

*Contract* *Sea Ranch Village*

THE VILLAGE OF SEA RANCH LAKES  
DOES HEREBY CERTIFY THAT THE ABOVE NAMED PERSONS ARE THE  
OFFICIALS OF THE VILLAGE OF SEA RANCH LAKES AND THAT THE  
SIGNED AND SEALED INSTRUMENT IS A TRUE AND CORRECT  
COPY OF THE ORIGINAL INSTRUMENT AS THE SAME APPEARS  
IN THE OFFICIAL RECORDS OF THE VILLAGE OF SEA RANCH LAKES.

RESOLUTION - WATER - VILLAGE OF SEA RANCH LAKES

WHEREAS the Village of Sea Ranch Lakes is desirous of  
obtaining water service from the City of Fort Lauderdale  
and the City of Fort Lauderdale has agreed to supply water  
to the Village of Sea Ranch Lakes under the terms of a  
contract which has been approved by the City Commission  
of the City of Fort Lauderdale and the City Commission  
of the City of Sea Ranch Lakes;

RESOLUTION

IT IS THE POLICY OF THE VILLAGE OF SEA RANCH LAKES  
TO OBTAIN WATER SERVICE FROM THE CITY OF FORT LAUDERDALE  
AND THE CITY OF SEA RANCH LAKES HAS AGREED TO OBTAIN  
WATER SERVICE FROM THE CITY OF FORT LAUDERDALE UNDER  
THE TERMS OF A CONTRACT WHICH HAS BEEN APPROVED BY THE  
CITY COMMISSION OF THE CITY OF FORT LAUDERDALE AND THE  
CITY COMMISSION OF THE CITY OF SEA RANCH LAKES;

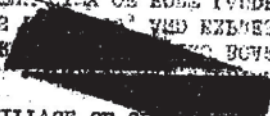
AND WHEREAS the City Commission of the City of Fort  
Lauderdale has agreed to supply water to the Village of  
Sea Ranch Lakes under the terms of a contract which has  
been approved by the City Commission of the City of Fort  
Lauderdale and the City Commission of the City of Sea  
Ranch Lakes;

IT IS HEREBY RESOLVED

WIS

THAT THE VILLAGE OF SEA RANCH LAKES SHALL OBTAIN  
WATER SERVICE FROM THE CITY OF FORT LAUDERDALE UNDER  
THE TERMS OF A CONTRACT WHICH HAS BEEN APPROVED BY THE  
CITY COMMISSION OF THE CITY OF FORT LAUDERDALE AND THE  
CITY COMMISSION OF THE CITY OF SEA RANCH LAKES;

IN WITNESS WHEREOF  
CERTIFIED ON THE 11TH DAY OF MARCH 1965 BY THE  
MAYOR AND COMMISSIONERS OF THE VILLAGE OF SEA RANCH LAKES  
BY THE COMMISSIONERS



AGREEMENT - WATER - VILLAGE OF SEA RANCH LAKES

By Resolution 9608, the City Commission approved water franchise Ordinance No. 65-1, which was passed by the Village of Sea Ranch Lakes by referendum held on March 16, 1965. It will be necessary for the City to pass an ordinance embodying the terms of Ordinance No. 65-1 of the

ORDINANCE NO. C-2119

AN ORDINANCE GRANTING WATER SERVICE TO THE VILLAGE OF SEA RANCH LAKES, FLORIDA AT A RATE BASED ON THE BASE RATE CHARGED TO WATER SERVICE CUSTOMERS OF VARIOUS CLASSES IN THE CITY OF FORT LAUDERDALE, WITHOUT SPECIAL USAGE TAX OR SPECIAL ASSESSMENT, PLUS A SURCHARGE NOT TO EXCEED TWENTY FIVE PERCENT FOR THE CLASS OF WATER SERVICE RENDERED TO THE WATER CUSTOMERS IN THE VILLAGE OF SEA RANCH LAKES.

Which ordinance was read in full. Roll call showed: AYES: Commissioners Burghard, Burry, Clements, Friese and Mayor-Commissioner Young. NAYES: none.

There were no objections to reading of the ordinance on second and third readings and Ordinance No. C-2119 was read by title only and placed upon second and third readings. Roll call showed: AYES: Commissioners Burghard, Burry, Clements, Friese and Mayor-Commissioner Young. NAYES: none.

*Ureg*  
*4/6/65*

A G R E E M E N T

THIS AGREEMENT, made and entered into this 1st day of April, 1965, by and between:

CITY OF FORT LAUDERDALE, a municipal corporation of Florida, hereinafter called the "City";

and

VILLAGE OF SEA RANCH LAKES, a municipal corporation of Florida, hereinafter called "Village";

**WITNESSETH:**

WHEREAS, the Village possesses no independent source of water supply of its own but is dependent upon the City to furnish water utility service within its corporate limits; and

WHEREAS, the Village and City have presently no existing agreement relative to the furnishing of water services between the two municipalities and wish to formalize and conclude such an agreement; and

WHEREAS, the Village is desirous of obtaining water service on similar terms and conditions as those between the City and Town of Lauderdale-By-The-Sea, an adjacent municipality to the Village also served by the City's water supply; and

WHEREAS, the Village, by Referendum held on March 16, 1965, has approved Ordinance 65-1 granting City water rights for a period of thirty years; and

WHEREAS, City is desirous of entering into a water agreement with the Village under the terms of Ordinance 65-1;

NOW, THEREFORE, for and in consideration of the mutual promises and agreements herein contained, it is agreed by the Village and City as follows:

1. Village and City hereby agree to the terms of the Village Ordinance 65-1, attached hereto and incorporated herein by reference and made a part of this agreement, which ordinance was passed by Village and approved by Referendum held on March 16, 1965.
2. This agreement shall be effective April 1, 1965 and Village and City shall be bound by the terms of Ordinance 65-1, effective April 1, 1965.

IN WITNESS WHEREOF, the parties hereunto have set their hands and seals the day and year first above written.

**WITNESSES:**

Margaret Deen  
Jean A. Auld

CITY OF FORT LAUDERDALE

By [Signature]  
Mayor-Commissioner

By [Signature]  
City Manager

(CORPORATE SEAL)

ATTEST:

Marie L. Crow  
City Clerk

Approved as to form:

C. Shelly Dale  
City Attorney

WITNESSES:

Harold H. Dwyer  
Francis Carey

(CORPORATE SEAL)

VILLAGE OF SEA RANCH LAKES

By Edward J. Ingram  
Mayor

ATTEST:

Pauline M. Finlay  
Village Clerk

Approved as to form:

Robert S. de laire  
Village Attorney

STATE OF FLORIDA :  
COUNTY OF BROWARD:

BEFORE ME, an officer duly authorized to administer oaths and take acknowledgments, personally appeared M. R. YOUNG, R. H. BUBIER, and MARIE L. CROW, Mayor-Commissioner, City Manager, and City Clerk, respectively of the City of Fort Lauderdale, a municipal corporation of Florida, and they acknowledged before me that they executed the foregoing Agreement as the proper City officials of the City of Fort Lauderdale, and that the same is the act and deed of the said City of Fort Lauderdale.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal at Fort Lauderdale, Broward County, Florida, this 12 day of April, 1965.

(SEAL)

Margaret Doe  
Notary Public  
My Commission Expires:

NOTARY PUBLIC STATE OF FLORIDA at LA.  
COMMISSION EXPIRES FEB. 20,  
1966 THROUGH FRED W. DIESTEL

STATE OF FLORIDA :  
COUNTY OF BROWARD:

BEFORE ME, an officer duly authorized to administer oaths and take acknowledgments, personally appeared Edward J. Ingram and Paulina M. Finlay, Mayor and Village Clerk respectively, of the Village of Sea Ranch Lakes, a municipal corporation of Florida, and they acknowledged before me that they executed the foregoing Agreement as the proper Village officials of the Village of Sea Ranch Lakes, and that the same is the act and deed of the said Village of Sea Ranch Lakes.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal at Ft. Lauderdale, Broward County, Florida, this 14th day of April, 1965.

(SEAL)

Gileen M. Daniels  
Notary Public  
My Commission Expires: Oct. 31, 1965

Notary Public, State of Florida at Large  
My Commission Expires Oct. 31, 1965  
Bonded by American Surety Co. of N. Y.

C E R T I F I C A T E


I, VERA D. MALES, the duly appointed Village Clerk for the Village of Sea Ranch Lakes, Florida, do hereby certify that the attached is a true and correct copy of:

ORDINANCE NO. 65 - 1

"AN ORDINANCE GRANTING TO THE CITY OF FORT LAUDERDALE, FLORIDA, THE USE OF PUBLIC ROADS, STREETS AND HIGHWAYS IN THE VILLAGE OF SEA RANCH LAKES, FLORIDA, FOR THE PURPOSE OF CONSTRUCTING, MAINTAINING AND OPERATING WATER MAINS AND WATER SERVICES TO RENDER PUBLIC UTILITY TYPE SERVICE TO ALL CLASSES OF WATER CUSTOMERS IN THE VILLAGE OF SEA RANCH LAKES, FLORIDA, AND IMPOSING PROVISIONS AND CONDITIONS RELATING THERETO."

as passed and adopted by the Village Council of the Village of Sea Ranch Lakes, Florida, on the 9th day of February, 1965, and as contained in the records of my office.

WITNESSETH my hand and the official seal of the Village of Sea Ranch Lakes, Florida, this the 17<sup>th</sup> day of March, 1965.

  
\_\_\_\_\_  
Vera D. Males  
Village Clerk  
Village of Sea Ranch Lakes,  
Florida

ORDINANCE NO. 65 - 1

AN ORDINANCE GRANTING TO THE CITY OF FORT LAUDERDALE, FLORIDA THE USE OF PUBLIC ROADS, STREETS AND HIGHWAYS IN THE VILLAGE OF SEA RANCH LAKES, FLORIDA FOR THE PURPOSE OF CONSTRUCTING, MAINTAINING AND OPERATING WATER MAINS AND WATER SERVICES TO RENDER PUBLIC UTILITY TYPE WATER SERVICE TO ALL CLASSES OF WATER CUSTOMERS IN THE VILLAGE OF SEA RANCH LAKES, FLORIDA AND IMPOSING PROVISIONS AND CONDITIONS RELATING THERETO.

WHEREAS, the Village Council has determined the necessity for all classes of water customers in the Village of Sea Ranch Lakes, Florida to receive public utility type water service; and

WHEREAS, the Charter of the Village of Sea Ranch Lakes, Florida provides that the Village Council may by Ordinance grant Franchises for the purposes of securing various utility services; and

WHEREAS, the Charter of the Village of Sea Ranch Lakes, Florida provides that any Franchise granted by the Village Council shall be subject to the approval of the qualified voters at a Referendum election, duly called and held, in connection therewith;

NOW, THEREFORE, BE IT ORDAINED BY THE VILLAGE COUNCIL OF SEA RANCH LAKES, FLORIDA:

Section 1 That permission be and the same is hereby granted to the City of Fort Lauderdale, Florida, its successors and assigns, to construct, maintain and operate water mains and water services, together with any and all other necessary pipes, fixtures, meters and devices as its business may from time to time require, in order to render utility type water service to all classes of water customers in the Village of Sea Ranch Lakes, Florida.

Section 2 That the work of constructing underground water mains, pipes and other public utility type water services and devices appurtenant thereto shall be subject to the general supervision of the Village, and the City of Fort Lauderdale, Florida, shall replace or relay any sidewalks, streets or planted areas that may be displaced by such work, and upon failure of the City of Fort Lauderdale, Florida, so to do, after twenty (20) days notice in writing shall have been given by the Mayor of the Village to the City of Fort Lauderdale, Florida, the Village may repair, replace or otherwise rehabilitate such portion(s) of the sidewalks, streets or planted areas as may have been disturbed by the City of Fort Lauderdale, Florida, and collect the cost(s) so incurred from the City of Fort Lauderdale, Florida.

Section 3 That the City of Fort Lauderdale, Florida, shall have entry upon or over the roads of the Village to perform any and all necessary work of installing, maintaining or operating their complete utility type water services within the Village; and further provided that the City of Fort Lauderdale, Florida shall not be subject to any Village occupational license fee or requirement for them or their contract agent(s) to install, maintain or operate any part of their complete utility type water services within the Village.

Section 4 That in consideration of the rights and privileges

herein granted, the City of Fort Lauderdale, Florida shall provide water service without a utility usage charge for the water used by such fire hydrants as may be located within the Village; provided, however, that the Village agrees to pay to the City of Fort Lauderdale, Florida, an annual charge per fire hydrant for the maintenance, testing and painting of the fire hydrants, and provided that the charge for such annual service work shall not be greater than the City of Fort Lauderdale, Florida charges other municipalities or customers outside of the geographic confines of the City of Fort Lauderdale, Florida for comparable service under comparable conditions of public utility type service rendered.

Section 5 That the Village shall not impose any gross receipts tax on the City of Fort Lauderdale, Florida in connection with the utility type water service to be rendered to any class of water customer within the Village; provided, however, that the various classes of water customers in the Village shall not be subject to any usage tax or special assessment of any nature whatsoever that may be ever imposed on the water users of the City of Fort Lauderdale, Florida proper over and above the base rate(s) for such public utility type water service.

Section 6 That the public utility type water rates to the various classes of water customers in the Village shall be the base rate charged to the water service customers of various classes in the City of Fort Lauderdale, Florida, without any special usage tax or special assessment imposed on the water users of the City of Fort Lauderdale, Florida plus a sur-charge not to exceed twenty five percent (25%) for the class (residential, commercial, industrial) of water service rendered to the water customers in the Village.

Section 7 That the City of Fort Lauderdale, Florida shall be permitted to charge prospective various classes of public utility type water service users in the Village its standard fees and provisions for extension of mains, individual water service connections, water meter(s) installation, posting of deposits to guarantee payment of water usage bills, and allied public utility type water services, contingent to rendering water service according to the same conditions as may be applicable from time to time, to other comparable prospective water users of the City of Fort Lauderdale, Florida, or, in the alternate, to otherwise provide for said standard provisions incident to water service connection and usage under conditions or terms acceptable to the City of Fort Lauderdale, Florida.

Section 8 That the Village upon the acceptance of this Ordinance by the City of Fort Lauderdale, Florida and approval of the qualified Village electorate on a Referendum herein provided for, shall quit-claim to the City of Fort Lauderdale, Florida all right, title and interest the Village may have in the existing total public utility type water system and facilities within the Village as same shall exist on said date

Section 9 That the City of Fort Lauderdale, Florida shall indemnify the Village against, and assume all liabilities for, damages that may arise or accrue to the Village for any injury to persons or property from the doing of any work herein authorized, or the neglect of the City

of Fort Lauderdale, Florida, or any of its employees or agents to comply with any Ordinance of the Village regulating the use of the streets of the Village, and the acceptance of the City of Fort Lauderdale, Florida of this Ordinance shall be an agreement by it to pay to the Village any sum of money for which the Village may become liable for or by reason of such injury or damage.

Section 10 That the City of Fort Lauderdale, Florida shall file with the Village Clerk of the Village of Sea Ranch Lakes, Florida its acceptance of this Ordinance within thirty (30) days from the date of approval by the qualified voters of the Village at a special Referendum granting a public utility type water service franchise to the City of Fort Lauderdale, Florida at the election to be held on March 16, 1965.

Section 11 That nothing in this Ordinance shall be construed to be, or shall be deemed to be, a surrender by the Village of its rights, or powers to pass Ordinances regulating the use of the streets of the Village.

Section 12 That this Ordinance shall be in full force and effect for a term of thirty (30) years from its effective date and which date shall not be more than sixty (60) days after approval of the qualified Village electorate on the Referendum incident to this Ordinance. The Village hereby reserves the right and requires of the said City of Fort Lauderdale, Florida, as a condition precedent to the taking effect of the grant herein, to give and grant to the Village of Sea Ranch Lakes, Florida the right at and after the expiration of the thirty (30) year term to purchase the entire public utility type water service system as same may exist at said date, together with all appurtenances thereto which are an integral part of said water service system within the Village used or in connection with this grant, or such part of said total water service system as the Village may desire to purchase, at a valuation of the property to be so conveyed and which valuation shall be fixed by arbitration as may be provided by law; and provided that the acceptance of this Ordinance by the City of Fort Lauderdale, Florida shall operate as a grant by the said City of Fort Lauderdale, Florida, to the Village of said right to purchase.

Section 13 That upon the annexation of any territory to the Village, the portion of the City of Fort Lauderdale, Florida public utility type water service system that may be located within the annexed territory shall, thereafter, be subject to all the terms and conditions of this Ordinance as fully as though by express extension of this Ordinance.

Section 14 That before this Ordinance shall become effective, it shall be the duty of the Village Council to call a special Referendum on the franchise involved herein, and which Referendum shall be submitted to the qualified voters of the Village at the Village General Election, as otherwise provided for, to be held on March 16, 1965, and the notice thereof shall be posted by the Village in accordance with the provisions of the Village Charter. The posting of due notice shall include notice of a public hearing to be held on February 9, 1965 in connection with and relative to this Ordinance and the Referendum provided for therein.

Section 15 That in the Referendum election so called and so held, the ballots to be used shall be prepared by the Village Council, and shall be, substantially, in the following form:

REFERENDUM ELECTION  
SEA RANCH LAKES, FLORIDA  
March 16, 1965

ORDINANCE NO. 65-1

AN ORDINANCE GRANTING TO THE CITY OF FORT LAUDERDALE, FLORIDA THE USE OF PUBLIC ROADS, STREETS AND HIGHWAYS IN THE VILLAGE OF SEA RANCH LAKES, FLORIDA FOR THE PURPOSE OF CONSTRUCTING, MAINTAINING AND OPERATING WATER MAINS AND WATER SERVICES TO RENDER PUBLIC UTILITY TYPE WATER SERVICE TO ALL CLASSES OF WATER CUSTOMERS IN THE VILLAGE OF SEA RANCH LAKES, FLORIDA AND IMPOSING PROVISIONS AND CONDITIONS RELATING THERETO.

- FOR the Ordinance
- AGAINST the Ordinance

Instructions

To vote on this Ordinance No. 65-1, place an "X" in the box in front of either "FOR the Ordinance" or "AGAINST the Ordinance"

Section 16 That not less than one (1) year prior to the expiration of a thirty (30) year franchise granted herein, the Village Council agrees to explore the possibility of a renewal or extension of any franchise granted hereunder, under such terms and conditions as may be mutually acceptable at such time to the Village of Sea Ranch Lakes, Florida and the City of Fort Lauderdale, Florida; provided, however, that under no conditions whatsoever shall the city of Fort Lauderdale, Florida terminate public utility type water service to water usage customers within the Village of Sea Ranch Lakes, Florida without advance written notice to the Village Council not less than one (1) year prior to any anticipated or scheduled termination date.

PASSED FIRST READING this 5th day of January, 1965.  
PASSED SECOND READING this 9th day of February, 1965  
ADOPTED this the 9th day of February, 1965

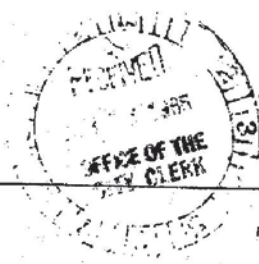
*William J. Roberts*  
President of Council

APPROVED: *E. J. Lyman*  
Mayor

POSTED January 6, 1965  
VILLAGE HALL  
BEACH CLUBHOUSE  
POLICE STATION

ATTEST: *Mrs. D. Miles*  
Village Clerk

Village of Sea Ranch Lakes



GATE HOUSE ROAD  
FORT LAUDERDALE, FLORIDA  
PHONE: 941-8428

April 15, 1965

City of Fort Lauderdale  
Office of the City Clerk  
P. O. Box 1181  
Fort Lauderdale, Florida

Gentlemen:

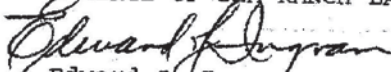
RE: Water Service Agreement by and between  
City of Fort Lauderdale and  
Village of Sea Ranch Lakes

Forward herewith is the duly executed and sealed original of the "Agreement" between the City of Fort Lauderdale and the Village of Sea Ranch Lakes, relative to a 30-year Franchise granted by the Village to the City for public utility type water service.

The Village has retained the duly executed and sealed copy of the referenced "Agreement".

Yours very truly,

VILLAGE OF SEA RANCH LAKES

  
Edward J. Ingram  
Mayor

EJI/emd  
encl.

April 13, 1965

Village of Sea Ranch Lakes  
Office of the Mayor  
Sea Ranch Lakes, Florida

Gentlemen:

I am enclosing two copies of the water agreement between the City of Fort Lauderdale and the Village of Sea Ranch Lakes. Please execute both copies and return the original to us for our records.

A copy of Resolution No. 9786 and Ordinance No. C-2119 relating to the water agreement are also enclosed for your records.

Very truly yours,

Marie L. Crow  
City Clerk

MJC:md  
Encl.

ORDINANCE NO. C-2119

*4/8 City atty sending certified copy to Mayor L. R. John Virginia Duwood Sullivan Mendenhall*

AN ORDINANCE GRANTING WATER SERVICE TO THE VILLAGE OF SEA RANCH LAKES, FLORIDA AT A RATE BASED ON THE RATE RATE CHARGED TO WATER SERVICE CUSTOMERS OF VARIOUS CLASSES IN THE CITY OF FORT LAUDERDALE, WITHOUT SPECIAL USAGE TAX OR SPECIAL ASSESSMENT, PLUS A SURCHARGE NOT TO EXCEED TWENTY FIVE PERCENT FOR THE CLASS OF WATER SERVICE RENDERED TO THE WATER CUSTOMERS IN THE VILLAGE OF SEA RANCH LAKES.

WHEREAS, the Village of Sea Ranch Lakes possesses no independent source of water supply of its own but is dependent upon the City of Fort Lauderdale to furnish water utility service within its corporate limits; and

WHEREAS, the Village is desirous of obtaining water service on similar terms and conditions as those between the City of Fort Lauderdale and the Town of Lauderdale-By-The-Sea, an adjacent municipality to the Village also served by the City's water supply; and

WHEREAS, the Village, by Referendum held on March 16, 1965, has approved Ordinance 65-1 granting City water rights for a period of thirty years; and

WHEREAS, City Commission is desirous of adopting an ordinance embodying the terms of Ordinance 65-1 which terms are to be included in the water service agreement between the City of Fort Lauderdale and the Village of Sea Ranch Lakes;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

**SECTION 1.** City, its successors and assigns shall have the right to construct, maintain and operate water mains and water services, together with any and all other necessary pipes, fixtures, valves and devices as its business may from time to time require, in order to render utility type water service to all classes of water customers in the Village of Sea Ranch Lakes, Florida.

**SECTION 2.** That the work of constructing underground water mains, pipes and other public utility type water services and devices appurtenant thereto shall be subject to the general supervision of the Village of Sea Ranch Lakes, and the City shall replace or relay any sidewalks, streets or planted areas that may be displaced by such work, and upon failure of the City so to do, after twenty (20) days notice in writing shall have been given by the Mayor of the Village to the City, the Village may repair, replace or otherwise reestablish such portion(s) of the sidewalks, streets or planted areas as may have been disturbed by the City, and collect the cost(s) so incurred from the City.

**SECTION 3.** That the City shall have entry upon or over the lands of the Village to perform any and all necessary work of installing, maintaining or operating their complete utility type water services within the Village; and further provided that the City shall not be subject to any Village occupational license fee or requirement for them or their contract agent(s) to install, maintain or operate any part of their complete utility type water services within the Village.

**SECTION 4.** That in consideration of the rights and privileges granted by the Village, the City shall provide water service without a utility usage charge for the water used by each fire hydrant as may be located within the Village; provided, however, that the Village shall pay to the City an annual charge per fire hydrant for the maintenance, testing and painting of the fire hydrants, and provided that the charge for such annual service work shall not be greater than the City charges other municipalities or customers outside of the geographic confines of the City for comparable service under comparable conditions of public utility type service rendered.

**SECTION 5.** That the Village shall not impose any gross receipts tax on the City in connection with the utility type water service to be rendered to any class of water customer within the Village; provided, however, that the various classes of water customers in the Village shall not be subject to any usage tax or special assessment of any nature whatsoever that may be ever imposed on the water users of the City proper over and above the base rate(s) for such public utility type water service.

**SECTION 6.** That the public utility type water rates to the various classes of water customers in the Village shall be the base rate charged to the water service customers of various classes in the City, without any special usage tax or special assessment imposed on the water users of the City plus a sur-charge not to exceed twenty five percent (25%) for the class (residential, commercial, industrial) of water service rendered to the water customer in the Village.

**SECTION 7.** That the City shall be permitted to charge prospective various classes of public utility type water service users in the Village its standard fees and provisions for extension of mains, individual water service connections, water meter(s) installation, posting of deposits to guarantee payment of water usage bills, and allied public utility type water services, contingent to rendering water service according to the same conditions as may be applicable. From time to time, to other comparable prospective water users of the City, or, in the alternate, to otherwise provide for said standard provisions incident to water service connection and usage under conditions or terms acceptable to the City.

**SECTION 8.** That the Village shall quit-claim to the City of Fort Lauderdale, Florida all right, title and interest the Village may have in the existing total public utility type water system and facilities within the Village in accordance with Section 8 of Village Ordinance 65-1.

**SECTION 9.** That the City shall indemnify the Village against, and assume all liabilities for, damages that may arise or accrue to the Village for any injury to persons or property from the doing of any work herein authorized, or the neglect of the City or any of its employees or agents to comply with any ordinance of the Village regulating the use of the streets of the Village, and the City agrees to pay to the Village any sum of money for which the Village may become liable for or by reason of such injury or damage.

**SECTION 10.** That the City shall file with the Village Clerk its acceptance of Village Ordinance 65-1 within thirty (30) days from the date of approval of Ordinance 65-1 by the qualified voters of the Village at a special Referendum granting a public utility type water service franchise to the City at the election held on March 16, 1965.

**SECTION 11.** That nothing in Village Ordinance 65-1 shall be construed to be, or shall be deemed to be, a surrender by the Village of its rights, or powers to pass ordinances regulating the use of the streets of the Village.

**SECTION 12.** That this ordinance shall be in full force and effect for a term of thirty (30) years from the effective date of Village Ordinance 65-1, which date shall not be more than sixty (60) days after approval of the qualified Village electorate on the referendum incident to Village Ordinance 65-1. The Village reserves the right and requires of the said City, as a condition precedent to the taking effect of the grant in Village Ordinance 65-1, to give and grant to the Village the right at and after the expiration of the thirty (30) year term to purchase the entire public utility type water service system as same may exist at said date, together with all appurtenances thereto which are an integral part of said water service system within the Village used or in connection with grant under Village Ordinance 65-1 or such part of said total water service system as the Village may desire to purchase, at a valuation of the property to be so conveyed and which valuation shall be fixed by arbitration as may be provided by law; and provided that the acceptance of Village Ordinance 65-1 by the City shall operate as a grant by the said City to the Village of said right to purchase.

**SECTION 13.** That upon the annexation of any territory to the Village, the portion of the City's public utility type water service system that may be located within the annexed territory shall, thereafter, be subject to all the terms and conditions of this ordinance as fully as though by express extension of this ordinance.

**SECTION 14.** That not less than one (1) year prior to the expiration of the thirty (30) year franchise, the Village Council has agreed pursuant to Village Ordinance 65-1 to explore the possibility of a renewal or extension of the franchise granted under Village Ordinance 65-1, under such terms and conditions as may be mutually acceptable at such time to the Village and the City; provided, however, that under no conditions whatsoever shall the City terminate public utility type water service to water usage customers within the Village without advance written notice to the Village Council not less than one (1) year prior to any anticipated or scheduled termination date.

PASSED FIRST READING this the 6th day of April, 1965.  
PASSED SECOND READING this the 6th day of April, 1965.  
PASSED THIRD READING this the 6th day of April, 1965.

Mayor-Councilman

ATTORNEY:

City Clerk

Contracts - Water - Sea Ranch Lakes

CONTRACT - WATER - VILLAGE OF SEA RANCH LAKES

By Resolution 9608, the City Commission approved water franchise Ordinance No. 65-1, which was passed by the Village of Sea Ranch Lakes by referendum held on March 16, 1965.

Commissioner Burghard introduced a written resolution entitled:

RESOLUTION NO. 9706

A RESOLUTION AUTHORIZING AND DIRECTING THE PROPER CITY OFFICIALS TO EXECUTE A WATER AGREEMENT WITH VILLAGE OF SEA RANCH LAKES UNDER THE TERMS OF ORDINANCE 65-1.

Which resolution was read by title only. Roll call showed: AYES: Commissioners Burghard, Burry, Friese and Mayor-Commissioner Young. NAYES: none.

vol - 1 - book

# Agreement City of Tamarac



**CITY OF FORT LAUDERDALE**  
**City Commission Agenda Memo**  
**REGULAR MEETING**

**#24-0678**

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**TO:** Honorable Mayor & Members of the Fort Lauderdale City Commission

**FROM:** Susan Grant, Acting City Manager

**DATE:** August 20, 2024

**TITLE:** Resolution Approving Agreement for Sale of Potable Water Between the City of Fort Lauderdale and the City of Tamarac - (**Commission Districts 1, 2, 3 and 4**)

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**Recommendation**

Staff recommends the City Commission adopt a Resolution approving the Agreement for Sale of Potable Water between the City of Fort Lauderdale and the City of Tamarac for five (5) years, beginning October 18, 2024, with one (1) extension for an additional two (2) years.

**Background**

The City of Fort Lauderdale (City) has sold potable water to the City of Tamarac (Tamarac) since 1994 pursuant to a 30-year agreement that will expire on October 18, 2024. The sale of bulk water is done via a series of master meters feeding sections of Tamarac adjacent to the City. In 2021, Tamarac requested a shorter duration agreement of five (5) to seven (7) years, instead of the typical 30-years, due to Tamarac's constructing a new pipeline to serve the areas currently supplied by the City, from its water treatment plant.

The City sells bulk water to the City of Tamarac, City of Okland Park, City of Wilton Manors, Town of Davie, and Port Everglades. In FY2023, water revenue from Tamarac was \$420,208.19, or 0.43% of total potable water revenues.

The new agreement was approved by Tamarac at its June 10, 2024, City Commission Meeting.

**Resource Impact**

Future revenues from bulk water sales to Tamarac will vary based on actual water consumption and the City's water rate structure that is in effect.

### **Strategic Connections**

This item is a FY 2024 *Commission* Priority, advancing the Infrastructure and Resilience initiative.

This item supports the *Press Play Fort Lauderdale 2029* Strategic Plan, specifically advancing:

- The Infrastructure and Resilience Focus Area
- Goal 3: Be a sustainable and resilient community.

This item advances the *Fast Forward Fort Lauderdale 2035* Vision Plan: We Are Ready.

This item supports the *Advance Fort Lauderdale 2040* Comprehensive Plan specifically advancing:

- The Infrastructure Focus Area
- The Sanitary Sewer, Water & Stormwater Element
- Goal 3: Develop and maintain an adequate water supply, treatment and distribution system, which meets the existing and projected needs of the service area in an efficient, economical, and environmentally sensitive manner.

### **Attachments**

Exhibit 1 – City of Tamarac Resolution

Exhibit 2 – Agreement for Sale of Potable Water

Exhibit 3 – Resolution

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Prepared by: Talal Abi-Karam, P.E., Public Works

Department Director: Linda Short, Finance  
Alan Dodd, Public Works

I HEREBY CERTIFY THAT THIS DOCUMENT IS A TRUE  
AND CORRECT COPY OF Agmt b/w C.O.T and  
City of Fort Lauderdale

THE ORIGINAL OF WHICH IS ON FILE IN CITY HALL  
WITNESS MY HAND AND OFFICIAL SEAL  
OF THE CITY OF TAMARAC, FLORIDA.

THIS 18th DAY OF June, 2024.

*Naivica Ramos*  
CITY CLERK

Temp. Reso. #14127  
June 10, 2024  
Page 1 of 5

CITY OF TAMARAC, FLORIDA

RESOLUTION NO. R-2024-055

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF TAMARAC, FLORIDA, APPROVING A FIVE-YEAR EXTENSION OF THE INTERLOCAL AGREEMENT BETWEEN THE CITY OF FORT LAUDERDALE AND THE CITY OF TAMARAC FOR THE SALE OF POTABLE WATER FROM AN EXISTING INTERCONNECTION, EFFECTIVE FROM OCTOBER 18, 2024, THROUGH OCTOBER 17, 2029, UNLESS TERMINATED EARLY PER THE CONDITIONS OF THE EXTENSION; AUTHORIZING EXPENDITURES FOR POTABLE WATER PURCHASE, NOT TO EXCEED THE ANNUAL AMOUNT BUDGETED FOR SAID PURPOSE; AUTHORIZING THE APPROPRIATE CITY OFFICIALS TO ADMINISTER THE AGREEMENT; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Tamarac owns, operates, and maintains the water supply, treatment, and distribution systems; and

WHEREAS, currently, the City's distribution system is divided into two sections; Tamarac Utility West (TUV) extending from the western limits of the City to State Road 7 and Tamarac Utility East (TUE), extending from NW 31st Avenue to Prospect Road and NW 15th Avenue; and

WHEREAS, the water servicing TUV is supplied by the City of Tamarac, while the City of Tamarac maintains the distribution infrastructure, water servicing the TUE is supplied by the City of Fort Lauderdale to the City of Tamarac as a bulk purchasing customer; and

Five-Year Extension to the Agreement between the City of Tamarac and the City of Fort Lauderdale for the Sale of Potable Water, and to authorize the appropriate City Officials to execute and administer the Agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF TAMARAC, FLORIDA, THAT:

SECTION 1: The foregoing "WHEREAS" clauses are hereby ratified and confirmed as being true and correct and are hereby made a specific part of this resolution. All exhibits attached hereto are incorporated herein and made a specific part of this Resolution.


SECTION 2: The City Commission of the City of Tamarac does hereby approve the Five-Year Extension to the Agreement between the City of Tamarac and the City of Fort Lauderdale for the Sale of Potable Water, and to authorize the appropriate City Officials to execute and administer the Agreement, and the appropriate City Officials are HEREBY authorized to execute and administer said Agreement effective through October 17, 2029, unless terminated early by the City of Tamarac per the conditions of the Extension, a copy of the Agreement is attached hereto as "Exhibit 1".

SECTION 3: Funding for said purpose is available in the Utilities Fund, and expenditures for said purpose, not to exceed the annual budgeted amount or as may be amended by the City Commission, are HEREBY approved.

SECTION 4: All resolutions or parts of resolutions in conflict herewith are hereby repealed to the extent of such conflict.

SECTION 6: This Resolution shall become effective immediately upon its passage and adoption.

PASSED, ADOPTED AND APPROVED this 10<sup>th</sup> day of JUNE, 2024.


  
\_\_\_\_\_  
MICHELLE J. GOMEZ  
MAYOR

ATTEST:

  
\_\_\_\_\_  
KIMBERLY DILLON, CMC  
CITY CLERK

RECORD OF COMMISSION VOTE:  
MAYOR GOMEZ YES  
DIST 1: COMM. BOLTON YES  
DIST 2: V/M WRIGHT, JR. YES  
DIST 3: COMM. VILLALOBOS YES  
DIST 4: COMM. DANIEL YES

APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE USE AND RELIANCE OF THE CITY OF TAMARAC ONLY.

  
\_\_\_\_\_  
HANS OTTINOT  
CITY ATTORNEY

## AGREEMENT FOR SALE OF POTABLE WATER

THIS AGREEMENT made and entered into this 10<sup>th</sup> day of JUNE, 2024,  
by and between:

CITY OF FORT LAUDERDALE, a municipal corporation of  
the State of Florida, herein called the "Seller,"

and

CITY OF TAMARAC, a municipal corporation of the State of  
Florida, herein called the "Consumer," collectively "Parties".

WHEREAS, Seller and Consumer entered into a 30-year agreement in 1994 for the provision of  
potable water from Seller to Consumer; and

WHEREAS, pursuant to Resolution No.94-178, adopted at its meeting of September 14, 1994,  
the City Commission of the City of Tamarac authorized the proper officials of Consumer to enter into an  
Agreement for the purchase of potable water from the Seller; and

WHEREAS, pursuant to Resolution No. 94-137, adopted at its meeting of September 7, 1994, the  
City Commission of the City of Fort Lauderdale authorized the proper officials of Seller to enter into an  
Agreement for the sale of potable water to the Consumer; and

WHEREAS, the Parties hereto desire to continue the relationship; and

WHEREAS, in 2021, the Consumer expressed its interest in a shorter duration Agreement due to  
undertaking a project to extend its infrastructure to serve the service area identified in the Agreement;  
and

WHEREAS, the Seller, in its proprietary capacity, owns and operates a municipal public water  
supply and is in a position to continue to provide service to the Consumer; and

WHEREAS, the Consumer, in its proprietary capacity, owns and operates a water distribution  
system, and Consumer desires to continue to purchase water from Seller to service Consumer's  
customers upon terms mutually agreeable

NOW, THEREFORE, in consideration of the mutual promises, covenants and agreements, and  
other good valuable consideration, the receipt and adequacy of which are hereby acknowledged, the  
Parties agree as follows:

1. Beginning October 18, 2024 and continuing for a period of Five-years (5)  
thereafter, Seller agrees to sell to the Consumer and the Consumer agrees to buy from the Seller potable  
water for resale to the citizens and customers of the Consumer, under the terms and conditions set forth  
herein. The Agreement may be extended for one additional two-year (2) term. Each Party shall notify  
the other regarding intention to extend or not extend two (2) years prior to the expiration date of the  
Agreement. After the completion of the Rate Study referred to in Section 9 of this Agreement, Consumer  
shall have the option to terminate the Agreement with two (2) year's notice if the water rates charged by  
the Seller increase by more than ten percent (10%) in any of the years covered by the Rate Study.

Notwithstanding the above, if Consumer is scheduled to complete its Eastside Water Main Project (Service Area) during the Agreement term, Consumer shall have the right to terminate the Agreement with twelve (12) months' notice in writing to Seller unless there is less than twelve (12) months remaining under the Agreement. In such case, the Agreement shall terminate at the end of the term.

2. The areas to be served by the Consumer are situated in Broward County, Florida, and are described in the City of Tamarac corporate limits as they may amended from time to time. Said Service Area is attached hereto as Exhibit "A".

3. During the term of this Agreement, the Consumer shall not purchase water from any person, firm or corporation other than the Seller for Consumer's customers within the service area boundaries so long as the Seller is able to supply the quantity and quality of water required by the consumer, except by written consent of Seller evidenced by an amendment to this Agreement. Seller shall not sell water to any person, firm, or corporation other than Consumer within the service area boundaries except as otherwise provided in this Agreement. Seller and Consumer shall each comply to the extent applicable with all laws and regulations pertaining to the delivery of potable water to the public.

4. During the term of this Agreement, the Seller will undertake to deliver water to the Consumer in such quantity and quality as are required by the Consumer for resale by the Consumer to its customers in the service areas. Water sold to Consumer hereunder will be supplied from Seller's water producing facilities and will be the same quality as the water furnished by Seller to its consumers within the city limits of Seller.

5. Consumer shall not allow any customer to connect with the Consumer's distribution system whose requirements are reasonably estimated to exceed 100,000 gallons of water per day without the prior written approval of Seller, which approval shall not be unreasonably withheld. In the event any customer, after being connected to the Consumer's distribution system, should use as much as 100,000 gallons of water per day, Consumer shall immediately notify Seller and obtain Seller's approval, which shall not be unreasonably withheld, before such customer shall be furnished water in quantities exceeding 100,000 gallons per day.

6. The Seller shall not be required during periods of water shortage resulting from an emergency condition declared by any governmental entity with jurisdiction or resulting from an inadequacy of mains or other facilities, to do more than deliver water to Consumer's master meters in such quantities as are available for allocation by the Seller among all its consumers. In the event it should become necessary for the Seller to adopt regulations for conservation of water in case of emergency per Chapter 40E-21 of the Florida Administrative Code (FAC), the Consumer agrees that it will adopt and enforce similar regulations for conservation of water during such time of emergency.

7. There shall be one (1) or more master meters located at points mutually agreeable, through which all water supplied to customers of Consumer shall be supplied, and all water furnished by Seller shall be metered through such meters. Such meters shall be supplied and installed by the Seller at the expense of the Consumer as provided in Chapter 28 of the Code of Ordinances of the City of Fort Lauderdale. After installation, the Seller shall, at its own expense, maintain the meters. Title to the meters shall remain with the Seller. All master meters shall be tested annually by and at the expense of the Seller. All master meters shall be adjusted to the registration accuracy as specified in the Appropriate American Water Works Association Standard for Cold Water Meters. The date and time of the test shall be coordinated with Consumer to allow Consumer to witness the test whenever possible. In addition to the annual test, the Consumer may at any time request that Seller conduct an additional test or that Seller arranges for such test by an independent qualified testing company. The request shall be made in writing and the date and time of the test shall be coordinated with Consumer to allow consumer to witness the

test whenever possible. If such test shows that the master meter has been over-registering by more than two percent (2%), there will be no charge for such test and the previous bill rendered based on the last reading of that master meter shall be adjusted accordingly. If such test shows that the master meter has not been over-registering by more than two percent (2%), the cost of such test shall be charged to Consumer. If such test shows that the master meter has been under-registering by more than two percent (2%), the previous bill rendered based on the last reading of that master meter shall be adjusted accordingly.

8. The Consumer shall be bound by the provisions of Chapter 28 of the Code of Ordinances of the City of Fort Lauderdale, now existing or as amended from time to time, insofar as same are applicable, as well as all applicable ordinances of the City of Fort Lauderdale now existing or hereafter adopted pertaining to water service and water regulations.

9. Water rates to be charged by the Seller to the Consumer shall be the rate provided to be charged to master meters under the provisions of Sections 28-143(b)(1) and 28-143(b)(2) of the Code of Ordinances of the City of Fort Lauderdale.

Seller agrees to conduct a Comprehensive Water and Wastewater Rate Study no later than every five (5) years during the term of this Agreement. Seller agrees to Consumer's non-binding participation in such Rate Study. Seller agrees that payment of fines or penalties imposed due to non-compliance of permit conditions or spills will be borne by Seller and will not be passed on to Consumer through the Rate Study.

10. The Seller shall render monthly or bimonthly statements for water furnished and the Consumer shall pay promptly all statements furnished. Should the Consumer fail or refuse to pay the amount of such statement within thirty (30) days after same has been submitted, the Seller shall have the right to enforce the provisions of Chapter 28 of the Code of Ordinances of the City of Fort Lauderdale providing for discontinuance of service until past due indebtedness is paid in addition to any other legal remedies available to Seller.

11. During the term of this Agreement, the Consumer may purchase quantities of potable water from sources other than the Seller, after written approval by the Seller, for emergency use, only if the Seller cannot provide potable water to each metering or connection point in compliance with the applicable section of the United States Environmental Protections Agency Safe Drinking Water Act and Florida Administrative Code 62-555-350.

12. Consumer and Seller shall cooperate in obtaining from or providing to the appropriate regulatory agencies such permits, or other data, as may be required for the performance of this Agreement. Consumer shall furnish to Seller plans and specifications of the existing water distribution system of Consumer and from time to time furnish copies of plans and specifications of any additions to or extension of Consumer's water distribution system.

13. To the extent provided by law and as expressly limited by Section 768.28, Florida Statutes, as may be amended or revised, Consumer and Seller agree to indemnify and hold harmless each other from all costs, losses, and expenses, including, but not limited to, damages to persons or property, judgments, and attorneys' fees, arising out of and in connection with this Agreement.

14. This Agreement supersedes the previous agreement between the Parties dated October 18, 1994. This Agreement may not be amended, except by the mutual consent of the Parties in writing executed with the same dignity as this Agreement.

15. This Agreement shall not become effective until a Resolution has been adopted by the governing bodies of Seller and Consumer approving this Agreement and authorizing its execution.

16. If at any time during this Agreement Consumer sells all or a portion of its utility system, then this Agreement shall be binding upon Consumer's Successor. Consumer's Successor shall have the option to terminate this Agreement, no later than two years after taking over this Agreement, upon written notice to Seller. The written notice shall provide twelve-month notice. If Consumer's Successor fails to terminate this Agreement within two years of taking over this Agreement, then Consumer's Successor shall waive this termination clause.

17. The Agreement shall be interpreted and construed in accordance with, and governed by, the laws of the state of Florida. The Parties agree that the exclusive venue for any lawsuit arising from, related to, or in connection with this Agreement shall be in the state courts of the Seventeenth Judicial Circuit in and for Broward County, Florida. If any claims arising from, related to, or in connection with this Agreement must be litigated in federal court, the Parties agree that the exclusive venue for any such lawsuit shall be in the United States District Court or United States Bankruptcy Court for the Southern District of Florida. **BY ENTERING INTO THIS AGREEMENT, THE PARTIES HEREBY EXPRESSLY WAIVE ANY AND ALL RIGHTS EITHER PARTY MIGHT HAVE TO A TRIAL BY JURY OF ANY ISSUES RELATED TO THIS AGREEMENT. IF A PARTY FAILS TO WITHDRAW A REQUEST FOR A JURY TRIAL IN A LAWSUIT ARISING OUT OF THIS AGREEMENT AFTER WRITTEN NOTICE BY THE OTHER PARTY OF VIOLATION OF THIS SECTION, THE PARTY MAKING THE REQUEST FOR JURY TRIAL SHALL BE LIABLE FOR THE REASONABLE ATTORNEYS' FEES AND COSTS OF THE OTHER PARTY IN CONTESTING THE REQUEST FOR JURY TRIAL, AND SUCH AMOUNTS SHALL BE AWARDED BY THE COURT IN ADJUDICATING THE MOTION.**

18. Other than as a remedy for nonpayment as provided in Paragraph 10 herein, Seller shall not totally discontinue the sale of potable water to consumer during the term of this Agreement and for a reasonable period thereafter, unless and until Consumer is able to secure an alternate source of supply.

