

# **REGION H**

## **Water Planning Group**

### **WATER MANAGEMENT STRATEGY COMMITTEE MEETING MATERIALS**

**September 4, 2019**

**San Jacinto River Authority**



## Common Region H Terms and Conversion Factors

### List of Abbreviations

COA	Certificate of Adjudication
CRU	Collective Reporting Unit
DCP	Drought Contingency Plan
DFC	Desired Future Condition
DOR	Drought of Record
EA	Executive Administrator
EPA	Environmental Protection Agency
FWSD	Fresh Water Supply District
GAM	Groundwater Availability Model
GCD	Groundwater Conservation District
GMA	Groundwater Management Area
GPCD	Gallons Per Capita Per Day
GRP	Groundwater Reduction Plan
IPP	Initially Prepared Plan
MAG	Modeled Available Groundwater
MPC	Master Planned Community
MUD	Municipal Utility District
MWP	Major Water Provider
PDSI	Palmer Drought Severity Index
PWS	Public Water Supply
RHWPG	Region H Water Planning Group
ROR	Run-of-River
RWP	Regional Water Plan
RWPA	Regional Water Planning Area
RWPG	Regional Water Planning Group
SWIFT	State Water Implementation Fund for Texas
SWP	State Water Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TPWD	Texas Parks and Wildlife Department
TWC	Texas Water Code
TWDB	Texas Water Development Board
UCM	Unified Costing Model
WAM	Water Availability Model
WCID	Water Control and Improvement District
WCP	Water Conservation Plan
WMS	Water Management Strategy
WRAP	Water Rights Analysis Package
WUD	Water Utility Database
WUG	Water User Group
WWP	Wholesale Water Provider

### Water Measurements

1 acre-foot (AF) = 43,560 cubic feet = 325,851 gallons

1 acre-foot per year (ac-ft/yr) = 325,851 gallons per year = 893 gallons per day

1 gallon per minute (gpm) = 1,440 gallons per day = 1.6 ac-ft/yr

1 million gallons per day (mgd) = 1,000,000 gallons per day = 1120 ac-ft/yr



**Region H Water Planning Group  
Water Management Strategy Committee**

**12:00 PM Wednesday**

**September 4, 2019**

**Following the conclusion of the Region H RWPG Meeting**

**San Jacinto River Authority Office**

**1577 Dam Site Rd, Conroe, Texas 77304**

**AGENDA**

1. Call to order.
2. Introductions.
3. Review and approve minutes of March 21, 2018 WMS Committee meeting.
4. **Receive public comments on specific issues related to agenda items 4 through 7.** (Public comments limited to 3 minutes per speaker)
5. Discuss Committee activities and schedule.
6. Discuss water management strategy recommendations and process from the Region H 2021 Regional Water Plan.
7. Discuss options for utilization of remaining unallocated Task 5 funds and consider making recommendations to the Region H Water Planning Group.
8. **Receive public comments.** (Public comments limited to 3 minutes per speaker)
9. Adjourn.

Persons with disabilities who plan to attend this meeting and would like to request auxiliary aids or services are requested to contact Sonia Zamudio at (936) 588-3111 at least three business days prior to the meeting so that appropriate arrangements can be made.



## Agenda Item 3

Review and approve minutes of March 21, 2018 WMS  
Committee meeting.





**REGION H WATER PLANNING GROUP  
WATER MANAGEMENT STRATEGY COMMITTEE  
MINUTES OF COMMITTEE MEETING  
MARCH 21, 2018**

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A meeting of the Region H Water Planning Group Water Management Strategy Committee was held at 9:30 a.m., March 21, 2018, at the Freese and Nichols Houston office. A notice of said meeting was posted as required by law.

