

# Saint-Gobain Performance Plastics Site Investigation Update

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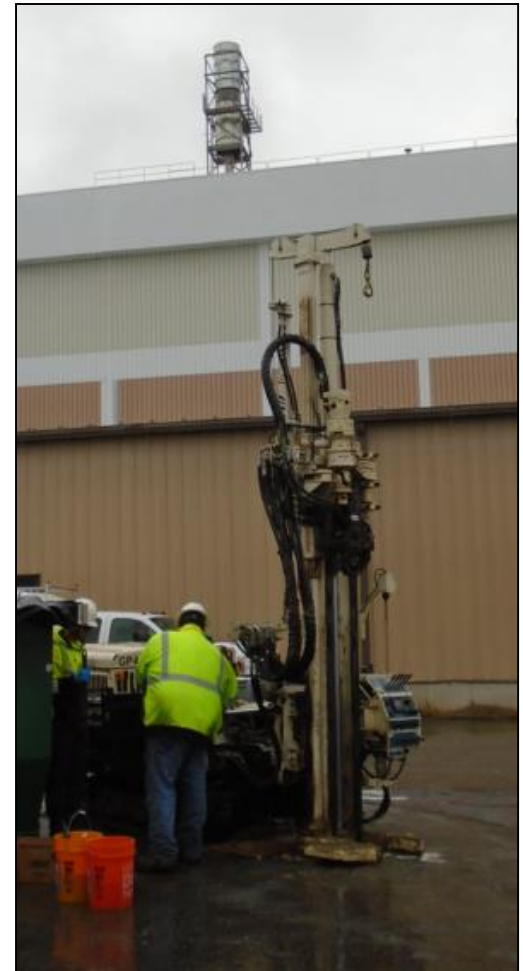
*NHDES Hazardous Waste Remediation Bureau*

