



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Transducer Study Update

Beth Place

EGLE Superfund

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Presentation Outline

- Objectives
- Scope of Study
- Results
- Next Steps

Objectives

Total PFAS (ppt)

Residential Wells

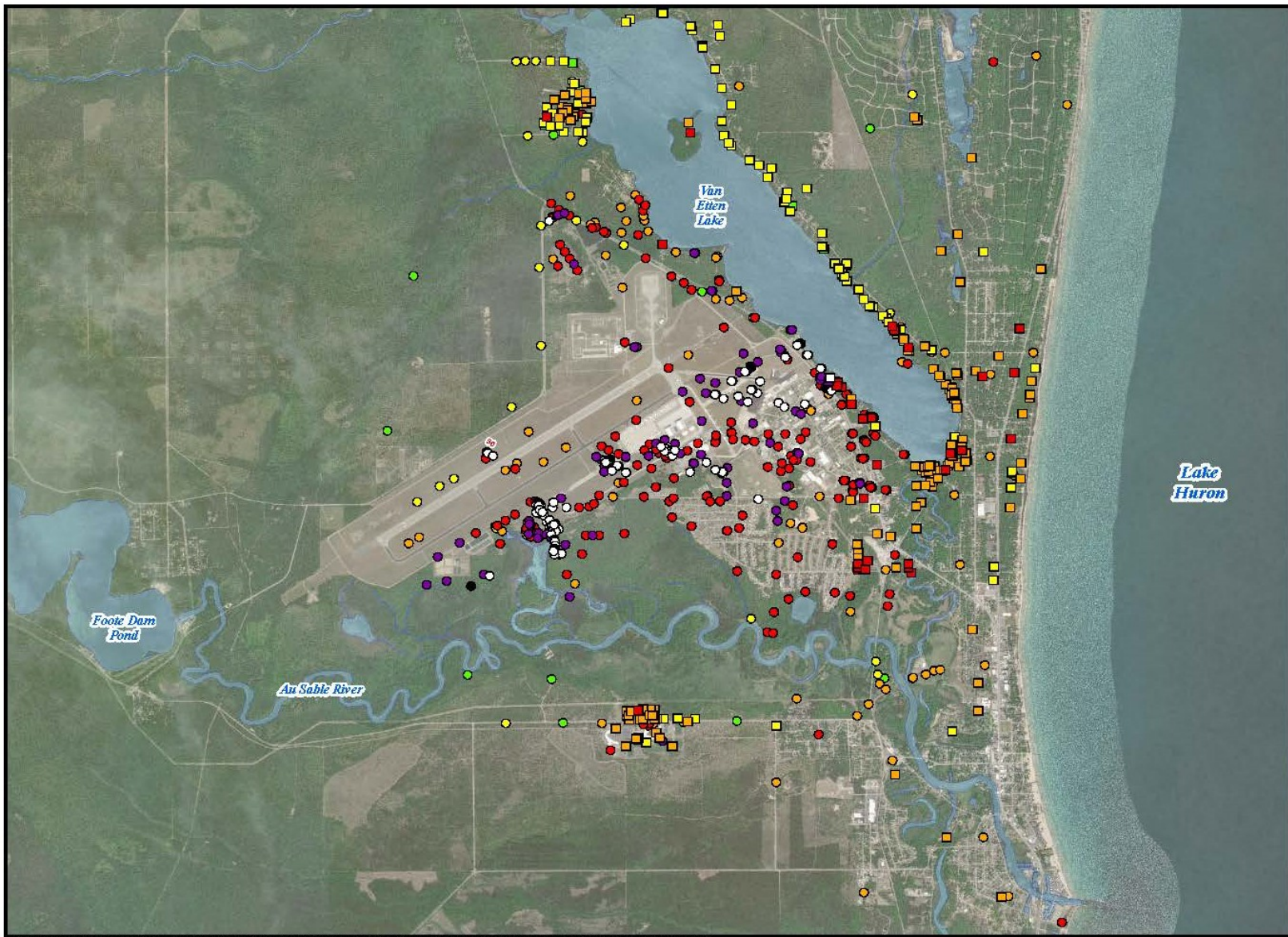
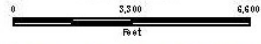
- Non-Detect
- <10
- 10 - <70
- 70 - <1,000
- 1,000 - <5,000
- 5,000 - <10,000
- >10,000

Groundwater Samples

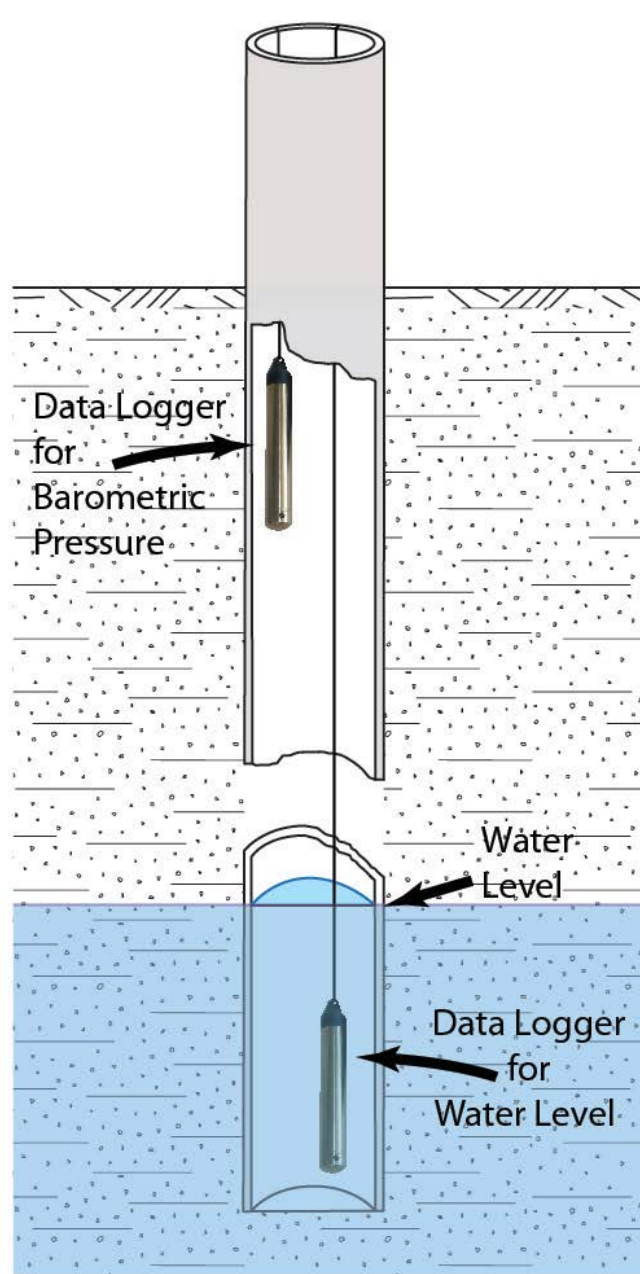
- Non-Detect
- <10
- 10 - <70
- 70 - <1,000
- 1,000 - <5,000
- 5,000 - <10,000
- >10,000

