch  
Wood County Board – Dennis Polach  
Wood County Planning & Zoning Office – Gary Popelka, AICP, EDFP

1. Call to order. Gary Popelka opened the meeting at 8:30 a.m. Those present introduced themselves and the communities they represent.
2. Explanation of the Plan. The Wisconsin Rapids Area Wide Water Quality Management (WQM) Plan was first completed in 1985. It is required under Section 208 of Public Law 92-500, the Federal Water Pollution Control Act Amendment, also known as the Clean Water Act. Every city with a population of 10,000 or more is required to have a WQM Plan to guide sanitary sewer extensions. It is a 20-year plan that is supposed to be updated every five years. The Wood County Planning & Zoning Office has been the designated agency that reviews sanitary sewer extension proposals to assure compliance with the WQM Plan. Review is required before federal and state grants can be approved.
3. Explanation of Policy Committee, Technical Committee and stakeholder municipalities. The Policy Committee consists of the chief elected officials of each community in the planning area. They have the responsibility to review and approve work on the plan and will take the final document to their respective communities for adoption. The Technical Committee is made up of the technical staff from the communities and includes engineers, plant operators, consultants and planners. They will do the actual work of putting the plan together for review and approval of the Policy Committee. Stakeholder communities are those who are included in the planning area, but may not be included in the final 20-year sewer service area (SSA). In the 1985 plan, Sigel was a stakeholder community, but chose not to be on the Policy Committee after it was determined that Sigel would not be in the SSA.
4. Review timeline. The WQM is being funded by the Wisconsin Department of Natural Resources (WDNR). The contract is to have the plan completed by the end of December, 2011. A timeline chart was distributed that schedules the plan to go to municipalities for approval and adoption in November and to the WDNR in December.
5. Bylaws and membership. Although formal bylaws are not required, the WDNR recommends that the Policy Committee have a structured format and set of rules to govern the meetings and voting. Those present reviewed the bylaws that were established in 1985 and made

several changes. There was considerable discussion about membership and the weighted voting system. The consensus of the group was that membership and weighted voting be as listed below. The change in voting will require more intergovernmental cooperation, providing consistency of this plan with the local comprehensive plans.

Member Community	Weighted Votes
Wisconsin Rapids	8
Grand Rapids	3
Biron	2
Rudolph Village	2
Rudolph Town	1
Seneca	1
Sigel	1
Grant	1
Total	19

Election of officers will be on the next agenda. It was decided that staff will serve as Secretary and be responsible for preparing and distributing meeting notices and agendas, and keeping and distributing minutes, resolution, transactions, findings and determinations of the Policy Committee.

6. Goals and objectives. The original plan had four primary goals. Gary Popelka told the Committee that he is reviewing the goals and will have some recommendations for updating the goals, objectives and policies for their consideration at the next meeting.
7. Define the planning area. The Committee reviewed a map of the 1985 planning area and changed it to include all of the Town of Rudolph, plus two sections in the Town of Plover. The Plover sections are being added because of recent meetings regarding changes to Highway 54 and Biron Business Park and changes in land use in that area that could potentially occur. Gary will contact town officials to explain this planning process and invite them to the next meeting. Plover's membership on the Policy Committee will be considered at that time.
8. Schedule future meeting dates, times and places were set for the first Wednesday of each month at 8:30 a.m. as follows:
  - July 6<sup>th</sup> – Biron Municipal Building
  - August 3<sup>rd</sup> – Rudolph Village Hall
  - September 7<sup>th</sup> – Wisconsin Rapids City Hall
  - October 5<sup>th</sup> – Grand Rapids Municipal Building
  - November 2<sup>nd</sup> – Seneca Town Hall
9. Adjourn. The meeting adjourned at 10:05 a.m.

Minutes prepared by Gary Popelka, AICP, EDFP



## MINUTES

Wisconsin Rapids Area Water Quality Management Plan Policy Committee  
Thursday, July 6, 2011, 8:30 a.m.  
Biron Municipal Building

Present: Wisconsin Rapids - Mayor Mary Jo Carson, Dave Laspa, Jim Neitzel, Joe Eichsteadt and Adam Tegen  
Biron – Rick O’Keefe  
Village of Rudolph – President Mark Bade  
Town of Grant – Sharon Schwab  
Town of Seneca – James Schuerman  
Town of Sigel – Tony Ruesch  
Town of Plover – Tim Karcheski  
Wood County Board – Dennis Polach  
Wood County Planning & Zoning Office – Gary Popelka, AICP, EDFP  
Wis. DNR – Scott Provost