*Emerging Contaminants Section*

*Presented to the*

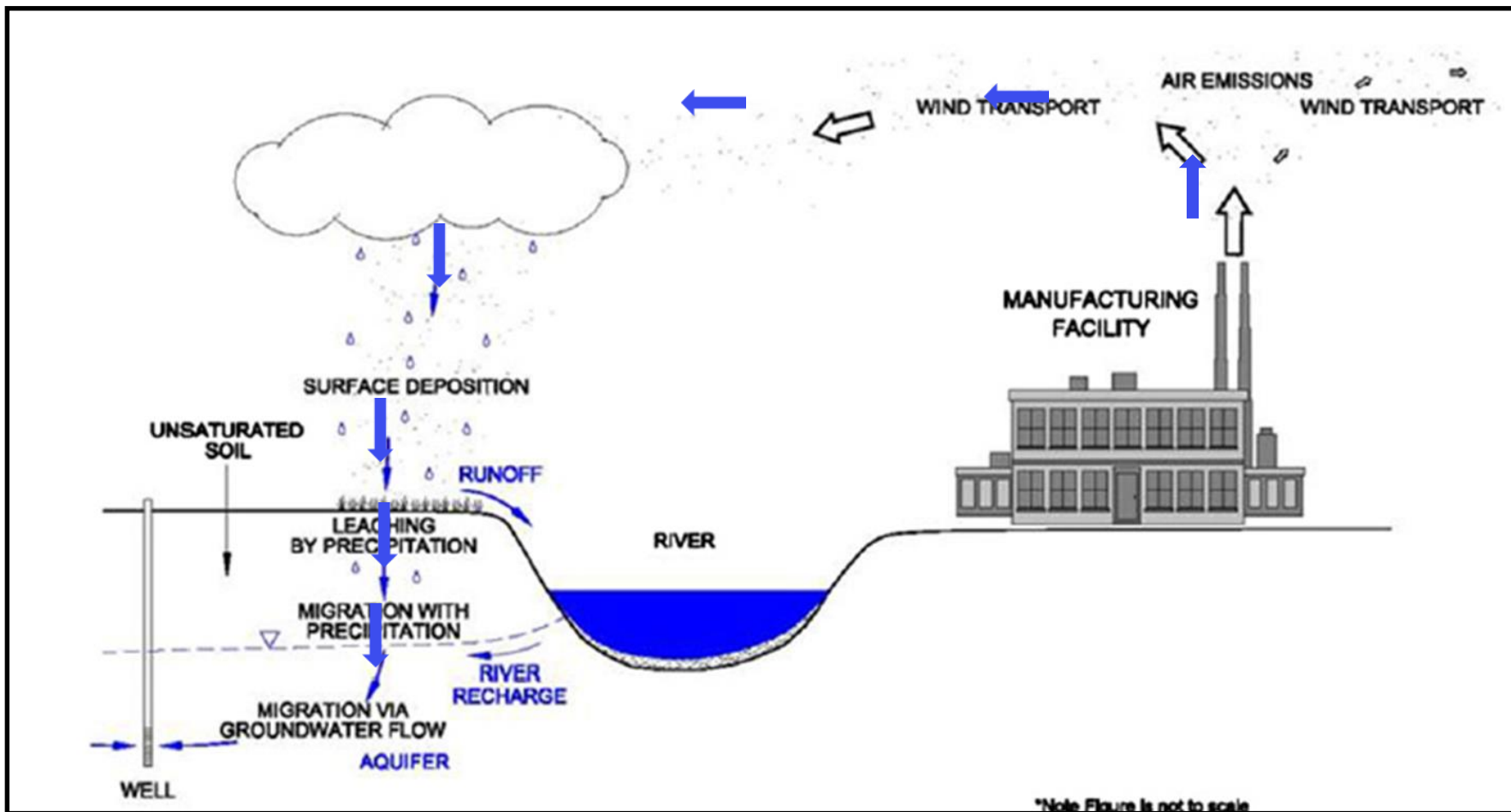
**Commission on the Environmental and  
Public Health Impacts of Perfluorinated  
Chemicals**

