

ROCK COUNTY, WISCONSIN
Planning, Economic & Community
Development Agency



51 South Main Street, Janesville, WI 53545
Phone: 608-757-5587
Fax: 608-757-5586
Website: www.co.rock.wi.us

February 1, 2012

Susan Sylvester
Director, Bureau of Water Quality
Wisconsin Department of Natural Resources
101 S. Webster Street
Box 7921
Madison, Wisconsin 53707

RE: Grant Funding Request for City of Beloit and Town of Beloit Area-wide Water Quality Management Plan Update: Phase I (January 1, 2012 – December 31, 2012)

Dear Ms. Sylvester:

Please accept the information provided herein as an application for Wisconsin Department of Natural Resources (DNR) grant funding to update the City of Beloit and Town of Beloit Area-wide Water Quality Management Plan ("Plan"). The application consists of this correspondence, which includes a discussion of the current Plan, Plan update project scope, and Plan update project budget. Additional application information includes a more detailed explanation of all other Plan update project aspects (including project budget and timeline) and a project area basemap.

Rock County is requesting grant funding for Phase I of the Plan update (January 1, 2012 – December 31, 2012) in the amount of \$15,000.00. Because the Plan will include two treatment plants and four local government units, we feel the Plan update is a two-year planning effort and as such we plan to seek an additional \$25,000 in funding for Phase II (January 1, 2013 – December 31, 2013).

The following provides background information on the Plan, Plan update project scope, and Plan update project budget.

Plan Background Information

The original Plan consisted of a 20-year planning horizon and was completed in the late 1980s. In the interim, there has not been an update to the Plan to keep pace with recent planning efforts such as the City of Beloit, Town of Beloit, and Rock County comprehensive plans, completed and adopted in 2008, 2009, and 2009 respectively. Those plans depict an amount of future growth and development which is not consistent with the current Plan. In addition, there are portions of adjacent developed areas not included in the current Plan where several on-site private septic systems have experienced problems. We feel those areas are worthy of study in the Plan update as well.

To date, the current Plan has been amended twice, with a third amendment currently pending. This, together with other significant departures from the original Plan, such as the Village of Clinton's withdrawal from the Sewer Service Area (SSA) and the City of Beloit's Water Pollution Control Facility upgrade, necessitate the need to update the Plan.

Plan Update Project Scope

The Plan update project scope includes a comprehensive review of the current Water Quality Management planning guidelines and requirements for developing a Plan update through the year 2035. The Plan update process will consist of two phases, identified as follows:

Phase I (January 1, 2012 - December 31, 2012) major tasks will include:

1. Equitably consider all interests that each community located within the Beloit Metropolitan Area has as they relate to the provision of municipal sewer service, to include the formation of two Committees, Policy Advisory (tentative) and Technical Advisory, to oversee the Plan update process;
2. Review and update the original Plan goals, ensuring consistency with each participating community's comprehensive plan;
3. Review and inventory the water quality impact of the area treatment facilities existing loadings, including industrial and commercial waste;
4. Inventory and identify (map) environmentally sensitive areas, existing private on-site treatment systems, existing private and public wells, and wellhead protection zones in the planning area;
5. Analyze the natural resources and environmental conditions and constraints with respect to development suitability in the planning area (i.e. wetlands, flood hazards, steep slopes, soil geology, depth to groundwater and shallow bedrock, etc.);
6. Produce a spatial data layer identifying the locations of the Town of Beloit's existing sewer mains, manholes, and service lateral hook up to properties located within the SSA;
7. Redefine the planning area for each system (City of Beloit and Town of Beloit) using the most current population and housing data and information;

Phase II (January 1, 2013 – December 31 2013) major tasks will include:

1. Produce an updated Plan for both the City of Beloit and the Town of Beloit, to include a map delineating future SSA boundaries for each municipality, as well as policy recommendations to assure compliance with required and desired water quality standards;
2. Assure Plan compliance with applicable DNR water quality standards and adoption by required local government units;

Plan Update Project Budget

The budget projection for Phase I of the Plan update project is estimated to be approximately \$15,000.00. This projection does not include in-kind contributions of staff time provided by the City of Beloit or the Town of Beloit. The City and Town will also provide additional technical resources and pertinent information (i.e. access to staff, plant loadings, plant capacity, and collection system information).

