

REGION H

Water Planning Group



DEVELOPING THE REGION H 2016 REGIONAL WATER PLAN

Lone Star Groundwater Conservation District

02 March 2015



Water Planning in Texas

Texas Water Development Board

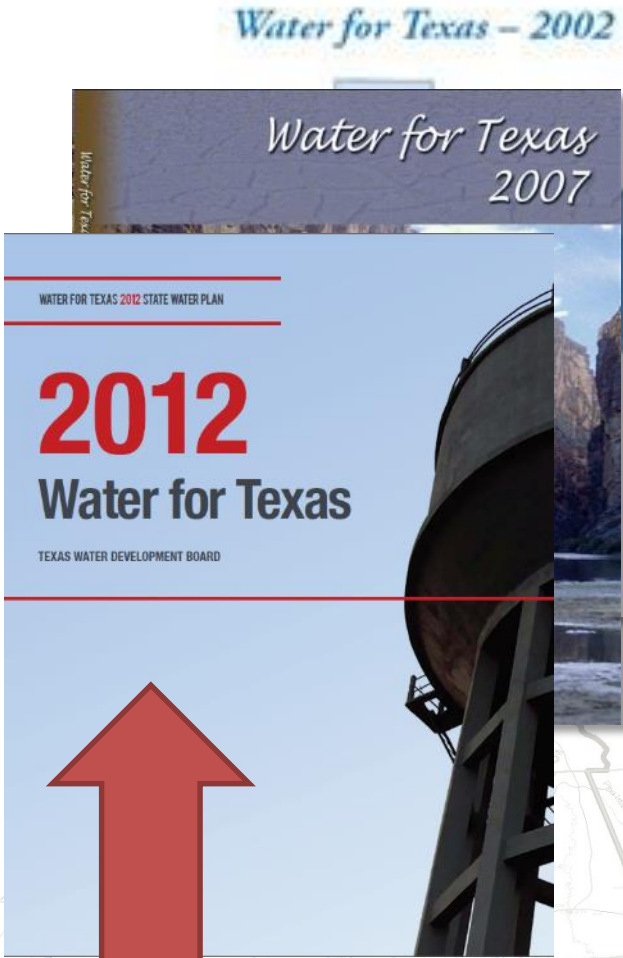
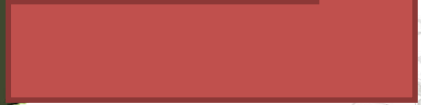
The logo for the Texas Water Development Board features three stylized, overlapping curved lines in shades of blue and grey, resembling waves or a fan.