Not Present: Town of Grand Rapids, Town of Rudolph

1. Call to order. Gary Popelka opened the meeting at 8:35 a.m. Those present introduced themselves and the communities they represent.
2. Minutes. **Motion by Jim Schuerman to approve the minutes of June 9, 2011. Second by Sharon Schwab. Motion carried.**
3. Town of Plover. At the last meeting, it was proposed to invite the Town of Plover to the Policy Committee meeting and add them to the Committee if they wished to participate. Plover Town Chairman Tim Karcheski was present and indicated that the Town would commit to participating as a member of this group. **Motion by Sharon Schwab to accept the Town of Plover as a member of the Policy Committee and allocate one vote to the town. Second by Mayor Carson. Motion carried.**
4. Election of Officers.
  - A. Chair. Town of Seneca Chairman Jim Schuerman was nominated for Chairman on three calls for nominations. **Motion by Sharon Schwab to close nominations and elect Jim Schuerman as Chairman of the Policy Committee. Second by Mark Bade. Motion carried with the City of Wisconsin Rapids voting nay. The weighted vote was 12 ayes and 8 nays.**
  - B. Vice Chair. Chairman Schuerman called three times for nominations for the position of Vice-Chair. Mayor Carson was nominated. **Motion by Sharon Schwab to close nominations and elect Mayor Carson to the position of Vice-Chair of the Policy Committee. Second by Dennis Polach. Motion carried with the City of Wisconsin Rapids and Town of Seneca voting nay. The weighted vote was 11 ayes and 9 nays.**

5. Bylaws. A revised draft of the bylaws was reviewed. In Article IV, Section 3, the wording for a quorum was changed from “five voting members...” to “five voting municipalities...” The Town of Plover was added as a member in Article IV, Section 4 and given one vote. It was suggested that the Town of Saratoga also be invited to participate because of the amount of residential and commercial development that is in the northern tier of the town. They will be invited to participate and Gary Popelka will report their response at the next meeting. If they choose to participate, they will be allocated one vote. An amendment to the bylaws will be made at that time. **Motion by Mayor Carson to accept the bylaws as amended. Second by Mark Bade. Motion carried.**

6. Define the planning area. A map of the proposed planning area was distributed and discussed. At the last meeting, the planning area was amended to include all of Wisconsin Rapids, Biron, Grand Rapids, and the Town and Village of Rudolph; two sections west of Wisconsin Rapids into Seneca and Sigel; and two sections east of Grand Rapids and Biron into the Towns of Grant and Plover. Scott Provost suggested adding that portion of the Village of Port Edwards that lies east of the Wisconsin River because of recent development proposals around NEPCO Lake. David Laspa said the developer had contacted the Wisconsin Rapids Engineering Department in their early stages of planning to inquire about obtaining sanitary sewer from the City. No further discussions have taken place and no commitments have been made by the City. The committee agreed that this area should be in the planning area. Gary Popelka is to contact the Village of Port Edwards to ask their thoughts about having that portion of the village in the 20-year planning area and to invite them to the next meeting. It was agreed that the Village should be allowed to participate in discussions of the Policy Committee, but would not be an official voting member.

It was then suggested that the Town of Saratoga be invited to participate as a voting member (one vote) because of the residential and commercial development in the northern portions of the town. Gary Popelka is to contact the Town to gauge their interest in participating and report back to the committee. He was also directed to suggest areas of Saratoga that should be part of the planning area and bring back his recommendation in the form of a revised planning area map.

7. Goals, objectives and policies. A draft of suggested goals, objectives and policies was discussed in detail, with several changes suggested.

A. At the suggestion of Scott Provost, under the Environmental Resources Goal’s water quality protection objective, the policy statement #3 – “Control construction site erosion and reduce urban storm water runoff” is to be amended to include a recommendation for reducing the amount of storm water that enters storm water sewers. This can be done with grass boulevards and other methods. Dave Laspa said municipalities are required to implement such methods.

B. Under the same goal’s objective to protect environmentally sensitive areas, the following suggestions will be incorporated:

- (1) Scott Provost recommended adding language to encourage connectivity of environmental corridors.
- (2) Sharon Schwab suggested adding threatened and special concern species to the statement, "Endangered and rare species should be preserved and enhanced."
- (3) Sharon Schwab suggested adding language to protect identified grassland areas because of their importance as wildlife habitat and wildlife movement corridors.

8. August meeting. The August 3<sup>rd</sup> meeting was rescheduled to Monday, August 8<sup>th</sup> at 8:30 a.m. at the Rudolph Village Hall.

