



7525 NW 88th Avenue
Tamarac, Florida 33321

CITY OF TAMARAC PLANNING BOARD AGENDA

November 3, 2021

THE PLANNING BOARD OF THE CITY OF TAMARAC, FLORIDA will hold a meeting on Wednesday, November 3, 2021 at 9:00 AM in City Commission Chambers, 7525 NW 88 Avenue, Tamarac FL 33321. The following items will be heard:

- A.** Call to Order
- B.** Pledge of Allegiance
- C.** Meditation
- D.** Roll Call
- E.** Approval of Minutes
 - 1. Meeting Minutes - August 4, 2021**
Project Name:
- F.** New Business
 - 2. TO 2486 - Water Supply Facilities Work Plan and Text Amendments to the Future Land Use, Infrastructure, Conservation, Intergovernmental Coordination and Capital Improvements Elements**
Project Name:
 - 3. TO 2491 - Specialty Automotive Treatments, Inc. - Land Development Code Text Amendment**
Project Name: Specialty Automotive Treatments, Inc. - Land Development Code Text Amendment
 - 4. TBO 49 - Specialty Automotive Treatments, Inc.- Special Exception**
Project Name: Specialty Automotive Treatments, Inc. - Special Exception
- G.** Other Business

- H. Director's Report
- I. Planning Board Reports
- J. Adjournment



Maxine A. Calloway, Esq., AICP
Director of Community Development

NOTE: A REPRESENTATIVE MUST BE PRESENT IN ORDER FOR AN APPLICATION TO BE HEARD.

PLEASE NOTE: PLANNING BOARD MEMBERS WHO CANNOT ATTEND THIS MEETING SHOULD CONTACT THE DEPARTMENT OF COMMUNITY DEVELOPMENT AT (954)-597-3530.

IN THE EVENT THIS AGENDA MUST BE REVISED, SUCH REVISED COPY WILL BE AVAILABLE TO THE PUBLIC AT THE PLANNING BOARD MEETING.

PURSUANT TO SECTION 286.0105, FLORIDA STATUTES, IF A PERSON DECIDES TO APPEAL ANY DECISION MADE BY THE PLANNING BOARD WITH RESPECT TO ANY MATTER CONSIDERED AT SUCH MEETING OR HEARING, HE WILL NEED A RECORD OF THE PROCEEDINGS AND FOR SUCH PURPOSE, HE MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDINGS IS MADE WHICH RECORD INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS BASED.

THE CITY OF TAMARAC COMPLIES WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT. IF YOU ARE A DISABLED PERSON REQUIRING ANY ACCOMMODATIONS OR ASSISTANCE, PLEASE NOTIFY THE CITY OF SUCH NEED AT LEAST 72 HOURS (3 DAYS) IN ADVANCE. ADDITIONALLY, IF YOU ARE HEARING OR SPEECH IMPAIRED AND NEED ASSISTANCE, YOU MAY CONTACT THE FLORIDA RELAY SERVICE AT EITHER OF THE FOLLOWING NUMBERS: 1-800-955-8770 OR 1-800-955-8771.



7525 NW 88th Avenue
Tamarac, Florida 33321

**CITY OF TAMARAC
PLANNING BOARD AGENDA**

November 3, 2021

**ITEM 1. Meeting Minutes - August 4,
2021**

ATTACHMENTS:

Description	Upload Date	Type
8-4-2021 Planning Board Meeting Minutes AMENDED	12/2/2021	Backup Material



PLANNING BOARD MEETING AMENDED MINUTES
08/04/2021
Page 1 of 3

CALL TO ORDER: Nikole Cleare called the virtual Planning Board meeting to order at 9:07 a.m.

PLEDGE OF ALLEGIANCE: Nikole Cleare led the Pledge of Allegiance.

ROLL CALL: Ms. Tibby took roll call and the following Board members were present: Nikole Cleare, Eric Gnage, Sajeen Bell, Viola Watson, Richard Hughes, David Mountford.

ABSENT: Mr. Alexander Roza

ALSO PRESENT: Maxine Calloway, Director of Community Development, Robert Johnson, Planning & Zoning Manager. Christian Waterval, Assistant Planner, John R. Herin Jr., City Attorney.

APPROVAL OF MINUTES:

- 12/2/2020 Minutes – Motion to approve: David Mountford, Second: Richard Hughes; Yes 6 – No 0
- Meeting date corrected to read June 2, 2021 - Motion to approve: Sajeen Bell, Second: Richard Hughes; Yes 6 – No 0

PLANNING BOARD DISCLOSURES: No disclosures were noted

QUASI-JUDICIAL PROCEEDINGS:

For the record, Attorney Herin stated the quasi-judicial proceedings for the meeting for item before the Planning Board. The proceedings relating to affected parties were also explained. All persons who addressed the Board were sworn in including the applicants, and staff.

PUBLIC GENERAL COMMENTS: Opened 9:15 am and Closed: 9:15 am – There were no general public comments

NEW BUSINESS:

ITEM 1

Public Hearing

TO 2479 - Amendment to the City's Comprehensive Plan to create a new Property Rights Element as required by Florida Statutes 177.3177(6)(i)/HB59

- Robert Johnson, Planning & Zoning Manager, presented the findings of fact providing a presentation for the Amendment to the City's Comprehensive Plan to create a new Property Rights Element request. In his presentation, he informed the Board of the details of the request and requested the Board's approval. Upon completion of his presentation, Mr. Johnson opened the floor to the Board for questions, comments, or concerns.
- Questions from the Board were addressed and discussed.
- **Public Comments:** Opened: 9:27 a.m. and Closed: 9:27 a.m. – There were no public comments on this item.
- The Chair called for a motion to approve Amendment to the City's Comprehensive Plan to create a new Property Rights Element as required by Florida Statutes 177.3177(6)(i)/HB59
- Motion to **APPROVE:** Eric Gnage ; Second: Viola Watson.

Name	Yes	No
David Mountford	1	
Alexander Roze		
Nikole Cleare	1	
Richard Hughes	1	
Sajeen Bell	1	
Eric Gnage	1	
Viola Watson	1	
	6	0

ITEM 2. Quasi-Judicial - Public Hearing

Project Name: 5601 N Hiatus Road Industrial Project: **Large Scale Land Use Plan Map Amendment**

PETITIONERS: Dennis Mele, Esq., for Greenspoon Marder, LLP, designated agent for the property owner, BOF FL 5601 Hiatus, LLC, c/o Bridge Investment Group.

CASE NO.: 1-LUA-21

PETITION: Requesting approval of a Large-Scale Land Use Plan Amendment petition to allow for the amendment of approximately 15.82 gross acres of land from Commercial to Industrial.

LOCATION: 5601 N Hiatus Road, Tamarac, Florida 33321

ITEM 3. Quasi-Judicial - Public Hearing

Project Name: 5601 N Hiatus Road Industrial Project: **Rezoning**

PETITIONERS: Dennis Mele, Esq., for Greenspoon Marder, LLP, designated agent for the property owner, BOF FL 5601 Hiatus, LLC, c/o Bridge Investment Group.

CASE NO.: 2-Z-21

PETITION: Requesting approval of a Rezoning petition to allow for the rezoning of approximately 12.55 acres of land from Mixed- Use Commercial (MU-C) to Business Park (BP).

LOCATION: 5601 N Hiatus Road, Tamarac, Florida 33321

- Robert Johnson, Planning & Zoning Manager, presented the findings of fact providing an extensive presentation for the 5601 N Hiatus Road Industrial Project: **Large Scale Land Use Plan Map Amendment and Rezoning** requests. In his presentation, he informed the Board of the applicant's justifications and request for approval of the requests. Upon completion of his presentation, Mr. Johnson invited the applicant to make his presentation and then opened the floor to the Board for questions, comments, or concerns.
- Questions from the Board to staff were addressed and discussed.
- Questions from the Board to the applicant were addressed and discussed.
- Public Comments: Opened: 10:05 a.m. and Closed: 10:05 a.m. – There were no public comments on these items.

- The Chair called for a motion to approve 5601 N Hiatus Road Industrial Project: **Large Scale Land Use Plan Map Amendment**
- Motion to **APPROVE**: Sajeen Bell ; Second: Viola Watson.

Name	Yes	No
David Mountford		1
Alexander Rozo		
Nikole Cleare	1	
Richard Hughes	1	
Sajeen Bell	1	
Eric Gnage	1	
Viola Watson	1	
	5	1

- The Chair called for a motion to approve 5601 N Hiatus Road Industrial Project: **Rezoning**
- Motion to **APPROVE**: Richard Hughes ; Second: Eric Gnage.

Name	Yes	No
David Mountford		1
Alexander Rozo		
Nikole Cleare	1	
Richard Hughes	1	
Sajeen Bell	1	
Eric Gnage	1	
Viola Watson	1	
	5	1

Planning Board Report:

- No reports

Director's Report:

- Update of previous project heard by the Board – Jenny Spa Special Exception and Parkside Memory Care Flex and Redevelopment Units/Acreage, Variance, Site Plan Approval (Major)

With no other items to be heard or reports to be given, the Chair adjourned the meeting.

The meeting was adjourned at 10:10 am.

Collette Tibby

Planning Board Secretary



7525 NW 88th Avenue
Tamarac, Florida 33321

CITY OF TAMARAC PLANNING BOARD AGENDA

November 3, 2021

ITEM 2.

**TO 2486 - Water Supply
Facilities Work Plan and Text
Amendments to the Future
Land Use, Infrastructure,
Conservation,
Intergovernmental
Coordination and Capital
Improvements Elements**

Commission District: Citywide

Petitioner: An ordinance of the City of Tamarac, Florida, amending, the Future Land Use Element, Infrastructure Element, Conservation Element, Intergovernmental Coordination Element, and Capital Improvements Element of the City of Tamarac's Comprehensive Plan, attached hereto as Exhibit "A" consistent with the South Florida Water Management District Water Supply Facilities Work Plan for the City of Tamarac; authorizing transmittal of the 2021 Ten Year Water Supply Facilities Work Plan attached hereto as Exhibit "B" and comprehensive plan amendments to the Department of Economic Opportunity and other agencies as required by Florida Statutes 163.3184(3) providing for inclusion in the comprehensive plan; providing for conflict; providing for severability; and, providing for an effective date.

ATTACHMENTS:

Description	Upload Date	Type
1 - TO2486 - Memo	10/29/2021	Cover Memo

2 - TO2486 - Ordinance	10/29/2021	Ordinance
3 - Exhibit A - Comp Plan Amendments	10/29/2021	Exhibit
4 - Exhibit B - 2021-Tamarac W SFWP Submittal	10/29/2021	Exhibit

CITY OF TAMARAC
INTEROFFICE MEMORANDUM (21-10-005 M)
COMMUNITY DEVELOPMENT DEPARTMENT

TO: Planning Board,
Meeting of November 3, 2021

FROM: Maxine A. Calloway,
Director of Community Development

DATE: October 14, 2021

RE: Water Supply Facilities Work Plan and Text Amendments to the Future Land Use, Infrastructure, Conservation, Intergovernmental Coordination and Capital Improvements Elements - Temp Ord No. 2486

Recommendation: The Director of Community Development recommends that the Planning Board recommend the proposed text amendments to the Future Land Use, Infrastructure, Conservation, Intergovernmental Coordination and Capital Improvements Elements, adopt the Water Supply Facilities Work Plan and authorize staff to transmit the 2021 Ten Year Water Supply Facilities Work Plan and the proposed amendments to the City Commission at its December 8, 2021 meeting.

Issue: The City of Tamarac is required to adopt amendments to its Comprehensive Plan reflecting necessary changes in the City of Tamarac Water Supply Work Plan (Work Plan).

Background: Chapter 163, Part II, Florida Statutes (F.S.), requires each municipality to prepare and adopt Work Plans into their Comprehensive Plan within 18 months after the South Florida Water Management District (SFWMD) approves a regional water supply plan or its update. The 2018 Lower East Coast Water Supply Plan Update (LEC Plan Update) was approved by the District's Governing Board on January 14, 2019. The Work Plan shall be a standalone document adopted by reference into the local government's Comprehensive Plan.

The water supply sources available to the City has been identified by SFWMD's 2018 LEC Plan Update. The LEC Plan Update presents population and water demand projections through 2040, evaluates water supply issues and presents water source options. The Work Plan will reference the initiatives already identified to ensure adequate water supply for the City. According to state guidelines, the Work Plan and the City's Comprehensive Plan must address the development of traditional and alternative water supplies, service delivery, and conservation and reuse programs necessary to serve existing and new development for at least a 10- year planning period, from 2020 to 2030.

The purpose of the City of Tamarac Water Supply Facilities Work Plan (Work Plan) is to identify and plan for the water supply sources and facilities needed to serve existing and new development within the City's jurisdiction. Residents of the City of Tamarac obtain their water from Lower East Coast which is responsible for ensuring enough capacity is available for existing and future customers. The Work Plan will reference the initiatives already identified to ensure adequate water supply for the City of Tamarac. According to state guidelines, the Work Plan and the Comprehensive Plan must address the development of traditional and alternative water supplies, service delivery, and conservation and reuse programs necessary to serve existing and new development for at least a 10-year planning period. The Work Plan

will have a planning time schedule consistent with the Comprehensive Plan and the Lower East Coast Water Supply Plan Update.

With the adoption of the Work Plan (dated February 1, 2021) and the water supply related amendments to the Comprehensive Plan the City will be in compliance with state requirements and will be consistent with the above referenced plans. Additionally, the Capital Improvements Program in the Comprehensive Plan is proposed to be updated from Fiscal Years 2021-2022 to 2026-2027.

Comprehensive Plan Text Amendments

Staff is proposing to amend five elements of the Comprehensive Plan in order to satisfy statutory requirements. The proposed revisions and additions are formalities that ensure proper intergovernmental coordination, encourage water conservation and incorporate the Water Supply Facilities Work Plan into the policies of the Comprehensive Plan. The proposed changes are attached as Exhibit “A”.

The proposed major changes/amendments to the existing Objectives and Policies reflect those needed based on the City’s Updated 10-Year Water Supply Facilities Work Plan (dated February 1, 2021) and the revised Capital Improvements Program and include the following:

1. Amending the City of Tamarac Comprehensive Plan to update LOS for Potable Water.
2. Outlining the Water Supply Plan update schedule.
3. Adding additional policies concerning agency coordination and water conservation.
4. Amending references to agency names and adoption dates of the LEC Water Supply Plan and Broward County Water Supply Plan and amendments.
5. Updating/Replacing the Capital Improvements Program to reflect Fiscal Years 2022-2027.

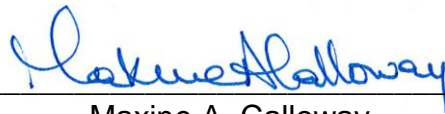
The Water Supply Facilities Work Plan

Tamarac’s Water Supply Facilities Work Plan, in keeping with the South Florida Water Management District Lower East Coast Water Supply Plan, reviews water supply in light of current and future demand for all service providers in the City of Tamarac. The plan, prepared by Eckler Engineering and reviewed by the Public Services Department, concludes that “the City of Tamarac Utilities will have adequate potable water supply facilities to support projected demands throughout its service area”. The Work Plan reports the same for the three (3) water utilities meeting the potable water demands of the residents: City of Tamarac Public Services Department, Broward County Water and Wastewater Services and the City of Fort Lauderdale Water Services. The plan is attached as Exhibit “B”.

Summary: In keeping with statutory requirements, the City of Tamarac and other potable service providers to Tamarac’s residents and businesses have established that adequate potable water facilities exist to meet current and future demand. Staff is recommending that the Planning Board to recommend the South Florida Water Management District 10 Year Water Supply Facilities Work Plan for the City of Tamarac and associated amendments which incorporate the document into the Comprehensive Plan.

Fiscal Impact: Eckler Engineering was retained by Public Services to complete the update to the South Florida Water Management District Water Supply Facilities Work Plan for the City of Tamarac, at a cost of \$19,810. Additionally, The Community Development Department performed the required updates to the Comprehensive Plan at no cost. Eckler Engineering was paid from the Utilities Fund.

This item supports the City's Strategic Plan, Goal #4 providing for "A Vibrant Community" by ensuring sufficient conservation methods are in place and the provision of adequate level of service for potable water is available for the future growth of the community.



Maxine A. Calloway,
Director of Community Development

ATTACHMENTS: Temporary Ordinance No. 2486
Exhibit 'A' – Future Land Use Element
Infrastructure Element
Conservation Element
Intergovernmental Coordination Element
Capital Improvements Element
Exhibit "B" – 2021-Ten Year Water Supply Facilities Work Plan Update

MAC

CITY OF TAMARAC, FLORIDA

ORDINANCE NO. 2021 - _____

AN ORDINANCE OF THE CITY OF TAMARAC, FLORIDA, AMENDING, THE FUTURE LAND USE ELEMENT, INFRASTRUCTURE ELEMENT, CONSERVATION ELEMENT, INTERGOVERNMENTAL COORDINATION ELEMENT, AND CAPITAL IMPROVEMENTS ELEMENT OF THE CITY OF TAMARAC'S COMPREHENSIVE PLAN, ATTACHED HERETO AS EXHIBIT "A" CONSISTENT WITH THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT WATER SUPPLY FACILITIES WORK PLAN FOR THE CITY OF TAMARAC; AUTHORIZING TRANSMITTAL OF THE 2021 TEN YEAR WATER SUPPLY FACILITIES WORK PLAN ATTACHED HERETO AS EXHIBIT "B" AND COMPREHENSIVE PLAN AMENDMENTS TO THE DEPARTMENT OF ECONOMIC OPPORTUNITY AND OTHER AGENCIES AS REQUIRED BY FLORIDA STATUTES 163.3184(3) PROVIDING FOR INCLUSION IN THE COMPREHENSIVE PLAN; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND, PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Section 163.3177(6)(c)3., F.S. requires local governments to prepare and adopt Work Plans into their comprehensive plans within 18 months after the South Florida Water Management District (SFWMD) approves a regional water supply plan or its update; and

WHEREAS, the 2018 Lower East Coast Water Supply Plan Update was approved by the District's Governing Board on January 14, 2019; and

WHEREAS, Section 163.3177(6)(c)3., F.S. requires that every local government that is subject to a regional water supply plan revise its five year schedule of capital improvements to include any water supply, reuse, and conservation projects and programs to be implemented during the five year period; and

WHEREAS, Section 163.3177, F.S. requires that every local government that is subject to a regional water supply plan revise its Conservation Element to the extent necessary to maintain internal consistency; and

WHEREAS, Section 163.3177, F.S. requires that every local government that is subject to a regional water supply plan revise its Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with applicable regional water supply plans and regional water supply authority plans; and

WHEREAS, the City Commission finds it appropriate to amend the text of the Capital Improvements Element of the City of Tamarac Comprehensive Plan for the purpose of internal consistency with the water supply policies being incorporated in other elements of the plan.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSISON OF THE CITY OF TAMARAC, FLORIDA:

SECTION 1: That the foregoing "WHEREAS" clauses are hereby ratified and confirmed as being true and correct and are hereby made a specific part of this Ordinance. All exhibits attached hereto and referenced herein are hereby incorporated by this reference.

SECTION 2: That the City of Tamarac's Comprehensive Plan is hereby amended to incorporate water supply policies consistent with the South Florida Water Management District Water Supply Facilities Work Plan for the City of Tamarac into the Future Land Use Element, Infrastructure Element, Conservation Element,

Intergovernmental Coordination Element, and Capital Improvements Element, as shown in Exhibit "A" attached hereto.

SECTION 3: That the South Florida Water Management District Water Supply Facilities Work Plan for the City of Tamarac, Florida, attached as Exhibit "B" is hereby approved.

SECTION 4: That the Director of Community Development is further authorized and directed to make the necessary textual changes to the City's Comprehensive Plan in order to reflect the above-stated changes.

SECTION 5: All Ordinances or parts of Ordinances, and all Resolutions or parts of Resolutions in conflict herewith are hereby repealed to the extent of such conflict.

SECTION 6: If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Ordinance that can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are declared to be severable.

SECTION 7: This Ordinance shall not become effective until a second public and final public hearing is held and thirty-one (31) days after the State of Florida

Department of Economic Opportunity notifies the City that the plan amendment package is complete.

PASSED, FIRST READING this day of , 2021.

PASSED, SECOND READING this day of , 2021.

MICHELLE GOMEZ,
MAYOR

ATTEST:

JENNIFER JOHNSON

CITY CLERK

I HEREBY CERTIFY that I
have approved this
ORDINANCE as to form.

JOHN R. HERIN
CITY ATTORNEY

City of Tamarac

Water Supply Plan Related Amendments to the Comprehensive Plan

Goals, Objectives & Policies

First Reading: **December 3, 2021**

Adoption Hearing: _____

Prepared by:
Maxine Calloway, AICP
City of Tamarac Community Development Department
7525 N.W. 88th Avenue, Room 206
Tamarac, Florida 33321-2401

The following lists the amended Objective and Policies which shall be included in the City's adopted Comprehensive Plan to ensure consistency between the elements in the Comprehensive Plan and the City's 2021 10-year Water Supply Facilities Work Plan Update.

The following revisions to this Element are hereby adopted. Adopted additions are denoted by underline; deletions by ~~striketrough~~.

Water Supply Plan Related Comprehensive Plan Amendments

I. FUTURE LAND USE ELEMENT

VOLUME I: GOALS, OBJECTIVE & POLICIES

City of Tamarac

I. FUTURE LAND USE ELEMENT

Objective 15

The City will ensure that its public facilities and services meet those applicable level of service standards established by the City Comprehensive Plan.

Monitoring and Evaluation:

- Provide for and maintain level of service standards.

Policy 15.1 The following level of service standards are established by the City of Tamarac for each public facility within the municipal boundary.

* * *

3. Potable Water: 110 gpcd, Tamarac Public Services
115 gpcd, Broward County
~~179~~ 107 gpcd, Fort Lauderdale

Water Supply Plan Related
Comprehensive Plan Amendments

IV. INFRASTRUCTURE ELEMENT
VOLUME I: GOALS, OBJECTIVE & POLICIES

City of Tamarac

The following lists the amended Objective and Policies which shall be included in the City's adopted Comprehensive Plan to ensure consistency between the elements in the Comprehensive Plan and the City's 2021 10-year Water Supply Facilities Work Plan Update.

The following revisions to this Element are hereby adopted. Adopted additions are denoted by underline; deletions by ~~striketrough~~.

IV. INFRASTRUCTURE ELEMENT

Objective 1

The City will correct existing facility deficiencies, maintain adequate levels-of-service, and provide for future growth.

Policy 1.2 The City of Tamarac shall use the following LOS standards:

* * *

3. POTABLE WATER

- Western Service Area (Tamarac Water Treatment Plant)
110 gallons per capita per day.
- Eastern Service Area (Fort Lauderdale Water Treatment Plants)
~~179~~ 107 gallons per capita per day.
- BCU Service Area (Broward County Water Treatment Plants)
115 gallons per capita per day.

Objective 2

The City of Tamarac will ensure that capacity is available at all shared facilities by coordinating with other local governments and appropriate government agencies.

* * *

Policy 2.2 The City will cooperate and coordinate with Broward County, Fort Lauderdale, and other adjoining municipalities, the South Florida Water Management District, and any other units or agencies of government with planning, management, maintenance, or monitoring responsibilities for sanitary sewers, solid waste including hazardous waste, potable water, or drainage and in the extension of or increase in capacity of facilities to meet future needs.

Policy 2.3 The City hereby adopts by reference the City of Tamarac's ~~2021~~16 10-Year Water Supply Facilities Work Plan (dated ~~May 16, 2016~~ February 1, 2021), adopted on November 10 2021~~16~~ and the capital improvement projects contained therein. The Work Plan will be updated, at a minimum, every 5 years, as required by Section 163.3177(6)(c), F.S., within 18 months after the governing board of the South Florida Water Management District approves updates to the Lower East Coast Water Supply Plan. The City's 2021~~16~~ 10-Year Water Supply Facilities Work Plan Update is designed to: assess current and projected potable water demands; evaluate the sources and capacities of available water supplies; and, identify those water supply projects, using all available technologies, necessary to meet the City's water demands for a 10-year period.

Policy 2.4 The City hereby adopts by reference the Fort Lauderdale Water Supply Facilities Work Plan, 2020~~15~~, and the capital improvement projects contained therein.

- Policy 2.5 The City hereby adopts by reference the Broward County 10-Year Water Supply Facilities Work Plan, 2020~~2015~~, and the capital improvement projects contained therein.
- Policy 2.6 The City hereby adopts by reference the South Florida Water Management District's 2018~~3~~ *Lower East Coast Water Supply Plan, Update* (LEC Plan Update).

Objective 4

The City will continue to ensure, through development review at the time of site plan approval, that adequate facility capacity is available, or will be available when needed, to serve development.

- Policy 4.5 Implementation of the City's 2021~~6~~ 10-Year Water Supply Facilities Work Plan through coordination with the South Florida Water Management District, Broward County and Fort Lauderdale shall ensure that adequate water supplies and public facilities are available to serve the water supply demands of any population growth that the City may experience. The City coordinates with Broward County and Fort Lauderdale in development permitting and capacity allocations and through the resources provided by Broward County and Fort Lauderdale.
- Policy 4.6 The City shall coordinate the planning of potable water and sanitary sewer facilities, water supply sources, demands, other services and level-of-service standards through the sharing of data with Broward County and Fort Lauderdale, South Florida Water Management District, and through the 2018~~3~~ Lower East Coast Water Supply Plan Update, as necessary.

Objective 5

The City shall take appropriate steps to ensure the conservation and protection of both the quality and quantity of the City's potable water resources for present and future residents of the City through water use conservation, the protection of wells currently in use by the City for residential, commercial, industrial, and emergency purposes, and their cones of influence; and protection and expansion of the natural groundwater recharge area within urban development.

* * *

- Policy 5.7 The City will support the SFWMD, the 2018~~3~~ Lower East Coast Water Supply Plan Update, its conservation initiatives, and other relevant jurisdictions' water reuse projects and the implementation of new regulations or programs designed to increase the volume of reclaimed water used.

* * *

- Policy 5.10 The City will participate, when warranted, in the SFWMD's Water Savings Incentive Program (WaterSIP) for large-scale retrofits as recommended by the 2018~~3~~ *Lower East Coast Water Supply Plan Update*.

Water Supply Plan Related
Comprehensive Plan Amendments

V. CONSERVATION ELEMENT
VOLUME I: GOALS, OBJECTIVE & POLICIES

City of Tamarac

The following lists the amended Objective and Policies which shall be included in the City's adopted Comprehensive Plan to ensure consistency between the elements in the Comprehensive Plan and the City's 2021 10-year Water Supply Facilities Work Plan Update.

The following revisions to this Element are hereby adopted. Adopted additions are denoted by underline; deletions by ~~striketrough~~.

V. CONSERVATION ELEMENT

Objective 2

The City will maintain and update (as necessary) its administrative procedures, especially those dealing with water supply and use, to ensure that optimum conservation of the ground water resource is achieved in concert with Broward County, the South Florida Water Management District (SFWMD), and other local government agencies.

Monitoring and Evaluation:

- * Maintain and update applicable administrative procedures

Policy 2.1 The ~~Utilities~~, Building and Public Works Services Departments will review codes and procedures to identify ways to increase water conservation and ways in which the codes and procedures might be inhibiting water conservation. The analysis will result, during the planning period, in appropriate amendments to the codes and procedures.

* * *

Policy 2.6 The City shall enforce year-round permanent landscape irrigation measures restrictions established by the City of Tamarac in the adoption of Ordinance Number 2021-014 as updated.

Water Supply Plan Related
Comprehensive Plan Amendments

VII. INTERGOVERNMENTAL COORDINATION ELEMENT
VOLUME I: GOALS, OBJECTIVE & POLICIES

City of Tamarac

The following lists the amended Objective and Policies which shall be included in the City's adopted Comprehensive Plan to ensure consistency between the elements in the Comprehensive Plan and the City's 2021 10-year Water Supply Facilities Work Plan Update.

The following revisions to this Element are hereby adopted. Adopted additions are denoted by underline; deletions by ~~striketrough~~.

VII. INTERGOVERNMENTAL COORDINATION ELEMENT

Objective 1

The City will continue and improve coordination activities among government agencies with planning and impact assessment duties affecting the City; with other units of local government providing services but not having regulatory authority over the use of land, and with the comprehensive plans of adjacent municipalities, the county, and other appropriate state, regional, and local agencies.

* * *

Policy 1.15 The City will coordinate with the South Florida Water Management District (SFWMD) to ensure that the City's plans, requirements and related actions are consistent with the 2018~~3~~ Lower East Coast Regional Water Supply Plan Update.

* * *

Policy 1.23 The City shall support agencies which supply potable water to the City in the development of alternative water supply sources as recommended by the SFWMD in its 2018~~3~~ *Lower East Coast Water Supply Work Plan Update*.

Water Supply Plan Related Comprehensive Plan Amendments

VIII. CAPITAL IMPROVEMENTS ELEMENT VOLUME I: GOALS, OBJECTIVE & POLICIES

City of Tamarac

The following lists the amended Objective and Policies which shall be included in the City's adopted Comprehensive Plan to ensure consistency between the elements in the Comprehensive Plan and the City's 2021 10-year Water Supply Facilities Work Plan Update.

The following revisions to this Element are hereby adopted. Adopted additions are denoted by underline; deletions by ~~striketrough~~.

VIII. CAPITAL IMPROVEMENTS ELEMENT

* * *

Objective 4

Development orders and permits shall be issued only when it is demonstrated by the applicant that the land development proposal conforms with the development requirements of this Comprehensive Plan, with land development regulations, and that sufficient public facilities or service capacity to support such development will exist at the time a building permit is issued for the project.

Policy 4.1 The City of Tamarac shall use the following LOS standards in reviewing impacts of development upon public facilities:

* * *

4. POTABLE WATER

- Western Service Area (Tamarac Water Treatment Plant)
110 gallons per capita per day.
- Eastern Service Area (Fort Lauderdale Water Treatment Plants)
~~179~~107 gallons per capita per day.
- BCU Service Area (Broward County Water Treatment Plants) ~~434~~
115 gallons per capita per day

* * *

Objective 6

To formally adopt the capital improvement plans/schedules of all governmental agencies which schedule and fund improvements needed to maintain City-adopted level of service standards.

* * *

Policy 6.3 The City of Tamarac hereby adopts the City of Tamarac's ~~2017-2022~~ 2022-2027 Capital Improvements Program as originally adopted on September 28, 2021~~16~~.

Policy 6.4 The City hereby adopts by reference the Ft. Lauderdale 2020~~15~~ Water Supply Facilities Work Plan.

Policy 6.5 The City hereby adopts by reference the Broward County 2020~~15~~ 10-Year Water Supply Facilities Work Plan.

Policy 6.6 The City hereby adopts by reference the City of Tamarac 2021 10-Year Water Supply Facilities Work Plan.

FY 2022							TOTAL
CAPITAL IMPROVEMENTS PROGRAM							FY 2022-
DEPARTMENT	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2027
COMMUNITY DEVELOPMENT							
Corridor Studies:							
Buffer Wall Phase 2 Southgate Blvd-West	-	-	-	-	-	-	-
Buffer Wall Phase 2 Southgate Blvd-West	3,659,294	-	-	-	-	-	3,659,294
Buffer Wall Phase 2 Southgate Blvd-East	-	-	-	-	-	-	-
Buffer Wall Phase 2 Southgate Blvd-East	2,980,730	-	-	-	-	-	2,980,730
Corridor Plans - City of Tamarac	-	-	-	-	1,500,000	-	1,500,000
Buffer Wall Phase 2 Rock Island Road	-	-	1,838,280	-	-	-	1,838,280
Buffer Wall Commercial Blvd	150,000	1,500,000	-	-	-	-	1,650,000
Buffer Wall Phase 2 Nob Hill Road	-	-	-	1,510,378	-	-	1,510,378
Buffer Wall Phase 2 NW 31st Avenue	-	-	-	636,405	-	-	636,405
Buffer Wall Phase 2 Pine Island Road -West	-	-	-	188,663	-	-	188,663
Corridor Bufferwall Pine Island North	-	-	-	-	779,443	-	779,443
Art Program:							
Art Bridge - Wildlife Nature Preserve Park	-	225,000	-	-	-	-	225,000
Artistic Fence Woodglen Park Playground	-	183,000	-	-	-	-	183,000
Shaker Village Artwork Slab	-	20,000	-	-	-	-	20,000
Artistic Fence Mainlands Park Playground	-	-	195,000	-	-	-	195,000
Artistic Fence - Sabal Palm Parcel (Playground)	-	194,250	-	-	-	-	194,250
Artistic Fence - Sabal Palm Parcel (Splashpad)	-	131,250	-	-	-	-	131,250
ADA Accessibility Study/Sidewalk Gap Analysis	-	-	-	-	-	-	-
ADA Accessibility/Sidewalk Gap Project	500,000	500,000	500,000	500,000	500,000	-	2,500,000
Tamarac 2040 Comprehensive Plan	200,000	-	-	-	-	-	200,000
Corridor Design Plans	-	-	165,375	-	-	-	165,375
Commercial Blvd/FL Turnpike Gateway Enhancements	-	-	66,150	220,500	-	-	286,650
Sub-Total- Community Development:	\$ 7,490,023	\$ 2,753,500	\$ 2,764,805	\$ 3,055,945	\$ 2,779,443	\$ -	\$ 18,843,717
INFORMATION TECHNOLOGY							
Fiber Network Expansion Phase 2	-	-	-	780,000	-	-	780,000
Fiber-Optic Transportation Cable-Comm. Blvd	120,000	4,000,000	-	-	-	-	4,120,000
Security Master Plan (SMP) Phase 2	-	1,065,346	1,279,929	-	-	-	2,345,275
Security Master Plan (SMP) Phase 3	-	-	-	1,898,050	-	-	1,898,050
Sub-Total- Information Technology:	\$ 120,000	\$ 5,065,346	\$ 1,279,929	\$ 2,678,050	\$ -	\$ -	\$ 9,143,325
PUBLIC SERVICES							
Sabal Palm Parcel	-	10,634,317	-	-	-	-	10,634,317
BIZ BOX at Reclamation Park	-	-	-	1,634,345	-	-	1,634,345
Caporella Park Concession & Amphitheater	1,058,500	-	-	-	-	-	1,058,500
GBJ Dog Park Shelters, Fence and Walkway	195,608	-	-	-	-	-	195,608
City Hall Roof Replacement	1,500,000	-	-	-	-	-	1,500,000
Westside Dog Walk Beside 108th Terrace	-	317,299	-	-	-	-	317,299
TSC Sports Courts and Parking	-	-	19,082,456	-	-	-	19,082,456
Mainlands Drive Bike Path	-	169,687	-	-	-	-	169,687
Tamarac Nature Preserve	-	6,494,271	-	-	-	-	6,494,271
Tamarac Sports Complex Small Playground	-	687,791	-	-	-	-	687,791
Shaker Village	-	5,693,419	-	-	-	-	5,693,419
Aquatic Center Sprayground and Shelter	-	-	-	324,784	-	-	324,784
Median Landscaping and Road Paving	-	-	1,000,000	1,000,000	1,000,000	-	3,000,000
Mainlands Park Phase 2	-	-	2,326,920	-	-	-	2,326,920
Sunset Point Park Shelter & Bench Replacements	-	-	598,868	-	-	-	598,868
Tamarac Park Field Lighting, Fence, Pathway	-	-	841,770	-	-	-	841,770
Woodglen Park	-	-	2,428,712	-	-	-	2,428,712
Public Safety Complex/City Hall Feasibility Study	-	-	-	-	50,000,000	-	50,000,000
Tamarac Park Multi-Purpose Center	-	-	-	-	21,720,222	-	21,720,222
Sub-Total- Public Services:	\$ 2,754,108	\$ 23,996,784	\$ 26,278,726	\$ 2,959,129	\$ 72,720,222	\$ -	\$ 128,708,969
PUBLIC SERVICES - STORMWATER							
Culvert and Headwalls Phase6: FY21-FY22	400,000	-	-	-	-	-	400,000
Culvert and Headwalls Phase7: FY23-FY24	-	400,000	400,000	-	-	-	800,000
Culvert and Headwalls Phase8: FY25-FY26	-	-	-	400,000	400,000	400,000	1,200,000
Sub-Total- Stormwater:	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 2,400,000

FY 2022 CAPITAL IMPROVEMENTS PROGRAM							TOTAL
DEPARTMENT	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2022- FY 2027
UTILITIES							
Rehab Acelerators - Internals	500,000	-	-	-	-	-	500,000
Water Treatment Plant Control Building	15,000,000	-	-	-	-	-	15,000,000
WTP Ammoniation System Upgrade & Improvements	124,500	-	-	-	-	-	124,500
WTP Filter Replacement	3,550,000	-	-	-	-	-	3,550,000
Eastside Distribution Expansion Project	5,000,000	4,700,000	-	-	-	-	9,700,000
Irrigation Replacement	82,000	82,000	82,000	82,000	120,000	120,000	568,000
Sewer Main Rehabilitation (I & I)	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
Tamarac West System Rehabilitation	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
WTP Renewal/Replacement	125,000	125,000	125,000	150,000	150,000	150,000	825,000
Replace Wastewater Force Mains	-	-	2,000,000	-	-	-	2,000,000
Replace Lime Silos and Slaker Systems	-	-	100,000	1,000,000	-	-	1,100,000
Wastewater Pump Station Renewal	-	-	400,000	-	-	400,000	800,000
Replace Greenleaf Filter Media/Sandblast Paint	-	-	-	2,000,000	-	-	2,000,000
Water Loss Assessment (Leak Detection Program)	-	-	-	250,000	-	-	250,000
WTP Well Maintenance Program (formerly Well Upgrade Project)	-	-	-	200,000	-	200,000	400,000
Rate Study	-	-	-	-	60,000	-	60,000
Shaker Village Paving Project after Pipe Bursting	120,000	-	-	-	-	-	120,000
Wastewater System Master Plan (Study)	300,000	-	-	-	-	-	300,000
WTP Filter Nos. 3&4 Rehab and Filter Media Replacement	159,000	-	-	-	-	-	159,000
NW 58th Street Neighborhood Water Main Replacement	-	2,200,000	-	-	-	-	2,200,000
Paint Storage Tanks/Filter/Acelerators/Piping	-	300,000	-	-	-	-	300,000
Replace Transfer Pumps	-	450,000	-	-	-	-	450,000
WTP Raw Well Upgrades - Meter Assembly & Electrical	-	100,000	-	-	-	-	100,000
Grants/Tamarac Square Water Main Replacement	-	-	575,000	-	-	-	575,000
Fire Hydrant Coverage Improvements (22 Hydrants)	-	-	250,000	-	-	-	250,000
Citywide AMI Program	-	-	1,500,000	1,550,000	1,650,000	-	4,700,000
Woodland Country Club WM Replacement-Phases 1-4	-	-	-	-	5,000,000	5,000,000	10,000,000
Replace West 8MG Acelerator	-	-	-	-	-	3,500,000	3,500,000
<i>RRA Security Upgrades for Tract 27 - 2MG Tank:</i>							
Tract 27 Booster Station Perimeter Fencing Improvements	20,000	-	-	-	-	-	20,000
<i>RRA Security Upgrades for Grants Plaza - 1MG Tank:</i>							
Install intrusion alarms at access points to Tanks and integrate into	-	-	5,000	-	-	-	5,000
Perimeter Fencing Modifications	-	-	33,000	-	-	-	33,000
Perform Study of Existing Diesel Tank & Implement Required Impro	-	-	22,000	-	-	-	22,000
Install Vehicle Barrier at Front Door (i.e. bollards/concrete barrier)	-	-	5,500	-	-	-	5,500
<i>RRA Security Upgrades for WTP Facility:</i>							
Video Surveillance for Wells 10, 11, 12, 13, 14, 15, 16, 17, 18 & 19	-	-	-	22,400	48,000	47,200	115,600
Sub-Total- Utilities:	\$ 25,780,500	\$ 8,757,000	\$ 5,908,500	\$ 6,054,400	\$ 7,826,000	\$ 10,217,200	\$ 64,543,600
TOTAL	\$ 36,544,631	\$ 40,972,630	\$ 36,631,960	\$ 15,147,524	\$ 83,725,665	\$ 10,617,200	\$ 223,639,611

Objective 7

The Capital Improvement Element, and the five-year Capital Improvements Schedule and Plan incorporated into the Element by reference, shall be used as the basis for detailing the City's public facility deficiencies and planning corrective capital projects.

Monitoring and Evaluation:

- Update on the Capital Improvements Schedule

* * *

Policy 7.3 The City shall incorporate capital improvements affecting City levels of service by referencing the Capital Improvements Schedules of Broward County and Fort Lauderdale, state agencies, regional water supply authorities and other units of government providing services but not having regulatory authority over the use of land into its 5-Year Schedule of Capital Improvements. The City Capital Improvement Element Schedule shall be maintained and updated and shall demonstrate that level of service standards will be maintained during the next five-year (~~2016/2017~~ 2021/2022 through ~~2021/2022~~ 2026/2027) planning period.

South Florida Water Management District
Water Supply Facilities Work Plan
for the
City of Tamarac
Public Services Department
Florida



For information regarding this project contact:

Eckler Engineering, Inc.

4700 Riverside Drive – Suite 110

Coral Springs, FL. 33067

(954) 510-4700

CA No. 7803

Project No. : 442-021.00

Date: February 1, 2021

E ECKLER ENGINEERING, INC.

South Florida Water Management District
Water Supply Facilities Work Plan
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City of Tamarac Public Services Department

Prepared By

**ECKLER ENGINEERING, INC.
4700 Riverside Drive
Coral Springs, Florida 33067
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February 1, 2021

442-021.00

Bryant J. Facey, P.E., 76026

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Abbreviations

ABBREVIATION

Avg	Average
BCWWS	Broward County Water and Wastewater Services
BCWWT	Broward County North Regional Wastewater Treatment Plant
CFWI	Central Florida Water Initiative
CIE	Capital Improvements Element
CIS	Capital Improvements Schedule
County	Broward County
DWTP	District 1 Water Treatment Plant
FAS	Floridian Aquifer Supply
FLUM	Future Land Use Map
F.S.	Florida Statutes
GPCD	Gallons per Capita per Day
LEC	Lower East Coast
LOS	Level of Service
MOR	Monthly Operating Report
MFL	Minimum Flow Level
MGD	Million Gallons per Day
MGM	Million Gallons per Month
MGY	Million Gallons per Year
SAS	Surficial Aquifer System
SFWMD	South Florida Water Management District
State	State of Florida
TCDA	City of Tamarac Community Development Department Demographic Analysis
TPSD	Tamarac Public Services Department
TUE	Tamarac Utility East
TUW	Tamarac Utility West
Work Plan	City of Tamarac Water Supply Facilities Work Plan
WTP	Water Treatment Plant
WUP	Water Use Permit
WWTP	Wastewater Treatment Plant

Introduction

Section 1 – Introduction

1.1 Purpose

The City of Tamarac (City) is located within Broward County (County) and has a total area of approximately 11.90 square miles. This City is surrounded by Lauderhill, Lauderdale Lakes, North Lauderdale, Fort Lauderdale, Sunrise, and Coral Springs with the west boundary abutting the Everglades Wildlife Management Area.

Potable water facilities were constructed to obtain, treat, and distribute potable water to the customers of the City. These facilities include raw water supply wells, raw water mains, water treatment plants, storage facilities, pumping and metering facilities, distribution mains, and customer meters. The City of Tamarac has adequate facilities in most of these areas to support projected demands for the 10-Year Water Supply planning period. These facilities are adequate to provide water which meets all applicable water quality standards. No areas of the City are served by domestic self-supply systems or potable water wells.

The City of Tamarac has three (3) water utilities meeting the potable water demands of the residents. These are:

- ▶ City of Tamarac Public Services Department (TPSD).
- ▶ Broward County Water and Wastewater Services - District 1 (BCWWS).
- ▶ City of Fort Lauderdale Water Services (FTLWS).

The TPSD is an enterprise fund within the City municipal government. BCWWS only serves several small portions of the City. FTLWS wholesales water to a portion of Tamarac. The City cannot plan or budget for the infrastructure improvements for the BCWWS or FTLWS.

The BCWWS District 1 Water Treatment Plant (D1 WTP) serves the residents of the City in a small area north of NW 58th Street, south of Bailey Road (NW 62nd St.), east of Rock Island Road, and west of NW 46th Avenue. In addition, it also serves the commercially zoned areas within the City along Commercial Boulevard between State Road 7 (US 441) and NW 31st Avenue.

The FTLWS serves the portion of the City east of NW 31st Avenue within the City limits referred to as Tamarac Utility East (TUE). Tamarac Utility West (TUW) serves the remainder of the City. The City also serves a small development located in the City of North Lauderdale called the Courtyards and is located just east of SW 81st Avenue between McNab Road and Bailey Road. The Courtyards Development contains 288 units split into several buildings.

SECTION 1 - INTRODUCTION

The purpose of the City of Tamarac Water Supply Facilities Work Plan (Work Plan) is to identify and plan for the water supply sources and facilities needed to serve existing and new development within Tamarac's local government jurisdiction. Chapter 163, Part II, Florida Statutes (F.S.), requires local governments to prepare and adopt Work Plans into their comprehensive plans within 18 months after the South Florida Water Management District (SFWMD) approves a regional water supply plan or its update. The 2018 Lower East Coast Water Supply Plan Update (LEC Plan Update) was approved by the District's Governing Board on January 14, 2019. The Work Plan shall be a standalone document adopted by reference into the local government's Comprehensive Plan.

The water supply sources available to the City has been identified by SFWMD's 2018 LEC Plan Update. The LEC Plan Update presents population and water demand projections through 2040, evaluates water supply issues and presents water source options. The Work Plan will reference the initiatives already identified to ensure adequate water supply for the City. According to state guidelines, the Work Plan and the City's Comprehensive Plan must address the development of traditional and alternative water supplies, service delivery, and conservation and reuse programs necessary to serve existing and new development for at least a 10-year planning period, from 2020 to 2030.

The Work Plan is divided into five (5) sections:

Section 1 – Introduction

Section 2 – Background Information

Section 3 – Data and Analysis

Section 4 – Capital Improvements

Section 5 – Goals, Objectives, and Policies

1.2 Physical Location

Figure 1-1, City of Tamarac Location Map, shows the physical location of the City with respect to the Broward County and the State of Florida. This map is located at the end of this section.

1.3 Existing Facilities

1.3.1 City of Tamarac Public Services Department

The City of Tamarac Public Services Department (TPSD) has a current SFWMD Water Use Permit (WUP No. 06-00071-W) for which has an annual allocation of 2,767 MG and a maximum month of 244.4 MG. This twenty (20) year permit expires on February 3, 2034. The City of Tamarac has one (1) water treatment plant (WTP) with a permitted capacity of

SECTION 1 - INTRODUCTION

20 MGD. Treatment of the raw water consists of lime softening, filtration, disinfection, finished water storage, fluoridation, and high service pumping to the distribution system. The WTP currently withdraws water from the Biscayne Aquifer, a minimum flow level (MFL) water body. These facilities include eighteen (18) primary wells and one (1) standby well. The water distribution system within the service area is in good condition and well maintained. Appendix 1-A, City of Tamarac Public Services Department SFWMD's Water Use Permit, shows the permitted withdrawals and information related to the facilities.

Along with the WTP, there are two (2) repump stations. The first station is within the Tamarac Sports Complex and called Tract 27 Booster Station. It has three (3) 2,500 gpm pumps and a 2.0-MG ground storage tank. The second station located behind the Sunshine Plaza is called Grant's Booster Station. It has two (2) 2,000 gpm pumps and a 1.0-MG ground storage tank.

The City's distribution system is currently divided into two sections:

1. Tamarac Utility West (TUV): from State Road 7 to the Sawgrass Expressway
2. Tamarac Utility East (TUE): from NW 31st Avenue to Prospect Road and NW 15th Avenue

The City of Tamarac is interested in connecting the eastern portion of its existing distribution system (TUE) to its western water supply and distribution system (TUV) to have full control of its water supply to all customers. Currently, TPSD supplies water to TUV service area while TUE's water supply is purchased in bulk from the City of Fort Lauderdale.

1.3.2 Broward County Water and Wastewater Services - District 1

The Broward County Water and Wastewater Services - District 1 WUP was most recently renewed on February 6, 2015. The current WUP number is 06-00146-W. At this time, it is expected that District 1 will receive a permit for 13.90 MGD which expires on April 10, 2028. The BCWWS 2018 Annual Report states District 1 has one (1) water treatment plant known as WTP 1A with a permitted plant capacity of 16 MGD. Treatment of the raw water consists of lime softening, filtration, disinfection, storage, and pumping to the distribution system. WTP 1A currently withdraws a permitted 10.5 MGD of aquifer groundwater from the Biscayne Aquifer through the use of 9 wells with future plans to withdraw from the Floridan Aquifer (2 on-site wells with incomplete equipment as of 2018). The water distribution system within the city limits of Tamarac's service area is in good condition and well maintained. Appendix 1-B, BCWWS WUP Application, shows the proposed withdrawals and information related to the facilities owned by BCWWS.

SECTION 1 - INTRODUCTION

1.3.3 City of Fort Lauderdale Water Services

The FTLWS has a current 2019 WUP (WUP No. 06-00123-W) for 61.19 MGD. This permit will expire on September 11, 2028. The FTLWS is supplied by the Dixie and Prospect wellfields, which draw from the Surficial Aquifer System (SAS). There are a total of 37 active wells between the two wellfields and 16 wells in operation at a given time. In 2015, data from the City of Fort Lauderdale 10-Year Water Supply Facilities Work Plan shows a population of 2,152 people and a finished water demand of 0.223 MGD being serviced to Tamarac by the FTLWS. This is Tamarac's utility service area east of NW 31st Avenue.

