To: Council Members                           AGENDA ITEM 4B9
From: Staff
Date: June 10, 2020
Subject: Local Government Comprehensive Plan Review
          Draft Amendment to the City of Boynton Beach Comprehensive Plan
          Amendment No. 20-01ESR

Introduction

The Community Planning Act, Chapter 163, Florida Statutes, requires that the regional planning
council review local government comprehensive plan amendments prior to their adoption. The
regional planning council review and comments are limited to adverse effects on regional
resources or facilities identified in the Strategic Regional Policy Plan (SRPP) and
extrajurisdictional impacts that would be inconsistent with the comprehensive plan of any
affected local government within the region. Council must provide any comments to the local
government within 30 days of the receipt of the proposed amendments and must also send a copy
of any comments to the state land planning agency.

The amendment package from the City of Boynton Beach was received on June 1, 2020 and
contains one text amendment to the Utility Element of the comprehensive plan. This report
includes a summary of the proposed amendment and Council comments.

Summary of Proposed Amendment

The purpose of the text amendment is to address statutory requirements of Chapter
163.3177(6)(c)3, Florida Statutes, by providing coordination of the City’s 10-Year Water Supply
Facilities Work Plan (WSFWP) with the South Florida Water Management District’s (SFWMD)
Lower East Coast Regional Water Supply Plan (LECWSP), which was approved on November
8, 2018. The statutes require that local governments update their plan within 18 months of the
SFWMD approval. Work plans must cover a ten-year period; be updated every 5 years; and
identify alternative and traditional water supply projects, conservation efforts, and reuse
activities needed to meet projected future demands.

The City’s first WSFWP was completed and adopted in 2008 and subsequently updated in 2015.
The current amendment revises language in the element to adopt by reference the updated 2020
plan. During the current update, the City and their consultant worked closely with SFWMD. A
detailed letter of how SFWMD comments were addressed in the updated plan is included as
Exhibit 2. Due to the file size of the updated plan, it is being provided for reference on Council’s website.

Regional Impacts

No adverse effects on regional resources or facilities have been identified.

Extrajurisdictional Impacts

The proposed amendments were circulated by the Palm Beach County Intergovernmental Plan Amendment Review Committee Clearinghouse Coordinator on June 3, 2020. No extrajurisdictional impacts have been identified.

Conclusion

No adverse effects on regional resources or facilities and no extrajurisdictional impacts have been identified.

Recommendation

Council should approve this report and authorize its transmittal to the City of Boynton Beach and the Florida Department of Economic Opportunity.

Council Action – June 19, 2020

Commissioner Dzadovsky from St. Lucie County moved approval of the staff recommendation. Vice Mayor Hmara from the Village of Royal Palm Beach seconded the motion, which carried unanimously.

Attachments
List of Exhibits

Exhibit

1 General Location Map
2 Letter dated April 28, 2020 from City Consultant CDM Smith to Deborah Oblaczynski with the South Florida Water Management District
Exhibit 1
General Location Map
April 28, 2020

Mrs. Deborah Oblaczynski
Policy & Planning Analyst
Water Supply Implementation Unit
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, Florida 33406

Subject: Request for Additional Information No. 1
Ten Year Water Supply Facilities Workplan
City of Boynton Beach, Florida

Dear Mrs. Oblaczynski:

The City is in receipt of your comments to the Draft 10-Year Water Supply Facilities Workplan sent via electronic correspondence on March 31, 2020. Below is each comment followed by a response addressing the comment.

Comment No. 1 - Update Section 2.2 Regional Issues to include how the relevant regional issues impact the City and the City’s water supply planning. Include a description of the City’s Comprehensive Plan Goals, Objectives, and Policies addressing the identified regional issues and impacts. If an issue does not apply to the City, include a statement as to why the regional issue does not apply.

Response to Comment No. 1 - Section 2.2 of the Draft Work Plan has been revised to include a description of the City’s Comprehensive Plan Goals, Objectives and Policies addressing the regional issues and impacts.

Comment No. 2 - The Lower East Coast Regional Water Availability Rule (Rule) criteria also applies to the City’s water supply planning. Please include a description of how the City addresses the Rule in Water Supply Planning. Include the information that the City received a water use allocation above the base condition for the Rule predicated on replacing existing irrigation supply with reclaimed water and using the terminated water use allocations to increase surficial withdrawal.

