



## **TOWN OF RIB MOUNTAIN**

Where Nature, Family & Sport Come Together

[www.townofribmountain.org](http://www.townofribmountain.org)

3700 North Mountain Road  
Wausau, Wisconsin 54401

(715) 842-0983  
Fax(715) 848-0186

March 28, 2017

DNR Service Center  
Attn: Storm Water Program  
5301 Rib Mountain Dr.  
Wausau, WI 54401

Re: 2016 Annual Report under MS4  
Town of Rib Mountain  
Marathon County, WI

Enclosed is the 2016 Annual Report under MS4 for the Town of Rib Mountain,  
Marathon County, WI.

Please call 715-848-5123 if you have any questions or comments.

Sincerely,

Scott Turner, PE  
Street & Park Superintendent  
Town of Rib Mountain

**Due by March 31, 2017**

**Notice:** Pursuant to s. NR 216.07(8), Wis. Adm. Code, an owner or operator of a Municipal Separate Storm Sewer System (MS4) is required to submit an annual report to the Department of Natural Resources (DNR) by March 31 of each year to report on activities for the previous calendar year. This form is being provided by the DNR for the user's convenience. Personal information collected will be used for administrative purposes and may be provided to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

This form is for reporting on activities undertaken in calendar year 2016.

**Instructions:** Complete each section of the form. If additional space is needed, attach additional pages. Provide descriptions that explain the program actions taken to comply with the general permit. Complete and submit the annual report by March 31, 2017, to the appropriate address indicated on the last page of this form.

Part I. Municipal Information			
Name of Municipality Town of Rib Mountain		Facility ID No. (FIN) 31053	
Mailing Address 3700 North Mountain Rd	City Wausau	State WI	ZIP Code 54401
County(s) in which Municipality is located Marathon	Municipality Type: (select one) <input type="radio"/> County <input type="radio"/> City <input type="radio"/> Village <input checked="" type="radio"/> Town <input type="radio"/> Other (specify)		

Part II. Municipal Contact Information			
Name of Municipal Contact Person Scott Turner, PE		Title Street & Park Superintendent	
Mailing Address (if different from above)	City	State WI	ZIP Code
Email sturner@townofribmountain.org	Phone Number (include area code) (715) 848-5123	Fax Number (include area code)	
Has the contact person changed in the last year? <input type="radio"/> Yes <input checked="" type="radio"/> No			

Part III. Certification			
<p><i>I hereby certify that I am an authorized representative of the municipality covered under MS4 General Permit No. WI-S050075-2 for which this annual report is being submitted and that the information contained in this document and all attachments were gathered and prepared under my direction or supervision. Based on my inquiry of the person or persons under my direction or supervision involved in the preparation of this document, to the best of my knowledge, the information is true, accurate, and complete. I further certify that the municipality's governing body or delegated representatives have reviewed or been apprised of the contents of this annual report. I understand that Wisconsin law provides severe penalties for submitting false information.</i></p>			
Authorized Representative Printed Name Scott Turner, PE		Authorized Representative Title Street & Park Superintendent	
Signature of Authorized Representative		Date	
Email sturner@townofribmountain.org	Phone Number (include area code) (715) 848-5123	Fax Number (include area code)	

Part IV. General Information			
<p>a. Describe the municipality's efforts to invite the municipal governing body, interest groups, and general public to review and comment on the annual report.</p> <p>The report has been submitted to the Town Board for review. All meetings are publicly noticed. The report is also posted on the Town's website: <a href="http://www.townofribmountain.org">www.townofribmountain.org</a> under the Public Works Department's section.</p>			
<p>b. Describe how the municipality has kept elected and municipal officials and appropriate staff (such as operators, department heads, and those that interact with the public) informed of the municipal storm water discharge permit and its requirements.</p> <p>Staff reports to the Town Board and provides updates on storm water activities. Department heads also hold weekly meetings and discuss upcoming construction projects or other issues that may include storm water activities. Key staff receive email notifications of WDNR proposed changes and events.</p>			
<p>c. Has the municipality prepared or updated its own municipal-wide storm water management plan during the reporting year?</p> <p style="text-align: right;"><input checked="" type="radio"/> Yes   <input type="radio"/> No</p> <p>If yes, provide the title and date of storm water management plan and list any updates:                  Stormwater Management Plan: Town of Rib Mountain, Wisconsin, January 2009. An update is currently in draft and will be available in fall 2017.</p> <p>If yes, has the information been submitted to the Department?   <input checked="" type="radio"/> Yes   <input type="radio"/> No</p>			

d. During the reporting year, has the municipality entered into a written agreement with another municipality or a contract with another entity to perform one or more of the conditions as provided under section 2.10 of the general permit?  Yes  No

If yes, describe these cooperative efforts:

Marathon County, the Cities of Baraboo, Schofield, Marshfield, Merrill, Mosinee, Stevens Point, Wausau, Wisconsin Rapids, the Villages of Weston, Kronenwetter and Rothschild, and the Town of Rib Mountain have entered into a Memorandum of Agreement that identifies the responsibilities of the parties of the agreement in accomplishing the requirements of the permit. Representatives of these communities comprise the Marathon County Metropolitan Planning Commission Stormwater Management Sub-Committee. The communities of this sub-committee work collaboratively as the North Central Wisconsin Stormwater Coalition (NCWSC) for the purpose of education and outreach and public involvement.

If yes, has the information been submitted to the Department?  Yes  No

e. If the municipality has an internet website, is there current information about or links provided to the MS4 general permit and/or the municipality's storm water management program?  Yes  No

If yes, provide web address:

Town of Rib Mountain website is [www.townofribmountain.org](http://www.townofribmountain.org), North Central Wisconsin Stormwater Coalition website is <http://www.ncwrpc.org/NCWSC>

**Part V. Evaluation of Permit Conditions (Section 2 of General Permit)**

**Minimum Control Measures:** For each of the permit conditions listed below, provide an evaluation of program compliance with the general permit.

1. Public Education and Outreach (Section 2.1 of General Permit)

Description of Program(s)	The Town is working with other permitted communities in the North Central Wisconsin Stormwater Coalition (NCWSC). In addition, the Town has featured storm water educational information in the Town newsletter. Information regarding storm water is featured in all pertinent Town newsletter publishings. The Town will continue to educate the public as well as work with the NCWSC. The NCWSC had the "Rubber Ducky Commercial" played during movie previews at Marcus Cedar Cr and Cosmo Theater
Measurable Goal(s)	Have one stormwater article per year in Town Newsletter. Have regular showing of educational material at local movie theaters.
Result(s) Achieved	Achieved both
Describe any planned changes to program.	Continue outreach efforts through the North Central Wisconsin Stormwater Coalition

2. Public Involvement and Participation (Section 2.2 of General Permit)

Description of Program(s)	Town meetings, including committee meetings are publicly noticed. In addition the NCWSC monthly meetings are open to the public, posted on North Central Wisconsin Regional Planning Commission on-line bulletin board, <a href="http://www.ncwrpc.org/NCWSC">http://www.ncwrpc.org/NCWSC</a> , and sent to Wausau Daily Herald, City Pages, Marshfield News, Midwest Radio Group. Meeting minutes are posted on the North Central Wisconsin Regional Planning Commission and sent to all NCWSC members.
Measurable Goal(s)	Notify the public with notices/announcements on websites and emails.
Result(s) Achieved	Additional public interest in protecting environmental resources
Describe any planned changes to program.	Continue outreach efforts through the North Central Wisconsin Stormwater Coalition

3. Illicit Discharge Detection and Elimination (Section 2.3 of General Permit)

Description of Program(s)	The appropriate staff and/or consultants enforces the Town's Stormwater Management Plan. All outfalls were field sampled and inspected. See attached
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<b>Part V. Evaluation of Permit Conditions</b> (continued)	
Measurable Goal(s)	Review/Inspect potential sources on a regular basis, annually at a minimum
Result(s) Achieved	No illicit discharges reported
Describe any planned changes to program.	none

4. Construction Site Pollutant Control (Section 2.4 of General Permit)

Description of Program(s)	The appropriate staff and/or consultants enforces the Town's Stormwater Management Plan.
Measurable Goal(s)	Review/Inspect potential sources on a regular basis during construction
Result(s) Achieved	Any potential sources were stabilized prior to any illicit discharges
Describe any planned changes to program.	None

5. Post-Construction Storm Water Management (Section 2.5 of General Permit)

Description of Program(s)	The appropriate staff and/or consultants enforces the Town's Stormwater Management Plan.
Measurable Goal(s)	Review/Inspect potential sources upon completion of construction
Result(s) Achieved	Any potential sources were stabilized prior to any illicit discharges
Describe any planned changes to program.	None

6. Pollution Prevention (Section 2.6 of General Permit)

Description of Program(s)	The appropriate staff and/or consultants enforces the Town's Stormwater Management Plan.
Measurable Goal(s)	Review/Inspect potential sources by Town staff on regular basis
Result(s) Achieved	Any potential sources were stabilized prior to any illicit discharges
Describe any planned changes to program.	None

• Storm Water Management Facilities (Section 2.6.1 of General Permit)

List any new municipality owned or operated structural storm water management facilities (ponds, biofilters, etc.) added in the last year.  
 None

• Routine Inspection and Maintenance (Section 2.6.2 – 2.6.4 of General Permit)

Does the municipality have an inspection and maintenance program for installed structural storm water management facilities?  
 Yes  No

Describe the inspection and maintenance program and any activities that have occurred for structural storm water management facilities in 2016. If available, attach any additional information on the inspection and maintenance program.  
 A detailed inspection and maintenance program/checklists is currently being established. Regular inspections and maintenance of Town owned facilities is conducted by staff.

Describe the street sweeping and catch basin cleaning efforts, and the disposal of waste.  
Street sweeping starting in the Commercial district (curb and gutter) followed by arterial routes, working outward towards the rural areas that include roadside ditches and swales. Street sweepings are disposed of utilizing the Marathon County Cooperative agreement for beneficial reuse.

• Winter Road Management Activities (Section 2.6.5 of General Permit)

Provide the name, title, and phone number of the individual(s) with overall responsibility for winter roadway maintenance.  
Scott Turner, Street & Park Superintendent, 715-848-5123

Describe the types of products used for winter road management (e.g. deicing, pre-wetting, salting, etc.).  
Sand/Salt Mix 5:1 Sand/Salt ratio for snow conditions, 1:1 Salt ratio for ice conditions

Report the amount of product used by month over the last winter season (approx. November 2015 through April 2016).  
Approximately 750 tons of salt and 600 cubic yards of sand annually

Report the snow disposal locations, if applicable.  
None

Describe anti-icing, equipment calibration, and salt reduction strategies.  
None

Describe any other additional data or information used to evaluate the winter road management activities.  
None

• Leaf Management (Section 2.6.6 of General Permit)

Describe the management of leaves and grass clippings.  
The Town of Rib Mountain does not have a leaf or grass roadside pickup. All yard waste is taken to the Town's permitted facility at 5501 South Mountain Rd (CTH N).

