



Items for Individual Consideration

7.i The Water and Infrastructure Committee update. *(S. Dodson)*

5 PILLARS OF WATER EXCELLENCE



SUPPLY



**CONSERVATION/
EDUCATION**



STORAGE



WATERLOSS



**INFRASTRUCTURE /
MAINTIANCE**

WATER COMMITTEE TEAM MEMBERS

- Scott Dodson, Chairman, Mayor Pro Tem, City Council Place-5
- Steven Alexander, Heath City Manager
- Ryan Moorman, City Council Place -3
- Johnny Myers, City Council Place – 2
- Bryan Creed, Director of Public Works
- Candace Gillespie, President FNH Construction
- Suzanne Brooke, Heath Director of Communications
- Norma Duncan, Heath City Secretary
- Dr. Michael Hites, Chief Information Officer at SMU





SUPPLY

What We Believe Today

- Heath formerly received 6M GPD from NTMWD via the City of Rockwall
- As a component of settling our litigation, Heath received an additional .5M GPD from Rockwall effective July 2026
- In July of 2027, Heath will receive an additional .5M GPD from Rockwall**
 - Heath may have the option to receive additional supplies from Rockwall
- Heath will construct up to (6) potable water wells between 2026 and 2029
 - Each well is expected to produce from .7M-1M GPD for a total of 4-6M GPD
- Heath is in discussions with others to assess additional water availability
 - projected volume availability up to 5M GPD (estimated)

Total Volume: $6+.5+.5+.5 +5^*+3^*=15.5$ M GPD with current options performing as expected

Heath Current Population = 11k / Heath Projected Buildout Population =17k

If 7M GPD supports a population of 11k, then 15.5M GPD should support a population of 17K with a buffer*

** (2027 is an estimated date)

*(5M GPD is an estimated TOTAL volume amount from 6 potable wells) + 3M GPD water availability is an estimate from an alternative source





SUPPLY ITEMS DISCUSSED

Peak Demand / Total Water Available in 2025

Current Population & Buildout Population

Projected Water Needs At Buildout

Water Usage Impact With SF-43 (1 Home / 1 Acre)

Conservation Projections / Reliability

Water Rate Tiers

Bond Amounts Based on Well / Storage Costs / Timing

Utilization of Non-Potable Water Assets



STORAGE

Heath currently has 2MG's of storage in elevated tanks

Heath currently has 3MG's of storage in an in-ground tank

Heath will build an additional 1.5MG elevated tank by 2027

Heath to co-develop an additional 3MG in-ground tank w/ Rockwall

- at take point #2 (behind Shenanigans on I30) / not yet begun

Engineering has long lead times for elevated and in-ground

Heath may obtain existing storage tank capacity*

Heath may need to build additional elevated storage tanks to manage the water volume from 6 wells

Current Storage Capacity in 2025 = 5MG's

Expected Storage Capacity by 2028 = an additional 5MG's for a total of 10MG's





STORAGE ITEMS DISCUSSED

Length of Time for Engineering – 200 / 400 Days

Timing for Co-Developed 3M In-Ground Tank

Treating – Mixing Points For All 6 Wells

Additional Assets Needed For Wells 5 & 6

Overall Timing of Storage Assets

Staging Bond Amounts to Match Work Effort



CONSERVATION / EDUCATION



Irrigation compliance is critical to the success of Heath's water plan

2025 data suggests that citizen compliance is trending in the right direction

Continued adherence is paramount. If we have 200 out of 4100 homes that are not compliant, that is 5%.

New developments could provide for the irrigation needs of their residents

Education is needed on a consistent basis via flyers, public education, text messages. Subject matter experts should be at the front of this effort.

Awareness as to drought tolerant plants and grass varieties are needed

A Multi-level Sustained Effort Can Help Ease The Burden of Additional Supply

Citizen Engagement & Subject Matter Expertise / Exposure Would Be Helpful



CONSERVATION / EDUCATION DISCUSSION

- Launch a Multi-level Marketing Plan
- Elements Include:
 - Social Media
 - Website
 - Targeted Updates
 - Events
 - Public Relations / Town Hall Meetings
 - Subject Matter Expert Engagement
- 90 Day Water Bridge Plan



BEAT THE PEAK!

WATER THE HEATH WAY...