*July 17, 2020*



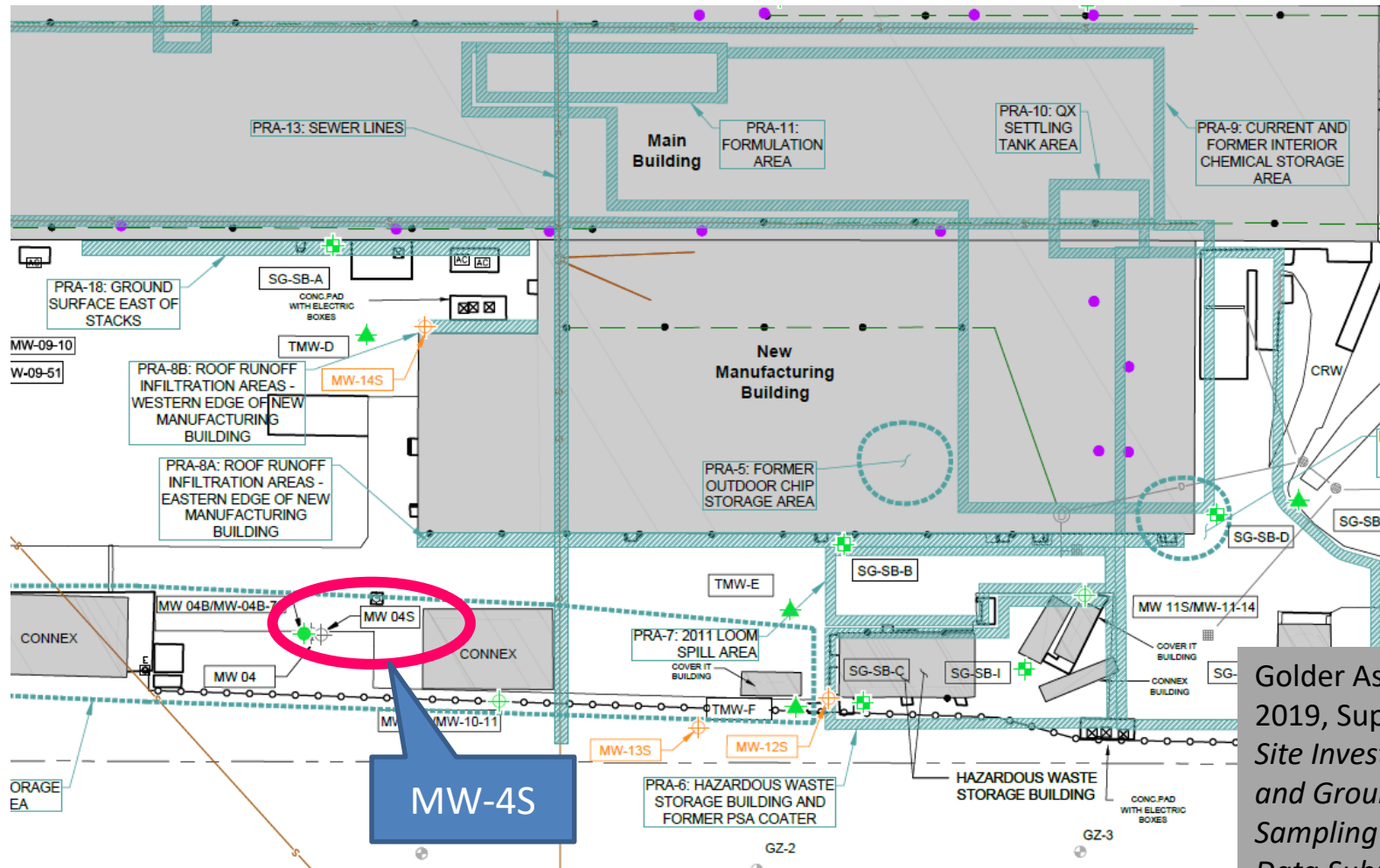
# Air Release

## *Conceptual Pathway to Groundwater Contamination*



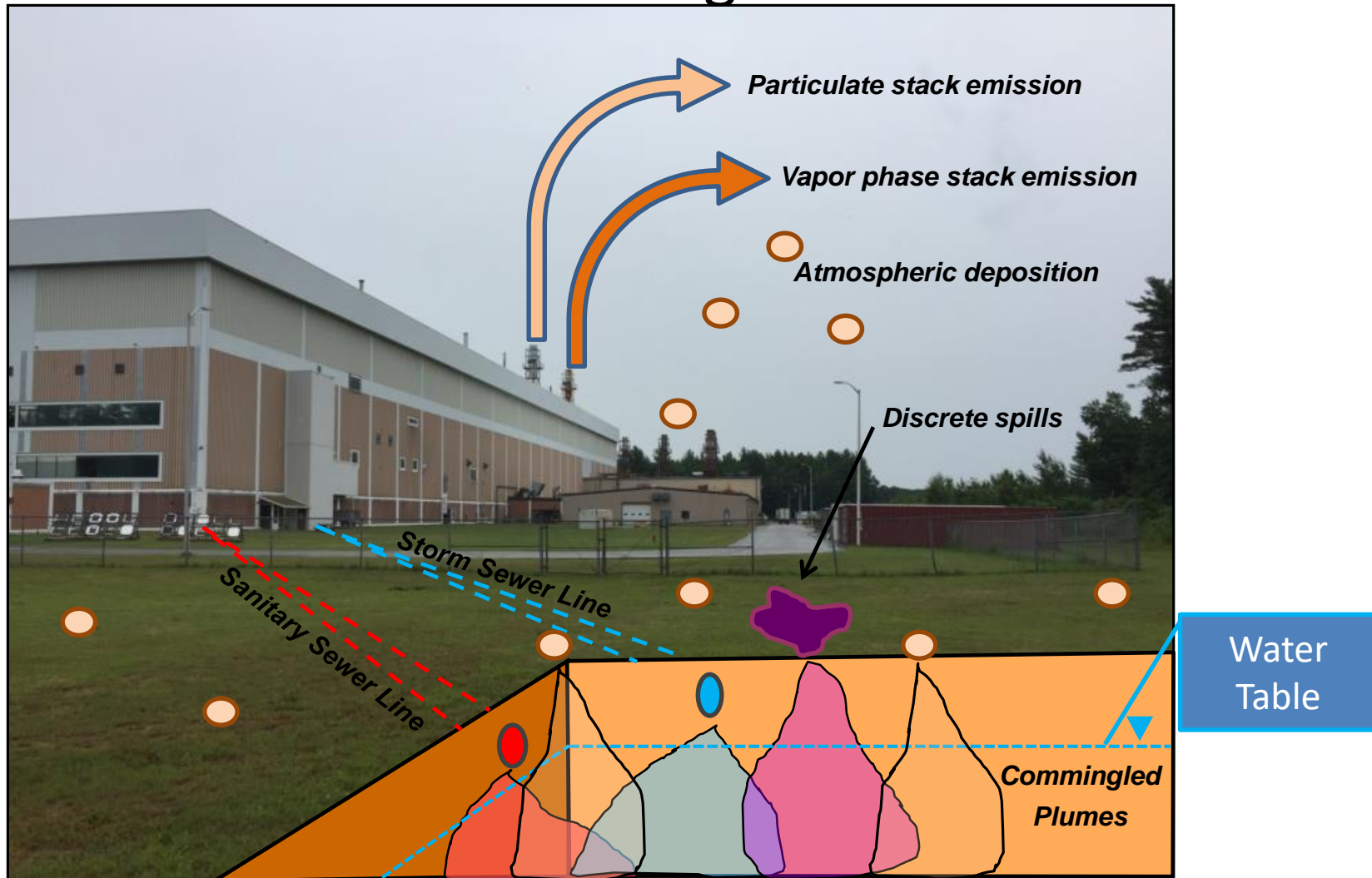
Davis et al., 2007, *Chemosphere*

# 25 Potential Release Areas (PRAs) Investigated



Golder Associates, Inc.,  
2019, Supplemental  
Site Investigation Soil  
and Groundwater  
Sampling Unvalidated  
Data Submittal, Figure  
8-1

# Potential Release Pathways Under Investigation



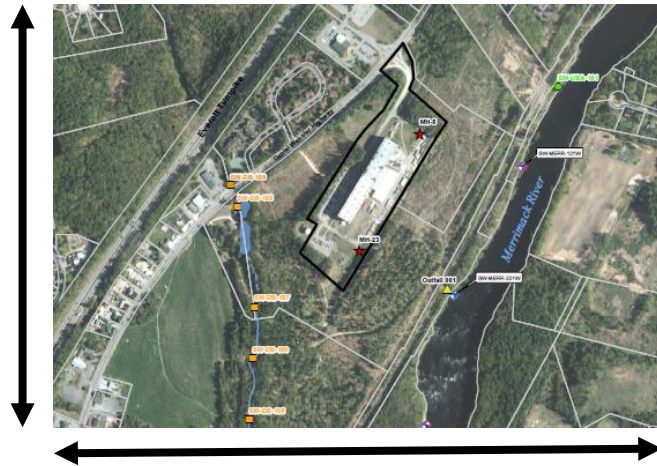
Schematic representation of potential PFAS release pathways and commingled plumes for illustration purposes only (not intended to reflect actual site conditions).