The raw water is treated at two (2) water treatment facilities, the Peele-Dixie nanofiltration plant and the Fiveash lime softening plant and have design capacities of 20 MGD and 70 MGD, respectively. The Peele-Dixie and Prospect Wellfields have a combined pumping capacity of approximately 111 MGD. Wholesale customers receive finished water from the Fiveash WTP. The FTLWS Fiveash WTP treatment of the raw water consists of aeration, lime softening, filtration, disinfection, storage, and pumping to the City's distribution system. The existing FTLWS Fiveash facility is adequate to supply Tamarac's east municipal limits. Appendix 1-C, City of Fort Lauderdale WUP, shows the different conditions and information related to the consumptive use of water for the City of Fort Lauderdale.

1.4 Statutory Information

1.4.1 Statutory History

The Florida Legislature enacted bills in the 2002, 2004, 2005, 2011 and 2016 sessions to address the state's water supply needs. These bills, in particular Senate Bills 360 and 444 (2005 legislative session), significantly changed Chapters 163 and 373, F.S. by strengthening the statutory links between the regional water supply plans prepared by the water management districts and the comprehensive plans prepared by local governments. In addition, these bills established the basis for improving coordination between local land use planning and water supply planning.

1.4.2 Statutory Requirements

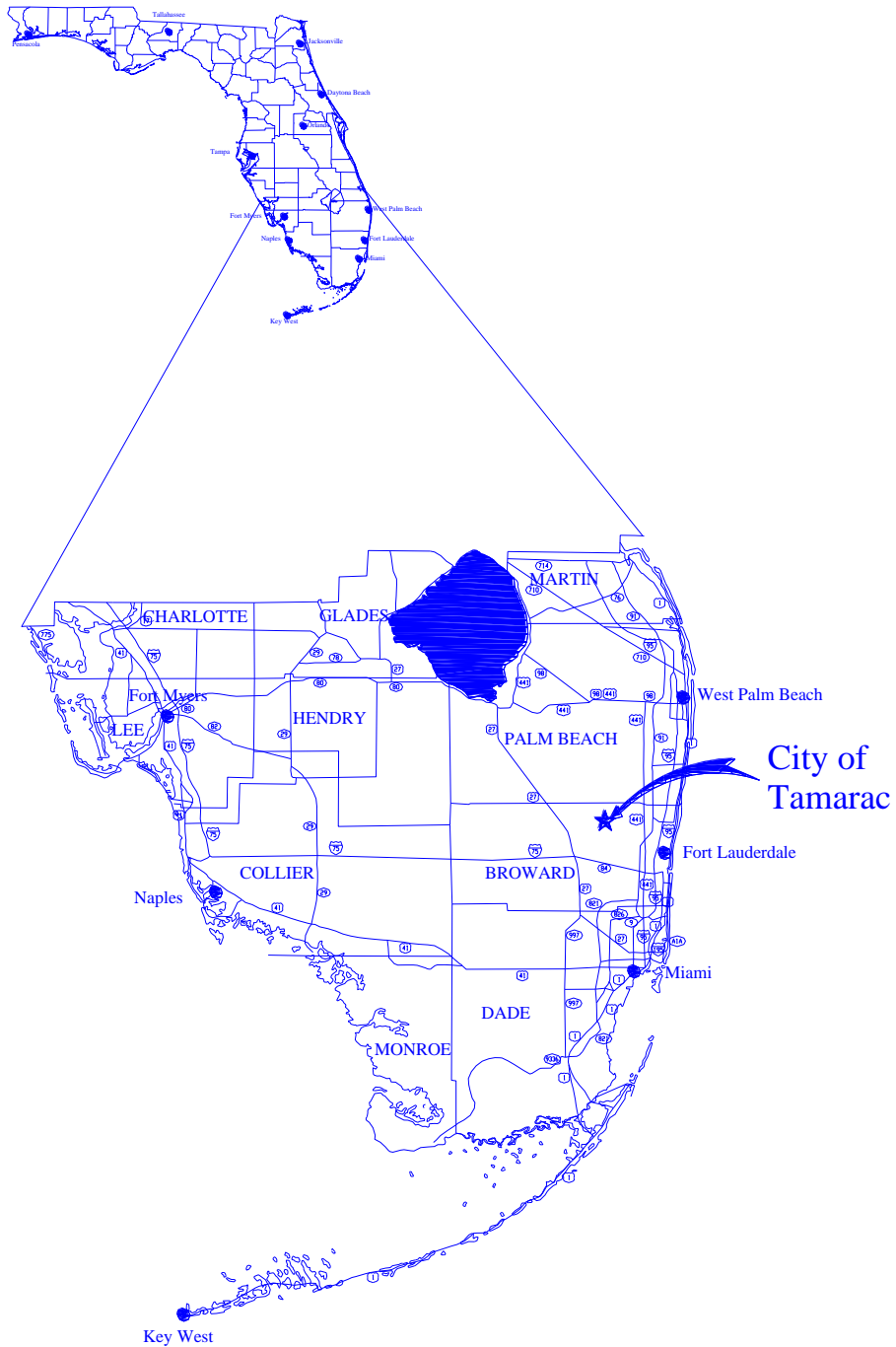
The City of Tamarac has considered the following statutory provisions when updating the Work Plan:

SECTION 1 - INTRODUCTION

1. Coordinate appropriate aspects of its comprehensive plan with the 2018 Lower East Coast Regional Water Supply Plan [163.3177(4) (a), F.S.].
2. Ensure the future land use plan is based upon availability of adequate water supplies and public facilities and services [s.163.3177 (6) (a), F.S.]. Data and analysis demonstrating that adequate water supplies and associated public facilities will be available to meet projected growth demands must accompany all proposed Future Land Use Map amendments submitted for review.
3. Ensure that adequate water supplies and potable water facilities are available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent and consult with the applicable water supplier to determine whether adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy [s.163.3180 (2), F.S.].
4. For local governments subject to a regional water supply plan, revise the General Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Element (the "Infrastructure Element"), within 18 months after the water management district approves an updated regional water supply plan, to:
 - a. Identify and incorporate the alternative water supply project(s) selected by the local government from projects identified in the LEC Regional Water Supply Plan, or alternative project(s) proposed by the local government under s. 373.709(8)(b), F.S. [s. 163.3177(6)(c), F.S.];
 - b. Identify the traditional and alternative water supply projects and the conservation and reuse programs necessary to meet water needs identified in the LEC Regional Water Supply Plan [s. 163.3177(6)(c)3, F.S.]; and
 - c. Update the Work Plan for at least a 10-year planning period for constructing the public, private, and regional water supply facilities identified in the element as necessary to serve existing and new development [s. 163.3177(6)(c)3, F.S.].
5. Revise the Five-Year Schedule of Capital Improvements to include water supply, reuse, and conservation projects and programs to be implemented during the five-year period [s. 163.3177(3)(a)4, F.S.].

SECTION 1 - INTRODUCTION

6. To the extent necessary to maintain internal consistency after making changes described in Paragraph 1 through 5 above, revise the Conservation Element to assess projected water needs and sources for at least a 10-year planning period, considering the LEC Water Supply Plan, as well as applicable consumptive use permit(s) [s.163.3177 (6) (d), F.S.]. The plan must address the water supply sources necessary to meet and achieve the existing and projected water use demand for the established planning period, considering the applicable regional water supply plan [s.163.3167(9), F.S.].
7. To the extent necessary to maintain internal consistency after making changes described in Paragraphs 1 through 5 above, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with the LEC Regional Water Supply Plan [s.163.3177 (6) (h) 1., F.S.].
8. While an Evaluation and Appraisal Report is not required, local governments are encouraged to comprehensively evaluate, and as necessary, update comprehensive plans to reflect changes in local conditions. The evaluation could address the extent to which the local government has implemented the need to update their Work Plan, including the development of alternative water supplies, and determine whether the identified alternative water supply projects, traditional water supply projects, and conservation and reuse programs are meeting local water use demands [s.163.3191 (3), F.S.].



Scale : NTS

Figure 1-1
City of Tamarac
Location Map
Source: ArcGIS

Background Information



SECTION 2 – BACKGROUND INFORMATION

Section 2 - Background

2.1 Overview

Included in this section is a brief overview of the existing water usage, population and relevant regional issues in the City of Tamarac.

Existing water usage demand data was taken from the SFWMD Water Use Permit (WUP) issued on February 3, 2014 shown in Appendix 1-A. The data from the WUP, especially historical populations, is inconsistent with the 2018 LEC Water Supply Plan which is shown in Appendix 2-A. Both sets of existing population and demand data are compared in Section 2.2. For the purposes of this Work Plan, most of the projected data will be taken from sources outside the WUP or has been provided in the form of raw data from the City.

The population projections in Section 2 and Section 3 are based on the City's Utility Service Area since the water withdrawals for the utility service area were approved, along with the herein specified population projections. Population projections for the City and its Utility Service Area are discussed in Section 3, Data and Analysis.

The City boundaries are shown in Figure 2-1, Aerial Photograph of the City of Tamarac. This figure is located at the end of this section and shows the limits of the area from which population projections are analyzed. Some sub areas within these boundaries are served by the City and other areas are served by other utility companies.

2.2 Population & Water Usage

Data Comparison between the 2018 LEC Plan Update and the City's 2014 WUP shown in Table 2-1 compares the City's per capita water use rate and population projections.

Table 2-1
Data Comparison for the City of Tamarac

<i>Year</i>	<i>LEC Water Supply Plan</i>		<i>Water Use Permit</i>	
	<i>Population</i>	<i>Per Capita (gpcd)</i>	<i>Population</i>	<i>Per Capita (gpcd)</i>
2020	65,315	98	63,741	110
2030	68,600		67,732	
2033			68,929	
2035	69,791			

SECTION 2 – BACKGROUND INFORMATION

Historical per capita water demands are important for the projection of future potable water requirements. Over the past five (5) years, the City has continued to experience a steady growth rate. Since the 2018 LEC Plan Update does not provide historical population data and the City's 2014 WUP is outdated and may not reflect the most accurate projections starting in the year 2020, historical population data from the available **U.S. Census Bureau** is used to help determine projected population growth and water demand. See Table 2-2, Historical Population and Water Demands, which presents five (5) years of population data for the City. The per capita water demands for the City were obtained from an average of the total finished water that the WTP treated in its Monthly Operating Reports (MORs) for the years shown.

Table 2-2
Historical Population and Water Demands

<i>Fiscal Year</i>	<i>TUW Service Area Population¹</i>	<i>Avg Daily Water Production² (mgd)</i>	<i>Per Capita Water Production (gpcd)</i>
2014	59,798	5.68	95
2015	60,474	5.80	96
2016	61,297	6.05	99
2017	61,693	6.27	102
2018	62,012	6.38	103
2019	62,497	6.40	102
2020	62,991	6.52	103

¹ Based on subtraction of District 1 and TUE service populations from the 2018 US Census Bureau historical population

² Calculated from the City WTP's MORs.

2.3 Relevant Regional Issues

Regional issues that affect the City include minimizing the pressure placed on the Everglades ecosystem and decreasing withdraws from the Biscayne Aquifer. Precautions have been made to address both issues such as the City placing into effect permanent water restrictions and water conservation campaigns.

SECTION 2 – BACKGROUND INFORMATION

Broward County is also focusing on a wider range of issues as they tackle topics that include:

1. Climate Impact.
2. Everglades and Lake Okeechobee Minimum Flows and Levels (MFLs).
3. Surficial Aquifer System and Limited Water Availability.
4. Ocean Outfall Program and Reclaimed Water Options.

Climate impact proves to be the biggest concern as it is predicted to effect sea level rise, saltwater intrusion, extreme weather events, and infrastructure development. These factors have a huge effect on the County territory and beyond. Greater detail of these issues can be seen in the Broward County 10-Year Water Supply Facilities Work Plan, most recently completed in 2020.

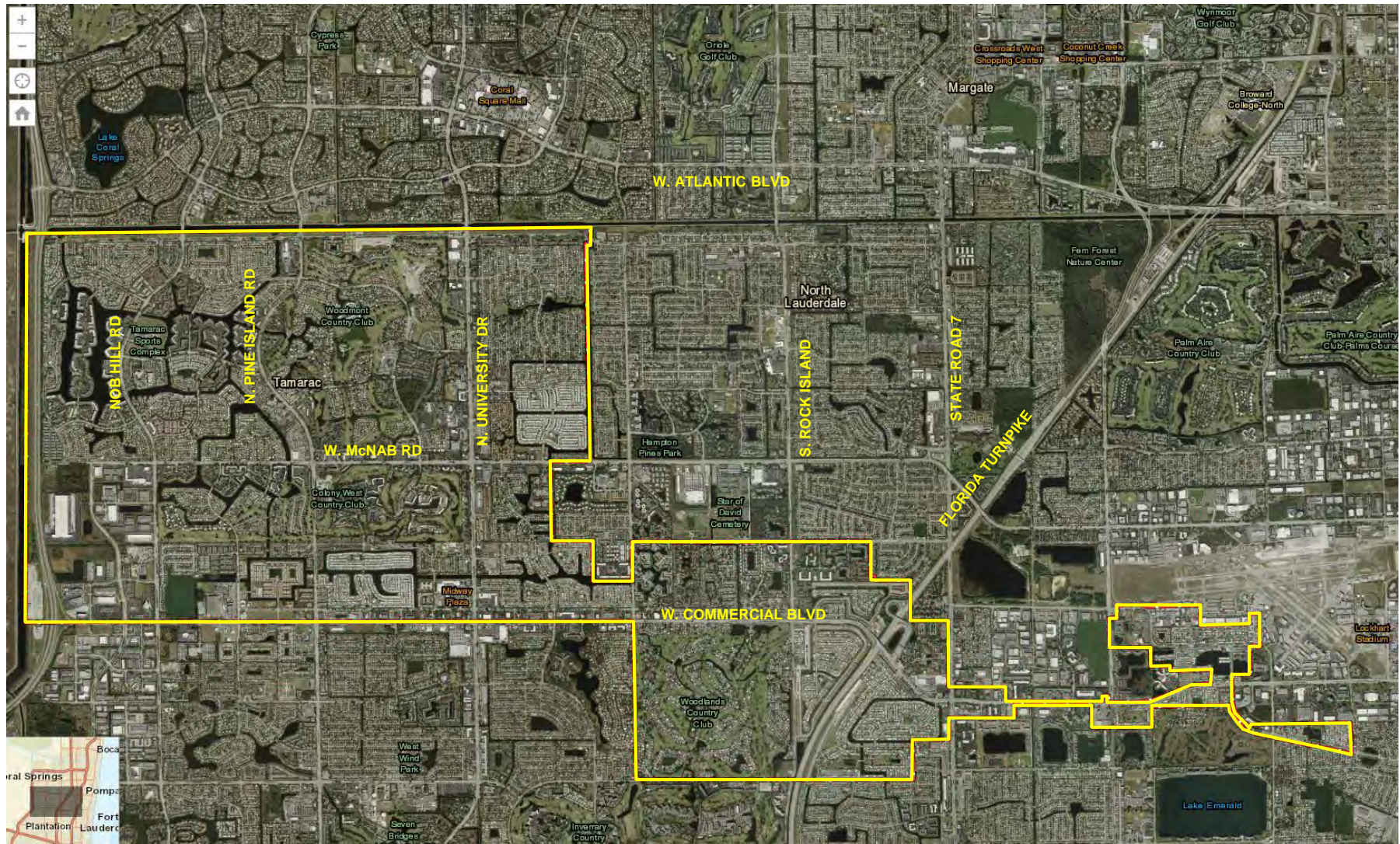
The Broward County Integrated Water Resource Plan Report (IWRP) and Water Supply Actions within the County's Climate Action Plan are intended to maintain adequate water supply through conservation and adaptation and increasing natural system's resiliency. The U.S. Army Corps of Engineers (USACE) have developed a planning scenario of 9 to 24 inches of sea level rise by 2060 which is adopted by Southeast Florida Counties. Adaptation plans are to be put in place inclusive of wellfield relocation and/or expansion of western wellfields as part of an effort to combat saltwater intrusion due to the Biscayne Aquifer being shallow and highly porous and transmissive. This involves groundwater monitoring and modeling efforts to predict the movement anticipated, in coordination with the United States Geological Survey (USGS). Projects providing additional long-term storage of stormwater runoff and redistribution of excess rainfall during dry period and drought is to be integrated to combat extreme weather events. Potentially viable alternative water supply projects include regional surface water reservoirs and below ground aquifer storage and recovery systems.

As part of establishing MFLs, the regional water management district determines if the existing water body is below or projected to fall in level within the next 20 years. Over the years, initiatives have been taken to reevaluate and define operations for Lake Okeechobee that take into account to address ecological impacts and consideration of infrastructure improvements. As for the SAS, withdrawals are managed by the SFWMD through the issuance of use permits and water utilities must meet a criteria set forth to be eligible for the permit, which include the following:

SECTION 2 – BACKGROUND INFORMATION

1. Being a reasonable and beneficial use of the resource
2. Demonstration of no adverse impact to other existing legal uses of water
3. Assurance that the use of the requested quantity of water is necessary for economic and efficient use and is both reasonable and consistent with the public interest

For alternative water supplies (AWS), Florida legislature enacted an ocean outfall statute requiring the elimination of six outfalls in Southeastern Florida, two of which are in the County, in order to reduce nutrient loadings to the environment and achieve a more efficient use of water for water supply needs. Also, when utilities seek use of the Floridan Aquifer, they are faced with higher energy costs associated with treatment of this aquifer in South Florida. Lastly, the C-51 Reservoir project is inclusive of constructing a 60,000 acre-feet of storage for use as an AWS source in Southeastern Florida.



Legend:

—— City of Tamarac Limits

ECKLER ENGINEERING, INC.

Figure 2-1
Aerial Photograph of
The City of Tamarac

Source: Google Earth (boundary from City GIS website – 2020)

TAMARAC
The City For Your Life

Data Analysis

SECTION 3 – DATA AND ANALYSIS

Section 3 – Data & Analysis

3.1 Purpose

The intent of the data and analysis section of the Work Plan is to describe information that local governments need to provide to state planning and regulatory agencies as part of their proposed comprehensive plan amendments, particularly those changing the Future Land Use Map (FLUM) to increase density and intensity. Additionally, population projections should be reviewed for consistency between the County and SFWMD's Water Supply Plans.

Within this section, population projections as well as level of service (LOS), raw water projections, and finished water projections will be discussed. This data analysis will be performed not only for TPSD, but also for the City of Fort Lauderdale and BCWWS District 1 which supply potable/finished water to different areas within the City of Tamarac municipal limit boundaries.

Figure 3-1, City of Tamarac Utility Service Area Site Map, shows the areas where the data analysis is located to evaluate the population within the City of Tamarac Utility Service Area. This figure is located at the end of this section.

3.2 Population & Finished Water Demand Projections by City Utility Service Area

As seen in Table 3-1, City of Tamarac Population Projections, the population of the City is the sum of the populations of TUW, TUE, and BCWWS District 1 (area of Sabal Palm community and Lakes of Carriage Hills). A small area within North Lauderdale called the Courtyards which is built out at 432 people and is served by TUW which is included in these projections. From the year 2023 on, these projections assume that TUE will be acquired by the City and its distribution system connected to TUW's water supply and distribution system. As shown in Table 3-1, the italicized population values for TUE starting 2023 are being added into the values for TUW.

For the City's total population projections, the historical populations from the US Census Bureau up to 2018 (as was shown in Table 2-2) were used as the base population which to project from. A per year percentage increase of about 1.01% was averaged out from the average year-to-year US Census Bureau population change from 2012-2018 and applied onward. Lastly, TUW's population was calculated by subtracting the populations of District 1 and TUE from the total City's population. Values in white cells for District 1 and TUE were interpolated using the County's 2020 Comprehensive Plan data.

SECTION 3 – DATA AND ANALYSIS

Based on the City's 2018 Development Map, the following housing developments are either under construction (UC) or recently completed (RC):

- Golfview Townhomes – 12 units (RC)
- Chelsea Place Townhouses – 68 units (RC)
- Central Parc single-family homes – 253 units (RC)
- Manor Parc single-family homes – 239 units (UC)
- Hidden Trails single-family homes – 214 units (UC)
- Woodmont/Pulte single-family homes – 152 units (UC)

These new developments are not reflected in the projections shown on Table 3-1. The population projections from the US Census Bureau already projects an increase far greater than the 2014 WUP which should more than make up for the potential increase due to the new developments shown above.

SECTION 3 – DATA AND ANALYSIS

**Table 3-1
City of Tamarac Population Projections**

Year	Populations (Served by)				
	BCWWS Area - District 1	Fort Lauderdale Area (TUE)*	Tamarac Utility Service Area (TUW)	Tamarac Public Services Dept. (TPSD)	City of Tamarac (Total)
2018	1,998	2,044	62,012	62,012	66,054
2019	2,190	2,040	62,498	62,498	66,728
2020	2,382	2,037	62,991	62,991	67,410
2021	2,394	2,031	63,672	63,672	68,098
2022	2,407	2,025	64,361	64,361	68,793
2023	2,419	2,019	65,057	67,076	69,495
2024	2,432	2,013	65,760	67,773	70,205
2025	2,444	2,007	66,470	68,477	70,921
2026	2,457	2,012	67,177	69,189	71,646
2027	2,470	2,017	67,890	69,907	72,377
2028	2,482	2,022	68,611	70,633	73,116
2029	2,495	2,027	69,340	71,367	73,862
2030	2,508	2,032	70,076	72,108	74,616
2031	2,527	2,036	70,814	72,851	75,378
2032	2,546	2,041	71,560	73,601	76,148
2033	2,566	2,045	72,314	74,359	76,925
2034	2,585	2,050	73,076	75,126	77,710
2035	2,604	2,054	73,846	75,900	78,504
2036	2,616	2,051	74,638	76,690	79,305
2037	2,627	2,049	75,439	77,488	80,115
2038	2,639	2,046	76,248	78,294	80,933
2039	2,650	2,044	77,065	79,109	81,759
2040	2,662	2,041	77,891	79,932	82,594

Notes:

* TUE population served by Ft. Lauderdale to be acquired and combined into TUW's service area starting 2023 (values italicized)

	- Orange cells are projections obtained from Broward County Comprehensive Plan (Updated April 2020)
	- Green cells are calculated from subtracting District 1 & TUE service populations from the projected City of Tamarac total populations (derived from US Census Bureau)
	- Blue cell calculation: TPSD = TUE + TUW
	- Purple cells are projections for the entire City of Tamarac obtained from the historical US Census Bureau data (as of 2018)

SECTION 3 – DATA AND ANALYSIS

The projections of the finished (treated) water demand based on the population projections are presented in Table 3-2, Finished and Raw Water Projection Demands within Utility Service Area (TUW). The projections are through the year 2040.

The average LOS and Max/Average Day Ratios for raw and finished water was calculated using MOR data provided by the City from the 7 year interval of 2014-2020. The finished LOS was compared by looking at both the MOR data and the WUP for the City, which projected an LOS per capita use rate of 110 GPCD up to the 2033. The MOR data showed a historical average of about 100 GPCD for the past 7 years and a steady increase of about 1.2 GPCD every year. Although the City has put forth conservation efforts to offset and stabilize this LOS demand, it is likely the population and household densities within the City is actually greater than what the US Census Bureau references to calculate their historical population data. This would explain the increase in water usage as the yearly rate of change of the population within the service area is only minimally increasing. For both the finished and raw water projections, an LOS of 105 GPCD was chosen to project out to the year 2040. This value was chosen because it is lower than the WUP value for finished water but high enough that TUW can maintain an average day raw water surplus until 2030, being that the current average day raw water allocation is 7.58 MGD. Additionally, although the table shows a deficit past 2030, there are plans to make modifications to the upcoming WUP which would increase the raw water allocation to 8.47 MGD and leave an average day raw water surplus until 2040.

A more detailed depiction and computation of population and finished and raw water projections are shown in Appendix 3-A, Population, Raw Water, and Finished Water Projections. Appendix 3-B, Amendment to Broward County Comprehensive Plan (2020), also shows population data related to District 1 and City of Fort Lauderdale which serves parts of the City of Tamarac.

SECTION 3 – DATA AND ANALYSIS

Table 3-2
Finished and Raw Water Projected Demands within Utility Service Area (TUW)

Information		Finished Water			Raw Water Source - SAS			Treatment Capacity = 16 MGD	SAS Raw Water
Planning Year	Population	Level of Service = 105.0 GPCD			Level of Service = 105.0 GPCD				Avg Day Allocation = 7.58 MGD
		Max/ Avg Day Ratio = 1.06			Max/ Avg Day Ratio = 1.07				
		Average Day (MGD)	Maximum Day (MGD)	Average Month (MGM)	Average Day (MGD)	Maximum Day (MGD)	Average Month (MGM)	Treatment Surplus/ Deficit ¹ (MGD)	Avg Day Surplus/ Deficit ² (MGD)
2020	62,991	6.52	7.28	199	6.34	7.29	193	8.71	1.24
2025	68,477	7.19	7.61	219	7.19	7.68	219	8.32	0.39
2030	72,108	7.57	8.02	231	7.57	8.09	231	7.91	0.01
2035	75,900	8.97	8.44	243	7.97	8.51	243	7.49	-0.39
2040	79,932	8.39	8.89	256	8.39	8.97	256	7.03	-0.81

Notes:

1. Treatment Capacity minus Maximum Day Raw Water
2. Raw Water Average Day Allocation minus Average Day Raw Water Demand

SECTION 3 – DATA AND ANALYSIS

3.4 Water Supply Provided by Local Government

Public water supply Water Use Permit 06-00071-W was originally issued to the City of Tamarac on June 10, 1976 for 18.7 MGD and 3,831 million gallons per year (MGY) to supply water to all of Tamarac and parts of Fort Lauderdale. The permit was renewed in 1986 for 6.9 MGD to serve the City of Tamarac only and was modified in 1989 for the eastern service area of Tamarac to be served by Fort Lauderdale. The permit was renewed every five (5) years thereafter and, in 2004, Tamarac was issued a 20-year WUP for 2,754 MGY (7.5 MGD) until February 2009, reducing to 2,625 MGY (7.2 MGD) for the remainder of the permit duration. The permit was modified on February 3, 2014 to supply 7.58 MGD and 2,767 MGY. The permit shall expire on February 3, 2034; however, an additional modification will need to be submitted prior to this date. This modification will be necessary to plan for the next 30 years of water supply as population within the Utility Service Area will continue to increase and, therefore, the demand for water will continue to rise as well. This modification should take into consideration the possible acquisition of the TUE and BCWWS District 1 areas into the Tamarac Public Services Department (TPSD) service area in addition to knock downs and rebuilding with increased density.

For utility purposes only, the City of Tamarac is divided into two (2) separate and distinct water and sanitary districts. These districts include:

- a. TUE (Public Water System ID 4061593): This area is the oldest section of the City that is located east of SR 7 (US 441) along Commercial Blvd. served by BCWWS District 1 and the area within the municipal limits east of NW 31st Ave. Both water and sanitary services for this area are provided by the City of Fort Lauderdale and Broward County through Large User Agreements with the City of Tamarac. This Utility System services 2,582 customers, which are predominately residential.
 - ▶ The City of Fort Lauderdale sells finished bulk water to the City of Tamarac through its two water treatment facilities, Fiveash WTP (lime softening) and Peele-Dixie WTP (nanofiltration).
 - ▶ All sewage collected in TUE is pumped to Broward County for treatment and ultimate disposal.
 - ▶ Billing reports which encompasses West Prospect Road, NW 30th Terrace and NW 21st Terrace shows that these areas were billed an average of \$23,000 per month (FY 2017). Municipal service bills by the City of Fort Lauderdale to TUE for 2018 show a commercial rate of \$4.59 per thousand gallons of usage.

SECTION 3 – DATA AND ANALYSIS

- ▶ Water Master Plan Consumption detailing the years 2018 and 2019 indicate 1,025 water service connections.
- b. TUV (Public Water System ID 4061429): This area provides water and sanitary services to all of the City of Tamarac West of US 441 except for the Sabal Palm community and Lakes of Carriage Hills, both being served by Broward County BCWWS District 1. This Utility System services 63,793 customers. The City of Tamarac has the following responsibilities in this area:
 - ▶ The City operates and maintains water wells, water treatment facilities, and water mains to provide service to the TPSD TUV.
 - ▶ The City operates and maintains sanitary collection sewer, sewage pump stations, and sewage force mains in TPSD TUV service area. All sewage collected in TUV is pumped to Broward County for treatment and ultimate disposal.
 - ▶ Monthly Water Consumption Reports from the WTP indicate roughly 160,000 GPM of water service consumption and 19,200 water service connections (FY 2017).

3.4.1 Existing Withdrawal Facilities

The TPSD TUV operates one (1) WTP with a capability of up to nineteen (19) dedicated raw water supply wells that pump raw water to the plant. Groundwater is pumped from the Biscayne Aquifer via nineteen (19) existing withdrawal facilities. TUV has several finished water storage facilities located throughout the distribution system including a 1.0 MG storage tank at the WTP that provides a combined total storage capacity of 4.0 MG.

The TPSD WTP wellfield operates six (6) wells at a time for a week and then switches to another six (6) wells the following week. Each rotation pumps six (6) wells that are scattered at different locations across the wellfield. The typical rotations are shown below in Table 3-3.

SECTION 3 – DATA AND ANALYSIS

Table 3-3
Configuration of Well Operation

<i>Well Pump Rotation No.</i>	Wells Running
1	2, 4, 7, 11, 13, 19
2	3, 5, 9, 10, 14, 17
3	6, 8, 12, 15, 16, 18

Tabular Description of the wells the City operates to supply finished water to the Utility Service Area and to Lakes of Carriage Hills can be seen in Tables 3-4, 3-5, and 3-6, Description of Wells A, B, and C. Figure 3-2, City of Tamarac Well Locations, shows an aerial view of the well locations within the TPSD TUW service area. This figure is located at the end of this section.

3.4.2 Existing Water Treatment Plant and Water Storage Facilities

There are two (2) finished water storage facilities located throughout the distribution system, including a 1.0 MG storage tank located at Grant's Plaza and a 2.0 MG storage tank located at Tract 27, within the Tamarac Sports Complex. This provides a combined total storage capacity of 6.0 MG to the TPSD TUW. The main water treatment process consists of initial lime softening, sand filtration, and chemical feed systems for lime, polymer, chloride, and fluoride treatments. The Tamarac WTP has a capacity of 16 MGD. Tamarac maintains thirteen (13) active interconnections with Broward County, City of Fort Lauderdale, City of North Lauderdale, City of Lauderhill and the City of Coral Springs.

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**Table 3-4
Description of Wells (A)**

Well No. (FLUWID)	29559 (AAE3664)	29560 (AAI9476)	29561 (AAE3661)	29562 (AAI9475)	29563 (AAI9474)	29564 (AAI9473)	29565 (AAI3662)
Name	1	2	3	4	5	6	7
Map Designation	1	2	3	4	5	6	7
Existing (E) or Proposed (P)	E	E	E	E	E	E	E
Well Diameter (Inches)	12	12	12	12	12	12	12
Total Depth (feet)	126	112	115	110	117	109	125
Cased Depth (feet)	112	101	109	101	102	102	111
Facility Elev. (ft. NGVD)							
Screened Interval							
From	0	0	0	0	0	0	0
To	0	0	0	0	0	0	0
Pumped or Flowing	P	P	P	P	P	P	P
Pump Type	Submersible	Submersible	Submersible	Submersible	Submersible	Submersible	Submersible
Pump Int. Elev.							
Feet (BLS)	92	60	60	60	60	60	60
Max. Pump Capacity (GPM)	850	850	850	850	850	850	850
Year Drilled	1969	1969	1970	1971	1971	1971	1973
Planar Location							
Feet East	900970	900120	900580	899310	898470	897750	900925
Feet North	679050	679080	679050	679240	679210	679200	679230
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Primary	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	Public Water Supply
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

SECTION 3 – DATA AND ANALYSIS

**Table 3-5
Description of Wells (B)**

Well ID (FLUWID)	29566 (AAE3665)	29567 (AAI9409)	29568 (AAE3667)	29569 (AAE3668)	29570 (AAE3669)	29571 (AAL5173)	29572 (AAL5171)
Name	8	9	10	11	12	13	14
Map Designation	8	9	10	11	12	13	14
Existing (E) or Proposed (P)	E	E	E	E	E	E	E
Well Diameter (Inches)	12	12	12	12	12	12	12
Total Depth (feet)	123	115	120	120	156	156	160
Cased Depth (feet)	105	108	95	95	106	106	105
Facility Elev. (ft. NGVD)							
Screened Interval							
From	0	0	0	0	0	0	0
To	0	0	0	0	0	0	0
Pumped or Flowing	P	P	P	P	P	P	P
Pump Type	Submersible	Submersible	Submersible	Submersible	Submersible	Submersible	Submersible
Pump Int. Elev.							
Feet (BLS)	60	60	42	42	62	42	85
Max. Pump Capacity (GPM)	850	850	850	850	850	850	850
Year Drilled	1973	1973	1983	1983	1986	1986	1992
Planar Location							
Feet East	900450	900120	902220	902240	902220	902230	902095
Feet North	679040	679230	678550	678550	679240	679440	679460
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Primary	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	Public Water Supply
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

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**Table 3-6
Description of Wells (C)**

Well ID (FLUWID)	29573 (AAL5172)	29574 (AAL5170)	29575 (AAL5169)	153122 (AAE3663)	29576 (AAE3666)
Name	15	16	17	18	19
Map Designation	15	16	17	18	19
Existing (E) or Proposed (P)	E	E	E	E	E
Well Diameter (Inches)	12	12	12	12	12
Total Depth (feet)	160	125	125	180	180
Cased Depth (feet)	105	105	97	105	105
Facility Elev. (ft. NGVD) Screened Interval					
From	0	0	0	0	0
To	0	0	0	0	0
Pumped or Flowing	P	P	P	P	P
Pump Type	Turbine*	Turbine*	Turbine*	Submersible	Submersible
Pump Int. Elev.					
Feet (BLS)	85	90	90	100	100
Max. Pump Capacity (GPM)	830	830	830	850	850
Year Drilled	1992	1992	1992	1996	1996
Planar Location					
Feet East	901870	902054	902030	901260	901270
Feet North	679500	679780	680060	678680	678530
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Primary	Primary	Primary	Primary	Primary
Water Use Type	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

*These pumps are expected to be converted to submersibles by the end of 2020.

SECTION 3 – DATA AND ANALYSIS

3.5 Water Supply Provided By Other Entities

In addition to its own facilities, the City of Tamarac receives water service from both Broward County BCWWS District 1 and the City of Fort Lauderdale Fiveash facility. This section is dedicated to these two (2) facilities. The various regions of service can be seen at the end of this section as Figure 3-1, City of Tamarac PSD Service Area Site Map. The following information was provided by the BCWWS' Annual Report FY 2018 (prepared by Brown and Caldwell, Inc. in July 2019) and the 2014 Broward County Water Supply Facility Work Plan, dated November 24, 2014.

3.5.1 Broward County Water and Wastewater Services: District 1

BCWWS District 1 provides finished water to the City of Tamarac as it supplies a small portion of the water while also treating all the wastewater produced. In addition to the City of Tamarac, BCWWS District 1 Service Area services all of Lauderdale Lakes as well as portions of the cities of Fort Lauderdale, Lauderhill, North Lauderdale, Oakland Park, Plantation, and Pompano Beach. BCWWS District 1 is supplied by District 1 Wellfield which draws raw water from the Surficial Aquifer System (SAS). Raw water is treated at the BCWWS District 1 Water Treatment Plant (D1 WTP) off of SR 7 (US 441), south of the C-14 Canal prior to distribution to retail customers. D1 WTP has a capacity of 16 MGD and operates under the plant permit number 06-58-00009. The WUP it operates under was updated in 2015 (06-00146-W).

Table 3-7, BCWWS District 1 Service Area Populations, shows the projected populations for the area east of SR 7 (US 441) to NW 31 Avenue within the City of Tamarac's boundary being served by BCWWS District 1. The County's proposed 2020 WSFWP does not include finished and raw water data specific to the City of Tamarac.

SECTION 3 – DATA AND ANALYSIS

Table 3-7
BCWWS - District 1 Service Area Populations

Municipalities Served	2020	2025	2030	2035	2040
Fort Lauderdale	7,457	7,950	8,047	8,017	8,012
Lauderdale Lakes	32,133	31,924	34,030	34,583	34,728
Lauderhill	8,276	8,167	10,192	10,796	11,463
North Lauderdale	6,407	7,718	8,035	8,193	8,263
Oakland Park	12,166	12,139	12,581	12,645	12,674
Plantation	601	616	630	625	622
Pompano Beach	508	523	569	577	594
Tamarac	2,208	2,306	2,356	2,483	2,590
Unincorporated	6,918	7,640	7,801	7,783	7,727

Table 3-8 has the actual and projected finished water demands that District 1 services to City of Tamarac, retrieved from the County's 2020 Work Plan. Raw water data was not available for Tamarac specifically. The projections were calculated using a per capita use rate of 96 gpcd. Figure 3-3, BCWWS Retail Water Service Areas, shows the different Districts BCWWS operates within Broward County. This figure is located at the end of this section.

Table 3-8
City of Fort Lauderdale Raw and Finished Water Demand Serviced to Tamarac

	2015	2020	2025	2030	2035	2040
Finished Water (mgd)	0.14	0.23	0.23	0.24	0.25	0.26

3.5.1.1 Existing withdrawal Facilities for District 1

The wellfield is located in the area surrounding the D1 WTP and is comprised of nine (9) wells, all of which are currently in service. The total design capacity of the wellfield is approximately 23.5 MGD. The total firm capacity of the wellfield is approximately 19.6 MGD, with the largest well

SECTION 3 – DATA AND ANALYSIS

out of service. Pursuant to the SFWMD Consumptive Use Permit (CUP), No. 06-00146-W issued in April 2015 for a 20-year permit duration, the maximum month and average annual daily withdrawals from the BCWWS District 1 Surficial Aquifer System (SAS) wellfield are 305 MG per month (MGM) and 10.04 MGD, respectively. Two (2) alternative water supply upper Floridian Aquifer wells are under construction to provide raw brackish water for membrane treatment by 2020. The current SFWMD WUP allows for a maximum monthly withdrawal from the upper Floridian Aquifer of 181 MGM with an associated average daily withdrawal of 4.7 MGD. Based on the water use projections, BCWWS District 1 will need the pending transfer of SAS allocation from Plantation (0.5 MGD for Broadview Park) and Fort Lauderdale (0.3 MGD of North Andrews Gardens) to District 1. Also, the alternative water supplies (AWS) provided by the Floridian Aquifer will be needed by 2020.

Alternative water supply (AWS) strategies and projects are being implemented to meet water supply needs. The Hillsboro Aquifer Storage & Recovery (ASR) well was constructed in 2000 to capture excess surface water from the Hillsboro Canal and store in in the Upper Floridian Aquifer to when surface water levels are low. The ASR well was to flow freely back to the canal at a rate of 2 MGD.

3.5.1.2 Existing Water Treatment Plant and Water Storage Facilities for District 1

The D1 WTP was expanded in 1994 to treat 16.0 MGD (firm capacity 15.3 MGD) and uses up-flow clarifiers and multimedia filtration to provide lime softening of the raw water supply. Per BCWWS's FY 2018 Annual Report, the plant is in very good condition and all equipment was operating in a satisfactory manner. The projected year 2018 maximum day is 15.2 MGD, or 95% of plant capacity. Figure 3-3 shows the location of the BCWWS District 1 service area. The D1 WTP has a total storage capacity of 6.0 MG storage tanks and approximately 250 miles of water distribution and transmission mains within the BCWWS District 1 Service Area.

While Floridan Aquifer production wells were planned as part of the original permit to provide AWS, no wells have been constructed to date. BCWWS determined that, because additional water supply above what is currently permitted by the SFWMD is not needed in the next 20year period, the District 1 and District 2A/North Regional WTP expansion and Floridan

SECTION 3 – DATA AND ANALYSIS

Aquifer development projects would be unfunded in the County's Capital Improvement Plan. These projects will be re-evaluated and re-established as funded projects when the need for additional water supply arises.

3.5.2 City of Fort Lauderdale

The Fort Lauderdale Water System municipal utility is owned and operated by the City of Fort Lauderdale. It provided service to approximately 250,000 customers in 2013. The utility's service area, shown in Figure 3-4 at the end of the section, City of Fort Lauderdale Service Area, encompasses a total area of 43 square miles. Other retail customers include residential, commercial, and industrial properties within the City of Fort Lauderdale, Lazy Lake, and a portion of Lauderdale-by-the-Sea. Emergency potable water interconnections are maintained with the cities of Dania Beach, Pompano Beach, and Plantation, and BCWWS service areas.

The City of Fort Lauderdale provides finished water services to certain areas in different cities within Broward County. The utility also maintains wholesale agreements for potable water supply with the following cities: Davie, Lauderdale Lakes, Lauderhill, Lazy Lake, North Lauderdale, Oakland Park, Tamarac, and Wilton Manors. Table 3-9, City of Fort Lauderdale Population Projections, shows information provided by the 2015 City of Fort Lauderdale 10-yr Water Supply Facilities Work Plan Update.

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Table 3-9
City of Fort Lauderdale Population Projections

City/Area	2020¹	2025¹	2030¹	2035¹	2040¹
Davie	526	700	821	919	1,016
Lauderdale Lakes	383	378	386	386	390
Lauderdale-by-the-Sea	3,689	3,996	3,940	3,890	3,850
Lauderhill	2,862	3,085	3,306	3,450	3,571
Lazy Lake	25	27	29	30	31
North Lauderdale	352	1,145	1,145	1,133	1,123
Oakland Park	31,952	32,719	34,693	36,114	37,145
Tamarac	2,037	2,007	2,032	2,054	2,041
Wilton Manors	11,878	13,132	14,225	14,935	15,576
Total	53,704	57,189	60,577	62,911	64,743

Notes:

1. Source: the 2020 to 2040 population projections are based on University of Florida's Bureau of Economic and Business Research (BEER) data.

Raw water for the City of Fort Lauderdale is supplied by the Peele-Dixie and Prospect wellfields, which draw from the SAS. The raw water is treated at two (2) water treatment facilities, the Peele-Dixie nanofiltration plant and the Fiveash lime softening plant. There are a total of 37 active wells between the two (2) wellfields and 16 wells in operation at a given time. The Peele-Dixie and Prospect Wellfields have a combined pumping capacity of approximately 111 MGD. Wholesale customers receive finished water from the Fiveash WTP. The City of Fort Lauderdale's WUP (Permit No. 06-00123-W) issued on December 5, 2019 until 2028 allows the City to pump a combined annual average daily allocation for the two (2) wellfields of 61.19 MGD, and a monthly maximum monthly allocation of 2,157.6 MGD. Table 3-10 has the finished and raw water data that the City of Fort Lauderdale services to City of Tamarac, retrieved from Fort Lauderdale's 2020 Work Plan.

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Table 3-10
City of Fort Lauderdale Raw and Finished Water Demand Serviced to Tamarac

City/Area	2020	2025	2030	2035	2040
Raw Water (mgd)	0.33	0.33	0.33	0.34	0.33
Finished Water (mgd)	0.32	0.31	0.32	0.32	0.32

In 1926, the 6 MGD capacity Peele-Dixie lime softening WTP was opened in western Fort Lauderdale. Over the years, the plant has been expanded and modernized, increasing its capacity to 20 MGD. In 2008, the WTP was converted from a lime-softening to a state-of-the-art membrane facility with a treatment capacity of 12 MGD at 85% treatment efficiency. Built in 1954, the Fiveash lime softening WTP was designed to treat 8 MGD. Through a series of expansions, the plant has been able to keep pace with the rapid growth experienced in Fort Lauderdale and today has a designed capacity of 70 MGD. The Fiveash WTP is supplied raw groundwater for treatment from the Prospect Wellfield.

Although the Peele-Dixie and Fiveash WTPs have a combined design capacity of 82.0 MGD, hydraulic constraints at the Fiveash WTP limit its operating capacity to between 55.0 and 60.0 MGD. The City of Fort Lauderdale maintains a total of 10 water system interconnections. The breakdown is as follows: BCWWS District 1 (3), the Cities of Plantation (1), Dania Beach (1), Tamarac (3), and Pompano Beach (1), and the Town of Davie (1).

3.6 Level of Service

Level of Service (LOS) data was contributed by City of Tamarac Comprehensive Plan, attached as Appendix 3-B, amended July 2018.

3.6.1 Broward County Water and Wastewater Services - District 1

As stated in the BCWWS Water Supply Facility Work Plan (BCWSFWP), BCWWS has parameters in place to determine and establish the LOS. Table 3-11 shows the LOS standards for each facility type as reported in the BCWSFWP. Additionally, in the City of Tamarac's 2019 Comprehensive Plan, the potable water LOS standard of 115 GPCD was established for Broward County.

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Table 3-11
BCWWS Retail Potable Water Level of Service Standards

<i>Facility</i>	<i>Level of Service Standard</i>
Raw Water Supply	Maximum Day Plus In-Plant Use
Treatment Plant	Maximum Day
Finished Water Storage	40% of Maximum Day demand to cover operational (10%) and emergency (30%) storage; plus fire protection storage of 630,000 gallons (3,500 GPM for 3 hours)
Transmission/Distribution System	The most stringent of: Peak Hour at 45 psi residual pressure, or Maximum Day Plus Fire Flow at 25 psi residual pressure.

3.6.2 City of Fort Lauderdale

The City of Fort Lauderdale has determined its own LOS as stated in the BCWWS Water Supply Facility Work Plan and is summarized in Table 3-12.

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Table 3-12
City of Fort Lauderdale Water System Level of Service Standards

<i>Facility</i>	<i>Level of Service Standard</i>
Raw Water Supply	Maximum Day with 20% of wells out of service for maintenance
Treatment Plant	Maximum Day with all units in service
Minimum system pressure during peak hour demand with largest pump out of service during non-fire flow conditions	Maintain a minimum of 40 psi in the distribution system
Minimum system pressure during peak hour demand with largest pump out of service during fire flow conditions	Maintain a minimum of 30 psi in the distribution system
Finished Water Pumped Per Capita - 2020 City of Ft. Lauderdale 10-Year WSFWP	Infrastructure Element of the City indicates the LOS for finished water pumped shall be 197 gallons per capita per day
Finished Water Pumped Per Capita - City Goal	It is the City's goal to reduce the finished water pumped level of service to 170 gallons per capita per day through conservation by the 2028
Finished Water Storage	Comply with F.A.C. 65-555.320(19): minimum requirement of 25 percent of maximum day demand plus maximum fire flow volume with all tanks in service. Maximum fire flow storage based upon a 5,000 gallons per minute (gpm) fire over a four hour period
Maximum Distribution System Water Loss	10 Percent of Finished Water Pumped

The finished water per capita demand averaged 170 GPD per day from 2012 to 2016. The City is projecting a finished water per capita of 170 GPD through the year 2040. The finished water per capita rates are based upon overall water consumption within the City's water service area including: 1) Residential; 2) Commercial; 3) Industrial; 4) Wholesale Customers such as Wilton Manors, etc.; and 5) Port Everglades.

SECTION 3 – DATA AND ANALYSIS

3.7 Conservation

This section describes applicable water conservation by regional, county or City programs, regulations, and opportunities to conserve water.

3.7.1 Local Government Specific Actions, Programs, Regulations, or Opportunities

The City of Tamarac has implemented a number of water conservation elements including utility leak detection programs, water conservation based rate structures, Florida-friendly landscaping, retrofits, meter replacement programs, and public information programs. A summary of each of these elements is provided below.

Restrictions on Permitted Water Use

The City of Tamarac fully supports the regulations and recommendations placed forward by the SFWMD. In addition, the City of Tamarac adheres to the irrigation ordinance placed forward by Broward County under Chapter 36, "Water Resources and Management," Article II, "Water Emergencies," Section 36-55:, "Restrictions on Landscape Irrigation, Year-round Landscape Irrigation Measures" of the Broward County Code of Ordinances. This imposes year-round, County-wide landscape 2 day/week irrigation restrictions. The landscape ordinance also includes a minimum 50% water conserving native plant material be used in all landscape plans (Section 11-7(a) (8)).

Utility Leak Detection Program

In addition, the City of Tamarac preforms the following precautions to ensure the highest level of conservation.

- ▶ Monthly records are rectified to calculate all losses throughout the system raw water lines, treatment losses, and distribution line losses.
- ▶ Three-point pressure monitoring system in pipeline network provides early warning for major line breaks and isolates the break areas.
- ▶ Telemetry system installed in 1986 provides water system pressure readings at two remote tanks and treatment plant.

SECTION 3 – DATA AND ANALYSIS

Toilet Rebate Program was established in 2008. This program provides the City of Tamarac residents with the opportunity to obtain 1.28 gal/flush toilets for \$150/each (price in the year 2015). The City has allocated \$90,000 to sell 400 toilets per year.

Use of Florida-Friendly Landscaping Principles

On February 14, 2014, Broward County Board of Commissioners approved a new water efficient landscape code located in Chapter 39, "Zoning", Article VIII, "Landscaping for Protection of Water Quality and Quantity" of the Broward Code of Ordinances. This code reflects the NatureScape Broward program principles that promote water and energy conservation while creating a climate resilient landscape. This is in effect for the unincorporated areas of Broward County and individual municipalities are adopting as a model landscape code. This program has developed nine (9) principles for sustainable landscape:

1. Right plant, right place
2. Water efficiently
3. Fertilize appropriately
4. Mulch
5. Attract wildlife
6. Manage yard pests responsibly
7. Recycle yard waste
8. Reduce storm water runoff
9. Protect the waterfront

In addition, the City of Tamarac performs the following precautions to ensure a high level and conservation. All new landscape designs must be pre-approved by the City of Tamarac and are screened to meet the Florida-Friendly Landscape standards. Good irrigation practices are encouraged that include:

- ▶ Water is applied in stages to allow adequate soak in, to avoid irrigation run-off.
- ▶ Irrigation is only between 4 p.m. and 10 a.m.
- ▶ Irrigation is limited to two days per week during water shortage.

In addition, participation in Broward County Mobile Irrigation Laboratory program and irrigation system reviews are offered to several accounts each year.