• Municipal Pollution Prevention (Section 2.6.7 of General Permit)

Provide the location (street address) of each facility (municipal yards and/or maintenance facilities) and contact information (name, title, and phone number) for the individual(s) with overall responsibility for each facility.  
Rib Mountain Public Works - 2001 Goose Ln, Wausau WI  
Rib Mountain Yard Waste Site - 5501 South Mountain Rd, Wausau, WI  
Scott Turner, PE, Street and Park Superintendent, 715-848-5123

Map(s) included?  Yes  No - Include a map of each facility, drawn to scale and include the following features:

- Location of major activities and storage areas
- Identification of drainage patterns, potential sources of storm contamination and discharge points.
- Identification of nearby receiving waters or wetlands
- Identification of connections to the permittees's MS4

**Part V. Evaluation of Permit Conditions** (continued)

Describe the housekeeping activities and best management practices installed at municipal yards and/or maintenance facilities to reduce or eliminate storm water contamination.

Rib Mountain Public Works - regular sweeping of pavement surfaces, organized outside storage. Regular cleaning/mowing of grass buffer strips. No fueling is conducted at this location.

Discuss recommendations for improvements to current storm water management practices at the facility(s) and provide a timeline for installation and/or implementation of these recommendations.

None

Provide information on facility inspections. Identify and address potential sources of storm water contamination.

Weekly inspections are conducted of the site. Salt storage area is located in a storage facility. Potential storm water concerns are addressed immediately.

Describe the municipal facility(s) employee training on storm water pollution prevention (frequency, duration, objectives, percentage of employees trained this year, etc.).

Best Management Practices including street sweeping and erosion control. Annual refresher training with all Public Works staff present.

Describe the spill prevention and response procedures in place at the municipal facility(s).

The Town does not own or utilize fluid storage facilities. In the event of a localized spill, standard spill prevention and response procedures are implemented.

7. Storm Water Quality Management (Section 2.7 of General Permit)

Has the municipality completed a pollutant-loading analysis to assess compliance with the 20% TSS reduction developed urban area performance standard?  Yes  No

If yes, provide the following: Model used WinSLAM Version 9.2.5 Reduction (%) 47

If no, include a description of any actions the municipality has undertaken during 2016 to help achieve the 20% standard.

8. Storm Sewer System Map (Section 2.8 of General Permit)

Describe any changes or updates to the storm sewer system map made in the reporting year. Provide an updated map if any changes occurred during the reporting year.

The Town's engineering consultant is developing GIS mapping of the storm sewer systems from project plans and field data. Additional field work and verification is ongoing. Data has been collected from approximately 3/4 of the Town. Maps will be available in the future.

**Part VI. Fiscal Analysis**

a. Provide a fiscal analysis that includes the annual expenditures for 2016, and the budget for 2016 and 2017. A table to document fiscal information is provided on page 8.

b. What financing/fiscal strategy has the municipality implemented to finance the requirements of the general permit?

Storm water utility  General fund  Other \_\_\_\_\_

c. Is adequate revenue generated to implement the storm water management program and meet permit requirements?

Yes  No

Please provide a brief summary of the municipality's financing/fiscal strategy and any additional information that will assist the Department in understanding how storm water management funds are being generated to implement and administer the storm water management program.

The Town is currently exceeding WDNR TSS removal standards, however, improvements to the existing infrastructure is required. The Town is considering the development of a storm water utility as a source of revenue to fund stormwater improvement projects. The Town is currently updating the 2009 Stormwater Management Plan and ordinances.

**Part VII. Inspections and Enforcement Actions**

**Note: If an ordinance listed below has been submitted to the Department previously and has not been amended since that time, a copy does not need to be submitted again. If the ordinance was previously submitted, indicate such in the space provided.**

- a. Has the municipality amended its illicit discharge detection and elimination ordinance in accordance with subsection 2.3.1 of the general permit during the reporting year?  Yes  No  
If yes, attach copy or provide web link to ordinance:
  
- b. Has the municipality amended its construction site pollutant control ordinance in accordance with subsection 2.4.1 of the general permit during the reporting year?  Yes  No  
If yes, attach copy or provide web link to ordinance:
  
- c. Has the municipality amended its post-construction storm water management ordinance in accordance with subsection 2.5.1 of the general permit during the reporting year?  Yes  No  
If yes, attach copy or provide web link to ordinance:
  
- d. Has the municipality adopted any other ordinances it has deemed necessary to implement a program under the general permit (e.g., pet waste ordinance, leaf management/yard waste ordinance, parking restrictions for street cleaning, etc.) during the reporting year?  Yes  No  
If yes, attach copy or provide web link to ordinance:
  
- e. Provide a summary of available information on the number and nature of inspections and enforcement actions conducted during the reporting period to ensure compliance with the ordinances described in a. to d. above.  
Regular inspections are done at all pertinent sites. The inspections are conducted to insure the BMP's that were established in the erosion control plan were being followed and applied. The inspections also specifically focused on erosion control measures. If corrections and improvements were needed, the owner was contacted and told of the needed improvements. Follow-up inspections were done to confirm the corrections.

**Part VIII. Water Quality Concerns**

- a. Does any part of the MS4 discharge to an outstanding resource water (ORW) or exceptional resource water (ERW) listed under s. NR 102.10 or 102.11, Wis. Adm. Code? (A list of ORWs and ERWs may be found on the Department's Internet site at: <http://dnr.wi.gov/topic/surfacewater/orwerw.html>)  Yes  No  
If yes, list:  
According to DNR data, the Big Rib River is 303(d) listed for mercury. Wisconsin River is 303(d) listed for PCB's
  
- b. Does any part of the MS4 discharge to an impaired waterbody listed in accordance with section 303(d)(1) of the federal Clean Water Act, 33 USC § 1313(d)(1)(C)? (A list of the most current Wisconsin impaired waterbodies may be found on the Department's Internet site at: <http://dnr.wi.gov/water/impairedsearch.aspx?status=303d>)  Yes  No  
If yes, complete the following:
  - Impaired waterbody to which the MS4 discharges:  
According to DNR data, the Big Rib River is 303(d) listed for mercury. Wisconsin River is 303(d) listed for PCB's
  - Description of actions municipality has taken to comply with section 1.5.2 of the MS4 general permit for discharges of pollutant(s) of concern to an impaired waterbody:  
Street sweeping program, illicit discharge detection monitoring

- c. Identify any known water quality improvements in the receiving water to which the MS4 discharges during the reporting period.  
Rookery View Park - Lake Wausau Association - weed removal
- d. Identify any known water quality degradation in the receiving water to which the MS4 discharges during the reporting period and what actions are being taken to improve the water quality in the receiving water.
- e. Does any part of the MS4 discharge to an approved Total Maximum Daily Load (TMDL) area (Section 1.5.4 of the general permit)?  
 Yes  No

If yes, fill out below. If no, disregard.

*Required reporting for TMDLs approved prior to the effective date of the permit for 2016:*

Name of TMDL: \_\_\_\_\_ Date TMDL approved? \_\_\_\_\_

Map(s) included?  Yes  No - Submit a storm sewer system map (may be the same map submitted under section V.6. of this form), which includes the TMDL reachshed boundaries and associated acreage within the municipality, and the MS4 drainage boundaries and associated acreage within the municipality.

**Part IX. Proposed Program Changes**

Describe any proposed changes to the storm water management program being considered for 2017 and the schedule for implementing those changes. Proposed program changes must be consistent with the requirements of the general permit.

The Town is considering the development of a storm water utility as a source of revenue to fund stormwater improvement projects and is updating the 2009 Stormwater Management Plan.

**Part X. Other**

Any other municipal storm water program information for inclusion in the Annual Report regarding their storm water program may be added here or attached.

None

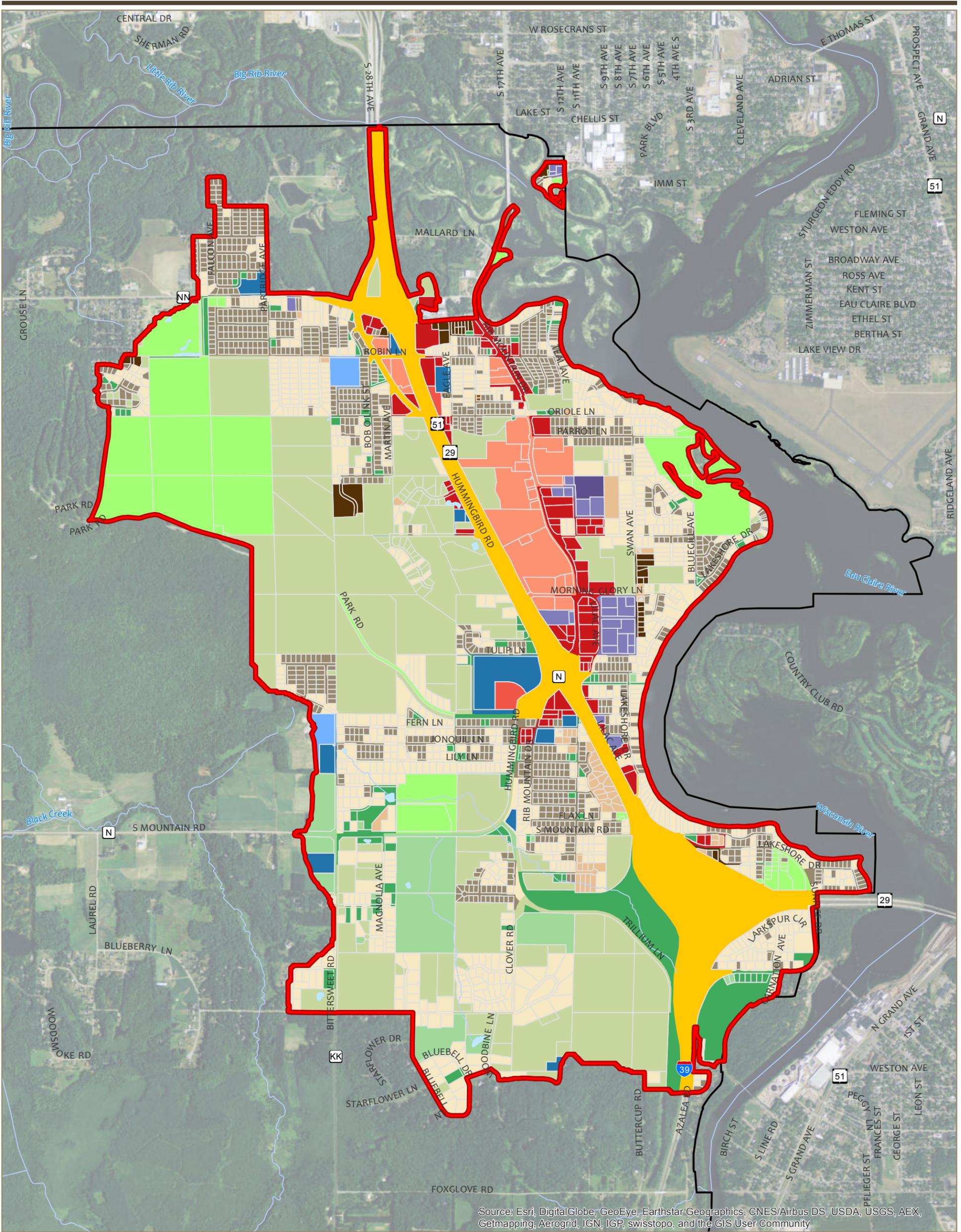
**Fiscal Analysis Table.** Complete the fiscal analysis table provided below.

