

DATE: December 2, 2019
TO: Matt Jordan, General Manager
FROM: Charles H. Carden, Chief Operating Officer *CHC*
SUBJECT: Update on Short and Long-term Project – *Presentation*

SUMMARY

South-Central Hillsborough County is experiencing significant growth which requires changes or additions to Tampa Bay Water’s existing delivery capacity and actions by the County downstream of Tampa Bay Water’s points of connection. The Board has approved multiple actions that will position Tampa Bay Water to meet the County’s needs in the short- and long-term.

RECOMMENDATION

Receive presentation on actions underway or completed that will meet increasing water needs in South-Central Hillsborough County.

DISCUSSION

Tampa Bay Water and Hillsborough County staff have been meeting since 2016 to determine the most effective way to meet the County’s growing demands for drinking water in the South County service area. Attachment A is a chronology of these meetings including Board Agenda information and action items on this subject.

Member Governments regularly provide their demand projections to Tampa Bay Water (Exhibit K). In March 2019, Hillsborough County submitted its Exhibit K projections that are being used as the basis to plan for the County’s future demands.

At its June 2019 meeting, the Board approved a short-term plan to increase delivery to South Hillsborough County through 2028, when a longer-term plan is in place. Tampa Bay Water is working on separate water supply initiatives to meet the growing water demands in Hillsborough County’s south-central service area. These initiatives are described below; a chart (Attachment B) detailing each is attached.

Immediate Water Needs – More Water at Existing Points of Connection

Hillsborough County began taking more water at its Central Water Treatment Plant in late summer 2019. Tampa Bay Water is currently able to deliver up to 19 million gallons per day (mgd) at the Central Water Treatment Plant location per a previous Agreement with



Hillsborough County. Hillsborough County has been taking roughly 14-15 mgd over the past several months at this location. This solution will provide the needed water through 2024.

Short-term Needs (2024) – Booster Pump Station

As approved by the board in June 2019, Tampa Bay Water is building a booster pump station to boost the amounts of water available to send to the Lithia point of connection. Tampa Bay Water is currently working with a land agent to procure property for the pump station and associated pipelines and is procuring an engineer for the project. The pump station project is on schedule and expected to be up and running by the end of 2024 and will meet the South Hillsborough County water needs through 2028. This solution does not require a Memorandum of Understanding or Agreement with Hillsborough County.

Intermediate Needs (2028) – Pipeline

Tampa Bay Water is looking at two pipeline options to connect the South-Hillsborough County service area with the regional system—one to the existing point of connection in Lithia and one to a new point of connection. Both options provide challenges and long schedules to accommodate the length of the pipelines and the need to acquire and potentially condemn property.

1. **Existing Lithia Point of Connection** – Tampa Bay Water is currently performing a route study to determine the best pipeline route to provide more water at the existing Lithia Point of Connection. This option is solely within Tampa Bay Water's responsibility and can be completed by 2028. Public outreach on pipeline routes has been completed and the route study will be brought to the board at its February 2020 meeting. Hillsborough County would then need to build a pipeline from the Lithia Point of Connection to where the water is most needed in South-Hillsborough County. This option does not require a Memorandum of Understanding with Hillsborough County.
2. **New Point of Connection** – At Hillsborough County staff's request, Tampa Bay Water is also exploring pipeline routes to convey regional water to the South-Hillsborough County service area at a new point of connection. Hillsborough County has not yet committed to a final location for the new point of connection but has shared with staff its plans to build a new water campus in the vicinity of the C.W. Bill Young Regional Reservoir. Hillsborough County staff has indicated they are working on a funding plan for these improvements. Public outreach on the potential pipeline routes has been completed and the route studies will be completed and brought to the board at its February 2020 meeting. This option requires a Memorandum of Understanding with Hillsborough County acceptable to Tampa Bay Water and the County in order to establish the terms of the new point of connection (location and capital funding obligations).

