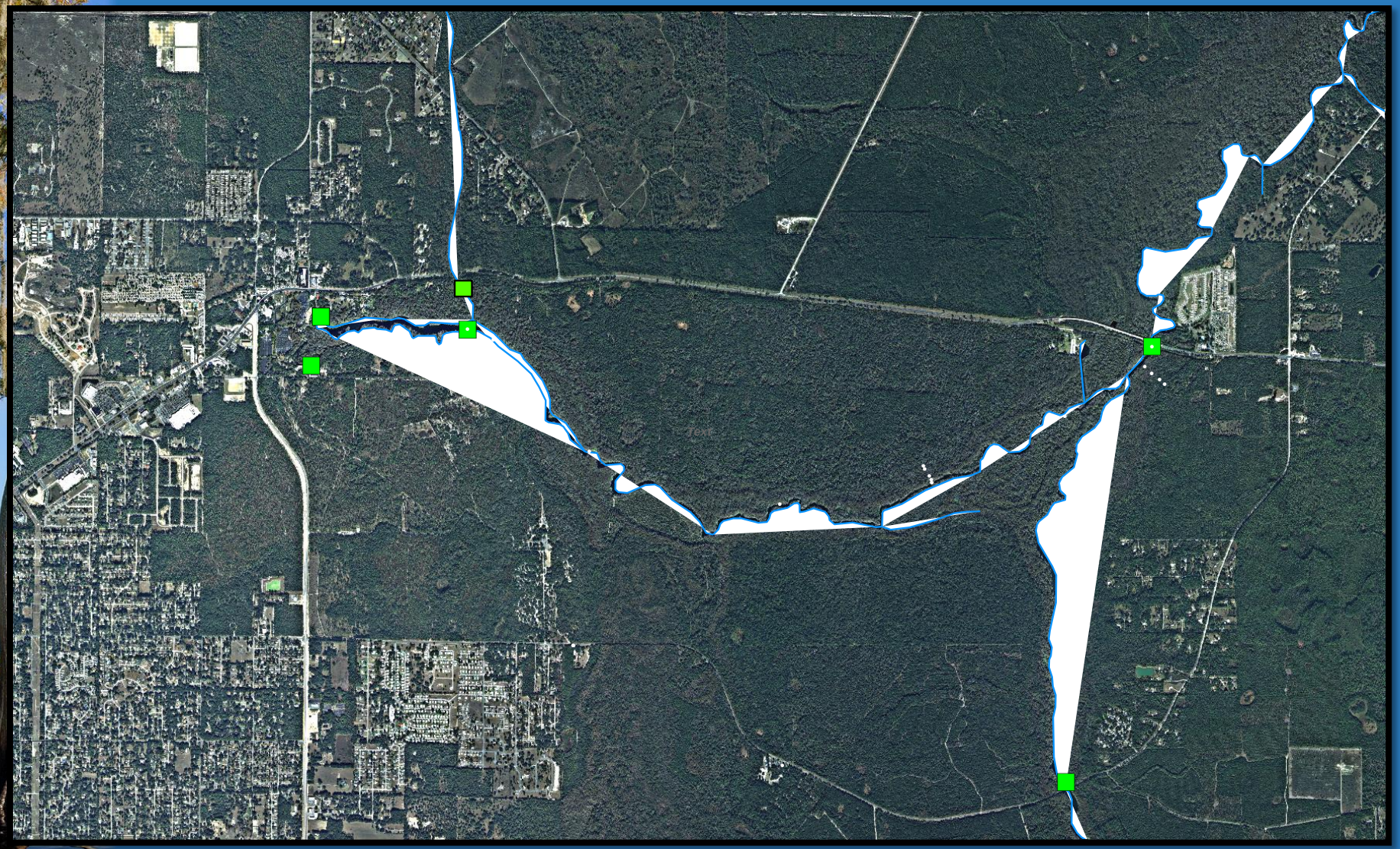
St. Johns River Water Management District

