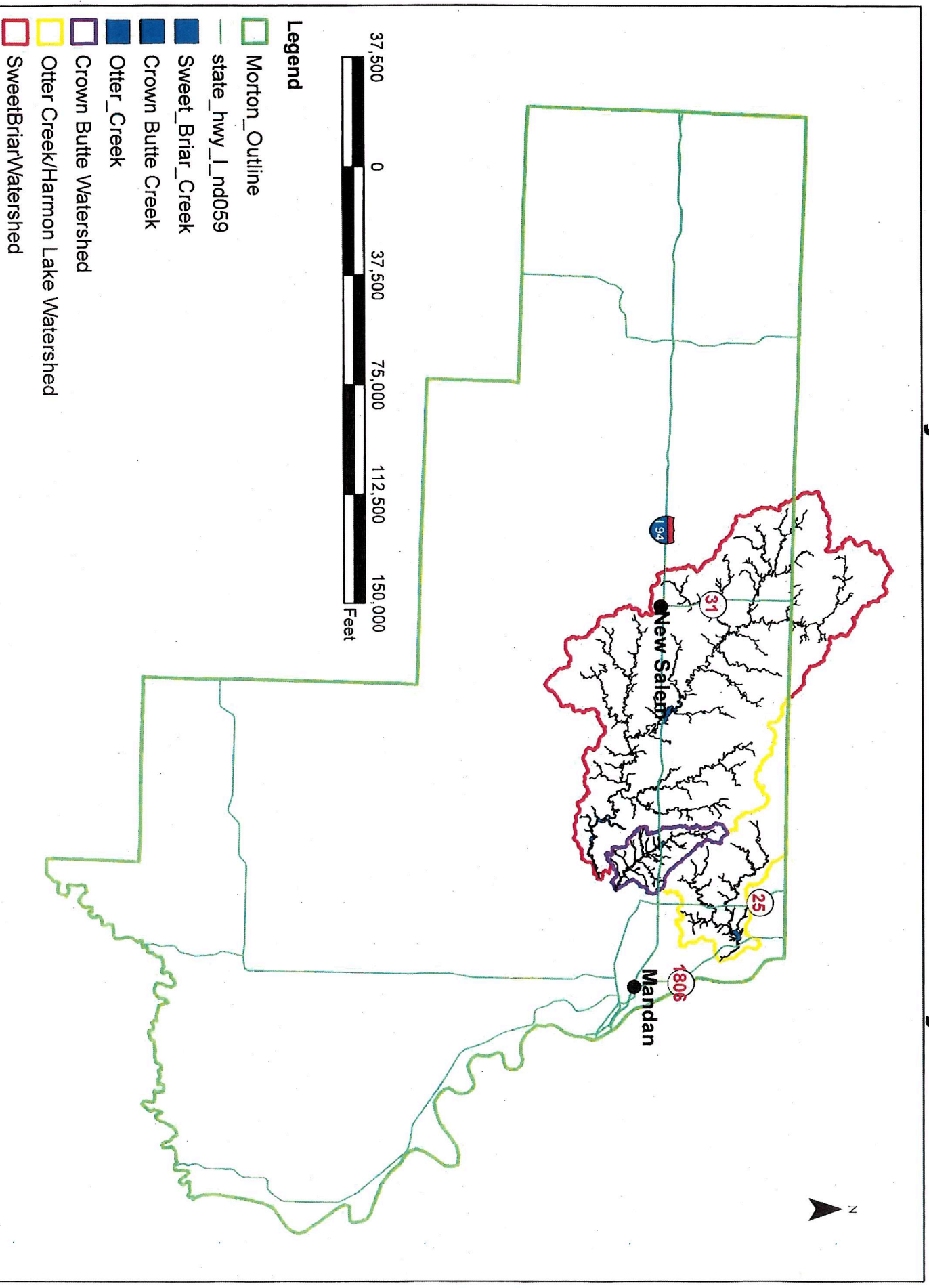




Figure 1. Overview of Lake and Stream Monitoring Locations for the Hailstone Creek/Danzig Dam TMDL Development and Assessment Project.

*New Project Area*

# Morton County Northeastern Watershed Project



New project is directly to the west.



2016 Integrated Report  
Published by the North Dakota Department of Health  
Watershed Management Program



**NORTH DAKOTA**  
DEPARTMENT of HEALTH

Approved by US EPA  
February 21, 2017

Glossary terms that will be used on the following page(s):

**Waterbody Description:** The description/location of the listed stream/river segment, lake or reservoir.

**Beneficial Use Impaired:** One of six beneficial uses assigned to a waterbody based on water quality standards define by the state.