Program Element	Annual Expenditure 2016	Budget		Source of Funds
		2016	2017	
Public Education and Outreach	\$2,000	\$2,000	\$3,000	General Fund
Public Involvement and Participation				General Fund - Staff Resources
Illicit Discharge Detection and Elimination				General Fund - Staff Resources
Construction Site Pollutant Control				General Fund - Staff Resources
Post-Construction Storm Water Management				General Fund - Staff Resources
Pollution Prevention				General Fund - Staff Resources
Storm Water Quality Management (including pollutant-loading analysis)	\$29,382	\$43,000	\$13,000	2015 Borrowing Note - SWMP Update
Storm Sewer System Map	\$5,000	\$5,000	\$5,000	General Fund - Summer intern, data collection, GIS implementation
Other:				

NORTHERN REGION COUNTIES			WEST CENTRAL REGION COUNTIES		
Ashland	Langlade	DNR Service Center	Adams	Marathon	DNR Service Center
Barron	Lincoln	Attn: Storm Water Program	Buffalo	Monroe	Attn: Storm Water Program
Bayfield	Oneida	5301 Rib Mountain Rd.	Chippewa	Pepin	5301 Rib Mountain Rd.
Burnett	Polk	Wausau, WI 54401	Clark	Pierce	Wausau, WI 54401
Douglas	Price	Phone: (715) 359-4522	Crawford	Portage	Phone: (715) 359-4522
Florence	Rusk		Dunn	St. Croix	
Forest	Sawyer		Eau Claire	Trempealeau	
Iron	Taylor		Jackson	Vernon	
	Vilas		Juneau	Wood	
	Washburn		La Crosse		

NORTHEAST REGION COUNTIES			SOUTH CENTRAL REGION COUNTIES		
Brown	Marquette	DNR Northeast Region	Columbia	Jefferson	DNR South Central Region
Calumet	Menominee	Attn: Storm Water Program	Dane	LaFayette	Attn: Storm Water Program
Door	Oconto	2984 Shawano Ave.	Dodge	Richland	3911 Fish Hatchery Rd.
Fond du Lac	Outagamie	Green Bay, WI 54313	Grant	Rock	Fitchburg, WI 53711
Green Lake	Shawano	Phone: (920) 662-5100	Green	Sauk	Phone: (608) 275-3266
Kewaunee	Waupaca		Iowa		
Manitowoc	Waushara				
Marinette	Winnebago				

SOUTHEAST REGION COUNTIES		
Kenosha	Sheboygan	DNR Service Center
Milwaukee	Walworth	Attn: Storm Water Program
Ozaukee	Washington	141 NW Barstow Street,
Racine	Waukesha	Room 180
		Waukesha, WI 53188
		(262) 574-2100



# MAP 2: LAND USE

TOWN OF RIB MOUNTAIN  
MARATHON COUNTY, WI

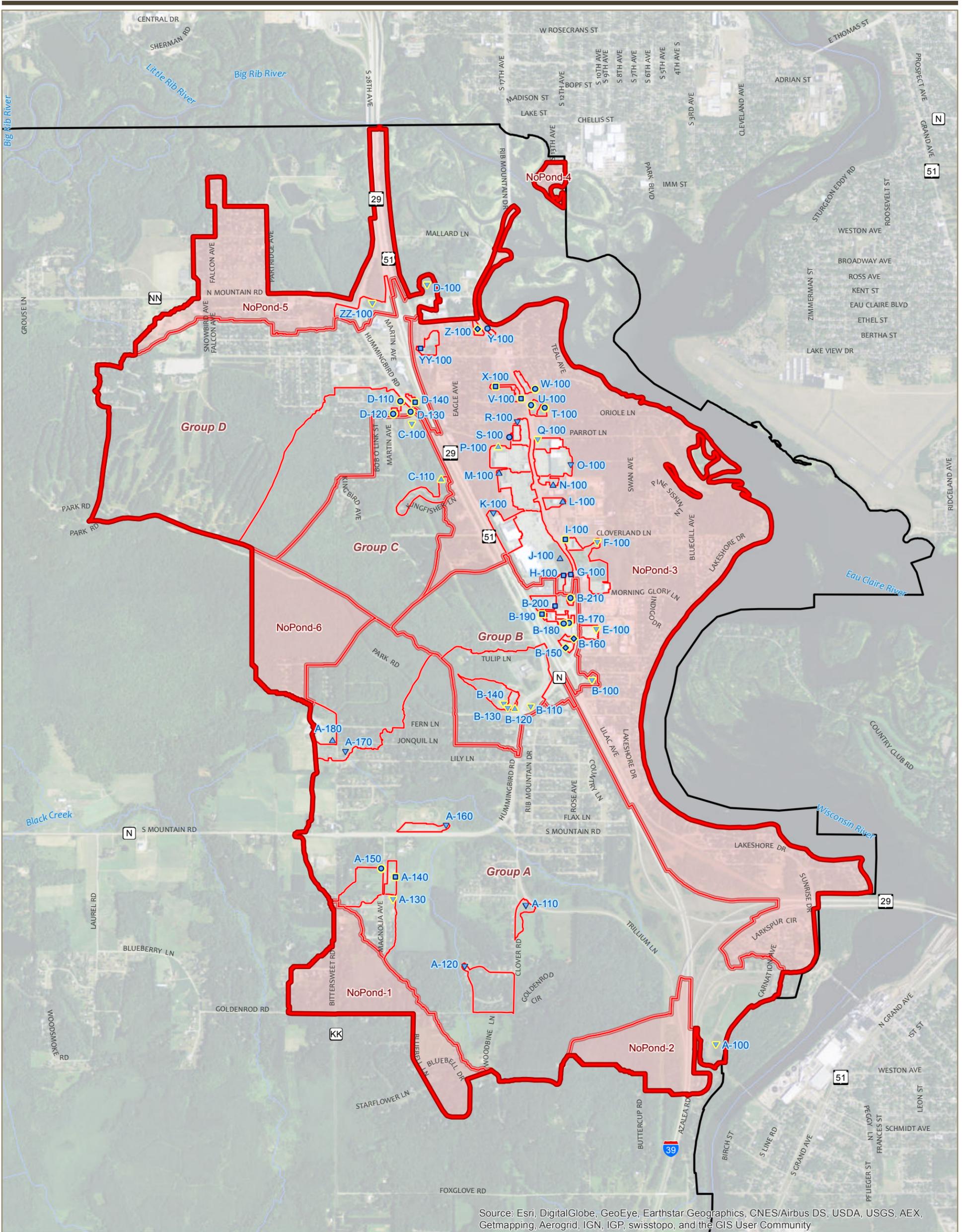
- |                      |                             |                             |                         |            |
|----------------------|-----------------------------|-----------------------------|-------------------------|------------|
| Town of Rib Mountain | Residential, Low Density    | School                      | Commercial, Office Park | Open Space |
| Study Area           | Residential, Duplex         | Institutional               | Commercial, Strip       | Water      |
| Parcel               | Residential, Medium Density | Light Industrial            | Wooded                  | Highway    |
| River/Stream         | Residential, High Density   | Medium Industrial           | Agricultural            | Park       |
|                      | Residential, Multi-Family   | Commercial, Shopping Center |                         |            |

DATA SOURCES:  
PARCELS AND TOWN BOUNDARY  
PROVIDED BY MARATHON COUNTY.  
FLOWLINE PROVIDED BY THE USGS (NHD).  
AERIAL IMAGERY PROVIDED BY ESRI.



0 500 1,000 2,000 Feet





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

# MAP 5: EXISTING STORMWATER PONDS

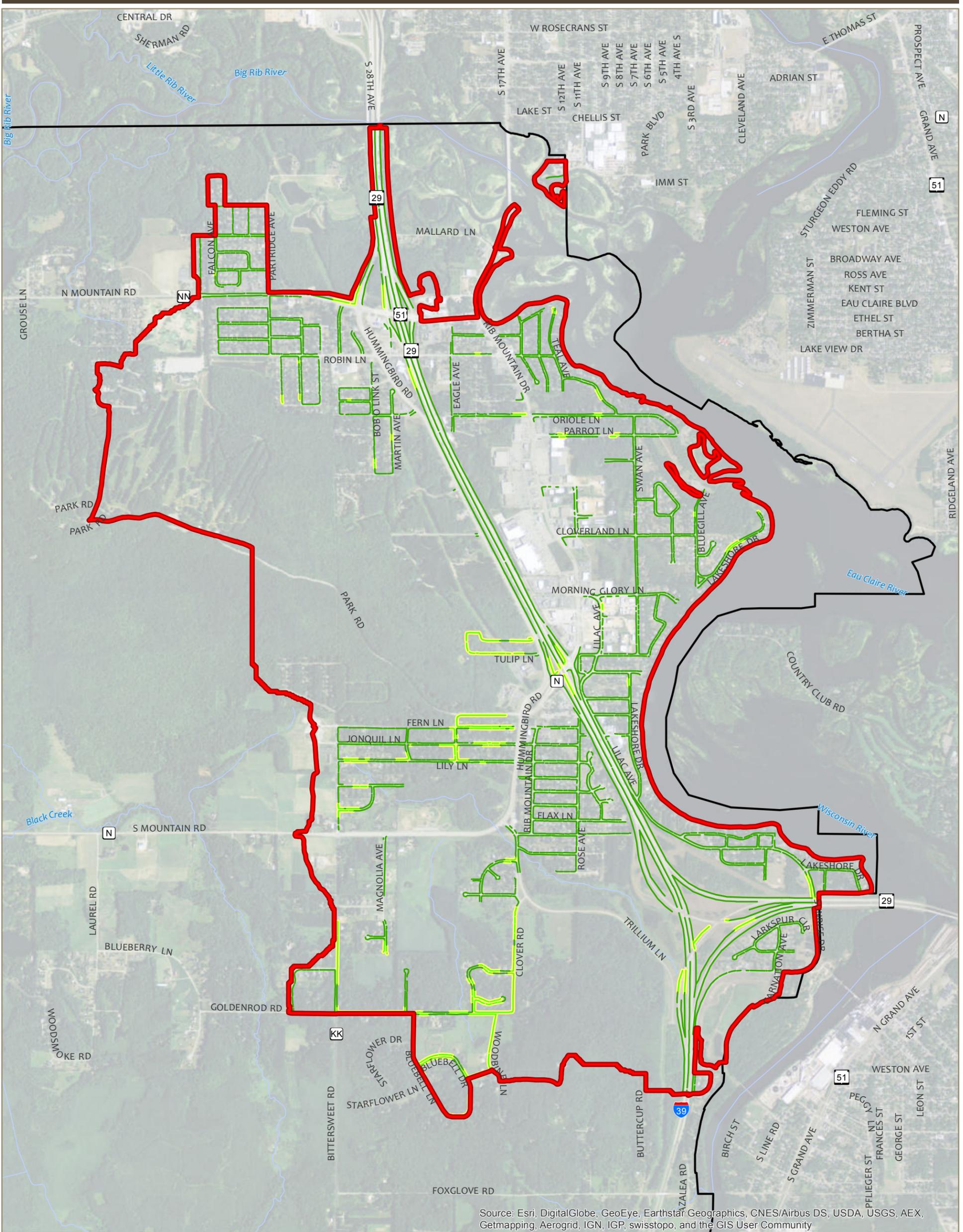
TOWN OF RIB MOUNTAIN  
MARATHON COUNTY, WI