# Site Investigations:

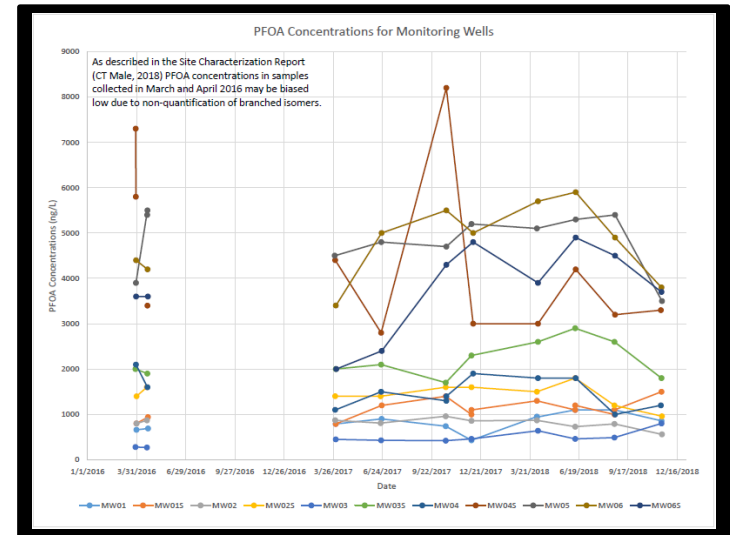
## 4 Dimensional Analysis

Map View



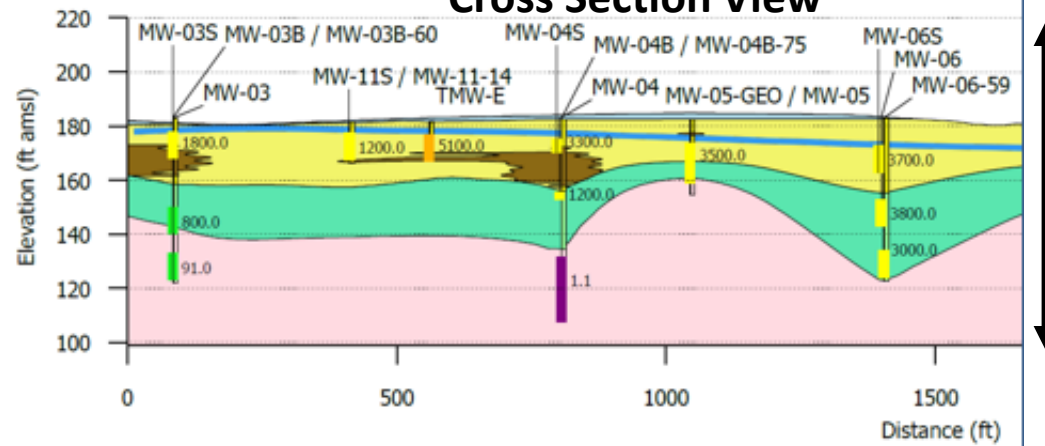
X (Width)

Time Series



T (Time)

Cross Section View



Z (Depth)

(Top Left) Golder Associates, Inc., 2018, Work Plan for 2018 Stormwater and Surface Water Investigation, Image clipped from Figure 4

(Bottom Left) Golder Associates, Inc., 2019, Site Investigation Report, Image clipped from Figure 7-4

(Top Right) Golder Associates, Inc., 2019, 2018 Annual Groundwater Monitoring Summary, Image clipped from Attachment B: Trend Plots

