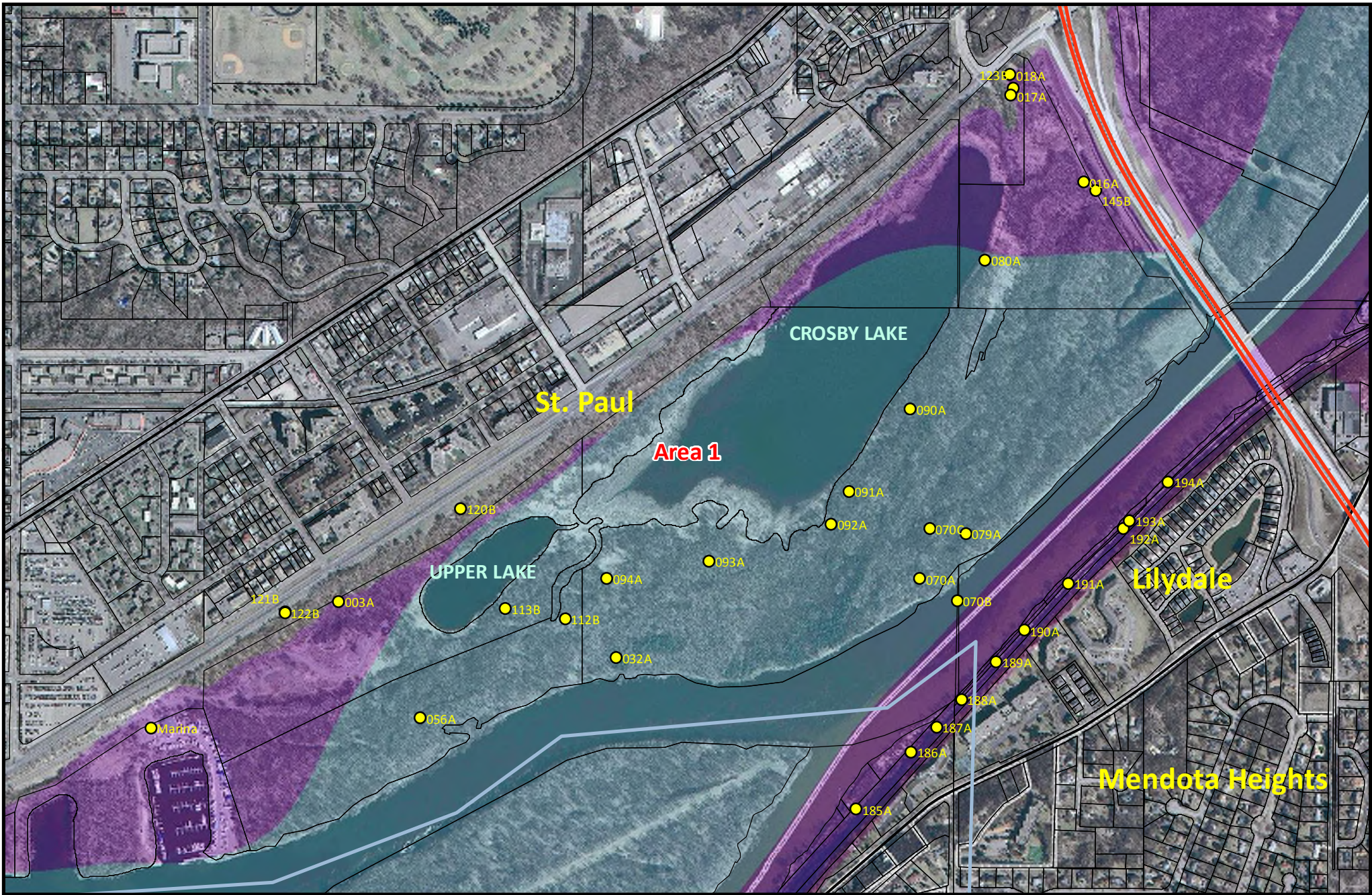


Appendix K: Lower Minnesota River Watershed District: Gully Inventory

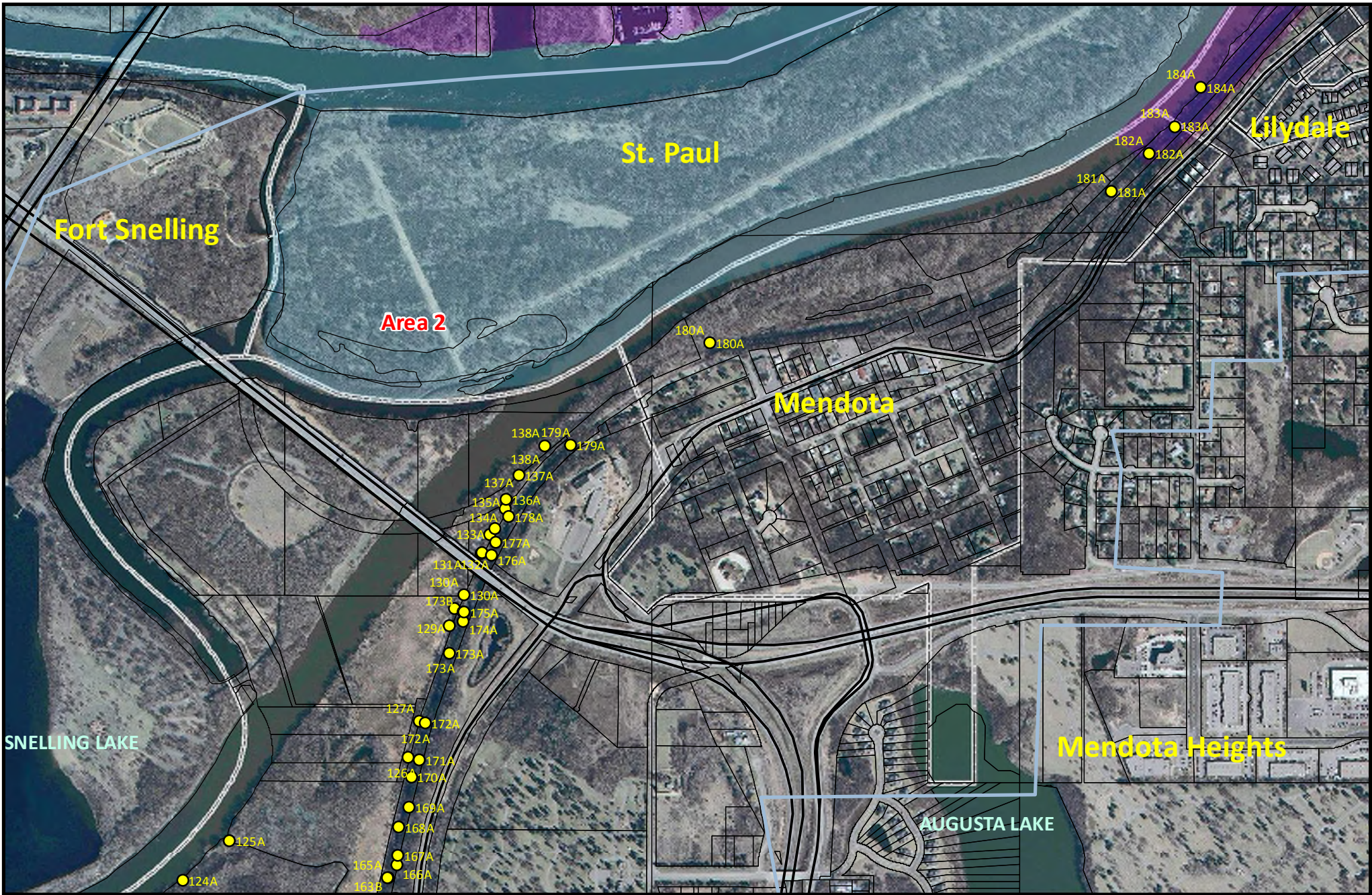


Gully Inventory Map
 Area #1
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain


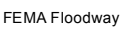

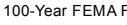


Not to Scale





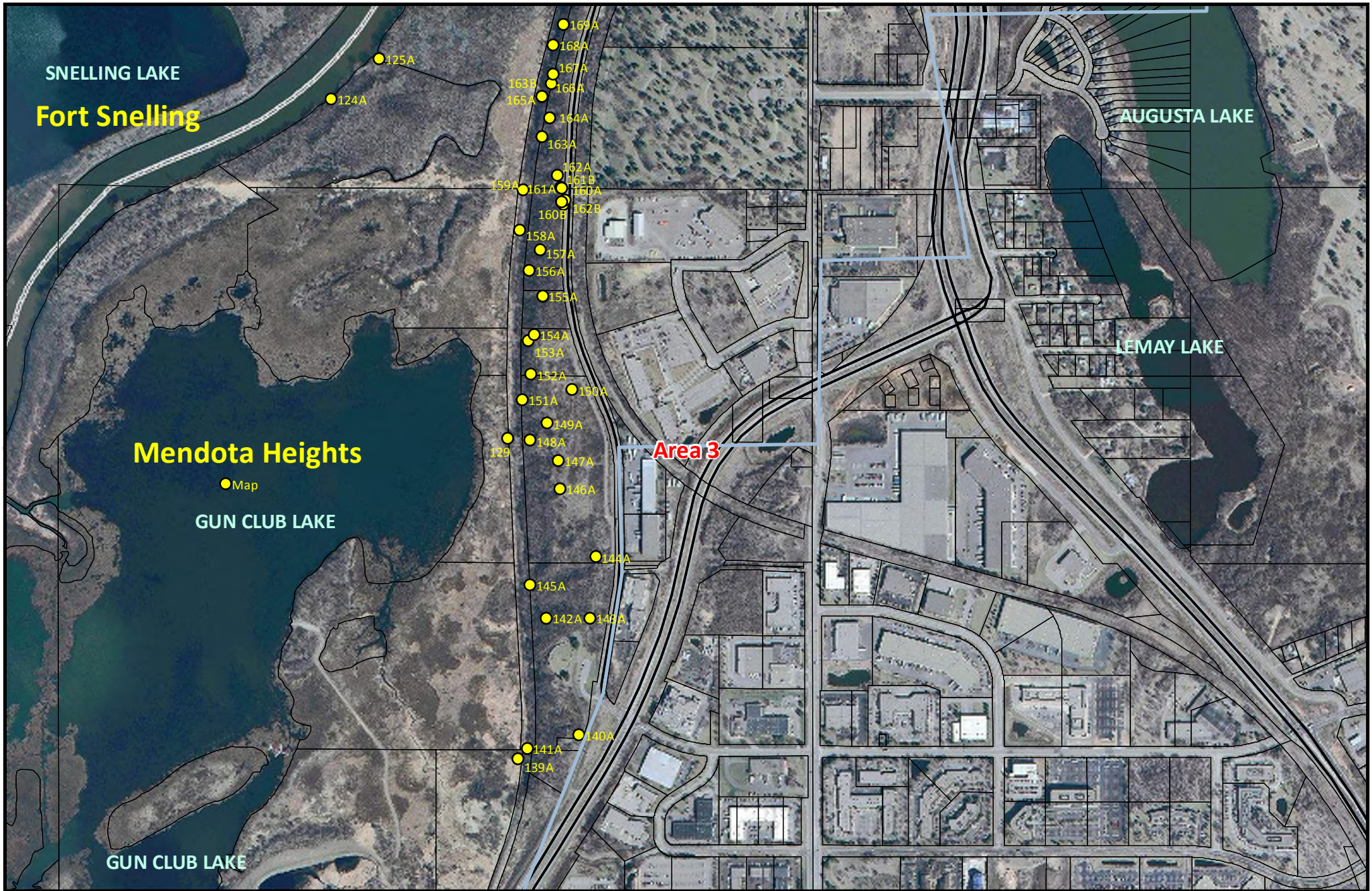
Gully Inventory Map
 Area #2
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend

 LMRWD Boundary (not official)	 FEMA Floodway
 City/Township Boundary	 100-Year FEMA Floodplain
 Gully Inventory Locations	 500-Year FEMA Floodplain


 Not to Scale



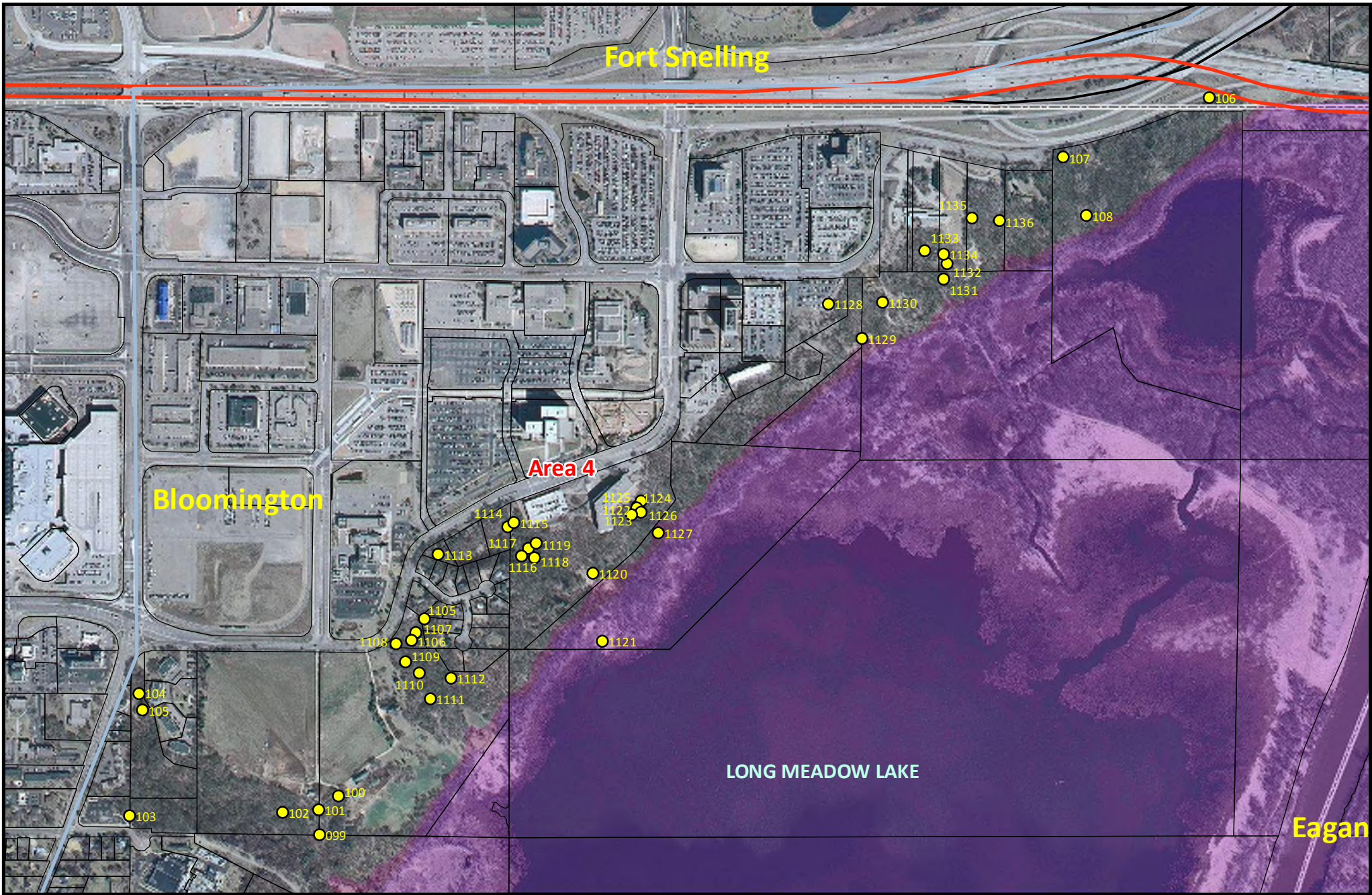


Gully Inventory Map
 Area #3
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain

Not to Scale



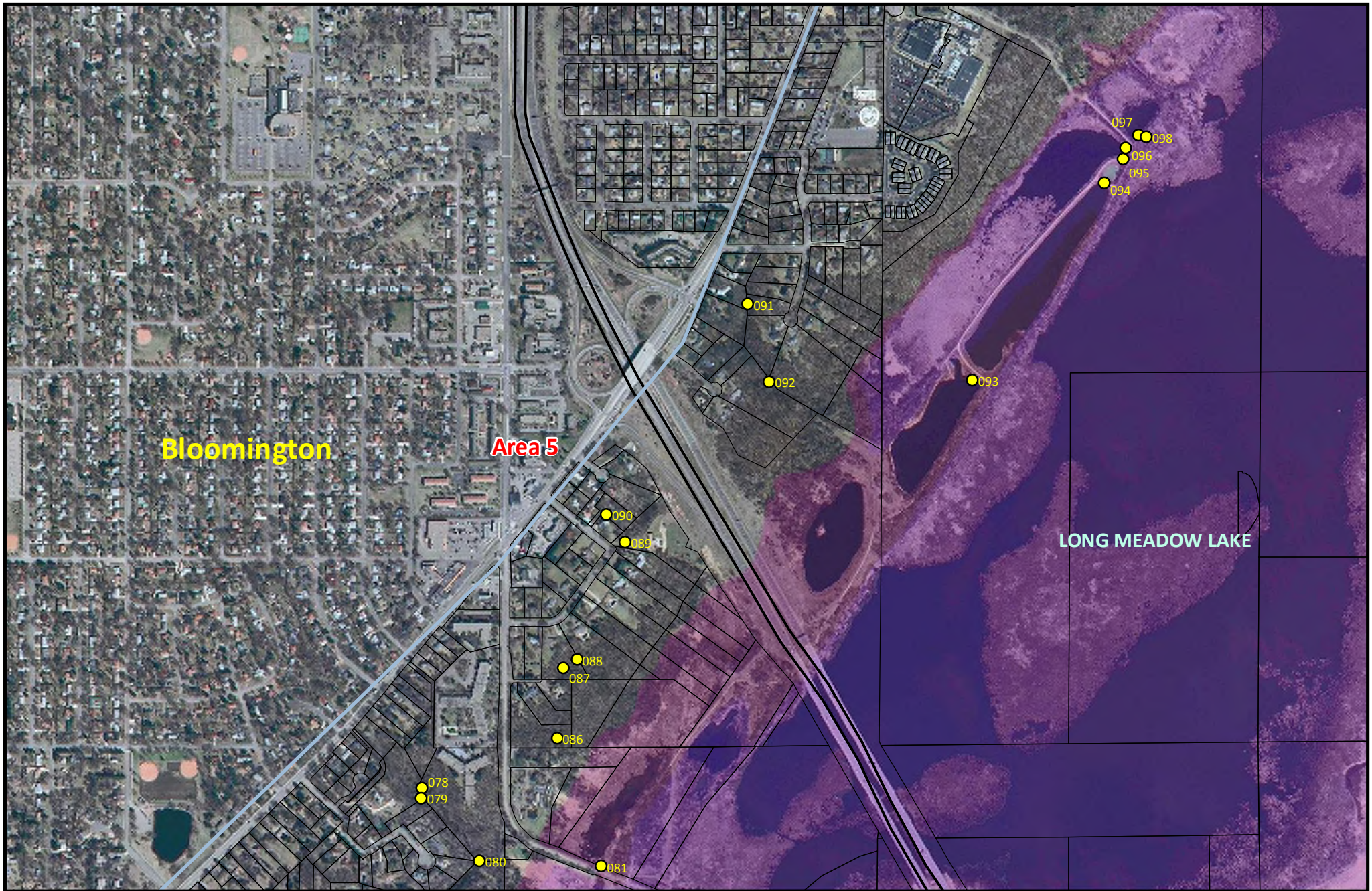


Gully Inventory Map
 Area #4
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain

Not to Scale





Gully Inventory Map
 Area #5
 Lower Minnesota River Watershed District
 Watershed Management Plan





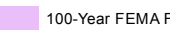
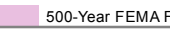
Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain

Not to Scale



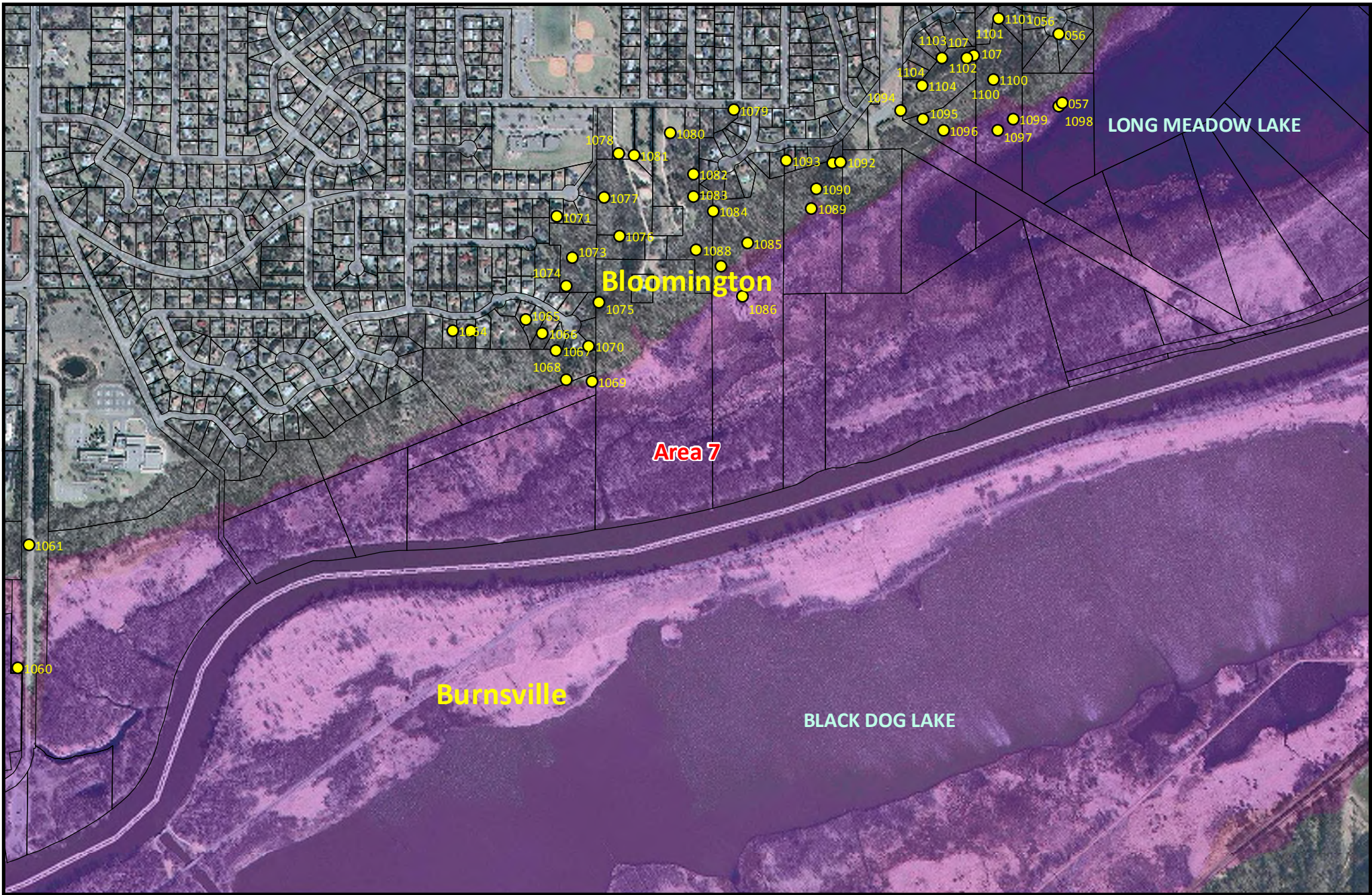


Gully Inventory Map
 Area #6
 Lower Minnesota River Watershed District
 Watershed Management Plan





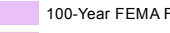

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain


 Not to Scale



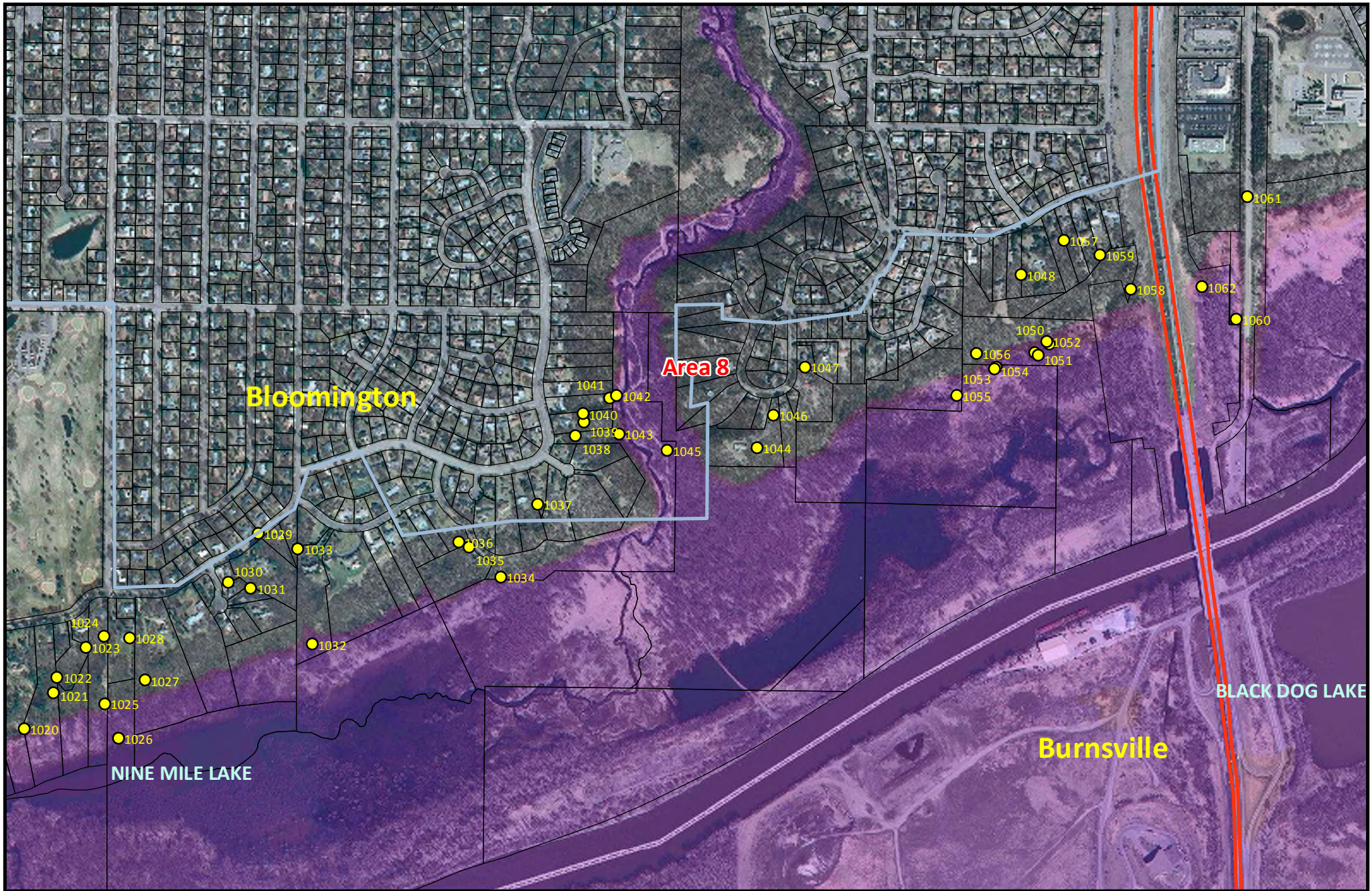


Gully Inventory Map
 Area #7
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain


 Not to Scale



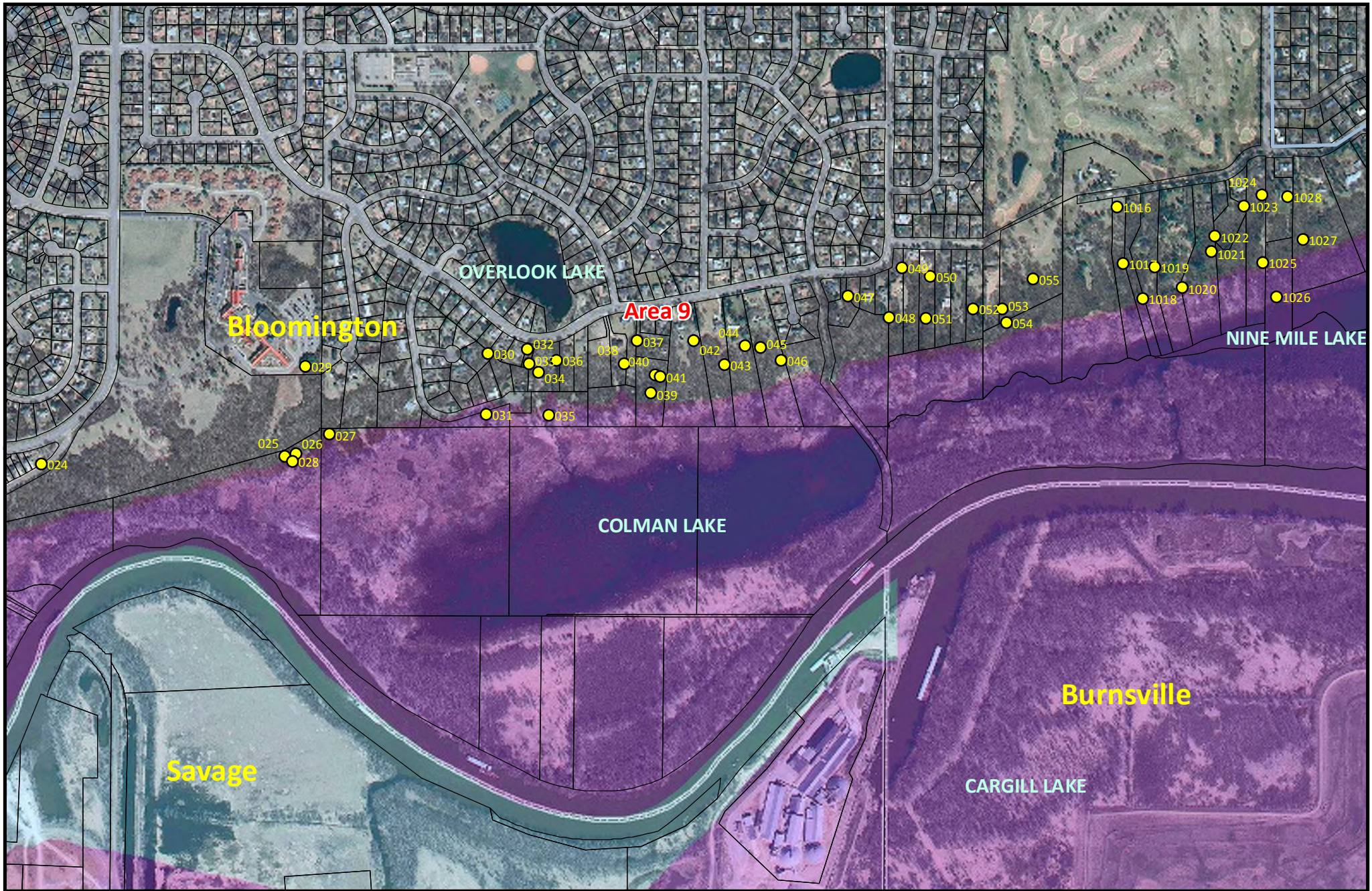


Gully Inventory Map
 Area #8
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain

Not to Scale



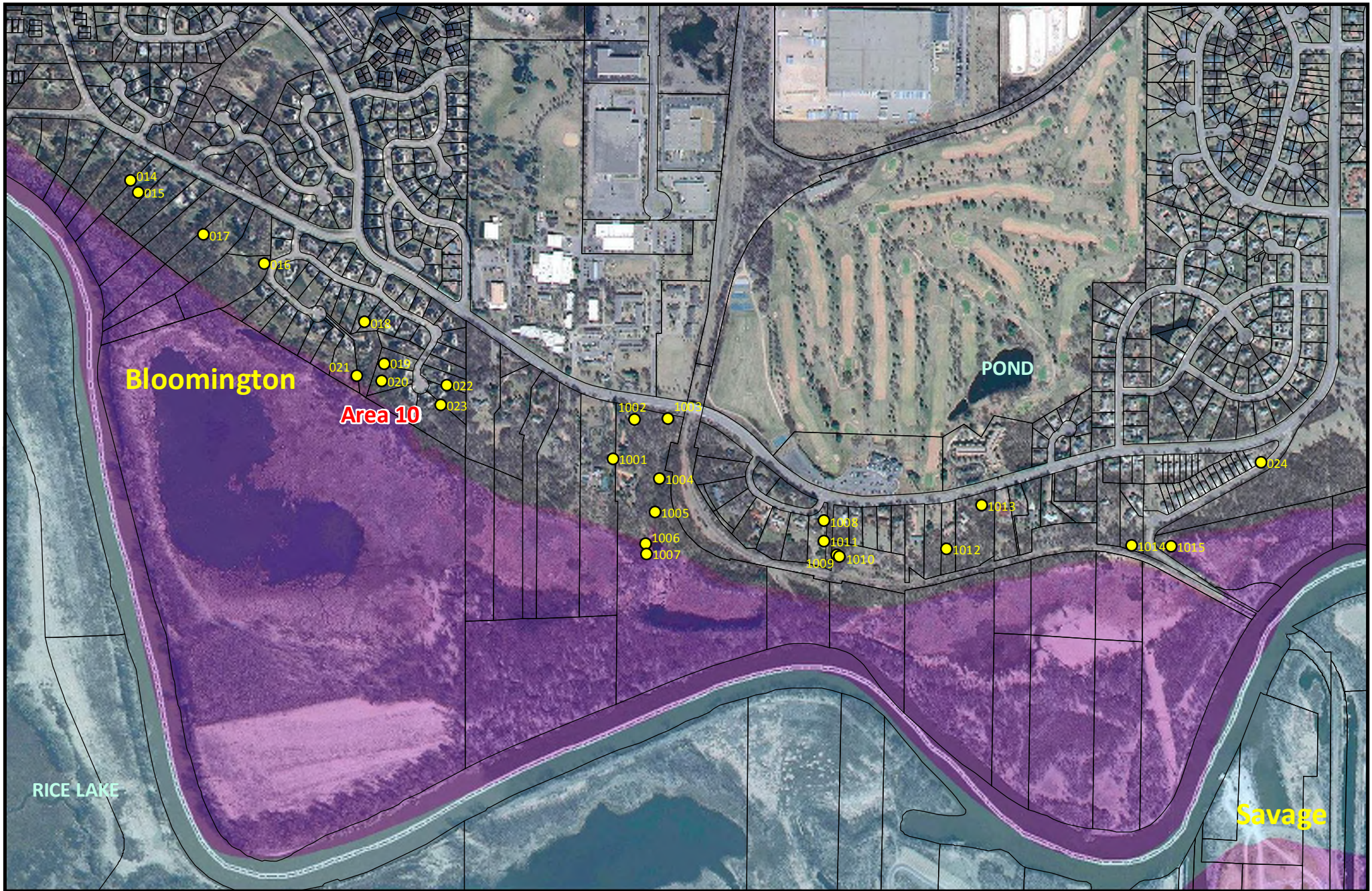


Gully Inventory Map
 Area #9
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain

