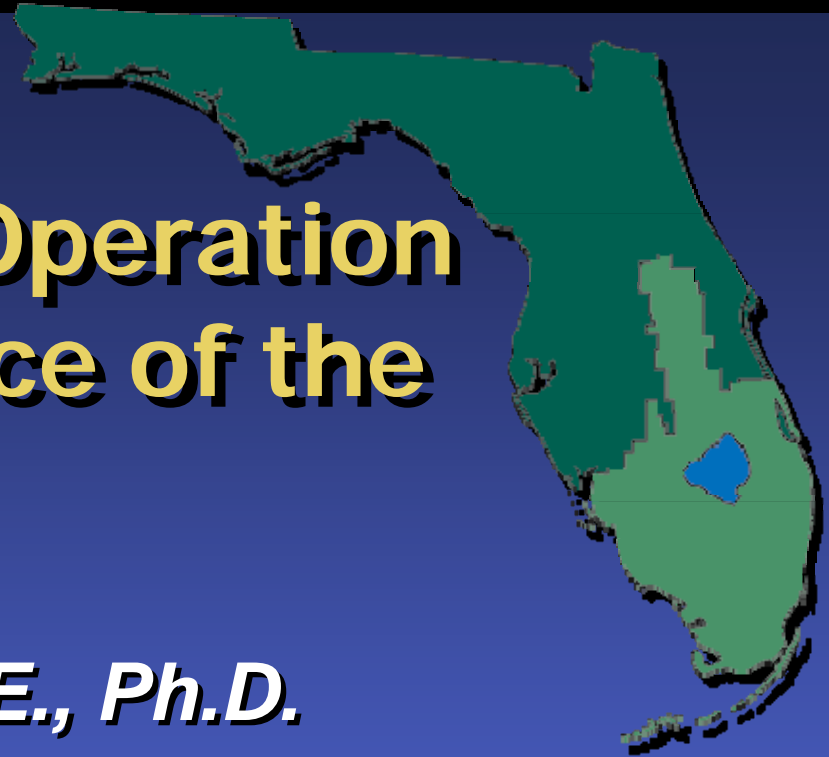


Update on the Operation and Performance of the STAs

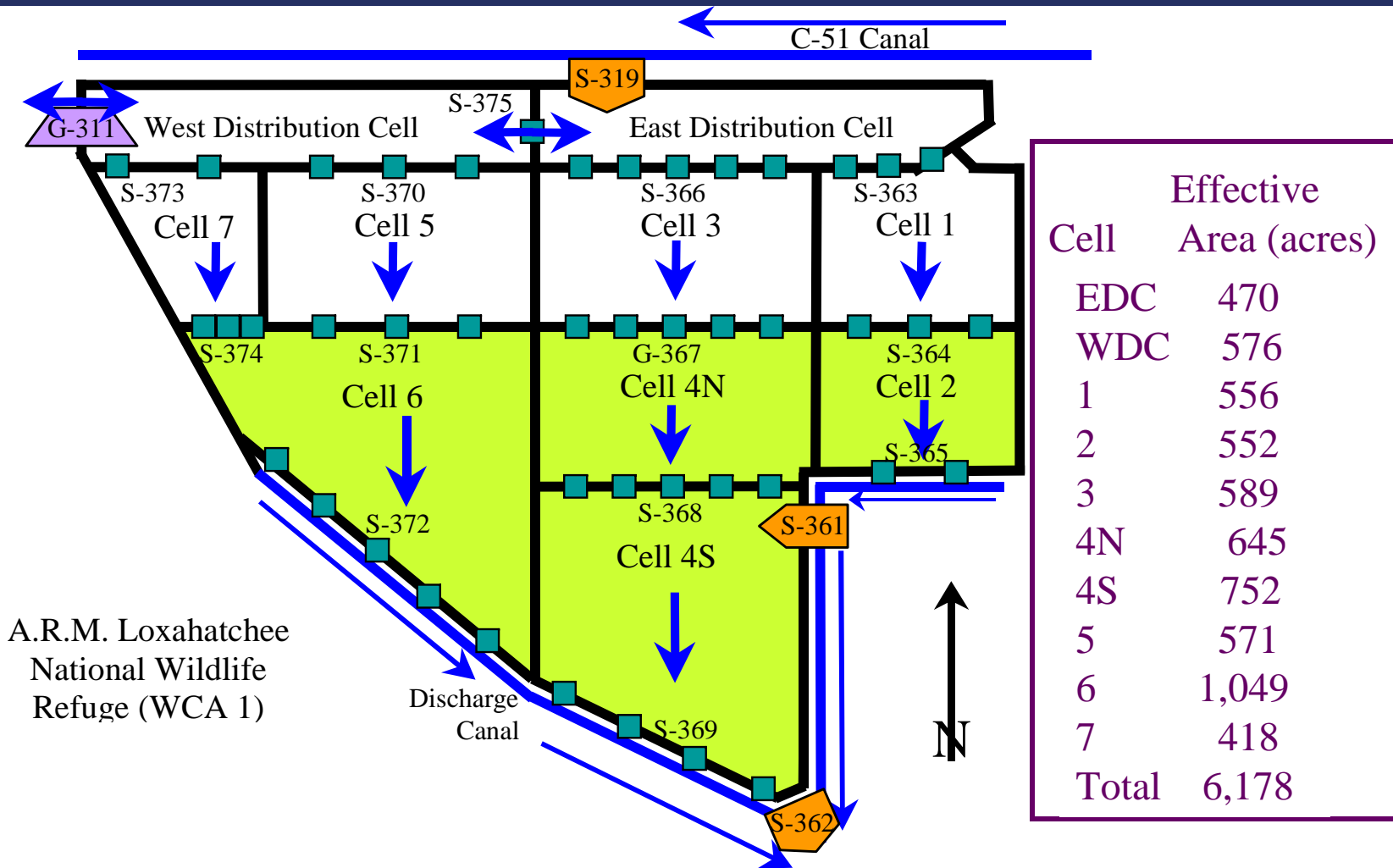
Gary Goforth, P.E., Ph.D.

