

**water quality program**   
FOR LAKE GRANBURY, TEXAS



**water quality program**   
FOR LAKE GRANBURY, TEXAS

## Water Quality Education

In cooperation with the TCEQ/BRA  
Watershed Protection Plan Development Project



# water quality program

FOR LAKE GRANBURY, TEXAS

## OBJECTIVES

- Develop a water quality education program to help reduce nonpoint sources of pollution
- Provide information to the public: mass media
- Hold public meetings to educate stakeholders about water quality and its protection
- Provide public educational programs to help achieve improved water quality
- Conduct training events on proper operation and maintenance of on-site wastewater treatment systems and collective facilities

# water quality program

FOR LAKE GRANBURY, TEXAS

## OUTCOMES

Develop a water quality education program to help reduce non-point sources of pollution

- Produced a series of water quality fact sheets
  - Agricultural best management practices
  - Bacteria and nutrients
  - Golden algae
  - Non-point source pollution
  - Urban best management practices
  - Urban stormwater
  - Watersheds

# water quality program

FOR LAKE GRANBURY, TEXAS

## OUTCOMES

Develop a water quality education program to help reduce non-point sources of pollution

- Produced a series of on-site wastewater publications
  - Alternative collection systems
  - Soil particle analysis procedures
  - Septic tank/soil absorption field
  - Aerobic treatment units
  - Spray distribution systems
  - Liquid/tablet chlorination
  - Operation and maintenance

# water quality program

FOR LAKE GRANBURY, TEXAS

## OUTCOMES

Provide information to the public: mass media

- Working with the Hood County Extension Agent, prepared radio news pieces on the following
  - Non-point sources of pollution
  - Bacterial impairment in the lake
  - Septic system health and maintenance
  - Water quality information
- Working with the North Central Texas Council of Government, developed a PSA on pet waste management

# water quality program

FOR LAKE GRANBURY, TEXAS

## OUTCOMES

Hold public meetings to educate stakeholders about water quality and its protection

- Presented information at Lake Granbury stakeholder meetings
  - Water quality standards
  - Overview of on-site wastewater treatment systems
  - Operation and maintenance of on-site wwts
  - Regional wastewater systems
- Made a presentation at the Oak Trail Shores HOA – March 2007
  - Bacterial contamination in coves
  - Sources of bacteria
  - Septic system maintenance and preventative measures

# water quality program

FOR LAKE GRANBURY, TEXAS

## OUTCOMES

Provide public educational programs to help achieve improved water quality goals

- Small acreage landowner land management program, April 2007, 66 participants
  - Non-point sources of pollution
  - On-site wastewater treatment systems maintenance
- Rainwater harvesting training – July 2007, 40 participants
  - Water quality and quantity issues
  - Impacts of stormwater to water quality
  - Non-point sources of pollution and control measures
- Groundwater management areas – July 2007, 52 participants
  - Non-point sources of pollution and control measures

# water quality program

FOR LAKE GRANBURY, TEXAS

## OUTCOMES

Conduct training events on proper operation and maintenance of on-site wastewater treatment systems and collection facilities

- Septic system installers training – July 2007, 11 installers
  - Overview of new technologies
  - State rules and regulations
  - Preventative maintenance of systems and correct instillation

# water quality program

FOR LAKE GRANBURY, TEXAS

## Future Work

Educational program resources

- Develop fact sheets on the following:
  - Fecal coliform contamination and sources
  - Best management practices to minimize bacterial loadings
  - Nutrient loading and its consequences

Educational programs

- Continue educational programs:
  - Presentations to HOA
  - Hood County Extension programs

**water quality program**   
FOR LAKE GRANBURY, TEXAS

**Additional Work**

Conducted an evaluation and dye study of septic systems in the Oak Trail Shores subdivision

- Six homeowners allowed us access to their homes and systems to conduct the dye test
- Developing a model to determine the potential loading of bacteria from on-site wastewater treatment systems
- Collected soil cores to conduct nutrient analysis
- Worked with a contractor to replace a cracked lid

**water quality program**   
FOR LAKE GRANBURY, TEXAS

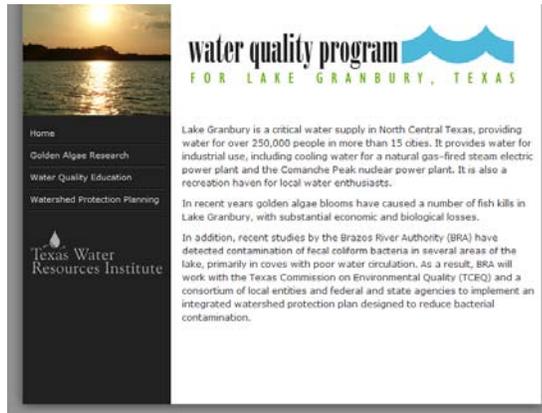
Project Web site

<http://lakegranbury.tamu.edu>

# water quality program



## FOR LAKE GRANBURY, TEXAS



The thumbnail shows a website layout with a navigation menu on the left and a main content area on the right. The navigation menu includes: Home, Golden Algae Research, Water Quality Education, Watershed Protection Planning, and the Texas Water Resources Institute logo. The main content area features the program title and introductory text about Lake Granbury's importance and the challenges of golden algae blooms.

# water quality program



## FOR LAKE GRANBURY, TEXAS

### REPORTS AND PUBLICATIONS

#### Water Quality Education Fact Sheets

- [Agricultural BMP](#)
- [Bacteria and Nutrients](#)
- [Golden Algae](#)
- [Groundwater](#)
- [In Home Water Conservation](#)
- [Pollution](#)
- [Rainwater Harvesting](#)
- [Urban BMP](#)
- [Urban Stormwater](#)
- [Water Conscious Landscapes](#)
- [Water Testing](#)
- [Watersheds](#)

#### On-Site Wastewater Publications

- [B-6077: Selecting and permitting](#)
- [B-6098: Alternative collection systems](#)
- [B-6171: Homeowner's guide to evaluating service contracts](#)
- [B-6175: Soil particle analysis procedure](#)
- [B-6176: Graywater](#)
- [L-5227: Septic tank/soil absorption field](#)
- [L-5228: Evapotranspiration bed](#)
- [L-5235: Low-pressure dosing](#)
- [L-5237: Subsurface drip distribution](#)
- [L-5302: Aerobic treatment unit](#)
- [L-5303: Spray distribution system](#)
- [L-5344: Tablet chlorination](#)
- [L-5347: Operation and maintenance](#)
- [L-5414: Mound System](#)
- [L-5460: Liquid chlorination](#)

# water quality program

FOR LAKE GRANBURY, TEXAS



  
Texas Water  
Resources Institute  
*make every drop count*

  
AgriLIFE RESEARCH  
& EXTENSION  
Texas A&M System