9. Adjourn. **Motion by Mayor Carson to adjourn at 9:45 a.m. Second by Dennis Polach. Motion carried.**

Minutes prepared by Gary Popelka, AICP, EDFP

---

## MINUTES


Wisconsin Rapids Area Water Quality Management Plan Policy Committee  
Wednesday, September 7, 2011, 8:30 a.m.  
Village of Rudolph Municipal Building

Present: City of Wisconsin Rapids - Mayor Mary Jo Carson, Dave Laspa, Jim Neitzel, Joe Eichstadt and Adam Tegen  
Village of Biron – Rick O’Keefe  
Village of Rudolph – President Mark Bade and Dave Bluhm (MSA Prof. Services)  
Village of Port Edwards – Joe Terry  
Town of Grand Rapids – Jeanne Fehrman  
Town of Grant – Sharon Schwab  
Town of Seneca – James Schuerman  
Town of Sigel – Tony Ruesch  
Town of Plover – Tim Karcheski  
Wood County Board – Dennis Polach  
Wood County Planning & Zoning Office – Gary Popelka, AICP, EDFP  
Wis. DNR – Scott Provost

1. Call to order. Chairman James Schuerman called the meeting to order at 8:30 a.m. and led the committee in the Pledge of Allegiance.
2. Minutes. **Motion by Mayor Carson to approve the minutes of July 6, 2011. Second by Rick O’Keefe. Motion carried.**
3. Review Draft of Chapter 3. Existing Facilities. Gary Popelka explained the contents of this chapter. The Administrative Code (NR 121) requires that population projections used in the plan be consistent with projections made by the Wisconsin Department of Administration (WDOA) and the U.S. Department of Commerce Bureau of Economic Analysis. The most current WDOA projections were completed in 2008, based on the 2000 census and 2005 WDOA population estimates. The Wood County Planning & Zoning Office (WCPZ) updated the projections, based on the 2010 census, using the simple linear regression model provided in Microsoft Excel. The WCPZ projections to 2030 are about six percent lower than WDOA’s earlier projections. The same method was done for future households. WDNR will be asked to provide preliminary approval of the projections.  
  
Maps of population density and address density (structures) were reviewed. It was noted that scales of low-to-high were used versus an actual number of persons or structures per acre. WDNR will be asked to verify that these scales are acceptable.
4. Defining the Planning Area. The revised map of the planning area was reviewed. It was requested that municipal boundaries be included in the legend and the names of each municipality be added. **Motion by Jeanne Fehrman to approve the final planning area map with the addition of municipal boundaries in the legend and names of municipalities on the map. Second by Tim Karcheski. Motion carried.**

5. Review Draft of Chapter 5. Existing Facilities. This chapter inventories the current treatment facilities in the planning area and their status. There are still sections that need to be completed.
6. Review of NR 121.05. A copy of the Wisconsin Administrative Code that details what must be in the plan was distributed and discussed briefly.
7. Looking Ahead to October Meeting. The plan implementation chapter and public participation plan will be discussed at the October meeting. The Policy Committee will be asked to take action to officially adopt the public participation plan. If a draft is complete, the environmentally sensitive areas chapter will also be reviewed.
8. October Meeting. The October 5<sup>th</sup> meeting will be held in the Grand Rapids Municipal Building at 8:30 a.m.
9. Adjourn. **Motion by Mayor Carson to adjourn at 9:10 a.m. Second by Dennis Polach. Motion carried.**

Minutes prepared by Gary Popelka, AICP, EDFP

---

## MINUTES

Wisconsin Rapids Area Water Quality Management Plan Policy Committee  
Wednesday, October 5, 2011, 8:30 a.m.  
Town of Grand Rapids Municipal Building

Present: City of Wisconsin Rapids - Mayor Mary Jo Carson, Dave Laspa, Jim Neitzel and Adam Tegen  
Village of Biron – Rick O’Keefe  
Village of Rudolph –Dave Bluhm (MSA Prof. Services)  
Town of Grand Rapids – Jeanne Fehrman  
Town of Grant – Sharon Schwab  
Town of Seneca – James Schuerman  
Town of Plover – Tim Karcheski  
Wood County Board – Dennis Polach  
Wood County Planning & Zoning Office – Gary Popelka, AICP, EDFP  
Wis. DNR – Scott Provost  
Others Present: County Supervisor Bill Clendenning, District 15

1. Call to order. Chairman James Schuerman called the meeting to order at 8:30 a.m. and led the committee in the Pledge of Allegiance.

2. Public Input. None.

3. Minutes. Sharon Schwab noted a typographical error to be corrected. **Motion by Tim Karcheski to approve the minutes of September 7, 2011. Second by Adam Tegan. Motion carried.**

4. Committee Comments about Earlier Drafts. Mayor Carson said it is important that the plan include additional technical information about the Wisconsin Rapids treatment plant so that the DNR and area officials know what the plant can and can not do, what sort of capacity there is to serve a sewer service area, and how much capacity exists for industrial waste. Treatment plant operator Jim Neitzel informed the committee that the plant capacity could be quadrupled on the existing site footprint. Ocean Spray is using only 1/3 of the capacity that they purchased. He is providing Gary Popelka with technical information to be included in the appropriate chapter of the plan.