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Requirement of Ultra-Low Volume Plumbing in New Construction

The City of Tamarac has officially been certified as a Florida Green Local Government through the Florida Green Building Coalition. This organization is a nonprofit organization dedicated to improving the environment through conservation efforts and which recognizes local governments for exceptional environmental stewardship. Tamarac was first certified in May 2008 at the silver level. In May 2010, the City achieved the Gold-level certification, making it one of only two cities in Florida to achieve this designation. In addition, SFWMD Grants are used to provide rain sensor shut-offs, low flow faucets, shower heads, restaurant spray-nozzles and toilets to local residents and businesses.

Water Conservation Based Rate Structure

The City of Tamarac offers a three-tiered rate structure to encourage conservation. In addition, during a SFWMD Declared Water Shortage, a 15% water conservation fee may be added to the water portion of the bill.

Meter Replacement Program

Unaccounted for water summaries are submitted to the District annually.

Rain Sensor Overrides for New Lawn Sprinkler Systems

Broward County's "Landscaping for Protection of Water Quality and Quantity", Ordinance is codified in the Broward County Code of Ordinances Section 39-79. Subsection 39-79(b)(11) includes the requirement for the location and specification of controllers of rain shut-off devices and soil moisture sensors as part of the landscape plan.

Public Information Program

The City of Tamarac offers a wide range of public information to help water conservation. These parameters can be seen below:

- ▶ Conservation messages are periodically enclosed in customer water bills.
- ▶ During SFWMD Declared Water Shortages, the city uses "Tam-a-Grams", direct mail, banners and social media to remind customers to reduce consumption.
- ▶ Speakers from TPSD address conservation issues.
- ▶ Restaurants are provided signage and only provide water to if requested.

SECTION 3 – DATA AND ANALYSIS

Other

The City of Tamarac also offers kitchen aerators and leak detection tablets as incentives for water conservation.

Filter Backwash Water Recovery Basin

The City of Tamarac constructed a 500,000 gallon filter backwash water recovery basin in 2012 in an effort to recover potable water during the water treatment process. Since the implementation of this basin the water treatment plant has averaged 150,000 gallons per day of additional potable water that would have previously been wasted.

3.8 Wastewater Reclamation & Reuse

Presently, all sanitary flows collected in the City of Tamarac are pumped to Broward County for treatment and ultimate disposal. There is no use of reclaimed or reused water within the City boundaries. However, the Broward County North Regional Wastewater Treatment Plant (NRWWTP) now has an established reuse program.

BCWWS operates the NRWWTP located in the City of Pompano Beach. As shown in BCWWS's FY 2018 Annual Report, the facility has an FDEP-permitted capacity of 95.00 MGD and it provides wastewater services for northern Broward County. In 2018, the annual average daily wastewater flow at the facility was 71.7 MGD. Approximately 4.0 MGD of the treated wastewater is reused at the facility or at adjacent facilities for irrigation, process, or cooling water. The reserve treatment capacity of the plant for the City of Tamarac is 8.5 MGD.

Most of the treated wastewater was disposed of via deep injection wells and ocean outfall. The County's facility permit from the FDEP acknowledges 66 MGD of effluent disposal capacity through the ocean outfall. Of the water sent to the ocean outfall, an average 1.35 MGD was captured by the City of Pompano Beach in 2010 for further treatment and reuse. Overall, water reuse at the facility was approximately six (6) percent of the wastewater treated at the facility. An intercounty agreement with Palm Beach County to supply reclaimed water for golf courses irrigation has been implemented and the reclaimed water pressure mains have undergone design and significant installation progress.

The primary users of reclaimed water are Broward County Septage Receiving Facility, Broward County North Regional WWTP and Pompano Beach Park of Commerce.

Based on historic flows to the ocean outfall, the facility is required to reclaim 21.45 MGD of treated wastewater by 2025 to comply with the 2008 Ocean Outfall statute (Section 403.086(9), F.S.). The BCWWS is promoting collaborative regional water supply strategies to meet the required 60

SECTION 3 – DATA AND ANALYSIS

percent water reuse by 2025. BCWWS has developed a regional reuse master plan and is working towards amended County ordinance(s) for the establishment of mandatory use of reclaimed water zones mainly for irrigation purposes.

BCWWS continues to investigate means to increase its reclaimed water usage, both as a method to meet future water needs and the requirements of the 2008 Ocean Outfall Program requirements. BCWWS is partnering with Palm Beach County Water Utilities Department to send reclaimed water into southern Palm Beach County for irrigation. Some irrigation customers will be included in northern Broward County as the reclaimed water is sent northward. BCWWS is also in the process of extending reclaimed water to the Pompano Highlands neighborhood for irrigation. The City of Coconut Creek, which is within the North Regional Wastewater Treatment Plant's (WWTP's) service area, installed infrastructure to accept reclaimed water from the facility, primarily for irrigation. The first phase of the City of Coconut Creek reclaimed water system is operational. The City of Pompano Beach, which takes treated wastewater from the County's ocean outfall pipeline, is expected to continue expanding its reclaimed system. Potential end users include: City of Coconut Creek, Pompano Highlands, Potential larger users (e.g., golf courses, parks, and schools).

3.8.1 Regional and Countywide Issues

The City of Tamarac supports reclaimed water use initiatives under consideration by both the SFWMD and Broward County and the implementation of new regulations or programs designed to increase the volume of reclaimed water used and public acceptance of reclaimed water.

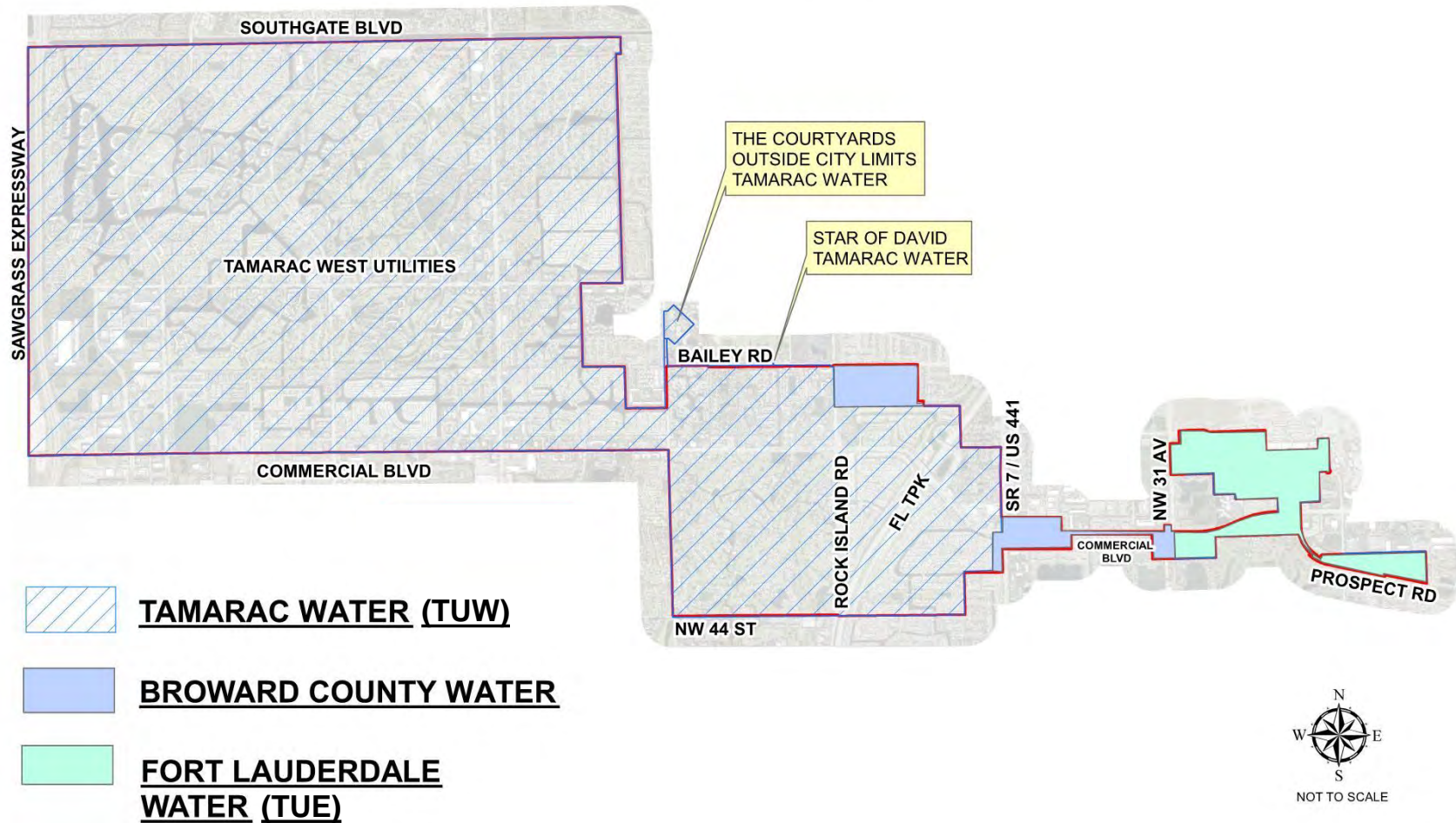
3.8.2 Local Government Specifications, Programs, Regulations, or Opportunities

The City of Tamarac does not currently have any wastewater reclamation programs in place nor are any such programs planned for the future.

3.8.3 Identify Local Financial Responsibilities

The City of Tamarac does not currently have any wastewater reclamation programs in place nor are any such programs planned for the future.

WATER SERVICE AREAS



Scale: NTS

11/5/19

Figure 3-1
City of Tamarac
Utility Service Area Site Map
Source: City Public Works Website

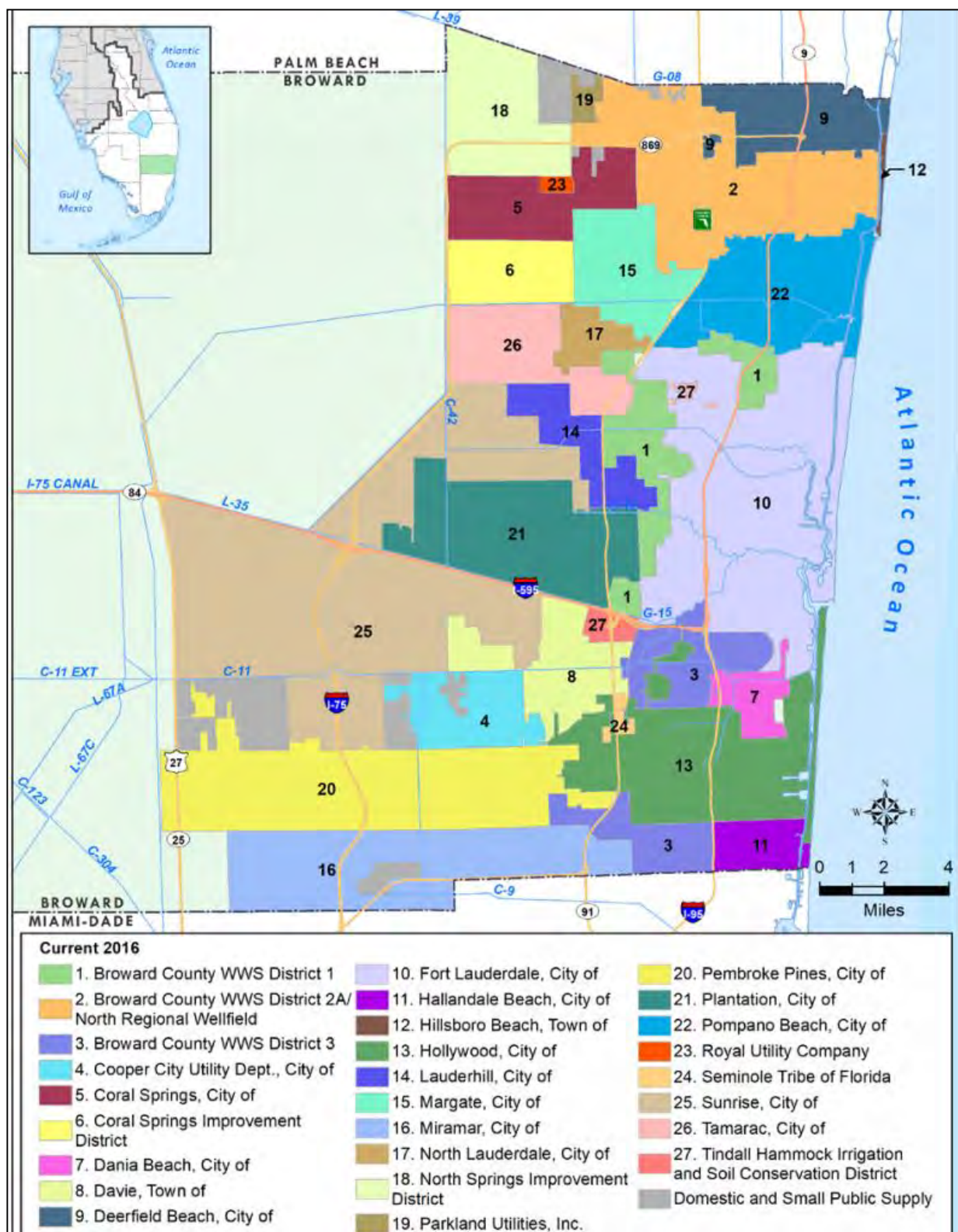


Figure 3-3
BCWWS Retail Water
Service Areas, 2016

Source: LEC Plan Update (2018)

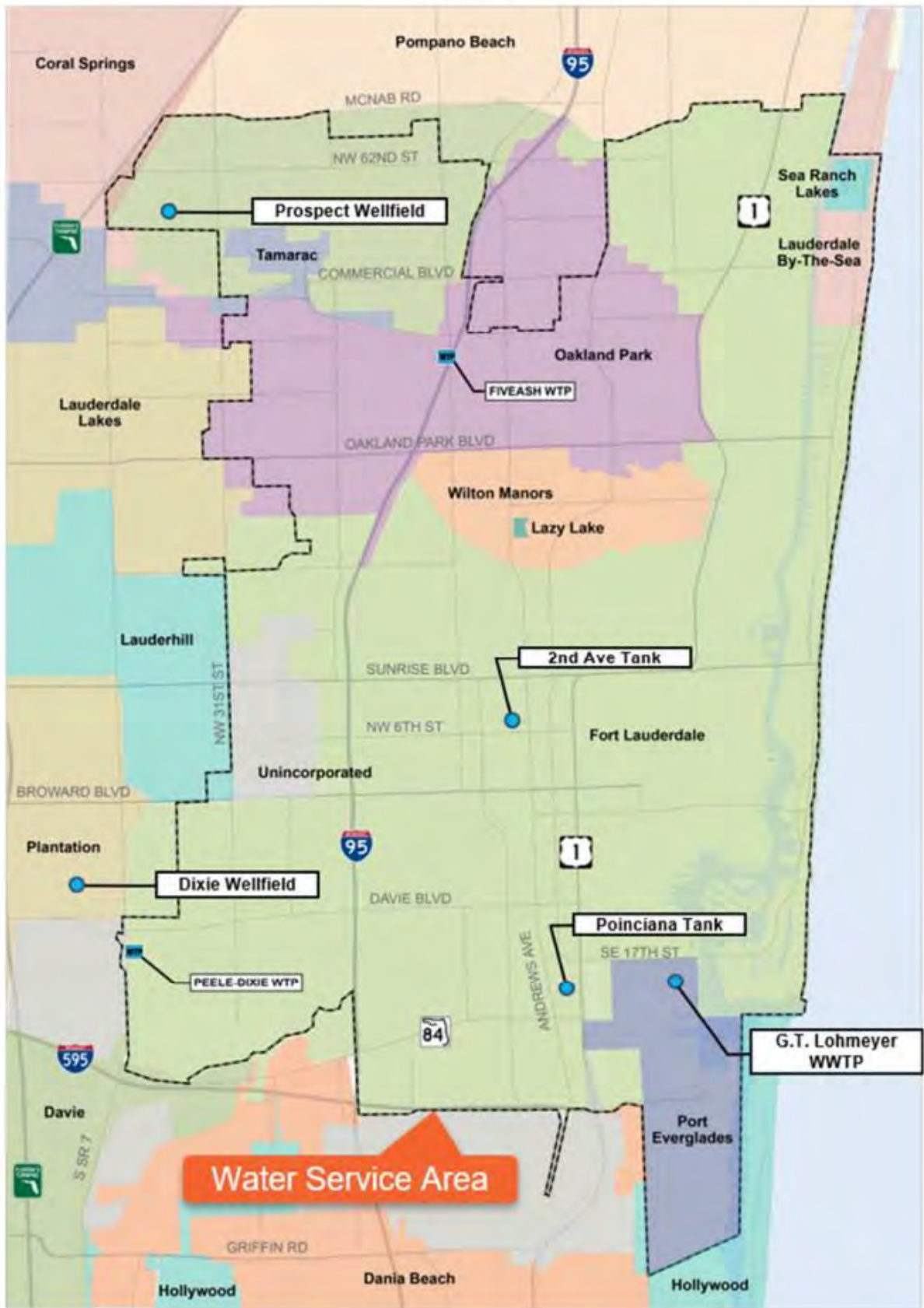


Figure 3-4
City of Fort Lauderdale
Service Area

Source: City of Ft. Lauderdale 2020 WSWP

Capital Improvements

SECTION 4 – CAPITAL IMPROVEMENTS

Section 4 – Capital Improvements

The Work Plan identifies and addresses all public, private, and regional water supply facilities needed within jurisdiction. The Work Plan is best addressed by the Capital Improvements Program (CIP), a compilation of projects to be implemented for the next 10 years in order to maintain a proper Level of Service.

The Work Plan also identifies and addresses all public and private projects and programs necessary during the next ten (10) years to achieve and maintain adopted level of service standards and reflect the identified projects and programs in the City of Tamarac's Five-Year Schedule of Capital Improvements. This includes any inter-local or development agreements needed to address the costs of capital improvements, the funding source, responsible City of Tamarac, populations to be served and the construction timeline.

4.1 Work Plan Projects

The 10-year Recommended Capital Improvement Program includes improvements pertaining to the City's water supply as shown in Table 4-1 at the end of this section. The list of projects shown was retrieved from the City's draft Water Master Plan and 2019 Comprehensive Plan. Only projects between 2020 to 2030 were chosen to be shown in the table.

SECTION 4 – CAPITAL IMPROVEMENTS

**Table 4-1
10-Year Recommended Capital Improvement Program**

Project No.	Project Name	Total Cost	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
From 2019 Comp. Plan	WTP Well Upgrade Project	\$75,000	\$25,000	\$25,000	\$25,000								
From 2019 Comp. Plan	WTP Renewal/Replacement	\$375,000	\$125,000	\$125,000	\$125,000								
From 2019 Comp. Plan	Irrigation Replacement	\$225,000	\$75,000	\$75,000	\$75,000								
From 2019 Comp. Plan	Tamarac West System Rehabilitation	\$840,000	\$240,000	\$300,000	\$300,000								
From 2019 Comp. Plan	Water Distribution System Upgrade	\$1,500,000	\$500,000	\$500,000	\$500,000								
WTP-11	Main Motor Control Center Upgrades & Improvements	\$819,000		\$819,000									
WDS-1	NW 58th Street Neighborhood WM Replacement	\$1,733,142		\$1,733,142									
WDS-2	Mainland Sections 1-5 WM Replacement - Phase 1	\$7,679,192			\$7,679,192								
WDS-3	Mainland Sections 1-5 WM Replacement - Phase 2	\$6,009,193					\$6,009,193						
WDS-4	Woodland Country Club WM Replacement - Phase 1,2,3,4	\$16,153,875							\$4,038,469	\$4,038,469	\$4,038,469	\$4,038,469	
WDS-5	Green Haven WM Replacement	\$4,159,122											\$4,159,122
WDS-6	Fair Haven WM Replacement	\$3,218,160											\$3,218,160
WDS-19	Tract 27 Storage & Pumping Facility Improvements	\$1,861,250	\$1,861,250										
WDS-20	Tamarac Utility East Connection - Transmission Main - Phase I	\$2,487,623			\$2,487,623								
WDS-21	Tamarac Utility East Connection - Transmission Main - Phase II	\$1,587,000				\$1,587,000							
Subtotal:		\$48,722,557	\$2,826,250	\$3,577,142	\$11,191,815	\$1,587,000	\$6,009,193	\$0	\$4,038,469	\$4,038,469	\$4,038,469	\$4,038,469	\$7,377,282

Goals, Objectives and Policies

SECTION 5 – GOALS, OBJECTIVES, AND POLICIES

Section 5 – Goals, Objectives & Policies

The following goals, objectives and policies presented in this section pertain to capital improvements of the City's water supply plan and are not inclusive of all City goals, objectives and policies, much of which was updated from the City's 2019 Comprehensive Plan.

GOAL

The City of Tamarac shall provide, or cause to be provided, the infrastructure necessary to provide for the health, welfare, and safety of its residents. The City will correct existing deficiencies and maintain needed public facilities and provide or require the provision of facilities concurrent with the impact of development. These include impact fees to new developers or for higher density knock downs and rebuild developments.

Objective 1

The City will use the Capital Improvement Element (CIE) as the means to establish needs and to develop programs for essential public improvements. Funds will be provided for capital improvements as outlined in the other elements of the comprehensive plan. Capital improvements will be directed toward correcting existing deficiencies, maintenance of all existing facilities, and to provide for future growth.

Monitoring and Evaluation:

- Objective can be evaluated in terms of its implementing policies.

- | | |
|------------|--|
| Policy 1.1 | The City of Tamarac shall revise and adopt annually a Capital Improvement Program (CIP) that addresses the existing and projected deficiencies as outlined in the CIE and those items listed in the five-year schedule of improvements. |
| Policy 1.2 | The City of Tamarac shall update its CIE on an annual basis after the adoption of the CIP and submit the CIE to the State Planning Agency, Department of Economic Opportunity, annually as a Comprehensive Plan Amendment. |
| Policy 1.3 | The City of Tamarac shall identify those projects in the other plan elements which will maintain or expand facilities. These projects shall be included in the five-year Schedule of Improvements and incorporated into the annual Capital Budget. |

SECTION 5 – GOALS, OBJECTIVES, AND POLICIES

- Policy 1.4 The City shall continue using the Needs Assessment Committee composed of the Director of Public Services, Financial Services, and Community Development which shall prioritize projects for the CIE, those projects in the five–year Schedule of Improvements, and the annual proposed capital budget.
- Policy 1.5 The City shall adopt annually a Capital Budget which shall include at a minimum the first year Improvements of the CIE.
- Policy 1.6 Proposed Capital Improvements shall be evaluated and ranked in priority according to the following guidelines:
1. Does the project contribute to or further the achievements of specific objectives contained in Elements of the Comprehensive Plan?
 2. Does the project eliminate possible hazards and protect the public health, safety, and welfare of the City’s residents, provide the necessary infrastructure as part of a legal requirement or prior commitment, and use, to the fullest extent, existing facilities?
 3. Will the project eliminate or correct existing deficiencies, increase capacity of existing facilities, or reduce the necessity for or cost of future improvements or provide for future needs?
 4. Will the project provide services to developed areas lacking services, or be a logical extension or expansion of facilities or services within designated service areas?
 5. Will or can funds be available for the project? Can operating and maintenance costs associated with the improvement be provided from the annual operating budget?

Objective 2

Future development shall be responsible for bearing a proportionate fair share of the cost for improvements in order to maintain adopted Level of Service (LOS) standards.

Monitoring and Evaluation:

SECTION 5 – GOALS, OBJECTIVES, AND POLICIES

- The balance of development revenues collected versus the cost of improvements.
- Policy 2.1 The City of Tamarac shall continue its policy of collecting impact fees from future development for traffic, recreation, open space, drainage retention, water, and sewers.
- Policy 2.2 The City of Tamarac shall continue its policy of mandatory dedications or fees in lieu of dedications as a condition of plat or site plan approval for recreation open sites and development of recreation facilities for residential developments.
- Policy 2.3 The City of Tamarac shall continue to require the dedication, deeding by separate instrument or grant of easement or necessary rights-of-way for public streets as shown on the Broward County Trafficways Plan and in the Transportation Element of the Tamarac Comprehensive Plan.
- Policy 2.4 The City shall conduct an impact fee rate studies (latest one effective April 7, 2020) to ensure that new development and redevelopment pays its fair share of capital improvements needed to serve the development and redevelopment.

Objective 3

The City of Tamarac shall exercise sound fiscal management to ensure that needed capital improvements are provided for existing and future development.

Monitoring and Evaluation:

- Evaluated at the time of creating the five-year capital improvements plan and schedule of capital improvements needed to maintain LOS standards.
- Policy 3.1 Section 7.16 of the City Charter states, “The City shall have full power and authority to issue municipal bonds or to borrow funds for municipal purposes to the extent authorized by and subject to the limitations provided in the Constitution of the State of Florida, the Municipal Home Rule Law, other statutes and this Charter; provided further that bonds intended for the funding or refunding of an acquisition or construction of a capital project shall not be issued until such project and such issuance has been approved by a majority of the qualified electors voting on the issue at a special or general election.”

SECTION 5 – GOALS, OBJECTIVES, AND POLICIES

- Policy 3.2 The Financial Services Director recommends that the City maintain a debt burden, defined as debt service payments, of less than fifteen percent (15%) of combined operating and debt service expenditures.
- Policy 3.3 The City shall adopt as part of its annual budget, a schedule for the depreciation and periodic replacement of capital facilities from current revenues.
- Policy 3.4 The City Manager shall submit to the City Commission an updated five–year CIP annually. The capital program shall include a summary of its contents and a list of all capital improvements which are proposed for the next five (5) fiscal years with appropriate detailed information. Whenever so requested by the Commission or otherwise required, the manager shall make recommendations for revisions of the program.
- Policy 3.5 The City of Tamarac shall require to be installed or install, all needed public facilities for development prior to the issuance of a Certificate of Occupancy. “Development orders shall be issued by the City in accordance with the adopted concurrency management system and with 163.3202(2)(g) F.S.

Objective 4

Development orders and permits shall be issued only when it is demonstrated by the applicant that the land development proposal conforms with the development requirements of this Comprehensive Plan, with land development regulations, and that sufficient public facilities or service capacity to support such development will exist at the time a building permit is issued for the project.

Monitoring and Evaluation:

- Monitored through the City’s Concurrency Management System and permit review process.

- Policy 4.1 The City of Tamarac shall use the following LOS standards in reviewing impacts of development upon public facilities:

SECTION 5 – GOALS, OBJECTIVES, AND POLICIES

POTABLE WATER

- Western Service Area (Tamarac Water Treatment Plant) 110 gallons per capita per day.
- Eastern Service Area (Fort Lauderdale Water Treatment Plants) 107 gallons per capita per day. (Based off of 2020 population and water demand projections, 179 stated in the Comprehensive Plan).
- BCWWS Service Area (Broward County Water Treatment Plants) ~~131~~ 115 gallons per capita per day.

Policy 4.2 The City of Tamarac shall ensure adequate facility capacity is available or will be available when needed prior to the issuance of a development order. Developments orders shall be issued by the City in accordance with the adopted concurrency management system and with 163.3202(2)(g), F.S. To do so, the City may approve a proposal, reject a proposal, or require that a development be phased in accordance with availability of specific facilities or services as provided in this element.

Policy 4.3 Requests for development permit or Land Use Plan amendments shall be reviewed to examine what affect upon the public facilities the request shall have per the following criteria:

1. Whether the proposal is consistent with, supports, or contributes to the achievement of the goals and objectives in this plan.
2. Whether it affects any existing condition of a public facility as outlined in the Transportation Element, Recreation and Open Space Element, and Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Ground Water Recharge Sub-Elements.
3. Can the plan amendment or proposed development be provided with the necessary public facilities that are planned in the five-year schedule of improvements.
4. Whether the proposal conforms to the Future Land Use Map of the Future Land Use Element.

SECTION 5 – GOALS, OBJECTIVES, AND POLICIES

5. Whether the plan amendment or development is in conformity with county, state agencies, water management district's plans, and those of other regulatory agencies with management or regulatory authority.

Development orders shall be issued by the City in accordance with the adopted concurrency management system and with 163.3202(2)(g), F.S.

Policy 4.4 The Public Services and Community Development Departments will continue to monitor and improve the established criteria the City employs to evaluate capital improvement projects to accommodate new development and redevelopment needs. These criteria will be used by the City during its annual capital budgeting process.

Policy 4.5 The Public Services Departments will continue to maintain and improve the adopted LOS standards for potable water as guided by the City's 10-Year Water Supply Facilities Work Plan and other relevant jurisdictions.

Policy 4.6 The City will maintain its water supply system through improvements to water facilities as needed when identified in the Capital Improvements Program.

Policy 4.7 The Financial Services Director will review all proposals for capital projects and make a recommendation to the City Manager concerning the City's ability to finance such proposals. The recommendation shall include a review of the following:

1. Ability to use impact fees.
2. Ability to use an existing revenue stream.
3. Assessment of likelihood of getting a bond approved by Tamarac voters.
4. Availability of grant funds.

Policy 4.8 During the planning period, the City shall use the following criteria for the consideration of the plans of state agencies and the SFWMD during the City's evaluation of capital improvement projects." These criteria include the following:

1. Project is needed by the City;

SECTION 5 – GOALS, OBJECTIVES, AND POLICIES

2. Project is funded by appropriate agency; and
3. City has funds available to meet any required local match.

Policy 4.9 Public facilities to serve developments for which development orders were issued prior to the adoption of the Tamarac Comprehensive Plan, provided those development orders meet all provisions of the Land Development regulations, shall be available. The Concurrency Management System, as identified in the Tamarac Code of Ordinances, already provides for facilities monitoring and development permit monitoring which will ensure availability as required during the planning period.

Policy 4.10 City of Tamarac traffic impact fees shall only be used for city streets. Since Broward County collects regional traffic impact fees (for the County road system) the city shall not collect fees for those same roads. Any state roads in Tamarac are covered by the regional road system and not eligible for city impact fees.

Objective 5

The City, in collaboration with the School Board, Broward County and non-exempt municipalities shall ensure that public school facilities are available for current and future students consistent with available financial resources and the adopted LOS.

Monitoring and Evaluation:

- School enrollment projections compared to the School District's Adopted Five-Year District Educational Facilities Plan, as adopted by reference into the Capital Improvement Element.
- Policy 5.1 Consistent with policies and procedures within the ILA, the DEFP shall contain a 5-year financially feasible schedule of capital improvements to address existing deficiencies and achieve and maintain the adopted LOS in all CSAs.
- Policy 5.2 The uniform, district-wide LOS shall be 110% of the permanent FISH capacity for each public, middle and high school.
- Policy 5.3 The adopted LOS shall be applied consistently by Broward County, the municipalities and the School Board, district-wide to all schools of the same type.

SECTION 5 – GOALS, OBJECTIVES, AND POLICIES

Objective 6

To formally adopt the capital improvement plans/schedules of all governmental agencies which schedule and fund improvements needed to maintain City-adopted LOS standards.

Monitoring and Evaluation:

- Periodic review of all interlocal agreements and related capital improvements work plans to ensure that they are current.

Policy 6.1 The City of Tamarac hereby adopts by reference the Broward County School Board's District Education Facilities Plan FY 2018-2019 to 2022-2023, adopted by the School Board on September 5, 2018.

Policy 6.2 The City of Tamarac hereby adopts by reference the Transportation Improvement Plan 2014-2019 formally adopted by the Broward County Metropolitan Planning Organization on July 2014.

Policy 6.3 The City of Tamarac hereby adopts the City of Tamarac's 2020 -2030 Capital Improvements Program as originally adopted in 2020.

Policy 6.4 The City hereby adopts by reference the Ft. Lauderdale Water Supply Facilities Work Plan, 2020.

Policy 6.5 The City hereby adopts by reference the Broward County 10-Year Water Supply Facilities Work Plan, 2020.

Appendices

APPENDIX 1-A

CITY OF TAMARAC UTILITY DEPARTMENT WATER USE PERMIT



FORM 80229
Rev. 07/05

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT
WATER USE PERMIT NO. RE-ISSUE 06-00071-W
NON-ASSIGNABLE**

Date Issued: February 3, 2014

Expiration Date: February 3, 2034

Authorizing: THE CONTINUED USE OF GROUNDWATER FROM THE BISCAYNE AQUIFER FOR PUBLIC WATER SUPPLY FOR THE WESTERN PORTION OF THE CITY OF TAMARAC SERVING 68,929 PERSONS IN THE YEAR 2033 WITH AN AVERAGE PER CAPITA USE RATE OF 110 GALLONS PER DAY AND A MAXIMUM MONTHLY TO AVERAGE MONTHLY PUMPING RATIO OF 1.07 TO 1 WITH AN ANNUAL ALLOCATION OF 2,767.50 MILLION GALLONS.

Located In: Broward County, S9,10/T49S/R41E

Issued To: CITY OF TAMARAC
(CITY OF TAMARAC)
10101 STATE ST.
TAMARAC, FL 33321

This is to notify you of the District's agency action concerning Permit Application No. 130415-21, dated April 15, 2013. 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 120.57 and Section 120.569, or request a judicial review pursuant Section 120.68, Florida Statutes.
2. The attached 25 Limiting Conditions.
3. The attached 15 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:

Juanita Addie, Deputy Clerk, MSC9610
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 4th day of February, 2014, in accordance with Section 120.60(3), Florida Statutes, and a copy has been filed and acknowledged with the Deputy District Clerk.

By 
DEPUTY CLERK
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Attachments

LIMITING CONDITIONS

1. This permit shall expire on February 3, 2034.
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

5. Annual allocation shall not exceed 2767 MG.

Maximum monthly allocation shall not exceed 244.3914 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:

City of Tamarac
10101 State Street
Tamarac, FL 33321

7. Withdrawal Facilities:

Ground Water - Existing:

- 1 - 12" X 125' X 830 GPM Well Cased To 105 Feet
- 1 - 12" X 126' X 400 GPM Well Cased To 112 Feet
- 1 - 12" X 112' X 800 GPM Well Cased To 101 Feet
- 1 - 12" X 125' X 800 GPM Well Cased To 111 Feet
- 1 - 12" X 115' X 800 GPM Well Cased To 109 Feet
- 1 - 12" X 115' X 800 GPM Well Cased To 108 Feet
- 1 - 12" X 117' X 800 GPM Well Cased To 102 Feet
- 2 - 12" X 110' X 750 GPM Wells Cased To 100 Feet

- 2 - 12" X 180' X 830 GPM Wells Cased To 105 Feet
- 1 - 12" X 109' X 800 GPM Well Cased To 102 Feet
- 2 - 12" X 160' X 830 GPM Wells Cased To 105 Feet
- 1 - 12" X 125' X 830 GPM Well Cased To 97 Feet
- 1 - 12" X 110' X 800 GPM Well Cased To 101 Feet
- 1 - 12" X 123' X 800 GPM Well Cased To 105 Feet
- 2 - 12" X 120' X 750 GPM Wells Cased To 102 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:

(A) 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

(B) 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:

(A) 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.)

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

(C) 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:

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

(B) Reduction in water levels that harm the hydroperiod of wetlands,

(C) Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,

(D) Harmful movement of contaminants in violation of state water quality standards, or

(E) 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, with advance notice to the permittee, shall be permitted to enter, inspect, and observe the permitted system to determine compliance with permit 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, Regulatory Support Bureau, 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.
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. 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:
 - (A) 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.
 - (B) 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.
23. 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.
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.
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 Chapter 40E-3, Florida Administrative Code.

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:
February 11, 2014

WATER USE STAFF REPORT

Application Number: 130415-21

Permit Number: 06-00071-W

Project Name: CITY OF TAMARAC

Water Use Permit Status: MODIFICATION/RENEWAL

Location: BROWARD COUNTY, S9,10/T49S/R41E

Applicant's Name and Address: CITY OF TAMARAC
10101 STATE ST
TAMARAC, FL 33321

Water Use Classification: Public Water Supply

Sources: Ground Water from: Biscayne Aquifer

Authorized Allocation:

Annual Allocation:	2,767	Million Gallons (MG)
Maximum Monthly Allocation:	244.4	Million Gallons (MG)

Existing Withdrawal Facilities - Ground Water

Source: Biscayne Aquifer

2 - 12" X 110' X 750 GPM Wells Cased to 100 Feet
1 - 12" X 125' X 800 GPM Well Cased to 111 Feet
1 - 12" X 112' X 800 GPM Well Cased to 101 Feet
1 - 12" X 117' X 800 GPM Well Cased to 102 Feet
1 - 12" X 109' X 800 GPM Well Cased to 102 Feet
1 - 12" X 125' X 830 GPM Well Cased to 97 Feet
1 - 12" X 115' X 800 GPM Well Cased to 108 Feet
2 - 12" X 180' X 830 GPM Wells Cased to 105 Feet
1 - 12" X 110' X 800 GPM Well Cased to 101 Feet
1 - 12" X 125' X 830 GPM Well Cased to 105 Feet
1 - 12" X 115' X 800 GPM Well Cased to 109 Feet
2 - 12" X 160' X 830 GPM Wells Cased to 105 Feet
2 - 12" X 120' X 750 GPM Wells Cased to 102 Feet
1 - 12" X 126' X 400 GPM Well Cased to 112 Feet
1 - 12" X 123' X 800 GPM Well Cased to 105 Feet

Rated Capacity

<u>Source</u>	<u>Status Code</u>	<u>GPM</u>	<u>MGM</u>	<u>MGY</u>
Biscayne Aquifer	E	14,780	647.0	7,768
Totals:		14,780	647.0	7,768

**FINAL APPROVED BY
EXECUTIVE DIRECTOR
FEBRUARY 3, 2014**

PURPOSE

The purpose of this application is to renew and modify Water Use Permit 06-00071-W for public water supply for the City of Tamarac to serve 68,929 persons in the year 2033 with an average per capita use rate of 110 gallons per day and a maximum monthly to average monthly pumping ratio 1.07 to 1. Withdrawals are from the Biscayne aquifer via 19 existing withdrawal facilities.

PROJECT DESCRIPTION

The City of Tamarac (Project or Tamarac), located in northeastern Broward County, is requesting to renew and modify Water Use Permit 06-00071-W for public water supply to serve the western portion of the City of Tamarac. The utility pumps groundwater from the Biscayne aquifer via 19 existing withdrawal facilities: 18 primary wells and 1 standby well (Well 1). The Project location, facility locations, service area and facility specifications are shown in Exhibits 1 through 5. Tamarac is requesting an increase in their allocations with this application.

Tamarac operates one water treatment plant with 16 dedicated raw water supply wells and three remote well sites that pump raw water to the water treatment plant. There are several finished water storage facilities located throughout the distribution system including a 1.0 million gallon (MG) storage tank at the water treatment plant that provide a combined total storage capacity of 4.0 MG. The main water treatment process consists of initial lime softening, sand filtration, and chemical feed systems for lime, polymer, chloride, and fluoride treatments. The permitted capacity of Tamarac's water treatment plant is 20 million gallons per day (MGD). The treatment system efficiency losses average 6.04% as shown in Exhibit 6. Tamarac maintains 11 active interconnections with Broward County, City of Fort Lauderdale, City of North Lauderdale and the City of Coral Springs as shown in Exhibit 7. The City of Tamarac is divided into two service areas: eastern Tamarac has 1,115 customer meters and is serviced by the City of Fort Lauderdale; western Tamarac has 17,596 customer meters and is serviced by this water use permit.

Wellfield Operation:

The Tamarac wellfield operates six wells at a time for a week and then switches to another set of six wells the following week. Each rotation pumps six wells that are scattered at different locations across the wellfield. The typical rotations are: Rotation #1 pumps wells 2, 4, 7, 11, 13, and 19; Rotation #2 pumps wells 3, 5, 9, 10, 14, and 17; and Rotation #3 pumps wells 6, 8, 12, 15, 16 and 18. Well 1 is kept as a standby well.

Permit History:

Public water supply Water Use Permit 06-00071-W was originally issued to the City of Tamarac on June 10, 1976 for 18.7 MGD and 3,831 million gallons per year (MGY) to supply water to all of Tamarac and parts of Fort Lauderdale. The permit was renewed in 1986 for 6.9 MGD to serve Tamarac only. The permit was modified in 1989 for the eastern service area of Tamarac to be serviced by Fort Lauderdale. The permit was renewed every five years thereafter and in 2004, Tamarac was issued a 20-year water use permit for 2,754 MGY (7.5 MGD) until February 2009, reducing to 2,625 MGY (7.2 MGD) for the remainder of the permit duration.

PROJECTED WATER USE DEMANDS

The annual and maximum month allocations for public water supply utilities are calculated as described in Section 2.6 of the Basis of Review (BOR) for Water Use Applications within the South Florida Water Management District (District). The annual allocation, 2,767.50 MGY, is based on a raw water per capita daily water use of 110 gallons per capita day (gpcd), based on the last five years pursuant to Section 2.6.3 of the BOR and a population of 68,929 in 2033, as shown in Exhibit 8. The maximum month allocation, 244.39 million gallons per month (MGM), is based on the average of the peaking ratios of the last five years of record (as opposed to the last three years of record) to reflect the recent years of extreme rainfall (Exhibit 8).

HYDROLOGIC MODELING

Theis non-equilibrium flow

In order to determine the potential impacts the withdrawals might have on the source, existing legal users, sensitive environmental features and pollution sources, a drawdown impact analysis was performed using the Theis analytical solution for groundwater flow. The modeling data are consistent with the criteria for basic analytical impact assessments set forth in Section 1.7.5.2 of the BOR. Specific capacity well testing results from the Tamarac wellfield were used to estimate transmissivity (United States Geological Society (USGS) Water-Resources Investigation Report 87-4034). This report indicates a transmissivity range of 75,000 to 150,000 feet squared per day for the Biscayne aquifer in the area of this wellfield. A transmissivity value of 595,000 gallons per day per foot (79,500 feet squared per day) was used for groundwater modeling for this Project renewal and has previously been used for impact assessments since 1998. The purpose of the analysis was to simulate withdrawal of the maximum monthly allocation during a 1-in-10 year drought scenario. Withdrawal of the recommended allocation from the wells was simulated for 90 days with no recharge. Modeling data and drawdown contours, relative to a reference head elevation of 0.0 feet, are appended in Exhibits 9 through 11.

The Permittee submitted hydrologic modeling showing the difference between pumping 6.89 MGD (the Permittee's current base condition) and 7.77 MGD (Exhibit 10); and between pumping 6.89 MGD and the estimated maximum month allocation of 8.47 MGD (Exhibit 11). These modeled withdrawals are slightly higher than the recommended allocations in this permit application: an average day allocation of 7.58 MGD and a maximum month of 8.04 MGD. The potential cumulative withdrawals of all other permitted users of the Biscayne aquifer within the 0.1-foot drawdown contour, including Tamarac, is 86.09 MGY (0.24 MGD). This cumulative impact was not modeled because the maximum month model of 8.47 MGD (Exhibit 11) evaluates a greater monthly withdrawal than all of the cumulative users.

IMPACT ASSESSMENTS

Water Resource Availability

Biscayne Aquifer-Tamarac wellfield

The land surface elevation at the Tamarac wellfield is 10 feet National Geodetic Vertical Datum (NGVD). According to District technical publication DRE-314, the base of the surficial aquifer system, which contains the Biscayne aquifer occurs around -160 feet NGVD beneath the Project. The end of dry season water level in the Biscayne aquifer in the vicinity of the Project, based on data from United States Geological Survey monitor well G-2033, is five feet NGVD. The results of the hydrologic modeling showed a maximum drawdown of 2 feet based on the withdrawal of the recommended allocation leaving a saturated thickness of approximately 163 feet. Therefore, the potential for harm to occur to water resource availability as a result of the withdrawal of the recommended allocation is considered minimal.

Existing Legal Users

Biscayne Aquifer-Tamarac wellfield

The nearest existing legal users to Tamarac's wellfield are Washington Mutual Bank (Water Use Permit 06-04229-W) that uses a Biscayne aquifer well to irrigate 0.54 acres; and Mainlands 13 (Water Use Permit 06-04951-W) that uses on-site lakes adjacent to the wellfield to irrigate 12 acres (Exhibits 3 and 12). These existing users have facilities located within 100 feet of Tamarac's wells. These existing users have been using water since at least 2006. Hydrologic modeling results indicate that an additional 0.5 foot of drawdown will occur at these users' withdrawal facilities as a result of the Project's proposed withdrawals. Therefore, the potential for harm occur to existing legal users as a result of the withdrawal of the recommended increase in allocation is considered minimal.

IMPACT ASSESSMENTS (CONTINUED)

Saline Water Intrusion

Biscayne Aquifer-Tamarac wellfield

The nearest source of surface saline water is downstream of Water Control Structure S-36 on the C-13 Canal located approximately 4.7 miles to the southeast (Exhibit 2). The Project is underlain by the Biscayne aquifer, which is not known to contain connate saline water in this area. The Biscayne aquifer is separated from deeper sources of saline water in the Floridan aquifer system by approximately 300 feet of confining sediments. Due to the large distances separating the saline water sources from the Project site, 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-Tamarac wellfield

There are no state jurisdictional wetlands or other surface waters located within the wellfield's area of influence which requires preservation, elimination or reduction of harm, or mitigation. Therefore, there is no potential for harm to occur to wetlands and other surface waters as a result of the authorized withdrawal of the recommended allocation.

Source Of Pollution

Biscayne Aquifer-Tamarac wellfield

The City of Tamarac wellfield is protected under the Broward County Wellfield Protection Ordinance #84-60 and the City of Tamarac Wellfield Protection Ordinances 92-2 and 2001-10, which create protection zones and a 1,000 feet radius buffer for each water supply well. The nearest known potential source of contamination is 7-Eleven #32881, a petroleum contaminated site (Florida Department of Environmental Protection ID 9803070), located approximately 2,000 feet south of the existing wellfield. Modeling indicates 0.5 foot of additional drawdown at this site. There are hydraulic barriers (lakes) located between this pollution site and the wellfield (Exhibits 3 and 12). The model used was conservative, simulates withdrawals from the deeper production zone and did not consider the shallow hydraulic barriers. Therefore, 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-Tamarac wellfield

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 parcel is surrounded by residential and commercial properties that also withdraw from the Biscayne aquifer. Additional drawdown at the nearest surface water lake is predicted to be 0.5 foot. No problems have been reported due to pumping from the Tamarac wells since their installation in 1976. 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 water use, or land collapse or subsidence caused by reduction in water levels associated with water use.

ADDITIONAL INFORMATION

REGIONAL ISSUES

Biscayne Aquifer Minimum Flow and Levels:

The withdrawal source for this project is the 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, Florida Administrative Code. The Biscayne Aquifer MFL is defined as the water level, which results in movement

ADDITIONAL INFORMATION (CONTINUED)

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. As discussed in the saline water intrusion section of this staff report, this Project is not expected to affect landward movement of the saltwater interface. Therefore, the recommended allocation is consistent with the Biscayne Aquifer MFL Prevention Plan.

Withdrawals Within the Lower East Coast Service Area:

The Project is an existing, permitted project that existed on and prior to April 1, 2006. The Project's base condition water use, consistent with actual historic usage determined in accordance with Section 2.4 of the BOR is 6.89 MGD. The nearest Lower East Coast Everglades Waterbody is the C-14 (Cypress Creek) Canal, located 2 miles north of the Project. The area of influence of the modeled increased withdrawals does not extend to this canal and therefore does not cause a net increase in the volume or cause a change in timing on a monthly basis of water from the C-14 Canal over the base condition water use that existed as of April 1, 2006.

PROJECT SITE ISSUES

Legal Control and Land Use:

The property where the wells are located either is owned by the City of Tamarac or Tamarac has an easement agreement for the well sites. The water allocation requested for public water supply is compatible with the public and private land use categories at these sites (Section 2.1 of the BOR). Additionally, the wells are protected by Broward County and City of Tamarac wellfield protection ordinances.

Water Conservation Plan:

The City of Tamarac Water Conservation Plan is summarized and included as Exhibit 13. Water loss for the past ten years is shown in Exhibit 6.

Water Use Accounting:

Pursuant to Limiting Condition 17, the Permittee shall submit a report of recalibration for the water use accounting system for each water withdrawal facility authorized under this permit every five years from each previous calibration (October 18, 2012), continuing at five-year increments.

Pursuant to Limiting Condition 18, monthly withdrawals for each withdrawal facility shall be submitted to the District quarterly.

Permit Reporting Requirements:

Pursuant to Limiting Condition 20, Permittee shall determine unaccounted-for system losses and submit results to the District on a yearly basis.

Pursuant to Limiting Condition 22, every 10 years from the date of this permit issuance, the Permittee shall submit a water use compliance report for review and approval by District Staff.

Permit Duration:

Pursuant to Section 1.7.2.2 C of the BOR, the Biscayne aquifer is a source of limited availability to the extent that the withdrawals result in induced seepage from the Central and Southern Florida Project. Project withdrawals do not induce seepage from the Central and Southern Florida Project. Therefore, Staff recommends a water use permit duration of 20 years.

ENVIRONMENTAL RESOURCE PERMIT STATUS:

Not Applicable.

RIGHT OF WAY PERMIT STATUS:

Not Applicable

RECOMMENDATIONS

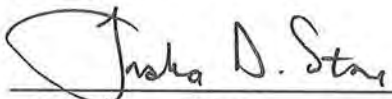
Project Name: CITY OF TAMARAC
Application Number: 130415-21
Permit Number: 06-00071-W


RECOMMENDATION TO EXECUTIVE DIRECTOR

Authorizing: The continued use of groundwater from the Biscayne aquifer for public water supply for the western portion of the City of Tamarac serving 68,929 persons in the year 2033 with an average per capita use rate of 110 gallons per day and a maximum monthly to average monthly pumping ratio of 1.07 to 1 with an annual allocation of 2,767.50 million gallons.

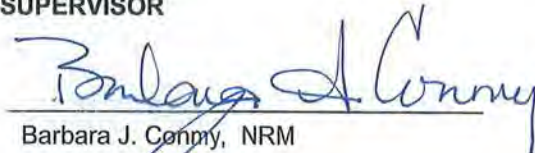
STAFF EVALUATION

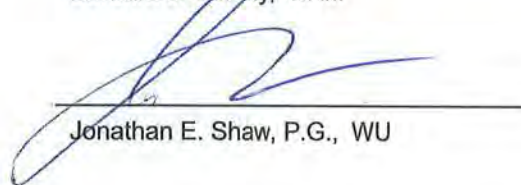
REVIEWER


Trisha Stone, NRM

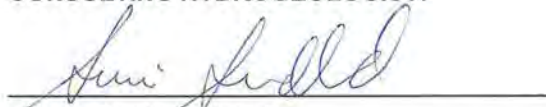

Lindy Cerar, P.G., WU

SUPERVISOR


Barbara J. Conmy, NRM


Jonathan E. Shaw, P.G., WU

CONSULTING HYDROGEOLOGIST:


Simon Sunderland, P.G.