*TOC Meeting
February 21, 2006*

sfwmd.gov



Enhanced STA-1E Design

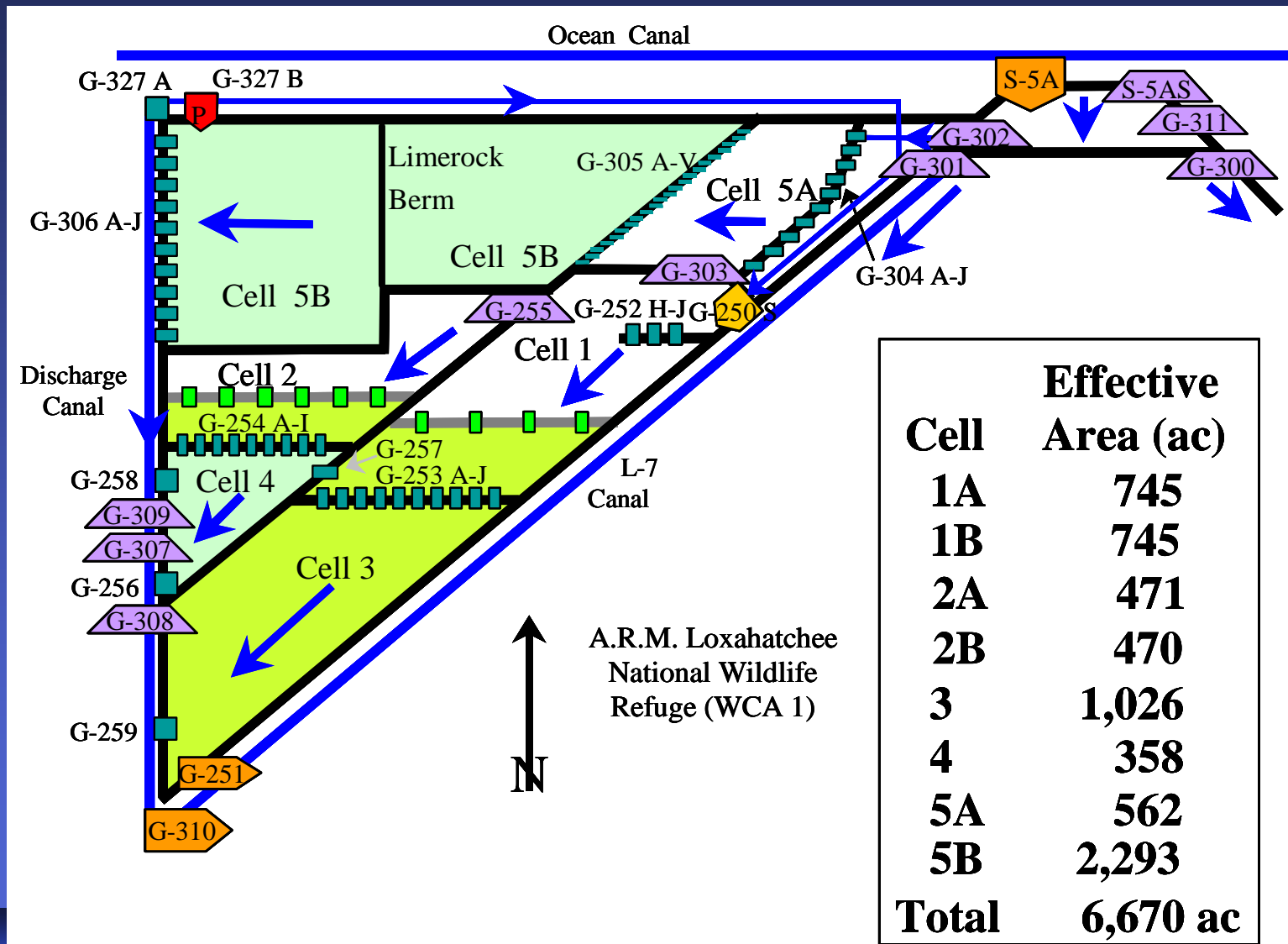


STA-1E Update

- Eastern Flow-way: Off-line
 - Corps constructing PSTA Demo project
- Central Flow-way: On-line
 - Good vegetation grow-in
- Western flow-way: On-line
 - SAV not growing in as well
 - Considering transplanting from donor sites
- WY06 (5-12/05) TP in: 14.9 tons/192 ppb
- WY06 TP out: 3.9 tons/114 ppb