Not to Scale



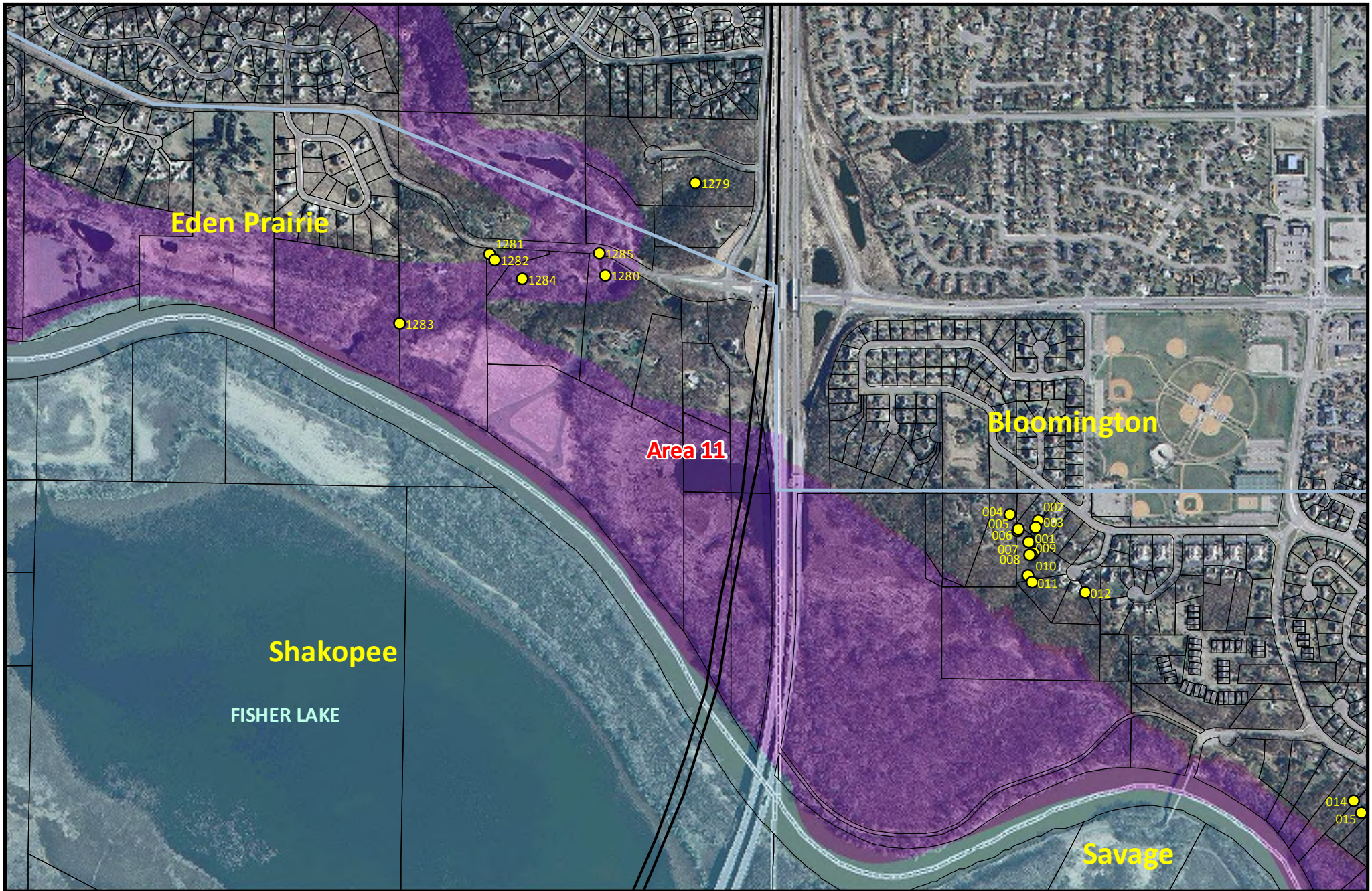


Gully Inventory Map
 Area #10
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain

Not to Scale



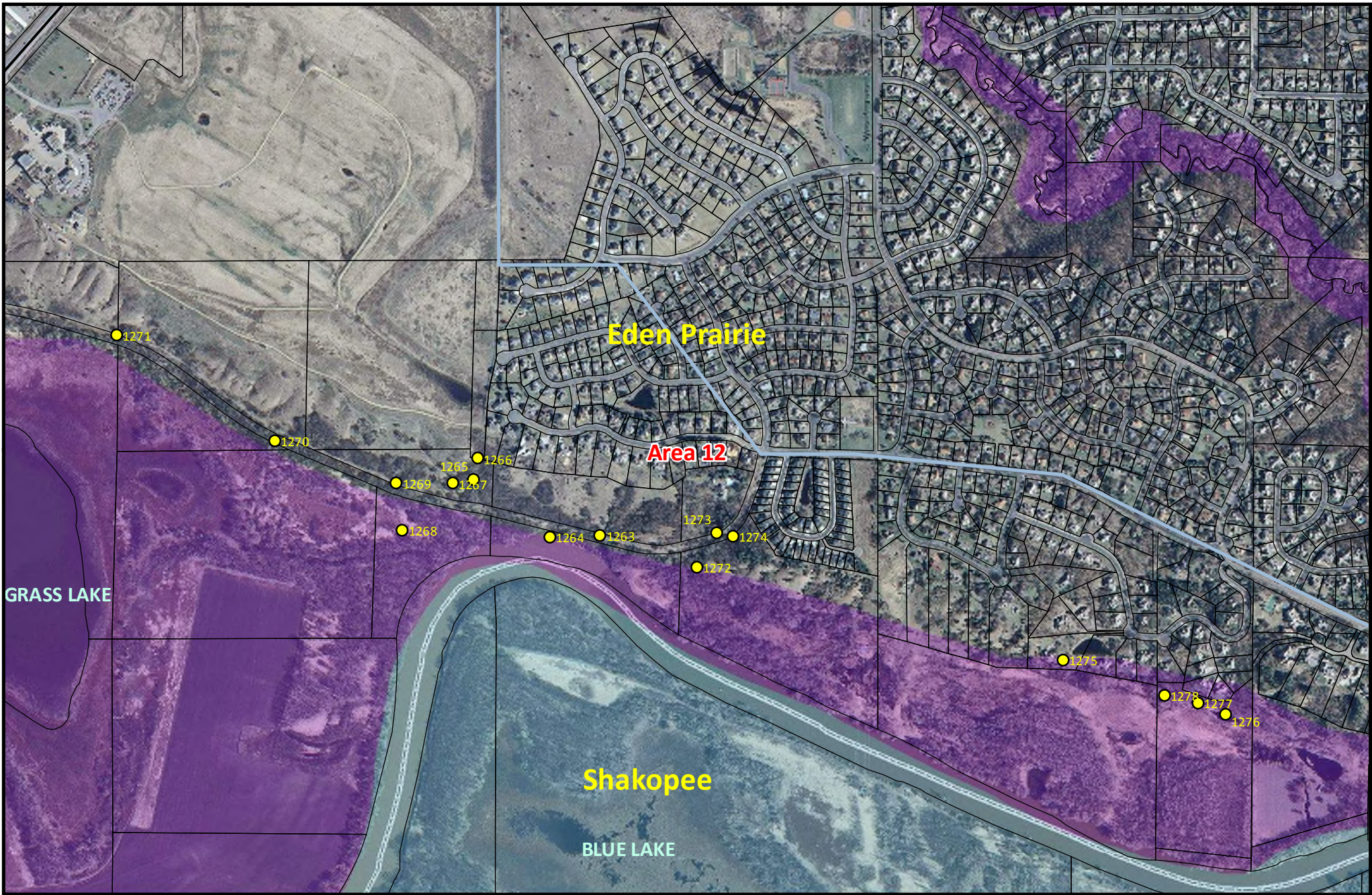


Gully Inventory Map
 Area #11
 Lower Minnesota River Watershed District
 Watershed Management Plan





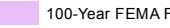
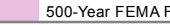
Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain

Not to Scale



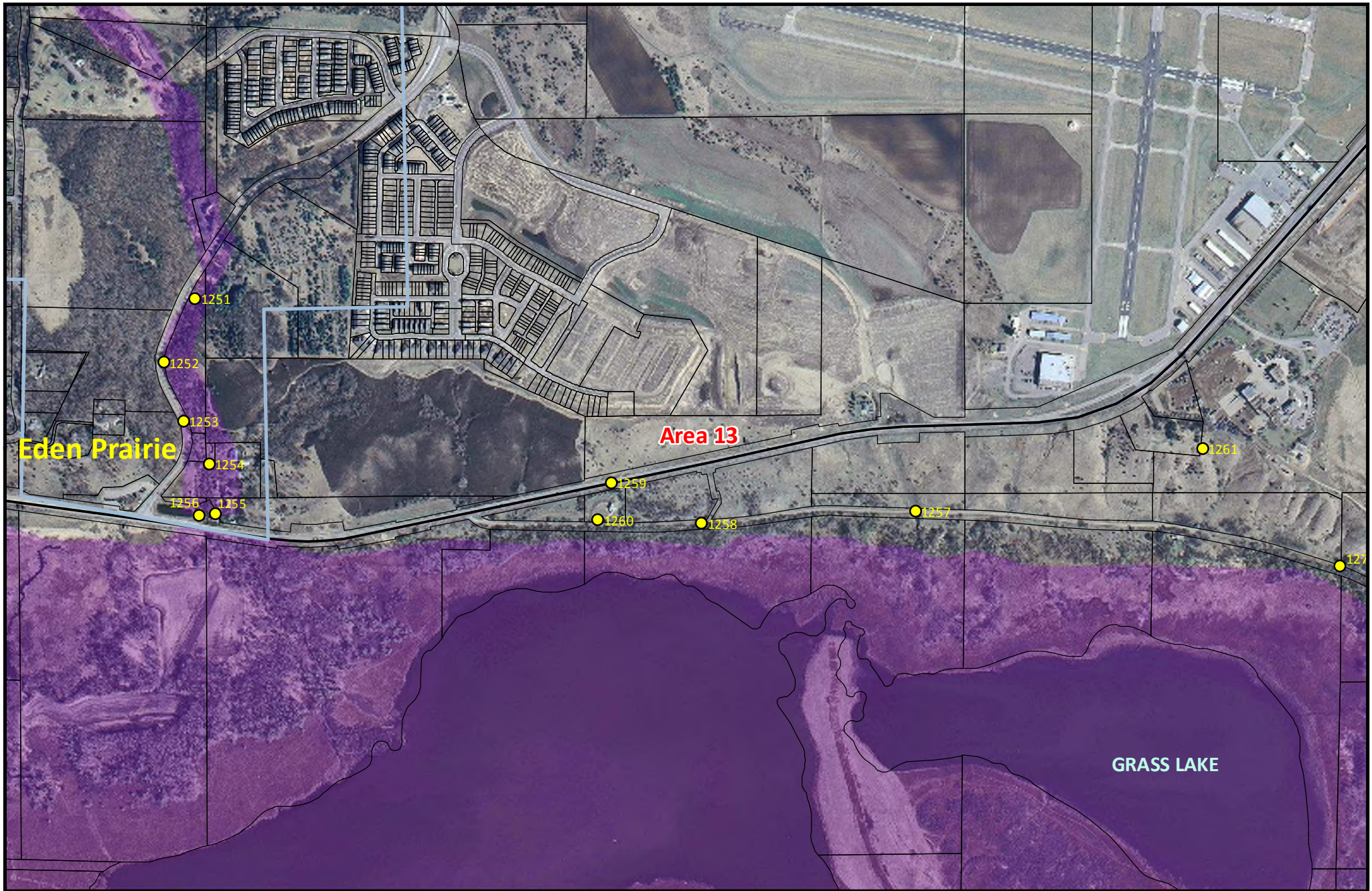


Gully Inventory Map
 Area #12
 Lower Minnesota River Watershed District
 Watershed Management Plan







Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain


 Not to Scale





Gully Inventory Map
 Area #13
 Lower Minnesota River Watershed District
 Watershed Management Plan




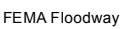
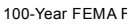

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain


 Not to Scale



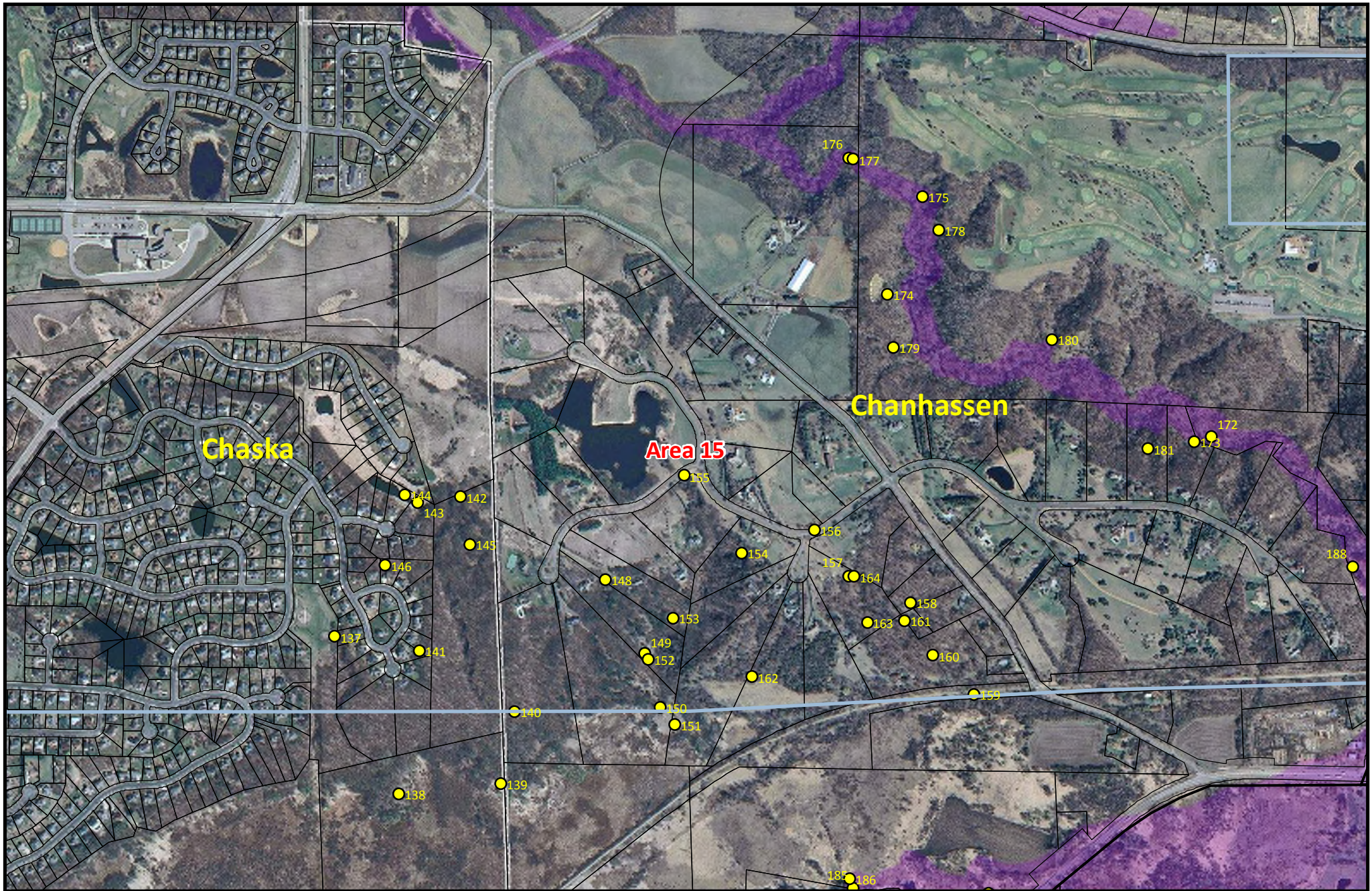


Gully Inventory Map
 Area #14
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain


 Not to Scale



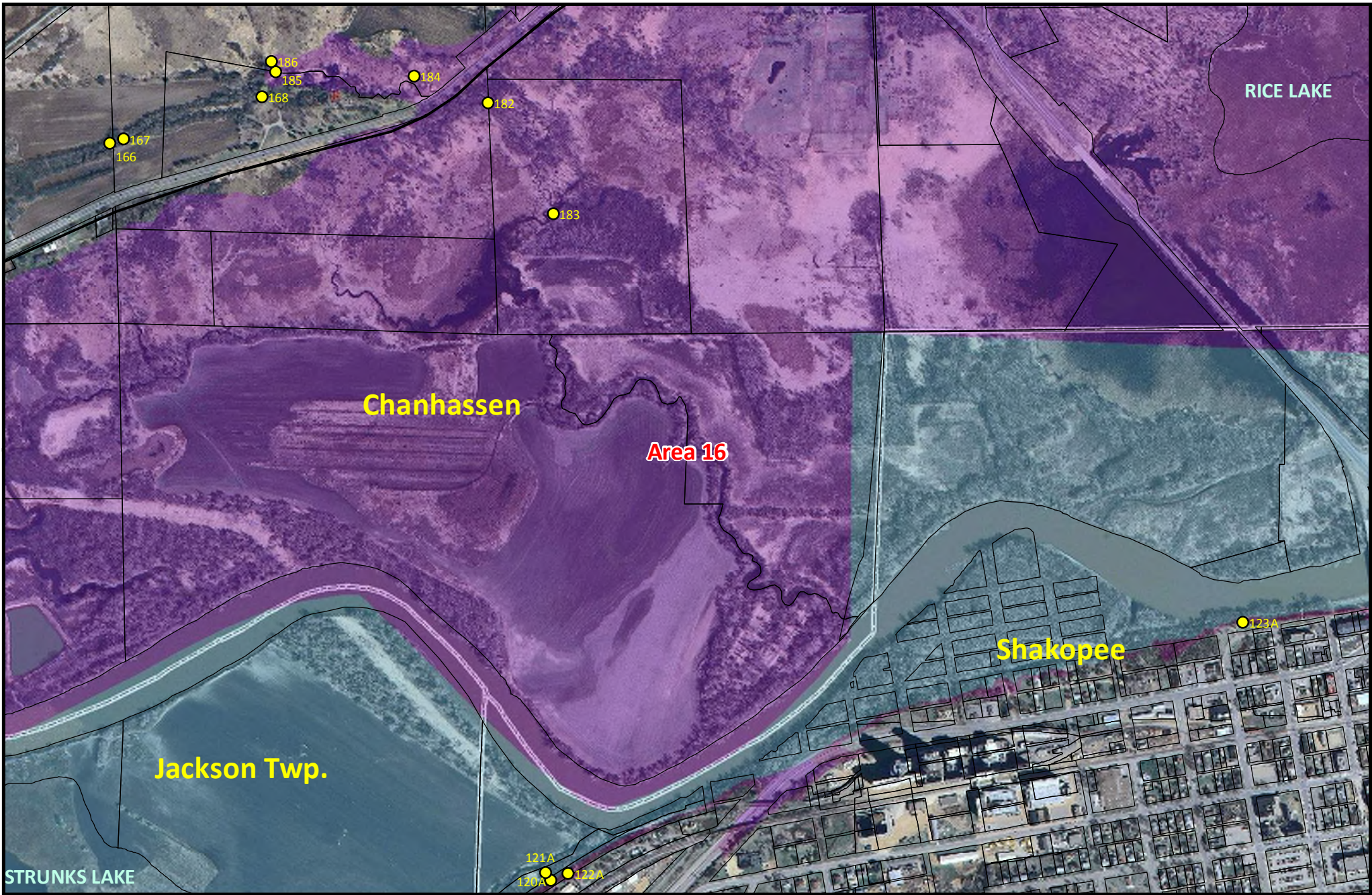


Gully Inventory Map
 Area #15
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend	
	LMRWD Boundary (not official)
	FEMA Floodway
	City/Township Boundary
	100-Year FEMA Floodplain
	Gully Inventory Locations
	500-Year FEMA Floodplain