# Springs Protection Initiative Monitoring

## Silver Springs Basin Management Action Plan Meeting

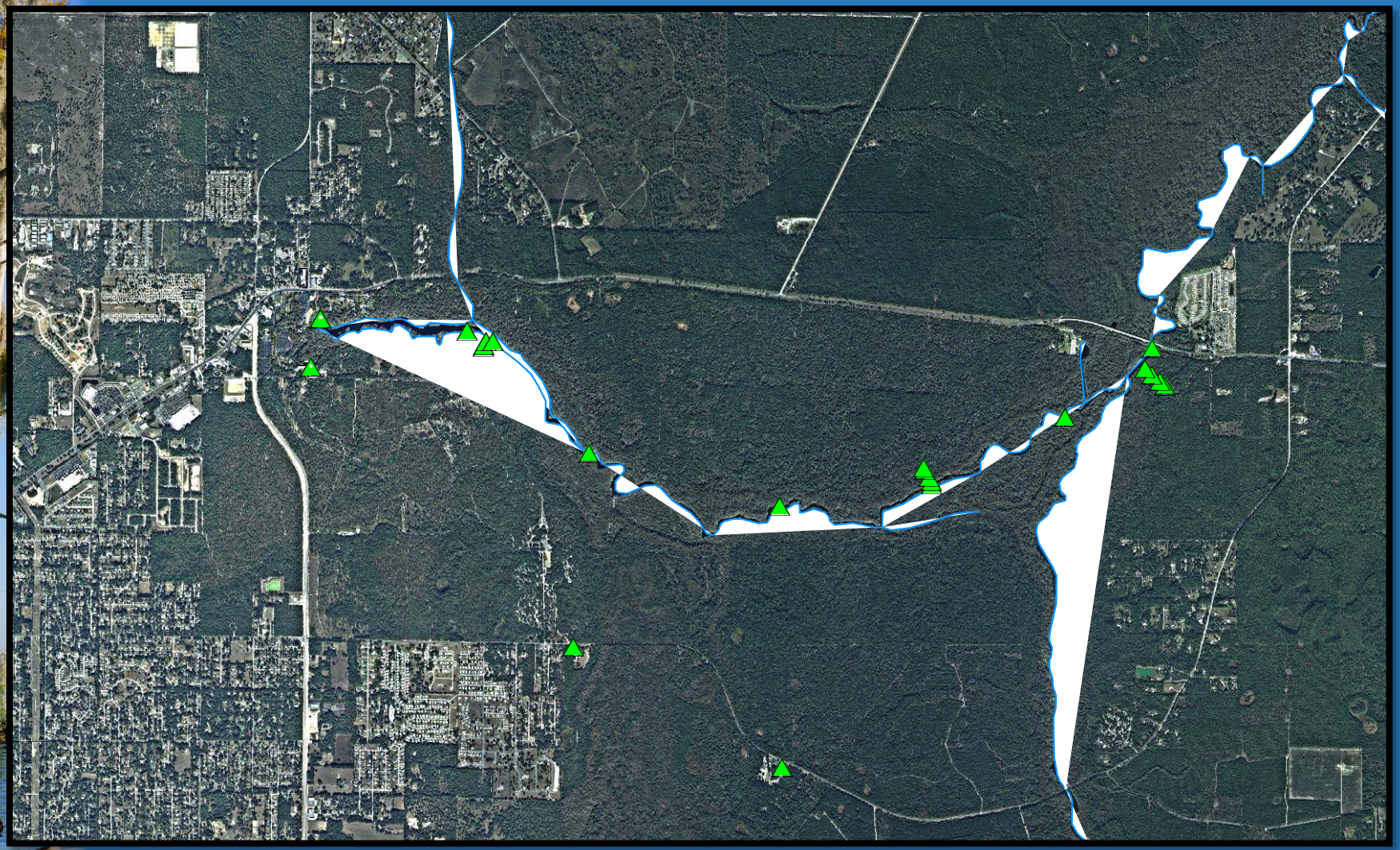
## October 24, 2013

# Discharge Monitoring

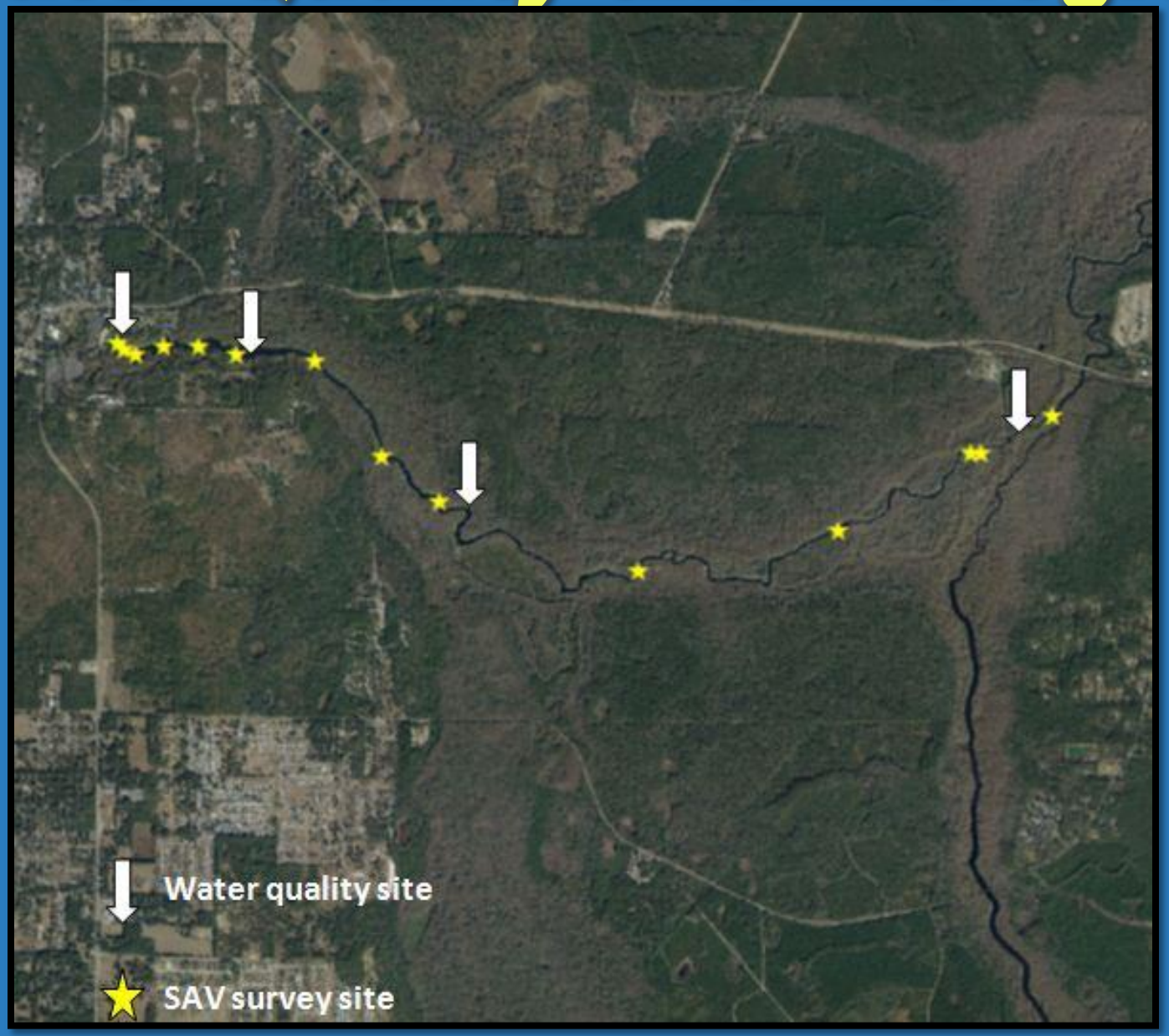


in cooperation with USGS

# Water Level



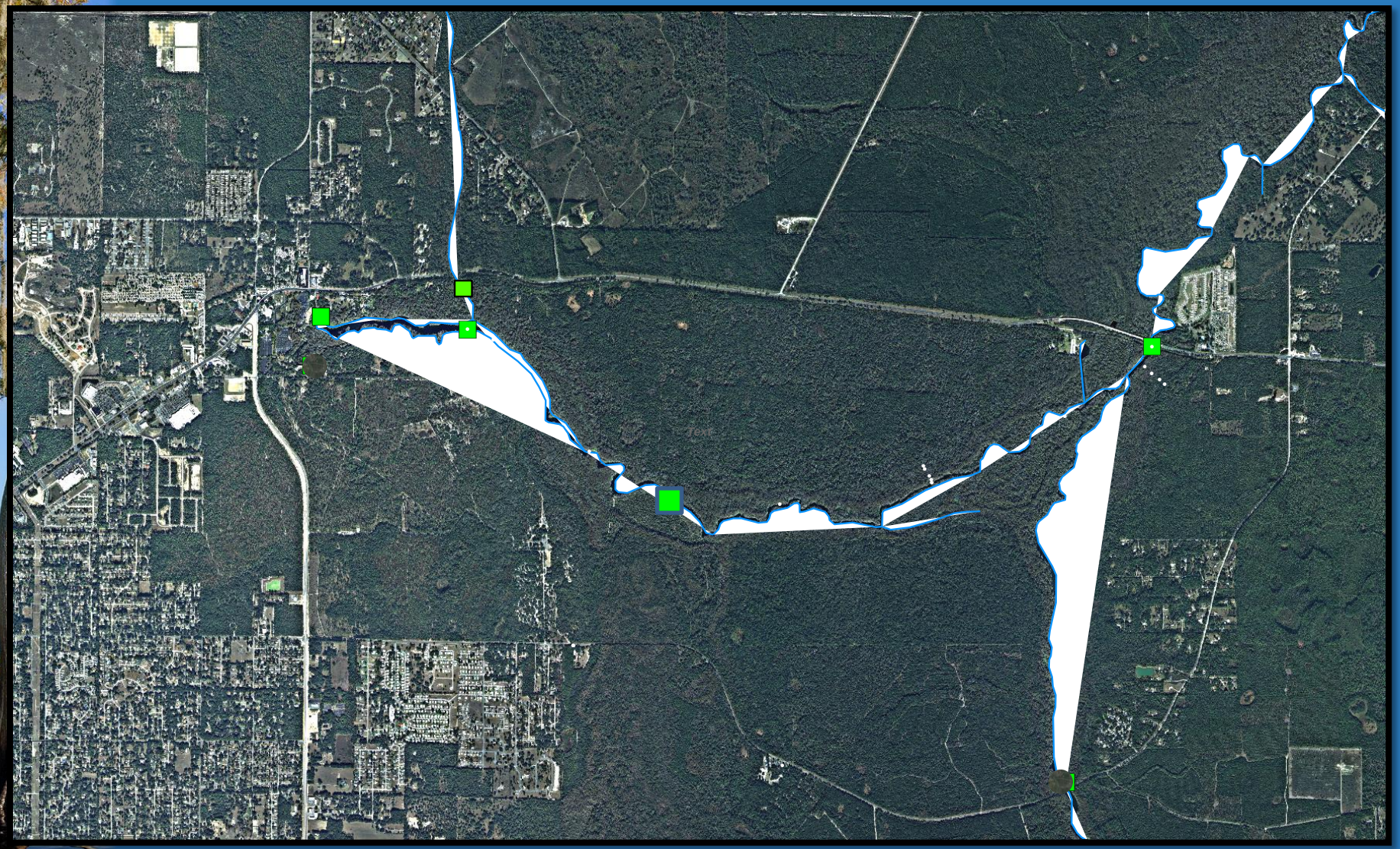
