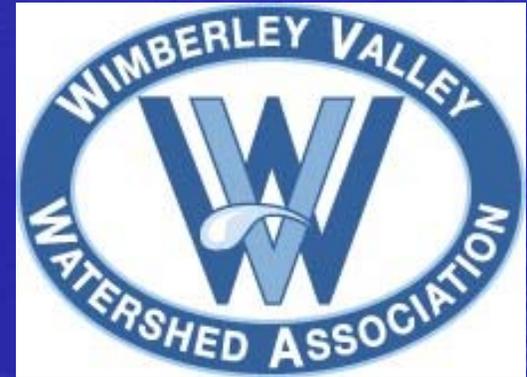


# Guadalupe River Basin Clean Rivers Program

2010

Steering  
Committee Meeting



# Guadalupe River Basin Clean Rivers Program

## 2010 Activities and Deliverables

### Project Administration:

Progress Reports and Invoicing

Management of Sub-Agreement with

UGRA

Attendance on CRP meetings

# Guadalupe River Basin Clean Rivers Program

## 2010 Activities and Deliverables

### Quality Assurance:

Maintain Quality Assurance Project Plan

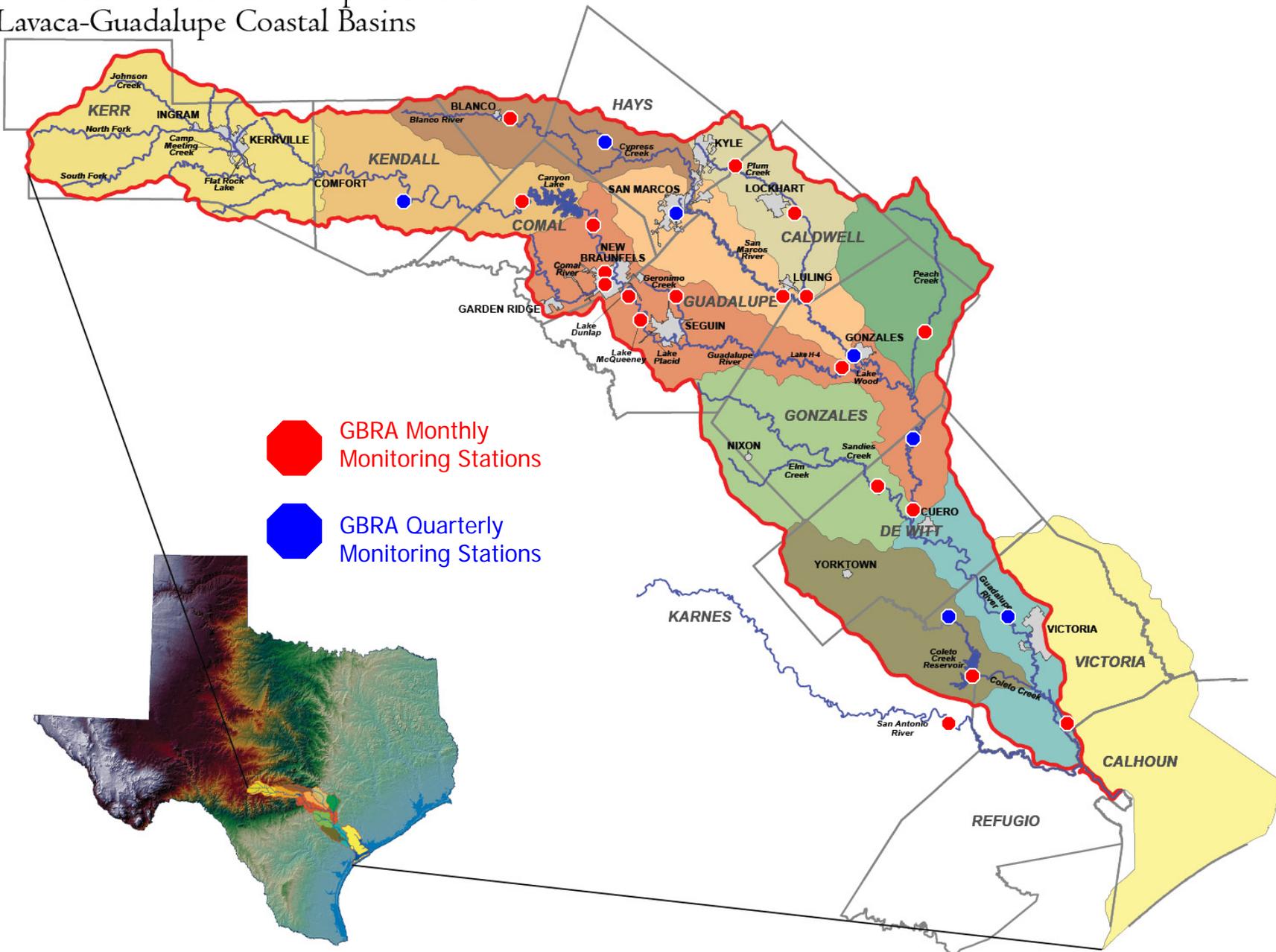
Coordinated Monitoring Meetings

# Guadalupe River Basin Clean Rivers Program

## FY2010 (09/2009 – 08/2010) Summary of Water Quality Sampling for the Guadalupe & Lavaca Coastal