19. **PUBLIC RECORDS**

**IF THE CONSUMER HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES (2023), TO THE CONSUMER'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT CITY CLERK'S OFFICE, 1 EAST BROWARD BOULEVARD, SUITE 444, FORT LAUDERDALE, FLORIDA 33301, PHONE: 954-828-5002, E-MAIL PRRCONTRACT@FORTLAUDERDALE.GOV.**

**CONSUMER shall:**

1. **Keep and maintain public records required by the City of Fort Lauderdale ("City") in order to perform the service.**
2. **Upon request from the City's custodian of public records, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes (2023), as may be amended or revised, or as otherwise provided by law.**

3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of this Agreement if the Consumer does not transfer the records to the City.
4. Upon completion of the Agreement, transfer, at no cost, to the City all public records in possession of the Consumer or keep and maintain public records required by the City to perform the service. If the Consumer transfers all public records to the City upon completion of this Agreement, the Consumer shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Consumer keeps and maintains public records upon completion of this Agreement, the Consumer shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.

20. **NOTICE**

Any notice required to be given hereunder shall be considered to have been properly given if the same has been sent in writing by certified mail, to the following:

CITY: City Manager  
City of Fort Lauderdale  
101 NE 3 Avenue, Suite 2100  
Fort Lauderdale, FL 33301

With a copy to: City Attorney  
City of Fort Lauderdale  
1 East Broward Boulevard, Suite 1320  
Fort Lauderdale, FL 33301

CUSTOMER: CITY OF TAMARAC  
7525 NW 88 Avenue  
Tamarac, FL 33321

IN WITNESS OF THE FOREGOING, the Parties have set their hands and seals the day and year first written above.

**SELLER**

CITY OF FORT LAUDERDALE, a municipal corporation

By: \_\_\_\_\_  
SUSAN GRANT  
Acting City Manager  
\_\_\_\_\_ day of \_\_\_\_\_, 2024

(CORPORATE SEAL)

ATTEST:

By: \_\_\_\_\_  
DAVID R. SOLOMAN  
City Clerk

Approved as to Legal Form and Correctness:  
Thomas J. Ansbro, City Attorney

By: \_\_\_\_\_  
RHONDA MONTOYA HASAN  
Senior Assistant City Attorney

**CONSUMER**

CITY OF TAMARAC, a municipal corporation

By: Michelle J. Gomez  
MICHELLE J. GOMEZ  
Mayor

(CORPORATE SEAL)

ATTEST:



By: Kimberly Dillon  
KIMBERLY DILLON  
City Clerk

Approved as to Legal Form:

By: Hans Ottinot, Esq.  
HANS OTTINOT, ESQ.  
City Attorney

## EXHIBIT A

### CITY OF TAMARAC SERVICE AREA

THE AREA TO BE SERVICED BY CONSUMER ARE SITUATED IN BROWARD COUNTY, FLORIDA, AND ARE DESCRIBED AS FOLLOWS:

THAT PART OF THE SOUTH HALF (S $\frac{1}{2}$ ) OF THE SOUTHWEST QUARTER (SW $\frac{1}{4}$ ) OF SECTION 16, TOWNSHIP 49 SOUTH, RANGE 42 EAST, BROWARD COUNTY, FLORIDA, LYING NORTH OF PROSPECT ROAD.

TOGETHER WITH:

BEGINNING AT THE SOUTHEAST CORNER OF PARCEL "S", "TAMARAC LAKES SOUTH", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 62, PAGE 24 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA; THENCE EASTERLY ALONG THE EASTERLY PROLONGATION OF THE SOUTH LINE OF SAID PARCEL "S" TO THE INTERSECTION WITH THE EASTERLY RIGHT OF WAY LINE OF PROSPECT ROAD; THENCE NORTHERLY ALONG SAID EASTERLY RIGHT OF WAY LINE TO THE INTERSECTION OF THE NORTH LINE OF THE SOUTH HALF (S $\frac{1}{2}$ ) OF THE SOUTHWEST QUARTER (SW $\frac{1}{4}$ ) OF THE SOUTHWEST QUARTER (SE $\frac{1}{4}$ ) OF THE NORTHEAST QUARTER (NE $\frac{1}{4}$ ) OF SECTION 17, TOWNSHIP 49 SOUTH, RANGE 42 EAST, BROWARD COUNTY, FLORIDA; ; THENCE EASTERLY ALONG SAID NORTH LINE TO THE WEST BOUNDARY OF THE EAST HALF (E $\frac{1}{2}$ ) OF THE SOUTHWEST QUARTER (SE $\frac{1}{4}$ ) OF THE NORTHEAST QUARTER (NE $\frac{1}{4}$ ) OF SAID SECTION 17; THENCE NORTHERLY ALONG SAID WEST BOUNDARY TO THE NORTHWEST CORNER THEREOF; THENCE EASTERLY ALONG THE NORTH BOUNDARY THEREOF TO THE WEST BOUNDARY OF THE EAST HALF (E $\frac{1}{2}$ ) OF THE EAST HALF (E $\frac{1}{2}$ ) OF THE NORTHEAST QUARTER (NE $\frac{1}{4}$ ) OF THE NORTHEAST QUARTER (NE $\frac{1}{4}$ ) OF SAID SECTION 17 SAID POINT ALSO BEING THE INTERSECTION OF THE EAST BOUNDARY OF THE PLAT, "TAMARAC INDUSTRIAL PARK", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 63, PAGE 26, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA; THENCE FOLOWING SAID PLAT BOUNDARY NORTHERLY, WESTERLY AND SOUTHERLY TO THE NORTHWEST CORNER OF LOT 6, "TAMARAC INDUSTRIAL PARK", SAID POINT ALSO BEING THE NORTHEAST CORNER OF LOT 55, BLOCK 27 "TAMARAC LAKES NORTH THIRD SECTION", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 63, PAGE 7, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA; THENCE WESTERLY ALONG SAID NORTH PLAT BOUNDARY TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER (SE $\frac{1}{4}$ ) OF THE NORTHEAST QUARTER

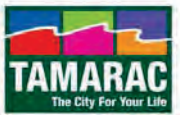
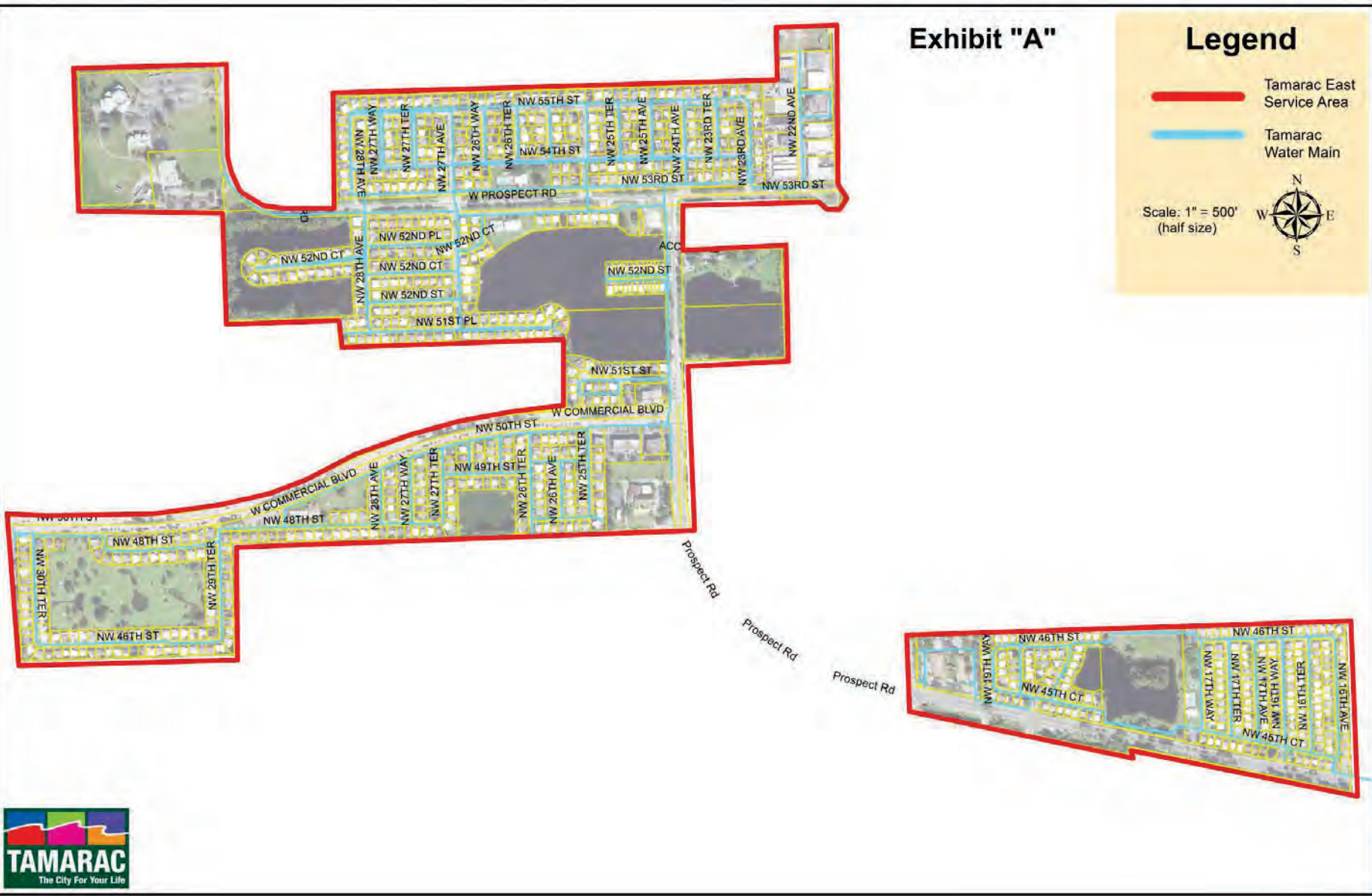
(NE $\frac{1}{4}$ ) OF THE NORTHWEST QUARTER (NW $\frac{1}{4}$ ) OF SAID SECTION 7; THENCE SOUTH ALONG SAID WEST LINE AND SOUTHERLY PROLONGATION TO THE SOUTH RIGHT OF WAY LINE OF PROSPECT ROAD; THENCE WESTERLY, NORTHWESTERLY AND NORTHERLY ALONG SAID RIGHT OF WAY LINE TO THE SOUTHEAST CORNER OF PARCEL "B", "PROSPECT ROAD PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 154, PAGE 4, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA; THENCE EASTERLY ALONG THE SOUTH LINE OF SAID PARCEL "B" TO THE SOUTHWEST CORNER THEREOF; THENCE SOUTHERLY ALONG THE EAST LINE OF PARCEL "C" OF SAID PLAT; THENCE SOUTHERLY ALONG THE EAST LINE OF SAID PARCEL "C" AND THE SOUTHERLY PROLONGATION THEREOF TO THE NORTH HALF (N $\frac{1}{2}$ ) OF THE SOUTHWEST QUARTER (SW $\frac{1}{4}$ ) OF THE NORTHWEST QUARTER (NW $\frac{1}{4}$ ) OF SAID SECTION 17; THENCE EASTERLY ALONG THE NORTH BOUNDARY THEREOF TO THE NORTHEAST CORNER THEREOF; THENCE SOUTHERLY ALONG THE EAST BOUNDARY THEREOF TO THE NORTHWEST CORNER OF THE SOUTHWEST QUARTER (SW $\frac{1}{4}$ ) OF THE SOUTHEAST QUARTER (SE $\frac{1}{4}$ ) OF THE NORTHWEST QUARTER (NW $\frac{1}{4}$ ) OF SAID SECTION 17; THENCE EASTERLY ALONG THE NORTH BOUNDARY THEREOF TO THE NORTHEAST CORNER THEREOF; THENCE SOUTHERLY ALONG THE EAST BOUNDARY THEREOF TO THE NORTHWEST CORNER OF THE SOUTH THREE-QUARTERS (S $\frac{3}{4}$ ) OF THE SOUTHEAST QUARTER (SE $\frac{1}{4}$ ) OF THE SOUTHEAST QUARTER (SE $\frac{1}{4}$ ) OF THE NORTHWEST QUARTER (NW $\frac{1}{4}$ ) OF SAID SECTION 17; THENCE EASTERLY ALONG THE NORTH BOUNDARY THEREOF AND ALONG THE NORTH BOUNDARY OF THE SOUTH THREE-QUARTERS (S $\frac{3}{4}$ ) OF THE SOUTHWEST QUARTER (SW $\frac{1}{4}$ ) OF THE SOUTHWEST QUARTER (SW $\frac{1}{4}$ ) OF THE NORTHEAST QUARTER (NE $\frac{1}{4}$ ) OF SAID SECTION 17 TO THE NORTHEAST CORNER THEREOF; THENCE SOUTHERLY ALONG THE EAST BOUNDARY THEREOF TO THE NORTHERLY RIGHT-OF-WAY LINE OF WEST COMMERCIAL BOULEVARD; THENCE WESTERLY ALONG SAID NORTHERLY RIGHT-OF-WAY LINE TO THE INTERSECTION OF THE WEST LINE OF SAID SECTION 17; THENCE SOUTHERLY ALONG SAID WEST LINE TO THE SOUTHWEST CORNER OF THE NORTHWEST QUARTER (NW $\frac{1}{4}$ ) OF THE SOUTHWEST QUARTER (SW $\frac{1}{4}$ ) OF SAID SECTION 17; THENCE EASTERLY ALONG THE SOUTH LINE OF SAID NORTHWEST QUARTER (NW $\frac{1}{4}$ ) OF THE SOUTHWEST QUARTER (SW $\frac{1}{4}$ ) OF SAID SECTION 17 TO THE SOUTHEAST CORNER THEREOF, SAID POINT ALSO BEING THE SOUTHEAST CORNER OF LOT 56, BLOCK 16, "TAMARAC LAKES SOUTH", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 62, PAGE 24 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA; THENCE NORTHERLY AND EASTERLY ALONG THE SOUTHERLY BOUNDARY OF SAID PLAT TO THE SOUTHEAST CORNER OF PARCEL "S" OF SAID PLAT AND THE POINT OF BEGINNING.

# Exhibit "A"

## Legend

-  Tamarac East Service Area
-  Tamarac Water Main

Scale: 1" = 500'  
(half size)



RESOLUTION NO. 24-

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA, AUTHORIZING THE PROPER CITY OFFICIALS TO EXECUTE AN AGREEMENT WITH THE CITY OF TAMARAC FOR THE SALE OF POTABLE WATER, SUBJECT TO MUTUALLY AGREED UPON TERMS AND CONDIITONS, AND PROVIDING FOR AN EFFECTIVE DATE.

---

WHEREAS, the City of Fort Lauderdale ("City") and the City of Tamarac entered into a 30-year agreement in 1994 for the provision of potable water; and

WHEREAS, pursuant to Resolution No. 94-178, adopted at its meeting of September 14, 1994, the City Commission of the City of Tamarac authorized the proper officials of Consumer to enter into an Agreement for the purchase of potable water from the City; and

WHEREAS, pursuant to Resolution No. 94-137, adopted at its meeting of September 7, 1994, the City Commission of the City of Fort Lauderdale authorized the proper officials of City to enter into an Agreement for the sale of potable water to the City of Tamarac; and

WHEREAS, the Parties hereto desire to continue the relationship; and

WHEREAS, in 2021, City of Tamarac expressed its interest in a shorter duration Agreement due to its undertaking of a project to extend its infrastructure to serve the service area identified in the Agreement; and

WHEREAS, the City, in its proprietary capacity, owns and operates a municipal public water supply and is in a position to continue to provide service to the City of Tamarac; and

WHEREAS, the City, in its proprietary capacity, owns and operates a water distribution system, and Consumer desires to continue to purchase water from City to service City of Tamarac customers upon terms mutually agreeable;

NOW, THEREFORE BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

SECTION 1. That the City Commission of the City of Fort Lauderdale, Florida, hereby approves the Agreement for Sale of Potable Water with the City of Tamarac for a period of five (5) years, plus one extension for two (2) additional years, subject to certain mutually agreeable terms and conditions.

SECTION 2. That the City Commission of the City of Fort Lauderdale, Florida, authorizes the City Manager to execute the Agreement for Sale of Potable Water with the City of Tamarac.

SECTION 3. That the office of the City Attorney shall review and approve as to form all documents prior to their execution by City officials.

SECTION 4. That this Resolution shall be in full force and effect upon the final passage and adoption.

ADOPTED this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Mayor  
DEAN J. TRANTALIS

ATTEST:

\_\_\_\_\_  
City Clerk  
DAVID R. SOLOMAN

Dean J. Trantalis \_\_\_\_\_

John C. Herbst \_\_\_\_\_

Steven Glassman \_\_\_\_\_

APPROVED AS TO FORM AND  
CORRECTNESS:

Pamela Beasley-Pittman \_\_\_\_\_

Warren Sturman \_\_\_\_\_

\_\_\_\_\_  
City Attorney  
THOMAS J. ANSBRO

# Agreement

## City of Wilton Manors

2 10-14-05

**DOCUMENT ROUTING FORM**

NAME OF DOCUMENT: Agreement for the Sale of Potable Water between the City of Wilton Manors and CFL  
ORIGINATING DEPT. PW ORIGINATOR: Julie Leonard, Ass't Utilities Service Director/Operations  
RESPONSIBLE ATTY.: Harry A. Stewart \_\_\_\_\_ Sharon P. Miller \_\_\_\_\_  
Robert B. Dunckel \_\_\_\_\_ Victoria F. Minard X *JLM*  
Cindy Bortman \_\_\_\_\_ Ebony Calloway \_\_\_\_\_  
DJ Williams-Persad \_\_\_\_\_ Paul Bangel \_\_\_\_\_

Approved as to Content  
By: *N.H. Cebarca*  
Department Head  
Amount Required by Contract/Agreement  
\$ 0  
Funding Source: \_\_\_\_\_  
Dept./Div. \_\_\_\_\_  
Index/Sub-object \_\_\_\_\_  
Project # \_\_\_\_\_  
Date \_\_\_\_\_

Approved as to Funds Available  
By: \_\_\_\_\_  
Director of Finance  
Date 9-21-05  
Approved as to Content  
By: *Kathleen Juan*  
Assistant City Manager

DEPARTMENT HEAD, ASSISTANT CITY MANAGER AND FINANCE APPROVALS MUST BE OBTAINED BEFORE A DOCUMENT IS ROUTED FOR SIGNATURE.

APPROVED AT COMMISSION MEETING OF: September 7, 2005 ITEM R- 10  
RESOLUTION # 05- Pending NO RESOLUTION \_\_\_\_\_

NO COMMISSION APPROVAL REQUIRED.  - Box checked if applicable.

ROUTE AND SIGN AS INDICATED BELOW IN SEQUENCE SHOWN.

1. City Attorney (as to form)
2. City Manager. City Manager must sign in presence of one witness, if witnesses are required.
3. Mayor's signature. Mayor must sign in presence of one witness, if witnesses are required.
4. To City Clerk for signature and City seal.
5. City Clerk retains one original of document and routing slip in City records unless otherwise indicated.

DIRECTIONS TO CLERK:

SEND One SIGNED ORIGINAL(s) TO: ~~Julie Leonard, Ass't Utilities Service Director/Operations for Wilton Manors and One~~ Complete copy for the Public Works Department as well as:

SEND 1 COMPLETE COPY OF SIGNED DOCUMENT TO CITY ATTORNEY'S OFFICE WITH THIS ROUTING SLIP ATTACHED.

Date: September 8, 2005  
File: 658.03

*2 copies Total - 1 for CAO  
1 for PW*

05 SEP 22 AM 10:18  
RECEIVED  
FORT LAUDERDALE  
CITY ATTORNEY'S OFFICE

VFM

R-10

# COMMISSION AGENDA REPORT

COMMISSION MEETING DATE:  AGENDA ITEM:

COMMISSION REPORT NO:

PREPARED BY:

DEPT:

DEPARTMENT DIRECTOR'S SIGNATURE

AUTHOR'S NAME, TITLE, AND TELEPHONE NUMBER

CITY MANAGER'S SIGNATURE

TITLE 1:

TITLE 2:

SUBJECT:

PROPERTY LOCATION/ADDRESS:

REQUESTED ACTION (STAFF RECOMMENDATION - CONTENT OF MOTION):

- REGULAR AGENDA
  - Motion
  - Public Hearing
  - Resolution
  - Purchase
- CONFERENCE
  - Motion for Discussion
  - Ordinance
  - Presentation
  - Citizen Presentation
- COMMISSION MEMO
  - Old/New Business
  - CRA
  - Exec Closed Door
  - Advisory Boards
  - City Commission Reports
  - City Manager Reports

Guest Speaker

Public Notice Advertised:

Name of Guest Speaker:

Affiliation of Guest Speaker:

FUNDS APPROPRIATION/TRANSFER (provide index code, subobject, and title of subobject):

### FOR PROCUREMENT ITEMS ONLY

PROCUREMENT REFERENCE NO:  TRANSACTION TYPE:

BIDS SOLICITED/RECEIVED:  WBE:  LATE BID:   
Vendor:  MBE:  NO BID:

Amount:  Details:

Procurement Recommendation:

**Description of Exhibits:**

1.		2.		3.	
4.		5.		6.	
7.		8.		9.	

**EXHIBITS: AVAILABLE VIA HARDCOPY: Exhibit #s:**

**PRIOR COMMISSION/BOARD ACTION: (attach additional file if necessary)**

**BACKGROUND/DETAIL: (2000 character limit)**

The City of Fort Lauderdale has provided water service to the City of Wilton Manors since 1980 through a Water Agreement, which expires September 16, 2005.

A new 25-year agreement has been negotiated with the City of Wilton Manors to provide water services. These water services are the same as provided to other municipalities.

The Wilton Manors City Commission approved this Agreement at their August 23, 2005 meeting.

Staff recommends the City Commission approve and authorize the proper City Officials to execute a 25-year Water Agreement with the City of Wilton Manors for the sale of water.

**Document Name:**

**Type:**

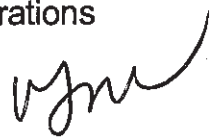
**Expiration Date:**  **Attorney's Initials:**

**Memorandum**

No. 05 -1165

City Attorney's Office

To: Julie Leonard, Ass't Utilities Service Director/Operations

From: Victoria F. Minard, Assistant City Attorney/5106 

Date: September 8, 2005

Re: Agreement between the City of Wilton Manors and the City of Fort Lauderdale for the Sale of Potable Water.

---

The above item was approved by the City Commission at its meeting of September 7, 2005. Attached is a copy of the document, as well as an original document routing form for the item that must be completed and executed by your department head and the Director of Finance, indicating their review and approval as to the content of the respective document.

Please return this completed routing form to me, so that I may then forward the two (2) original documents, previously forwarded to me, to the proper City officials for execution.

VFM/mas

L:\VFMMEMOS\2005\CCM approval 2005\1165\_Wilton Manors Wtr.wpd

FILE: 658.03

## AGREEMENT

THIS AGREEMENT, made and entered into this 7<sup>th</sup> day of September, 2005 by and between:

CITY OF FORT LAUDERDALE, a municipal corporation of Florida, hereinafter referred to as the "Seller";

and

CITY OF WILTON MANORS, a municipal corporation of Florida, hereinafter referred to as the "Purchaser";

Whereas Pursuant to Resolution No. 05-154 adopted at its meeting of September 7, 2005, the City Commission of the City of Fort Lauderdale authorized the proper officials of Seller to enter into this Agreement.

Whereas Pursuant to Resolution No. 2919, adopted at its meeting of August 23, 2005, the City of Wilton Manors authorized the proper officials of Purchaser to enter into this Agreement.

Whereas Seller and Purchaser entered into a twenty five (25) year agreement in 1980 for the provision of potable water from Seller to Purchaser.

Whereas the parties hereto desire to continue the relationship experienced for those 25 years.

Whereas Seller is willing to enter into a new agreement with Purchaser for the sale of water, subject to certain terms and conditions.

Whereas the Seller in its proprietary capacity owns and operates a municipal public water supply and is in a position to continue to provide potable water to the Purchaser.

Whereas the Purchaser in its proprietary capacity owns and operates a water distribution system, and the Purchaser desires to continue to purchase water from Seller to service Purchaser's customers upon terms mutually agreeable.

Now, therefore, in consideration of the mutual promises, covenants and conditions hereinafter contained, and other good and valuable consideration, receipt of which is hereby acknowledged, Seller and Purchaser hereby agree as follows:

1. The term of this Agreement shall be for a period of twenty-five (25) years, commencing on the date first written above.

2. During the term of this Agreement, Seller agrees to sell and Purchaser agrees to buy water from the Seller, which may be re-sold by Purchaser to its water consumers within the municipal boundaries of the Wilton Manors Utility System.

3. During the term of this Agreement, the Purchaser shall not purchase water from any other person, firm or corporation other than Seller for Purchaser's customers within the boundaries of the Wilton Manors Utility System, so long as Seller is able to supply the quantity and quality of water required by Purchaser, except by written consent of Seller evidenced by an amendment to this Agreement. Seller shall not sell water to any person, firm or corporation other than Purchaser within the boundaries of the Wilton Manors Utility System except as otherwise provided in this Agreement. Seller and Purchaser shall each comply to the extent applicable with all laws and regulations pertaining to the delivery of potable water to the public.

4. Purchaser shall not permit any Wilton Manors Utility customer to connect with the Purchaser's distribution system when such Purchaser's water requirements are reasonably estimated to exceed 100,000 gallons of water a day without previous written approval of Seller. In the event any customer of Purchaser, after being connected to Purchaser's distribution system, should use as much as 100,000 gallons of water per day, Purchaser shall immediately notify Seller of such consumption and the written approval of Seller shall be obtained before such customer shall be furnished water in quantities exceeding 100,000 gallons of water per day. Exception to this article shall be automatic in the event(s) of an unforeseen circumstance of limited duration such as a leak or emergency usage.

5. Seller states, and Purchaser acknowledges, that Seller does not bind itself during any period of water shortage, resulting from any type of emergency condition or inadequacy of mains or other facilities, to do more than to deliver water to Purchaser in such quantities as are available for allocation by Seller among all Seller's municipal utility customers, after the demands of water customers and demands for fire protection in the City of Seller have been satisfied.

6. In the event it should become necessary for Seller to adopt regulations or laws in a case of an emergency as determined by Seller for the conservation of water sold by Seller to Purchaser, Purchaser agrees that it will adopt and enforce corresponding regulations and laws for conservation binding upon Purchaser's consumers during the time of such emergency.

7. The area to be served is generally limited to the municipal boundaries and the distribution system of the Purchaser as they exist as of the date of this Agreement. Such service areas shall not be increased or enlarged, nor does Seller agree to furnish water for use of Purchaser's consumers lying outside of the area

described above, unless written consent of the Seller has first been obtained by Purchaser and evidenced by an amendment to this Agreement.

8. Purchaser shall install, at its own expense, such water master meters as may be required from time to time by the Seller. Such meters shall be installed under the supervision of the Seller and shall be of a type approved by the Seller. After installation, the Seller will maintain such meters at its own expense, but title to the same shall remain in the Purchaser.

9. Purchaser agrees that it will neither adopt nor enforce any regulation or law that adversely affects the obligations of the parties as set forth in this Agreement.

10. The Purchaser shall be bound by the provisions of Chapter 28 of the Code of Ordinances of the City of Fort Lauderdale now existing or as amended from time to time, insofar as same are applicable, as well as all applicable ordinances of the City of Fort Lauderdale now existing or hereafter adopted pertaining to water service and water regulations.

11. The water rates to be charged by the Seller to the Purchaser shall be the rate provided to be charged to municipalities, political subdivisions and privately owned utilities under the provision(s) of the applicable sections of the Code of Ordinances of the City of Fort Lauderdale. It is the intention of the parties that the Seller shall not discriminate against the Purchaser vis-à-vis, the consumers within the limits of the City of Fort Lauderdale. Any rate increases to Purchaser during the life of this Agreement shall be based on any increase in the cost of providing water to Purchaser and others similarly situated.

12. The Seller shall render monthly statements for water furnished and the Purchaser shall pay promptly all statements furnished. Should the Purchaser fail or refuse to pay the amount of such statement within thirty (30) days after the same has been submitted, the Seller shall have the right to enforce the provisions of Chapter 28 of the Code of Ordinances of the City of Fort Lauderdale providing for discontinuance of service until past due indebtedness is paid and any other legal remedies available to Seller.

13. It is the obligation of the Purchaser to obtain all necessary approvals from all appropriate governmental authorities having jurisdiction for operation of its water distribution system. Purchaser shall submit to the City Manager or other designated City of Fort Lauderdale official such data as they may require from time to time, including, but not limited to, plans and specifications for additions, modifications, extensions or alterations of the Purchaser's distribution system.

14. The Purchaser shall not assign or transfer its interests or obligations under this Agreement in whole or in part.

15. This Agreement shall not become effective until a Resolution has been adopted by the governing bodies of Seller and Purchaser approving this Agreement and authorizing its execution.

16. This Agreement shall be governed by the laws of the State of Florida. The parties waive the privilege of venue and agree that all litigation between them in the state courts shall take place in Broward County, Florida, and that all litigation between them in the federal courts shall take place in the United States District Court for the Southern District of Florida.

[This Space Intentionally Left Blank]

IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first written above.

WITNESSES:

Safeya B. Ali

Safeya B. Ali

Print Name

H. Skoundridakis

HARRIN SKOUNDRIDAKIS

Print Name

(SEAL)

CITY OF FORT LAUDERDALE, a municipal corporation of the State of Florida.

By [Signature]  
JIM NAUGLE, Mayor

By [Signature]  
GEORGE GRETSAS, City Manager

ATTEST:

[Signature]  
JONDA K. JOSEPH, City Clerk

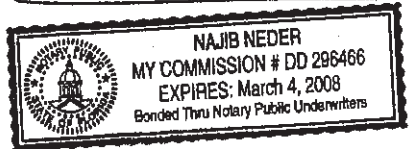
Approved as to form:

[Signature]  
VICTORIA F. MINARD  
Assistant City Attorney

STATE OF FLORIDA:  
COUNTY OF BROWARD:

The foregoing instrument was acknowledged before me this 6 day of October, 2005, by JIM NAUGLE, Mayor of the CITY OF FORT LAUDERDALE, a municipal corporation of Florida. He is personally known to me and did not take an oath.

(SEAL)



[Signature]  
Signature: Notary Public, State of Florida

Najib Neder  
Name of Notary Typed, Printed or Stamped

STATE OF FLORIDA:  
COUNTY OF BROWARD:

The foregoing instrument was acknowledged before me this 5<sup>th</sup> day of October, 2005, by GEORGE GRETSAS, City Manager of the CITY OF FORT LAUDERDALE, a municipal corporation of Florida. He is personally known to me and did not take an oath.

(SEAL)



[Signature]  
Signature: Notary Public, State of Florida

DONNA M. SAMUDA  
Name of Notary Typed, Printed or Stamped

WITNESSES:

[Signature]

Leigh Ann Gros

Print Name

[Signature]

ANGELA D. SCOTT

Print Name

(CORPORATE SEAL)

CITY OF WILTON MANORS

By [Signature]  
SCOTT NEWTON, Mayor

By [Signature]  
JOSEPH L. GALLEGOS, City Manager

ATTEST:


[Signature]  
City Clerk

Approved as to form:

[Signature]  
City Attorney

STATE OF FLORIDA:  
COUNTY OF BROWARD:

The foregoing instrument was acknowledged before me this 29<sup>th</sup> day of August, 2005, by SCOTT NEWTON, Mayor of the CITY OF WILTON MANORS, a municipal corporation of Florida. He is personally known to me and did not take an oath.  
(SEAL)

 Patricia A Staples  
My Commission DD112265  
Expires May 14, 2006


[Signature]  
Signature: Notary Public, State of Florida

Patricia A. Staples  
Name of Notary Typed, Printed or Stamped

STATE OF FLORIDA:  
COUNTY OF BROWARD:

The foregoing instrument was acknowledged before me this 29<sup>th</sup> day of August, 2005, by JOSEPH L. GALLEGOS, City Manager of the CITY OF WILTON MANORS, a municipal corporation of Florida. He is personally known to me and did not take an oath.

(SEAL)

 Patricia A Staples  
My Commission DD112265  
Expires May 14, 2006

[Signature]  
Signature: Notary Public, State of Florida

Patricia A. Staples  
Name of Notary Typed, Printed or Stamped



**WILTON MANORS, *Island City***  
524 NORTHEAST 21ST COURT, WILTON MANORS, FLORIDA 33305

JL

**PUBLIC SERVICES**

DAVID J. ARCHACKI  
(954) 390-2190  
FAX (954) 567-4212

August 30, 2005

TO VICKI MINARD  
9/1/05

Ms. Julie Leonard  
Public Services Department  
City of Fort Lauderdale  
949 NW 38 Street  
Fort Lauderdale, FL 33309

RE: 25-Year Water Agreement

Dear Julie:

Enclosed are two signed originals of the 25-Year Water Agreement, which was approved by our Commission at their August 23<sup>rd</sup> Commission meeting. Please arrange for both copies to be fully executed by the City of Fort Lauderdale, and return one original signed document to me for our files.

Thank you for all of your assistance in this matter and please feel free to contact me at (954) 390-2190 if you require anything further.

Sincerely,

Rita Leseberg  
Administrative Coordinator  
Public Services Department

DJA/rl  
Encls.

# Water Supply Plan Update Related Comprehensive Plan Amendments

## Future Land Use Plan Element

\*\*\*

### **OBJECTIVE FLU 3.3: Coordination of Water Supply Planning and Land Use Planning**

Coordinate water supply planning and land use planning activities of the City with municipalities receiving water from the City and providing water to the City to ensure that water needs of the City's residents are met.

EVALUATION MEASURE FLU 3.3.a: Implementation of water supply projects described in the 10-Year 2026 Water Supply Facilities Work Plan prepared by Hazen and Sawyer.

POLICY FLU 3.3.1: The City shall maintain a 10-Year Water Supply Plan and update this plan within eighteen (18) months of any update to the regional plan adopted by the South Florida Water Management District.

POLICY FLU 3.3.2: Maintain consistency between the demand calculations in the Water Supply Facilities Work Plan and the population projections contained in the Future Land Use Element.

POLICY FLU 3.3.3: Monitor water demand needs and land use planning in municipalities receiving water from the City and providing water to the City.

POLICY FLU 3.3.4: Assess the Water Supply Facilities Work Plan as part of the Evaluation and Appraisal Report analysis.

POLICY FLU 3.3.5: Work with Broward County and other municipalities to update the Broward County Population Forecasting Model. Wholesale user agreement shall meet the demand projected by the Broward County Population Forecasting Model. Monitoring of population projections for retail customers outside the City limits will be accomplished through the Broward County Population Forecasting Model and annual confirmation of those projections with each City.

POLICY FLU 3.3.6: The City shall coordinate with Broward County and its municipalities to pursue the establishment of mandatory reuse zones in order to require the use of reclaimed water for irrigation, when source water is available, with the goal of reducing demands on the Biscayne Aquifer. (Cross-reference BCLUP POLICY 2.11.3.)

\*\*\*

## Conservation Element

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### **OBJECTIVE CON 1.3: Quality and Quantity of Groundwater Resources**

The City shall protect, monitor, and address issues pertaining to the quality and quantity of groundwater resources.

POLICY CON 1.3.1: Continue to identify, protect, monitor, and treat all groundwater and aquifer recharge areas to meet or exceed local, regional, and state requirements.

POLICY CON 1.3.2: Continue source-water (wellfield) monitoring, protection, and treatment programs to proactively and reactively address issues to water quality and quantity.

POLICY CON 1.3.3: The City shall ~~maintain and update a~~ implement the City's 2026 Water Supply Plan on a 10-year outlook basis, in coordination with the 2023-2024 Lower East Coast Water Supply Plan Updated adopted by the South Florida Water Management District (SFWMD).

\*\*\*

## Sanitary Sewer, Water, & Stormwater Element

\*\*\*

### **OBJECTIVE SWS 3.1: Meet Level of Service Demand in an Efficient, Economical and Environmentally Sensitive Manner**

The City shall, through the coordination of land use planning with water supply planning and management, provide potable water service to meet the demands of the service area in an efficient, economical and environmentally sensitive manner.

EVALUATION MEASURE SWS 3.1.1: Record of the City providing potable water service to meet the demands at adopted levels of service.

EVALUATION MEASURE SWS 3.1.2: ~~Reduce~~ Maintain water demand at ~~to~~ 170 gallons per capita per day through conservation strategies ~~by the year 2028~~.

POLICY SWS 3.1.3: Coordinate any necessary raw water wellfield expansion and specific well location with local land use plans and the plans of appropriate County and regional agencies, including the South Florida Water Management District (SFWMD).

POLICY SWS 3.1.4: Assure that adequate watersupplies and potable water facilities shall be in place and available to serve new development no later than the issuance of a certificate of occupancy.

POLICY SWS 3.1.5: Monitor water usage for compliance with the City's Consumptive Use Permit.

POLICY SWS 3.1.6: Implement the City's ~~10-Year~~ 2026 Water Supply Facilities Work Plan prepared by Hazen and Sawyer and coordinated with the 2023-2024 Lower East Coast Water Supply Plan Updated adopted by the South Florida Water Management District (SFWMD). ~~(current version).~~

POLICY SWS 3.1.7: ~~Maintain a Water Supply Facilities Work Plan, eCoordinated with the adopted Community Investment Plan as the City's Capital Improvement Program, for at least a 10-year planning period addressing water supply facilities necessary to serve existing and future development within the water service areas, adjacent municipalities. potential new demand, and support other local and regional water supply plans. The 10-Year Water Supply Facilities Work Plan (Work Plan) shall be incorporated wholly into the Infrastructure Element of the Comprehensive Plan.~~

POLICY: SWS 3.1.8: The City's 2026 Water Supply Facilities Work Plan shall coordinate ~~Coordinate~~ and be consistent with the ~~latest adopted version of 2023-2024 SFWMD Lower East Coast Water Supply Plan (LEC Plan) when proposing or amending the City's Water Supply Work Plan.~~ and update ~~Update~~ the City's Work Plan within 18 months following an update to the LEC Plan. Where appropriate and feasible, the Work Plan shall include collaborative approaches with other local governments for water supply source use and water treatment technology.

POLICY: SWS 3.1.9: The City's 2026 Water Supply Facilities Work Plan prepared by Hazen Sawyer shall be incorporated wholly into the Sanitary Sewer, Water and Stormwater Element of the Comprehensive Plan.

\*\*\*

### **OBJECTIVE SWS 3.2: Water Supply System**

Expand and improve the necessary facets of the water supply system to meet the projected demand for the service area and minimizes disruptions of service.

EVALUATION MEASURE SWS 3.2.1: The level of service for potable water shall be 170 gallons per capita per day.

POLICY SWS 3.2.2: Design capacity of potable water treatment facilities shall be developed based on the following:

- Existing LOS measured by the average number of gallons per day per unit based on the average flows experienced and the total number of equivalent residential units within the service area.
- Existing potable water storage capabilities of the water system.
- Existing minimum water pressure.
- Adopted LOS standards for the potable water facility components.
- Existing capacities or deficiencies of the system.

- Capacities reserved for approved but unbuilt development.
- Improvements to be made to the facility in the current fiscal year by any approved developments pursuant to previous development orders and the impact of such improvements on the existing capacities or deficiencies.
- Improvements to be made to the facility in the current fiscal year by the City and the impact of such improvements on the existing capacities or deficiencies.

POLICY SWS 3.2.3: Immediate priorities for water system maintenance shall be areas where:

- The health, safety and welfare of system users is a concern;
- Deteriorated condition has caused repeated occurrences of leakage and/or breakage; and
- Complaints have been received due to repeated water aesthetic quality problems including color, clarity, and taste and odor, which do not pose a health threat.

POLICY SWS 3.2.4: Coordinate expansion of the potable water system with the appropriate local governments to ensure that projected service area demands are considered in the cost of supplying new development in order to maintain economic feasibility.

POLICY SWS 3.2.5: Water supply and distribution mains must assure adequate flow for both firefighting and consumer needs.

POLICY SWS 3.2.6: Provide extension of potable water mains and distribution lines to new development in the City, as necessary, via agreements with developers to share in costs on a negotiated basis.

EVALUATION MEASURE SWS 3.2.7: Potable water storage and other level of service criteria shall be as recommended in the 2017 Utility Plan or other planning documents. Daily potable water pressure shall be maintained up to 90 pounds per square inch of pressure (psi) to ensure adequate system operation and fire protection.

POLICY SWS 3.2.8: The City has identified portions of the water system requiring upgrading to meet future demands, as well as, overall priorities and coordinate these improvements for public and/or private funding as necessary as per the results and recommendations of the 2017 Utility Plan, ~~The~~ the Five-Year Community Investment Plan (CIP), and other planning documents, including the 2026 latest adopted 10-Year Water Supply Facility Work Plan prepared by Hazen and Sawyer.

POLICY SWS 3.2.9: In order to maintain the City's distribution system, create a redundant system for potable water infrastructure and rehabilitate prioritized pipelines on a yearly basis.

POLICY SWS 3.2.10: The City will evaluate and support any new funding recommendations in the 2017 Utility Plan or other planning documents to ensure financial feasibility.

POLICY SWS 3.1.11: As new development and infill development occur, the City shall require looped water distribution systems, especially where there are currently dead ends in the system.

~~POLICY SWS 3.2.12: The City will review the need for a future water treatment plant in the future.~~

POLICY SWS 3.2.12~~3~~: The City will seek funding to replace all water meters with electronic meters and advanced metering infrastructure (AML) system wide.

\*\*\*

## Capital Improvements Element

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### OBJECTIVE CI 1.1: **Funding Capital Improvements**

Ensure that financial resources are available to provide capital improvements that meet existing needs and needs of planned future growth and in a cost-effective manner.

POLICY CI 1.1.1: The City Manager shall prepare and propose a five-year Capital Improvement Program and One-Year Capital budget to the City Commission annually as part of the Community Investment Plan preparation process, for adoption to meet present infrastructure deficiencies and future infrastructure needs as discussed in other Elements of this Comprehensive Plan as follows:

1. The proposed plan shall include sources of funding for each capital improvement or category of capital improvement.
2. Utilize the findings and recommendations of the Comprehensive Plan to develop the annual capital improvement plan.
3. The Capital Improvement Schedule should demonstrate that level of service standards will be maintained in a such a way that deficiencies and needs are addressed during the next five-year period.
4. The schedule of capital improvements provides an estimate of public facility costs including a delineation of when it will be needed, the general location of the facilities and projected revenue sources to fund the facilities. Projects necessary to ensure that any adopted level-of-service standards are achieved and maintained for the 5-year period are identified as either funded or unfunded and given a level of priority for funding.

POLICY CI 1.1.2: Identify public facilities needed to adequately service existing development and development for which development orders were previously issued.

POLICY CI 1.1.3: Capital projects will be evaluated using the following criteria:

1. **Meets federal, state or legal requirement** - Whether there is a federal, state,

- local mandate, grant, court order, judgment, or other requirement that the project must be completed.
2. **Project feasibility** - Whether there are obstacles to proceeding with the project (land acquisition, easements, approvals required, etc.)
  3. **Costs and sources of funds** - Whether the project would impact the City's operating costs, debt service level, and/or whether the project would yield revenue.
  4. **Reduces risk and improves urgent safety needs** - Whether the project reduces an immediate or future risk, addresses a public health and/or safety hazard, or addresses an urgent safety needs.
  5. **Relevant level of service and performance measures** - Is the impact of the project measurable? Will completing the project improve key performance measures or result in efficiencies?
  6. **Addresses aging infrastructure needs and maintenance of existing facilities** - Whether the project helps to repair or replace the City's aging infrastructure (e.g. bridges, seawalls, roads) or provides for capital maintenance of existing City facilities (e.g. community centers, swimming pools, or sports complex).
  7. **Project consistency with existing approved plans and projects** - Whether the project is directly consistent with a Commission approved plan, including the 10-Year 2026 Water Supply Facility Work Plan prepared by Hazen and Sawyer, Utility Master Plan, Parks and Open Space Master Plan, and the Long- Range Transportation Master Plan; advances the Strategic Plan; the Commission Priorities; and/or the 2035 Community Vision Plan.
  8. **Improves traffic, mobility, connectivity, pedestrian safety and cyclist safety** - Whether the project would result in filling mobility gaps, supporting more effective interconnectivity, and ensuring increased and safe accessibility to activities, events and locations (bikeway path, commuter rail).
  9. **Environmental benefits** - Whether the project would address sea level rise, flooding, energy efficiency, water quality, water efficiency or other sustainability measures.
  10. **Promotes or accelerates sustainable economic development** - Whether the project would directly result in capital investment, increased tax base, increased property values, or improved job opportunities.