Date: January 23, 2014

WATER USE BUREAU CHIEF:


Maria C. Clemente, P.E.

Date: 1/28/14

Limiting Conditions

1. This permit shall expire on February 3, 2034.
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

5. Annual allocation shall not exceed 2767 MG.

Maximum monthly allocation shall not exceed 244.3914 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:

City of Tamarac
10101 State Street
Tamarac, FL 33321

7. Withdrawal Facilities:

Ground Water - Existing:

- 1 - 12" X 125' X 830 GPM Well Cased To 105 Feet
- 1 - 12" X 126' X 400 GPM Well Cased To 112 Feet
- 1 - 12" X 112' X 800 GPM Well Cased To 101 Feet
- 1 - 12" X 125' X 800 GPM Well Cased To 111 Feet
- 1 - 12" X 115' X 800 GPM Well Cased To 109 Feet
- 1 - 12" X 115' X 800 GPM Well Cased To 108 Feet

Limiting Conditions

- 1 - 12" X 117' X 800 GPM Well Cased To 102 Feet
- 2 - 12" X 110' X 750 GPM Wells Cased To 100 Feet
- 2 - 12" X 180' X 830 GPM Wells Cased To 105 Feet
- 1 - 12" X 109' X 800 GPM Well Cased To 102 Feet
- 2 - 12" X 160' X 830 GPM Wells Cased To 105 Feet
- 1 - 12" X 125' X 830 GPM Well Cased To 97 Feet
- 1 - 12" X 110' X 800 GPM Well Cased To 101 Feet
- 1 - 12" X 123' X 800 GPM Well Cased To 105 Feet
- 2 - 12" X 120' X 750 GPM Wells Cased To 102 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:

(A) 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

(B) 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:

(A) 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.)

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

(C) 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:

Limiting Conditions

- (A) Reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface,
 - (B) Reduction in water levels that harm the hydroperiod of wetlands,
 - (C) Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,
 - (D) Harmful movement of contaminants in violation of state water quality standards, or
 - (E) 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, with advance notice to the permittee, shall be permitted to enter, inspect, and observe the permitted system to determine compliance with permit 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, Regulatory Support Bureau, 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

Limiting Conditions

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.
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. 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:
 - (A) 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.
 - (B) 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.
23. 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.
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.
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 Chapter 40E-3, Florida Administrative Code.



BROWARD COUNTY, FLORIDA

Application No: 130415-21

Permit No: 06-00071-W

Sec 9,10 / Twp 49 / Rge 41

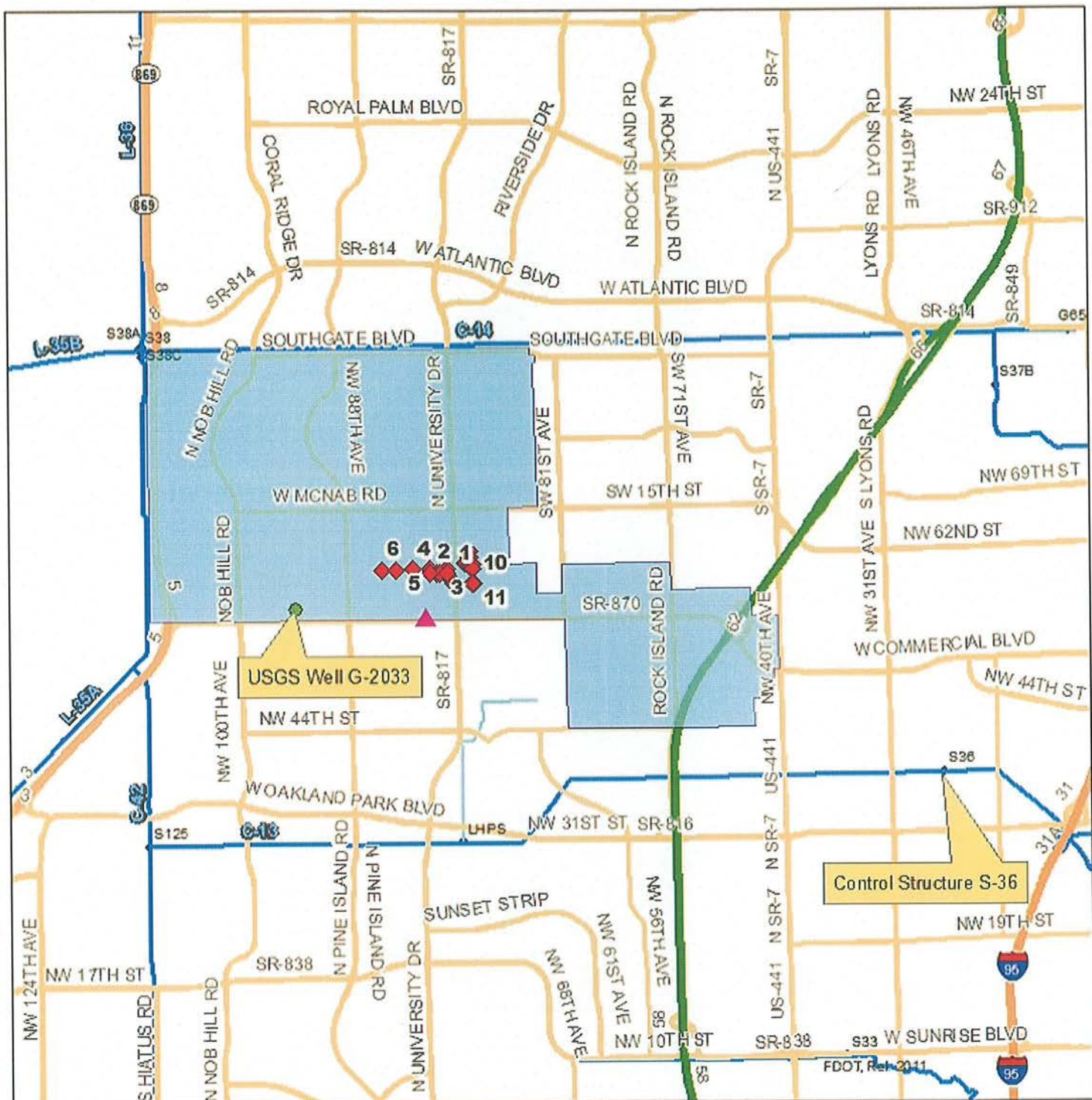
Project Name: CITY OF TAMARAC



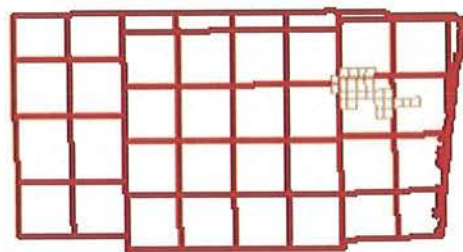
Map Date: 2013-12-23



Exhibit No: 1



BROWARD COUNTY, FLORIDA



Legend

Application

USGS Well G-2033

18 Tamarac Well Locations

Petroleum Pollution Site

Project Name: CITY OF TAMARAC

Map Date: 2013-12-23

Permit No: 06-00071-W

Application No: 130415-21

Sec 9,10 / Twp 49 / Rge 41

0 2.5 5 Miles

Exhibit No: 2



BROWARD COUNTY, FLORIDA



Legend

Application

USGS Well G-2033

18 Tamarac Well Locations

Petroleum Pollution Site

Project Name: CITY OF TAMARAC

Map Date: 2013-12-23

Permit No: 06-00071-W

Application No: 130415-21

Sec 9,10 / Twp 49 / Rge 41

0 0.275 0.55 Miles

Exhibit No: 3



Scale : NTS

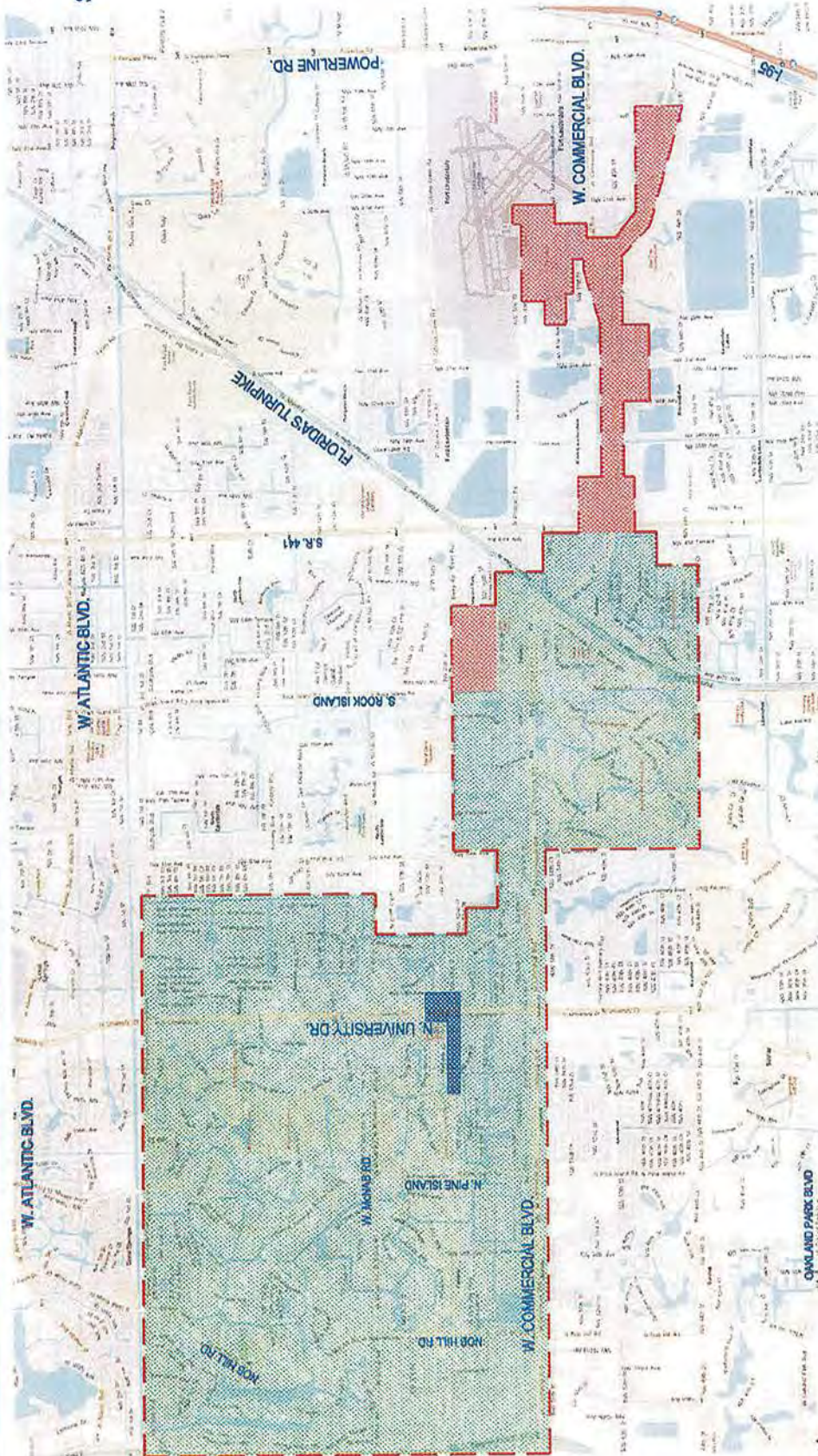


Figure 2
City of Tamarac
Utility Service Area
Site Map



ECKLER ENGINEERING, INC.

TABLE - A
Description Of Wells.

Application Number: 130415-21

Well ID	29559	29560	29561	29562	29563	29564
Name	1	2	3	4	5	6
Map Designator	1	2	3	4	5	6
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	12	12	12	12	12	12
Total Depth(feet)	126	112	115	110	117	109
Cased Depth(feet)	112	101	109	101	102	102
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)	92	60	60	60	60	60
Pump Capacity(GPM)	400	800	800	800	800	800
Year Drilled	1969	1969	1970	1971	1971	1971
Planar Location						
Source	Migrate	Migrate	Migrate	Migrate	Migrate	Migrate
Feet East	900970	900120	900580	899310	898470	897750
Feet North	679050	679080	679050	679240	679210	679200
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Standby	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

Exhibit No: 5

TABLE - A
Description Of Wells.

Application Number: 130415-21

Well ID	29565	29566	29567	29568	29569	29570
Name	7	8	9	10	11	12
Map Designator	7	8	9	10	11	12
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	12	12	12	12	12	12
Total Depth(feet)	125	123	115	120	120	110
Cased Depth(feet)	111	105	108	102	102	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)	60	60	60	42	42	62
Pump Capacity(GPM)	800	800	800	750	750	750
Year Drilled	1973	1973	1973	1983	1983	1986
Planar Location						
Source	Migrate	Migrate	Migrate	Migrate	Migrate	Migrate
Feet East	900925	900450	900120	902220	902240	902220
Feet North	679230	679040	679230	678550	678550	679240
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: 130415-21

Well ID	29571	29572	29573	29574	29575	153122
Name	13	14	15	16	17	18
Map Designator	13	14	15	16	17	18
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	12	12	12	12	12	12
Total Depth(feet)	110	160	160	125	125	180
Cased Depth(feet)	100	105	105	105	97	105
Facility Elev. (ft. NGVD)						
Screened Interval						
From	0	0	0	0	0	
To	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)	42	85	85	90	90	100
Pump Capacity(GPM)	750	830	830	830	830	830
Year Drilled	1986	1992	1992	1992	1992	1996
Planar Location						
Source	Migrate	Migrate	Migrate	Migrate	Migrate	DIGITIZED
Feet East	902230	902095	901870	902040	902030	901260
Feet North	679440	679460	679500	679780	680060	678680
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: 130415-21

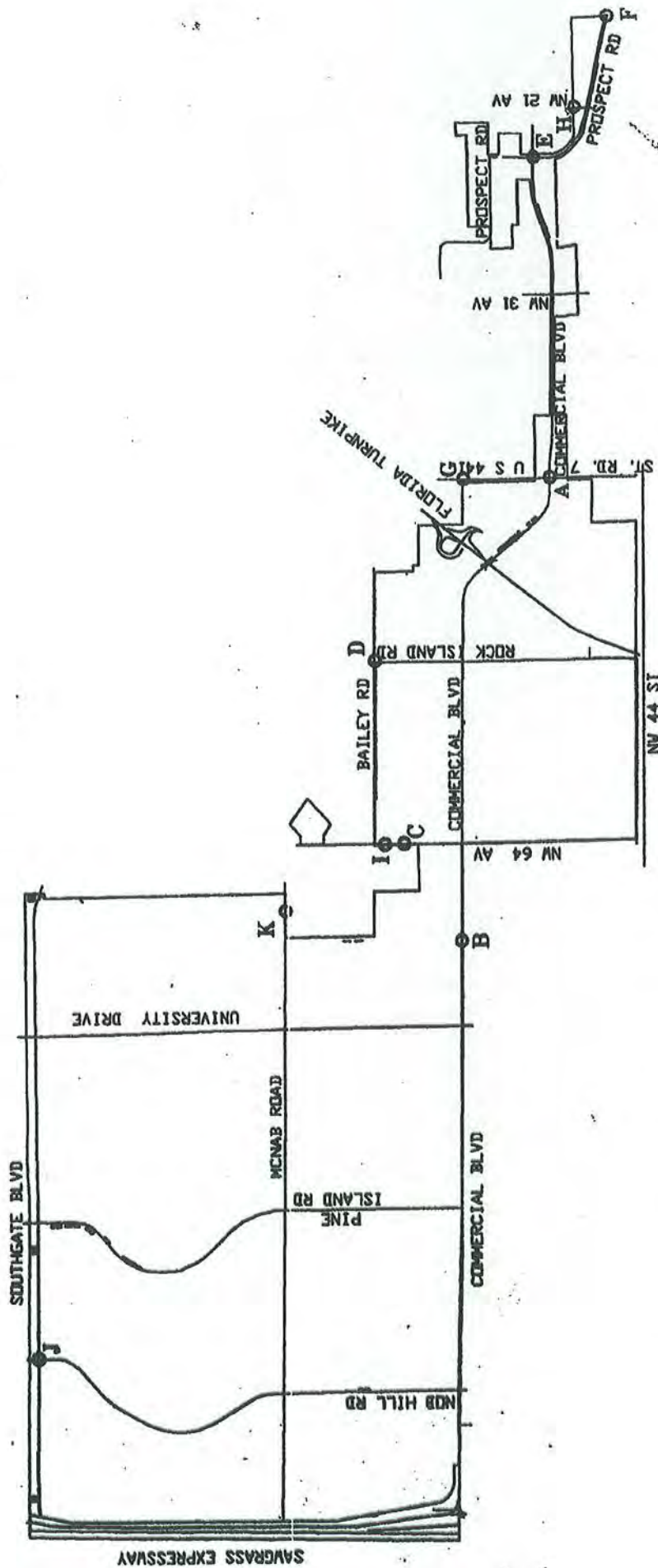
Well ID	29576
Name	19
Map Designator	19
FLUWID Number	
Well Field	
Existing/Proposed	E
Well Diameter(Inches)	12
Total Depth(feet)	180
Cased Depth(feet)	105
Facility Elev. (ft. NGVD)	
Screened Interval	0
From	0
To	P
Pumped Or Flowing	Turbine
Pump Type	
Pump Int. Elev. Feet (NGVD)	100
Feet (BLS)	830
Pump Capacity(GPM)	1996
Year Drilled	
Planar Location	DIGITIZED
Source	901270
Feet East	678530
Feet North	Flow Meter
Accounting Method	Primary
Use Status	
Water Use Type	Public Water Supply
	Biscayne Aquifer
Aquifer	

Exhibit No: 5

City of Tamarac
10 YEAR SYSTEM EFFICIENCY LOSSES

YEAR	% Water Loss between WTP & Wells	%Water Production Losses	% Distribution Losses	Cumulative
2002	1.58	4.43	3.40	9.41
2003	-0.04	6.00	3.14	9.10
2004	-0.01	4.78	3.07	7.84
2005	0.25	5.90	2.21	8.36
2006	1.68	3.95	2.87	8.50
2007	0.01	10.23	-4.08	6.16
2008	0.01	9.30	0.90	10.21
2009	-0.81	7.64	4.14	10.97
2010	-4.22	8.33	5.39	9.50
2011	-8.48	3.36	6.73	1.61
2012	-4.03	2.50	1.25	-0.28
Average	-1.28	6.04	2.64	7.40

WATER INTERCONNECTION MAP



POINTS OF INTERCONNECTION

- | | |
|--|--|
| <p>A 12" BROWARD COUNTY - S.V. CORNER U.S. 441 AND COMMERCIAL BLVD.</p> <p>B 12" CITY OF LAUDERHILL - N.V. CORNER COMMERCIAL BLVD. & N.V. 64th AVE.</p> <p>C 8" NORTH LAUDERDALE - SOUTH OF INTERSECTION BAILY RD. & N.V. 64th AVE.</p> <p>D 8" BROWARD COUNTY - S.V. CORNER BAILY RD. & ROCK ISLAND RD.</p> <p>E 8" FORT LAUDERDALE SUPPLY - S.V. CORNER COMMERCIAL BLVD. & PROSPECT FIELD RD.</p> <p>F 6" FORT LAUDERDALE SUPPLY - S.V. CORNER TRACT 'A' 1660 PROSPECT FIELD RD.</p> | <p>G 8" BROWARD COUNTY 5545 N.V. TSATE RD. 7</p> <p>H 6" FORT LAUDERDALE SUPPLY - N.E. CORNER N.W. 21st AVE. & PROSPECT FIELD RD.</p> <p>I 12" NORTH LAUDERDALE 270' NORTH OF INTERCONNECT 'C'</p> <p>J 12" CORAL SPRINGS IMPROVE. DIST. C-14 CANAL & NOB HILL RD.</p> <p>K 8" NORTH LAUDERDALE - SOUTH OF INTERSECTION McNAB RD. & N.V. 64th AVE.</p> |
|--|--|

Public Water Supply Demands

Application Number: 130415-21

Service Area: CITY OF TAMARAC
Treatment Name:
Standard PCUR: 110

System Efficiency:

Standard Max Monthly Ratio: 1.07

Past Water Use (Table-F)

Year	Population	PCUR	Average Use (MGD)	Max Day Use (MGD)	Ratio	Average Monthly Use(MG)	Max Monthly Use (MG)	Ratio	Basis For Demand	Basis For Ratio
2008	55,916	108	6.06			184.22	207.00	1.12	Y	Y
2009	56,400	111	6.24			189.70	206.00	1.09	Y	Y
2010	56,884	113	6.44			195.78	204.00	1.04	Y	Y
2011	57,570	109	6.27			190.61	191.00	1.00	Y	Y
2012	58,255	103	6.00			182.40	199.00	1.09	Y	Y

Projected Water Use (Table-G)

Year	Population	PCUR	Recommended Average (MGD)	Recommended Max Day (MGD)	Ratio	Average Monthly Use(MG)	Rec Max Monthly (MG)	Ratio	Basis for Allocation
2013	58,941	110	6.48			197.10	210.8956	1.070	
2014	59,627	110	6.56			199.39	213.3502	1.070	
2015	60,132	110	6.61			201.08	215.1571	1.070	
2016	60,998	110	6.71			203.98	218.2557	1.070	
2017	61,684	110	6.79			206.27	220.7103	1.070	
2018	62,369	110	6.86			208.56	223.1613	1.070	
2019	63,055	110	6.94			210.86	225.6158	1.070	
2020	63,741	110	7.01			213.15	228.0704	1.070	
2033	68,929	110	7.58			230.50	246.6335	1.070	

Modeling Scenario Description

Project Name: CITY OF TAMARAC

Application Number: 130415-21

Model Name: Theis non-equilibrium flow

Model Type: Analytical

Version: 2.0

Scenario: 1

Comments:

Input Parameters

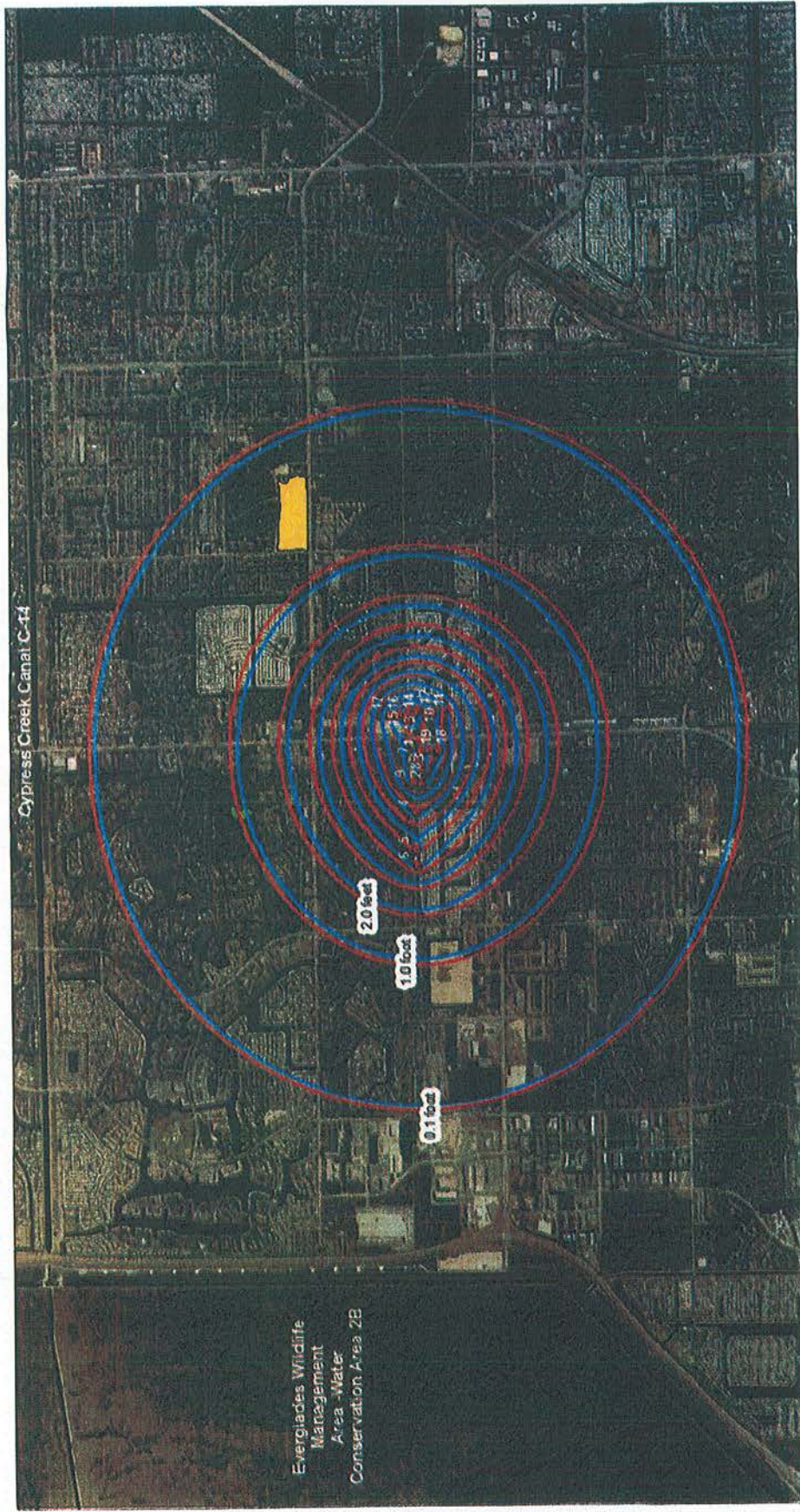
Dataset Name	Value	Unit	Comments
Transmissivity	595000	GPD/Ft	
Storage coefficient	0.25	Dimensionless	
Duration of Pumping	90	Days	
Number of Columns (X-direction)		Number	
Number of Rows (Y-direction)		Number	
Row & Column Spacing	50	Feet	
Map Scale	3,000	Feet / Inch	
Lower-left origin X Coordinate		Feet	
Lower-left origin Y coordinate		Feet	

Withdrawals

Source	Type	Facility ID	Name	Type	East (feet)	North (feet)	Withdrawn (gpd)	Comments
Biscayne Aquifer	GW	29560	2	Well	900120	679080	0	
Biscayne Aquifer	GW	29561	3	Well	900580	679050	0	
Biscayne Aquifer	GW	29562	4	Well	899310	679240	0	
Biscayne Aquifer	GW	29563	5	Well	898470	679210	0	
Biscayne Aquifer	GW	29564	6	Well	897750	679200	0	
Biscayne Aquifer	GW	29565	7	Well	900925	679230	0	
Biscayne Aquifer	GW	29566	8	Well	900450	679040	0	
Biscayne Aquifer	GW	29567	9	Well	900120	679230	0	
Biscayne Aquifer	GW	29568	10	Well	902220	678550	0	
Biscayne Aquifer	GW	29569	11	Well	902240	678550	0	
Biscayne Aquifer	GW	29570	12	Well	902220	679240	0	
Biscayne Aquifer	GW	29571	13	Well	902230	679440	0	
Biscayne Aquifer	GW	29572	14	Well	902095	679460	0	
Biscayne Aquifer	GW	29573	15	Well	901870	679500	0	
Biscayne Aquifer	GW	29574	16	Well	902040	679780	0	
Biscayne Aquifer	GW	29575	17	Well	902030	680060	0	
Biscayne Aquifer	GW	29576	19	Well	901270	678530	0	
Biscayne Aquifer	GW	153122	18	Well	901260	678680	0	

41171 2102/ST/11 SA AB 03/10/05

Tamarac Water Treatment Facility - Difference Model Map for 6.890 MGD and 7.770 MGD (Scenario 1b)



- Legend
- Tamarac Production Wells
 - Drawdown Contours for 6.890 MGD
 - Drawdown Contours for 7.770 MGD
 - Hampton Pines Park
 - Woodmont Natural Area

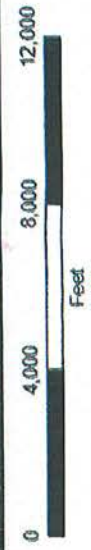
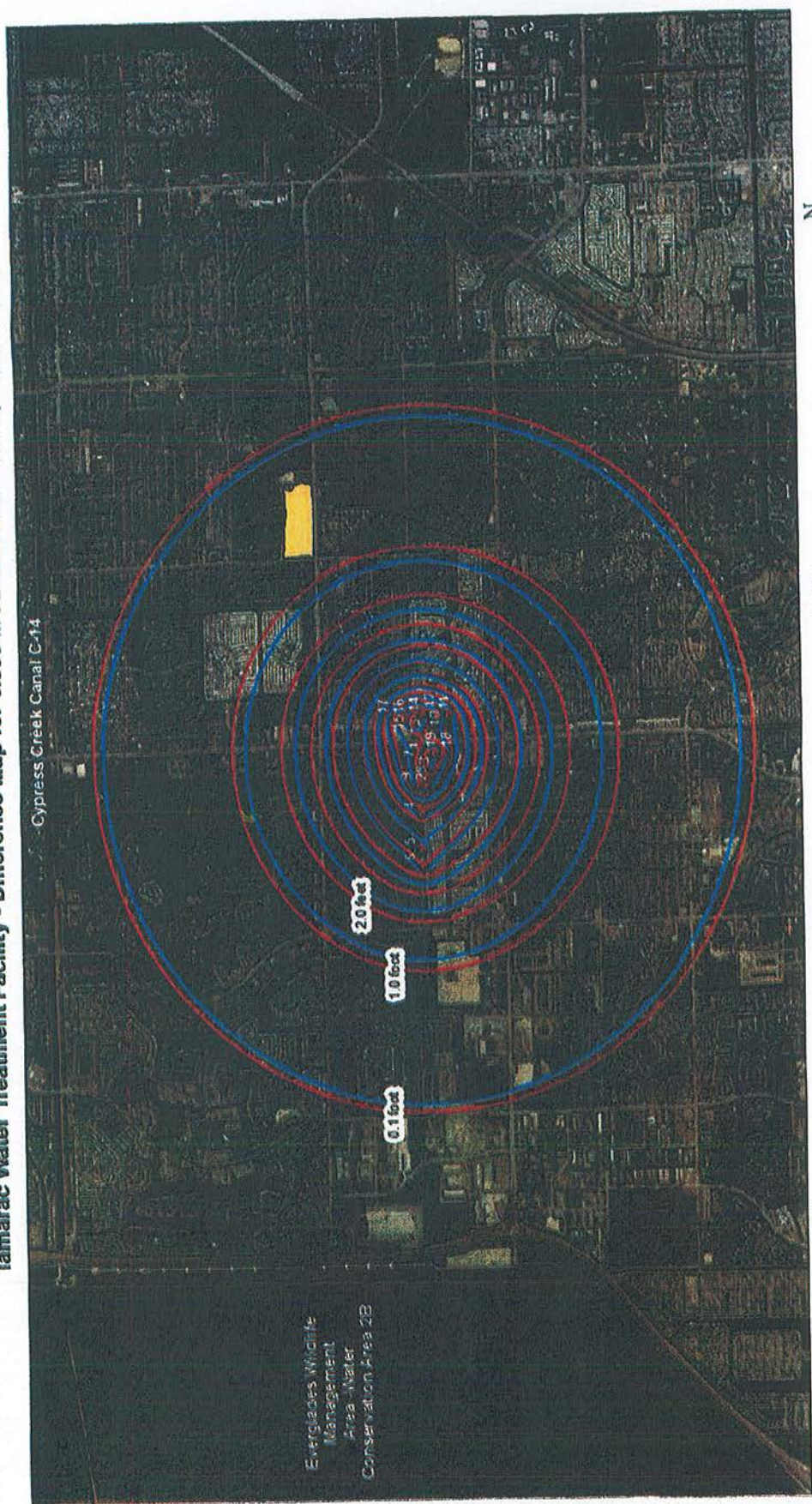


Figure 6

Gerhardt M.
Witt
& Associates, Inc.

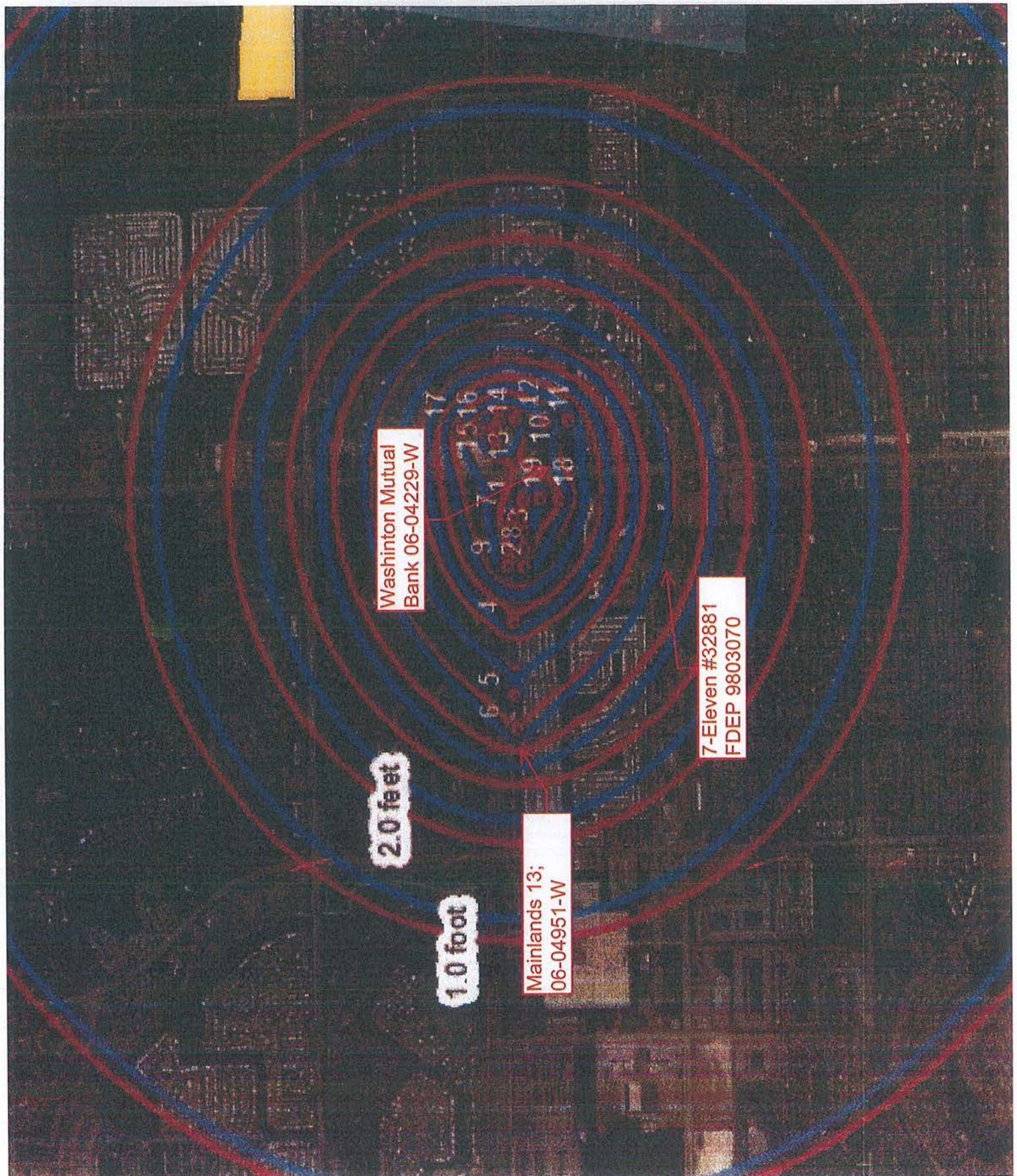
Tamarac Water Treatment Facility - Difference Map for 6.890 MGD and 8.470 MGD (Scenario 2b)



- Legend**
- Tamarac Production Wells
 - Drawdown Contours for 6.890 MGD
 - Drawdown Contours for 8.470 MGD
 - Hampton Pines Park
 - Woodmont Natural Area

Gerhardt M.
Witt
& Associates, Inc.

Figure 8



Tamarac Water Conservation Plan Summary

Utility Leak Detection Program

- Monthly records are rectified to calculate all losses throughout the system: raw water lines, treatment losses and distribution line losses
- Three-point pressure monitoring system in pipeline network provides early warning for major line breaks and isolates the break areas
- Telemetry system installed in 1986 provides water system pressure readings at two remote tanks and treatment plant
- A Water Conservation Specialist staff position was added in 2006

Rate Structure

- Three-tiered rate structure to encourage conservation
- During SFWMD Declared Water Shortage, a 15% water conservation fee may be added to the water portion of the bill

Public Information Programs

- Conservation messages are periodically enclosed in customer water bills
- During SFWMD Declared Water Shortages, the City uses "Tam-a-Grams", direct mail, banners and social media to remind customers to reduce consumption
- Speakers from City of Tamarac Utilities Department address conservation issues
- Restaurants are provided signage and only provide water to if requested

Florida-Friendly Landscaping

- All new landscape designs must be pre-approved by the City of Tamarac and are screened to meet the Florida-Friendly Landscaping standards
- Section 11 of City of Tamarac Code adopted Florida-Friendly Landscaping (Xeriscape)
- Good irrigation practices are encouraged: water is applied in stages to allow adequate soak in, to avoid irrigation run-off, to promote irrigation only between 4 p.m. and 10 a.m., irrigation is limited to two days per week during water shortage
- Participation in Broward County Mobile Irrigation Laboratory program and irrigation system reviews are offered to several accounts each year

Retrofits

- Water-saving fixtures installed on all new construction
- SFWMD Grants are used to provide rain sensor shut-offs; low flow faucets, shower heads, restaurant spray-nozzles and toilets

Other

- The City of Tamarac joined the Broward County 201 Program in 1988

Requirement by Limiting Condition Report

App No: 130415-21

Permit No: 06-00071-W

Project Name: CITY OF TAMARAC

Limiting Condition No: 17

Limiting Condition Code: WUSTD021-8

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - 1	Calibration report for WELL 1	Every Five Years	Every Five Years	30-OCT-2017
WELL - 2	Calibration report for WELL 2	Every Five Years	Every Five Years	30-OCT-2017
WELL - 3	Calibration report for WELL 3	Every Five Years	Every Five Years	30-OCT-2017
WELL - 4	Calibration report for WELL 4	Every Five Years	Every Five Years	30-OCT-2017
WELL - 5	Calibration report for WELL 5	Every Five Years	Every Five Years	30-OCT-2017
WELL - 6	Calibration report for WELL 6	Every Five Years	Every Five Years	30-OCT-2017
WELL - 7	Calibration report for WELL 7	Every Five Years	Every Five Years	30-OCT-2017
WELL - 8	Calibration Report for Well 8	Every Five Years	Every Five Years	30-OCT-2017
WELL - 9	Calibration Report for Well 9	Every Five Years	Every Five Years	30-OCT-2017
WELL - 10	Calibration Report for Well 10	Every Five Years	Every Five Years	30-OCT-2017
WELL - 11	Calibration Report for Well 11	Every Five Years	Every Five Years	30-OCT-2017
WELL - 12	Calibration Report for Well 12	Every Five Years	Every Five Years	30-OCT-2017
WELL - 13	Calibration Report for Well 13	Every Five Years	Every Five Years	30-OCT-2017
WELL - 14	Calibration Report for Well 14	Every Five Years	Every Five Years	30-OCT-2017
WELL - 15	Calibration Report for Well 15	Every Five Years	Every Five Years	30-OCT-2017
WELL - 16	Calibration Report for Well 16	Every Five Years	Every Five Years	30-OCT-2017
WELL - 17	Calibration Report for Well 17	Every Five Years	Every Five Years	30-OCT-2017
WELL - 18	Calibration Report for Well 18	Every Five Years	Every Five Years	30-OCT-2017
WELL - 19	Calibration Report for Well 19	Every Five Years	Every Five Years	30-OCT-2017

Limiting Condition No: 18

Limiting Condition Code: WUSTD022-1

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - 1	Monthly Withdrawal for Well 1	Monthly	Quarterly	31-MAY-2014
WELL - 2	Monthly Withdrawal for Well 2	Monthly	Quarterly	31-MAY-2014
WELL - 3	Monthly Withdrawal for Well 3	Monthly	Quarterly	31-MAY-2014
WELL - 4	Monthly Withdrawal for Well 4	Monthly	Quarterly	31-MAY-2014
WELL - 5	Monthly Withdrawal for Well 5	Monthly	Quarterly	31-MAY-2014
WELL - 6	Monthly Withdrawal for Well 6	Monthly	Quarterly	31-MAY-2014
WELL - 7	Monthly Withdrawal for Well 7	Monthly	Quarterly	31-MAY-2014
WELL - 8	Monthly Withdrawal for Well 8	Monthly	Quarterly	31-MAY-2014
WELL - 9	Monthly Withdrawal for Well 9	Monthly	Quarterly	31-MAY-2014
WELL - 10	Monthly Withdrawal for Well 10	Monthly	Quarterly	31-MAY-2014
WELL - 11	Monthly Withdrawal for Well 11	Monthly	Quarterly	31-MAY-2014
WELL - 12	Monthly Withdrawal for Well 12	Monthly	Quarterly	31-MAY-2014
WELL - 13	Monthly Withdrawal for Well 13	Monthly	Quarterly	31-MAY-2014
WELL - 14	Monthly Withdrawal for Well 14	Monthly	Quarterly	31-MAY-2014
WELL - 15	Monthly Withdrawal for Well 15	Monthly	Quarterly	31-MAY-2014
WELL - 16	Monthly Withdrawal for Well 16	Monthly	Quarterly	31-MAY-2014
WELL - 17	Monthly Withdrawal for Well 17	Monthly	Quarterly	31-MAY-2014
WELL - 18	Monthly Withdrawal for Well 18	Monthly	Quarterly	31-MAY-2014
WELL - 19	Monthly Withdrawal for Well 19	Monthly	Quarterly	31-MAY-2014

Requirement by Limiting Condition Report

Limiting Condition No: 20	Limiting Condition Code: <u>WUPWS003-1</u>			
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Unaccounted for Distribution Losses for PERMIT	Yearly	Yearly	28-FEB-2015
Limiting Condition No: 22	Limiting Condition Code: <u>WUPWS008-2</u>			
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Ten-Year Compliance Report for PERMIT	Every Ten Years	Every Ten Years	29-FEB-2024

STAFF REPORT DISTRIBUTION LIST

CITY OF TAMARAC

Application No: 130415-21

Permit No: 06-00071-W

INTERNAL DISTRIBUTION

- X Lindy Cerar, P.G.
- X J. Marquez

EXTERNAL DISTRIBUTION

- X Permittee - City Of Tamarac
- X Engr Consultant - Eckler Engineering Inc

GOVERNMENT AGENCIES

- X Broward County - Director, Water Mgmt Div
- X Dept of Environmental Protection - West Palm Beach
- X Div of Recreation and Park - District 7

OTHER INTERESTED PARTIES

- X Alexandria Larson
- X B.F. Sewell

Exhibit No:15

APPENDIX 1-B

BCWWS - DISTRICT 1 WATER USE PERMIT (2018 Modification)



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Regulation Division

May 25, 2018

John M. Crouse, P.E.
Director
Broward County Water & Wastewater Services
2555 W. Copans Road
Pompano Beach, FL 33069

Subject: Project Name: Broward County District 1
Application No.: 130403-5,
Broward County

Dear Mr. Crouse:

On February 6, 2015, a letter modification to the water use permit for Broward County District 1 was issued for the above referenced application. Two Floridan aquifer production wells, F- 3 and F-4, were listed as existing instead of proposed. This error has been corrected. Enclosed please find a corrected copy of the letter modification reflecting the changes. We apologize for any inconvenience this may have caused.

Should you have any questions, please do not hesitate to contact me at or 561-682-2705 or ssunder@sfwmd.gov

Sincerely,

A handwritten signature in blue ink, which appears to read "Simon Sunderland".

Simon Sunderland, P.G.
Section Administrator
South Florida Water Management District

SS/ss

Enclosure

cc: Susan Bodmann, P.G.

NOTICE OF RIGHTS

As required by Sections 120.569 and 120.60(3), Fla. Stat., the 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 of 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 SFWMD decision which affects or may affect their substantial interests shall file a petition for hearing with the Office of the District Clerk of the SFWMD, in accordance with the filing instructions set forth herein, 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 Section 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of written notice through mail, electronic mail, or posting that the SFWMD has or intends to take final agency action, or publication of notice that the SFWMD 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.

If the District takes final agency action which materially differs from the noticed intended agency decision, persons who may be substantially affected shall, unless otherwise provided by law, have an additional Rule 28-106.111, Fla. Admin. Code, point of entry.

Any person to whom an emergency order is directed pursuant to Section 373.119(2), Fla. Stat., shall comply therewith immediately, but on petition to the board shall be afforded a hearing as soon as possible.

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 an extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

FILING INSTRUCTIONS

A petition for administrative hearing must be filed with the Office of the District Clerk of the SFWMD. Filings with the Office of the District Clerk may be made by mail, hand-delivery, or e-mail. Filings by facsimile will not be accepted. A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the Office of the District Clerk at SFWMD headquarters in West Palm Beach, Florida. **The District's normal business hours are 8:00 a.m. – 5:00 p.m.,** excluding weekends and District holidays. Any document received by the Office of the District Clerk after 5:00 p.m. shall be deemed 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 District Clerk, 3301 Gun Club Road, West Palm Beach, Florida 33406.

- Filings by hand-delivery must be delivered to the Office of the District Clerk. Delivery of a petition to the SFWMD's security desk does not constitute filing. It will be necessary to request that the SFWMD's security officer contact the Office of the District Clerk. An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by e-mail must be transmitted to the Office of the District Clerk at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the Office of the District Clerk receives the complete document. A party who files a document by e-mail shall (1) represent that the original physically signed document will be retained by that party for the duration of the proceeding and of any subsequent appeal or subsequent proceeding in that cause and that the party shall produce it upon the request of other parties; and (2) 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.

INITIATION OF AN ADMINISTRATIVE HEARING

Pursuant to Sections 120.54(5)(b)4. and 120.569(2)(c), Fla. Stat., and 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 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, SFWMD file number or any other SFWMD identification number, if known.
2. The name, address, any email address, any facsimile number, 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.**

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 Section 120.68, Fla. Stat., and in accordance with Florida Rule of Appellate Procedure 9.110, 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 with the Office of the District Clerk of the SFWMD in accordance with the filing instructions set forth herein within 30 days of rendition of the order to be reviewed, and by filing a copy of the notice with the clerk of the appropriate district court of appeal.



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

WATER USE LETTER MODIFICATION

CORRECTED PERMIT

APPLICATION NUMBER: 130403-5 **PERMIT NUMBER:** 06-00146-W
DATE ISSUED: February 6, 2015 **EXPIRATION DATE:** April 10, 2028
PERMITTEE: BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS
2555 W COPANS ROAD
POMPANO BEACH, FL 33069
PROJECT NAME: BROWARD COUNTY DISTRICT 1
PROJECT LOCATION: BROWARD COUNTY, S12, 13, 24, 25/T49S/R41E
S6,7/T50S/R42E
S13,24/T50S/R41E
S3,4,7,9,10,11,14,15,18,19,10,29,30,31/T49S/
R42E

District staff has reviewed the information submitted in support of the referenced application for permit modification(s) and determined that the proposed activities are in compliance with the previous permit and the appropriate provisions of Rule 40E-2.331 (4)(a), Florida Administrative Code. The permit modification(s) include the following:

The purpose of this letter is to modify Water Use Permit 06-00146-W for public water supply for Broward County District 1. The modification consists of changing the service area boundary to include the areas of North Andrews Garden and Broadview Park (Exhibit 1). The Permittee currently provides finished water to these areas but the previous Water Use Permit did not reflect these changes. As part of the addition of these two service areas, the allocations to provide finished water to these areas have been included in this Permit and added to the Permit's source limitation on the Biscayne aquifer. The previously permitted base condition, as defined in Section 3.2.1(E)(3) of the Basis of Review (BOR), has been adjusted to reflect this modification. The transferred allocations are 0.30 million gallons (MG) per day of average raw water from the City of Fort Lauderdale's Water Use Permit (06-00123-W) to Broward County District 1 for the North Andrews Service area and 0.537 MG per day of average raw water from the City of Plantation's Water Use Permit (06-00103-W) to Broward County District 1 for the service area of Broadview Park. The City of Fort Lauderdale's current Water Use Permit reflects this transfer. The City of Plantation's current Water Use Permit also reflects this transfer. The City of Plantation's base condition water use from the Biscayne aquifer has been met and future base condition increases from the Biscayne aquifer will not be authorized.

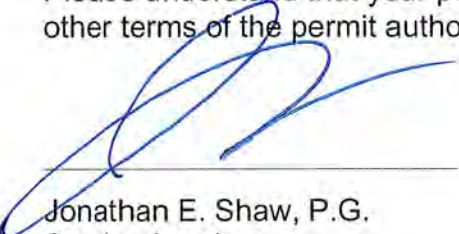
An additional modification to the Water Use Permit is to correct a miscalculation in the maximum monthly source limit on the Biscayne aquifer. The previous Permit listed the source limit on the Biscayne aquifer as 280 MG per month. The correct source limit on the Biscayne aquifer should have been 305 MG per month. The previous monthly source limit was based on the maximum historic twelve month base condition value of 3,358 MG, pursuant to Section 3.2.1(E)(3) of the BOR. The previous source limit of 280 MG per month was the average monthly limit (3,358/12). The corrected source limit on the

Biscayne aquifer should be the maximum monthly limit, which is the average value multiplied by the maximum to average month ratio of 1:1.09 (peaking factor of 1.09).

