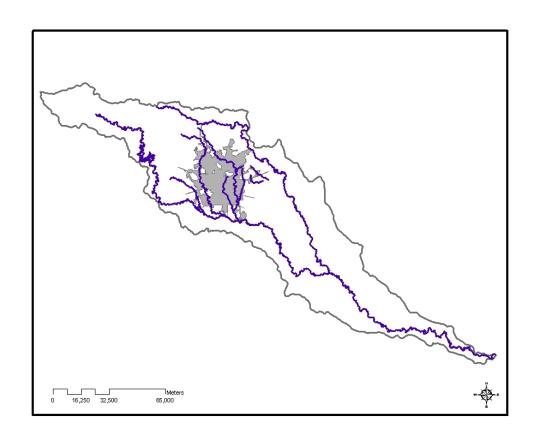
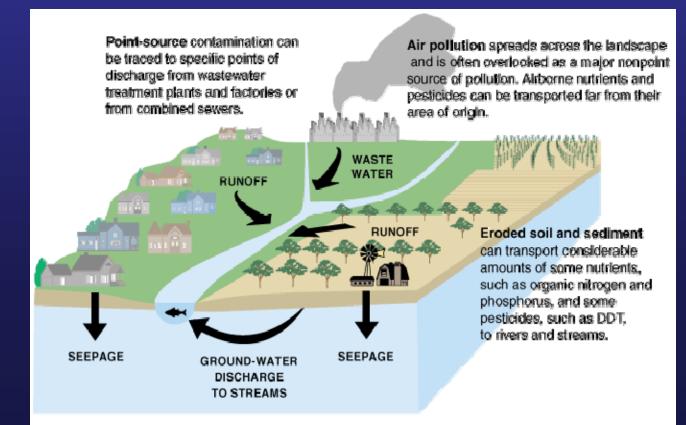
Water Quality in the San Antonio Basin Dakus Geeslin Texas Commission on Environmental Quality





What is Water Quality?

- Physical, chemical, and biological characteristics of water in relation to a set of standards
- Aquatic Life Use, Contact Recreation, Public Water Supply, Fish Consumption



Standards Criteria

		Uses		Criteria						
Segment No.	Segment Name	Recreation	Aquatic Life Use	Cl ⁻¹ (mg/L)	SO ₄ ⁻² (mg/L)		DO (mg/L)	рН (SU)	indicator bac #/100ml	Temp
1901	Lower San Antonio River	Contact Recreation	High	180	140	750	5	6.5-9.0	126/200	90 F
1911	Upper San Antonio River	Contact Recreation	High	150	150	750	5	6.5-9.0	126/200	90 F

Concerns

Portions of San Antonio River, Cibolo Creek, and Salado Creek, have elevated E. Coli levels



Bacteria

Concerns



Nutrients

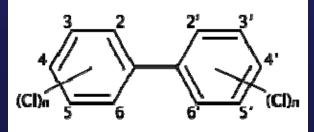
San Antonio River, Cibolo Creek, Lower Medina River, Salado Creek, And Lower Leon Creek