- 1) aquatic life
- 2) recreation
- 3) drinking water
- 4) fish consumption
- 5) agriculture use
- 6) industrial use

**Beneficial Use Status:**

**Fully Supporting**

**but Threatened:**

**Not Supporting:**

If current trends continue these waterbodies may not meet their designated use  
The waterbody's designated uses have been assessed and are not being supported

**Cause of Impairment:**

The reason the beneficial use is being impaired.

Nutrient/Eutrophication – Excess nutrients are causing an increase in the eutrophication (aging) of the lake/reservoir

Sedimentation/Siltation – Excess sediments are limiting the propagation of fish or other aquatic life

Fecal Coliform or Escherichia coli – bacteria found in fecal material that can be detrimental to human health

Benthic-Macroinvertebrate Assessments – Surveys indicate populations of macros are of poor health

Methylmercury – methylmercury levels in fish tissue have resulted in fish consumption advisories

Dissolved Oxygen – levels of dissolved oxygen do not support fish and other aquatic biota

**TMDL Priority:**

**L =**

Low – The Department will work with EPA to develop a method of prioritizing waterbodies and watersheds for TMDL development

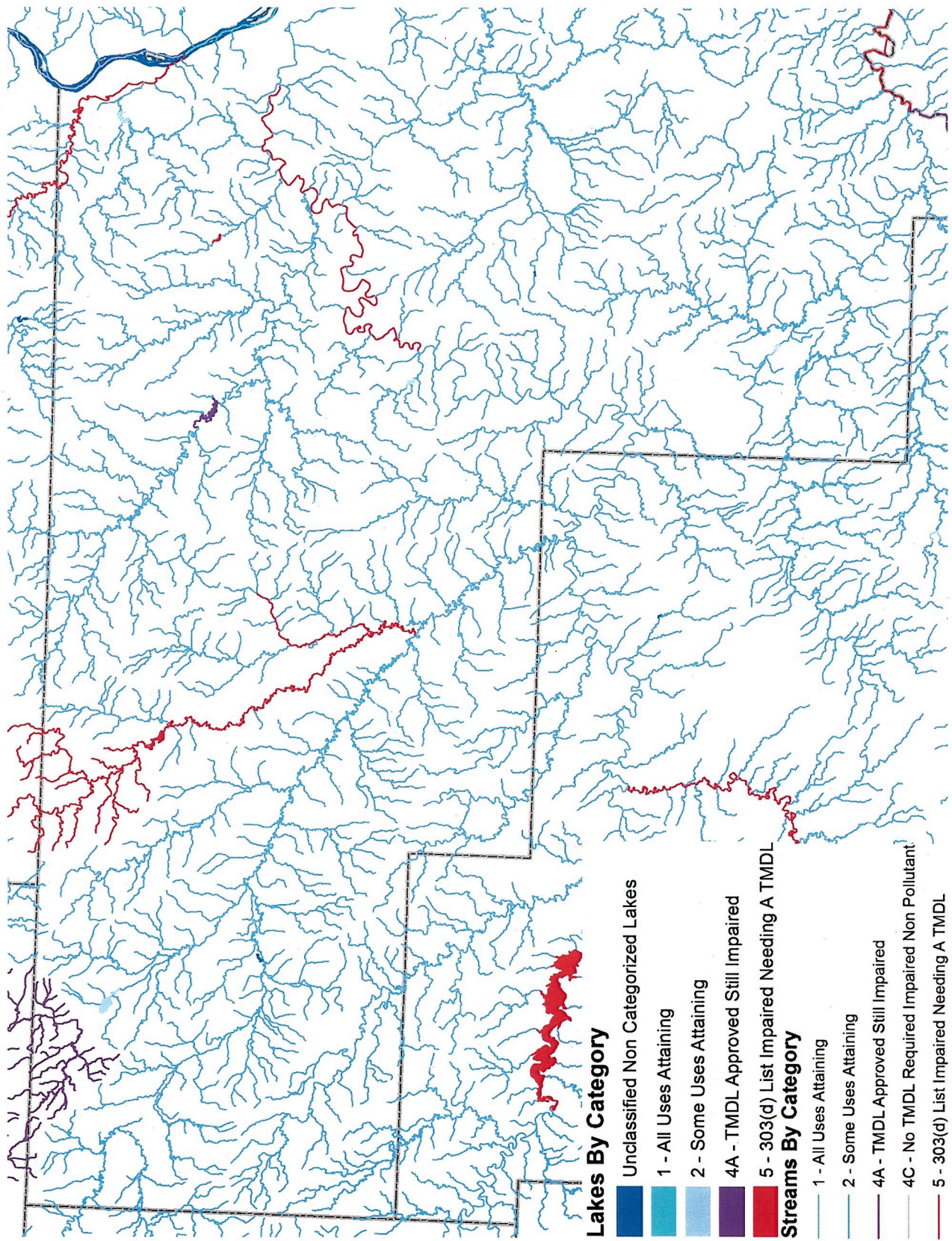
**H =**

High – TMDLs or alternative restoration approaches will be developed by 2022

**Date TMDL Completed:**

If a Total Maximum Daily Load Report (TMDL) has been written for the listed waterbody, a date will appear after the heading.







### Big Muddy Creek

Waterbody ID Waterbody Type Waterbody Description

Date TMDL Completed

ND-10130203-002-S\_00 RIVER

Big Muddy Creek from its confluence with Hailstone Creek downstream to its confluence with the Heart River. Located in Morton and Grant Counties.

Size Units Beneficial Use Impaired

22.13 MILES Recreation

Beneficial Use Status

Not Supporting

Cause of Impairment

Escherichia coli

TMDL Priority

L

ND-10130203-032-S\_00 RIVER

Big Muddy Creek from its confluence with Hay Marsh Creek downstream to its confluence with Hailstone Creek. Located in Morton County.

Size Units Beneficial Use Impaired

32.55 MILES Recreation

Beneficial Use Status

Not Supporting

Cause of Impairment

Escherichia coli

TMDL Priority

L

### Chanta Peta Creek

Waterbody ID Waterbody Type Waterbody Description

Date TMDL Completed

ND-10130206-022-S\_00 RIVER

Chanta Peta Creek from its confluence with East Fork Chanta Peta Creek downstream to its confluence with Louse Creek. Located in Morton County.

Size Units Beneficial Use Impaired

12.69 MILES Recreation

Beneficial Use Status

Not Supporting

Cause of Impairment

Escherichia coli

TMDL Priority

L

### Crown Butte Dam

Waterbody ID Waterbody Type Waterbody Description