Not to Scale







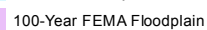



Gully Inventory Map

Area #16

Lower Minnesota River Watershed District
Watershed Management Plan

Legend

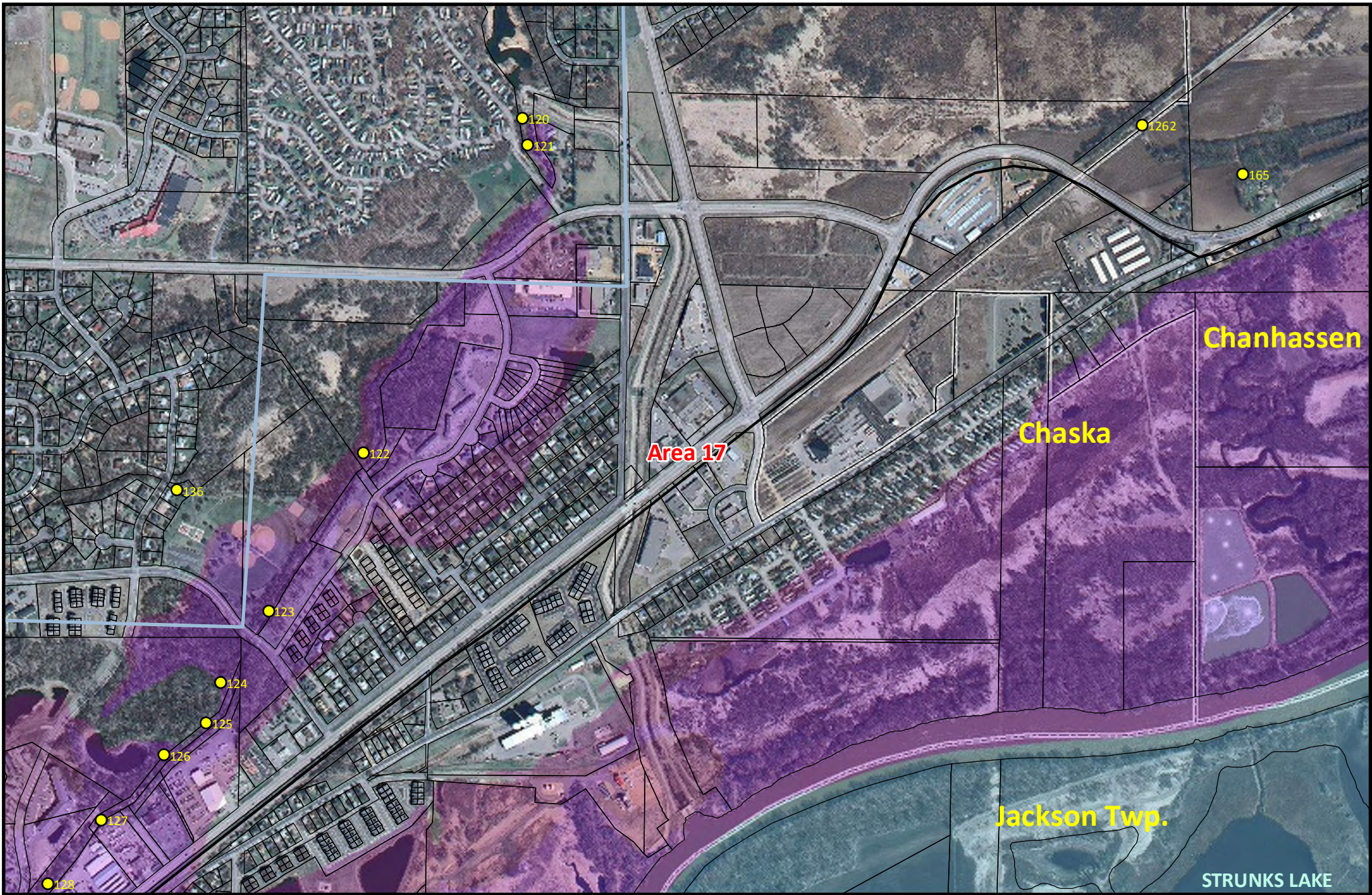
-  LMRWD Boundary (not official)
-  City/Township Boundary
-  Gully Inventory Locations
-  FEMA Floodway
-  100-Year FEMA Floodplain
-  500-Year FEMA Floodplain



Not to Scale



LOWER MINNESOTA RIVER
WATERSHED DISTRICT









Gully Inventory Map

Area #17

Lower Minnesota River Watershed District
Watershed Management Plan

Legend

-  LMRWD Boundary (not official)
-  FEMA Floodway
-  City/Township Boundary
-  100-Year FEMA Floodplain
-  Gully Inventory Locations
-  500-Year FEMA Floodplain



Not to Scale



LOWER
MINNESOTA RIVER
WATERSHED DISTRICT





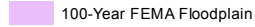



Gully Inventory Map

Area #18

Lower Minnesota River Watershed District
Watershed Management Plan

Legend

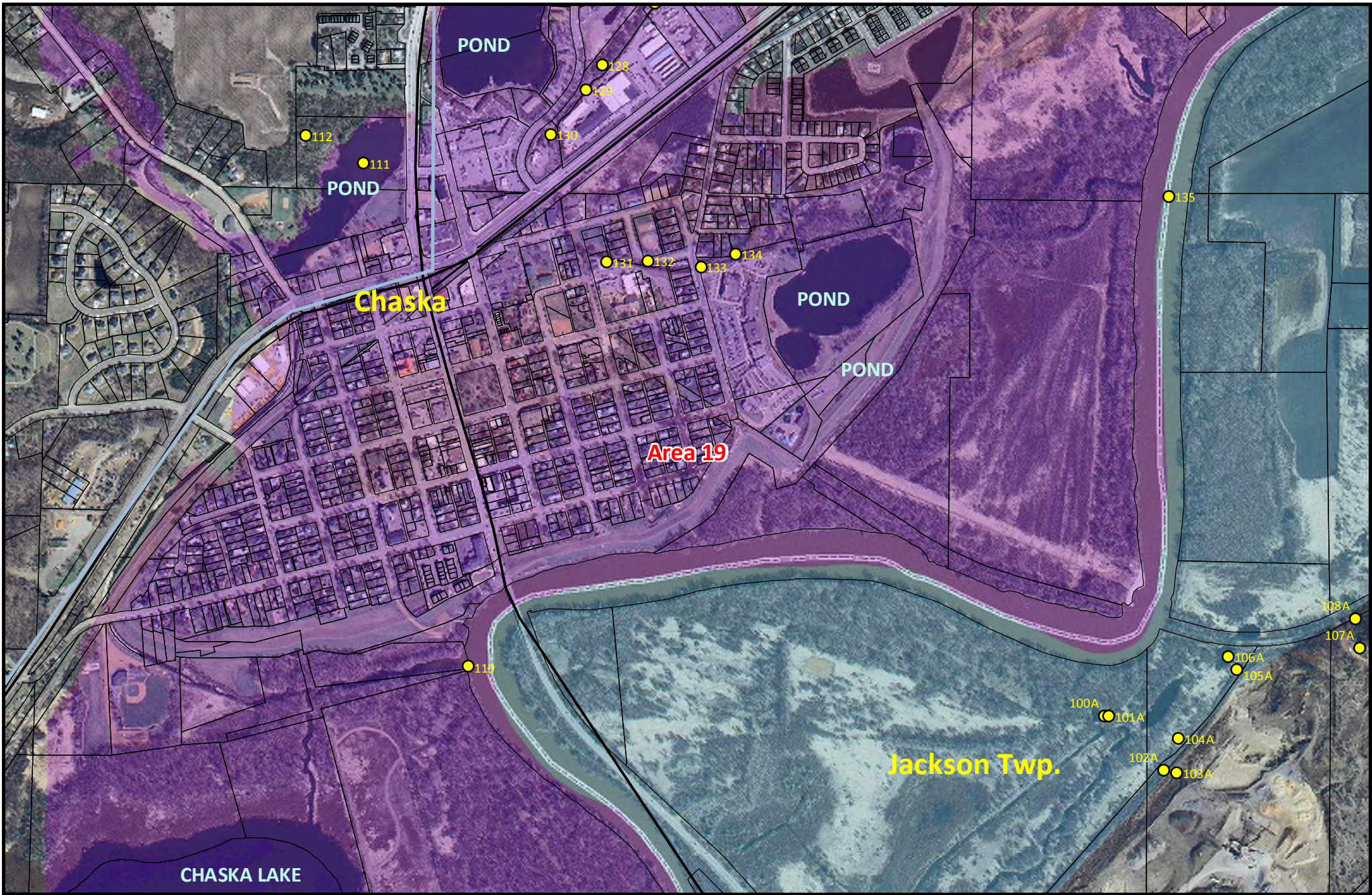
-  LMRWD Boundary (not official)
-  City/Township Boundary
-  Gully Inventory Locations
-  FEMA Floodway
-  100-Year FEMA Floodplain
-  500-Year FEMA Floodplain



Not to Scale



LOWER
MINNESOTA RIVER
WATERSHED DISTRICT




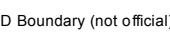
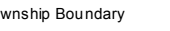



Gully Inventory Map

Area #19

Lower Minnesota River Watershed District
Watershed Management Plan

Legend

-  LMRWD Boundary (not official)
-  City/Township Boundary
-  Gully Inventory Locations
-  FEMA Floodway
-  100-Year FEMA Floodplain
-  500-Year FEMA Floodplain



Not to Scale



LOWER
MINNESOTA RIVER
WATERSHED DISTRICT

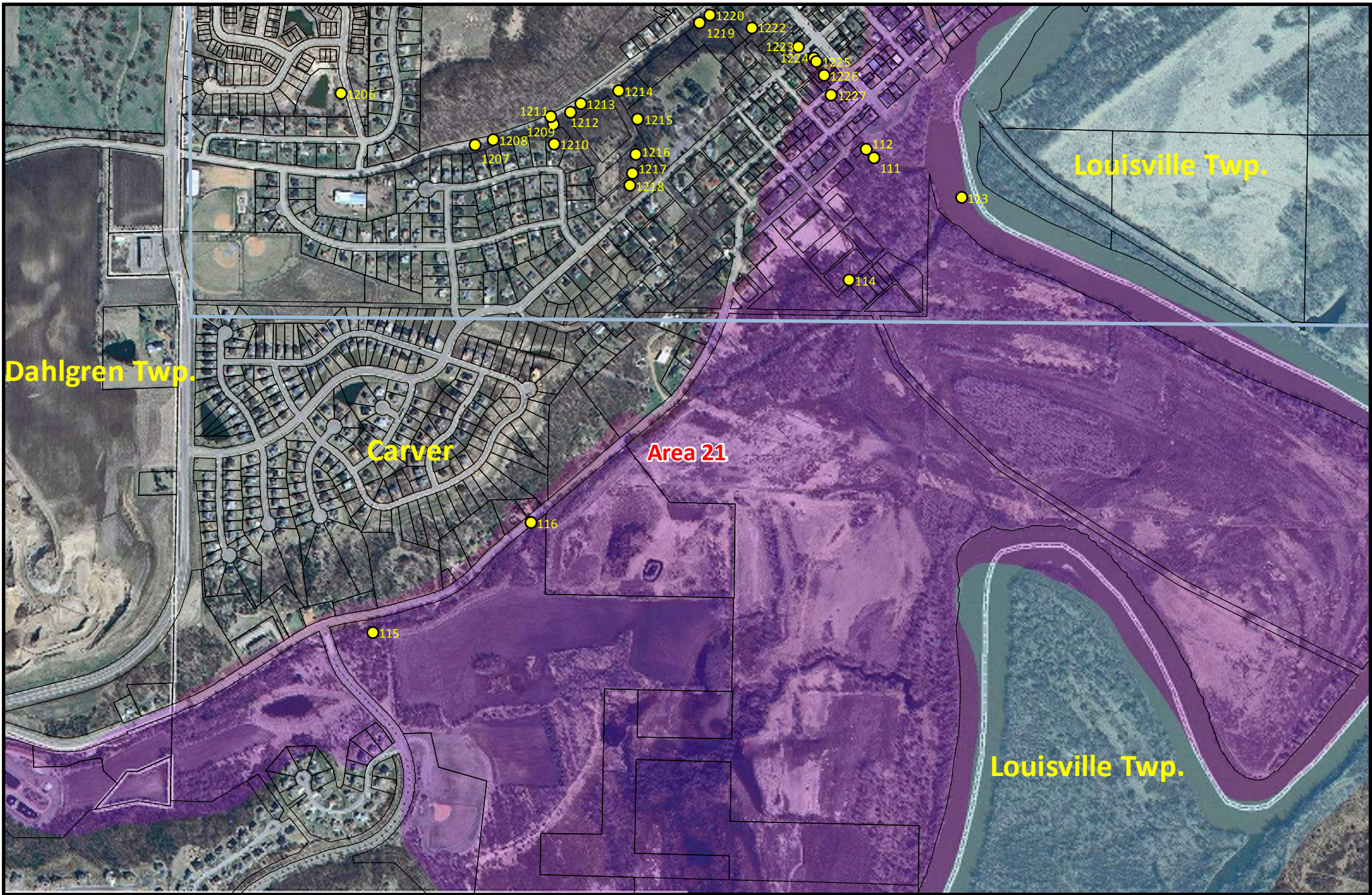


Gully Inventory Map
 Area #20
 Lower Minnesota River Watershed District
 Watershed Management Plan

Legend	
	LMRWD Boundary (not official)
	City/Township Boundary
	Gully Inventory Locations
	FEMA Floodway
	100-Year FEMA Floodplain
	500-Year FEMA Floodplain

Not to Scale











Gully Inventory Map

Area #21

Lower Minnesota River Watershed District
Watershed Management Plan

Legend

-  LMRWD Boundary (not official)
-  City/Township Boundary
-  Gully Inventory Locations
-  FEMA Floodway
-  100-Year FEMA Floodplain
-  500-Year FEMA Floodplain



Not to Scale



LOWER
MINNESOTA RIVER
WATERSHED DISTRICT

Waypoint WAYPOINT ID

Location: LOCATION

Comments:

LOCATION COMMENTS

Site comments:

SITE COMMENTS

View: VIEW

No image attached. (Image reference: .JPG)

Waypoint 1

Location: 11020 Yukon Circle

Site comments:

Pronounced soil erosion.



Waypoint 2

Location: 11020 Yukon Circle

Site comments:

Tree debris; exposed soil.

No image attached. (Image reference: 0.JPG)

Waypoint 3

Location: 11020 Yukon Circle

Site comments:

Tree debris; exposed soil.



Waypoint 003A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 4

Location: 11020 Yukon Circle

Site comments:

Trash, car, glass, cans



Waypoint 5

Location: 11020 Yukon Circle

Site comments:

Drain pipe



Waypoint 6

Location: 11020 Yukon Circle

Site comments:

Drain pipe



Waypoint 7

Location: 11020 Yukon Circle

Site comments:

Spring/groundwater seeping



Waypoint 8

Location: 11020 Yukon Circle

Site comments:

Spring/groundwater seeping



Waypoint 9

Location: 11020 Yukon Circle

Site comments:

Spring/groundwater seeping



Waypoint 10

Location: 11020 Yukon Circle

Site comments:

Drain pipe w/gardening weed barrier around pipe.



Site comments:

Eroded banks



Waypoint 11

Location: 11020 Yukon Circle

Site comments:

Drain pipe



Waypoint 12

Location: 11020 Yukon Circle

Site comments:

Drain pipe



Waypoint 14

Location: 7501-7425 Auto Club Road

Site comments:

Minimal erosion; minor tree litter.



Waypoint 15

Location: 7501-7425 Auto Club Road

Site comments:

Minimal erosion.



Waypoint 16

Location: 7303 Auto Club Road-7110 Kenmare Drive

Site comments:

Minimal erosion.



Waypoint 016A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 17

Location: 7303 Auto Club Road-7110 Kenmare Drive

Site comments:

Minimal erosion.



Waypoint 017A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 18

Location: 7001 Kenmare Drive

Site comments:

Erosion control; matting, stone drain field.

View: DH



Site comments:

Erosion control; matting, stone drain field.

View: UP



Waypoint 018A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 19

Location: 7001 Kenmare Drive

Site comments:

continuation of WP018 gully; med.erosion; tree litter.



Waypoint 20

Location: 7001 Kenmare Drive

Site comments:

Drain pipe entrance for 018 WP



Waypoint 21

Location: 7001 Kenmare Drive

Site comments:

Drain pipe exit into pond



Waypoint 22

Location: 6954-6950 Kenmare Drive

Site comments:

Storm drain



Waypoint 23

Location: 6954-6950 Kenmare Drive

Site comments:

Minimal erosion, house gutter drain pipes



Site comments:

Gully uphill view



Waypoint 24

Location: Masonic Lodge - Compass Drive

Site comments:

Minimal erosion.