\*\*\*

#### **OBJECTIVE CI 1.2: Public Facilities and Standards for LOS**

Provide infrastructure, roads and public education facilities to meet existing needs and needs of planned future growth at the adopted level of service standards.

**POLICY CI 1.2.1: Water** - Provide the necessary capital improvements to maintain water, wastewater and stormwater levels of service, based on service area proportional needs as described in the Infrastructure Element through 2040 and for consistency with the Sustainability Action Plan as follows:

1. Capital improvements will adhere to all construction standards, minimize construction costs and assure acceptable useful life and minimum

maintenance cost.

2. Water, sanitary sewer, and stormwater improvements will be designed and constructed to the size required to serve the City's projected needs.
3. To the maximum extent possible, water and sanitary sewer support systems should be designed to accept future facilities without the need to substantially redesign existing facilities.
4. Utilize existing and future sources of funding for water, stormwater and wastewater improvements including water and wastewater impact fees. Ensure all enterprise funds are continued and utilized for the intended purpose.
5. Assure that adequate water supplies and potable water facilities meeting the adopted level of service, shall be in place and available to serve new development no later than the issuance of a certificate of occupancy.
6. Implement the water supply projects described in the 10-Year 2026 Water Supply Facilities Plan prepared by Hazen and Sawyer. These improvements shall be incorporated into the Capital Improvements Element and City's budget on an annual basis.
7. Water supply projects to be undertaken within the next five years shall be included in the Five-year Capital Improvements Plan with identified, committed funding sources for the initial three years as required by Chapter 163, F.S.

\*\*\*

APPENDIX E

# TOWN OF DAVIE WATER USE PERMIT NO. 06-001340-W



FORM #0225  
REV. 07/09

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
WATER USE PERMIT NO. RE-ISSUE 06-00134-W  
NON-ASSIGNABLE**

**Date Issued:** October 18, 2010

**Expiration Date:** October 24, 2030

**Authorizing:** THE USE OF GROUNDWATER FROM THE BISCAYNE AQUIFER AND FLORIDAN AQUIFER SYSTEM FOR PUBLIC WATER SUPPLY USE WITH AN ANNUAL ALLOCATION OF 7244.1 MILLION GALLONS.

**Located In:** Broward County,

S19,20/T50S/R42E, S7,8,13-30,33-36/T50S/R41E, S2-4,10/T51S/R41E  
S4,5/T51S/R40E, S2,3,9-16,21-28,32,33/T50S/R40E

**Issued To:** TOWN OF DAVIE  
(TOWN OF DAVIE WATER PLANT SYS I, III, AND V)  
6591 ORANGE DRIVE,  
DAVIE, FL 33314

This is to notify you of the District's agency action concerning Permit Application No. 090721-3, dated July 21, 2009. This action is taken pursuant to the provisions of Chapter 373, Part II, Florida Statutes (F.S.), Rule 40E-1.603 and Chapter 40E-2, Florida Administrative Code (F.A.C.). Based on the information provided, District rules have been adhered to and a Water Use Permit is in effect for this project subject to:

1. Not receiving a filed request for an administrative hearing pursuant to Section 120.5 and Section 120.569, or request a judicial review pursuant Section 120.68, Florida Statutes.
2. The attached 29 Limiting Conditions.
3. The attached 18 exhibits.

Permittee agrees to hold and save the South Florida Water Management District and its successors harmless from any and all damages, claims or liabilities which may arise by reason of the construction, maintenance or use of activities authorized by this permit. Said application, including all plan and specifications attached thereto, is by reference made a part hereof. Upon written notice to permittee, this permit may be temporarily modified, or restricted under a Declaration of Water Shortage or a Declaration of Emergency due to Water Shortage in accordance with provisions of Chapter 373, Fla. Statutes, and applicable rules and regulations of the South Florida Water Management District. This Permit may be permanently or temporarily revoked, in whole or in part, for the violation of the conditions of the permit or for the violation of any provision of the Water Resources Act and regulations thereunder. This Permit does not convey to the permittee any property rights nor any privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation, or requirement affecting the rights of other bodies or agencies.

Should you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Should you wish to object to the proposed agency action or file a petition or request, please provide written objections, petitions, requests and/or waivers to:

Elizabeth Veguilla, Deputy Clerk, MSC2440  
South Florida Water Management District  
Post Office Box 24680  
West Palm Beach, FL 33416-4680

Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights", we will assume that you concur with the District's action.

**CERTIFICATION OF SERVICE**

I HEREBY CERTIFY that the Staff Report, Conditions and Notice of Rights have been mailed to the Permittee (and the persons listed on the attached staff report distribution list) no later than 5:00 p.m. on this 19th day of October, 2010, in accordance with Section 120.60(3), Florida Statutes, and a copy has been filed and acknowledged with the Deputy District Clerk.

**ORIGINAL SIGNED BY**

By ELIZABETH VEGUILLA  
DEPUTY CLERK  
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Attachments

CERTIFIED MAIL# 70050390000598222925

### LIMITING CONDITIONS

1. This permit shall expire on October 24, 2030.
2. Application for a permit modification may be made at any time.
3. Water use classification:

Public water supply

4. Source classification is:

Ground Water from:  
Biscayne Aquifer  
Floridan Aquifer System

5. Annual allocation shall not exceed 7244 MG.

Maximum monthly allocation shall not exceed 652 MG.

Pursuant to Basis of Review for Water Use Permit Applications 1.7.2.2 the use of the Biscayne Aquifer is stipulated between January 1, 2014 and October 24, 2030 for the following amount:

Annual allocation shall not exceed 1830.8 MG.  
Maximum Monthly allocation shall not exceed 164.8 MG.

Pursuant to Basis of Review for Water Use Permit Applications 1.7.2.2 the use of the Biscayne Aquifer is stipulated between October 24, 2010 and December 31, 2013 for the following amount:

Annual allocation shall not exceed 2254.2 MG.  
Maximum Monthly allocation shall not exceed 202.9 MG.

Pursuant to Basis of Review for Water Use Permit Applications 1.7.2.2 the use of the Floridan Aquifer System is stipulated between October 24, 2010 and October 24, 2030 for the following amount:

Annual allocation shall not exceed 5413.3 MG.  
Maximum Monthly allocation shall not exceed 487.2 MG.

6. Pursuant to Rule 40E-1.6105, F.A.C., Notification of Transfer of Interest in Real Property, within 30 days of any transfer of interest or control of the real property at which any permitted facility, system, consumptive use, or activity is located, the permittee must notify the District, in writing, of the transfer giving the name and address of the new owner or person in control and providing a copy of the instrument effectuating the transfer, as set forth in Rule 40E-1.6107, F.A.C.

Pursuant to Rule 40E-1.6107 (4), until transfer is approved by the District, the permittee shall be liable for compliance with the permit. The permittee transferring the permit shall remain liable for all actions that are required as well as all violations of the permit which occurred prior to the transfer of the permit.

Failure to comply with this or any other condition of this permit constitutes a violation and pursuant to Rule 40E-1.609, Suspension, Revocation and Modification of Permits, the District may suspend or revoke the permit.

This Permit is issued to:

Town of Davie  
6591 Orange Drive  
Davie, FL 33314

7. Withdrawal Facilities:

Ground Water - Existing:

- 2 - 10" X 110' X 550 GPM Wells Cased To 100 Feet
- 1 - 12" X 140' X 1050 GPM Well Cased To 120 Feet
- 1 - 20" X 165' X 900 GPM Well Cased To 100 Feet
- 1 - 12" X 150' X 1050 GPM Well Cased To 133 Feet
- 1 - 18" X 120' X 1500 GPM Well Cased To 100 Feet
- 1 - 16" X 1582' X 1600 GPM Well Cased To 965 Feet
- 1 - 20" X 125' X 1600 GPM Well Cased To 117 Feet
- 1 - 16" X 165' X 900 GPM Well Cased To 145 Feet

Ground Water - Proposed:

- 9 - 16" X 1500' X 1500 GPM Wells Cased To 1000 Feet

8. Permittee shall mitigate interference with existing legal uses that was caused in whole or in part by the permittee's withdrawals, consistent with the approved mitigation plan. As necessary to offset the interference, mitigation will include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means.

Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1 in 10 year drought event that results in the:

(1) Inability to withdraw water consistent with provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; or

(2) Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent.

9. Permittee shall mitigate harm to existing off-site land uses caused by the permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the permittee to modify withdrawal rates or mitigate the harm. Harm caused by withdrawals, as determined through reference to the conditions for permit issuance, includes:

(1) Significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other governmental authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g. fill for construction, mining, drainage canal, etc.)

(2) Damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; or

(3) Land collapse or subsidence caused by reduction in water levels associated with consumptive use.

10. Permittee shall mitigate harm to the natural resources caused by the permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the permittee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to the conditions for permit issuance includes:

(1) Reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface,

- (2) Reduction in water levels that harm the hydroperiod of wetlands.
  - (3) Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,
  - (4) Harmful movement of contaminants in violation of state water quality standards, or
  - (5) Harm to the natural system including damage to habitat for rare or endangered species.
11. If any condition of the permit is violated, the permit shall be subject to review and possible modification, enforcement action, or revocation.
  12. Authorized representatives of the District shall be permitted to enter, inspect, and observe the permitted system to determine compliance with special conditions.
  13. The Permittee is advised that this permit does not relieve any person from the requirement to obtain all necessary federal, state, local and special district authorizations.
  14. The permit does not convey any property right to the Permittee, nor any rights and privileges other than those specified in the Permit and Chapter 40E-2, Florida Administrative Code.
  15. Permittee shall submit all data as required by the implementation schedule for each of the limiting conditions to: SFWMD, P.O. Box 24680, West Palm Beach, FL 33416-4680.
  16. In the event of a declared water shortage, water withdrawal reductions will be ordered by the District in accordance with the Water Shortage Plan, Chapter 40E-21, F.A.C. The Permittee is advised that during a water shortage, pumpage reports shall be submitted as required by Chapter 40E-21, F.A.C.
  17. Prior to the use of any proposed water withdrawal facility authorized under this permit, unless otherwise specified, the Permittee shall equip each facility with a District-approved operating water use accounting system and submit a report of calibration to the District, pursuant to Section 4.1, Basis of Review for Water Use Permit Applications.  
  
In addition, the Permittee shall submit a report of recalibration for the water use accounting system for each water withdrawal facility (existing and proposed) authorized under this permit every five years from each previous calibration, continuing at five-year increments.
  18. Monthly withdrawals for each withdrawal facility shall be submitted to the District quarterly. The water accounting method and means of calibration shall be stated on each report.
  19. The Permittee shall notify the District within 30 days of any change in service area boundary. If the Permittee will not serve a new demand within the service area for which the annual allocation was calculated, the annual allocation may then be subject to modification and reduction.
  20. Permittee shall determine unaccounted-for distribution system losses. Losses shall be determined for the entire distribution system on a monthly basis. Permittee shall define the manner in which unaccounted-for losses are calculated. Data collection shall begin within six months of Permit issuance. Loss reporting shall be submitted to the District on a yearly basis from the date of Permit issuance.  
The Town shall complete the leak detection system and repairs and calibrations by December 2012, pursuant to Section 2.6.1 (E) of the BOR. The Town shall provide a report detailing the completed tasks by January 2013..
  21. Permittee shall maintain an accurate flow meter at the intake of the water treatment plant for the purpose of measuring daily inflow of water.
  22. The Permittee shall notify the District within 30 days of entry into an inter-local agreement, contract, or other similar instrument to deliver or receive water outside of its service area or to serve a demand not identified to determine the allocation described in this permit. A copy of such agreement shall be provided to the District. The monthly volume of water delivered and/or received via each inter-local agreement, contract, or other similar instrument shall be submitted

to the District on a quarterly basis.

23. Every ten years from the date of permit issuance, the permittee shall submit a water use compliance report for review and approval by District Staff, which addresses the following:
  1. The results of a water conservation audit that documents the efficiency of water use on the project site using data produced from an onsite evaluation conducted. In the event that the audit indicates additional water conservation is appropriate or the per capita use rate authorized in the permit is exceeded, the permittee shall propose and implement specific actions to reduce the water use to acceptable levels within timeframes proposed by the permittee and approved by the District.
  2. A comparison of the permitted allocation and the allocation that would apply to the project based on current District allocation rules and updated population and per capita use rates. In the event the permit allocation is greater than the allocation provided for under District rule, the permittee shall apply for a letter modification to reduce the allocation consistent with District rules and the updated population and per capita use rates to the extent they are considered by the District to be indicative of long term trends in the population and per capita use rates over the permit duration. In the event that the permit allocation is less than allowable under District rule, the permittee shall apply for a modification of the permit to increase the allocation if the permittee intends to utilize an additional allocation, or modify its operation to comply with the existing conditions of the permit
24. The Water Conservation Plan required by Section 2.6.1 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District, must be implemented in accordance with the approved implementation schedule.  
Most of the elements shown in Exhibit 15 have been implemented by September 30, 2010. Element H Reclaimed Water Study shall be implemented by January 2013.
25. If at any time there is an indication that the well casing, valves, or controls leak or have become inoperative, repairs or replacement shall be made to restore the system to an operating condition. Failure to make such repairs shall be cause for filling and abandoning the well, in accordance with procedures outlined in Chapters 40E-3 and 40E-30, Florida Administrative Code.
26. The Permittee shall continue to submit monitoring data in accordance with the approved water quality monitoring program for this project.  
  
Monitor wells MW-1 (near the north wellfield at Potters Park), MW-2 (near the south wellfield east), MW-3 (near the south wellfield west), and MW-4 (near the north wellfield at Veteran's Park) shall be monitored monthly for chloride concentrations and groundwater elevations referenced to NGVD. The monitoring data shall be submitted to the District quarterly.
27. The Permittee shall submit to the District an updated Well Description Table (Table A) within one month of completion of the proposed wells identifying the actual total and cased depths, pump manufacturer and model numbers, pump types, intake depths and type of meters.
28. Public water utilities that control, either directly or indirectly, a wastewater treatment plant, and which have determined pursuant to Section 403.064, F.S., that use of reclaimed water is feasible, must provide the District with annual updates of the following information: (1) the status of distribution system construction, including location and capacity of lines; (2) a summary of uncommitted supplies for the next year; (3) copies of any new or amended local mandatory reclaimed water reuse zone ordinances; and (4) a list of end-users who have contracted to receive reclaimed water and the agreed upon quantity of water to be delivered.
29. The permittee shall develop alternative water supplies (including reclaimed water), at a minimum, in accordance with the schedules described in Exhibits 6 and 15. The permittee shall provide annual updates of the status of all alternative water supply projects. The status report shall include work completed to date, expenditures and any anticipated changes in the timelines.

## NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

### **RIGHT TO REQUEST ADMINISTRATIVE HEARING**

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a District decision which does or may determine their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, or electronic mail, or posting that the District has or intends to take final agency action, or publication of notice that the District has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

### **Filing Instructions**

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery or facsimile. **Filings by e-mail will not be accepted.** Any person wishing to receive a clerked copy with the date and time stamped must provide an additional copy. A petition for administrative hearing is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the SFWMD Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the SFWMD Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the SFWMD Clerk. **Delivery of a petition to the SFWMD's security desk does not constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office.** An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by facsimile must be transmitted to the SFWMD Clerk's Office at (561) 682-6010. Pursuant to Subsections 28-106.104(7), (8) and (9), Fla. Admin. Code, a party who files a document by facsimile represents that the original physically signed document will be retained by that party for the duration of that proceeding and of any subsequent appeal or subsequent proceeding in that cause. Any party who elects to file any document by facsimile shall be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed with the clerk as a result. The filing date for a document filed by facsimile shall be the date the SFWMD Clerk receives the complete document.

### **Initiation of an Administrative Hearing**

Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, District file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

If the District takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

### **Mediation**

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

### **RIGHT TO SEEK JUDICIAL REVIEW**

Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the SFWMD Clerk within 30 days of rendering of the final SFWMD action.

Last Date for Agency Action:  
October 24, 2010

### Water Use Staff Review Summary

**FINAL APPROVED BY  
EXECUTIVE DIRECTOR  
OCTOBER 18, 2010**

**Application Number:** 090721-3  
**Permit Number:** 06-00134-W  
**Project Name:** TOWN OF DAVIE WATER PLANT SYS I, III, AND V

**Water Use Permit Status:** MODIFICATION/RENEWAL

**Environmental Resource Permit Status:** NOT APPLICABLE.

**Right Of Way Permit Status:** NOT APPLICABLE

**Location:** BROWARD COUNTY, S2,3,9-16,21-28,32,33/T50S/R40E  
S7,8,13-30,33-36/T50S/R41E  
S19,20/T50S/R42E  
S4,5/T51S/R40E  
S2-4,10/T51S/R41E

**Applicant's Name and Address:** TOWN OF DAVIE  
6591 ORANGE DRIVE  
DAVIE, FL 33314

**Purpose:**

The purpose of this application is to modify and renew Water Use Permit 06-00134-W for public water supply for the Town of Davie serving 91,091 persons in the year 2030 with an average per capita use rate of 145 gallons per day and a maximum monthly to average monthly pumping ratio of 1.08:1. Withdrawals are from the Biscayne aquifer via eight existing withdrawal facilities and from the Upper Floridan aquifer system via one existing and nine proposed withdrawal facilities. To meet the increased water demands due to rising populations, the Town of Davie proposes to construct a new reverse osmosis (RO) water treatment facility and to use alternative water supplies. Pending completion of the new Floridan aquifer system (FAS) wells and RO water treatment plant, the applicant requests a temporary increase in allocation (423.4 million gallons per year) from the Biscayne aquifer, above the base condition amount of 1,830.84 million gallons per year. Upon completion of the FAS wells and treatment system in 2013, the Town of Davie will reduce withdrawals from the Biscayne aquifer back down to the base condition amount.

## Project Summary

**Expiration Date:** October 24, 2030  
**Water Use Classification:** Public Water Supply  
**Sources:** **Ground Water from:** Biscayne Aquifer  
 Floridan Aquifer System

**Authorized Allocation:**

**Annual Allocation:** 7,244 Million Gallons (MG)  
**Maximum Monthly Allocation:** 652 Million Gallons (MG)

**Existing Withdrawal Facilities - Ground Water**

Source: Biscayne Aquifer  
 1 - 20" X 165' X 900 GPM Well Cased to 101 Feet  
 1 - 12" X 140' X 1050 GPM Well Cased to 120 Feet  
 1 - 16" X 165' X 900 GPM Well Cased to 145 Feet  
 1 - 18" X 120' X 1500 GPM Well Cased to 100 Feet  
 2 - 10" X 110' X 550 GPM Wells Cased to 100 Feet  
 1 - 20" X 165' X 1600 GPM Well Cased to 117 Feet  
 1 - 12" X 150' X 1050 GPM Well Cased to 133 Feet  
 Source: Floridan Aquifer System  
 1 - 16" X 1582' X 1600 GPM Well Cased to 965 Feet

**Proposed Withdrawal Facilities - Ground Water**

Source: Floridan Aquifer System  
 9 - 16" X 1500' X 1500 GPM Wells Cased to 1000 Feet

**Rated Capacity**

<u>Source</u>	<u>Status Code</u>	<u>GPM</u>	<u>MGM</u>	<u>MGY</u>
Biscayne Aquifer	E	8,100	354.6	4,257
Floridan Aquifer System	E	1,600	70.0	841
Floridan Aquifer System	P	13,500	591.0	7,096
<b>Totals:</b>		<b>23,200</b>	<b>1,015.6</b>	<b>12,194</b>

## Project Description

The Town of Davie (Town or "the project") is an existing public water supply utility (Water Use Permit 06-00134-W) located in southeastern Broward County (Exhibits 1, 2 & 3). The Town's service area (Exhibit 3) is bound on the north by State Road 84, on the south side by Stirling Road, on the east by State Road 7, Ferncrest Utilities, Hacienda Village and the Seminole Indian Reservation, and on the west by Hiatus Road and University Drive. The Town's service area is approximately 10 square miles with the Town providing water service to approximately one third and the City of Sunrise providing water services to approximately two thirds of the Town. The Town has two Biscayne aquifer treatment plants (System I is the north plant and System III is the south plant) which are depicted on Exhibits 4A through 4C. Withdrawals are from the Biscayne aquifer via eight existing withdrawal facilities and from the FAS via one existing and nine proposed withdrawal facilities from the two existing wellfields (north and south) and one proposed wellfield as shown on Exhibits 2, 4A, 4B and 4C. Well specifications and details are shown on Exhibit 5.

The Town proposes to construct a new RO groundwater treatment plant and to use alternative water supplies to meet all future demands. The new RO groundwater treatment plant will treat brackish water from the FAS. During construction of the FAS wells and treatment plant, the Town proposes to withdraw groundwater from the Biscayne aquifer above historic withdrawal rates. Upon completion of the FAS wells and RO treatment system, the Town of Davie intends to reduce withdrawals from the Biscayne aquifer back down to historically used volumes. Further discussion of the timing, demands and quantities are described below in the Projected Water Use Demands Section.

## HISTORY

The Town has historically used the Biscayne aquifer to meet potable water supply demands since the 1970's, and was first permitted on November 17, 1977. The permit was subsequently modified and renewed several times from 1977 to the present. The last water use permit was issued in 2005.

## WELLFIELDS AND WATER TREATMENT PLANTS

The Biscayne aquifer will continue to be used as a raw water supply throughout the permit duration. The project has two existing Biscayne aquifer groundwater treatment plants (Systems I and III) which provide potable water to its service area through its current distribution system. The project uses lime softening, filtration, ion exchange, and disinfection as the method for groundwater treatment for the Biscayne aquifer groundwater. The calculated treatment and distribution losses, obtained from the Town's last five years of water use from the Biscayne aquifer was averaged and the treatment losses for the existing two Biscayne aquifer treatment plants is estimated to be less than five percent.

The Town proposes to construct nine new FAS wells, a raw water piping network, and one new RO water treatment plant (System V) to meet the Town's projected future demands for the next twenty years (2030). The new treatment plant will be using low-pressure reverse-osmosis (LPRO) technology. The water treatment process exclusively uses FAS groundwater and a filtration method that removes many types of large molecules and ions (desalination) for potable drinking supply. The calculated treatment system losses are estimated to be less than 25 percent. The FAS Wells and Water Treatment Plant Construction, Schedule is included as Exhibit 6A. The Town's Wellfield Operating Plan is included as Exhibit 6B.

## WASTE WATER TREATMENT PLANTS

The Town operates one existing wastewater treatment plant (System II) which has the capacity to treat approximately 3.5 million gallons per day (mgd). The effluent is presently piped to the City of Hollywood and discharged via Hollywood's ocean outfall system. Due to the recent legislation that restricts ocean outfall quantities, the Town is proposing to construct System IV, which will treat wastewater for public access irrigation and/or for the future implementation of groundwater recharge and an indirect potable

## **Project Description**

reuse program (Exhibit 6C). The Town is in the planning stages of developing this reuse program.

## **Projected Water Use Demands**

### **RAW WATER DEMANDS**

Based on historical water use and the criteria of Section 2.6.3 of the Basis of Review for Consumptive Use Permits (BOR), the Town's finished per capita use rate is 145 gallons per day (gpd) per person. Exhibits 7 and 8 show the historical population and the projected finished and raw water demands from the Biscayne aquifer and the FAS through 2030 based on the projected population for the service area. Public water supply demands for the Town's service area serving 91,091 persons in the year 2030 with an average per capita use rate of 145 gpd and a maximum monthly to average monthly pumping ratio of 1.08:1 results in a raw water demand of 7,244 million gallons per year (mgy) and 652 million gallons per month (mgm).

### **TEMPORARY BISCAYNE AQUIFER ALLOCATION**

Pursuant to Section 3.2.1.E of the BOR, the Town's pumpage reports for the Biscayne aquifer were evaluated and the base condition water use was calculated to be 1,830.84 mgy. Since the proposed FAS groundwater treatment plant is under construction and is not projected to come on-line until December 2013, the applicant proposes to temporarily increase withdrawals from the Biscayne aquifer above the base condition pursuant to Section 3.2.1E(6)(b) of the BOR. The Town is being permitted a Biscayne aquifer allocation of up to approximately 423.4 million gallons per year (1.16 million gallons per day) to temporarily exceed the base condition water use until the FAS water treatment plant comes on-line. The applicant has provided reasonable assurances that the proposed temporary increase in withdrawals, above the base condition, will not cause harm. Demand allocation calculations are included as Exhibit 9.

## **Hydrologic Modeling**

### **Winflow**

#### **BISCAYNE AQUIFER IMPACT ASSESSMENT**

The applicant is requesting a temporary increase in allocation of groundwater from the Biscayne aquifer above the base condition, until the FAS wells and reverse osmosis plant are operational. In order to evaluate the potential impacts from the proposed use of the Biscayne aquifer, the applicant provided an impact analysis using "AquiferWin32@" (compatible with Winflow 1.0), an analytical groundwater model utilizing the Theis (1935) equation. The model simulations were performed for 90 days of continuous pumping at the maximum monthly withdrawal rates with no recharge. The aquifer parameters used in the model include a transmissivity of 440,000 feet squared per day (ft<sup>2</sup>/day) and a storage coefficient of 0.2. The model was used to assess potential impacts to the water resources, existing legal users, wetlands, potential movement of contaminants, and the potential for salt water intrusion. Withdrawal scenarios were modeled in accordance with the impact evaluation provisions of Section 1.7.5.2 of the BOR. The model was used to define the extent of the cone of influence of both the project withdrawals and cumulative withdrawals with other users. Model parameters and results are shown on Exhibits 10A-E. Model results indicate approximately 0.9 feet of drawdown could occur at the northern wellfield and approximately 1.3 feet of drawdown could occur at the southern wellfield. The cumulative drawdown revealed approximately 0.3 to 0.5 feet of drawdown at the closest known wetlands could occur. This drawdown is quite conservative, as it does not include the recharge effects of rainfall, canals, and other surface water bodies. Model results demonstrate that the increased withdrawals from the Biscayne aquifer, over the Town's base condition water use does not result in an impact to the water resources. Additionally, this interim increase in allocation from the Biscayne aquifer above the base condition will revert to the base condition once the FAS water treatment system is operational in December 2013.

## **Winflow**

### **UPPER FLORIDAN AQUIFER SYSTEM IMPACT ASSESSMENT**

In order to assess impacts from the proposed FAS withdrawals, the applicant submitted analytical modeling to define the area encompassed by the 1-foot drawdown contour. The applicant utilized Winflow, which contains an analytical leaky confined aquifer solution based on equations developed by Hantush and Jacob to evaluate the potential impacts from the proposed Upper Floridan aquifer withdrawals. The model simulated a constant withdrawal rate of 16 mgd for a period of 90 days. The volume was evenly distributed among the ten FAS wells. Aquifer coefficients obtained from an aquifer performance test (APT) conducted by the District in Hollywood (District C-13 Floridan aquifer testing site) were used for the model. These parameters were determined to be the most reliable aquifer coefficients in the area because they were calculated from a full-scale aquifer performance test (APT). The model used a Transmissivity of 24,400 feet squared per day, a storage coefficient of 0.0003, and a leakance value of 0.00063 foot per day foot (Exhibit 11A-C). Model results indicate that a maximum drawdown of 31.0 feet could occur at the Town's FAS withdrawal facilities as a result of the project's withdrawals alone. The maximum cumulative drawdown at the Town of Davie wellfield resulting from the regional cone of depression is 42.2 feet.

## **Impact Assessments**

### **Water Resource Availability**

#### **Biscayne Aquifer**

Land surface elevation in the vicinity of the Biscayne aquifer wellfield is approximately five to six feet National Geodetic Vertical Datum (NGVD). The base of the Biscayne aquifer is approximately -140 feet NGVD. The Biscayne aquifer is part of the surficial aquifer system (SAS), and the base of the SAS is approximately -270 feet NGVD in this area per the United States Geological Survey (USGS) Water Resources Investigations Report 87-4034 (Hydrogeology, Aquifer Characteristics and Groundwater Flow of the Surficial Aquifer System, Broward County, Florida). Water level data collected from the USGS monitor wells G-1221 and G-1223 indicate that the average dry season water elevation is approximately 2.5 feet NGVD in this area inclusive of the Town's historic withdrawals. Predicted drawdown indicates approximately 0.9 foot of drawdown could occur at the northern wellfield and approximately 1.3 feet of drawdown could occur at the southern wellfield. Model results indicate that the Town's Biscayne aquifer withdrawals result in minimal drawdown and will revert back to the base condition in 2013. Considering this information and the available drawdown in the Biscayne aquifer, the potential for harm to occur to the water resource availability of the Biscayne aquifer as a result of the withdrawal of the recommended allocation is considered minimal.

#### **Floridan Aquifer System**

FAS groundwater will be to be utilized to meet all increases in demands above the Biscayne aquifer base condition. The FAS is present in all of Florida and parts of adjacent states. Per the USGS Water Resource Investigations Report 94-4010, the top of the FAS occurs at approximately -1,000 feet NGVD in this area. The Upper Floridan aquifer is generally 500 to 600 feet thick. There are no current water level (potentiometric) maps of the Upper FAS available but potentiometric heads between 35 and 40 feet above sea level have historically been measured in this area. Model results predict a maximum drawdown of 31.0 feet could occur at the Town's FAS withdrawal facilities as a result of the project's withdrawals alone. The maximum cumulative drawdown at the Town's wellfield resulting from the regional cone of depression is predicted to be about 42.2 feet. The cumulative drawdown at the City of Sunrise (Park City) wellfield (the closest public water supply Water Use Permit 06-00120-W) is approximately 18.9 feet. The total available amount of drawdown from the FAS is approximately 1,000 feet. Based on this information, the potential for harm to occur to the water resource availability of the FAS as a result of the withdrawal of the recommended allocation is considered minimal.

## **Existing Legal Users**

### **Biscayne Aquifer**

There are numerous users of the Biscayne aquifer in the vicinity of the Town's wellfields. The nearest existing legal user (ELU) to the north wellfield is Eisenhower Elementary School (Water Use Permit 06-04706-W) which is located approximately 500 feet southwest of the project's northern most Biscayne aquifer wells. The nearest ELU to the south wellfield is Driftwood and Joy Yoder Parks (Water Use Permit 06-05584-W), which is located approximately 530 feet southwest of the project's southern most Biscayne aquifer wells. The modeling results described in the above modeling section indicate that cumulative drawdown in the Biscayne aquifer within the vicinity of the project's wellfields are minimal. The Town's drawdown on the nearest ELUs is predicted to be less than 0.7 foot.

Based on historic water level data and the model results, it is reasonable to assume that continued use of the Biscayne aquifer will not result in the inability of an existing legal user to withdraw water, degrade the quality of the water to the extent that it can no longer be used for its authorized purpose, or prevent an ELU from meeting permitted demands. Therefore, the potential for harm to occur to ELUs as a result of the withdrawal of the recommended allocation is considered minimal.

### **Floridan Aquifer System**

The nearest existing legal user of the FAS is the City of Sunrise (Permit 06-00120-W) located approximately 0.45 mile north of the Town's proposed FAS well FA-PW-6. Model results indicate that a maximum drawdown of 31.0 feet could occur at the Town's FAS withdrawal facilities as a result of the Town's withdrawals alone. The predicted maximum cumulative drawdown at the Town's wellfield resulting from the regional cone of depression is approximately 42.2 feet. The cumulative drawdown at the City of Sunrise wellfield is 18.9 feet. The total available amount of drawdown from the FAS is approximately 1,000 feet. Based on the model results, it is reasonable to assume that the Town's proposed withdrawals will not result in the inability of an existing legal user to withdraw water, change the quality of the water to the extent that it can no longer be used for its authorized purpose, or prevent an existing legal user from meeting its permitted demands. Therefore, the potential for harm to occur to existing legal users as a result of the withdrawal of the recommended allocation is considered minimal.

## **Saline Water Intrusion**

### **Biscayne Aquifer**

The closest salinity control structure, the G-54, maintains control stages in the North New River and is located approximately 1.25 miles north of the northern wellfield as shown on Exhibit 12. SFWMD Structure S-13 salinity control structure on the C-11E Canal (South New River Canal) is located approximately 1.5 miles southeast of the north wellfield and approximately 3.0 miles northeast of the south wellfield. Water levels are maintained at approximately 4.5 feet NGVD in the North New River upstream of the G-54 control structure for the purpose of maintaining a sufficient freshwater head to prevent saline water intrusion. Additionally, the Town of Davie has four monitoring wells. Monitoring wells MW-1 and MW-4 (near Potter's Park DW-1 and Veteran's Park DW-4, respectively) are located near the north wellfield and monitoring wells MW-2 and MW-3 (near Stirling Road DW-2 east and DW-3 west, respectively) are located near the south wellfield (Exhibits 13A-C). The monitoring wells are located between the wellfields and the surface saline sources. Chloride concentration data and water level elevations are being monitored to provide an early warning of possible saline water intrusion into these areas. The chloride concentrations in the monitoring wells are stable and indicate no historic increasing trend. Pursuant to Limiting Condition 26, the Permittee shall continue to implement the saline water monitoring program which monitors the water level and chloride concentration within the Biscayne aquifer in the vicinity of the project's wellfields. A drawdown of less than 0.2 feet at the G-54 control structure is predicted from the modeling results. Therefore, a one-foot mound is expected to be maintained between the wellfields and the sources of saline water, which is consistent with Section 3.4 of the BOR. Based on the model results and review of existing water quality data, the potential for saline water intrusion or upconing to occur as a result of the withdrawal of the recommended allocation

is considered minimal.

### **Floridan Aquifer System**

The one existing and nine proposed FAS wells are or will be installed at approximate depths of 1,500 feet below land surface. The FAS is isolated from surface water saline sources by the confining beds of the Hawthorn Formation, which is estimated to be greater than 600 feet thick. The FAS contains saline water and will be treated with RO to improve the water quality to drinking water standards. Due to the hydraulic confinement between to FAS and land surface, the potential for saline water intrusion or upconing to occur as a result of the withdrawal of the recommended allocation is considered minimal.

### **Wetlands**

#### **Biscayne Aquifer**

There are several wetland areas located within the cone of depression of the Town of Davie's wellfields. These wetlands are identified as Berman's Park Preserve, Country Marketplace, Walnut Creek, and Waldrep/Engle Parcel, as well as some un-named wetland parcels in the vicinity of the wellfields (Exhibit 14A). The applicant has conducted an impact analysis and the conservative model results indicate that cumulative drawdowns of approximately 2.03 to 2.41 feet may occur under the identified wetlands, with this project contributing approximately 0.30 to 0.49 feet of the drawdown (Exhibit 14B).

District environmental staff performed on-site inspections of the identified wetlands in the vicinity of the wellfields. Field assessments confirmed that the wetlands are in good to excellent condition, with appropriate vegetation, wildlife, and hydrologic conditions. District environmental staff also reviewed historical aerial photography, interviewed responsible District compliance personnel, interviewed responsible wetland monitoring consultants, and reviewed submitted wetland mitigation monitoring reports as available. The temporary increase in allocation for the Town results in an additional drawdown of less than 0.1 feet on any wetland, which is considered to be a negligible change based on the results of the analytic model. As previously discussed, model results demonstrate that the increased withdrawals from the Biscayne aquifer, over the Town's base condition water use, does not result in an impact to the water resources or the wetlands. Additionally, this interim increase in allocation from the Biscayne aquifer above the base condition will revert to the base condition once the FAS water treatment system is operational in December 2013. The potential for harm to occur to protected wetland environments as a result of the withdrawal of the recommended allocation is considered minimal.

### **Floridan Aquifer System**

The FAS is isolated from land surface environmental features by the confining beds of the Hawthorn Formation, which is estimated to be greater than 600 feet thick. Considering the hydraulic confinement between to FAS and land surface, the potential for harm to occur to wetlands as a result of the withdrawal of the recommended allocation is considered minimal.

### **Source Of Pollution**

#### **Biscayne Aquifer**

There are numerous potential pollution sources identified by the Florida Department of Environmental Protection (FDEP) in the vicinity of the project. The majority of these identified potential pollution sources are closed with a No Further Action designation (no longer considered a pollution threat) or are undergoing active remediation. There are some facilities with ongoing assessment and investigation activities. The nearest potential pollution source to the northern wellfield is Texaco-Nova Royal Mart (FDEP 8502565), which received a Site Rehabilitation Closure Report and is reportedly no longer a pollution source. The nearest potential pollution source to the southern wellfield is Dagram Station (FDEP 8501814), which is located approximately 1,525 feet southeast of the project's wells. According to the FDEP this facility is undergoing remedial activities, which is designed to pull pollution away from the southern wellfield. According to the impact assessment, the project's drawdown on this reported

pollution source is less than 0.5 feet. There has been no reported movement of pollution into uncontaminated portions of the aquifer as a result of the Town of Davie's withdrawals.

The closest solid waste site to the north wellfield is the Transfer/Recycling Services, which is located approximately 1.2 miles northwest. The closest solid waste site to the south wellfield is the Hollywood Memorial Gardens Sludge Disposal site, which is located approximately 3,200 feet southeast. The closest solid waste landfill is Broward County South Resource Recovery, which is located approximately 1.75 miles to the northeast. As detailed in the previously discussed modeling section the drawdown from the project's withdrawals and the cumulative withdrawals in the area of the Biscayne aquifer is minimal. The potential for the induced movement of contaminants from known sources of pollution to occur as a result of the withdrawal of the recommended allocation is considered minimal.

### **Floridan Aquifer System**

As stated above, there are several potential pollution sources located within the Town's service area. The FAS is separated from the Biscayne aquifer by several low permeability confining units of the Hawthorn Formation, which is estimated to be greater than 600 feet thick. Due to the hydraulic confinement between the FAS and land surface, the potential for movement of contaminants if present from known pollution sources as a result of the withdrawal of the recommended allocation is considered minimal.

### **Other Impacts**

#### **Biscayne Aquifer**

Land uses that are dependent upon water being on or near land surface and that existed prior to this application are protected from harm. The permittee's wellfields and treatment plants are bordered primarily by residential communities, golf courses, some industrial and commercial developments, parks, and schools. The project has been historically withdrawing groundwater from the Biscayne aquifer since the 1970's. Therefore, pursuant to Section 3.6.2 of the BOR, the use is not expected to result in significant reduction in water levels on the property of an existing offsite land use to the extent that the designed function of a water body and related surface water management improvements are damaged (not including aesthetic values), damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use, or land collapse or subsidence caused by reduction in water levels associated with consumptive use.

## Facility Operation

### WITHDRAWAL FACILITIES AND WELLFIELD OPERATING PLAN

The Town of Davie has two existing wellfields with eight existing Biscayne aquifer wells. The north wellfield (System I) maintains four Biscayne aquifer wells B1-1, B1-2, B1-3, and B1-4 and the south wellfield (System III) maintains four Biscayne aquifer wells B3-5, B3-6, B3-7, and B3-10. Two Biscayne aquifer wells were abandoned and are no longer in service (abandoned wells B3-8 and B3-9). The northern and southern wellfields currently provides and will continue to provide the Biscayne aquifer base allocation through the year 2030. The Biscayne aquifer withdrawals are permitted to exceed the base condition water use until the FAS plant is in operation in 2013.

The Town proposes to construct a new reverse-osmosis groundwater treatment plant (System V) and to use alternative water supplies (FAS) to meet all future demands. One FAS well was installed in 2009 and there are nine proposed FAS wells to be installed between 2010 to 2017 as detailed in the Floridan Wells and Water Treatment Plant Schedule (Exhibit 6A). Upon completion of the FAS wells and treatment system, the Town intends to reduce withdrawals from the Biscayne aquifer, back to the base condition. The wellfield operation plan is included as Exhibit 6B. Changes to an approved operational plan involving modifications to the normal operating protocols approved in the permit (that would persist throughout the remaining permit duration) shall be authorized through the issuance of a modification per Rule 40E-2.331, F.A.C., as applicable. Short-term changes in operations associated with emergencies or wellfield maintenance will not require modifications of the wellfield operating plan.

## Additional Information

### MINIMUM FLOWS AND LEVELS - BISCAYNE AQUIFER

The Biscayne aquifer is a minimum flows and levels (MFL) water body covered under a prevention strategy set forth in Chapter 40E-8, F.A.C. The Biscayne aquifer MFL is defined as the water level which results in movement of the saltwater interface landward to the extent the water quality of an established withdrawal point is insufficient to serve as a water supply source. Consumptive use permit criteria for MFLs are located in Section 3.9.1 of the BOR. As previously discussed, the applicant has demonstrated that a greater than one-foot mound of freshwater is expected to be maintained between the wellfields and the saline water sources.

Pursuant to Section 3.2.1.E of the BOR, historic pumpage reports for the Biscayne aquifer were evaluated and the base condition water use was calculated to be 1,830.84 mgy. Since the proposed FAS groundwater treatment plant is in construction and is not projected to come on line and provide potable water until December 2013, the applicant proposes to temporarily increase withdrawals from the Biscayne aquifer above the base condition. The temporary Biscayne aquifer allocation exceeds the base condition water use by 423.4 million gallons per year (1.16 million gallons per day). The modeling evaluation predicts the area of influence resulting from withdrawal of the recommended allocation does not extend to the coastal saline water interface and will not result in movement of the saltwater interface. Therefore, the recommended allocation is consistent with the Biscayne aquifer MFL Prevention Plan.

### REGIONAL WATER AVAILABILITY RULE - BISCAYNE AQUIFER

The Regional Water Availability (RWA) rule is set forth in Section 3.2.1.E of the BOR. The RWA rule criteria must be met, in addition to all other conditions for permit issuance (e.g., reasonable-beneficial and public interest test under Section 373.223, F.S.), in order to receive a permit allocation. The RWA rule ensures that continuing and increasing consumptive use withdrawals in identified portions of Miami-Dade, Broward and Palm Beach Counties are consistent with Everglades' restoration and MFL recovery plans, including CERP. In addition to serving as a component of the Everglades MFL Recovery Strategy, the RWA rule is a key component in determining whether a proposed consumptive use is consistent with public interest, as required by Section 373.223(1)(c), F.S., and Rule 40E-2.301(1)(j), F.A.C. CERP

### **Additional Information**

implementation is explicitly considered by the Legislature as consistent with the public interest in Section 373.470, F.S.

The general premise under the RWA Rule is the requested allocation cannot cause a net increase in the volume or cause a change in timing on a monthly basis of the surface and groundwater withdrawn from the Lower East Coast Everglades Waterbodies (freshwater portions of Everglades National Park and Water Conservation Areas) or integrated conveyance systems over the base condition water use withdrawals from such Waterbodies. For public water supplies, the base condition water use is that volume of water withdrawn over any consecutive twelve-month period, during the five years preceding to April 1, 2006, but in no case shall it exceed the permitted allocation, pursuant to Section 3.2.1.E of the BOR.

The Town of Davie has requested a temporary increased allocation from the Biscayne aquifer above the base condition water use until December 2013. After 2013, all future additional demands above the base condition shall be met by groundwater from the FAS withdrawals, which is considered an alternative source. Therefore, the requested allocation will not cause a net increase in the volume or change the timing on a monthly basis of surface and ground water withdrawn from the Lower East Coast Waterbodies or Waterbodies over the base condition water use withdrawals from such Waterbodies beyond 2013.

### **WATER USE ACCOUNTING AND REPORTING**

The applicant submitted calibration reports which were performed on January 3, 2007 for the existing flow meters on the eight Biscayne aquifer wells. The calibration reports for the Biscayne aquifer production wells exceeded the margin of error of 10% and the Town is repairing and recalibrating the meters. The Permittee has indicated new, factory calibrated flow meters will be installed on the one existing and nine proposed FAS wells prior to their use. Pursuant to Limiting Condition 17, recalibration is due once every five years. Therefore, recalibration of the existing water use accounting method shall be due in January of 2012 for the existing Biscayne aquifer wells and five years from installation of the FAS wells. Pursuant to Limiting Condition 18, monthly withdrawals for each withdrawal facility shall be submitted to the District quarterly.

### **DISTRIBUTION SYSTEM LOSSES**

Pursuant to Limiting Condition 20, unaccounted-for distribution losses shall be determined for the entire distribution system on a monthly basis and reported to the District annually. Historical unaccounted losses were not provided, but the Town is installing a leak detection system (remote readers on all meters). According to the Town the leak detection system and repairs and calibrations will be complete by 2010, pursuant to Section 2.6.1 (E) of the BOR.

### **DEMAND PROJECTIONS**

Pursuant to Section 2.6.3 of the BOR, the average daily per capita use rate is calculated for the last five years of record. The per capita use rate was determined to be 145 gallons per day per capita. Pursuant to Section 2.6.4 of the BOR, the recommended maximum monthly allocation for a public water supply is based on the average monthly demand for the duration of the permit times the maximum monthly to average monthly peaking ratio. The ratio is generally the average of the last three years of record, unless changes in the historic water use patterns require a more representative timeframe. Historical pumpage data was utilized to estimate the monthly pumpage amounts and peaking ratio for the years 2007 through 2009. Pursuant to Section 2.6.5.1 of the BOR, population projections should be derived from the prevailing Comprehensive Land Use Plan or the University Florida Bureau of Economics and Business Research (BEBR), Regional Planning Council, County Planning Departments or the District Planning Department. Population estimates were obtained from the Broward County Planning and Development Division and were approved by SFWMD Planning Department Staff. Exhibits 7 and 8 show the historical

### **Additional Information**

population and the projected finished and raw water demands from the Biscayne aquifer and the FAS serving 91,091 persons in the year 2030. Demand allocation calculations are included as Exhibit 9.