CONCERNS PCBs in Lower Leon Creek

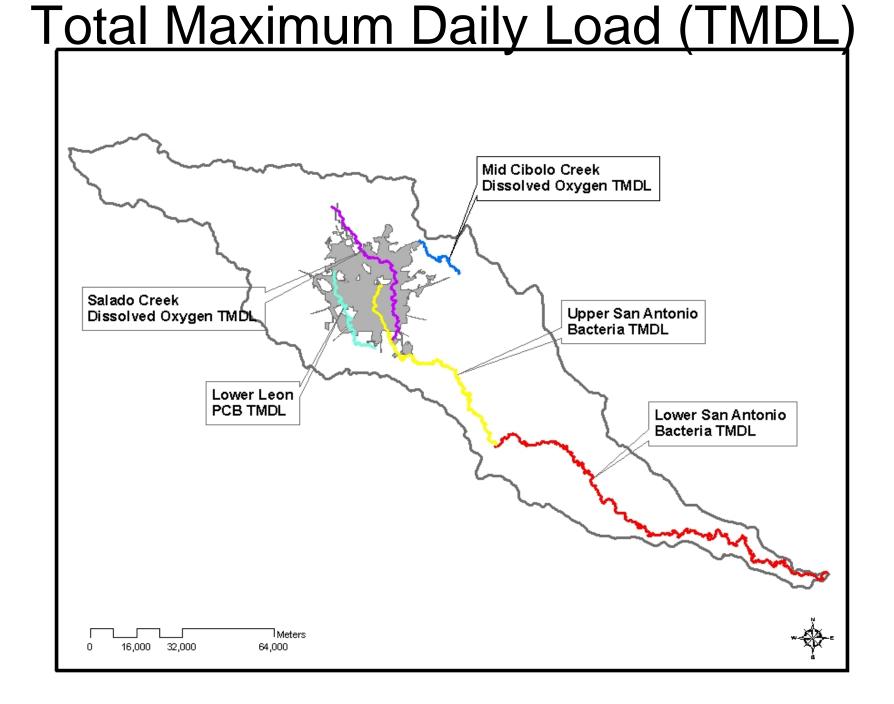
Person's should not consume any species of fish from Leon Creek starting at the Texas Hwy 90 Bridge downstream to Military Drive - TDSHS





•PCBs were used as coolants and lubricating fluids or for transformers and capacitors, stabilizing additives in flexible PVC coatings of electrical wiring and electronic components, pesticide extenders, cutting oils, flame retardants, hydraulic fluids, sealants.

•PCB production was banned in the 1970s due to the high toxicity of most PCB congeners and mixtures. PCBs are classified as persistent organic Pollutants which bioaccumulate in animals.