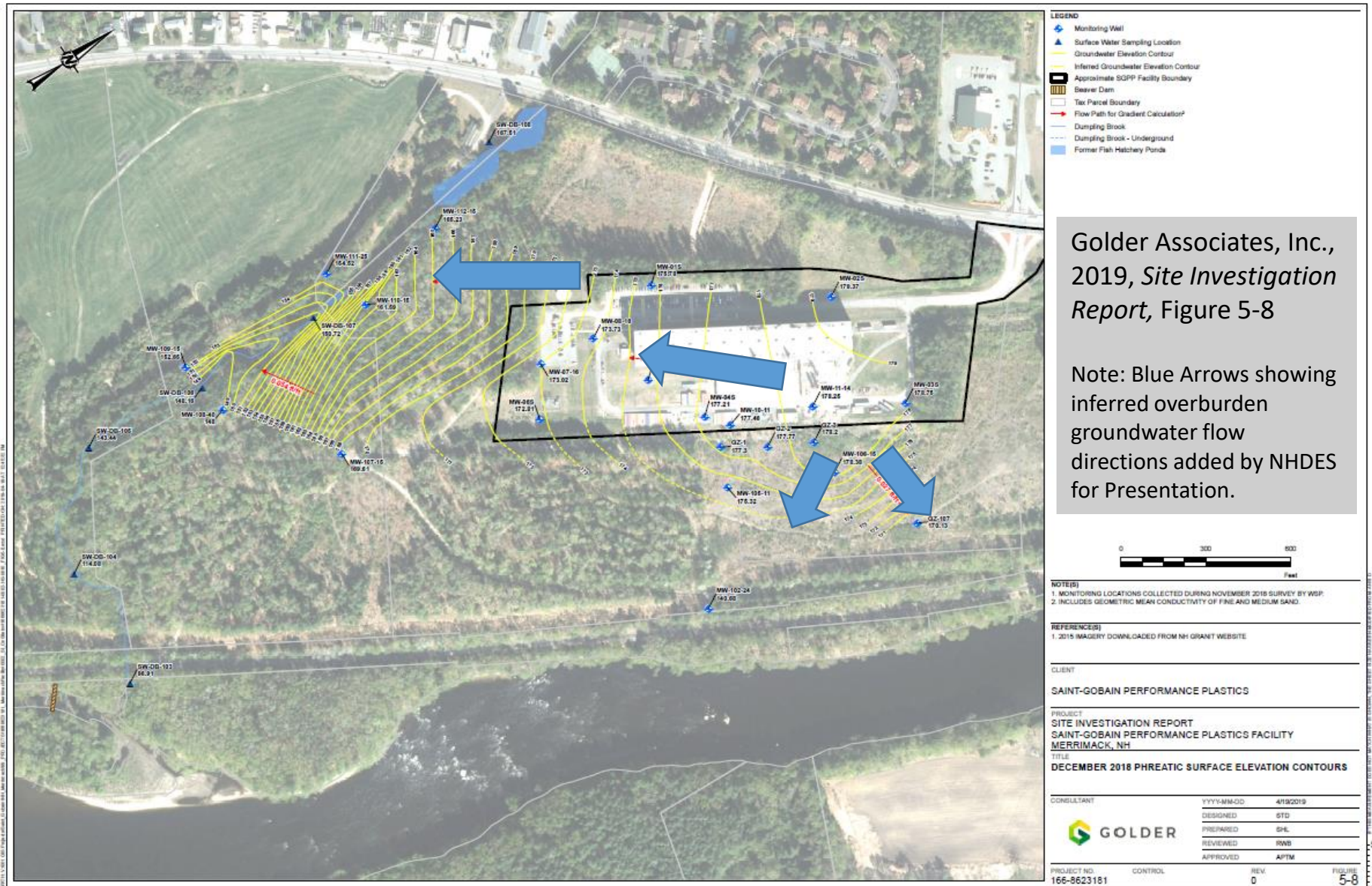


# Site Investigation Activities

## *Near-Facility*

- Testing at Facility
  - Initial Site Investigation (11 Monitoring Wells Installed)
    - Work Plan Submitted March 2016
    - Draft Report March 2017; Final Report May 2018
  - Stormwater and Surface Water Investigation (> 190 Stormwater Samples)
    - Report Submitted March 2019
  - Site Investigation (33 Monitoring Wells Installed, 42 Soil Borings)
    - Work Plan Submitted June 2018
    - Work Plan Addendum Submitted July 2018
    - Report Submitted April 2019
  - Supplemental Site Investigation (4 Monitoring Wells Installed)
    - Data Submittal October 2019

