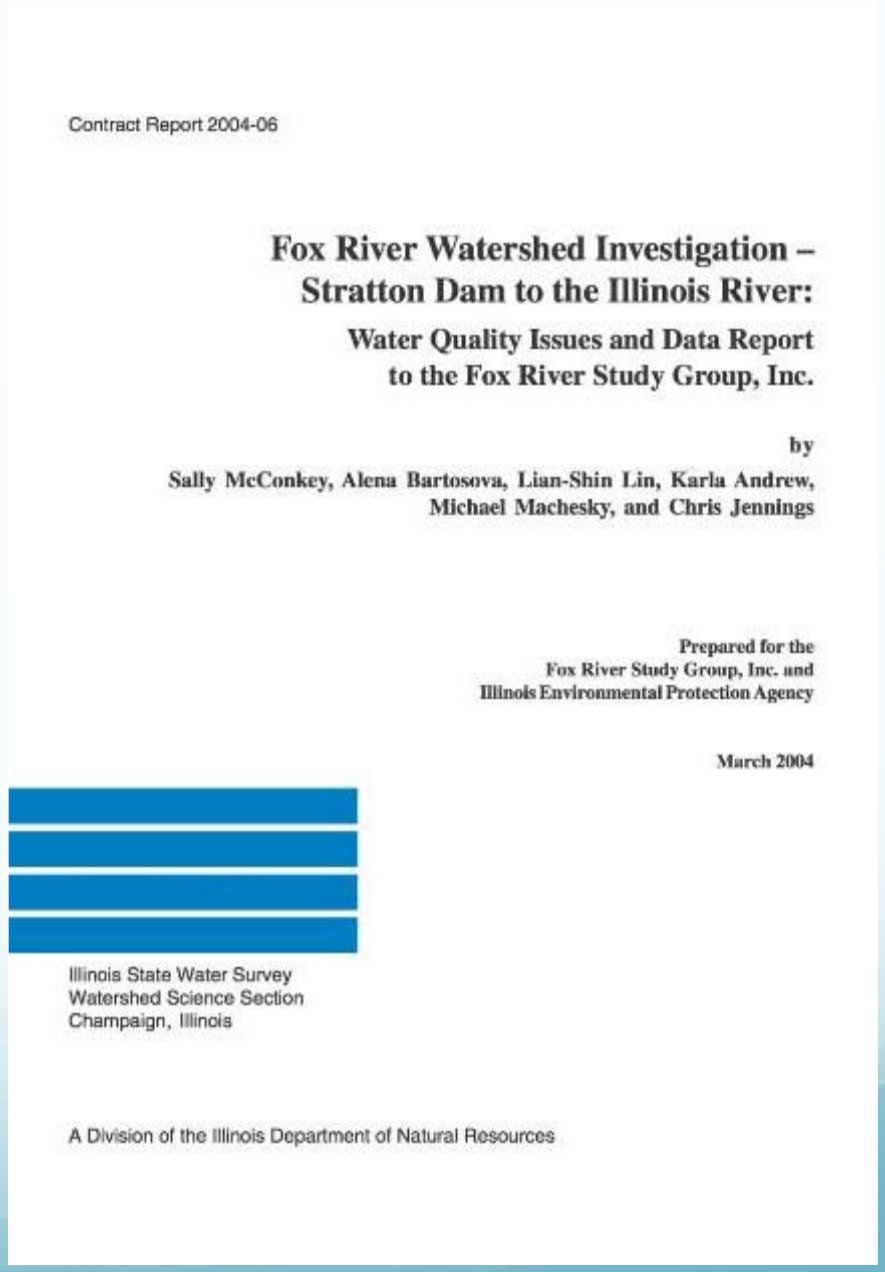
Protecting our Water Sources

Ground Water and Surface Water are vulnerable

Major Water Quality Concerns for Surface Water

- Low dissolved oxygen levels
- High pH
- Total nitrogen
- Total phosphorus
- Fecal coliform
- Algae mass exceeding USEPA guidance for eutrophic conditions
- Dams (unnatural impoundments)