- Provide water project funding

- Prepare state water plans

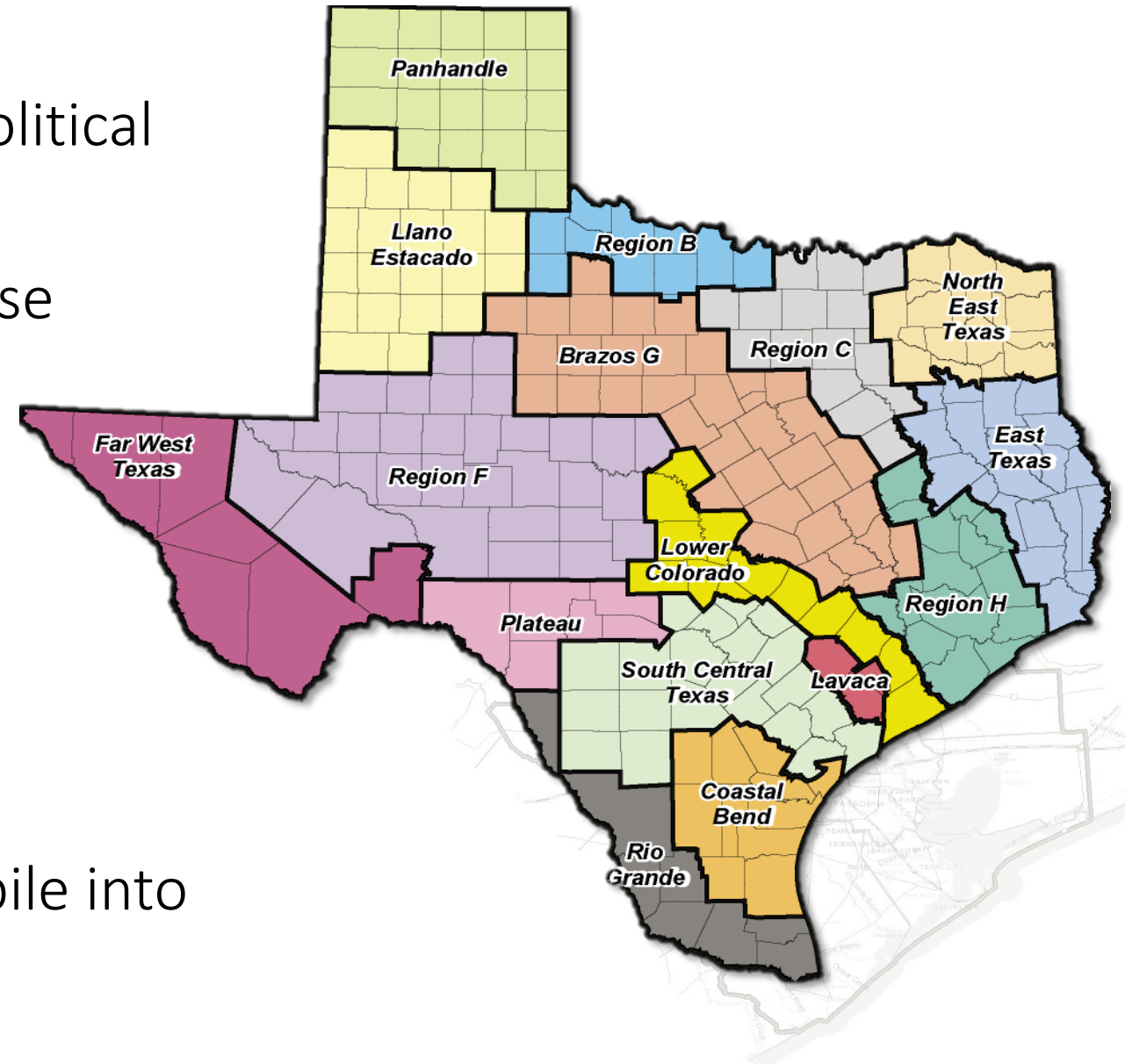


Water Planning in Texas



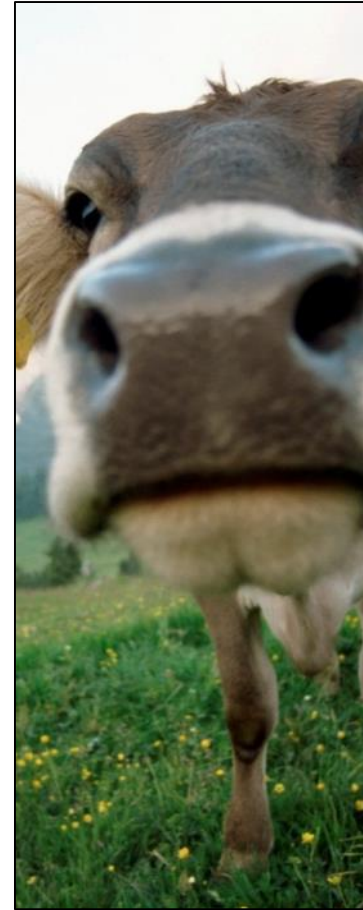
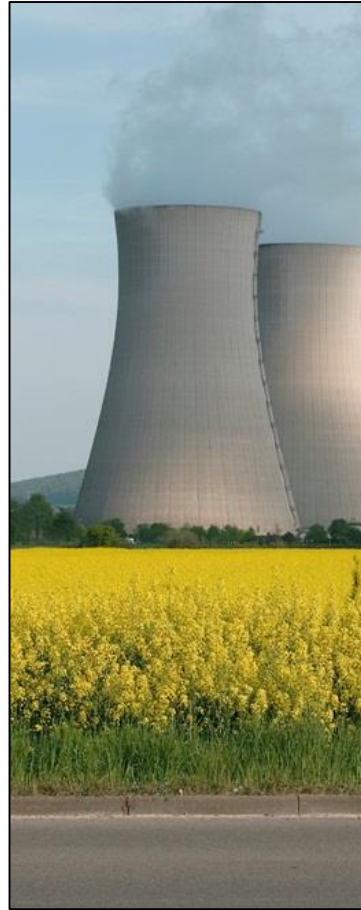
The Planning Process

- 16 regions based on natural and political boundaries
- Volunteer planning groups of diverse interests
- Five-year cycle
 - 2001
 - 2006
 - 2011
 - 2016
- Regional Water Plans (RWPs) compile into State Water Plan (SWP)