Basins

Sampling Entity	Conventional, Field & Bacteria	Biological & Habitat	24 Hour DO	Metals in Water	Metals in Sediment	Organics In Water	Organics in Sediment
<b>GBRA</b>	19 Sites Monthly; 7 Sites Quarterly	4 Sites Annually	1 Site; 5 times a year	2 Sites Annually; 1 Site Quarterly	1 Site Annually; 1 Site Quarterly	3 Sites Annually	5 Sites Annually
<b>UGRA</b>	10 Sites Quarterly	2 Sites Annually			1 Site Annually		
<b>TCEQ</b>	16 Sites Quarterly			2 Sites Semi-annually	4 Sites Semi-annually	1 Site Semi-annually	1 Site Semi-annually
<b>WVWA</b>	7 Sites 8 Times a year		1 Site Annually				

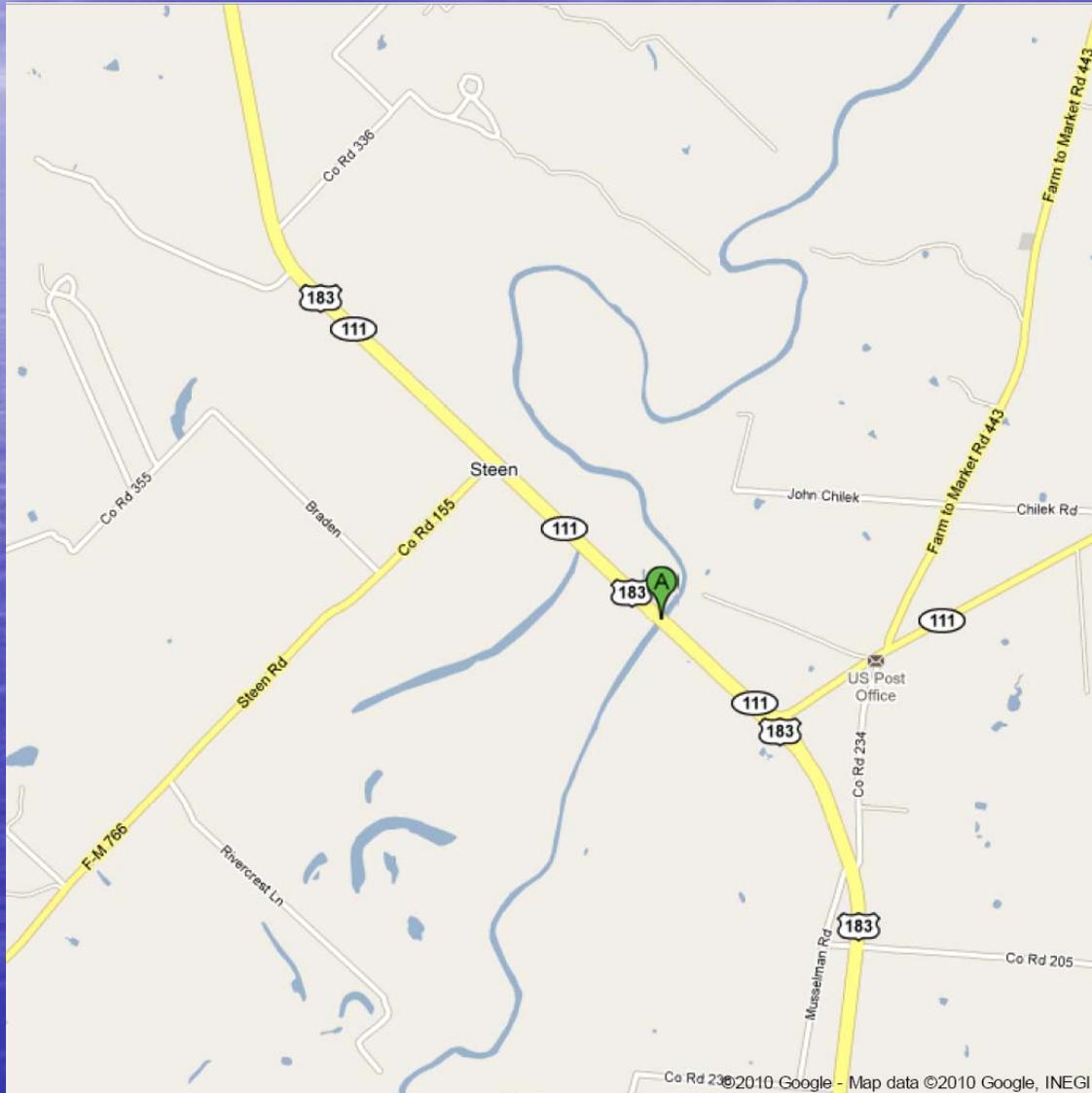
# Watersheds of the Guadalupe River and Lavaca-Guadalupe Coastal Basins