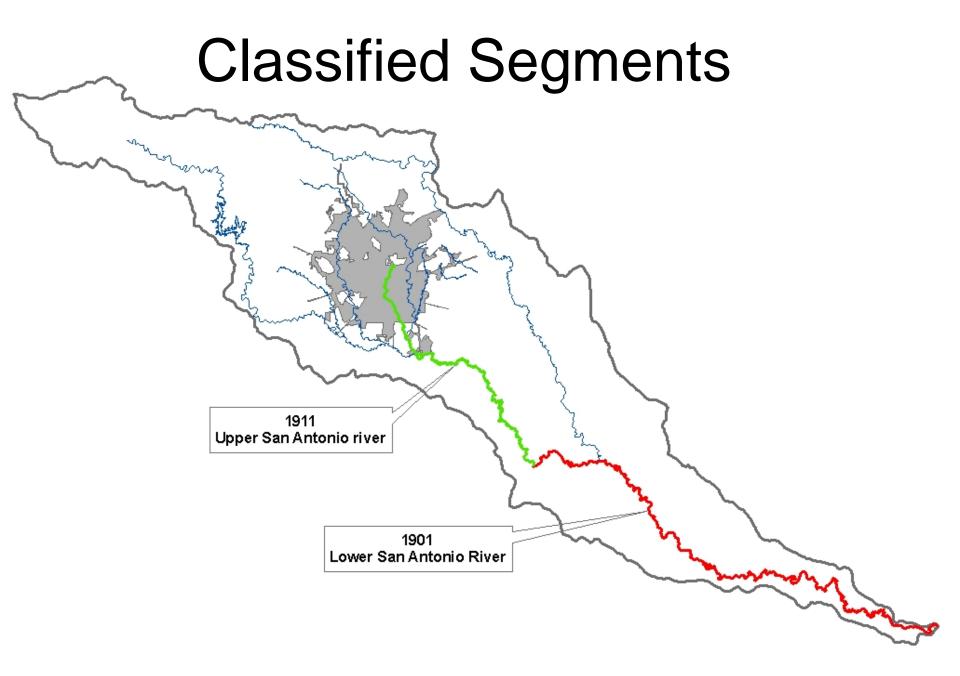
TMDL Implementation

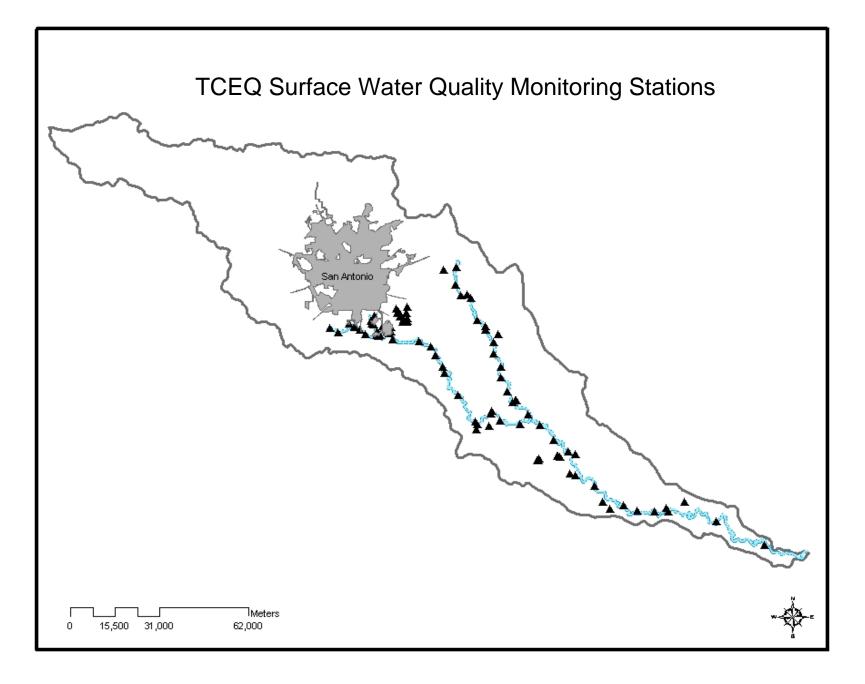
• Adjustment of effluent limitation in permits

Schedule of elimination of pollutant

Identification of nonpoint sources

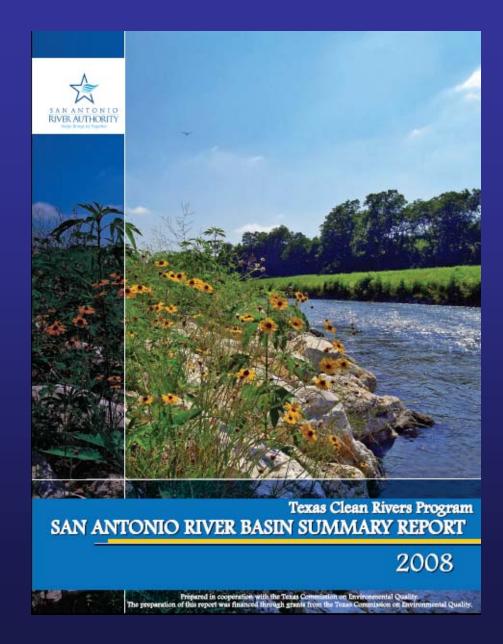
Modification to a storm water program





Clean Rivers Program

- The Texas Clean Rivers Program incorporates water quality monitoring, assessment, and public outreach.
- The program is a collaboration of 15 partner agencies (ex. SARA, BRA, etc.) and the TCEQ.
- The CRP works as a hub for participating collaborators to provide data as well as coordinated watershed protection.



Goal and Objectives

- The goal for the Lower San Antonio River system is a naturally functioning and sustainable ecosystem that supports a balance of ecological benefits and economic, recreational and educational uses.
- Maintain flow in order to sustain water quality to support:
 - Biodiversity,
 - Economic uses, and
 - Recreational uses

Web Resources

Water Quality Standards http://www.tceq.state.tx.us/nav/eq/eq_swqs.html

TMDL http://www.tceq.state.tx.us/implementation/water/tmdl/index.html

Leon River PCB TMDL http://www.tceq.state.tx.us/implementation/water/tmdl/73-leoncreekpcbs.html

Clean Rivers Program http://www.tceq.state.tx.us/nav/eq/texcleanriver.html

SARA Basin Report http://www.saratx.org/site/water_quality/water_qual_mon/clean_rivers/Basin_Reports/2008/ 2008SummaryReport.pdf