The Planning Process

- Demands



The Planning Process

- Needs



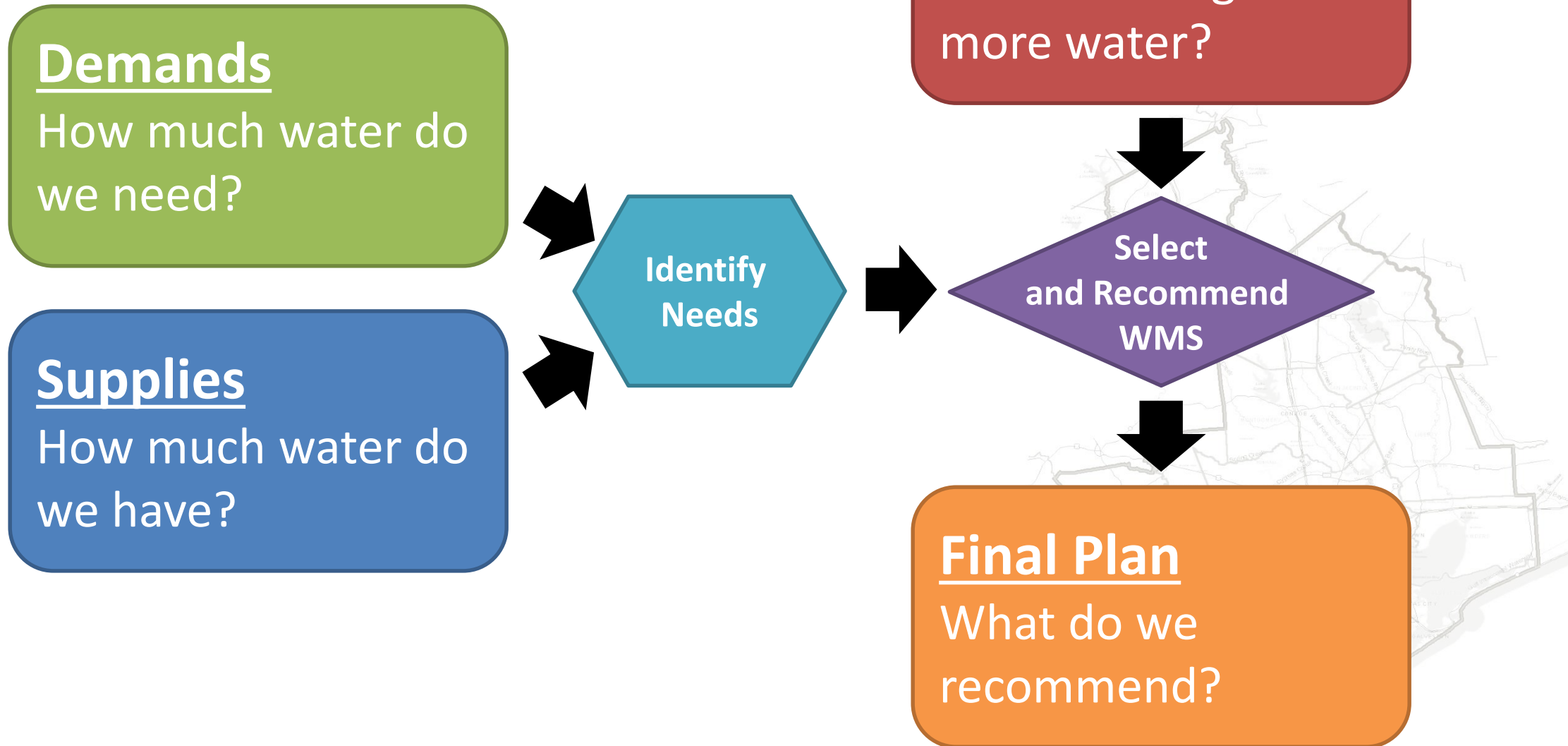
The Planning Process

- Water Management Strategies and Projects

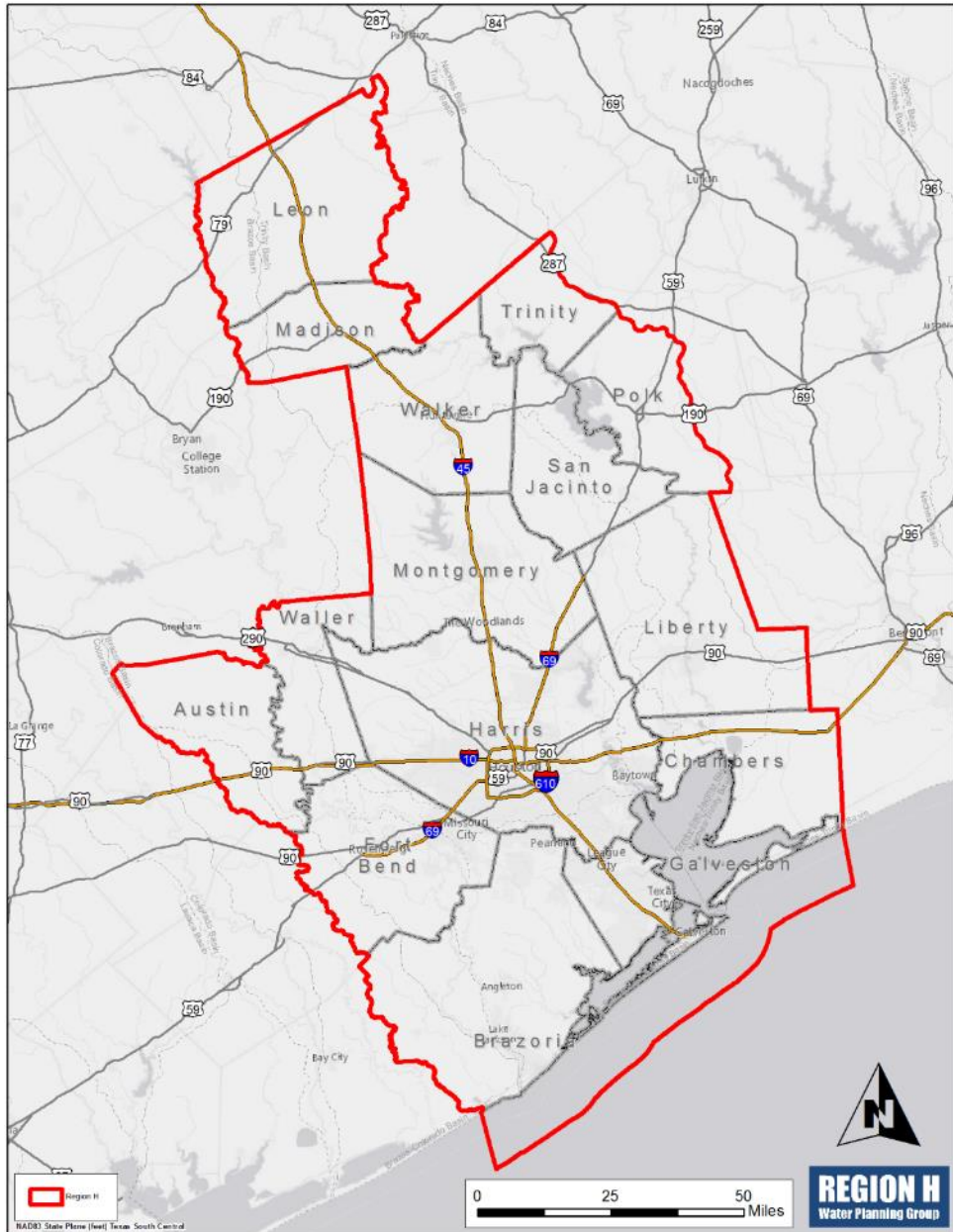


The Planning Process

- The Process



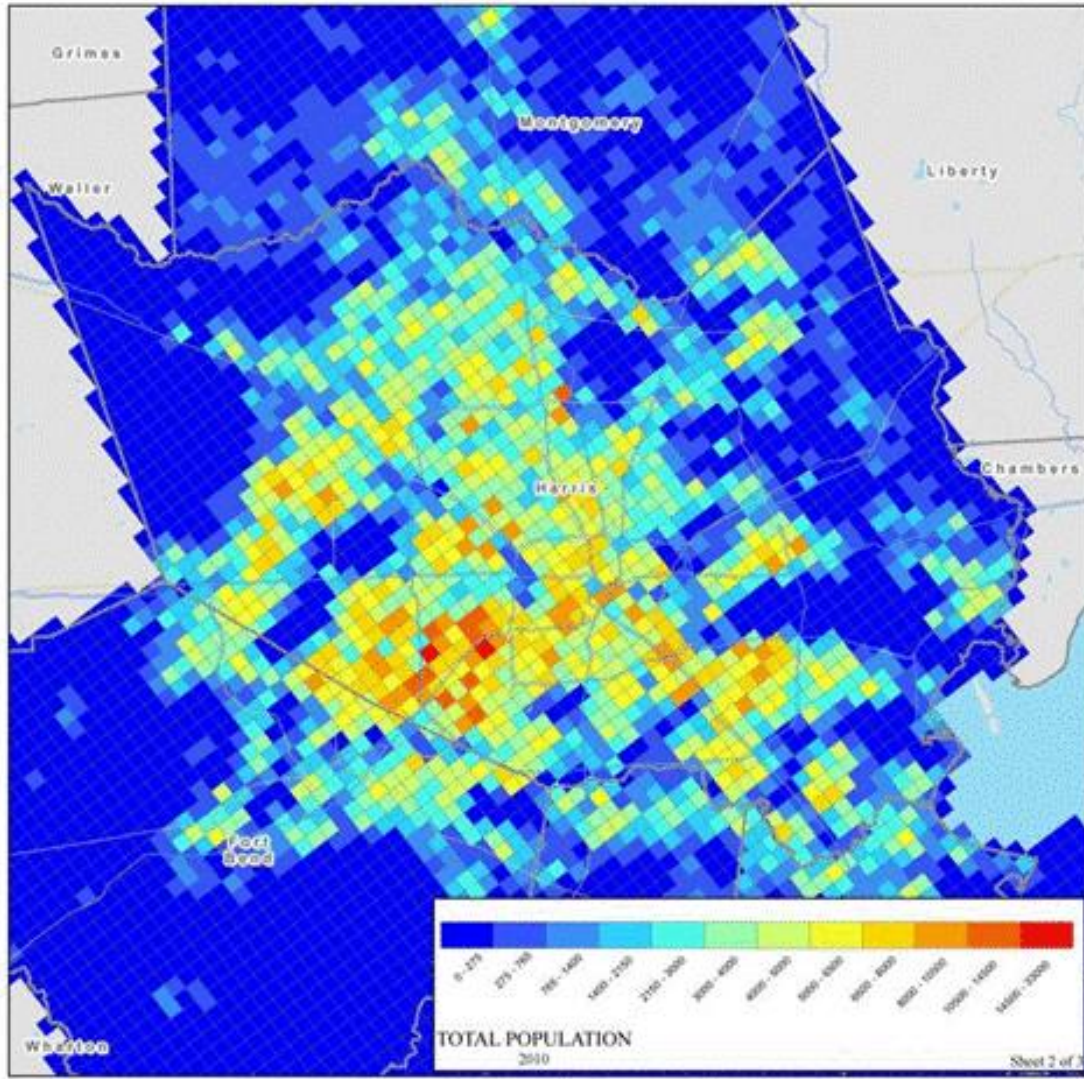
Region H 2016 Regional Water Plan



- Client:
 - TWDB (Sponsor)
 - SJRA (Political Subdivision)
 - Region H Planning Group (26 Individuals)
- Budget:
 - \$2,124,601
- Schedule:
 - Commence work 23 June 2011
 - Initially Prepared Plan 01 May 2015
 - Regional Water Plan 01 December 2015