Enhanced STA-1W Design

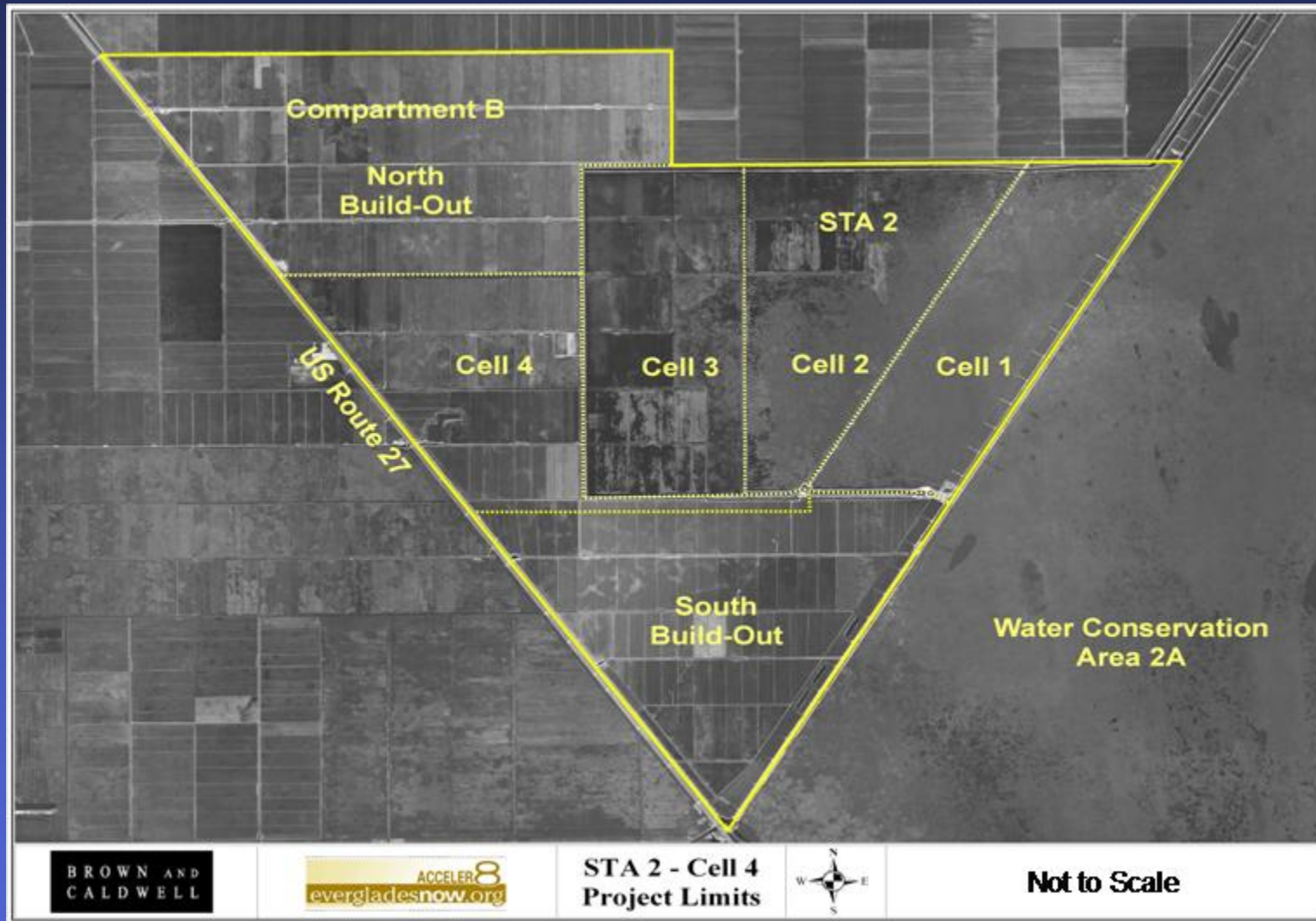


STA-1W Update

- Limited operation: enhancement and recovery
- Enhancements
 - Construction of Cell 2 levee complete
 - Other enhancements underway in Cells 4 & 5
- Recovery
 - Cell 5 off-line for recovery activity (Dr. Newman)
- WY06 TP in: 30.2 tons/200 ppb (high)
- WY06 TP out: 16.5 tons/112 ppb (high)