The transferred allocations discussed above, to include the additional service areas, total 0.837 MG per day. This Water Use Permit is being modified to change the source limitation on the Biscayne aquifer to 333 MG per month and 3,664 MG per year. This is inclusive of the transferred volumes of water and the corrected source limit. The maximum monthly source limit was calculated by multiplying the average monthly value (3,664/12) by the 1.09 peaking factor. The updated source limitation on the Biscayne aquifer is equivalent to the new base condition water use, as defined in the BOR. The total Permitted allocations have not been modified and remain 461 MG maximum per month and 5,074 MG per year.

Additional modifications to the Water Use Permit include updates to the status of the withdrawal and monitoring facilities and updates to the monitoring requirements. Wells F1, F2 and MW-1 have been changed from Proposed to Existing. Well MW-2 has been added as a proposed monitoring well. A facilities location map and an updated "Table A - Description of Wells" are shown in Exhibits 2 and 3.

Please understand that your permit remains subject to the 33 Limiting Conditions and all other terms of the permit authorization as previously issued.



Jonathan E. Shaw, P.G.
Section Leader
Water Use Bureau

LIMITING CONDITIONS

1. This permit shall expire on April 10, 2028.
2. Application for a permit modification may be made at any time.
3. Water use classification:

Public Water Supply
4. Source classification is:

Groundwater from:
Biscayne Aquifer
Upper Floridan Aquifer
5. Annual allocation shall not exceed 5,074.00 million gallons (MG). (13.90 MGD)

Maximum monthly allocation shall not exceed 461.00 million gallons (MG).

The following limitations to annual withdrawals from specific sources are stipulated:
Biscayne Aquifer-: 3,664 MG.

The following limitations to maximum monthly withdrawals from specific sources are stipulated:
Biscayne Aquifer-: 333.00 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:

BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS
2555 WEST COPANS ROAD
POMPANO BEACH, FL - 33069

7. Withdrawal facilities:

Groundwater - Proposed:

2 - 18" X 1250' X 1400 GPM Wells Cased To 1000 Feet

Groundwater - Existing:

1 - 20" X 94' X 2100 GPM Well Cased To 84 Feet
1 - 12" X 100' X 1150 GPM Well Cased To 89 Feet
2 - 20" X 100' X 2100 GPM Wells Cased To 75 Feet
1 - 12" X 100' X 1150 GPM Well Cased To 70 Feet
1 - 17.4" X 1250' X 700 GPM Well Cased To 1150 Feet
1 - 12" X 145' X 2700 GPM Well Cased To 80 Feet
1 - 12" X 147' X 2700 GPM Well Cased To 80 Feet
1 - 17.4" X 1250' X 700 GPM Well Cased To 1035 Feet
1 - 12" X 100' X 1100 GPM Well Cased To 72 Feet
1 - 12" X 100' X 1200 GPM Well Cased To 76 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:

(A) 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

(B) 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:

(A) 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.)

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

(C) 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:

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

(B) Reduction in water levels that harm the hydroperiod of wetlands,

(C) Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,

(D) Harmful movement of contaminants in violation of state water quality standards, or

(E) 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, with advance notice to the permittee, shall be permitted to enter, inspect, and observe the permitted system to determine compliance with permit 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: S.F.W.M.D., Supervising Hydrogeologist - Post-Permit Compliance, Water Use Regulation Dept. (4320), 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 implement the wellfield operating plan described in District staff report prepared in support of recommendation for permit issuance.
21. 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.
22. Permittee shall maintain an accurate flow meter at the intake of the water treatment plant for the purpose of measuring daily inflow of water.
23. It has been determined that this project relies, in part on the waters from the Central and Southern Project, and as such is considered to be an indirect withdrawal from an MFL water body under recovery (Everglades). The Lower East Coast Regional Water Supply Plan (May 2000), which is the recovery plan for the Everglades, incorporates a series of water resource development projects and operational changes that are to be completed over the duration of the permit and beyond. If the recovery plan is modified and it is determined that this project is inconsistent with the approved recovery plan, the Permittee shall be required to modify the permit consistent with the provisions of Chapter 373, Florida Statutes.
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.
25. 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:
 - (A) 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.

(B) 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.

26. 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: (A) the status of distribution system construction, including location and capacity of lines; (B) a summary of uncommitted supplies for the next year; (C) copies of any new or amended local mandatory reclaimed water reuse zone ordinances; and (D) a list of end-users who have contracted to receive reclaimed water and the agreed upon quantity of water to be delivered.
27. Within six months of permit issuance, Permittee shall develop and implement a water level monitoring program to monitor the water level of the groundwater source(s) or adjacent zones potentially influenced as identified in the impact assessment summary of this staff report. A preliminary proposal shall be submitted to staff for review and approval within three months of permit issuance. In developing the program, the Permittee shall consider the number of wells, well localities, depth, method of well construction, types of screen, method of water level measurement or water quality analysis, and frequency of data collection.

The permittee shall select a location for Biscayne aquifer monitor well MW-2 within the cone of influence of the Biscayne aquifer wellfield. The location of the proposed monitoring well shall be south of the existing Biscayne aquifer wellfield. Once the monitor well is installed, it shall be sampled for water levels monthly and the data submitted quarterly.

28. Within six months of permit issuance, the Permittee shall implement the following saline water intrusion monitoring program:
Upon completion of the Upper Floridan aquifer wellfield, the permittee shall select one

Upper Floridan aquifer well to be designated as a production/monitor well. The well shall be sampled quarterly for chloride concentration and water level.

29. If a proposed well location is different from a location specified in the application, the Permittee shall submit to the District an evaluation of the impact of pumpage from the proposed well location on adjacent existing legal uses, pollution sources, environmental features, the saline water interface, and water bodies one month prior to all new well construction. The Permittee is advised that the proposal must be in compliance with all permitting criteria and performance standards in effect at the time of submittal, and that a formal modification of the permit shall be required if the withdrawals from the well location will result in an environmental or resource impact significantly greater than that anticipated in the permit review process.
30. 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 Chapter 40E-3, Florida Administrative Code.
31. 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.
32. Within two years of permit issuance, potable public water supply utilities are required to provide a study evaluating emergency water supply preparedness, including analysis of demand management measures, potential pumpage shifting and the feasibility of emergency interconnections for the purpose of supplying water on a short-term, emergency basis to adjoining utilities. The Permittee must provide the District with a copy of the study. As to emergency interconnects, the feasibility study must assess the technical, physical and economic ability of the Permittee to develop interconnecting pipes capable of delivering water to adjoining utilities to meet emergency, short-term water supply needs. (in the event of an interconnect being established, individual public water supply Permit allocations will not address the emergency usage.) It is the policy of the District to encourage emergency interconnects between adjoining public water supply utilities for the purpose of providing emergency water supply. Thus, where the feasibility study indicates emergency interconnects are possible, the District encourages the adjoining utilities to implement the same.
33. The permittee shall construct the proposed Floridan aquifer wellfield in accordance with

the following schedule:

Planning and Design	January 2008 - September 2010
Permitting and Procurement	October 2010 - June 2011
Construction and Startup	June 2013 - January 2019

Beginning in January 2009, the permittee shall provide annual updates of the status of all alternative water supply projects being constructed by the permittee that are associated with this permit. The status report shall include work completed to date, expenditures and any anticipated changes in the timelines. The annual report shall address activities that occurred during a calendar year and shall be submitted to Water Use Compliance on or before January 31st of the following year.

NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., the 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 SFWMD decision which does or may affect 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, electronic mail, or posting that the SFWMD has or intends to take final agency action, or publication of notice that the SFWMD 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 e-mail. Filings by facsimile will not be accepted after October 1, 2014. A petition for administrative hearing or other document 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 District 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 District Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the District 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 e-mail must be transmitted to the District Clerk's Office at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the District Clerk receives the complete document. A party who files a document by e-mail shall (1) represent that the original physically signed document will be retained by that party for the duration of the proceeding and of any subsequent appeal or subsequent proceeding in that cause and that the party shall produce it upon the request of other parties; and (2) 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.

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, SFWMD 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 decision.
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.

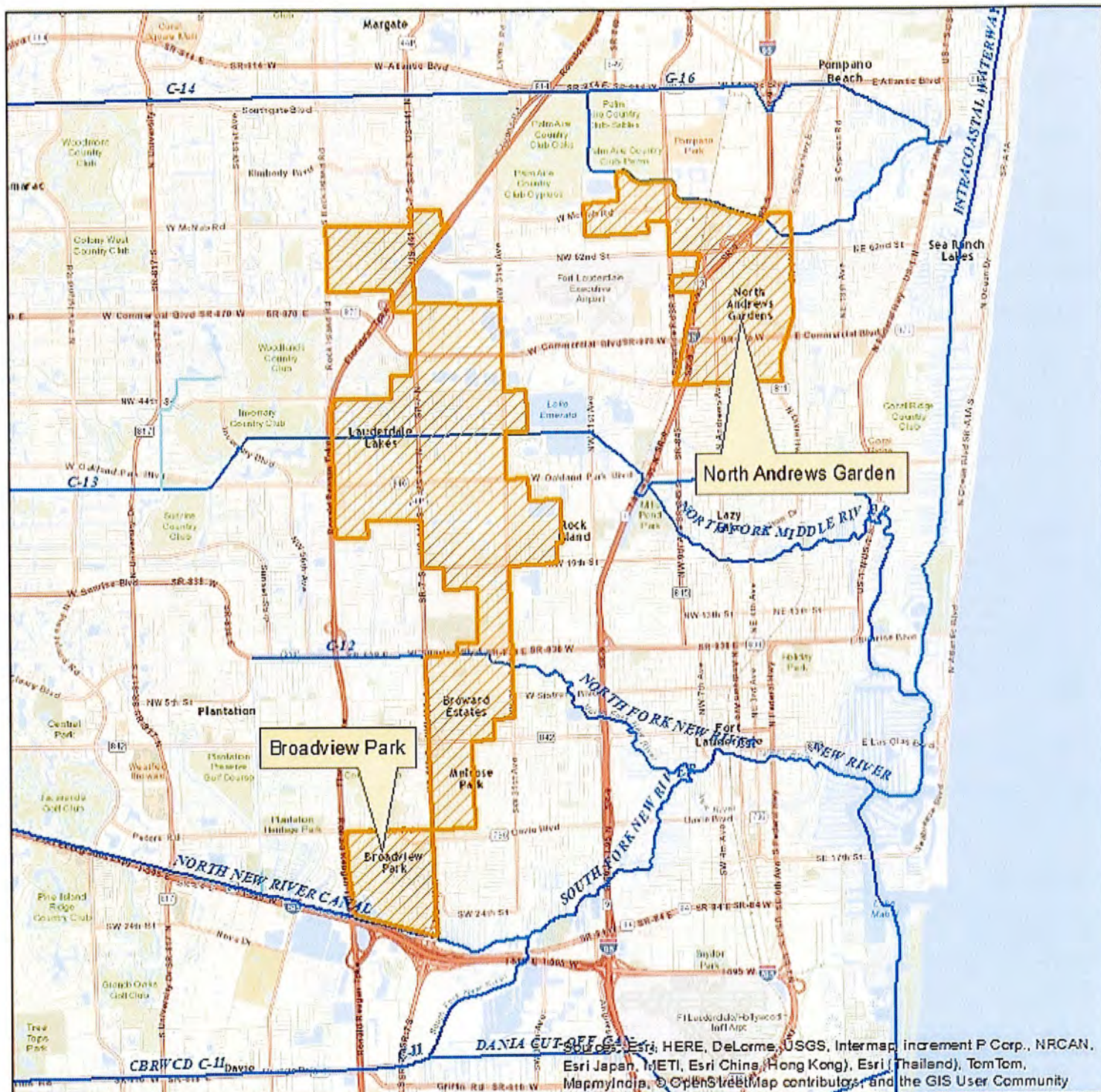
If the SFWMD takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

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 District Clerk within 30 days of rendering of the final SFWMD action.



BROWARD COUNTY, FLORIDA

Legend

 Application

Application No: 130403-5

Sec 12, 13, 24, 25 / Twp 49 / Rge 41

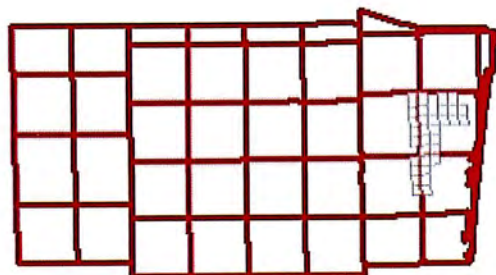
Project Name: BROWARD COUNTY DISTRICT 1

Map Date: 2015-01-08

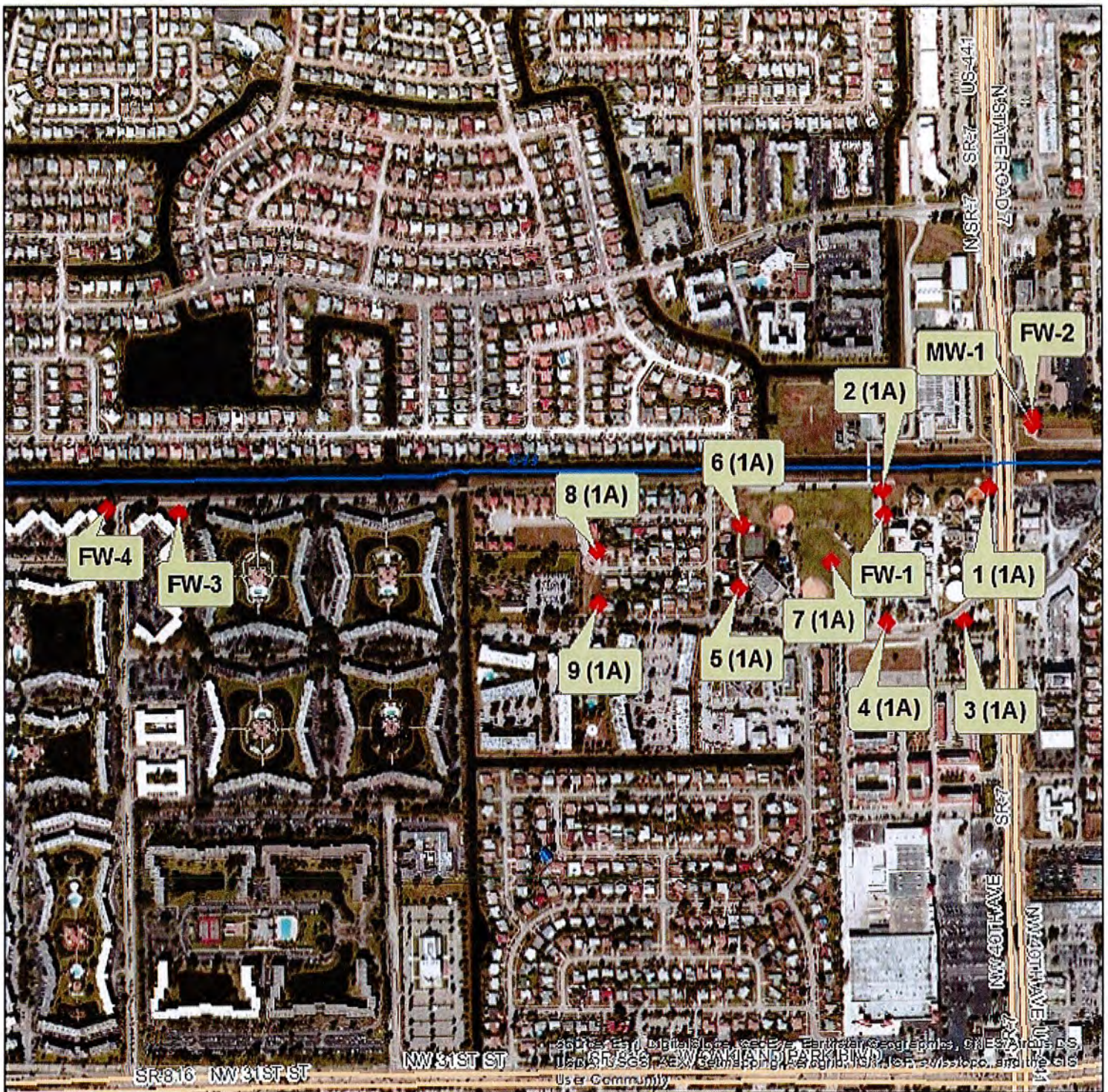
Permit No: 06-00146-W

0 1.5 3 Miles

Exhibit No: 1



Sources: HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



BROWARD COUNTY, FLORIDA

 Application

 WELL

Application No: 130403-5

Sec 12, 13, 24, 25 / Twp 49 / Rge 41

Project Name: BROWARD COUNTY DISTRICT 1

N



Map Date: 2015-01-08

Permit No: 06-00146-W

0 500 1,000
Feet

Exhibit No: 2



TABLE - A
Description Of Wells.

Application Number: 130403-5

Well ID	21419	21418	21420	21421	21422	21423
Name	1 (1A)	2 (1A)	3 (1A)	4 (1A)	5 (1A)	6 (1A)
Map Designator	1 (1A)	2 (1A)	3 (1A)	4 (1A)	5 (1A)	6 (1A)
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	12	12	12	12	20	20
Total Depth(feet)	100	100	100	100	94	100
Cased Depth(feet)	72	70	89	76	84	75
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	Submersible	Submersible	Submersible	Submersible	Submersible	Submersible
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	16	24	24	26	26	31
Pump Capacity(GPM)	1100	1150	1150	1200	2100	2100
Year Drilled					1974	1982
Planar Location						
Source	APPLICANT	APPLICANT	APPLICANT	APPLICANT	Migrate	APPLICANT
Feet East	917399	916886	917280	916907	916185	916197
Feet North	669213	669210	668578	668571	668734	669041
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: 130403-5

Well ID	21424	21425	21426	220601	220600	220602
Name	7 (1A)	8 (1A)	9 (1A)	F-2 (1A)	F-1 (1A)	F-3 (1A)
Map Designator	7 (1A)	8 (1A)	9 (1A)	FW-2 (1A)	FW-1 (1A)	FW-3 (1A)
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	P
Well Diameter(Inches)	20	12	12	17.4	17.4	18
Total Depth(feet)	100	145	147	1250	1250	1250
Cased Depth(feet)	75	80	80	1035	1150	1000
Facility Elev. (ft. NGVD)						
Screened Interval						
From	0	80	82			
To	0	90	92			
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Turbine	Submersible	Submersible	Turbine	Turbine	Turbine
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	33	0	0			
Pump Capacity(GPM)	2100	2700	2700	700	700	1400
Year Drilled	1982	1991	1991	2014	2014	
Planar Location						
Source	Migrate	Migrate	APPLICANT	DIGITIZED	DIGITIZED	DIGITIZED
Feet East	916637	915498	915502	917613	916894	913480
Feet North	668861	668915	668658	669560	669089	669095
Accounting Method	Unspecified	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	Upper Floridan Aquifer	Upper Floridan Aquifer	Upper Floridan Aquifer

TABLE - A
Description Of Wells.

Application Number: 130403-5

Well ID	220603	220865	270104
Name	F-4 (1A)	MW-1 (1A)	MW-2 (1A)
Map Designator	FW-4 (1A)	MW-1 (1A)	MW-2 (1A)
FLUWID Number			
Well Field			
Existing/Proposed	P	E	P
Well Diameter(Inches)	18	2	2
Total Depth(feet)	1250	90	100
Cased Depth(feet)	1000	80	70
Facility Elev. (ft. NGVD)			
Screened Interval			
From			
To			
Pumped Or Flowing	P	P	P
Pump Type	Turbine	None	None
Pump Int. Elev.			
Feet (NGVD)			
Feet (BLS)			
Pump Capacity(GPM)	1400	0	0
Year Drilled		2014	
Planar Location			
Source	DIGITIZED	REVIEWER	
Feet East	913132	917613	
Feet North	669118	669519	
Accounting Method	Flow Meter	None	None
Use Status	Primary	Monitor	Monitor
Water Use Type	Public Water Supply	Monitor	Monitor
Aquifer	Upper Floridan Aquifer	Biscayne Aquifer	Biscayne Aquifer

Requirement by Permit Condition Report

App No: 130403-5

Permit No: 06-00146-W

Project Name: BROWARD COUNTY DISTRICT 1

Permit Condition No: 17		Permit Condition Code: <u>WUSTD021-8</u>		
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - 1 (1A)	Calibration report for WELL 1 (1A)	Every Five Years	Every Five Years	30-SEP-2018
WELL - 2 (1A)	Calibration report for WELL 2 (1A)	Every Five Years	Every Five Years	31-JUL-2019
WELL - 3 (1A)	Calibration report for WELL 3 (1A)	Every Five Years	Every Five Years	31-AUG-2018
WELL - 4 (1A)	Calibration report for WELL 4 (1A)	Every Five Years	Every Five Years	31-AUG-2018
WELL - 5 (1A)	Calibration report for WELL 5 (1A)	Every Five Years	Every Five Years	31-AUG-2018
WELL - 6 (1A)	Calibration report for WELL 6 (1A)	Every Five Years	Every Five Years	31-AUG-2018
WELL - 7 (1A)	Calibration report for WELL 7 (1A)	Every Five Years	Every Five Years	30-SEP-2018
WELL - 8 (1A)	Calibration report for WELL 8 (1A)	Every Five Years	Every Five Years	31-AUG-2018
WELL - 9 (1A)	Calibration report for WELL 9 (1A)	Every Five Years	Every Five Years	30-SEP-2018
WELL - F-1 (1A)	Calibration report for WELL F-1 (1A)	Every Five Years	Every Five Years	31-MAY-2015
WELL - F-2 (1A)	Calibration report for WELL F-2 (1A)	Every Five Years	Every Five Years	31-MAY-2015
WELL - F-3 (1A)	Calibration report for WELL F-3 (1A)	Every Five Years	Every Five Years	31-AUG-2015
WELL - F-4 (1A)	Calibration report for WELL F-4 (1A)	Every Five Years	Every Five Years	31-AUG-2015
Permit Condition No: 18		Permit Condition Code: <u>WUSTD022-1</u>		
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - 1 (1A)	Monthly withdrawal for WELL 1 (1A)	Monthly	Quarterly	30-APR-2015
WELL - 2 (1A)	Monthly withdrawal for WELL 2 (1A)	Monthly	Quarterly	30-APR-2015
WELL - 3 (1A)	Monthly withdrawal for WELL 3 (1A)	Monthly	Quarterly	30-APR-2015
WELL - 4 (1A)	Monthly withdrawal for WELL 4 (1A)	Monthly	Quarterly	30-APR-2015
WELL - 5 (1A)	Monthly withdrawal for WELL 5 (1A)	Monthly	Quarterly	30-APR-2015
WELL - 6 (1A)	Monthly withdrawal for WELL 6 (1A)	Monthly	Quarterly	30-APR-2015
WELL - 7 (1A)	Monthly withdrawal for WELL 7 (1A)	Monthly	Quarterly	30-APR-2015
WELL - 8 (1A)	Monthly withdrawal for WELL 8 (1A)	Monthly	Quarterly	30-APR-2015
WELL - 9 (1A)	Monthly withdrawal for WELL 9 (1A)	Monthly	Quarterly	30-APR-2015
WELL - F-1 (1A)	Monthly withdrawal for WELL F-1 (1A)	Monthly	Quarterly	30-APR-2015
WELL - F-2 (1A)	Monthly withdrawal for WELL F-2 (1A)	Monthly	Quarterly	30-APR-2015
WELL - F-3 (1A)	Monthly withdrawal for WELL F-3 (1A)	Monthly	Quarterly	30-APR-2015

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - F-4 (1A)	Monthly withdrawal for WELL F-4 (1A)	Monthly	Quarterly	30-APR-2015
Permit Condition No: 21	Permit Condition Code: <u>WUPWS003-1</u>			
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Unaccounted for Distribution Losses	Yearly	Yearly	30-APR-2015
Permit Condition No: 25	Permit Condition Code: <u>WUPWS008-2</u>			
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Ten-Year Water Use Compliance Report for BROWARD COUNTY DISTRICT 1	Every Ten Years	Every Ten Years	30-APR-2018
Permit Condition No: 27	Permit Condition Code: <u>WUWLM001-1</u>			
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - MW-1 (1A)	Water Level for MW-1 (1A)	Monthly	Quarterly	30-APR-2015
WELL - MW-2 (1A)	Water Level for Well MW-2 (1A)	Monthly	Quarterly	30-APR-2015
WELL - F-4 (1A)	Water Level for Well F-4 (1A)	Quarterly	Quarterly	30-APR-2015
Permit Condition No: 28	Permit Condition Code: <u>WUSAT001-5</u>			
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - F-4 (1A)	Chloride for Well F-4 (1A)	Quarterly	Quarterly	30-APR-2015
Permit Condition No: 31	Permit Condition Code: <u>WUWC004-1</u>			
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - F-3 (1A)	Updated Table A for WELL F-3 (1A)	One time Only	One time Only	01-SEP-2015
WELL - F-4 (1A)	Updated Table A for WELL F-4 (1A)	One time Only	One time Only	01-SEP-2015
WELL - MW-2 (1A)	Updated Table A for WELL MW-2 (1A)	One time Only	One time Only	01-SEP-2015
Permit Condition No: 33	Permit Condition Code: <u>WUZZUD001-2</u>			
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	AWS Projects Status Report for BROWARD COUNTY DISTRICT 1 PWS	Yearly	Yearly	31-JAN-2016

APPENDIX 1-C

CITY OF FORT LAUDERDALE WATER USE PERMIT (2019 LETTER MODIFICATION)

**WATER USE
LETTER MODIFICATION****APPLICATION NUMBER:** 190820-4**PERMIT NUMBER:** 06-00123-W**DATE ISSUED:** December 5, 2019**EXPIRATION DATE:** September 11, 2028**PERMITTEE:** CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
949 N W 38TH STREET
FORT LAUDERDALE, FL 33309**PROJECT NAME:** FORT LAUDERDALE PUBLIC WATER SUPPLY**PROJECT LOCATION:** BROWARD COUNTY, S7-36/T49S/R42E
S1-22/T50S/R43E
S1-22/T50S/R42E
S7,18,19,30,31/T49S/R43E

District staff has reviewed the information submitted in support of the referenced application for permit modification(s) and determined that the proposed activities are in compliance with the previous permit and the appropriate provisions of Rule 40E-2.331 (4)(a), Florida Administrative Code. The permit modification(s) include the following:

- Add replacement monitor wells MW2A, MW3A, MW5A, MW6A, MW7A, MW8A, and MW10C
- Update the status of monitor wells MW2, MW3, MW5, MW6, MW7, MW8, and MW10 from existing to abandoned
- Remove former Limiting Condition #23 which consisted of the submission of a long term water supply plan and former Limiting Condition #30 which consisted of the submission of an emergency water supply preparedness study, as the intent of these conditions has been satisfied through the utility's Comprehensive Plan and 10-Year Water Supply Facility Work Plan
- Update the utility's Alternative Water Supply/Offset Project Deadlines and Goals that was included as Exhibits 9A and 9B in the previous permit; update the exhibit reference in former Limiting Condition #25 to Exhibit 4 for the Alternative Water Supply/Offset Project Deadlines and Goals. This is now Limiting Condition 23 in this modification.
- Remove text from former Limiting Condition #29 that required an evaluation of the existing monitoring program and results and any proposed changes to be submitted within 6 months of permit issuance, as this requirement is complete
- Update the utility's service area boundary

The updated service area boundary map is shown on Exhibit 1, well locations are shown on Exhibits 2A, 2B, 2C, and 2D, the updated Table A - Description of Wells is shown on

Exhibit 3, and the updated Alternative Water Supply/Offset Project Schedule is shown on Exhibit 4. There are no other changes to the permit.

Please understand that your permit remains subject to the 27 Limiting Conditions and all other terms of the permit authorization as previously issued.



Nicholas M. Vitani, P.G.
Section Leader
Water Use Bureau

LIMITING CONDITIONS

1. This permit shall expire on September 11, 2028.
2. Application for a permit modification may be made at any time.
3. Water use classification:

Public Water Supply
4. Source classification is:

Groundwater from:
Biscayne Aquifer
Floridan Aquifer System
5. Annual allocation shall not exceed 22,334.00 million gallons (MG). (61.19 MGD)

Maximum monthly allocation shall not exceed 2,157.60 million gallons (MG).

The following limitations to annual withdrawals from specific sources are stipulated:

Biscayne Aquifer-: 19,181 MG.

The following limitations to maximum monthly withdrawals from specific sources are stipulated:

Biscayne Aquifer-: 1,857.00 MG.

Based on the established base condition as specified in the Regional Water availability Rule (Section 3.2.1.E of the water Use Basis of review) and modeling impact scenarios, Wellfield/Source Limitations are as follows:

Total Biscayne aquifer withdrawals shall not exceed 19,181 million gallons per year (52.55 million gallons per day), and 1,857 million gallons per month (59.9 million gallons per day).

Biscayne aquifer withdrawals from the Peele-Dixie Wellfield are limited to 5,475 million gallons per year (15 million gallons per day), and 465 million gallons per month (15 million gallons per day).

Biscayne aquifer withdrawals from the Prospect Wellfield are limited to 15,853 million gallons per year (43.43 million gallons per day), and 1,534.5 million gallons per month (49.5 million gallons per day).

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:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
949 NW 38TH STREET
FORT LAUDERDALE, FL 33309

7. Withdrawal facilities:

Groundwater - Proposed:

14 - 16" X 1200' X 3300 GPM Wells Cased To 1000 Feet

Groundwater - Existing:

9 - 24" X 120' X 2800 GPM Wells Cased To 90 Feet
1 - 16" X 1205' X 3300 GPM Well Cased To 1015 Feet
1 - 16" X 1200' X 2100 GPM Well Cased To 1055 Feet
1 - 17" X 90' X 2100 GPM Well Cased To 66 Feet
2 - 12" X 76' X 0 GPM Wells Cased To 61 Feet
1 - 17" X 91' X 2100 GPM Well Cased To 82 Feet
2 - 18" X 98' X 2100 GPM Wells Cased To 82 Feet
1 - 17" X 103' X 2100 GPM Well Cased To 82 Feet
1 - 17" X 101' X 2100 GPM Well Cased To 80 Feet
1 - 17" X 100' X 2100 GPM Well Cased To 80 Feet
5 - 16" X 120' X 2100 GPM Wells Cased To 100 Feet

- 1 - 10" X 132' X 0 GPM Well Cased To 120 Feet
- 1 - 17" X 144' X 2100 GPM Well Cased To 105 Feet
- 1 - 10" X 128' X 0 GPM Well Cased To 116 Feet
- 1 - 17" X 90' X 2100 GPM Well Cased To 68 Feet
- 1 - 10" X 130' X 0 GPM Well Cased To 118 Feet
- 1 - 17" X 90' X 2100 GPM Well Cased To 62 Feet
- 1 - 17" X 96' X 2100 GPM Well Cased To 70 Feet
- 1 - 10" X 125' X 0 GPM Well Cased To 113 Feet
- 1 - 17" X 103' X 2100 GPM Well Cased To 100 Feet
- 1 - 12" X 80' X 0 GPM Well Cased To 68 Feet
- 1 - 24" X 125' X 2800 GPM Well Cased To 100 Feet
- 3 - 17" X 120' X 2100 GPM Wells Cased To 100 Feet
- 1 - 17" X 90' X 2100 GPM Well Cased To 75 Feet
- 1 - 18" X 102' X 2100 GPM Well Cased To 82 Feet
- 1 - 17" X 109' X 2100 GPM Well Cased To 90 Feet
- 1 - 17" X 150' X 2100 GPM Well Cased To 112 Feet
- 1 - 17" X 95' X 2100 GPM Well Cased To 82 Feet
- 2 - 17" X 0' X 2100 GPM Uncased Wells
- 1 - 18" X 99' X 2100 GPM Well Cased To 81 Feet
- 1 - 16" X 1505' X 3300 GPM Well Cased To 1015 Feet
- 1 - 17" X 116' X 2100 GPM Well Cased To 81 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:

(A) 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

(B) 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:

(A) 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.)

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

(C) 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:

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

(B) Reduction in water levels that harm the hydroperiod of wetlands,

(C) Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,

(D) Harmful movement of contaminants in violation of state water quality standards, or

(E) 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, with advance notice to the permittee, shall be permitted to enter, inspect, and observe the permitted system to determine compliance with permit 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: S.F.W.M.D., Supervising Hydrogeologist - Post-Permit Compliance, Water Use Regulation Dept. (4320), 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.
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. 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:
 - (A) 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.
 - (B) 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.
23. 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.

See Exhibit 4 for the Alternative Water Supply/Offset Project Deadlines and Goals.

24. If a proposed well location is different from a location specified in the application, the Permittee shall submit to the District an evaluation of the impact of pumpage from the proposed well location on adjacent existing legal uses, pollution sources, environmental features, the saline water interface, and water bodies one month prior to all new well construction. The Permittee is advised that the proposal must be in compliance with all permitting criteria and performance standards in effect at the time of submittal, and that a formal modification of the permit shall be required if the withdrawals from the well location will result in an environmental or resource impact significantly greater than that anticipated in the permit review process.
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 Chapter 40E-3, Florida Administrative Code.
26. 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.
27. The Permittee shall continue to submit monitoring data in accordance with the approved saline water intrusion monitoring program for this project.

The Permittee's monitoring plan shall be implemented as follows:

The five conductivity profile wells at the Peele-Dixie Wellfield and the five conductivity profile wells at the Prospect Wellfield shall be monitored and the data submitted semi-annually (twice per year), once at the end of the wet season, and once at the end of the dry season.

NOTICE OF RIGHTS

As required by Sections 120.569 and 120.60(3), Fla. Stat., the 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 of 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 SFWMD decision which affects or may affect their substantial interests shall file a petition for hearing with the Office of the District Clerk of the SFWMD, in accordance with the filing instructions set forth herein, 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 Section 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of written notice through mail, electronic mail, or posting that the SFWMD has or intends to take final agency action, or publication of notice that the SFWMD 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.

If the District takes final agency action which materially differs from the noticed intended agency decision, persons who may be substantially affected shall, unless otherwise provided by law, have an additional Rule 28-106.111, Fla. Admin. Code, point of entry.

Any person to whom an emergency order is directed pursuant to Section 373.119(2), Fla. Stat., shall comply therewith immediately, but on petition to the board shall be afforded a hearing as soon as possible.

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 an extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

FILING INSTRUCTIONS

A petition for administrative hearing must be filed with the Office of the District Clerk of the SFWMD. Filings with the Office of the District Clerk may be made by mail, hand-delivery, or e-mail. Filings by facsimile will not be accepted. A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the Office of the District Clerk at SFWMD headquarters in West Palm Beach, Florida. **The District's normal business hours are 8:00 a.m. – 5:00 p.m.,** excluding weekends and District holidays. Any document received by the Office of the District Clerk after 5:00 p.m. shall be deemed 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 District Clerk, 3301 Gun Club Road, West Palm Beach, Florida 33406.

- Filings by hand-delivery must be delivered to the Office of the District Clerk. Delivery of a petition to the SFWMD's security desk does not constitute filing. It will be necessary to request that the SFWMD's security officer contact the Office of the District Clerk. An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by e-mail must be transmitted to the Office of the District Clerk at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the Office of the District Clerk receives the complete document. A party who files a document by e-mail shall (1) represent that the original physically signed document will be retained by that party for the duration of the proceeding and of any subsequent appeal or subsequent proceeding in that cause and that the party shall produce it upon the request of other parties; and (2) 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.

INITIATION OF AN ADMINISTRATIVE HEARING

Pursuant to Sections 120.54(5)(b)4. and 120.569(2)(c), Fla. Stat., and 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 1/2 by 11 inch white paper. All petitions shall contain:

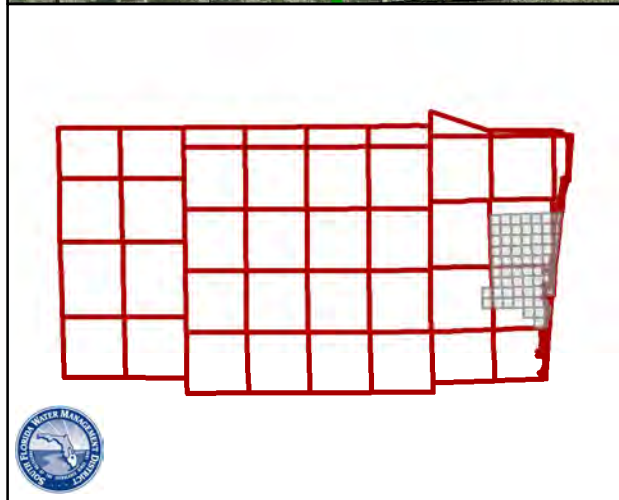
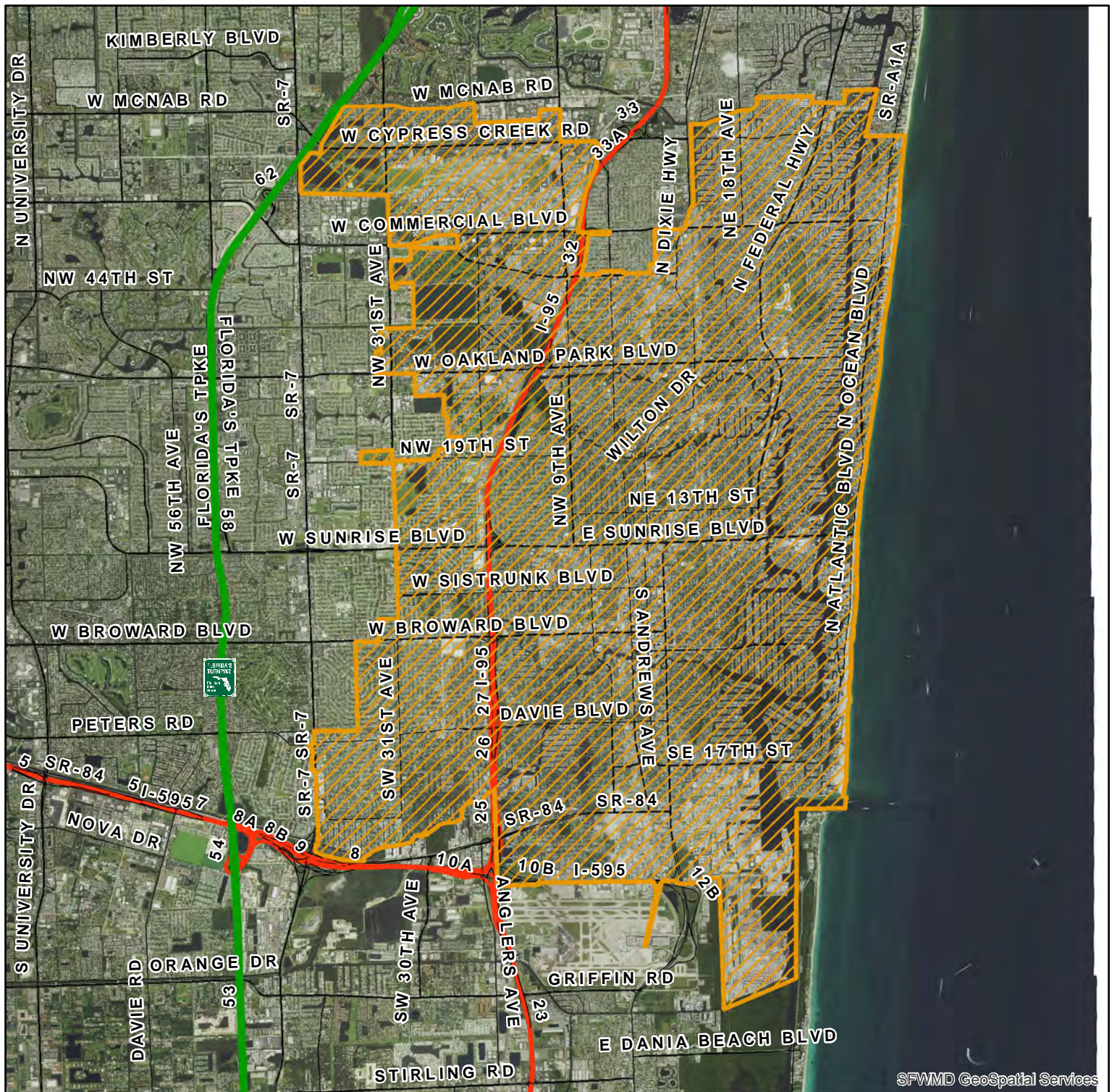
1. Identification of the action being contested, including the permit number, application number, SFWMD file number or any other SFWMD identification number, if known.
2. The name, address, any email address, any facsimile number, and telephone number of the petitioner and **petitioner's representative, 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.**

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 Section 120.68, Fla. Stat., and in accordance with Florida Rule of Appellate Procedure 9.110, 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 with the Office of the District Clerk of the SFWMD in accordance with the filing instructions set forth herein within 30 days of rendition of the order to be reviewed, and by filing a copy of the notice with the clerk of the appropriate district court of appeal.



BROWARD COUNTY, FLORIDA

Legend

 Application

Application No: 190820-4

Sec 7-36 / Twp 49 / Rge 42

Sec 7,18,19,30,31 / Twp 49 / Rge 43

Sec 1-22 / Twp 50 / Rge 42

Sec 1-22 / Twp 50 / Rge 43

Project Name: FORT LAUDERDALE PUBLIC WATER SUPPLY

0 1.5 3
Miles

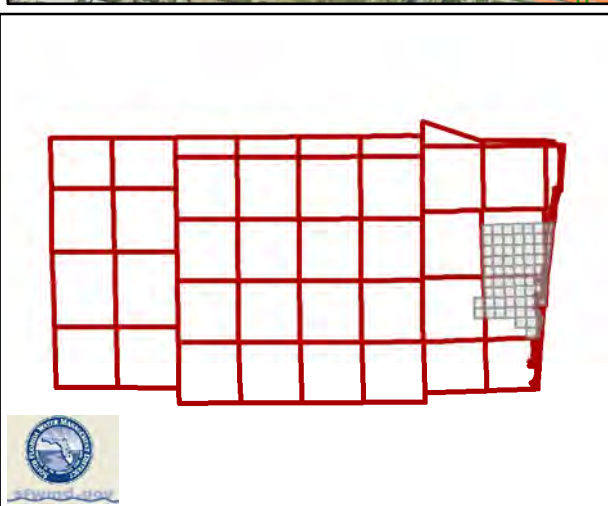
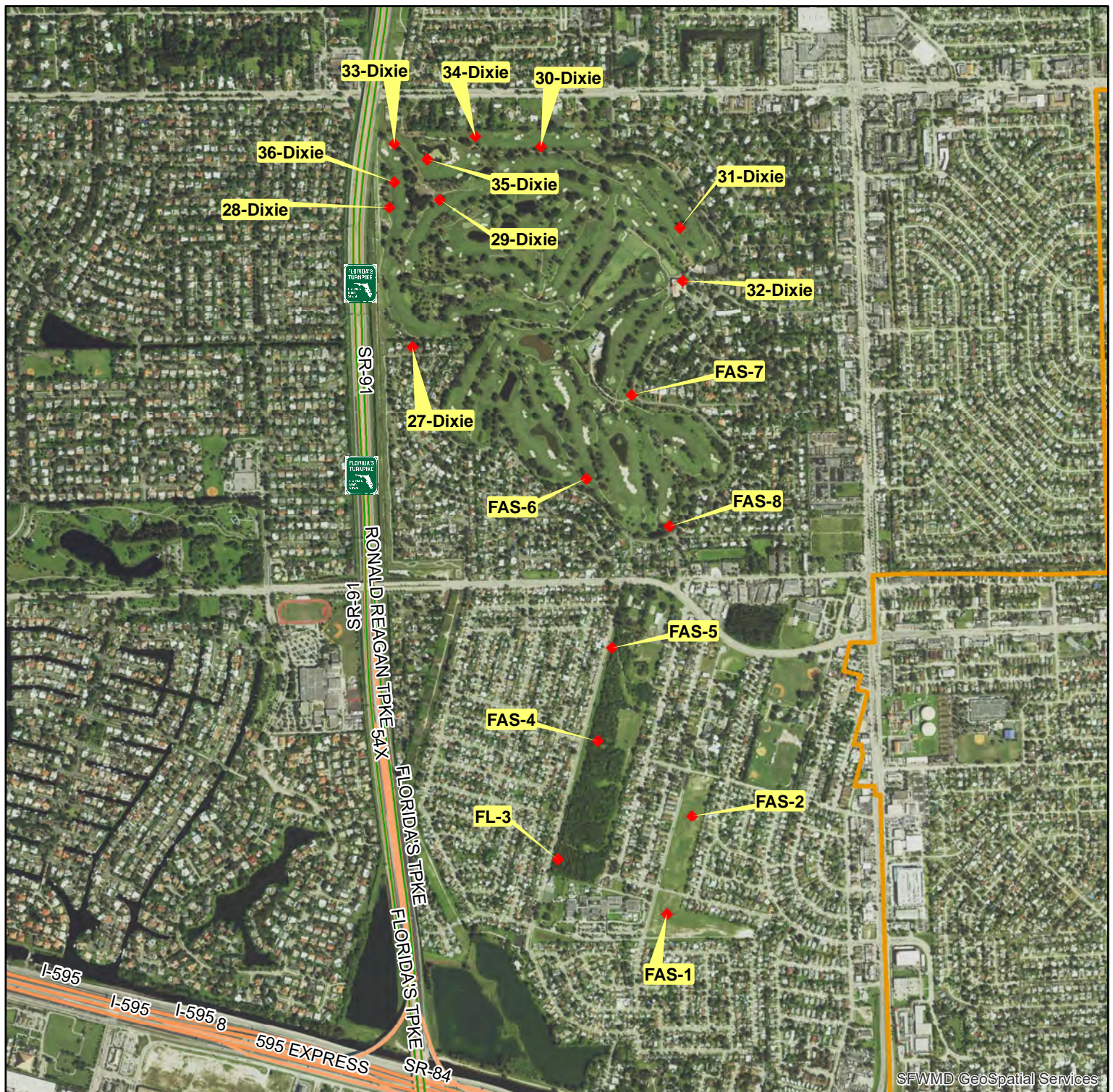
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Map Date: 2019-12-02

Permit No: 06-00123-W

Exhibit No: 1



BROWARD COUNTY, FLORIDA

 Application

 WELL

Application No: 190820-4

Map Date: 2019-11-27

Permit No: 06-00123-W

Project Name: FORT LAUDERDALE PUBLIC WATER SUPPLY

**PEELE-DIXIE WELLFIELD
FLORIDAN AQUIFER SYSTEM AND BISCAYNE
AQUIFER WELLS**


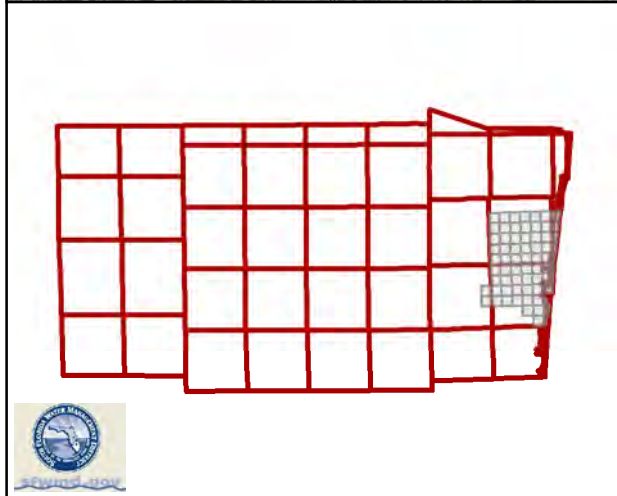
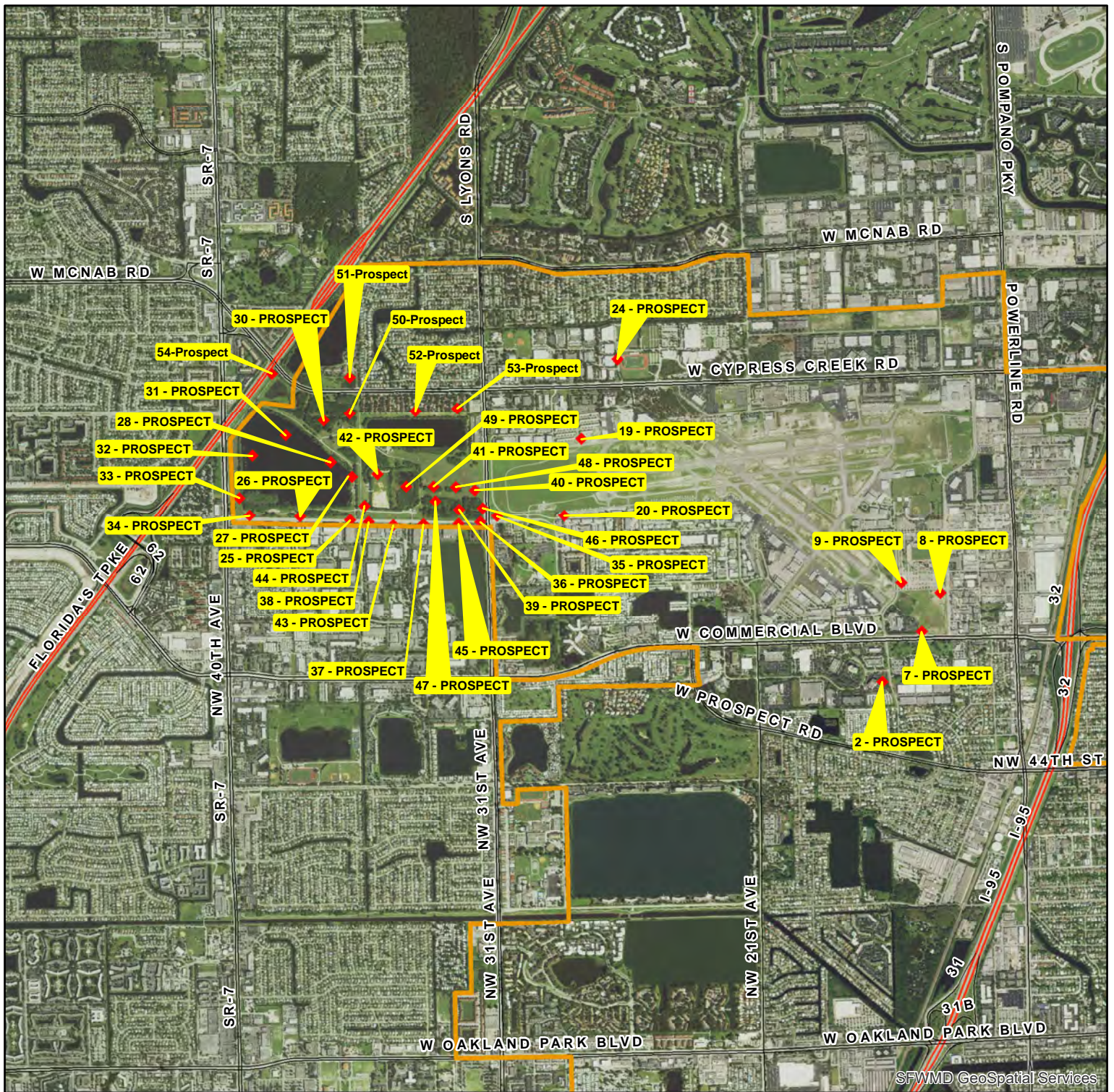
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Exhibit No: 2A