5. Review Draft of Chapter 7. Plan Implementation & Institutional Structure. Gary Popelka explained that the purpose of this chapter is to detail the process used to implement the plan once adopted and approved by the DNR. He explained how requests are made from the Engineering Department for compliance reviews for sewer extensions that are in their work program each year. He noted the language about submittal of a review fee, along with the sewer extension requests. Currently there is no review fee, but the committee may want to consider one in the future for those requests from private developers. It was also noted that the 15-day review of the requests will not begin until review fees have been paid in full. The DNR-Madison office also asked for some language clarifications, with which the committee agreed.

The section regarding sewerage treatment facilities review was in the original plan and has been left in this draft with few modifications. This section deals with temporary and interim treatment facilities and plants for isolated nonresidential development, as provided in Ch. NR 110.08, Wis. Admin. Code. There was discussion about the Grand Rapids Sanitary District, which is fairly inactive, although they meet annually. After considerable discussion about the function of the sanitary district, it was agreed that the Chairman of that group be contacted about this plan and asked to provide information to be included in the plan.

Scott Provost offered several thoughts about the language about small scale treatment plants and interim (temporary) plants. He noted that since the original plan was written in 1985, new technology has been developed, approved and used that may make this language obsolete or irrelevant. He asked about what constitutes a “small scale” system, noting that there are private on-site waste treatment systems that can serve multiple structures. These aerobic systems are common in other states and are being used in Wisconsin. Gary Popelka will contact the Madison office to inquire about how to address this section.

Gary Popelka then reviewed the amendment process for the two types of amendments. He distributed three maps showing how amendments are made. The Madison-DNR has suggested additional language for a Type I amendment where some land is added and a like amount is deleted from the sewer service area. It was suggested that, for small land swaps – say up to 10 acres or so – language could be added that if environmentally sensitive areas are not involved with either piece, the decision to amend the map can be made locally without DNR approval. DNR approval is required under existing guidelines. The consensus of the Policy Committee was to add that language.

Should an application fee be established for amendments? The rationale for such a fee is that the local governing body – most often the Wisconsin Rapids Planning Commission – is required to conduct a public hearing. There are publishing costs, copying costs, possible per diem and mileage costs, etc. associated with public hearings. It was suggested that the applicant that wants the amendment should bear some or all of the related costs. No decision was made at this time.

6. Review Draft of Chapter 8. Public Participation Plan. Each member community adopted a public participation plan during their comprehensive planning process. The plan reviewed for the Policy Committee is based on the 2006 plan that was adopted by the Wood County Board, with some modifications. The plan was reviewed in detail. Mayor Carson recommended that the written comments paragraph clarify that written comments be submitted at least one week prior to any scheduled Policy Committee meeting. This will allow comments to be included with the packet of committee materials and reviewed in advance of the meeting. There were no other changes suggested for the plan. **Motion by Tim Karcheski to approve the public participation plan with the amendment to the written comments section. Second by Jeanne Fehrman. Motion carried.**

7. Review Draft of Chapter 4. Environmentally Sensitive Areas. Chapter 4 was distributed and discussed briefly. More detailed review will be on the November 2<sup>nd</sup> agenda. The following points were noted for the committee. First, this draft contains sections that are not required under for this plan. Specifically, it is not required and other community water quality management plans do not include discussion on prime agricultural lands, soil limitations for shallow excavations, or endangered/threatened animal species & natural areas. The committee was asked to think about whether those should be included in this edition. They were included in the 1985 edition. It was suggested that a map layer be created to show state owned land because, if the state has purchased it, there is probably an environmental reason.

8. Looking Ahead to November Meeting. Chapter 4 will be reviewed and the 20-year sewer service area will be developed. To prepare, Gary Popelka will contact the engineers, planners and treatment plant operator to discuss density thresholds that should be used to draw the boundary lines. He will contact the Madison-DNR first to get their input.