Contract Report 2004-06

Fox River Watershed Investigation – Stratton Dam to the Illinois River:

Water Quality Issues and Data Report to the Fox River Study Group, Inc.

by

Sally McConkey, Alena Bartosova, Lian-Shin Lin, Karla Andrew, Michael Machesky, and Chris Jennings

Prepared for the
Fox River Study Group, Inc. and
Illinois Environmental Protection Agency

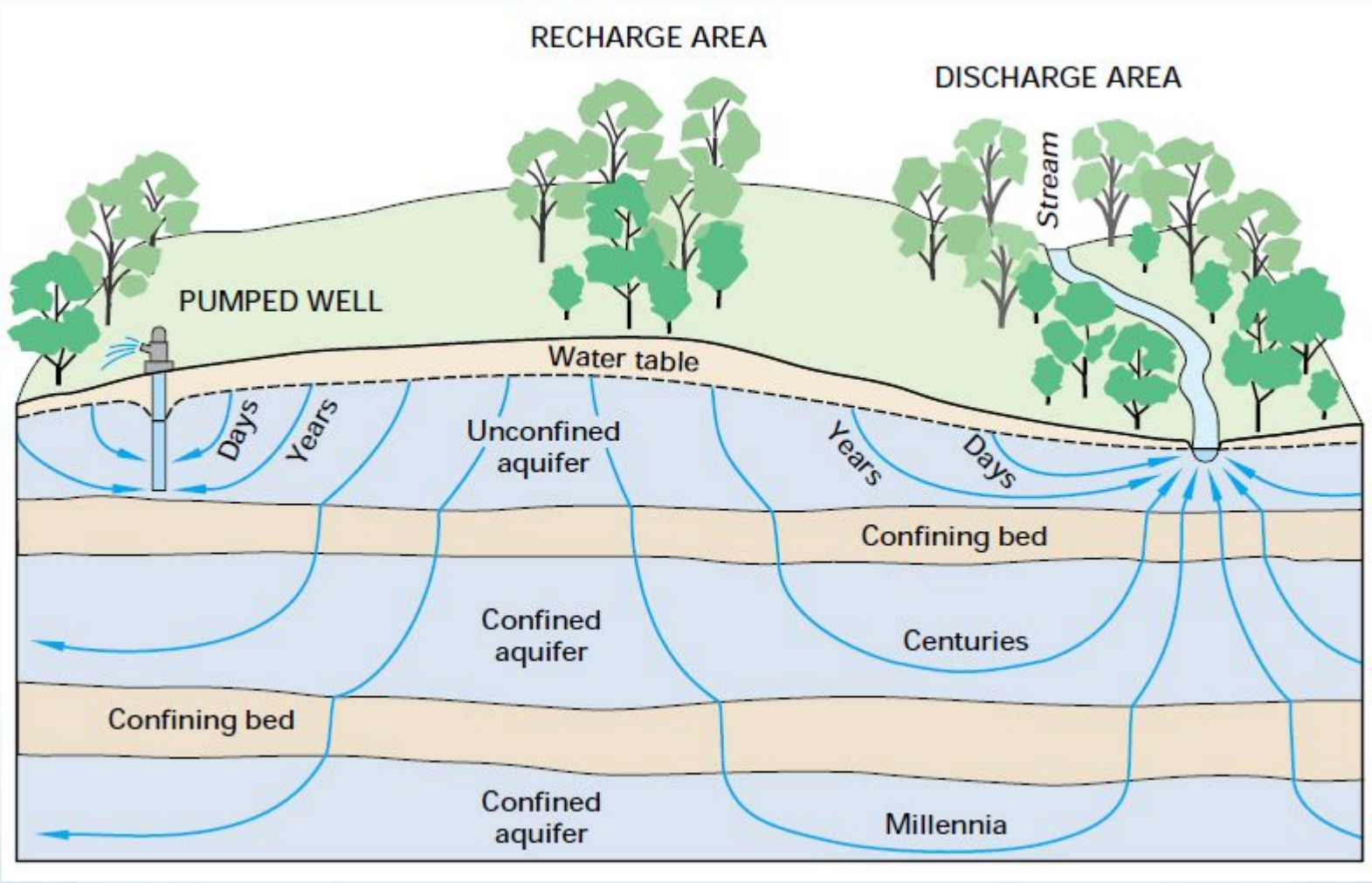
March 2004

Illinois State Water Survey
Watershed Science Section
Champaign, Illinois

A Division of the Illinois Department of Natural Resources

Major Water Quality Concerns for Ground Water

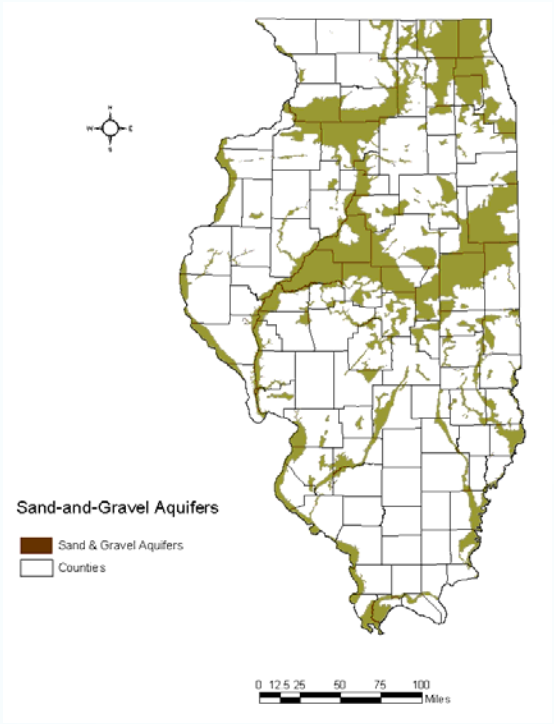
