

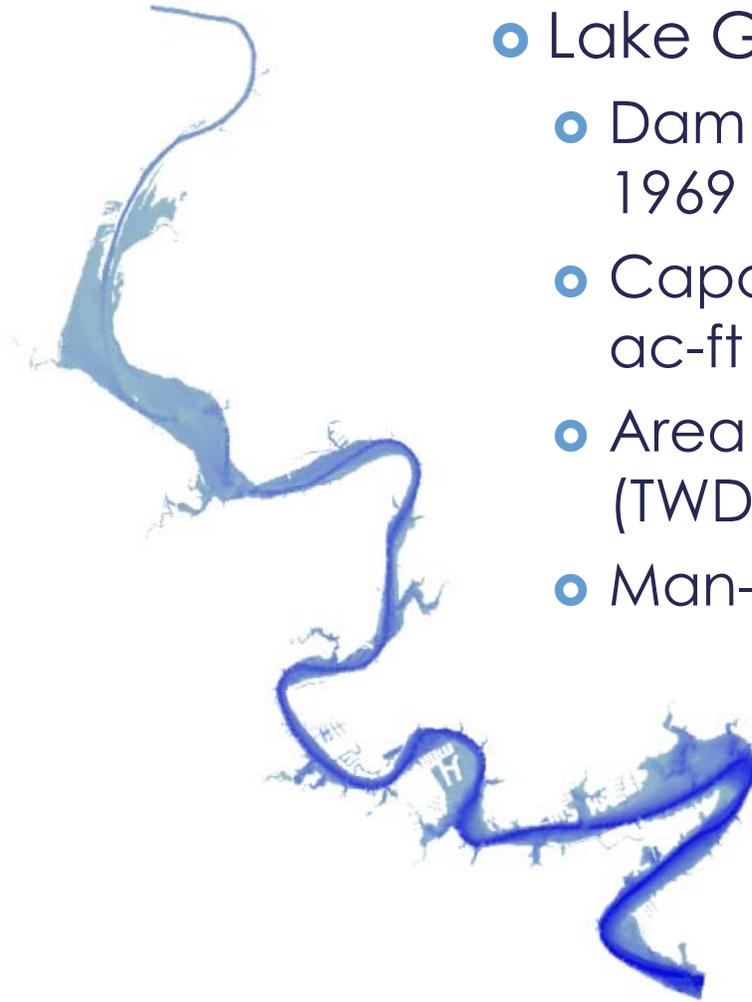
5/14/2012

# Lake Granbury Watershed Protection Plan Implementation

Jody Cason - Texas Agrilife Extension Service



# Lake Background



- Lake Granbury
  - Dam completed in 1969
  - Capacity - 129,011 ac-ft (TWDB, 2003)
  - Area – 7,945 acres (TWDB, 2003)
  - Man-made canals

# Hood County Background

- Population
  - 2010 = 51,182
  - Proj. 2030 ≈ 100,000
- 74% of subdivisions within 2 miles of lake built before 1989
- 86% of subdivisions within 2 miles of lake rely on septic systems
- About 9,000 septic systems around lake

Category	Population
Humans	47,627
Dogs	3,489
Cats	3,491
Cattle	30,059
Horses	1,889
Swine	123
Goats	4,000
Sheep/Lambs	606
Chickens	1,386
Domestic Ducks/Geese	119
Domestic turkey	138
Emus	28

# Water Quality History

- 1993 - Cooperative study between the Texas Water Commission, the Brazos River Authority (BRA) and the Hood County Health Unit
  - Identified fecal coliform as a problem in canals.
- 1995 - *Survey of Conditions and Impact of Septic Tank Pollution on the Water Quality in Lake Granbury*
  - Soils around lake are generally not well-suited for septic tanks/absorption fields.
- 2002 - Large-scale monitoring program conducted in canals by BRA
  - Indicates higher levels of bacteria than main body of lake and levels above state criteria.

# Watershed Protection Plan

- First stakeholders meeting - Mar. 2006
- EPA Approval - April 2011

## Lake Granbury Watershed Protection Plan

**Prepared for:**

U.S. Environmental Protection Agency  
Texas Commission on Environmental Quality

**Developed by:**

The Lake Granbury Watershed Protection Plan Stakeholders Committee

**Prepared By:**



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July 7, 2010

# Lake Granbury WPP

- Parameter of concern  
– E. coli
- Stakeholder numeric goal: geo. mean of 53 MPN/100mL

Area	% E. coli Reductions
Port Ridglea East	27
Oak Trail Shores	24
Sky Harbor	16
Indian Harbor	24
Walnut Creek	57
Long Creek	66
Strouds Creek	49
Rucker Creek	47
Robinson Creek	30

# Sources of Bacteria Pollution for Lake Granbury

- Failing Septic Tanks
  - Over 9,000 septic tanks around Lake Granbury
  - Much of the soil is unsuitable for absorption fields
  - Undersized lots
- Pet Waste
- Livestock
- Other Animals – ducks, geese, feral hogs, deer, etc.

# Priority Management Measures

- Watershed coordinator
- Regional wastewater collection and treatment
- Pursue funding for management measures
- Community education and outreach
- Support record keeping activities to assist Hood County Health Department
- Support development of HOA rules that require consultation with Hood County Health Dept.
- Improve Cove circulation

# Regional WW Collection

- High Priority Areas - Top 3
  - Oak Trail Shores and Sky Harbor - existing near-by infrastructure.
  - Port Ridglea East - Acton Municipal Utility District has secured 2 Community Development Block Grants through the TX Office of Rural Affairs to bring wastewater collection system

# Education and Outreach

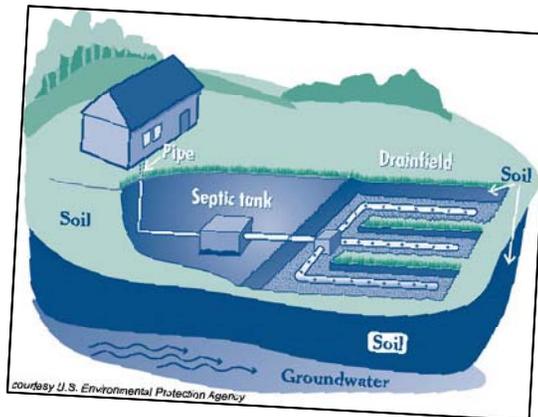
- Outreach events
  - Schools
  - Civic organizations
  - Workshops
- Newsletter
- Articles in local newspaper
- Public Service Announcements on local radio
- Website – <http://lakegranburywatershed.org>

# Message

- Define the value of water quality
  - Property values
  - Tax revenue from tourism
- Define the problem
  - Bacteria contamination
- Define solutions
  - Enhanced infrastructure
  - Improved stormwater management
- Define what people can do

# Topics

- Septic tank maintenance
- Pick up after your pet
- Don't feed the ducks
- Rain barrel/Rain garden



# You Can't Swim in a Plan

- The plan only defines a strategy and identifies opportunities for participation of stakeholders
- It does not guarantee participation
- Keeping the stakeholders engaged is essential for implementation

5/14/2012

# Questions?

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