**MEMBERS PRESENT:** John Bartos, Bob Hebert, Jace Houston (phone), Ivan Langford (phone), Glenn Lord, Mike Turco, Kevin Ward (phone)

**DESIGNATED ALTERNATES:** Brad Burnett for David Collinsworth, Veronica Osegueda for Yvonne Forrest

**MEMBERS ABSENT:** Robert Bruner, Mark Evans, Jimmie Schindewolf

**NON-VOTING MEMBERS PRESENT:**

**NON-MEMBERS PRESENT:** Lann Bookout (TWDB), Beth Wolf (Fort Bend County), Ken Kramer (Sierra Club) for Carl Masterson, Chris Rosales (City of Houston), Alisa Max (Harris County), John Burke (Region K), Jim Sims (TRA)

**CONSULTANT TEAM:** Jason Afinowicz, Philip Taucer, Mike Reedy, Courtney Merket, Glenda Callaway

The meeting was called to order at 9:36 a.m.

**1. INTRODUCTIONS**

Mr. Hebert welcomed the committee members and guests to the meeting.

**2. REVIEW AND APPROVE MINUTES OF NOVEMBER 1, 2017 WMS COMMITTEE MEETING**

The committee passed a motion to approve the minutes of the WMS Committee meeting on November 1, 2017.

**3. RECEIVE PUBLIC COMMENTS ON SPECIFIC ISSUES RELATED TO AGENDA ITEMS 4 THROUGH 8**

There were no public comments.

**4. DISCUSS COMMITTEE ACTIVITIES AND SCHEDULE**

Mr. Taucer provided an update to the 2021 Regional Water Plan schedule referencing various due dates. The Committee agreed that future Committee meetings would be scheduled on an as-needed basis.

**5. DISCUSS WATER MANAGEMENT STRATEGY RECOMMENDATIONS AND PROCESS FROM THE REGION H 2016 REGIONAL WATER PLAN.**

Mr. Taucer summarized the types of water management strategies in the 2016 Region H RWP. Mr. Mike Turco requested a summary of SWIFT spending by region; Mr. Lann Bookout responded that the Texas Water Development Board does have a summary list of all spending in Region H.

**6. DISCUSS PRELIMINARY SCOPE AND BUDGET FOR REQUESTING TASK 5 FUNDS FOR THE INITIATION OF DETAILED INVESTIGATION INTO POTENTIAL WATER MANAGEMENT STRATEGIES AND CONSIDER MAKING RECOMMENDATIONS TO THE REGION H WATER PLANNING GROUP.**

Mr. Taucer explained the funding process for Task 5A and then detailed each of six subtasks developed by the consultant team for potential inclusion in the initial Task 5A request for notice-to-proceed. Based on discussion by the group, the Committee recommended adding subtasks for conservation and aquifer storage and recovery (ASR). Ms. Alisa Max noted that direct reuse would be likely be increasing, particularly in rural areas.

**7. DISCUSS POTENTIAL WATER MANAGEMENT STRATEGY FOCUS AREAS FOR THE 2021 RWP.**

Mr. Brad Brunett suggested that reallocation of reservoir supplies should be included as a focus area. Mr. Ken Kramer commented that some regions adopted drought management strategies in the 2016 RWPs and suggested that this be considered as an option in Region H.

**8. CONSIDER DEVELOPMENT OF A SAFETY FACTOR FOR THE ALLOCATION OF SUPPLIES AND STRATEGIES TO WATER USER GROUPS IN DEVELOPMENT OF THE 2021 REGIONAL WATER PLAN.**

The Committee decided to recommend to the RWPG that Region H should not use a management supply factor target in the 2021 Region H RWP.

**9. RECEIVE PUBLIC COMMENTS**

Mr. Ken Kramer notified the Committee of the “Water Conservation by the Yard” report being published this month.