- Naturally occurring TDS
- Natural or human contaminants (septic interference)
- Hydroxides, calcite, barite
- Infiltration contamination in recharge area (groundwater/surface water interactions)
- Radiological contaminations


RECHARGE AREA
DISCHARGE AREA
Stream
PUMPED WELL
Water table
Days
Years
Unconfined aquifer
Years
Days
Confining bed
Confined aquifer
Centuries
Confining bed
Confined aquifer
Millennia

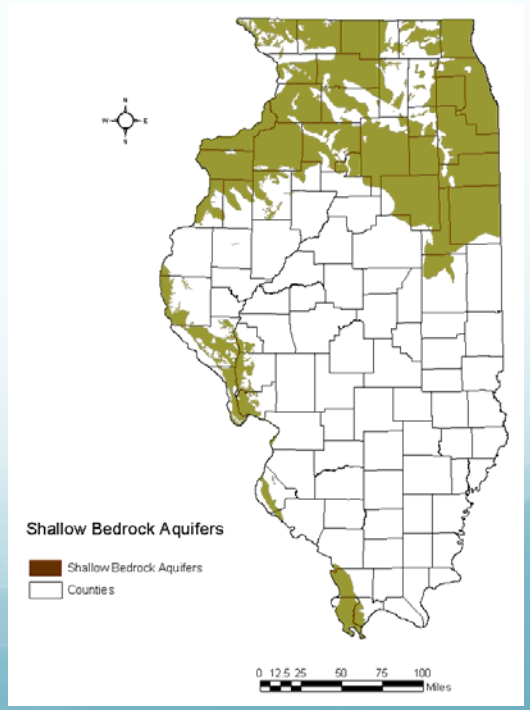
Northeastern Illinois Priority Planning Area

Aquifers and Watersheds

- Sand-and-gravel aquifers
- Shallow bedrock aquifers
- Deep bedrock aquifers
- Fox River watershed
- Priority planning area