Expanded STA-2 Design



STA-2 Update

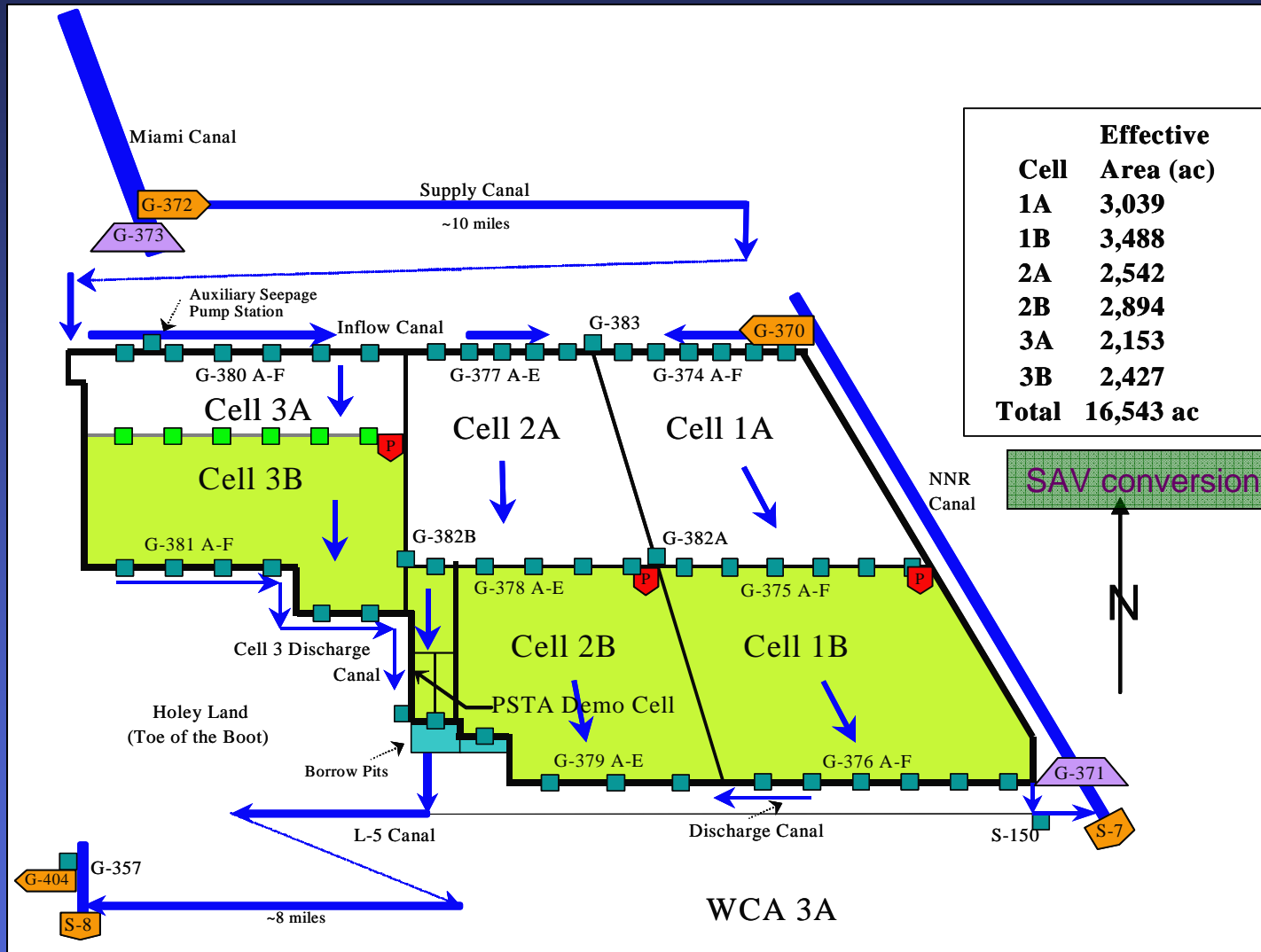
- Normal operations
 - WY06 TP in: 36.9 tons/115 ppb
 - WY06 TP out: 7.2 tons/20 ppb
- New Cell 4 expansion under construction
 - ~2,000 acres
 - Flow-capable by 12/31/2006
 - ~18 months after concept was first discussed