BROWARD COUNTY, FLORIDA

 Application

 WELL

Application No: 190820-4

Map Date: 2019-12-02

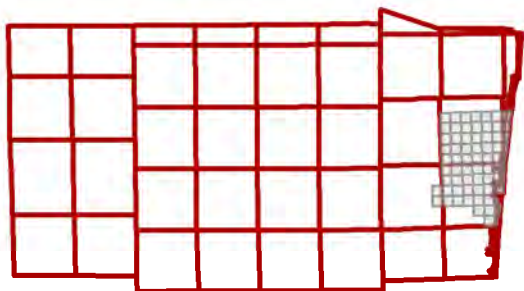
Permit No: 06-00123-W

Project Name: FORT LAUDERDALE PUBLIC WATER SUPPLY

PROSPECT WELLFIELD BISCAYNE AQUIFER WELLS

0 0.5 1
Miles

Exhibit No: 2B



BROWARD COUNTY, FLORIDA

 Application

 WELL

Application No: 190820-4

Project Name: FORT LAUDERDALE PUBLIC WATER SUPPLY

Map Date: 2019-12-02

Permit No: 06-00123-W

PROSPECT WELLFIELD FLORIDAN AQUIFER SYSTEM WELLS

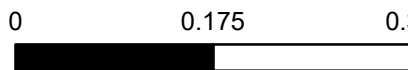
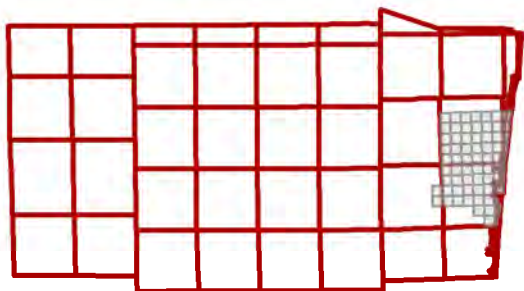
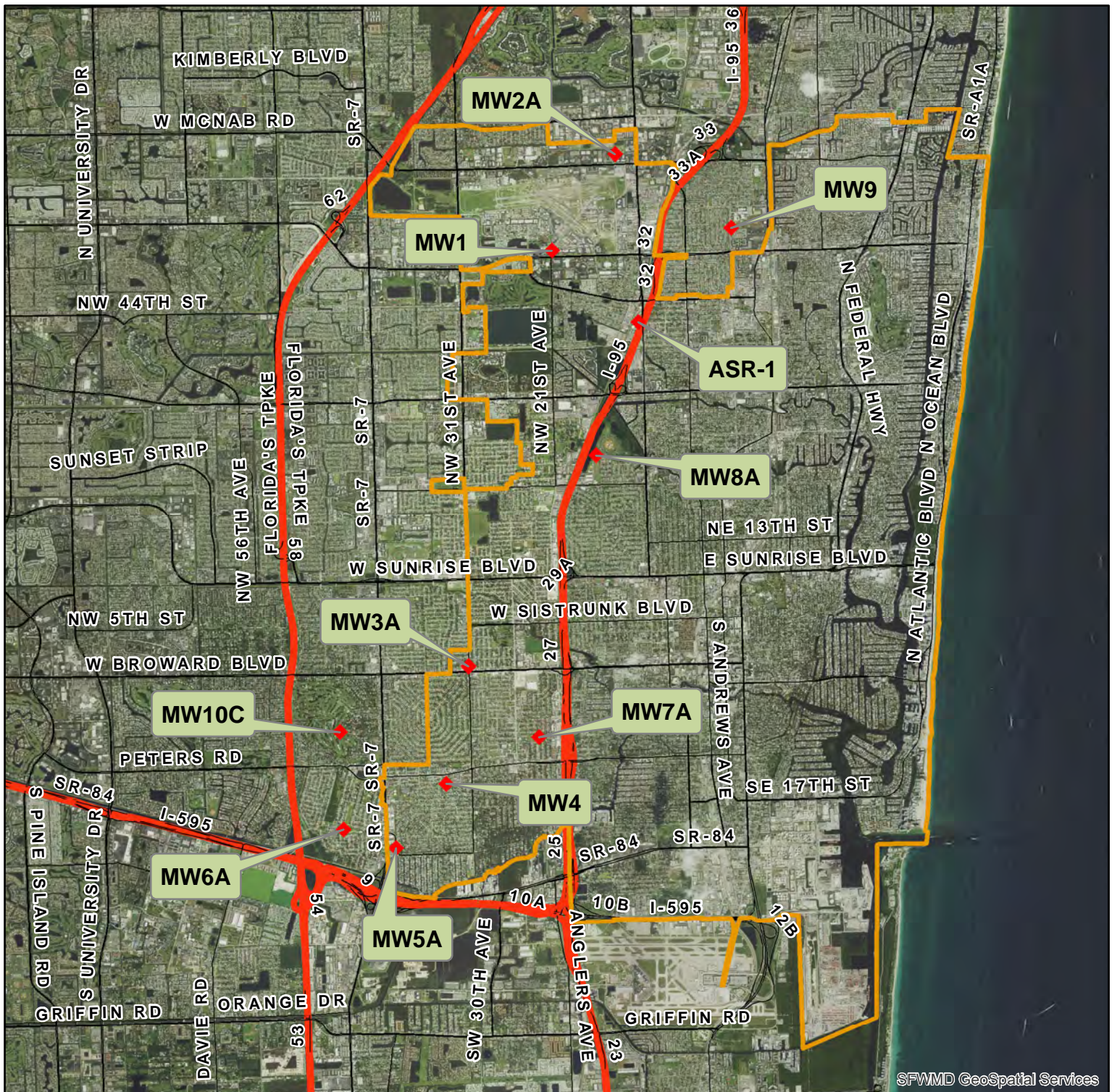
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 Miles

Exhibit No: 2C





BROWARD COUNTY, FLORIDA

 Application

 WELL

Application No: 190820-4

Map Date: 2019-11-27

Permit No: 06-00123-W

Project Name: FORT LAUDERDALE PUBLIC WATER SUPPLY

ASR WELL AND MONITOR WELLS

0 1.5 3
Miles

Exhibit No: 2D



TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	220652	220654	220655	220656	220657	220658
Name	ASR-1	FAS-1 Peele-Dixie	FAS-2 Peele-Dixie	FAS-3 Peele-Dixie	FAS-4 Peele-Dixie	FAS-5 Peele-Dixie
Map Designator	ASR-1	FAS-1	FAS-2	FL-3	FAS-4	FAS-5
FLUWID Number						
Well Field		Peele-Dixie FAS	Peele-Dixie FAS	Peele-Dixie FAS	Peele-Dixie FAS	Peele-Dixie FAS
Existing/Proposed	E	E	E	P	P	P
Well Diameter(Inches)	16	16	16	16	16	16
Total Depth(feet)	1200	1505	1205	1200	1200	1200
Cased Depth(feet)	1055	1015	1015	1000	1000	1000
Facility Elev. (ft. NGVD)		22.15	22.18			
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)	2100	3300	3300	3300	3300	3300
Year Drilled		2007	2007			
Planar Location						
Source						
Feet East	933089	915956	916229	914760	915200	915350
Feet North	671155	641423	642495	642020	643320	644340
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Standby	Standby	Standby	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

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	220659	224654	224655	224656	224657	224658
Name	FAS-6 Peele-Dixie	FAS-7 Peele-Dixie	FAS-8 Peele-Dixie	FAS-101 Prospect	FAS-102 Prospect	FAS-103 Prospect
Map Designator	FAS-6	FAS-7	FAS-8	FAS-101	FAS-102	FAS-103
FLUWID Number						
Well Field	Peele-Dixie FAS	Peele-Dixie FAS	Peele-Dixie FAS	Prospect FAS	Prospect FAS	Prospect FAS
Existing/Proposed	P	P	P	P	P	P
Well Diameter(Inches)	16	16	16	16	16	16
Total Depth(feet)	1200	1200	1200	1200	1200	1200
Cased Depth(feet)	1000	1000	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)	3300	3300	3300	3300	3300	3300
Year Drilled						
Planar Location Source						
Feet East	915070	915570	915980	919890	918600	917360
Feet North	646200	647120	645670	678200	677550	677780
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

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	224659	224660	224661	224662	224663	31114
Name	FAS-104 Prospect	FAS-105 Prospect	FAS-106 Prospect	FAS-107 Prospect	FAS-108 Prospect	2 - PROSPECT
Map Designator	FAS-104	FAS-105	FAS-106	FAS-107	FAS-108	2 - PROSPECT
FLUWID Number						
Well Field	Prospect FAS	Prospect FAS	Prospect FAS	Prospect FAS	Prospect FAS	Prospect BAS
Existing/Proposed	P	P	P	P	P	E
Well Diameter(Inches)	16	16	16	16	16	10
Total Depth(feet)	1200	1200	1200	1200	1200	132
Cased Depth(feet)	1000	1000	1000	1000	1000	120
Facility Elev. (ft. NGVD)						
Screened Interval						
From						0
To						0
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Submersible	Submersible	Submersible	Submersible	Submersible	Unspecified
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)						0
Pump Capacity(GPM)	3300	3300	3300	3300	3300	0
Year Drilled						1953
Planar Location						
Source						Migrate
Feet East	917360	918200	919370	920960	922130	930489
Feet North	679030	679730	679195	678625	678640	674188
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Unspecified
Use Status	Primary	Primary	Primary	Primary	Primary	Standby
Water Use Type	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply	Public Water Supply Monitor
Aquifer	Floridan Aquifer System	Floridan Aquifer System	Floridan Aquifer System	Floridan Aquifer System	Floridan Aquifer System	Biscayne Aquifer

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	31122	31124	31126	31146	31148	31062
Name	7 - PROSPECT	8 - PROSPECT	9 - PROSPECT	19 - PROSPECT	20 - PROSPECT	24 - PROSPECT
Map Designator	7 - PROSPECT	8 - PROSPECT	9 - PROSPECT	19 - PROSPECT	20 - PROSPECT	24 - PROSPECT
FLUWID Number						
Well Field	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	10	10	10	12	12	12
Total Depth(feet)	130	128	125	76	76	80
Cased Depth(feet)	118	116	113	61	61	68
Facility Elev. (ft. NGVD)						
Screened Interval						
From	0	0	0		0	0
To	0	0	0		0	0
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	0	0	0	0	0	0
Pump Capacity(GPM)	0	0	0	0	0	0
Year Drilled	1953	1953	1953	1959	1959	1963
Planar Location						
Source	Migrate	Migrate	Migrate	Migrate	Migrate	Migrate
Feet East	931283	931653	930868	924419	924080	925147
Feet North	675193	675989	676197	679081	677535	680693
Accounting Method	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Use Status	Standby	Standby	Standby	Standby	Standby	Standby
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	31064	31066	31068	31070	31074	31076
Name	25 - PROSPECT	26 - PROSPECT	27 - PROSPECT	28 - PROSPECT	30 - PROSPECT	31 - PROSPECT
Map Designator	25 - PROSPECT	26 - PROSPECT	27 - PROSPECT	28 - PROSPECT	30 - PROSPECT	31 - PROSPECT
FLUWID Number						
Well Field	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	17	17	17	17	17	17
Total Depth(feet)	150	144	103	116	109	100
Cased Depth(feet)	112	105	100	81	90	80
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	Submersible	Submersible	Submersible	Submersible	Submersible	Submersible
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	50	50	50	50	50	50
Pump Capacity(GPM)	2100	2100	2100	2100	2100	2100
Year Drilled	1969	1969	1971	1971	1972	1973
Planar Location						
Source	Migrate	Migrate	Migrate	Migrate	Migrate	Migrate
Feet East	919764	918753	919799	919372	919236	918467
Feet North	677445	677522	678317	678612	679454	679156
Accounting Method	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	31078	31080	31082	31084	31086	31088
Name	32 - PROSPECT	33 - PROSPECT	34 - PROSPECT	35 - PROSPECT	36 - PROSPECT	37 - PROSPECT
Map Designator	32 - PROSPECT	33 - PROSPECT	34 - PROSPECT	35 - PROSPECT	36 - PROSPECT	37 - PROSPECT
FLUWID Number						
Well Field	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	17	17	17	17	18	18
Total Depth(feet)	103	101	90	96	99	98
Cased Depth(feet)	82	80	75	70	81	82
Facility Elev. (ft. NGVD)						
Screened Interval						
From	0	0	0	0		0
To	0	0	0	0		0
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Submersible	Submersible	Submersible	Submersible	Turbine	Turbine
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	50	50	50	50	0	0
Pump Capacity(GPM)	2100	2100	2100	2100	2100	2100
Year Drilled	1973	1973	1973	1974	1980	1980
Planar Location						
Source	Migrate	Migrate	Migrate	Migrate	Migrate	Migrate
Feet East	917790	917535	917742	922720	922383	921240
Feet North	678746	677894	677535	677526	677408	677357
Accounting Method	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	31090	31092	31094	31096	31098	31100
Name	38 - PROSPECT	39 - PROSPECT	40 - PROSPECT	41 - PROSPECT	42 - PROSPECT	43 - PROSPECT
Map Designator	38 - PROSPECT	39 - PROSPECT	40 - PROSPECT	41 - PROSPECT	42 - PROSPECT	43 - PROSPECT
FLUWID Number						
Well Field	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	18	18	17	17	17	17
Total Depth(feet)	102	98	90	95	91	90
Cased Depth(feet)	82	82	62	82	82	66
Facility Elev. (ft. NGVD)						
Screened Interval						
From	0	0	0		0	0
To	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)	0	0	0	0	0	0
Pump Capacity(GPM)	2100	2100	2100	2100	2100	2100
Year Drilled	1980	1980	1980	1980	1980	1985
Planar Location						
Source	Migrate	Migrate	Migrate	Migrate	Migrate	Migrate
Feet East	920135	921961	922272	921443	920313	920634
Feet North	677411	677663	678049	678129	678374	677341
Accounting Method	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	31102	31104	31106	31108	31110	31112
Name	44 - PROSPECT	45 - PROSPECT	46 - PROSPECT	47 - PROSPECT	48 - PROSPECT	49 - PROSPECT
Map Designator	44 - PROSPECT	45 - PROSPECT	46 - PROSPECT	47 - PROSPECT	48 - PROSPECT	49 - PROSPECT
FLUWID Number						
Well Field	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	17	17	17	17	17	17
Total Depth(feet)	90	120	120	120	0	0
Cased Depth(feet)	68	100	100	100	0	0
Facility Elev. (ft. NGVD)						
Screened Interval						
From		0	0	0	0	0
To		0	0	0	0	0
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Turbine	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	0	0	0	0	0	0
Pump Capacity(GPM)	2100	2100	2100	2100	2100	2100
Year Drilled	1985	1988	1988	1988	9999	9999
Planar Location						
Source	Migrate	Migrate	Migrate	Migrate	Migrate	Migrate
Feet East	920054	921952	922431	921478	921891	920893
Feet North	677733	677374	677690	677827	678119	678122
Accounting Method	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	31154	31156	31158	31160	31162	144152
Name	50-Prospect	51-Prospect	52-Prospect	53-Prospect	54-Prospect	27-Dixie
Map Designator	50-Prospect	51-Prospect	52-Prospect	53-Prospect	54-Prospect	27-Dixie
FLUWID Number						
Well Field	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Prospect BAS	Peele-Dixie BAS
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	16	16	16	16	16	24
Total Depth(feet)	120	120	120	120	120	120
Cased Depth(feet)	100	100	100	100	100	90
Facility Elev. (ft. NGVD)						
Screened Interval						
From	100	100	100	100	100	
To	120	120	120	120	120	
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Unspecified	Unspecified	Unspecified	Unspecified	Unspecified	Turbine
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	0	0	0	0	0	
Pump Capacity(GPM)	2100	2100	2100	2100	2100	2800
Year Drilled	2001	2001	2001	2001	2001	2002
Planar Location						
Source	DIGITIZED	DIGITIZED	DIGITIZED	DIGITIZED	DIGITIZED	
Feet East	919757	919757	921082	921917	918186	913167
Feet North	679591	680328	679640	679690	680401	647638
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: 190820-4

Well ID	144153	144154	144155	144160	144161	144162
Name	28-Dixie	29-Dixie	30-Dixie	31-Dixie	32-Dixie	33-Dixie
Map Designator	28-Dixie	29-Dixie	30-Dixie	31-Dixie	32-Dixie	33-Dixie
FLUWID Number						
Well Field	Peele-Dixie BAS	Peele-Dixie BAS	Peele-Dixie BAS	Peele-Dixie BAS	Peele-Dixie BAS	Peele-Dixie BAS
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	24	24	24	24	24	24
Total Depth(feet)	125	120	120	120	120	120
Cased Depth(feet)	100	90	90	90	90	90
Facility Elev. (ft. NGVD)						
Screened Interval						
From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Turbine	Turbine	Turbine	Turbine	Turbine	Turbine
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)						
Pump Capacity(GPM)	2800	2800	2800	2800	2800	2800
Year Drilled	2002					
Planar Location						
Source						
Feet East	912912	913465	914575	916100	916130	912970
Feet North	649175	649260	649840	648950	648370	649870
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: 190820-4

Well ID	144166	144167	144168	212899	212901	282737
Name	34-Dixie	35-Dixie	36-Dixie	MW1	MW2	MW2A
Map Designator	34-Dixie	35-Dixie	36-Dixie	MW1	MW2	MW2A
FLUWID Number						
Well Field	Peele-Dixie BAS	Peele-Dixie BAS	Peele-Dixie BAS			
Existing/Proposed	E	E	E	E	A	E
Well Diameter(Inches)	24	24	24	2	2	4
Total Depth(feet)	120	120	120	200	200	200
Cased Depth(feet)	90	90	90	5	5	5
Facility Elev. (ft. NGVD)						
Screened Interval						
From				5		5
To				200		200
Pumped Or Flowing	P	P	P			
Pump Type	Turbine	Turbine	Turbine	None	None	None
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)						
Pump Capacity(GPM)	2800	2800	2800	0	0	0
Year Drilled				2001	2001	2016
Planar Location						
Source				APPLICANT	APPLICANT	APPLICANT
Feet East	913855	913330	912970	928025	931727	931727
Feet North	649950	649700	649450	675331	680983	680983
Accounting Method	Flow Meter	Flow Meter	Flow Meter	None	None	None
Use Status	Primary	Primary	Primary	Monitor	Abandoned	Monitor
Water Use Type	Public Water Supply	Public Water Supply	Public Water Supply	Monitor	Monitor Water Shortage Monitoring Facility	Monitor Water Shortage Monitoring Facility
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	212902	282733	212903	212904	282734	212900
Name	MW3	MW3A	MW4	MW5	MW5A	MW6
Map Designator	MW3	MW3A	MW4	MW5	MW5A	MW6
FLUWID Number						
Well Field						
Existing/Proposed	A	E	E	A	E	A
Well Diameter(Inches)	4	4	2	2	4	2
Total Depth(feet)	200	200	200	200	200	270
Cased Depth(feet)	5	5	5	5	5	5
Facility Elev. (ft. NGVD)						
Screened Interval						
From		5			5	
To		200			200	
Pumped Or Flowing						
Pump Type	None	None	None	None	None	None
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)						
Pump Capacity(GPM)	0	0	0	0	0	0
Year Drilled	2001	2011	2001	2001	2013	2001
Planar Location						
Source	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT
Feet East	923133	923133	921841	918894	918894	915819
Feet North	650933	650933	644061	640281	640281	641352
Accounting Method	None	None	None	None	None	None
Use Status	Abandoned	Monitor	Monitor	Abandoned	Monitor	Abandoned
Water Use Type	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor Water Shortage Monitoring Facility
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	282730	212912	282736	212913	282735	212914
Name	MW6A	MW7	MW7A	MW8	MW8A	MW9
Map Designator	MW6A	MW7	MW7A	MW8	MW8A	MW9
FLUWID Number						
Well Field						
Existing/Proposed	E	A	E	A	E	E
Well Diameter(Inches)	4	2	4	2	4	2
Total Depth(feet)	270	200	200	260	260	200
Cased Depth(feet)	5	5	5	5	5	5
Facility Elev. (ft. NGVD)						
Screened Interval						
From	5		5		5	5
To	270		200		260	200
Pumped Or Flowing						
Pump Type	None	None	None	None	None	None
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)						
Pump Capacity(GPM)	0	0	0	0	0	0
Year Drilled	2001	2001	2011	2001	2012	2001
Planar Location						
Source	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT
Feet East	915819	927266	927266	930628	930628	938538
Feet North	641352	646779	646779	663303	663303	676653
Accounting Method	None	None	None	None	None	None
Use Status	Monitor	Abandoned	Monitor	Abandoned	Monitor	Monitor
Water Use Type	Monitor Water Shortage Monitoring Facility	Monitor	Monitor	Monitor	Monitor	Monitor
Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer	Biscayne Aquifer

TABLE - A
Description Of Wells.

Application Number: 190820-4

Well ID	212917	282729
Name	MW10	MW10C
Map Designator	MW10	MW10C
FLUWID Number		
Well Field		
Existing/Proposed	A	P
Well Diameter(Inches)	4	4
Total Depth(feet)	250	270
Cased Depth(feet)	82	82
Facility Elev. (ft. NGVD)		
Screened Interval		
From	5	5
To	250	270
Pumped Or Flowing		
Pump Type	None	None
Pump Int. Elev.		
Feet (NGVD)		
Feet (BLS)		
Pump Capacity(GPM)	0	0
Year Drilled	2013	
Planar Location		
Source	APPLICANT	APPLICANT
Feet East	915603	915603
Feet North	647064	647064
Accounting Method	None	None
Use Status	Abandoned	Monitor
Water Use Type	Monitor	Monitor
Aquifer	Biscayne Aquifer	Biscayne Aquifer

Alternative Water Supply/Offset Project Deadlines and Goals

Project/Milestone	Average daily flow	Milestone Completion Date
Dixie Floridan Water Supply/Treatment 1. Design Complete Pilot Testing & Design 2. Construction Complete	6.0 MGD	Mid — 2010 2025 January 2013 2028
Demand Management Program Water Reduction Ordinance Water Conservation Plan Implementation ¹	7.0 MGD 6.0 MGD 1.0 MGD	12/30/08 - Completed 2008-2028
Reclaimed Water Feasibility Study² 1. Report Completion 2. Determine Projects	12.0-15.0 MGD	Feasibility Study Completion Date October 2008 - Completed October 2008 - Reclaimed projects not currently feasible.
<u>Reclaimed Water Project 1</u> 1. Design Completion 2. Determine Projects	3.0 MGD	January 2015 January 2018
<u>Other reclaimed water projects</u> 1. Design Completion 2. Design Completion	2.0 MGD	January 2020 January 2023

¹Water Conservation Plan elements include: Limitation of landscape irrigation hours, Xeriscape requirements, ultra-low volume plumbing requirements for new construction, water conservation rate structure, leak detection, rain sensor ordinance, and water conservation education program.

²Note upon completion of the Feasibility Study the City will choose the mix of reclaimed water projects it will implement including irrigation, concentrate blending, aquifer recharge and/or indirect well recharge. The City is also investigating the use of flow at its E and B Repumps for injection into wells. Implementation of reuse may result in no additional alternative water supply projects being needed.

Project/Milestone	Average daily flow	Milestone Completion Date
Stormwater Capture Projects³ 1. Report Completion 2. Determine Projects	1.5 — 5.0 MGD	2018-2023
<u>Stormwater capture and interconnect at C-12 C-13 & C-14</u> 1. Design 2. Notice to process 3. Completion	4.0 MGD	2000 Note: C-12, C-13 project canceled due to construction costs and logistics. C-14 interconnect with Prospect Wellfield was completed in 2000.
<u>Other stormwater capture projects</u> 1. Design 2. Notice to proceed 3. Completion	1.0 MGD	2028
Other Alternative Water Supply/Offset Projects <u>ASR at Fiveash</u> 1. Report Completion 2. Determine Projects 3. Design Completion 4. Construction Completion 5. Final Completion	0.5 — 2.0 MGD 2.0 MGD	December 2008 January 2009 December 2009 December 2010 January 2011
Beneficial Use of Nanofiltrration Concentrate 1. Report Completion 2. Pilot Testing 3. Determine Projects 4. Design Completion 5. Construction Completion 6. Final Completion	2.0 MGD	January 2009 December 2009 January 2010 January 2012 January 2014 March 2014
Regional (C-51) Reservoir Project	6.0 MGD	

1. Commencement of Construction 2. Operational Testing 3. Commencement of Operations 4. Design Completion 5. Construction Completion 6. Final Completion		September 2020 August 2022 September 2022 June 2020 August 2020—2023
Advanced Metering Infrastructure (AMI) 1. Project start date 2. Project completion date	4.0 MGD	January 2021 January 2023

³ The City is already providing stormwater recharge to Prospect Lake and the Prospect Weelfield through the C-14 Interconnect. ~~The City is analyzing future interconnects on C-12 and C-13.~~

ATTACHMENT D

EXHIBIT 4 PAGE 3
(Previously EXHIBIT 9B)

Requirement by Permit Condition Report

App No: 190820-4

Permit No: 06-00123-W

Project Name: FORT LAUDERDALE PUBLIC WATER SUPPLY

Permit Condition No: 17		Permit Condition Code: <u>WUSTD021-8</u>		
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - ASR-1	Calibration report for WELL ASR - 1	Every Five Years	Every Five Years	30-SEP-2023
WELL - 2 - PROSPECT	Calibration report for WELL 2 - PROSPECT	Every Five Years	Every Five Years	31-MAY-2020
WELL - 7 - PROSPECT	Calibration report for WELL 7 - PROSPECT	Every Five Years	Every Five Years	31-MAY-2020
WELL - 8 - PROSPECT	Calibration report for WELL 8 - PROSPECT	Every Five Years	Every Five Years	31-MAY-2020
WELL - 9 - PROSPECT	Calibration report for WELL 9 - PROSPECT	Every Five Years	Every Five Years	31-MAY-2020
WELL - 19 - PROSPECT	Calibration report for WELL 19 - PROSPECT	Every Five Years	Every Five Years	31-MAY-2020
WELL - 20 - PROSPECT	Calibration report for WELL 20 - PROSPECT	Every Five Years	Every Five Years	31-MAY-2020
WELL - 24 - PROSPECT	Calibration report for WELL 24 - PROSPECT	Every Five Years	Every Five Years	31-MAY-2020
WELL - 25 - PROSPECT	Calibration report for WELL 25 - PROSPECT	Every Five Years	Every Five Years	31-JUL-2023
WELL - 26 - PROSPECT	Calibration report for WELL 26 - PROSPECT	Every Five Years	Every Five Years	30-SEP-2023
WELL - 27 - PROSPECT	Calibration report for WELL 27 - PROSPECT	Every Five Years	Every Five Years	30-NOV-2023
WELL - 28 - PROSPECT	Calibration report for WELL 28 - PROSPECT	Every Five Years	Every Five Years	31-JUL-2023
WELL - 30 - PROSPECT	Calibration report for WELL 30 - PROSPECT	Every Five Years	Every Five Years	31-OCT-2023
WELL - 31 - PROSPECT	Calibration report for WELL 31 - PROSPECT	Every Five Years	Every Five Years	30-JUN-2023
WELL - 32 - PROSPECT	Calibration report for WELL 32 - PROSPECT	Every Five Years	Every Five Years	31-JUL-2023
WELL - 33 - PROSPECT	Calibration report for WELL 33 - PROSPECT	Every Five Years	Every Five Years	31-JUL-2023
WELL - 34 - PROSPECT	Calibration report for WELL 34 - PROSPECT	Every Five Years	Every Five Years	30-NOV-2023
WELL - 35 - PROSPECT	Calibration report for WELL 35 - PROSPECT	Every Five Years	Every Five Years	31-JUL-2023
WELL - 36 - PROSPECT	Calibration report for WELL 36 - PROSPECT	Every Five Years	Every Five Years	31-JUL-2023
WELL - 37 - PROSPECT	Calibration report for WELL 37 - PROSPECT	Every Five Years	Every Five Years	30-JUN-2023
WELL - 38 - PROSPECT	Calibration report for WELL 38 - PROSPECT	Every Five Years	Every Five Years	28-FEB-2024
WELL - 39 - PROSPECT	Calibration report for WELL 39 - PROSPECT	Every Five Years	Every Five Years	31-OCT-2023
WELL - 40 - PROSPECT	Calibration report for WELL 40 -	Every Five Years	Every Five Years	31-MAY-2020

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
	PROSPECT			
WELL - 41 - PROSPECT	Calibration report for WELL 41 - PROSPECT	Every Five Years	Every Five Years	31-OCT-2023
WELL - 42 - PROSPECT	Calibration report for WELL 42 - PROSPECT	Every Five Years	Every Five Years	31-OCT-2023
WELL - 43 - PROSPECT	Calibration report for WELL 43 - PROSPECT	Every Five Years	Every Five Years	30-SEP-2023
WELL - 44 - PROSPECT	Calibration report for WELL 44 - PROSPECT	Every Five Years	Every Five Years	31-OCT-2023
WELL - 45 - PROSPECT	Calibration report for WELL 45 - PROSPECT	Every Five Years	Every Five Years	30-JUN-2023
WELL - 46 - PROSPECT	Calibration report for WELL 46 - PROSPECT	Every Five Years	Every Five Years	31-OCT-2023
WELL - 47 - PROSPECT	Calibration report for WELL 47 - PROSPECT	Every Five Years	Every Five Years	30-NOV-2023
WELL - 48 - PROSPECT	Calibration report for WELL 48 - PROSPECT	Every Five Years	Every Five Years	31-OCT-2023
WELL - 49 - PROSPECT	Calibration report for WELL 49 - PROSPECT	Every Five Years	Every Five Years	31-OCT-2023
WELL - 50-Prospect	Calibration report for WELL 50-Prospect	Every Five Years	Every Five Years	31-JUL-2023
WELL - 51-Prospect	Calibration report for WELL 51-Prospect	Every Five Years	Every Five Years	31-OCT-2023
WELL - 52-Prospect	Calibration report for WELL 52-Prospect	Every Five Years	Every Five Years	31-OCT-2023
WELL - 53-Prospect	Calibration report for WELL 53-Prospect	Every Five Years	Every Five Years	31-OCT-2023
WELL - 54-Prospect	Calibration report for WELL 54-Prospect	Every Five Years	Every Five Years	31-OCT-2023
WELL - 27-Dixie	Calibration report for WELL 27-Dixie	Every Five Years	Every Five Years	31-DEC-2021
WELL - 28-Dixie	Calibration report for WELL 28-Dixie	Every Five Years	Every Five Years	31-DEC-2021
WELL - 29-Dixie	Calibration report for WELL 29-Dixie	Every Five Years	Every Five Years	31-DEC-2021
WELL - 30-Dixie	Calibration report for WELL 30-Dixie	Every Five Years	Every Five Years	31-DEC-2021
WELL - 31-Dixie	Calibration report for WELL 31-Dixie	Every Five Years	Every Five Years	31-DEC-2021
WELL - 32-Dixie	Calibration report for WELL 32-Dixie	Every Five Years	Every Five Years	31-DEC-2021
WELL - 33-Dixie	Calibration report for WELL 33-Dixie	Every Five Years	Every Five Years	31-DEC-2021
WELL - 34-Dixie	Calibration report for WELL 34-Dixie	Every Five Years	Every Five Years	31-DEC-2021
WELL - 35-Dixie	Calibration report for WELL 35-Dixie	Every Five Years	Every Five Years	31-MAY-2020
WELL - 36-Dixie	Calibration report for WELL 36-Dixie	Every Five Years	Every Five Years	31-MAY-2020
WELL - FAS-1 Peele-Dixie	Calibration report for WELL FAS-1	Every Five Years	Every Five Years	31-MAY-2020

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - FAS-2 Peele-Dixie	Calibration report for WELL FAS-2	Every Five Years	Every Five Years	31-MAY-2020
WELL - FAS-3 Peele-Dixie	Calibration report for WELL FAS-3	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-4 Peele-Dixie	Calibration report for WELL FAS-4	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-5 Peele-Dixie	Calibration report for WELL FAS-5	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-6 Peele-Dixie	Calibration report for WELL FAS-6	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-7 Peele-Dixie	Calibration report for WELL FAS-7	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-8 Peele-Dixie	Calibration report for WELL FAS-8	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-101 Prospect	Calibration report for WELL FAS-101	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-102 Prospect	Calibration report for WELL FAS-102	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-103 Prospect	Calibration report for WELL FAS-103	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-104 Prospect	Calibration report for WELL FAS-104	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-105 Prospect	Calibration report for WELL FAS-105	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-106 Prospect	Calibration report for WELL FAS-106	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-107 Prospect	Calibration report for WELL FAS-107	Every Five Years	Every Five Years	31-AUG-2020
WELL - FAS-108 Prospect	Calibration report for WELL FAS-108	Every Five Years	Every Five Years	31-AUG-2020

Permit Condition No: 18

Permit Condition Code: WUSTD022-1

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - ASR-1	Monthly WELL ASR-1 injection	Monthly	Quarterly	30-APR-2020
WELL - ASR-1	Monthly WELL ASR-1 withdrawal	Monthly	Quarterly	30-APR-2020
WELL - 2 - PROSPECT	Monthly withdrawal for WELL 2 - Prospect	Monthly	Quarterly	30-APR-2020
WELL - 7 - PROSPECT	Monthly withdrawal for WELL 7 - Prospect	Monthly	Quarterly	30-APR-2020
WELL - 8 - PROSPECT	Monthly withdrawal for WELL 8 - Prospect	Monthly	Quarterly	30-APR-2020
WELL - 9 - PROSPECT	Monthly withdrawal for WELL 9 - Prospect	Monthly	Quarterly	30-APR-2020
WELL - 19 - PROSPECT	Monthly withdrawal for WELL 19 - Prospect	Monthly	Quarterly	30-APR-2020
WELL - 20 - PROSPECT	Monthly withdrawal for WELL 20 - Prospect	Monthly	Quarterly	30-APR-2020
WELL - 24 - PROSPECT	Monthly withdrawal for WELL 24 - Prospect	Monthly	Quarterly	30-APR-2020
WELL - 25 - PROSPECT	Monthly withdrawal for WELL 25 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 26 - PROSPECT	Monthly withdrawal for WELL 26 -	Monthly	Quarterly	30-APR-2020

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
	PROSPECT			
WELL - 27 - PROSPECT	Monthly withdrawal for WELL 27 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 28 - PROSPECT	Monthly withdrawal for WELL 28 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 30 - PROSPECT	Monthly withdrawal for WELL 30 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 31 - PROSPECT	Monthly withdrawal for WELL 31 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 32 - PROSPECT	Monthly withdrawal for WELL 32 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 33 - PROSPECT	Monthly withdrawal for WELL 33 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 34 - PROSPECT	Monthly withdrawal for WELL 34 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 35 - PROSPECT	Monthly withdrawal for WELL 35 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 36 - PROSPECT	Monthly withdrawal for WELL 36 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 37 - PROSPECT	Monthly withdrawal for WELL 37 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 38 - PROSPECT	Monthly withdrawal for WELL 38 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 39 - PROSPECT	Monthly withdrawal for WELL 39 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 40 - PROSPECT	Monthly withdrawal for WELL 40 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 41 - PROSPECT	Monthly withdrawal for WELL 41 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 42 - PROSPECT	Monthly withdrawal for WELL 42 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 43 - PROSPECT	Monthly withdrawal for WELL 43 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 44 - PROSPECT	Monthly withdrawal for WELL 44 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 45 - PROSPECT	Monthly withdrawal for WELL 45 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 46 - PROSPECT	Monthly withdrawal for WELL 46 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 47 - PROSPECT	Monthly withdrawal for WELL 47 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 48 - PROSPECT	Monthly withdrawal for WELL 48 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 49 - PROSPECT	Monthly withdrawal for WELL 49 - PROSPECT	Monthly	Quarterly	30-APR-2020
WELL - 50-Prospect	Monthly withdrawal for WELL 50-Prospect	Monthly	Quarterly	30-APR-2020
WELL - 51-Prospect	Monthly withdrawal for WELL 51-Prospect	Monthly	Quarterly	30-APR-2020
WELL - 52-Prospect	Monthly withdrawal for WELL 52-Prospect	Monthly	Quarterly	30-APR-2020

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - 53-Prospect	Monthly withdrawal for WELL 53-Prospect	Monthly	Quarterly	30-APR-2020
WELL - 54-Prospect	Monthly withdrawal for WELL 54-Prospect	Monthly	Quarterly	30-APR-2020
WELL - 27-Dixie	Monthly withdrawal for WELL 27-Dixie	Monthly	Quarterly	30-APR-2020
WELL - 28-Dixie	Monthly withdrawal for WELL 28-Dixie	Monthly	Quarterly	30-APR-2020
WELL - 29-Dixie	Monthly withdrawal for WELL 29-Dixie	Monthly	Quarterly	30-APR-2020
WELL - 30-Dixie	Monthly withdrawal for WELL 30-Dixie	Monthly	Quarterly	30-APR-2020
WELL - 31-Dixie	Monthly withdrawal for WELL 31-Dixie	Monthly	Quarterly	30-APR-2020
WELL - 32-Dixie	Monthly withdrawal for WELL 32-Dixie	Monthly	Quarterly	30-APR-2020
WELL - 33-Dixie	Monthly withdrawal for WELL 33-Dixie	Monthly	Quarterly	30-APR-2020
WELL - 34-Dixie	Monthly withdrawal for WELL 34-Dixie	Monthly	Quarterly	30-APR-2020
WELL - 35-Dixie	Monthly withdrawal for WELL 35-Dixie	Monthly	Quarterly	30-APR-2020
WELL - 36-Dixie	Monthly withdrawal for WELL 36-Dixie	Monthly	Quarterly	30-APR-2020
WELL - FAS-1 Peele-Dixie	Monthly withdrawal for WELL FAS-1	Monthly	Quarterly	30-APR-2020
WELL - FAS-2 Peele-Dixie	Monthly withdrawal for WELL FAS-2	Monthly	Quarterly	30-APR-2020
WELL - FAS-3 Peele-Dixie	Monthly withdrawal for WELL FAS-3	Monthly	Quarterly	30-APR-2020
WELL - FAS-4 Peele-Dixie	Monthly withdrawal for WELL FAS-4	Monthly	Quarterly	30-APR-2020
WELL - FAS-5 Peele-Dixie	Monthly withdrawal for WELL FAS-5	Monthly	Quarterly	30-APR-2020
WELL - FAS-6 Peele-Dixie	Monthly withdrawal for WELL FAS-6	Monthly	Quarterly	30-APR-2020
WELL - FAS-7 Peele-Dixie	Monthly withdrawal for WELL FAS-7	Monthly	Quarterly	30-APR-2020
WELL - FAS-8 Peele-Dixie	Monthly withdrawal for WELL FAS-8	Monthly	Quarterly	30-APR-2020
WELL - FAS-101 Prospect	Monthly withdrawal for WELL FAS-101	Monthly	Quarterly	30-APR-2020
WELL - FAS-102 Prospect	Monthly withdrawal for WELL FAS-102	Monthly	Quarterly	30-APR-2020
WELL - FAS-103 Prospect	Monthly withdrawal for WELL FAS-103	Monthly	Quarterly	30-APR-2020
WELL - FAS-104 Prospect	Monthly withdrawal for WELL FAS-104	Monthly	Quarterly	30-APR-2020
WELL - FAS-105 Prospect	Monthly withdrawal for WELL FAS-105	Monthly	Quarterly	30-APR-2020
WELL - FAS-106	Monthly withdrawal for WELL	Monthly	Quarterly	30-APR-2020

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
Prospect	FAS-106			
WELL - FAS-107	Monthly withdrawal for WELL	Monthly	Quarterly	30-APR-2020
Prospect	FAS-107			
WELL - FAS-108	Monthly withdrawal for WELL	Monthly	Quarterly	30-APR-2020
Prospect	FAS-108			
Permit Condition No: 20	Permit Condition Code:	<u>WUPWS003-1</u>		
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Unaccounted for Distribution Losses for PERMIT	Yearly	Yearly	30-NOV-2020
Permit Condition No: 22	Permit Condition Code:	<u>WUPWS008-2</u>		
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Ten-Year Water Use Compliance Report for FORT LAUDERDALE PUBLIC WATER SUPPLY	Every Ten Years	Every Ten Years	30-NOV-2028
Permit Condition No: 26	Permit Condition Code:	<u>WUWC004-1</u>		
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - FAS-3 Peele-Dixie	Updated Table A for WELL FAS-3	One time Only	One time Only	01-AUG-2020
WELL - FAS-4 Peele-Dixie	Updated Table A for WELL FAS-4	One time Only	One time Only	01-AUG-2020
WELL - FAS-5 Peele-Dixie	Updated Table A for WELL FAS-5	One time Only	One time Only	01-AUG-2020
WELL - FAS-6 Peele-Dixie	Updated Table A for WELL FAS-6	One time Only	One time Only	01-AUG-2020
WELL - FAS-7 Peele-Dixie	Updated Table A for WELL FAS-7	One time Only	One time Only	01-AUG-2020
WELL - FAS-8 Peele-Dixie	Updated Table A for WELL FAS-8	One time Only	One time Only	01-AUG-2020
WELL - FAS-101 Prospect	Updated Table A for WELL FAS-101	One time Only	One time Only	01-AUG-2020
WELL - FAS-102 Prospect	Updated Table A for WELL FAS-102	One time Only	One time Only	01-AUG-2020
WELL - FAS-103 Prospect	Updated Table A for WELL FAS-103	One time Only	One time Only	01-AUG-2020
WELL - FAS-104 Prospect	Updated Table A for WELL FAS-104	One time Only	One time Only	01-AUG-2020
WELL - FAS-105 Prospect	Updated Table A for WELL FAS-105	One time Only	One time Only	01-AUG-2020
WELL - FAS-106 Prospect	Updated Table A for WELL FAS-106	One time Only	One time Only	01-AUG-2020
WELL - FAS-107 Prospect	Updated Table A for WELL FAS-107	One time Only	One time Only	01-AUG-2020
WELL - FAS-108 Prospect	Updated Table A for WELL FAS-108	One time Only	One time Only	01-AUG-2020
WELL - MW10C	Updated Table A for WELL MW10C	One time Only	One time Only	01-AUG-2020
Permit Condition No: 27	Permit Condition Code:	<u>WUSAT001-4</u>		
Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - MW1	Specific Conductance for Well MW1	Semi-Annually	Semi-Annually	31-JUL-2020

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - MW2A	Specific Conductance for Well MW2A	Semi-Annually	Semi-Annually	31-JUL-2020
WELL - MW3A	Specific Conductance for Well MW3A	Semi-Annually	Semi-Annually	31-JUL-2020
WELL - MW4	Specific Conductance for Well MW4	Semi-Annually	Semi-Annually	31-JUL-2020
WELL - MW5A	Specific Conductance for Well MW5A	Semi-Annually	Semi-Annually	31-JUL-2020
WELL - MW6A	Specific Conductance for Well MW6A	Semi-Annually	Semi-Annually	31-JUL-2020
WELL - MW7A	Specific Conductance for Well MW7A	Semi-Annually	Semi-Annually	31-JUL-2020
WELL - MW8A	Specific Conductance for Well MW8A	Semi-Annually	Semi-Annually	31-JUL-2020
WELL - MW9	Specific Conductance for Well MW9	Semi-Annually	Semi-Annually	31-JUL-2020
WELL - MW10C	Specific Conductance for Well MW10C	Semi-Annually	Semi-Annually	31-JUL-2020

STAFF REPORT DISTRIBUTION LIST

FORT LAUDERDALE PUBLIC WATER SUPPLY

Application No: 190820-4

Permit No: 06-00123-W

INTERNAL DISTRIBUTION

X Stephanie Lancaster, P.G.

EXTERNAL DISTRIBUTION

- X Permittee - City Of Fort Lauderdale
- X Primary Compliance Contact - City Of Fort Lauderdale
- X Primary Compliance Contact - City Of Fort Lauderdale

GOVERNMENT AGENCIES

- X Broward County - Director, Water Mgmt Div
- X Dept of Environmental Protection - West Palm Beach
- X FDEP Div of Recreation and Park - District 5

OTHER INTERESTED PARTIES

- X Natural Resources Defense Council

Exhibit No:6

APPENDIX 2-A

2018 LEC WATER SUPPLY PLAN UPDATE (REPORT RELEVANT DATA)



LOWER EAST COAST WATER SUPPLY PLAN UPDATE

Appendices



Local/Tribal Government	Utility/Entity Serving Local/Tribal Government
Broward County	
Broward County (unincorporated)	Broward County WWS, City of Hollywood, and Sunrise Utilities Department
Coconut Creek, City of	Broward County WWS District 2 and City of Margate
Cooper City, City of	Cooper City Utilities Department
Coral Springs, City of	City of Coral Springs, Coral Springs Improvement District, North Springs Improvement District, and Royal Utility Corporation
Dania Beach, City of	City of Dania Beach, City of Hollywood, and Broward County WWS District 3
Davie, Town of	City of Hollywood, Town of Davie, City of Fort Lauderdale, Sunrise Utilities Department, Tindell Hammock, and Broward County WWS District 3
Deerfield Beach, City of	City of Deerfield Beach and Broward County WWS District 2
Fort Lauderdale, City of	City of Fort Lauderdale and Broward County WWS District 1
Hallandale Beach, City of	City of Hallandale Beach and Broward County WWS District 3
Hillsboro Beach, Town of	Town of Hillsboro Beach
Hollywood, City of	City of Fort Lauderdale, City of Hollywood, and Broward County WWS District 3
Lauderdale-by-the-Sea, Town of	City of Fort Lauderdale and City of Pompano Beach Utilities Department
Lauderdale Lakes, City of	Broward County WWS District 1 and City of Fort Lauderdale
Lauderhill, City of	City of Lauderhill, City of Fort Lauderdale, and Broward County WWS District 1
Lazy Lake, Village of	City of Fort Lauderdale
Lighthouse Point, City of	City of Pompano Beach Utilities Department and Broward County WWS District 2
Margate, City of	City of Margate
Miramar, City of	City of Miramar and Broward County WWS District 3
North Lauderdale, City of	City of North Lauderdale, City of Fort Lauderdale, City of Tamarac, and Broward County WWS District 1
Oakland Park, City of	City of Oakland Park, City of Fort Lauderdale and Broward County WWS District 1
Parkland, City of	Parkland Utilities, Inc., North Springs Improvement District, and City of Coconut Creek
Pembroke Park, Town of	Broward County WWS District 3
Pembroke Pines, City of	City of Pembroke Pines and Broward County WWS
Plantation, City of	City of Plantation
Pompano Beach, City of	City of Pompano Beach Utilities Department and Broward County WWS Districts 1 and 2
Sea Ranch Lakes, Village of	City of Fort Lauderdale
Seminole Tribe of Florida	Seminole Tribe of Florida's Hollywood Reservation, City of Hollywood, Town of Davie, Broward County WWS District 2 via City of Coconut Creek ^a
Southwest Ranches, Town of	City of Pembroke Pines, Cooper City Utilities, and Sunrise Utilities Department
Sunrise, City of	Sunrise Utilities Department
Tamarac, City of	City of Tamarac, City of Fort Lauderdale, and Broward County WWS District 1
Weston, City of	Sunrise Utilities Department
West Park, City of	Broward County WWS District 3
Wilton Manors, City of	City of Fort Lauderdale

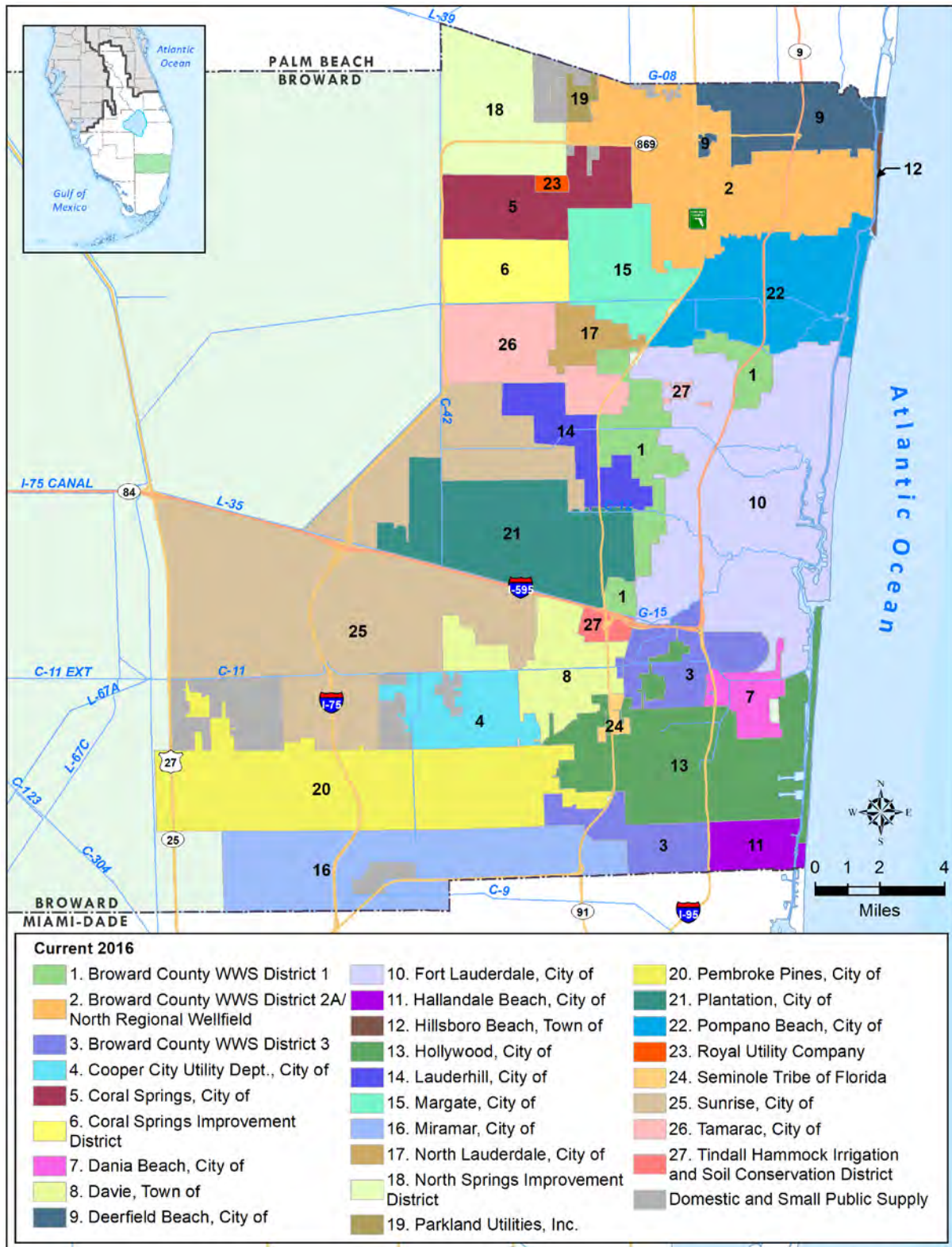


Figure A-3. Current (2016) public water supply utility service areas in Broward County.

