



The Myakka River

Fish Kill Update

Myakka River Management Coordinating Council
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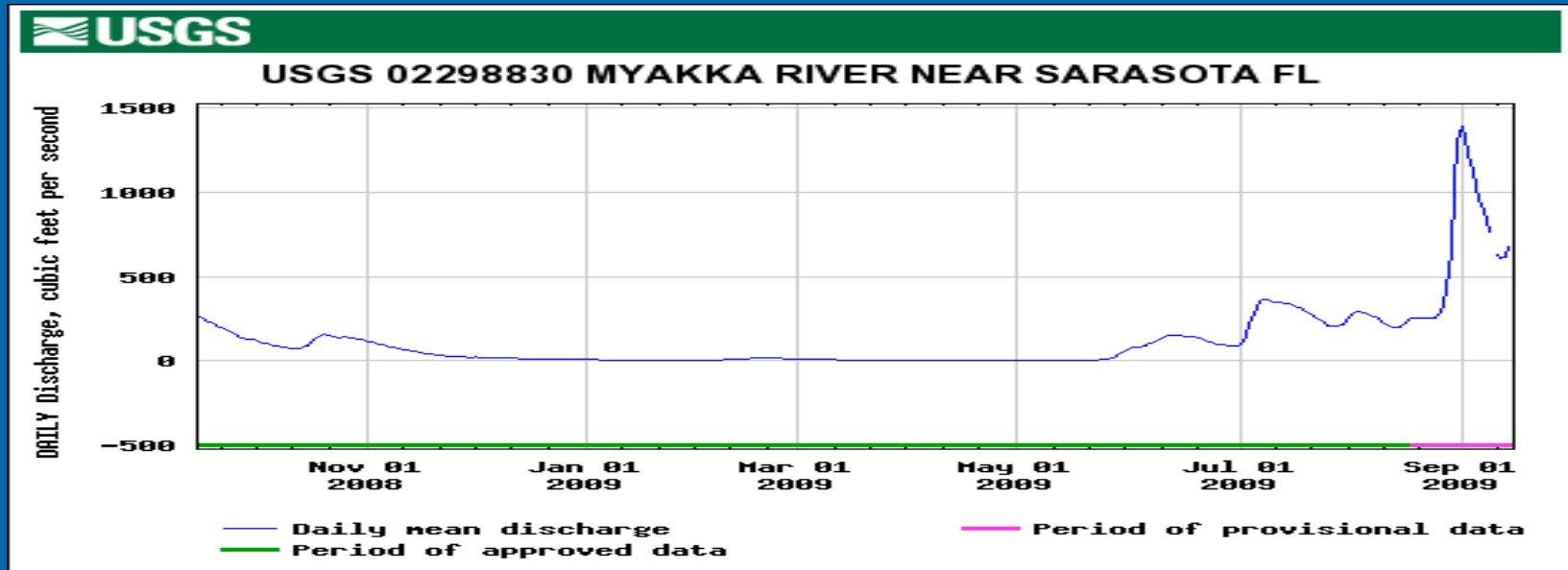
REFRESHER

- **1.5 inches of rainfall Sunday, May 29**
- **Fishkill observed in river between Snook Haven and Border Road**
- **Fishkill observed in river at Laurel Road, > 1 mile north**
- **Agencies Involved:**
 - **Florida Fish and Wildlife**
 - **Florida DEP**
 - **EPA**
 - **Florida DOH**
 - **Sarasota County**