STA-2 Cell 4 Construction



Enhanced STA-3/4 Design



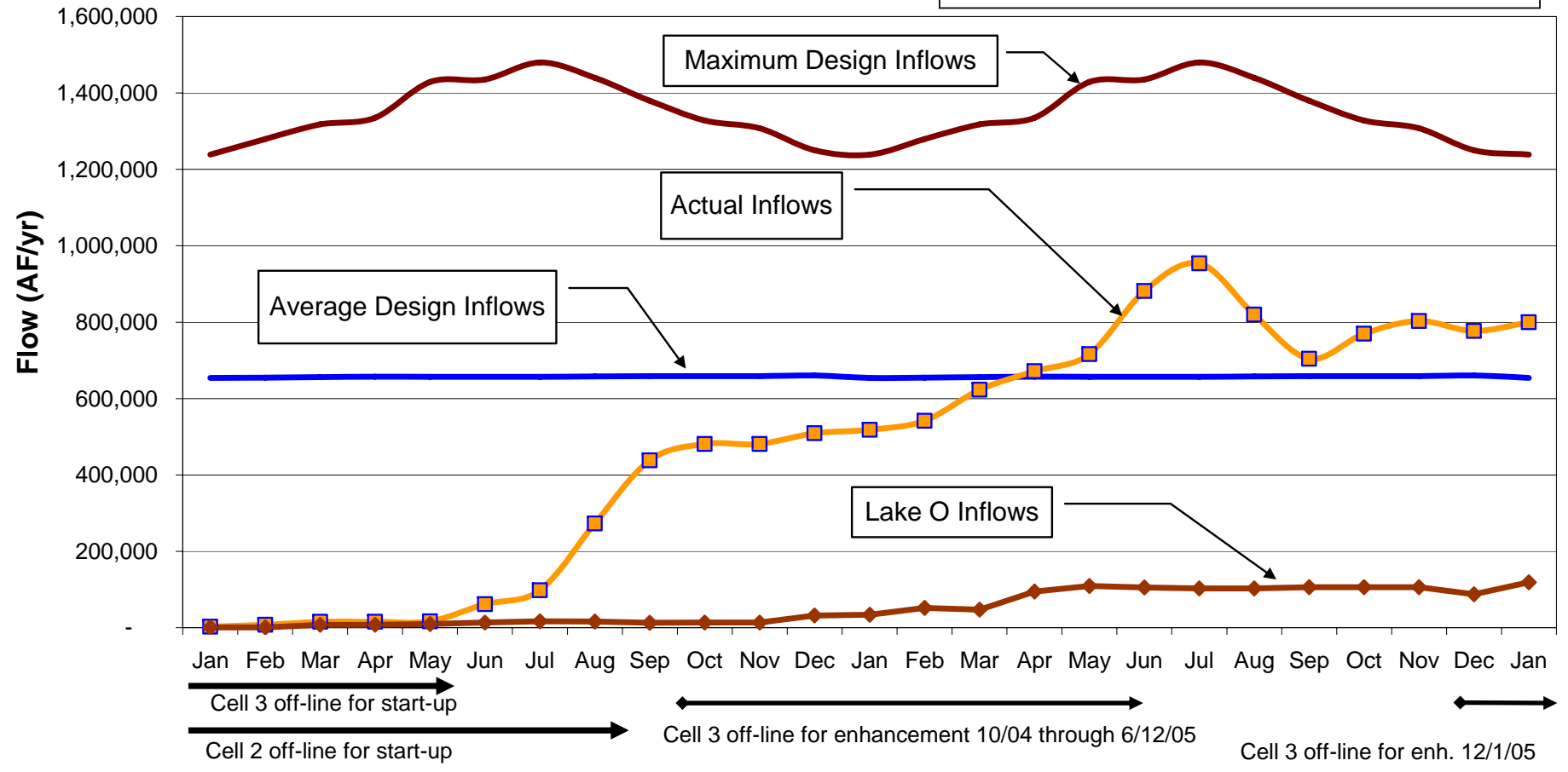
STA-3/4 Update

- Eastern and central flow-ways on-line
- Cell 3 off-line to complete enhancements
- PSTA demonstration project: operational
- Performance: Good
 - High rainfall (>33 inches) during June-August
 - WY06 TP in: 81.8 tons/111 ppb
 - WY06 TP out: 23.6 tons/23 ppb