Region H 2016 Regional Water Plan

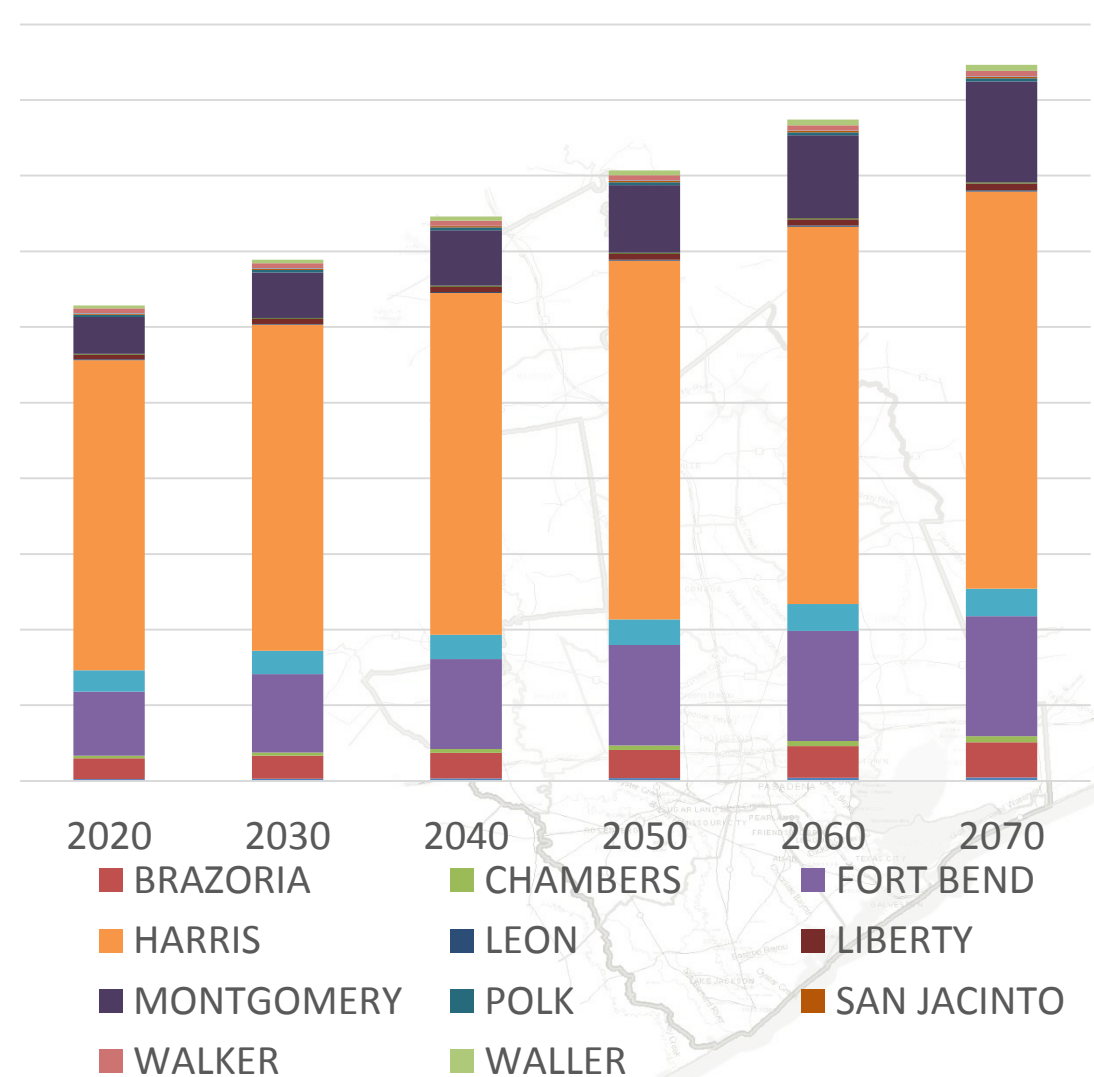
Population and Water Demands



Projected Demand (Acre-Feet per Year)

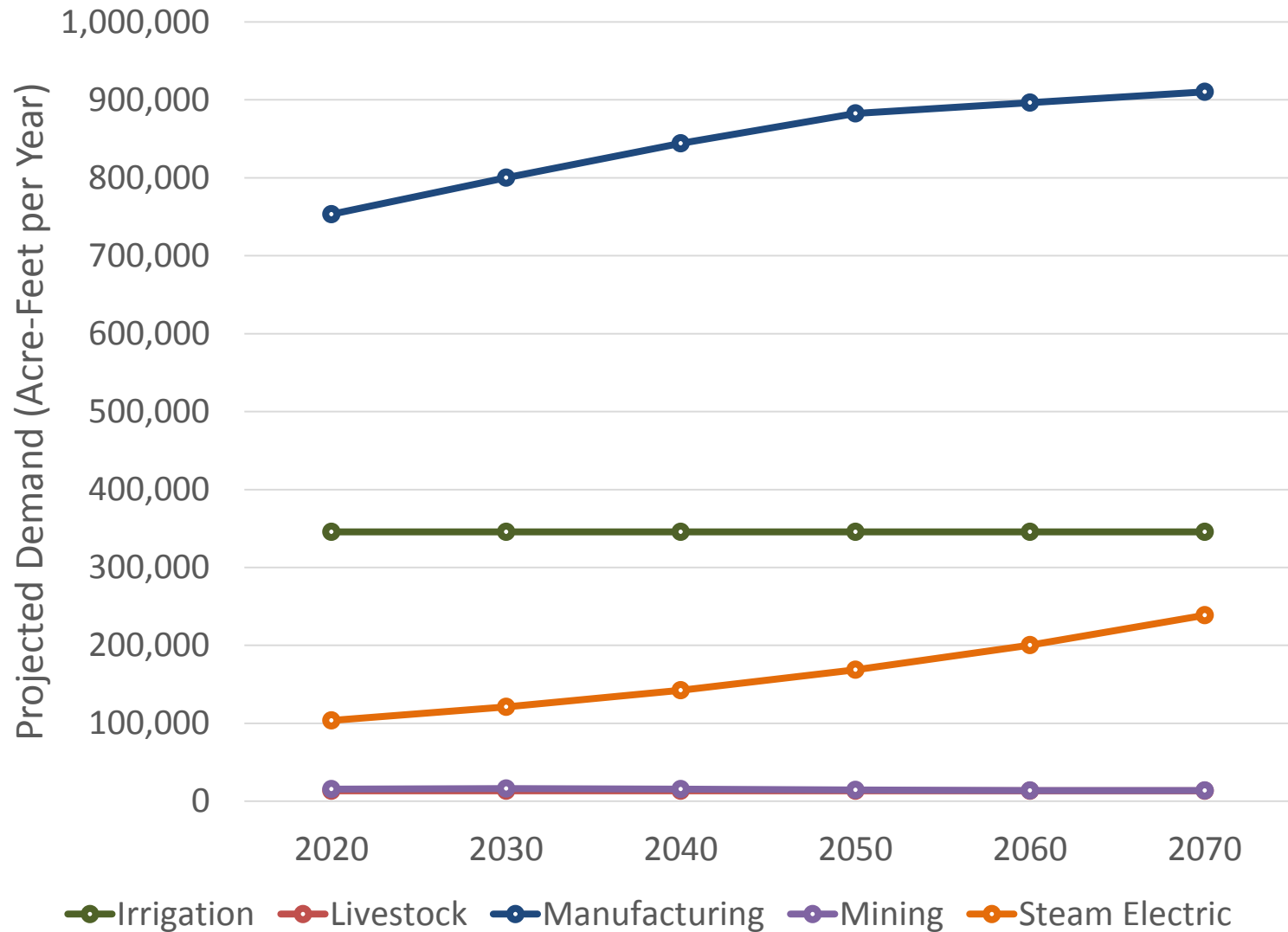
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
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800,000
600,000
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200,000
0