The Plan update process will be coordinated by the Rock County Planning, Economic & Community Development Agency, with assistance from the Rock County Environmental Health Department. Qualified City of Beloit and Town of Beloit staff representatives will review all technical work tasks. Additionally, the Policy Advisory (tentative) and Technical Advisory Committees will review all project findings and recommendations.

I trust this information satisfies the DNR criteria for requesting grant funds for the update of the City of Beloit and Town of Beloit Area-wide Water Quality Management Plan. If you should have any questions, do not hesitate to contact me. Thank you very much.

Sincerely,

Richard G. Cannon, P.E.
Rock County Planning, Economic & Community Development Agency

cc: Lisa Helmuth, Wisconsin Department of Natural Resources
Fran Keally, Wisconsin Department of Natural Resources

Enclosure

City of Beloit and Town of Beloit Area-wide Water Quality Management Plan Update: Request For Incremental Funding 2012-2013

Date: February 1, 2012

Proposal Prepared By: Rock County Planning, Economic & Community Development Agency
51 South Main Street
Janesville, Wisconsin 53545
(608) 757-5587 – phone
(608) 757-5586 – fax
planning@co.rock.wi.us
www@co.rock.wi.us

Grant Period: 2012 - 2013

Amount Requested: \$15,000 For Phase I (January 1, 2012 – December 31, 2012)
\$25,000 For Phase II (January 1, 2013 – December 31, 2013)

Lead Agency: Rock County Planning, Economic & Community Development Agency
51 South Main Street
Janesville, Wisconsin 53545
(608) 757-5587 – phone
(608) 757-5586 – fax
planning@co.rock.wi.us
www@co.rock.wi.us

Project Description:

1. PLAN OVERVIEW

The original Beloit Metropolitan Sewer Service Plan, covering the City of Beloit and the surrounding urbanized area, was produced in 1986 and subsequently updated in the late 1990s. Due to a number of significant changes to the area's overall urbanized landscape, the Plan has become outdated. Because the previous Plan update was conducted over a decade ago, the two urban area sewer service providers in the area, the City of Beloit and the Town of Beloit, together with Rock County, have concluded that it is necessary to update the Plan at this time.

It is the intention of the Rock County Planning, Economic & Community Development Agency and the Rock County Environmental Health Department to work cooperatively with both Beloit urbanized area sewer service providers and each of the area's affected units of government in order to produce this Plan update. Therefore this request is made so that Wisconsin Department of Natural Resources (DNR) funds can be made available through their application process.

2. PLAN AMENDMENT HISTORY

The first Beloit Metropolitan Sewer Service Plan amendment was performed in 1996. This amendment adjusted the City of Beloit's Sewer Service Area boundaries by taking into consideration the addition of a residential subdivision development, proposed for the City of Beloit's northwest side. The second Plan amendment performed in 2007, made slight modifications to the actual sewer service provided to a number of Town of Beloit and City residents in a limited geographic area adjacent to the Rock River. Lift station operations within the current Plan boundaries were also addressed in the second amendment.

3. PARTICIPATING LOCAL UNITS of GOVERNMENT

The City of Beloit, along with the Town of Beloit, Town of Turtle, and Town of Rock are the local units of government that will be directly affected by the Plan updates. Because the Rock County Planning, Economic & Community Development Agency has been Rock County's overall urbanized sewer service area review agency, the Agency will coordinate the Plan update process. When applicable, the aforementioned local units of government previously will provide pertinent data and technical assistance throughout the process.

4. WASTEWATER TREATMENT FACILITIES AND SANITARY DISTRICTS

Two sanitary sewer system providers comprise the project area, the City of Beloit and Town of Beloit. This Plan update will address both systems.

The City of Beloit operates its Water Pollution Control Facility at 555 Willowbrook Road, located in the City. According to the City, this facility was commissioned in November of 1991 and uses advanced activated sludge technology. The system is capable of processing up to 11 million gallons of wastewater per day, however it currently treats an average of approximately 3.5 million gallons a day. This facility is required to meet several National Pollution Discharge Elimination System (NPDES) permit criteria including:

- Biochemical Oxygen Demand
- Total Suspended Solids
- Phosphorus
- Ammonia
- Chlorine Residual
- Fecal Coliform

The Town of Beloit's Wastewater Treatment Plant Facility is located at 3629 S. Walters Road. This facility was built in 1969 and processes wastewater from the Town of Beloit and portions of the Town of Rock. This facility has operators certified by the State of Wisconsin in wastewater treatment activities.