It's important to note that a decision will need to be made in March 2020 as to which pipeline option will move forward to allow enough time for design, permitting, property acquisition and construction to meet a 2028 deadline to have it online.

Long-term Needs (Beyond 2028) – New Groundwater Wellfield via South-Central Hillsborough Aquifer Recharge Credits (SHARP) – As part of its Long-term Master Water Supply Plan, Tampa Bay Water is continuing to explore the feasibility of this project to bring forward complete information by December 2022 for board consideration along with the other feasibility studies for expansion of the surface water and desalination supplies. Current efforts include test and monitor well design and land procurement for a test well to determine the available quantities of water in this area. An important part of this project is the negotiation of the value of the reclaimed water credits with Hillsborough County. This project also requires a Memorandum of Understanding with the County acceptable to Tampa Bay Water and the County to provide the framework for the value of the reclaimed water credits.

Attachment A

South Central Meeting Chronology

Updated Through October 25, 2019

<u>Date</u>	<u>Item</u>	<u>Topic(s)</u>
August 4, 2016	TBW/HC staff	Discuss demand projections, potential new POC
April 7, 2017	Letter to HC	Includes discussion of need for new POC for growth
July 2017	EC item F	South county demands, structure to guide solution
August 2017	Board Item I-2	Set boundaries to develop MOU for new POC
October 26, 2017	TBW/HC staff	Demands, options to meet growth, MOU structure
November 15, 2017	TBW/HC staff	Demands, options, costs, criteria (1)
December 7, 2017	TBW/HC staff	Demands, options, costs, criteria to evaluate
December 2017	Board Item I-1	MOU, sources of supply to meet needs
January 18, 2018	TBW/HC staff	Discuss option criteria, costs for reclaim credits
January 2018	EC item D	South county discussed in context of CIP
January 30, 2018	TBW/HC/SWFWMD	Discuss co funding and aquifer recharge
February 2018	Board item I-2	MOU, capital improvements needed in FY 2019 CIP
February 28, 2018	TBW/HC/SWFWMD	Discuss permitting and aquifer recharge
March 2019	TBW/MG's	Individual meetings to go over CIP and South county
June 2018	FY 2019 CIP	Includes \$4 MM for funding of MOU activity Includes placeholder for \$86 MM pipeline construction
July 13, 2018	Draft MOU	MOU sent to HC staff
August 31, 2018	TBW/HC staff	Review draft MOU, HC asked TBW to not issue credit Until HC proposes its formula
October 1, 2018	TBW/HC staff	Review test well site, status of HC credit formula
October 6, 2018	HC e mail	MOU comments coming next week w/o HC credit formula
October 12, 2018	TBW call to HC	Asking for status of MOU w/o reclaim credit formula
October 15, 2018	TBW e mail	Following up on October 12 voice mail
October 24, 2018	TBW/HC staff	Discuss pipeline route studies and MOU status

October 31, 2018	TBW	SCH- MOU Briefing Outline
November 1, 2018	TBW	Discuss South County Options
November 13, 2018	TBW/HC staff	Discuss Test Well project and MOU status
December 4, 2018	TBW/HC staff	Discuss pipeline route studies
December 6, 2018	TBW	Discuss South County Options and Status
December 14, 2018	TBW e-mail	Requested Status update on MOU from HC
December 17, 2018	Board Item C-4	South County and MOU Status
December 27, 2018	HC e-mail	Update on internal HC discussions on MOU
January 8, 2019	TBW e-mail	Provided SCH flows and projections to HC for MOU
January 15, 2019	TBW/HC staff	Discuss Test Well, Route Studies, and MOU Status
January 16, 2019	TBW e-mail	Provided MOU attachments to HC for review/comment
January 18, 2019	HC e-mail	Provided HC SHARE permit to TBW
January 24, 2019	TBW e-mail	Provided draft pipeline routes to HC
January 30, 2019	TBW/HC staff	Discuss MOU changes and Status
February 4, 2019	TBW e-mail	E-mail to HC with clean version of MOU from 1/30/19 meeting
February 18, 2019	Board Item I-1	MOU, Release of Wellfield Feasibility Work – Deferred
March 8, 2019	HC e-mail	E-mail requesting pipeline implementation schedule
March 11, 2019	TBW e-mail	E-mail supplying HC requested pipeline schedule
March 11, 2019	HC e-mail	Requesting for Water Supply Master Plan and draft Pipeline Routes
March 18, 2019	EC item D	MOU – status and benefits
March 20, 2019	HC e-mail	Revised demand projections showing need in 2024
April 8, 2019	TBW/ HC staff	Discuss revised demand projections and shared pipeline corridors
April 11, 2019	HC e mail	Requesting deferral of MOU to study use of reclaim water
April 15, 2019	Board Item C-3	MOU, Release of Wellfield Feasibility Work, Deferred indefinitely
April 20, 2019	TBW/HC staff	Discuss short and long term needs for SCH