### **NEW CONTRACTS**

Pursuant to Limiting Condition 22, the Town shall notify the District within 30 days of entry into an inter-local agreement, contract, or other similar instrument to deliver or receive water outside of its service area.

### **WATER USE COMPLIANCE**

Pursuant to Limiting Condition 23, every ten years from the date of permit issuance, the permittee shall submit a water use compliance report for review and approval by District Staff.

### **WATER CONSERVATION PLAN**

Pursuant to Limiting Condition 24, water conservation plan elements have been provided pursuant to Section 2.6.1 of the BOR and are included as Exhibit 15.

### **MONITORING**

Pursuant to Limiting Condition 26 (EXHIBIT 13A-C), monitor wells MW-1 (near the north wellfield at Potter's Park), MW-2 (near the south wellfield east), MW-3 (near the south wellfield west), and MW-4 (near the north wellfield at Veteran's Park) shall be monitored monthly for chloride concentrations and groundwater elevations. The monitoring data shall be submitted to the District quarterly.

### **RECLAIMED WATER**

Pursuant to Limiting Condition 29, reclaimed water elements are included in the conservation plan as shown in Exhibits 6C and 15.

### **INTERCONNECTS**

The Town of Davie has (six) large user/bulk user agreements (Exhibit 16) with Ferncrest Utilities (Tindall Hammock Irrigation and Soil Conservation District), City of Cooper City, City of Hollywood, Seminole Tribe of Florida (Hard Rock), City of Fort Lauderdale, and City of Sunrise. Only two of these user agreements, Ferncrest and Seminole Tribe of Florida, receive potable water on a consistent basis from the Town of Davie (Exhibit 16). The remaining bulk user agreements are for emergency purposes and to date no water has been supplied to the emergency interconnects.

### **PERMIT DURATION**

The source of water is the Biscayne aquifer and saline water from the Floridan aquifer which is considered an alternative water supply. Pursuant to Section 1.7.2.2.B.2 of the BOR, the Biscayne aquifer is a source of limited availability to the extent that withdrawals result in induced seepage from the Central and Southern Florida Project. For public water supplies using a source of limited availability, a 20 year permit shall not exceed the demands of the population existing at the time of permit renewal at the approved per capita rate. Requests for allocations beyond this amount may be authorized if the increased impacts on the source of limited availability will be offset through the implementation of alternative sources, as described in Section 1.7.2.2.D.3 of the BOR. All additional projected demands will be obtained from the Floridan aquifer (alternative source) which is not a source of limited availability and therefore the permit duration may be up to 20 years, pursuant to Section 1.7.2.2 C of the BOR. Therefore, Staff recommends a permit duration of 20 years.

**Recommendations**

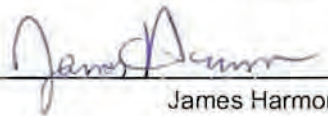
**Project Name:** TOWN OF DAVIE WATER PLANT SYS I, III, AND V  
**Application Number:** 090721-3  
**Permit Number:** 06-00134-W

**Recommendations to Executive Director:**

Staff recommends renewal and modification of Water Use Permit 06-00134-W for public water supply for the Town of Davie service area serving 91,091 persons in the year 2030 with an average per capita use rate of 145 gallons per day and a maximum monthly to average monthly pumping ratio of 1.08. Withdrawals are from the Biscayne aquifer via eight existing withdrawal facilities and from the Upper Floridan aquifer system via one existing and nine proposed withdrawal facilities. The use is reasonable-beneficial, will not interfere with any presently existing legal use of water and is consistent with the public interest. The use is further subject to 29 limiting conditions.

**Application Reviewer:**  \_\_\_\_\_ **Date:** 9/30/10  
Lisa J. Ullman, P.G.

**Supervisor:**  \_\_\_\_\_ **Date:** 10/4/10  
Thomas Colios

**Water Use Division:**  \_\_\_\_\_ **Date:** 10/6/10  
James Harmon, P.G.

## Limiting Conditions

1. This permit shall expire on October 24, 2030.
2. Application for a permit modification may be made at any time.
3. Water use classification:

Public water supply

4. Source classification is:

Ground Water from:  
Biscayne Aquifer  
Floridan Aquifer System

5. Annual allocation shall not exceed 7244 MG.

Maximum monthly allocation shall not exceed 652 MG.

Pursuant to Basis of Review for Water Use Permit Applications 1.7.2.2 the use of the Biscayne Aquifer is stipulated between January 1, 2014 and October 24, 2030 for the following amount:

Annual allocation shall not exceed 1830.8 MG.  
Maximum Monthly allocation shall not exceed 164.8 MG.

Pursuant to Basis of Review for Water Use Permit Applications 1.7.2.2 the use of the Biscayne Aquifer is stipulated between October 24, 2010 and December 31, 2013 for the following amount:

Annual allocation shall not exceed 2254.2 MG.  
Maximum Monthly allocation shall not exceed 202.9 MG.

Pursuant to Basis of Review for Water Use Permit Applications 1.7.2.2 the use of the Floridan Aquifer System is stipulated between October 24, 2010 and October 24, 2030 for the following amount:

Annual allocation shall not exceed 5413.3 MG.  
Maximum Monthly allocation shall not exceed 487.2 MG.

6. Pursuant to Rule 40E-1.6105, F.A.C., Notification of Transfer of Interest in Real Property, within 30 days of any transfer of interest or control of the real property at which any permitted facility, system, consumptive use, or activity is located, the permittee must notify the District, in writing, of the transfer giving the name and address of the new owner or person in control and providing a copy of the instrument effectuating the transfer, as set forth in Rule 40E-1.6107, F.A.C.

Pursuant to Rule 40E-1.6107 (4), until transfer is approved by the District, the permittee shall be liable for compliance with the permit. The permittee transferring the permit shall remain liable for all actions that are required as well as all violations of the permit which occurred prior to the transfer of the permit.

Failure to comply with this or any other condition of this permit constitutes a violation and pursuant to Rule 40E-1.609, Suspension, Revocation and Modification of Permits, the District may suspend or revoke the permit.

This Permit is issued to:

Town of Davie  
6591 Orange Drive  
Davie, FL 33314

## Limiting Conditions

### 7. Withdrawal Facilities:

#### Ground Water - Existing:

- 2 - 10" X 110' X 550 GPM Wells Cased To 100 Feet
- 1 - 12" X 140' X 1050 GPM Well Cased To 120 Feet
- 1 - 20" X 165' X 900 GPM Well Cased To 100 Feet
- 1 - 12" X 150' X 1050 GPM Well Cased To 133 Feet
- 1 - 18" X 120' X 1500 GPM Well Cased To 100 Feet
- 1 - 16" X 1582' X 1600 GPM Well Cased To 965 Feet
- 1 - 20" X 125' X 1600 GPM Well Cased To 117 Feet
- 1 - 16" X 165' X 900 GPM Well Cased To 145 Feet

#### Ground Water - Proposed:

- 9 - 16" X 1500' X 1500 GPM Wells Cased To 1000 Feet

8. Permittee shall mitigate interference with existing legal uses that was caused in whole or in part by the permittee's withdrawals, consistent with the approved mitigation plan. As necessary to offset the interference, mitigation will include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means.

interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1 in 10 year drought event that results in the:

(1) Inability to withdraw water consistent with provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; or

(2) Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent.

9. Permittee shall mitigate harm to existing off-site land uses caused by the permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the permittee to modify withdrawal rates or mitigate the harm. Harm caused by withdrawals, as determined through reference to the conditions for permit issuance, includes:

(1) Significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other governmental authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g. fill for construction, mining, drainage canal, etc.)

(2) Damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; or

(3) Land collapse or subsidence caused by reduction in water levels associated with consumptive use.

10. Permittee shall mitigate harm to the natural resources caused by the permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is

## Limiting Conditions

imminent, the District will require the permittee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to the conditions for permit issuance includes:

- (1) Reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface,
  - (2) Reduction in water levels that harm the hydroperiod of wetlands,
  - (3) Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,
  - (4) Harmful movement of contaminants in violation of state water quality standards, or
  - (5) Harm to the natural system including damage to habitat for rare or endangered species.
11. If any condition of the permit is violated, the permit shall be subject to review and possible modification, enforcement action, or revocation.
  12. Authorized representatives of the District shall be permitted to enter, inspect, and observe the permitted system to determine compliance with special conditions.
  13. The Permittee is advised that this permit does not relieve any person from the requirement to obtain all necessary federal, state, local and special district authorizations.
  14. The permit does not convey any property right to the Permittee, nor any rights and privileges other than those specified in the Permit and Chapter 40E-2, Florida Administrative Code.
  15. Permittee shall submit all data as required by the implementation schedule for each of the limiting conditions to: SFWMD, P.O. Box 24680, West Palm Beach, FL 33416-4680.
  16. In the event of a declared water shortage, water withdrawal reductions will be ordered by the District in accordance with the Water Shortage Plan, Chapter 40E-21, F.A.C. The Permittee is advised that during a water shortage, pumpage reports shall be submitted as required by Chapter 40E-21, F.A.C.
  17. Prior to the use of any proposed water withdrawal facility authorized under this permit, unless otherwise specified, the Permittee shall equip each facility with a District-approved operating water use accounting system and submit a report of calibration to the District, pursuant to Section 4.1, Basis of Review for Water Use Permit Applications.

In addition, the Permittee shall submit a report of recalibration for the water use accounting system for each water withdrawal facility (existing and proposed) authorized under this permit every five years from each previous calibration, continuing at five-year increments.

18. Monthly withdrawals for each withdrawal facility shall be submitted to the District quarterly. The water accounting method and means of calibration shall be stated on each report.
19. The Permittee shall notify the District within 30 days of any change in service area boundary. If the Permittee will not serve a new demand within the service area for which the annual allocation was calculated, the annual allocation may then be subject to modification and reduction.
20. Permittee shall determine unaccounted-for distribution system losses. Losses shall be determined for the entire distribution system on a monthly basis. Permittee shall define the manner in which unaccounted-for losses are calculated. Data collection shall begin within six months of Permit issuance. Loss reporting shall be submitted to the District on a yearly basis from the date of Permit issuance.

The Town shall complete the leak detection system and repairs and calibrations by December 2012, pursuant to Section 2.6.1 (E) of the BOR. The Town shall provide a report detailing the completed tasks by January 2013.

## Limiting Conditions

21. Permittee shall maintain an accurate flow meter at the intake of the water treatment plant for the purpose of measuring daily inflow of water.
22. The Permittee shall notify the District within 30 days of entry into an inter-local agreement, contract, or other similar instrument to deliver or receive water outside of its service area or to serve a demand not identified to determine the allocation described in this permit. A copy of such agreement shall be provided to the District. The monthly volume of water delivered and/or received via each inter-local agreement, contract, or other similar instrument shall be submitted to the District on a quarterly basis.
23. Every ten years from the date of permit issuance, the permittee shall submit a water use compliance report for review and approval by District Staff, which addresses the following:
  1. The results of a water conservation audit that documents the efficiency of water use on the project site using data produced from an onsite evaluation conducted. In the event that the audit indicates additional water conservation is appropriate or the per capita use rate authorized in the permit is exceeded, the permittee shall propose and implement specific actions to reduce the water use to acceptable levels within timeframes proposed by the permittee and approved by the District.
  2. A comparison of the permitted allocation and the allocation that would apply to the project based on current District allocation rules and updated population and per capita use rates. In the event the permit allocation is greater than the allocation provided for under District rule, the permittee shall apply for a letter modification to reduce the allocation consistent with District rules and the updated population and per capita use rates to the extent they are considered by the District to be indicative of long term trends in the population and per capita use rates over the permit duration. In the event that the permit allocation is less than allowable under District rule, the permittee shall apply for a modification of the permit to increase the allocation if the permittee intends to utilize an additional allocation, or modify its operation to comply with the existing conditions of the permit.
24. The Water Conservation Plan required by Section 2.6.1 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District, must be implemented in accordance with the approved implementation schedule.

Most of the elements shown in Exhibit 15 have been implemented by September 30, 2010. Element H Reclaimed Water Study shall be implemented by January 2013.
25. If at any time there is an indication that the well casing, valves, or controls leak or have become inoperative, repairs or replacement shall be made to restore the system to an operating condition. Failure to make such repairs shall be cause for filling and abandoning the well, in accordance with procedures outlined in Chapters 40E-3 and 40E-30, Florida Administrative Code.
26. The Permittee shall continue to submit monitoring data in accordance with the approved water quality monitoring program for this project.

Monitor wells MW-1 (near the north wellfield at Potters Park), MW-2 (near the south wellfield east), MW-3 (near the south wellfield west), and MW-4 (near the north wellfield at Veteran's Park) shall be monitored monthly for chloride concentrations and groundwater elevations referenced to NGVD. The monitoring data shall be submitted to the District quarterly.
27. The Permittee shall submit to the District an updated Well Description Table (Table A) within one month of completion of the proposed wells identifying the actual total and cased depths, pump manufacturer and model numbers, pump types, intake depths and type of meters.
28. Public water utilities that control, either directly or indirectly, a wastewater treatment plant, and which have determined pursuant to Section 403.064, F.S., that use of reclaimed water is feasible, must provide the District with annual updates of the following information: (1) the status of distribution system construction, including location and capacity of lines; (2) a summary of uncommitted supplies for the next year; (3) copies of any new or amended local mandatory reclaimed water reuse zone

## Limiting Conditions

ordinances; and (4) a list of end-users who have contracted to receive reclaimed water and the agreed upon quantity of water to be delivered.

29.

The permittee shall develop alternative water supplies (including reclaimed water), at a minimum, in accordance with the schedules described in Exhibits 6 and 15. The permittee shall provide annual updates of the status of all alternative water supply projects. The status report shall include work completed to date, expenditures and any anticipated changes in the timelines.

R 35

R 36

R 37

R 38

R 39

R 40

R 41

R 42

R 43

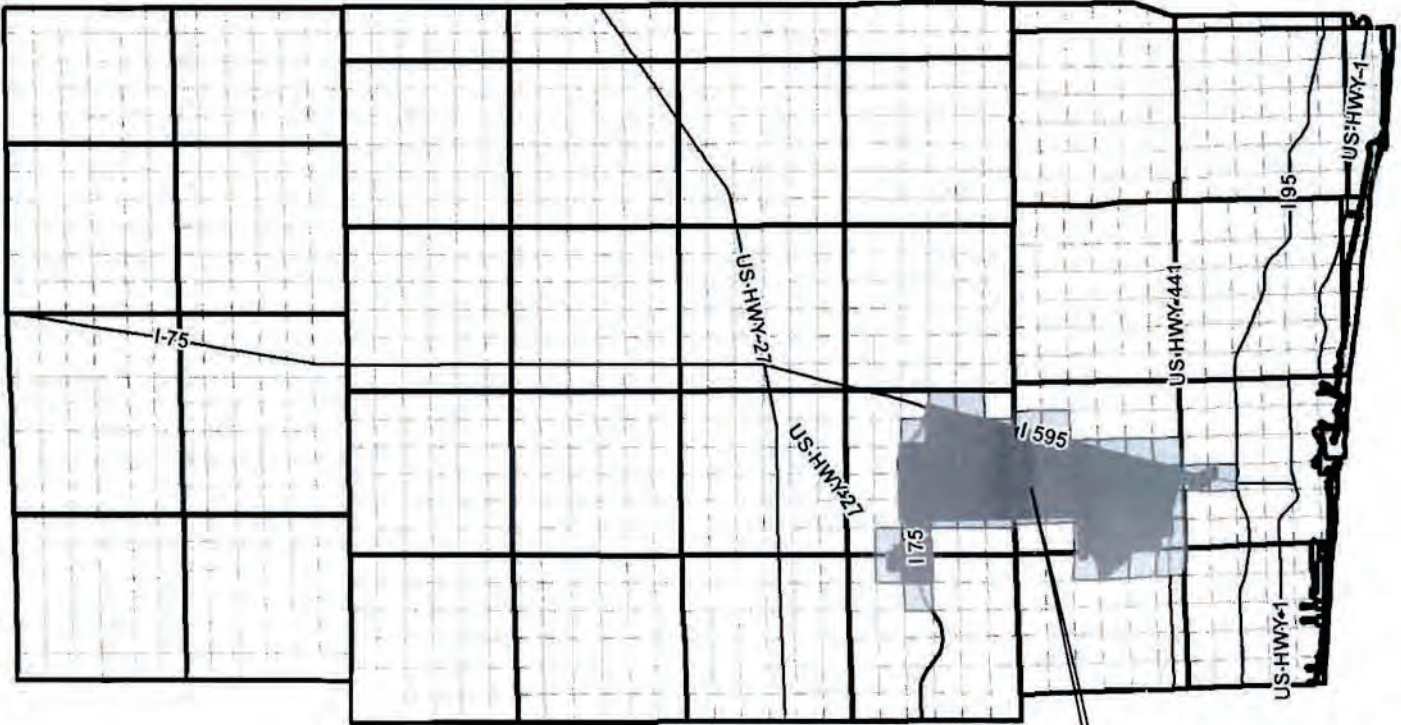
T 47

T 48

T 49

T 50

T 51



**Project Site**



**BROWARD COUNTY, FLORIDA**

**Legend**

- Application
- Application Sections

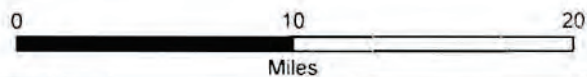
Application Number: 090721-3

Permit Number: 06-00134-W

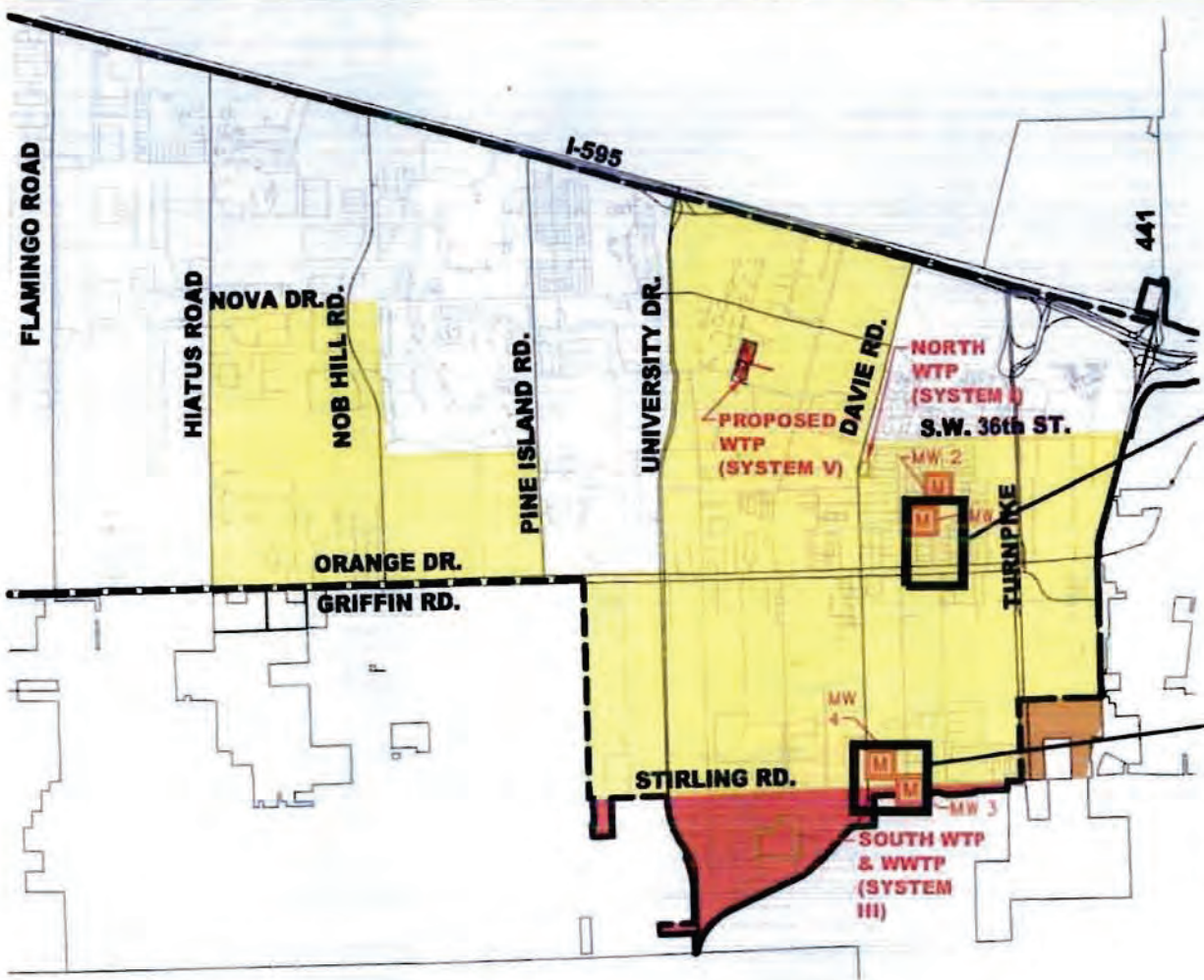
Project Name: TOWN OF DAVIE WATER PLANT SYS  
I, III, AND V



Map Date: 9/13/2010



SCANNED 04/12/2010 13:03:50  
DWG 0019/2010 13:28:44



FOR ENLARGED VIEW OF THIS AREA SEE "NORTH WTP MONITOR WELLS DETAIL", APPENDIX E2z

FOR ENLARGED VIEW OF THIS AREA SEE "SOUTH WTP MONITOR WELLS DETAIL", APPENDIX E2z

### LEGEND

- BOUNDARY TOWN OF DAVIE LIMITS
- BOUNDARY OF CITIES
- EXISTING WATER TREATMENT PLANT
- PROPOSED WATER TREATMENT PLANT
- TOWN OF DAVIE SVC. AREA ONE
- TOWN OF DAVIE SVC. AREA TWO-SHARED WITH HOLLYWOOD
- EXISTING GROUNDWATER MONITOR WELL

EXHIBIT 2



## TOWN OF DAVIE, FLORIDA WATER USE PERMIT MONITOR WELL LOCATIONS

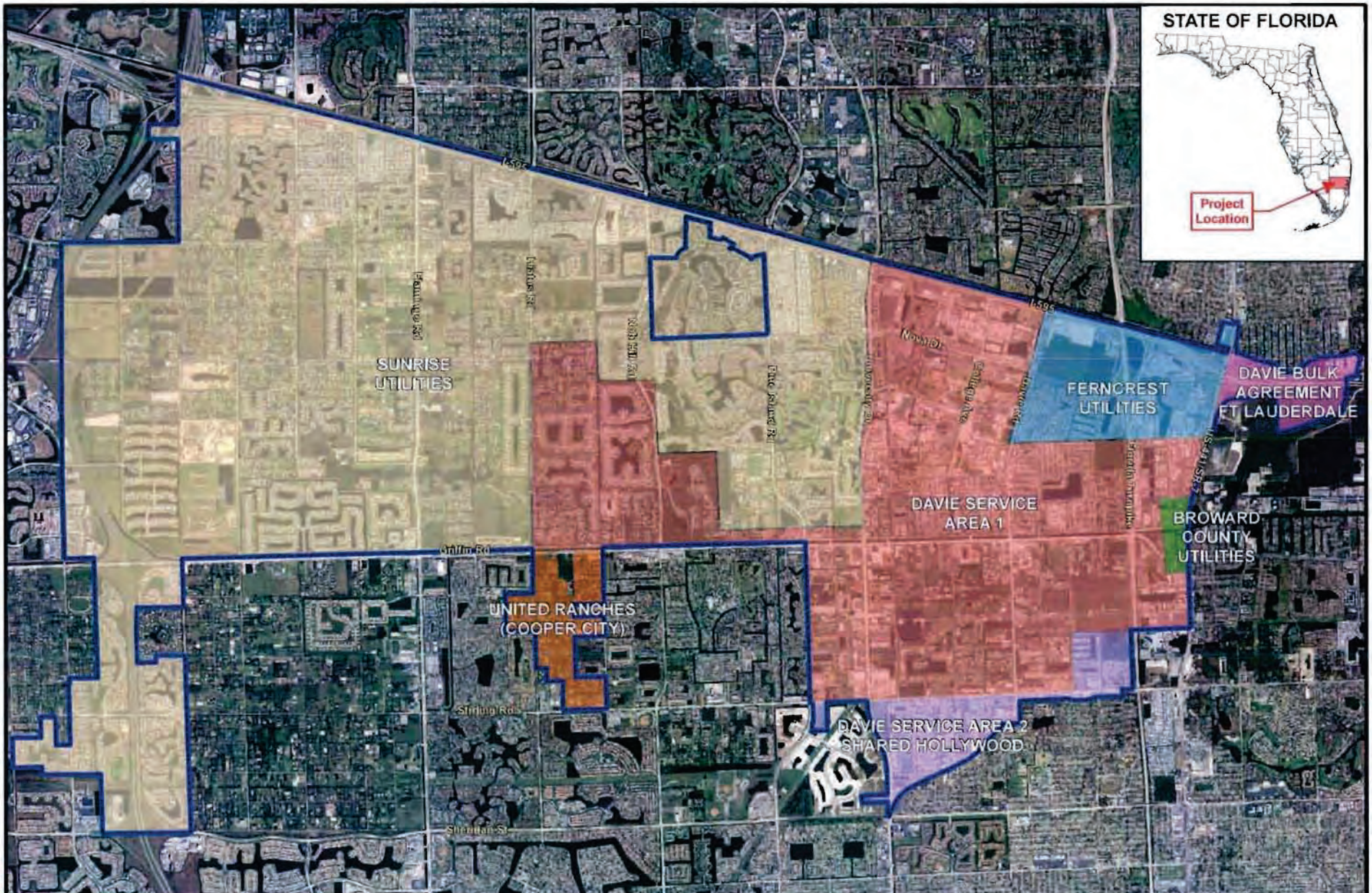










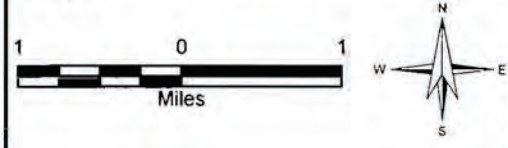
EXHIBIT 3

AECOM

**LEGEND:**

-  Broward County Utilities
-  Ferncrest
-  Davie Bulk Agreement Ft Lauderdale
-  Sunrise Utilities
-  Davie Service Area 1
-  United Ranches
-  Davie Service Area 2 shared Hollywood
-  Town of Davie Boundary

**SCALE:**



**SERVICE AREA BOUNDARY MAP**

Town of Davie  
Broward County, Florida



Figure 1-#

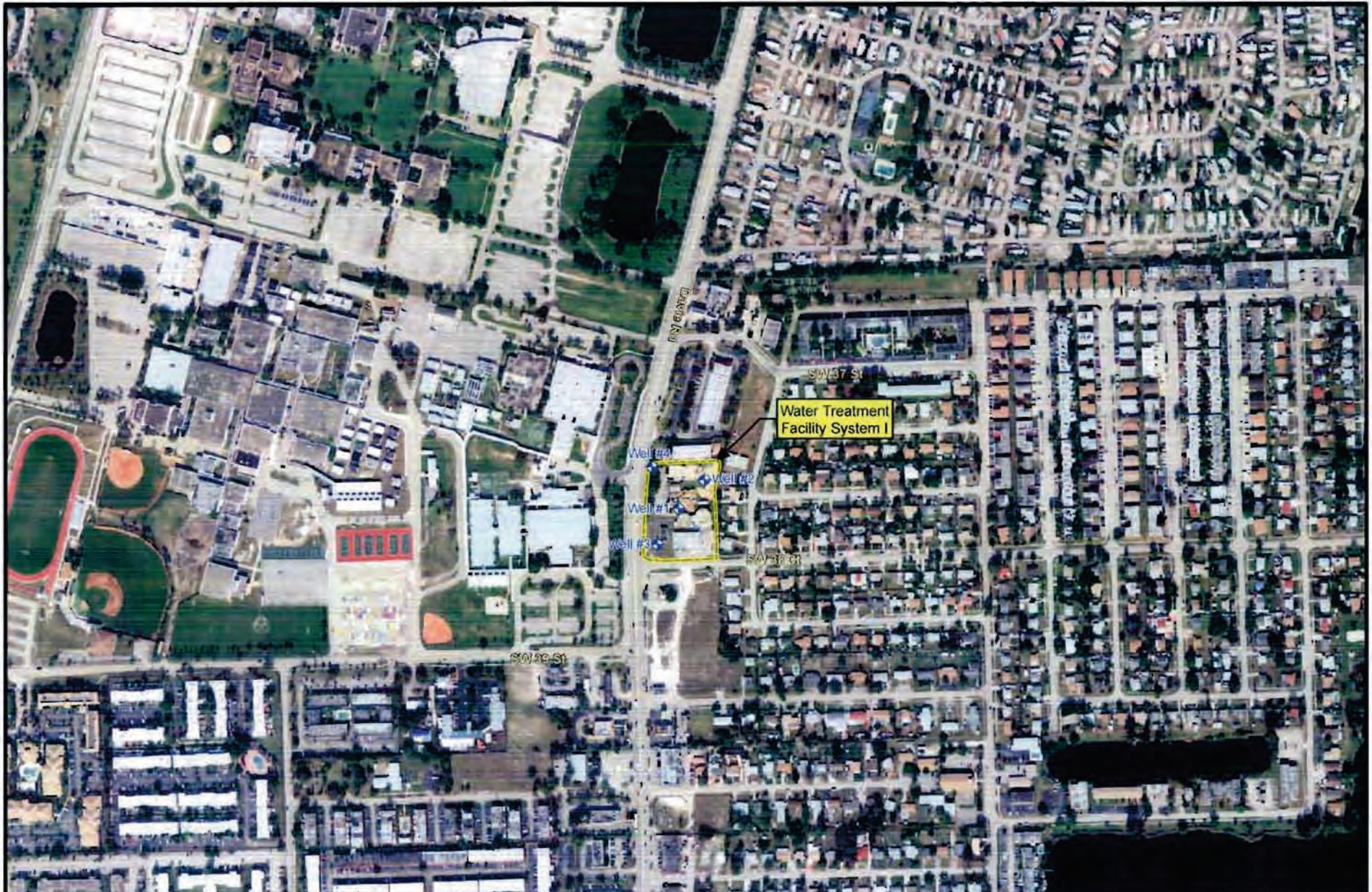


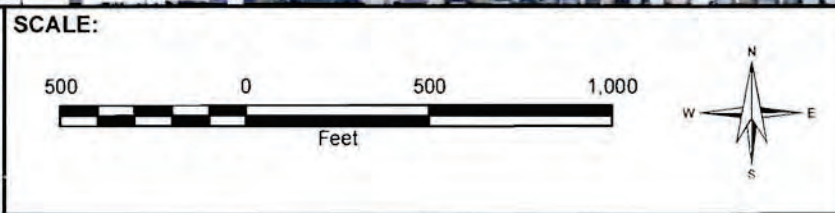


EXHIBIT 4A



**LEGEND:**

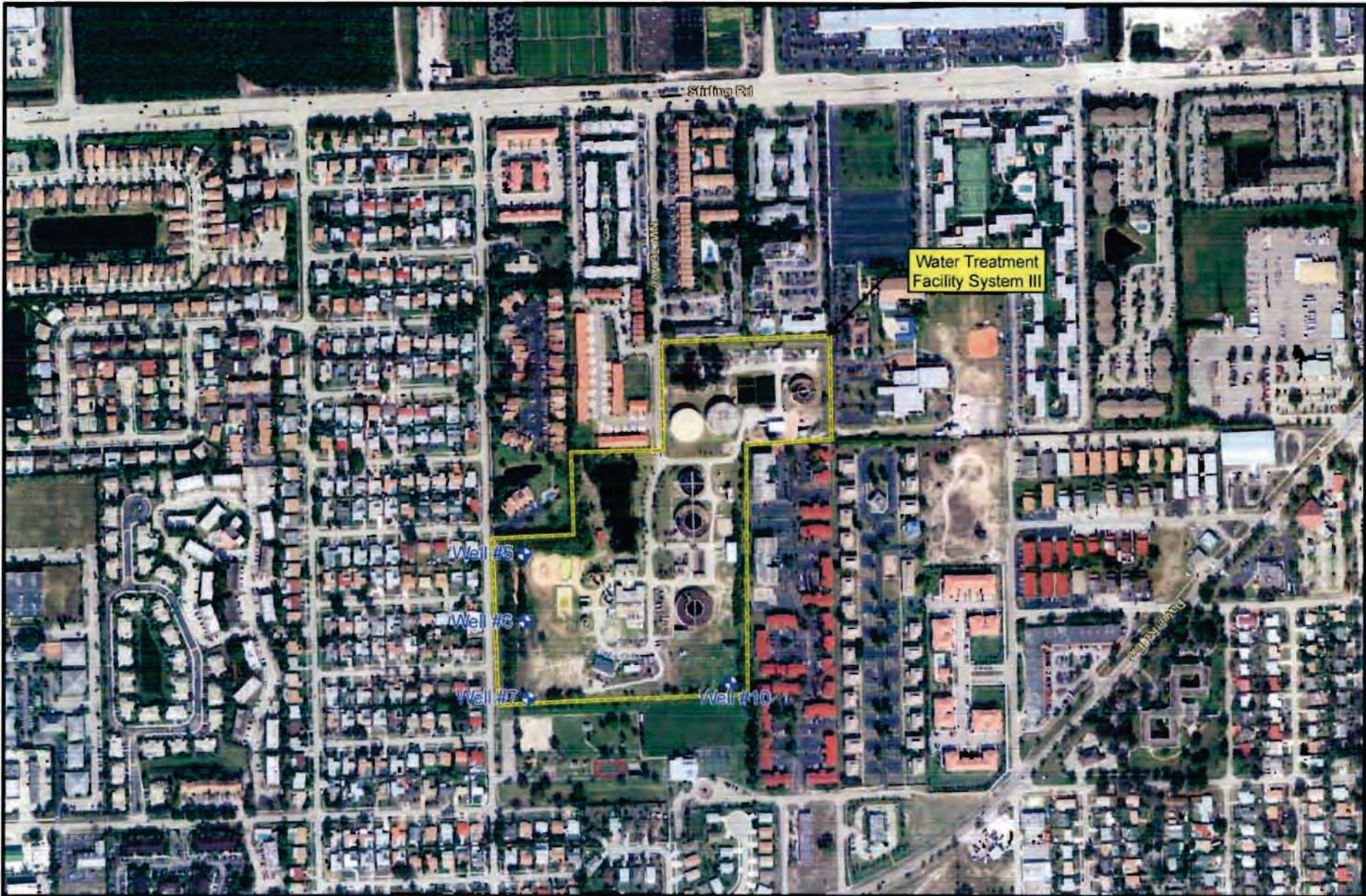
-  Raw Water Wells II Location
-  Water Treatment Facility System I



**SERVICE AREAS AND  
RAW WATER WELLS II  
(System I)**

Town of Davie  
Broward County, Florida





**LEGEND:**

- ◆ Raw Water Wells II Location
- Water Treatment Facility System III

**SCALE:**

500      0      500      1,000

Feet

**SERVICE AREAS AND  
RAW WATER WELLS II  
(System III)**

Town of Davie  
Broward County, Florida



EXHIBIT 4B

AECOM

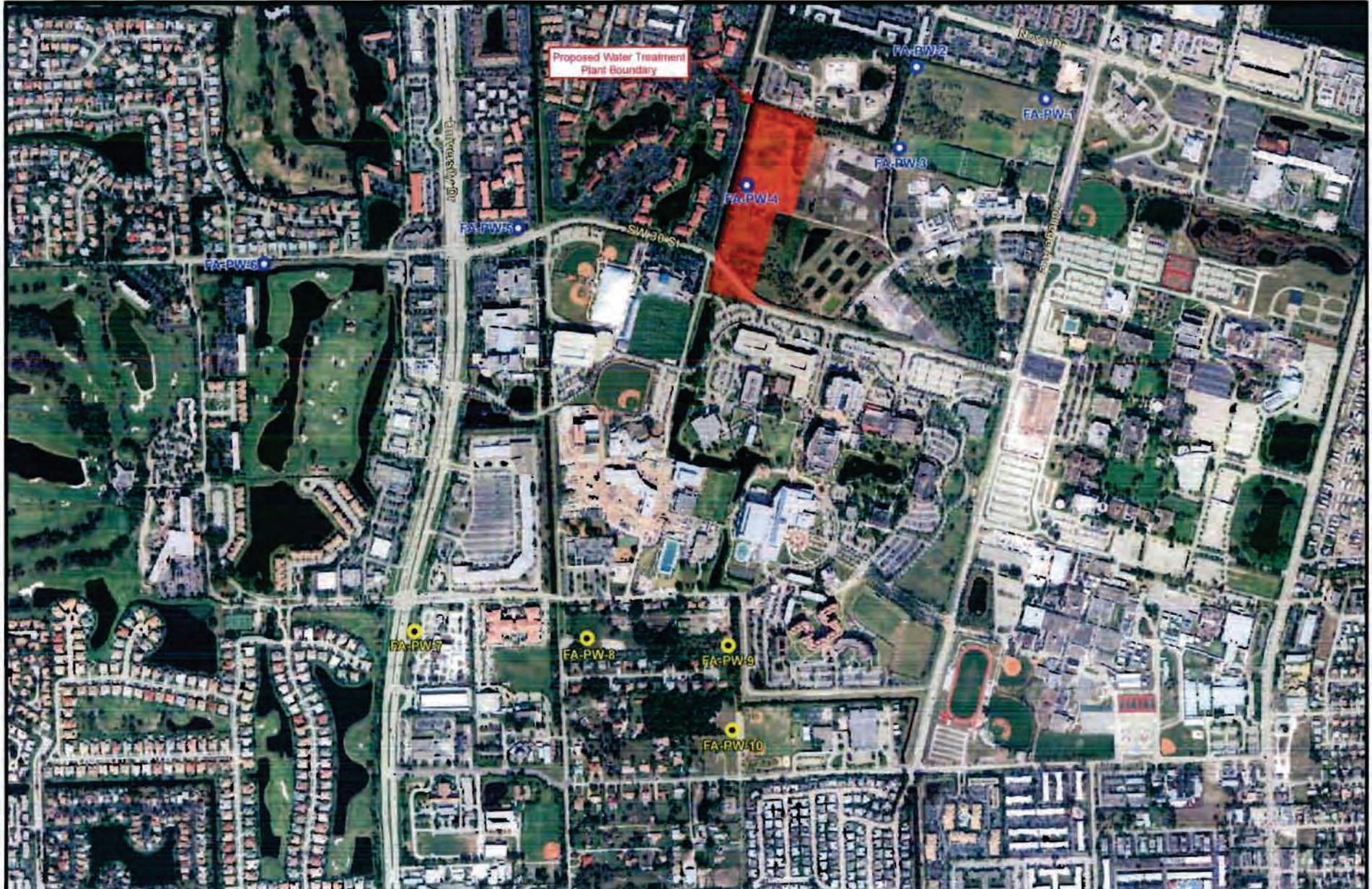


EXHIBIT 4C

AECOM

**LEGEND:**

- Proposed Raw Water Wells I Locations
- Future Raw Water Wells Locations
- Proposed Water Treatment Plant Boundary

**SCALE:**

1,000 0 1,000

Feet

**SERVICE AREAS AND PROPOSED RAW WATER WELLS I (Proposed WTP)**

Town of Davie  
Broward County, Florida



Appendix E2c

**TABLE - A**  
**Description Of Wells.**

Application Number: **090721-3**

Well ID	28191	28192	28193	28194	28195	28196
Name	B1-1 (1 NORTH)	B1-2 (2 NORTH)	B1-3 (3 NORTH)	B1-4 (4 NORTH)	B3-5 (SOUTH)	B3-6 (SOUTH)
Map Designator	B1-1	B1-2	B1-3	B1-4	B3-5	B3-6
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	10	10	12	12	16	20
Total Depth(feet)	110	110	150	140	165	165
Cased Depth(feet)	100	100	133	120	145	100
Facility Elev. (ft. NGVD)						
Screened Interval						
From	0	0	0	0	0	0
To	0	0	0	0	0	0
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	turbine	turbine	turbine	turbine	turbine	turbine
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	31	31	31	31	51	51
Pump Capacity(GPM)	550	550	1050	1050	900	900
Year Drilled	1959	1961	1972	1972	1995	1995
Planar Location						
Source	DIGITIZED	DIGITIZED	DIGITIZED	DIGITIZED	DIGITIZED	DIGITIZED
Feet East	908214	908410	908217	908313	904919	904915
Feet North	633690	633696	633412	633551	621332	621071
Accounting Method	flow meter	flow meter	flow meter	flow meter	flow meter	flow meter
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

**TABLE - A**  
**Description Of Wells.**

Application Number: 090721-3

Well ID	28197	28198	28199	105612	230662	230661
Name	B3-7 (SOUTH)	B3-8 (SOUTH)	B3-9 (SOUTH)	B3-10 (SOUTH)	FA-PW1	FA-PW2
Map Designator	B3-7	B3-8	B3-9	B3-10	FA-PW1	FA-PW2
FLUWID Number						
Well Field						
Existing/Proposed	E	E	A	E	P	P
Well Diameter(Inches)	20	12	12	18	16	16
Total Depth(feet)	125	115	150	120	1500	1500
Cased Depth(feet)	117	100	131	100	1000	1000
Facility Elev. (ft. NGVD)						
Screened Interval						
From	0	0	0			
To	0	0	0			
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	turbine	none	none	turbine	submersible	submersible
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	31	31	31	31		
Pump Capacity(GPM)	1600	0	0	1500	1500	1500
Year Drilled	1986	1972	1972	2001	2010	2010
Planar Location						
Source	DIGITIZED	DIGITIZED	DIGITIZED	DIGITIZED		
Feet East	904919	906147	906178	905309	906479	905530
Feet North	620804	622264	621959	620909	637921	638163
Accounting Method	flow meter	none	none	flow meter	flow meter	flow meter
Use Status	Primary	Abandoned	Abandoned	Primary	Primary	Primary
Water Use Type	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Floridan Aquifer System	Floridan Aquifer System

Exhibit No: 5

**TABLE - A**  
**Description Of Wells.**

**Application Number: 090721-3**

Well ID	230660	230659	230658	230653	230654	230655
Name	FA-PW3	FA-PW4	FA-PW5	FA-PW6	FA-PW7	FA-PW8
Map Designator	FA-PW3	FA-PW4	FA-PW5	FA-PW6	FA-PW7	FA-PW8
FLUWID Number						
Well Field						
Existing/Proposed	P	E	P	P	P	P
Well Diameter(Inches)	16	16	16	16	16	16
Total Depth(feet)	1500	1582	1500	1500	1500	1500
Cased Depth(feet)	1000	965	1000	1000	1000	1000
Facility Elev. (ft. NGVD)						
Screened Interval						
From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	submersible	submersible	submersible	submersible	submersible	submersible
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)						
Pump Capacity(GPM)	1500	1600	1500	1500	1500	1500
Year Drilled	2010	2010	2010	2017	2017	2010
Planar Location						
Source	APPLICANT	APPLICANT		APPLICANT	APPLICANT	APPLICANT
Feet East	905380	904256	902582	900575	901695	902980
Feet North	637605	637272	636980	636731	633942	633900
Accounting Method	flow meter	flow meter	flow meter	flow meter	flow meter	flow meter
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply
Aquifer	Floridan Aquifer System	Floridan Aquifer System	Floridan Aquifer System	Floridan Aquifer System	Floridan Aquifer System	Floridan Aquifer System

Exhibit No: 5

**TABLE - A**  
**Description Of Wells.**

**Application Number: 090721-3**

Well ID	230656	230657	137072	137074	137075	137073
Name	FA-PW9	FA-PW10	MW-1 (Potters Park DWMW-2 (Stirling East DW MW-3 (Stirling West DWMW-4 (Veterans Park D			
Map Designator	FA-PW9	FA-PW10	MW-1	MW-2	MW-3	MW-4
FLUWID Number						
Well Field						
Existing/Proposed	P	P	E	E	E	E
Well Diameter(Inches)	16	16	2	2	2	2
Total Depth(feet)	1500	1500	180	150	120	175
Cased Depth(feet)	1000	1000	170	140	110	165
Facility Elev. (ft. NGVD)			1.417	1.344	2.01	1
Screened Interval From						
To						
Pumped Or Flowing	P	P		P	P	
Pump Type	submersible	submersible	none	none	none	none
Pump Int. Elev. Feet (NGVD)				1.344	2.01	
Feet (BLS)				0	0	
Pump Capacity(GPM)	1500	1500	0	0	0	0
Year Drilled	2010	2010				
Planar Location Source	APPLICANT		APPLICANT	APPLICANT	APPLICANT	APPLICANT
Feet East	904090	904095	911455	909472	909446	910816
Feet North	633789	633197	631337	622918	622918	632765
Accounting Method	flow meter	flow meter	none	none	none	none
Use Status	Primary	Primary	Monitor	Monitor	Monitor	Monitor
Water Use Type	Public Water Supply	Public Water Supply	Monitor	Monitor	Monitor	Monitor
Aquifer	Floridan Aquifer System	Floridan Aquifer System	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

Exhibit No: 5

DAVE WATER USE PERMIT - SFWMD RA#3 COMMENT #5

FLORIDAN WELLS AND WATER TREATMENT PLANT - BAR SCHEDULE	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>DESIGN</b>															
Floridan Well #4															
Floridan Wells #1, 2, 3 and 5															
Floridan Wells #6, 7 and 8															
Floridan Wells #9 and 10															
System V WTP (Phase 1 LPRO to 6mgd)															
System V WTP (Phase 2 LPRO to 10mgd)															
System V WTP (Phase 3 LPRO to 12mgd)															
<b>PERMITTING</b>															
SFWMD WUP															
SFWMD Permit to Drill Floridan Well #4															
SFWMD Permit to Drill Floridan Wells #1, 2, 3 and 5															
SFWMD Permit to Drill Floridan Wells #6, 7 and 8															
SFWMD Permit to Drill Floridan Wells #9 and 10															
DOH Permit to Construct Floridan Wells #1, 2, 3, 4 and 5															
SFWMD Permit to Drill Floridan Wells #6, 7 and 8															
SFWMD Permit to Drill Floridan Wells #9 and 10															
DOH Permit to Construct System V WTP (Phase 1 LPRO to 6mgd)															
DOH Permit to Construct System V WTP (Phase 2 LPRO to 10mgd)															
DOH Permit to Construct System V WTP (Phase 3 LPRO to 12mgd)															
EPA Permit to Construct UIC Wells (for brine disposal)															
<b>CONSTRUCTION</b>															
Floridan Well #4															
Floridan Wells #1, 2, 3 and 5															
Floridan Wells #6, 7 and 8															
Floridan Wells #9 and 10															
System V WTP (Phase 1 LPRO to 6mgd)															
System V WTP (Phase 2 LPRO to 10mgd)															
System V WTP (Phase 3 LPRO to 12mgd)															
UIC Wells (for brine disposal)															
<b>OPERATION</b>															
Place System V WTP & Wells into operation (Phase 1 LPRO to 6mgd)															
Place System V WTP & Wells into operation (Phase 2 LPRO to 10mgd)															
Place System V WTP & Wells into operation (Phase 3 LPRO to 12mgd)															

EXHIBIT 6A

DAVIE WATER USE PERMIT - SFWMD RAI#3 COMMENT #5

FLORIDAN WELLS AND WATER TREATMENT PLANT -TEXT SCHEDULE	COMMENCE DATE	COMPLETE DATE
<b>DESIGN</b>		
Floridan Well #4	Jan-09	Jun-09
Floridan Wells #1, 2, 3 and 5	Oct-09	Dec-10
Floridan Wells #6, 7 and 8	Jul-16	Dec-16
Floridan Wells #9 and 10	Oct-21	Dec-21
System V WTP (Phase 1 LPRO to 6mgd)	Oct-09	Dec-10
System V WTP (Phase 2 LPRO to 10mgd)	Jan-16	Dec-16
System V WTP (Phase 3 LPRO to 12mgd)	Jan-21	Dec-21
<b>PERMITTING</b>		
SFWMD WUP	Apr-09	Dec-10
SFWMD Permit to Drill Floridan Well #4	Jul-09	Sep-09
SFWMD Permit to Drill Floridan Wells #1, 2, 3 and 5	Jan-11	Mar-11
SFWMD Permit to Drill Floridan Wells #6, 7 and 8	Jan-17	Mar-17
SFWMD Permit to Drill Floridan Wells #9 and 10	Jan-22	Mar-22
DOH Permit to Construct Floridan Wells #1, 2, 3, 4 and 5	Apr-10	Sep-10
SFWMD Permit to Drill Floridan Wells #6, 7 and 8	Jul-16	Dec-16
SFWMD Permit to Drill Floridan Wells #9 and 10	Jul-21	Dec-21
DOH Permit to Construct System V WTP (Phase 1 LPRO to 6mgd)	Apr-10	Sep-10
DOH Permit to Construct System V WTP (Phase 2 LPRO to 10mgd)	Jul-16	Dec-16
DOH Permit to Construct System V WTP (Phase 3 LPRO to 12mgd)	Jul-21	Dec-21
EPA Permit to Construct UIC Wells (for brine disposal)	Oct-09	Sep-10
<b>CONSTRUCTION</b>		
Floridan Well #4	Jul-09	Dec-09
Floridan Wells #1, 2, 3 and 5	Jul-11	Dec-11
Floridan Wells #6, 7 and 8	Apr-17	Sep-17
Floridan Wells #9 and 10	Apr-22	Sep-22
System V WTP (Phase 1 LPRO to 6mgd)	Oct-10	Mar-13
System V WTP (Phase 2 LPRO to 10mgd)	Jan-17	Dec-17
System V WTP (Phase 3 LPRO to 12mgd)	Jan-22	Dec-22
UIC Wells (for brine disposal)	Oct-10	Jun-11
<b>OPERATION</b>		
Place System V WTP & Wells into operation (Phase 1 LPRO to 6mgd)	Apr-13	Jun-13
Place System V WTP & Wells into operation (Phase 2 LPRO to 10mgd)	Jan-18	Mar-18
Place System V WTP & Wells into operation (Phase 3 LPRO to 12mgd)	Oct-22	Dec-22

## Town of Davie Wellfield Operating Plan

### Biscayne Wellfield Operating Plan

1. The Town of Davie has two wellfields. The North wellfield is located on site at the System 1 (North Plant) water treatment facility. The South wellfield is located at System 3 (South Plant). Each wellfield contains four active Biscayne wells. This includes well numbers 1 – 4 at System 1 and well numbers 5 – 10 at System 3. Wells 8 and 9, at System 3, are plugged and abandoned.
2. The raw water from the Biscayne wells is lifted with well pumps to the Biscayne raw water supply piping. The raw water from each wellfield feeds the lime-softening process for both plants.
3. All four wells at System 1 run 16 hours daily.
4. Two wells are run weekly at System 3 on a rotation schedule.
  - a. Week 1 – wells 5 and 6 will run
  - b. Week 2 – wells 6 and 7 will provide raw water
  - c. Week 3 – wells 7 and 10 are turned on
  - d. Week 4 – wells 10 and 5 will operate
  - e. Week 5 – rotation schedule repeats

### Floridan Well Rotations

1. There are a total of ten proposed Floridan wells including one backup (secondary) well.
2. The raw water from Floridan wells is pumped with submersible pumps to the Floridan raw water supply piping. The raw water passes through cartridge filters and is pumped through the reverse osmosis membranes via feed pumps.
3. The maximum daily flow criterion from the Floridan wellfield will be set as 16 MGD at build-out.
4. The pressure upstream to the cartridge filters is maintained between 55 and 75 psi.
5. Well rotation occurs every morning. All Floridan wells are rotated to ensure that each well is on standby for no more than 48 hours.
6. During the shift of Floridan wells, the standby well pump is turned on first. After the pressure rises, the Floridan well pump with the most running hours in the previous 24-hour period, will be turned off.