Initially, this facility had a treatment capacity of 350,000-gallons of wastewater per day. In 1979, the Town more than doubled this facility's processing capability by adding a 650,000-gallon per day unit, making the total facility capacity 1,000,000-gallons per day. In 2003, a 750,000-gallon sludge storage tank along with a radio telemetry alarm system and new pre-treatment equipment were added.

5. GEOGRAPHIC INFORMATION SYSTEM (GIS) PERSONNEL

- a. Matthew Wesson - Rock County Environmental Health Department
- b. Adam Elmer – Rock County Environmental Health Department
- c. Wade Thompson – Rock County Planning, Economic & Community Development Agency

6. PROPOSED PROJECT POLICY ADVISORY AND TECHNICAL ADVISORY COMMITTEE

The Rock County Planning, Economic & Community Development Agency is currently in the process of formulating two committees to oversee the plan updates. A Policy Advisory Committee (tentative), predominately comprised of elected/appointed officials from the participating local governmental units will establish the appropriateness of the system service boundaries and any necessary changes to existing service coverage limits. In addition a Technical Advisory Committee, comprised of staff from these same local governmental units will coordinate and review all data collection and analytical activities needed to perform the updates. Committee membership is proposed as follows and subject to approval by the participating local units of government:

Policy Advisory Committee (tentative)

City of Beloit (Both Plan Updates)

- 1. City Council President
- 2. City Manager
- 3. Community Development Director
- 4. Public Works Director/City Engineer

Town of Beloit (Both Plan Updates)

- 1. Board Chair
- 2. Administrator
- 3. Planning Commission Chair
- 4. Public Works Director

Town of Turtle (City of Beloit Plan Update only)

- 1. Board Chair
- 2. Planning Commission Chair

Town of Rock (Town of Beloit Plan Update only)

- 1. Board Chair
- 2. Planning Commission Chair

Rock County (Both Plan updates)

- 1. Board Supervisor
- 2. Board Supervisor

Technical Advisory Committee

City of Beloit (Both Plan updates)

- 1. Public Works Director/City Engineer
- 2. Wastewater Treatment Facility Supervisor
- 3. Project Engineer

Town of Beloit (Both Plan updates)

- 1. Public Works Director
- 2. Wastewater Treatment Facility Supervisor
- 3. Project Engineer

Town of Turtle (City of Beloit Plan update only)

- 1. Technical Representative

Town of Rock (Town of Beloit Plan update only)

- 1. Technical Representative

Rock County (Both Plan updates)

1. **Planning, Economic & Community Development Agency**

- a. Director
- b. Engineer
- c. Planner

2. **Environmental Health Department**

- a. Director
- b. Sanitarian

7. PROJECT TIMELINE

The Plan update process, as proposed, will have two separate phases, Phase I and Phase II. Phase I will concentrate on fact-finding, data collection, a thorough review of the existing service areas and capabilities, and creation of a data layer for the Town of Beloit Sewer System, detailing sanitary service main, manhole and lateral locations. Phase II will consist of determining the need for making any pertinent adjustments to the current sewer system boundaries in order to necessitate water quality protection, public health, and safety.

City of Beloit and Town of Beloit Water Quality Management Plan Update: 2012-2013

Project Budget - Phase I: January 1, 2012 - December 31, 2012

Rock County staff	<u>Planning and Development Director</u>	<u>Environmental Health Director</u>	<u>Engineer</u>	<u>Planner</u>	<u>GIS Manager</u>	<u>Sanitarian</u>	<u>Intern</u>	Projected Cost
Hourly wage plus fringe	\$53.70	\$47.00	\$45.00	\$33.70	\$40.00	\$37.00	\$12.90	
1. Meetings*								
Staff hours	9	9	9	9	4	9		
Committee hours	14	14	14	14	0	0		
Prep/follow-up hours			8	8	6	6		
Projected Cost	\$1,235.10	\$1,081.00	\$1,395.00	\$1,044.70	\$400.00	\$555.00		\$5,710.80
2. Analysis & Mapping**								
Hours			13	15	8	13	116	
Projected Cost			\$585.00	\$505.50	\$320.00	\$481.00	\$1,496.40	\$3,387.90
3. Report & Map Production*								
Hours			14	20	7	12	116	
Projected Cost			\$630.00	\$674.00	\$280.00	\$444.00	\$1,496.40	\$3,524.40
4. Presentation to County Board^								
Hours	2							
Projected Cost	\$107.40							\$107.40
5. Project Expenses								
Mileage (based on \$0.555 per mile)								\$250.00
Copying/printing								\$300.00
Postage, etc.								\$106.47
Projected Cost								\$650.00
Projected Sub-total Cost (1., 2., 3., 4., and 5. above)								\$14,036.97
Contingency (10% of staff ho	\$123.51	\$108.10	\$261.00	\$222.42	\$100.00	\$148.00		\$963.03
TOTAL PROJECTED COST (Projected Sub-total Cost + Contingency)								\$15,000.00

*Staff meetings assume 1.0 hour per meeting, on approximately a monthly basis. Committee meetings assume 2.0 hours per meeting, on approximately a monthly basis.

