

Lake Conroe Watershed Protection Plan Stakeholder Group Meeting



March 28, 2014

San Jacinto River
Authority

AGENDA for Today's Meeting

- Introduction
- Watershed Protection 101
- Example Program Elements
- Stakeholder Involvement
- Discussions

The Big Picture

- Lake Conroe's Use is Expanding...
- Area growth has more people using Lake Conroe for recreational purposes than ever before
- Beginning in 2015 the use of Lake Conroe will include its original purpose of a water supply
- **BIG PICTURE** - Our Water Quality is Good – Let's Keep it that way!



Overall Objectives

- To maintain or improve the quality of Lake Conroe's water
 - i.e. remain unimpaired
- To provide source-water protection for the GRP
- To provide area stakeholders an opportunity for input into what is ultimately accomplished

SJRA Team

- * Randy Acreman, Lake Conroe Water Quality Manager
- * Jace Houston, General Manager
- * Ron Kelling, Deputy General Manager
- * Davies Mtundu, Technical Services Support
- * David Parkhill, Director Raw Water Enterprise
- * Bret Raley, Lake Conroe Division Manager
- * Michelle Simpson, Public Relations Specialist
- * Shane Simpson, Lake Conroe Water Quality Specialist
- * Mark Smith, GRP Division Manager
- * Ronda Trow, Public Relations Manager

Identified Stakeholder Categories

- **Recreational:** angling, boating, swimming, skiing
- **Environmental:** TPWD, USFS
- **Residential:** property owners, real estate interests
- **MUDS/WWTP's:** utility districts and wastewater treatment plants
- **Civic/Governmental:** City of Conroe, City of Huntsville, Montgomery County, Walker County
- **Law Enforcement:** Montgomery County Constables
- **Commercial/Business:** marinas, real estate companies, chamber of commerce

Stakeholder Volunteers

<u>Name</u>	<u>Affiliation</u>
Terry Bowie	President, Lake Conroe Communities Network
Timothy Cade	Lieutenant, Montgomery County Precinct-1 Constables
Peter Czerwinski	Resident, Walden on Lake Conroe
Arthur Faiello	Public Works Director, City of Willis
Ron Gunter	President, Seven Coves Bass Club
Scott Harper	President, Greater Conroe/Lake Conroe Area Chamber of Commerce
Jim Haymon	President, Far Hills Utility District
Andy Isbell	Director of Planning and Development, Walker County

Stakeholder Volunteers Cont.

<u>Name</u>	<u>Affiliation</u>
Tyler Jacobs	Land Broker/Ranch Owner, Jacobs Properties
Vernon Miller	Owner, Shoreline Services
Scott Nichols	D.R., Montgomery County Environmental Health Services
Warren Oja	District Ranger, Sam Houston National Forest
Carol Reed	Director of Public Works, City of Huntsville
Ben Richardson	Owner, The Palms Marina
Ruth Stultz	Owner/Broker, Ruth Stultz & Co. Realty
Scott Taylor	Director of Public Works, City of Conroe
Mark Webb	District Supervisor, Inland Fisheries, TX Parks and Wildlife Dept.

Role of Stakeholder Group

- Provide guidance and input to SJRA
- Act as a sounding board
- Bring a unique perspective

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Watershed Protection 101

Shane Simpson

What is a Watershed?

