

Reforming the Joint Water Planning Process

Recommendations by Texas Desalination Association

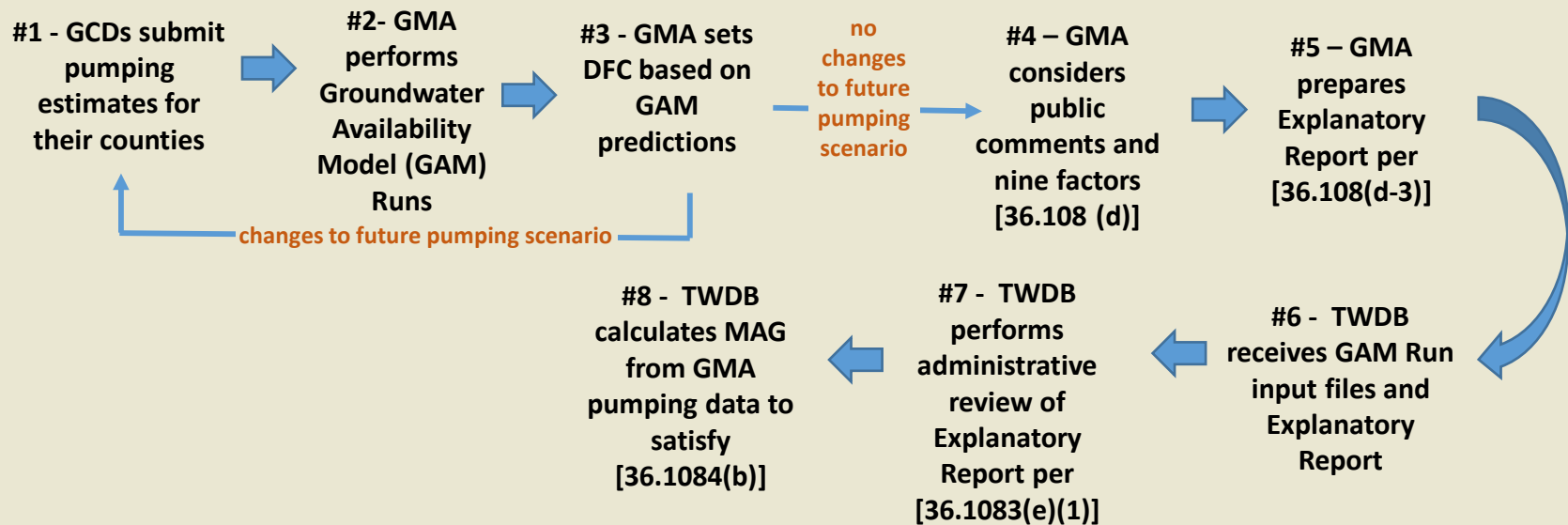
SOURCES

This information was developed by the Legislative Committee of the Texas Desalination Association in December 2016.

Committee members are:

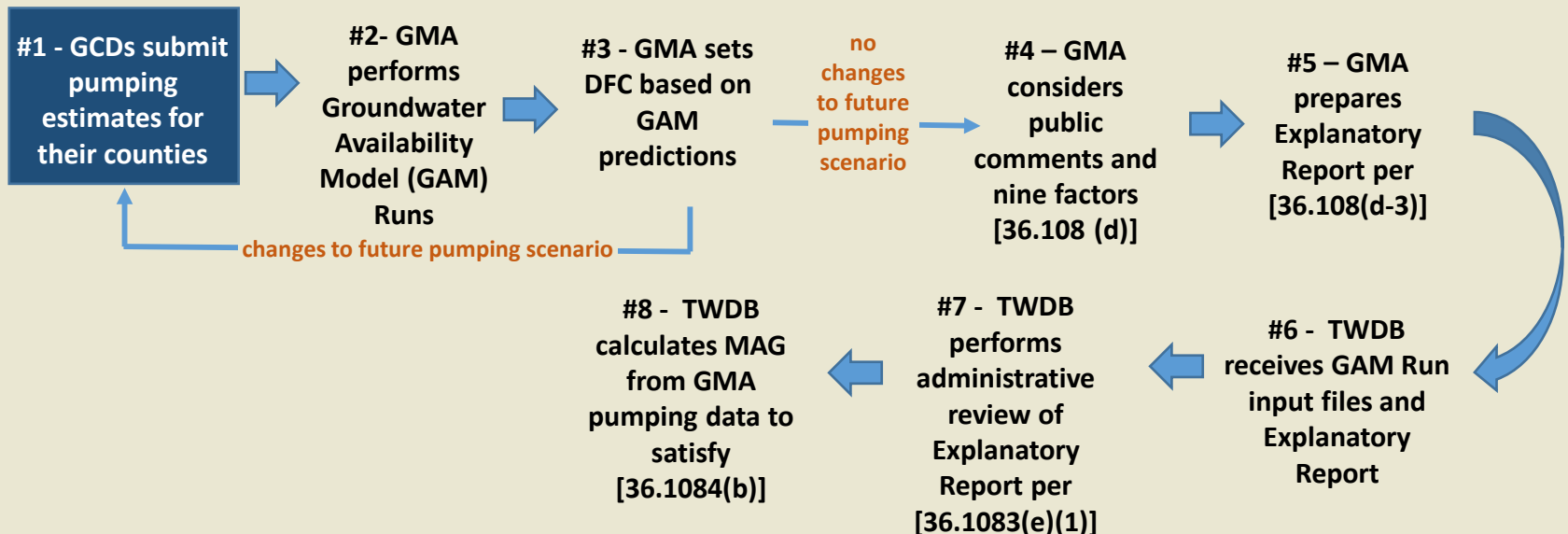
- Justin Sutherland, Chair
- Mike Gisclair
- Darrell Peckham
- Fred Rothauge
- Carlos Rubinstein
- Steve Young
- Steve Walden

FLOWCHART OF A FLAWED JOINT PLANNING PROCESS UNDER CHAPTER 36



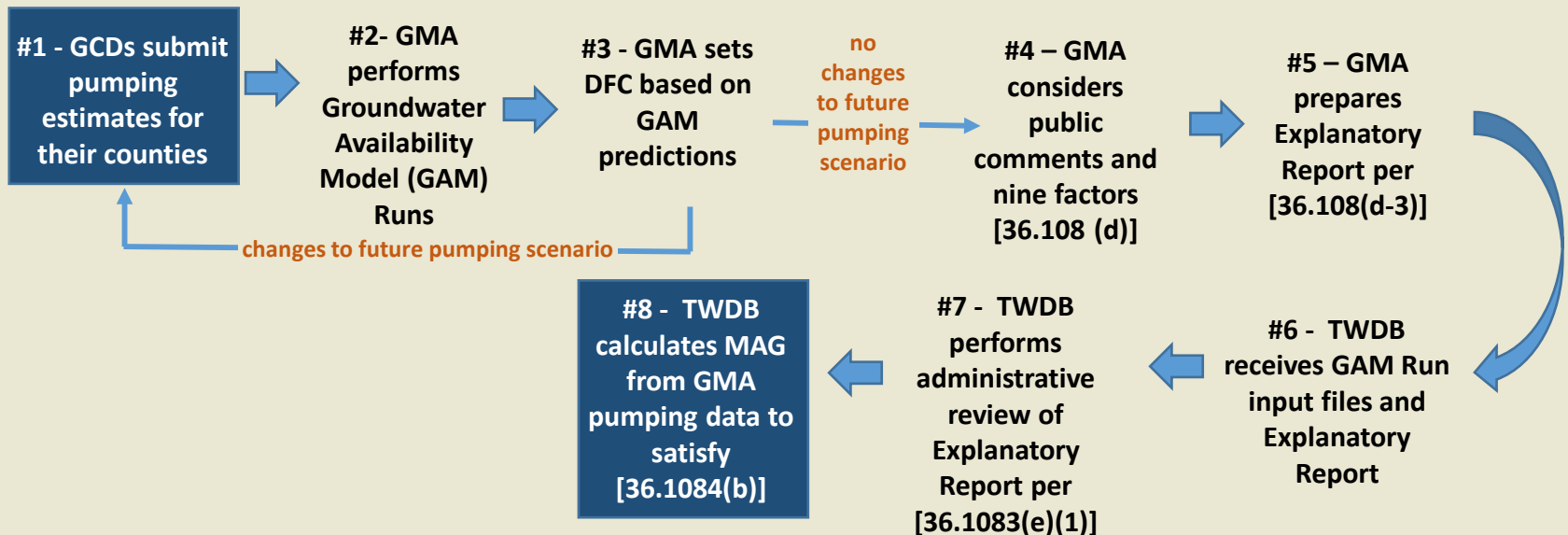
ISSUES THAT CAN RESULT FROM A FLAWED JOINT PLANNING PROCESS