AUSTIN
GALVESTON
MADISON
TRINITY



Region H 2016 Regional Water Plan

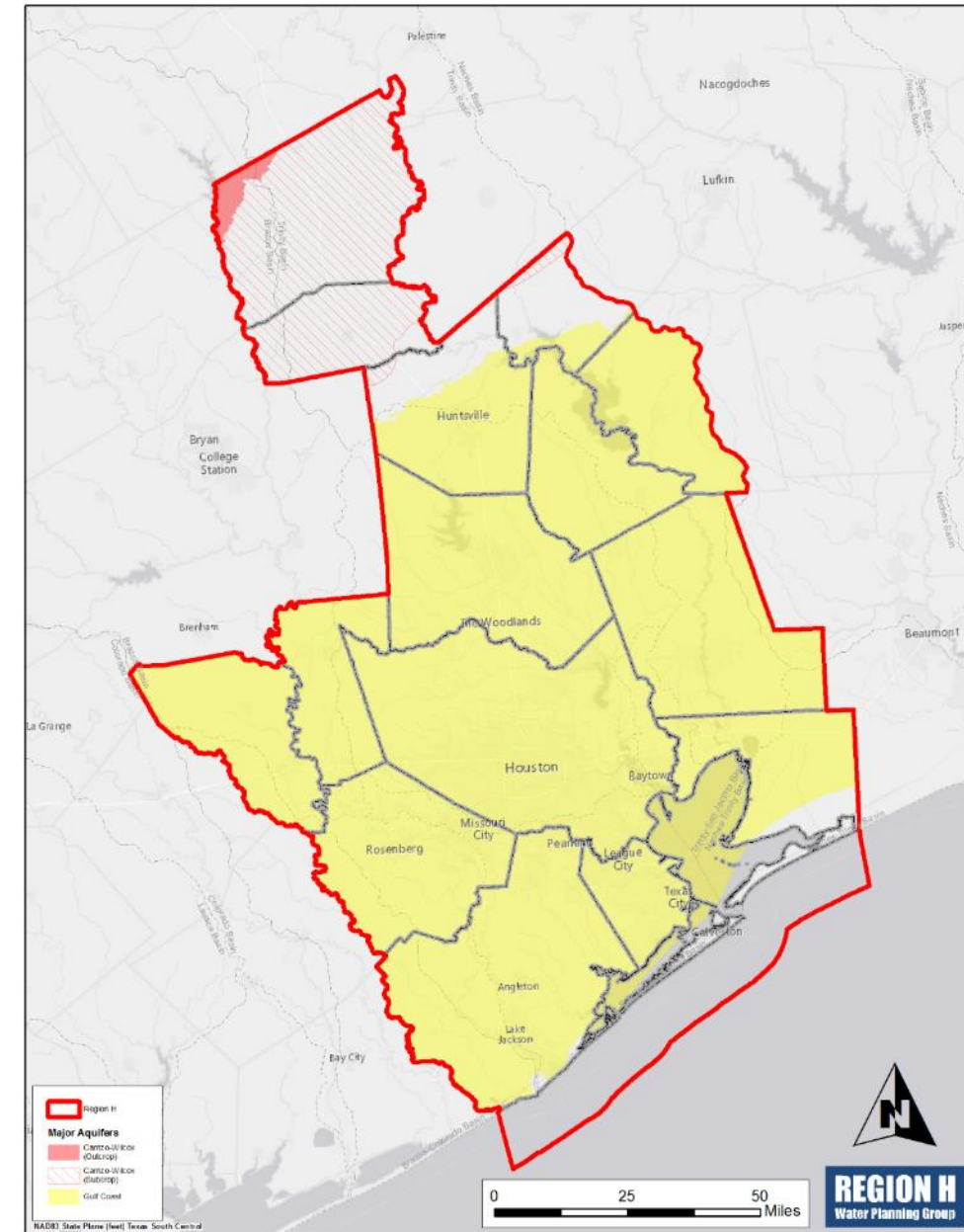
■ Demands



- Irrigation
 - TWDB recommended
 - Region H adjusted
- Livestock
 - TWDB recommended
- Manufacturing
 - Region H adjusted
- Mining
 - TWDB recommended
 - Include oil and gas exploration
- Steam Electric
 - TWDB recommended
 - Region H adjusted