## WASTE WATER TREATMENT PLANTS

Year	Projected Population	Average Day Flow (MGD)	Flow to Existing System II (MGD)				Flow to Proposed WRF (MGD)			Notes
			To City of Hollywood (MGD)	Proposed Direct Aquifer Recharge (MGD)	To Deep Injection Well (MGD)	Total Flow to Existing System II (MGD)	Proposed Irrigation (MGD)	To Deep Injection Well (MGD)	Total Flow to Proposed WRF (MGD)	
2009	31,547	3.47	---	---	---	---	---	---	---	<ul style="list-style-type: none"> <li>Phase 1 starts in 2012, however, construction of the proposed facility will not be completed until 2013.</li> <li>Per a signed agreement, the City of Hollywood (COH) must receive at least 2.3 MGD of effluent from the Town of Davie until 2021.</li> <li>Proposed System IV will have a capacity of 3.5 MGD starting in 2013 and 7.0 MGD starting in 2020.</li> <li>60% of the effluent flows to proposed System IV will be used for irrigation.</li> <li>1.0 MGD of aquifer recharge will be implemented at System II in 2017; this will increase to 3.0 MGD in 2023.</li> <li>Effluent that is not being used for irrigation or aquifer recharge or sent to COH, is proposed to be sent to a deep well for disposal.</li> </ul>
2010	32,700	3.63	---	---	---	---	---	---		
2011	35,817	4.07	---	---	---	---	---	---		
2012	38,934	4.51	---	---	---	---	---	---		
2013	42,050	4.95	2.30	---	---	2.30	1.67	0.55	2.65	
2014	45,167	5.40	2.30	---	---	2.30	2.10	1.00	3.10	
2015	48,283	5.84	2.30	---	0.04	2.34	2.10	1.40	3.50	
2016	51,542	6.30	2.30	---	0.50	2.80	2.10	1.40	3.50	
2017	54,800	6.76	2.30	0.96	---	3.26	2.10	1.40	3.50	
2018	58,059	7.21	2.30	1.00	0.41	3.71	2.10	1.40	3.50	
2019	61,317	7.67	2.30	1.00	0.87	4.17	2.10	1.40	3.50	
2020	64,575	8.13	2.30	1.00	---	3.30	2.90	1.93	4.83	
2021	67,358	8.54	2.30	1.00	---	3.30	3.14	2.10	5.24	
2022	70,141	8.94	---	1.00	0.94	1.94	4.20	2.80	7.00	
2023	72,924	9.35	---	2.35	---	2.35	4.20	2.80	7.00	
2024	75,707	9.76	---	2.76	---	2.76	4.20	2.80	7.00	
2025	78,489	10.16	---	3.00	0.16	3.16	4.20	2.80	7.00	
2026	81,173	10.56	---	3.00	0.56	3.56	4.20	2.80	7.00	
2027	83,857	10.95	---	3.00	0.95	3.95	4.20	2.80	7.00	
2028	86,541	11.35	---	3.00	1.35	4.35	4.20	2.80	7.00	
2029	89,225	11.74	---	3.00	1.74	4.74	4.20	2.80	7.00	
2030	91,091	12.02	---	3.00	2.02	5.02	4.20	2.80	7.00	

2012 – Water and WW Phase 1 – System IV capacity is 3.5 MGD

2015 – Water Phase 2

2020 – WW Phase 2 – System IV capacity increases to 7.0 MGD

2023 – Water Phase 3

## SOUTH FLORIDA WATER MANAGEMENT DISTRICT

**Service Area:** Davie (self-served) Treatment Plant (Table I) Systems I and III for Past, I, III and System V for Future.  
 Note: the distribution system for both of the existing WTPs is combined and cannot be separated into two Service Areas.

**TABLE F  
Past Water Use**

Year	Past Population*	Per Capita Usage	Non-Residential Demand	Total Annual Use (MG)	Average Month Use (MG)	Maximum Month Use (MG)	Ratio Max: Average
2001	25,884	139.95	Not Applicable	1,322.18	110.18	114.09	1.04
2002	26,557	148.50	N/A	1,439.50	119.96	133.85	1.12
2003	27,229	154.30	N/A	1,533.57	127.80	138.14	1.08
2004	27,901	164.12	N/A	1,675.95	139.66	158.74	1.14
2005	29,635	152.73	N/A	1,652.07	137.67	144.67	1.05
2006	30,335	153.21	N/A	1,696.37	141.36	156.63	1.11
2007	31,035	140.46	N/A	1,591.14	132.60	146.88	1.11
2008	31,734	138.05	N/A	1,603.46	133.62	144.22	1.08
2009	31,547	139.29	N/A	1,603.84	133.60	141.82	1.06

\* Source of Past Use Population Information: 2001-2008: Tables 4-1, 5-1 and 5-2 of "Davie 10 Year Water Supply Plan". For 2009 only: Monthly Operating Reports.

**TABLE G  
Projected Water Use**

Year	Projected Population*	Per Capita Usage	Non-Residential Demand	Total Annual Use (MG)	Average Month Use (MG)	Maximum Month Use (MG)	Ratio Max: Average
2010	31,882	145	0.00	1,687.35	140.61	151.86	1.08
2011	32,438	145	0.00	1,716.78	143.07	154.51	1.08
2012	35,485	145	0.14	1,929.14	160.76	173.62	1.08
2013	38,531	145	0.28	2,141.45	178.45	192.73	1.08
2014	41,578	145	0.42	2,353.82	196.15	211.84	1.08
2015	44,625	145	0.56	2,566.18	213.85	230.96	1.08
2016	47,814	145	0.70	2,786.06	232.17	250.75	1.08
2017	51,002	145	0.84	3,005.88	250.49	270.53	1.08
2018	54,191	145	0.98	3,225.76	268.81	290.32	1.08
2019	57,379	145	1.12	3,445.58	287.13	310.10	1.08
2020	60,568	145	1.26	3,665.46	305.46	329.89	1.08
2021	63,668	145	1.40	3,880.63	323.39	349.26	1.08
2022	66,768	145	1.54	4,095.80	341.32	368.62	1.08
2023	69,869	145	1.68	4,311.02	359.25	387.99	1.08
2024	72,969	145	1.82	4,526.18	377.18	407.36	1.08
2025	76,069	145	1.96	4,741.35	395.11	426.72	1.08
2026	79,070	145	2.10	4,951.28	412.61	445.62	1.08
2027	82,072	145	2.24	5,161.26	430.11	464.51	1.08
2028	85,073	145	2.38	5,371.19	447.60	483.41	1.08
2029	88,075	145	2.52	5,581.17	465.10	502.31	1.08
2030	91,091	145	2.68	5,799.19	483.27	521.93	1.08

\* Source of Projected Population Information: Broward County 2007 TAZs and Town of Davie Planning and Zoning Dept. (RAC and TOC). Please note: The Town of Davie's Planning and Zoning Dept. has provided "non-residential" water demand requirements for the RAC and TOC which are in addition to the residential demands. Please see "Modified Table G - Service Area Water Demand Projections RAI #2" for backup.

**[sfwmd.gov](http://sfwmd.gov)**

**EXHIBIT 7**

**Modified Table G - Service Area Water Demand Projections**  
Town of Davie Water Use Permit (SFWMD WUP #06-00134-W) - RAI #3

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
<b>Population</b>																						
Projected Population in RAC Area *			1,630	3,260	4,890	6,520	8,150	9,780	11,410	13,040	14,670	16,300	17,930	19,560	21,190	22,820	24,450	26,080	27,710	29,340	30,976	
Projected Population in TOC Area *			861	1,722	2,583	3,444	4,305	5,166	6,027	6,888	7,749	8,610	9,471	10,332	11,193	12,054	12,915	13,776	14,637	15,498	16,368	
Projected Population in Service Area Self-Supply Areas by Davis per Draft TAZs	31,882	32,438	32,994	33,549	34,105	34,661	35,217	35,773	36,329	36,885	37,441	37,997	38,553	39,109	39,665	40,221	40,777	41,333	41,889	42,445	43,001	
<b>Table G - Total Projected Population in all Davis Service Areas</b>	31,882	32,438	33,485	34,531	35,578	36,624	37,671	38,717	39,764	40,811	41,858	42,905	43,952	44,999	46,046	47,093	48,140	49,187	50,234	51,281	52,328	
<b>Per Capita Use</b>																						
Finished Water per Day (mg) Required <small>(excluding Additional RAC and TOC Non-Residential Areas)</small>	4.62	4.70	5.15	5.59	6.03	6.47	6.93	7.40	7.86	8.32	8.78	9.23	9.68	10.13	10.58	11.03	11.47	11.90	12.34	12.77	13.21	
<b>Table G - Per Capita Usage (gpcpd) excluding Additional RAC and TOC Non-Residential Areas</b>	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	
Finished Water per Day (mg) Required for all Areas <small>(including Additional RAC and TOC Non-Residential Areas)</small>	4.62	4.70	5.29	5.87	6.45	7.03	7.63	8.24	8.84	9.44	10.04	10.63	11.22	11.81	12.40	12.99	13.57	14.14	14.72	15.29	15.89	
<b>Population-Based Avg. Day Demand</b>																						
Population-Based Avg. Day Demand (mg)	4.62	4.70	5.15	5.59	6.03	6.47	6.93	7.40	7.86	8.32	8.78	9.23	9.68	10.13	10.58	11.03	11.47	11.90	12.34	12.77	13.21	
<small>Additional Non-Residential Water Requirements</small> <small>(RAC and TOC Non-Residential Demand) (mg)</small>	0.00	0.00	0.14	0.28	0.42	0.56	0.70	0.84	0.98	1.12	1.26	1.40	1.54	1.68	1.82	1.96	2.10	2.24	2.38	2.52	2.68	
<b>Average Day Demand</b>																						
Average Day Demand (mg)	4.62	4.70	5.29	5.87	6.45	7.03	7.63	8.24	8.84	9.44	10.04	10.63	11.22	11.81	12.40	12.99	13.57	14.14	14.72	15.29	15.89	
<b>Table G - Total Average Day Annual Use (mg)</b>	1687.35	1710.78	1929.14	2141.43	2353.92	2566.18	2778.66	2991.89	3205.76	3419.88	3634.58	3849.23	4063.93	4278.68	4493.48	4708.33	4923.23	5138.18	5353.18	5568.13	5783.13	
<b>Table G - Average Month Use (mg)</b>	140.61	143.07	160.76	178.45	196.15	213.85	231.57	249.31	267.05	284.79	302.53	320.27	338.01	355.75	373.49	391.23	408.97	426.71	444.45	462.19	479.93	
<b>Table G - Max. Month Use (mg) 1.08 Peaking Factor</b>	151.88	154.51	173.62	192.73	211.84	230.95	250.06	269.17	288.28	307.39	326.50	345.61	364.72	383.83	402.94	422.05	441.16	460.27	479.38	498.49	517.60	
<b>Table G Demands</b>																						
Biscayne Fin. Water Average Day Demand (mg) †	4.623	4.704	5.285	5.867	6.448	7.029	7.610	8.191	8.772	9.353	9.934	10.515	11.096	11.677	12.258	12.839	13.420	14.001	14.582	15.163	15.744	
Biscayne Fin. Water Year Demand (mg) †	1,687.35	1,710.78	1,929.14	2,141.43	2,353.92	2,566.18	2,778.66	2,991.89	3,205.76	3,419.88	3,634.58	3,849.23	4,063.93	4,278.68	4,493.48	4,708.33	4,923.23	5,138.18	5,353.18	5,568.13	5,783.13	
Biscayne Fin. Water Average Month Water Demand (mg) †	140.61	143.07	160.76	178.45	196.14	213.84	231.54	249.24	266.94	284.64	302.34	320.04	337.74	355.44	373.14	390.84	408.54	426.24	443.94	461.64	479.34	
Floridan Fin. Water Average Day Demand (mg) †	N/A	N/A	N/A	N/A	N/A	6.14	6.27	6.40	6.53	6.66	6.79	6.92	7.05	7.18	7.31	7.44	7.57	7.70	7.83	7.96	8.09	8.22
Floridan Fin. Water Year Demand (mg) †	N/A	N/A	N/A	N/A	N/A	614.58	626.95	639.32	651.69	664.06	676.43	688.80	701.17	713.54	725.91	738.28	750.65	763.02	775.39	787.76	800.13	812.50
Floridan Fin. Water Average Month Water Demand (mg) †	N/A	N/A	N/A	N/A	N/A	51.22	68.91	87.24	105.55	123.88	142.20	160.52	178.85	197.18	215.50	233.83	252.15	270.48	288.81	307.14	325.47	343.80
Floridan Fin. Water Max. Month (1.08 Peaking Factor) †	N/A	N/A	N/A	N/A	N/A	55.31	74.43	94.21	114.00	133.79	153.57	173.36	193.15	212.94	232.73	252.52	272.31	292.10	311.89	331.68	351.47	371.26
<b>Production Requirements:</b>																						
<b>Biscayne Aquifer</b>																						
Biscayne Finished Water Production (mgd, Average Day)	4.623	4.704	5.285	5.867	6.448	7.029	7.610	8.191	8.772	9.353	9.934	10.515	11.096	11.677	12.258	12.839	13.420	14.001	14.582	15.163	15.744	
<small>Losses From Treatment 5% (mgd)</small>	0.243	0.248	0.278	0.309	0.340	0.371	0.402	0.433	0.464	0.495	0.526	0.557	0.588	0.619	0.650	0.681	0.712	0.743	0.774	0.805	0.836	
<b>Biscayne Raw Water Demand (mgd, Average Day) (See Note 1)</b>	4.866	4.951	5.564	6.178	6.791	7.405	8.018	8.632	9.245	9.859	10.472	11.086	11.700	12.313	12.927	13.540	14.154	14.768	15.381	15.995	16.609	
<b>Floridan Aquifer</b>																						
Floridan Finished Water Production (mgd, Average Day) †	N/A	N/A	N/A	N/A	1.68	2.27	2.87	3.47	4.07	4.67	5.28	5.87	6.46	7.05	7.64	8.23	8.80	9.38	9.95	10.53	11.12	11.71
<small>R/O Losses from Treatment Average Day (mgd) (25%) †</small>	N/A	N/A	N/A	N/A	0.56	0.76	0.96	1.16	1.36	1.56	1.76	1.96	2.15	2.35	2.55	2.74	2.93	3.13	3.32	3.51	3.71	
<b>Floridan Raw Water Demand (mgd, Average Day) †</b>	N/A	N/A	N/A	N/A	2.25	3.02	3.82	4.63	5.43	6.23	7.04	7.82	8.61	9.40	10.18	10.97	11.73	12.50	13.27	14.03	14.83	15.63
<small>Losses - Total Losses from all Treatment (mgd)</small>	0.24	0.25	0.28	0.31	0.41	0.51	0.61	0.71	0.81	0.91	1.01	1.11	1.21	1.31	1.41	1.51	1.61	1.71	1.81	1.91	2.01	
<b>Total Raw Water Demand (mgd, Average Day) †</b>	4.87	4.95	5.56	6.18	7.26	8.04	8.84	9.64	10.45	11.25	12.05	12.84	13.64	14.44	15.24	16.04	16.84	17.64	18.44	19.24	20.04	
<b>Permit App. Calculations - Section E</b>																						
<b>Total Finished Water Demand (mgd, Average Day)</b>	4.62	4.70	5.29	5.87	6.45	7.03	7.63	8.24	8.84	9.44	10.04	10.63	11.22	11.81	12.40	12.99	13.57	14.14	14.72	15.29	15.89	
<b>Biscayne Raw Water Demand (mg, Max Month, 1.08 PF) †††</b>	159.85	162.64	182.76	202.87	222.99	243.11	263.22	283.34	303.45	323.57	343.68	363.80	383.91	404.03	424.14	444.26	464.37	484.49	504.60	524.72	544.83	
<b>Floridan Raw Water Demand (mg, Max Month, 1.08 PF) †††</b>	N/A	N/A	N/A	N/A	73.75	99.23	125.62	152.00	178.38	204.76	231.15	257.53	283.92	310.30	336.68	363.07	389.45	415.84	442.22	468.61	495.00	521.38
<b>Total Raw Water Demand (mg, Max Month, 1.08 PF) ††††</b>	159.85	162.64	182.76	202.87	236.82	262.34	291.96	319.71	347.46	375.21	402.96	430.71	458.46	486.21	513.96	541.71	569.46	597.21	624.96	652.71	680.46	
<b>Biscayne Finished Water Demand (mg, Max Month, 1.08 PF) ††††</b>	151.88	154.51	173.62	192.73	211.84	230.95	250.06	269.17	288.28	307.39	326.50	345.61	364.72	383.83	402.94	422.05	441.16	460.27	479.38	498.49	517.60	
<b>Floridan Finished Water Demand (mg, Max Month, 1.08 PF) ††††</b>	N/A	N/A	N/A	N/A	55.31	74.43	94.21	114.00	133.79	153.57	173.36	193.15	212.94	232.73	252.52	272.31	292.10	311.89	331.68	351.47	371.26	391.05
<b>Total Finished Water Demand (mg, Max Month, 1.08 PF) ††††</b>	151.88	154.51	173.62	192.73	211.84	230.95	250.06	269.17	288.28	307.39	326.50	345.61	364.72	383.83	402.94	422.05	441.16	460.27	479.38	498.49	517.60	
<b>Biscayne Raw Water Demand (mg, Avg Month) †</b>	140.61	143.07	160.76	178.45	196.14	213.84	231.54	249.24	266.94	284.64	302.34	320.04	337.74	355.44	373.14	390.84	408.54	426.24	443.94	461.64	479.34	
Floridan Raw Water Demand (mg, Avg Month) †	N/A	N/A	N/A	N/A	68.29	91.88	116.31	140.74	165.17	189.60	214.03	238.46	262.89	287.32	311.75	336.18	360.61	385.04	409.47	433.90	458.33	482.76
<b>Total Raw Water Demand (mg, Avg Month) †</b>	140.61	143.07	160.76	178.45	225.13	245.72	271.85	300.01	328.17	356.33	384.49	412.65	440.81	468.97	497.13	525.29	553.45	581.61	609.77	637.93	666.09	694.25
<b>Biscayne Finished Water Production (mg, Avg Month) †</b>	140.61	143.07	160.76	178.45	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94	144.94
Floridan Finished Water Production (mg, Avg Month) †	N/A	N/A	N/A	N/A	51.22	68.91	87.24	105.55	123.88	142.20	160.52	178.85	197.18	215.50	233.83	252.15	270.48	288.81	307.14	325.47	343.80	362.13
<b>Total Finished Water Production (mg, Avg Month) †</b>	140.61	143.07	160.76	178.45	196.15	213.85	231.57	249.31	267.05	284.79	302.53	320.27	338.01	355.75	373.49	391.23	408.97	426.71	444.45	462.19	479.93	497.67

**Notes:**  
 1. Demand will exceed permitted allocation from 2012-2013. A temporary increase is requested while the new WTP is under construction.  
 Legend:  
 † Assumes WTP expansion and Floridan Production Wells coming on line as shown on Table A.  
 †† Water sold to or purchased from other entities. The Hard Rock Hotel and Casino complex and part of Ferncrest Utilities Service Area are currently supplied by the Town of Davie.  
 ††† New Floridan Wells to come on line for Reverse Osmosis Finished Water Production, schedule as shown on Table A. If required, a request for a temporary increase in Biscayne Aquifer raw water will be submitted at a later date.  
 †††† Max. Monthly Peaking Factor of 1.08 reported in 2006 and 2007.  
 ††††† The Average Day amount of Raw Water to be withdrawn from the Biscayne Aquifer shall be 5.016 mgd starting in 2010.  
 \* RAC and TOC population provided by Town of Davie Planning and Zoning Dept. See Appendix E3a 3.  
 \*\* RAC and TOC Non-Residential Areas' Water Requirements raw data provided by Town of Davie Planning and Zoning Dept. See Appendix E3a 3 ("Town of Davie Water and Wastewater System Expansion" 2009) by AECOM.  
 LEC = South Florida Water Management's "Lower East Coast Water Supply Plan 2005-2009".

EXHIBIT 8

TOWN OF DAVIE WATER USE PERMIT 06-00134-W

RAW WATER DEMANDS

Biscayne Aquifer Wellfield Limitations (MG):

<u>2010-2013</u>			<u>2013-2030</u>		
<u>Annual</u>	<u>Average Daily Equivalent</u>	<u>Maximum Monthly</u>	<u>Annual</u>	<u>Average Daily Equivalent</u>	<u>Maximum Monthly</u>
2,254.2	6.18	202.9	1,830.8	5.02	164.8

Base Condition (Biscayne) = 1,830.8 MGY

Floridan Aquifer Wellfield Limitations (MG):

<u>2030</u>		
<u>Annual</u>	<u>Average Daily Equivalent</u>	<u>Maximum Monthly</u>
5,413.3	14.83	487.2

TOTAL BISCAYNE AND FLORIDAN AQUIFER WELLFIELDS 2030

<u>Annual</u>	<u>Average Daily Equivalent</u>	<u>Maximum Monthly</u>
7,244.1	19.85	652.0

**BISCAYNE AQ. PARAMETERS**

$T = 440,000 \text{ ft}^2/\text{day}; (K=2666.67 \text{ ft/day}) \times b \text{ (aq. Thickness)} = 165 \text{ ft.}$

$S = 0.2$

$t = 90 \text{ days}$

=====  
WinFlow  
Analytical Model of 2D Ground-Water Flow  
Developed by  
James O. Rumbaugh, III  
Douglas B. Rumbaugh  
(c) 1995-2001 Environmental Simulations, Inc.  
=====

Date: 8/4/2010

Time: 13:30:32.00

Input File: BISCAYNE\_DAVIEONLY\_2010.AQF

Aquifer Properties

.... Transient Flow Model ....

Permeability..... = 2666.666667 ft/d  
Porosity..... = 0.200000  
Storage..... = 0.200000  
Leakage factor..... = 0.000000 ft  
Elevation of Aquifer Top.... = 0.000000 ft  
Elevation of Aquifer Bottom = -165.000000 ft  
Uniform Regional Gradient... = 0.000000  
Angle of Uniform Gradient... = 0.000000

Model Results Computed at Time = 90.000000 d

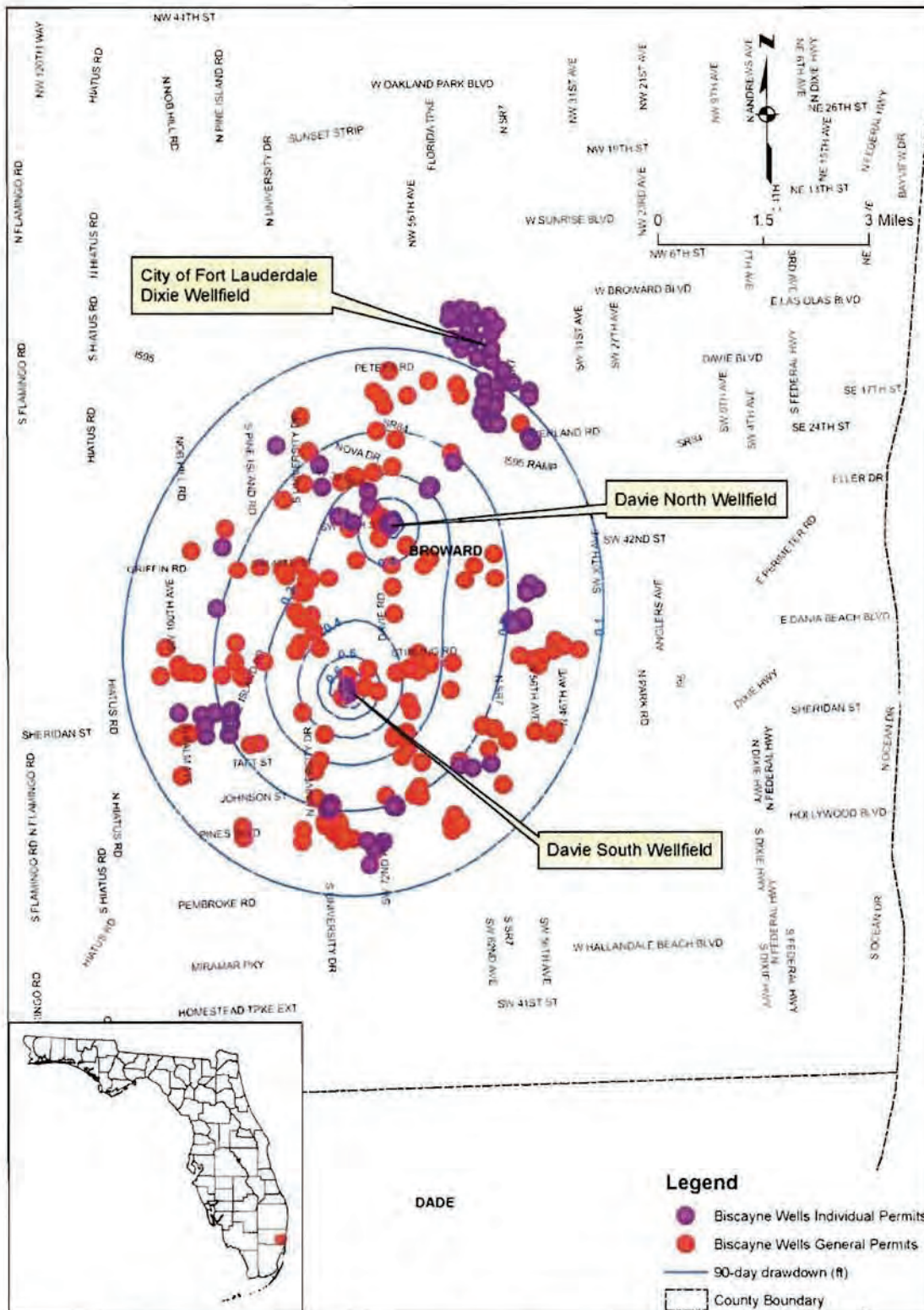


Figure 3. Biscayne Aquifer drawdown with withdrawals from Davie wells only

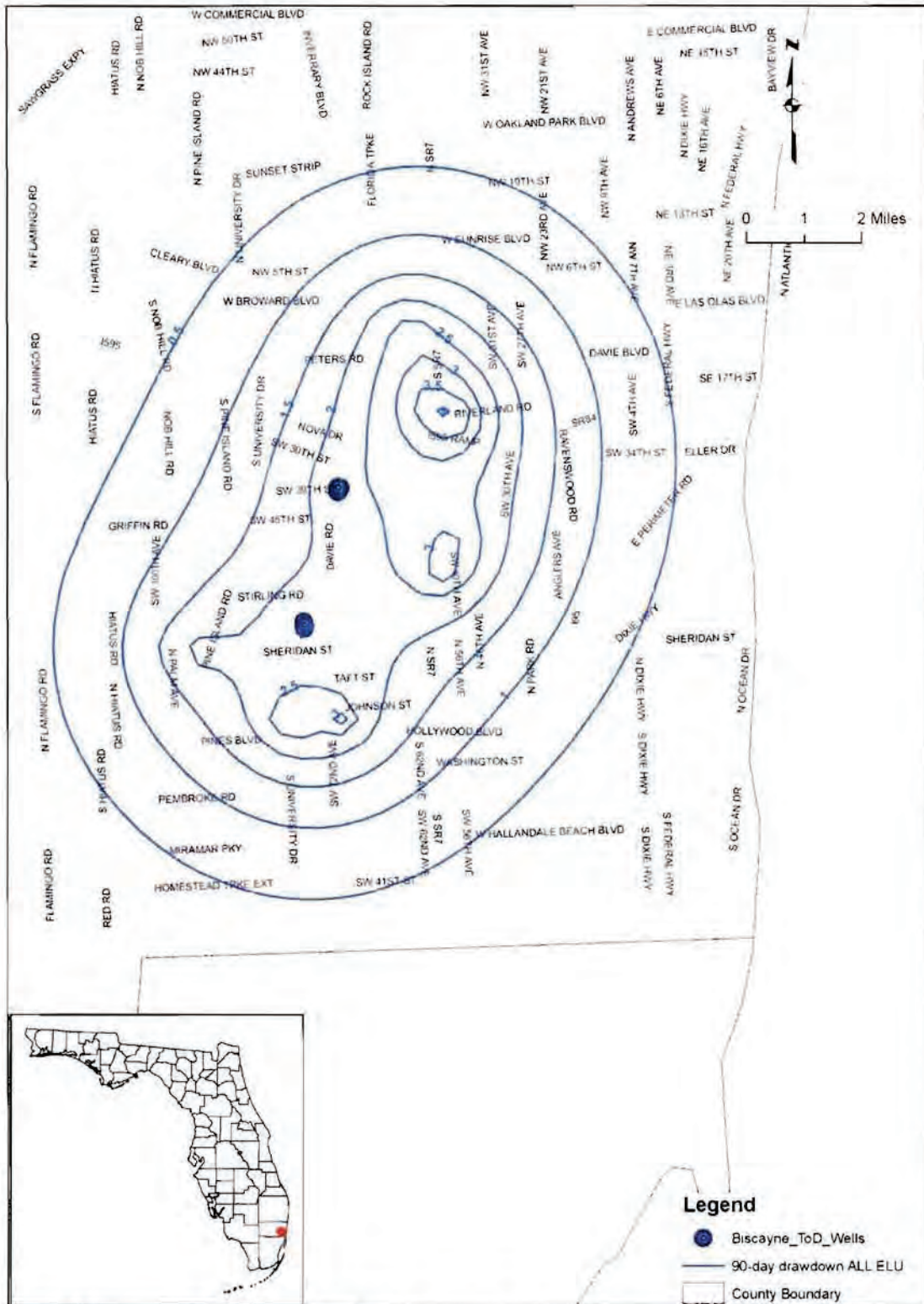


Figure 4. Cumulative Biscayne Aquifer drawdown showing all permitted users' withdrawals



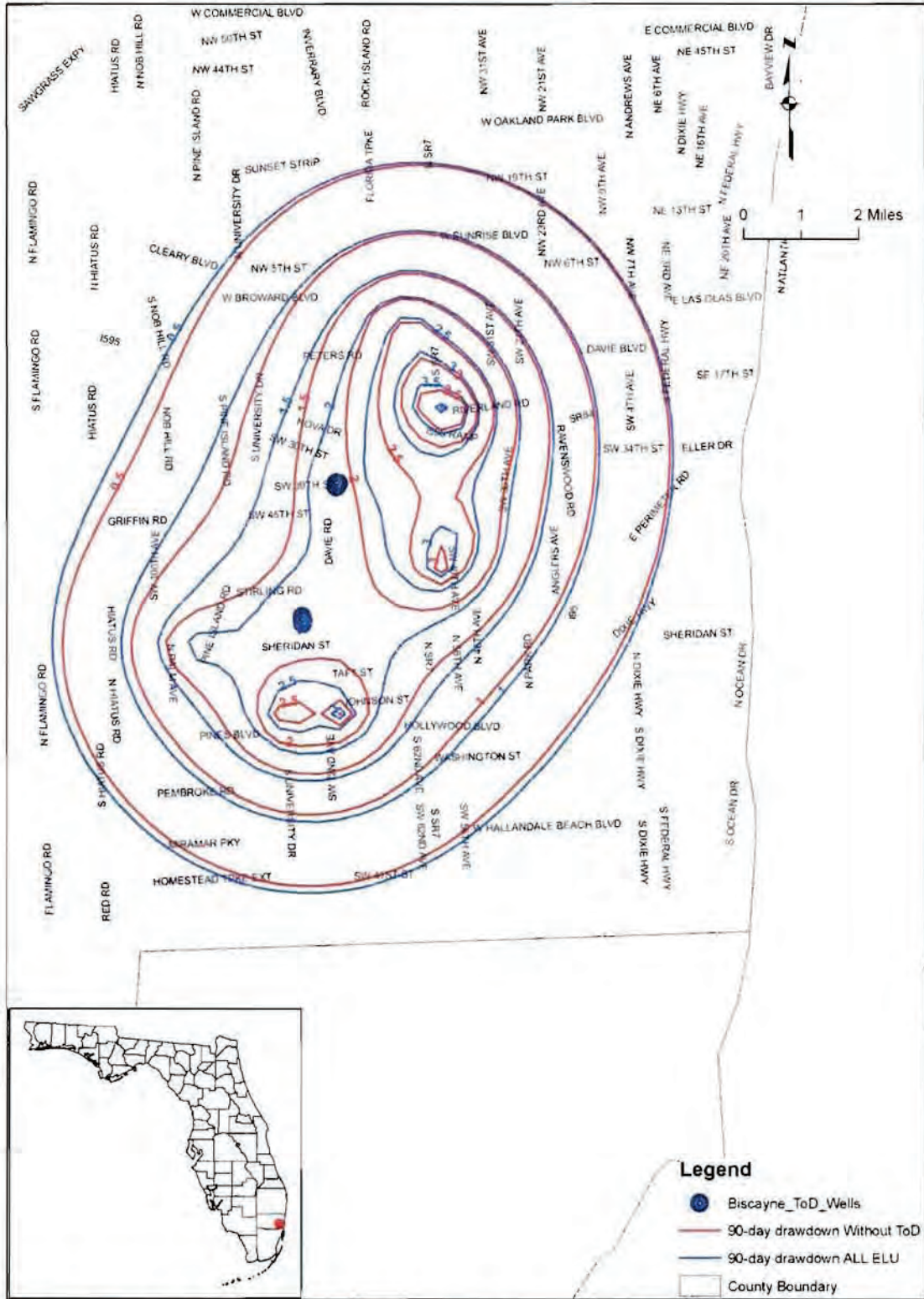


Figure 6. Cumulative Biscayne Aquifer drawdown with and without ToD's withdrawals

**FAS AQ. PARAMETERS**

$$T = 24,400 \text{ FT}^2/\text{DAY}$$

$$S = 0.0003$$

$$L = 0.00063 \text{ 1/day}$$

$$T = 90 \text{ days}$$

AquiferWin32

Analytical Simulation of Groundwater Flow

Developed by

James O. Rumbaugh, III

Douglas B. Rumbaugh

(c) 1997-2000 Environmental Simulations, Inc.