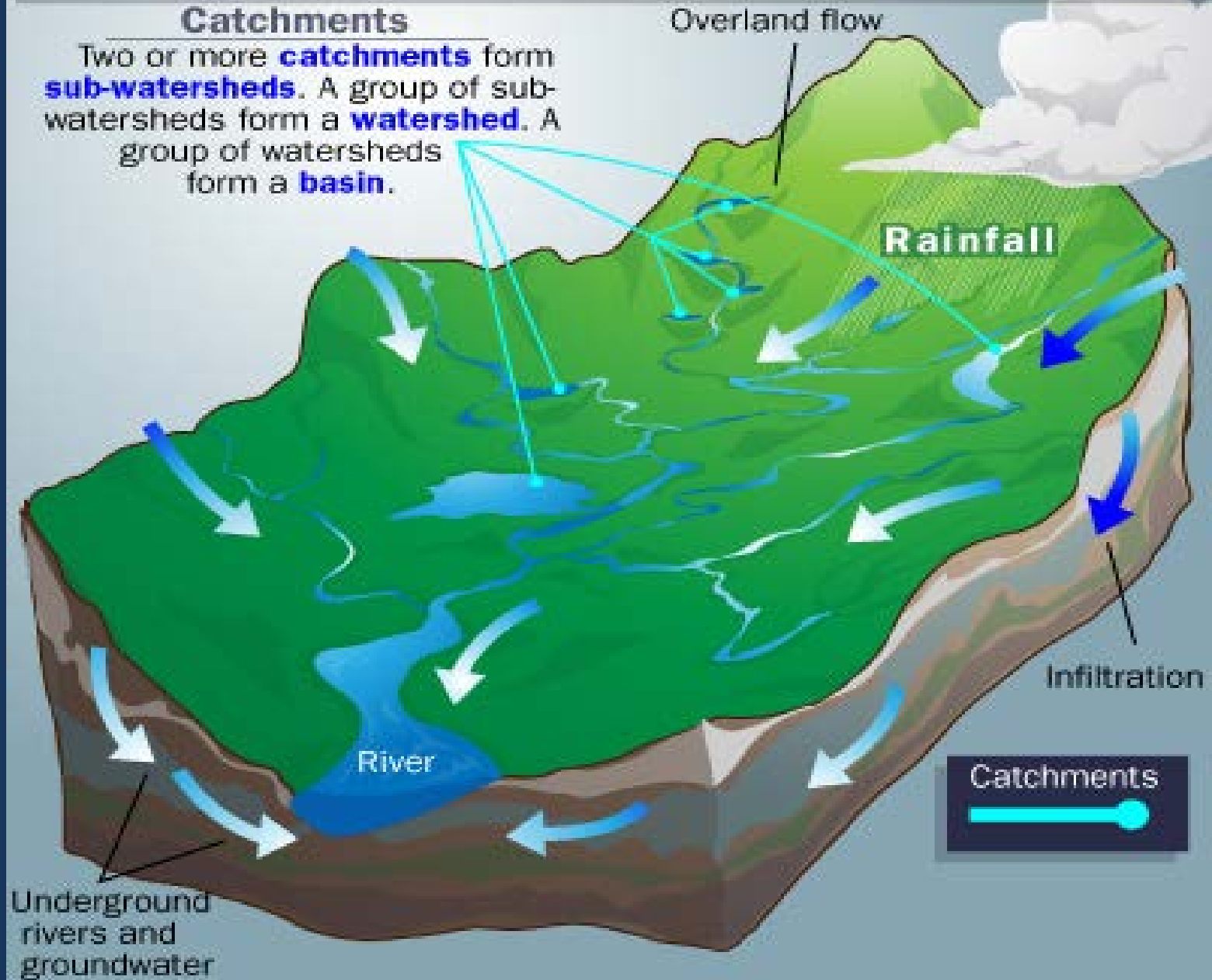
- The land that water flows across or through on its way to a common stream, river, or lake.
 - A watershed can be very large (e.g. draining thousands of square miles to a major river or lake or the ocean), or very small, such as a 20-acre watershed that drains to a pond.
 - A small watershed that nests inside of a larger watershed is sometimes referred to as a sub-watershed.

