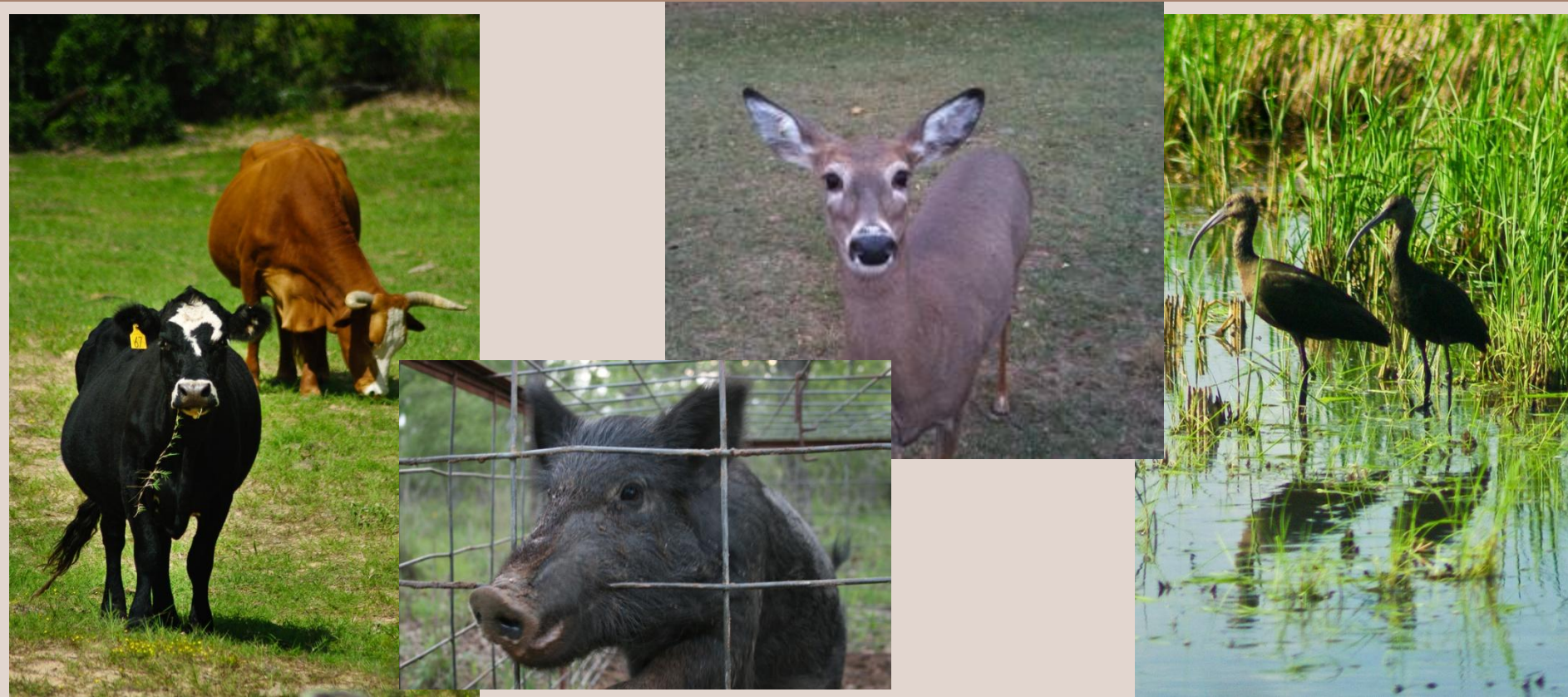


Armand Bayou I-Plan

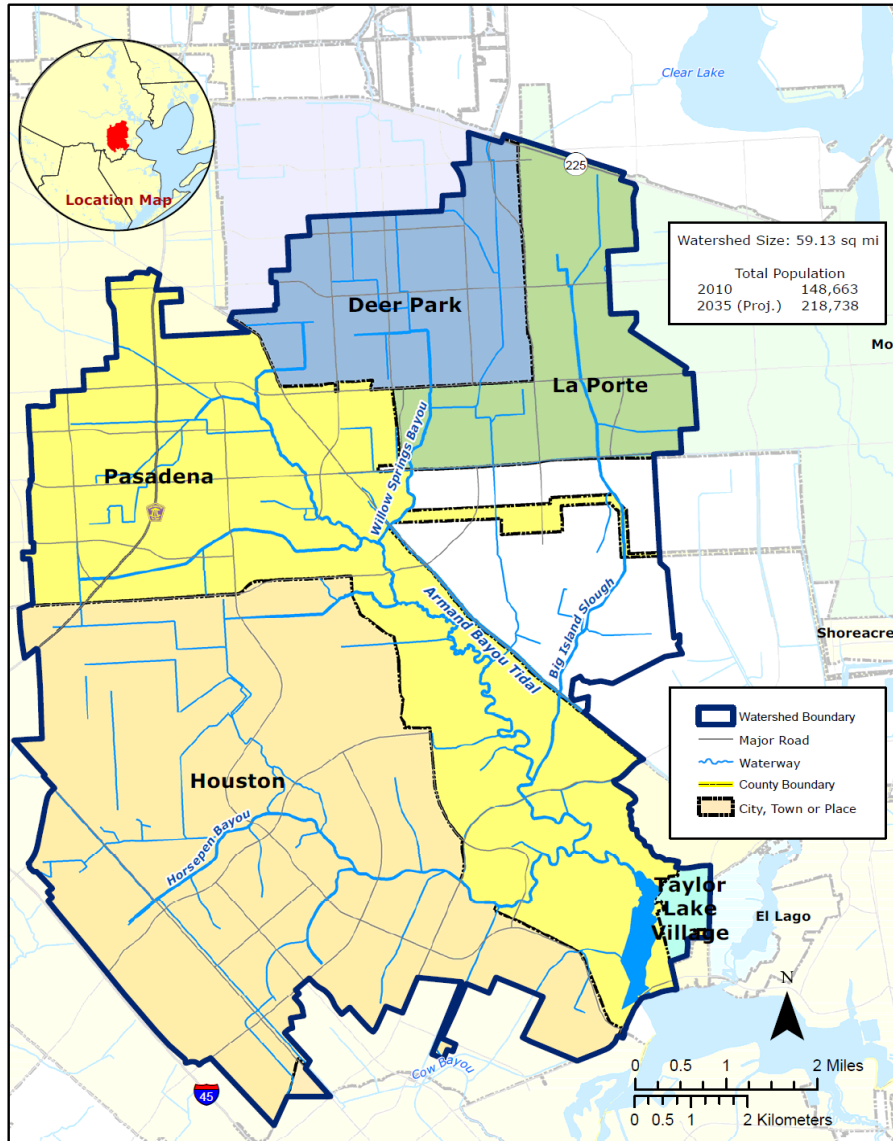
Wildlife, Habitat, Agriculture, and Feral Hogs Work Group



Aubin Phillips, Houston Galveston Area Council

Jurisdictions Involved

ARMAND BAYOU WATERSHED



Harris County

City of Pasadena

City of La Porte

City of Houston

City of Deer Park

Taylor Lake Village

Ellington Air Field

Johnson Space Center

Armand Bayou Nature Center

University of Houston Clear Lake



Option to Join the BIG I-Plan

- The Coordination Committee has discussed the possibility of joining the BIG I-Plan as opposed to creating their own I-Plan
 - This would require having a completed TMDL and could be discussed at the next BIG annual meeting in May 2014
- The Coordination Committee has also discussed using the BIG I-Plan as a “menu”



Issues Raised

- Large lots with livestock, chickens, horses
- Waterfowl
- Cattle leases along Genoa/Red Bluff
- Deer overpopulation
- Bridges – birds, bats, pigeons



Examples from Other Plans

Implementation Activity 7.1: Promote Increased Participation in Existing Programs for Erosion Control, Nutrient Reduction, and Livestock Management

