

**GULF COAST WATER AUTHORITY  
BOARD WORKSHOP  
MINUTES**

**COUNTY OF GALVESTON     §  
STATE OF TEXAS           §**

The Board of Directors of the Gulf Coast Water Authority convened at 11:00 a.m. on the 11<sup>th</sup> day of July, 2012 and duly constituted members of said Board in attendance:

R. C. Williams	President
Eric Wilson	Vice-President
Rosalyn Sue Edrozo	Secretary-Treasurer
James McWhorter	Assistant Secretary-Treasurer
Bill Eisen	Director
Ray Holbrook	Director
Russell C. Jones	Director
James Cesarini	Director
William Pedersen	Director

A quorum was present. R.C. Williams was not in attendance. Eric Wilson called the meeting to order at 11:00 a.m.

**ALSO PRESENT** were: Ivan Langford, David Sauer, Bob Webb, Nancy Matthews, George Orum, James Vanderwater, Mack Chapman, Karen Ivey, Richard Evans, Darrell Richardson, Ken Kromka, Stan Duitscher, David Paulissen, Philip Topek, Trent Epperson, J.R. Fussell, Tim Turner, Shane Turner, John Dieringer, Steve Jefferson, Michael Huynh, Jeff Peters, Scott Carlson, Court Clark, Cody Cockcroft, Jason Afinowitz, Jeremy Dixon, Doug Kneupper, Chris Canonico, and Bill Manning.

**AGENDA:**

1. **Presentation of draft Water Conservation and Drought Contingency Plans.**  
Jason Afinowicz from Freese and Nichols gave a PowerPoint presentation of the draft 2012 Water Conservation and Drought Contingency Plans.

The topics discussed were as follows:

**Water Conservation Plan**

TCEQ Texas Administrative Code, Chapter §288.3, §288.4, and §288.5

GCWA's role as a Wholesale Provider

GCWA System goals

Customer goals

Description of service area based on current and projected population

Water Use for Municipal, Industrial, and Agricultural customers

Identification of customers by conveyance and type of use

**F&N Presentation Water Conservation and Drought Contingency Plan and  
GCWA Capital Improvements Program**

Certificates of Adjudication 449,432 Ac-Ft/Yr.  
BRA Contracts 32,668 Ac-Ft/Yr.  
Approach to Water Conservation  
GCWA Goals and Practices  
Recommended Customer Conservation practices

Five-Year Goals:

- Meter all diversions
- Maintain water loss at 10% at TMWTP
- Maintain water loss at 20% for treated water

Ten-Year Goals:

- Meter all diversions
- Maintain water loss at 10% at TMWTP
- Maintain water loss at 15% for treated water

GCWA System Conservation Practices:

- Measurement and accounting for diversions
- Monitoring record management
- Metering and leak detection and repair
- System Operations Plan
- Reuse and recycling of wastewater
- Public education

Recommended Customer Conservation Practices:

Municipal:

- Customer education
- School education
- Leak detection
- Water waste ordinance
- Water rate structure
- Work to reduce per capita demands to 140 gpcd

Industrial:

- As economically feasible

Agricultural:

- On-farm practices

Implement conservation and reuse as practicable

**F&N Presentation Water Conservation and Drought Contingency Plan and GCWA Capital Improvements Program****Drought Contingency Plan**

Texas Administrative Code, Chapter 288.21 and 288.22

## Considerations for GCWA and Customers

- Complexity of system

- Potential modes of failure (River conditions, pump stations, treatment infrastructure, canals, pipelines)

- Need for flexibility

- Need to target problem areas

Stage 1 Response – Mild Water Shortage (Triggers and actions)

Stage 2 Response – Moderate Water Shortage (Triggers and actions)

Stage 3 Response – Severe Water Shortage (Triggers and actions)

Stage 4 Response – Emergency Water Shortage (Triggers and actions)

## Water Allocation, Enforcement, and Variances

- Texas Water Code §11.039

- Provisions in new contracts and extensions

- Variances granted by General Manager:

  - Emergency conditions

  - Inability to comply

  - Alternative methods to reduce demands

## What it means for Customers:

- Plan focused on targeting affected customers and limiting unnecessary impacts

- Equal impact under curtailment scenarios, per TWC §11.039

- Contract provisions related to drought response

- No requirement to develop a Drought Contingency Plan beyond Ch. 288 rules

**2. Presentation of draft GCWA Capital Improvements Program.**

Ivan Langford, David Sauer, and Bob Webb made a presentation of the following draft GCWA Capital Improvement projects:

## Administrative Office

- Building modifications and new roof

## Canal Division

- Refurbish Alvin Office (vacated 12 years ago)