Date TMDL Completed

ND-10130203-002-L\_00

FRESHWATER RESERVOIR

A small hypereutrophic impoundment on a tributary to the Heart River in Morton County, N.D. It's watershed covers 4,170 acres of an even mix of grassed and cropped agricultural lands.

Size Units Beneficial Use Impaired

31.2 ACRES Fish and Other Aquatic Biota

Beneficial Use Status

Fully Supporting But Threatened

Cause of Impairment

Sedimentation/Siltation

TMDL Priority

L

**Danzig I**

| Waterbody ID | Waterbody Type | Waterbody Description |
|--------------|----------------|-----------------------|
|--------------|----------------|-----------------------|

| Date TMDL Completed |
|---------------------|
|---------------------|

|                      |                      |                                                                                                                                                   |
|----------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| ND-10130203-007-L_00 | FRESHWATER RESERVOIR | A hypereutrophic impoundment on Hailstone Creek in Morton County, N.D. Built in the 1930's by the WPA, the dam is fed by a 25,200 acre watershed. |
|----------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|

| <u>Size</u> | <u>Units</u> | <u>Beneficial Use Impaired</u> | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u>                    | <u>TMDL Priority</u> |
|-------------|--------------|--------------------------------|---------------------------------|-----------------------------------------------|----------------------|
| 147.5       | ACRES        | Recreation                     | Fully Supporting But Threatened | Nutrient/Eutrophication Biological Indicators | H                    |

|                      |                      |                                                                                                                                                   |
|----------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| ND-10130203-007-L_00 | FRESHWATER RESERVOIR | A hypereutrophic impoundment on Hailstone Creek in Morton County, N.D. Built in the 1930's by the WPA, the dam is fed by a 25,200 acre watershed. |
|----------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|

| <u>Size</u> | <u>Units</u> | <u>Beneficial Use Impaired</u> | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u>                    | <u>TMDL Priority</u> |
|-------------|--------------|--------------------------------|---------------------------------|-----------------------------------------------|----------------------|
| 147.5       | ACRES        | Fish and Other Aquatic Biota   | Fully Supporting But Threatened | Nutrient/Eutrophication Biological Indicators | H                    |