**BY THE SCHEDULE
IF IT'S NEEDED**

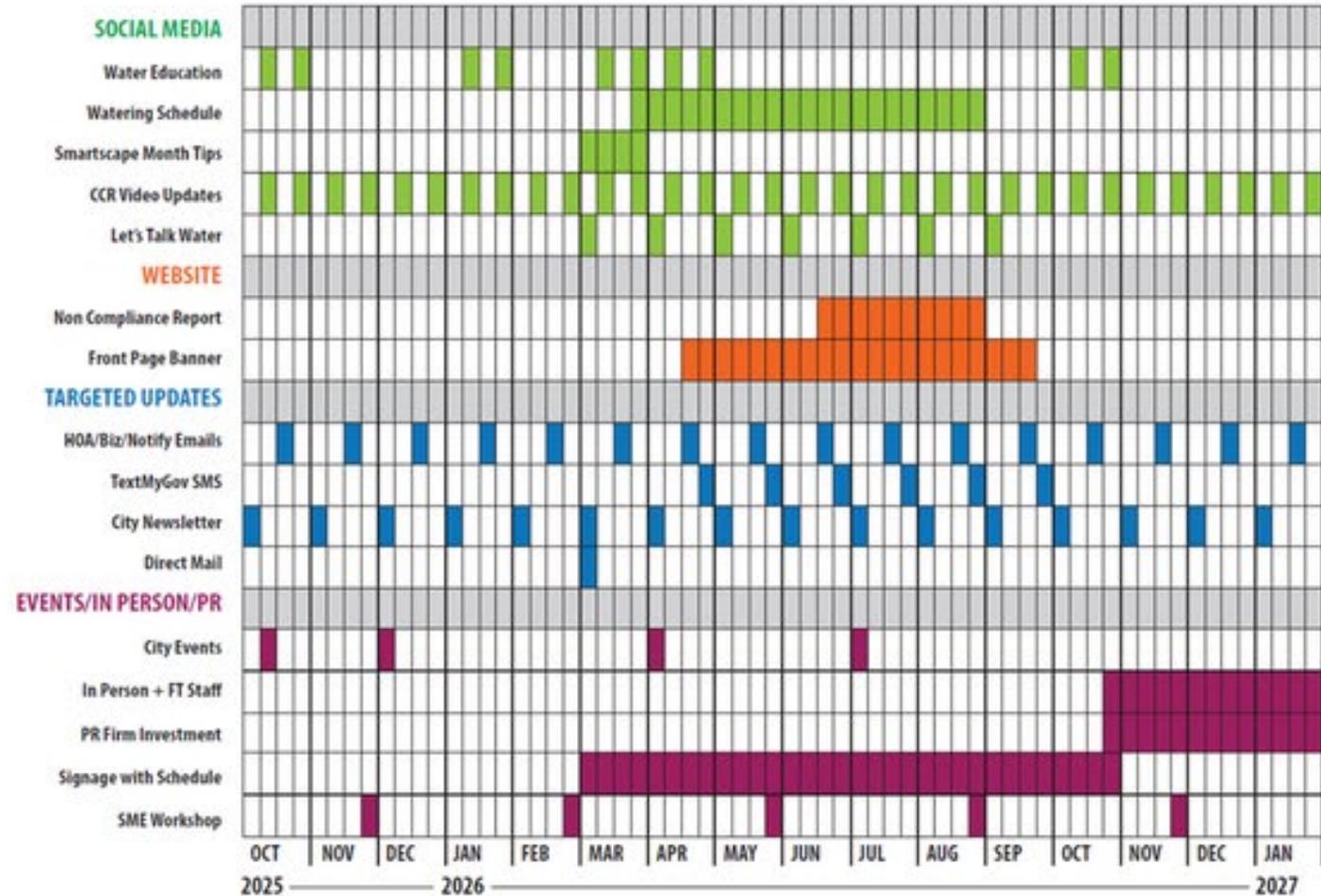
*Together, we can conserve this precious resource
and ensure a sustainable future for our community.*

EDUCATION / CONSERVATION



2025-2026 WATER WISE EDUCATION CALENDAR

All communication ties back to heathtx.com/water-wise



WATER LOSS



Two areas that this covers includes evaporation and system leakage



Current method is based on a calculation (a line-item estimate)



City must develop a plan for the assessment of water loss and a plan to reduce this loss going forward



City must develop a plan to mitigate using our SMART system and implement a CMOM Plan



City must include park management and maintenance in our calculations for our water resources



Includes billable and non-billable items



Heath may lose up to 400k GPD from pool evaporation





WATER LOSS DISCUSSION

- How Does Heath Assess Water Loss Using The New Meters and SCADA System?
- What Are The Thresholds For Water Loss, Including Pool Evaporation?
- How Does Heath Estimate Park Watering Demand & Future Commercial Development Water Needs?
- How Does Heath's Wastewater Infrastructure Impact Water Loss?
- With So Many Water Line Breakages in 2025, How Does Heath Gain A Better Understanding of Underground Assets?
- How Does Heath Improve Its Redundancy Given Its Dependence on Rockwall For Its Water Supply

INFRASTRUCTURE & MAINTENANCE

Heath has an ageing infrastructure with old pipes and connections

Heath needs a plan to proactively update our infrastructure

Continued execution of the fireflow plan must be front and center as well as a cross-connection control program

Estimated costs of water treatment needed for all potable wells, parks and new developments where non-potable water will be required.

- these costs should have their own line item in the budget

Backup motors and generators should be purchased and maintained by Public Works or an external service agreement

Heath could benefit from some in-house or contracted expertise on system assessment of macro data



RESOURCES NEEDED TO IMPROVE KNOWLEDGE



AGRICULTURE
AND NATURAL
RESOURCES VIA
TEXAS A&M



OIT
MANAGEMENT
OF MACRO DATA
VIA SOUTHERN
METHODIST
UNIVERSITY



TCEQ
GUIDELINES



NTMWD
DIVISION OF
WATER
MANAGEMENT



NORTH CENTRAL
TEXAS COUNCIL
OF
GOVERNMENT
(NCTCOG)



GRANT WRITING
SERVICE FOR
CAPITAL WATER
PROJECTS



DEEP WELL
DRILLING AND
WATER
TREATMENT
EXPERTISE



STRENGTHENING
PUBLIC WORKS /
COMMUNICATIONS
TEAM

IMMEDIATE RECOMMENDATIONS

- ✓ Execute Well #1
- ✓ Approve Engineering On Elevated & In-Ground Storage
 - Approve Well #2-#4 For Engineering Work
 - Expedite Bid Solicitation for Wells #2 - #4
 - Assess Requirements & Cost For Wells #5 - #6
 - Modify Bond To Reflect Lower Well Estimates, Storage Timing & Water Rates
 - Explore 2nd Bond Option When Additional Diligence Is Gathered
 - Execute Sustained Marketing Effort for Education & Conservation
 - Assess Non-Potable Options For Irrigation Needs
 - Assess Alternative Source Water Options
 - Strengthen Relationship With NTMWD
 - Research Non-Dilutive Grants for Conservation & Infrastructure
 - Engage Citizens on Comprehensive Water Plan Cadence
 - Strengthen Staff Capabilities in Public Works and Communications





THANK YOU