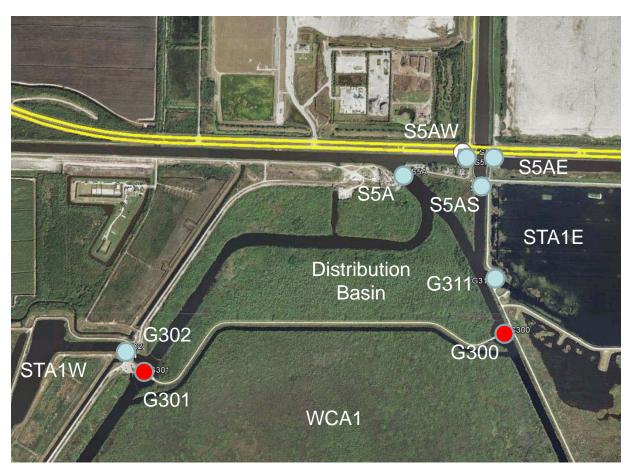
# Recommendations to the TOC Concerning Monitoring for the Settlement Agreement

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For the Water Quality Monitoring Subteam
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# Water Quality Subteam Met to Address Multiple Issues

- Rules for monitoring G300 and G301 (diversion structures)
- Ions monitoring at G311 and G302
- Pesticides Monitoring
- Metals monitoring
  - Copper
  - Iron

#### SOUTH FLORIDA WATER MANAGEMENT DISTRICT



S5A and Associated Structures Showing G300 and G301

# Monitoring at G300 and G301

- At the last meeting, the TOC agreed to monitoring at these structures to do the following:
  - Response monitoring, weekly when in use
    - Physical parameters (DO, pH, specific conductivity, temperature)
    - -TPO<sub>4</sub>, OPO<sub>4</sub>, TDPO<sub>4</sub>, alkalinity, Ca,Cl, Na, K, Mg, SO<sub>4</sub>, TN, NO<sub>x</sub>, NH<sub>4</sub>, TSS
- The following clarifications are suggested:
  - This includes reverse flow events
  - Prior to a diversion event District staff will collect a pre-discharge sample for the above parameters initiated either by the following:
    - Falling into the 5-day impact cone of a storm
    - The initiation of interagency diversion discussions

# lons at G311 and G302

- It is suggested that the parameter list at G311 and G302 be adjusted by adding Mg, Na, K, and SiO<sub>2</sub> to the weekly recorded flow grab samples
- Weekly Grab Samples
  - TP
- Weekly Recorded Flow Grab Samples
  - TDP, OPO<sub>4</sub>
  - TKN, NO<sub>X</sub>, NH<sub>4</sub>
  - Alkalinity, Ca, CI, SO<sub>4</sub>, Mg, Na, K, SiO<sub>2</sub>
  - TSS
- Quarterly
  - DOC

# **Pesticides**

- "Water quality monitoring shall include timely data on . . . pesticides/herbicides . . ."
- Quarterly monitoring of 17 stations, 9 overlap with the NECP permit required pesticide monitoring meaning 8 are strictly Settlement Agreement
- Team reviewed the last ten years of data

## **Pesticides**

#### Consideration

- Reduce frequency of pesticide monitoring
- However, TOC action will have no impact on 9 overlapping NECP permit stations
- Stakeholder concerns in western WCA-3A

#### Recommendation

- All 9 NECP stations to remain quarterly
- L3BRS, S8, and S12A to remain quarterly pending coordination with stakeholders
- 5 Stations (S5A, S6, S7, US41-25 and Tambr105) to change from quarterly to semi-annually

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# Pesticides Monitoring

- Settlement Agreement
  - Settlement Agreement and NECP Permit
- Recommended for Reduction



# **Copper Monitoring at S5A**

- Since 2009, 20 samples collected (2 to 4 samples per year)
- 16 samples were below the detection limit of 2.00 µg/L
- 4 samples from 2011 and 2012 detected copper
- All values far below variable standard
- Recommend to implement the previously agreed to frequency of annually during the wet season

Date	Hardness	Standard (µg/L)	Cu (µg/L)	Status
12/12/2011	269	22	10.3	Acceptable
3/19/2012	247	20	2.1	Acceptable
6/11/2012	311	25	2.8	Acceptable
9/10/2012	364	28	3.4	Acceptable

# Iron Monitoring at S5A

- Since 2010, 609 samples collected at 44 Settlement Agreement stations (primarily inflows and marsh)
- 95% of samples below half of the state standard of 1,000 µg/L
- Only 2 samples above the standard
- Data was provided to partners for potential optimization
- This will be a subject for discussion at the next subteam meeting

# Recommendations to the TOC for Approval

- Clarifications of G300 and G301
- Supplemental monitoring of ions at G311 and G302
- Reduced monitoring for pesticides at 5 stations (quarterly to semi-annually)
- Maintain Cu monitoring at S5A annually during the wet season

## **Future Discussions**

- Iron
- A surrogate station for S5AE, S5AW, and S5AS

# **Discussion**