|                      |                      |                                                                                                                                                   |
|----------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| ND-10130203-007-L_00 | FRESHWATER RESERVOIR | A hypereutrophic impoundment on Hailstone Creek in Morton County, N.D. Built in the 1930's by the WPA, the dam is fed by a 25,200 acre watershed. |
|----------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|

| <u>Size</u> | <u>Units</u> | <u>Beneficial Use Impaired</u> | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u> | <u>TMDL Priority</u> |
|-------------|--------------|--------------------------------|---------------------------------|----------------------------|----------------------|
| 147.5       | ACRES        | Fish and Other Aquatic Biota   | Fully Supporting But Threatened | Oxygen, Dissolved          | H                    |

|                      |                      |                                                                                                                                                   |
|----------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| ND-10130203-007-L_00 | FRESHWATER RESERVOIR | A hypereutrophic impoundment on Hailstone Creek in Morton County, N.D. Built in the 1930's by the WPA, the dam is fed by a 25,200 acre watershed. |
|----------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|

| <u>Size</u> | <u>Units</u> | <u>Beneficial Use Impaired</u> | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u> | <u>TMDL Priority</u> |
|-------------|--------------|--------------------------------|---------------------------------|----------------------------|----------------------|
| 147.5       | ACRES        | Fish and Other Aquatic Biota   | Fully Supporting But Threatened | Sedimentation/Siltation    | L                    |

**Danzig Dam Watershed**

| Waterbody ID | Waterbody Type | Waterbody Description |
|--------------|----------------|-----------------------|
|--------------|----------------|-----------------------|

| Date TMDL Completed |
|---------------------|
|---------------------|

|                      |       |                                                                                            |
|----------------------|-------|--------------------------------------------------------------------------------------------|
| ND-10130203-041-S_00 | RIVER | Hailstone Creek upstream from Danzig Dam, including tributaries. Located in Morton County. |
|----------------------|-------|--------------------------------------------------------------------------------------------|

| <u>Size</u> | <u>Units</u> | <u>Beneficial Use Impaired</u> | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u> | <u>TMDL Priority</u> |
|-------------|--------------|--------------------------------|---------------------------------|----------------------------|----------------------|
| 60.03       | MILES        | Recreation                     | Fully Supporting But Threatened | Escherichia coli           | H                    |



**Dogtoot** :k

Waterbody ID Waterbody Type Waterbody Description

Date TMDL Completed

ND-10130206-008-S\_00 RIVER

Dogtooth Creek from its confluence with Louse Creek downstream to its confluence with the Cannonball River. Located in Morton County.

Size Units Beneficial Use Impaired

6.53 MILES Recreation

Beneficial Use Status

Not Supporting

Cause of Impairment

Escherichia coli

TMDL Priority

L

ND-10130206-010-S\_00 RIVER

Dogtooth Creek from its confluence with a tributary near Raleigh, ND (ND-10130206-011-S) downstream to its confluence with Louse Creek. Located in Grant County.

Size Units Beneficial Use Impaired

30.63 MILES Recreation

Beneficial Use Status

Not Supporting

Cause of Impairment

Escherichia coli

TMDL Priority

L

**Hailstone Creek**

Waterbody ID Waterbody Type Waterbody Description

Date TMDL Completed

ND-10130203-033-S\_00 RIVER

Hailstone Creek from Danzig Dam downstream to its confluence with Big Muddy Creek. Located in Morton county.

Size Units Beneficial Use Impaired

28.07 MILES Recreation

Beneficial Use Status

Not Supporting

Cause of Impairment

Escherichia coli

TMDL Priority

H

**Heart River**

Waterbody ID Waterbody Type Waterbody Description

Date TMDL Completed

ND-10130203-009-S\_00 RIVER

Heart River from its confluence with Fish Creek downstream to its confluence with Dead Heart Slough. Located in Morton County.

Size Units Beneficial Use Impaired

33.95 MILES Recreation

Beneficial Use Status

Fully Supporting But Threatened

Cause of Impairment

Escherichia coli

TMDL Priority

H



### *Louse Cr*

Waterbody ID      Waterbody Type      Waterbody Description

Date TMDL Completed

ND-10130206-016-S\_00      RIVER

Louse Creek from its confluence with Chanta Peta Creek downstream to its confluence with Dogtooth Creek. Located in Grant County.