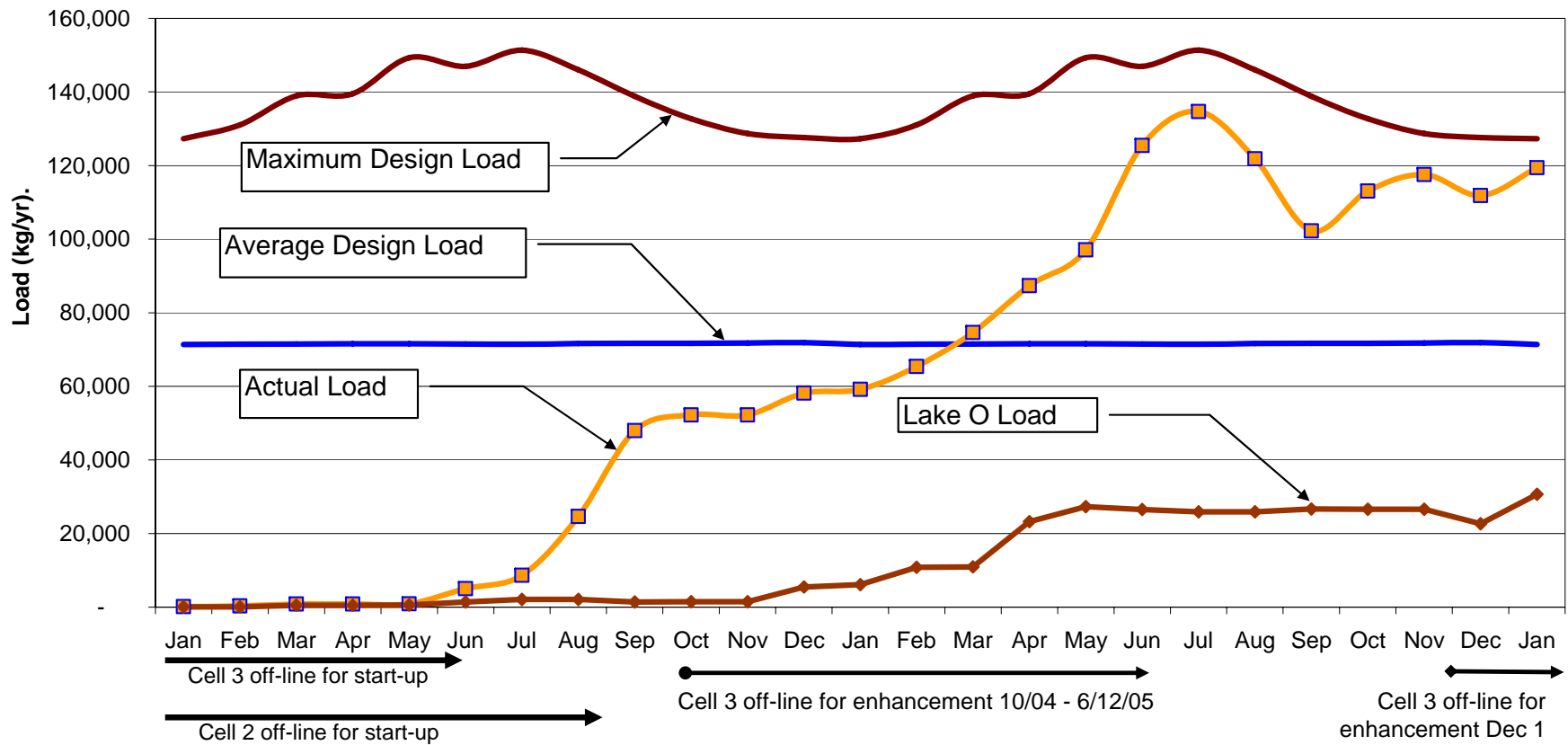
STA-3/4 365-day Cumulative Flows

Average Annual Design Inflow = 657,158 AF/yr
Data from STA-3/4 Design Documents