- |  |                      |  |                           |  |                    |
|--|----------------------|--|---------------------------|--|--------------------|
|  | Town of Rib Mountain |  | BMP Type and Model Status |  | Wet Pond (Shallow) |
|  | River/Stream         |  | Dry Pond                  |  | Wet Pond           |
|  | Study Area           |  | Infiltration Basin        |  | Pond was modeled   |
|  | Subwatershed         |  | Underground/Infiltration  |  |                    |
|  | Subwatershed Group   |  |                           |  |                    |

DATA SOURCES:  
TOWN BOUNDARY PROVIDED BY  
MARATHON COUNTY.  
FLOWLINE PROVIDED BY THE USGS (NHD).  
AERIAL IMAGERY PROVIDED BY ESRI.

0 500 1,000 2,000 Feet

**MSA**  
PROFESSIONAL SERVICES

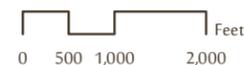


# MAP 4: SWALES

TOWN OF RIB MOUNTAIN  
MARATHON COUNTY, WI

-  Town of Rib Mountain
-  Study Area
-  River/Stream
-  Swale within Urban Area
-  Swale within Urban Area where slope > 4%

DATA SOURCES:  
TOWN BOUNDARY PROVIDED BY MARATHON COUNTY.  
FLOWLINE PROVIDED BY THE USGS (NHD).  
SWALES LOCATED WITH AERIAL IMAGERY.  
AERIAL IMAGERY PROVIDED BY ESRI.



**NORTH CENTRAL WI STORMWATER COALITION  
OUTREACH AND EDUCATION PLAN ACTIVITIES COMPILATION**

March 28, 2017

DATE	ACTIVITY	DESCRIPTION	EDUCATION & OUTREACH PLAN GOAL	AUDIENCE
01/19/16	Letter of Support	Assembly Bill 600 - Letter of Support	Public outreach and education	Elected Officials
02/02/16	Letter of Support	Senate Bill 567 - Letter of Support	Public outreach and education	Elected Officials
02/08/16	School Rain Garden Development Grant Application	The North Central Stormwater Coalition made available to local schools and technical colleges up to 3 mini-grants of \$1,000 each in 2016 or 2017 toward the preparation and planting of a school rain garden.	Public outreach and education	Centrat WI Area Youth
02/17/16	Letter of Support	Senate Bill 459 - Letter of Support	Public outreach and education	Elected Officials
02/18/16	Rubber Ducky Informercial	Marcus Cedar Creek Theater, Rothschild and Baraboo - 8 weeks Campus Theater, Stevens Point, WI Rapids and Marshfield - 8 weeks Rogers Cinema, WI Rapids and Marshfield - 8 weeks Cosmo Theater, Merrill - May - September; 288 view times per week	Public outreach and education	Wausau Metro Area / Central WI Residents
02/19/16	Letter of Support	Assembly Bill 735 - Letter of Support	Public outreach and education	Elected Officials
03/07/16	Stormwater video training	The City of Wausau Street Department requested Coalition stormwater videos for staff training	Public outreach and education	City of Wausau Street Department staff
04/15/16	Wisconsin River Cleanup Sponsor	\$500 Platinum Sponsor	Public outreach and education	Central WI Area Youth
05/12/16	DNR Comment Letter	Comments to DNR on the Petenwell/Castle Rock Reservoir, Big Eau Pleine Reservoir, and the Wisconsin River SWAT modeling.	Technical review of modeling	DNR
05/13/16	Wisconsin River Cleanup Presentation	Interactive educational presentation to participants	Public outreach and education	Approx. 250 Central WI area youth
05/20/16	City of Schofield catch basin stenciling	Small presentation and stenciling of 86 catch basins in the City of Schofield.	Public outreach and education	30 Girl Scouts and 10 parents

## TECHNICAL MEMORANDUM



**Date:** November 12, 2014

**To:** Rib Mountain Streets and Parks Superintendent  
**Cc:** Marathon County Highway Department Project Superintendent

**From:** Schoen Engineering Solutions LLC

**Subject:** 2014 Illicit Discharge Detection and Elimination Dry Weather Screening

**Executive Summary:** The Town of Rib Mountain contracted with Schoen Engineering Solutions LLC (SES) to conduct dry weather screenings of the Town's major outfalls, and Marathon County's major outfalls falling within the Town municipal boundary. SES conducted the field screenings in accordance with the Wisconsin Department of Natural Resources (WDNR) permit requirements. SES concluded not tested outfalls fell outside acceptable parameter limits..

**Purpose:** WDNR requires screening as a condition of the Wisconsin Pollutant Discharge Elimination System (WPDES) General Permit to discharge stormwater from a Municipal Separate Storm Sewer System (MS4), Permit No. WI-S050075-2. The permit requires all major outfalls to be screened once per permit cycle. Major outfalls are classified as those with either an inside diameter of at least 36 inches (or equivalent cross-sectional area) serving a drainage area of at least 50 acres, or an inside diameter of at least 12 inches draining at least two acres of industrial land use. The permit requires chemical testing when flow is observed at a monitored outfall. The permit holder is allowed to choose from two sample panels, either pH, total chlorine, total copper, total phenol and detergents, or detergent, ammonia, potassium and fluoride.

**Methods:** In collaboration with SES, the Town chose to utilize the pH, total chlorine, total copper, total phenol and detergent test panel. Field samples were taken at all outfalls where flow was present and testing was performed utilizing CHEMetrics field test kits for chemical constituents and an Oakton Instruments pHTestr 20 unit for pH. Follow-up levels for test parameters, and outfall identification, were per the Town of Rib Mountain Illicit Discharge Detection and Elimination Program prepared by AECOM in 2009. Chemical test parameter limits are as follows:

Parameter	Acceptable Limit
pH	Between 6.0 and 9.0
Chlorine	Less than 1.0 mg/l
Detergent	Less than 0.5 mg/l
Copper	Less than 0.2 mg/l
Phenols	Less than 0.1 mg/l

**Results and Discussion:**

**Town of Rib Mountain Outfalls**

<b>Outfall ID</b>	<b>Outfall Location</b>	<b>Active?</b>	<b>Tests within limits?</b>	<b>Comment</b>
BR-1	NE Corner of Swallow Lane and Macaw Ave	N	N/A	
BR-2	Swale on W side of Partridge Ave, S of Swallow Ln	N	N/A	
BR-6	Culvert under Rib Mt Way at Canvasback	Y	Y	
BR-7	N Mountain Rd North of Spring Circle	Y	Y	
BR-8	N Mountain Rd West of Bobwhite Rd	N	N/A	Some sediment in culvert bottom.
DOT-3	Hummingbird Rd, S of Oriole Ln	Y	Y	
DOT-5	Hummingbird Rd and Oriole Ln	N	N/A	
DOT-7	Robin Ln and HWY 51			See discussion below.
DOT-8	Between Country Ln and HWY 51	N	N/A	
MCO-5	Lilac and Phlox Ln swale	N	N/A	
MCO-6	Large beehive at end of county swale east of Lakeshore Dr, south of Phlox.	N	N/A	Verified inactive by viewing beehive upstream of outfall at Phlox Lane cul-de-sac.
MCO-7	County swale north of Oriole Ln	Y	N	See comment below.
WI-5	Pintail Ln	Y	Y	
WI-6	Swan Ave	Y	Y	
WI-9	Under Trillium,	Y	N/A	Insufficient flow to obtain sample.
WI-10	Between S Mountain Rd and Orchid Ln	Y	Y	
WTL-2	South of Lily Ln	Y	Y	
WTL-3	S of Primrose Ave and Lily Ln	Y	Y	
WTL-4	SE of Iris Ln and Strawberry Ln	Y	Y	
WTL-5	SE of Iris Ln and Strawberry Ln	N	N	
WTL-8	Chickadee Ln and Martin Ave	Y	Y	

1. Wisconsin State Patrol staff directed SES to not access the DOT-7 outfall due to safety constraints. The outfall is within the I-39 ROW. Future sampling efforts should focus on locating upstream manholes, if accessible.
2. Test results at MCO-7 exceeded the detergent action limit of 0.5 mg/l, but the appearance of the blue portion of the test media during the reaction indicated potential interference from organic

materials. The same response occurred at this location in 2013, and after further testing, SES concluded that the test result at the outfall was not indicative of detergent, but was caused by organic matter coming from a segment of drainage swale that flows north and intersects the main outfall swale just south of Cardinal Ave.