=====  
Date: 9/2/2010

Time: 12:52:21.00

Input File: IMPACTS\_DAVIEWELLSONLY\_FINAL.AQF  
=====

Aquifer Properties

Transmissivity

Specified Value = 24400 sq ft/d

Storage Coefficient

Specified Value = 0.0003 1/B

Specified Value = 6.3e-005 /ft

Porosity

Specified Value = 0.2

Aquifer Thickness

Specified Value = 450 ft

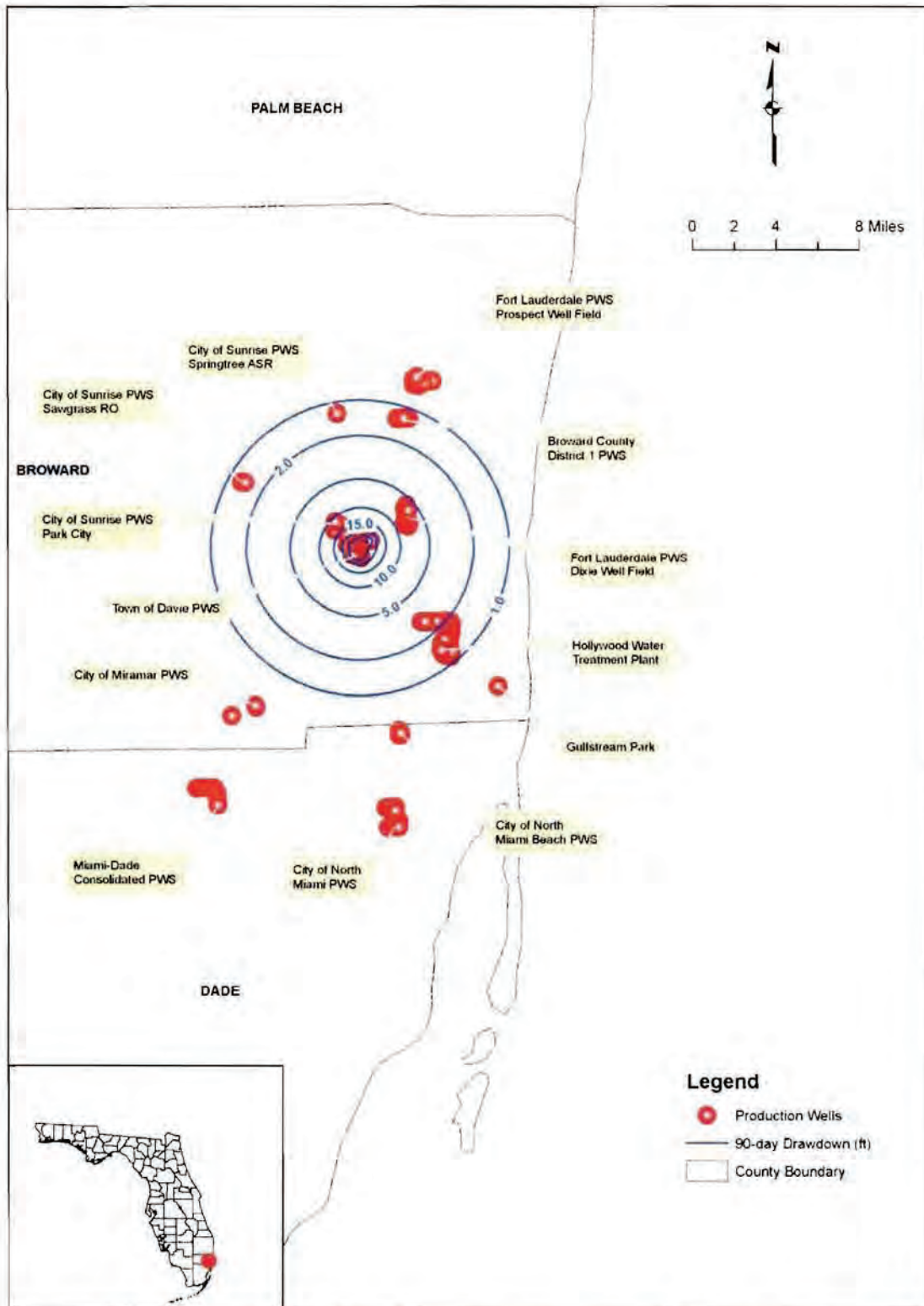


Figure 4. Upper Floridan Aquifer drawdown with withdrawals from Davie wells only

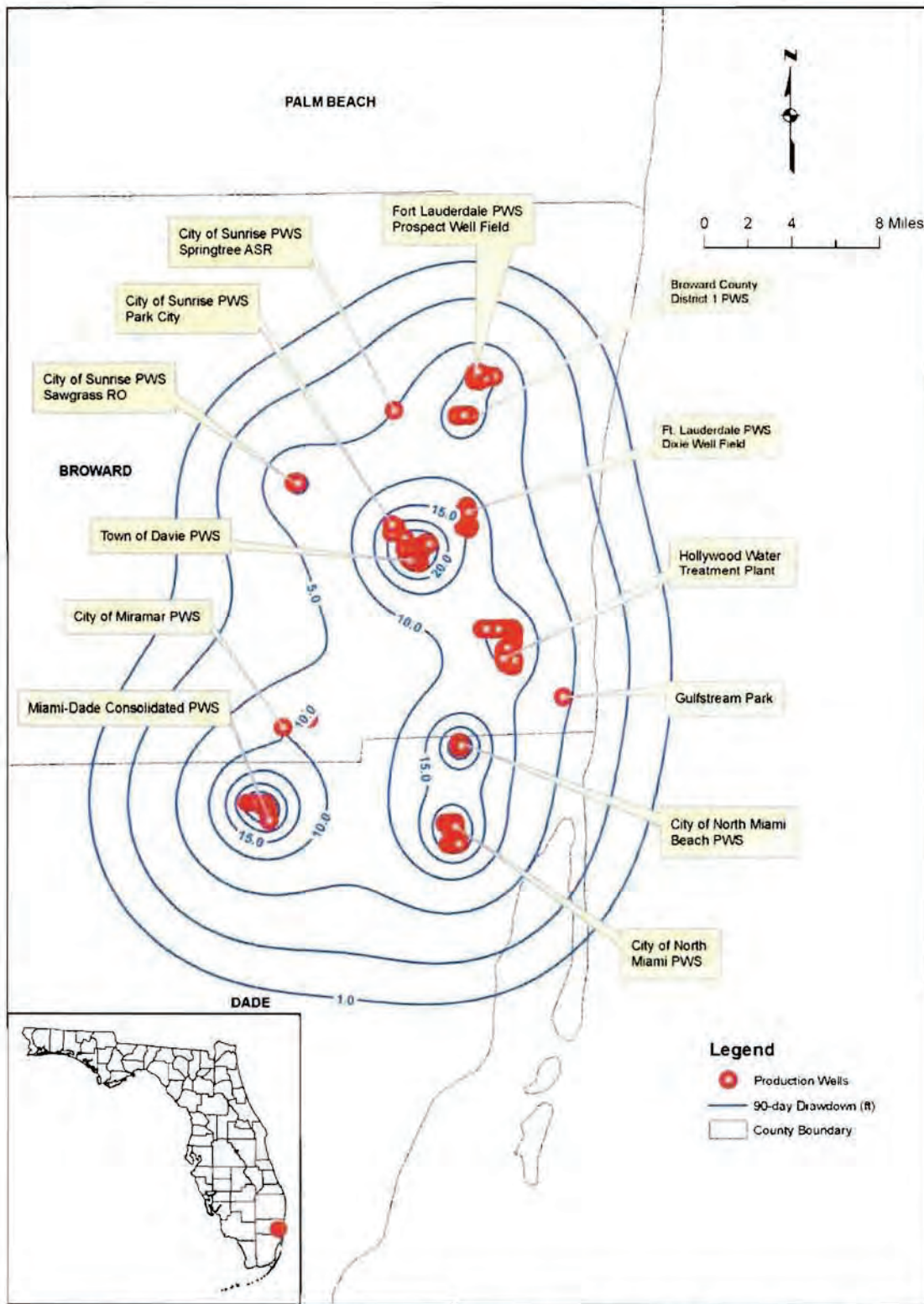


Figure 5. Cumulative Upper Floridan Aquifer drawdown showing all permitted users' withdrawals

EXHIBIT 11C

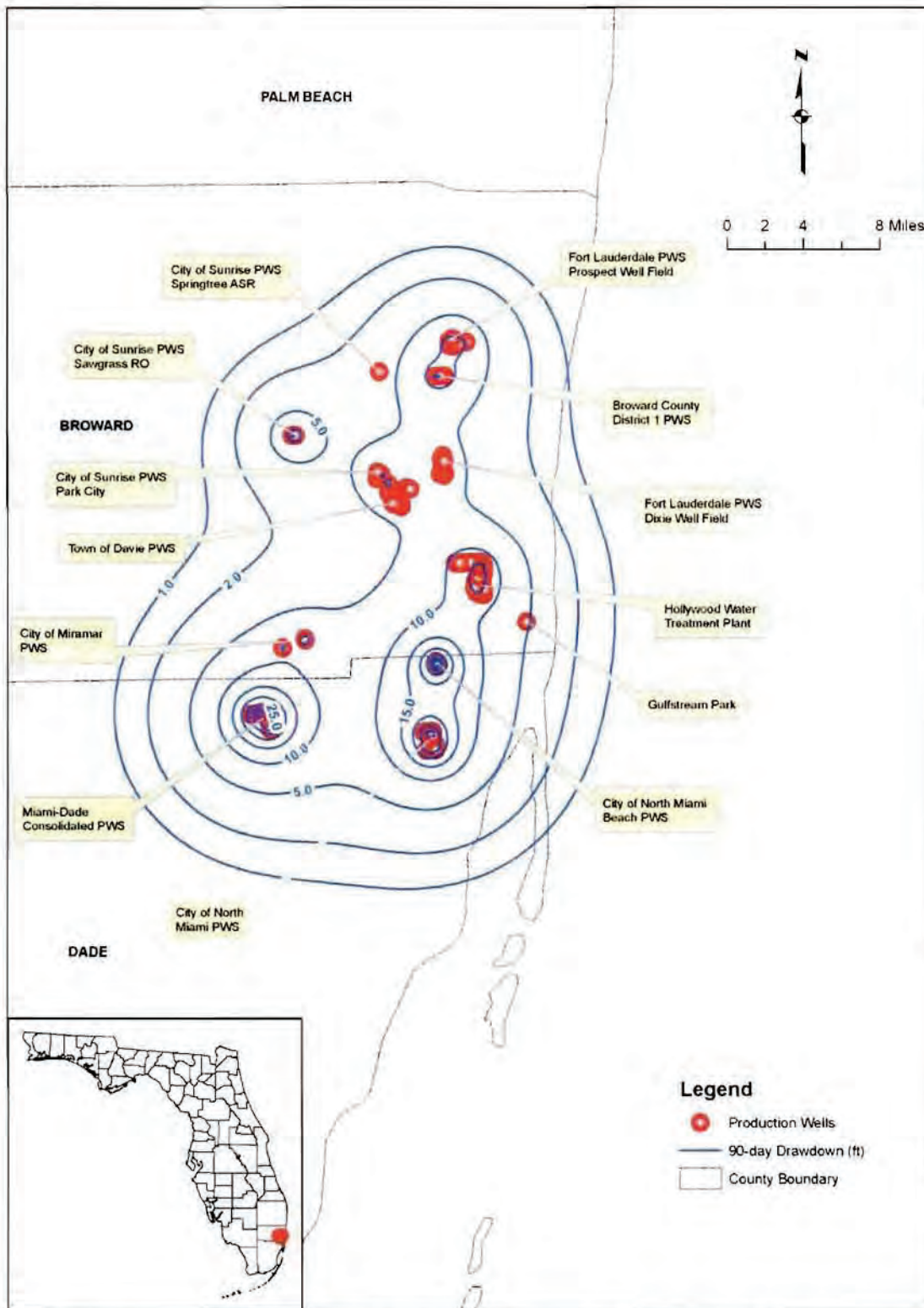
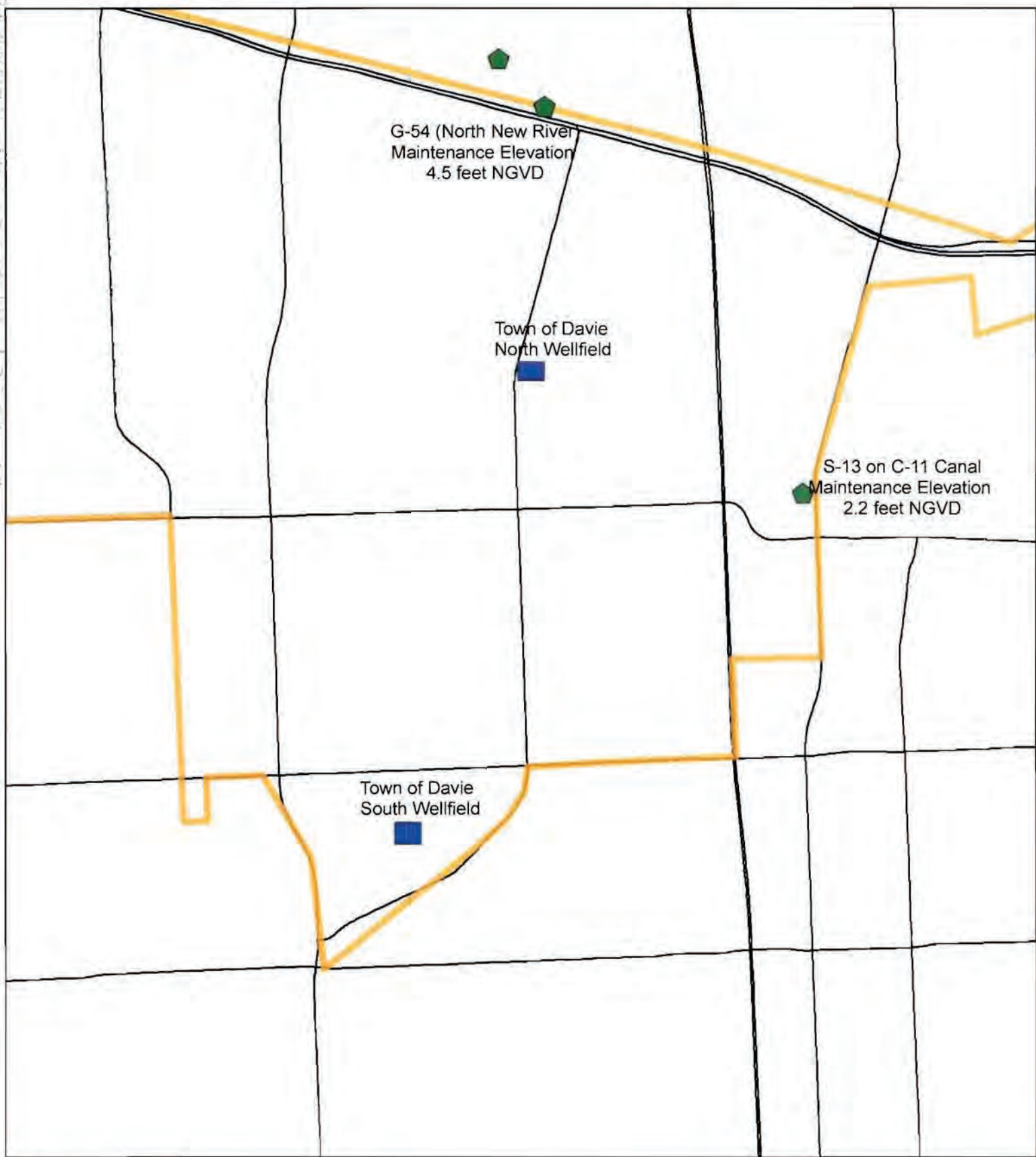




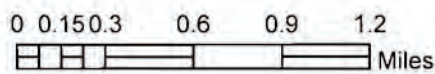


Figure 6. Cumulative Upper Floridan Aquifer drawdown without ToD 's withdrawals



**Legend**

-  Structure Site SFWMD
-  090721-3 - Water Use - Public Water Supply
-  Canal Centerline WCD
-  FPL Major Road Centerline



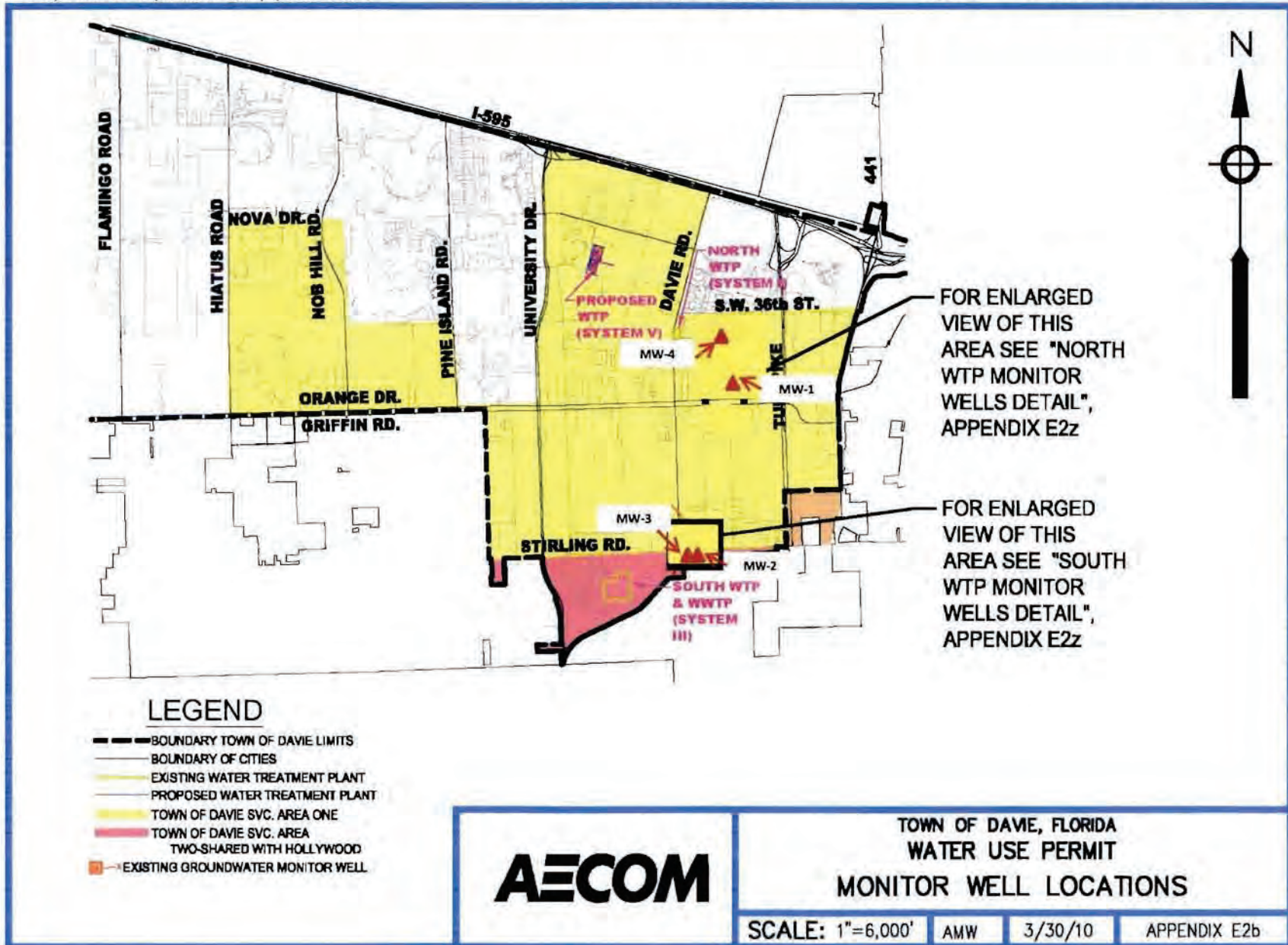


EXHIBIT 13A

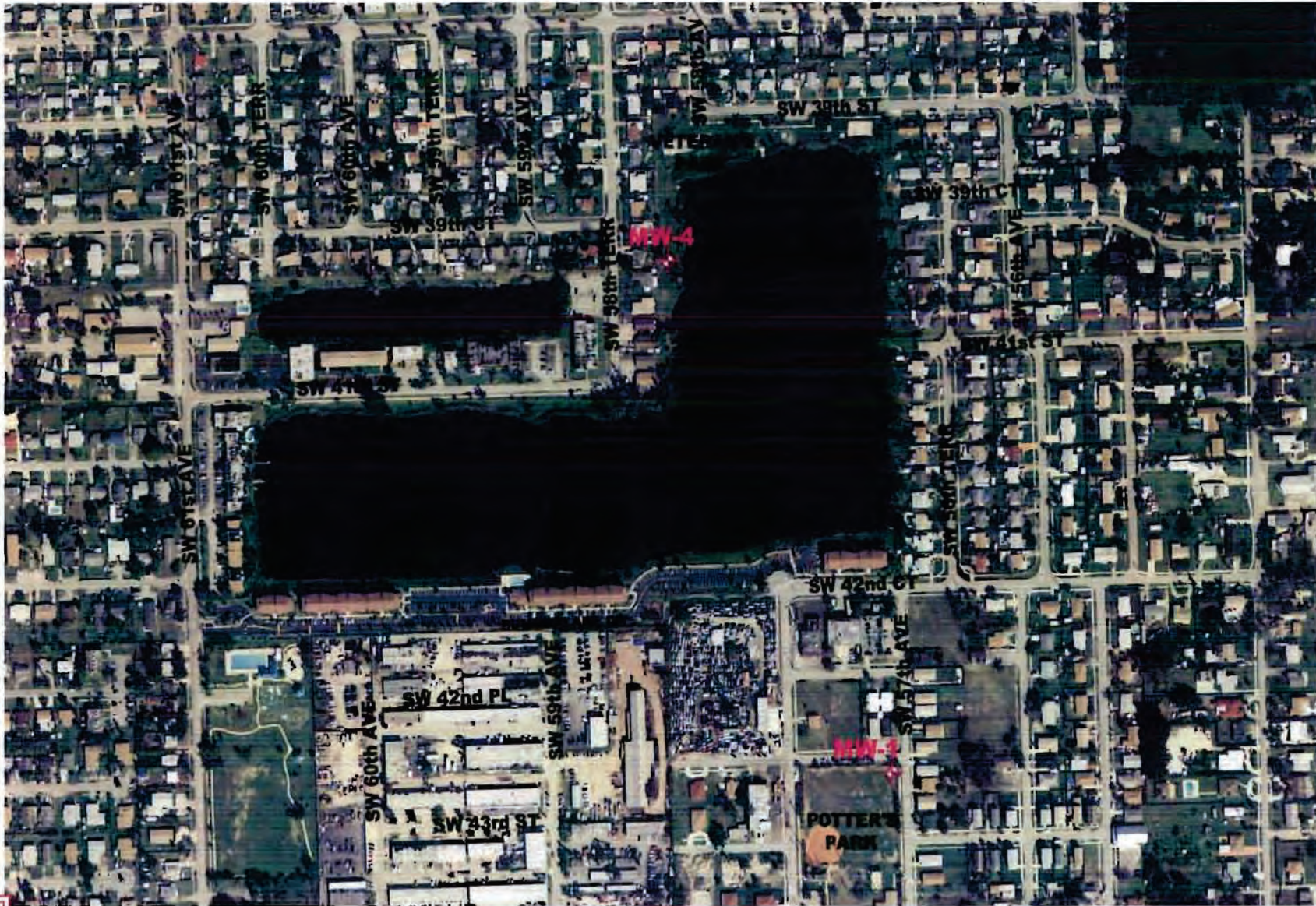


EXHIBIT 13B

**AECOM**

TOWN OF DAVIE, FLORIDA  
WATER USE PERMIT  
MONITOR WELLS LOCATION  
LOCATION MAP #1

SCALE: 1"=400'	AMW	9-9-10	FIGURE 1
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EXHIBIT 13C

**AECOM**

TOWN OF DAVIE, FLORIDA  
WATER USE PERMIT  
MONITOR WELLS LOCATION  
LOCATION MAP #2

SCALE: 1"=300' AMW 9-9-10 FIGURE 2



**Table 3 Wetland Areas Predicted Drawdown**

Name	ERP Permit	Wetland Acreage	Predicted Drawdown (ft)			
			ToD Only Current Permit (5.94 MGD)	ToD Only Proposed (6.66 MGD)	All ELU without ToD	All ELU
Berman's Park Preserve	06-02792-P	39	0.29	0.33	2.0	2.33
Country Marketplace	06-02896-P	3	0.44	0.49	1.74	2.23
Walnut Creek	06-02659-P	4	0.28	0.31	2.10	2.41
Waldrep/Engle Parcel	031201-8	34	0.25	0.30	1.73	2.03

**Town of Davie - SFWMD BOR Section 2.6.1 - Water Conservation Plan Mandatory Elements Schedule - RAI #1  
Comments #6 through 7 - Updated 10-5-10**

<b>BOR 2.6.1 Paragraph/Subject</b>	<b>SFWMD reviewer's comment No.</b>	<b>Per rule, is an Ordinance req'd?</b>	<b>Date that Davie will be in compliance w/ BOR</b>	<b>Notes</b>
<b>A/Irrigation</b>	6a	No, but existing Ordinance 91-08	<b>Complete</b>	New Ordinance 2010-018 addressing "Water Conservation (Irrigation)" was passed on 9-7-10
<b>B/Xeriscape</b>	6b	Yes, revise existing	<b>Complete</b>	New Ordinance 2010-020 addressing "Florida-Friendly Landscaping" was passed by Town Commission on 9-7-10
<b>C/Ultra Low Vol. Plumbing Fixtures</b>	6c	Yes	<b>Complete</b>	Per CUP Permit Application the Town of Davie is currently in compliance
<b>D/Rate Structures</b>	6d	No, but revise existing	<b>Complete</b>	New Ordinance 2010-018 addressing "Water Conservation (Rate Structures)" was passed on 9-7-10
<b>E/Leak Detection</b>	10a	No	<b>In progress, expect to be complete by 2013</b>	A Leak Detection Plan shall be implemented. Installation of remote meter sensors as part of a new leak detection program began in August, 2009. Complete meter replacement will be phased in over a three year period starting in FY10.
<b>F/Sprinkler Rain Sensor</b>	N/A	Yes	→	Per CUP Permit Application the Town of Davie is currently in compliance
<b>G/WC Public Education Programs</b>	6e	No	<b>Ongoing</b>	More elements shall be added to Water Conservation Public Education Program
<b>H/Reclaimed Water Study</b>	7	No	<b>Complete</b>	FDEP approved the Reuse Feasibility Study on 3-9-10

**Town of Davie**  
**Summary of Bulk Water Sales from 2005 to 2009**

Large User	Bulk Sales Agreement Amount (mgd)	Average Day Supplied (mgd)
Seminole Tribe of Florida	0.50 <sup>(a)</sup>	0.41 <sup>(b)</sup>
Ferncrest Utilities	0.20 <sup>(c)</sup>	0.09 <sup>(d)</sup>

Notes: ONLY TWO OF THE BULK WATER SALES RECIEVES POTABLE WATER ON A CONSISTENT BASIS.

- a) Source: RAI #1 Item 9 – Bulk Sales agreement dated Feb. 5, 2009 (Note: bulk sales volume increased from 0.3 to 0.5 mgd in 2009)
- b) Source: RAI #2 Item 9 – Modified Table E - Water Distributed to Other Entities (Seminole Tribe of Florida)
- c) Source: Original Application – App E4b1.2 1 Bulk Water Agreement Ferncrest and Davie
- d) Source: RAI #2 Item 8 – Modified Table E - Water Distributed to Other Entities (Ferncrest Util.)



### Requirement by Limiting Condition Report

Limiting Condition No: 18

Limiting Condition Code: WUSTD022-1

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
WELL - B1-1 (1 NORTH)	Monthly withdrawal for WELL B1-1 (1 NORTH)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - B1-2 (2 NORTH)	Monthly withdrawal for WELL B1-2 (2 NORTH)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - B1-3 (3 NORTH)	Monthly withdrawal for WELL B1-3 (3 NORTH)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - B1-4 (4 NORTH)	Monthly withdrawal for WELL B1-4 (4 NORTH)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - B3-5 (SOUTH)	Monthly withdrawal for WELL B3-5 (SOUTH)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - B3-6 (SOUTH)	Monthly withdrawal for WELL B3-6 (SOUTH)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - B3-7 (SOUTH)	Monthly withdrawal for WELL B3-7 (SOUTH)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - B3-10 (SOUTH)	Monthly withdrawal for WELL B3-10 (SOUTH)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - FA-PW1	Monthly withdrawal for WELL FA-PW1	31-MAR-11	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - FA-PW2	Monthly withdrawal for WELL FA-PW2	31-MAR-11	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - FA-PW3	Monthly withdrawal for WELL FA-PW3	31-MAR-11	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - FA-PW4	Monthly withdrawal for WELL FA-PW4	31-MAR-11	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - FA-PW5	Monthly withdrawal for WELL FA-PW5	31-MAR-11	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - FA-PW6	Monthly withdrawal for WELL FA-PW6	31-MAR-11	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - FA-PW7	Monthly withdrawal for WELL FA-PW7	31-MAR-11	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - FA-PW8	Monthly withdrawal for WELL FA-PW8	31-MAR-11	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - FA-PW9	Monthly withdrawal for WELL FA-PW9	31-MAR-11	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - FA-PW10	Monthly withdrawal for WELL FA-PW10	31-MAR-11	01-NOV-10	30-SEP-30	Monthly	Quarterly

Limiting Condition No: 20

Limiting Condition Code: WUPWS003-1

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
PERMIT	Unaccounted for Distribution Losses for PERMIT	30-NOV-10	01-NOV-10	30-SEP-30	Monthly	Monthly
PERMIT	Leak Detection and Calibrations	01-NOV-11	01-NOV-10	30-SEP-30	One time Only	One time Only

Exhibit No: 17

## Requirement by Limiting Condition Report

Limiting Condition No: 23

Limiting Condition Code: WUPWS008-2

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
PERMIT	Ten-Year Compliance Report for PERMIT	31-OCT-20	01-NOV-10	30-SEP-30	Every Ten Years	Every Ten Years

Limiting Condition No: 24

Limiting Condition Code: WUPWS006-1

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
PERMIT	Water Conservation Plan for TOWN OF DAVIE	30-NOV-10	01-NOV-10	30-SEP-30	One time Only	One time Only

Limiting Condition No: 26

Limiting Condition Code: WUPCM001-4

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
WELL - MW-1 (Potters Park DW-1)	Chloride for WELL MW-1 (Potters Park DW-1)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - MW-2 (Stirling East DW-2)	Chloride for WELL MW-2 (Stirling East DW-2)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - MW-3 (Stirling West DW-3)	Chloride for WELL MW-3 (Stirling West DW-3)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly
WELL - MW-4 (Veterans Park DW-4)	Chloride for WELL MW-4 (Veterans Park DW-4)	31-DEC-10	01-NOV-10	30-SEP-30	Monthly	Quarterly

Limiting Condition No: 27

Limiting Condition Code: WUWC004-1

Facility Name	Requirement Name	Due Date	Start Date	End Date	Col Freq	Sub Freq
WELL - FA-PW1	Updated Table A for WELL FA-PW1	01-MAY-11	01-NOV-10	30-SEP-30	One time Only	One time Only
WELL - FA-PW2	Updated Table A for WELL FA-PW2	01-MAY-11	01-NOV-10	30-SEP-30	One time Only	One time Only
WELL - FA-PW3	Updated Table A for WELL FA-PW3	01-MAY-11	01-NOV-10	30-SEP-30	One time Only	One time Only
WELL - FA-PW5	Updated Table A for WELL FA-PW5	01-MAY-11	01-NOV-10	30-SEP-30	One time Only	One time Only
WELL - FA-PW6	Updated Table A for WELL FA-PW6	01-MAY-11	01-NOV-10	30-SEP-30	One time Only	One time Only
WELL - FA-PW7	Updated Table A for WELL FA-PW7	01-MAY-11	01-NOV-10	30-SEP-30	One time Only	One time Only
WELL - FA-PW8	Updated Table A for WELL FA-PW8	01-MAY-11	01-NOV-10	30-SEP-30	One time Only	One time Only
WELL - FA-PW9	Updated Table A for WELL FA-PW9	01-MAY-11	01-NOV-10	30-SEP-30	One time Only	One time Only
WELL - FA-PW10	Updated Table A for WELL FA-PW10	01-MAY-11	01-NOV-10	30-SEP-30	One time Only	One time Only

Exhibit No: 17

### Requirement by Limiting Condition Report

<b>Limiting Condition No: 28</b>		<b>Limiting Condition Code: <u>WURWF007-1</u></b>				
<b>Facility Name</b>	<b>Requirement Name</b>	<b>Due Date</b>	<b>Start Date</b>	<b>End Date</b>	<b>Col Freq</b>	<b>Sub Freq</b>
PERMIT	Annual reclaimed water feasibility report for PERMIT	31-OCT-11	01-NOV-10	30-SEP-30	Yearly	Yearly
 <b>Limiting Condition No: 29</b>		 <b>Limiting Condition Code: <u>WUZZUD001-1</u></b>				
<b>Facility Name</b>	<b>Requirement Name</b>	<b>Due Date</b>	<b>Start Date</b>	<b>End Date</b>	<b>Col Freq</b>	<b>Sub Freq</b>
PERMIT	AWS Projects Status Report for TOWN OF DAVIE	31-OCT-11	01-NOV-10	30-SEP-30	Yearly	Yearly

# STAFF REPORT DISTRIBUTION LIST

TOWN OF DAVIE WATER PLANT SYS I, III, AND V

**Application No:** 090721-3

**Permit No:** 06-00134-W

## INTERNAL DISTRIBUTION

- X J. Marquez
- X Permit File
- X WU Compliance - A. Morales

## EXTERNAL DISTRIBUTION

- X Permittee - Town Of Davie
- X Agent - Aecom

## GOVERNMENT AGENCIES

- X Broward County - Director, Water Mgmt Div
- X Broward County -Environmental Protection Department
- X Broward County Bureau of Water and Wastewater Services
- X Dept of Environmental Protection - West Palm Beach
- X Div of Recreation and Park - District 7
- X Engineer, City of Davie
- X Engineer, City of Davie

## OTHER INTERESTED PARTIES

- X B.F. Sewell
- X CITY OF SUNRISE
- X Central Broward Water Control District Michael Crowley
- X Old Plantation Water Control District Pat O'Quinn
- X SCHOOL BOARD OF BROWARD COUNTY
- X TOWN OF DAVIE

Exhibit No:18

APPENDIX F

# SYSTEM V RERATING PERMIT NO. 0126324-266-WC



# FLORIDA DEPARTMENT OF Environmental Protection

Southeast District  
3301 Gun Club Road, MSC 7210-1  
West Palm Beach, FL 33406  
561-681-6600

**Ron DeSantis**  
Governor

**Jeanette Nuñez**  
Lt. Governor

**Shawn Hamilton**  
Secretary

August 21, 2024

## **In the Matter of an Application for Permit by:**

Ms. Renuka Mohammed, Utilities Director  
Town of Davie System V  
7351 SW 30<sup>th</sup> St.  
Davie, Florida 33314

**DEP File No.** 0126324-266-WC  
Broward County  
**PWS No.:** 4060344  
Town of Davie System V Rerating to  
8 MGD Capacity

Sent by Email: [rmohammed@davie-fl.gov](mailto:rmohammed@davie-fl.gov)

## **NOTICE OF PERMIT ISSUANCE**

Enclosed is Permit Number 0126324-266-WC to rerate the Town of Davie System V Reserve Osmosis Water Treatment Plant, issued pursuant to Section 403.861(9), Florida Statutes.

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until a subsequent order of the Department. Because the administrative hearing process is designed to formulate final agency action, the subsequent order may modify or take a different position than this action.

### Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;

- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at [Agency\\_Clerk@dep.state.fl.us](mailto:Agency_Clerk@dep.state.fl.us). Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

#### Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver may not apply to persons who have not received a clear point of entry.

#### Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at [Agency\\_Clerk@dep.state.fl.us](mailto:Agency_Clerk@dep.state.fl.us), before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

#### Mediation

Mediation is not available in this proceeding.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

**EXECUTION AND CLERKING:**

Executed in Palm Beach County, Florida.

**STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**



---

Norva Blandin, MSEM  
Permitting Program Administrator  
Southeast District

NB/JH/DB

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy clerk hereby certifies that this permit and all copies were sent on the filing date below to the following listed persons:

Electronic Copies Furnished to:

FDEP — [SED.DrinkingWater@FloridaDEP.gov](mailto:SED.DrinkingWater@FloridaDEP.gov) ; [Deanna.Baxter@FloridaDEP.gov](mailto:Deanna.Baxter@FloridaDEP.gov); Norva Blandin, Jacqueline Hurd  
AECOM — William Lovins — [will.lovins@aecom.com](mailto:will.lovins@aecom.com)

**FILING AND ACKNOWLEDGMENT**

FILED, on this date, pursuant to Section 120.52(7), F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

*Vanessa Osborne*  
\_\_\_\_\_  
Clerk

08-21-2024  
\_\_\_\_\_  
Date

**This space is intentionally left blank**



# FLORIDA DEPARTMENT OF Environmental Protection

**Ron DeSantis**  
Governor

**Jeanette Nuñez**  
Lt. Governor

**Shawn Hamilton**  
Secretary

Southeast District  
3301 Gun Club Road, MSC 7210-1  
West Palm Beach, FL 33406  
561-681-6600

August 21, 2024

**PERMITTEE:**

Ms. Renuka Mohammed  
Utilities Director  
City of Fort Lauderdale  
100 North Andrews Avenue  
Fort Lauderdale, Florida 33301

**PWS ID NUMBER:** 4060344

**PERMIT NUMBER:** 0126324-266-WC

**DATE OF ISSUE:** August 21, 2024

**EXPIRATION DATE:** August 20, 2029

**COUNTY:** Broward

**PROJECT:** Town of Davie System V  
Rerating to 8 MGD Capacity

**Sent by Email:** [rmohammed@davie-fl.gov](mailto:rmohammed@davie-fl.gov)

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-550, 62-555 and 62-560. The above-named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

**This project consists of the rerating of Town of Davie System V Reverse Osmosis Water Treatment Plant (ROWTP). This permit increases the permitted capacity from 6,000,000 gallons per day (GPD) to 8,000,000 gallons per day (GPD).**

As per the DEP's database and latest sanitary survey report, the following are the total installed capacities of each WTP component:

- A. **Well Pumps:** Total Installed Capacity = 7,300 gallons per minute (GPM)
- a) Well 1 Pump – 1,460 GPM
  - b) Well 2 Pump – 1,460 GPM
  - c) Well 3 Pump – 1,460 GPM
  - d) Well 4 Pump – 1,460 GPM
  - e) Well 5 Pump – 1,460 GPM

The existing wellfield capacity meets the 10.67 MGD raw water flow required for the 8 MGD rerated capacity. Four of the five wells will be in service with one well in standby at the expanded flow rate.

- B. **Deep Injection Wells (DIW):** Total Capacity = 22.8 million gallons per day (MGD)
- a) Class 1 injection well (service) – 11.4 MGD
  - b) Class 1 Injection well (standby) – 11.4 MGD

The discharge flow to the injection well from the RO process will increase by 0.67 MGD, 2 MGD for current MGD rated 6 MGD capacity vs. 2.66 MGD for 8 MGD uprated plant capacity.

### **C. Pretreatment**

#### **I. Sulfuric Acid Chemical Feed**

- a) The injection point is upstream of the cartridge filters and is used to lower the pH for the RO treatment system. Sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) system comprises two 6,500-gallon bulk storage tanks, transfer pumps, 500-gallon day tank and duplex metering pump skid with 15.8 gph capacity per pump.
- b) The existing sulfuric acid feed pump capacity is greater than the 13.0 gph required for the 8 MGD rerated capacity.

#### **II. Anti-scalant Chemical Feed**

- a) Anti-scalant system comprises chemical storage totes, transfer pump, day tank and duplex metering pump skid with 1.98 gph capacity per pump.
- b) The existing anti-scalant feed pump capacity is greater than the 1.09 gph required for the 8 MGD rerated capacity.

#### **III. Cartridge Filtration**

- a) The plant has a total of three cartridge filter vessels arranged in a parallel configuration.
- b) The existing cartridge filters are sized to maintain operation with two of the three cartridge filter vessels in operation and one as standby for the 8 MGD rerated capacity.

### **D. RO Treatment**

#### **I. RO Trains: Total Capacity = 8 million gallons per day (GPD)**

- a) Train 1 – 2 MGD
- b) Train 2 – 2 MGD
- c) Train 3 – 2 MGD
- d) Train 4 – 2 MGD

#### **II. Membrane Clean-in Place (CIP) System**

- a) The existing RO cleaning system consists of two 2,600-gallon fiberglass reinforced plastic (FRP) cone bottom tanks, cleaning pump, flushing pump, cartridge filter housing, and chemical make-up tank.
- b) The existing system is set up to function as normal and designed with the plant increase in capacity to 8 MGD.

### **E. RO Post-Treatment**

#### **I. Degasification**

- a) RO permeate flows into the top of two degasifiers. The design air flow for each degasifier is 17,000 cfm at 8.5-inches of water head loss provided by a 40 hp blower motor. Each degasifier is rated for 6 MGD for a total equipment capacity of 12 MGD.
- b) The use of two degasifiers operating at 4 MGD will be proportionally less than the design conditions for each degasifier that is required for 8 MGD capacity expansion.

#### **II. Sodium Hypochlorite Chemical Feed**

- a) The system utilizes a water softener, bulk storage tanks for the sodium hypochlorite solution, a brine saturator, an electrolytic cell, and an electric rectifier. Sodium hypochlorite is stored in two 15,000-gallon bulk storage tanks. Sodium hypochlorite is pumped using two metering pumps, one duty and one standby, each with pumping capacity of 6 gpm.
  - b) The existing sodium hypochlorite feed pump capacity is greater than the 4.2 gpm required for the 8 MGD rated capacity. In addition, the 400 ppd chlorine production is well below the 600 ppd generator capacity designated for the water treatment plant.
- III. Carbon Dioxide Chemical Feed
- a) The carbon dioxide feed system comprises a 30-ton bulk storage pressure vessel and gas/vapor supply and injection system sized for up to 2,040 ppd carbon dioxide feed.
- IV. Hydrated Lime Chemical Feed
- a) The hydrated lime feed system comprises a 40-ton storage silo, lime slurry make-up tanks, 2,200-gallon day tank, and one duty and one standby chemical feed pump.
  - b) The existing lime dosing pumping capacity is greater than the 189 gph required for the 8 MGD rated capacity.
- V. Corrosion Inhibitor Chemical Feed
- a) The corrosion inhibitor system comprises an 800-gal chemical storage tank, transfer pump, 100-gal day tank and duplex metering pump skid with 15.8 gph capacity per pump.
  - b) The existing corrosion inhibitor feed pump capacity is greater than the 1.43 gph required for the 8 MGD rated capacity.
- VI. Fluorosilicic Acid Chemical Feed
- a) The system consists of one 1,800-gallon bulk tank, one 100-gallon day tank and one fluoride transfer pump. There are two fluoride feed pumps each with 1.45 gph capacity with one pump being used as stand by.
  - b) The existing fluoride feed pump capacity is greater than the 1.12 gph required for the 8 MGD rated capacity.

**F. Clearwell, Transfer Pumping, and High Service Pumping**

I. Transfer Pumping: Total Capacity = 6,300 gallons per minute (GPM)

- a. Fin. P-1 – 2,100 GPM
- b. Fin. P-2 – 2,100 GPM
- c. Fin. P-3 – 2,100 GPM

The existing transfer pumping capacity is greater than that required for the 8 MGD rated capacity.

II. High Service Pump: Total Capacity = 9,450 gallons per minute (GPM)

- a. HSP 1 (lead) – 3,150 GPM
- b. HSP 2 (lag 1) – 3,150 GPM
- c. HSP 3 (lag 2) – 3,150 GPM

The existing high service pumping capacity is greater than that required for the expected peak hourly demand of 12 MGD.

**G. Chloramination and pH Stabilization**

I. Ammonium Hydroxide Chemical Feed

- a. The ammonium hydroxide system comprises two 3,500-gallon bulk storage tanks, transfer pump, 224-gal day tank and duplex metering pump skid with 1.98 gph capacity per pump.

- II. Sodium Hydroxide Chemical Feed
  - a. Sodium hydroxide feed system consists of two 9,150-gallon capacity bulk tanks, one 200 gallon capacity day tank and two separate chemical metering pump skids. Chemical dosing for water treatment is provided by two feed pumps, one of which is used as spare, each with 15.9 gph capacity.
  - b. The existing sodium hydroxide feed pump capacity is greater than the 8.66 gph required for the 8 MGD rerated capacity
- III. Assurance of Odor Control Compliance
  - a. Recirculation pumps provide a flow rate of 325 GPM at 51.7 ft of discharge head. Each scrubbing stage has a blowdown rate of 12 to 18 GPM that is wasted by a solenoid operated valve in the discharge from the recirculation pumps. Each dual stage scrubber system is designed to treat 250 lbs/day of total sulfide with 500 lbs/day of combined capacity with both scrubber systems in operation.
  - b. The existing off-gas odor control system capacity is greater than the 313 ppd available for the 8 MGD rerated capacity.

The permitted maximum day design capacity of the Town of Davie System V WTP (based on the total installed capacity of the wells) is rerated from 6,000,000 GPD to 8,000,000 GPD.

**The Town of Davie WTP after the rerating approval will have a permitted maximum design capacity of 8,000,000.**

**IN ACCORDANCE WITH:** The construction permit application and engineering report dated May 24, 2024 and June 11, 2024, with RAI\_1 response received August 15, 2024, respectively prepared by Will Lovins, P.E., by AECOM and received by DEP on May 28, 2024 and June 11, 2024, respectively, with a processing fee dated July 17, 2024.

**LOCATED AT:** 7531 SW 30<sup>th</sup> Street, Davie, Florida

This permit does not pertain to any wastewater, storm water, or dredge and fill aspects of the Project. Work must be conducted in accordance with the General and Specific Conditions, attached hereto.

The permittee shall be aware of and operate under the Permit Conditions below. These applicable conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes. [F.A.C. Rule 62-555.533(1)]

## A. General Conditions

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times (reasonable time may depend on the nature of the concern being investigated), access to the premises where the permitted activity is located or conducted to:
  - a. Have access to and copy any records that must be kept under conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. A description of and cause of noncompliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
  - a. Determination of Best Available Control Technology (BACT)
  - b. Determination of Prevention of Significant Deterioration (PSD)
  - c. Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
  - d. Compliance with New Source Performance Standards
14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance

records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

- c. Records of monitoring information shall include:
  - i. the date, exact place, and time of sampling or measurements;
  - ii. the person responsible for performing the sampling or measurements;
  - iii. the dates analyses were performed;
  - iv. the person responsible for performing the analyses;
  - v. the analytical techniques or methods used;
  - vi. the results of such analyses.

- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

## **B. Regulatory Section**

- 1. All construction must be in accordance with this permit. Before commencing work on project changes for which a construction permit modification is required per 62-555.536(1), the permittee shall submit to the Department a written request for a permit modification. Each such request shall be accompanied by one copy of a revised construction permit application, the proper processing fee and one copy of either a revised preliminary design report or revised drawings, specifications and design data. [F.A.C. Rule 62-555.536].
- 2. Permitted construction or alteration of public water supply systems must be supervised during construction by a professional engineer registered in the State of Florida if the project was designed under the responsible charge of a professional engineer licensed in the State of Florida. The permittee must retain the service of a professional engineer registered in the State of Florida to observe that construction of the project is in accordance with the engineering plans and specifications as submitted in support of the application for this permit. [F.A.C. Rule 62-555.520(3)].
- 3. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoe remains, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section at 850.245.6333 or 800.847.7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources and the permitting agency. In the event that unmarked human remains are encountered during

permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, *Florida Statutes*.

4. If delays will cause project completion to extend beyond the expiration date of this permit, the permittee shall submit to the Department a request to extend the expiration date of this permit including the appropriate processing fee. This request shall specify the reasons for the delay and shall be submitted to the Department for approval prior to the expiration date of this permit. Note that no specific construction permit shall be extended so as to remain in effect longer than five years. [F.A.C. Rule 62-555.536(4)].
5. In accordance with General Condition #11 of this permit, this permit is transferable only upon Department approval. Persons proposing to transfer this permit must apply jointly for a transfer of the permit within 30 days after the sale or legal transfer of ownership of the permitted project that has not been cleared for service by the Department using form, 62-555.900(8), Application for Transfer of a PWS Construction Permit along with the appropriate fee. [F.A.C. Rule 62-555.536(5)]
6. This permit satisfies Drinking Water permitting requirements only and does not authorize construction or operation of this facility prior to obtaining all other necessary permits from other program areas within the Department, or required permits from other state, federal, or local agencies.
7. If gasoline contamination is found at the construction site, work shall be stopped and the proper authorities notified. With the approval of the Department, ductile iron pipe and fittings, and solvent resistant gaskets materials shall be used in the contaminated area. The ductile pipe shall be used in the contaminated area. The ductile iron pipe shall extend 100 feet beyond any solvent noted. Any contaminated soil that is excavated shall be placed on an impermeable mat, covered with waterproof covering, and held for disposal. If the site cannot be properly cleaned, then consultation with the Department is necessary prior to continuing with the project construction.
8. This permit does not constitute approval of construction on jurisdictional wetland areas; therefore such approval must be obtained separately from the Water Management District or from DEP ERP Section, as applicable, Permittee shall provide a copy of the permit approval to the Department if water main installation involves activities on wetlands.
9. Permittee shall ensure that the well and drinking water treatment facilities will be protected to prevent tampering, vandalism, and sabotage as required by Rule 62-555.315(1) & 62-555.320(5), F.A.C.