- DFCs are not based on achieving a balance between highest practical level of groundwater production and conservation, preservation and protection per 36.108 (d-2).
- Rather DFCs are based on pumping rates supplied by GCDs in Step #1.



ISSUES THAT CAN RESULT FROM A FLAWED JOINT PLANNING PROCESS

- The TWDB develops the Managed Available Groundwater (MAG) in Step #8 based on the pumping rates developed by GCDs in Step #1.
- MAGs are then used by GCDs as part of their management practices, such as a production cap.
- DFCs are set without an evaluation of how they impact well owners' access to personal property rights or a landowner access to a "fair share."



TO PROMOTE DEVELOPMENT OF BRACKISH GROUNDWATER, CHAPTER 36 LANGUAGE SHOULD BE AMENDED TO ASSURE THAT THE EXPLANATORY REPORT:

1. Include the following information: (needed to accomplish the following items 2 & 3 and increase the transparency of the DFC process)
 - a. Three-dimensional maps of groundwater with different salinities, well locations, current pumping and aquifer subdivisions. (See example for Gulf Coast Aquifer—maps will help establish the placement and location of “untapped” brackish groundwater resources)
 - b. An evaluation of the potential errors and uncertainties in the GAM for predicting impacts from future pumping (as seen in the figures, there is little to no hydrogeological data for much of the Gulf Coast Aquifer)

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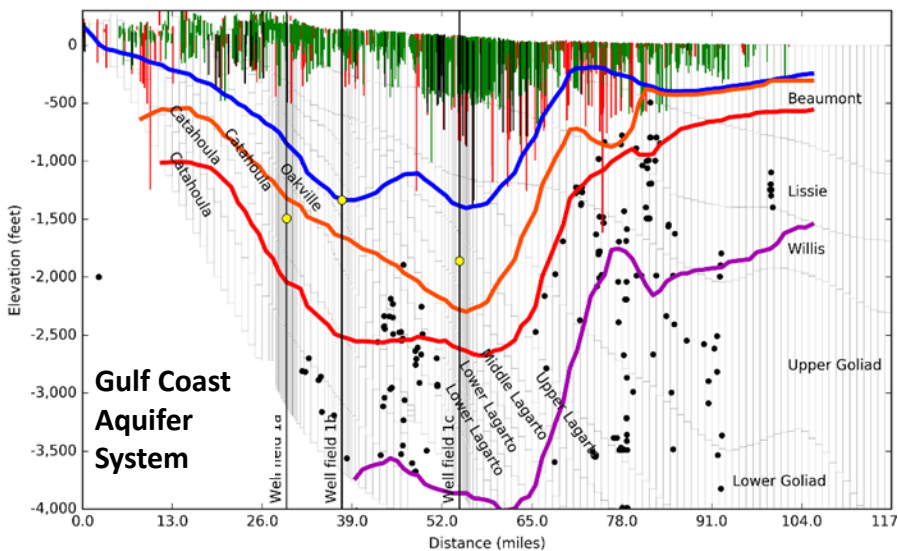
2. Demonstrate that DFCs ... provide a balance:
 - a. “Between the highest practicable level of groundwater production and the conservation, preservation, protection, recharging, and prevention of waste of groundwater and control of subsidence in the management area.” [36.108(d-2)]
(This requirement already exists, but is often ignored in the joint planning process).