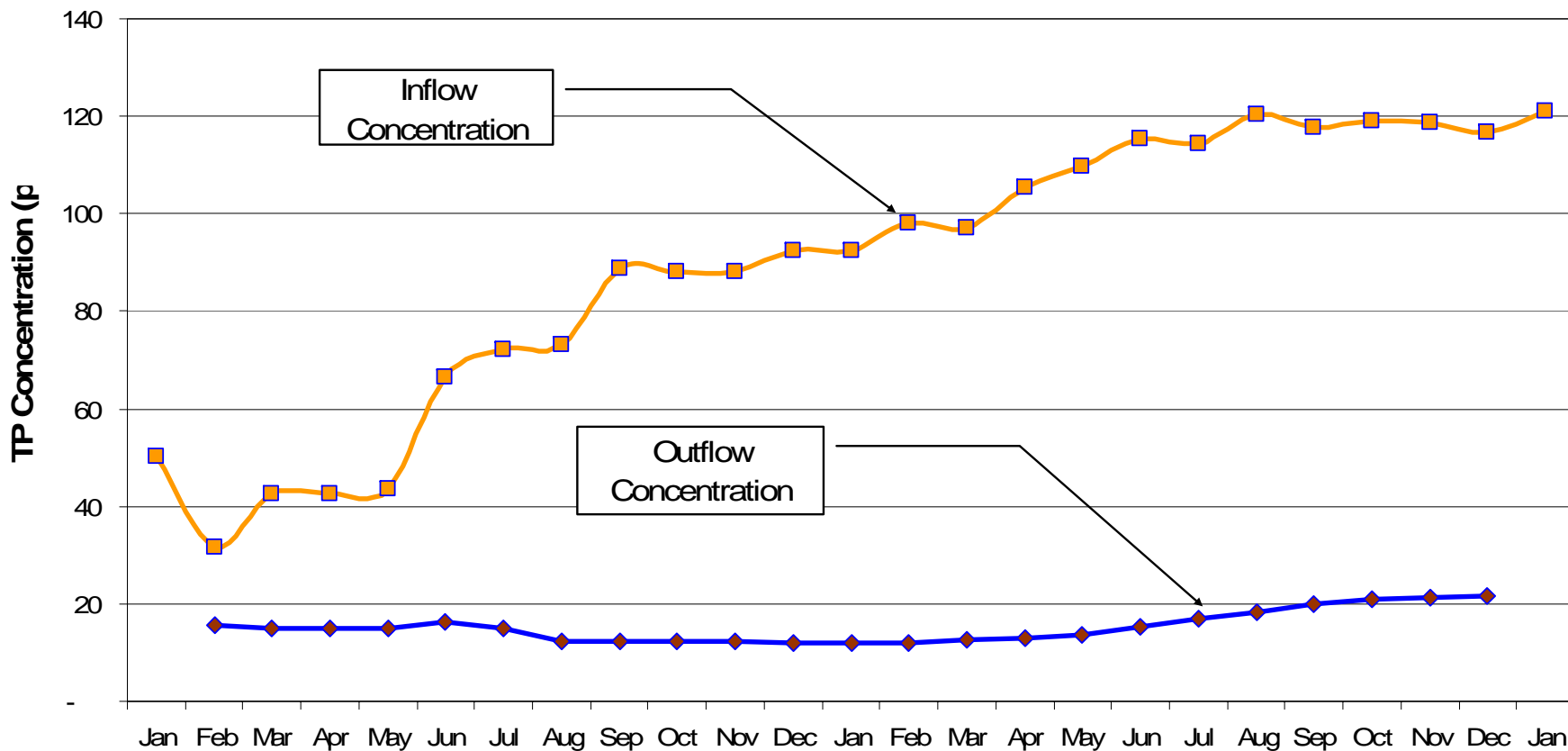


STA-3/4 365-day Cumulative Loads

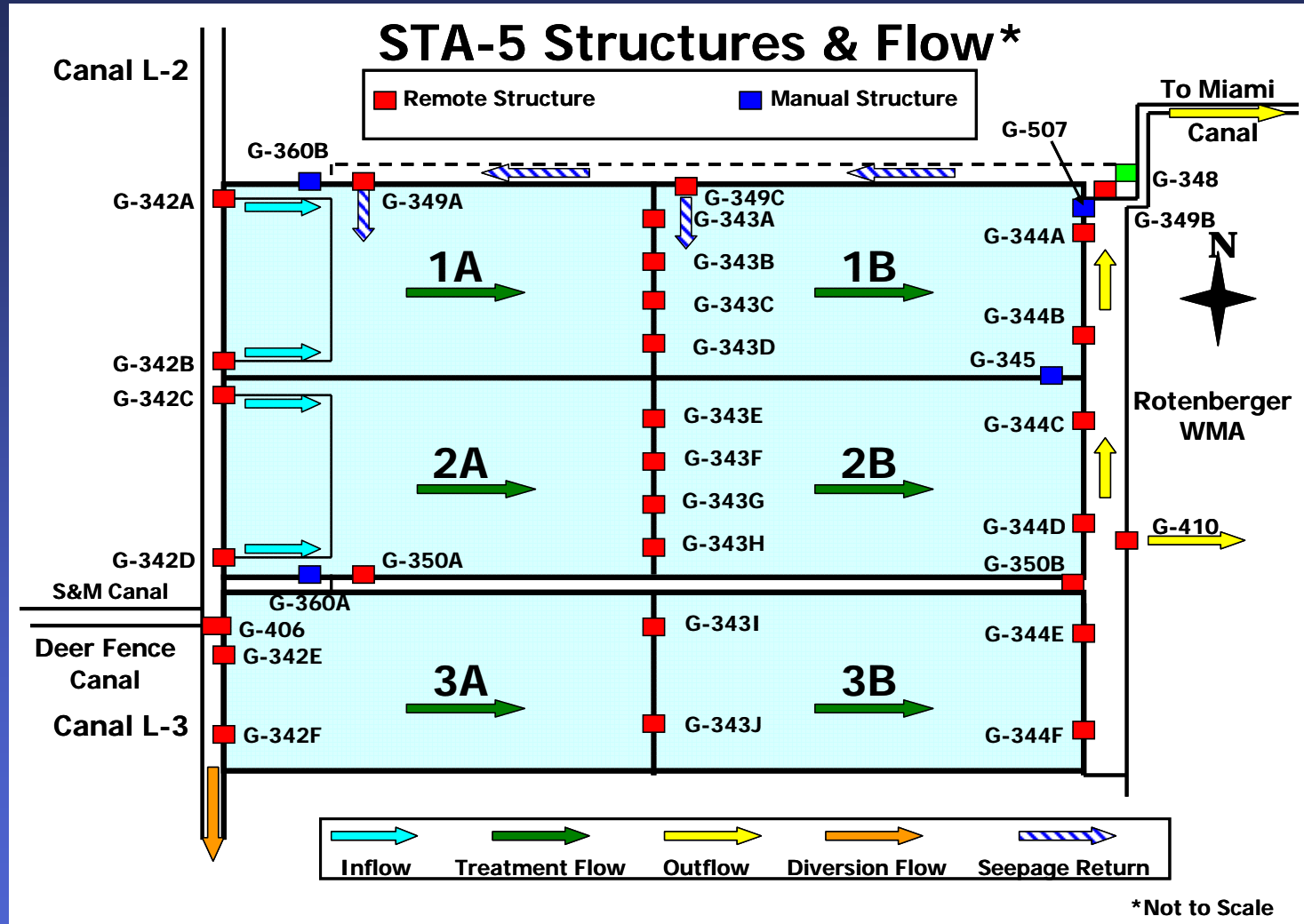
Average Annual Load = 72,019 kg/yr
Data from STA-3/4 Design Documents