# Overburden Groundwater Contours & Flow Directions

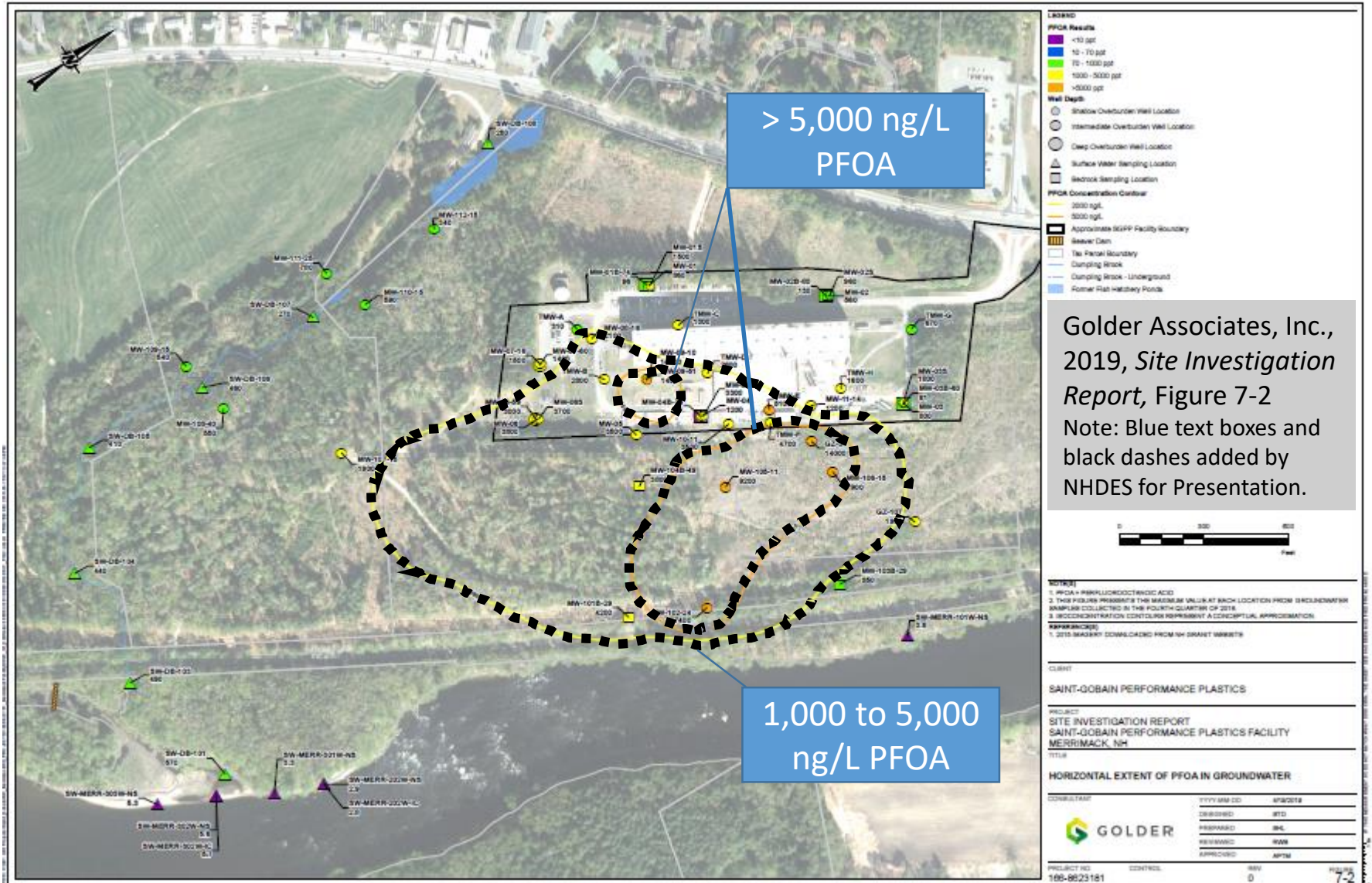


Golder Associates, Inc.,  
2019, *Site Investigation  
Report*, Figure 5-8

Note: Blue Arrows showing  
inferred overburden  
groundwater flow  
directions added by NHDES  
for Presentation.