CAUSAL FACTORS



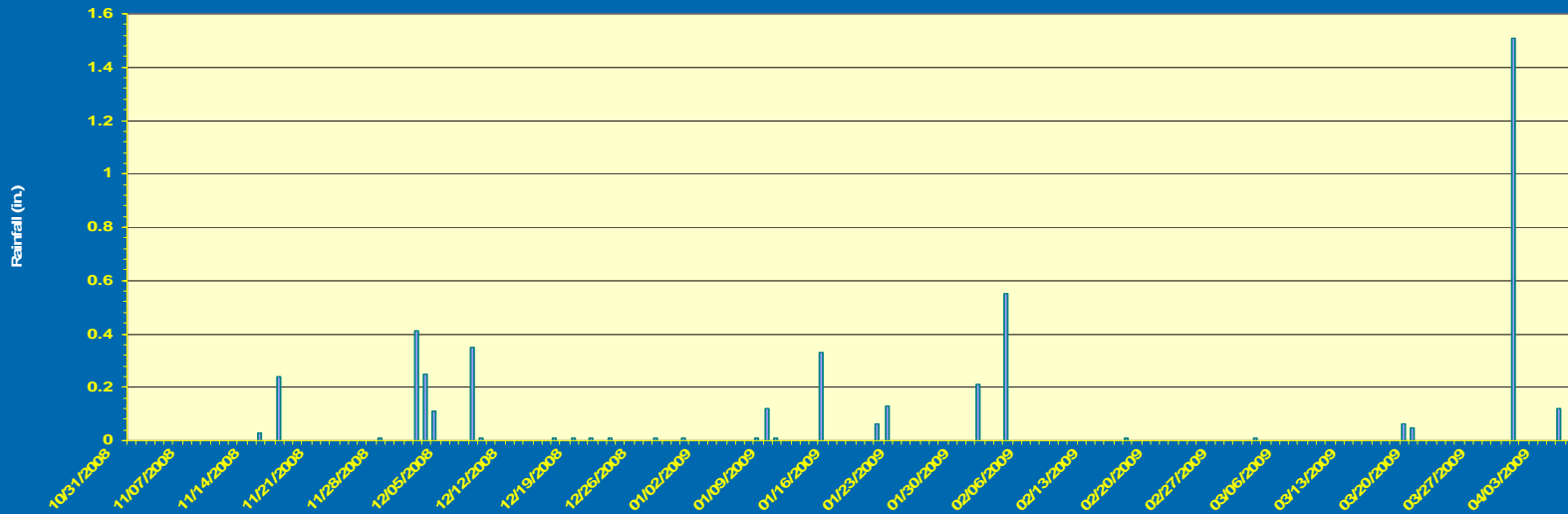
Very Low to No Flow



- Lowered water level
- Reduced flushing of river
- Tidal extent was beyond Border Road
 - Salt wedge moved up river
 - Saltwater inflow from Blackburn Canal
 - River water oscillating back and forth with tide

No Significant Rainfall

Myakka River Watershed - 6 Months Rainfall



- No significant rainfall in 50 days
- Windy spring –
 - Leaves, etc. added to nutrient/organic loading
- First flush of pollutants on 3/29
 - High nutrient and organic loading
- Algae blooms and die-off
- Reduction in dissolved oxygen
- Fish kills

Citizen Concerns

- Fish Kill at Laurel Road was caused by illicit discharge from Venice Minerals
 - DEP conducted inspection of Venice Minerals and found no evidence of an illicit discharge
- Fish Kill at Border Road was caused by illegal discharge from Blackburn Property
 - Sarasota County conducted an inspection of the property and found no evidence of an illicit discharge
 - Investigators found flow from the abandoned dolomite mine pit did have elevated BOD and Nutrient levels and low DO levels that could have contributed to the fish kill.
 - Property owner is restoring the lake to improve water quality and is planning to install a weir in the ditch to prevent inflow and outflow of tidal waters.