How Watersheds Work

©2008 HowStuffWorks

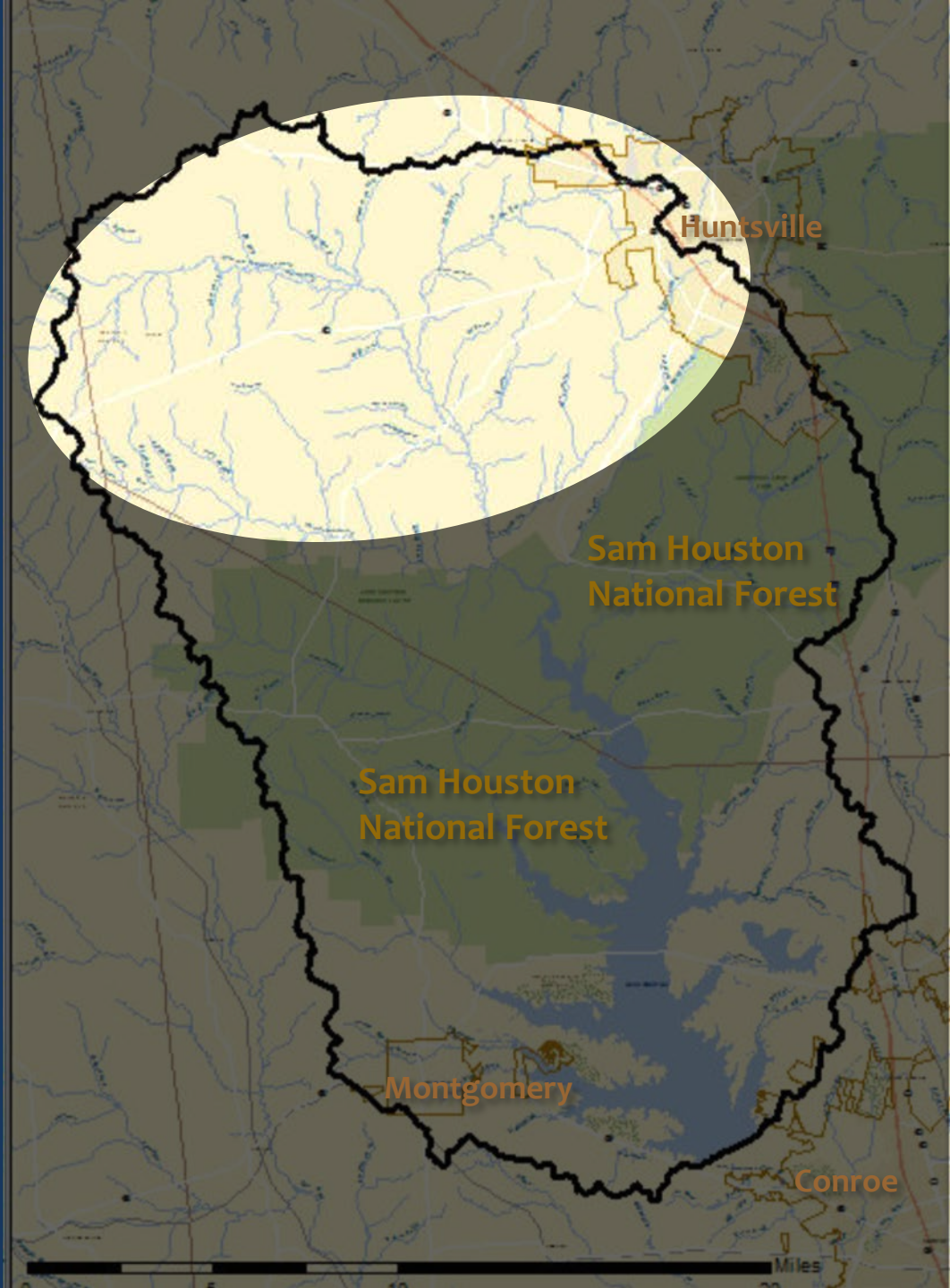
Catchments

Two or more **catchments** form **sub-watersheds**. A group of sub-watersheds form a **watershed**. A group of watersheds form a **basin**.



Lake Conroe Watershed

- Covers over 440 square miles
- Within Grimes, Montgomery, and Walker Counties
- Nine main tributaries
- Multiple land uses
 - **Agriculture**
 - **National Forest**
 - **Residential/Urban**
 - **Commercial**



What is Watershed Management?

- Watershed Management is a holistic approach to managing water resources for quantity and quality within a watershed. Watershed management is also a useful, proactive approach in areas without immediate problems.