9. November Meeting. The November 2<sup>nd</sup> meeting was will be held in the Seneca Town Hall at 8:30 a.m.

10. Adjourn. **Motion by Jeanne Fehrman to adjourn at 9:55 a.m. Second by Tim Karcheski. Motion carried.**

Minutes prepared by Gary Popelka, AICP, EDFP



---



## MINUTES

Wisconsin Rapids Area Water Quality Management Plan Policy Committee  
Wednesday, December 7, 2011, 8:30 a.m.  
Town of Seneca Town Hall

Present: City of Wisconsin Rapids - Dave Laspa, Jim Neitzel and Adam Tegen  
Village of Biron – Rick O’Keefe  
Village of Rudolph – President Mark Bade and Dave Bluhm (MSA Prof. Services)  
Town of Grand Rapids – Jeanne Fehrman  
Town of Grant – Sharon Schwab  
Town of Saratoga – Tom Grygo  
Town of Seneca – James Schuerman  
Town of Sigel – Tony Ruesch  
Wood County Board – Dennis Polach  
Wood County Planning & Zoning Office – Gary Popelka, AICP, EDFP  
Wis. DNR – Scott Provost

1. Call to order. Chairman James Schuerman called the meeting to order at 8:30 a.m. and led the committee in the Pledge of Allegiance.
2. Public Input. None.
3. Minutes. **Motion by Jeanne Fehrman to approve the minutes of October 5, 2011. Second by Rick O’Keefe. Motion carried.**
4. Bylaws Amendment. Saratoga Chairman Terry Rickaby has accepted the Policy Committee offer to have the Town of Saratoga join the Committee. **Motion by Mark Bade to accept the Town of Saratoga as a voting member of the Policy Committee and amend the bylaws to reflect their membership and voting privileges. Second by Sharon Schwab. Motion carried.** Tom Grygo was welcomed as the representative for Saratoga.
5. Update on Changes in Draft of the Plan. Gary Popelka highlighted major changes in the plan since the last meeting. He pointed out that Sharon Schwab, Scott Provost, Dave Bluhm, and Dave Laspa have all provided information and, in some cases, drafted new language that is now included in several chapters of the plan. Chapter 6 is being drafted at this time and will include projections of land uses and acreages needed to accommodate those uses to the year 2030. While reviewing these, committee members noted additional changes or corrections needed on pages, 12, 17, 21 and 49. It was also noted that the same map appears on pages 10 and 12.
6. Determination of Sewer Service Area. Using maps projected onto a large screen, the committee reviewed the existing SSA boundary. Gary Popelka explained how the boundary had changed with several amendments over the past several years. It was noted that the environmentally sensitive areas that lie within the SSA are not considered in the calculation of developable acres. It was also noted that the areas that were deleted from the SSA boundary for the amendments were areas that were the furthest from the Wisconsin Rapids

Wastewater Treatment Plant and not necessarily the areas that had the least need for sanitary sewers. Because of that, the committee closely considered which of those areas, if any, should be include in the SSA. The following changes to the boundary were recommended at this meeting:

A. Town of Grant: Scott Provost recommended adding the developed area north of County Road FF, one forty deep between County Road U and the N-S portion of FF (90<sup>th</sup> Street), then extending the boundary south, using 90<sup>th</sup> Street as the east boundary, to Griffith Avenue, then west to County Road U. The rationale for this addition is that it was included in the original plan because of the density of development, there is an elementary school in the area, and the density combined with lot sizes may warrant consideration for municipal sewer during the planning period.

B. Town of Rudolph: It was noted that the boundary from the Village to Wisconsin Rapids is the Highway 34 right-of-way. After discussing whether or not that should be widened by 100-150 feet in both directions, it was determined that there is a lot of undevelopable land along that corridor; when the road was widened in the early 2000s, several septic systems were replaced; and the city would require annexation before providing service to those residences. The consensus of the committee was not to include the Highway 34 corridor residences in the SSA boundary at this time.

C. Wisconsin Rapids:

(1) There are three forties on the far north side of Wisconsin Rapids where the wastewater treatment for NewPage Corp. is located. This area can be removed from the SSA if it is not currently served by sanitary sewer and if it is likely not to be served in the future. Dave Laspa will follow-up.

(2) It was noted that the Urban Cranberry marshes are not included in the current SSA, although shown to be included on the map. Only the residence and operations buildings are included. The map will be corrected.

D. Seneca: Housing density maps show medium density residential development in Seneca in the area of George Road. Most of the dwellings in that area have mound systems or holding tanks and could benefit from sanitary sewer in the future. The minimum lot size in that portion of Seneca is 2 acres, giving ample room to replace failing systems. Jim Schuerman said the Town Board is meeting this evening and he will ask for their input about including this area in the SSA. Their determination will likely be based on the lot sizes and required annexation to receive sewer service. Mr. Schuerman will follow-up with Gary Popelka following the meeting.

E. Village of Port Edwards & Town of Saratoga: Owners of land on that surrounds Lake NEPCO have a subdivision proposal for 15 lots on the south shore, with plans for more high-end residential development between the lake and, roughly, Larry Avenue.

Scott Provost recommended including that area west of Highway 13, north of Larry Avenue and south of Lake NEPCO in the SSA because of the proposed medium- to high-density development that is proposed. Tom Grygo recommended including the development on the east side of Highway 13 to a depth of 330 feet. That area has a lot of development and is in Saratoga's comprehensive plan as a future commercial development area.