**10. ADJOURN**

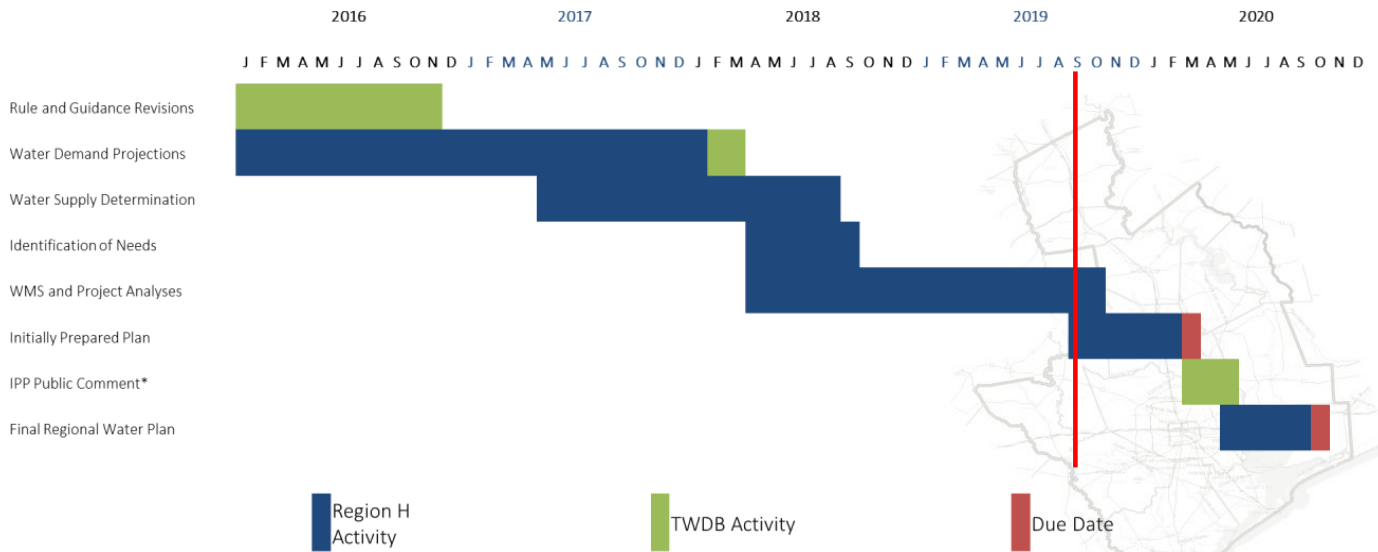
Without objection, the meeting was adjourned at 10:45 a.m.

## Agenda Item 5

Discuss Committee activities and schedule.



# Agenda Item 5 Committee Activities and Schedule



\*Region H accepts public comment throughout the planning cycle and at each RWPG and committee meeting.

# Agenda Item 5 Committee Activities and Schedule

Date	Scheduled Events/Tasks
09/2019	WMS Committee Meeting
11/2019	WMS Committee Meeting
01/2020	WMS Committee Meeting
03/2020	DUE DATE: Initially Prepared Plan
10/2020	DUE DATE: FINAL RWP

## **Agenda Item 5**

### **Committee Activities and Schedule**

Completed

- Process to identify
- Process to evaluate

In Progress

- WMS Evaluation and recommendations

In Near Future

- Additional WMS scope
- Implementation analysis

At The End

- Prioritization analysis

## Agenda Item 6

Discuss water management strategy recommendations and process from the Region H 2021 Regional Water Plan.





## Agenda Item 6 WMS Recommendations

Primary  
Topics for  
Today

- Context for 2021 RWP
- Strategy Outlook
- Major Milestones
- Demand Management
- Work in Progress
- Related Tasks
- Discussion and Recommendations