STA-3/4 12-Month Flow-weighted Mean Concentrations



Expanded STA-5



STA-5 Update

- Northern flow-way: on-line; enhancements done
- Southern flow-way: off-line for enhancement
- New ~2,000-ac flow-way 3 under construction
 - Flow-capable by December 31, 2006
- WY06 TP in: 52.6 tons/200 ppb (high)
- WY06 TP out: 23.4 tons/95 ppb (high)



STA-5 Flow-way 3 Construction

Discharge Canal Excavation



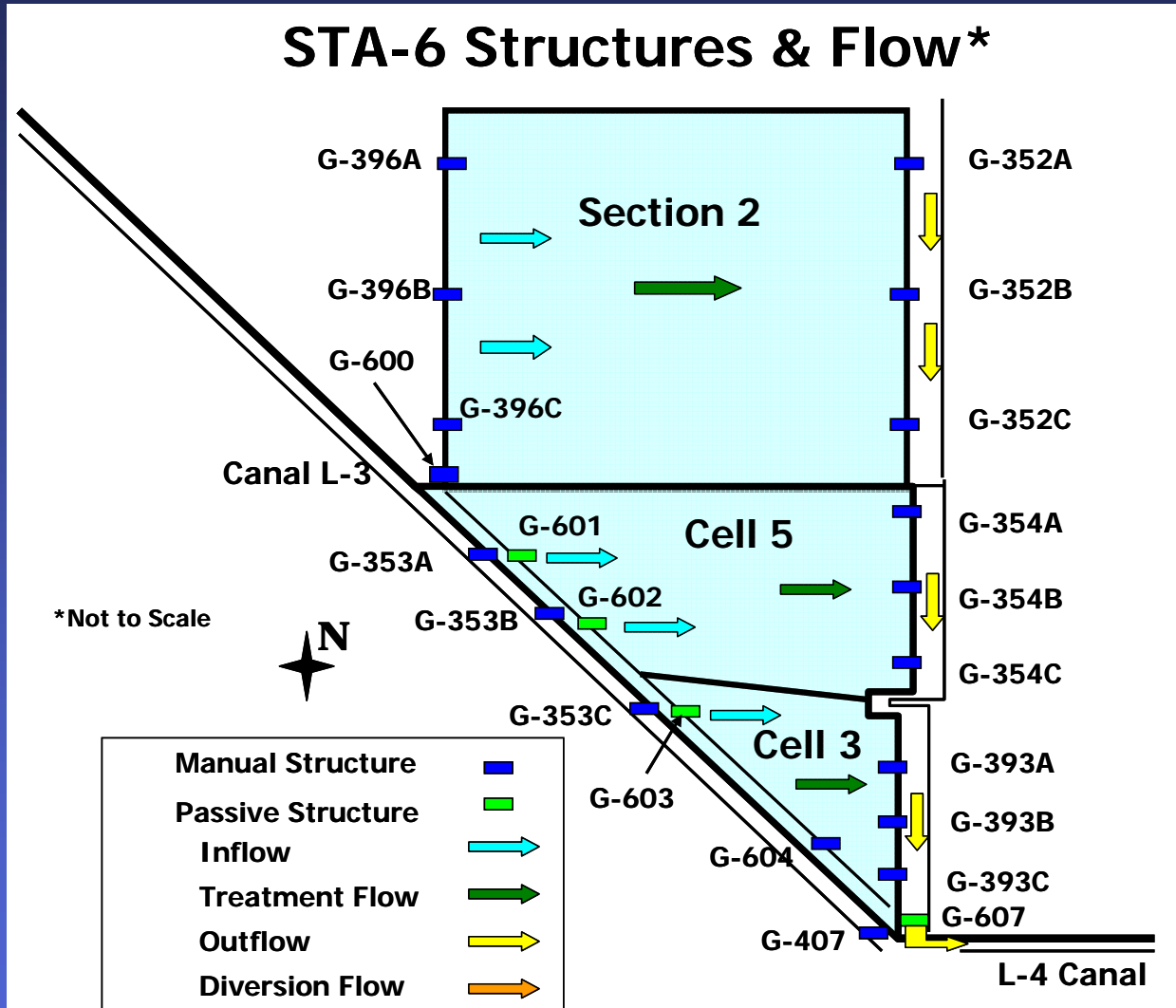
STA-5 Flow-way 3 Construction

Structure Excavation and Base Slab Formwork



Expanded STA-6

STA-6 Structures & Flow*



STA-6 Update

- Existing treatment cells operational
- New ~1,300-ac Section 2 under construction
 - Flow-capable by December 31, 2006
- WY06 TP in: 4.5 tons/111 ppb
- WY06 TP out: 0.8 tons/26 ppb



STA-6 Section 2 Construction

G-401 pump station on C-139 Annex



STA-6 Section 2 Construction

Clearing, degrading and filling old farm ditches underway

