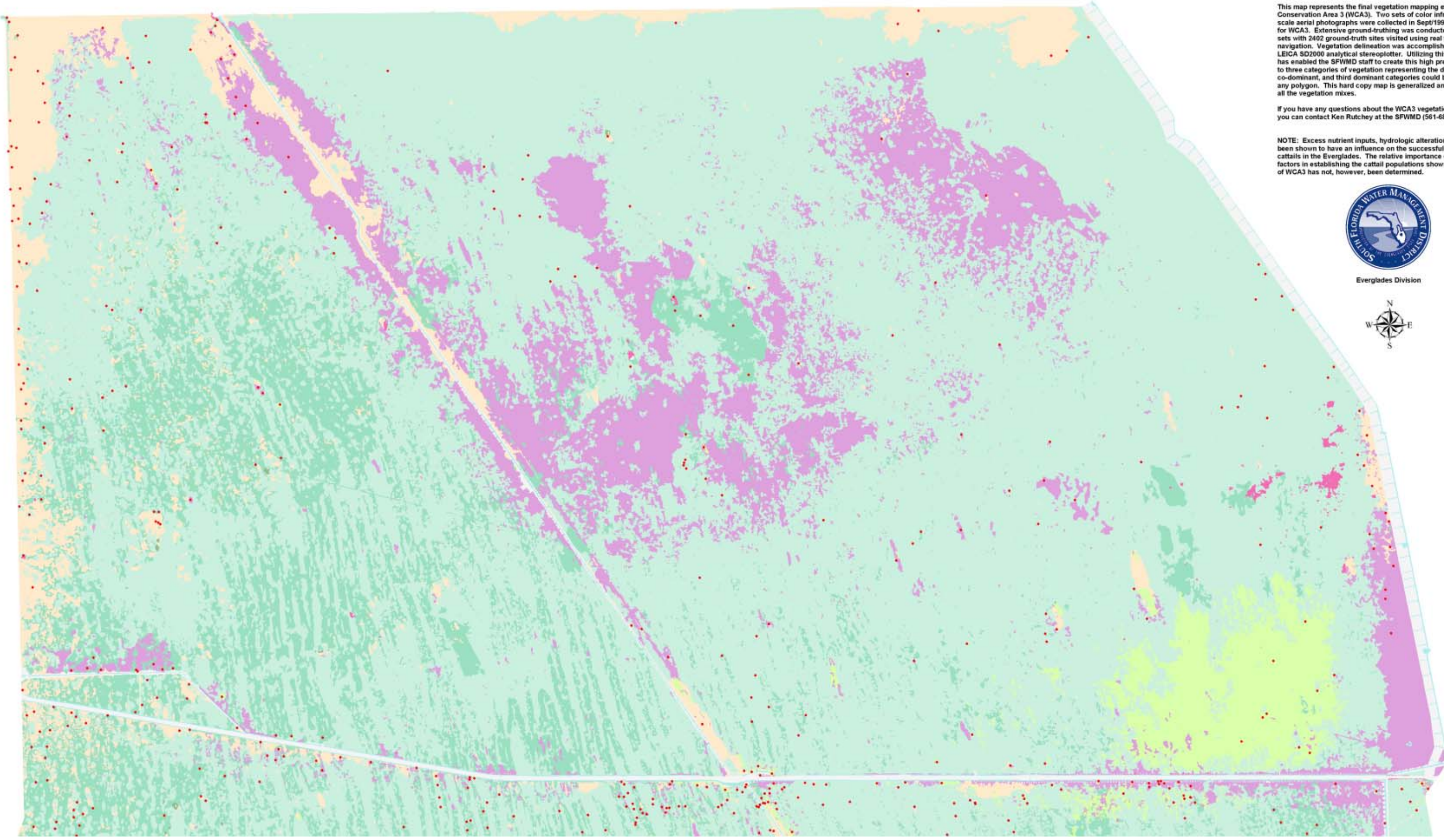
WATER CONSERVATION AREA 3 VEGETATION MAP



This map represents the final vegetation mapping effort for Water Conservation Area 3 (WCA3). Two sets of color infrared, 1:24000 scale aerial photographs were collected in Sept/1994 and June/1995 for WCA3. Extensive ground-truthing was conducted on these data sets with 2402 ground-truth sites visited using real time GPS navigation. Vegetation delineation was accomplished by using a LEICA SD2000 analytical stereoplotter. Utilizing this technology has enabled the SFWMD staff to create this high precision map. Up to three categories of vegetation representing the dominant, co-dominant, and third dominant categories could be included within any polygon. This hard copy map is generalized and does not include all the vegetation mixes.

If you have any questions about the WCA3 vegetation mapping project, you can contact Ken Rutchey at the SFWMD (561-682-6618).

NOTE: Excess nutrient inputs, hydrologic alterations, and fire have been shown to have an influence on the successful establishment of cattails in the Everglades. The relative importance of these factors in establishing the cattail populations shown in this map of WCA3 has not, however, been determined.