GROUNDWATER AND RESIDENTIAL SAMPLING RESULTS TOTAL PFAS

FORMER WURTSMITH AIR FORCE BASE & OSCODA AREA
IOSCO COUNTY, MICHIGAN



Study



Figures - Minnesota Board of Water and Soil Resources (2013)



FIGURE 1
 TRANSDUCER LOCATIONS
 FORMER WURTSMITH
 AIR FORCE BASE &
 OSCODA AREA,
 IOSCO COUNTY,
 MICHIGAN

Results

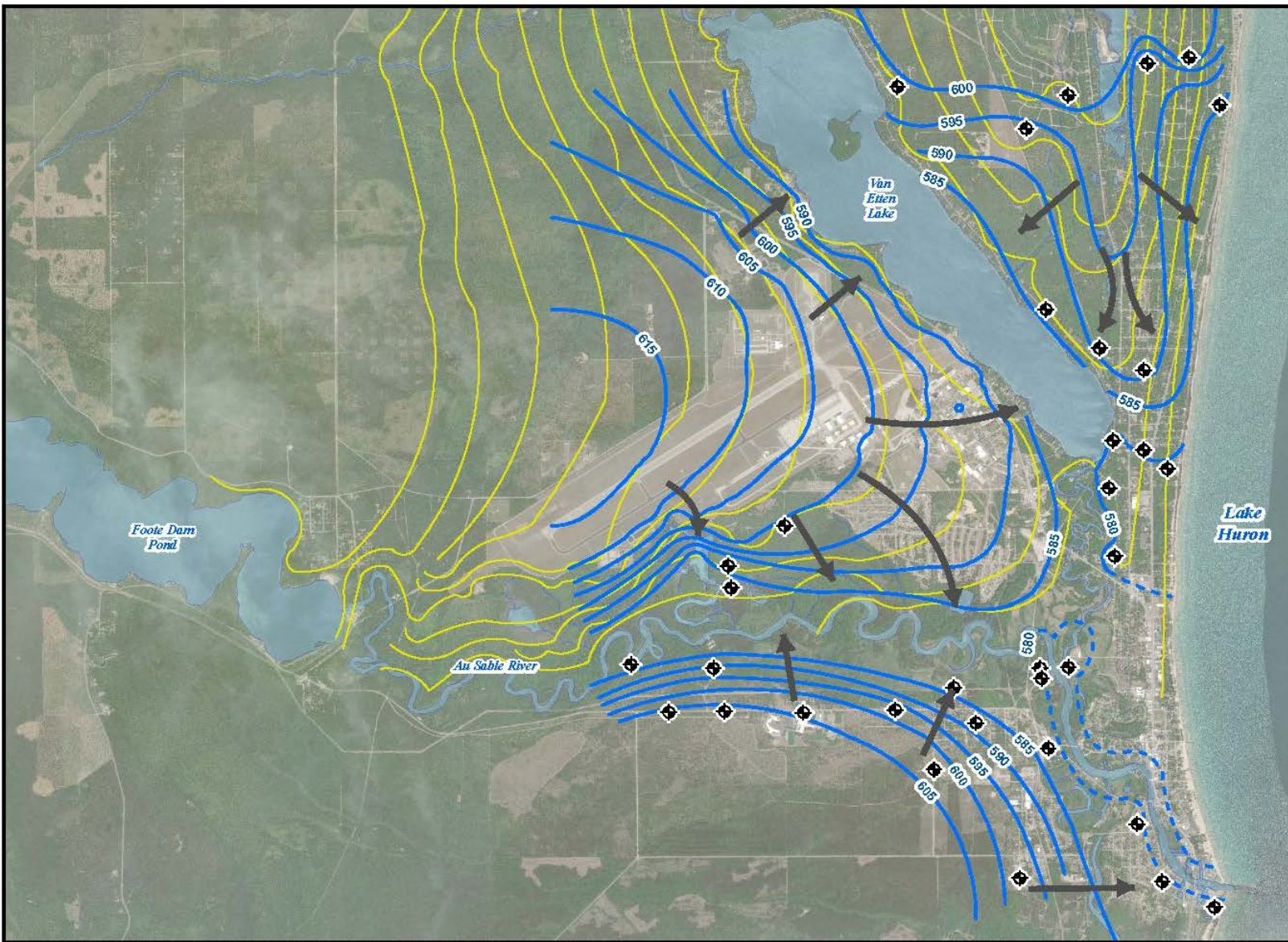
Legend

- Monitoring Wells
- Groundwater Contour
- Inferred Groundwater Contour
- USGS Contour
- Groundwater Flow Direction

