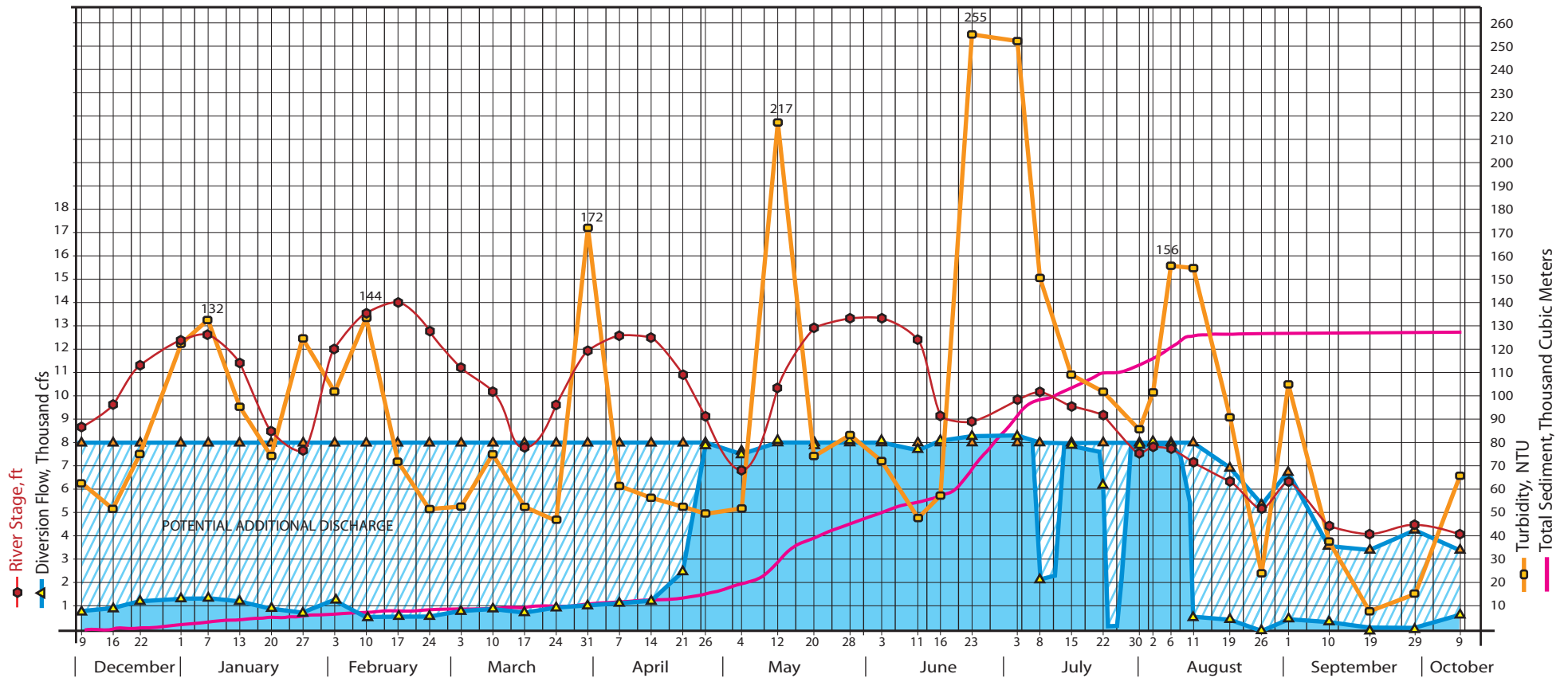


Caernarvon Diversion Turbidity Sampling 12/2009 - 10/2010

A Project of the Lake Pontchartrain Basin Foundation



This graph shows the results of water sampling at the Caernarvon diversion in St. Bernard Parish, Louisiana.

The orange line shows the measured turbidity (cloudiness), which tells how much sediment is suspended in the water. The red line shows the river stage (height). The lower blue line indicates the actual discharge of water from the diversion in cubic feet per second (cfs).

An estimated 125,000 cubic meters of sediment have been delivered so far in 2010 (pink line), mostly during the extended opening in response to the oil crisis. After 20 years of operation, several acres of land have built up in the Big Mar area, even though this diversion was not designed to convey sediment.

Conclusions:

- Sediment levels vary with river stage, but not in a simple or predictable way.
- How a diversion is operated is as important as how it is designed.
- Diversion operators should monitor river turbidity and flow most when sediment levels are highest.
- Flexible, adaptive management can deliver more sediment with less flow.

LEGEND