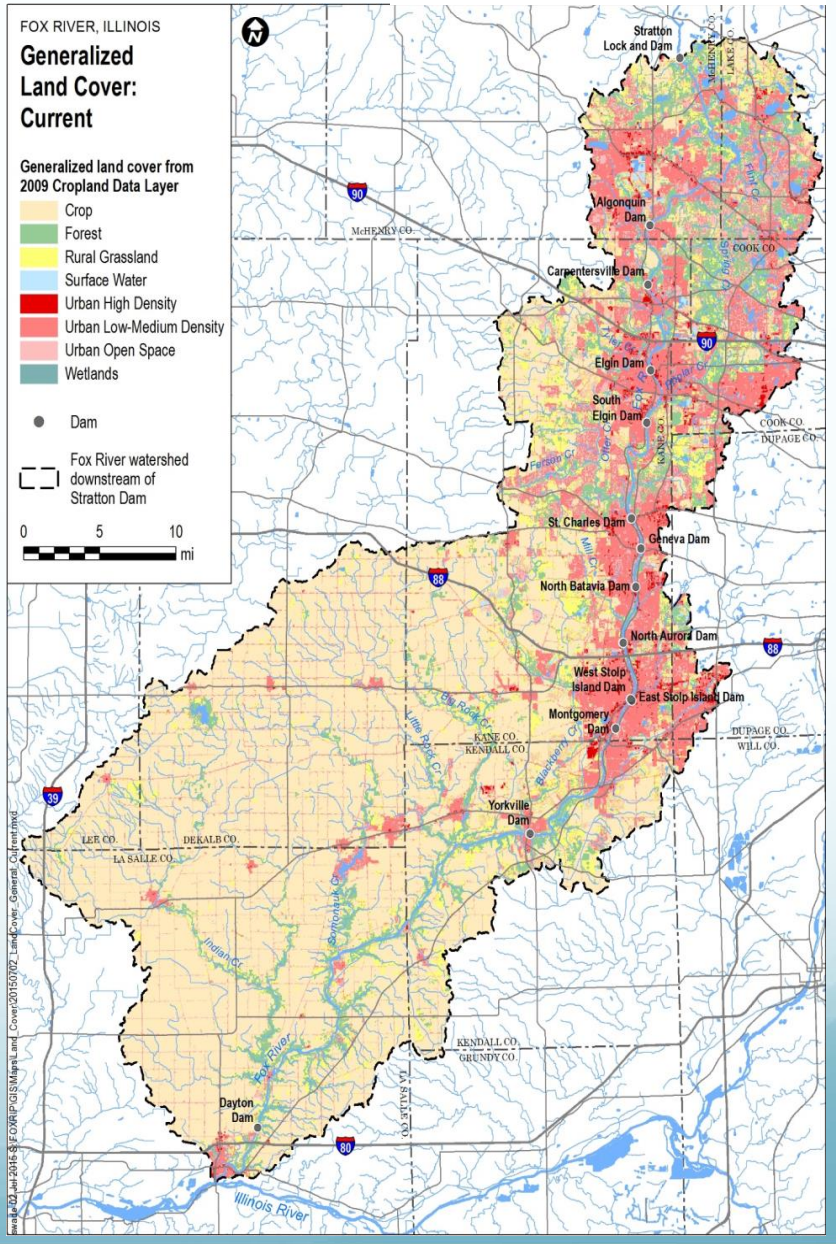
The location of sand and gravel aquifers in Illinois