Population Projection Results

Table B-1 provides the results of the population distributions by county and PWS utility from 2016 to 2040. The results were shared with and reviewed by utility, municipal, and local government staff. Feedback from local stakeholders produced information that led to minor adjustments to some service area population projections.

Table B-1. Service area population projections in the LEC Planning Area.

County	PWS Utility or DSS	2016	2020	2025	2030	2035	2040
Palm Beach	Boca Raton, City of	113,040	117,109	121,510	124,630	127,163	129,336
	Boynton Beach, City of	107,646	113,090	121,542	126,509	130,858	134,809
	Delray Beach WSD, City of	67,272	70,520	74,188	77,079	79,597	81,874
	Golf, Village of	2,904	2,967	3,028	3,056	3,071	3,077
	Highland Beach, Town of	3,828	3,911	3,992	4,030	4,049	4,058
	Jupiter, Town of	72,984	75,871	79,042	81,381	83,334	85,047
	Lake Worth Utilities, City of	47,397	49,608	52,093	54,033	55,712	57,225
	Lantana, Town of	10,943	11,215	11,485	11,634	11,730	11,795
	Manalapan, Town of	2,552	2,626	432	446	463	478
	Mangonia Park, Town of	1,990	2,156	2,354	2,527	2,687	2,837
	Maralago Cay	1,063	1,093	1,124	1,142	1,156	1,167
	PBCWUD	498,848	534,857	577,172	613,513	646,757	677,834
	PBCWUD Western Region	34,886	36,137	37,489	38,446	39,222	39,888
	Palm Springs, Village of	47,899	50,206	52,810	54,860	56,645	58,260
	Riviera Beach, City of	39,805	42,467	45,576	48,212	50,606	52,835
	Seacoast Utility Authority	90,703	94,330	98,320	101,276	103,751	105,926
	Tequesta, Village of	8,668	8,866	9,059	9,155	9,210	9,241
	Wellington Public Utilities Department	55,587	57,640	59,869	61,468	62,777	63,908
	West Palm Beach Public Utilities, City of	115,088	121,366	128,554	134,399	139,587	144,341
	PWS Total	1,323,103	1,396,035	1,479,639	1,547,796	1,608,375	1,663,936
	DSS Total	68,636	69,865	70,962	71,304	71,324	71,165
	Palm Beach County Total	1,391,739	1,465,900	1,550,601	1,619,100	1,679,699	1,735,101
Broward	BCWWS District 1	81,380	85,750	90,782	94,977	98,552	101,686
	BCWWS District 2A/NR Wellfield	118,161	121,697	125,441	128,006	129,762	130,991
	Cooper City Utility Department, City of	30,449	31,401	32,419	33,131	33,634	34,000
	Coral Springs, City of	61,565	64,733	68,365	71,365	73,901	76,109
	CSID	39,222	40,008	40,760	41,125	41,233	41,183
	Dania Beach, City of	16,520	18,316	20,490	22,484	24,321	26,033
	Davie, Town of	29,833	33,204	37,294	41,055	44,530	47,772
	Deerfield Beach, City of	53,069	56,340	60,156	63,422	66,269	68,811
	Fort Lauderdale, City of	223,112	240,549	261,271	279,628	296,108	311,157
	Hallandale Beach, City of	39,375	41,021	42,862	44,304	45,461	46,424
	Hillsboro Beach, Town of	1,989	2,054	2,125	2,175	2,211	2,239
	Hollywood, City of*	197,845	207,322	218,103	226,864	234,155	240,420
	Lauderhill, City of	61,857	63,931	66,174	67,797	68,989	69,896
	Margate, City of	61,868	64,790	68,108	70,796	73,025	74,936
	Miramar, City of	122,845	128,105	134,007	138,662	142,425	145,576
	North Lauderdale, City of	35,460	36,688	38,024	39,003	39,735	40,301
	NSID	36,879	38,817	41,043	42,891	44,459	45,829
	Parkland Utilities, Inc.	2,277	2,526	2,827	3,104	3,359	3,597
	Pembroke Pines, City of	161,337	164,152	166,709	167,682	167,615	166,913
	Plantation, City of	89,674	93,283	97,299	100,408	102,872	104,900
	Pompano Beach, City of	84,524	91,552	99,937	107,422	114,181	120,381
	Royal Utility Corporation	3,431	3,520	3,611	3,669	3,703	3,722
	Seminole Tribe of Florida (Hollywood)	1,258	1,635	2,106	2,559	2,993	3,407
	Sunrise, City of	224,042	231,288	239,075	244,619	248,611	251,584
	Tamarac, City of	63,379	65,315	67,374	68,800	69,791	70,498
	Tindall Hammock ISCD	2,823	3,060	3,342	3,595	3,823	4,032
	PWS Total	1,844,174	1,931,057	2,029,704	2,109,543	2,175,718	2,232,397
	DSS Total	10,340	9,644	8,697	7,659	6,583	5,502
	Broward County Total	1,854,514	1,940,701	2,038,401	2,117,202	2,182,301	2,237,899

Table B-2. Average net (finished) water per capita use rates (in gallons per capita per day) in the LEC Planning Area.

County	PWS Utility or DSS	2012-2016 Average PCUR
Palm Beach	Boca Raton, City of	299
	Boynton Beach, City of	119
	Delray Beach WSD, City of	229
	Golf, Village of	151
	Highland Beach	334
	Jupiter, Town of	215
	Lake Worth Utilities, City of	107
	Lantana, Town of	175
	Manalapan, Town of	442
	Mangonia Park, Town of	176
	Maralago Cay	225
	PBCWUD	111
	PBCWUD Western Region	157
	Palm Springs, Village of	81
	Riviera Beach, City of	184
	Seacoast Utility Authority	191
	Tequesta, Village of	309
	Wellington Public Utilities Dept.	107
	West Palm Beach Public Utilities, City of	243
	Palm Beach County DSS	111
	Palm Beach County Average	162
Broward	BCWWS District 1	92
	BCWWS 2A/NR Wellfield	106
	Cooper City Utility Dept., City of	104
	Coral Springs, City of	101
	CSID	109
	Dania Beach, City of	119
	Davie, Town of	143
	Deerfield Beach, City of	185
	Fort Lauderdale, City of	170
	Hallandale Beach, City of	148
	Hillsboro Beach, Town of	327
	Hollywood, City of	112
	Lauderhill, City of	98
	Margate, City of	110
	Miramar, City of	104
	North Lauderdale, City of	80
	NSID	113
	Parkland Utilities, Inc.	103
	Pembroke Pines, City of	79
	Plantation, City of	114
	Pompano Beach, City of	159
	Royal Utility Company	106
	Seminole Tribe of Florida (Hollywood)	174
	Sunrise, City of	98
	Tamarac, City of	98
	Tindall Hammock ISCD	129
	Broward County DSS	98
	Broward County Average	120

Table B-3. PWS net (finished) water demands under average rainfall conditions in the LEC Planning Area.

County	PWS Utility	Demand - Average Rainfall Conditions (mgd)					
		2016	2020	2025	2030	2035	2040
Palm Beach	Boca Raton, City of	33.80	35.02	36.33	37.26	38.02	38.67
	Boynton Beach, City of	12.81	13.46	14.46	15.05	15.57	16.04
	Delray Beach WSD, City of	15.41	16.15	16.99	17.65	18.23	18.75
	Golf, Village of	0.44	0.45	0.46	0.46	0.46	0.46
	Highland Beach, Town of	1.28	1.31	1.33	1.35	1.35	1.36
	Jupiter, Town of	15.69	16.31	16.99	17.50	17.92	18.29
	Lake Worth Utilities, City of	5.07	5.31	5.57	5.78	5.96	6.12
	Lantana, Town of	1.92	1.96	2.01	2.04	2.05	2.06
	Manalapan, Town of	1.13	1.16	0.89	0.91	0.95	0.98
	Mangonia Park, Town of	0.35	0.38	0.41	0.44	0.47	0.50
	Maralago Cay	0.24	0.25	0.25	0.26	0.26	0.26
	PBCWUD	55.37	59.37	64.07	68.10	71.79	75.24
	PBCWUD Western Region	5.48	5.67	5.89	6.04	6.16	6.26
	Palm Springs, Village of	3.88	4.07	4.28	4.44	4.59	4.72
	Riviera Beach, City of	7.32	7.81	8.39	8.87	9.31	9.72
	Seacoast Utility Authority	17.32	18.02	18.78	19.34	19.82	20.23
	Tequesta, Village of	2.68	2.74	2.80	2.83	2.85	2.86
	Wellington Public Utilities Department	5.95	6.17	6.41	6.58	6.72	6.84
	West Palm Beach Public Utilities, City of	27.97	29.49	31.24	32.66	33.92	35.07
	Palm Beach County Total	214.10	225.08	237.54	247.57	256.40	264.44
Broward	BCWWS District 1	7.49	7.89	8.35	8.74	9.07	9.36
	BCWWS District 2A/NR Wellfield	12.53	12.90	13.30	13.57	13.75	13.89
	Cooper City Utility Department, City of	3.17	3.27	3.37	3.45	3.50	3.54
	Coral Springs, City of	6.22	6.54	6.90	7.21	7.46	7.69
	CSID	4.28	4.36	4.44	4.48	4.49	4.49
	Dania Beach, City of	1.97	2.18	2.44	2.68	2.89	3.10
	Davie, Town of	4.27	4.75	5.33	5.87	6.37	6.83
	Deerfield Beach, City of	9.82	10.42	11.13	11.73	12.26	12.73
	Fort Lauderdale, City of	37.93	40.89	44.42	47.54	50.34	52.90
	Hallandale Beach, City of	5.83	6.07	6.34	6.56	6.73	6.87
	Hillsboro Beach, Town of	0.65	0.67	0.69	0.71	0.72	0.73
	Hollywood, City of	22.16	23.22	24.43	25.41	26.23	26.93
	Lauderhill, City of	6.06	6.27	6.49	6.64	6.76	6.85
	Margate, City of	6.81	7.13	7.49	7.79	8.03	8.24
	Miramar, City of	12.78	13.32	13.94	14.42	14.81	15.14
	North Lauderdale, City of	2.84	2.94	3.04	3.12	3.18	3.22
	NSID	4.17	4.39	4.64	4.85	5.02	5.18
	Parkland Utilities, Inc.	0.23	0.26	0.29	0.32	0.35	0.37
	Pembroke Pines, City of	12.75	12.97	13.17	13.25	13.24	13.19
	Plantation, City of	10.22	10.63	11.09	11.45	11.73	11.96
	Pompano Beach, City of	13.44	14.56	15.89	17.08	18.15	19.14
	Royal Utility Corporation	0.36	0.37	0.38	0.39	0.39	0.39
	Seminole Tribe of Florida (Hollywood)	0.22	0.28	0.37	0.45	0.52	0.59
	Sunrise, City of	21.96	22.67	23.43	23.97	24.36	24.66
	Tamarac, City of	6.21	6.40	6.60	6.74	6.84	6.91
	Tindall Hammock ISCD	0.36	0.39	0.43	0.46	0.49	0.52
	Broward County Total	214.69	225.74	238.40	248.86	257.70	265.40

Table B-4. Raw-to-finished water adjustment ratios for PWS utilities in the LEC Planning Area.

County	PWS Utility	Raw-to-Finished Ratio
Palm Beach	Boca Raton, City of	1.13
	Boynton Beach, City of	1.10
	Delray Beach WSD, City of	1.03
	Golf, Village of	1.18
	Highland Beach	1.33
	Jupiter, Town of	1.25
	Lake Worth Utilities, City of	1.13
	Lantana, Town of	1.18
	Manalapan, Town of	1.33
	Mangonia Park, Town of	1.03
	Maralago Cay	1.03
	PBCWUD	1.11
	PBCWUD Western Region	1.33
	Palm Springs, Village of	1.05
	Riviera Beach, City of	1.03
	Seacoast Utility Authority	1.20
	Tequesta, Village of	1.22
	Wellington Public Utilities Dept.	1.13
	West Palm Beach Public Utilities, City of	1.03
Broward	BCWWS District 1	1.03
	BCWWS District 2A/NR Wellfield	1.03
	Cooper City Utility Dept., City of	1.20
	Coral Springs, City of	1.03
	CSID	1.18
	Dania Beach, City of	1.08
	Davie, Town of	1.16
	Deerfield Beach, City of	1.13
	Fort Lauderdale, City of	1.06
	Hallandale Beach, City of	1.12
	Hillsboro Beach, Town of	1.03
	Hollywood, City of	1.09
	Lauderhill, City of	1.03
	Margate, City of	1.03
	Miramar, City of	1.20
	North Lauderdale, City of	1.03
	NSID	1.03
	Parkland Utilities, Inc.	1.03
	Pembroke Pines, City of	1.03
	Plantation, City of	1.33
	Pompano Beach, City of	1.08
	Royal Utility Company	1.03
	Seminole Tribe of Florida (Hollywood)	1.03
	Sunrise, City of	1.09
	Tamarac, City of	1.03
	Tindall Hammock ISCD	1.03

PWS Projection Results

Average Rainfall Conditions

Gross (raw) demands for PWS under average rainfall conditions for 2016 through 2040 are provided in **Table B-5**.

Table B-5. PWS gross (raw) water demands under average rainfall conditions in the LEC Planning Area.

County	PWS Utility	Demand - Average Rainfall Conditions (mgd)					
		2016	2020	2025	2030	2035	2040
Palm Beach	Boca Raton, City of	38.19	39.57	41.05	42.11	42.96	43.70
	Boynton Beach, City of	14.09	14.80	15.91	16.56	17.13	17.65
	Delray Beach WSD, City of	15.87	16.63	17.50	18.18	18.77	19.31
	Golf, Village of	0.52	0.53	0.54	0.54	0.55	0.55
	Highland Beach, Town of	1.70	1.74	1.77	1.79	1.80	1.80
	Jupiter, Town of	19.61	20.39	21.24	21.87	22.40	22.86
	Lake Worth Utilities, City of	5.73	6.00	6.30	6.53	6.74	6.92
	Lantana, Town of	2.26	2.32	2.37	2.40	2.42	2.44
	Manalapan, Town of	1.50	1.54	1.18	1.22	1.26	1.30
	Mangonia Park, Town of	0.36	0.39	0.43	0.46	0.49	0.51
	Maralago Cay	0.25	0.25	0.26	0.26	0.27	0.27
	PBCWUD	61.46	65.90	71.11	75.59	79.69	83.52
	PBCWUD Western Region	7.28	7.55	7.83	8.03	8.19	8.33
	Palm Springs, Village of	4.07	4.27	4.49	4.67	4.82	4.96
	Riviera Beach, City of	7.54	8.05	8.64	9.14	9.59	10.01
	Seacoast Utility Authority	20.79	21.62	22.53	23.21	23.78	24.28
	Tequesta, Village of	3.27	3.34	3.42	3.45	3.47	3.48
	Wellington Public Utilities Department	6.72	6.97	7.24	7.43	7.59	7.73
	West Palm Beach Public Utilities, City of	28.81	30.38	32.18	33.64	34.94	36.13
	Palm Beach County Total	240.03	252.24	265.99	277.09	286.85	295.74
Broward	BCWWS District 1	7.71	8.13	8.60	9.00	9.34	9.64
	BCWWS District 2A/NR Wellfield	13.50	13.89	14.30	14.58	14.77	15.60
	Cooper City Utility Department, City of	3.80	3.92	4.05	4.13	4.20	4.24
	Coral Springs, City of	6.40	6.73	7.11	7.42	7.69	7.92
	CSID	5.04	5.15	5.24	5.29	5.30	5.30
	Dania Beach, City of	2.12	2.35	2.63	2.89	3.13	3.35
	Davie, Town of	4.95	5.51	6.19	6.81	7.39	7.92
	Deerfield Beach, City of	10.49	11.18	11.98	12.66	13.25	13.78
	Fort Lauderdale, City of	40.20	43.35	47.08	50.39	53.36	56.60
	Hallandale Beach, City of	6.53	6.80	7.10	7.34	7.54	8.11
	Hillsboro Beach, Town of	0.67	0.69	0.72	0.73	0.74	0.75
	Hollywood, City of	24.15	25.31	26.63	27.70	28.59	29.35
	Lauderhill, City of	6.24	6.45	6.68	6.84	6.96	7.19
	Margate, City of	7.01	7.34	7.72	8.02	8.27	8.49
	Miramar, City of	15.33	15.99	16.72	17.31	17.77	18.17
	North Lauderdale, City of	2.92	3.02	3.13	3.21	3.27	3.32
	NSID	4.29	4.52	4.78	4.99	5.17	5.33
	Parkland Utilities, Inc.	0.24	0.27	0.30	0.33	0.36	0.38
	Pembroke Pines, City of	13.13	13.36	13.57	13.64	13.64	13.58
	Plantation, City of	13.60	14.14	14.75	15.22	15.60	15.90
	Pompano Beach, City of	14.51	15.72	17.16	18.45	19.61	20.67
	Royal Utility Corporation	0.37	0.38	0.39	0.40	0.40	0.41
	Seminole Tribe of Florida (Hollywood)	0.23	0.29	0.38	0.46	0.54	0.61
	Sunrise, City of	23.93	24.71	25.54	26.13	26.56	26.87
	Tamarac, City of	6.40	6.59	6.80	6.94	7.04	7.12
	Tindall Hammock ISCD	0.38	0.41	0.44	0.48	0.51	0.54
	Broward County Total	234.17	246.19	259.99	271.37	281.00	291.15

Table B-6. PWS net (finished) water demands under 1-in-10 year drought conditions in the LEC Planning Area.

County	PWS Utility	Demand - 1-in-10 Year Drought Conditions (mgd)					
		2016	2020	2025	2030	2035	2040
Palm Beach	Boca Raton, City of	37.18	38.52	39.96	40.99	41.82	42.54
	Boynton Beach, City of	14.09	14.80	15.91	16.56	17.13	17.65
	Delray Beach WSD, City of	16.95	17.76	18.69	19.42	20.05	20.62
	Golf, Village of	0.48	0.49	0.50	0.51	0.51	0.51
	Highland Beach, Town of	1.41	1.44	1.47	1.48	1.49	1.49
	Jupiter, Town of	17.26	17.94	18.69	19.25	19.71	20.11
	Lake Worth Utilities, City of	5.58	5.84	6.13	6.36	6.56	6.74
	Lantana, Town of	2.11	2.16	2.21	2.24	2.26	2.27
	Manalapan, Town of	1.24	1.28	0.97	1.01	1.04	1.08
	Mangonia Park, Town of	0.39	0.42	0.46	0.49	0.52	0.55
	Maralago Cay	0.26	0.27	0.28	0.28	0.29	0.29
	PBCWUD	60.91	65.31	70.47	74.91	78.97	82.76
	PBCWUD Western Region	6.02	6.24	6.47	6.64	6.77	6.89
	Palm Springs, Village of	4.27	4.47	4.71	4.89	5.05	5.19
	Riviera Beach, City of	8.06	8.60	9.22	9.76	10.24	10.69
	Seacoast Utility Authority	19.06	19.82	20.66	21.28	21.80	22.26
	Tequesta, Village of	2.95	3.01	3.08	3.11	3.13	3.14
	Wellington Public Utilities Department	6.54	6.78	7.05	7.23	7.39	7.52
	West Palm Beach Public Utilities, City of	30.76	32.44	34.36	35.92	37.31	38.58
	Palm Beach County Total	235.51	247.59	261.30	272.32	282.04	290.88
Broward	BCWWS District 1	8.24	8.68	9.19	9.61	9.97	10.29
	BCWWS District 2A/NR Wellfield	13.78	14.19	14.63	14.93	15.13	15.27
	Cooper City Utility Department, City of	3.48	3.59	3.71	3.79	3.85	3.89
	Coral Springs, City of	6.84	7.19	7.60	7.93	8.21	8.46
	CSID	4.70	4.80	4.89	4.93	4.94	4.94
	Dania Beach, City of	2.16	2.40	2.68	2.94	3.18	3.41
	Davie, Town of	4.69	5.22	5.87	6.46	7.00	7.51
	Deerfield Beach, City of	10.80	11.47	12.24	12.91	13.49	14.00
	Fort Lauderdale, City of	41.72	44.98	48.86	52.29	55.37	58.19
	Hallandale Beach, City of	6.41	6.68	6.98	7.21	7.40	7.56
	Hillsboro Beach, Town of	0.72	0.74	0.76	0.78	0.80	0.81
	Hollywood, City of	24.37	25.54	26.87	27.95	28.85	29.62
	Lauderhill, City of	6.67	6.89	7.13	7.31	7.44	7.53
	Margate, City of	7.49	7.84	8.24	8.57	8.84	9.07
	Miramar, City of	14.05	14.66	15.33	15.86	16.29	16.65
	North Lauderdale, City of	3.12	3.23	3.35	3.43	3.50	3.55
	NSID	4.58	4.82	5.10	5.33	5.53	5.70
	Parkland Utilities, Inc.	0.26	0.29	0.32	0.35	0.38	0.41
	Pembroke Pines, City of	14.02	14.26	14.49	14.57	14.57	14.50
	Plantation, City of	11.25	11.70	12.20	12.59	12.90	13.15
	Pompano Beach, City of	14.78	16.01	17.48	18.79	19.97	21.05
	Royal Utility Corporation	0.40	0.41	0.42	0.43	0.43	0.43
	Seminole Tribe of Florida (Hollywood)	0.24	0.31	0.40	0.49	0.57	0.65
	Sunrise, City of	24.15	24.93	25.77	26.37	26.80	27.12
	Tamarac, City of	6.83	7.04	7.26	7.42	7.52	7.60
	Tindall Hammock ISCD	0.40	0.43	0.47	0.51	0.54	0.57
	Broward County Total	236.16	248.31	262.24	273.75	283.47	291.94

Table B-7. PWS gross (raw) water demands under 1-in-10 year drought conditions in the LEC Planning Area.

County	PWS Utility	Demand - 1-in-10 Year Drought Conditions (mgd)					
		2016	2020	2025	2030	2035	2040
Palm Beach	Boca Raton, City of	42.01	43.52	45.16	46.32	47.26	48.07
	Boynton Beach, City of	15.50	16.28	17.50	18.22	18.84	19.41
	Delray Beach WSD, City of	17.45	18.30	19.25	20.00	20.65	21.24
	Golf, Village of	0.57	0.58	0.59	0.60	0.60	0.60
	Highland Beach, Town of	1.87	1.91	1.95	1.97	1.98	1.98
	Jupiter, Town of	21.58	22.43	23.37	24.06	24.64	25.14
	Lake Worth Utilities, City of	6.30	6.60	6.93	7.19	7.41	7.61
	Lantana, Town of	2.49	2.55	2.61	2.64	2.66	2.68
	Manalapan, Town of	1.65	1.70	1.30	1.34	1.39	1.43
	Mangonia Park, Town of	0.40	0.43	0.47	0.50	0.54	0.57
	Maralago Cay	0.27	0.28	0.29	0.29	0.29	0.30
	PBCWUD	67.61	72.49	78.22	83.15	87.66	91.87
	PBCWUD Western Region	8.01	8.30	8.61	8.83	9.01	9.16
	Palm Springs, Village of	4.48	4.70	4.94	5.13	5.30	5.45
	Riviera Beach, City of	8.30	8.85	9.50	10.05	10.55	11.01
	Seacoast Utility Authority	22.87	23.78	24.79	25.53	26.16	26.71
	Tequesta, Village of	3.59	3.68	3.76	3.80	3.82	3.83
	Wellington Public Utilities Department	7.39	7.67	7.96	8.18	8.35	8.50
	West Palm Beach Public Utilities, City of	31.69	33.41	35.39	37.00	38.43	39.74
	Palm Beach County Total	264.03	277.46	292.59	304.79	315.54	325.31
Broward	BCWWS District 1	8.48	8.94	9.46	9.90	10.27	10.60
	BCWWS District 2A/NR Wellfield	14.85	15.28	15.73	16.03	16.24	17.16
	Cooper City Utility Department, City of	4.18	4.31	4.45	4.55	4.62	4.67
	Coral Springs, City of	7.05	7.41	7.82	8.17	8.46	8.71
	CSID	5.55	5.66	5.77	5.82	5.83	5.83
	Dania Beach, City of	2.34	2.59	2.90	3.18	3.44	3.68
	Davie, Town of	5.44	6.06	6.80	7.49	8.13	8.72
	Deerfield Beach, City of	11.54	12.30	13.17	13.92	14.58	15.16
	Fort Lauderdale, City of	44.23	47.68	51.79	55.43	58.69	62.26
	Hallandale Beach, City of	7.18	7.48	7.82	8.08	8.29	8.92
	Hillsboro Beach, Town of	0.74	0.76	0.79	0.81	0.82	0.83
	Hollywood, City of	26.57	27.84	29.29	30.47	31.44	32.29
	Lauderhill, City of	6.87	7.10	7.35	7.53	7.66	7.91
	Margate, City of	7.71	8.07	8.49	8.82	9.10	9.34
	Miramar, City of	16.86	17.59	18.40	19.04	19.55	19.98
	North Lauderdale, City of	3.21	3.33	3.45	3.54	3.60	3.65
	NSID	4.72	4.97	5.25	5.49	5.69	5.87
	Parkland Utilities, Inc.	0.27	0.29	0.33	0.36	0.39	0.42
	Pembroke Pines, City of	14.44	14.69	14.92	15.01	15.00	14.94
	Plantation, City of	14.96	15.56	16.23	16.75	17.16	17.50
	Pompano Beach, City of	15.97	17.29	18.88	20.29	21.57	22.74
	Royal Utility Corporation	0.41	0.42	0.43	0.44	0.44	0.45
	Seminole Tribe of Florida (Hollywood)	0.25	0.32	0.42	0.50	0.59	0.67
	Sunrise, City of	26.33	27.18	28.09	28.74	29.21	29.56
	Tamarac, City of	7.04	7.25	7.48	7.64	7.75	7.83
	Tindall Hammock ISCD	0.41	0.45	0.49	0.53	0.56	0.59
	Broward County Total	257.58	270.81	285.98	298.51	309.10	320.26

Table E-1. Summary of the public water supply utilities with a capacity of 0.10 mgd or greater in the LEC Planning Area.

Supply Entity/Facility	SFWMD Permit Number	Gross (Raw) Water (mgd)			FDEP PWS ID	Rated Net (Finished) Capacity (mgd)
		Annual Allocation	SAS	FAS		
Palm Beach County						
Boca Raton, City of	50-00367-W	51.54	51.54	0.00	4500130	70.00
Boynton Beach, City of	50-00499-W	20.86	16.58	6.42	4500145	29.64
Delray Beach Water and Sewer Department, City of	50-00177-W	19.10	19.10	1.50	4500351	26.00
Golf, Village of	50-00612-W	0.69	0.69	0.00	4501528	0.86
Highland Beach, Town of	50-00346-W	3.15	0.00	3.15	4500609	3.00
Jupiter, Town of	50-00010-W	24.41	18.80	11.71	4501491	30.00
Lake Worth Utilities, City of	50-00234-W	11.25	5.25	6.00	4500773	17.40
Lantana, Town of	50-00575-W	2.48	2.48	0.00	4500784	3.84
Manalapan, Town of	50-00506-W	1.92	0.58	1.34	4500840	2.35
Mangonia Park, Town of	50-00030-W	0.58	0.58	0.00	4500841	1.08
Maralago Cay	50-01283-W	0.27	0.27	0.00	4500062	0.42
Palm Beach County Water Utilities Department	50-00135-W	86.99	79.99	7.00	4504393	103.28
Palm Beach County Water Utilities Department Western Region	50-06857-W	9.43	0.00	9.43	4505005	10.00
Palm Springs, Village of	50-00036-W	4.62	4.62	0.00	4501058	10.00
Riviera Beach, City of	50-00460-W	9.08	9.08	0.00	4501229	17.50
Seacoast Utility Authority	50-00365-W	26.92	22.30	8.90	4501124	30.50
Tequesta, Village of	50-00046-W	4.37	1.10	3.43	4501438	6.33
Wellington Public Utilities Department	50-00464-W	8.02	8.02	0.00	4500014	12.80
West Palm Beach Public Utilities, City of ^a	50-00615-W	41.20 ^a	41.20	0.00	4501559	47.00
Palm Beach County Total		326.88	282.18	58.88		422.00
Broward County						
Broward County WWS District 1	06-00146-W	13.90	10.04	3.86	4060167	16.00
Broward County WWS District 2A/North Regional Wellfield	06-01634-W	22.06	17.50	4.60	4060163	40.00
Broward County WWS South Regional Wellfield ^b	06-01474-W	15.64	15.64	0.00	N/A ^b	N/A ^b
Cooper City Utility Department, City of	06-00365-W	4.55	4.55	0.00	4060282	7.00
Coral Springs, City of	06-00102-W	9.44	9.44	0.00	4060290	16.00
Coral Springs Improvement District	06-00100-W	5.42	5.42	0.00	4060291	7.40
Dania Beach, City of	06-00187-W	1.10	1.10	0.00	4060253	5.02
Davie, Town of	06-00134-W	19.85	5.02	14.83	4060344	10.00
Deerfield Beach, City of	06-00082-W	14.74	11.91	4.00	4060254	23.60
Fort Lauderdale, City of	06-00123-W	61.19	52.55	8.64	4060486	90.00
Hallandale Beach, City of	06-00138-W	4.03	4.03	0.00	4060573	16.00
Hillsboro Beach, Town of	06-00101-W	0.88	0.88	0.00	4060615	2.25
Hollywood, City of	06-00038-W	39.38	24.80	8.68	4060642	59.50
Lauderhill, City of	06-00129-W	8.72	7.70	1.02	4060787	16.00
Margate, City of	06-00121-W	9.30	9.30	0.00	4060845	13.50
Miramar, City of	06-00054-W	18.87	15.15	3.15	4060925	17.75
North Lauderdale, City of	06-00004-W	3.65	3.65	0.00	4060976	7.50
North Springs Improvement District	06-00274-W	5.18	5.18	0.00	4064390	6.80
Parkland Utilities, Inc.	06-00242-W	0.35	0.35	0.00	4061957	0.58

Supply Entity/Facility	SFWMD Permit Number	Gross (Raw) Water (mgd)			FDEP PWS ID	Rated Net (Finished) Capacity (mgd)
		Annual Allocation	SAS	FAS		
Pembroke Pines, City of	06-00135-W	15.60	15.60	0.00	4061083	18.00
Plantation, City of	06-00103-W	17.24	17.24	0.00	4061121	24.00
Pompano Beach, City of	06-00070-W	17.75	17.75	0.00	4061129	50.00
Royal Utility Corporation	06-00003-W	0.48	0.48	0.00	4061517	1.00
Seminole Tribe of Florida – Hollywood ^c	N/A ^c	0.53	0.53	0.00	N/A ^c	N/A ^c
Sunrise, City of	06-00120-W	40.07	29.09	10.98	4061408 ^d	51.50
Tamarac, City of	06-00071-W	7.58	7.58	0.00	4061429	16.00
Tindall Hammock Irrigation and Soil Conservation District	06-00170-W	0.74	0.74	0.00	4060419	1.00
Broward County Total		358.24	293.22	60.60		516.40
Miami-Dade County						
Americana Village	13-02004-W	0.26	0.26	0.00	4131403	0.50
Florida City Water and Sewer Department	13-00029-W	2.08	2.08	0.00	4130255	4.00
Homestead, City of	13-00046-W	10.55	10.55	0.00	4130645	19.20
Miami-Dade Water and Sewer Department	13-00017-W	386.07	349.50	36.60	4130871 ^e	461.43
North Miami, City of	13-00059-W	17.27	9.30	7.97	4130977	9.30
North Miami Beach, City of	13-00060-W	38.38	26.31	12.07	4131618	32.00
Miami-Dade County Total		454.61	398.00	56.64		526.43
Monroe County						
Florida Keys Aqueduct Authority ^f	13-00005-W	23.97	17.79	9.70	4134357	29.80
Monroe County Total		23.97	17.79	9.70		29.80
Hendry County						
Seminole Tribe of Florida – Big Cypress ^c	N/A ^c	2.00	2.00	0.00	N/A ^c	N/A ^c
Hendry County Total		2.00	2.00	0.00		
LEC Planning Area Total		1,165.70	993.19	185.82		1,494.63

FAS = Floridan aquifer system; FDEP = Florida Department of Environmental Protection; mgd = million gallons per day; N/A = not applicable; PWS ID = Public Water Supply identification number; SAS = surficial aquifer system; SFWMD = South Florida Water Management District; WWS = Water and Wastewater Services.

^a Withdrawal source is surface water from Clear Lake.

^b Does not treat water, provides raw water to City of Hollywood for treatment before delivery to Broward County District 3, which serves a population but does not have a wellfield or water treatment plant and thus does not have a permit or FDEP water treatment ID.

^c Allocation was established in the Water Rights Compact not through an SFWMD water use permit, and there is no FDEP water treatment ID for the Seminole Tribe of Florida.

^d This system has two FDEP PWS IDs: 4061408 and 4061410.

^e This system has two permit numbers: 4130871 and 4131202.

^f Withdrawals located in Miami-Dade County.

BROWARD COUNTY WATER AND WASTEWATER SERVICES DISTRICT 1

Service Area: All or portions of the cities of Fort Lauderdale, Lauderdale Lakes, Lauderhill, North Lauderdale, Oakland Park, Plantation, Pompano Beach, and Tamarac, and unincorporated areas of Broward County

Description: Potable water supplies are obtained from one SAS wellfield, and water is treated at one WTP using lime softening. Two FAS wells were constructed but not active. The utility may expand the WTP by developing an FAS water source and constructing an RO treatment facility to serve future demands. The utility maintains interconnections with the cities of Fort Lauderdale, Lauderhill, and Tamarac.

Population and Finished Water Demand							
				Existing	Projected		
				2016	2020	2030	2040
Population				81,380	85,750	94,977	101,686
Average 2012-2016 Per Capita (gallons per day finished water)				92			
Potable Water Demands (daily average annual finished water in mgd)				7.49	7.89	8.74	9.36
SFWMD Water Use Permitted Allocation (mgd)							
Potable Water Source				Permit Number 06-00146-W (expires 2028)			
SAS				10.04			
FAS				4.70			
Total Allocation				13.90			
FDEP Potable Water Treatment Capacity (PWS ID # 4060167)							
Permitted Capacity by Source				Cumulative Facility & Project Capacity (mgd)			
				Existing	Projected		
				2016	2020	2030	2040
SAS				16.00	16.00	16.00	16.00
FAS				0.00	0.00	3.00	3.00
Total Potable Capacity				16.00	16.00	19.00	19.00
Nonpotable Alternative Water Source Capacity (mgd)							
Total Nonpotable Capacity				0.00	0.00	0.00	0.00
Project Summary							
Water Supply Projects		Source	Completion Date	Total Capital Cost (\$ million)	Projected Cumulative Design Capacity (mgd)		
					2020	2030	2040
Potable Water							
District 1 water supply improvement alternatives		FAS	2025	\$5.60	0.00	3.00	3.00
Total Potable Water				\$5.60	0.00	3.00	3.00
Nonpotable Water							
No Projects							
Total Nonpotable Water				\$0.00	0.00	0.00	0.00
Total New Water				\$5.60	0.00	3.00	3.00

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CITY OF TAMARAC

Service Area: City of Tamarac and portions of the City of North Lauderdale

Description: Potable water supplies are obtained from one SAS wellfield, and water is treated at one WTP using lime softening. The City maintains interconnections with the BCWWS and the cities of Coral Springs, Fort Lauderdale, and North Lauderdale.

Population and Finished Water Demand							
				Existing	Projected		
				2016	2020	2030	2040
Population				61,083	63,099	66,837	68,835
Bulk Population				2,296	2,216	1,963	1,663
Average 2012-2016 Per Capita (gallons per day finished water)				98			
Potable Water Demands (daily average annual finished water in mgd)				5.99	6.18	6.55	6.75
Bulk Potable Water Demands (daily average annual finished water in mgd from City of Fort Lauderdale)				0.23	0.22	0.19	0.16
Total Potable Water Demands (daily average annual finished water in mgd)				6.22	6.40	6.74	6.91
SFWMD Water Use Permitted Allocation (mgd)							
Potable Water Source				Permit Number 06-00071-W (expires 2034)			
SAS				7.58			
FAS				0.00			
Total Allocation				7.58			
FDEP Potable Water Treatment Capacity (PWS ID # 4061429)							
Permitted Capacity by Source				Cumulative Facility & Project Capacity (mgd)			
				Existing	Projected		
				2016	2020	2030	2040
SAS				16.00	16.00	16.00	16.00
FAS				0.00	0.00	0.00	0.00
Total Potable Capacity				16.00	16.00	16.00	16.00
Nonpotable Alternative Water Source Capacity (mgd)							
Total Nonpotable Capacity				0.00	0.00	0.00	0.00
Project Summary							
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ million)	Projected Cumulative Design Capacity (mgd)			
				2020	2030	2040	
Potable Water							
No Projects							
Total Potable Water			\$0.00	0.00	0.00	0.00	
Nonpotable Water							
No Projects							
Total Nonpotable Water			\$0.00	0.00	0.00	0.00	
Total New Water			\$0.00	0.00	0.00	0.00	

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CITY OF FORT LAUDERDALE

Service Area: Cities of Fort Lauderdale, Lauderdale Lakes, City of North Lauderdale, Oakland Park, and Wilton Manors; portions of the City of Dania Beach, City of Hollywood, City of Tamarac, City of Lauderdale; Port Everglades; towns of Lauderdale-By-The-Sea and Davie; and villages of Lazy Lake and Sea Ranch Lakes

Description: Potable water supplies are obtained from two SAS wellfields, and water is treated at two WTPs: Fiveash WTP uses lime softening and Peele-Dixie WTP uses nanofiltration. The City plans to expand the Peele-Dixie WTP and install FAS wells by 2030. The City sells finished bulk water to the Town of Davie and City of Tamarac. The City maintains interconnections with the BCWWS, Town of Dania Beach, Town of Davie, City of Plantation, and City of Pompano Beach.

Population and Finished Water Demand							
				Existing	Projected		
				2016	2020	2030	2040
Population				223,112	240,549	279,628	311,157
Average 2012-2016 Per Capita (gallons per day finished water)				170			
Potable Water Demands (daily average annual finished water in mgd)				37.93	40.89	47.54	52.90
SFWMD Water Use Permitted Allocation (mgd)							
Potable Water Source				Permit Number 06-00123-W (expires 2028)			
SAS				52.55			
FAS				8.64			
Bulk Raw Water (Finished Water Sale to Town of Davie)				(0.002-0.16)			
Bulk Raw Water (Finished Water Sale to City of Tamarac)				(0.17-0.24)			
Total Allocation				61.19			
FDEP Potable Water Treatment Capacity (PWS ID # 4060486)							
Permitted Capacity by Source				Cumulative Facility & Project Capacity (mgd)			
				Existing	Projected		
				2016	2020	2030	2040
SAS				90.00	90.00	90.00	90.00
FAS				0.00	0.00	6.00	6.00
Total Potable Capacity				90.00	90.00	96.00	96.00
Nonpotable Alternative Water Source Capacity (mgd)							
Total Nonpotable Capacity				0.00	0.00	0.00	0.00
Project Summary							
Water Supply Projects	Source	Completion Date	Total Capital Cost (\$ million)	Projected Cumulative Design Capacity (mgd)			
				2020	2030	2040	
Potable Water							
Dixie Floridan Water Supply/WTP	FAS	2030	\$22.90	0.00	6.00	6.00	
Total Potable Water			\$22.90	0.00	6.00	6.00	
Nonpotable Water							
No Projects							
Total Nonpotable Water			\$0.00	0.00	0.00	0.00	
Total New Water			\$22.90	0.00	6.00	6.00	

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APPENDIX 3-A

POPULATION, RAW AND FINISHED WATER PROJECTIONS, AND MOR DATA

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

City of Tamarac Population Projections

Year	Populations (Served by)				
	BCWWS Area - District 1	Fort Lauderdale Area (TUE)*	Tamarac Utility Service Area (TUW)	Tamarac Public Services Dept. (TPSD)	City of Tamarac (Total)
2018	1,998	2,044	62,012	62,012	66,054
2019	2,190	2,040	62,498	62,498	66,728
2020	2,382	2,037	62,991	62,991	67,410
2021	2,394	2,031	63,672	63,672	68,098
2022	2,407	2,025	64,361	64,361	68,793
2023	2,419	2,019	65,057	67,076	69,495
2024	2,432	2,013	65,760	67,773	70,205
2025	2,444	2,007	66,470	68,477	70,921
2026	2,457	2,012	67,177	69,189	71,646
2027	2,470	2,017	67,890	69,907	72,377
2028	2,482	2,022	68,611	70,633	73,116
2029	2,495	2,027	69,340	71,367	73,862
2030	2,508	2,032	70,076	72,108	74,616
2031	2,527	2,036	70,814	72,851	75,378
2032	2,546	2,041	71,560	73,601	76,148
2033	2,566	2,045	72,314	74,359	76,925
2034	2,585	2,050	73,076	75,126	77,710
2035	2,604	2,054	73,846	75,900	78,504
2036	2,616	2,051	74,638	76,690	79,305
2037	2,627	2,049	75,439	77,488	80,115
2038	2,639	2,046	76,248	78,294	80,933
2039	2,650	2,044	77,065	79,109	81,759
2040	2662	2,041	77,891	79,932	82,594

Notes:

* TUE population served by Ft. Lauderdale to be acquired and combined into TUW's service area starting 2023 (values italicized)

	- Orange cells are projections obtained from Broward County Comprehensive Plan (Updated April 2020)
	- Green cells are calculated from subtracting District 1 & TUE service populations from the projected City of Tamarac total populations (derived from US Census Bureau)
	- Blue cell calculation: TPSD = TUE + TUW
	- Purple cells are projections for the entire City of Tamarac obtained from the historical US Census Bureau data (as of 2018)

- There are two (2) areas within the City of Tamarac that are being served by Broward County and the City of Ft. Lauderdale. Lakes of Carriage Hills (served by Broward County) and the West Area of Fort Lauderdale (served by Ft. Lauderdale).
- City of Tamarac serves The Courtyards in North Lauderdale which has a population of 432 (included in TUW). This population is considered to be at a built-out stage.
- Total City populations between years 2020 and 2040 were calculated using the average percent change year-to-year from

Average Yearly % Change = 1.01021

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Service Area: City of Tamarac (TUW)

PAST WATER USE (RAW WATER)

YEAR	PAST POPULATION*	PER CAPITA USAGE (GPD)	TOTAL ANNUAL USE (MG)	AVERAGE MONTH USE (MG)	RATIO MAX:AVE	MAXIMUM MONTH USE (MG)	AVERAGE DAILY USE (MGD)*	MAXIMUM DAILY USE (MGD)
2014	59,798	96	2,104	175	1.10	192	5.765	6.800
2015	60,474	98	2,162	180	1.04	188	5.924	6.970
2016	61,297	98	2,199	183	1.09	200	6.025	7.090
2017	61,693	99	2,230	186	1.04	194	6.109	6.872
2018	62,012	97	2,201	183	1.11	204	6.031	7.625
2019	62,498	99	2,262	188	1.05	197	6.197	7.230
2020	62,991	101	2,313	193	1.05	202	6.338	7.290

*US Census (2018)

*MORs from TUW

Average per capita use: **98.4**
 Per capita use (for projections): **105.0** Average peaking (5yrs): **1.068**

PROJECTED WATER USE (RAW WATER)

YEAR	PROJECTED POPULATION	PER CAPITA USAGE (GPD)	TOTAL ANNUAL USE (MG)	AVERAGE MONTH USE (MG)	RATIO MAX:AVE	MAXIMUM MONTH USE (MG)	AVERAGE DAILY USE (MGD)	MAXIMUM DAILY USE (MGD)
2021	63,672	105.0	2,440	203	1.07	217	6.686	7.143
2022	64,361	105.0	2,467	206	1.07	220	6.758	7.220
2023	67,076	105.0	2,571	214	1.07	229	7.043	7.525
2024	67,773	105.0	2,597	216	1.07	231	7.116	7.603
2025	68,477	105.0	2,624	219	1.07	234	7.190	7.682
2026	69,189	105.0	2,652	221	1.07	236	7.265	7.762
2027	69,907	105.0	2,679	223	1.07	239	7.340	7.842
2028	70,633	105.0	2,707	226	1.07	241	7.417	7.924
2029	71,367	105.0	2,735	228	1.07	243	7.494	8.006
2030	72,108	105.0	2,764	231	1.07	247	7.571	8.089
2031	72,851	105.0	2,792	233	1.07	248	7.649	8.172
2032	73,601	105.0	2,821	235	1.07	251	7.728	8.257
2033	74,359	105.0	2,850	237	1.07	254	7.808	8.342
2034	75,126	105.0	2,879	240	1.07	256	7.888	8.428
2035	75,900	105.0	2,909	243	1.07	260	7.969	8.514
2036	76,690	105.0	2,939	245	1.07	262	8.052	8.603
2037	77,488	105.0	2,970	247	1.07	264	8.136	8.693
2038	78,294	105.0	3,001	250	1.07	267	8.221	8.783
2039	79,109	105.0	3,032	253	1.07	270	8.306	8.874
2040	79,932	105.0	3,063	256	1.07	273	8.393	8.967

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Service Area: City of Tamarac (TUW)

PAST WATER USE (TREATED WATER)

YEAR	PAST POPULATION*	PER CAPITA USAGE (GPD)	TOTAL ANNUAL USE (MG)	AVERAGE MONTH USE (MG)	RATIO MAX:AVE	MAXIMUM MONTH USE (MG)	AVERAGE DAILY USE (MGD)*	MAXIMUM DAILY USE (MGD)
2014	59,798	95	2,074	173	1.07	185	5.682	6.460
2015	60,474	96	2,115	176	1.06	186	5.795	6.730
2016	61,297	99	2,207	184	1.07	197	6.046	6.990
2017	61,693	102	2,287	191	1.04	198	6.265	7.251
2018	62,012	103	2,329	194	1.08	210	6.382	8.200
2019	62,498	102	2,335	195	1.05	204	6.397	7.130
2020	62,991	103	2,378	198	1.04	207	6.516	7.280

*US Census (2018)

*MORs from TUW

Average per capita use:	100.0	
Per capita use from WUP:	110.0	Average peaking (3yrs): 1.059
Per capita use (for projections):	105.0	

PROJECTED WATER USE (TREATED WATER)

YEAR	PROJECTED POPULATION	PER CAPITA USAGE (GPD)	TOTAL ANNUAL USE (MG)	AVERAGE MONTH USE (MG)	RATIO MAX:AVE	MAXIMUM MONTH USE (MG)	AVERAGE DAILY USE (MGD)	MAXIMUM DAILY USE (MGD)
2021	63,672	105.0	2,440	203	1.06	215	6.686	7.078
2022	64,361	105.0	2,467	206	1.06	218	6.758	7.154
2023	67,076	105.0	2,571	214	1.06	227	7.043	7.456
2024	67,773	105.0	2,597	216	1.06	229	7.116	7.534
2025	68,477	105.0	2,624	219	1.06	232	7.190	7.612
2026	69,189	105.0	2,652	221	1.06	234	7.265	7.691
2027	69,907	105.0	2,679	223	1.06	236	7.340	7.771
2028	70,633	105.0	2,707	226	1.06	239	7.417	7.852
2029	71,367	105.0	2,735	228	1.06	241	7.494	7.933
2030	72,108	105.0	2,764	230	1.06	244	7.571	8.016
2031	72,851	105.0	2,792	233	1.06	246	7.649	8.098
2032	73,601	105.0	2,821	235	1.06	249	7.728	8.181
2033	74,359	105.0	2,850	237	1.06	251	7.808	8.266
2034	75,126	105.0	2,879	240	1.06	254	7.888	8.351
2035	75,900	105.0	2,909	242	1.06	256	7.969	8.437
2036	76,690	105.0	2,939	245	1.06	259	8.052	8.525
2037	77,488	105.0	2,970	247	1.06	262	8.136	8.613
2038	78,294	105.0	3,001	250	1.06	265	8.221	8.703
2039	79,109	105.0	3,032	253	1.06	267	8.306	8.794
2040	79,932	105.0	3,063	255	1.06	270	8.393	8.885

Raw Water Monthly Operating Report (MOR) Data

	Month	Population Served by TUW	Avg Daily Water Production (mgd)		Per Capita Water Production (gpcd)	Max day	Max month
2014	January	59,798	5.613	5.765	96.40	6.800	192
	February		5.667				
	March		5.781				
	April		6.145				
	May		6.195				
	June		5.678				
	July		5.558				
	August		5.697				
	September		5.534				
	October		5.668				
	November		5.872				
	December		5.766				
2015	January	60,474	5.818	5.924	97.96	6.970	188
	February		5.956				
	March		6.001				
	April		6.324				
	May		6.025				
	June		6.269				
	July		5.982				
	August		5.498				
	September		5.709				
	October		5.708				
	November		5.984				
	December		5.811				
2016	January	61,297	5.597	6.025	98.29	7.090	200
	February		5.729				
	March		5.952				
	April		6.391				
	May		6.448				
	June		6.139				
	July		6.231				
	August		6.161				
	September		5.77				
	October		5.706				
	November		6.105				
	December		6.071				
2017	January	61,693	6.072	6.109	99.03	6.872	194
	February		6.273				
	March		6.253				
	April		6.288				
	May		6.228				
	June		5.996				
	July		6.129				
	August		6.051				
	September		5.955				
	October		6.003				
	November		5.935				
	December		6.128				
2018	January	62,012	6.067	6.031	97.26	7.625	204
	February		6.303				
	March		6.596				
	April		6.301				
	May		5.814				
	June		5.722				
	July		5.813				
	August		5.819				
	September		5.789				
	October		5.999				
	November		6.07				
	December		6.083				
2019	January	62,498	6.049	6.197	99.16	7.230	197
	February		6.018				
	March		6.095				
	April		6.366				
	May		6.371				
	June		6.288				
	July		6.283				
	August		6.07				
	September		6.237				
	October		6.236				
	November		6.227				
	December		6.124				
2020	January	62,991	6.071	6.338	100.62	7.290	202
	February		6.059				
	March		6.511				
	April		6.665				
	May		6.48				
	June		6.297				
	July		6.285				
	August						
	September						
	October						
	November						
	December						

Average PCUD 2014-2018
98.39

Treated Water Monthly Operating Report (MOR) Data

	Month	Population Served by TUW	Avg Daily Water Production (mgd)		Per Capita Water Production (gpcd)	Max day	Max month
2014	January	59,798	5.782	5.682	95.03	6.460	185
	February		5.705				
	March		5.733				
	April		5.859				
	May		5.972				
	June		5.597				
	July		5.387				
	August		5.53				
	September		5.459				
	October		5.609				
	November		5.836				
	December		5.719				
2015	January	60,474	5.742	5.795	95.82	6.730	186
	February		5.842				
	March		5.897				
	April		6.025				
	May		5.817				
	June		6.011				
	July		6.005				
	August		5.708				
	September		5.467				
	October		5.692				
	November		5.7				
	December		5.631				
2016	January	61,297	5.652	6.046	98.63	6.990	197
	February		5.59				
	March		5.888				
	April		6.279				
	May		6.367				
	June		6.117				
	July		6.1				
	August		6.053				
	September		5.966				
	October		5.93				
	November		6.295				
	December		6.311				
2017	January	61,693	6.329	6.265	101.56	7.251	198
	February		6.392				
	March		6.399				
	April		6.488				
	May		6.388				
	June		6.116				
	July		6.265				
	August		6.193				
	September		6.161				
	October		6.052				
	November		6.113				
	December		6.288				
2018	January	62,012	6.326	6.382	102.91	8.200	210
	February		6.536				
	March		6.773				
	April		6.477				
	May		6.064				
	June		6.108				
	July		6.151				
	August		6.154				
	September		6.237				
	October		6.543				
	November		6.596				
	December		6.617				
2019	January	62,498	6.578	6.397	102.36	7.130	204
	February		6.559				
	March		6.433				
	April		6.390				
	May		6.351				
	June		6.313				
	July		6.349				
	August		6.178				
	September		6.364				
	October		6.45				
	November		6.447				
	December		6.355				
2020	January	62,991	6.317	6.516	103.44	7.280	207
	February		6.281				
	March		6.679				
	April		6.805				
	May		6.607				
	June		6.448				
	July		6.473				
	August						
	September						
	October						
	November						
	December						

Average PCUD 2014-2020
99.96

APPENDIX 3-B

**WATER SUPPLY PLAN - BROWARD COUNTY COMPREHENSIVE
PLAN 2020
(POPULATION RELEVANT DATA)**



Adopted Amendment 20-T1
Broward Next 2.0 Water Supply Plan Amendments
Submittal for Compliance Review (DEO 19-08ESR)
April 2020

Contents

Staff Report and Attachments

Attachment A-Ordinance [Note: The enclosed Ordinance was adopted; however, a signed copy will be provided under separate cover due to delayed processing of Ordinances as a result of COVID-19.]