COMPOSITE
POTENTIOMETRIC
GROUNDWATER
CONTOURS

FORMER WURTSMITH
AIR FORCE BASE &
OSCODA AREA
IOSCO COUNTY,
MICHIGAN

0 1,000 2,000 3,000 4,000
Feet



Lake Huron

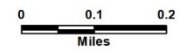


Legend

- Groundwater Elevation Monitoring Points
- Groundwater Elevation Contours
- Groundwater Flow Direction

DECEMBER 12, 2018 GROUNDWATER CONTOURS

FORMER WURTSMITH AIR FORCE BASE & OSCODA AREA OSCODA COUNTY, MICHIGAN



DEQ-LD-MW005
586.30

RI-MW034
585.22

RI-MW009
591.78

RI-MW033
589.40

RI-MW032
587.72

RI-MW035
585.73

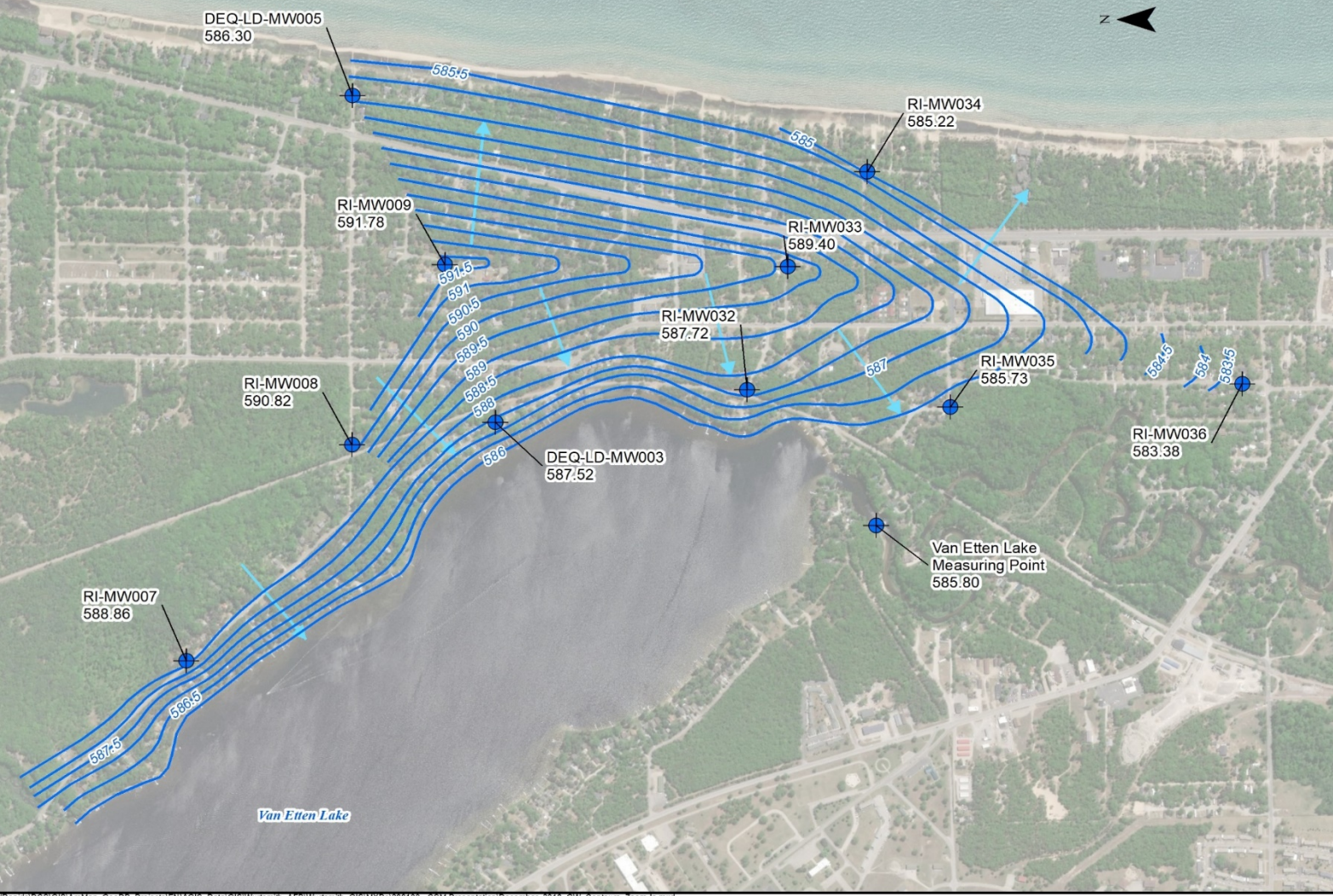
RI-MW008
590.82

RI-MW036
583.38

DEQ-LD-MW003
587.52

Van Etten Lake
Measuring Point
585.80

RI-MW007
588.86



Van Etten Lake

Lake Huron