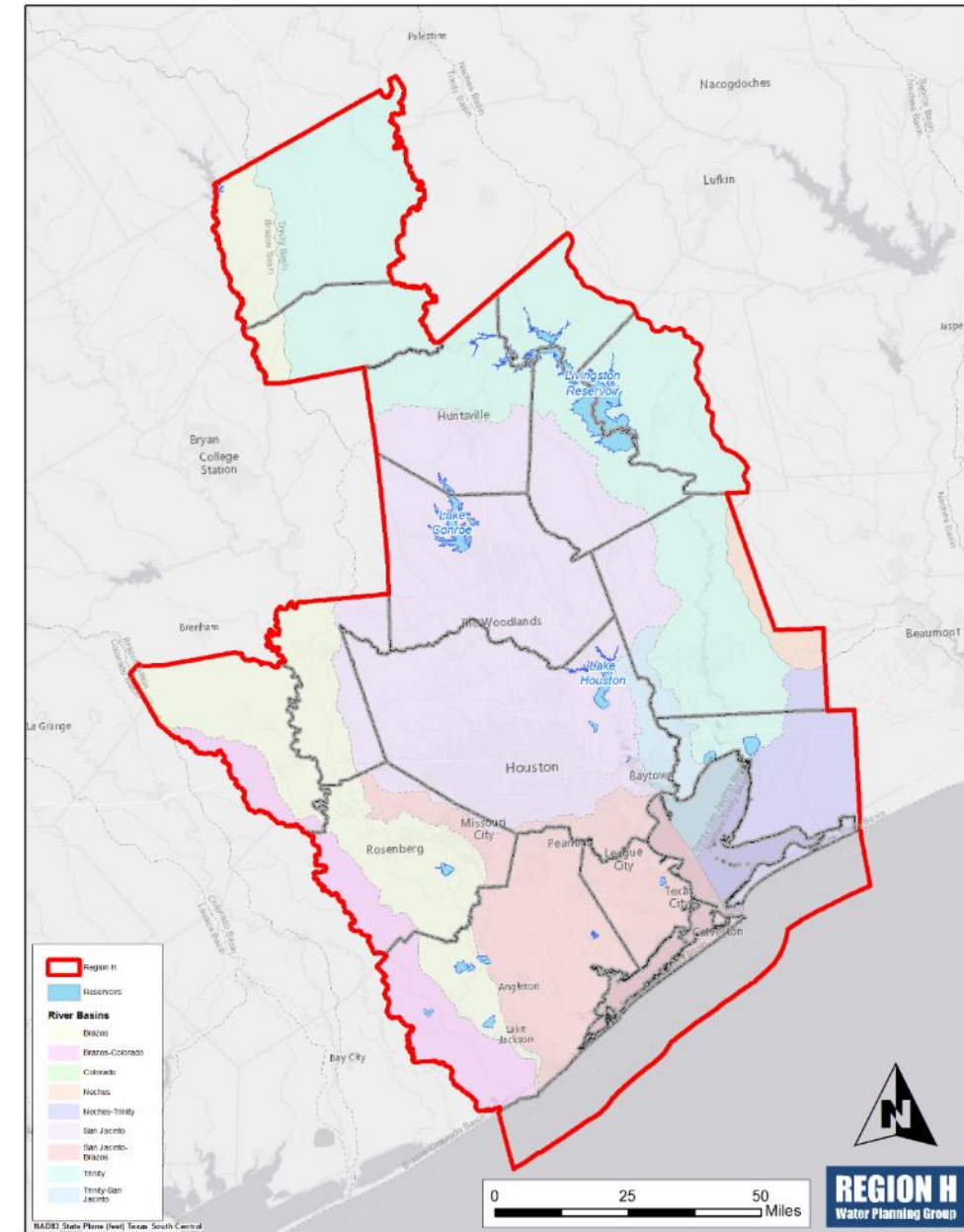
Region H 2016 Regional Water Plan

- Groundwater Supplies
 - Resources
 - Two major aquifers
 - Four minor aquifers
 - Availability
 - Set as TWDB estimate of Modeled Available Groundwater (MAG)
 - MAGs from Desired Future Conditions (DFCs) set by Groundwater Management Areas (GMAs) 11, 12, and 14
 - MAGs are based on joint planning in GMAs submitted in 2010



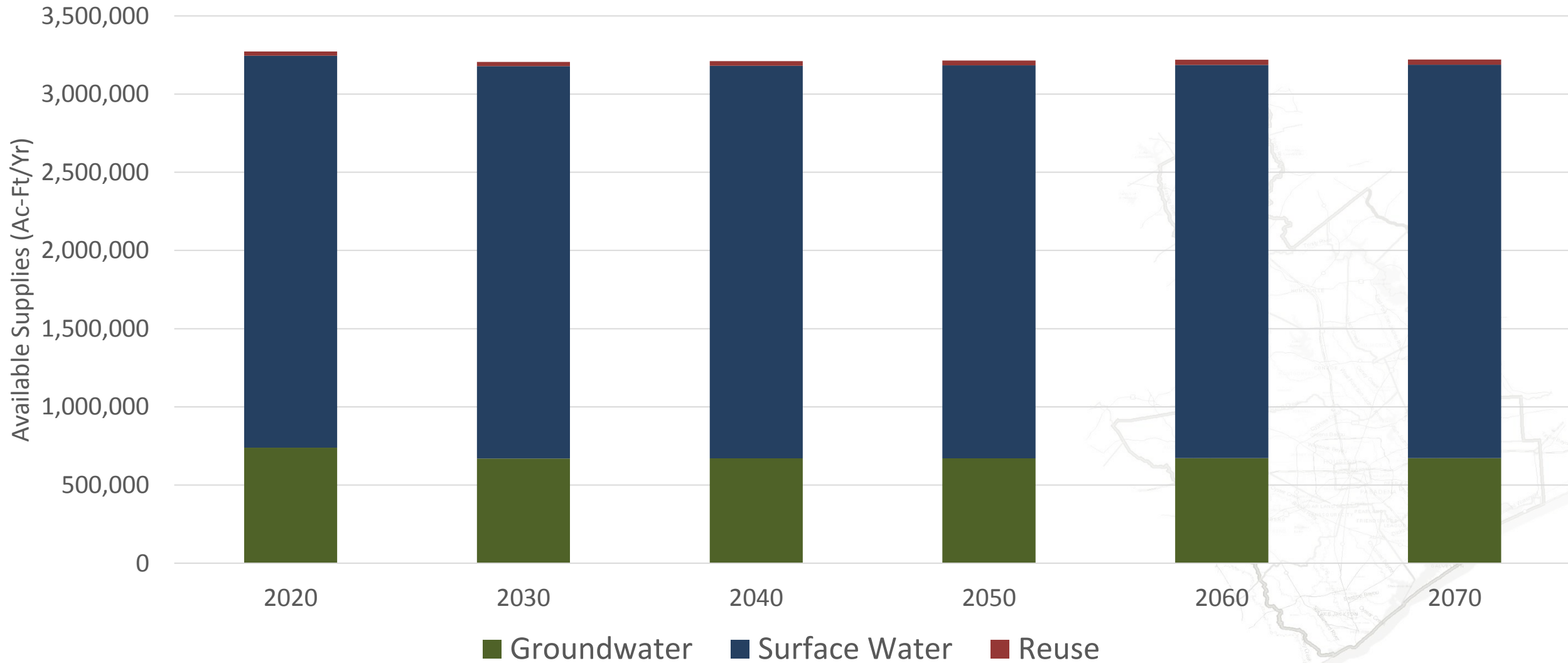
Region H 2016 Regional Water Plan

- Surface Water Supplies
 - Resources
 - Three river basins
 - Three major reservoirs
 - Availability
 - Evaluated by RWPG
 - Based on TCEQ Water Availability Model (WAM) “Run 3” for each basin
 - Maximum diversion
 - No return flows
 - Certain exceptions allowed by TWDB