The GBRA Began Monitoring Conventional, Field and Bacteria Parameters Monthly at the Plum Creek @ Old McMahan Road (CR202) Site, Located in Caldwell County in Support of the Plum Creek WPP



In FY2009, GBRA Began Monitoring Conventional, Field and Bacteria Parameters Quarterly at the Guadalupe River @ HWY 183, near Hochheim, TX, in DeWitt County.



# 6 Biological/Habitat Assessments in FY2010

- Cypress Creek @ RR12, in the City of Wimberley (This location went completely dry during the summer of 2009)
- Guadalupe River @ Riverview Road, near Ingram, TX
- Guadalupe River @ Splitrock Road, Downstream of Kerrville
- Geronimo Creek @ Haberle Road, near Geronimo, TX
- Plum Creek @ Old McMahan Road (CR 202), Downstream of Lockhart, TX
- Plum Creek @ Plum Creek Road, near Umland, TX



# Cypress Creek @ RR12 Biological Assessment was Not Conducted in FY2009 Due to Drought



## Changes to Biological/Habitat Assessment Schedule in FY2010-11

- The Geronimo Creek @ Haberle Road location was added to the FY10-11 work plan in support of the Geronimo Creek Watershed Protection Plan.
- Biological/Habitat data collection was discontinued because data goals were reached at:
  - Dry Comal Creek @ Seguin Street, New Braunfels, TX
  - Peach Creek @ CR353, in Gonzales County
- The Clean Rivers Program is currently considering the discontinuation of sampling either the Splitrock or Riverview location, near Kerrville, TX.

# Metals in Water Sampling

- Peach Creek @ CR 353
- Guadalupe River @ Salt Water Barrier
- Samples Were Tested for Total (Hg, Se) & Dissolved (Al, Ag, As, Cd, Cr, Cu, Ni, Pb, Zn)  
All FY2009 results were reported below TSWQS Acute, Chronic & Human Health Criteria.



# Metals in Sediment Sampling

- Geronimo Creek @ Haberle Road
- Guadalupe River @ Kerrville State Park
- Samples Were Tested for Total (Al, Ag, As, Cd, Cr, Cu, Hg, Ni, Pb, Se, Zn)
- At Geronimo Creek Total (Al, Cu, Ni & Cr) were found above the Method Detection limit (MDL)
- At Kerrville State Park Total (Al, Ag, As, Cd, Cr, Cu, Hg, Ni, Pb & Zn) were found above the MDL.
- All FY2009 levels were below the Threshold Effects Concentrations (TECs) that have been developed as consensus-based sediment quality guidelines for freshwater systems by MacDonald et al. (2000).

# Organics in Sediment

- San Marcos River @ Luling WTP
- San Marcos River @ IH35
- Guadalupe River @ Kerrville State Park
- Geronimo Creek @ Haberle Road
- Total Petroleum Hydrocarbons and BTEX (Benzene, Toluene, Ethylene, Xylene) were not found above the method detection limit in FY2009.
- In FY10, sampling will begin at, the Cypress Creek @ Blanco Confluence and the Dry Comal Creek @ Seguin Street.



# Organics in Water



- Plum Creek @ Whisper Road (CR 135) will continue to be monitored for organics in water
- Total Petroleum Hydrocarbons and BTEX (Benzene, Toluene, Ethylene, Xylene) were not found above the method detection limit in FY2009.
- Sampling will begin at Cypress Creek @ the Blanco Confluence and Dry Comal Creek @ Seguin Street in FY2010

# 24 Hour Diurnal Monitoring

- Blanco River @ FM 165 (5x annually)
- Cypress Creek @ Blue Hole Campground (once annually)



# Radiologicals in Water/Sediment

- Coleta Creek at Arnold Road quarterly sampling for the three naturally occurring uranium isotopes  $^{234}\text{U}$  (*uranium II*),  $^{235}\text{U}$  (*actino-uranium*),  $^{238}\text{U}$  (*uranium I*), and Total Uranium will continue in FY10 in order to document baseline conditions.
- To date, the alpha spectroscopy method has detected the  $^{234}\text{U}$  &  $^{238}\text{U}$  isotopes, but total uranium levels have consistently been below the method detection limit.



