Status of Environmental Projects in the Guadalupe River Basin - 2010

Debbie Magin
Director of Water Quality Services

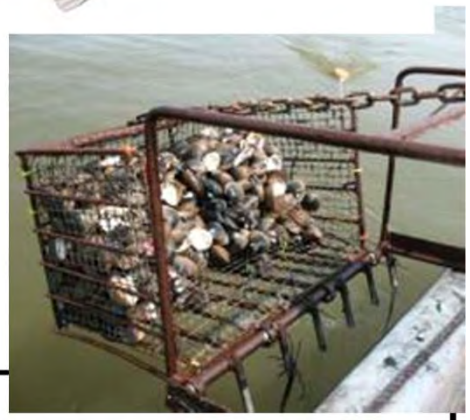
Environmental Flows Process

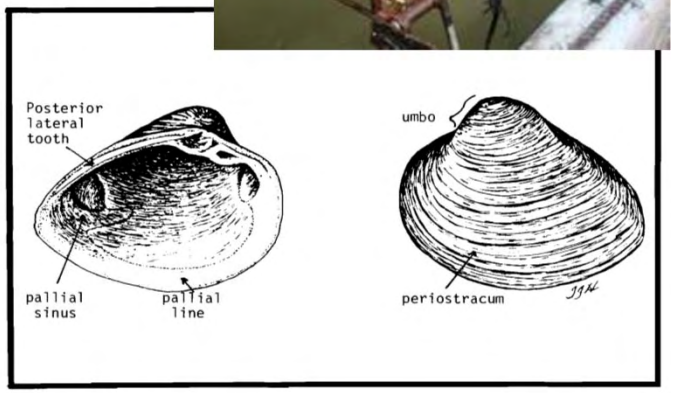
Environmental Flow Process

- SB3 - establish flow recommendations that balance protection of the environment with human needs
- BBASC – Steering Committee
- BBEST – Science Team
- BBEST has given flow regime recommendations to BBASC

Environmental Flow Process

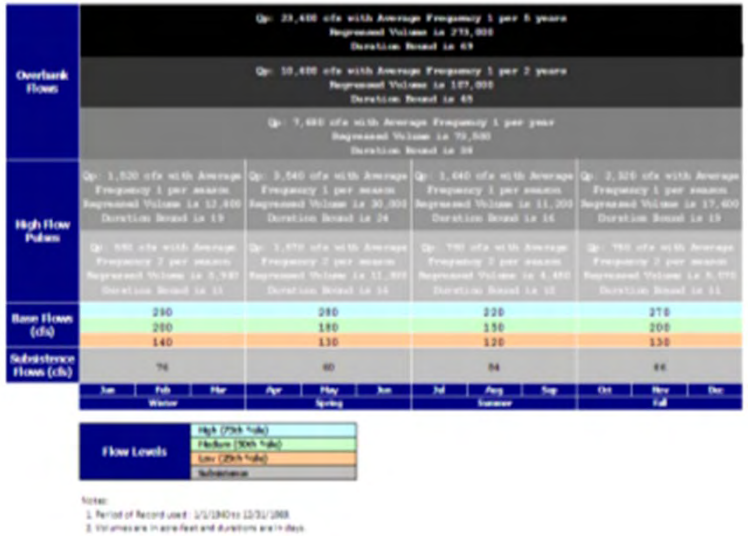
- Looks at both instream needs and inflow to bays and estuaries
- Stakeholders are considering the recommendations and looking at how implementation would work
- Recommendations due to the state in August 2011
- If recommendations are accepted, TCEQ will write rules that implement the flow regime





Environmental Flow Process

- Science Team based recommendations on **historical flows**
- Determined that there is **a sound ecological environment now**
- Recommendations will only **impact future diversions**
- Recommendations include flows at **3 base conditions, required pulses, overbank flows** to protect riparian areas, and **subsistence flows**
- Recommendations are at **16 gaged locations** in two watersheds



www.tceq.texas.gov/permitting/water_supply/water_rights/eflows

Edwards Aquifer Recovery Implementation Program (RIP)

Edwards Aquifer Recovery Implementation Program (RIP)