7. Looking Ahead to January Meeting. Because Gary Popelka will be on medical leave the last half of December, the January meeting will be held at the Wisconsin Rapids City Hall on Wednesday, January 25, 2012 at 8:30 a.m. A public hearing on the plan may be held that same morning, depending on comments received from the DNR-Madison office.

8. Adjourn. **Motion by Jeanne Fehrman to adjourn at 9:30 a.m. Second by Tom Grygo. Motion carried.**

Minutes prepared by Gary Popelka, AICP, EDFP

---

## MINUTES

Wisconsin Rapids Area Water Quality Management Plan Policy Committee  
Wednesday, January 25, 2012, 8:30 a.m.  
Council Chambers, Wisconsin Rapids City Hall

Present: City of Wisconsin Rapids - Mayor Mary Jo Carson, Dave Laspa, Jim Neitzel and Adam Tegen  
Village of Biron – Rick O’Keefe  
Village of Rudolph – President Mark Bade and Dave Bluhm (MSA Prof. Services)  
Town of Grand Rapids – Jeanne Fehrman  
Town of Grant – Sharon Schwab  
Town of Plover – Tim Karcheski  
Town of Saratoga – Tom Grygo  
Town of Seneca – James Schuerman  
Wood County Board – Dennis Polach  
Wood County Planning & Zoning Office – Gary Popelka, AICP, EDFP

1. Call to order. Chairman James Schuerman called the meeting to order at 8:30 a.m.
2. Public Input. None.
3. Minutes. The December 7, 2011 minutes were inadvertently left out of today’s packet and will be sent to the committee prior to the next meeting.
4. Update on Changes in Draft of the Plan. Fran Keally (DNR-Madison) has been providing oversight on this project. Fran has provided several comments and corrections for the plan. She and Gary Popelka have spent considerable time on the phone reviewing those changes. Adam Tegan and Sharon Schwab also provided comments and corrections for the last draft. Gary Popelka distributed a worksheet that listed all the changes and spent time in today’s meeting highlighted the major changes.

Determination of Sewer Service Area (SSA). Three areas were proposed to be added to the SSA at the December 7, 2011 meeting. Because the total area, less ESAs, exceeds 1,000 acres, an Environmental Assessment (EA) will need to be completed before final DNR approval can be given. Fran Keally told Gary Popelka that the EA can be done by a DNR staff person in the Wisconsin Rapids office. Popelka will follow-up to ask if a public hearing can be held ahead of completion of the EA.

**Motion by Mark Bade to approve the proposed boundary of the sewer service area, adding the new areas as proposed at the December 7, 2011 Policy Committee meeting. Second by Tim Karcheski. Motion carried.**

5. Looking Ahead to February. Gary Popelka still has to complete the supporting text for the SSA boundary. That language will be in Chapter 6 of the plan. He will correspond with Fran Keally regarding A) if the plan draft is in approvable form sans Chapter 6, B) if a public hearing can be scheduled for late February, and C) if the Environmental Assessment of the newly added areas must be completed ahead of holding a public hearing.

6. Adjourn. **Motion by Mayor Carson to adjourn at 9:25 a.m. Second by Sharon Schwab. Motion carried.**

Minutes prepared by Gary Popelka, AICP, EDFP

---

## MINUTES

Wisconsin Rapids Area Water Quality Management Plan Policy Committee  
Wednesday, March 21, 2012, 9:00 a.m.  
Council Chambers, Wisconsin Rapids City Hall

Present: City of Wisconsin Rapids - Mayor Mary Jo Carson, Dave Laspa, Jim Neitzel and Adam Tegen  
Village of Biron – President Jon Evenson and Rick O’Keefe  
Town of Grand Rapids – Jeanne Fehrman  
Town of Grant – Chm. Sharon Schwab  
Town of Plover – Tim Karcheski  
Town of Rudolph – Chm. James Bushmaker  
Town of Saratoga – Tom Grygo  
Town of Seneca – Chm. James Schuerman  
Town of Sigel – Chm. Tony ruesch  
Wood County Board – Dennis Polach  
Wood County Planning & Zoning Office – Gary Popelka

### PUBLIC HEARING – WISCONSIN RAPIDS WATER QUALITY MANAGEMENT PLAN

10. Call to order. Chairman James Schuerman called the public hearing to order at 9:00 a.m. and began with the pledge of allegiance.

11. Notice of Public Hearing, Purpose & Availability. Gary Popelka read the notice of public hearing, noting that it was published as a Class 2 Notice in the Wisconsin Rapids Daily Tribune on March 10 and March 14, 2012. The purpose of the hearing is to receive testimony regarding the final draft of the Water Quality Management Plan – 2030 and the 20-year sewer service area boundary. Copies of the plan draft have been available in the Wisconsin Rapids City Clerk’s Office and the Wood County Planning & Zoning Office.