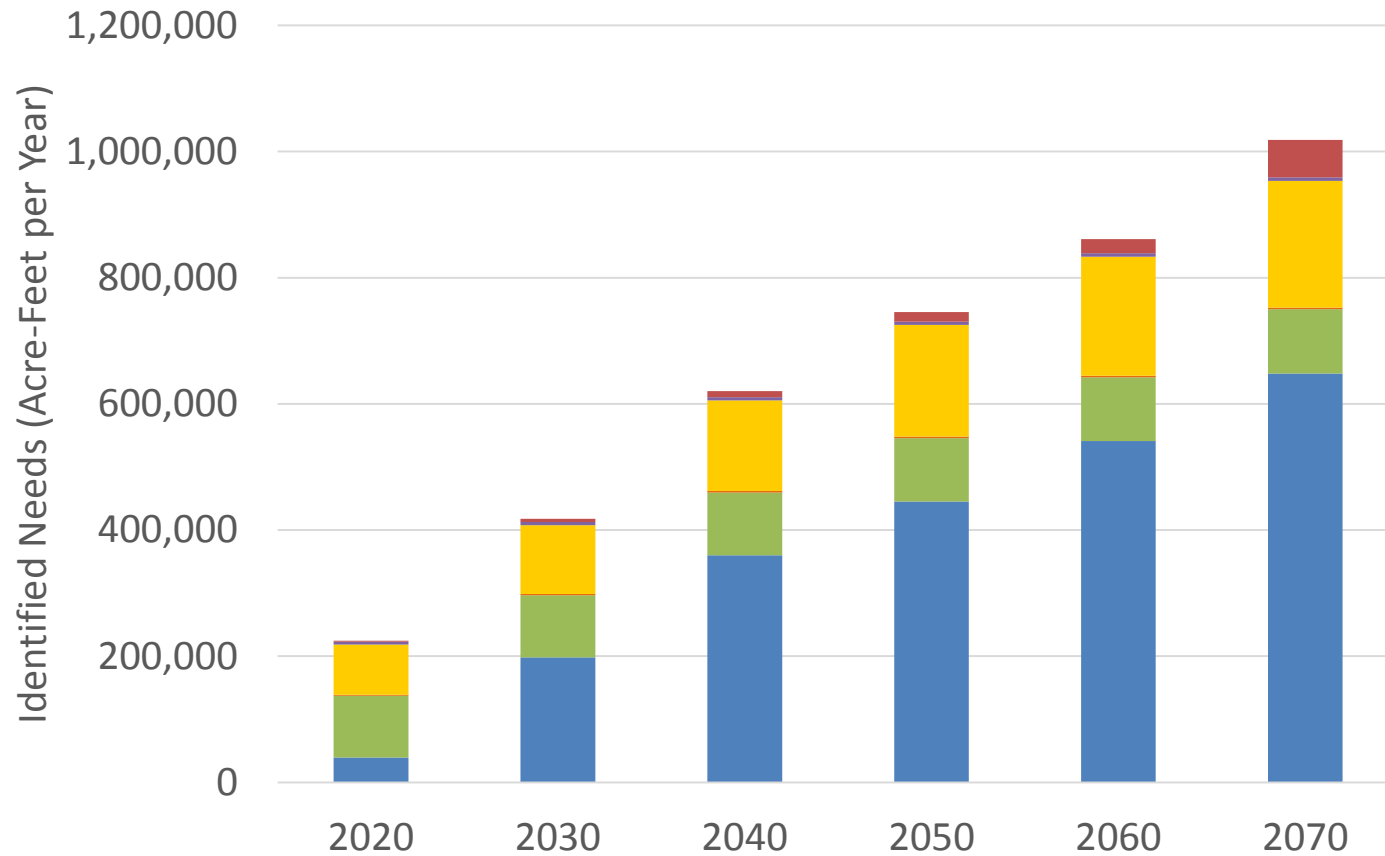
Region H 2016 Regional Water Plan

■ Total Supplies

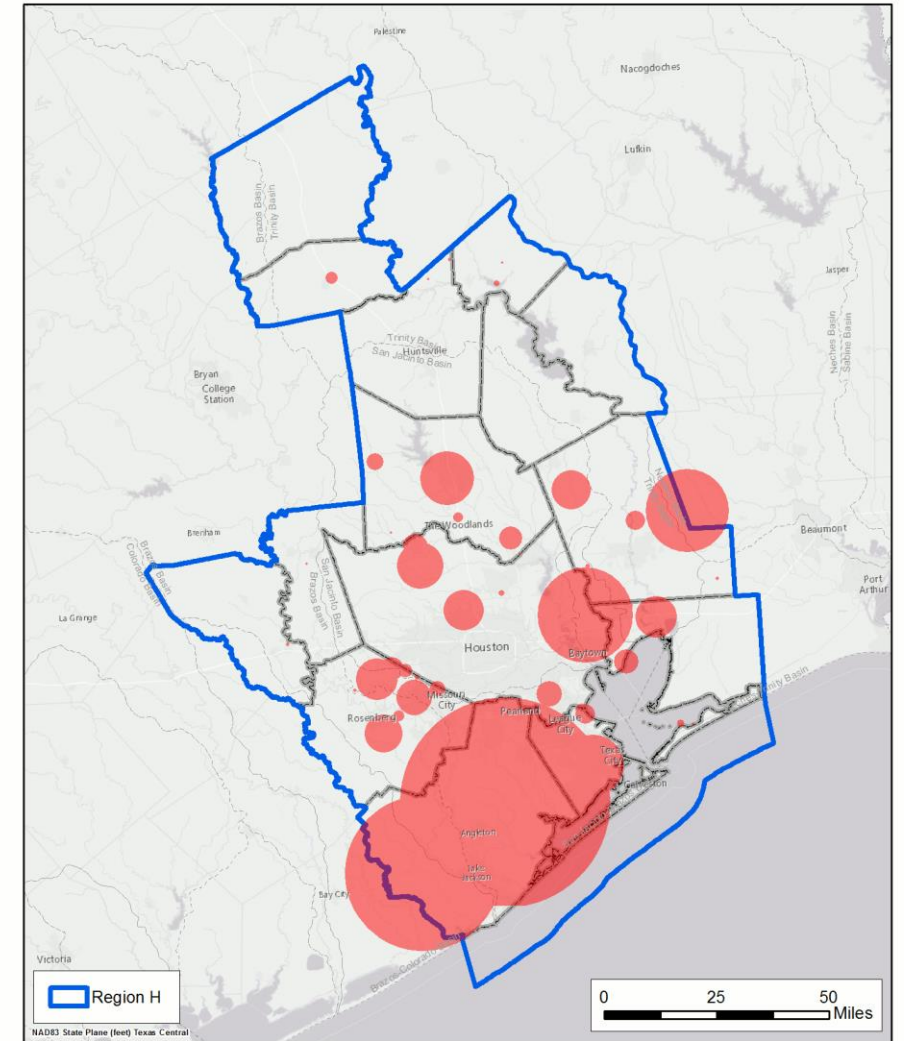


Region H 2016 Regional Water Plan

Needs



- Municipal
- Irrigation
- Livestock
- Manufacturing
- Mining
- Steam Electric Power



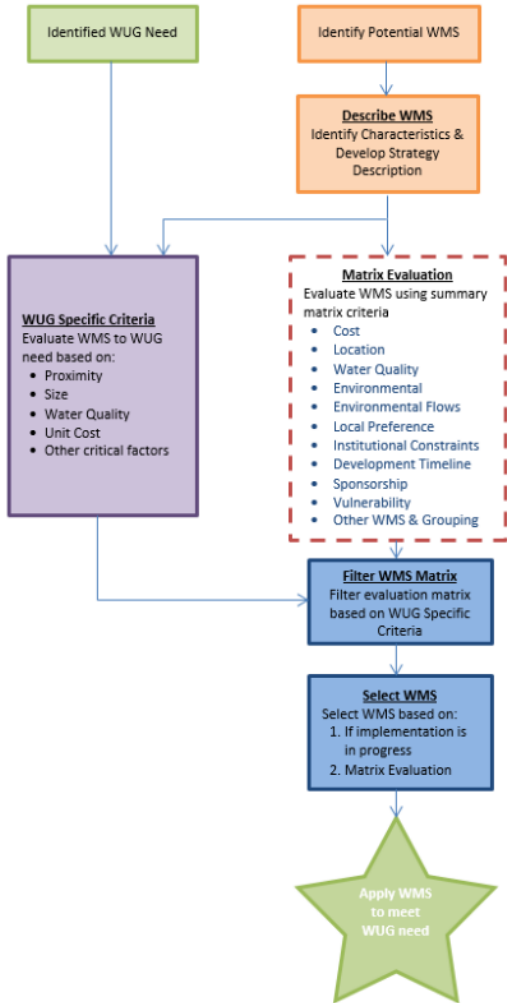
Identified WUG Needs
2020 Decade



Texas

Region H 2016 Regional Water Plan

Water Management Strategies and Projects



WATER PLAN
The Luce Bayou project would pump water from the Trinity River north of Dayton and deliver it to Lake Houston through a pipeline and canal.

