



EAST TEXAS

Regional Water Planning Group

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Region I

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DID YOU KNOW ?

- ◆ It takes 3 liters of water to produce 1 liter of plastic bottled water?
- ◆ The average 1 liter bottle of water costs \$0.87? That's equivalent to paying \$3,293.31 per 1,000 gallons of water!
- ◆ 1,000 gallons of water from your faucet costs on average \$2.35. That's over 1,400 times less expensive than the same amount of bottled water! Even with the added cost of a filter, water from the faucet is much less expensive than buying bottled water from the store.

UPCOMING EVENTS

- ◆ East Texas (Region I) Regional Water Planning Group Meeting will be held at 10am on October 14, 2009, at the Nacogdoches Recreation Center in Nacogdoches.
- ◆ Water for Texas forum hosted by Senator Averitt, Representative Ritter, and the Texas Water Foundation will be held on November 16 and 17, 2009, at the Omni Hotel in Ft. Worth. More information is available at www.texaswater.org/waterfortexas.
- ◆ The River Systems Institute will hold their "Land, Water, People" conference at the San Marcos Convention Center on November 16 through 18, 2009. More information is available at www.rivers.txstate.edu/projects/conferences/Land-Water-People-09.html

EAST TEXAS REGIONAL WATER PLAN UPDATE

The Regional Water Planning Group will convene in October to discuss updates to Chapters 4, 5 and 6 of the 2011 East Texas Regional Water Plan. The consulting team has been preparing these three chapters since July and will present them at the next meeting.

Chapter 4 identifies water needs based on changed conditions in demand or supply as described in Chapter 2. Chapter 4 also updates recommended water management strategies and cost estimates for each strategy.

The consulting team has also been preparing Chapter 5. This chapter assesses water quality impacts of the water management strategies outlined in Chapter 4. The chapter includes an analysis of moving water from agricultural areas to urban areas.

Chapter 6 consolidates water conservation recommendations and reviews water conservation and drought contingency strategies employed by water users in Region I. The chapter incorporates water use findings from a water conservation study prepared by Region I last year and suggests strategies for water conservation.

The next meeting will be held on October 14, 2009, at 10am at the Nacogdoches Recreation Center, located at 1112 North Street in Nacogdoches. A detailed agenda will be available on the region's website etexwaterplan.org prior to the October meeting. For more information, contact Lila Fuller, City of Nacogdoches, at (936) 559-2504 or lfuller@ci.nacogdoches.tx.us.

SCIENCE ADVISORY GROUP WEIGHS ISSUES OF ENVIRONMENTAL FLOWS

Environmental flows include river flows that are necessary to support an ecologically sound environment. Senate Bill 3, passed in 2007, called for the development of stakeholder groups for various river basins in the state to consider development of recommendations for environmental flows. A stakeholder's group for the Sabine and Neches Rivers and Sabine Lake Estuary was appointed in the summer of 2008. The group is comprised of a wide range of stakeholders, including Region I Regional Water Planning Group members Kelley Holcomb and Jerry Clark. Mr. Clark serves as the stakeholder group's chairman.

The Sabine and Neches Rivers and Sabine Lake Bay Basin and Bay Expert Science Team (SNB-BEST) is a science advisory group appointed by the stakeholders group in November 2008 to consider recommendations for environmental flows for the Sabine and Neches Rivers and for Sabine Lake Estuary. The SNBBEST has been working diligently toward a goal of making such recommendations since that time.

The SNBBEST includes hydrologists, engineers, aquatic biologists, and other scientists. The East Texas Regional Water Planning Group is well represented on this committee, including planning group member Scott Hall and consultant team members Gary Graham and Rex Hunt.

The SNBBEST is currently evaluating flow data at selected locations in the Neches and Sabine Rivers. Hydrologic analyses of flow data along with biological and water quality data will be used to develop appropriate flow scenarios throughout the year that will be adequate to support sound ecological environments in the basins and in Sabine Lake estuary. Over the next two months, a report will emerge providing recommendations for environmental flows to be presented to the stakeholder's group for consideration.