Size   Units   Beneficial Use Impaired

9.92   MILES   Recreation

Beneficial Use Status

Not Supporting

Cause of Impairment

Escherichia coli

TMDL Priority

L

ND-10130206-018-S\_00      RIVER

Louse Creek from its confluence with Gap Creek downstream to its confluence with Chanta Peta Creek. Located in Morton and Grant County.

Size   Units   Beneficial Use Impaired

30.12   MILES   Recreation

Beneficial Use Status

Not Supporting

Cause of Impairment

Escherichia coli

TMDL Priority

L

### *Sims Creek*

Waterbody ID      Waterbody Type      Waterbody Description

Date TMDL Completed

ND-10130203-034-S\_00      RIVER

Sims Creek from its confluence with Cut Bank Creek downstream to its confluence with Hailstone Creek. Located in Morton County.

Size   Units   Beneficial Use Impaired

9.1   MILES   Recreation

Beneficial Use Status

Not Supporting

Cause of Impairment

Escherichia coli

TMDL Priority

H

### *Square Butte Creek*

Waterbody ID      Waterbody Type      Waterbody Description

Date TMDL Completed

ND-10130101-002-S\_00      RIVER

Square Butte Creek from its confluence with Otter Creek downstream to its confluence with the Missouri River. Located in Morton County.

Size   Units   Beneficial Use Impaired

2.83   MILES   Fish and Other Aquatic Biota

Beneficial Use Status

Fully Supporting But Threatened

Cause of Impairment

Sedimentation/Siltation

TMDL Priority

L

|                               |                |                                                                                                                           |                                 |                            |
|-------------------------------|----------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------|
| ND-130101-009-S_00            | RIVER          | Square Butte Creek from Nelson Lake downstream to its confluence with Otter Creek. Located in Oliver and Morton Counties. |                                 |                            |
| <u>Size</u>                   | <u>Units</u>   | <u>Beneficial Use Impaired</u>                                                                                            | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u> |
| 38.3                          | MILES          | Recreation                                                                                                                | Not Supporting                  | Fecal Coliform             |
| ND-10130101-009-S_00          | RIVER          | Square Butte Creek from Nelson Lake downstream to its confluence with Otter Creek. Located in Oliver and Morton Counties. |                                 |                            |
| <u>Size</u>                   | <u>Units</u>   | <u>Beneficial Use Impaired</u>                                                                                            | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u> |
| 38.3                          | MILES          | Fish and Other Aquatic Biota                                                                                              | Fully Supporting But Threatened | Sedimentation/Siltation    |
| <b>Wilson Creek Watershed</b> |                |                                                                                                                           |                                 |                            |
| Waterbody ID                  | Waterbody Type | Waterbody Description                                                                                                     | Date TMDL Completed             |                            |
| ND-10130203-046-S_00          | RIVER          | Wilson Creek and tributaries located in Morton County.                                                                    |                                 |                            |
| <u>Size</u>                   | <u>Units</u>   | <u>Beneficial Use Impaired</u>                                                                                            | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u> |
| 62.56                         | MILES          | Recreation                                                                                                                | Not Supporting                  | Escherichia coli           |
|                               |                |                                                                                                                           |                                 |                            |



| Waterbody ID | Waterbody Type | Waterbody Description |
|--------------|----------------|-----------------------|
|--------------|----------------|-----------------------|

| Date TMDL Completed | 12/3/2008 |
|---------------------|-----------|
|---------------------|-----------|

|                      |                      |                                                                                                                                                                                         |
|----------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ND-10130203-002-L_00 | FRESHWATER RESERVOIR | A small hypereutrophic impoundment on a tributary to the Heart River in Morton County, N.D. It's watershed covers 4,170 acres of an even mix of grassed and cropped agricultural lands. |
|----------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| Size | Units | Beneficial Use Impaired | Beneficial Use Status           | Cause of Impairment                           | TMDL Priority |
|------|-------|-------------------------|---------------------------------|-----------------------------------------------|---------------|
| 31.2 | ACRES | Recreation              | Fully Supporting But Threatened | Nutrient/Eutrophication Biological Indicators | H             |

|                      |                      |                                                                                                                                                                                         |
|----------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ND-10130203-002-L_00 | FRESHWATER RESERVOIR | A small hypereutrophic impoundment on a tributary to the Heart River in Morton County, N.D. It's watershed covers 4,170 acres of an even mix of grassed and cropped agricultural lands. |
|----------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| Size | Units | Beneficial Use Impaired      | Beneficial Use Status           | Cause of Impairment | TMDL Priority |
|------|-------|------------------------------|---------------------------------|---------------------|---------------|
| 31.2 | ACRES | Fish and Other Aquatic Biota | Fully Supporting But Threatened | Oxygen, Dissolved   | H             |