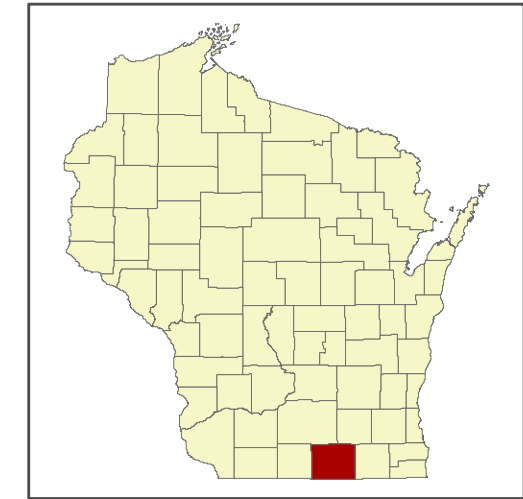
**Analysis & Mapping includes Committee meeting preparation, work review time, and report updates to DNR.

***Report & Map Production includes internal report review and editing time.

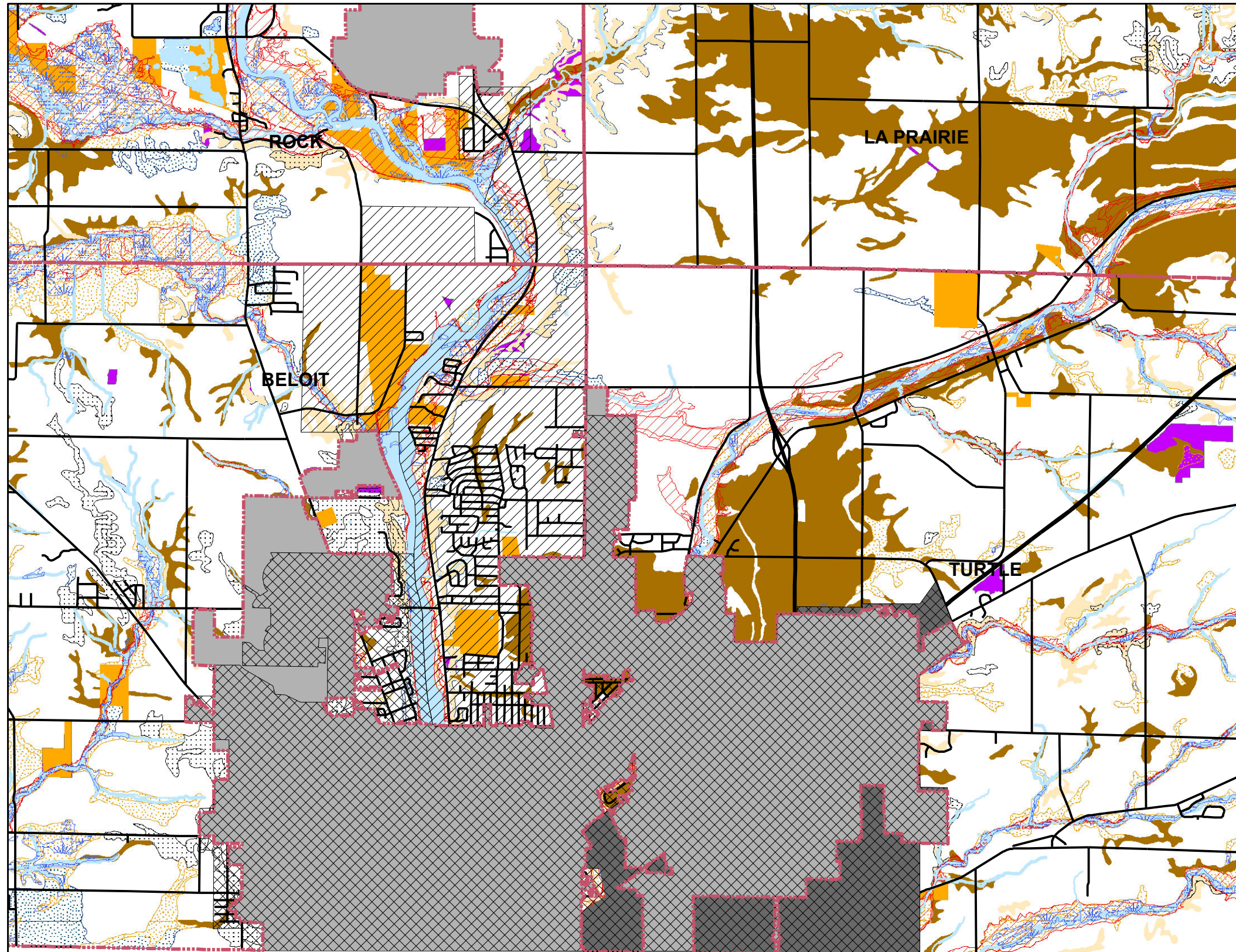
^Presentation to Rock County Board is for planning project progress update and informational purposes.