BORDER RD

Upstream
sample point

Downstream
sample point

S MOON DR

S MOON DR

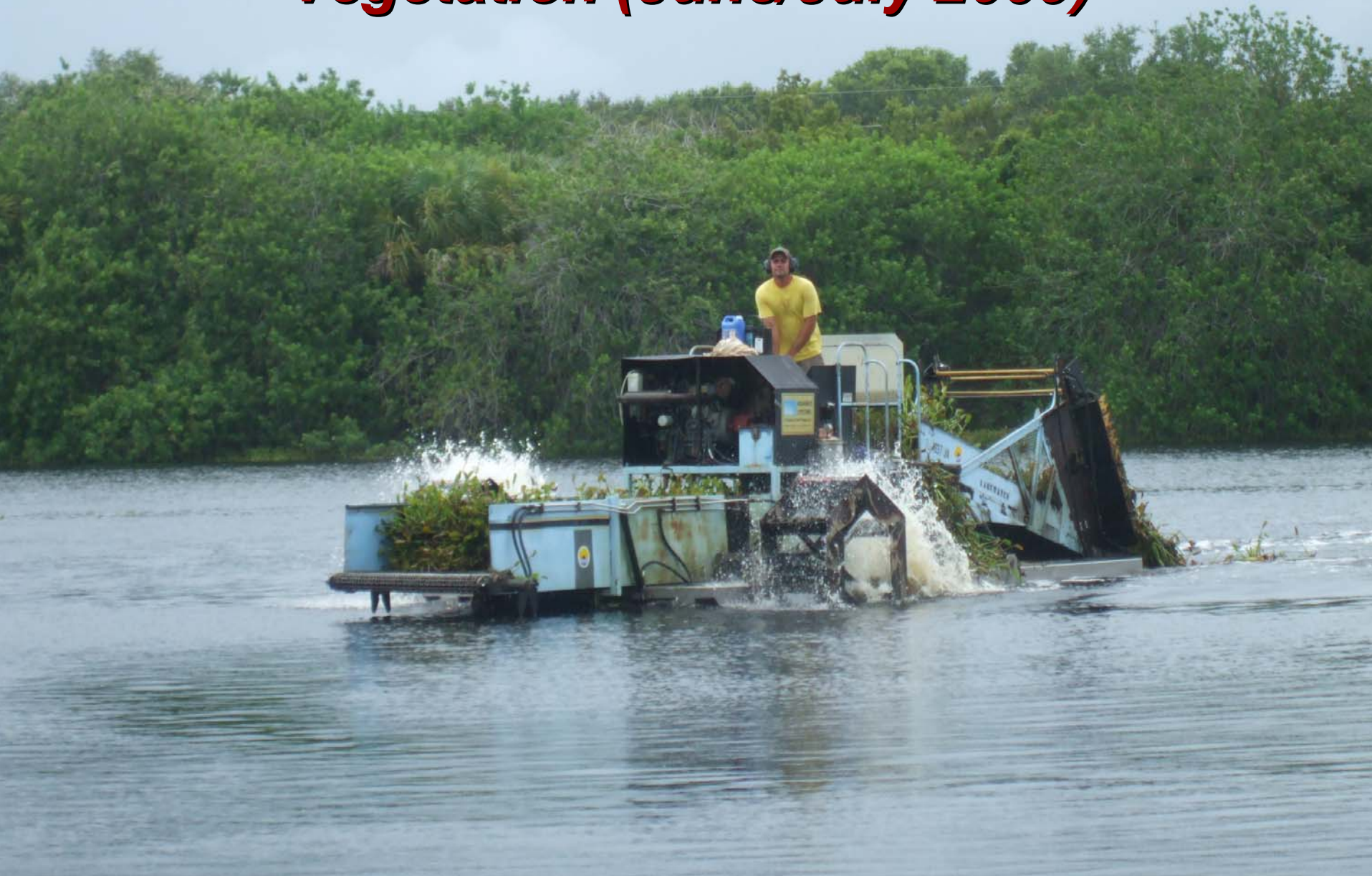
Conditions Changed

- Rainy Season – rainfall to watershed
- Increased river flow
- Salinity has dropped – salt wedge pushed back downstream
 - 8.79 ppt in May at Border Road at high tide; 0.15 ppt in August at Border Road at high tide
 - 12.39 ppt in May at Snook Haven at high tide; 0.15 ppt in August at Snook Haven at high tide
- Chlorophyll values have dropped significantly
 - **15.3 – 70.2 mg/kg (Mar.-June); 3.08 – 6.52 mg/kg (July & Aug.)**
- DO fluctuates seasonally (2.19 – 10.5)
- Water quality of flow from lake has improved
 - **BOD levels have fallen significantly (From 13.4 – 16.9 mg/L to 1.02 – 4.78 mg/L)**
 - **Ammonia values have dropped (From 3.79-4.07 mg/L to 0.172-0.432 mg/L)**
 - **TKN values have dropped (From 3.23 - 3.68 mg/L to 1.28 - 1.57 mg/L)**
 - **TP values have dropped (From 0.523-0.602 mg/L to 0.305-0.40 mg/L)**

***Blackburn Property Lake
Clean-up Progress***



UF Harvester Removing Surface Vegetation (June/July 2009)





Before Clean-Up



View S to N

After Clean-Up





Before Clean-Up



View SW to NE



After Clean-Up





Thank You