|                      |                      |                                                                                                                                                                                         |
|----------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ND-10130203-002-L_00 | FRESHWATER RESERVOIR | A small hypereutrophic impoundment on a tributary to the Heart River in Morton County, N.D. It's watershed covers 4,170 acres of an even mix of grassed and cropped agricultural lands. |
|----------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| Size | Units | Beneficial Use Impaired      | Beneficial Use Status           | Cause of Impairment                           | TMDL Priority |
|------|-------|------------------------------|---------------------------------|-----------------------------------------------|---------------|
| 31.2 | ACRES | Fish and Other Aquatic Biota | Fully Supporting But Threatened | Nutrient/Eutrophication Biological Indicators | H             |

## Sweetbriar Reservoir

| Waterbody ID | Waterbody Type | Waterbody Description |
|--------------|----------------|-----------------------|
|--------------|----------------|-----------------------|

| Date TMDL Completed | 12/3/2008 |
|---------------------|-----------|
|---------------------|-----------|

|                      |                      |                                                         |
|----------------------|----------------------|---------------------------------------------------------|
| ND-10130203-005-L_00 | FRESHWATER RESERVOIR | A 270.6 acre reservoir, in Morton County, North Dakota. |
|----------------------|----------------------|---------------------------------------------------------|

| Size  | Units | Beneficial Use Impaired | Beneficial Use Status           | Cause of Impairment                           | TMDL Priority |
|-------|-------|-------------------------|---------------------------------|-----------------------------------------------|---------------|
| 270.6 | ACRES | Recreation              | Fully Supporting But Threatened | Nutrient/Eutrophication Biological Indicators | H             |

**Cannonball River**

| Waterbody ID         | Waterbody Type | Waterbody Description                                                                                                                                      | Date TMDL Completed             | TMDL Priority              |
|----------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------|
| ND-10130206-001-S_00 | RIVER          | Cannonball River from its confluence with Dogtooth Creek, downstream to Lake Oahe. Border of Morton and Sioux County.                                      | 9/29/2009                       |                            |
| <u>Size</u>          | <u>Units</u>   | <u>Beneficial Use Impaired</u>                                                                                                                             | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u> |
| 28.44                | MILES          | Recreation                                                                                                                                                 | Not Supporting                  | Fecal Coliform             |
|                      |                |                                                                                                                                                            |                                 | H                          |
| ND-10130206-001-S_00 | RIVER          | Cannonball River from its confluence with Dogtooth Creek, downstream to Lake Oahe. Border of Morton and Sioux County.                                      |                                 |                            |
| <u>Size</u>          | <u>Units</u>   | <u>Beneficial Use Impaired</u>                                                                                                                             | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u> |
| 28.44                | MILES          | Recreation                                                                                                                                                 | Not Supporting                  | Escherichia coli           |
|                      |                |                                                                                                                                                            |                                 | H                          |
| ND-10130206-007-S_00 | RIVER          | Cannonball River from its confluence with a tributary watershed near Shields, ND (ND-10130206-028-S_00), downstream to its confluence with Dogtooth Creek. |                                 |                            |
| <u>Size</u>          | <u>Units</u>   | <u>Beneficial Use Impaired</u>                                                                                                                             | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u> |
| 21.58                | MILES          | Recreation                                                                                                                                                 | Fully Supporting But Threatened | Fecal Coliform             |
|                      |                |                                                                                                                                                            |                                 | H                          |

**Elm Creek Watershed**

| Waterbody ID         | Waterbody Type | Waterbody Description                                | Date TMDL Completed             | TMDL Priority              |
|----------------------|----------------|------------------------------------------------------|---------------------------------|----------------------------|
| ND-10130201-045-S_00 | RIVER          | Elm Creek and tributaries, located in Mercer County. | 9/30/2010                       |                            |
| <u>Size</u>          | <u>Units</u>   | <u>Beneficial Use Impaired</u>                       | <u>Beneficial Use Status</u>    | <u>Cause of Impairment</u> |
| 181.46               | MILES          | Recreation                                           | Fully Supporting But Threatened | Fecal Coliform             |
|                      |                |                                                      |                                 | H                          |