Response to Comment No. 2 - Section 2.2 has been revised to include information about how the City addresses the Rule in Water Supply Planning.

Comment No. 3 - Figure 3-2 of Section 3.1.3 shows location of self-supplied systems; however, the service area shown for High Ridge North of Gateway is different from what is shown in Water Use Permit 50-07208-W, and the service area for Colonial Estates on Figure 3-2 differs from the service...
area included in the Water Use Permit 50-10245-W. Please update Figure 3-2 to match boundaries shown in the permits.

**Response to Comment No. 3** – Section 3.1.3 has been revised to remove references to Permit 50-07208-W which is for landscape irrigation and not for Public Water Supply. No Water Use Permit information was found for the High Ridge area. Figure 3.2 has been revised to match the boundaries shown in Permit No. No. 50-10245-W for Colonial Estates.

**Comment No. 4** – Section 3.1.3 identifies High Ridge as an area of self-supply. The Section states the area has a Water Use Permit 50-07208-W, which is for landscape irrigation. Clarify as to whether the High Ridge area is covered under a Public Water Supply Water Use Permit, or if the area meets the requirements for permit exemptions for domestic self-supply found under Rule 40E-2.051, F.A.C.

**Response to Comment No. 4** – Section 3.1.3 has been revised to remove references to Permit 50-07208-W which is for landscape irrigation and not for Public Water Supply. No Water Use Permit information was found for the High Ridge area.

**Comment No. 5** – Include in the narrative of Section 3.1.3 that Permit 50-07208-W is issued to the Palm Beach County Board of County Commissioners and not directly to High Ridge. High Ridge is one of several properties that are supplied under the Water Use Permit 50-07208-W; therefore, the annual allocation of 9.36 MG is not all allocated to High Ridge. Recommended allocations for High Ridge are included in Exhibit 4 of the permit. Please revise information to be consistent with the permit. Conversely, if this permit is not applicable to the public water supply use for the self-supplied service area, please remove this section.

**Response to Comment No. 5** – Section 3.1.3 has been revised to remove references to Permit 50-07208-W which is for landscape irrigation and not for Water Use or Public Water Supply. No Water Use Permit information was found for the High Ridge area.

**Comment No. 6** – Revise Section 3.2 to match the information in Water Use Permit 50-00499-W. The section currently reads the permit was issued on December 13, 2009. The permit was issued on December 8, 2009 with a final action date of December 10, 2009. Also consider including that the water use permit was first issued in 1978 and that the latest modification was approved in 2009.

**Response to Comment No. 6** – Section 3.2 was revised to include additional information about Water Use Permit No. 50-00499-W.

**Comment No. 7** – Section 3.2.1 Surficial Aquifer System Wellfields states the following: “The Eastern Wellfield is comprised of 20 wells of which only 19 are operational. The Western Wellfield is comprised of 11 operational wells.” Well 3E was not included in the 2009 well renewal of the permit, and the well has been abandoned. Therefore, this well should not be included as part of the Eastern Wellfield. Please revise the statement to reflect 19 existing wells. In addition, pumpage reports indicate that Western Wellfield Well 8W has been out of service since 2013. It would be
more appropriate to use “existing” instead of “operational” in the above sentences while describing wells.

Response to Comment No. 7 - Section 3.2.1 was revised. Well 3E was removed from the Eastern wellfield list and the wells are referenced as “existing” rather than “operational”.

Comment No. 8 - Update Tables 3-1 and 3-2 by revising the status of the wells to “existing” from “operational” as some wells are in and out of service and well 8W has not been in operation since 2013. Also remove Well 3E from Table 3-1 and update total capacity for Eastern Wellfield as the capacity of the abandoned well should not be counted in the total capacity of the Eastern Wellfield.

Response to Comment No. 8 – Section 3.2.1 was revised. Table 3.1 and Table 3.2 were revised to remove Wells 3E and to label wells as “existing.”

