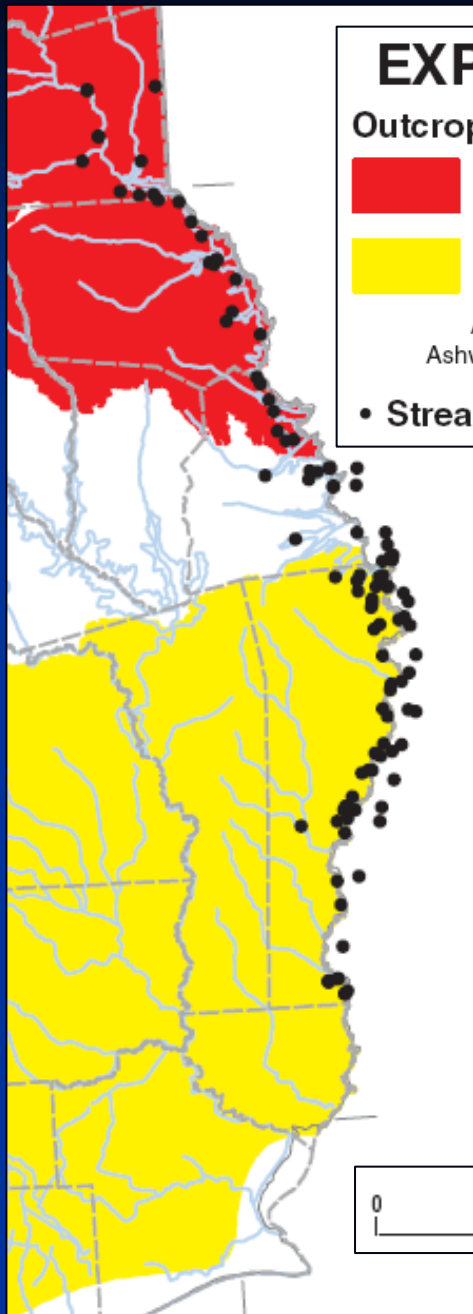


# Technical Study Summaries: Lower Sabine River

## Connectivity Data





## EXPLANATION

Outcrop of major aquifer



Carrizo-Wilcox



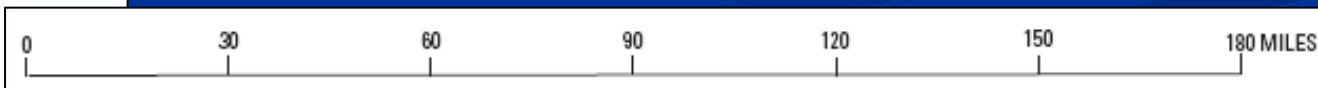
Gulf Coast

Aquifer outcrops from  
Ashworth and Hopkins (1995)

• Streamflow-measurement site

# Results of Streamflow Gain-Loss Studies in Texas

USGS (2002)  
(Original data from 1963)

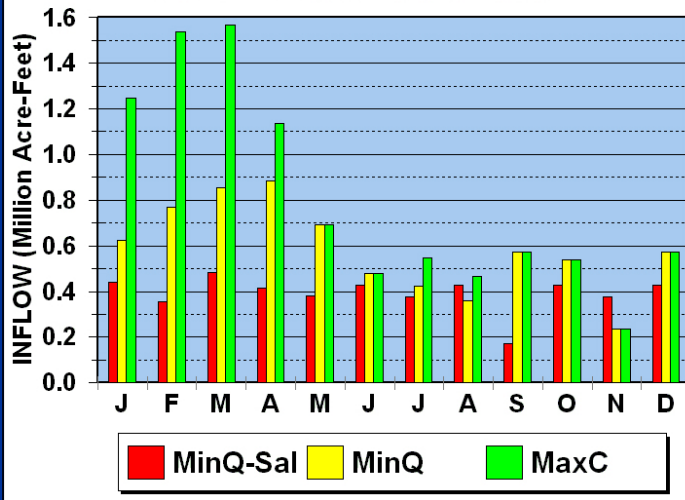


# Freshwater Inflow Recommendation for Sabine Lake Estuary

## FRESHWATER INFLOW RECOMMENDATION FOR THE SABINE LAKE ESTUARY OF TEXAS AND LOUISIANA

TPWD, TWDB  
(2005)