Everglades Division

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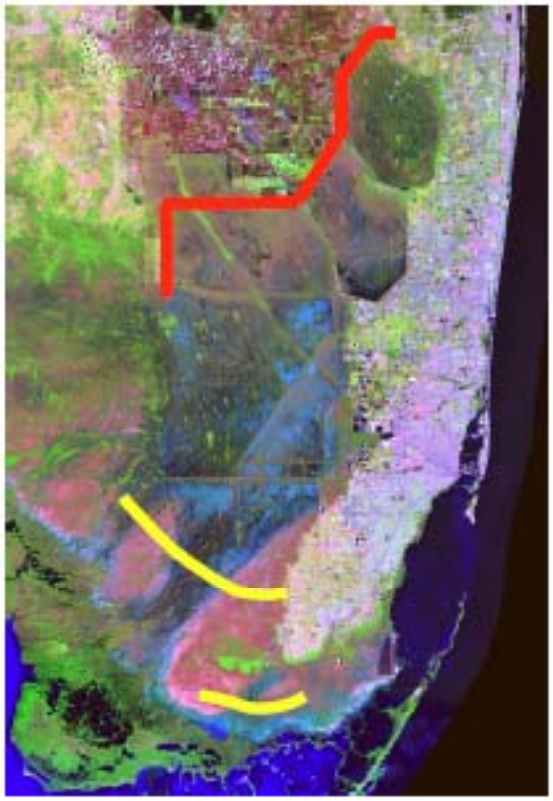
Flow Direction & Discharge Windows
Scenario 3 – "Lake Belt"

