STA Operations and Performance Update

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Overview

- Operations and performance dominated by hurricane flows and loads

  - Inflow: 445,630 AF; 48,566; 88 ppb
  - Outflow: 432,649 AF; 6,579 kg; 12 ppb
  - Removal: 42 tons; 86%

- STA-6 fire at inflow pump station destroyed 2 pumps
Glancing blows from Hurricanes Frances, Ivan and Jeanne

In general, STAs performed well
- Inflow: 414,000 acre feet & 96 tons of phosphorus
  - 30% of annual flows; 60% of annual loads
- 65 m tons removed (70%)
- Average outflow = 53 ppb
- STA-1E was utilized

STA-1W was severely impacted by storms
- Inflow: 109,900 AF (70% of annual flows)
  - 40 tons (150% of annual loads); 296 ppb
- Outflow: 19 tons; average TP = 123 ppb
- 21 m tons removed
Effects of wind and wave action on north levee
Loss of SAV due to storm action
Water Year 2005
(preliminary data through 10/04)

- STA-1W
  - Inflow: 287,187 AF; 91,306 kg; 258 ppb
  - Outflow: 325,794 AF; 39,130 kg; 97 ppb

- STA-2
  - Inflow: 240,289 AF; 39,187 kg; 132 ppb
  - Outflow: 275,736 AF; 6,608 kg; 19 ppb
Water Year 2005
(preliminary data through 10/04)

- STA-3/4 (May – September)
  - Inflow: 422,327 AF; 47,159 kg; 91 ppb
  - Outflow: 404,941 AF; 6,033 kg; 12 ppb

- STA-5
  - Inflow: 93,705 AF; 21,324 kg; 184 ppb
  - Outflow: 101,175 AF; 10,280 kg; 82 ppb
  - Additional treatment provided by STA-3/4
Water Year 2005
(preliminary data through 10/04)

STA-6 (data collection reduced due to fire)

- Inflow: 23,358 AF; 2,875 kg; 100 ppb
- Outflow: 17,760 AF; 439 kg; 20 ppb
STA Performance
STA-1W, STA-2, STA-3/4 & STA-6

Anticipated STA Performance = 50 ppb
Phosphorus Load Removal - STA-1W, STA-2, STA-3/4 & STA-6

Cumulative Removal = 74%