Site comments:

Spring



Waypoint 25

Location: Masonic Lodge - Compass Drive

Site comments:

Spring & small channel leading to wetland



Site comments:

Spring & small channel leading to wetland



Waypoint 26

Location: Masonic Lodge - Compass Drive

Site comments:

Spring & small channel 20 ft. long leading to wetland



Waypoint 27

Location: Masonic Lodge - Compass Drive

Site comments:

Spring & small channel leading to wetland



Waypoint 28

Location: Masonic Lodge - Compass Drive

Site comments:

Spring & small channel leading to wetland



Waypoint 29

Location: Masonic Lodge - Compass Drive

Site comments:

Gully bank erosion from parking lot



Site comments:

Gully bank erosion from parking lot



Waypoint 30

Location: 11531 Palmer Circle

Site comments:

Minimal erosion



Waypoint 31

Location: 11641 Palmer Drive

Site comments:

Storm sewer drain pipe outlet



Site comments:

Storm sewer drain pipe outlet from street above



Waypoint 32

Location: 4617-4525 Overlook Drive

Site comments:

Steep bank, minimal erosion visible



Waypoint 032A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 33

Location: 4617-4525 Overlook Drive

Site comments:

Water table, spring seepage



Waypoint 34

Location: 4617-4525 Overlook Drive

Site comments:

Drain pipe outlet



Waypoint 35

Location: 4617-4525 Overlook Drive

Site comments:

Storm pipe outlet - deep pit



Waypoint 36

Location: 4617-4525 Overlook Drive

Site comments:

Storm pipe outlet from above

View: DH



Site comments:

Storm pipe outlet from below

View: UP



Site comments:

East branch of gully



Waypoint 37

Location: 4617-4525 Overlook Drive

Site comments:

Downhill view of gully



Site comments:

Downhill view of gully



Site comments:

Uphill view of gully



Waypoint 38

Location: 4617-4525 Overlook Drive

Site comments:

Groundwater seepage/spring



Waypoint 39

Location: 4617-4525 Overlook Drive

Site comments:

Outlet pipe



Waypoint 40

Location: 4617-4525 Overlook Drive

Site comments:

Groundwater seepage/spring with watercress around



Waypoint 41

Location: 4617-4525 Overlook Drive

Site comments:

crew not sure, said try and look at the picture



Waypoint 42

Location: 4617-4525 Overlook Drive

Site comments:

Minimal erosion, some tree debris



Site comments:

Uphill view



Waypoint 43

Location: 4215-4125 Overlook Drive

Site comments:

Minimal erosion



Waypoint 44

Location: 4215-4125 Overlook Drive

Site comments:

Minimal erosion



Waypoint 45

Location: 4215-4125 Overlook Drive

Site comments:

Pronounced gully

View: DH



Site comments:

Significant erosion

View: UH



Site comments:

Significant erosion uphill view further down the gully



Waypoint 46

Location: 4107 Overlook Circle

Site comments:

bowl-shaped gully, quite steep, large amount of tree debris from homeowner, exposed soil on slopes w/ significant erosion



Waypoint 47

Location: 3917 Overlook Drive

Site comments:

Minimal erosion, some tree debris



Waypoint 48

Location: 3821 Overlook Drive

Site comments:

Path cleared down the gully, flagging down gully, minimal erosion



Waypoint 49

Location: 3811-3801 Overlook Drive

Site comments:

Deep gully, some erosion



Site comments:

Eroded bank downhill, some large tree debris



Waypoint 50

Location: 3811-3801 Overlook Drive

Site comments:

East branch of gully



Waypoint 51

Location: 3811-3801 Overlook Drive

Site comments:

Spring/groundwater seepage and channel feeding to marsh



Waypoint 52

Location: 3701 Overlook Drive

Site comments:

Deep gully w/some erosion & some tree debris



Waypoint 53

Location: 3501 Overlook Drive

Site comments:

Gully w/lots of tree debris



Site comments:

Good spring 10 ft. from WP053 GPS point forming deep channel & stream, some metal trash



Waypoint 54

Site comments:

Pronounced erosion



Waypoint 55

Location: 3401 Overlook Drive

Site comments:

Minimal erosion



Waypoint 56

Location: 10325 10th Avenue Circle South

Site comments:

Storm drain



Waypoint 056A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 57

Location: 10325 10th Avenue Circle South

Site comments:

Storm drain outlet



Waypoint 58

Location: 10233-10217 10th Avenue Circle

Site comments:

Uphill shot of point 058



Site comments:

Water table/spring from point 058



Waypoint 59

Location: 10233-10217 10th Avenue Circle

Site comments:

E. branch uphill shot from point 058, min. erosion



Waypoint 60

Location: 10233-10217 10th Avenue Circle

Site comments:

W. branch: uphill, some tree debris in gully



Waypoint 61

Location: 10201 10th Avenue Circle & East 102nd

Site comments:

Storm sewer*



Waypoint 62

Location: 10201 10th Avenue Circle & East 102nd

Site comments:

Minimal erosion



Waypoint 63

Location: 10001 10Th Avenue South - 1012 Mound

Site comments:

Drainage pit, erosion very evident, bare soil on all sides of slopes



Waypoint 64

Location: 9801 11th Avenue South (severe soil

Site comments:

Path - some erosion down center of trail



Waypoint 65

Location: 9801 11th Avenue South (severe soil

Site comments:

NE branch of gully, some erosion apparent



Waypoint 66

Location: 9801 11th Avenue South (severe soil

Site comments:

Spring on west edge of path



Waypoint 67

Location: 9801 11th Avenue South (severe soil

Site comments:

Branch off main gully



Waypoint 68

Location: 9801 11th Avenue South (severe soil

Site comments:

Spring on east edge of path



Waypoint 69

Location: 9801 11th Avenue South (severe soil

Site comments:

Branch and outlet pipe off main gully, severe erosion



Waypoint 70

Location: 9801 11th Avenue South (severe soil

Site comments:

Pipe outfall



Waypoint 070A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 070B

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 070C

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 71

Location: 9801 11th Avenue South (severe soil

Site comments:

Outlet of pipe



Waypoint 72

Location: 9801 11th Avenue South (severe soil

Site comments:

Minimal erosion and some tree debris



Site comments:

Minimal erosion and some tree debris



Waypoint 73

Location: 1401 East 100th Street

Site comments:

Deep gully with severe erosion

View: DH



Site comments:

Some erosion control in place



Waypoint 74

Location: 1800 Orchard Springs-1636 Orchard Spr

Site comments:

Storm drain



Site comments:

Beginning of gully erosion



Waypoint 75

Location: 1800 Orchard Springs-1636 Orchard Springs

Site comments:

Retaining wall in gully, erosion apparent, bare soil



Site comments:

Spring by retaining wall



Waypoint 76

Location: 1800 Orchard Springs-1636 Orchard Springs

Site comments:

Branch and retaining wall, erosion apparent



Waypoint 77

Location: 9524-9530 Riverview Avenue

Site comments:

Gully with a lot of tree debris



Site comments:

Culvert under dam



Waypoint 78

Location: 9300 Old Cedar Avenue South

Site comments:

Spring with water table seepage

View: UH



Waypoint 79

Location: 9300 Old Cedar Avenue South

Site comments:

Pipe outlet and spring



Site comments:

Some severe erosion throughout gully

View: DH



Waypoint 079A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 80

Location: 9300 Old Cedar Avenue South

Site comments:

Pipe outfall



Waypoint 080A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 81

Location: Old Cedar Bridge

Site comments:

Pipe outfall



Waypoint 82

Location: Old Cedar Bridge

Site comments:

Pipe outfall



Waypoint 83

Location: Old Cedar Bridge

Site comments:

Pipe outfall



Site comments:

Pipe outfall



Waypoint 84

Location: Old Cedar Bridge

Site comments:

40 ft. of broken clay pipe along a long spring

View: DH



Waypoint 85

Location: Old Cedar Bridge

Site comments:

Pipe outfall



Waypoint 86

Location: 9347 Cedar Ave. - 9405 Old Cedar Ave.

Site comments:

Spring w/retaining wall and outlet pipe on top of wall, minimal erosion

View: DH



Waypoint 87

Location: 1865-1875 Meadowview Road

Site comments:

Some erosion present/spring-S. Branch

View: UH



Site comments:

Old retaining wall, some erosion

View: DH



Waypoint 88

Location: 1865-1875 Meadowview Road

Site comments:

N. branch of spring, tree litter



Waypoint 89

Location: 9145 Meadowview Road - 9109 Springsid

Site comments:

Severe erosion on banks and spring

View: DH



Waypoint 90

Location: 9145 Meadowview Road - 9109 Springsid

Site comments:

Spring on N. branch, much tree debris

View: UH



Waypoint 090A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 91

Location: 8905-8920 River Ridge Road

Site comments:

Spring, some severe erosion and tree debris

View: DH



Waypoint 091A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 92

Location: 8905-8920 River Ridge Road

Site comments:

S. branch, spring, moderate erosion

View: DH



Waypoint 092A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 93

Location: Lower Bass Ponds

Site comments:

No erosion, pipe outlet



Waypoint 093A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 94

Location: Lower Bass Ponds

Site comments:

Pipe underwater



Waypoint 094A

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 95

Location: Lower Bass Ponds

Site comments:

Outlet pipe



Waypoint 96

Location: Lower Bass Ponds

Site comments:

Outlet pipe



Waypoint 97

Location: Lower Bass Ponds

Site comments:

Culvert



Waypoint 98

Location: Lower Bass Ponds

Site comments:

Culvert



Waypoint 99

Location: Bass Ponds Stream-furthest East and d

Site comments:

Extreme erosion

View: UH



Site comments:

Extreme erosion

View: DH



Waypoint 100

Location: Bass Ponds Stream-furthest East and d

Site comments:

Lots of tree litter

View: UH



Waypoint 100A

Site comments:

Concrete culvert along paved trail on river side; culvert goes under paved trail; high water; little erosion; couldn't get to river shore cu



Site comments:

Concrete culvert on other side of paved trail; culvert goes under paved trail; high water; little erosion; couldn't get to river shore cue t



Waypoint 101

Location: Bass Ponds Stream-furthest East and d

Site comments:

Deeply eroded gully/tributary

View: DH



Waypoint 101A

Site comments:

Metal culvert piping going under paved trail - river side.



Site comments:

Metal culvert piping going under paved trail - opposite side of trail.



Site comments:

Small amount of erosion on riverside of trail at metal culvert.



Site comments:

Closer picture of erosion.



Waypoint 102

Location: Bass Ponds Stream -first tributary

Site comments:

Some trash and some erosion at spring



Site comments:

Erosion



Waypoint 102A

Site comments:

Between trail and quarry; steep hillside slope with slight erosion.



Site comments:

To the left of previous picture; slight erosion.



Waypoint 103

Location: Upper Bass Ponds stream

Site comments:

Erosion and trash heap



Waypoint 103A

Site comments:

Long metal piping coming down from quarry onto large boulders; major erosion.



Site comments:

Long metal piping coming down from quarry onto large boulders; major erosion.



Site comments:

Long metal piping coming down from quarry onto large boulders; major erosion.



Waypoint 104

Location: Upper Bass Ponds stream

Site comments:

Bass ponds stream source/spring



Waypoint 104A

Site comments:

Small culvert going under paved trail; little or no erosion



Site comments:

Small culvert going under paved trail; little or no erosion



Site comments:

Opposite side of path from river; culvert going under path; erosion matting/rock placed under culvert; pooling water around culvert.



Site comments:

Opposite side of path from river; culvert going under path; erosion matting/rock placed under culvert; pooling water around culvert.



Site comments:

River side of trail; matting/rock layer; pooling water.



Waypoint 105

Location: Upper Bass Ponds stream

Site comments:

Pipe outfall at spring/somewhat buried



Waypoint 105A

Site comments:

No pictures.

No image attached. (Image reference: 0.JPG)

Waypoint 106

Location: 4301 American Blvd.

Site comments:

Deep erosion

View: DH



Site comments:

Deep erosion

View: UH



Waypoint 106A

Site comments:

Riverside metal culvert going under trail; large rocks around culvert.



Site comments:

Major erosion



Site comments:

Severe erosion



Site comments:

Severe erosion



Site comments:

Other end of culvert; rock and erosion blanket.



Site comments:

Pooling water around culvert.



Waypoint 107

Location: 4301 American Blvd.

Site comments:

Some erosion; Multiple 111

View: DH



Site comments:

Gully with tree litter;

View: UH



Waypoint 107A

Site comments:

Top of gully; lots of litter, cans, bottles, refrigerator, mattress, rugs, tires, etc.



Site comments:

Major erosion.



Site comments:

Major erosion.



Site comments:

Looking down at gully.



Site comments:

Middle of gully looking up.



Site comments:

Natural water springs; large boulders.



Site comments:

Litter.



Waypoint 108

Location: 4301 American Blvd.

Site comments:

Trash, Multiple 112



Waypoint 108A

Site comments:

Bottom of gully; culvert going under trail.



Site comments:

Looking up to the top of gully.



Site comments:

River side of trail; other end of culvert.



Site comments:

Slight erosion coming out of culvert.



Waypoint 109

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 109A

Site comments:

Small culvert on river side of trail; small amount of erosion.



Site comments:

Other end of culvert.



Waypoint 110

Location: Bade Residence off #213

Site comments:

construction/erosion, standing water



Waypoint 110A

Site comments:

Looking down gully; moderate erosion.



Site comments:

Looking up at gully.



Waypoint 111

Location: Bade Residence off #214

Site comments:

Delta/end of water flow into lake



Site comments:

cement erosion control



Waypoint 111A

Site comments:

Culvert going under trail opposite of river side; little erosion.



Site comments:

Looking up at gully above previous picture; very little erosion.



Site comments:

Culvert on river side; small amount of erosion.



Site comments:

Same culvert as previously



Waypoint 112

Location: Bade Residence off #212

Site comments:

Heavy erosion middle short & short of finger tip



Site comments:

Heavy erosion middle short & short of finger tip



Site comments:

Eroded stream bank



Waypoint 112A

Site comments:

Culvert opposite side of river going under trail; very little erosion.



Site comments:

Culvert on river side of trail; large drop-off under culvert; probably some erosion but could not see due to leaves/ground cover; too hard t



Waypoint 112B

Site comments:

No picture.

No image attached. (Image reference: 0.JPG)

Waypoint 113

Location: Carver Stream (large amounts of tree

Site comments:

View of sediment out-wash into river

View: DH



Site comments:

Eroded banks of stream

View: UH



Waypoint 113A

Site comments:

Culvert opposite river side; large rocks in front of culvert.



Site comments:

Culvert on river side; large rocks around it; small amount of erosion.



Waypoint 113B

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 114

Location: Carver Stream (large amounts of tree

Site comments:

Drain pipe exit

View: DH



Site comments:

Upstream view of WP114

View: UH



Waypoint 114A

Site comments:

Opposite side of river on trail; moderate erosion.



Waypoint 115

Location: Carver Stream (large amounts of tree

Site comments:

Drain pipe exit

View: UH



Site comments:

Erosion control matting

View: UH



Site comments:

Gully from WP1716 drain pipe

View: DH



Site comments:

Erosion control along bank of river



Waypoint 115A

Site comments:

Culvert going under trail opposite river side.



Site comments:

Above culvert; moderate erosion.



Site comments:

Culvert on river side of trail; cement culvert; minor erosion.



Waypoint 116

Location: Carver Stream (large amounts of tree

Site comments:

Drain pipe exit



Waypoint 116A

Site comments:

Cement culvert opposite river side of trail; minor erosion.



Site comments:

Culvert on river side of trail; minor erosion.



Waypoint 117

Location: Along County Road 40 and #212

Site comments:

Sewer grate



Site comments:

Erosion control/culvert/tunnel



Waypoint 117A

Site comments:

All pictures - Large dump site; lots of bottles, cans, metal containers, misc. metals (rusted); old style of cans indicate they've been here



Site comments:

See comments above.



Site comments:

See comments above.



Site comments:

See comments above.



Waypoint 118

Location: Along County Road 40 and #212

Site comments:

Blacktop/cement rubble piles and trash



Waypoint 118A

Site comments:

Cement culvert opposite river side; minor erosion.



Site comments:

Culvert on river side of trail; minor erosion.



Waypoint 119

Location: Creek by Chaska baseball field (Chaska

Site comments:

Outlet of stream into river

View: DH



Site comments:

Erosion of banks

View: UH



Site comments:

Erosion of banks

View: UH



Waypoint 119A

Site comments:

Large pipe coming out of ground; seems to be holding up barbed wire fence.



Site comments:

Large pipe coming out of ground; seems to be holding up barbed wire fence.



Site comments:

Scrap metal dumping.



Waypoint 120

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe from trailer park & erosion



Site comments:

Culvert on other side



Waypoint 120A

Site comments:

Culvert coming out of side of slope; minor erosion.



Site comments:

Large gap between two culverts.



Site comments:

Large gap between two culverts.



Waypoint 120B

Site comments:

No picture or comments.

No image attached. (Image reference: 0.JPG)

Waypoint 121

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe from trailer park & erosion



Waypoint 121A

Site comments:

Culvert opposite river side halfway under water; possibly clogged.



Site comments:

Culvert on river side completely under water



Waypoint 121B

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 122

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe



Waypoint 122A

Site comments:

Large amount of erosion cut 3-5 feet into the ground.



Waypoint 122B

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 123

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe



Waypoint 123A

Site comments:

Trail construction along river; couldn't access river side (downtown Shakopee).



Waypoint 123B

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 124

Location: Trailer Park (East Chaska Creek)

Site comments:

Heavy erosion on stream bank



Waypoint 124A

Site comments:

Culvert coming from underneath path to river.



Site comments:

Culvert coming from underneath path to river.



Waypoint 125

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe



Waypoint 125A

Site comments:

Newly installed metal culvert, matting and fencing laid over slope to control erosion; some major erosion on trail.



Site comments:

Newly installed metal culvert, matting and fencing laid over slope to control erosion; some major erosion on trail.



Site comments:

Newly installed metal culvert, matting and fencing laid over slope to control erosion; some major erosion on trail.



Site comments:

Newly installed metal culvert, matting and fencing laid over slope to control erosion; some major erosion on trail.



Waypoint 126

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe and bank erosion



Site comments:

Drain pipe and bank erosion



Waypoint 126A

Site comments:

Culvert coming from underneath railroad tracks; little erosion.



Site comments:

Culvert going under path; minor erosion.



Site comments:

Culvert on river side of trail; cement slab under lip of culvert then approx. 6" drop-off to ground; lots of logs and debris at bottom.



Site comments:

Culvert on river side of trail; cement slab under lip of culvert then approx. 6" drop-off to ground; lots of logs and debris at bottom.



Waypoint 127

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe



Waypoint 127A

Site comments:

Culvert outlet from under railroad tracks; moderate erosion.



Site comments:

Culvert outlet from under railroad tracks; moderate erosion.



Site comments:

Erosion of trail due to no culvert going under trail; major erosion.



Site comments:

Erosion of trail due to no culvert going under trail; major erosion.



Waypoint 128

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe



Site comments:

Drain pipe



Waypoint 128A

Site comments:

Culvert going under railroad; moderate erosion.



Site comments:

Culvert going under trail below picture #1; culvert is buried and very hard to see; lots of grass and reeds covering both inlet and outlet o



Site comments:

Culvert going under trail below picture #1; culvert is buried and very hard to see; lots of grass and reeds covering both inlet and outlet o



Waypoint 129

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe



Waypoint 129A

Site comments:

Culvert coming out from railroad.



Site comments:

Culvert going under trail below picture #1; moderate erosion on both sides on culvert.



Waypoint 130

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe



Waypoint 130A

Site comments:

Culvert going under trail below picture #1; culvert is buried and very hard to see; lots of grass and reeds covering both inlet and outlet o



Site comments:

Culvert going under trail; lots of washed out sand and moderate erosion.



Site comments:

Culvert going under trail; lots of washed out sand and moderate erosion.



Waypoint 131

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe and erosion



Site comments:

Drain pipe and erosion



Site comments:

Drain pipe 40 years downstream



Waypoint 131A

Site comments:

PVC pipe going under trail; not effective due to pipe being too high; water is not able to go through pipe.