# Guadalupe River Basin Clean Rivers Program

## **FY 2010 Activities and Deliverables**

### Data Management and Watershed Inventories:

Summarize Water Quality Monitoring Activities  
and Submit to TCEQ with Progress Report

Submit Water Quality Data Files Monthly

Data available on website in Excel or PDF

Update Basin Events Inventory

Submit Report of Outreach and Public  
Participation in Progress Report

# Highlights of Events Inventory

- In July of 2009 the Plum Creek Watershed Protection Plan became the first plan in Texas to be accepted by the EPA.
- In Fall of 2009 the Texas Agrilife Extension Service and Texas State Soil and Water Conservation Board began public meetings to develop a watershed protection plan for the Geronimo/Alligator Creek Watershed
- In Fall of 2009 the Guadalupe County began a Flood Mitigation Study on Geronimo Creek

# Highlights of Events Inventory

- In September of 2009, the GBRA discovered a broken oil field brine line on the Salt Branch of Plum Creek and worked with the Texas Railroad Commission to clean up the associated oil.



# Highlights of Events Inventory

- In the Summer of 2009, invasive *Hydrilla* was discovered on the Guadalupe River below Lake Dunlap. The TPWD surveyed the river and the GBRA and Johnson Lake Management treated the infected areas with Aquathol K and then manually removed all visible vegetation.



# Highlights of Events Inventory

- In order to utilize the hard freeze as a method of controlling invasive Water Hyacinths in the lower two hydro impoundments at Lake Gonzales and Lakewood, GBRA lowered the lakes 18" to expose approximately 50 acres of the nuisance plant to four days of subfreezing temperatures, in December of 2009.



# Guadalupe River Basin Clean Rivers Program

## **FY 2010 Activities and Deliverables**

Data Analysis and Reporting:

Draft Basin Highlights Report

# Guadalupe River Basin Clean Rivers Program

## **FY 2010 Activities and Deliverables**

### Public Participation and Outreach:

Distribute Information through Website

Assist with Training and Supplies for the Texas  
Streams Team (formerly Texas Watch)

# Guadalupe River Basin Clean Rivers Program

## FY 2010 Activities and Deliverables

### Special Studies:

None planned for 2010

# Guadalupe River Basin Clean Rivers Program

## FY 2010 – 2011 Budget

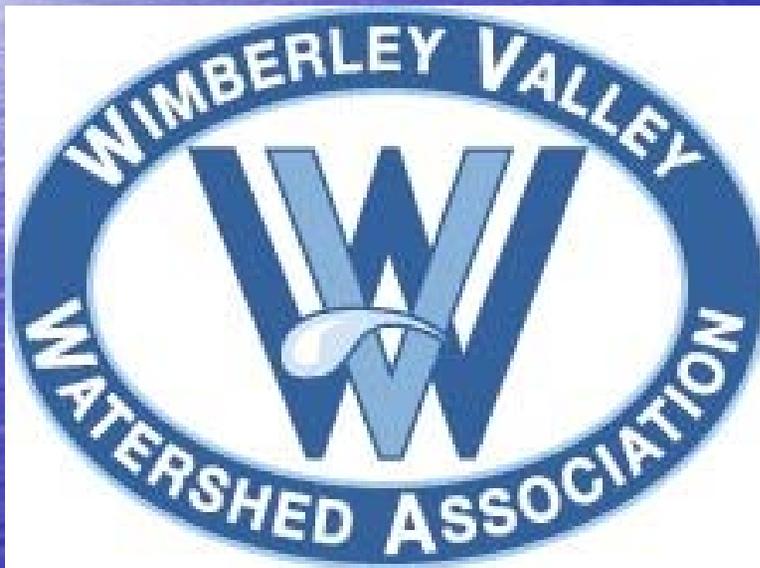
FY2010 (09/01/2009 - 08/31/2010)	FY2011 (09/01/2010 - 08/31/2011)	FY2010-2011 (09/01/2009 – 08/31/2011)
\$160,341.00*	\$143,341.01	\$303,682.00

\* FY2010 Budget includes 3 large equipment purchases: A Beckman Spectrophotometer (\$8000.00), and a digital camera (\$800.00), to be used by the GBRA and a SonTek Acoustic flow meter (\$8220.00), to be used by the UGRA contractual partner.

# Highlights of 2010-11 Work Plan

Continue to work with participants in program

Village of Wimberley



UGRA



# Highlights of 2010-11 Work Plan

Coordinate with other monitoring projects

- TSSWCB Plum Creek Watershed Protection Plan
  - Basin Highlights Report
- Geronimo Creek Watershed Protection Plan
  - Guadalupe River Monitoring Network
- Cypress Creek watershed planning project

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**GBRA**

**Guadalupe-Blanco River Authority**  
*flowing solutions*