Luce Bayou

Allens Creek

North Harris County REGIONAL WATER Authority

Houston Reuse

East Texas IBT

Dow Off-Channel

GRP Conversion

Seawater Desalination

Industrial Reuse

Conservation

Transfers from Lake Livingston

Brackish GW

Catahoula Formation Outcrop

1,000-3,000

3,000-10,000

<1,000

2020



Region H 2016 Regional Water Plan

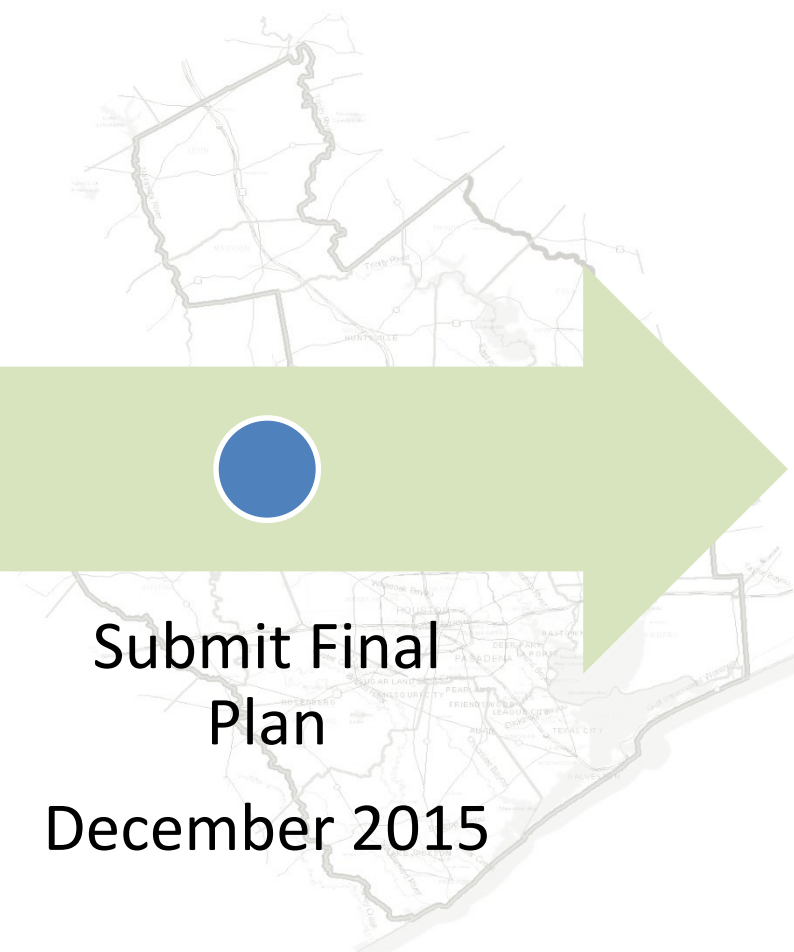
- Timeline

Develop and
apply strategies

Public Input

Submit Draft
Plan
May 2015

Submit Final
Plan
December 2015



Region H 2016 Regional Water Plan

■ Public Involvement

How to Get Involved

- Public process by design
- Regional Planning Group meetings
- Outreach to stakeholders
 - Survey (population and demand projections, supplies, projects)
 - Directed correspondence
- Public comment period
 - Between IPP and Final Plan submittals

Why Get Involved?

- Build upon local planning efforts
 - Enhanced tools from region, state
- Identify gaps in long-term planning
 - Finding regional opportunities
- State funding
 - Identify regional need for infrastructure
 - Eligible for State programs
- TWDB-funded
 - No cost to participate



Region H 2016 Regional Water Plan

- Significant Remaining Effort
 - Planning Group, agency, and public review
 - Data entry into DB17
 - Database reports
 - Socioeconomic impacts
 - Infrastructure financing survey
 - Implementation survey



After the Planning Process

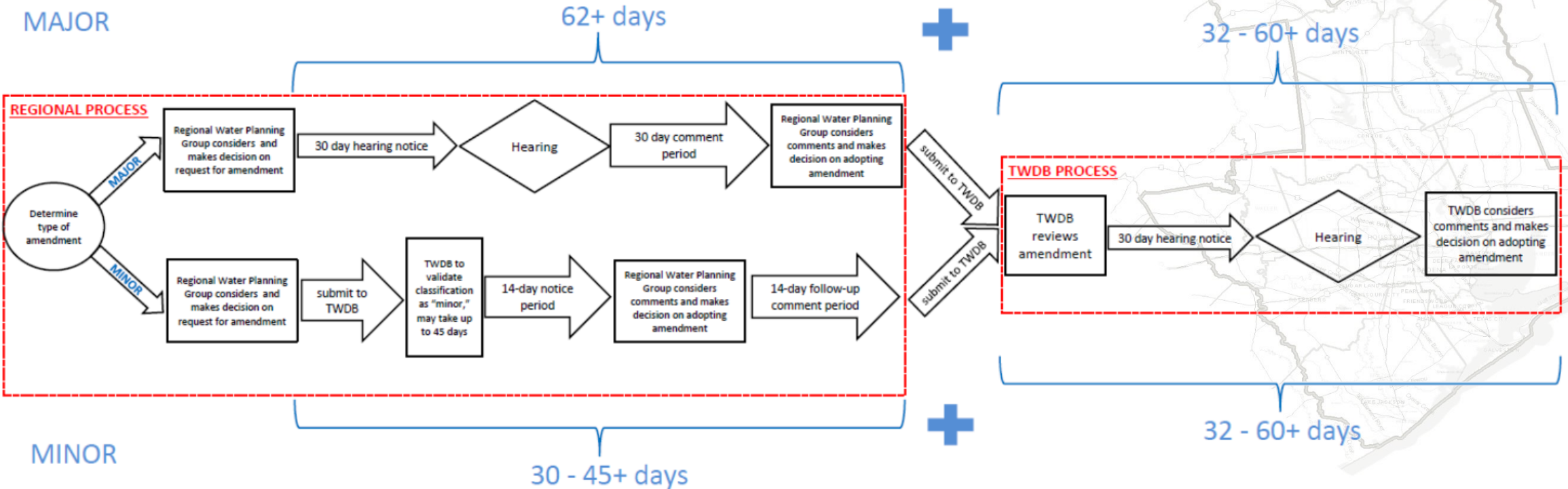
- Amendments

- 2011 RWP

- Brazosport Water Authority
- Dow Chemical
- Gulf Coast Water Authority

- 2016 RWP

- ???



Developing the Region H 2016 Regional Water Plan

Thank you

<http://www.regionhwater.org>

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