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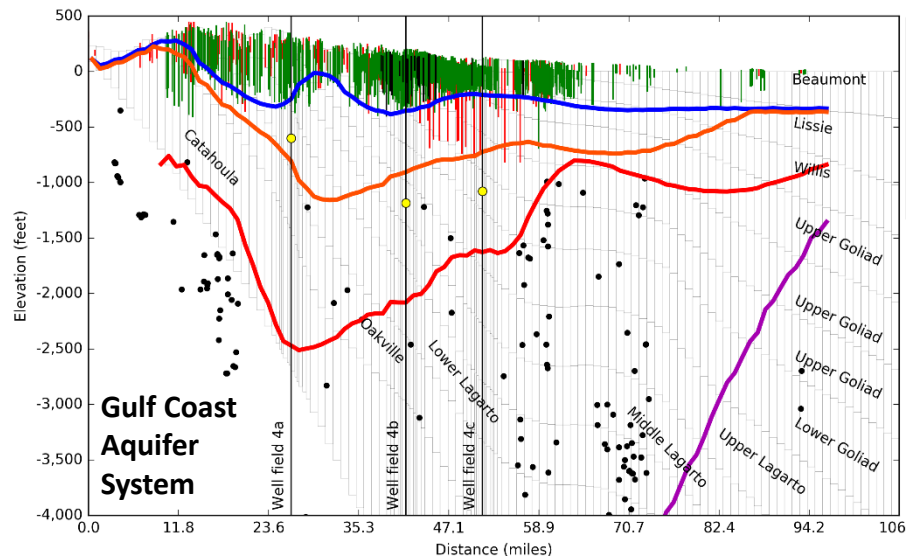
3. Establish DFCs and a methodology for “fair share” based on aquifer subdivisions that is independent of political boundaries.
 - a. This approach is supported by the Texas Supreme Court in the Day Case – “As with oil and gas, one purpose of groundwater regulation is to afford each owner in a common, subsurface reservoir a fair share.”
 - b. The aquifer subdivision approach should lead to general permits being issued by GCDs in a GMA that are aquifer-based and not use-based.

FIGURES SHOW “UNTAPPED” BRACKISH GROUNDWATER RESOURCES (FROM RECENT HB30 STUDIES)

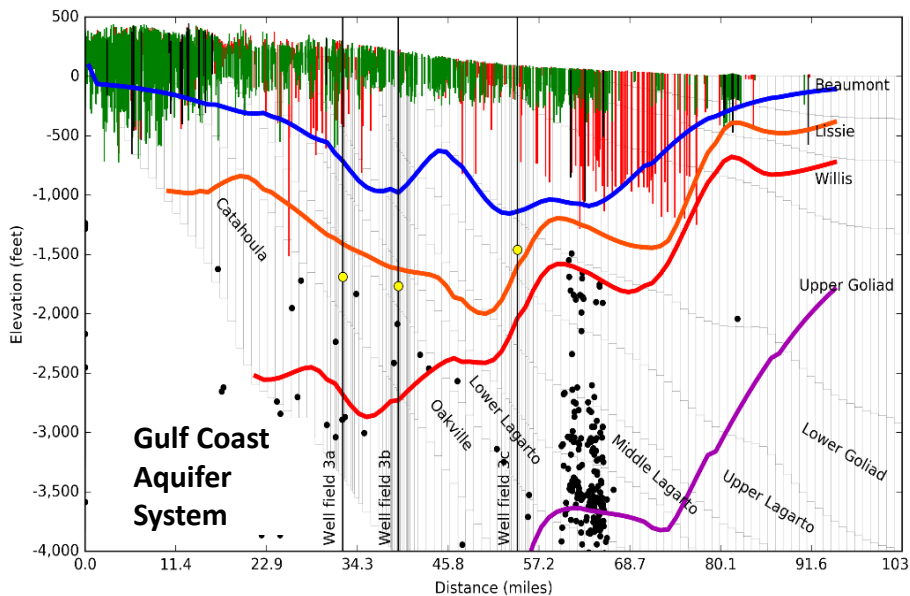
Cross-section through Tyler, Hardin, and Jefferson



Cross-section through McMullen, Live Oak and San Patricio



Cross-section through Karnes, Goliad, and Refugio



- Wells in TWDB Groundwater Database
- Wells in TWDB Driller Log Database
- Wells in TCEQ Public Water Well Database
- TRC Injection/Disposal Database (permits & wells)
- Well Field
- Base of 1,000 mg/L TDS groundwater
- Base of 3,000 mg/L TDS groundwater
- Base of 10,000 mg/L TDS groundwater
- Base of 35,000 mg/L TDS groundwater