Site comments:

PVC pipe going under trail; not effective due to pipe being too high; water is not able to go through pipe.



Site comments:

PVC pipe going under trail; pooling water at top part of pipe; possibly clogged; minor erosion; approx. 20-feet between pipe shown in pictu



Site comments:

PVC pipe going under trail; pooling water at top part of pipe; possibly clogged; minor erosion; approx. 20-feet between pipe shown in pictu



Waypoint 132

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe



Waypoint 132A

Site comments:

Pipe coming from under railroad tracks; moderate erosion; lots of leaves, rock and branches.



Site comments:

Culvert going under path; minimum erosion; lots of rocks, leaves and branches; area below culvert in picture #1.



Site comments:

Culvert going under path; minimum erosion; lots of rocks, leaves and branches; area below culvert in picture #1.



Waypoint 133

Location: Trailer Park (East Chaska Creek)

Site comments:

Two drain pipes



Site comments:

Two drain pipes



Waypoint 133A

Site comments:

PVC pipe going under trail; very little erosion; pooling water at inlet side; covered by tall grass; 2 sets of pipes approx. 20-feet apart;



Site comments:

PVC pipe going under trail; very little erosion; pooling water at inlet side; covered by tall grass; 2 sets of pipes approx. 20-feet apart;



Site comments:

PVC pipe going under trail; very little erosion; pooling water at inlet side; covered by tall grass; 2 sets of pipes approx. 20-feet apart;



Site comments:

PVC pipe going under trail; very little erosion; pooling water at inlet side; covered by tall grass; 2 sets of pipes approx. 20-feet apart;



Site comments:

PVC pipe going under trail; very little erosion; pooling water at inlet side; covered by tall grass; 2 sets of pipes approx. 20-feet apart;



Waypoint 134

Location: Trailer Park (East Chaska Creek)

Site comments:

Drain pipe



Waypoint 134A

Site comments:

PVC pipe going under trail; pipe is not low enough to ground for water to flow through pipe; instead water flows around the pipe and over th



Site comments:

Eroding under pipe due to water going over trail.



Site comments:

PVC pipe going under trail.



Site comments:

Minimal erosion due to logs under the flow of the piping.



Waypoint 135

Location: Trailer Park (East Chaska Creek)

Site comments:

Mouth of creek at river, moderate soil erosion



Waypoint 135A

Site comments:

PVC pipe going under trail; pooling water with lots of leaf litter; slow output of water.



Site comments:

PVC pipe outlet; minimum erosion.



Waypoint 136

Location: Trailer Park (East Chaska Creek)

Site comments:

Culvert at Engler Blvd.



Waypoint 136A

Site comments:

PVC piping going under trail.



Site comments:

Pooling water at outflow end of pipe; minimum erosion.



Waypoint 137

Location: Bluff Ridge No. 1

Site comments:

Start of gully



Site comments:

Extreme soil erosion



Site comments:

Extreme soil erosion



Site comments:

End of gully; severe erosion throughout gully/near newer housing development; is erosion caused by construction?



Waypoint 137A

Site comments:

PVC pipe going under trail; pooling water at intake end of pipe.



Site comments:

PVC outlet; moderate to major erosion.



Waypoint 138

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 138A

Site comments:

PVC pipe going under trail; pooling water.



Site comments:

PVC outlet.



Site comments:

Major erosion due to outlet of PVC pipe.



Waypoint 139

Location: Bluff Ridge No. 2

Comments:

*severe erosion throughout gully/near newer housing development; is erosion caused by construction?

Site comments:

End of gully; severe erosion throughout gully/near newer housing development; is erosion caused by construction?



Waypoint 139A

Site comments:

Dump side; lots of old barrels and metal scraps.



Site comments:

Dump side; lots of old barrels and metal scraps.



Waypoint 140

Location: Bluff Ridge No. 2

Comments:

*severe erosion throughout gully/near newer housing development; is erosion caused by construction?

Site comments:

Severe erosion throughout gully/near newer housing development; is erosion caused by construction? Moderate erosion



Waypoint 140A

Site comments:

Culvert output coming from under trail; minor erosion.



Site comments:

Major erosion; gully further below culvert in picture #1; some litter; looking down gully.



Site comments:

Looking up at gully; major erosion.



Site comments:

Looking down at gully; major erosion.



Waypoint 141

Location: Bluff Ridge No. 2

Comments:

*severe erosion throughout gully/near newer housing development; is erosion caused by construction?

Site comments:

Branch of gully; severe erosion throughout gully/near newer housing development; is erosion caused by construction?



Waypoint 141A

Site comments:

Bottom of gully from waypoint 140A; looking up at gully.



Site comments:

Looking up gully; moderate erosion heading towards major erosion in near future.



Waypoint 142

Location: Bluff Ridge No. 2

Comments:

*severe erosion throughout gully/near newer housing development; is erosion caused by construction?

Site comments:

Severe erosion throughout gully/near newer housing development; is erosion caused by construction?



Site comments:

Severe erosion throughout gully/near newer housing development; is erosion caused by construction?



Waypoint 142A

Site comments:

Beginning of erosion; minimal erosion; could potentially turn into a large gully.



Site comments:

Beginning of erosion; minimal erosion; could potentially turn into a large gully.



Waypoint 143

Location: Bluff Ridge No. 2

Comments:

*severe erosion throughout gully/near newer housing development; is erosion caused by construction?

Site comments:

Drain pipe; severe erosion throughout gully/near newer housing development; is erosion caused by construction?



Waypoint 143A

Site comments:

Very large gully off of trail; minor erosion but hard to tell due to leaf litter; no culverts.



Waypoint 144

Location: Bluff Ridge No. 2

Comments:

*severe erosion throughout gully/near newer housing development; is erosion caused by construction?

Site comments:

Start of gully; severe erosion throughout gully/near newer housing development; is erosion caused by construction?



Waypoint 144A

Site comments:

Looking up gully at culvert with black matting underneath; major erosion; large cuts going into ground.



Site comments:

Looking down gully; large boulders at bottom of gully with lots of sand deposits.



Site comments:

Looking down gully; large boulders at bottom of gully with lots of sand deposits.



Waypoint 145

Location: Bluff Ridge No. 2

Comments:

*severe erosion throughout gully/near newer housing development; is erosion caused by construction?

Site comments:

Garbage in branch at start; severe erosion throughout gully/near newer housing development; is erosion caused by construction?



Waypoint 145A

Site comments:

Culvert at bottom of gully; major erosion.



Site comments:

Further up in gully; major erosion.



Site comments:

Other side of culvert; minimal erosion.



Site comments:

Bottom of culvert; minimal erosion.



Waypoint 145B

Site comments:

No comments

No image attached. (Image reference: 0.JPG)

Waypoint 146

Location: Bluff Ridge No. 2

Comments:

*severe erosion throughout gully/near newer housing development; is erosion caused by construction?

Site comments:

Branch w/moderate to severe erosion throughout gully/near newer housing development; is erosion caused by construction?



Waypoint 146A

Site comments:

Make-shift culvert made out of concrete; overall looks good.



Site comments:

Looking down gully; flat rocks placed below culvert to slow down speed of water; very minor erosion; lots of cans, glass bottles, old metal



Waypoint 147A

Site comments:

Looking down gully; minimal erosion; some erosion due to uprooted tree; lots of old metal, cans, bottles and old are; at top there is a thic



Site comments:

Looking down gully; minimal erosion; some erosion due to uprooted tree; lots of old metal, cans, bottles and old are; at top there is a thic



Waypoint 148

Location: Heidi Lane No. 1

Site comments:

Start of gully



Waypoint 148A

Site comments:

Drop-off about 8-feet; major erosion at top then merges into a gully which has minimal erosion; looking up at beginning of drop-off.



Site comments:

Looking down gully; small drop-off about 3-feet.



Waypoint 149

Location: Heidi Lane No. 1

Site comments:

End of gully-mild to moderate erosion



Waypoint 149A

Site comments:

Large gully with moderate to major erosion; hard to see sides of gully due to leaf litter.



Waypoint 150

Location: Heidi Lane No. 2

Site comments:

End -no major concerns



Waypoint 150A

Site comments:

Looking down gully; lots of rock at top of gully; minimal erosion.



Site comments:

Looking down gully; lots of rock at top of gully; minimal erosion.



Waypoint 151

Location: Heidi Lane No. 2

Site comments:

Drain pipe



Waypoint 151A

Site comments:

Bottom of gully of waypoint 150A; minimal erosion.



Site comments:

Bottom of gully of waypoint 150A; minimal erosion.



Waypoint 152

Location: Heidi Lane No. 2

Site comments:

Branch



Waypoint 152A

Site comments:

Looking up at gully; minimal erosion.



Site comments:

Looking downhill at gully; minimal erosion.



Waypoint 153

Location: Heidi Lane No. 2

Site comments:

Branch w/moderate to severe erosion



Waypoint 153A

Site comments:

Looking up at some moderate erosion; looks like water coming down a deer trail and starting to erode part of the slope.



Waypoint 154

Location: Heidi Lane No. 2

Site comments:

Branch



Waypoint 154A

Site comments:

Looking up at gully; top of gully about a 10-foot layer of rock.



Site comments:

Looking down gully; some sides of gully have moderate erosion.



Waypoint 155

Location: Heidi Lane No. 2

Site comments:

Start and drain pipe



Waypoint 155A

Site comments:

Large rock shelf at top of gully with water coming out of rock layer.



Site comments:

Looking down gully; minor to moderate erosion.



Waypoint 156

Location: West Farm Road

Site comments:

Start



Waypoint 156A

Site comments:

Large rock shelf at top of gully with an approx. 6-foot drop off.



Site comments:

Looking down gully; minimal to moderate erosion.



Waypoint 157

Location: West Farm Road

Site comments:

Garbage and erosion



Waypoint 157A

Site comments:

Rock shelf at top of gully approx. 8-feet.



Site comments:

Looking down gully; minimal erosion.



Waypoint 158

Location: West Farm Road

Site comments:

Severe erosion



Waypoint 158A

Site comments:

Culvert on slope side going under railroad tracks.



Site comments:

Erosion above culvert in picture #1; major erosion.



Site comments:

Culvert on lower side of railroad tracks.



Site comments:

Moderate erosion on sides of culvert.



Waypoint 159

Location: West Farm Road

Site comments:

End/two drain pipes



Site comments:

End/two drain pipes



Waypoint 159A

Site comments:

Culvert on slope side.



Site comments:

Waterfall? Major erosion above culvert in picture #1.



Site comments:

Looking up towards picture #2; major erosion.



Site comments:

Down slope side of culvert in picture #1; starting to erode.



Site comments:

Down slope side of culvert in picture #1; starting to erode.



Site comments:

Farther up slope cut into rock; 30-foot drop.



Waypoint 160

Location: West Farm Road

Site comments:

Severe erosion



Waypoint 160A

Site comments:

Culvert coming from under road.



Site comments:

Erosion due to the culvert; 3-4 foot cut.



Waypoint 160B

Site comments:

No picture; no comments.

No image attached. (Image reference: 0.JPG)

Waypoint 161

Location: West Farm Road

Site comments:

Branch/erosion



Waypoint 161A

Site comments:

Looking down gully; lots of rock and erosion; hard to access due to rough terrain.



Waypoint 161B

Site comments:

No picture; no comments.

No image attached. (Image reference: 0.JPG)

Waypoint 162

Location: West Farm Road

Site comments:

Gully - no concerns



Waypoint 162A

Site comments:

Very large gully with large rock ledge.



Site comments:

Looking down gully; large blue barrels midway down.



Waypoint 162B

Site comments:

No picture; no comments.

No image attached. (Image reference: 0.JPG)

Waypoint 163

Location: West Farm Road

Site comments:

Drain pipe



Waypoint 163A

Site comments:

Large gully with moderate erosion.



Waypoint 163B

Site comments:

No picture; no comments.

No image attached. (Image reference: 0.JPG)

Waypoint 164

Location: West Farm Road

Site comments:

Garbage



Waypoint 164A

Site comments:

Culvert coming from under road.



Site comments:

Looking down from culvert; moderate to major erosion.



Site comments:

10-foot drop-off into large ravine.



Waypoint 165

Location: Assumption Creek

Site comments:

Drain pipe



Waypoint 165A

Site comments:

Large rock ledge at top of gully.



Site comments:

Looking down gully; steep sides with moderate erosion.



Waypoint 166

Location: Assumption Creek

Site comments:

Well pipes



Waypoint 166A

Site comments:

Small rock ledge at top; looking down gully, minimal to moderate erosion; below gully there is a culvert going under the railroad tracks; mo



Waypoint 167

Location: Assumption Creek

Site comments:

Pipe



Waypoint 167A

Site comments:

Large gully with moderate erosion; large rock shelf at top of gully.



Waypoint 168

Location: Assumption Creek

Site comments:

Drain pipe/granite wall



Waypoint 168A

Site comments:

Very large rock shelf at top of large gully; moderate erosion.



Site comments:

Culvert at bottom of gully going under railroad tracks; minor erosion.



Waypoint 169

Location: Bluff Creek Park

Site comments:

End



Waypoint 169A

Site comments:

Large gully with large rock shelf at top of gully; moderate erosion.



Site comments:

Culvert at bottom of gully going under railroad tracks; minor erosion.



Waypoint 170

Location: Bluff Creek Park

Site comments:

End



Waypoint 170A

Site comments:

Large gully with large rock shelf at top; moderate erosion; culvert at bottom of gully going under railroad tracks; moderate erosion.



Waypoint 171

Location: Bluff Creek Park

Site comments:

Severe erosion in two parallel gullies



Waypoint 171A

Site comments:

Large gully with large rock shelf at top; moderate erosion; culvert at bottom of gully going under railroad tracks; moderate erosion.



Waypoint 172

Location: Bluff Creek Park

Site comments:

Severe erosion



Waypoint 172A

Site comments:

Large gully with large rock ledge at top; major erosion.



Site comments:

Large gully with large rock ledge at top; major erosion.



Site comments:

Culvert at top of gully coming from under road.



Waypoint 173

Location: Bluff Creek Park

Site comments:

Severe erosion



Waypoint 173A

Site comments:

Large gully with two arms going down and connecting midway down gully; arm #1 has moderate erosion.



Site comments:

Arm #2 has major erosion.



Waypoint 173B

Site comments:

No picture; no comments.

No image attached. (Image reference: 0.JPG)

Waypoint 174

Location: Bluff Creek Park

Site comments:

Severe erosion



Waypoint 174A

Site comments:

Looking down at large gully; moderate erosion.



Waypoint 175

Location: Bluff Creek Park

Site comments:

Severe erosion



Site comments:

Fresh water sponges



Waypoint 175A

Site comments:

Looking down at gully; moderate to major erosion; looks like large amounts of water flow down gully.



Waypoint 176

Location: Bluff Creek Park

Site comments:

End



Waypoint 176A

Site comments:

Looking up at gully from railroad tracks; moderate to major erosion.



Waypoint 177

Location: Bluff Creek Park

Site comments:

Branch



Waypoint 177A

Site comments:

Looking up at large gully from railroad tracks; lots of rock ledges; minimal erosion.



Waypoint 178

Location: Bluff Creek Park

Site comments:

Branch



Waypoint 178A

Site comments:

Medium gully with moderate erosion on sides; lots of down trees and brush; looking up at gully from railroad tracks.



Waypoint 179

Location: Bluff Creek Park

Site comments:

Branch



Waypoint 179A

Site comments:

Looking up at small gully from railroad tracks; lots of small rock and some sort of erosion control method at top; looks like a fence laying



Waypoint 180

Location: Bluff Creek Park

Site comments:

Branch



Waypoint 180A

Site comments:

Lower side of railroad tracks; culvert with lots of cement piled below culvert; minimal erosion.



Site comments:

Lower side of railroad tracks; culvert with lots of cement piled below culvert; minimal erosion.



Site comments:

Upper side of culvert; lots of rock and debris.



Site comments:

Side where water flows into culvert; rock and soil removed; moderate erosion.



Waypoint 181

Location: Bluff Creek Park

Site comments:

Branch



Waypoint 181A

Site comments:

Culvert coming down from trail above; lots of loose rock; looking down at culvert; moderate erosion.



Site comments:

Looking up to where water comes down into culvert.



Site comments:

Culvert on lower side; half full with loose rock; minimal erosion.



Waypoint 182

Location: Assumption Creek

Site comments:

Erosion (undercutting)



Waypoint 182A

Site comments:

Above railroad tracks, a chute leading water down through the culvert.



Site comments:

Sides next to culvert are beginning to erode; minimal erosion.



Site comments:

River side of culvert has cut away the stream bank along the river; culvert has lots of loose rock in culvert; moderate to major erosion.



Site comments:

River side of culvert has cut away the stream bank along the river; culvert has lots of loose rock in culvert; moderate to major erosion.



Site comments:

River side of culvert has cut away the stream bank along the river; culvert has lots of loose rock in culvert; moderate to major erosion.



Waypoint 183

Location: Assumption Creek

Site comments:

End



Waypoint 183A

Site comments:

Culvert on upper side of railroad.



Site comments:

Moderate erosion.



Site comments:

Part of bank beginning to cut under.



Site comments:

Major erosion on lower side of railroad tracks; undercutting bank.



Site comments:

Lots of fallen rock; cutting out river bank.



Waypoint 184

Location: Assumption Creek

Site comments:

Drain pipe



Waypoint 184A

Site comments:

Upper side of railroad tracks; culvert minimal erosion.



Site comments:

Upper side of railroad tracks; culvert minimal erosion.



Site comments:

Lower side of culvert; lots of large rock and rip-rap protecting river bank; minimal erosion.



Waypoint 185

Location: Assumption Creek

Site comments:

Drain pipe



Waypoint 185A

Site comments:

Culvert on upper side of railroad tracks; minimal erosion.



Site comments:

Culvert on upper side of railroad tracks; minimal erosion.



Site comments:

Lower side of culvert.



Site comments:

Major erosion; sides cut out all the way to the river; loose rock and exposed soil.



Waypoint 186

Location: Assumption Creek

Site comments:

Branch



Waypoint 186A

Site comments:

Culvert on upper side of railroad tracks; minimal erosion.



Site comments:

Culvert on upper side of railroad tracks; minimal erosion.



Site comments:

Culvert on lower side of railroad tracks; sides of culvert starting to erode; minimal erosion.



Waypoint 187

Location: Bluff Creek Park

Site comments:

Finger tip, looks all right; crew said # out of order; no picture

No image attached. (Image reference: 0.JPG)

Waypoint 187A

Site comments:

Lots of rocks, sticks and leaves covering culvert; minimal erosion.