# Water Quality and Biological



# Biological

- Quantitative sampling of benthic algal mats and attached algae (species richness, total dry weight, density by species, diversity)
- Quantitative sampling of submerged aquatic vegetation (SAV), focusing on the dominant species at each sampling site (total dry weight and by species; shoot morphometrics)
- Quantitative sampling of benthic macroinvertebrates associated with algal mats and SAV habitat (species richness, density, diversity)

# Continuous Water Quality



# Water Quality Sensor

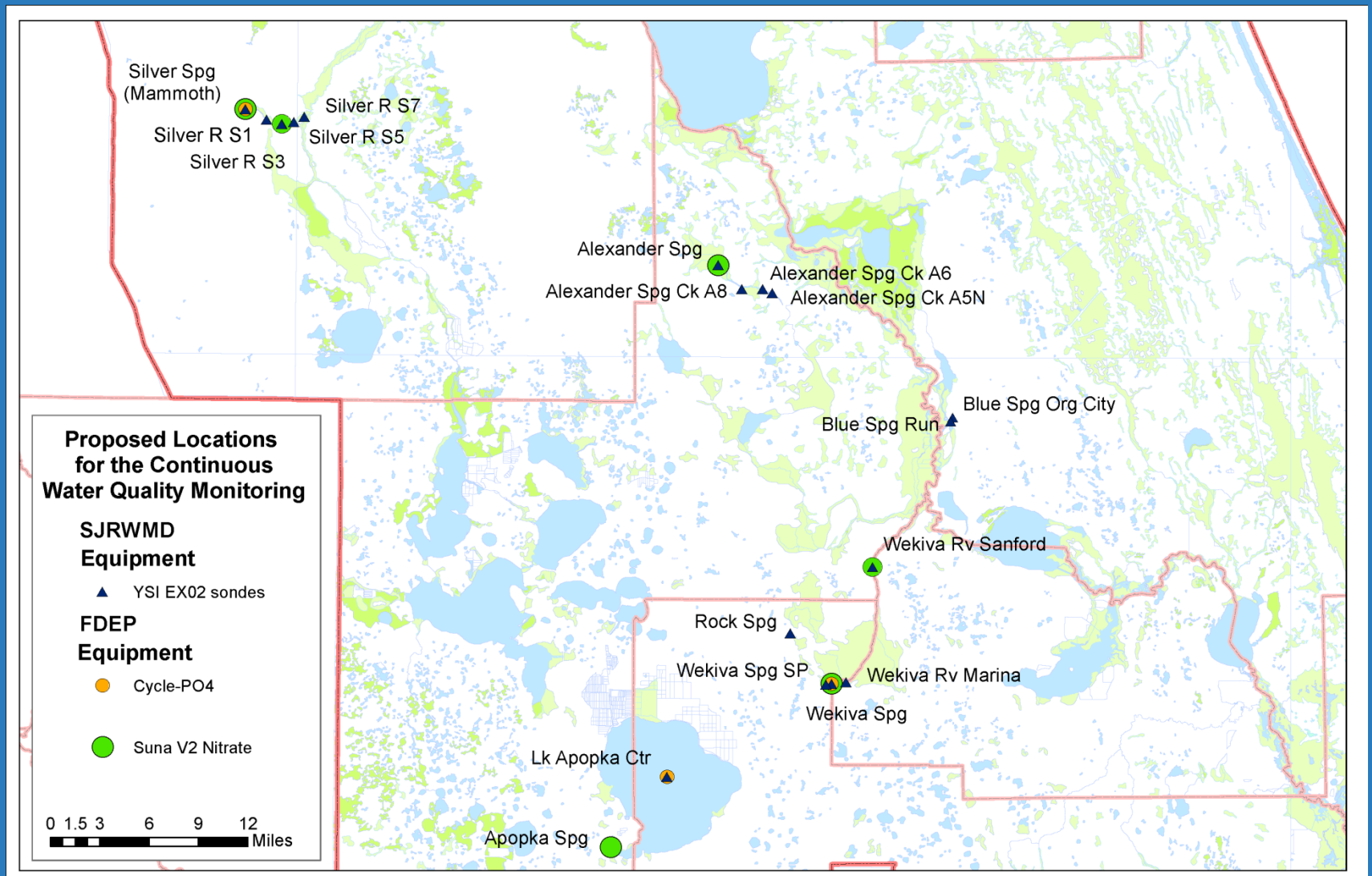
- Multiparameter YSI EXO2 sondes
  - *in situ* nitrate-nitrogen concentration
  - pH
  - dissolved oxygen (DO)
  - Conductivity
  - Temperature
  - Depth