### Marathon County Outfalls

<b>Outfall ID</b>	<b>Outfall Location</b>	<b>Active?</b>	<b>Tests within limits?</b>	<b>Comment</b>
N-1	CTH-N, into wetland east of Doepke Park.	N	N/A	
N-2	CTH-N into N/S culvert under N, flows out of small wetland west of Doepke Park	N	N/A	
N-3	CTH-N near Juniper Ln.	N	N/A	
NN-1	Swale draining north along west side of CTH-R, north of CTH-NN.	N	N/A	
NN-2	Swale draining north along CTH-R, north of CTH-NN.	N	N/A	
NN-3	North side of CTH-N between Partridge Ave and Snowbird Ln.	N	N/A	
NN-4	South side of CTH-NN at Snowbird Ln	N	N/A	
NN-5	North side of CTH-NN, west of bridge west of Raven Ave	N	N/A	
R-1	Swale on east side of CTH-R, south of Rib River..	N	N/A	
R-2	Swale along west side of CTH-R, south of Rib River.	N	N/A	
R-3	Storm sewer at CTH-R and Robin Ln intersection.	N	N/A	
R-4	Swales along CTH-R downhill from Kingfisher Ln.	N	N/A	
R-5	Swale on east side of CTH-R, drains to pond ~100 yds north of Kingfisher Ln	N	N/A	
R-6	Into pond northwest of CTH-R south of Immanuel Church.	N	N/A	

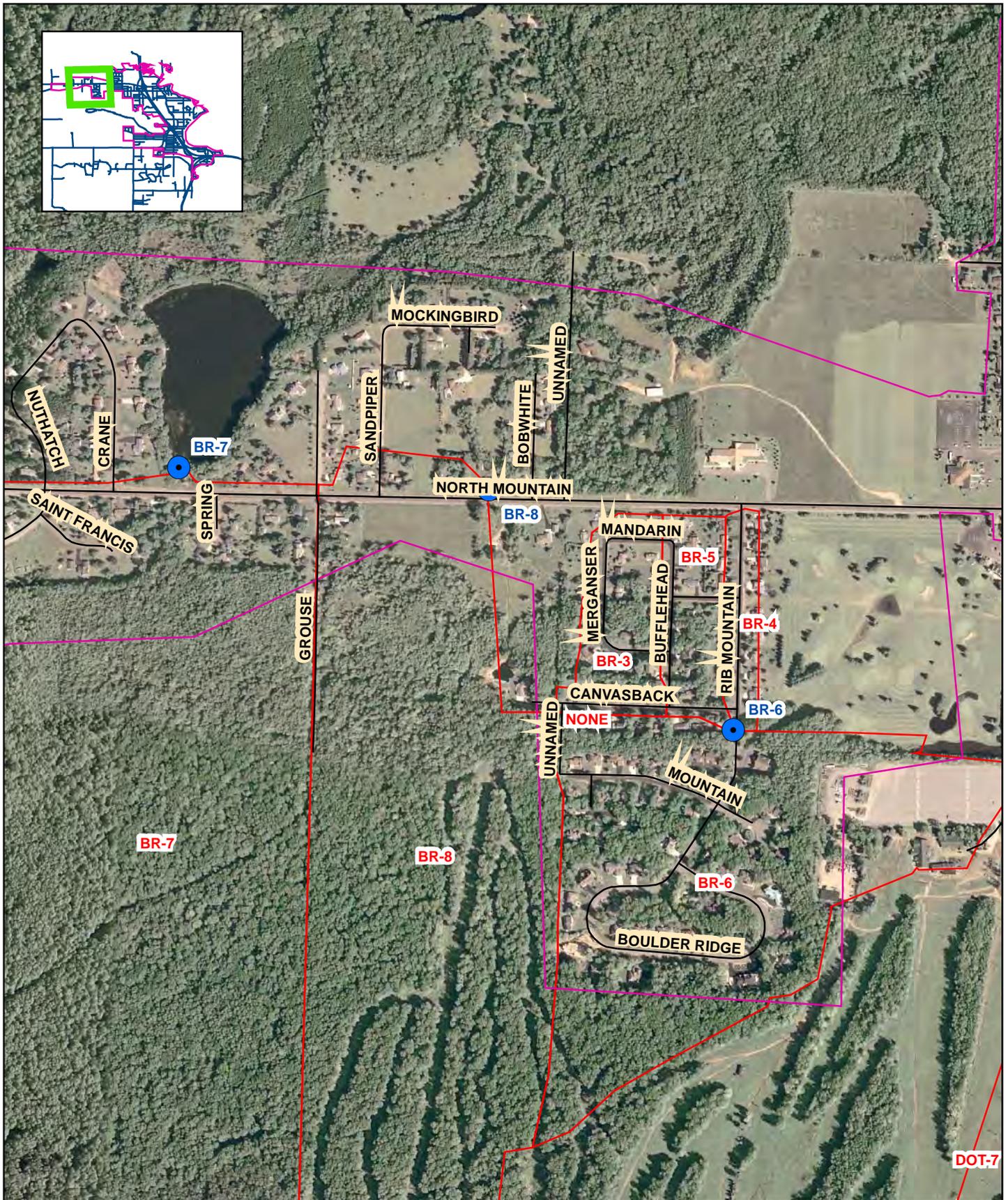
**Conclusions and Recommendations:**

MCO-5 and WTL-3 might not meet WDNR criteria for a major outfall, and therefore could potentially be removed from the IDDE program. SES recommends the Town consider utilizing Marathon Counties LiDAR derived contours to review existing drainage basin delineations as part of the update to the Stormwater Management Plan the Town will be performing under a WDNR grant. Major outfalls are those with a diameter of 36 inches draining a watershed of at least 50 acres, or a diameter of at least 12 inches draining 2 acres of industrial area.

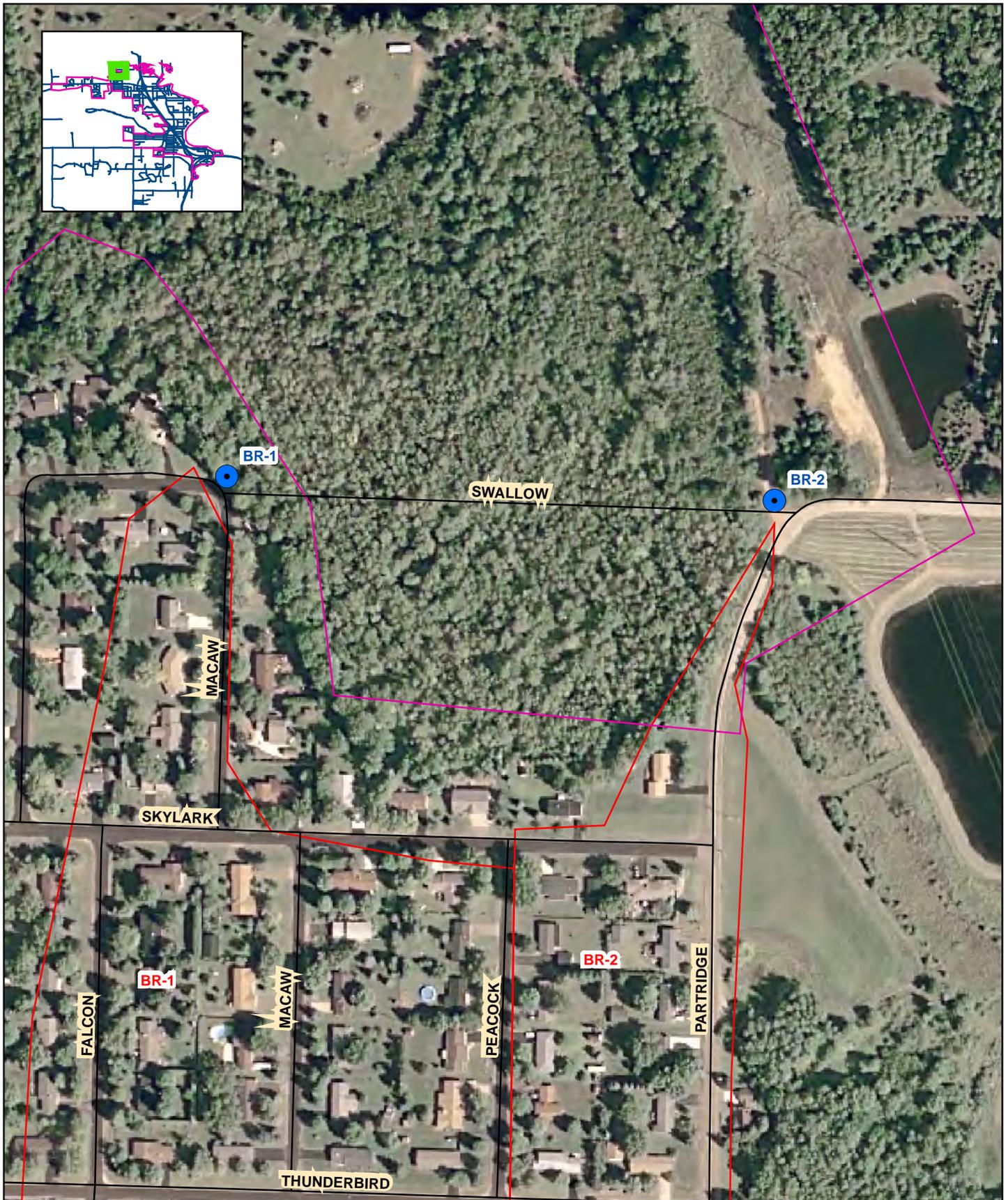
None of the County outfalls appear to meet criteria for a major outfall. The basin delineations prepared for the County by AECOM were developed as part of a pollution load analysis, and were not intended for identifying IDDE outfalls. SES discussed the County outfalls with Brad Johnson, the regional WDNR stormwater management specialist, who agreed that the County outfalls should all be removed from the IDDE program.

**Attachments:**

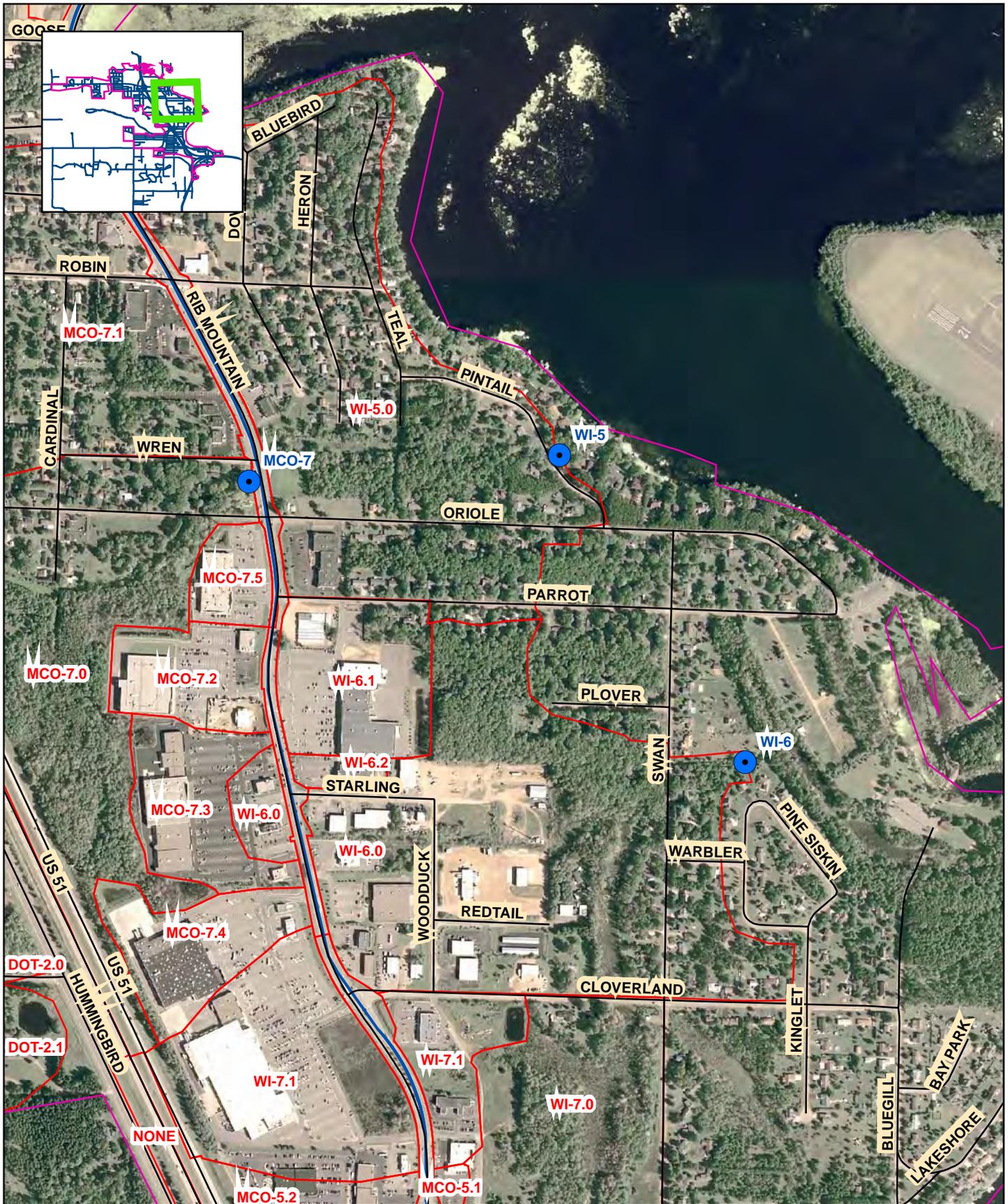
Field documents.