Implementation Activity 7.2: Promote the Management of Feral Hog Populations

Implementation Strategy 9.0: Avian Wildlife Management

Example 9 Element Table

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Causes/Sources	Implementation Activities and Targeted Critical Areas	Estimated Potential Load Reduction	Technical and Financial Assistance Needed for Each Activity	Education Component for Each Activity	Schedule of Implementation for Each Activity	Interim, Measureable Milestones for Each Activity	Indicators to Measure Progress	Monitoring Component	Responsible Entity	
Agriculture and Animal	Nonpoint sources from croplands and rangelands	Promote increased participation in existing erosion control, nutrient reduction, and livestock management programs (IA 7.1).	It can be expected that a 65% reduction in bacteria loading can be achieved for each cattle population addressed. In conjunction with IA 7.2, a 10% reduction in bacteria loading from agriculture and animal sources is expected over 25 years.	<p>Technical: assistance will be provided to farmers and ranchers by the Texas State Soil and Water Conservation Board, local Soil and Water Conservation Districts, Texas AgriLife Extension Service, the United States Department of Agriculture's Natural Resources Conservation Service, etc.</p> <p>Financial: The costs depend on the goals for the property, the size of the management area, the existing condition of the property, and the plan that is collaboratively developed with the various resource agencies. The state's cost-share limit for Water Quality Management Plans is \$15,000.</p>	Information will be disseminated via word of mouth from participants; Texas AgriLife Extension Service agents' contact with the public; public outreach from local Soil and Water Conservation Districts; and through 4-H clubs, rodeos, agricultural field days, the Texas Farm Bureau, the Texas and Southwestern Cattle Raisers Association, and the Independent Cattleman's Association of Texas.	Implementation of this activity will begin immediately and will continue for the entire implementation process.	5% increase in participation each year.	The number of new or expanded plans or projects	H-GAC will collect reports from agencies such as TSSWCB, local SWCDs, NRCS, and AgriLife Extension.	<p>Farmers and Ranchers: upgrade/develop plans and projects</p> <p>BIG: provide the I-Plan to the implementing agencies along with a formal request for their assistance in encouraging program participation</p> <p>TSSWCB, local SWCDs, NRCS, and AgriLife Extension: work with landowners and provide information and technical assistance</p> <p>H-GAC: collect and share information on the progress made each year</p>
	Bacteria deposited in the watersheds by feral hogs	Promote the reduction of feral hog populations (IA 7.2).	In conjunction with IA 7.1, a 10% reduction in bacteria loading from agriculture and animal sources is expected over 25 years.	<p>Technical: existing resources such as feral hog management trainings offered by the Texas Wildlife Damage Management Service and others.</p> <p>Financial: grant funding and existing program funding</p>	Trainings will be offered to large landowners, land managers, local governments, and other interested parties on feral hog management and reduction methods.	Two feral hog management workshops will be offered each year for the first five years of implementation with the potential to continue offering the trainings.	Two workshops each year for five years	The number of trainings offered each year The number of attendees	H-GAC will collect information from agencies regarding the number of trainings held and the total number of attendees at each.	<p>TWDMS: conduct feral hog management training</p> <p>H-GAC: request workshops and collect and share information on the progress made each year</p>



Requirements of the Clean Water Act (1972)



- Identify impaired water bodies
- Develop Plans (Total Maximum Daily Loads) to determine extent of problem
- Complete TMDLs and Implementation Plans to bring the water up to standards



Total Maximum Daily Load (TMDL) Has Two Meanings

A TMDL is a tool which:

Determines the maximum amount of a
Particular pollutant (load) that a water body can
absorb and still maintain its standards

A TMDL is also a document submitted to the EPA that:

Identifies the pollutant of concern and its sources,
specifies the allowable amount and serves as a
framework for corrective action



Elements of an Implementation Plan (I-Plan)

Implementation Plan

For Total Maximum Daily Loads for Bacteria
in the Houston-Galveston Region

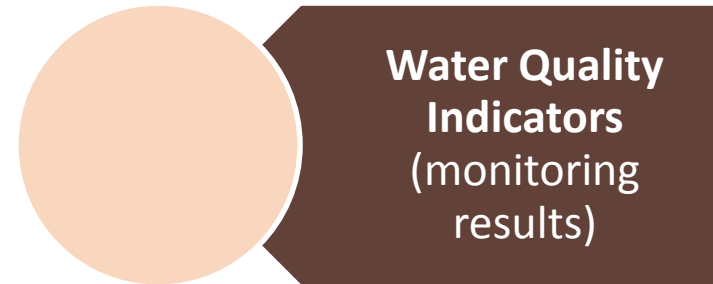
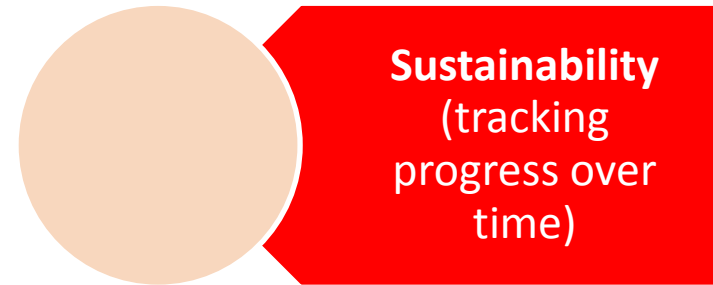


Bacteria Implementation Group
August 2011

- Management Measures
- Implementation Schedule
- Follow-up Monitoring Plan
- Voluntary Implementation on Non-Point Source Pollution
- Measurable Outcomes



Basic Contents of the Final I-Plan Report



Areas Where I-Plans are Completed



■ ■ ■ Process Conclusions



- Mechanism to address regulated sources
- Mechanism to address complex water quality issues of NPS pollution
- Promote intergovernmental cooperation
- Require community support and input



Project Timeline and Milestones

✓ January to April 2013

- ✓ Coordination Committee Forms

- ✓ Appoint Work Groups

☐ April to May 2013

- ☐ Work Groups Begin Meeting

- ☐ Work Groups Develop Recommendations

☐ May to August 2013

- ☐ Report drafting, editing, building support



 **Thank You!**