Site comments:

Culvert on upper side of railroad tracks.



Site comments:

Lower side of railroad tracks; sides of culvert starting to erode; minimal to moderate erosion.



Waypoint 188

Location: Bluff Creek Park

Site comments:

Erosion on side of creek, laying soil in the creek



Waypoint 188A

Site comments:

Upper side of railroad tracks; lots of garbage and rock on top of fencing that is laid over top of culvert; minimal erosion.



Site comments:

Upper side of railroad tracks; lots of garbage and rock on top of fencing that is laid over top of culvert; minimal erosion.



Site comments:

Lower side of railroad tracks; culvert had lots of rip-rap; sides starting to erode; moderate erosion.



Waypoint 189

Location: Bluff Creek Park

Site comments:

Steep erosion into creek



Waypoint 189A

Site comments:

Large cement culvert going under railroad tracks and into river.



Site comments:

Large cement culvert going under railroad tracks and into river.



Site comments:

Lower side of culvert; minimal erosion; lots of rock surrounding the culvert.



Waypoint 190A

Site comments:

Culvert at upper side of railroad tracks; minimal erosion.



Site comments:

Culvert at upper side of railroad tracks; minimal erosion.



Site comments:

Lower side of culvert; full of rock and sand; water pooling at outlet; minimal erosion.



Waypoint 191A

Site comments:

Culvert on upper side of railroad tracks; water coming down through culvert; minimal erosion.



Site comments:

Culvert on upper side of railroad tracks; water coming down through culvert; minimal erosion.



Site comments:

Culvert on lower side of railroad tracks.



Site comments:

Water coming out of culvert and going through 2 large pools of water before going into river; moderate erosion.



Waypoint 192A

Site comments:

Culvert going under railroad tracks



Site comments:

Upper side has wooden track to bring water down through the culvert to the other side and to the river.



Waypoint 193A

Site comments:

Two culverts on upper side of railroad tracks going under tracks.



Site comments:

Fencing covering top of culverts is completely smashed and torn apart.



Site comments:

Lower side of culvert; minimal erosion.



Waypoint 194A

Site comments:

Culvert of upper side of railroad tracks; minimal erosion.



Site comments:

Large chunks of concrete on lower side of culvert; moderate erosion; no actual culvert but it looks like there used to be one and then it ma



Waypoint 1001

Location: 6601 Auto Club Road

Comments:

overall looks good

Site comments:

Cement block erosion control, leaf and mulch dumping; overall looks good



Waypoint 1002

Location: 6601 Auto Club Road

Comments:

overall looks good

Site comments:

Trash manhole dumping



Waypoint 1003

Location: 6601 Auto Club Road

Comments:

overall looks good

Site comments:

Overall looks good.



Waypoint 1004

Location: 6601 Auto Club Road

Comments:

overall looks good

Site comments:

Groundwater discharge; overall looks good



Waypoint 1005

Location: 6601 Auto Club Road

Comments:

overall looks good

Site comments:

Man made road barrier/bridge



Waypoint 1006

Location: 6601 Auto Club Road

Comments:

overall looks good

Site comments:

Pond outlet 1; overall looks good



Waypoint 1007

Location: 6607 Auto Club Road

Comments:

overall looks good

Site comments:

Pond outlet 2; overall looks good



Site comments:

Pond drain 2



Waypoint 1008

Location: 6301/6251/6501 Auto Club Road

Comments:

not much erosion, lots of buckthorn/garlic mustard

Site comments:

Logs and brush at top of gully; not much erosion, lots of buckthorn/garlic mustard.



Waypoint 1009

Location: 6301/6251/6501 Auto Club Road

Comments:

not much erosion, lots of buckthorn/garlic mustard

Site comments:

Abandoned garden; not much erosion, lots of buckthorn/garlic mustard.



Waypoint 1010

Location: 6301/6251/6501 Auto Club Road

Comments:

not much erosion, lots of buckthorn/garlic mustard

Site comments:

Cut brush along top of gully; not much erosion, lots of buckthorn/garlic mustard



Waypoint 1011

Location: 6301/6251/6501 Auto Club Road

Comments:

not much erosion, lots of buckthorn/garlic mustard

Site comments:

Cement blocks erosion right up to yard; much erosion, lots of buckthorn/garlic mustard.



Waypoint 1012

Location: 6121 Auto Club Road

Site comments:

Small gully-just getting started



Waypoint 1013

Location: 6001 Auto Club Road

Site comments:

Metal scraps, one tile line/drainage erosion not much of an issue, lots of garlic mustard/buckthorn



Site comments:

Metal scraps, one tile line/drainage erosion not much of an issue, lots of garlic mustard/buckthorn



Waypoint 1014

Location: 11710 Normandale - west side of road

Site comments:

Some groundwater seepage at bottom



Waypoint 1015

Location: 11710 Normandale - east side of road

Site comments:

Large cement pipe w/riprap



Site comments:

Erosion below riprap



Waypoint 1016

Location: 3325 Overlook

Site comments:

large pile of mulch at top, 4-wheeler tracks down gully



Waypoint 1017

Location: 3325 Overlook

Site comments:

Large amount of brush & dirt when gully gets steeper, some bank erosion



Waypoint 1018

Location: 3301-3315 Overlook

Site comments:

Pushed dirt and brush at bottom of gully



Site comments:

Pushed dirt and brush at bottom of gully



Waypoint 1019

Location: 3301-3315 Overlook

Site comments:

Top of gully



Waypoint 1020

Location: 3301-3215 Overlook

Site comments:

Landscaped road



Waypoint 1021

Location: 3301-3215 Overlook

Site comments:

Top of gully



Waypoint 1022

Location: 3131-3125 Overlook

Site comments:

Some cat brush at top, no real concerns



Waypoint 1023

Location: 3115-3119 Overlook

Site comments:

Gully in hillside - drops into 4463



Site comments:

Gully in hillside - drops into 4463



Waypoint 1024

Location: 3115-3119 Overlook

Site comments:

Top of gully



Waypoint 1025

Location: 3115-3119 Overlook

Site comments:

Groundwater seepage, no real flow



Waypoint 1026

Location: 3115-3119 Overlook

Site comments:

Pipe outlet



Waypoint 1027

Location: 3001 Overlook

Site comments:

Eroding gully with some old woven wire fence



Waypoint 1028

Location: 3001 Overlook

Site comments:

Top of gully



Waypoint 1029

Location: 2815/2621 Overlook

Comments:

random deeper cut gullies throughout the drain

Site comments:

Looks fine at top; random deeper cut gullies throughout the drain



Waypoint 1030

Location: 2815/2621 Overlook

Comments:

random deeper cut gullies throughout the drain

Site comments:

Gully top drainage pipe; random deeper cut gullies throughout the drain



Waypoint 1031

Location: 2815/2621 Overlook

Comments:

random deeper cut gullies throughout the drain

Site comments:

Deep cut gully below 4469-about 60 yards in length; random deeper cut gullies throughout the drain.



Waypoint 1032

Location: 2815/2621 Overlook

Comments:

random deeper cut gullies throughout the drain

Site comments:

Springs that disappear; random deeper cut gullies throughout the drain



Waypoint 1033

Location: 2815/2621 Overlook

Comments:

random deeper cut gullies throughout the drain

Site comments:

Top of gully; random deeper cut gullies throughout the drainage.



Waypoint 1034

Location: Queen Avenue

Site comments:

Storm water pipe outlet



Waypoint 1035

Location: Queen Avenue

Site comments:

Top of gully, lots of cement chunks, no real erosion problems



Waypoint 1036

Location: Queen Avenue

Site comments:

Top of gully, no erosion problems



Waypoint 1037

Location: 2273 Overlook (could be 2213)

Site comments:

Leaves and mulch piled at top, looks fine otherwise



Waypoint 1038

Location: 2949 Overlook-City Property

Site comments:

Top of gully, some bare dirt behind house, dumped mulch, some erosion halfway down gully



Site comments:

Top of gully, some bare dirt behind house, dumped mulch, some erosion halfway down gully



Waypoint 1039

Location: 2951 Overlook-City Property

Site comments:

Looks fine



Waypoint 1040

Location: 2952 Overlook-City Property

Site comments:

Some mulch and brush dumping, no erosion problems, but steep



Waypoint 1041

Location: 2953 Overlook-City Property

Site comments:

Spring



Waypoint 1042

Location: 2954 Overlook-City Property

Site comments:

Spring empties into creek, unvegetated, undercut banks



Waypoint 1043

Location: 2955 Overlook-City Property

Site comments:

Storm water pipe



Waypoint 1044

Location: 11020/11018 Glen Wilding

Site comments:

Looks good



Waypoint 1045

Location: 11020/11018 Glen Wilding

Site comments:

Pipe with depress/erosion hole



Waypoint 1046

Location: 11020/11018 Glen Wilding

Site comments:

Looks good



Waypoint 1047

Location: 11036 Glen Wilding

Site comments:

Looks good



Waypoint 1048

Location: 1209 River Terrace

Site comments:

Blank



Waypoint 1049

Location: 1209 River Terrace

Site comments:

Spring



Waypoint 1050

Location: 1209 River Terrace

Site comments:

Spring



Waypoint 1051

Location: 1209 River Terrace

Site comments:

Spring



Waypoint 1052

Location: 1209 River Terrace

Site comments:

Spring



Waypoint 1053

Location: 1209 River Terrace

Site comments:

Spring



Waypoint 1054

Location: 1209 River Terrace

Site comments:

Stormwater pipe, some water flow, undercut bank



Waypoint 1055

Location: 1209 River Terrace

Site comments:

Culvert under land bridge, drains where the pond appears to be located



Waypoint 1056

Location: 1209 River Terrace

Site comments:

Storm water grate



Waypoint 1057

Location: 1025/1101 River Terrace

Site comments:

Top of gully - looks good



Waypoint 1058

Location: City property next to 35W - west side

Site comments:

Culvert w/ cut gully below



Waypoint 1059

Location: City property next to 35W - west side

Site comments:

Top of gully, 2 small storm water pipes, leaves pushed into gully



Waypoint 1060

Location: City property between 35W & Lyndale A

Site comments:

Bank erosion on active stream



Waypoint 1061

Location: City property between 35W & Lyndale A

Site comments:

Culvert empties into cement channel onto rocks



Site comments:

Same culvert close up



Waypoint 1062

Location: City property between 35W & Lyndale A

Site comments:

Stormier culvert from under 35W



Waypoint 1063

Location: 101 107th Street Circle

Site comments:

Looks fine



Waypoint 1064

Location: 101 107th Street Circle

Site comments:

Looks fine



Waypoint 1065

Location: 151 107th Street

Site comments:

Looks fine



Waypoint 1066

Location: 151 107th Street

Site comments:

House drainage pipe/tube



Waypoint 1067

Location: 161 107th Street

Site comments:

Looks fine



Waypoint 1068

Location: 201 107th Street

Site comments:

Erosion on bike path in between 161 & 201



Waypoint 1069

Location: 201 107th Street

Site comments:

Storm water outlet



Waypoint 1070

Location: 201 107th Street

Site comments:

Top of gully w/retaining wall & small drainage pipe



Waypoint 1071

Location: 211 105th Street Circle

Site comments:

Top of gully



Waypoint 1073

Location: 211 105th Street Circle

Site comments:

Spring - looks healthy-watercress



Waypoint 1074

Location: 211 105th Street Circle

Site comments:

Top of gully - lots of garlic mustard



Waypoint 1075

Location: 211 105th Street Circle

Site comments:

Pipes - active drainage?



Waypoint 1076

Location: 211 105th Street Circle

Site comments:

Spring - looks healthy-watercress



Waypoint 1077

Location: 211 105th Street Circle

Site comments:

Top of gully



Waypoint 1078

Location: 211 105th Street Circle

Site comments:

Top of gully



Waypoint 1079

Location: 421,413 East 104th Street - lots of g

Site comments:

Leaves/mulch at top-drainage pipe but not connected



Waypoint 1080

Location: 421,413 East 104th Street - lots of g

Site comments:

Finger of gully-lots of brush and ??? Chunks



Waypoint 1081

Location: 421,413 East 104th Street - lots of g

Site comments:

Finger of gully-lots of brush and ??? Chunks



Waypoint 1082

Location: 421,413 East 104th Street - lots of g

Site comments:

Retaining wall above spring/4526 is spring



Site comments:

Spring



Waypoint 1083

Location: 421,413 East 104th Street - lots of g

Site comments:

Finger - brush at top



Waypoint 1084

Location: 421,413 East 104th Street - lots of g

Site comments:

Finger - moderate erosion in gully



Waypoint 1085

Location: 421,413 East 104th Street - lots of g

Site comments:

Culvert under walking path



Waypoint 1086

Location: 421,413 East 104th Street - lots of g

Site comments:

Storm water outlet



Waypoint 1087

Location: City Property

Site comments:

"V" cut erosion gully - not too bad



Waypoint 1088

Location: City Property

Site comments:

Top of gully, some bare banks - looks just o.k.



Waypoint 1089

Location: Columbus Road

Site comments:

Walking path bridge erosional storm water stream underneath



Waypoint 1090

Location: Columbus Road

Site comments:

Down cut stream bed



Waypoint 1091

Location: Columbus Road

Site comments:

Deeply cut stream bed-bad bank erosion



Waypoint 1092

Location: Columbus Road

Site comments:

Top of gully, stormwater drain, deeply cut, bad erosion from points 1089-1092



Site comments:

Top of gully, stormwater drain, deeply cut, bad erosion from points 1089-1092



Waypoint 1093

Location: 10949/10440 Columbus Road

Site comments:

Top of gully looks fine, retaining wall, some dumping of lumber



Waypoint 1094

Location: City Property off Columbus Road

Site comments:

Top of gully



Waypoint 1095

Location: City Property off Columbus Road

Site comments:

Trail/bike erosion on bank



Waypoint 1096

Location: City Property off Columbus Road

Site comments:

Trail crossing dry stream bed-bank erosion



Waypoint 1097

Location: City Property off Columbus Road

Site comments:

Pipe outfall w/bank erosion, some riprap in place



Waypoint 1098

Location: City Property off Columbus Road

Site comments:

Pipe outfall, minimal erosion



Waypoint 1099

Location: City Property off Columbus Road

Site comments:

Stream alluvial fan - looks like some re-charge



Site comments:

Water looks iron rich, orange "goo" buildup



Waypoint 1100

Location: City Property off Columbus Road

Site comments:

Stream confluence, bank erosion on east shore



Waypoint 1101

Location: 100249 Chicago

Site comments:

Top of gully/spring



Waypoint 1102

Location: 100249 Chicago

Site comments:

Spring



Waypoint 1103

Location: 100249 Chicago

Site comments:

Spring that appears to recharge



Waypoint 1104

Location: 10331 Columbus Road

Site comments:

Top of gully, pretty steep banks, but looks o.k.



Waypoint 1105

Location: 2901 E. Old Shakopee Road

Site comments:

Top of gully, lots of brush and brush piled up



Waypoint 1106

Location: 2901 E. Old Shakopee Road

Site comments:

Springs with eroding banks



Site comments:

Springs with eroding banks



Site comments:

Springs with eroding banks



Waypoint 1107

Location: 2901 E. Old Shakopee Road

Site comments:

Spring



Waypoint 1108

Location: 2901 E. Old Shakopee Road

Site comments:

Spring



Waypoint 1109

Location: 2901 E. Old Shakopee Road

Site comments:

More springs-top of gully huge complex of springs/grndwatr.



Waypoint 1110

Location: 2901 E. Old Shakopee Road

Site comments:

Bank erosion along stream seepage



Site comments:

Steep gully side w/exposed roots and soil, spring flowing at base



Waypoint 1111

Location: 2901 E. Old Shakopee Road

Site comments:

Finger gully with spring



Waypoint 1112

Location: 2901 E. Old Shakopee Road

Site comments:

Old pipes and concrete structure w/old fence



Waypoint 1113

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Top of gully and spring; pretty steep banks along west side



Waypoint 1114

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Spring, very orange, two old pipes; pretty steep banks along west side



Waypoint 1115

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Top of gully with spring and bank erosion; steep banks along west side.



Site comments:

Top of gully with spring and bank erosion; steep banks along west side.



Waypoint 1116

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Spring with some bank erosion; pretty steep banks along west side



Waypoint 1117

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Bank erosion; pretty steep banks along west side.



Waypoint 1118

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Pipe and bank erosion; pretty steep banks along west side.



Waypoint 1119

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Pipe with active water flow, some bank erosion; pretty steep banks along west side.



Waypoint 1120

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Exposed dirt, looks like its from machinery next to walking path; pretty steep banks along west side.



Waypoint 1121

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Storm water outlet w/adjacent stream outlet; pretty steep banks along west side



Waypoint 1122

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Gully/spring - slight bank erosion; pretty steep banks along west side



Waypoint 1123

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Gully/spring - slight bank erosion; pretty steep banks along west side



Waypoint 1124

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Gully/spring; pretty steep banks along west side



Waypoint 1125

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Gully/spring, cut fairly deep w/steep banks along west side/loose soil



Waypoint 1126

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Gully/spring, cut fairly deep w/steep banks along west side/loose soil



Waypoint 1127

Location: 3055 Old Shakopee

Comments:

pretty steep banks along west side

Site comments:

Walking path bridge - eroding bank above



Waypoint 1128

Location: USWFS - Near Visitor's Center

Site comments:

Top of gully-small broken retaining wall, top of gully looks fine, garbage, TV



Waypoint 1129

Location: USWFS - Near Visitor's Center

Site comments:

Old foundation



Waypoint 1130

Location: USWFS - Near Visitor's Center

Site comments:

Top of gully, exposed tree roots, some bank erosion



Waypoint 1131

Location: USWFS - Near Visitor's Center

Site comments:

Top of gully, fairly steep banks, not too bad



Waypoint 1132

Location: USWFS - Near Visitor's Center

Site comments:

Top of gully, fairly steep banks, not too bad



Waypoint 1133

Location: USWFS - Near Visitor's Center

Site comments:

Top of gully, fairly steep banks, not too bad



Waypoint 1134

Location: USWFS - Near Visitor's Center

Site comments:

Top of gully, fairly steep banks, not too bad



Waypoint 1135

Location: USWFS - Near Visitor's Center

Site comments:

Storm water grate?