## Agenda Item 6 WMS Recommendations – Context for 2021 RWP

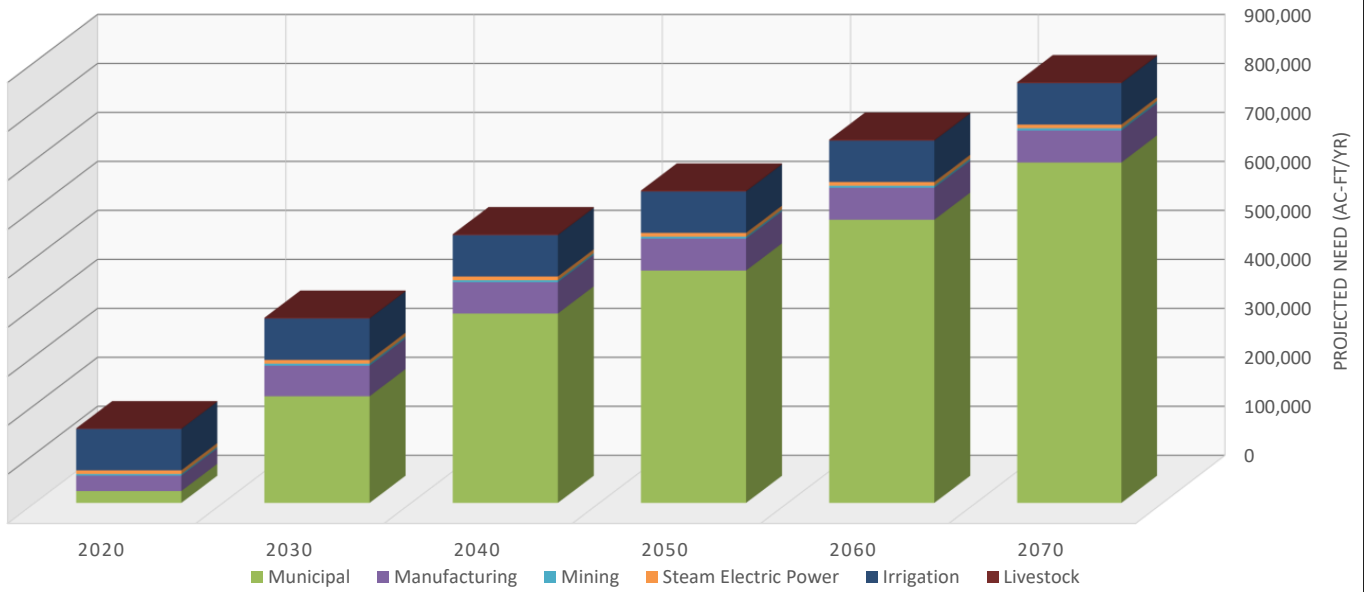
### Similar to Last Time:

- Report structure
- Database structure
- Suite of WMS and projects
- Uniform Standards

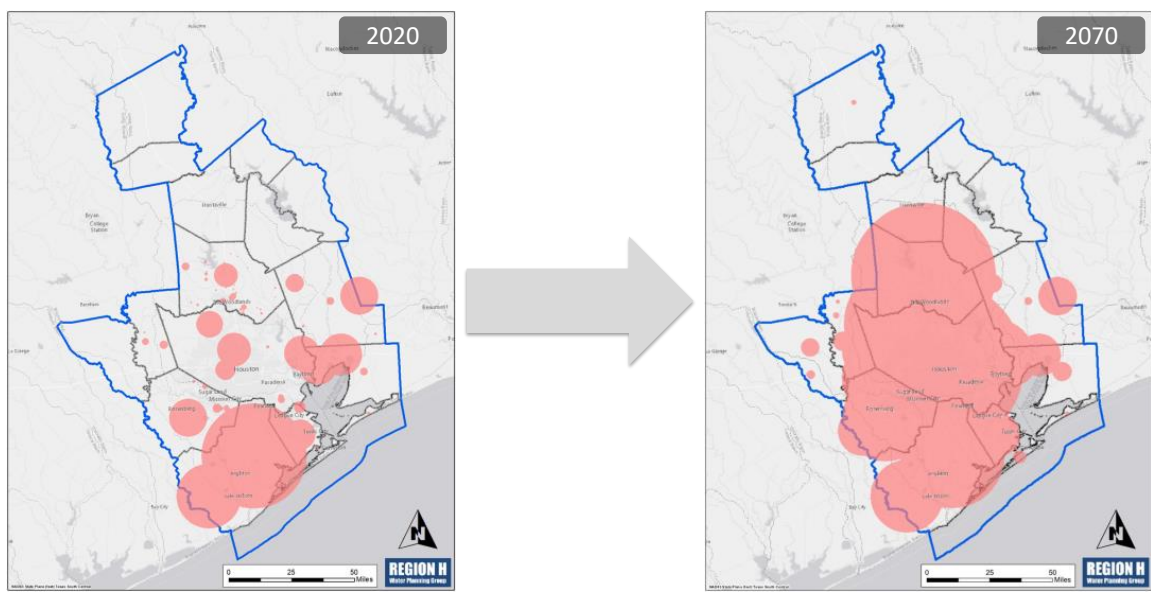
### Some Changes:

- Project implementation
- Demand and supply projections
- Timing
- Cost assumptions
- Qualifying projects

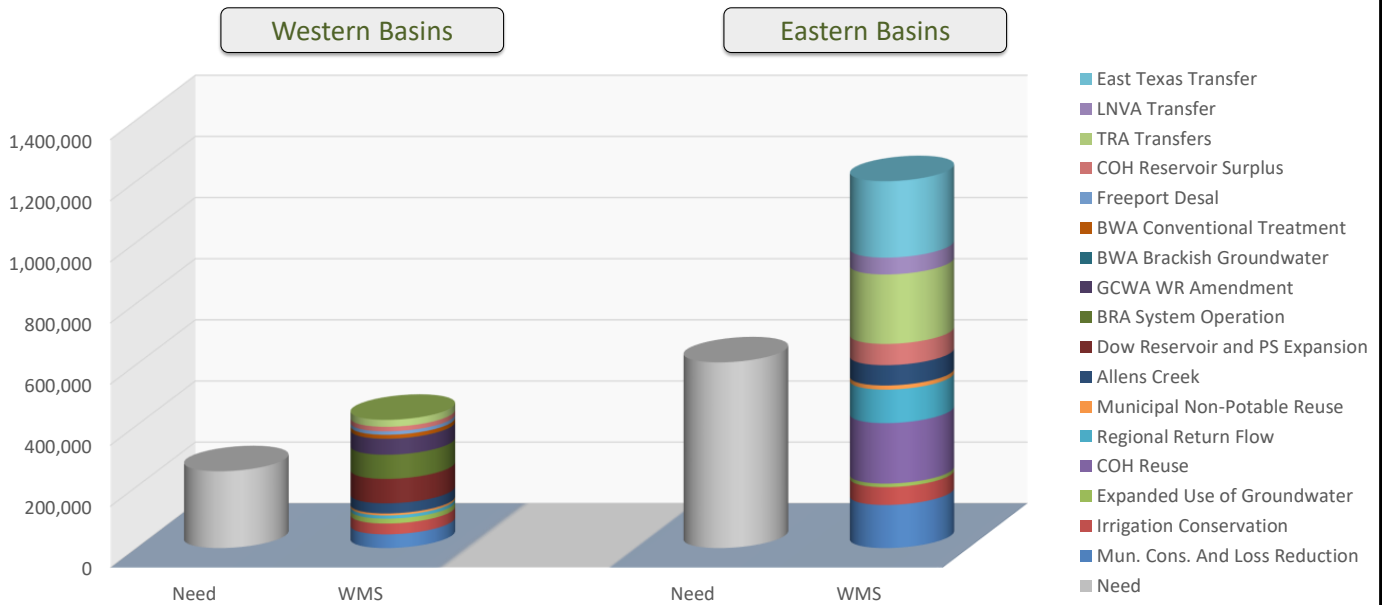
# Agenda Item 6 WMS Recommendations – Strategy Outlook



# Agenda Item 6 WMS Recommendations – Strategy Outlook



## Agenda Item 6 WMS Recommendations – Strategy Outlook



## Agenda Item 6 WMS Recommendations – Major Milestones



Region H Database Dev.