Comment No. 9 - Section 3.2.3 Floridan Aquifer System (FAS) Wells states that the total maximum monthly allocation from the proposed FAS wells shall not exceed 35.7 MG; however, the total max allocation in Water Use Permit 50-00499-W for the FAS wells is 37.5 MG. Please revise the sentence to match permitted allocation for the FAS wells.

Response to Comment No. 9 – Section 3.2.3 was revised to correct the total maximum monthly allocation for the FAS wells of 37.5 MG.

Comment No. 10 - Section 3.2.4 Reclaimed Water provides limited information on the reclaimed water in the City’s services area. Appendices E and F (pages E-8 and F-29) of the 2018 Lower East Coast Water Supply Plan Update (2018 LEC Plan) provides information regarding the expansion of the reuse system as well as the City’s plans to address the Ocean Outfall Law requirements. Also expand Section 3.2.4 Reclaimed Water and Section 2.2 Regional Issues by including the City’s plans to meet Ocean Outfall Law requirements.

Response to Comment No. 10 – Section 3.2.4 has been revised to include additional information of the City’s reclaimed water system.

The South-Central Regional Wastewater Treatment Plant (SCRWWTP) collects and treats wastewater from the Cities of Delray Beach and Boynton Beach. Reclaimed water shared between these two municipalities is primarily used for irrigation purposes. In accordance with the Ocean Outfall Law requirements, the SCRWWTP will achieve a total reuse of 13.30 mgd or 60 percent reuse of total permitted flow by 2025. A deep injection well was constructed and became operational in 2009, for wastewater effluent disposal, thereby eliminating discharge through the ocean outfall, except for emergency discharges.

The City distributes reclaimed water from SCRWWTP to customers within the City’s water service area through a reclaimed distribution water system with pipe sizes ranging from six inches to 36 inches. In 2019, the City had a total of 52 reclaimed water users and a total of 1.5 million gallons of reclaimed water was utilized by these users. Through the City’s Capital Improvements Program, the City continues to expand its reclaimed water distribution system with the intent of utilizing additional reclaimed water capacity from SCRWWTP.
Comment No. 11 - Update Section 3.3.1 East Water Treatment Plant to include the efficiency of the treatment process.

Response to Comment No. 11 – Figure 3.3.1 was updated to include the efficiency of the East Water Treatment Plant process.

Comment No. 12 - Update Section 3.2.2 Aquifer Storage and Recovery to include:
- The efficiency of the wells;
- The volumes stored and/or withdrawn; and
- Any future plans for expansion.

Response to Comment No. 12 – Section 3.3.2 was updated to include information from Aquifer Storage and Recovery (ASR) Wells No. 1 and No. 2.

Comment No. 13 - Review and revise Figure 3-5 as needed. The labels on the WTPs appear to be reversed.

Response to Comment No. 13 – Figure 3-5 was revised to correct the labels of the Water Treatment Plants.

Comment No. 14 - Clarify the estimated City water use rate in Section 4.3 Historical Water Use. It is unclear how the average per capita rate of 131 gallons per capita per day (gpcd) was calculated. The 2018 LECS Plan’s per capita for that time period is calculated to be 119 gpcd.

Response to Comment No. 14 – The City’s average finished water production data (in mgd) and estimated population data were used to calculate the estimated City’s water use rate. The City’s finished water production data for the East WTP and West WTP was obtained from January 2015 through December 2019 Monthly Operating Reports.

Water Use Rate = Population Served / Average Finished Water Produced

The City is not sure where the 119 gpcd in the LECS Plan came from. The average per capita consumption was calculated to be 125 gallons per capita per day (gpcd). This consumption rate was multiplied by a factor of 5% to obtain a planning level water use rate of 131 gpcd. A peaking factor of 1.18 was then used to obtain a planning level per capita maximum water use rate of 154 gpcd. These estimated water consumption rates are considered for planning purposes and are used to estimate water demand projections for the planning period of 2020 to 2040.