- Integrated into the District telemetry network

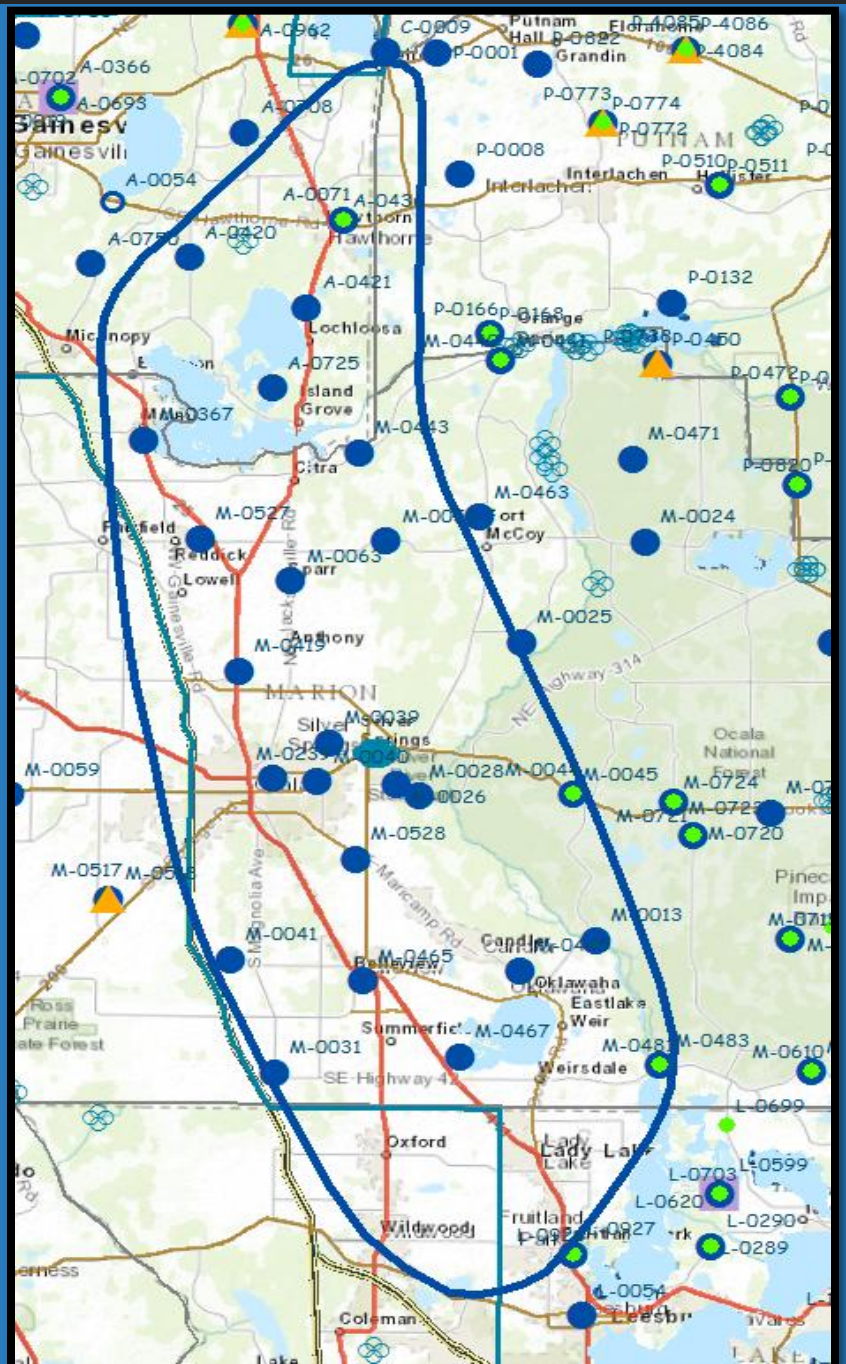
# Coordination

- Requested DEP for quality sensors
- Coordination between DEP request and Springs Protection Initiative to prevent duplication of effort or equipment
- Requested water quality sensors will complement equipment used in Springs Protection Initiative