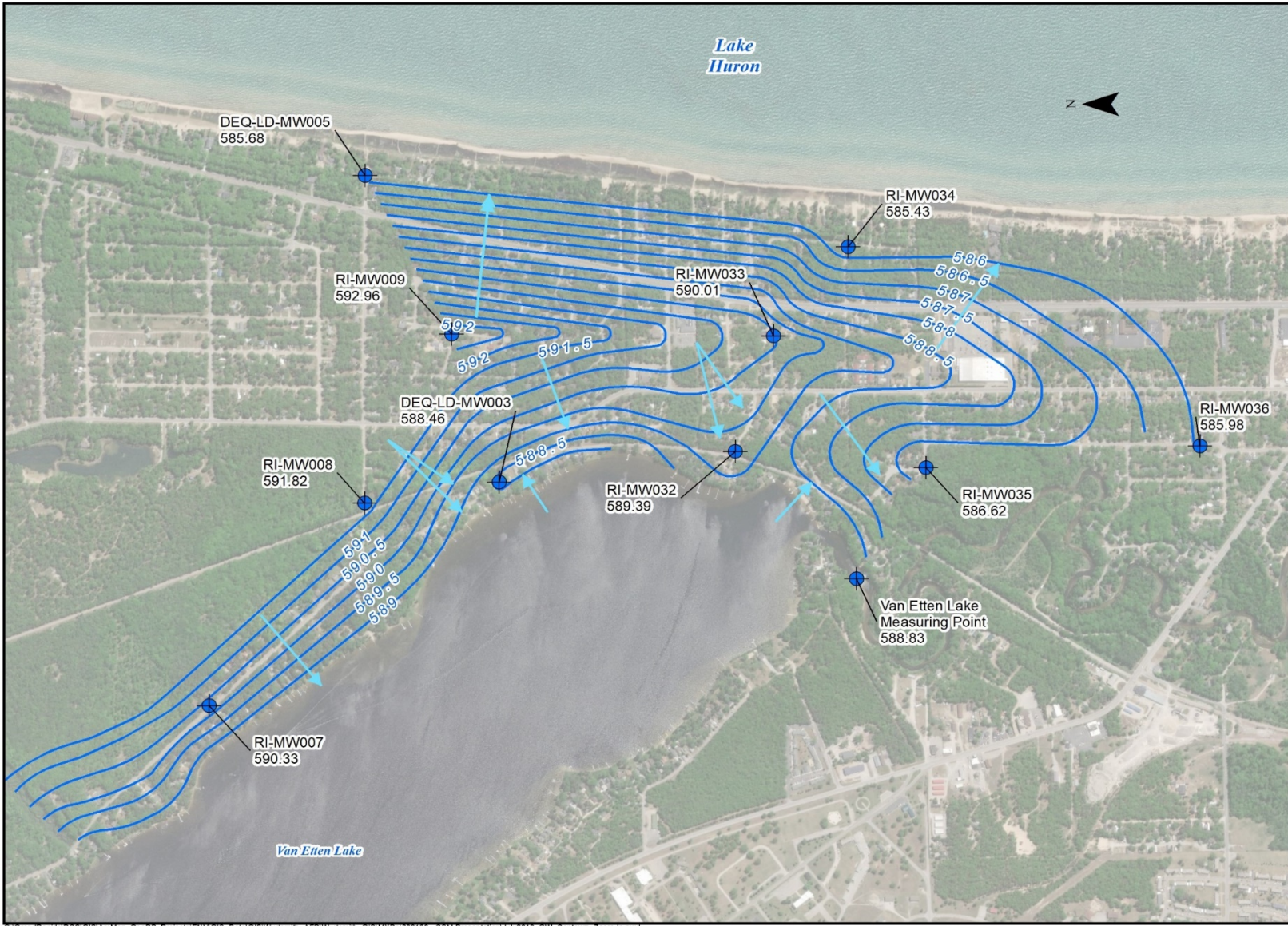
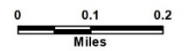


Legend

- Groundwater Elevation Monitoring Points
- Groundwater Elevation Contours
- Groundwater Flow Direction

JULY 17, 2019
GROUNDWATER
CONTOURS

FORMER WURTSMITH
AIR FORCE BASE &
OSCODA AREA
IOSCO COUNTY,
MICHIGAN



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Lake Huron



DEQ-LD-MW005
585.68

RI-MW034
585.43

RI-MW009
592.96

RI-MW033
590.01

RI-MW036
585.98

DEQ-LD-MW003
588.46

RI-MW032
589.39

RI-MW035
586.62

RI-MW008
591.82

Van Etten Lake
Measuring Point
588.83

RI-MW007
590.33

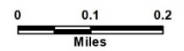
Van Etten Lake

Legend

- Groundwater Elevation Monitoring Points
- Groundwater Elevation Contours
- Groundwater Flow Direction