Comment No. 15 - Revise Tables 4-3, 4-4, and 4-5 to be consistent with each other. The per capita rates used to project the average and maximum daily demands in Tables 4-4 and 4-5 are greater than the average rates listed in Table 4-3. Based on the last five years of data listed in Table 4-3, the average and maximum daily per capita use rates should be 124 and 146, respectively. The Tables use the higher per capita use rates of 131 and 154.
Response to Comment No. 15 - As explained in the previous response, the average per capita consumption was calculated to be 125 gallons per capita per day (gpcd). This consumption rate was multiplied by a factor of 5% to obtain a planning level water use rate of 1.31 gpcd. A peaking factor of 1.10 was then used to obtain a planning level per capita maximum water use rate of 1.45 gpcd. These estimated water consumption rates are considered for planning purposes and are used to estimate water demand projections for the planning period of 2020 to 2040. Table 4-3 has been revised to include additional information.

Comment No.16 - Include the City’s Potable Water Level of Service Standard in the calculation of Water Demand projections in the Work Plan or provide an explanation as to why the LOSS is not used in the projections. The City’s Potable Water Level of Service Standard (LOSS) is not included in the Work Plan. The per capita rate used to calculate the water demand projections need to be generally consistent with the City’s LOSS and the 2018 LEC Plan or provide an explanation for the differences.

Response to Comment No.16 - The Potable Water Sub-Element of the City’s Comprehensive Plan, last updated in 2015, includes the City’s Potable Water Level of Service Standard of 200 gallons maximum daily flow per capita of peak population for water supply and treatment. This information is now included under Section 4.4.1.

Comment No.17 - Revise Section 4.4.2 Additional Water Demands to include the population and water demands for Briny Breezes and Ocean Ridge.

Response to Comment No. 17 - The Boynton Beach Service Area population projections were obtained from the 2018 LEC Water Supply Plan Update (LEC Plan). The LEC Plan population data include Briny Breezes and Ocean Ridge as part of the current and future service area for the Boynton Beach Public Water Supply (PWS) system. Therefore, water demands for Briny Breezes and Ocean Ridge were not considered for the additional water demand calculations in Section 4.4.2.

Comment No. 18 - Add to Section 4.4.2 Additional Water Demands and 4.4.3 Water Demands for Proposed Service Area, a future service area boundary map including the additional areas proposed to be served.

Response to Comment No.18 - Figure 4.1 was added to the report to show the Future Proposed Service Area and additional future water users.

Comment No. 19 - Section 4.4.3 Tables 4-7 and 4-8 include separate population projections for the Town of Hypoluxo. However, the Town of Hypoluxo’s projected population numbers are already included in the Boynton Beach Service Area population projections presented in the 2018 LEC Plan for the City starting from year 2020. Please review information provided in Tables 4-7 and 4-8 and revise appropriately.

Response to Comment No. 19 - The Boynton Beach Service Area population projections were obtained from the 2018 LEC Water Supply Plan Update (LEC Plan). Appendix E, Public Water Supply Utility Summaries, includes a Summary for the City of Boynton Beach Public Water Supply (PWS).
Footnote 'a' of this Summary states that the additional population and demand for Town of Hypoluxo is included in the City's data starting in 2020. After carefully studying the LEC Plan and its data, it was concluded that the additional population and demand for Town of Hypoluxo is included in the City's data starting in 2025, not in 2020. This can also be confirmed by looking at the population reduction from Town of Manalapan, which currently serves potable water to certain areas of the Town of Hypoluxo. A reduction in population for Town of Manalapan is shown in year 2025.

Since the City will begin serving the additional population of Town of Hypoluxo beginning on year 2020, it was decided to add this population increase to year 2020 in order to properly estimate demands for that year. Exhibit A has been added to the 10-Yr CUP Compliance Report and reflects the corrections in population estimates for the City’s future service area. In addition, Section 4.2.2 and Section 4.2.3 of the 10-Yr Water Supply Facilities Work Plan have been updated to reflect the same correction.

Comment No. 20 - Update the population projections in Section 5 Water Demand-Supply Analysis to be consistent with any changes in Section 4 detailed in the comments above.

Response to Comment No. 20 – The population and water demand-supply projections in Section 5 were revised for consistency with changes in Section 4.

Comment No. 21 - Provide an explanation in Table 5-1 Raw Water Demand of the raw to finished water ratio of 1.08. In the 2018 LEC Plan the actual 2016 difference between raw and finished was 1.10. This does not account for any Floridian efficiency impacts once those wells come on-line and assumed a 50-50 split of nano-tine softening. The raw to finished conversion is important since the City is nearing the permit allocation limit.