WPP Development Strategy

- Characterize the watershed
- Public outreach & education
- Build partnerships
 - Stakeholder Committee
- Set goals and identify solutions
- Select program elements
- Finalize and publish Watershed Protection Plan
- Implement the Watershed Protection Plan
- Measure progress and make adjustments

Watershed Protection Plan

Ongoing Activities

- Further characterize the watershed
- Continue water quality monitoring
- Respond to and report possible violations
- Build partnerships by increasing public outreach
- Work with stakeholder group



Water Quality Monitoring

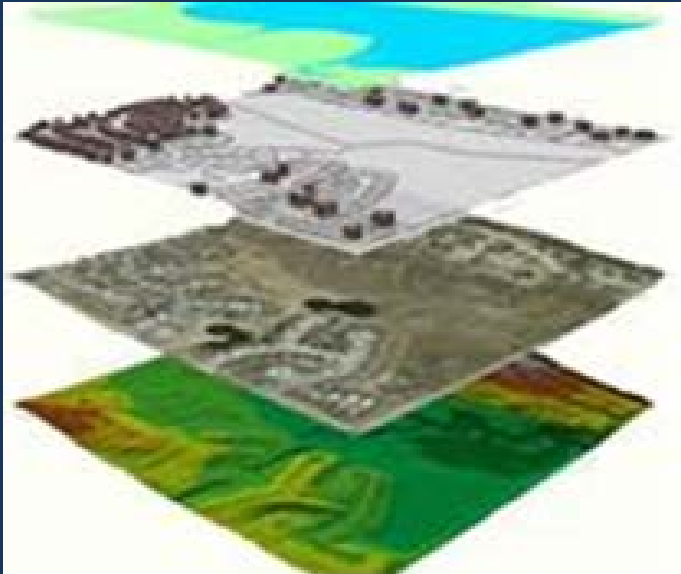
Lake Conroe's water quality is monitored through:

- Clean Rivers Program
- SJRA intake structure water sampling
- WPP sampling
- Storm Sampling
- SJRA in house data analysis of some samples collected daily/monthly/annually