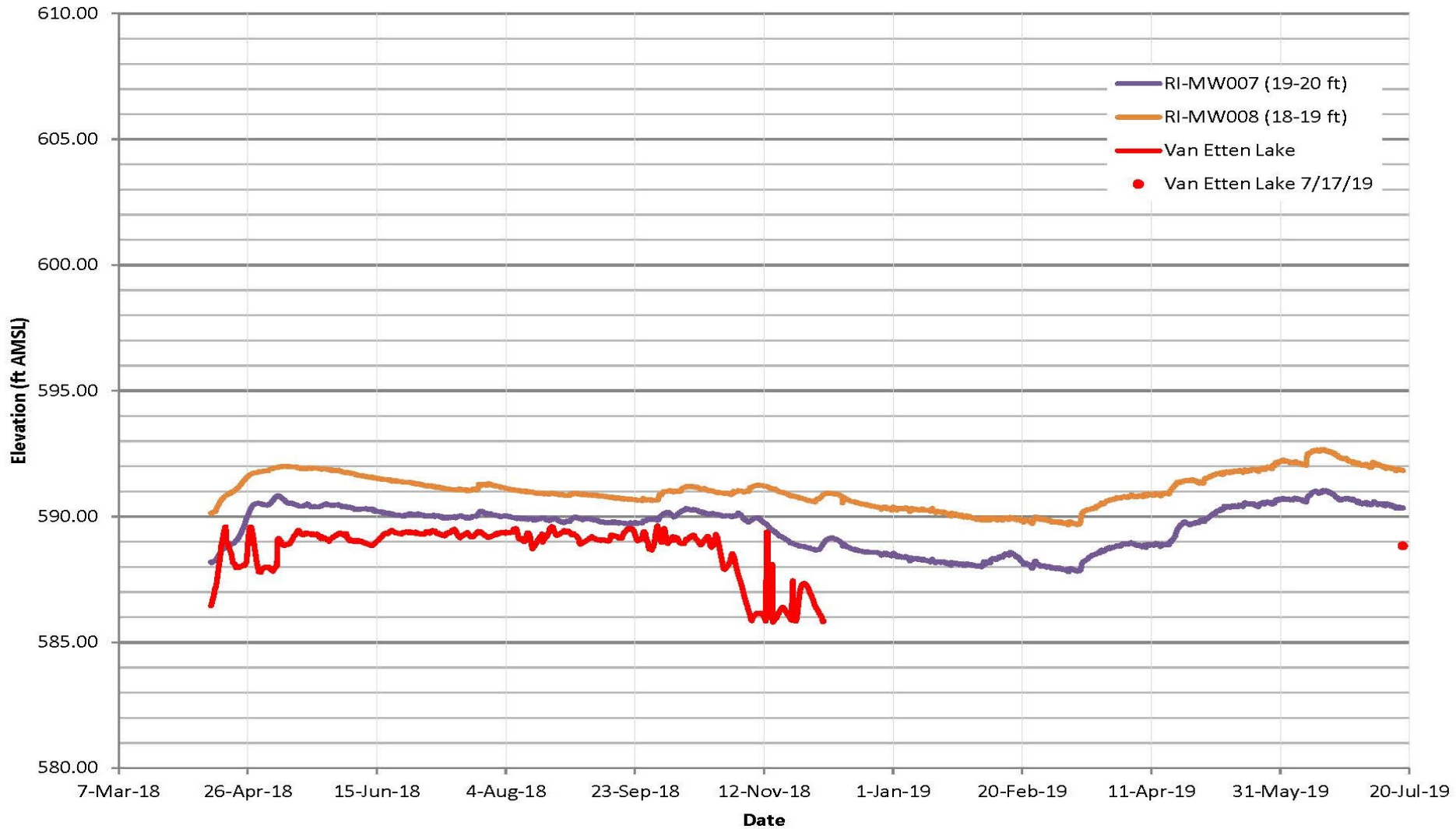
JULY 17, 2019
GROUNDWATER
CONTOURS

FORMER WURTSMITH
AIR FORCE BASE &
OSCODA AREA
IOSCO COUNTY,
MICHIGAN



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Hydrographs Near Van Etten Lake



Lake
Huron

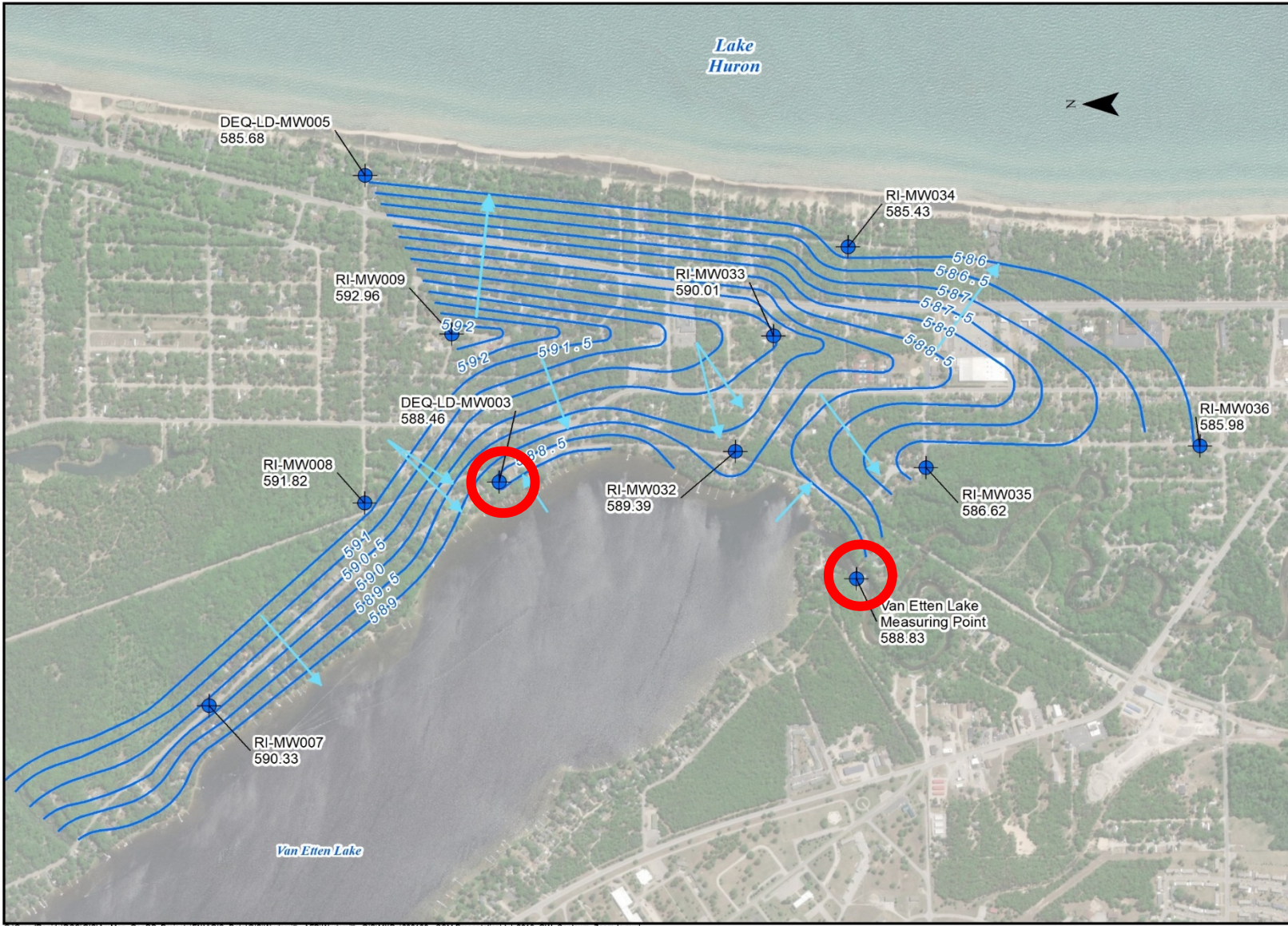
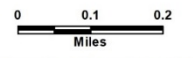