SABINE-NECHES ESTUARY  
MONTHLY TxEMP SOLUTIONS



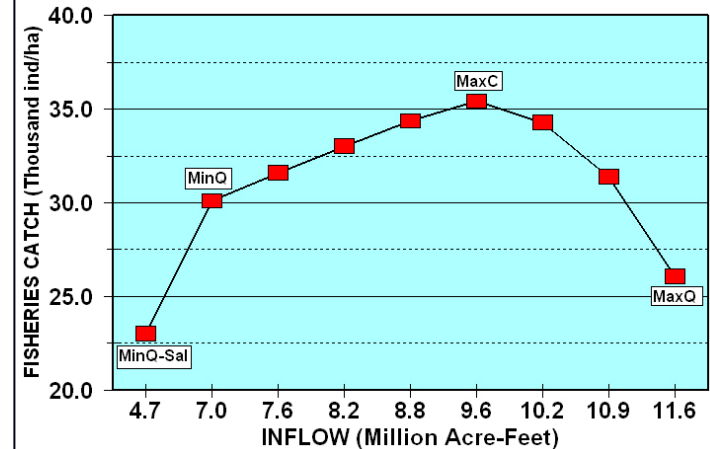
By  
Texas Parks and Wildlife Department  
Coastal Fisheries Division  
Coastal Studies Program  
Austin, TX 78744

### Appendix

By  
Texas Water Development Board  
Surface Water Availability Division  
Environmental Section  
Austin, TX 78711