The location of shallow bedrock aquifers in Illinois

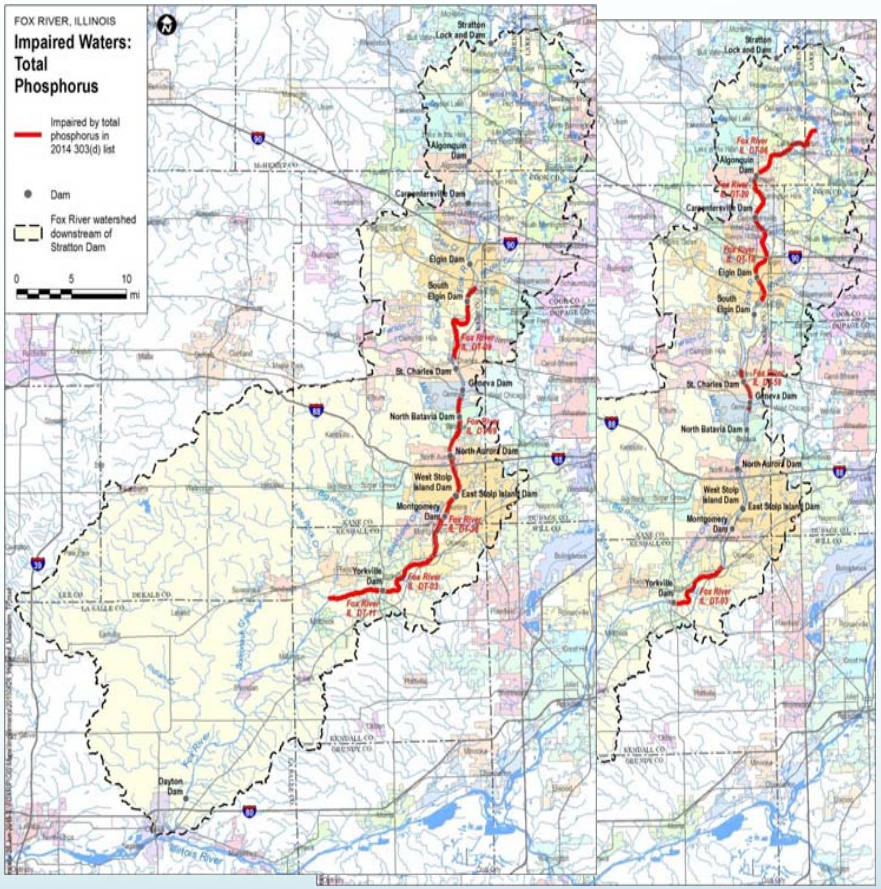
Fox River Watershed

Fox River Study Area



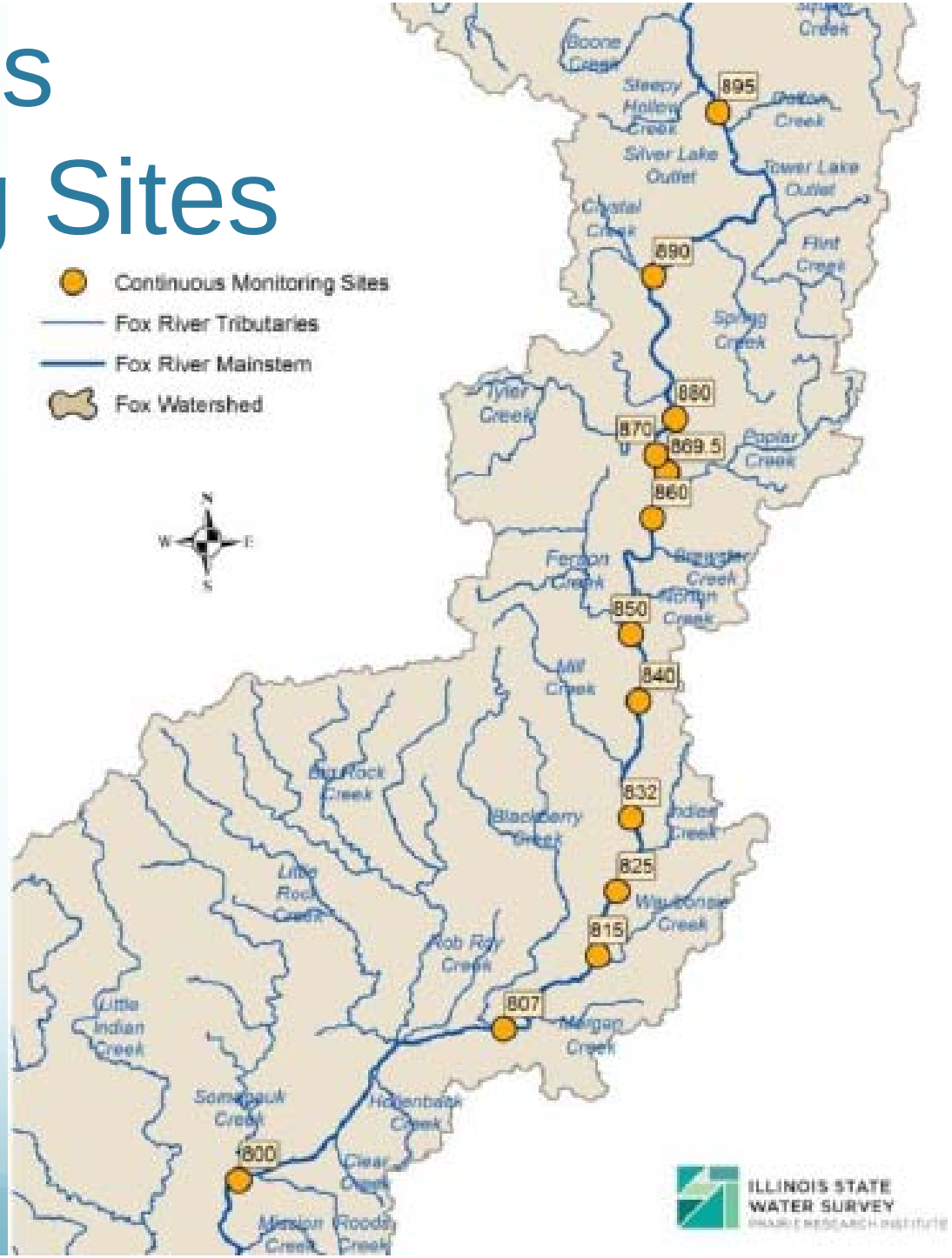
Current Nutrient-Related Impairments

Reach ID and Description	Length (mi)	Listed Cause of Impairment	Downstream River Mile	Upstream River Mile
IL_DT-35 From: Grass Lake To: IL/IN state line	5.03	[illegible]algae	110.1	115.1
IL_DT-23 From: about 0.52 miles downstream Stratton Dam To: [illegible] Lake	7.77	[illegible]algae	97.7	105
IL_DT-22 From: Confluence with Flint Creek To: Stratton Dam	7.86	[illegible]algae		97.7
IL_DT-06 From: Crystal Lake Outlet To: Flint Creek	8.06	DO, aquatic algae	84.55	92.6
IL_DT-20 From: Confluence with [illegible] Creek To: Confluence with Crystal Lake Outlet	9.95	DO	74.6	84.55
IL_DT-18 From: Confluence with Poplar Creek To: Confluence with [illegible] Creek	5.8	DO	68.8	74.6
IL_DT-09 From: Confluence with [illegible] Creek To: Confluence with Poplar Creek	7.9	[illegible] phosphorus, aquatic algae	60.9	68.8
IL_DT-58 From: Confluence with Whites Creek To: Confluence with [illegible] Creek	3.76	DO	59.5	63.25
IL_DT-69 From: Confluence with Mill Creek To: Confluence with Whites Creek	4.51	[illegible] phosphorus, aquatic algae	55	59.5
IL_DT-38 From: Confluence with [illegible] Creek To: Mill Creek	12.3	[illegible] phosphorus, aquatic algae	42.7	55
IL_DT-03 From: Confluence with Blackberry Creek To: Confluence with [illegible] Creek	7.1	DO, total phosphorus, aquatic algae	35.6	42.7
IL_DT-11 From: Confluence with Big Rock Creek To: Confluence with Blackberry Creek	4.6	[illegible] phosphorus, aquatic algae	31.0	35.6



Can we create one map with all this info?

Continuous Monitoring Sites



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