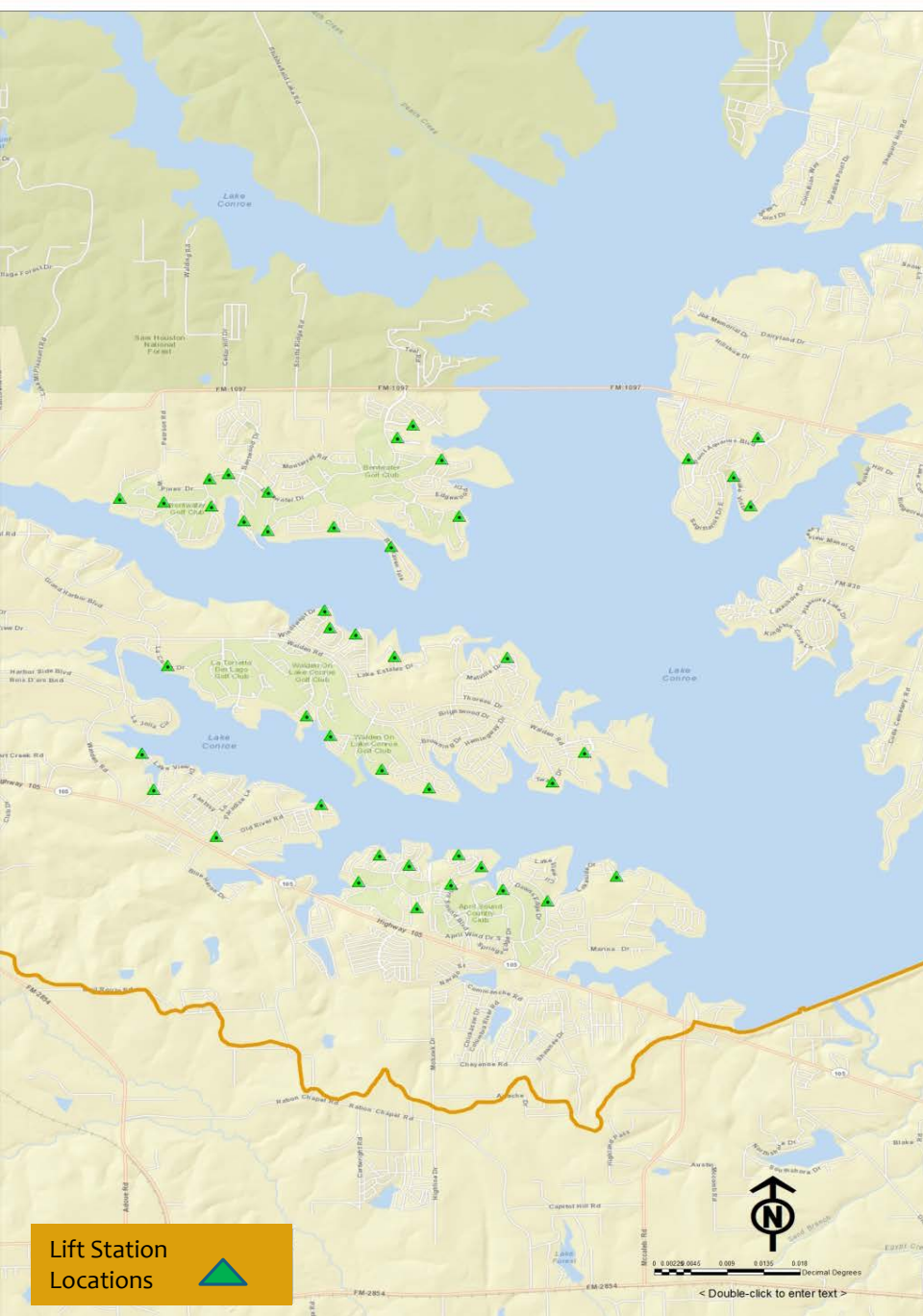
Characterization Mapping

- Mapping is a great way to display all kinds of data in an easy to understand format.



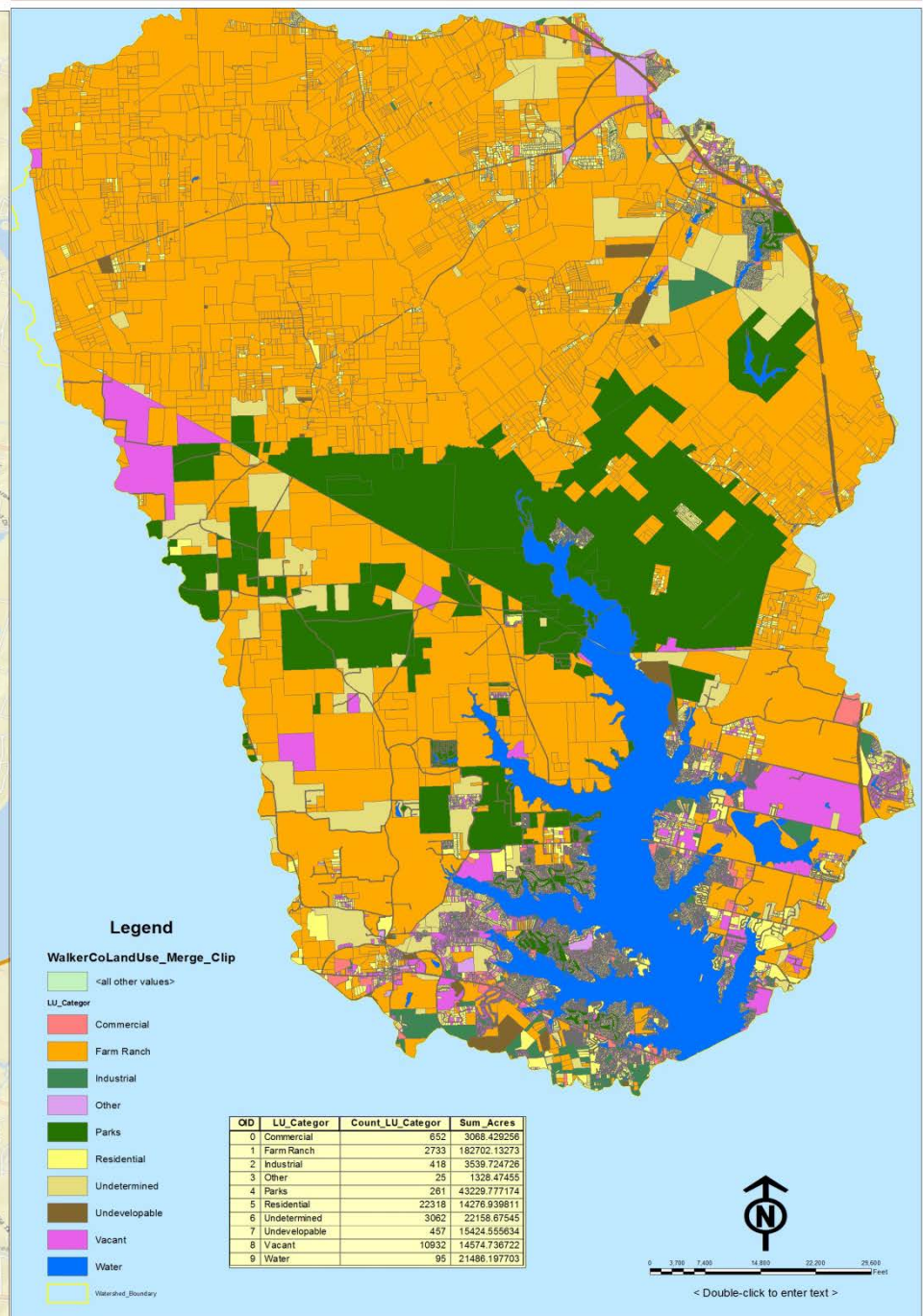
- Some of the data that we are collecting for the Lake Conroe Watershed Protection Plan are:
 - Storm drains
 - Sewage Lift stations
 - On-Site Sewage Facilities (OSSF's)
 - Waste Water Treatment Plants
 - Demographics
 - Land-use
 - Businesses with toxic waste