	<b>IDDE Outfall Locations</b>	Town of Rib Mountain 3700 North Mountain Rd Wausau, WI 54401
	Project No. 131002	Figure No.1
October 2013		



	<b>IDDE Outfall Locations</b>		Town of Rib Mountain 3700 North Mountain Rd Wausau, WI 54401
	Project No. 131002	Figure No.2	October 2013



**IDDE Outfall Locations**

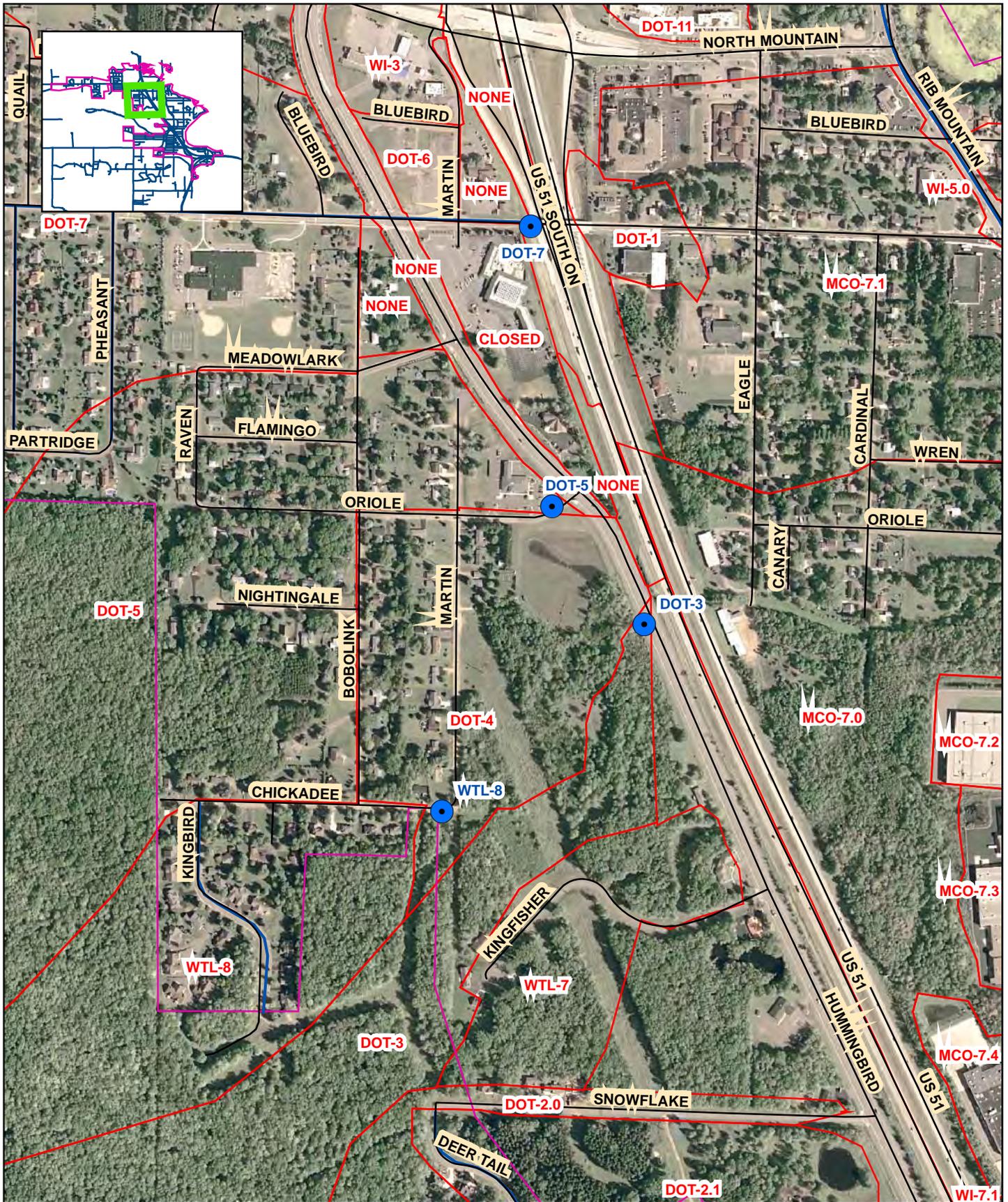
Town of Rib Mountain  
3700 North Mountain Rd  
Wausau, WI 54401