Response to Comment No. 21 – Average Daily Raw Water Demand calculations assume a Raw Water to Finished Water Ratio of 1.10 which considers efficiencies of 97% and 85% at the East WTP and West WTP, respectively. Section 5 was revised to include the revised ratio of 1.10.

Comment No. 22 - Update the City’s Xeriscape Ordinance and language in Section 6 Water Conservation to reference Florida-friendly landscaping. Florida Statutes (F.S.) were revised in 2009 to replace xeriscaping with Florida-friendly landscaping. See Section 373.195 F.S.

Response to Comment No. 22 – Section 6 has been updated to include language about Florida Friendly Landscaping.

Comment No. 23 - Include in Section 6.0 Water Conservation, a leak detection program as part of the City’s conservation program. The 2019 unaccounted-for loss report showed less than 10% loss. Discuss what programs are in place to continue to keep the unaccounted-for water loss rate low.

Response to Comment No. 23 – The City’s 2019 unaccounted-for loss report showed less than 10% loss. The City has a continuous program of distribution system upgrades and employs online pressure sensors in the system to assist with leak detection. These actions have allowed the City to consistently...
maintain a low unaccounted-for water loss rate. Section 6 has been updated to include this information.

Comment No. 24 - Add to Section 6.0 Water Conservation how the City plans to implement the District’s Mandatory Year-Round Landscape Irrigation Conservation Measures as detailed in Chapter 40F.24, Florida Administrative Code, including updating the City’s irrigation ordinances. To encourage more responsible use of water resources throughout South Florida, the District’s Governing Board adopted the Year-Round Irrigation Rule in 2010. The rule restricts the times and number of days landscape irrigation is allowed within the District’s jurisdiction and follows scientifically-sound recommendations for lawn irrigation. Many local governments have since enacted/updated their irrigation ordinances to promote water conservation in their respective counties and municipalities and follow the District’s Year-Round Irrigation Rule. Our review of the City’s ordinances indicates the City has not enacted or updated your irrigation ordinances. Please include the date by which the City plans to implement the Year-Round Irrigation Rule.

Response to Comment No. 24 - The City has a policy in place and uses their website to provide information related to irrigation conservation measures. The City also utilizes social media to inform residents of drought conditions and remind them of irrigation measures. Section 6 has been updated to include this information.

Comment No. 25 - Include in Section 7 Water Supply Projects the proposed Floridan Aquifer wells as described in Section 3.2.3. Also add a table describing capital improvement projects for the FAS production wells planned for development by 2023.

Response to Comment No. 25 - The City has future plans to install three (3) FAS wells. These FAS wells will not be installed by 2023 as originally planned since the City has maintained low water consumption rates. The City considers the installation of these FAS wells as a long-term solution for future water supply needs. This information has been added to Section 7.

Comment No. 26 - The Goals, Objectives and Policies are not identified in Section 8 Goals and Objectives. Please include the Element, Goal, Objective and Policy identifiers for each Water Supply related Comprehensive Plan reference in the section. This will assist those reading and using the Work Plan in finding the referenced policies.

Response to Comment No. 26 - Section 8 was revised to include the Element, Goal, Objective and Policy identifiers for each Water Supply related Comprehensive Plan reference.

Comment No. 27 - Add to Section 8 Goals and Objectives the following City Comprehensive Plan Policies:

- Policy or Policies implementing the Work Plan by reference or incorporating the Work Plan into the Comprehensive Plan.

- Policies implementing concurrency requirements for potable water availability.
Mrs. Deborah Oblaczynski  
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- The adopted potable water level of service standard (LOSS).
- Policies for Intergovernmental coordination with the District, water suppliers, and other local governments concerning Water Supply Planning.

Response to Comment No. 27 - Section 8 was revised to include Goals and Objectives from the City’s 2015 Comprehensive Plan.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

[Signature]

Yance Mercado, P.E., P.M.P  
Senior Project Manager

YM/bm

cc: Joe Paterniti, City of Boynton Beach  
Michael Low, City of Boynton Beach  
Suzanne Mechler, CDM Smith  
Lee Wiseman, CDM Smith