# Proposed Continuous Water Quality Monitoring Locations (Springs Initiative and DEP)



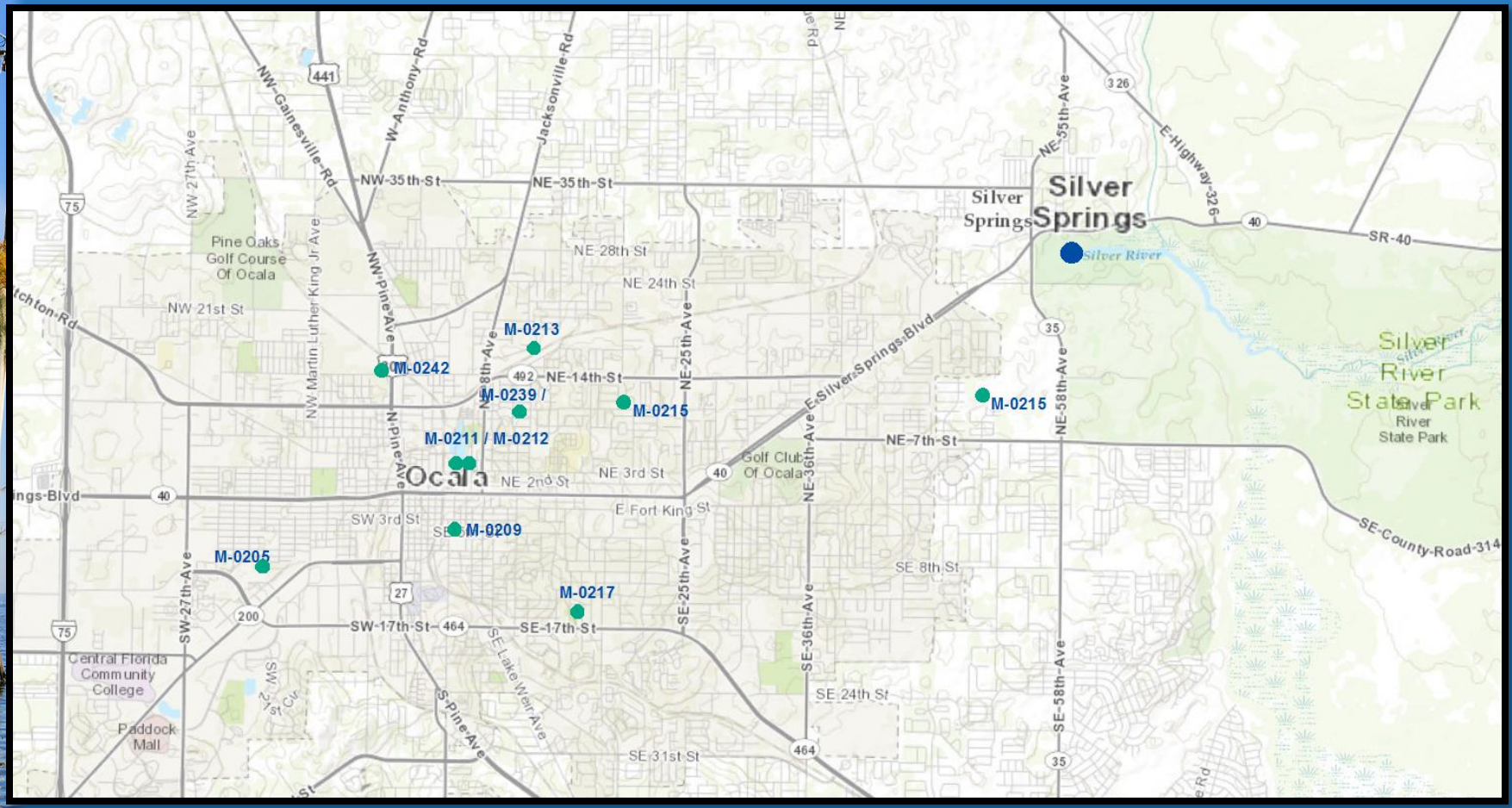
# Existing Groundwater