March 2005

TxEMP MODEL SOLUTIONS  
FOR SABINE-NECHES ESTUARY



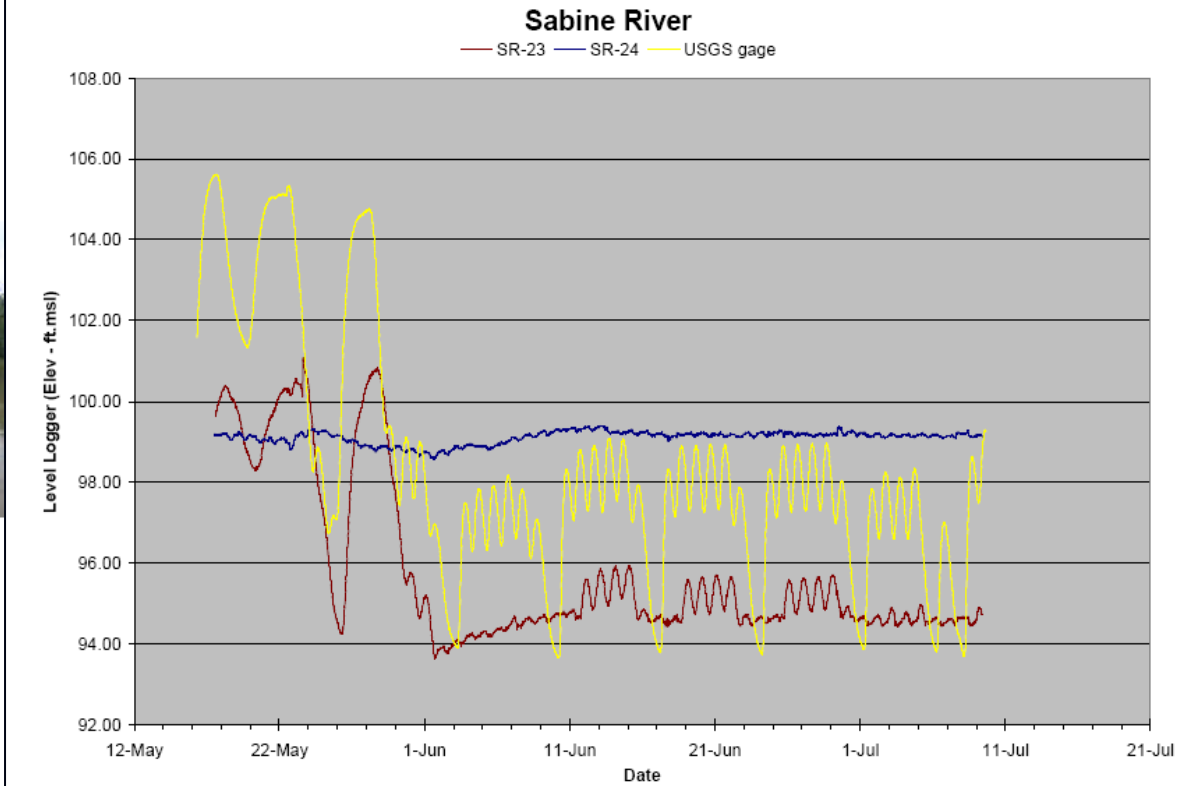
TOLEDO BEND RELICENSING PROJECT

FERC NO. 2305

LOWER SABINE RIVER  
BOTTOMLAND CONNECTIVITY  
PRE-PAD  
STUDY REPORT



Figure 3.1-21 Levellogger results at SR-23 (RM 74.00) and SR-24 (74.00-Oxbow Lake) in relation to the Bon Weir Gage (8028500)



SEPTEMBER 2008

This Report Was  
Prepared For:

Sabine River Authority of Texas  
Sabine River Authority, State of Louisiana

This Report Was  
Prepared By:

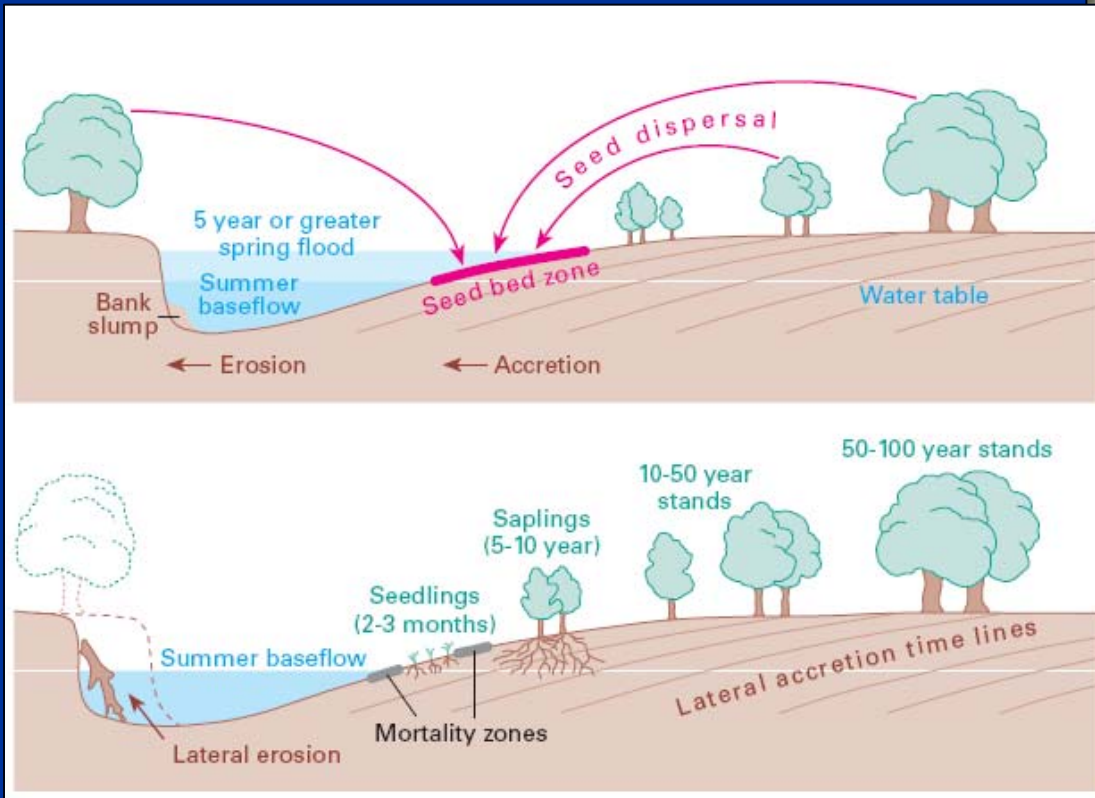
Devine Tarbell & Associates, Inc.