Costing Workbook and Package Costs



Advanced Mun. Conservation



Water Loss Reduction



Irrigation Conservation



Regional Return Flows

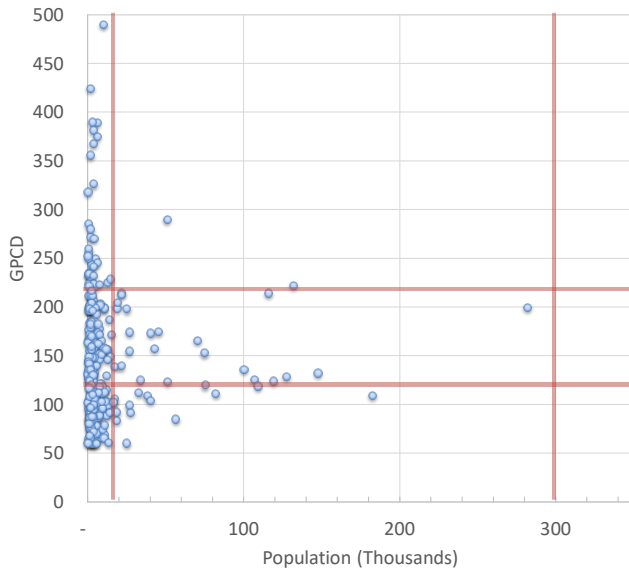


Mun. Non-Potable Reuse

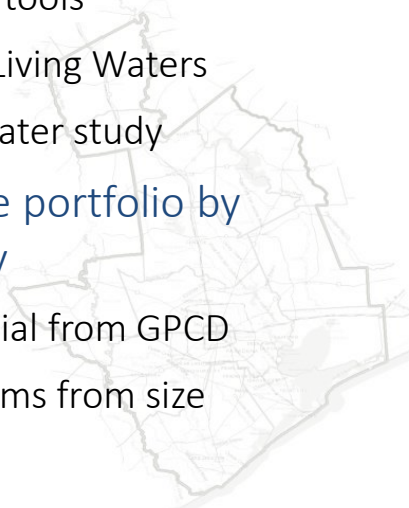


Expanded Use of Groundwater

## Agenda Item 6 WMS Recommendations – Advanced Conservation

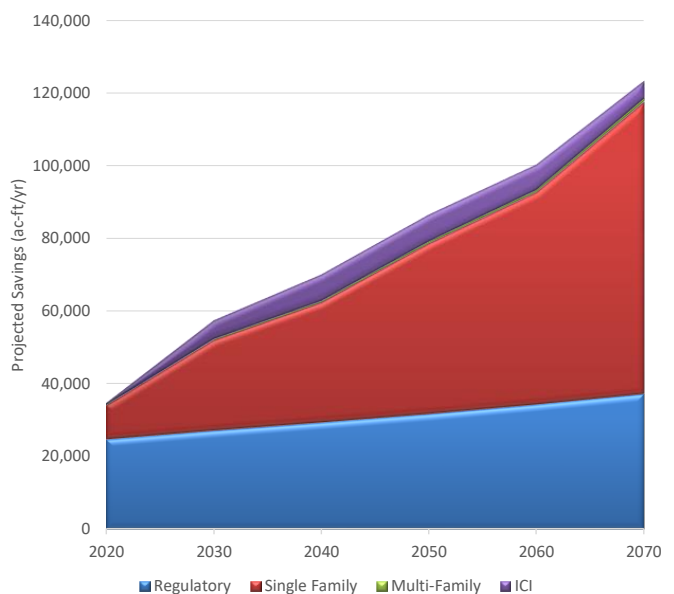


- Growing knowledge base
  - TWDB tools
  - Texas Living Waters
  - Goldwater study
- Measure portfolio by category
  - Potential from GPCD
  - Programs from size

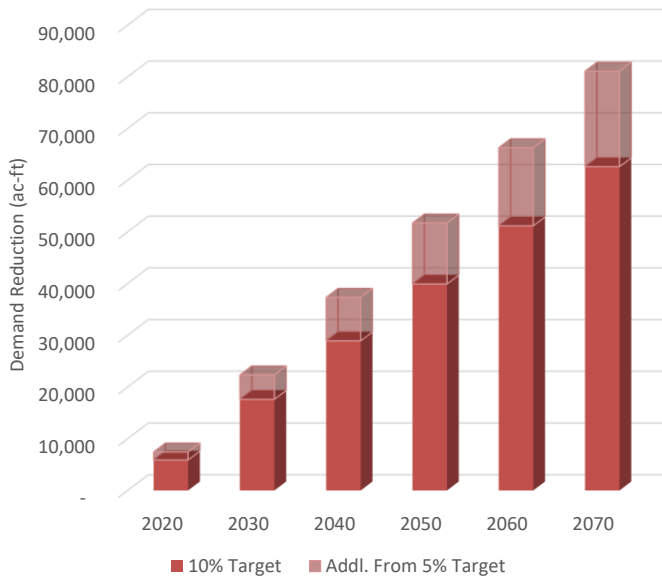


## Agenda Item 6 WMS Recommendations – Advanced Conservation

- Adjusted for RWPG input
- Broad range of measures
  - Twice-per-week watering
  - Home water reports
  - Irrigation audits
  - Rebate programs
  - Rain barrels
  - Commercial fixture rebates