Monitoring



# Existing Groundwater Monitoring

## Ocala FDEP – VISA project

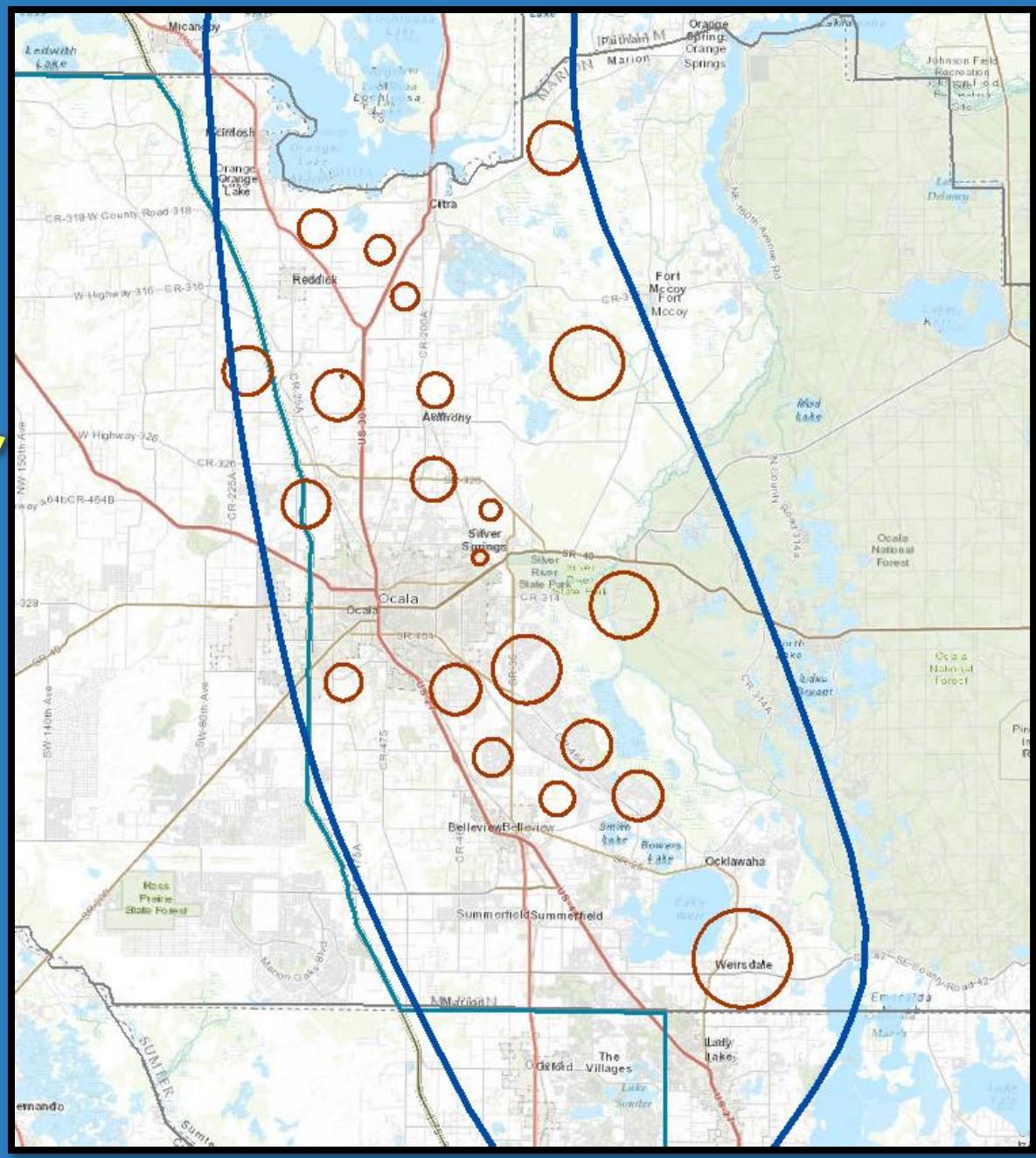
## Sampled 3 times (1990, 1994, 1997)