12. Testimony. The Chairman called for testimony in favor or opposition to the plan. No testimony was offered.

13. Close Hearing. **Motion by Jeanne Fehrman to close the public hearing. Second by Tom Grygo. Motion carried.**

### POLICY COMMITTEE MEETING

1. Call to Order. Chairman Schuerman called the meeting of the Policy Committee to order at 9:05 a.m.

2. Public Input. There was no public input regarding items on the agenda.

3. Minutes. **Motion by Tim Karcheski to approve the minutes of December 7, 2011 and January 25, 2012. Second by Rick O’Keefe. Motion carried.**

4. Staff Comments. Gary Popelka explained that the final approval of the plan will not occur until May because the local DNR staff is preparing an environmental assessment because of the amount of area added to the sewer service area. He said it would be preferable if Wisconsin Rapids and the villages of Biron and Rudolph take formal action to approve or adopt the plan. The other partner communities are being asked to either approve the plan or submit a letter to be included with the plan that they don't object to the contents of the plan or the SSA boundary.

5. Committee Comments Regarding Public Hearing Testimony. It was noted that there was no testimony at the public hearing. The committee had no comments at this time.

6. Plan Approval. **Motion by James Bushmaker to approve the plan as presented at the public hearing and forward it to Wisconsin Rapids and the villages of Biron and Rudolph with a recommendation for adoption, and to the other partner communities with a request for a letter of support. Second by Jeanne Fehrman. Motion carried.**

7. Adjourn. **Motion by Tim Karcheski to adjourn at 9:20 a.m. Second by Mayor Carson. Motion carried.**

Minutes prepared by Gary Popelka, AICP, EDFP

---

APPENDIX C: Natural Heritage Inventory  
Wisconsin Rapids Area Water Quality Management Planning Area

<u>Threatened, Endangered, or Protected Species</u>		<u>Location by Township and Range</u>
Birds (7)	Henslow's Sparrow Red-Shouldered Hawk Bald Eagle Osprey Barn Owl Greater Prairie Chicken Upland Sandpiper	21-7, 22-7 21-5, 22-5, 21-6, 21-7, 22-6, 22-7, 23-6 21-5, 22-6 21-5, 22-5, 23-7 21-6, 23-5 21-7, 22-7, 23-5, 23-6 22-7
Butterflies (5)	Dusted Skipper Gray Copper Persius Dusky Wing Regal Fritillary Karner Blue	21-5, 21-6 21-7, 22-7 21-5 21-7, 22-7 21-5, 21-7, 22-5
Beetles (2)	A Tiger Beetle ( <i>cicindela macra</i> ) A Tiger Beetle ( <i>cicindela patruela huberi</i> )	22-5, 22-6 22-5
Fish (3)	Pirate Perch Redfin Shiner Redside Dace	23-7 21-5, 23-7 22-5
Lizard (1)	Slender Glass Lizard	21-5
Mammal (2)	Franklin's Ground Squirrel Gray Wolf	23-7 22-5, 23-5
Salamander (1)	Four-Toed Salamander	23-7
Turtles (2)	Blanding's Turtle Wood Turtle	21-5, 21-6, 21-7, 23-6, 23-7 21-6, 22-7
Plant (9)	Adder's Tongue Deam's Rockcress Georgia Bullrush Long-Leaved Aster Pale Green Orchid Slim-Stem Small-Reedgrass Swamp Pink Bushy Aster White Adder's-mouth	21-7 21-6, 22-6, 23-7 23-7 21-7 23-7 21-7 22-5, 22-6 22-6 22-6
Community (8)	Alder Thicket Floodplain Forest Northern Wet Forest Northern Dry-Mesic Forest Northern Mesic Forest Northern Sedge Meadow Sand Prairie Stream – Slow, Hard, Cold	21-6 21-5, 22-6 21-5 22-5, 21-6, 22-6, 23-6 22-6, 23-6 22-6 23-7 21-6
<u>Township/Range</u>		<u>Municipalities in Township/Range</u>
21-5 21-6 22-5 22-6 22-7 23-5 23-6 23-7		Saratoga, Nekoosa, T. Port Edwards Saratoga Seneca, Wisconsin Rapids Wisconsin Rapids, Biron, Grand Rapids Grant Sigel Rudolph, Biron Plover
Source: Wisconsin Department of Natural Resources <a href="http://dnr.wi.gov/org/land/er/nhi/CountyData/pdfs/Portage_County.pdf">http://dnr.wi.gov/org/land/er/nhi/CountyData/pdfs/Portage_County.pdf</a> <a href="http://dnr.wi.gov/org/land/er/nhi/CountyData/pdfs/Wood_County.pdf">http://dnr.wi.gov/org/land/er/nhi/CountyData/pdfs/Wood_County.pdf</a> Current as of 10/6/2009		





## **BIBLIOGRAPHY**

Becher-Hoppe Engineers, Inc., *An Engineering Feasibility Report on Wastewater Facilities To Serve The Grand Rapids Sanitary District No. 1, Town of Grand Rapids, Wood County Wisconsin*, (Wausau, Wisconsin), December 1979.