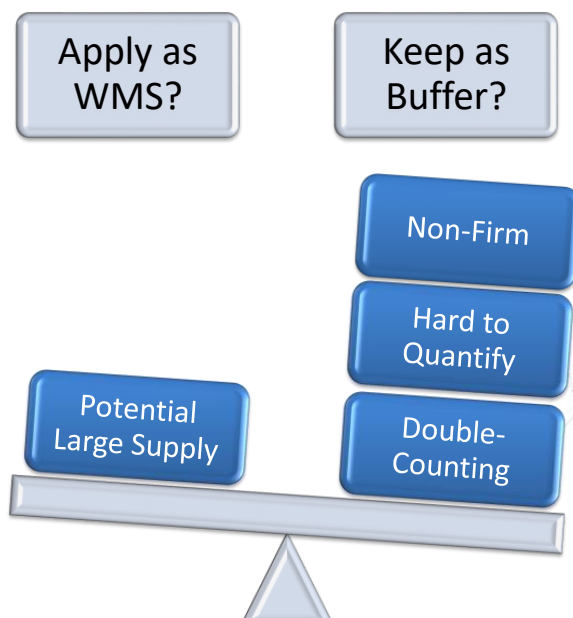


## Agenda Item 6 WMS Recommendations – Water Loss Reduction

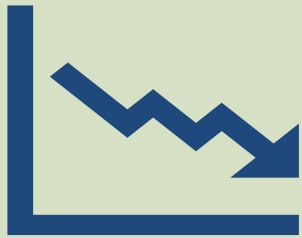


- First cut for this time at 5%
- RWPG and stakeholder feedback
  - 5% not feasible for all
  - Large suppliers bear for many
  - New infrastructure
- Reverted to 10%
- Still substantial savings

## Agenda Item 6 WMS Recommendations – Drought Contingency



## Agenda Item 6 WMS Recommendations – Accounting Components



Groundwater  
Reduction Plans



New and Expanded  
Contracts



Reallocation of  
Existing Supply

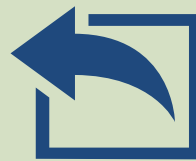
## Agenda Item 6 WMS Recommendations – Source Water



Reservoir Expansion  
and Construction



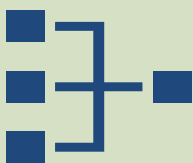
System Operation and  
Other Amendments



Interbasin Transfers



Seawater Desalination



Brackish and Blended  
Groundwater



Aquifer Storage and  
Recovery



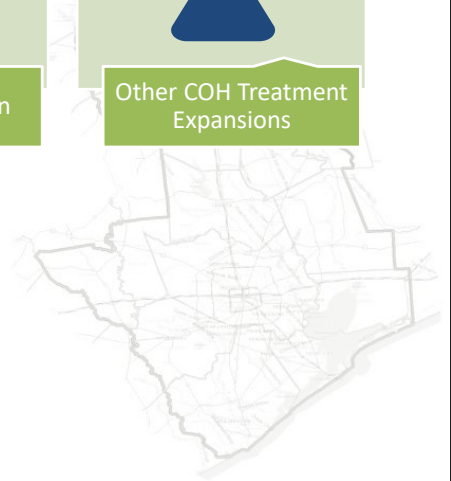
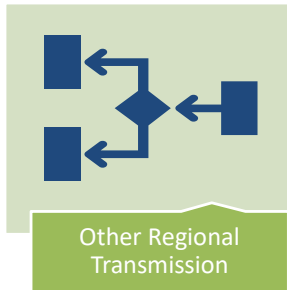
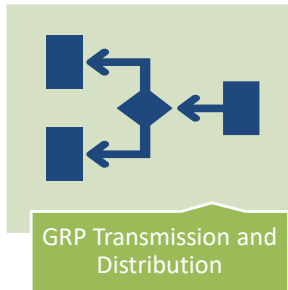
City of Houston Reuse



