



# Bacteria Reduction Plan

## Year Two Update

### Project Background and History

UGRA has been working with the Texas Commission on Environmental Quality (TCEQ) to address an area of the Guadalupe River that was identified as impaired due to elevated bacteria levels. Specifically, the area of concern is from the confluence of Town Creek through Flat Rock Lake in Kerrville.

In 2011, UGRA received federal Clean Water Act §319 funding from TCEQ to put surface water bacteria reduction strategies in place with the assistance of the City of Kerrville, TXDOT, and Kerr County.

The strategies address the primary sources of bacteria pollution that have been identified in this section of the Guadalupe River including birds nesting on the SH 16 Bridge, large flocks of domestic waterfowl congregating in the lakes, pet waste, malfunctioning septic systems, and pollution from general urban runoff.

The ultimate goal of the project is to reduce the bacteria levels in the Guadalupe River to a concentration that supports water quality standards for contact recreation.

### Year Two Activities

- Bird deterrent netting was installed on three sections of the SH16 bridge in Kerrville.



- 24 surveys were conducted to monitor the presence of waterfowl, other wildlife, and recreation in the impaired reach. The number of waterfowl increased during year two.
- 14 water quality monitoring events were conducted (148 bacteria samples collected).
- Numerous unplanned, but necessary administrative tasks were completed. Although this required some project activities to be rescheduled to year three, all implementation measures will still be addressed during the project term.

## Plans for Year Three

- Continue water quality monitoring, surveys, street sweeping, clean ups, educational presentations, and use of interactive kiosk.
- Develop and execute waterfowl management plan.
- Develop and distribute OSSF education materials.
- Develop public service announcements.
- Update water quality model in order to evaluate effectiveness of implementation measures.
- Compile project summary report.

## Year Two Activities (con't)

- City of Kerrville invested over \$7 million in improvements to the wastewater collection system.
- Twelve pet waste stations continue to be maintained by the City of Kerrville and Kerr County. Ten additional pet waste stations were purchased. 1,032 pounds of pet waste was collected at the Flat Rock Park stations.
- An Interactive kiosk featuring a non point source pollution education program was put into use in the community.



- Numerous presentations were conducted highlighting non point source pollution and watershed stewardship.



- UGRA Annual River Clean Up removed 6,830 pounds of trash with 337 participants.
- UGRA River Crossing Clean Up Program removed 18,065 pounds of trash.
- Two local groups continued additional routine clean ups.
- City of Kerrville conducted 322 hours of street sweeping.