Waypoint 1136

Location: USWFS - Near Visitor's Center

Site comments:

Top of gully, lots of broken concrete/4587 erosion cut



Site comments:

Erosion cut



Waypoint 1137

Location: USWFS - Near Visitor's Center

Site comments:

Storm water outlet from catchment pond in new development-top of gully



Waypoint 1138

Location: USWFS - Near Visitor's Center

Site comments:

Finger, bad down cut and bank erosion, a little water wash, brush and mulch



Waypoint 1139

Location: USWFS - Near Visitor's Center

Site comments:

Bank erosion, slump/slide



Site comments:

Bank erosion, slump/slide



Waypoint 1140

Location: USWFS - Near Visitor's Center

Site comments:

Finger, down cut at top, pretty bad



Waypoint 1141

Location: USWFS - Near Visitor's Center

Site comments:

Finger, undercut banks, exposed roots, real bad, looks like an old path that channels water



Site comments:

Finger, undercut banks, exposed roots, real bad, looks like an old path that channels water



Waypoint 1142

Location: USWFS - Near Visitor's Center

Site comments:

Finger, looks fine



Waypoint 1143

Location: USWFS - Near Visitor's Center

Site comments:

Top of gully/4596 cut deep with bad bank erosion



Waypoint 1144

Location: USWFS - Near Visitor's Center

Site comments:

Half-way down to creek/4597 cut deep with bad erosion



Waypoint 1145

Location: USWFS - Near Visitor's Center

Site comments:

Finger, looks pretty good



Waypoint 1146

Location: USWFS - Near Visitor's Center

Site comments:

Finger, looks good



Waypoint 1147

Location: USWFS - Near Visitor's Center

Site comments:

Finger, car frame, steep banks with bare soil



Waypoint 1148

Location: USWFS - Near Visitor's Center

Site comments:

Finger, metal junk



Waypoint 1149

Location: USWFS - Near Visitor's Center

Site comments:

End of big finger, some garbage, looks pretty sad



Waypoint 1150

Location: USWFS - Near Visitor's Center

Site comments:

Drainage pipe, no flow



Waypoint 1151

Location: USWFS - Near Visitor's Center

Site comments:

Resident confront about washout issues



Waypoint 1152

Location: USWFS - Near Visitor's Center

Site comments:

House runoff tile



Waypoint 1153

Location: USWFS - Near Visitor's Center

Site comments:

House runoff tile



Site comments:

House runoff tile



Waypoint 1154

Location: USWFS - Near Visitor's Center

Site comments:

Finger, moderate erosion



Waypoint 1155

Location: USWFS - Near Visitor's Center

Site comments:

Bank erosion pretty bad; groundwater seepage starting here, seepage disappears just downstream



Waypoint 1156

Location: USWFS - Near Visitor's Center

Site comments:

Spring w/solid flow - below 1146



Waypoint 1157

Location: USWFS - Near Visitor's Center

Site comments:

Both flows from water stop by house, spring water disappears right before house



Waypoint 1158

Location: USWFS - Near Visitor's Center

Site comments:

Culvert under driveway by house, finger to 212 NE, quite a bit of bank erosion along extent finger



Waypoint 1159

Location: USWFS - Near Visitor's Center

Site comments:

Other sides of culvert, erosion on bank directly adjacent



Waypoint 1160

Location: USWFS - Near Visitor's Center

Site comments:

Water seepage and erosion



Waypoint 1161

Location: USWFS - Near Visitor's Center

Site comments:

Top of gully erosion/construction erosion prevention



Waypoint 1162

Location: USWFS - Near Visitor's Center

Site comments:

Runoff tile from construction



Waypoint 1163

Location: USWFS - Near Visitor's Center

Site comments:

Finger gully top and garbage pile



Waypoint 1164

Location: USWFS - Near Visitor's Center

Site comments:

Spring water begins



Waypoint 1165

Location: USWFS - Near Visitor's Center

Site comments:

Culvert and finger gully tip and tile line



Waypoint 1166

Location: USWFS - Near Visitor's Center

Site comments:

Extensive erosion



Waypoint 1167

Location: USWFS - Near Visitor's Center

Site comments:

Steady water flow and extensive erosion



Waypoint 1168

Location: USWFS - Near Visitor's Center

Site comments:

Spring water



Waypoint 1169

Location: USWFS - Near Visitor's Center

Site comments:

Entrance to finger erosion



Waypoint 1170

Location: USWFS - Near Visitor's Center

Site comments:

Extensive erosion



Waypoint 1171

Location: USWFS - Near Visitor's Center

Site comments:

Extensive erosion on southern gully



Waypoint 1172

Location: USWFS - Near Visitor's Center

Site comments:

Extensive and deep erosion



Waypoint 1173

Location: USWFS - Near Visitor's Center

Site comments:

Extensive erosion



Waypoint 1174

Location: USWFS - Near Visitor's Center

Site comments:

Finger tip and tile line w/mild erosion



Waypoint 1175

Location: Llama Farm

Site comments:

Erosion encroachment to llama fence



Waypoint 1176

Location: Llama Farm

Site comments:

Finger tip looks good



Waypoint 1177

Location: Llama Farm

Site comments:

Finger tip looks good



Waypoint 1178

Location: Llama Farm

Site comments:

Bigger gully tip, looks alright



Waypoint 1179

Location: Llama Farm

Site comments:

Finger tip, mild erosion, tip to spring water #1168



Waypoint 1180

Location: Llama Farm

Site comments:

Finger tip/bowl, looks alright



Waypoint 1181

Location: Llama Farm

Site comments:

Deep cut erosion under trees and all up hillside, small finger



Waypoint 1182

Location: Llama Farm

Site comments:

Deep cut erosion on finger



Waypoint 1183

Location: Llama Farm

Site comments:

Finger tip, sizeable erosion whole finger



Waypoint 1184

Location: Llama Farm

Site comments:

Large culvert w/some water flow -small spring, minor channel

View: DH



Site comments:

channel leading to culvert/some tree debris leading to culvert

View: UP



Site comments:

Erosion control on banks of culvert



Waypoint 1185

Location: Llama Farm

Site comments:

Deep channel outlet w/trash/significant

View: UP



Waypoint 1186

Location: Llama Farm

Site comments:

Erosion control/tile outlet

View: UP



Waypoint 1187

Location: Llama Farm

Site comments:

Under cut bank/erosion problem along entire driveway

View: UP



Waypoint 1188

Location: Llama Farm

Site comments:

Minimal erosion along channel

View: DH



Waypoint 1189

Location: Llama Farm

Site comments:

Deep cut channel, severe erosion/large amount of llama feces in channel from llama farm

View: DH



Waypoint 1190

Location: Llama Farm

Site comments:

Deep channel w/severe erosion and copious amounts of feces/straw on hillside and trash

View: DH



Waypoint 1191

Location: Llama Farm

Site comments:

Deeply eroded finger

View: DH



Waypoint 1192

Location: Llama Farm

Site comments:

Eroded bank

View: DH



Site comments:

Extreme channel tires piled up in gully

View: UP



Site comments:

Extreme channel tires piled up in gully

View: UP



Site comments:

Eroded channel view from WP1192

View: DH



Waypoint 1193

Location: Llama Farm

Site comments:

Some erosion along finger

View: UP



Waypoint 1194

Location: Llama Farm

Site comments:

Finger strongly eroded banks

View: UP



Waypoint 1195

Location: Llama Farm

Site comments:

Beginning of long channel

View: UP



Waypoint 1196

Location: Llama Farm

Site comments:

Pile of rusty cans



Waypoint 1197

Location: Llama Farm

Site comments:

Beginning of spring

View: DH



Waypoint 1198

Location: Llama Farm

Site comments:

End of spring

View: UP



Waypoint 1199

Location: Llama Farm

Site comments:

End of extremely eroded channel w/tires on top

View: UP



Waypoint 1200

Location: Llama Farm

Site comments:

Spring at end of marsh

View: DH



Site comments:

Spring at end of marsh

View: UP



Waypoint 1201

Location: Llama Farm

Site comments:

Severely undercut stream bank

View: UP



Waypoint 1202

Location: Llama Farm

Site comments:

End of huge channel system/box culvert



Waypoint 1203

Location: Llama Farm

Site comments:

Gully with minor erosion

View: DH



Waypoint 1204

Location: Llama Farm

Site comments:

Start of severe erosion in gully



Waypoint 1205

Location: Llama Farm

Site comments:

Rusty bus



Waypoint 1206

Location: Llama Farm

Site comments:

Old gully

View: DH



Waypoint 1207

Location: Llama Farm

Site comments:

Culvert on side of road



Waypoint 1208

Location: Llama Farm

Site comments:

Culvert entrance on side of road



Waypoint 1209

Location: Llama Farm

Site comments:

Culvert exit



Waypoint 1210

Location: Llama Farm

Site comments:

Gully w/minor erosion/trash



Waypoint 1211

Location: Llama Farm

Site comments:

Drain pipe exit



Waypoint 1212

Location: Llama Farm

Site comments:

Culvert entrance on side of road



Waypoint 1213

Location: Llama Farm

Site comments:

Culvert exit



Waypoint 1214

Location: Llama Farm

Site comments:

Culvert entrance on side of road



Waypoint 1215

Location: Llama Farm

Site comments:

Spring at end of marsh

View: DH



Waypoint 1216

Location: Llama Farm

Site comments:

Washout area w/trash, tires, cans, etc.



Waypoint 1217

Location: Llama Farm

Site comments:

Scrap metal/trash

View: UH



Waypoint 1218

Location: Llama Farm

Site comments:

Drain pipe w/horribly black water/top of gully

View: UH



Waypoint 1219

Location: Llama Farm

Site comments:

4 pipe outlets, lots of iron deposits

View: UH



Waypoint 1220

Location: Llama Farm

Site comments:

Culvert exit



Waypoint 1221

Location: Llama Farm

Site comments:

Entrance bridge tunnel

View: DH



Site comments:

Exit

View: DH



Waypoint 1222

Location: Llama Farm

Site comments:

Drain pipe

View: DH



Site comments:

Eroded bank

View: DH



Site comments:

Drain pipe entrance at end of driveway



Waypoint 1223

Location: Llama Farm

Site comments:

2 pipes draining from street into river



Site comments:

View of pipe from above



Site comments:

View of retaining wall from bridge

View: UH



Site comments:

2 pipes draining into stream



Site comments:

1 pipe draining into stream



Waypoint 1224

Location: Llama Farm

Site comments:

Runoff from roof drains onto ground going into this pipe



Waypoint 1225

Location: Llama Farm

Site comments:

Pipe draining into stream



Waypoint 1226

Location: Llama Farm

Site comments:

Pipe draining into stream



Waypoint 1227

Location: Llama Farm

Site comments:

Pipe from street into disposal



Waypoint 1228

Location: Llama Farm

Site comments:

Pipe outlet/groundwater seepage



Waypoint 1229

Location: Llama Farm

Site comments:

Stream bank erosion



Waypoint 1230

Location: Llama Farm

Site comments:

End of water in stream/banks lined w/honeysuckle/buckthorn, easily removable

View: UH



Waypoint 1231

Location: Llama Farm

Site comments:

Gully filled in with soil from construction

View: DH



Waypoint 1232

Location: Llama Farm

Site comments:

Culvert exit w/erosion on bank

View: UH



Site comments:

Culvert entrance

View: DH



Waypoint 1233

Location: Llama Farm

Site comments:

Drain pipe

View: UH



Waypoint 1234

Location: Llama Farm

Site comments:

Culvert under #212

View: DH



Site comments:

Culvert outlet under #212

View: UH



Waypoint 1235

Location: Llama Farm

Site comments:

Eroded bank very sandy

View: DH



Waypoint 1236

Location: Llama Farm

Site comments:

Eroded stream bank/very ferrous stream



Site comments:

Eroded stream bank/very ferrous stream



Waypoint 1237

Location: Llama Farm

Site comments:

Outlet pipe/severe erosion

View: UH



Waypoint 1238

Location: Llama Farm

Site comments:

Spring of ferrous stream

View: UH



Site comments:

Sulfur smell



Waypoint 1239

Location: Llama Farm

Site comments:

Gully extreme erosion

View: UH



Site comments:

Spring

View: DH



Waypoint 1240

Location: Llama Farm

Site comments:

Eroded hillside glacial fill along trail severe

View: UH



Site comments:

large boulders (from quarry?) to prevent erosion, beginning of gully

View: UH



Waypoint 1241

Location: Llama Farm

Site comments:

Eroded gully/small spring



Waypoint 1242

Location: Llama Farm

Site comments:

Eroded gully beginning at house

View: DH



Site comments:

Some small erosion control-ineffective

View: UH



Waypoint 1243

Location: Llama Farm

Site comments:

Spring

View: DH



Waypoint 1244

Location: Llama Farm

Site comments:

Erosion control like WP1242

View: UH



Site comments:

Beginning of gully/severe erosion by residential development

View: DH



Waypoint 1245

Location: Llama Farm

Site comments:

Strong erosion present

View: DH



Site comments:

Beginning of gully on edge of residential development

View: UH



Waypoint 1246

Location: Llama Farm

Site comments:

Erosion matting and drain field

View: UH



Site comments:

Spring/very ferrous, severe erosion, watercress

View: DH



Waypoint 1247

Location: Llama Farm

Site comments:

Beginning of gully

View: UH



Site comments:

Severe erosion

View: UH



Site comments:

Erosion on rest of finger

View: DH



Waypoint 1248

Location: Llama Farm

Site comments:

Extreme erosion next to development

View: DH



Waypoint 1249

Location: Llama Farm

Site comments:

Little erosion/beginning of gully

View: UH



Waypoint 1250

Location: Llama Farm

Site comments:

Culvert



Waypoint 1251

Location: Llama Farm

Site comments:

Biologs underneath new bridge @ Fred Miller spring



Waypoint 1252

Location: Llama Farm

Site comments:

Exit culvert

View: UH



Site comments:

Extreme

View: DH



Waypoint 1253

Location: Llama Farm

Site comments:

Exit culvert

View: DH



Site comments:

Entrance

View: DH



Waypoint 1254

Location: Llama Farm

Site comments:

Exit culvert

View: DH



Site comments:

Entrance

View: DH



Waypoint 1255

Location: Llama Farm

Site comments:

Entrance culvert

View: DH



Site comments:

Exit

View: UH



Waypoint 1256

Location: Llama Farm

Site comments:

Culvert

View: UH



Site comments:

Rain catchment area feeding culvert



Waypoint 1257

Location: Llama Farm

Site comments:

Entrance culvert

View: DH



Site comments:

Exit culvert

View: UH



Site comments:

Culvert - big

View: UH



Site comments:

Severe erosion on banks after culvert



Site comments:

Culvert complex from #212/erosion control in place

View: UH



Waypoint 1258

Location: Llama Farm

Site comments:

Entrance culvert, minor erosion in gully



Site comments:

Exit



Waypoint 1259

Location: Llama Farm

Site comments:

Culvert exit/culvert from #212 & culvert continues



Waypoint 1260

Location: Llama Farm

Site comments:

Culvert exit from WP1259, severe erosion & trash



Waypoint 1261

Location: Llama Farm

Site comments:

Gully, no erosion



Waypoint 1262

Location: Llama Farm

Site comments:

Culvert exit

View: UH



Site comments:

Culvert entrance

View: DH



Waypoint 1263

Location: Llama Farm

Site comments:

Pipe outlet along MN River/severe erosion



Site comments:

Spring 40 ft from river edge



Waypoint 1264

Location: Llama Farm

Site comments:

Pipe outlet/spring/pipe outlet plugged up with dirt

View: DH



Site comments:

Erosion/severe on edge of river

View: DH



Site comments:

Shot of outlet facing river

View: DH



Waypoint 1265

Location: Llama Farm

Site comments:

Spring/minor erosion

View: DH



Waypoint 1266

Location: Llama Farm

Site comments:

Beginning of gully/strong erosion

View: UH



Waypoint 1267

Location: Llama Farm

Site comments:

Gully w/some exposed soil on banks

View: UH



Waypoint 1268

Location: Llama Farm

Site comments:

Culvert w/open manhole 20 ft. behind it; outlet from development straight above?

View: UH



Waypoint 1269

Location: Llama Farm

Site comments:

Drain pipe outlet

View: UH



Site comments:

Drain pipe entrance

View: DH



Waypoint 1270

Location: Llama Farm

Site comments:

Drain pipe outlet

View: DH



Waypoint 1271

Location: Llama Farm

Site comments:

Culvert outlet

View: UH



Site comments:

Culvert inlet

View: DH



Waypoint 1272

Location: Llama Farm

Site comments:

Spring

View: DH



Waypoint 1273

Location: Llama Farm

Site comments:

Eroded path/severe 100 yards from gate to w.p.

View: UH



Waypoint 1274

Location: Llama Farm

Site comments:

Top of gully/some erosion apparent

View: UH



Waypoint 1275

Location: Llama Farm

Site comments:

Culvert exit /spring

View: UH



Waypoint 1276

Location: Llama Farm

Site comments:

Culvert outlet

View: UH



Waypoint 1277

Location: Llama Farm

Site comments:

Residential pipe outlet

View: UH



Waypoint 1278

Location: Llama Farm

Site comments:

Small pipe outlet into pond

View: UH



Waypoint 1279

Location: Llama Farm

Site comments:

Large spring

View: DH



Site comments:

Small gully erosion

View: DH



Waypoint 1280

Location: Llama Farm

Site comments:

Tim Marpe pointed out this eroded stream bank as being very close to pond. Bank is very water-logged between pond & stream. Believe there is



Waypoint 1281

Location: Llama Farm

Site comments:

Spring which feeds into Purgatory/minor erosion

View: UH



Waypoint 1282

Location: Llama Farm

Site comments:

Culvert on right/spring on left/ some erosion control

View: UH



Waypoint 1283

Location: Llama Farm

Site comments:

Purgatory near outlet into Minnesota/typical erosion

View: UH



Waypoint 1284

Location: Llama Farm

Site comments:

Culvert entrance

View: DH



Waypoint 1285

Location: Llama Farm

Site comments:

2 culvert exits by River View Road

View: UH



Waypoint 1286

Location: Llama Farm

Site comments:

Huge tunnel exit

View: UH



Site comments:

Severely eroded stream bank adjacent to tunnel



Waypoint 1287

Location: Llama Farm

Site comments:

Culvert exit

View: UH



Waypoint 1288

Location: Llama Farm

Site comments:

Caged riprap erosion control



Waypoint 1289

Location: Llama Farm

Site comments:

Culvert entrance

View: DH



Site comments:

Culvert exit

View: UH



Waypoint 1290

Location: Llama Farm

Site comments:

Culvert entrance

View: DH



Site comments:

Culvert exit

View: UH