Legend

- Groundwater Elevation Monitoring Points
- Groundwater Elevation Contours
- Groundwater Flow Direction

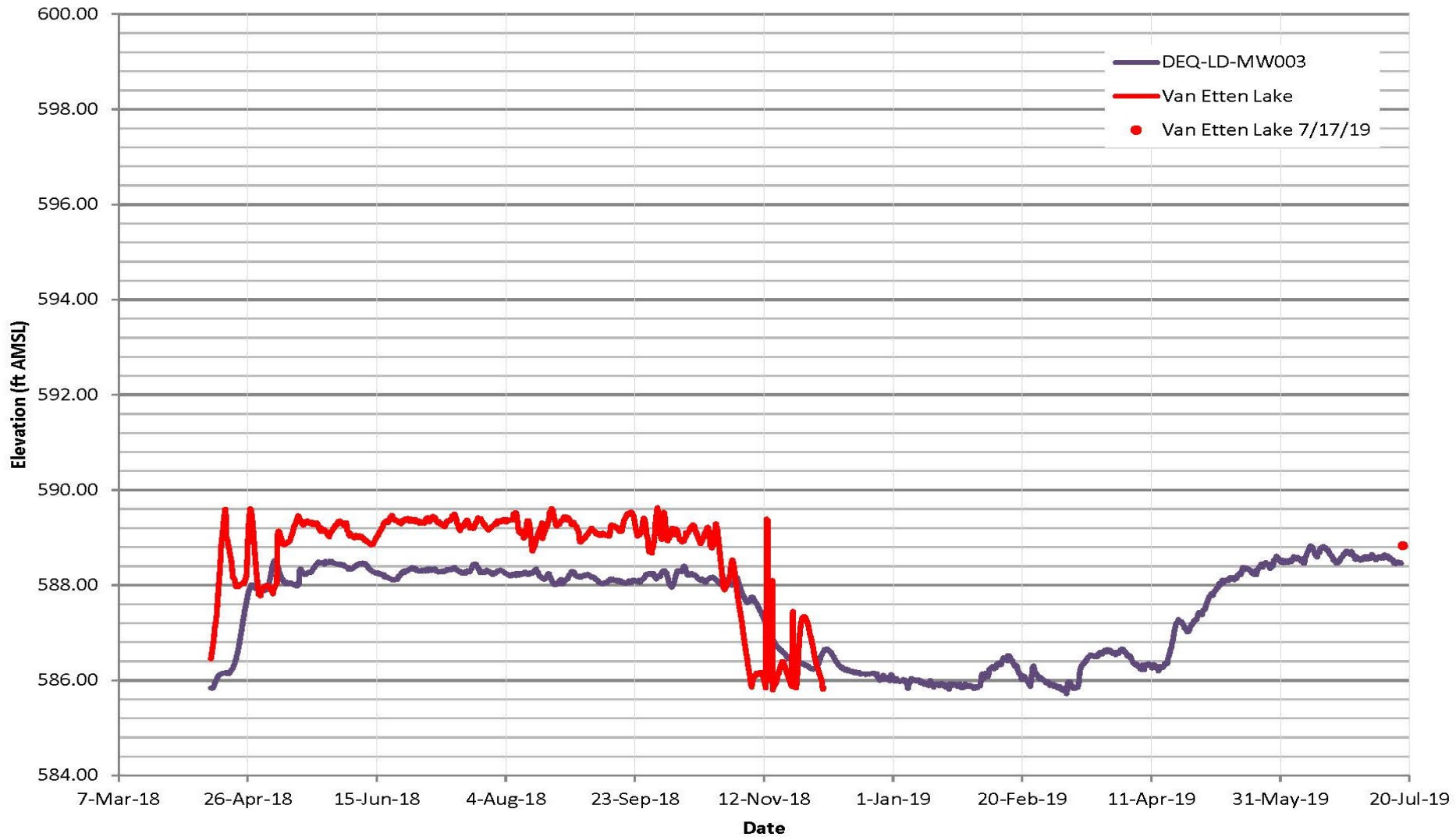
JULY 17, 2019
GROUNDWATER
CONTOURS

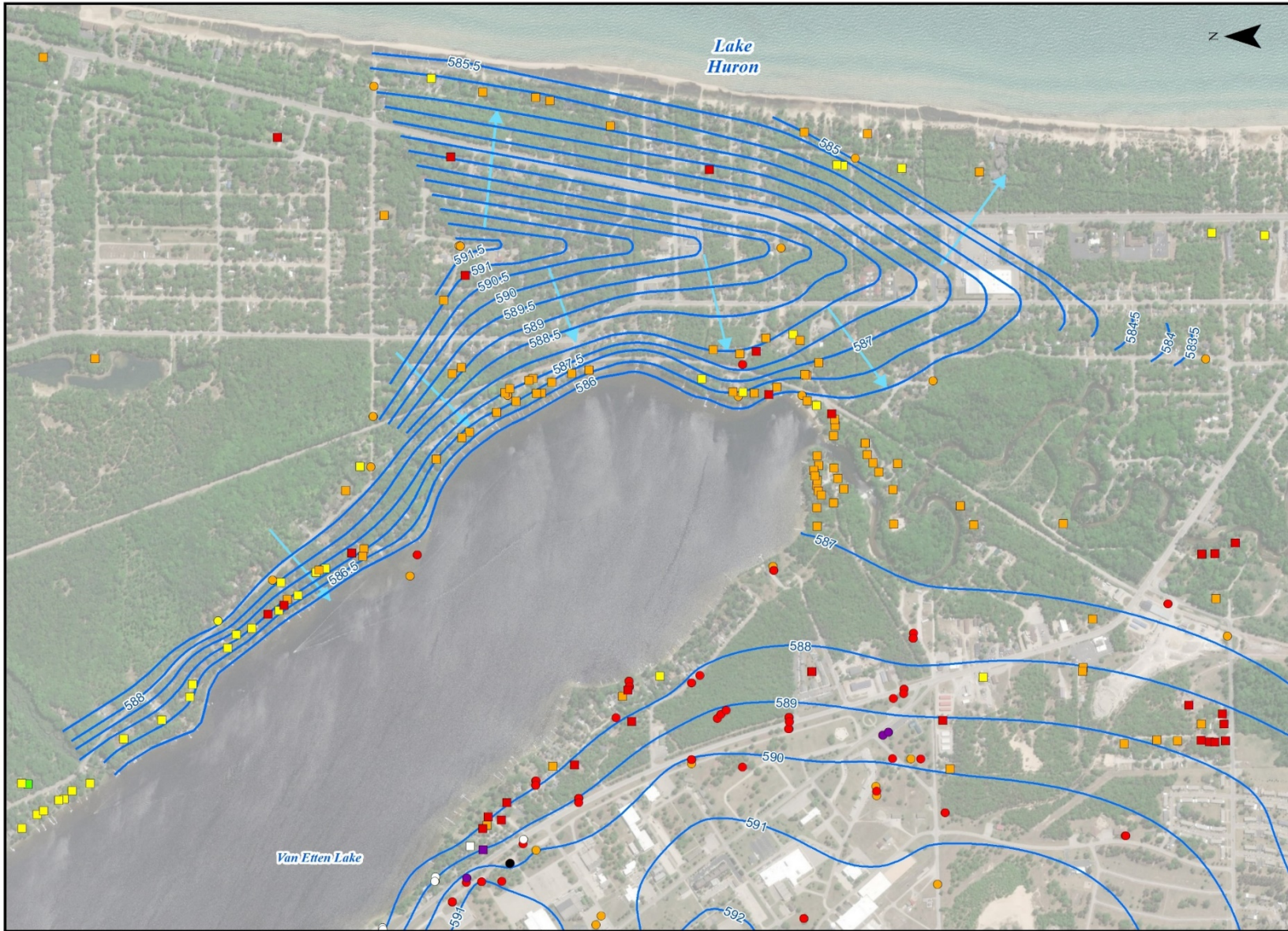
FORMER WURTSMITH
AIR FORCE BASE &
OSCODA AREA
IOSCO COUNTY,
MICHIGAN



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Hydrographs Near Van Etten Lake





Legend

Residential Wells

- Green square: Non-Detect
- Yellow square: <10
- Orange square: 10 - <70