This is not an easy task. Despite extensive daily flow data throughout both river basins, biological, sediment transport, and water quality data are more limited at this time. Specific recommendations will need to consider the limitations of data. The recommendations may include further studies to obtain additional data to refine recommendations in the future.

Preliminary results of the SNBBEST's work might be incorporated into the 2011 Region I planning update, which is underway at this time. Final recommendations by the stakeholders may be incorporated into future water planning.

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ZEBRA MUSSELS SPREADING IN TEXAS: INVASIVE THREAT BELIEVED TO BE ENTERING TRINITY RIVER VIA LAKE LAVON

By Tom Harvey, TPWD

Invasive zebra mussels have been confirmed to have spread from Lake Texoma into the head waters of Lake Lavon, and experts fear they could eventually spread throughout the Red River and Trinity River watersheds.

Zebra mussels multiply rapidly and can block water treatment plant intakes and pipes as well as attach themselves to boats, ropes or anything else left in the water. They can cause declines in fish populations, native mussels and birds. They can also restrict water flow in pipes, foul swimming beaches, damage boat engine cooling systems and cause navigation buoys to sink. The financial cost of controlling and removing zebra mussels from fouled water intake structures can be significant.

Since 2006, there have been five documented cases of zebra mussels being found on boats at Lake Texoma that were trailered in from other states. All five boats were quarantined and cleaned of all mussels prior to being allowed to launch into Lake Texoma. However, April 3 of this year marked the first time that an adult zebra mussel was documented as living in Texas waters. Since that time, additional live specimens have been reported in Lake Texoma and are now believed to be well-established.

According to the online National Atlas of the United States, "Once zebra mussels become established in a water body, they are impossible to eradicate with the technology currently available. The cost of dealing with zebra mussels varies widely, [but] for many plants, costs average hundreds of thousands of dollars a year."

Zebra mussels originated in the Balkans, Poland, and the former Soviet Union and were first introduced in North America in 1988 in Lake St. Clair, a small water body connecting Lakes Huron and Erie.

Boaters and anglers can help slow the spread of zebra mussels from one water body to another by practicing the following steps when leaving any water suspected of having zebra mussels.

- Drain all water from the boat, such as the engine, bilge, livewells and bait buckets before leaving the lake.
- Inspect the boat and trailer and remove any zebra mussels, vegetation or foreign objects that are found.
- Wash your boat and trailer at a commercial carwash using high pressure and hot (140-degree) soapy water. Hot water will kill zebra mussel larvae.
- Open all compartments and livewells and allow the boat and trailer to dry for a week before entering another water body. Boaters and anglers can also help by reporting sightings of suspected zebra mussels to the Operation Game Thief toll-free hotline at (800) 792-4263.

This August news release is republished in-part with permission from the Texas Parks and Wildlife Department.

EL NIÑO AND IMPACTS IN TEXAS IN 2009-2010

Scientists at the National Oceanic and Atmospheric Administration announced in July the arrival of El Niño, a climate phenomenon causing global influences on weather, oceanic conditions and marine fisheries.

El Niño occurs every two to five years and is characterized by the warming of central and eastern tropical Pacific waters. The warming of these waters can cause some parts of the globe to be inundated with water, while turning other areas into deserts.

Scientists are predicting strengthening of El Niño in the upcoming months, becoming most intense from December through March.

For Texans, this means more rain and cooler than normal temperatures could be headed in their direction during Winter of 2009-2010. Historically, precipitation totals average from 130% to 160% of normal. In south Texas, precipitation amounts could be almost two times the normal rainfall amount. In east Texas, rainfall totals are typically 115% of normal. East Texas could see 1-3 inches more rain from December through March. Colder temperatures usually accompany El Niño events. East Texas could see average temperatures decrease by 1 to 3 degrees Fahrenheit.