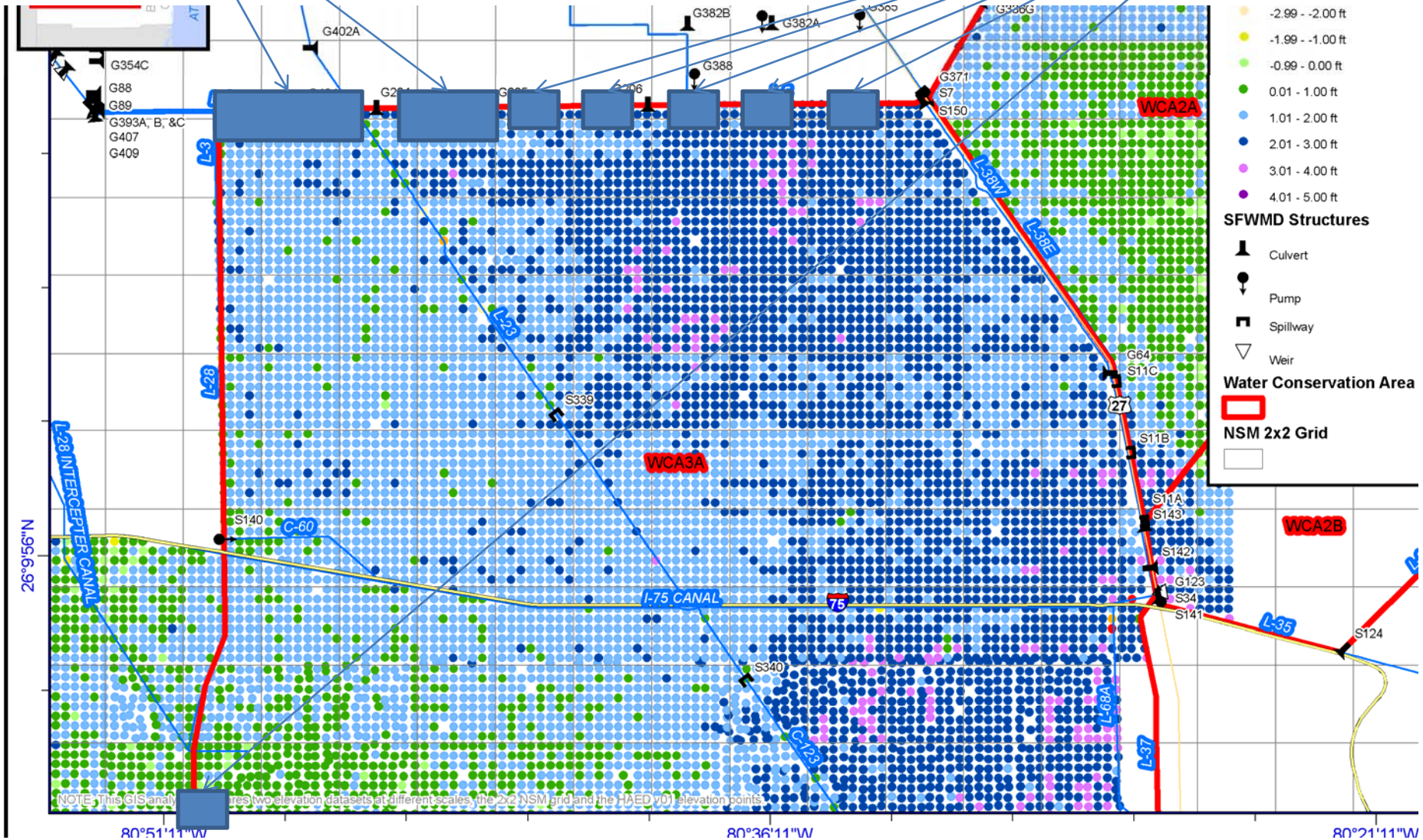
Inflows = 2.04 mAf

T-C = 1.39 mAf

T-D = 0.17 mAf



Hypothetical Design

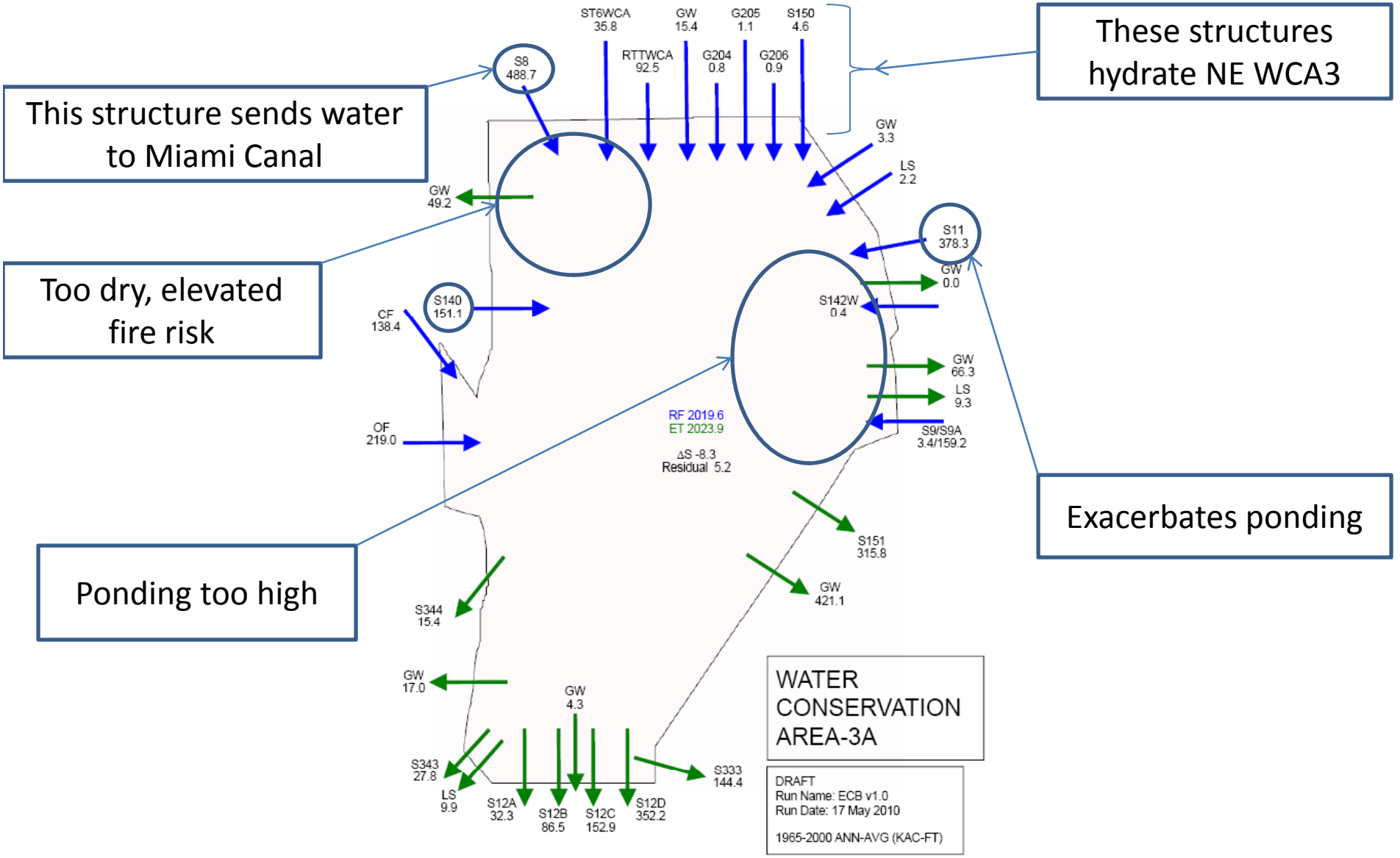


Implementation strategy

- Install spreaders in areas of low uncertainty about ecological response.
- Install flow focusing structures in a checkerboard pattern based on existing constraints
  - As these constraints are lifted, install more flow focusing structures.
  - Ultimate goal is to move to a full spreader canal system (assuming all constraints are removed).

- Careful monitoring of effects of hydropattern restoration is essential for determining the status of constraints, particularly
  - Nutrient impact constraints
  - Effects of hydroperiod versus effects of velocity

RSM ECB water budget for WCA3A



Conclusion

- Implementation of Hydropattern restoration features must be paired with systematic observations of ecological responses.
  - Observations determine whether constraints are removed or not.

- **Doing nothing is undesirable**

- Precedent for modular implementation exists in planning/installation of L-67 canals and North New River Canals (both planned more canals than were actually built). Monitoring of initial phases of these projects supported decision to halt further implementation.