- Red square: 70 - <1,000
- Purple square: 1,000 - <5,000
- Black square: 5,000 - <10,000
- White square: >10,000

Groundwater Samples

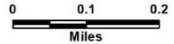
- Green circle: Non-Detect
- Yellow circle: <10
- Orange circle: 10 - <70
- Red circle: 70 - <1,000
- Purple circle: 1,000 - <5,000
- Black circle: 5,000 - <10,000
- White circle: >10,000

Blue line: Groundwater Elevation Contours

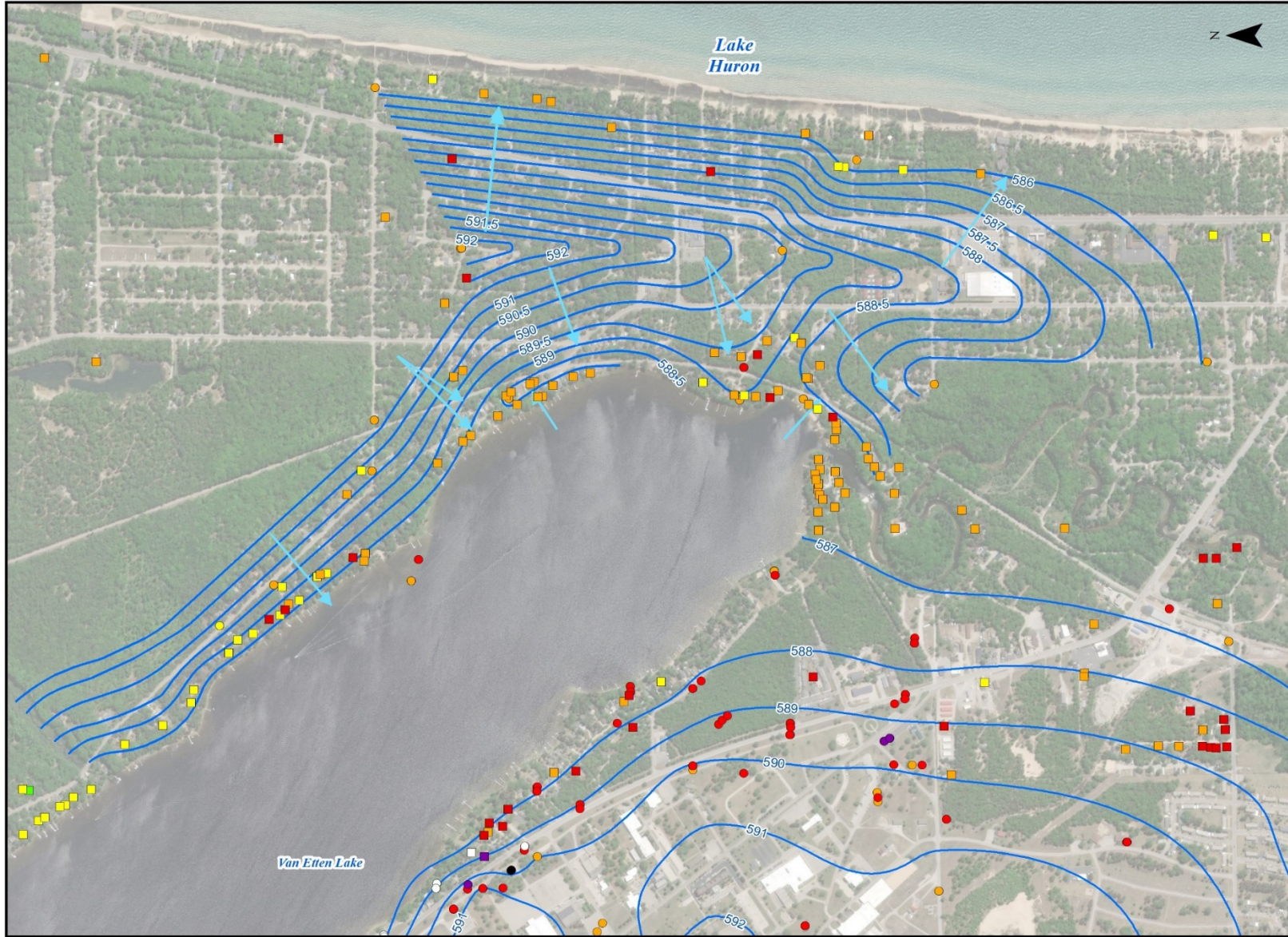
Light blue arrow: Groundwater Flow Direction