# Existing Groundwater Monitoring

## Including DEP-VISA

# Additional Groundwater Monitoring

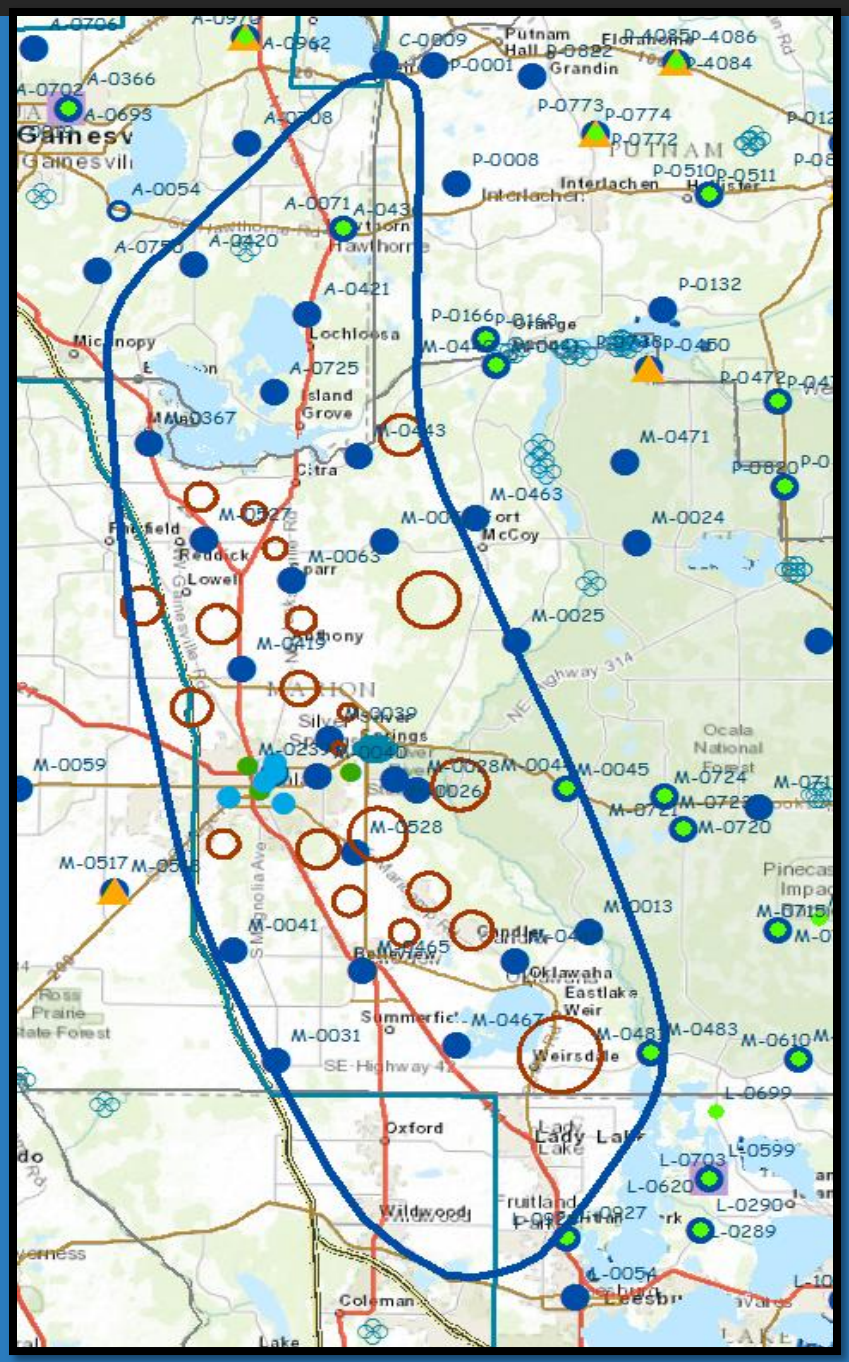


# Coordination

- Potential new well locations identified by SJRWMD and DEP
- DEP to identify monitoring locations and obtain access
  - Use URS under contract to DEP to:
    - Identify monitoring locations
    - Verify land use
    - Obtain easement access
- Wells installed by SJRWMD

# Groundwater Monitoring

## Including new sites



# Path Forward

- Identifying monitoring sites over next few months
- Coordination with SWFWMD
- Well installations
- Water quality sampling

# Questions?