Established by SB3

Collaborative Effort

Due to State by 2012

Develop Habitat Conservation Plan and Incidental Take Permit

EARIP has tentatively agreed to

- A 15-year, two phase incidental take permit under the Endangered Species Act

San Marcos Gambusia

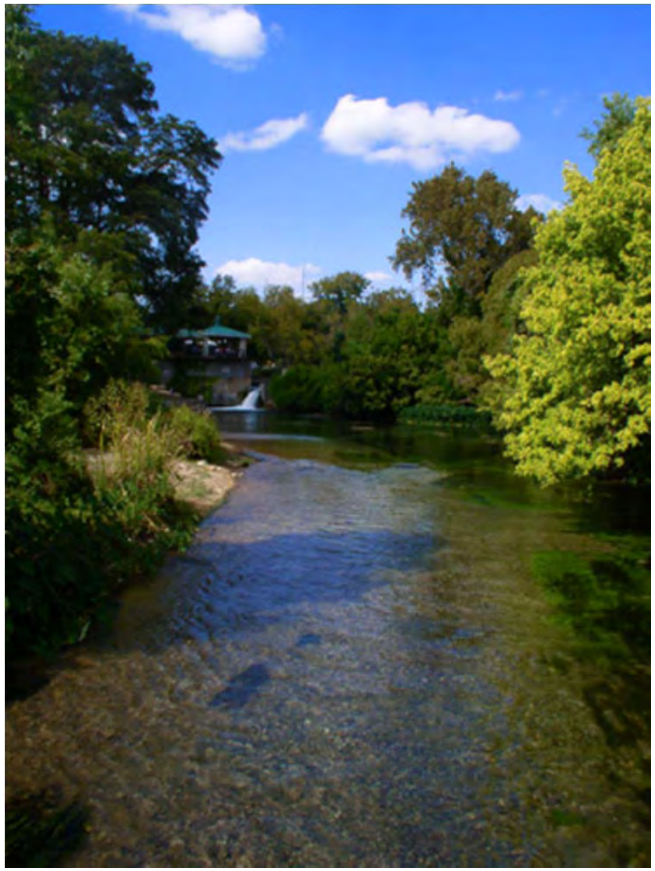
Fountain Darter

EARIP has tentatively agreed to

- No less than **30 cfs** daily average flow from Comal Springs during the repeat of the drought of record

EARIP has tentatively agreed to

- No less than **45 cfs** at the San Marcos Springs during the drought of record



EARIP has tentatively agreed to

- A bottom-up package of conservation measures, habitat restoration and mitigation
- Phase 1 (7 years)–
  - Effectiveness will be evaluated
  - Long-term biological requirements evaluated
  - The need for additional measures and water supplies

EARIP has tentatively agreed to

- Funding for management measures
  - $40 million for Year 1
  - $30 million for Years 2-14
  - More if additional measures or water supplies needed

- Regional Sales Tax proposed

http://earip.org/

USGS Coleto Creek Gain\Loss Survey

Coleto Creek Gain/Loss Survey

USGS study funded by Goliad County GW and others

Summer 2009

Collected both ground and surface water

Enhance understanding of hydrology

Will support management decisions to protect water resources

Coleto Creek Gain/Loss Survey

Data collection has been completed

Report is in draft form

Will include presentation at next year's CRP meeting

TCEQ Study of Methods for Disposing of Unused Pharmaceuticals

Disposal of Pharmaceuticals

- **SB 1757 required that TCEQ study and recommend methods of disposing of unused pharmaceuticals so that they don't enter the wastewater system**

Disposal of Pharmaceuticals

- **Most pharmaceuticals introduced to environment in raw or treated wastewater or land application**
- **Conventional wastewater treatment technologies do not remove all compounds completely**

Disposal of Pharmaceuticals

- **Get into wastewater by:**
  - **Excretion (majority)**
  - **Disposed intentionally**

Disposal of Pharmaceuticals

- **Sources:**
  - **Hospitals**
  - **Nursing homes, assisted living, hospice**
  - **Pharmacies**
  - **Veterinarians**
  - **Reverse distributors (take back unsalable, unused, unwanted)**
  - **Consumers**

Disposal of Pharmaceuticals

- Biohazard boxes and managed as medical waste
- Long-term storage
- Down the drain
- Incineration
- Take back – redistribute (veterinarians)
- Landfill
- Rendered undesirable -> Landfill
- Other areas – collection events, continuous collection, mail back programs

TCEQ Recommended Approaches

- **Goal:**
  - **Reduce amount that enters wastewater system**
  - **Raise awareness of potential impacts of improper disposal**

TCEQ Recommended Approaches

- Render drugs undesirable before disposal in municipal trash
- Support single-day collection events
- Voluntary use of take-back programs
- Educate consumers on impacts

www.tceq.texas.gov/assets/public/comm_exec/pubs/sfr/098.pdf