### **C. Construction Standards**

1. All products, including paints, which shall come into contact with potable water, either directly or indirectly, shall conform to National Sanitation Foundation (NSF) International, Water Chemicals Codex, Food Chemicals Codex, American Water Works Association (AWWA) Standards and the Food and Drug Administration, as provided in Rule 62-555.320(3), F.A.C.
2. Water supply facilities, including mains, pipe, fittings, valves, fire hydrants and other materials shall be installed in accordance with the latest applicable AWWA Standards and Department rules and regulations. The system shall be pressure and leak tested in accordance

- with AWWA Standard C600 C603, or C605, as applicable, and disinfected in accordance with AWWA Standard C651-653, as well as in accordance with Rule 62-555.340, F.A.C.
3. The installation or repairs of any public water system, or any plumbing in residential or nonresidential facilities providing water for human consumption, which is connected to a public water system shall be lead free in accordance with Rule 62-555.322, F.A.C.
  4. Permittee shall maintain vertical clearance and horizontal separation between water mains and sanitary sewers, storm sewers, etc. unless approved otherwise by the Department, as provided in Rule 62-555.314, F.A.C., and Section 8.6 of *Recommended Standards for Water Works*, a manual adopted by reference in Rule 62-555.330(3), F.A.C.
  5. The new or altered aboveground piping at the drinking water treatment plant shall be color coded and labeled as recommended in Section 2.14 of "Recommended Standards for Water Works, 1997 Edition". [F.A.C. Rule 62-555.320(10)]
  6. Permittee shall ensure that there shall be no cross-connection with any non-potable water source in accordance with Rule 62-555.360, F.A.C.

#### **D. Operational Requirements**

1. The facility has been classified as a Category I, Class A water treatment plant. Accordingly, the lead or chief operator must be Class A. Proof of staffing by a Class C or higher operator for [24 hours/day for 7 days/week] must be provided. [F.A.C. Rule 62-699.310] (Note: This condition would be added when appropriate and would be tailored to the WTP.)
2. The supplier of water shall operate and maintain the public water system so as to comply with applicable standards in F.A.C. Rule 62-550 and 62-555.350.
3. The permittee shall provide an operation and maintenance manual for the new or altered treatment facilities to fulfill the requirements under subsection 62-555.350(13), F.A.C. The manual shall contain operation and control procedures, and preventative maintenance and repair procedures, for all plant equipment and shall be made available for reference at the plant or at a convenient location near the plant. Bound and indexed equipment manufacturer manuals shall be considered sufficient to meet the requirements of the subsection.
4. The permittee shall submit a monthly operations report (MOR) DEP Form 62-555.900(x), to the Department no later than the tenth of each succeeding month. [Note (x) depends upon type of treatment].
5. The permittee shall have complete record drawings produced for the project in accordance with Rule 62-555.530(4), F.A.C
6. The permittee or suppliers of water shall telephone the State Warning Point (SWP), at 1-800-320-0519 immediately (i.e., within two hours) after discovery of any actual or suspected sabotage or security breach, or any suspicious incident, involving a public water system in accordance with the F.A.C. Rule 62-555.350(10).

#### **E. Monitoring Provisions**

1. Permittee shall follow the guidelines of Chapters 62-550, 62-555, and 62-560, F.A.C., regarding public drinking water system standards, monitoring, reporting, permitting, construction, and operation.

This facility is a Community Water System as defined in F.A.C. Rule 62-550.200(12) and shall comply with the applicable chemical, radiological, lead and copper, and bacteriological monitoring requirements of F.A.C. Rule 62-550. Such requirements shall be initiated within the quarter that the water treatment facility is placed into service (i.e. January—March or April—June, the preceding are examples of quarters) and the results submitted to the Department.

2. The water treatment plant shall maintain throughout the distribution system a minimum continuous and effective free chlorine residual of 0.2 mg/l or its equivalent OR a minimum combined chlorine residual of 0.6 mg/l or its equivalent. A minimum system pressure of 20 psi must be maintained throughout the system. Also, safety equipment shall be provided and located outside of chlorine room.

## **F. Clearance Requirements**

1. The permittee must instruct the engineer of record to request system clearance from the Department within sixty (60) days of completion of construction, testing and disinfecting the system. Bacteriological test results shall be considered unacceptable if the test were completed more than 60 days before the Department received the results. [F.A.C. Rule 62-555.340(2)(c)]
2. Permitted construction or alteration of a public water system may not be placed into service until a letter of clearance has been issued by this Department. [F.A.C. Rule 62-555.345]
3. Prior to placing this project into service, Permittee shall submit, at a minimum, all of the following to the Department for evaluation and approval for operation, as provided in Rules 62-555.340 and 62-555.345, F.A.C.:
  - a. The engineer's *Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components Into Operation* {DEP Form 62-555.900(9)};
  - b. Certified record drawings, if there are any changes noted for the permitted project.
  - c. Two consecutive days of satisfactory bacteriological analytical results
  - d. Copy of a satisfactory pressure test of the process piping performed in accordance with AWWA Standards. [F.A.C. Rule 62-555.320(21)(a)(1)]
  - e. Satisfactory chemical clearance, to include Primary Inorganic Contaminants, Secondary Contaminants, Volatile Organic Contaminants (VOCs), Synthetic Organic Contaminants (SOCs, aka Pesticides and PCBs), Radionuclides (Gross Alpha, Radium-226, Radium-228, Uranium), Alkalinity, Dissolved Iron, Dissolved Oxygen, pH, Total Sulfide, and Turbidity results from a certified laboratory.

In order to facilitate the issuance of a letter of clearance, the Department requests that all of the above information be submitted as one package.

APPENDIX G

# RESOLUTION NO. R 2021-277 AND INTERLOCAL AGREEMENT BETWEEN BROWARD COUNTY AND TOWN OF DAVIE FOR COST SHARE SUPPORT OF A WATER CONSERVATION INCENTIVES PROGRAM

RESOLUTION NO. R 2021-227

A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, AUTHORIZING THE MAYOR TO SIGN AN INTERLOCAL AGREEMENT BETWEEN BROWARD COUNTY AND THE TOWN OF DAVIE TO PROVIDE COST SHARE SUPPORT OF A WATER CONSERVATION INCENTIVES PROGRAM; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Town of Davie wishes to continue to participate in the Water Conservation Incentives Program being coordinated by Broward County;

WHEREAS, Broward County will conduct specific media promotion, outreach, administrative and other activities associated with fostering a county-wide water conservation ethic; and

WHEREAS, the Town of Davie and Broward County mutually agree to the terms outlined in the Interlocal Agreement (Exhibit "A").

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF DAVIE, FLORIDA THAT:

Section 1. Legislative Findings/Recitals. The above recitals are hereby adopted by the Town of Davie as its legislative findings relative to the subjects and matters set forth in this Resolution.

Section 2. The Town Council of the Town of Davie does hereby authorize the Mayor to enter into an Interlocal Agreement with Broward County which is attached hereto as Exhibit "A".

Section 3. Expenditures will be in excess of \$25,000 per year and on an as-needed basis from the adopted budget of the Utilities Department.

Section 4. The term of this agreement is for five (5) years at an annual cost not to exceed \$26,882.44.

Section 5. Conflict. All resolutions or parts of resolutions in conflict with any of the provisions of this Resolution are hereby repealed.


Section 6. Severability. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, it is the intent of the Town Council that such invalidity shall not affect other provisions or applications of the Resolution which can be given effect without the invalid provision or application and, to this end, the provisions of this Resolution are declared severable.

Section 7. Effective Date. This Resolution shall take effect immediately upon adoption.

PASSED AND ADOPTED THIS 28<sup>TH</sup> DAY OF JULY, 2021.

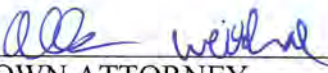
  
MAYOR/COUNCILMEMBER

ATTEST:

  
TOWN CLERK

APPROVED THIS 28<sup>TH</sup> DAY OF JULY, 2021.

Approved as to Form and Legality:

  
TOWN ATTORNEY



## **INTERLOCAL AGREEMENT**

**Between**

**BROWARD COUNTY**

**and**

**TOWN OF DAVIE**

**for**

### **COST SHARE SUPPORT OF A WATER CONSERVATION INCENTIVES PROGRAM**

This Interlocal Agreement (the "Agreement") is made and entered into by and between Broward County, a political subdivision of the State of Florida ("County"), and The Town of Davie, its successors and assigns, hereinafter referred to as "Partner," collectively the "Parties." Collectively "County" and/or "Partner" will be referred to as the "Party" or "Parties."

#### **RECITALS**

- A. County-wide consumptive use water demands are projected to increase by as much as 45 million gallons per day by the year 2040 based on South Florida Water Management District's Lower East Coast Water Supply Plan projections for public water supply raw water demands;
- B. The county-wide Integrated Water Resource Plan seeks to optimize the beneficial uses of local water resources by making our water resources go further;
- C. In May 2008, the Broward Water Resources Task Force (Task Force) was created through resolutions of the Broward County Board of County Commissioners, South Florida Water Management District, and Broward League of Cities to identify and evaluate potential regional and subregional water supply projects and water conservation opportunities;
- D. The Task Force recognized that water conservation and incentive programs offer the lowest cost means of generating the additional water needed to meet the region's projected water demands;
- E. Since its formation in 2011, the Broward Water Partnership (aka Conservation Pays) and the regional Water Conservation Incentives Program have experienced many successes, and therefore the Parties now desire to renew this Agreement in furtherance of shared water conservation goals, regional water conservation strategies, and conservation activities reflected in consumptive use permit requirements.

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

#### ARTICLE 1. DEFINITIONS

- 1.1. Board. The Board of County Commissioners of Broward County, Florida.
- 1.2. Contract Administrator. Director of the Broward County Environmental Planning and Community Resilience Division or such person's successor as designated by County in writing.
- 1.3. County. Broward County, Florida, a political subdivision of the State of Florida.
- 1.4. Project. The project or projects set forth in Article 2 hereof, and Exhibit A.

#### ARTICLE 2. SCOPE OF SERVICES

- 2.1. Scope of Services. The Parties shall perform all work specified in this Agreement including the work specified in Exhibit A ("Scope of Services"). Unless stated otherwise in this Agreement, the work required of the Parties includes all labor, materials and tasks, whether or not enumerated in the Agreement, that are such an inseparable part of the work expressly stated in the Agreement that exclusion thereof would render any Party's performance impractical, illogical, or unconscionable.

#### ARTICLE 3. FINANCIAL CONTRIBUTION

- 3.1 County agrees to provide a total not to exceed amount of \$125,000.00 annually towards meeting all obligations amongst the Parties as outlined in Exhibit A.
- 3.2 Partner agrees to pay the maximum amounts not to exceed described in Exhibit B, including i) an annual base cost for media outreach and administration of \$ 15,014.04, subject to an annual cost-of-living adjustment of 3% in Years 2 through 5 of the Agreement, and ii) reimbursement of incentives/rebates costs actually incurred by County.
- 3.3 County may invoice Partner within 45 days of the Effective Date and annually thereafter for the amounts set forth in Exhibit B. Payment is due no later than 45 days from invoice. Payment shall be made to County at:

Broward County Board of County Commissioners  
Director, Environmental Planning and Community Resilience Division  
115 South Andrews Avenue, Room 329-H  
Fort Lauderdale, Florida 33301

#### ARTICLE 4. TERM AND TIME OF AGREEMENT

- 4.1 Term. The term of this Agreement shall begin on October 1, 2021 (the "Effective Date"). The term of the Agreement shall be for a period of five (5) years from the Effective Date.
- 4.2 Extensions. No extensions of this Agreement are anticipated. In the event that expiration of this Agreement would result in a gap in the provision of services necessary for the ongoing operations of the County, then this Agreement may be extended, at the sole discretion of the Purchasing Director, on the same terms and conditions by the Purchasing Director for period(s) not to exceed six (6) months in the aggregate.
- 4.3 Fiscal Year. The continuation of this Agreement beyond the end of any Party's fiscal year shall be subject to both the appropriation and the availability of funds, in accordance with Chapters 129 and 166, Florida Statutes.
- 4.4 Force and Effect. All duties, obligations, and responsibilities of the Parties required by this Agreement shall remain in full force and effect throughout the term of this Agreement, as set forth above, unless written notice of termination by the County or any of the Partners is provided pursuant to the Notices provision.
- 4.5 Time of the Essence. Time is of the essence for all performance required under this Agreement.

#### ARTICLE 5. TERMINATION

- 5.1. This Agreement may be terminated for cause by the aggrieved Party if the Party in breach has not corrected the breach within ten (10) days after receipt of written notice from the aggrieved Party identifying the breach. This Agreement may also be terminated for convenience by the Board. Termination for convenience by the Board shall be effective on the termination date stated in written notice provided by County, which termination date shall be not less than thirty (30) days after the date of such written notice. Unless otherwise stated in this Agreement, if this Agreement was approved by Board action, termination for cause by County must be by action of the Board or the County Administrator; in all other instances termination for cause may be effected by the County Administrator, the County representative expressly authorized under this Agreement, or the County representative (including any successor) who executed the Agreement on behalf of County. This Agreement may also be terminated by the County Administrator upon such notice as the County Administrator deems appropriate under the circumstances if the County Administrator determines that termination is necessary to protect the public health, safety, or welfare. If County erroneously, improperly, or unjustifiably terminates for cause, such termination shall be deemed a termination for convenience and shall be effective thirty (30) days after such notice of termination for cause was provided.

- 5.2. Termination of this Agreement for cause shall include, but not be limited to, negligent, or intentional acts, repeated submission for payment of false or incorrect bills or invoices, failure to suitably perform the work, failure to continuously perform the work in a manner calculated to meet or accomplish the objectives as set forth in this Agreement, or multiple breaches of this Agreement which has a material adverse effect on the efficient administration of the Project notwithstanding whether any such breach was previously waived or cured.
- 5.3. Notice of termination shall be provided in accordance with the "Notices" section of this Agreement except that notice of termination by County Administrator which County Administrator deems necessary to protect the public health, safety, or welfare may be verbal notice which shall be promptly confirmed in writing in accordance with the "Notices" section of this Agreement.
- 5.4. In the event this Agreement is terminated for convenience, County shall be paid for any services properly performed to the date the Agreement is terminated; however, upon being notified of Partner's election to terminate, County shall refrain from performing further services or incurring additional expenses under the terms of this Agreement. Partner acknowledges that it has received good, valuable, and sufficient consideration for County's right to terminate this Agreement for convenience in the form of County's obligation to provide advance notice to Partner of such termination in accordance with Section.

#### **ARTICLE 6. GOVERNMENTAL IMMUNITY AND LIABILITY PROTECTION**

- 6.1 Nothing herein is intended to serve as a waiver of sovereign immunity by any Party nor shall any term included herein be construed as consent to be sued by third Parties in any matter arising out of this Agreement or any other contract. County and Partner, to the extent that they are state agencies or political subdivisions as defined in Chapter 768.28, Florida Statutes, agree to be fully responsible for the acts and omissions of its agents or employees to the extent permitted by law.
- 6.2 Partner is an entity subject to Section 768.28, Florida Statutes, and Partner shall furnish Contract Administrator with written verification of liability protection in accordance with state law prior to final execution of said Agreement.

#### **ARTICLE 7. MISCELLANEOUS**

- 7.1 Contract Administrator Authority. The Contract Administrator is authorized to coordinate and communicate with Partner and Consultants to manage and supervise the performance of this Agreement. Unless expressly stated otherwise in this Agreement or otherwise set forth in an applicable provision of the Broward County Procurement Code, Broward County Code of Ordinances, or Broward County Administrative Code, the Contract Administrator may exercise any ministerial authority in connection with the day-to-day management of this Agreement. The Contract

Administrator may approve in writing minor modifications to the Scope of Services provided that such modifications do not increase the total cost to County or waive any rights of County.

7.2 Assignment. Neither this Agreement nor any interest herein shall be assigned, transferred, or encumbered by either Party. If Partner violates this provision, County shall have the right to immediately terminate this Agreement.

7.3 Public Records. To the extent either Party is acting on behalf of the other as stated in Section 119.0701, Florida Statutes, each Party shall:

7.3.1. Keep and maintain public records required to perform the Services;

7.3.2. Upon request, provide the other Party with a copy of the requested records or allow the records to be inspected or copied within a reasonable time and at a cost that does not exceed that provided in Chapter 119, Florida Statutes, or as otherwise provided by law;

7.3.3. Ensure that public records that are exempt or confidential and exempt from public record requirements are not disclosed except as authorized by law for the duration of this Agreement and following completion or termination of this Agreement; and

7.3.4. Upon completion or termination of this Agreement, each Party shall keep and maintain all public records related to this Agreement, except as required to comply with paragraph 6.2, and shall destroy any duplicate public records that are exempt or confidential and exempt. All records stored electronically must be provided to County upon request in a format that is compatible with the information technology systems of County.

Any material a Party contends constitutes or contains trade secrets or is otherwise exempt from production under Florida public records laws (including Chapter 119, Florida Statutes) ("Trade Secret Materials") must be separately submitted and conspicuously labeled "EXEMPT FROM PUBLIC RECORD PRODUCTION – TRADE SECRET." In addition, the Party providing the material must, simultaneous with the submission of any Trade Secret Materials, provide a sworn affidavit from a person with personal knowledge attesting that the Trade Secret Materials constitute trade secrets under Section 812.081, Florida Statutes, and stating the factual basis for same. If a third party submits a request to either Party for records designated as Trade Secret Materials, that Party shall refrain from disclosing the Trade Secret Materials, unless otherwise ordered by a court of competent jurisdiction or authorized in writing by the Party claiming the exemption. Neither Party waives any defense of sovereign immunity or increases the limits of its liability by entering into this Agreement, and each Party shall be liable for its own negligence and does not assume any liability for the other Party's negligence

relating to the nondisclosure of any Trade Secret Materials in response to a records request by a third party.

IF PARTNER HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO PARTNER'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (954) 519-1466, SMOLLOY@BROWARD.ORG, 115 S. ANDREWS AVE., SUITE 329H, FORT LAUDERDALE, FLORIDA 33301.

- 7.4 Materiality and Waiver of Breach. Each requirement, duty, and obligation set forth in this Agreement was bargained for at arm's-length and is agreed to by the Parties. Each requirement, duty, and obligation set forth in this Agreement is substantial and important to the formation of this Agreement, and each is, therefore, a material term of this Agreement. Neither Party's failure to enforce any provision of this Agreement shall be deemed a waiver of such provision or modification of this Agreement. A waiver of any breach of a provision of this Agreement shall not be deemed a waiver of any subsequent breach and shall not be construed to be a modification of the terms of this Agreement. To be effective, any waiver must be in writing signed by an authorized signatory of the Party granting the waiver.
- 7.5 Notices. In order for notice to a Party to be effective under this Agreement, notice must be sent via U.S. first-class mail with a contemporaneous copy via e-mail to the addresses listed below and shall be effective upon mailing. The addresses for notice shall remain as set forth herein unless and until changed by providing notice of such change.

NOTICE TO COUNTY:

Environmental Protection and Growth Management Department  
Broward County Environmental Planning and Community Resilience Division  
115 South Andrews Avenue, Room 329H  
Fort Lauderdale, Florida 33301  
Email address: smalloy@broward.org

With copy to:

Broward County Administrator  
115 South Andrews Avenue, Suite 409  
Fort Lauderdale, Florida 33301

NOTICE TO PARTNER:

Town of Davie  
Renuka Bajnath, Utilities Director  
7351 SW 30 St.  
Davie, FL 33314

- 7.6 Compliance with Laws. Each Party shall comply with all federal, state, and local laws, codes, ordinances, rules, and regulations in performing its duties, responsibilities, and obligations under this Agreement.
- 7.7 Third Party Beneficiaries. The Parties acknowledge that there are no third party beneficiaries under this Agreement.
- 7.8 Severability. In the event any part of this Agreement is found to be unenforceable by any court of competent jurisdiction, that part shall be deemed severed from this Agreement and the balance of this Agreement shall remain in full force and effect.
- 7.9 Joint Preparation. This Agreement has been jointly prepared by the Parties hereto, and shall not be construed more strictly against either Party.
- 7.10 Priority of Provisions. If there is a conflict or inconsistency between any term, statement, requirement, or provision of any exhibit attached hereto, any document or events referred to herein, or any document incorporated into this Agreement by reference and a term, statement, requirement, or provision of Articles 1 through 7 of this Agreement, the term, statement, requirement, or provision contained in Articles 1 through 7 shall prevail and be given effect.
- 7.11 Headings and Interpretation. The headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement. All personal pronouns used in this Agreement shall include the other gender, and the singular shall include the plural, and vice versa, unless the context otherwise requires. Terms such as "herein," "hereof," "hereunder," and "hereinafter," refer to this Agreement as a whole and not to any particular sentence, paragraph, or section where they appear, unless the context otherwise requires.
- 7.12 Governing Law, Venue and Waiver of Jury Trial. This Agreement shall be interpreted and construed in accordance with, and governed by, the laws of the state of Florida. The Parties agree that the exclusive venue for any lawsuit arising from, related to, or in connection with this Agreement shall be in the state courts of the Seventeenth Judicial Circuit in and for Broward County, Florida. If any claim arising from, related to, or in connection with this Agreement must be litigated in federal court, the Parties agree that the exclusive venue for any such lawsuit shall be in the United States District Court or United States Bankruptcy Court for the Southern District of Florida. **BY ENTERING INTO THIS AGREEMENT, PARTNER AND COUNTY HEREBY EXPRESSLY WAIVE ANY AND ALL RIGHTS EITHER PARTY MAY HAVE TO A TRIAL BY JURY OF ANY RELATED TO THIS AGREEMENT. IF A PARTY FAILS TO WITHDRAW A REQUEST FOR A JURY TRIAL IN A LAWSUIT ARISING OUT OF THIS AGREEMENT AFTER WRITTEN NOTICE BY THE OTHER PARTY OF VIOLATION OF THIS SECTION, THE PARTY MAKING THE REQUEST FOR JURY TRIAL SHALL BE LIABLE FOR THE REASONABLE ATTORNEYS' FEES AND COSTS OF THE OTHER PARTY IN CONTESTING THE REQUEST FOR JURY TRIAL, AND SUCH AMOUNTS SHALL BE AWARDED BY THE COURT IN ADJUDICATING THE MOTION.**

- 7.13 Amendments. No modification, amendment, or alteration in the terms or conditions contained herein shall be effective unless contained in a written document prepared with the same or similar formality as this Agreement and executed by the Board and Partner. Further, Partner acknowledges and agrees that the Contract Administrator has no authority to make changes that would increase, decrease, or otherwise modify the Scope of Services to be provided under this Agreement.
- 7.14 Prior Agreements. This Agreement represents the final and complete understanding of the Parties regarding the subject matter hereof and supersedes all prior and contemporaneous negotiations and discussions regarding that subject matter. There is no commitment, agreement, or understanding concerning the subject matter of this Agreement that is not contained in this written document.
- 7.15 Incorporation by Reference. The truth and accuracy of each "Whereas" clause set forth above is acknowledged by the Parties. The attached Exhibit A and Exhibit B are incorporated into and made a part of this Agreement.
- 7.16 Representation of Authority. Each individual executing this Agreement on behalf of a Party hereto does hereby represent and warrant that he or she is, on the date he or she signs this Agreement, duly authorized by all necessary and appropriate action to execute this Agreement on behalf of such Party.
- 7.17 Force Majeure. If the performance of this Agreement, or any obligation hereunder, is prevented by reason of hurricane, earthquake, or other casualty caused by nature, or by labor strike, war, or by a law, order, proclamation, regulation, or ordinance of any governmental agency, the Party so affected, upon giving prompt notice to the other Party, shall be excused from such performance to the extent of such prevention, provided that the Party so affected shall first have taken reasonable steps to avoid and remove such cause of nonperformance and shall continue to take reasonable steps to avoid and remove such cause, and shall promptly notify the other Party in writing and resume performance hereunder whenever and to the full extent such causes are removed. However, if such nonperformance exceeds sixty (60) days, the Party that is not prevented from performance by the force majeure event shall have the right to immediately terminate this Agreement upon written notice to the Party so affected. This Section shall not supersede or prevent the exercise of any right the Parties may otherwise have to terminate this Agreement.
- 7.18 Counterparts and Multiple Originals. This Agreement may be executed in multiple originals, and may be executed in counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.
- 7.19 Use of County Logo. Contractor shall not use County's name, logo, or otherwise refer to this Agreement in any marketing or publicity materials without the prior written consent of County.

- 7.20 Independent Contractors. The Parties are independent contractors, and nothing in this Agreement shall constitute or create a legal entity, partnership, joint venture, or any other relationship between the Parties. In providing Services, neither Party nor their agents shall act as officers, employees, or agents of the other. Neither Party shall have the right to bind the other Party to any obligation not expressly undertaken by this Agreement.
- 7.21 Regulatory Capacity. Notwithstanding the fact that County is a political subdivision with certain regulatory authority, County's performance under this Agreement is as a Party to this Agreement and not in its regulatory capacity. If County exercises its regulatory authority, the exercise of such authority and the enforcement of any rules, regulation, laws, and ordinances shall have occurred pursuant to County's regulatory authority as a governmental body separate and apart from this Agreement, and shall not be attributable in any manner to County as a Party to this Agreement.

(The remainder of this page is intentionally left blank.)

IN WITNESS WHEREOF, the Parties hereto have made and executed this Agreement: BROWARD County through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Mayor or Vice-Mayor, authorized to execute same by Board action on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, and Partner, signing by and through its \_\_\_\_\_, duly authorized to execute same.

COUNTY

ATTEST:

BROWARD COUNTY, by and through its Board of County Commissioners

\_\_\_\_\_  
Broward County Administrator, as  
Ex-officio Clerk of the Broward County  
Board of County Commissioners

By: \_\_\_\_\_  
\_\_\_\_ day of \_\_\_\_\_, 20\_\_

Approved as to form by  
Andrew J. Meyers  
Broward County Attorney  
Governmental Center, Suite 423  
115 South Andrews Avenue  
Fort Lauderdale, Florida 33301  
Telephone: (954) 357-7600  
Telecopier: (954) 357-7641

By: \_\_\_\_\_  
Deanna Kalil (Date)  
Assistant County Attorney

By: \_\_\_\_\_  
Michael C. Owens (Date)  
Senior County Attorney


DK\gmb  
RENEWAL ConservationPays ILA.docx  
05/12/2021  
#60057


INTERLOCAL AGREEMENT BETWEEN BROWARD COUNTY AND PARTNER TO PROVIDE COST SHARE SUPPORT OF A WATER CONSERVATION INCENTIVES PROGRAM

TOWN OF DAVIE

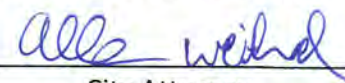
Attest:

  
Clerk

By   
Mayor-Commissioner  
28 day of July, 2021

By   
Manager  
28 day of July, 2021

APPROVED AS TO FORM:

  
City Attorney

**EXHIBIT A  
SCOPE OF SERVICES**

**Broward Community  
Water Conservation and Incentives Program**

**1. INTRODUCTION**

Water plays a critical role in South Florida and will continue to directly influence the future sustainability of Broward County's economy, environment, and quality of life. Future water demands will continue to be influenced by population growth, rates of per capita consumption, and variable climatologic conditions.

In 2007, the Regional Water Availability (RWA) Rule was adopted by the South Florida Water Management District to ensure the preservation of regional water resources in support of Everglades restoration. The RWA Rule limits future withdrawals from the Biscayne Aquifer, currently our primary source of drinking water, thereby requiring the development of alternative water supplies to meet growing urban demands for water. Although a number of alternative water supply projects are under development and regional strategies are being explored, water conservation has been repeatedly identified as a strategy warranting aggressive implementation.

In May 2008, the Broward Water Resources Task Force ("Task Force") was created to identify and evaluate potential regional and sub-regional water supply projects and water conservation opportunities. The Task Force recognized that water conservation offers the lowest cost means of generating the additional water needed to meet the region's projected water demands. In June 2010, the Task Force completed its report and included several recommendations for immediate implementation pertaining to regional water conservation efforts. A key recommendation advanced by the Task Force and supported by resolution of the Broward County Board of County Commissioners and the Broward League of Cities is the establishment of a county-wide water conservation and incentives program with the purpose of delivering unified water conservation messaging, information, and services to benefit all Broward county residents and water suppliers.

In response, in 2011, the Broward Water Partnership was formed, with water utilities committing resources to fund a regional rebate and incentives program as well as the centralized administration of the program by Broward County's Environmental Planning and Community Resilience Division, and Broward County committing funds for consultant services to aid in program branding, marketing, outreach and implementation. This program was subsequently branded Conservation Pays.

The overall objectives of the Conservation Pays Program (the "Program") are to encourage residents and businesses in Broward County to adopt an enduring water conservation ethic that supports long-term water resource sustainability and to achieve

permanent and measurable water savings through replacement of low efficiency plumbing fixtures with high efficiency models.

There are two principal components to the Program:

- Implementation of an aggressive media campaign to promote the overall need for water conservation, provide residents and businesses with information on ways to reduce their water consumption, and promote the availability of program resources.
- Provision of incentives for retrofitting existing fixtures with new, high efficiency plumbing fixtures through offers of free water-saving fixtures and rebates. Incentives and rebates will be provided for such retrofitting to include high efficiency toilets, pre-rinse spray valves, faucets, aerators, and showerheads or other mutually agreed upon combination of water-saving fixtures of equal value.

## **2. PROGRAM DESCRIPTION**

The Conservation Pays Program is a coordinated county-wide program, with uniform branding that distinguishes this collaborative Partnership. Year-round messaging promotes water conservation and is heightened during dry months and periods of water shortage. Promotion and coordination of rebates and incentives is coordinated by the County, with an annual goal of distributing 2,000 toilet rebates, along with production of promotional materials, articles, a recognition program, and community outreach.

The proposed scope of work builds upon achievements already realized through implementation of the Conservation Pays program during its initial five-year period. The scope of work in Section 3, below, details the program elements, obligations, and commitments of the both Parties (County and Partners) in the delivery of the water conservation and incentives program within Partner jurisdictions in Broward County. This scope of work covers five years of full program implementation.

The County proposes to provide these services to achieve water conservation, cost savings, and greater environmental stewardship within residences and businesses throughout the County. This effort consists of both a technical approach, designed to replace water fixtures with higher efficiency models and reduce demand throughout residences and business operations, thereby resulting in documented water and cost savings, and supporting energy conservation; and, an education and outreach approach, aimed at championing the overall need to conserve water. The overall effort will be coordinated by the County, while individual Partner participation will be required for complete program implementation.

### 3. SCOPE OF WORK

The Scope of Work in support of the Partnership Agreement is undertaken through the following series of tasks.

#### COUNTY RESPONSIBILITIES:

**Task 1 Administration of the Program.** The County will provide overall administration of the Agreement, including financial and annual reporting.

The County will coordinate at least one meeting annually with Partners to present annual Program achievements, review administrative or logistical Program issues, and consider new Program promotions and opportunities for improvement.

The County will provide reports to Partners as requested on rebate expenditures, device deliveries, and water savings.

An Annual Report will outline the performance of the program and the meeting of goals and objectives. It will include a comparison of planned vs. implemented measures, communications tools, marketing efforts (including media buys), an analysis of marketing efforts relative to rebate activities, a report on leveraged funds, a summary of Program awards, identification of Program needs, and opportunities, and recommendations going forward. The report will also address any unanticipated delays and issues that necessitate modification of the Program. The County shall provide the Annual Report within one month following the completion of the County's fiscal year.

**Task 2 Procurement and management of professional services to assist with Program development and implementation.** The County will procure consulting services to assist in the overall development and implementation of an annual media and outreach campaign to get the water conservation message out, promote the Program, and connect conservation needs to climate change pressures on our water resources. For cost-effectiveness, the campaign will be designed to integrate as much as possible with existing regional outreach initiatives and media sources. The consultant, under direction of the County, will work with Partners to complete the following tasks, including, but not limited to: develop Program branding, create a Program website, develop Public Service Announcements ("PSAs") for broadcast media, prepare newsprint advertisements, arrange media buys, develop promotional articles, produce PSAs for viewing on public access channels and the County's video-on-demand service, design print materials, and develop promotional concepts.

**Task 3 Manage and promote media campaign for water conservation outreach and Program marketing.** The County will develop and promote an annual media

campaign designed to impart water conservation messages to residents (brochures, website, etc.); identify opportunities to distribute water-saving information and Program promotional materials to communities, businesses, schools and other venues of interest; and develop and deliver educational materials on the need to conserve water and ways to save water to residents through various media. Residents, employees, businesses, homeowner associations and other organizations that include utility customers are the targeted audiences. Categories of media to be considered in the promotion of the Program include pieces for written publications (newspapers, trade publications, newsletters, brochures), broadcast media (television, radio, automated phone lines), social media, and mobile device compatible websites. Promotion of the water conservation and incentives initiative will also occur through interaction with consumer groups, the plumbing industry, and fixture vendors. Opportunities to highlight results and publicize successes will be identified by the County.

**Task 4**      **Communications coordination.** The County will work with Partners to ensure linking of resources and communications among the network of Partners. A database will be created that identifies Partners, Program services, and educational resources. Program materials (brochures, fliers, posters) will be provided in electronic form for reproduction by Partners. A detailed list of preferred educational resources will be generated and posted on the main Program website (to be hosted by County) with all information to be coordinated and cross-posted.

**Task 5**      **Rebate and incentives program.** The County will coordinate with device vendors to promote the program and eligible devices; manage and process rebates; coordinate the purchase of conservation devices for exchange and giveaway; coordinate with Partners to identify appropriate points of distribution; promote both residential and commercial opportunities; provide for full accounting/tracking; and, provide additional outreach/promotion where demand may be less than availability.

The County will work with residents to guide them through the incentives process; work with regional vendors to ensure the availability of the desired retrofit fixtures and establish agreements for bulk purchasing; establish working relationships with the plumbing industry and fixture vendors; receive and evaluate resident applications for eligibility for replacement and rebates; manage the acquisition and distribution of fixtures to be provided to residents free of charge; manage the collection and disposal of replaced fixtures; manage the preparation and issuance of rebate checks; collect and analyze resident survey data; and evaluate the success of the incentives initiative.

**Task 6**      **Development of an awards/recognition program.** The County will coordinate with Partners to develop an awards/recognition program that quantifies and

promotes water savings achieved in homes and businesses where new water conservation devices are installed.

- Task 7**      **Leverage funds and resources.** The County will seek to leverage dollars and resources by pursuing additional funds and support from local, state, and national sources, including, but not limited to SFWMD's Local Cooperative Funding Program, Water Sense Partnership (EPA), and local groups. In addition, the County will solicit support from sponsors through the County's Advantage Marketing program.

#### **PARTNER(S) RESPONSIBILITIES**

- Task 8**      **Participate in coordination meetings.** The Partner will participate in coordination meetings and provide timely review and feedback on any Program products or deliverables. The Partner will identify a designated point of Partner contact. The Partner will assist in refining Program elements and expenditure priorities, as needed; develop controls and measures of success for the Program; and, provide final oversight of Program operations within the Partner's jurisdiction.
- Task 9**      **Promotion.** The Partner will work with the County to identify points of distribution and promotional outlets available to Partner to promote the Program and services within the Partner's jurisdiction and will actively coordinate with County on program promotions utilizing municipal media outlets and communications.

#### **4. PAYMENT AND DELIVERABLES SCHEDULE**

Payments for services provided by the County will be provided by the Partner according to the Exhibit B, Payment Schedule. Participating entities will not front the cost of individual rebates and/or devices but will be invoiced by the County for actual rebates and/or devices issued within their service areas within a given year.

This Agreement includes a 5-year term for Program delivery.

**EXHIBIT B**  
**PAYMENT SCHEDULE**  
**Town of Davie**

Total consideration for this Agreement is subject to multi-year funding allocations, and funding for each applicable fiscal year of this Agreement will be subject to County and Partner budgetary appropriations. In the event the County or Partner does not approve funding for any subsequent fiscal year, this Agreement shall terminate upon expenditure of the current funding, notwithstanding other provisions in this Agreement to the contrary. Annual invoices shall be issued by August 20<sup>th</sup>, payment to be received by no later than September 30<sup>th</sup>. Partner will not front the cost of individual rebates and devices, but will be invoiced up to the maximum not to exceed costs exhibited in the chart below, by the County for actual rebates and devices issued within their service areas within a given year.

Year	Incentives/ rebates cost	Media Outreach/ Administration cost	Maximum Not to Exceed Partner's Cost	Invoice submitted by:
1	\$ 9,984.00	\$ 15,014.04	\$ 24,998.04	August 20, 2022
2	\$ 9,984.00	\$ 15,464.46	\$ 25,448.46	August 20, 2023
3	\$ 9,984.00	\$ 15,928.40	\$ 25,912.40	August 20, 2024
4	\$ 9,984.00	\$ 16,406.25	\$ 26,390.25	August 20, 2025
5	\$ 9,984.00	\$ 16,898.44	\$ 26,882.44	August 20, 2026

**TOWN OF DAVIE  
TOWN COUNCIL AGENDA REPORT**

Item Number: 43.

**To:** Mayor and Councilmembers  
**From:** Renuka Mohammed, Utilities  
**Prepared By:** Heidi G. Klemm, Utilities - Utilities  
**Subject:** Resolution  
**Affected District:** Town Wide  
**Item Request:** Schedule for Council Meeting

**Title of Agenda Item:** **INTERLOCAL AGREEMENT - A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, AUTHORIZING THE MAYOR TO SIGN AN INTERLOCAL AGREEMENT BETWEEN BROWARD COUNTY AND THE TOWN OF DAVIE TO PROVIDE COST SHARE SUPPORT OF A WATER CONSERVATION INCENTIVES PROGRAM; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.**

**Executive Summary:** The Utilities Department is requesting Town Council approval for the Mayor to sign the interlocal agreement with Broward County to provide cost share support of a water conservation incentives program.

**Key Points:**

- The Town of Davie has been participating in the cost share water conservation incentives program for the last ten (10).
- The interlocal agreement with Broward County is expiring and we are requesting Town Council approval of the new agreement which will be in effect through 2026.
- The estimated annual cost for the Towns' participation is not to exceed \$26,882.44.
- Broward County administers the program and provides media promotion, outreach, water conservation products, toilet rebates and other administrative activities associated with the program.

**Previous Actions:** R2011-120, R2016-145

**Concurrences:** The agreement was reviewed and approved by the Town Attorney.

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**Fiscal Impact:**

Has request been budgeted? Yes  
If yes expected cost: Dependent on usage and within established budget  
Account name and number: Various Departmental accounts of using departments  
If no, amount needed:  
Account name funds will be appropriated from  
Additional Comments

---

**Recommendation:** Motion to approve

---

**Strategic Goals This Item Supports:**

Commitment to Customer Satisfaction, Dedication to Excellence in Service Delivery, Nurturing the health, safety, and welfare of the community

**ATTACHMENTS:**

File Name	Description
<input type="checkbox"/> Water_Consevation.docx	Resolution
<input type="checkbox"/> Davie_RENEWAL_ConsevationPays_ILA(1).pdf	Interlocal Agreement

APPENDIX H

# PROJECT MEMO – POPULATION PROJECTIONS



TOWN OF DAVIE

Population Projections For Use in the Water Supply Facilities Work Plan 2025 Update

Project No.: 203966
Date: December 4, 2025
Prepared By: Karen Liang, PE, CFM; Evan Greenberg, PE
Reviewed By: Angelica Gregory, Ph.D, PE
Subject: Population Projections

This document is released for the purpose of information exchange review and planning only under the authority of M. Angelica Gregory, December 3, 2025, Florida PE No. 75583.

1.0 BACKGROUND AND PURPOSE

The Town of Davie engaged Carollo Engineers, Inc (Carollo) to update the Town’s Water Supply Facilities Work Plan (WSFWP). This memorandum documents the analysis and results from the population projection effort completed for the project.

2.0 POPULATION PROJECTIONS

Davie has population of approximately 112,052 in 2024 and is expected to continue growing modestly throughout the forecast period. The Town is known for its unique blend of suburban and rural character, featuring large areas of green open space, equestrian trails, and a western-themed district, while also serving as a major educational hub with several colleges and universities. Land use in Davie is diverse: about half of the Town is allocated to residential uses, with significant areas also dedicated to agriculture, commercial, industrial, and community facilities. While much of the Town is well developed, Davie maintains a balance between suburban neighborhoods and preserved rural areas. Recent and planned developments reflect a trend toward higher-density, mixed-use construction, particularly near major transportation corridors and employment centers while preserving Davie’s distinctive open space and rural atmosphere.

Currently, the Town of Davie provides potable water utility service to approximately one-third of its total area. To assess the population growth within this service area, an analysis was conducted focusing on the portion of the Town that receives water service. The boundaries of this service area were delineated as a GIS shapefile based on the 2024 LEC report. The total square footage of the service area was then calculated using GIS tools, with the results summarized in Table 2.1 below.

Table 2.1 Town of Davie Service Area

Table with 4 columns: Municipality, Total Area (sqft), Area Served by Town of Davie (sqft), % of Municipality Served. Row 1: DAVIE, 991,435,984, 310,659,969, 31%

A steady growth can be observed in the historic data. Table 2.2 summarizes the US Census Bureau population estimates of the Town of Davie for the past 5 years.

Table 2.2 Town of Davie Historic Population

Year	Population
2020	106,032
2021	105,898
2022	107,745
2023	110,056
2024	112,052

Source : US Census Bureau population data published in May 2025.

To project future growth, population estimates were calculated using the 2024 Broward County Population Forecast and Allocation Model (PFAM) data. PFAM data was selected as the most accurate population projection data because it allocates population forecasts, provided by the University of Florida’s Bureau of Economic and Business Research (BEBR), to both Traffic Analysis Zones (TAZ) and municipalities based on expected housing demand, existing development patterns, and each zone’s capacity to absorb additional housing units. Redevelopment input from the municipalities was also considered. TAZs are created by the Broward County Metropolitan Planning Organization and are widely used by planners and demographers for analyzing and projecting population, households, employment, and other key socioeconomic variables at a granular level. This approach ensures that forecasts are responsive to both current land use policies and anticipated changes in development trends. A graphical presentation of the TAZs that the service area covers is presented in Figure 2.1.

The PFAM provides population and household forecasts for each TAZ in five-year increments, considering factors such as land use, redevelopment potential, and changes in household size distribution. To calculate the population growth within the service area, growth within each TAZ was calculated based on residential parcels count. A parcels GIS shapefile was obtained from the FDOT and assigned to the TAZs using GIS process. Then, the parcels shapefile was further processed to count the residential parcels within and outside of the service area. Using this result and supplemented with manual verification, a percentage of population served in each TAZ is summarized in Table 2.3. It is assumed that land use rezoning will be minimal in the future and the percentage of residential parcels served is representative of the percentage of population served.

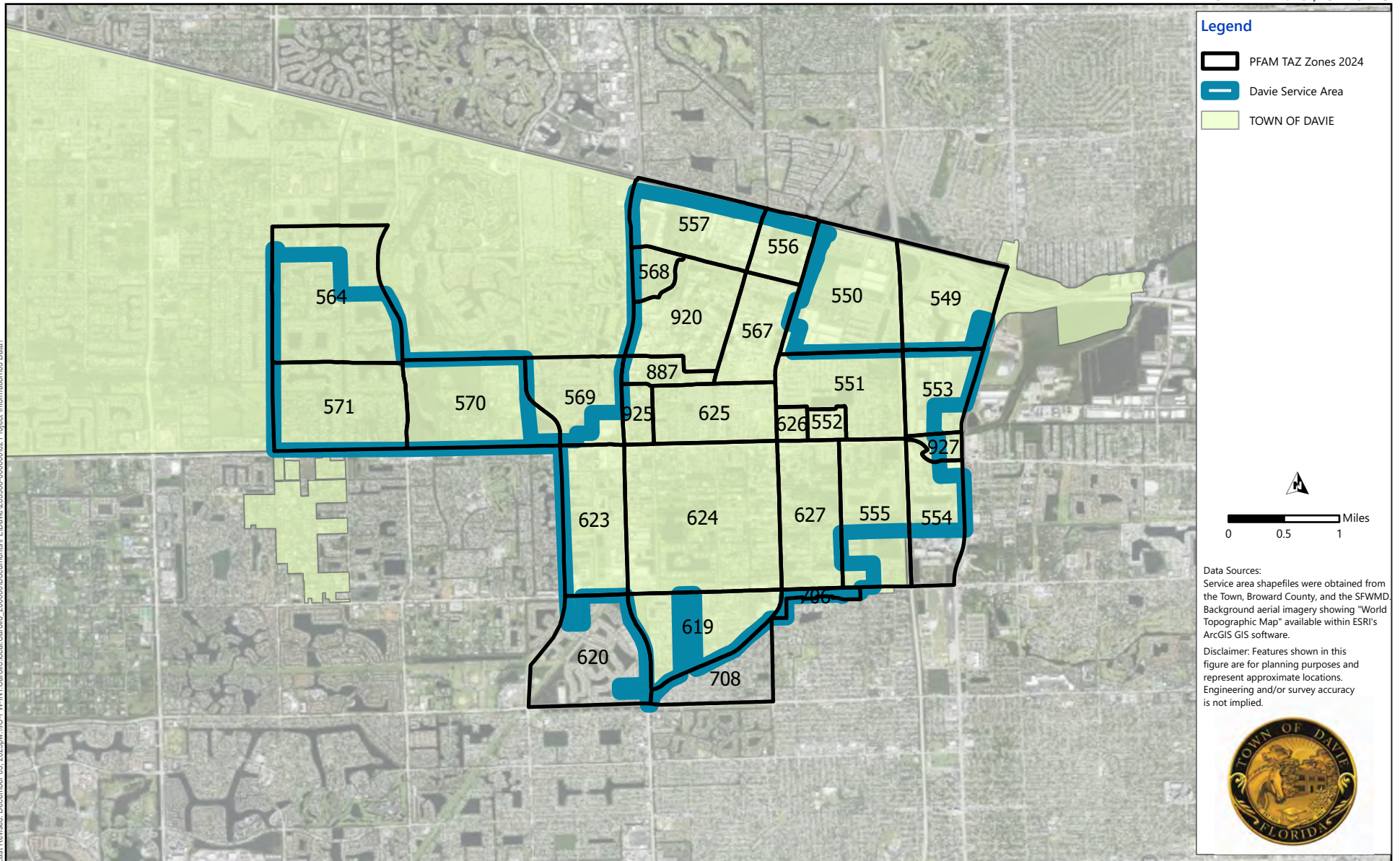


Figure 2.1 Town of Davie Service Area And 2024 PFAM TAZ Zones  
 TOWN OF DAVIE  
 2025 WATER SUPPLY PLAN UPDATE

Table 2.3 TAZs in the Town of Davie Service Area

TAZ	DU Within TAZ	DU Within Service Area	% Served By Town of Davie
549	532	0	0%
550	2,842	259	9.1%
551	1,969	1,969	100.0%
552	13	13	100.0%
553	2	0	0.0% 1
554	198	198	100.0%
555	787	526	66.8%
556	5	5	100.0%
557	712	712	100.0%
564	685	459	72.4%
567	0	0	100.0%
568	911	911	100.0%
569	1,143	32	2.8%
570	271	62	22.9%
571	408	408	100.0%
619	2,720	2,451	90.1%
620	1,598	0	0.0%
623	714	714	100.0%
624	1,838	1,838	100.0%
625	1,922	1,922	100.0%
626	185	185	100.0%
627	1,014	1,014	100.0%
706	95	79	83.2%
708	1,083	0	0.0%
887	43	43	100.0%
920	786	786	100.0%
925	52	52	100.0%
927	331	331	100.0%

Note:

(1) This TAZ is an industrial area.