May 20, 2019	EC Item C	Short Term Plan for SCH
May 20, 2019	e mail	Description of short and long term plans
May 29, 2019	e mail	HC request to restart MOU with new terms
May 31, 2019	TBW/HC staff	Discussion of short and long term plans
June 17, 2019	Board Item I1	Short Term Plan
July 24, 2019	e mail	HC "statement of need"
July 26, 2019	TBW/HC staff	Discussion of short and long term needs and plans status
August 12, 2019	TBW/HC staff	Discussion of short and long term plans status
August 14, 2019	HC Letter	Request for new POC in 2024
August 19, 2019	I2	Short and Long term plan status
Sep 5, 2019	e mail	Schedule for pipeline is 6-8 years
Oct 4, 2019	TBW/HC staff	Discussion of short and long term plans status; county rates strategy to finalize new POC location.
Oct 21, 2019	Board Item I2	Short and Long Term plan status

(1) No meeting summary, but did have references to the meeting in follow up e mails

South Hillsborough County Supply Improvements Program - December 2019 Update

Time Frame	Immediate	2024	2028	Post 2028
Action/Status	Increase Flows to Central Hillsborough Water Treatment Plant	New Booster Station	New Pipeline	New Wellfield via SHARP Credits
Status	Complete	<p>Completed hydraulic analysis for optimal booster siting.</p> <p>Identified 30 parcels; performing market analysis/appraisals for candidate properties. Need property before engineering services selected.</p> <p>Initiated procurement for engineering services. Selection due February 2020.</p>	<p>Awarded construction contract to expand High Service Pump Station (October 2019 Board).</p> <p>Completed public outreach corridor survey.</p> <p>Continue pipeline corridor studies. Present to Board February 2020.</p> <p>Hillsborough County currently seeking rate increase to fund county improvements.</p>	<p>Started test well design.</p> <p>Initiated property acquisition efforts for test and monitor wells.</p> <p>Evaluate siting, potential yields, and treatment of new groundwater plant</p> <p>Perform groundwater modeling to confirm withdrawal yields.</p> <p>Conduct water quality sampling.</p> <p>Develop conceptual design of new wellfield and treatment plant.</p> <p>Assess additional property and pipeline routing.</p>
Required Participants	Hillsborough County	Tampa Bay Water	Hillsborough County and Tampa Bay Water	Hillsborough County and Tampa Bay Water
Notes	County has increased flows from Tampa Bay Water. The maximum capacity is 19 mgd; about 14-15 mgd has been delivered to the County over the past several months.	On schedule for completion in 2024.	To meet increased demands in 2028, must have new delivery point commitment from Hillsborough County March 2020; default project after March 2020 will be a new pipeline to existing Lithia Water Treatment Plant.	Further assess the feasibility of developing a new wellfield and associated collection mains and water treatment facilities using credits from injection of reclaim water by Hillsborough County.