**Bottomland  
Connectivity Study  
DTA (2008)**



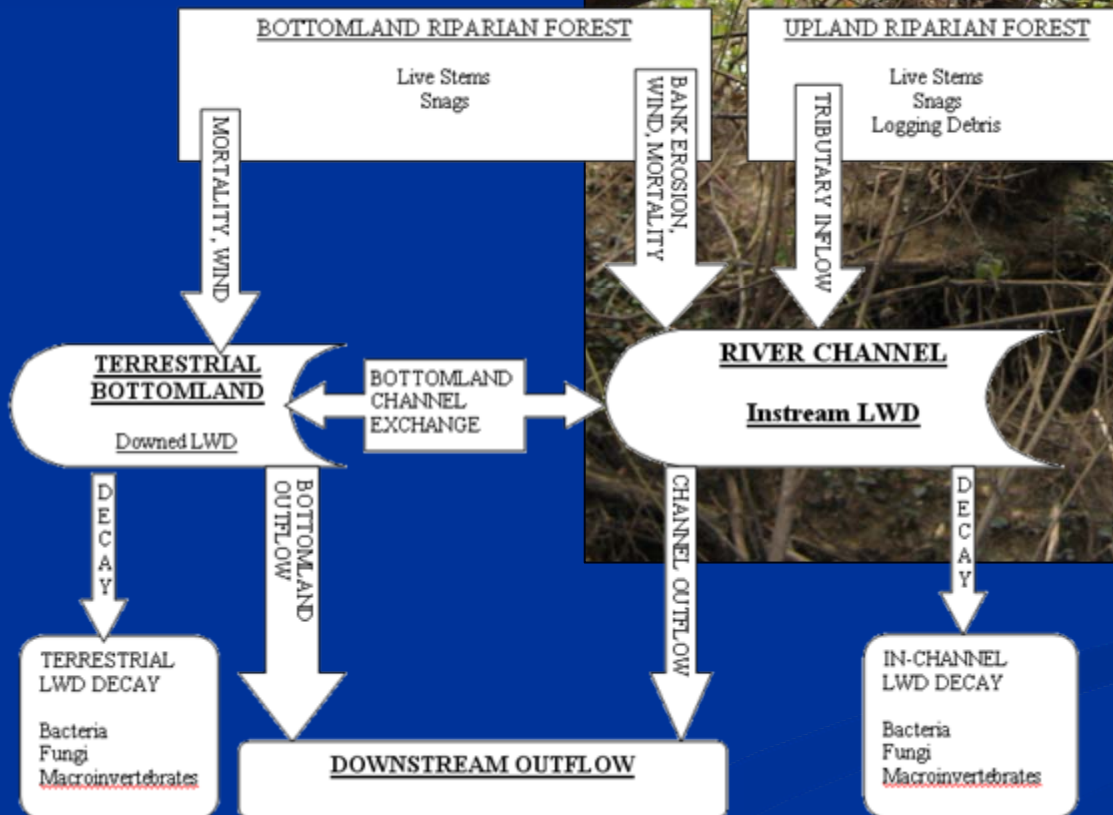
# Riparian Area Survey Methodology

Williams, SFASU (2009)

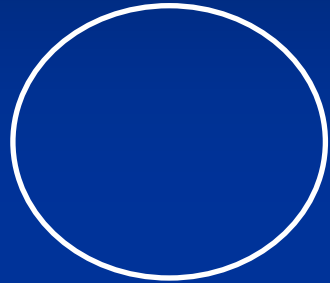


# Large Woody Debris

McBroom (2010)



# Statewide Objectives



## Connectivity

- Define connectivity issues within the system



# Lower Sabine River



## Objectives Connectivity

- **Maintain/improve hydrologic connectivity needed to sustain floodplain and wetlands area (i.e. bottomland hardwoods, swamps, emergent marshes, oxbows, yazoos)**
- **Ensure that studies are not conducted in a vacuum that ignores other needs such as bays and estuaries**



# Lower Sabine River



## Indicators Connectivity

- **Riparian**
  - **Total area inundated**
  - **Habitat area inundated**
- **Connectivity to river**
- **Freshwater inflows to Sabine Lake**