These percentages of population served in each TAZ (Table 2.3) was applied to each TAZ’s projected population to calculate the population projection from 2025 to 2045 shown in Table 2.4.

Table 2.4 Population Projections Served By Town of Davie Within Each TAZ

TAZ	2025	2030	2035	2040	2045
549	0	0	0	0	0
550	507	512	520	530	539
551	4,343	4,827	4,909	4,997	5,082
552	30	30	42	52	58
553	0	0	0	0	0
554	507	827	5,041	5,130	5,691
555	1,371	1,544	1,577	1,571	1,564
556	12	12	49	68	81
557	1,591	1,577	1,640	1,670	1,659
564	1,417	1,410	1,403	1,397	1,391
567	0	0	371	378	385
568	1,846	1,831	1,823	1,811	1,802
569	71	70	70	70	69
570	169	169	168	168	168
571	1,168	1,159	1,157	1,151	1,145
619	6,500	6,447	6,399	6,339	6,308
620	0	0	0	0	0
623	1,581	1,571	1,562	1,551	1,544
624	4,407	4,369	4,394	4,598	4,676
625	4,488	5,105	5,192	5,286	5,375
626	415	717	729	742	754
627	2,104	2,094	2,103	2,086	2,066
706	167	165	164	165	165
708	0	0	0	0	0
887	81	84	97	106	109
920	1,594	1,782	1,923	2,002	2,055
925	105	105	114	117	120
927	679	665	842	952	1,037
<b>Total</b>	<b>35,153</b>	<b>37,073</b>	<b>42,289</b>	<b>42,936</b>	<b>43,843</b>

The total population for each planning horizon is presented in Table 2.5.

Table 2.5 Population Projections from 2025 to 2045

Year	Population Within Davie Service Area	Growth Since 2025
2025	35,153	--
2030	37,073	5.5%
2035	42,289	20.3%
2040	42,936	22.1%
2045	43,843	24.7%

APPENDIX I

# PROJECT MEMO – DEMAND PROJECTIONS

TOWN OF DAVIE

**Demand Projections For Use in the Water Supply Facilities Work Plan 2025 Update**

<b>Project No.:</b> 203966	This document is released for the purpose of information exchange review and planning only under the authority of M. Angelica Gregory, December 3, 2025, Florida PE No. 75583.
<b>Date:</b> December 3, 2025	
<b>Prepared By:</b> Karen Liang, PE, CFM; Evan Greenberg, PE	
<b>Reviewed By:</b> Angelica Gregory, Ph.D., PE	
<b>Subject:</b> Demand Projections	

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## 1.0 PURPOSE AND BACKGROUND

The Town of Davie (Town) engaged Carollo Engineers, Inc (Carollo) to update the Town's Water Supply Facilities Work Plan (WSFWP). As part of the WSFWP, demand projections covering a 20-year planning horizon were to be developed. This memorandum documents the analysis and results from the demand projection effort completed as part of the project.

The Town provides retail water service to approximately one-third of its geographic footprint. The Town's service area is bordered to the north by Fern Crest Village (associated with Tindall Hammock Irrigation and Soil Conservation District) and State Road 84, to the south by Stirling Road, to the east by State Road 7, Broward County, and the Seminole Indian Reservation, and to the west by Hiatus Road and University Drive. The Town's utility service area includes the majority of eastern Town of Davie. The Town owns infrastructure in the Hacienda Village subnetwork, located to the northeast of the main service area. However, this subnetwork is served by the City of Fort Lauderdale and therefore is not incorporated in demand calculations in this technical memorandum. The Town's System V Water Treatment Plant (WTP) is the sole source of treated water to the customers within the Town's utility service area. The Town has no current plans to provide raw or finished water to any retail or wholesale customer outside of its existing water service areas in the future.

## 2.0 DEMAND PROJECTIONS

This section presents the steps necessary to perform the demand projection analysis.

### 2.1 Historical Per Capita Demand

Historic data was compiled from the US Census Bureau 2024 population report, Town of Davie Annual Operation Reports and Water Loss Reports, and the latest Town of Davie Comprehensive Utilities Master Plan. This historic data was used to calculate the average per capita demand, or level of service (LOS). The compiled data and the calculations involved are presented in Table 2.1.

Table 2.1 Town of Davie Historical Service Area Population, Finished Water Production and Retail Per Capita Usage

Reference	Parameter	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
1	Town Retail Population Served	36,696	37,516	37,722	37,928	38,924
2	Avg. Daily Finished Water Production (mgd)	4.06	3.97	3.99	3.87	3.93
3	Large Users Consumption (mgd)	0.25	0.35	0.31	0.27	0.33
4	Five-Year Average Large User Consumption (mgd)	0.30				
5	Town Non-Revenue Water (mgd)	0.09	0.09	0.12	0.06	0.09
6	Five-Year Average Town Non-Revenue Water (mgd)	0.09				
7	Avg. Daily Finished Water to Town Retail Customers Excluding Large Users (mgd) <sup>(2)(3)(5)</sup>	3.72	3.53	3.57	3.54	3.51
8	Overall Town Residential Retail Per Capita Demand Factor (gpcd) <sup>(5)*1000000/(1)</sup>	101.4	94.2	94.6	93.4	90.3
<b>Five-Year Average Town Residential Water Demand (gpcd)</b>		<b>94.8</b>				

Notes:

- (1) Sourced from Annual Utility Report with 2022 extrapolated and Hacienda Village population subtracted. Hacienda Village population is based on Zone 651 data from the 2024 Broward County Population Forecast and Allocation Model (PFAM) study.
- (2) Sourced from Town of Davie monthly WTP Operation Reports for System III and System V. System III was in operation during parts of 2020 and 2021.
- (3) Sourced from Town of Davie Consumption Trend Reports for Reddy Ice and ANDRX Pharmaceuticals, and Annual Water Loss Reports and Annual Utility Reports for bulk sales to Ferncrest Utility.
- (5) Sourced 2022 and 2023 values from Annual Water Loss Reports for FY 2022 and 2023. The average percentage of 2022 and 2023 was assumed for 2020, 2021, and 2024. The reported non-revenue water includes fire protection and line flushing.

The historical per capita demand or LOS is an important and relevant planning value because of several reasons:

- It is later applied to project demand for future periods.
- It is an index used by the South Florida Water Management District (SFWMD) to assess the ability of a utility to efficiently use and conserve water. Although the expectation of the SFWMD is for the LOS to decrease in time, the LOS must also be sufficient to cover the needs of residents.

From Table 2.1, the annual average water use of the Town’s residential retail customers measured as gallons per capita per day (gpcd) over the five-year period from 2020 to 2024 is 94.8 gpcd. This value was used in conjunction with the projected population to forecast the population-dependent annual average daily water demand, which is shown in the fourth column of Table 2.2.

The five-year average large user consumption is 0.30 million gallons per day (mgd) which is based on large user billing data. The five-year average non-revenue water is 0.09 mgd, based on the annual average non-revenue percentage from the FY2022 and FY2023 Annual Water Loss Reports provided by the Town. Because historical data suggests that both the large users’ and non-revenue water volumes are approximately consistent and unaffected by population growth in the future, large users’ consumption and non-revenue water were added back to the population-dependent demand. The new total represents the projected finished water demand from the WTP, and is shown in the last column of Table 2.2.

Table 2.2 Total Forecasted Average Daily Demand from 2025 to 2045

Year	Total Population	Demand Factor (gpcd)	Population-Dependent Demand (mgd)	Large User Demand (mgd)	Non-Revenue Water (mgd)	Total Average Annual Demand (mgd)
2025	35,153	94.8	3.33	0.30	0.09	3.72
2030	37,073	94.8	3.51	0.30	0.09	3.90
2035	42,289	94.8	4.01	0.30	0.09	4.40
2040	42,936	94.8	4.07	0.30	0.09	4.46
2045	43,843	94.8	4.15	0.30	0.09	4.54

Based on the presented historical trends, the total finished water demand is projected to increase from 3.72 mgd in 2025 to 4.54 mgd in 2045.

## 2.2 Peaking Factor and Maximum Day Demand

The maximum day flow during the year from the WTP and the maximum day factor, which is the ratio of maximum day flow to annual average daily flow, were derived from the WTP Monthly Operations Report (MOR) data. The average maximum day factor for the historical period of analysis can be used to estimate the maximum day finished water demand that needs to be supplied by the Town’s WTP in the future. The average maximum day factor between 2020 and 2024 was 1.33, as shown in Table 2.3.

Table 2.3 Historical Maximum Day Finished Water Production and Peaking Factor

Year	Finished Water Production		
	Annual Average Day Demand (ADD) (mgd)	Maximum Day Demand (MDD) (mgd)	Maximum Day Peaking Factor
(1)	(2)	(3)	(4)=(3)/(2)
2020	4.1	5.3	1.3
2021	3.97	4.8	1.2
2022	3.95	5.6	1.4
2023	3.87	5.2	1.3
2024	3.97	5.5	1.4
<b>5-Year Average</b>			<b>1.33</b>

Source : Town of Davie Monthly Operating Reports.

To forecast the maximum day finished water demand in the future, the maximum day peaking factor is applied to the forecasted annual average demand. The forecasted finished water production increases to 6.05 mgd by 2045 as depicted in Table 2.4.

Table 2.4 Forecasted Maximum Daily Demand from 2025 to 2045

Year	Annual Average Day Demand (mgd)	Max Day Peaking Factor	Max Day Demand (mgd)
(1)	(2)	(3)	(4)=(2)*(3)
2025	3.72	1.33	4.96
2030	3.90	1.33	5.20
2035	4.40	1.33	5.86
2040	4.46	1.33	5.94
2045	4.54	1.33	6.05

### 2.3 Raw Water Demand Projection

For the purpose of determining the amount of raw water needed to produce the forecasted finished water demand, the treatment loss was projected using the data collected and summarized in the annual Water Loss Reports. Treatment loss is common and expected, particularly in facilities with membrane technology (such as the Town’s) where minerals and other rejected compounds (called the concentrate) are necessarily separated from the produced water stream (called the permeate) and disposed of. Table 2.5 summarizes the past four years of production losses.

Table 2.5 Historical Average Treatment Loss

Historic Treatment Loss				
Year	2021	2022	2023	2024
Annual Loss (gal)	521,507,612	510,278,625	511,003,787	526,912,172
Annual Loss (mgd) <sup>(1)</sup>	1.43	1.40	1.40	1.44
<b>4-Year Average (mgd)</b>	<b>1.42</b>			

Note:

(1) For years with incomplete treatment loss data, the annual sum was extrapolated using available data.

The resulting value of 1.42 mgd was used to convert the average finished water demand forecast into the total annual raw water requirement.

The raw water demand forecast is calculated in Table 2.6. It shall be noted that the treatment loss is a function of the installed technology, and therefore this demand forecast would be subject to change if the Town were to modify or diversify its current treatment technology. The total raw water need under the assumption that no technology changes will occur and that any additional treatment capacity constructed at the plant will be of equal nature (reverse osmosis, RO), will increase each year from 5.14 mgd in 2025 to 5.96 mgd by 2045.

Table 2.6 Forecasted Raw Water Demand

Year	Average Finished Water Demand (mgd)	5-Year Historical Average Treatment Loss (mgd)	Annual Average Raw Water Demand (mgd)
(1)	(2)	(3)	(4)=(2)+(3)
2025	3.72	1.42	5.14
2030	3.90	1.42	5.32
2035	4.40	1.42	5.81
2040	4.46	1.42	5.87
2045	4.54	1.42	5.96

## 2.4 Capacity Analysis

The Town’s combined permitted raw water withdrawal quantities from the Biscayne Aquifer and the Floridan Aquifer total 19.85 mgd on an annual average day basis and 652.0 million gallons on a maximum month basis, as summarized in Table 2.7.

Table 2.7 Town of Davie Permitted Raw Water Withdrawal Quantities

Water Supply Source	Annual Average Day (mgd)	Maximum Monthly Allocation (MGM)
(1)	(2)	(3)
Biscayne Aquifer:	5.02	164.8
Floridan Aquifer	14.83	487.2
<b>Total</b>	<b>19.85</b>	<b>652.0</b>

The maximum amount of finished water that can be produced was based on the firm raw water treatment capacity of the Town’s System V WTP, the permitted quantities in the Consumptive Use Permit, and the historical treatment losses. The calculation of the finished water treatment limit is provided in Table 2.8. The treatment firm capacity of the existing System V WTP and System III WTP are 8.0 mgd and 4.0 mgd, respectively. The capacity of System V WTP was previously 6.0 mgd, it was rerated and permitted as 8.0 mgd on August 21, 2024.

Table 2.8 Calculation of Finished Water Quantity Limit based on Raw Water Permit Limit

Treatment Plant	Treatment - Firm Capacity (mgd)	Treatment Loss (mgd)	Raw Water Treatment Capacity (mgd)	- LIMIT - Raw Water Withdrawal Allocation (mgd)	- LIMIT - Finished Water Treatment (mgd)
(1)	(2)	(3)	(4) = (2) + (3)	(5)	(6) = (5) - (3)
System V	8.0	1.42	9.42	14.83 <sup>(1)</sup>	13.41
System III <sup>(2)</sup>	4.0	0.09 <sup>(3)</sup>	4.09	5.02 <sup>(4)</sup>	4.93

Notes:

- (1) System V is a Reverse Osmosis treatment facility that withdraws water from the Floridan Aquifer only. The reported 14.83 mgd allocation represents the Town’s permitted quantity from the Floridan Aquifer.
- (2) System III WTP has not been in operation since June 2021.
- (3) System III WTP started operating intermittently in 2020 and has stopped operation since June 2021. The reported treatment loss is based on historic record from 2014 to 2018 as reported in the Town’s 2020 WSWFP, which is 2.2 percent.
- (4) System III WTP is a conventional Lime Softening treatment plant that withdrew water from Biscayne Aquifer only. The reported 5.02 mgd allocation represents the Town’s permitted quantity from the Biscayne Aquifer.

Comparison of the forecasted finished water demand (Table 2.4) and raw water needs (Table 2.6) to the finished water treatment limit and WTP firm capacity (Table 2.8) is provided in Figure 2.1. During the period 2025 through 2045, the finished water and raw water demand is within the treatment plant firm capacity, permitted withdrawal limit and treatment limit.

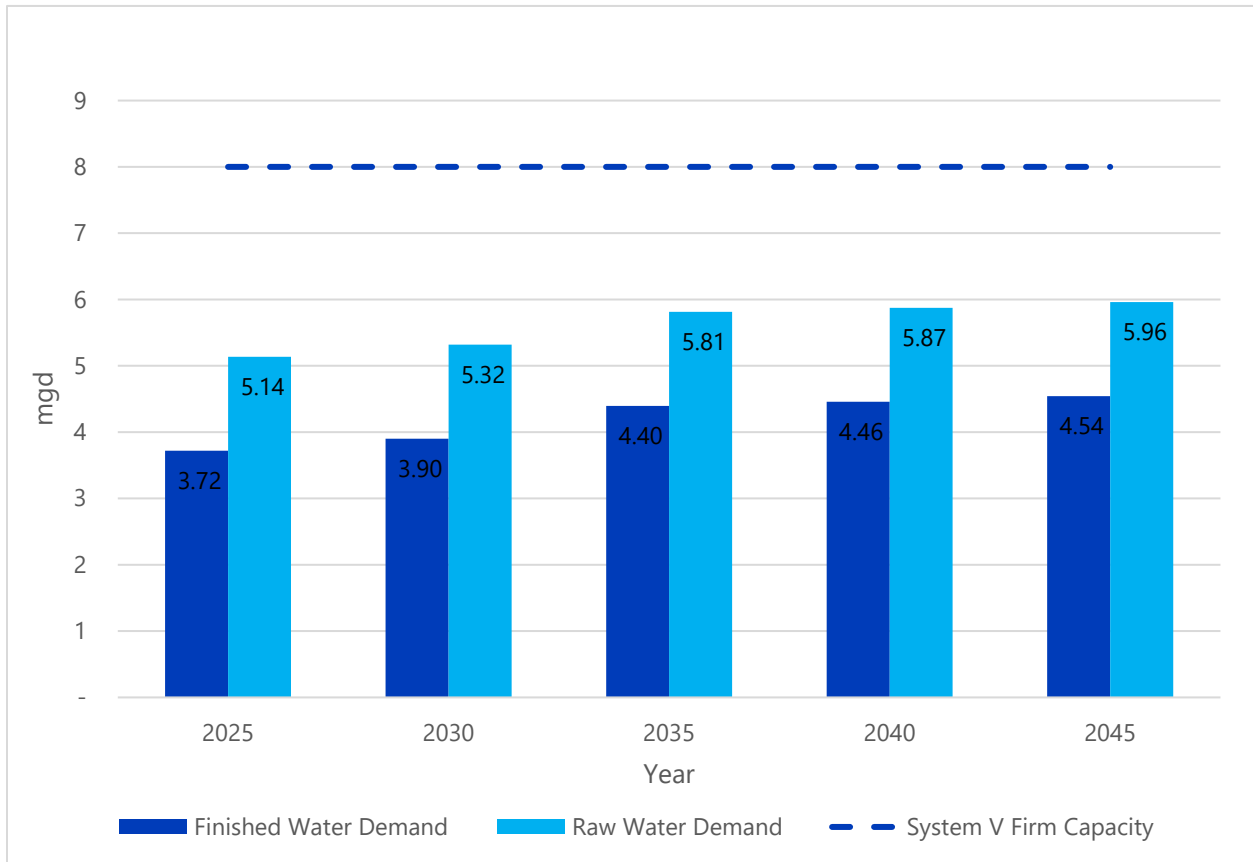


Figure 2.1 Comparison of Finished and Raw Water Demand Forecast to Treatment Capacity

APPENDIX J

# WSFWP 2025 UPDATE LETTER TO SFWMD



December 24, 2025

South Florida Water Management District

Water Supply Implementation Unit

Attention: Nancy Demonstranti, P.G., Lower East Coast Water Supply Plan Manager

3301 Gun Club Road

West Palm Beach, FL 33406

Dear Ms. Demonstranti:

The Town of Davie (Town) has reviewed the South Florida Water Management District (SFWMD) 2023-2024 Lower Coast Water Supply Plan Update (LEC Plan Update) and identified projects located within the jurisdiction of the Town's Utilities Department. The following summarizes those projects and their current status.

### **Ocean Outfall Program**

The Ocean Outfall Program requires the elimination of the six ocean outfalls in southeastern Florida as the primary means of disposal of treated wastewater effluent by December 31, 2025. In addition, affected wastewater utilities are required to reuse at least 60 percent of the average annual outfall flows, measured from 2003 to 2007, by December 31, 2025

The Town and Cooper City have an agreement to send wastewater to the City of Hollywood, which has to comply with the Ocean Outfall Law (OOL), and thus the three municipalities are linked in their obligation to meet the requirements for nutrient removal. Currently, the Town is obligated to provide 2.3 mgd of treated wastewater to the City of Hollywood's reuse program. The Town's treated effluent is pumped to the Southern Regional Wastewater Treatment Plant (SRWWTP) for disposal through either a deep injection well, a reclaimed water system, or an open ocean outfall. Due to the Town's low-saline effluent, a high portion of effluent is preferentially used for off-site reuse (i.e., golf courses) or used by the industrial reclaimed system when SRWWTP effluent is not sufficient. However, a portion of the effluent that is sent to SRWWTP can be discharged to the ocean outfall at times, and thus the Town has an obligation to meet the 60 percent reclaimed requirement. The Town's ocean outfall baseline flow is 1.9 mgd, therefore the Town's reuse requirement is 1.1 mgd.

- The creation of the Town's reclaimed water system was a direct result of the need to comply with the 1.1 mgd reclaimed requirement. The reclaimed water distribution system was completed and placed into service in late 2015 and consists of approximately 4 miles of 12- and 16-inch piping to large users for slow rate public access irrigation. This distribution system delivers the reclaimed water produced at the System IV Water Reclamation Facility (WRF). The system is relatively small and serves mainly the educational complexes south of the System IV WRF, but recent expansion projects have extended the system east near Broward College Central Campus and west to Bamford Park, Pine Island Park, Bamford Sports Complex, University Drive, Broward County Tree Tops Park, and the Pine Island Road corridor.
- The WRF has a 2.0 mgd annual average daily flow permitted reuse capacity.

- The Town’s progress towards OOL compliance with respect to reclaimed water is summarized in Table 1. In June 2024, the Town completed the Bamford Park & Sports Complex + University Drive expansion project, adding an estimated 0.5 mgd capacity to the reclaimed water usage. With this addition, the Town currently has 2.997 mgd of connected reuse capacity, which is more than sufficient to fulfill the 1.1 mgd requirement. In addition, the Town plans to further extend reclaimed water usage at the Davie Golf Course, which has reuse capacity of 0.332 mgd based on the WRF’s permit (FLA706736). The Town is also anticipating the addition of two cooling towers at NSU’s campus and is currently negotiating a connection with Broward College. These two customers would add approximately 0.225 mgd and 0.175 mgd of reuse capacity, respectively.

Table 1 Status of Town of Davie’s FDEP OOL Compliance With Respect to Reclaimed Water

Requirement	Reclaimed Water Average Demand in mgd
<b>OOL Reuse Required <sup>1</sup></b>	<b>1.1</b>
Ocean Outfall Baseline Flow	1.9
60% Reclaimed Requirement	1.1
<b>Reuse Capacity – Existing Customers <sup>2, 3, 4</sup></b>	<b>2.997</b>
Grand Oaks Country Club	0.54
NSU Main Campus	0.439
University of Florida	0.242
NSU Cooling Towers	0.225
Town of Davie Industrial Usage	0.891
Town of Davie Toilet Flushing	0.16
Bamford Park & Sports Complex + University Drive Expansion Project Estimated Demand (Completed and operational in June 2024)	0.5
<b>Reuse Estimated Capacity – Planned Customers <sup>2, 3, 4</sup></b>	<b>0.732</b>
Davie Golf Course (Completed, pending operational plan as of November 2025)	0.332
NSU 2 Additional Cooling Towers (Anticipated expansion)	0.225
Broward College (Negotiating for connection)	0.175
<b>Total Reuse Capacity – Existing and Planned</b>	<b>3.729 <sup>5</sup></b>

Sources:

- (1) Town of Davie 2020 Utilities Comprehensive Master Plan.
- (2) Town of Davie 2024 Reclaimed Water Report.
- (3) Town of Davie 2024 Annual Utility Report.
- (4) FDEP Domestic Wastewater Facility Permit Renewal, Town of Davie Water Reclamation Facility, July 1, 2020.
- (5) Calculated as the sum of existing customers and recently completed projects, which is 2.997 + 0.732 = 3.729 mgd.

## Reclaimed Water

The Town has made significant investments to fulfill its commitment of 1.1 mgd of reclaimed requirement. The grants pursued and project status for the Town's reclaimed water expansion projects, including the 3 projects identified in the LEC Plan Update, are described below:

- Bamford Park & Sports Complex + University Drive:
  - » The Broward County Integrated Water Resource Plan ("IWRP") provided cost share funding for design and feasibility study of reclaimed water line expansion project to use reclaimed water for irrigation of approximately 138 acres of the Pine Island Park, Bamford Sports Complex and University Drive.
  - » The SFWMD Alternative Water Supply program provided cost share construction funds for installation of reclaimed water distribution pipelines along University Drive (from SW 30 St to SW 36 St) and inside Bamford Park & Sport Complex to supply approximately 0.5 mgd of reclaimed water for irrigation purpose.
  - » This expansion project was completed as of June 2024 and is currently in use.
- College Avenue to SW 30th St:
  - » IWRP provided cost share funding for design and feasibility of reclaimed expansion along SW 30th St to potentially serve academic corridor including Broward College Central Campus. The project went out to bid in Spring 2024.
  - » The SFWMD Alternative Water Supply program provided cost share construction funds for installation of reclaimed water distribution pipeline along SW 30th Street to supply approximately 0.2 to 0.5 mgd of reclaimed water for irrigation purposes.
  - » The construction of this expansion project was expected to be completed by summer 2025. However, as of March 2025, this construction was stopped before the College Avenue intersection because of the college's unwillingness to connect.
- SW 92nd Ave to Pine Island Road:
  - » IWRP provided cost share funding for design and feasibility of reuse expansion along SW 92nd Ave to potentially serve Pine Island Road corridor as well as Broward County Tree Tops Park in the future.
  - » The project design is complete; however, the Town has decided not to proceed with construction.
- Davie Golf Course:
  - » This site is located at the end of the existing reclaimed water system; therefore, no additional pipeline within the right-of-way is needed.
  - » As of March 2025, the Town was accessing the potential to irrigate the golf course with a combination of reclaimed water and surface water.

## Water Supply

Efforts to provide an effective use of the LEC water supply are identified throughout the LEC Plan Update. The following are efforts being implemented by the Town:

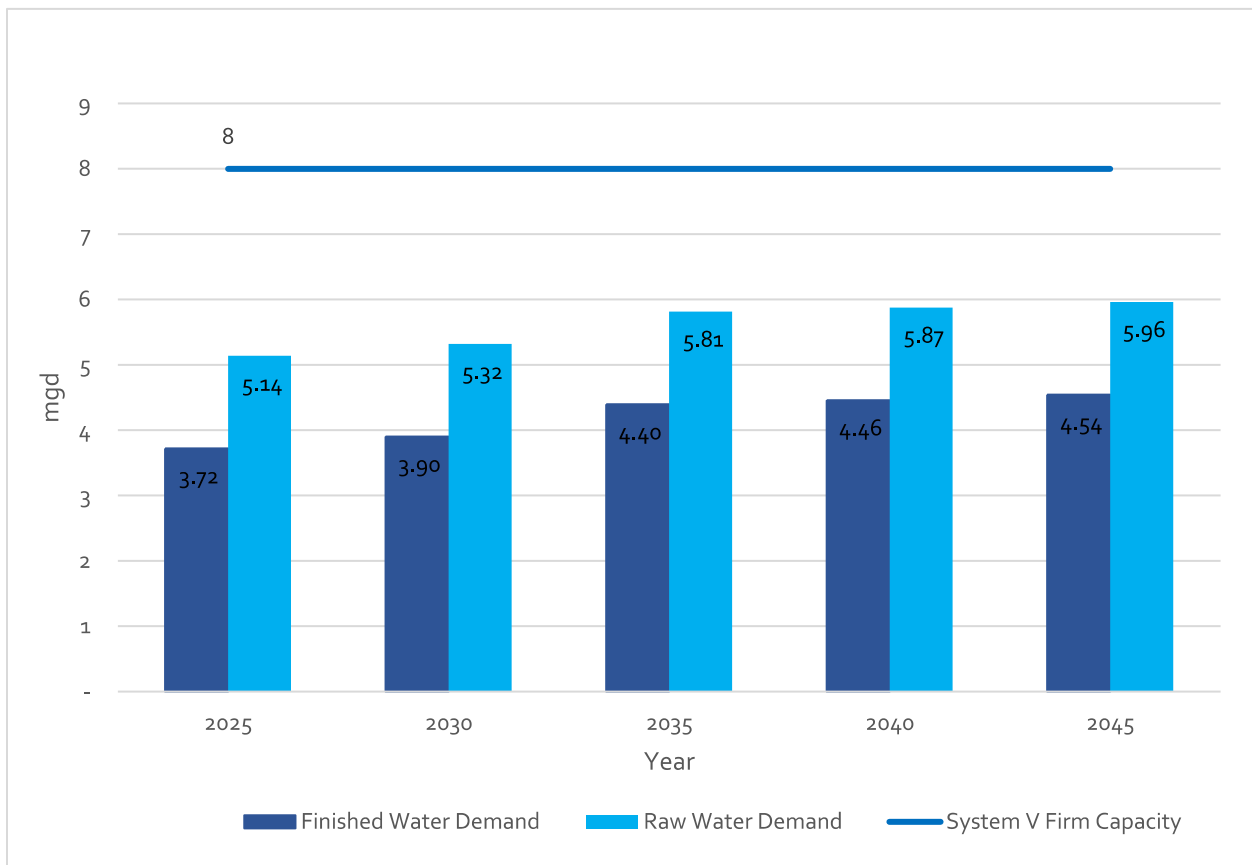
- Alternative Water Supply:
  - » The Town’s commitment to the development of alternative water supply sources through the reduction of potable water used for irrigation and conservation of water have been demonstrated through their reclaimed water system expansion projects, community outreach, rebate programs, and ordinances efforts.
  - » The Town’s planning effort regarding water supply infrastructure includes the recent water main improvement projects on University Drive (completed in May 2025) and SW 121<sup>st</sup> Avenue (ongoing, complete by Summer 2026). The Town also monitors issues impacting water supply and demand including the RWA Rule, the C- 51 Reservoir Project, the Ocean Outfall Program, and the Regional Climate Change Action Plan.
  - » The Town is contracting a consultant to perform a pilot study to evaluate alternative water supply.
- Traditional Water Supply:
  - » As per the Town’s Consumptive Use Permit, the total permitted allocation of groundwater from the Biscayne Aquifer for use in raw water supply is a daily average of 5.02 mgd and a maximum monthly allocation of approximately 164.8 MGM. The permitted allocation from the Floridan Aquifer is a daily average of 14.83 mgd and a maximum monthly allocation of approximately 487.2 MGM. Table 2 presents the permitted allocation of each water supply source.

**Table 2 City of Hollywood Permitted Raw Water Withdrawal Quantities**

Water Supply Source	Annual Average Day (mgd)	Maximum Monthly Withdrawal (MGM)
Biscayne Aquifer	5.02	164.8
Floridan Aquifer	14.83	487.2
<b>Total</b>	<b>19.85</b>	<b>652.0</b>

- » In 2020, the System III Water Treatment Plant (WTP) was taken offline for periods of time after testing showed natural ammonia levels in the raw water source (Biscayne Aquifer) nearing zero parts per million. The shutdown was necessary because, without sufficient level of natural ammonia, the System III WTP is unable to properly disinfect via chloramine method. As of 2020, the Town’s raw water testing has shown no return of historical normal levels of ammonia. System III WTP was shut down in June 2021 and remained offline. In 2023, the Town added a Liquid Ammonium Sulfate system to the System III WTP but the WTP continues to remain offline due to operating and maintenance costs. The Town would like to transfer the System III WTP’s raw water allocation to the System V WTP and treat the System III WTP’s allocation there. This request will be addressed in a separate submittal in the near future. In addition, the treatment technology at the System V WTP is capable of processing PFAS, which the System III WTP is incapable of and is essential for satisfying PFAS limits.

- » Based on the current water treatment facility capacity, the permitted withdrawal quantities, and the historical treatment loss, the Town has sufficient water supplies to meet its anticipated service needs through a 20-year period. The treatment firm capacity of the existing treatment plant – the System V WTP – is 8.0 mgd and the maximum treatment utilizing the full raw water allocation is 13.41 mgd. This comparison indicates that the Town’s ability to provide potable water is limited by the System V WTP’s treatment firm capacity. The System III WTP has a firm capacity of 4.0 mgd but has stopped operation since June 2021. Comparison of the forecasted finished water demand and raw water needs to the finished water treatment limit and WTP firm capacity is provided in Figure 1. During the period 2025 through 2045, the finished water and raw water demand is within the treatment plant firm capacity, permitted withdrawal limit and treatment limit.



**Figure 1** Comparison of Finished and Raw Water Demand Forecast to Treatment Capacity, Treatment and Withdrawal Limit – Town of Davie from 2025 to 2045

- » There are no major water supply projects listed for the Town in the LEC Plan Update.
- » To support planning effort, the Town evaluated its water distribution system as part of its 2020 Utilities Master Plan.
  - The Town conducted a vulnerability assessment of the water distribution system to analyze the reliability and redundancy of the network. It was found that the existing infrastructure is sufficient to meet the existing peak hour demand and approximately 87.4 percent of the pipes have some degree of redundancy and can maintain reliable supply in case of a break.

- The Town also evaluated the water distribution system performance for the 2025, 2030, and 2040 future scenarios. Improvement needs and schedule were determined based on the results.
- » The Town has allocated annual budget for the WTP Raw Water Infrastructure & Rehabilitation project in its 5-year Capital Improvement Plan (CIP). Water supply infrastructure - including raw water wells, pumps, motors, casing and transmission mains - delivers raw water from the water supply to the treatment plant. This maintenance project will rehabilitate, redesign, replace, relocate, and/or abandon components of the infrastructure system as needed.

## Water Treatment

- The Town's System V WTP is the sole source of treated water to its customers. It uses reverse osmosis membrane technology. The Town also has a System III WTP that uses conventional lime softening technology but it is no longer in operation. The Town of Davie has no plans to provide raw or finished water to any retail or wholesale customer outside of its existing water service areas.
- The Town would like to expand the System V WTP's capacity to replace the loss of the System III WTP and assume the processing of its allocation. The advantages of the System V WTP are its capability to process PFAS and cost efficiency. The Town does not have any other planned major improvement projects to alter The System V WTP's treatment processes.
- The Town has allocated annual budgets for the following maintenance projects in its 5-year Capital Improvement Plan (CIP):
  - » RO Membrane Replacement:
    - RO membranes have an average life of 5 years due to compaction from organics in the water.
  - » SCADA Upgrades:
    - Upgrades of the hardware and software used by the treatment plants to meet cybersecurity requirements
  - » WTP Chemical Feed System Pumps Replacements:
    - Chemical feed systems are required for accurate dosing of treatment to produce chemically stable drinking water. Some of chemicals are hazardous in nature and require frequent rehabilitation and repairs. Over time, pump replacements are needed due to system expansion and equipment redundancy.
  - » WTP Electrical/Switchgear/Generator Replacements:
    - The electrical systems and devices at the WTPs are of varying degrees of age and condition. The Town will actively plan to replace or rehabilitate equipment before they fail (predictive maintenance). The Town also recognizes the need to upgrade to more efficient equipment in the future.
  - » WTP Pumps & Motors Replacements:
    - The pumps and motors at the WTPs are of varying type, size and age. The Town will actively replace or rehabilitate equipment before they fail (predictive maintenance).
  - » WTP Upgrades:
    - The Town will perform general infrastructure repairs at the WTPs as needed.

- The Town issues annual Drinking Water Quality Reports to share information about its water quality. The 2024 report included test results indicating the Town’s potable water has no water quality violation. PFAS was among the contaminants tested, the result was that PFAS was not detected, indicating the substance was not found by the laboratory analysis.

## Water Conservation

Water conservation efforts are identified throughout the 2023-2024 LEC Plan Update for all planning areas to reduce the future amount of water supply needed to meet water demands. The conservation related- actions identified in the 2023-2024 LEC Plan Update, and the efforts being implemented by the Town, are the following:

- *“The SFWMD should continue to implement its Comprehensive Water Conservation Program and its Cooperative Funding Program.”* (2023-2024 LEC Work Plan Update).

The initiatives and actions being implemented by the Town are in accordance with the 2008 District’s Comprehensive Water Conservation Program. The Town continues to seek supplemental sources of revenue to expand the reclaimed system, promote water conservation, and provide alternative water supply.

- *“PS utilities are encouraged to develop goal-based water conservation plans and proactively implement water-saving measures and programs.”* (2023-2024 LEC Work Plan Update).

The Town is a committed member of the Broward Water Partnership Conservation Program known as "ConservationPays" that has a goal of saving 30 mgd county-wide. This program was launched in 2011 and consists of 19 municipalities and water utilities that collaborate on water conservation implementation. This program helps inform residents about the importance of year-round water conservation and any available County conservation incentives.

The Town promotes water conservation through various ways:

- » Passing Ordinance Section 25-32. (5) to mandate all-year, two-day-a-week landscape irrigation restrictions in accordance with Rule 40E-24.301, F.A.C.
- » Providing reuse water for irrigation and industrial use.
- » Implementing local public education programs and events, such as Water Matters Day and Earth Day, to encourage water conservation.
- » Providing educational material and Water Reuse tours at the Town’s water, wastewater, and reuse treatment facilities to college and high school students throughout the year.
- » Promoting Florida-friendly landscape practices and use of native plants to reduce irrigation water use on the Town’s Landscape Information website (<https://www.davie-fl.gov/426/Landscape-Information>).
- » Distributing of High Efficiency Toilet (HET) Rebates, kitchen per rinse spray valves, and retrofit Water Conservation Kits giveaways.
- » Collaborating with Broward County through an interlocal agreement renewed in 2021 for cost share support of a water conservation incentives program that includes media campaign, rebate and incentives program, and an awards/recognition program.
- » Participating in NatureScape –a Broward County program that provides free advice on irrigation efficiency to large water users.

- » Completing in 2020 the Utility-wide Automated Meter Infrastructure (AMI) project consisting of water meter replacement to smart meters (with automatic readers), communication collectors and data management.
- » Providing tips and answers to FAQs on the Town's Water Conservation website (<https://www.davie-fl.gov/576/Water-Conservation>).
- *"Local governments should evaluate whether mandated water conservation measures, such as requirements for construction of water-efficient homes and commercial properties, are appropriate for their jurisdiction."* (2023 – 2024 LEC Plan Update).

The Town promotes but does not mandate water conservation practices. It provides free Water Conservation Kits for water customers, which includes a low flow showerhead, a kitchen aerator, a bath sink aerator and leak detection tablets for toilet. It also collaborates with Broward County on the Toilet Rebate program and kitchen per rinse spray valves. Between October to December of 2024, 10 high efficiency toilet rebates were reported in Town's 2025 Quarter 1 Broward Water Partnership Quarterly Partner Update Report.

- *"Local governments should adopt a year-round irrigation ordinance that fully comports with the SFWMD's Mandatory Year-Round Landscape Irrigation Conservation Measures Rule (Chapter 40E-24, Florida Administrative Code). Although 71 of the 116 local governments have adopted acceptable ordinances, 45 in the LEC Planning area have not yet adopted irrigation ordinances."* (2023 – 2024 LEC Plan Update).

The Town has adopted this irrigation ordinance. In 2010, the Town adopted an ordinance (Section 25-32. (5)) called "year-round landscape irrigation measures" to comply with the Rule 40E-24, F.A.C., for the SFWMD's Mandatory Year-Round Landscape Irrigation Conservation Measures. The Town of Davie supports all-year, two-day-a-week landscape irrigation restrictions imposed by the SFWMD and the Broward County Environmental Protection and Growth Management Department. These information as well as Residential lawn watering schedules are available on the Town's official website: <https://www.davie-fl.gov/1273/Water-Restrictions>.

- *"Local governments should consider developing or enhancing ordinances regarding Florida-Friendly Landscaping Program principles [Section 373.185, Florida Statutes]."* (2023 – 2024 LEC Plan Update).

The Town promotes Florida-friendly landscape practices and use of native plants to reduce irrigation water use. The Town's Landscape Department is responsible for this effort and has developed 5 Florida-Friendly demonstration gardens for Town residents to model their gardens after with the help of the Welcoming Wildlife into Natural Davie (WWIND) team and Town employees.

- *"Public Education programs can help instill a year-round conservation ethic. Local and tribal government and PS Utilities are encouraged to provide conservation-related information, messaging, and educational programs in cooperation with the SFWMD."* (2023 – 2024 LEC Plan Update).

The Town has continuously implemented local public education programs to encourage water conservation. Public educational events are held regularly such as Water Matters Day in March and Earth Day in April. The Town also collaborates with schools and provides tours at the water and reclamation plants to college and high school students throughout the year. Additionally, the Town collaborates with schools for the AWWA Drop Savers Poster Contest, an annual event that encourages K-12 students to participate in a water conservation poster design competition, further engaging the community in water-saving efforts.

- *"All eligible water users are encouraged to seek cost-share funding opportunities that may be available for water conservation projects."* (2023 – 2024 LEC Plan Update).
  - » The Town passed and adopted, effective October 1, 2016, an interlocal agreement with Broward County to provide cost share support of a water conservation incentives program. Resolution No R 2021-227 renewed this agreement on July 28, 2021, in which the Town provides financial contribution for five years to support the Broward County Conversation Pays program. The total maximum cost of the five-year commitment is summarized in Table 3. The current agreement is set to expire in 2026. As of December 2025, Broward County is preparing a renewal agreement for the Town's review, which the Town supports. The proposed renewal would extend the program for an additional five-year period, from October 2026 through September 2031.

**Table 3 Water Conservation Incentives Program Cost-Sharing Agreement**

Year	Maximum Not to Exceed Contribution	
	Broward County	Town of Davie
1	\$ 125,000.00	\$ 24,998.04
2	\$ 125,000.00	\$ 25,448.46
3	\$ 125,000.00	\$ 25,912.40
4	\$ 125,000.00	\$ 26,390.25
5	\$ 125,000.00	\$ 26,882.44

- » As described in the Water Reuse section, the Town has also applied for and received IWRP and alternative water supply funding from FDEP in the past for reclaimed water expansion projects.
- *"L/R water users are encouraged to use advanced irrigation technology, improve landscape design and best management practices, and participate in user recognition programs (e.g. Florida-Friendly Landscaping program) to further increase landscape water use efficiency."* (2023 – 2024 LEC Plan Update).

The Town, in coordination with Broward County NatureScape Division, performs irrigation system evaluations and provides irrigation efficiency advice to large water users. Launched in 2005, the NatureScape Irrigation Services (NIS) is implemented by the Broward County's Environmental Protection and Community Resilience Division with cost-share funding provided by Broward County Water and Wastewater Services and local municipalities. The NIS conducts irrigation evaluations of, mostly, large-scale irrigation systems. At each site, the NIS assesses irrigation system design, functional integrity, scheduling, and maintenance issues related to water use efficiency, and landscape best management practices. Following each assessment, efficiency improvement recommendations are provided to the site owner or manager. Water consumption is documented before and after improvements are implemented to calculate water savings. The program targets large water users including government facilities, parks, schools, and homeowner associations where the greatest potential exists for significant water savings. Best Management Practices that encourage the 'right plant in the right place', irrigation water use efficiency, and smart irrigation technology help to secure outdoor water use reductions and long-term water savings.

- *“Commercial/Industrial/Institutional (CII) entities are encouraged to use the Water Efficiency and Self-Conducted Water audits at Commercial and Institutional Facilities, a Guide for Facility Managers (SFWMD 2013) to improve water use efficiency and reduce operating costs.” (LEC Plan Update).*

The Town encourages the implementation of EPA WaterSense guidelines including industrial, commercial, and institutional entities. To better implement this action, this WSFWP Update will suggest the Town to encourage self-conducted water audits.

- Smart Meter Technology:

In 2020, the Town successfully completed the Utility-wide Automated Meter Infrastructure (AMI) project consisting of water meter replacement to smart meters (with automatic readers), communication collectors and data management. There are approximately 10,000 smart meters Utility-wide replaced allowing to hourly, daily, monthly water consumption and compliance monitoring by Utility staff.

The Water Supply Facilities Work Plan will be adopted and incorporated into the applicable elements of the Town’s Comprehensive Plan. We hope the District finds the information included in this letter useful. The Town of Davie continues to plan for and support future water supply and management alternatives for the Town.

Sincerely,



David Stambaugh, P.E., DBIA  
Interim Utilities Director

cc: Evelyn Valerio, P.E. , Interim Utilities Assistant Director