DECEMBER 12, 2018
GROUNDWATER
CONTOURS

FORMER WURTSMITH
AIR FORCE BASE &
OSCODA AREA
IOSCO COUNTY,
MICHIGAN



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Legend

Residential Wells

- Non-Detect
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- 1,000 - <5,000
- 5,000 - <10,000
- >10,000

Groundwater Samples

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Groundwater Elevation Contours
Groundwater Flow Direction

JULY 17, 2019
GROUNDWATER
CONTOURS

FORMER WURTSMITH
AIR FORCE BASE &
OSCODA AREA
IOSCO COUNTY,
MICHIGAN






0 0.1 0.2
Miles



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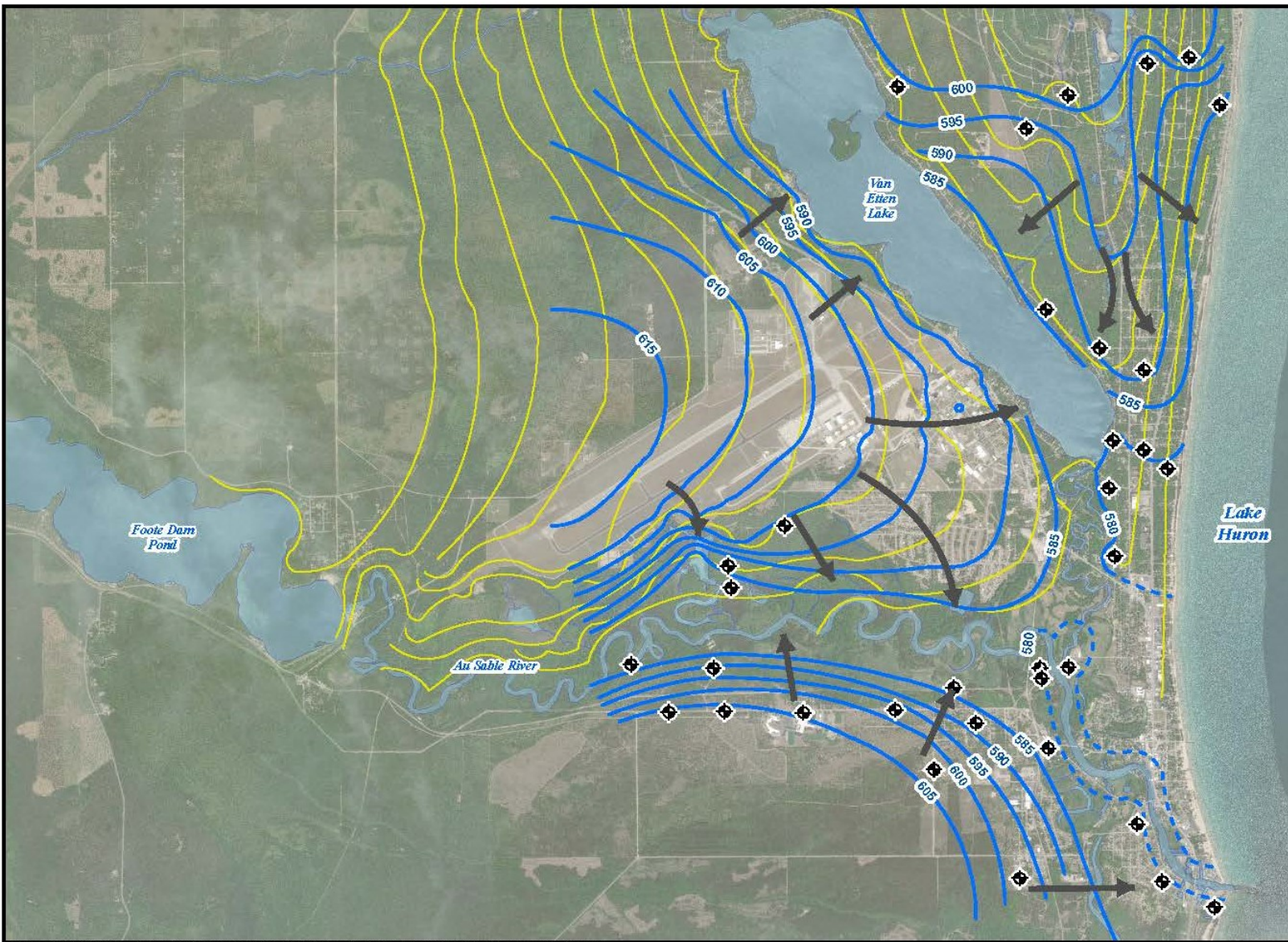
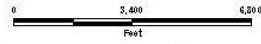
Next Steps

Legend

-  Monitoring Wells
-  Groundwater Contour
-  Inferred Groundwater Contour
-  USGS Contour
-  Groundwater Flow Direction

COMPOSITE POTENTIOMETRIC GROUNDWATER CONTOURS

FORMER WURTSMITH AIR FORCE BASE & OSCODA AREA
IOSCO COUNTY, MICHIGAN



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Michigan Department of
Environment, Great Lakes, and Energy

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