- Dump Truck

- Long Boom Excavator

**F&N Presentation Water Conservation and Drought Contingency Plan and  
GCWA Capital Improvements Program**

Shannon Plant (Richmond)  
P-3 Pumps Set (Pump and Motor)  
McCray Bridge

Second Lift  
Jones Creek Spillway  
P-3 Pump Set V.F.D.  
Future P-4 Pump Set V.F.D.  
WCID #2 Pumps 5 & 6 (given back as credit)

Mustang Bayou (A System)  
Pilot check (Engineering and Construction)  
#4 Check (2013-14)  
Coffee Check #17 (2013-14)  
TV Check 21 (2013-14)

Mustang Bayou on Lateral 10 – Interlocal agreement with Pearland  
Flume replacement with siphon

System B  
P-1 Pump Set  
Recondition Intake pipes  
Recondition Discharge pipes

Canal  
Move Sand along road  
Check 4 – Rebuilt  
Knight Flume

Brazoria County Engineers have placed Bridge projects on Federal Bridge Replacement Program for us. TXDOT may replace or rebuild and money has been budgeted in the event that fails.

SCADA Improvements  
Identified locations and put placeholders in CIP where improvements are needed

Chocolate Bayou  
Portable pump  
Recondition Intake pipes  
Recondition Discharge pipes  
P-1, P-2, P-3, P-5 Pump Sets  
Switchgear upgrade

**F&N Presentation Water Conservation and Drought Contingency Plan and GCWA Capital Improvements Program**

## Juliff Plant 2

- P-5 Pump Set with carryover
- P-6 Pump Set
- River training
- Support structure refurbishment

## Juliff Canal

- Credit for CR 504-8
- Future reservoir for Ineos at Archer Lakes (pass through)
- Brunner Ditch – pipes, meters, SCADA

## Chocolate Bayou P.S.

- Pumping Plant refurbishment
- P-1, P-2 Pump Sets
- Natural gas engine replacement/refurbishment

## Chocolate Bayou

- Salt Water Barrier Improvements
- P-1 Pump Set
- Natural gas engine replacement/refurbishment
- Mustang Bayou MCC

## Industrial Pump Station

- Reservoir Intake/Discharge Pipe and Gate Improvement
- Reservoir 1A Circulation Pipes and Gate Installation
- Reservoir Bypass Canal #2
- Solar powered mixers
- Discharge Canal - Horse barn design and construction
- Replacement of Industrial Pump Station
- Back-Up Generators
- Replacement of 2 Transformers
- P-1 Pump Set
- P-8 Pump Set
- P-2 through P-9 Pump Sets spread over next 10 years
- P-8 and P-9 V.F.D. Replacement (Carryover credit from last year)
- Rotating screens (carryover credit)
- Raw Water Line Master Plan
- Design and repair of BP 12-inch branch
- Meter Installation – Design and construction

## Water Treatment Plant

- Canal PAC (powdered activated carbon) System
- Low Lift traveling screens

**F&N Presentation Water Conservation and Drought Contingency Plan and GCWA Capital Improvements Program**

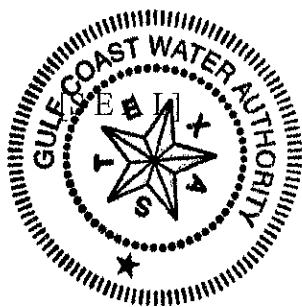
Low Lift P-102, P-103, P-105 Pump Sets (2013)  
RC#1 & RC#2 Effluent Pipe Liner (moved to 2013-14)  
Filters 1 -4 Air Scours  
Filter Basement Pipe Gallery Piping painting  
Filter #6 Underdrain replacement  
Clearwell Pump station P-501 Pump Set  
P-551 Pump Set (Remaining Pump Sets spread over next 10 years)  
Distribution P-601& P-604 Pump Set  
Distribution – Plant Portable Generators  
Main Building HVAC  
GC Mass Spec Analyzer  
Sludge Removal/Dewatering (Must be done in coming fiscal year)  
Filters 11-14 (Plant Expansion 2014-15) Study for 20 MGD Expansion  
CIP Treated Water Piping Transmission System (Possible grant project)

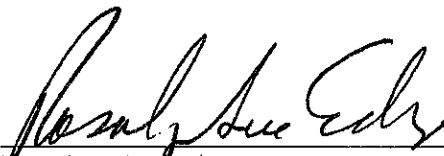
Ivan Langford stated the Capital Improvements Program is a massive work in progress. Staff is working with the Board Engineering Committee to identify projects and prioritize them to determine how best to proceed. Ivan stated the projected budget will be presented in special meetings with Mainland Municipal Advisory Committee and Industrial Advisory Committee in the coming weeks.

**No action was taken.**

Eric Wilson adjourned the meeting at 2:55 p.m.

**PASSED AND APPROVED** this the 16<sup>th</sup> day of August, 2012.



  
\_\_\_\_\_  
Rosalyn Sue Edrozo  
Secretary-Treasurer