Liftstations in Watershed



Lift Station Locations 

Landuse/ Lake Conroe Watershed



Legend

WalkerCoLandUse_Merge_Clip

-  <all other values>
- LU_Categor**
-  Commercial
-  Farm Ranch
-  Industrial
-  Other
-  Parks
-  Residential
-  Undetermined
-  Undevelopable
-  Vacant
-  Water
-  Watershed_Boundary

OID	LU_Categor	Count_LU_Categor	Sum_Acres
0	Commercial	652	3068.429256
1	Farm Ranch	2733	182702.13273
2	Industrial	418	3539.724726
3	Other	25	1328.47455
4	Parks	261	43228.777174
5	Residential	22318	14276.939811
6	Undetermined	3082	22158.67545
7	Undevelopable	457	15424.555634
8	Vacant	10932	14574.736722
9	Water	95	21486.197703

0 3,760 7,520 14,800 29,600 29,600 Feet

< Double-click to enter text >

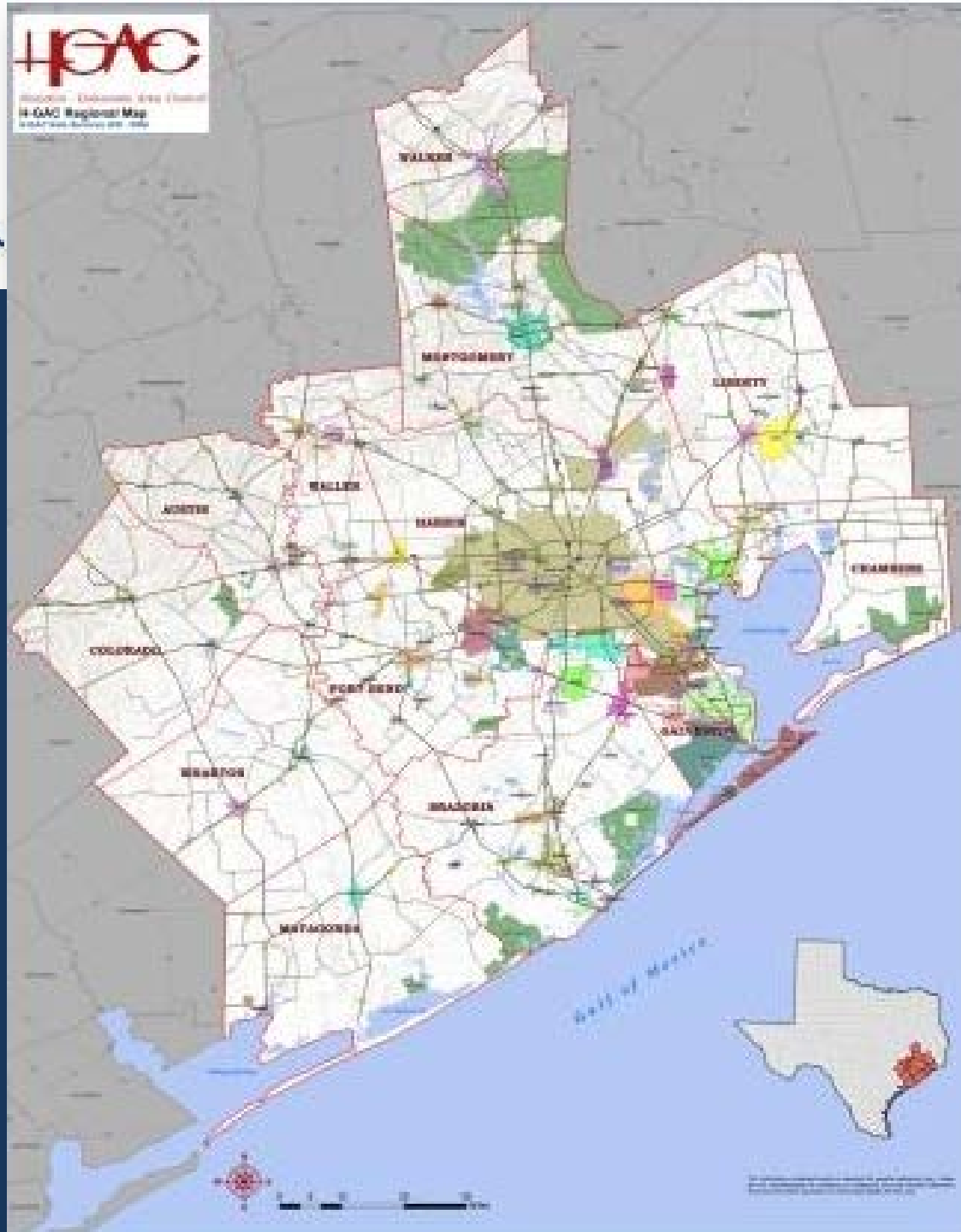
Increasing Public Outreach

- Informative Tours: Dam and Water Quality Lab
 - Local Schools, Non-Profit Organizations, Community Leaders, Utilities, MUDs, Cities, etc.
- Environmental Expos
- Press Releases, Articles, and Representation on Social Media
- Handouts and pamphlets



Building Partnerships

- Stakeholder Group
- Clean Rivers program
- BIG workgroup
- Texas Stream Team



- “Texas Clean Rivers Program (CRP) is a state fee-funded, non-regulatory program that was created to provide a framework and forum for managing water quality issues in a more holistic manner. The focus of the program is to work at the watershed level, within each river basin, by coordinating the efforts of diverse organizations.”



“Texas Stream Team is a network of trained volunteers and supportive partners working together to gather information about the natural resources of Texas and to ensure the information is available to all Texans.”



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Example Program Elements

- On Site Sewage Facility (OSSF) program
- Storm water discharge requirements for new development and redevelopment
- Sewage lift station improvements
- Wastewater plant effluent regulations
- Shoreline management

Changes to the On Site Sewage Facility (OSSF) Program

- TCEQ rules on aerobic treatment units changed in 2007
- Amend OSSF order to require a trained and licensed maintenance provider on aerobic treatment units (ATU's)



Storm Water Quality Requirements for New Development

- SJRA has no formal standards for storm water discharge from new developments.
- There are opportunities for best management practices (BMPs) to be implemented.



Sewage Lift Station Auto Dialer Program

- Failure of lift station operations can cause overflows of raw sewage into our waterways



More Stringent Wastewater Plant effluent regulations

- Lobby TCEQ to require more strict regulations on wastewater treatment plant effluent.



Shoreline Management

- Vegetation shoreline planting with native species
- Managing invasive plants
- Construction erosion control
- Education and regulation within water quality zone



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Stakeholder Involvement

- Schedule of Activities
- Meeting Logistics
- Meeting Ground Rules
- Group Organization

Meeting Logistics

Recommendations

Time of day

Lunch

Day of the week

Discussion

Length of meeting

1.5 hrs.

Location

SJRA

Meeting correspondence

E-mail

Meeting Ground Rules

- Be mindful of the schedule
- Keep an open mind
- Silence cell phones
- Respect all opinions
- No question is a bad question

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Group Discussion

- Formality
- Structure
- Decisions (majority, consensus?)
- Mechanism for feedback to SJRA