# Groundwater PFOA Contours

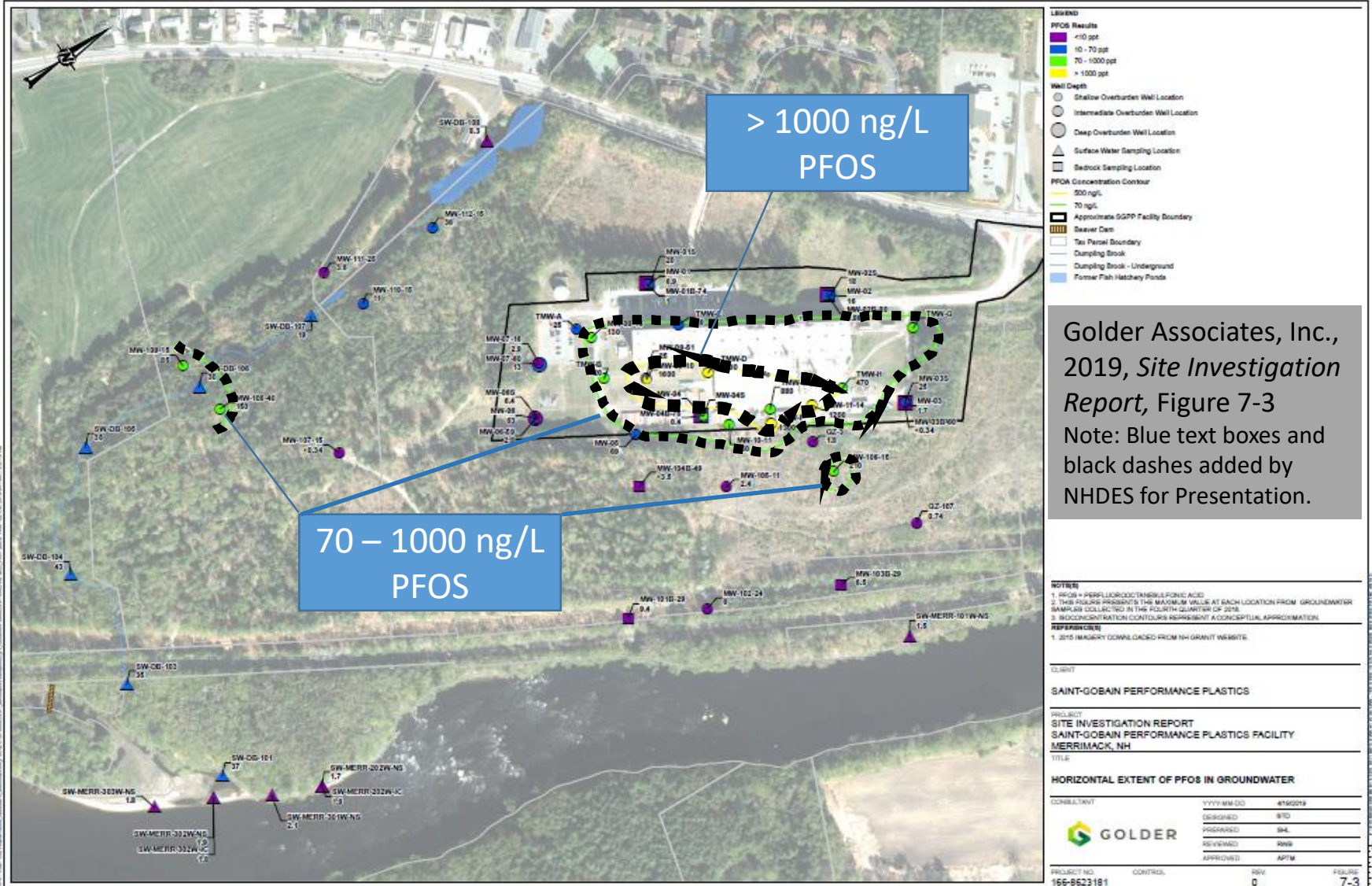


Golder Associates, Inc.,  
2019, *Site Investigation  
Report*, Figure 7-2

Note: Blue text boxes and  
black dashes added by  
NHDES for Presentation.



# Groundwater PFOS Contours



Golder Associates, Inc.,  
2019, *Site Investigation  
Report*, Figure 7-3  
Note: Blue text boxes and  
black dashes added by  
NHDES for Presentation.



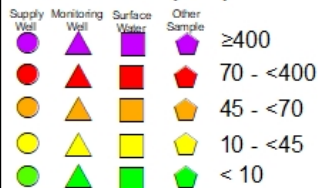
**PFOA + PFOS – 70 ng/L AGQS**  
*(Adopted May 2016)*

**PFOA 12 ng/L AGQS**  
*(Effective September 30, 2019)*

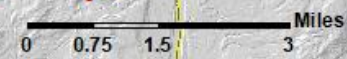
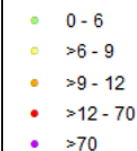
“Pre-GMZ”  
 Boundary  
 14.6 Square  
 Miles

Consent  
 Decree Outer  
 Boundary 64.1  
 Square Miles

**PFOA + PFOS (PPT)**



**Groundwater Sample PFOA Results**  
 PFOA Concentration (ng/L)



Note – Color scales are different on the two maps to show AGQS exceedances at 70 ng/L (left) and at 12+ ng/L (right).