Project No. 131002

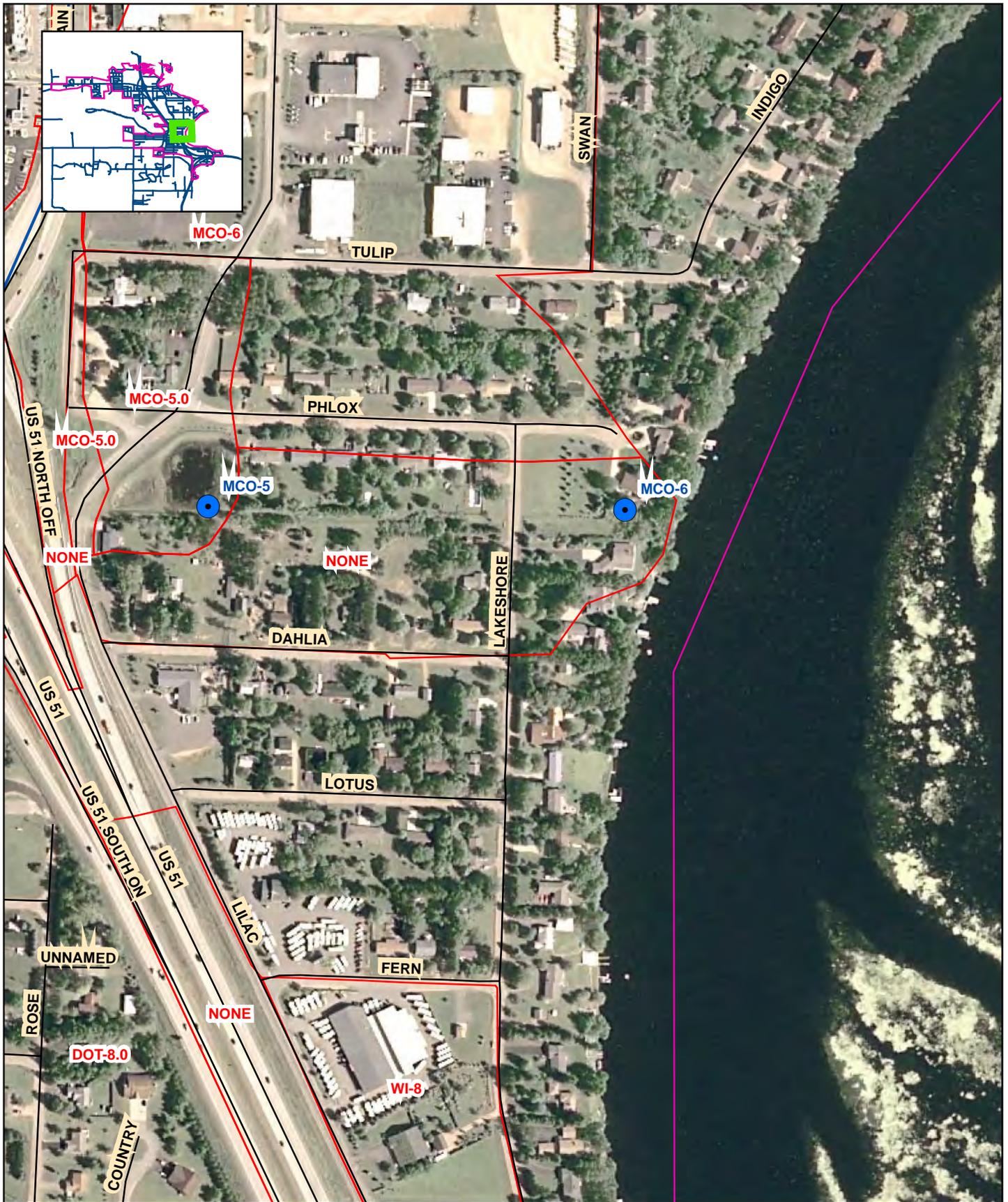
Figure No.2

October 2013

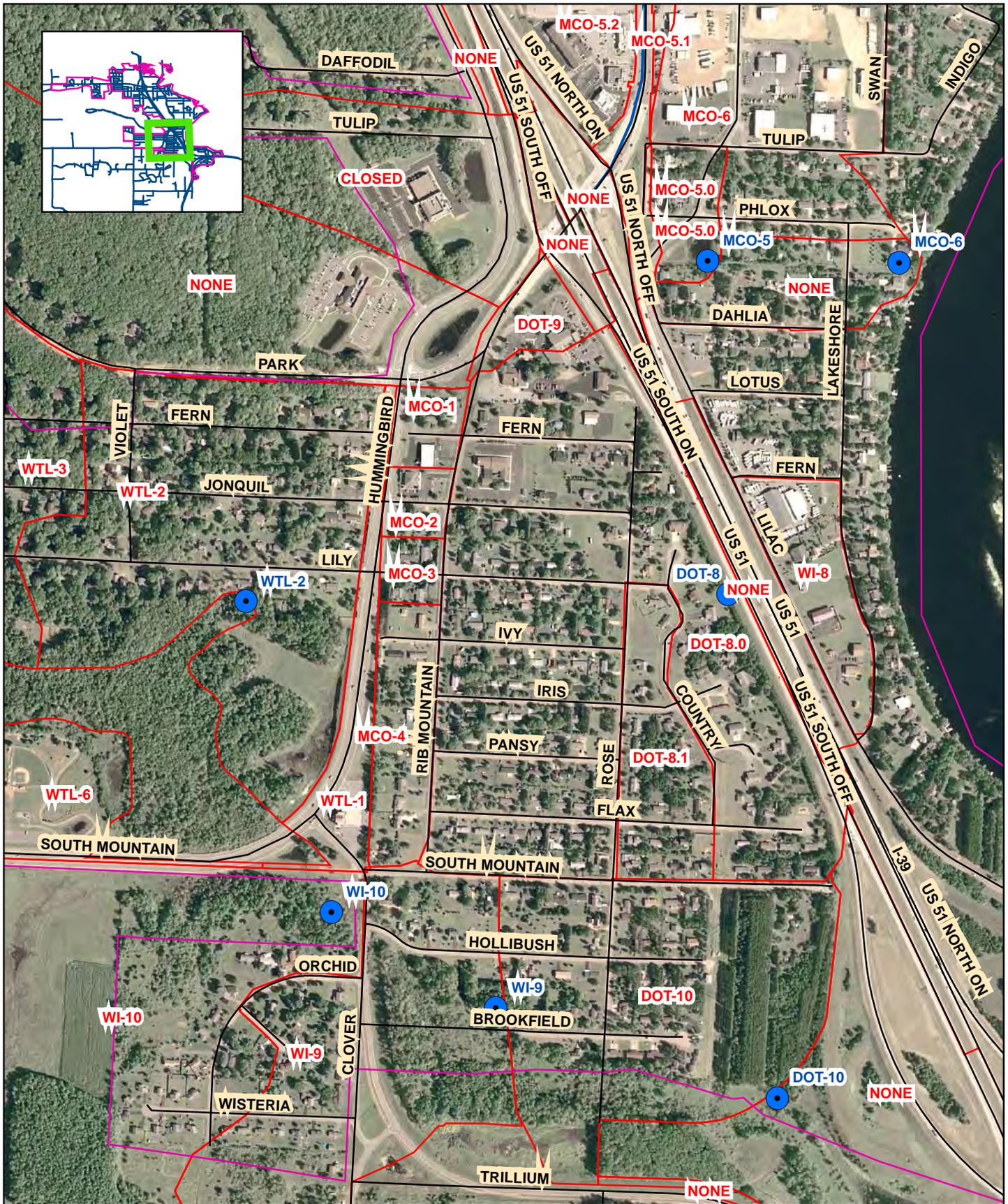




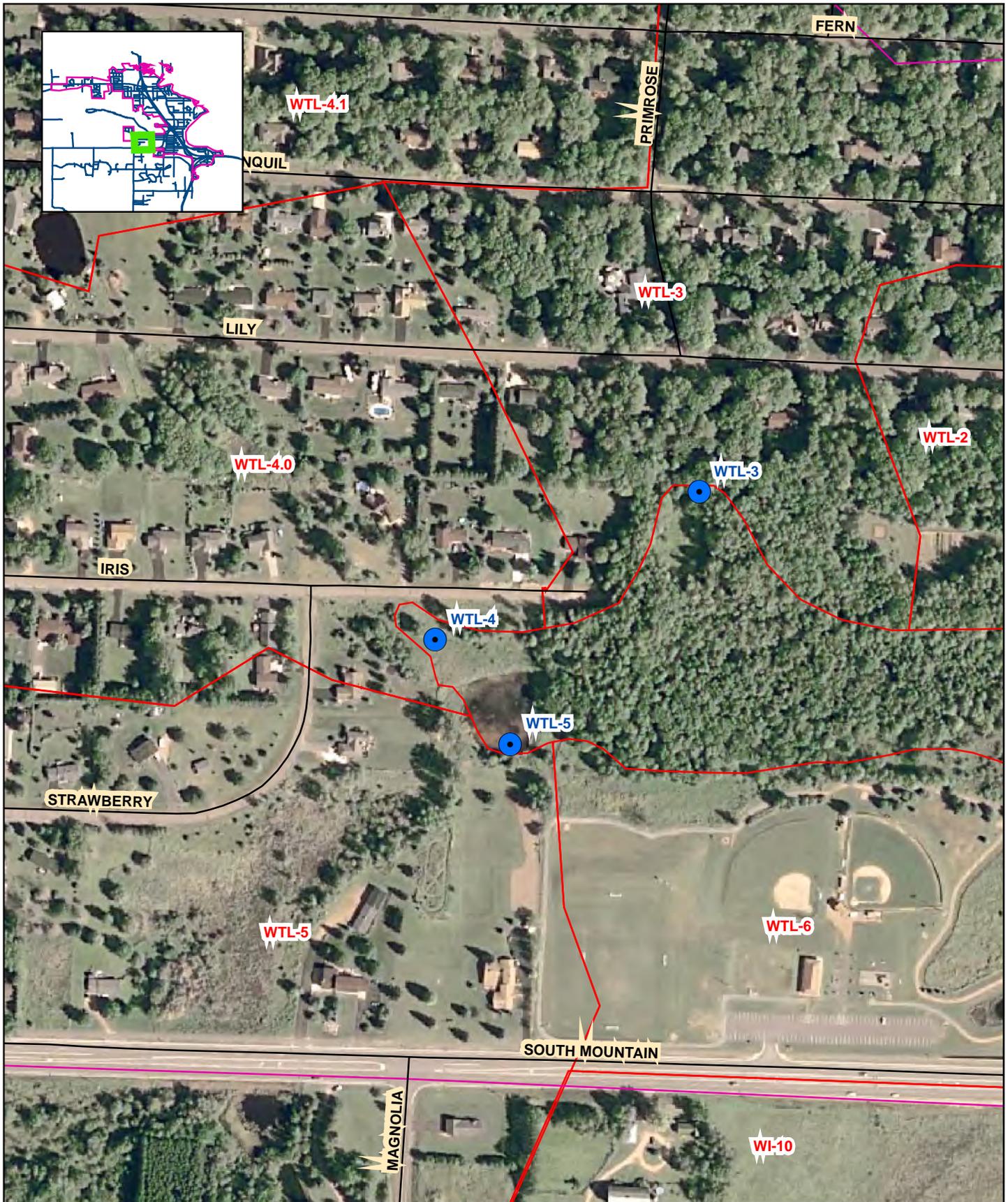
	<b>IDDE Outfall Locations</b>	Town of Rib Mountain 3700 North Mountain Rd Wausau, WI 54401
Project No. 131002	Figure No.2	October 2013



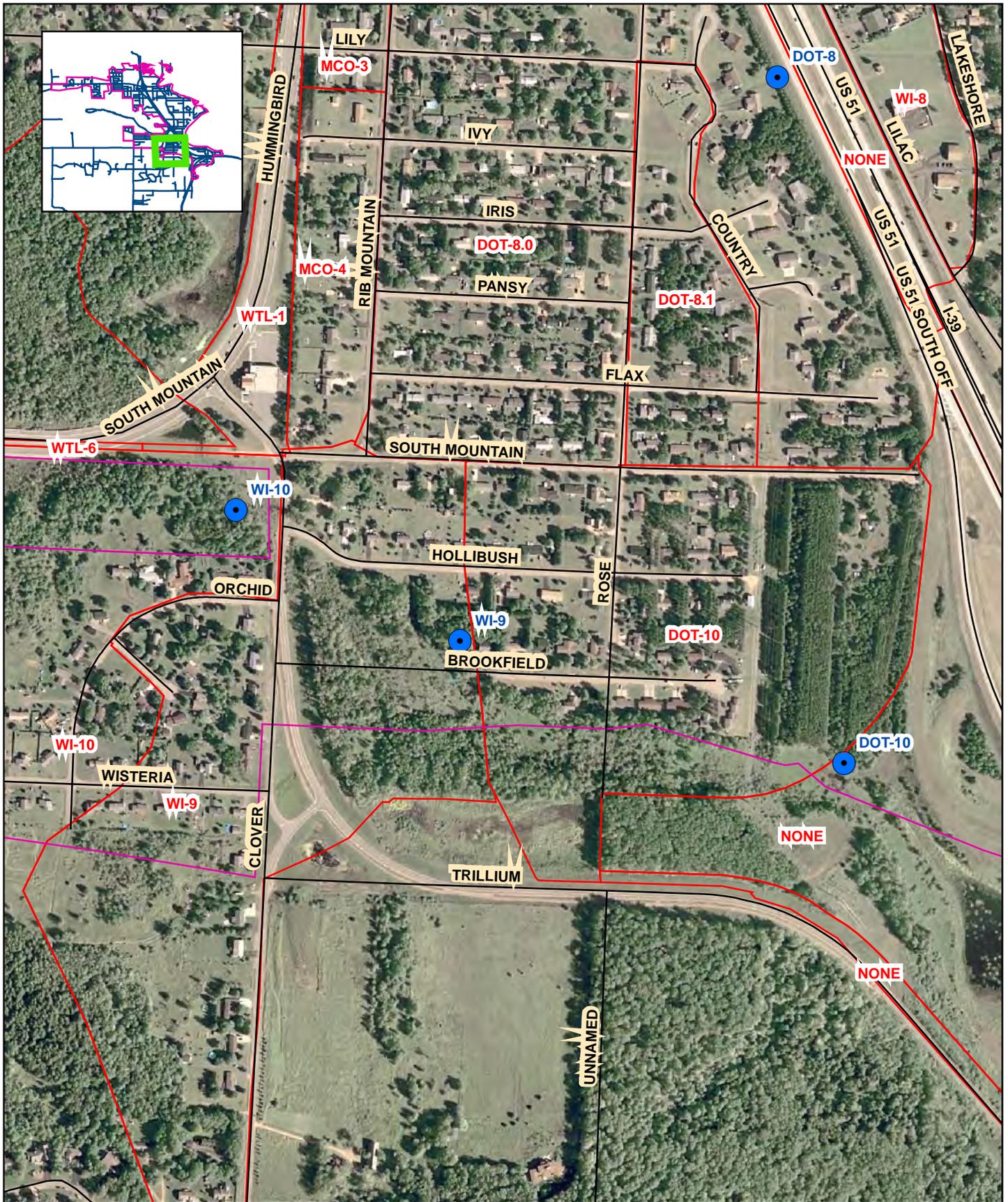
	<b>IDDE Outfall Locations</b>		Town of Rib Mountain 3700 North Mountain Rd Wausau, WI 54401
	Project No. 131002	Figure No.2	October 2013



<b>IDDE Outfall Locations</b>		Town of Rib Mountain 3700 North Mountain Rd Wausau, WI 54401
Project No. 131002	Figure No.2	October 2013



	<p align="center"><b>IDDE Outfall Locations</b></p>		<p align="center">Town of Rib Mountain 3700 North Mountain Rd Wausau, WI 54401</p>
	<p>Project No. 131002</p>	<p>Figure No.2</p>	<p>October 2013</p>