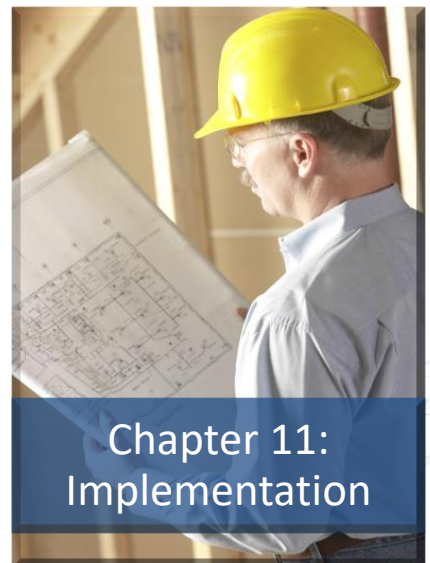
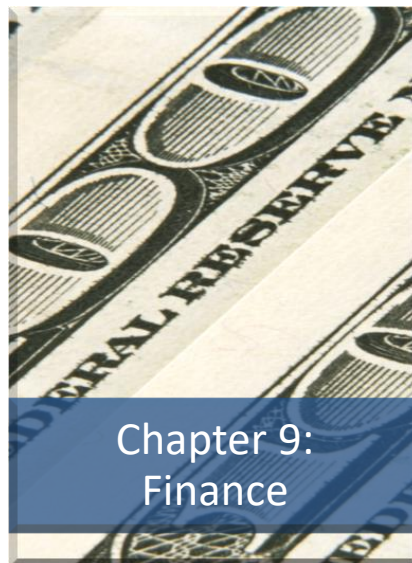
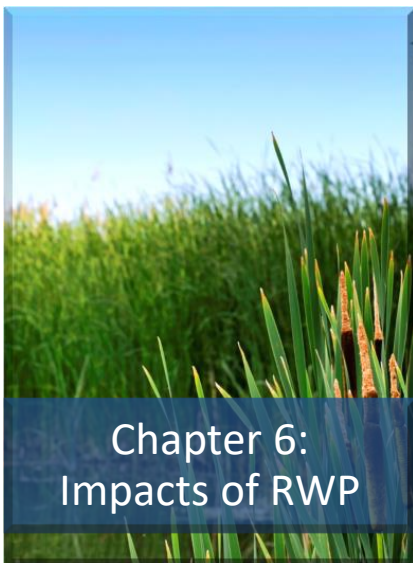
Other Reuse Projects



## Agenda Item 6 WMS Recommendations – Other Facilities



## Agenda Item 6 WMS Recommendations – Related Tasks



**Agenda Item 6**  
**WMS Recommendations – Discussion and Recommendations**





## Agenda Item 7

Discuss options for utilization of remaining unallocated Task 5 funds and consider making recommendations to the Region H Water Planning Group.



## Agenda Item 7 WMS Funding

WMS Database	Update / Reallocate	Comprehensive Cost Updates	Contractual Transfers	Expanded GW
GRPs	Aquifer Storage and Recovery	Conservation	Brackish GW	Regional Return Flow
WUG Reuse	BRA SysOp	IBTs	NEWPP Expansion	Other Facility / Storage

## Agenda Item 7 WMS Funding

- Funds allocated for effort related to Water Management Strategies
- \$118,385 remaining
  - Allocated to Region H
  - Not yet authorized

Task 5A Funding	\$948,695
4D Items Part 1	(\$482,200)
4D Items Part 2	(\$348,100)
<b>Remaining</b>	<b>\$118,385</b>

## **Agenda Item 7**

### **WMS Funding**

- Potential Item:

*Review input from stakeholders and identify requests to adjust recommended WMS and projects included in the IPP. This may include addition of new projects that have not been identified to date and will require further analysis and study in order to make them eligible for inclusion in the Final RWP. Effort will include revisions to DB22 to incorporate new projects as necessary.*