Basemap

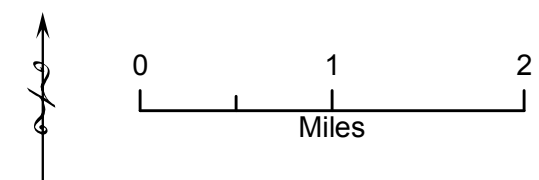
City of Beloit - Town of Beloit Areawide Water Quality Management Plans Update



Rock County, Wisconsin (1/25/2012)



- City of Beloit
 - Towns
 - City of Beloit Sewer Service Area
 - Town of Beloit Sewer Service Area
 - City of Beloit - Town of Beloit boundary agreement area
 - Protected land
 - Roads
 - Productive agricultural soils
- Environmentally Sensitive Areas**
- Bedrock within 20" of surface
 - Steep slope (12% or greater)
 - Hydric soil
 - Natural area
 - Potential groundwater protection area
 - FEMA floodplains
 - Surface water and 75-foot buffer
 - WDNR wetlands



Data Sources: Rock County Planning and Development

Rock County Geographic Information Systems (GIS)
 Planning, Economic and Community
 Development Agency
 51 S Main St, Janesville, WI 53545
 (TEL) 608-757-5587, (FAX) 608-757-5586
 email: Planning@co.rock.wi.us

Duplication of this map is prohibited without written consent of the Rock County Planning, Economic and Community Development Agency. The data in this map was compiled using the Rock County Coordinate System. All graphic and attribute information is based on the Rock County Coordinate system. This map is not intended to be a substitute for an actual field survey and is an advisory reference only.

TASK	City of Beloit - Town of Beloit Area-wide Water Quality Management (208) Plans Update: 2011 - 2013 - Timeline																											
	2011				2012												2013											
	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
City of Beloit - Town of Beloit 208 Plans Update: 2011 - 2013	→																											
	PHASE I														PHASE II													
1. Convene City of Beloit - Town of Beloit 208 Plans Update Workgroup.	→																											
2. City of Beloit - Town of Beloit 208 Plans Update Policy Advisory and Technical Advisory Committees (Committee) Resolution authorizing Committee to Rock County Board of Supervisors, via Rock County Planning & Development Committee.																												
3. Invitations to Committee, via written correspondence.																												
4. Public Committee meeting to present/discuss Committee mission, vision, timeline, deliverables, etc. and WDNR application.																												
5. Preliminary research and analysis																												
6. Submit Phase I - WDNR application.																												
7. Public Committee meeting to present/analyze/discuss WDNR application results and preliminary research and analysis (see narrative).																												
8. Additional public Committee meetings to present/analyze/discuss preliminary research and analysis;																												
9. Prepare alternatives.																												
10. Submit Phase II - WDNR application.																												
11. Additional public Committee meetings to:																												
a. Present/analyze/discuss alternatives;																												
b. Select/approve alternative;																												
12. Prepare deliverables (2).																												
13. Additional public Committee meetings to:																												
a. Present/analyze/discuss deliverables;																												
b. Approve deliverables;																												
14. Open house.																												
15. WDNR approval of deliverables.																												
16. Local government approval of deliverables.																												
17. County Board approval of deliverables.																												
	Indicates completion of task														Indicates duration of task													