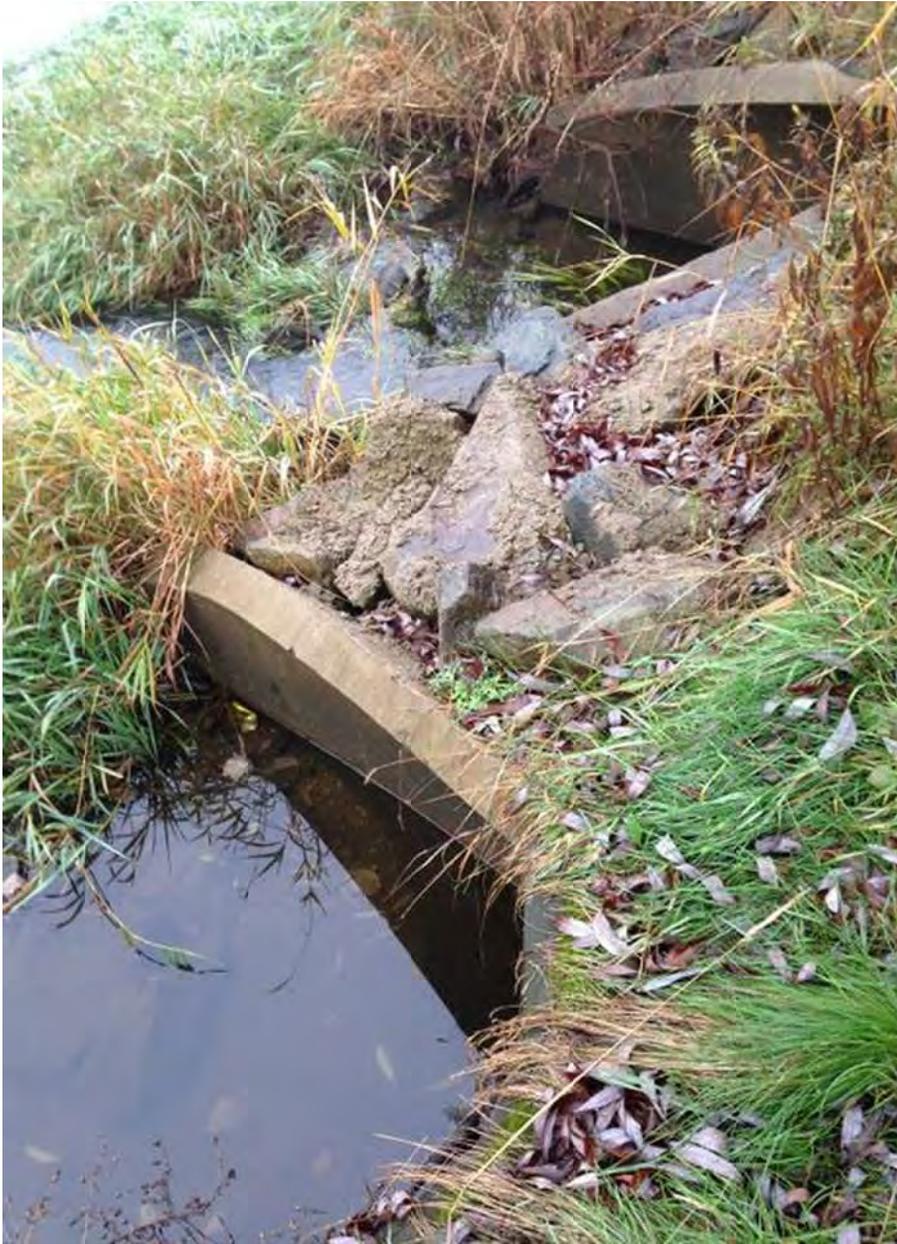
	<b>IDDE Outfall Locations</b>		Town of Rib Mountain 3700 North Mountain Rd Wausau, WI 54401
Project No. 131002	Figure No.2	October 2013	



wi\_6



wi\_5



dot\_11\_old



dot\_5



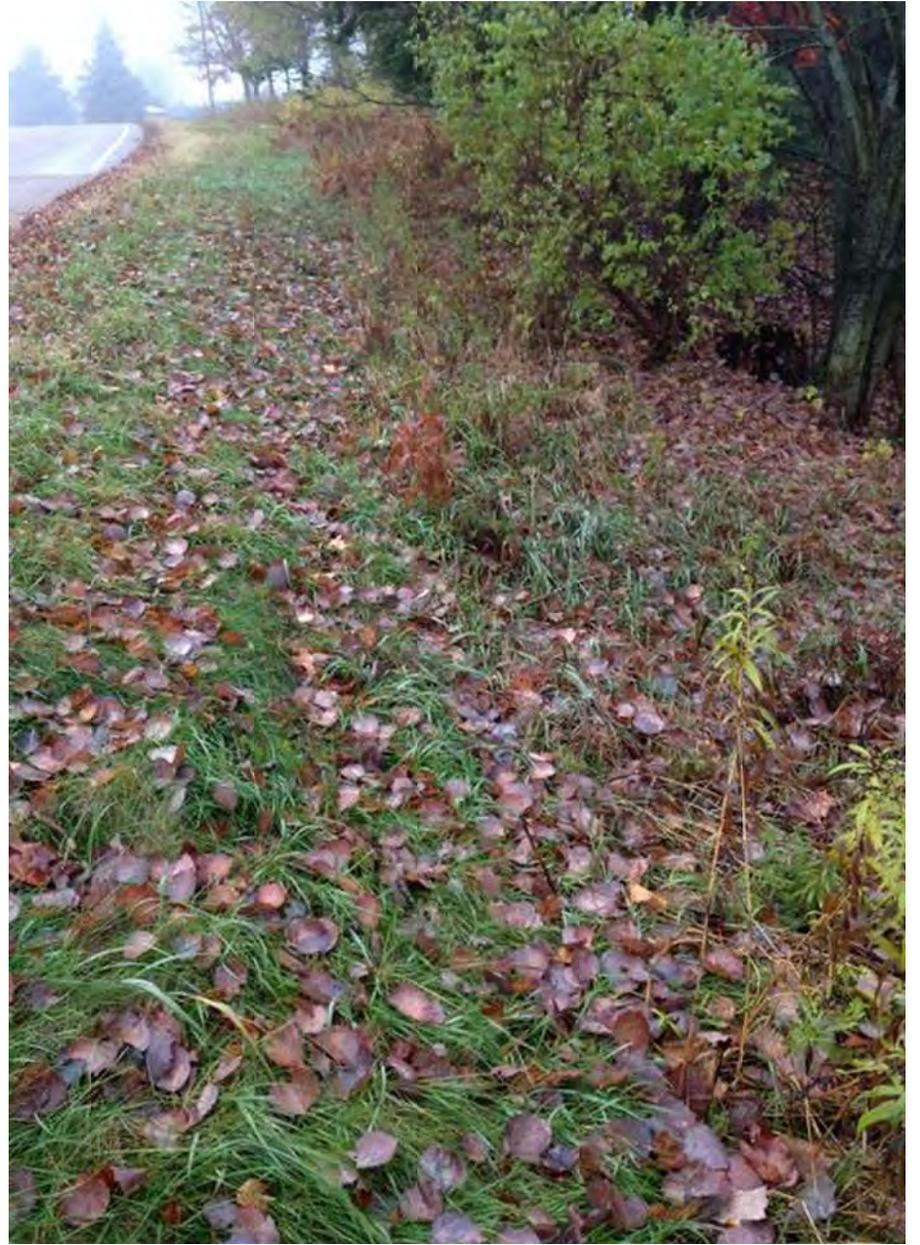
br\_1



dot\_11



br\_6



br\_2



br\_7



br\_8



mco\_6



wtl\_8



mco\_5



wtl\_2



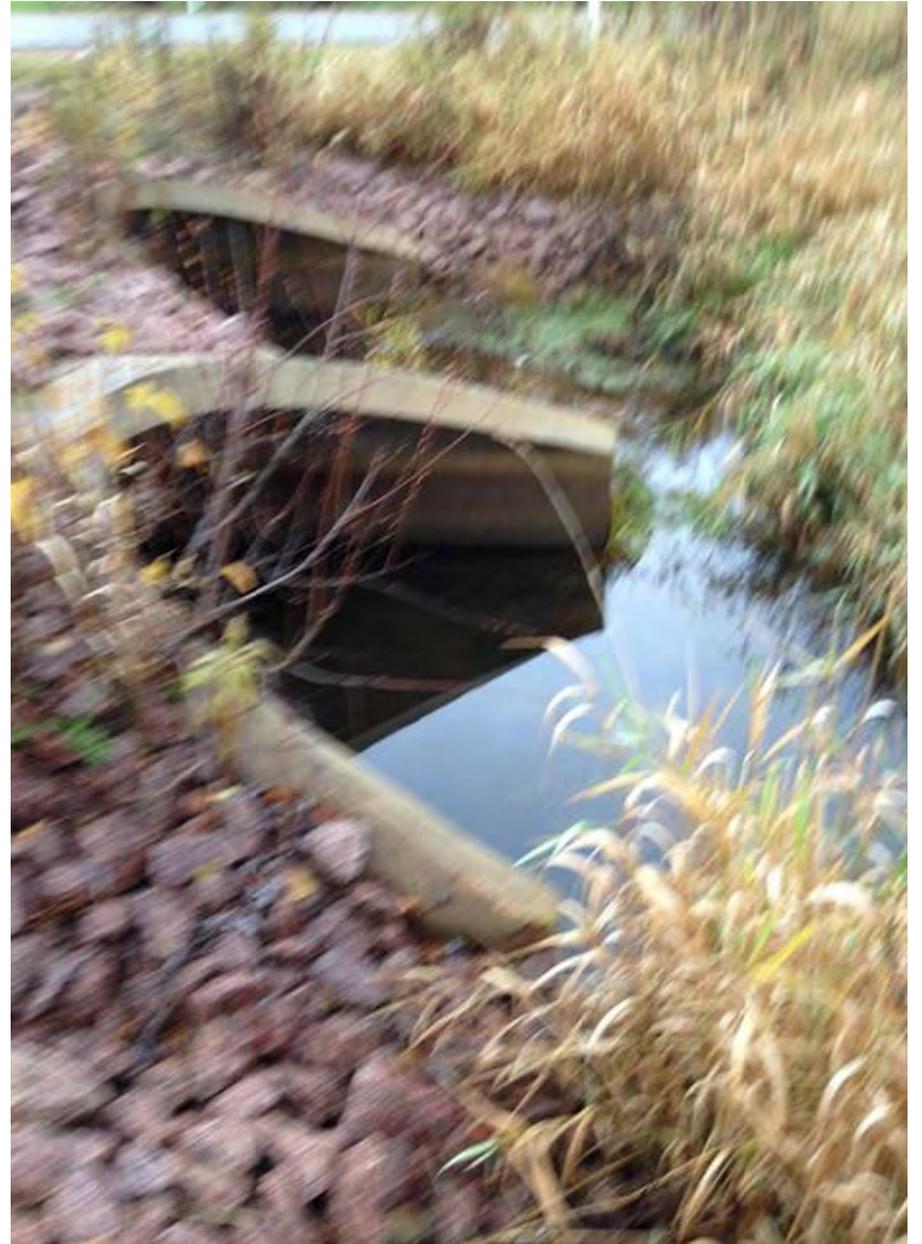
wi\_9



dot\_8



dot\_3



wi\_10



wtl\_4



mco\_7



wtl\_5



wtl\_3