City of Wisconsin Rapids, *City of Wisconsin Rapids Comprehensive Plan 2010*, City of Wisconsin Rapids Planning Commission with the assistance of North Central Wisconsin Regional Planning Commission, September 28, 2009.

Federal Emergency Management Agency, National Flood Insurance Program, *Flood Insurance Rate Map, Wood County, Wisconsin and Incorporated Areas*, Map Revised February 17, 2010.

Foth, *Facilities Plan for Wastewater Treatment Plant Modifications, Project I.D. 06W025, City of Wisconsin Rapids, Wood County, Wisconsin*, June, 2007.

Portage County, *Portage County Comprehensive Plan 2005*, Portage County Planning & Zoning Department and the Portage County Comprehensive Plan Rural Steering Committee.

Town of Grand Rapids, Wood County, Wisconsin, *Comprehensive Plan 2009*, Town of Grand Rapids Planning Commission with the assistance of Wood County Planning & Zoning Office, May, 2009.

Town of Grant, Portage County, Wisconsin, *Comprehensive Plan 2005*, Town of Grant with the assistance of Portage County Planning Department, September 8, 2005.

Town of Rudolph, Wood County, Wisconsin, *Comprehensive Plan for the Town of Rudolph, Wood County Wisconsin 2009*, Town of Rudolph Land Use Committee with the assistance of Wood County Planning & Zoning Office June 3, 2009.

Town of Saratoga, Wood County, Wisconsin, *Comprehensive Plan 2007-2025*, MSA Professional Services, Inc., August 15, 2007.

Town of Seneca, Wood County, Wisconsin, *Comprehensive Plan 2003*, Town of Sigel Plan Commission with the assistance of Wood County Planning & Zoning Office, May 5, 2003.

Town of Sigel, Wood County, Wisconsin, *Town of Sigel, Wood County, Wisconsin Comprehensive Plan*, Town of Sigel Planning Commission with the assistance of North Central Wisconsin Regional Planning Commission, December 2, 2009.

Village of Biron, Wisconsin, *Comprehensive Plan to 2030*, Village of Biron Planning Commission with the assistance of Wood County Planning & Zoning Office, Draft of 6/2/2011.

Village of Rudolph, *Village of Rudolph Comprehensive Plan*, September 8, 2009.

United States Department of Agriculture, Soil Conservation Service, *Soil Survey of Portage County, Wisconsin*, December 1978.

United States Department of Agriculture, Soil Conservation Service, *Soil Survey of Wood County, Wisconsin*, January 1977.

Wood County, Wisconsin, *Wood County Comprehensive Plan 2009*, Wood County Planning & Zoning Office, September 22, 2009.

Wisconsin Department of Administration, Division of Intergovernmental Relations, Demographic Services Center, *Wisconsin Population and Household Projections 2000-2035*, <http://doa.wi.gov/demographics>, June, 2011.

Wisconsin Department of Natural Resources, Bureau of Planning, *Wisconsin Wetlands Inventory Maps*, September 9, 1979.

Wisconsin Department of Natural Resources, Bureau of Water Quality, Comments and Guidance, March 2011–March 2012.

Wisconsin Department of Natural Resources *Central Wisconsin River Basin Description, Watersheds, Projects, Plans, Maps*, <http://dnr.wi.gov/water/basin/cwrbl/> (September, 2011).

Wisconsin Department of Natural Resources, Natural Heritage Inventory, *Elements for Townrange for Wood County*, [http://dnr.wi.gov/org/land/er/nhi/countyData/pdfs/Wood\\_County.pdf](http://dnr.wi.gov/org/land/er/nhi/countyData/pdfs/Wood_County.pdf), (November 4, 2011).

Wisconsin Department of Natural Resources, Natural Heritage Inventory, *Elements for Townrange for Portage County*, [http://dnr.wi.gov/org/land/er/nhi/countyData/pdfs/Portage\\_County.pdf](http://dnr.wi.gov/org/land/er/nhi/countyData/pdfs/Portage_County.pdf), (November 4, 2011).

Wood County, Wisconsin, *Wood County Land Records Interactive Map Version 2.3.1*, Wood County Planning & Zoning Office, 2011.