Attachment B-South Florida Water Management District Comments and County Responses
Attachment C-2020 Broward County Water Supply Facilities Work Plan

2018 Broward County Comprehensive Plan



Broward County Board of County Commissioners
Environmental Protection and Growth Management Department
Planning and Development Management Division



Water Supply Facilities Work Plan

Table WS6 BCWWS Service Area Population Projections 2015-2040¹

BCWWS Service Area	2015	2020	2025	2030	2035	2040
District 1	75,931	78,718	84,292	89,479	92,895	95,299
District 2 Total	110,278	113,023	114,814	119,226	121,410	122,631
D2	55,052	54,510	55,702	57,779	58,493	58,672
Coconut Creek	55,226	58,513	59,112	61,447	62,917	63,959
District 3A	16,321	16,908	18,083	19,075	19,686	20,109
District 3BC	36,263	37,486	38,889	41,146	42,639	43,625
BCWWS Total	238,793	246,135	256,078	267,859	276,630	281,278

1. Based on 2017 BCPDMD TAZ estimate translation to UAZ populations performed by Brown and Caldwell for BCWWS, 2019

Table WS7 District 1 - Population Projection by Municipality ¹

Municipality	2015	2020	2025	2030	2035	2040	2045
DISTRICT 1 TOTAL	75,931	78,718	84,292	89,479	92,895	95,299	97,665
FORT LAUDERDALE	7,306	7,856	8,830	9,311	9,670	9,962	10,293
LAUDERHILL	8,376	8,237	9,116	10,714	11,664	12,411	13,180
LAUDERDALE LAKES	31,928	32,479	33,305	35,327	36,650	37,554	38,398
NORTH LAUDERDALE	6,844	6,719	8,213	8,236	8,358	8,350	8,325
OAKLAND PARK	12,113	13,109	12,914	13,374	13,545	13,639	13,680
POMPANO BEACH	521	561	586	632	660	682	705
PLANTATION	184	263	591	803	973	1,133	1,315
TAMARAC	1,423	2,382	2,444	2,508	2,604	2,662	2,709
BMSD	7,236	7,112	8,293	8,574	8,771	8,906	9,060

1. Based on 2017 BCPDMD TAZ estimate translation to UAZ populations performed by Brown and Caldwell for BCWWS, 2019

Table WS8 District 2 - Population Projection by Municipality ¹

Municipality	2015	2020	2025	2030	2035	2040	2045
DISTRICT 2 TOTAL	55,052	54,510	55,702	57,779	58,493	58,672	58,677
COCONUT CREEK	66	65	65	66	66	65	64
DEERFIELD BEACH	22,823	22,467	23,085	24,193	24,617	24,820	24,925
LIGHTHOUSE POINT	8,970	8,871	8,743	8,908	8,969	8,981	8,956
POMPANO BEACH	23,193	23,107	23,809	24,612	24,841	24,806	24,732

1. Based on 2017 BCPDMD TAZ estimate translation to UAZ populations performed by Brown and Caldwell for BCWWS, 2019

Plantation and BCWWS service area. The population of Fort Lauderdale and the other municipalities in the water service area was forecasted based on 2017 BCPDMD TAZ estimate translation to UAZ populations performed by EPCRD using 2018 SFWMD LECWSP Service Area Boundaries. The City of Fort Lauderdale Utility Service Area population projections for 2015-2040 are shown in Table WS11 and were obtained from the City's Draft Water Supply Facilities Work Plan Update for 2020.

Table WS11 City of Fort Lauderdale Utility Service Area Population by Jurisdiction, Actual 2015 and Forecasted 2020 to 2040

Jurisdiction	2015	2020	2025	2030	2035	2040
TOTAL	235,840	241,454	274,470	292,768	304,918	315,109
Fort Lauderdale	175,228	179,997	208,747	222,915	232,419	240,134
Lauderdale by The Sea	4,147	3,689	3,996	3,940	3,890	3,850
Sea Ranch Lakes	700	693	680	715	734	746
BMSD	6,457	7,060	7,854	8,561	8,854	9,486
Davie	529	526	700	821	919	1,016
Lauderdale Lakes	381	383	378	386	386	390
Lauderhill	2,917	2,862	3,085	3,306	3,450	3,571
Lazy Lake	26	25	27	29	30	31
North Lauderdale	358	352	1,145	1,145	1,133	1,123
Oakland Park	31,111	31,852	32,719	34,693	36,114	37,145
Tamarac	2,054	2,037	2,007	2,032	2,054	2,041
Wilton Manors	11,932	11,878	13,132	14,225	14,935	15,576
Port Everglades	Population is included in BMSD					

Source: City of Fort Lauderdale Draft Water Supply Facilities Work Plan Update for 2020 - Based on BEBR data.

City of Hollywood

Broward County works closely with the City of Fort Lauderdale through involvement in the County Commission's Water Advisory Board and its Technical Advisory Committee, Southeast Florida Utility Council, Broward Water Partnership and other area technical and policy groups. The City's populations were obtained from the City's DRAFT Water Supply Facility Work Plan 2020 Update. The City of Hollywood's service area includes population projection of approximately 230,000 in year 2040, Table WS12 below. Through the bulk sales agreements with BCWWS, the City of Hollywood provides treated water to BCWWS

APPENDIX 3-C

WATER SUPPLY PLAN - TAMARAC COMPREHENSIVE PLAN 2019 (SECTIONS IV, V, VII & VIII)



City of Tamarac

Comprehensive Plan

Volume I: Goals, Objectives & Policies

**Volume 1: Principles, Guidelines, Goals &
Recommendations**

Adopted: June 11, 2008

Amended: July 8, 2009

Amended: December 14, 2016

Amended: July 11, 2018



City of Tamarac

Comprehensive Plan

Adoption Date & Ordinance for Elements of Volume I:

- I. Future Land Use Element -adopted July 11, 2018, Ordinance Number 2018-08
- II. Transportation Element -adopted June 11,2008, Ordinance Number 2008-08
- III. Housing Element -adopted June 11, 2008, Ordinance Number 2008-08
- IV. Infrastructure Element -adopted December 14, 2016, Ordinance Number 2016-19
- V. Conservation Element -adopted December 14, 2016, Ordinance Number 2016-19
- VI. Recreation & Open Space Element -adopted June 11, 2008, Ordinance Number 2008-08
- VII. Intergovernmental Coordination Element -adopted December 16, 2016, Ordinance Number 2016-19
- VIII. Capital Improvements Element -adopted December 14, 2016, Ordinance Number 20016-19
- IX. Public School Facilities Element -adopted June 11, 2008, Ordinance Number 2008-08
- X. Economic Development Element – adopted July 11, 2018, Ordinance Number 2018-07

IV. INFRASTRUCTURE ELEMENT

VOLUME I: GOALS, OBJECTIVES & POLICIES

City of Tamarac

IV. INFRASTRUCTURE ELEMENT

GOAL

The City will provide, or cause to be provided, and maintain essential public facilities serving all areas of the City and meeting all public health and safety standards for the following: the collection, transmission and treatment of sanitary sewage; the drainage of surface water; potable water supply, treatment, and transmission; the collection and disposal of solid waste including hazardous wastes, and for recharge of the natural groundwater aquifer.

Objective 1

The City will correct existing facility deficiencies, maintain adequate levels-of-service, and provide for future growth.

Monitoring and Evaluation:

- Each facility has been assigned a specific and measurable Level of Service (LOS) Standard. Population projections and LOS standards are used in combination to determine if any facility deficiencies are likely to exist in the five and ten-year planning horizon. Any facility deficiencies identified which require capital improvements are addressed in a Capital Improvements Schedule contained in the Capital Improvement Element (CIE). The CIE is updated annually and sent to the State Planning Agency along with a citywide Capital Improvement Plan to demonstrate the financial feasibility of the CIE.

Policy 1.1 Through its concurrency management system, as adopted in its Land Development Code, the City will monitor the growth of population, building permits and certificates of occupancy, and available capacities. The concurrency management system identifies the specific procedures for measuring facility capacity and for evaluating service availability against demand.

Policy 1.2 The City of Tamarac shall use the following LOS standards:

1. SANITARY SEWER

- Western Service Area (Broward County Wastewater Treatment Facilities)
124 gallons per capita per day.
- Eastern Service Area (Fort Lauderdale Wastewater Treatment Facilities)
131 gallons per capita per day.

2. SOLID WASTE

- Broward County Disposal Facilities (BIC Landfill and Resource Recovery Facility)
8.9 pounds per capita per day.

- Tamarac Collection (Contractual Service Providers)
All solid waste collection provided by City contracted service providers.

3. DRAINAGE

- FEMA criteria for minimum floor elevation and protection of floodplains;
- Standards as established by the Broward County Department of Natural Resources, South Florida Water Management District, Broward County Water Management Division, and the City of Tamarac for off-site discharge, on-site retention, and best management practices for pollutant discharge; and
- Ten (10) year storm will produce a headwater no higher than four (4) inches above the lowest catch basin rim in parking lots or two (2) inches below the edge of pavement in subdivisions.

4. POTABLE WATER

- Western Service Area (Tamarac Water Treatment Plant)
110 gallons per capita per day.
- Eastern Service Area (Fort Lauderdale Water Treatment Plants)
179 gallons per capita per day.
- BCU Service Area (Broward County Water Treatment Plants)
115 gallons per capita per day.

Policy 1.3	The City shall ensure that all city funded projects included in the schedule of capital improvements are also included in the City's five-year Capital Improvement Program and annual capital budget if appropriate.
Policy 1.4	All improvements for repair or replacement of facilities to correct existing deficiencies shall be consistent with the adopted level of service (LOS) standards for those facilities.
Policy 1.5	All improvements for expansion or increase in capacity of facilities to meet demand shall be consistent with the adopted level of service (LOS) standards for those facilities.
Policy 1.6	The City will continue to require that developers provide basic water distribution and wastewater collection systems and drainage to serve their development prior to issuance of a Certificate of Occupancy and provide a fair share of the capital costs of major system improvements necessary to serve development.
Policy 1.7	Prior to approving a building permit or its functional equivalent, the City shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of

issuance of a certificate of occupancy or its functional equivalent.

- Policy 1.8 The City will continue to collect the stormwater utility fee, enforce the Development Standards and Criteria and other code requirements pertaining to drainage. Development orders may be issued only if facilities and services are available to meet the adopted level of service standards concurrent with the impacts of development, as required by SS. 163.3202(2)(g), F.S.

Objective 2

The City of Tamarac will ensure that capacity is available at all shared facilities by coordinating with other local governments and appropriate government agencies.

Monitoring and Evaluation:

- At least once a year, the City shall review all infrastructure related interlocal agreements to ensure that all entities are in compliances with the terms of the agreement and that the agreements are up-to-date.

- Policy 2.1 All interlocal agreements will always be kept current and upheld according to the terms specified in the agreement.

- Policy 2.2 The City will cooperate and coordinate with Broward County, Fort Lauderdale, and other adjoining municipalities, the South Florida Water Management District, and any other units or agencies of government with planning, management, maintenance, or monitoring responsibilities for sanitary sewers, solid waste including hazardous waste, potable water, or drainage and in the extension of or increase in capacity of facilities to meet future needs.

- Policy 2.3 The City hereby adopts by reference the City of Tamarac's 2016 10-Year Water Supply Facilities Work Plan (dated May 16, 2016), adopted on **December 14, 2016**, and the capital improvement projects contained therein. The Work Plan will be updated, at a minimum, every 5 years, as required by Section 163.3177(6)(c), F.S., within 18 months after the governing board of the South Florida Water Management District approves updates to the Lower East Coast Water Supply Plan. The City's 2016 10-Year Water Supply Facilities Work Plan Update is designed to: assess current and projected potable water demands; evaluate the sources and capacities of available water supplies; and, identify those water supply projects, using all available technologies, necessary to meet the City's water demands for a 10-year period.

- Policy 2.4 The City hereby adopts by reference the Fort Lauderdale Water Supply Facilities Work Plan, 2015, and the capital improvement projects contained therein.

- Policy 2.5 The City hereby adopts by reference the Broward County 10-Year Water Supply Facilities Work Plan, 2015, and the capital improvement projects contained therein.

- Policy 2.6 The City hereby adopts by reference the South Florida Water Management District's *2013 Lower East Coast Water Supply Plan, Update*.

Objective 3

The City will maximize the use of existing facilities, and will take appropriate actions to extend the useful life of existing public facilities in order to reduce capital expenditures, conserve public financial resources, and maintain the level of service of existing facilities.

Monitoring and Evaluation:

- The City shall monitor and evaluate the condition and use of each facility as it is appropriate.

Policy 3.1 The City will regularly monitor the operation and effectiveness of all elements of the system for which it is responsible, and repair, upgrade and maintain existing public facilities as necessary.

Policy 3.2 The City will continue to fund capital improvements needed to maintain the level of service for all facilities.

Policy 3.3 The City will continue to inspect sanitary sewer mains and repair or replace faulty mains in order to prevent increased infiltration and inflow of stormwater and debris into the gravity collection system for the purposes of reducing cost to the City and users and extend the present level of service for sanitary sewers.

Objective 4

The City will continue to ensure, through development review at the time of site plan approval, that adequate facility capacity is available, or will be available when needed, to serve development.

Monitoring and Evaluation:

- The City shall periodically monitor its concurrency management system to make sure that it is current and accurate. Further, the City shall review its capital improvement schedule to ensure that capacity expansions will be available to served new development when appropriate.

Policy 4.1 The City will maintain a five-year schedule of capital improvement needs for all infrastructure related facilities as consistent with the Capital Improvements Element of this Plan.

Policy 4.2 The City shall issue no development permit or order which results in a reduction of the level of service for the affected public facilities below the level of service provided for and adopted in this Comprehensive Plan.

Policy 4.3 The City will continually monitor federal, State and local grant programs for infrastructure planning, design and construction funding which Tamarac could utilize to build necessary public facilities.

Policy 4.4 The City will update its 10-Year Water Supply Facilities Work Plan within 18 months

after any update to South Florida Water Management District's Lower East Coast Water Supply Plan as required by state law.

- Policy 4.5 Implementation of the City's 2016 10-Year Water Supply Facilities Work Plan through coordination with the South Florida Water Management District, Broward County and Fort Lauderdale shall ensure that adequate water supplies and public facilities are available to serve the water supply demands of any population growth that the City may experience. The City coordinates with Broward County and Fort Lauderdale in development permitting and capacity allocations and through the resources provided by Broward County and Fort Lauderdale.
- Policy 4.6 The City shall coordinate the planning of potable water and sanitary sewer facilities, water supply sources, demands, other services and level-of-service standards through the sharing of data with Broward County and Fort Lauderdale, South Florida Water Management District, and through the 2013 Lower East Coast Water Supply Plan Update, as necessary.
- Policy 4.7 If, in the future there are issues associated with water supply, conservation or reuse the City will immediately contact Broward County and Fort Lauderdale to address the corresponding issue(s). In addition, the City will follow adopted communication protocols with Broward County and Fort Lauderdale to communicate and/or prepare an appropriate action plan to address any relevant issue(s) associated with water supply, conservation or reuse.

Objective 5

The City shall take appropriate steps to ensure the conservation and protection of both the quality and quantity of the City's potable water resources for present and future residents of the City through water use conservation, the protection of wells currently in use by the City for residential, commercial, industrial, and emergency purposes, and their cones of influence; and protection and expansion of the natural groundwater recharge area within urban development.

Monitoring and Evaluation:

- The City shall evaluate its conservation programs on an annual basis to ensure that they are effective.

- Policy 5.1 The City will continue to require, in wellfield protection areas as part of development review or other permitting including Occupational Licensing, disclosure by all business and industry of materials, processes, and waste byproducts which may be introduced into the environment and which may be potentially harmful to life and health or interfere with the effective treatment and disposal of waterborne wastes. Substances which cannot be effectively managed or treated within acceptable public health and environmental standards, or safely and legally disposed of by the business or industry as certified by the

disposal agency, will be prohibited.

- Policy 5.2 The City will continue to participate in the enforcement of the Broward County Wellfield Protection Ordinance and will prohibit through zoning, site design and other review and permitting procedures, uses and activities which potentially threaten water quality.
- Policy 5.3 The City will continue to monitor its water production and distributive systems to ensure minimum water loss and the maintenance of acceptable ratios of raw water pumped in to water treated and distributed (Utility Leak Detection Program).
- Policy 5.4 The City will continue to monitor and enforce ordinances requiring water conserving fixtures in new construction and major renovation, and will maintain other policies directed toward water conservation such as pressure reduction in the potable water distribution system.
- Policy 5.5 The City will maintain its landscape ordinance and landscape irrigation systems ordinance which requires that a minimum of 50% water conserving native plant material be used in all landscape plans.
- Policy 5.6 In the interest of protecting surface waters from pollutants carried by storm runoff and increasing infiltration and recharge of the groundwater aquifer, the City will require in its development regulations a minimum percentage of pervious surface area, and promote the development of stormwater retention systems which contribute to recharge of the ground water aquifer.
- Policy 5.7 The City will support the SFWMD, the 2013 Lower East Coast Water Supply Plan Update, its conservation initiatives, and other relevant jurisdictions' water reuse projects and the implementation of new regulations or programs designed to increase the volume of reclaimed water used.
- Policy 5.8 The City shall continue to coordinate future water planning and conservation efforts with the City of Fort Lauderdale, Broward County, and the South Florida Water Management District.
- Policy 5.9 The City shall continue to support and improve programs that promote water conservation in a cost-effective manner, including Public Information Programs.
- Policy 5.10 The City will participate, when warranted, in the SFWMD's Water Savings Incentive Program (WaterSIP) for large-scale retrofits as recommended by the *2013 Lower East Coast Water Supply Plan Update*.
- Policy 5.11 Adopt, a model landscape code, based on Broward County's "Landscaping for Protection of Water Quality and Quantity" Ordinance.
- Policy 5.12 Continue to utilize the Filter Backwash Water Recovery Basin in order to recover potable water during the water treatment process.

Objective 6

The City will continue to maintain the public waterways, lakes, and canals within its jurisdiction now and in the future, and cooperate with the SFWMD in maintaining the function of the public canal system and the water quality of the primary drainage system under its jurisdiction.

Monitoring and Evaluation:

- The City will monitor its Code, administrative policies and programs concerning stormwater retention, and the extension and maintenance of the waterway system under its jurisdiction.

- Policy 6.1 The City will prevent actions which would reduce the quality of water in its waterways below Class III.
- Policy 6.2 The City will maintain and update as necessary its stormwater utility fee ordinance which provides for the extension, restoration, and maintenance of the City's waterway drainage system.
- Policy 6.3 The City will continue to enforce, as a part of this Land Development Code, requirements regulating land clearance and site grading activity in order to control non-point source pollution and filtration of the City's stormwater retention areas and waterways.

V. CONSERVATION ELEMENT
VOLUME I: GOALS, OBJECTIVES & POLICIES

City of Tamarac

V. CONSERVATION ELEMENT

GOAL

Conserve, protect, and appropriately manage the City's natural resources.

Objective 1

The City will monitor and maintain its codes and ordinances, especially those dealing with platting, site planning, and subdivision design for the impact of their enforcement on the physical environment and to ensure that maximum practical protection is afforded thereby to the principal elements of the environment.

Monitoring and Evaluation:

- Record of enforcement of applicable City codes and ordinances.

Policy 1.1 During the planning period, the Community Development, Utilities and the Public Works Departments will review the land development regulations to identify any ways in which the codes require actions which are not sensitive to the environment and ways in which actions to protect the environment can be improved. This analysis will result in appropriate amendments to the Codes during the planning period.

Objective 2

The City will maintain and update (as necessary) its administrative procedures, especially those dealing with water supply and use, to ensure that optimum conservation of the ground water resource is achieved in concert with Broward County, the South Florida Water Management District (SFWMD), and other local government agencies.

Monitoring and Evaluation:

- Maintain and update applicable administrative procedures.

Policy 2.1 The Utilities, Building and Public Works Departments will review codes and procedures to identify ways to increase water conservation and ways in which the codes and procedures might be inhibiting water conservation. The analysis will result, during the planning period, in appropriate amendments to the codes and procedures.

Policy 2.2 The City shall utilize measures such as those outlined in the SFWMD's *Model Water Shortage Ordinance*, and the Florida Department of Environmental Protection's (FDEP) *Florida Water Conservation Initiative* to address water usage so that a reduction in the per capita use of water is realized.

Policy 2.3 The City shall enforce lawn irrigation restrictions established by SFWMD and Broward County as updated.

Policy 2.4 The City will continue to prohibit through land use, zoning, and site design and other review and permitting procedures, uses and activities which potentially threaten water quality.

Policy 2.5 The City shall consider the adoption of an ordinance, such as the “Landscaping for Protection of Water Quality and Quantity” Ordinance that will encourage water conservation initiatives as recommended by Broward County such as, Naturescape Irrigation, Naturescape Broward and Know the Flow, the SFWMD, the Florida Department of Environmental Protection and the City’s Public Services Department to reduce the average daily water consumption in the City.

Objective 3

The City of Tamarac will act to improve air quality in Tamarac during the planning period by continuing to participate with the Broward County Department of Natural Resource Protection (DNRP) Environmental Protection Department (EPD) in regional air quality monitoring.

Monitoring and Evaluation:

- Maintain permit records reviewed by the Broward County Environmental Protection Department (EPD).

Policy 3.1 The City will increase by 10 percent its enforcement of its anti-burning ordinance, especially in conjunction with construction activities and the disposal by incineration of hazardous waste through its Code Enforcement Department during the planning period.

Policy 3.2 The City will continue to have plats reviewed by the Broward County Department of Natural Resource Protection (DNRP) Environmental Protection Department (EPD) to determine whether all air quality standards, including ozone, are being met by plats and proposed DRIs.

Objective 4

The City will continue to enforce its noise ordinance during the planning period through the Community Development Department.

Monitoring and Evaluation:

- Record of enforcement of the City noise ordinance.

Policy 4.1 The City will review its development regulations, especially those concerning site planning, to ensure that suitable separation and buffers between living areas and nonresidential structures and arterial streets are required. Revisions to codes will consider such other noise reducing measures in site design such as earth berms, walls, and landscaping.

Policy 4.2 The City will also evaluate the impact of noise caused by nonresidential traffic on residential neighborhoods and will consider site plan or traffic control measures which will reduce the number of residential streets on which trucks are permitted to travel.

Objective 5

The City will continue to maintain the public waterways, lakes, and canals in Tamarac now and in the future and will cooperate with South Florida Water Management District (SFWMD) in the maintenance of water quality of the primary drainage system.

Monitoring and Evaluation:

- Conduct frequent sampling and monitoring of surface waters based upon local, regional and state regulations.

Policy 5.1 The City Public Works Department will continue to monitor and maintain, during the planning period, the Code, its administrative procedures, and its implementation programs for stormwater retention, extension, and maintenance of the waterway system under its jurisdiction to ensure adequate stormwater management and to prevent, through appropriate ordinances, actions which would reduce the quality of water in its waterways to below Class III. All development in the city must be consistent with the applicable SFWMD rules and regulations for maintenance and enhancement of surface water quality.

Policy 5.2 The City will maintain the stormwater utility fee ordinance which provides for the extension, restoration, and maintenance of the City's waterway drainage system.

Policy 5.3 The City will continue to enforce its ordinance regulating land clearance and site grading activity to control non-point source pollution and filtration of the City's waterways.

Policy 5.4 The City will continue to enforce existing Land Development Code provisions for extended use of semi-pervious paving materials within parking areas and emergency internal circulation ways in order to reduce the quantity of contaminants reaching the surface drainage system.

Objective 6

The City will continue to protect native vegetation through compliance with, and enforcement of, Broward County regulations concerning Local Areas of Particular Concern (LAPC), Environmentally Sensitive Lands (ESL), Upland Tree Resources (UTR) and Natural Resource Areas (NRA) designated by the Broward County Commission.

Monitoring and Evaluation:

- Annual recordation of development permits issued in the LAPCs, ESLs, and NRAs.

Policy 6.1 The City will require approval of a site development plan prior to commencement of site

clearance and grading activities.

- Policy 6.2 In order to reduce the amount of water drawn from the aquifer for irrigation of ornamental landscaping, the City should strengthen the current landscape ordinance (Section 11-7(a) (8)) to provide for a minimum of 35 percent native plant material in landscape plans until 2010 when a minimum of 50 percent will be required.
- Policy 6.3 The City will implement its adopted landscape ordinance to provide that a minimum of 20 percent of plant material used in required landscaping shall provide habitats for native wildlife and birds.
- Policy 6.4 The City will protect native vegetative communities from destruction by development activities by implementing the requirements of the County's Local Areas of Particular Concern (LAPC) environmental legislation. The Community Development Department will during the planning period review its site plan and landscape plan requirements to identify additional means of protecting native vegetative communities, such as: no more than 30 percent of the native vegetation on a site may be destroyed during the development process; applicant shall relocate native vegetation to other locations on the site plan during the development process and will ensure that it is protected and maintained.
- Policy 6.5 Tamarac will protect and conserve wetlands and the natural functions of wetlands, and direct future land uses which are incompatible with the conservation and protection of wetlands away from identified wetland areas.
- Policy 6.6 The City shall continue to protect native vegetation through code enforcement of Broward County's Tree Preservation Ordinance.
- Policy 6.7 The City should incorporate provisions into the land development regulations which preserve existing wetlands. The preservation of existing wetlands shall serve as a proactive approach to lessen the need for wetlands mitigation steps.
- Policy 6.8 Tamarac shall maximize the use of native plants in City landscaping projects to provide and improve urban habitat and connectivity for native species.
- Policy 6.9 The City shall increase the tree canopy through streetscape and free-tree programs throughout City parks and facilities.
- Policy 6.10 Property owners should be educated about the environmental benefits of landscaping with drought-tolerant, native plants – known as Xeriscaping. The City shall support the efforts of property owners to do so.
- Policy 6.11 The City shall continue to require water conserving fixtures for new construction, enforce adopted Xeriscaping standards, and other water conservation methods as recommended by Broward County, the SFWMD, the Department of Environmental Protection, and other relevant jurisdictions.

Objective 7

The City shall conserve and protect the quantity and quality of the City's water resources by requiring

the protection of wells currently in use by the City for residential, commercial, industrial, and emergency purposes; their cones of influence and future wells and wellfields.

Monitoring and Evaluation:

- Documentation of monitoring program of City wellhead protection areas.

- Policy 7.1 The City will continue to enforce the Broward County Wellfield Protection Ordinance and will prohibit through zoning, site planning, and occupational licensing, uses and activities which threaten water quality.
- Policy 7.2 The City will continue to monitor its water production and distribution systems to ensure a minimum of water loss and to maintain acceptable ratios (raw water pumped: water treated and distributed).
- Policy 7.3 The City will continue to monitor and enforce ordinances requiring water conserving fixtures in new construction and major renovation.
- Policy 7.4 The City will provide in its development regulations for increasing the amount of pervious surface included in site plans. Methods to be considered include the use of partially pervious paving materials such as turf blocks in employee parking areas and fire lanes; and the development of stormwater retention systems which recharge the groundwater aquifer rather than channel stormwater to surface waters.
- Policy 7.5 The City will continue to participate in the adopted SFWMD Emergency Water Conservation Plan and Program and in the Water Shortage Plan during periods of drought as declared by the District.
- Policy 7.6 The City shall continue to actively support the SFWMD in the implementation of programs that are designed to conserve water.

Objective 8

The City will continue to include consideration of wildlife, soils and other natural features of the land as part of the site plan and development review process.

Monitoring and Evaluation:

- Ensure site plan and development review performed by proper departments and/or agencies.

- Policy 8.1 The City includes in its development review requirements a provision for the restriction of development activities which adversely affect the survival of endangered and threatened wildlife. These requirements rely on Broward County EPD programs to help restrict development in certain wildlife habitats and mitigate usage of environmentally-sensitive lands.

- Policy 8.2 The City will continue to cooperate with adjacent cities and the county in order to conserve unique vegetative communities. The mechanism is the mutual review of zoning and land use plan amendments proposed for areas adjacent to municipal boundaries.
- Policy 8.3 The City's Land Development Code will continue to include a procedure for the preservation or mitigation of environmentally sensitive lands should any be identified during the platting or site plan processes. Developers will be required to identify any environmentally sensitive sites, as defined in the Broward County Land Use Plan and by the Broward County EPD as Local Areas of Particular Concern (LAPC) and/or Environmentally Sensitive Land (ESL).
- Policy 8.4 By 2010, the ordinance providing for occupational licensing shall be amended to provide for consequences should license holder mismanage any hazardous wastes on the licensed area or which would emanate from the licensed area.
- Policy 8.5 The City shall reduce the volume of solid waste requiring disposal by an additional five percent by the year 2010. Ordinances which address the packaging of products sold in Tamarac will be among those considered by the City for implementing this requirement.
- Policy 8.6 The City shall encourage residents to participate in the Broward County Waste and Recycling Services Department's Household Hazardous Waste (HHW) Program in an effort to prevent the improper disposal of hazardous materials.
- Policy 8.7 The City will provide for the conservation and protection of the natural functions of existing soils, wildlife habitats, rivers, lakes, floodplains, wetlands, freshwater shores, and marine habitats.

VII. INTERGOVERNMENTAL COORDINATION ELEMENT

VOLUME I: GOALS, OBJECTIVES & POLICIES

City of Tamarac

VII. INTERGOVERNMENTAL COORDINATION ELEMENT

GOAL

The City of Tamarac will coordinate with all appropriate agencies and units of government in order to successfully implement its Comprehensive Plan, to ensure that land development decisions made by the City are consistent with the plans of adjacent municipalities and applicable governmental entities, and to assist in the implementation of the plans of other units of government.

Objective 1

The City will continue and improve coordination activities among government agencies with planning and impact assessment duties affecting the City; with other units of local government providing services but not having regulatory authority over the use of land, and with the comprehensive plans of adjacent municipalities, the county, and other appropriate state, regional, and local agencies.

Monitoring and Evaluation:

- Upon completion of Comprehensive Plan updates and amendments, the City shall transmit the Plan to appropriate agencies within 60 days.
- Attendance and participation of City staff at appropriate meetings and workshops.

Policy 1.1 The City will continue to work at the staff level with the following agencies: the Broward County School Board (through interlocal agreement); the South Florida Water Management District (SFWMD); the South Florida Regional Planning Council (SFRPC); Broward County and its agencies; the Department of Economic Opportunity (DEO); agencies of the State of Florida and adjacent municipalities.

Policy 1.2 The City will transmit the Comprehensive Plan to all adjoining municipalities, to the Broward County Planning Council (BCPC) as the county certifying agency, to the Broward County School Board, to the South Florida Regional Planning Council (SFRPC), to the South Florida Water Management District (SFWMD), and to the Department of Economic Opportunity (DEO), which is the state's land planning agency, as provided in the State law for review and comment (as amended this language formerly included in Objective 1).

Policy 1.3 The City will improve communication and coordination between the office of the Mayor, City departments, Florida Power and Light (FPL), Broward County Water and Wastewater Services, the City of Fort Lauderdale Water Services, and other utilities which site utilities facilities and lines in Tamarac. This coordination will be done in order to provide improved service, demonstrate service needs, coordinate level of service standards, implement joint conservation activities and programs, and to minimize negative land use and environmental impacts from utilities facilities siting and location. These efforts will include the exchange of information including population and housing projections, service demands, and formal and informal review of proposed plans of service and site plans.

- Policy 1.4 The City, through the Public Works, Utilities and Community Development Departments, will improve communication and coordination with the South Florida Water Management District (SFWMD). This coordination will be achieved by the exchange of information and technical assistance with regard to development of a local water supply facilities work plan, water conservation and drainage. Joint use by the City and the South Florida Water Management District (SFWMD) of District property for recreational as well as drainage purposes will also be sought.
- Policy 1.5 The Community Development Department will submit information on proposed land use amendments, rezonings, annexations, and traffic improvements in a timely manner, both formally and informally, to the appropriate local government agencies of adjacent units of government including the School Board, Broward County, State agencies and cities.
- Policy 1.6 The City will annually review the plans of the Broward County School Board, the South Florida Water Management District (SFWMD), Broward County Metropolitan Planning Organization (MPO), and the Florida Department of Transportation (FDOT) to identify impacts to or conflicts with the City's Comprehensive Plan. The City will provide written comments identifying these impacts or conflicts and coordinate as necessary with the appropriate officials of the respective agency to address the conflicts or impacts, and/or consider amendment of the City's Comprehensive Plan to maintain consistency.
- Policy 1.7 The Tamarac Public Works Department and Utilities Department will continue to participate in countywide planning for sanitary sewers, solid waste, potable water, water management, and drainage at coordinating committee meetings and special workshops.
- Policy 1.8 The City will improve communication and coordination with all agencies of county and local municipal government, regional, state, and federal agencies whose plans and programs affect or are affected by those of the City of Tamarac. These improvements will include exchanging information, sharing proposed plans, technical assistance, and participating in formulation of regional implementation programs including transportation, drainage, water supply and conservation, sanitary sewers and solid waste management.
- Policy 1.9 In the event of any conflict between the City of Tamarac and other units or agencies of government regarding the Future Land Use Plan, amendments to it, or other Comprehensive Plan issues or their implementation, the City will seek first a negotiated settlement between the parties. In the event the conflict cannot be resolved directly between the units of local government, the City will use the South Florida Regional Planning Council's informal mediation process as provided by state law.
- Policy 1.10 The City will ensure that the development review process provides for full disclosure and assessment of any potential development proposal impacts on adjoining jurisdictions, and identified regional or state resources or facilities. In addition, all affected entities will be notified of application development proposals and hearings, and measures will be required to ensure mitigation of any adverse impacts and compatibility

of proposed development with the development patterns of neighboring cities, and identified regional and state resources and facilities.

- Policy 1.11 The City will continue to both provide review and comment to and seek review and comment from other appropriate units of government on all development proposals, proposed plan amendments, proposed rezoning, annexation, and other matters which affect or may be affected by the plans of the City of Tamarac. Particular attention will be given to coordination in the development and adoption of levels of service (LOS) standards for public facilities with state, regional, and local agencies with monitoring, operational, or maintenance responsibilities for public facilities in Tamarac (as amended this language formerly included in Objective1).
- Policy 1.12 The City of Tamarac will promote coordination with adjacent municipalities regarding large redevelopment projects, to monitor synchronous projects, and to evaluate how such projects may be made mutually beneficial.
- Policy 1.13 The City, Broward County, adjacent municipalities, and other appropriate agencies will coordinate to identify any joint planning areas for the purposes of annexation, municipal incorporation and joint infrastructure service areas.
- Policy 1.14 The City will coordinate road and transit improvements in Tamarac through City representation on the Metropolitan Planning Organization (MPO) Board and the Technical Coordinating Committee (TCC).
- Policy 1.15 The City will coordinate with the South Florida Water Management District (SFWMD) to ensure that the City's plans, requirements and related actions are consistent with the 2013 Lower East Coast Regional Water Supply Plan Update.
- Policy 1.16 The City will continue to coordinate with the Broward County Environmental Protection Department (EDP) as necessary to comply with the requirements of the Broward County Joint Municipal National Pollutant Discharge Elimination System (NPDES) Permit.
- Policy 1.17 The City will coordinate with local housing agencies, the South Florida Regional Planning Council (SFPRC), and appropriate State housing organizations to identify housing needs and strategies for housing attainment and affordability.
- Policy 1.18 The City will monitor the progress of the South Florida Regional Planning Council (SFRPC) and Broward County in creating a regional affordable housing policy and, when complete, evaluate how the regional strategy could be supported by the City of Tamarac.
- Policy 1.19 The City will coordinate with the U.S. Department of Housing and Urban Development (HUD) in the administration of the City's Community Development Block Grant (CDBG) program and/or other programs, which may benefit the City.
- Policy 1.20 The City will use the State Housing Initiatives Partnership (SHIP) program allocations to help maintain existing housing stock by providing financial assistance for minor home repairs, and provide opportunities for home ownership through home purchase loans as available through the City's Local Housing Assistance Program (LHAP).

- Policy 1.21 The City will participate in coordination efforts with Broward County municipalities, Broward County, FDOT, and other appropriate federal, state, regional, and county transportation agencies to ensure, to the greatest extent feasible, roadways maintain their respective levels of service.
- Policy 1.22 The City will continue to coordinate with appropriate local, county, state, regional, and federal agencies to create a common and cohesive vision for the redevelopment of State Road 7 (aka 441).
- Policy 1.23 The City shall support agencies which supply potable water to the City in the development of alternative water supply sources as recommended by the SFWMD in its *2013 Lower East Coast Water Supply Work Plan Update*.

Objective 2

The City will communicate and coordinate with the Broward County School Board to implement, update, and/or ensure the continuance of interlocal agreements and joint use agreements, and to ensure the adoption of the Public School Facilities Element.

Monitoring and Evaluation:

- The City will sign the appropriate interlocal agreements within the state mandated timeframes.
- City staff participation and attendance to meetings, workgroups, and committees regarding public school concurrency, siting, and joint use.
- The City will adopt the Public School Facilities Element by February 1, 2008.

- Policy 2.1 The City and School Board should, at a minimum, address the following in the agreements:
1. School concurrency;
 2. Student enrollment and population projections;
 3. Coordination of population projections;
 4. Assessment and upgrading of school infrastructure;
 5. Selection of appropriate school sites and site plan review;
 6. Comprehensive plan amendments, rezonings, development approvals;
 7. Traffic impacts;
 8. Periodic review of the educational facilities impact fee ordinance to ensure that capital costs associated with the development of public school capacity are

identified appropriately;

9. Joint meetings between the City of Tamarac and the School Board to discuss and formulate policies and recommendations regarding school planning;
10. Coordination and sharing of information;
11. Representation from the School Board at the City's public meetings that address residential projects and affect school capacity issues; and
12. Dispute resolution process.

Policy 2.2 The City will work at the staff level with the School Board to successfully implement and continue the joint use agreements of facilities at Tamarac Elementary School and Tamarac Park, as well as explore other opportunities for additional joint use agreements (formerly Policy 1.2 amended).

Policy 2.3 The City will coordinate with Broward County and the School Board to develop and adopt the Public School Facilities Element (PSFE) by the February 1, 2008 deadline.

The PSFE should address the following:

1. Updating of the public school interlocal agreement;
2. School concurrency, including a concurrency management system and concurrency service areas;
3. Level of service standards for maximum permissible school utilization rates relative to capacity;
4. A financially feasible Public School Capital Facilities Program; and
5. Proportionate-share mitigation methodology and options.

Objective 3

The City will support climate change and sea level rise initiatives.

Monitoring and Evaluation:

- The City shall enact legislation supporting the efforts of Broward County and the SFWMD to evaluate climate change and its impacts.

Policy 3.1 Support Broward County and the SFWMD in any efforts to evaluate the consequences of sea level rise, changing rainfall and storm patterns, temperature effects, and cumulative impacts to existing structures and existing legal uses.

- Policy 3.2 Participate in the Southeast Florida Regional Climate Change Compact to support regional planning efforts and initiatives to adapt to rising sea level in the LEC Planning Area.
- Policy 3.3 Work collaboratively with the Broward County, Fort Lauderdale and other utilities and the SFWMD to identify the utility wellfields and other users at potential risk of saltwater intrusion within the LEC Planning Area.

VIII. CAPITAL IMPROVEMENTS ELEMENT
VOLUME I: GOALS, OBJECTIVES & POLICIES

City of Tamarac

VIII. CAPITAL IMPROVEMENTS ELEMENT

GOAL

The City of Tamarac shall provide, or cause to be provided, the infrastructure necessary to provide for the health, welfare, and safety of its residents. The City will correct existing deficiencies and maintain needed public facilities and provide or require the provision of facilities concurrent with the impact of development.

Objective 1

The City will use the Capital Improvement Element (CIE) as the means to establish needs and to develop programs for essential public improvements. Funds will be provided for capital improvements as outlined in the other elements of the comprehensive plan. Capital improvements will be directed toward correcting existing deficiencies, maintenance of all existing facilities, and to provide for future growth.

Monitoring and Evaluation:

- Objective can be evaluated in terms of its implementing policies.

- Policy 1.1 The City of Tamarac shall revise and adopt annually a Capital Improvement Program (CIP) that addresses the existing and projected deficiencies as outlined in the Capital Improvement Element and those items listed in the five-year schedule of improvements.
- Policy 1.2 The City of Tamarac shall update its Capital Improvement Element (CIE) on an annual basis after the adoption of the Capital Improvement Program and submit the CIE to the State Planning Agency (Department of Economic Opportunity) annually as a Comprehensive Plan Amendment.
- Policy 1.3 The City of Tamarac shall identify those projects in the other plan elements which will maintain or expand facilities. These projects shall be included in the five-year Schedule of Improvements and incorporated into the annual Capital Budget.
- Policy 1.4 The City shall continue using the Needs Assessment Committee composed of the Director of Public Works, Financial Services, Utilities and Community Development which shall prioritize projects for the CIE, those projects in the five-year Schedule of Improvements, and the annual proposed capital budget.
- Policy 1.5 The City shall adopt annually a Capital Budget which shall include at a minimum the first year Improvements of the CIE.
- Policy 1.6 Proposed Capital Improvements shall be evaluated and ranked in priority according to the following guidelines:
1. Does the project contribute to or further the achievements of specific objectives contained in Elements of the Comprehensive Plan?

2. Does the project eliminate possible hazards and protect the public health, safety, and welfare of the City's residents, provide the necessary infrastructure as part of a legal requirement or prior commitment, and use, to the fullest extent, existing facilities?
3. Will the project eliminate or correct existing deficiencies, increase capacity of existing facilities, or reduce the necessity for or cost of future improvements or provide for future needs?
4. Will the project provide services to developed areas lacking services, or be a logical extension or expansion of facilities or services within designated service areas?
5. Will or can funds be available for the project? Can operating and maintenance costs associated with the improvement be provided from the annual operating budget?

Objective 2

Future development shall be responsible for bearing a proportionate fair share of the cost for improvements in order to maintain adopted Level of Service (LOS) standards.

Monitoring and Evaluation:

- The balance of development revenues collected versus the cost of improvements.

- | | |
|------------|--|
| Policy 2.1 | The City of Tamarac shall continue its policy of collecting impact fees from future development for traffic, recreation, open space, drainage retention, water, and sewers. |
| Policy 2.2 | The City of Tamarac shall continue its policy of mandatory dedications or fees in lieu of dedications as a condition of plat or site plan approval for recreation open sites and development of recreation facilities for residential developments. |
| Policy 2.3 | The City of Tamarac shall continue to require the dedication, deeding by separate instrument or grant of easement or necessary rights-of-way for public streets as shown on the Broward County Trafficways Plan and in the Transportation Element of the Tamarac Comprehensive Plan. |
| Policy 2.4 | The City shall conduct an impact fee rate study by the year 2009 to ensure that new development and redevelopment pays its fair share of capital improvements needed to serve the development/redevelopment. |

Objective 3

The City of Tamarac shall exercise sound fiscal management to ensure that needed capital improvements are provided for existing and future development.

Monitoring and Evaluation:

- Evaluated at the time of creating the five-year capital improvements plan and schedule of capital improvements needed to maintain LOS standards.

- Policy 3.1 Section 7.16 of the City Charter states, “The City shall have full power and authority to issue municipal bonds or to borrow funds for municipal purposes to the extent authorized by and subject to the limitations provided in the Constitution of the State of Florida, the Municipal Home Rule Law, other statutes and this Charter; provided further that bonds intended for the funding or refunding of an acquisition or construction of a capital project shall not be issued until such project and such issuance has been approved by a majority of the qualified electors voting on the issue at a special or general election.”
- Policy 3.2 The Financial Services Director recommends that the City maintain a debt burden, defined as debt service payments, of less than fifteen percent (15 %) of combined operating and debt service expenditures.
- Policy 3.3 The City shall adopt as part of its annual budget, a schedule for the depreciation and periodic replacement of capital facilities from current revenues.
- Policy 3.4 The City Manager shall submit to the City Commission an updated five–year Capital Improvement Program annually. The capital program shall include a summary of its contents and a list of all capital improvements which are proposed for the next five (5) fiscal years with appropriate detailed information. Whenever so requested by the Commission or otherwise required, the manager shall make recommendations for revisions of the program.
- Policy 3.5 The City of Tamarac shall require to be installed or install, all needed public facilities for development prior to the issuance of a Certificate of Occupancy. “Development orders shall be issued by the City in accordance with the adopted concurrency management system and with 163.3202(2)(g) F.S.

Objective 4

Development orders and permits shall be issued only when it is demonstrated by the applicant that the land development proposal conforms with the development requirements of this Comprehensive Plan, with land development regulations, and that sufficient public facilities or service capacity to support such development will exist at the time a building permit is issued for the project.

Monitoring and Evaluation:

- Monitored through the City’s Concurrency Management System and permit review process.

- Policy 4.1 The City of Tamarac shall use the following LOS standards in reviewing impacts of development upon public facilities:

1. SANITARY SEWER

- Western Service Area (Broward County Wastewater Treatment Facilities)
124 gallons per capita per day.
- Eastern Service Area (Fort Lauderdale Wastewater Treatment Facilities)
131 gallons per capita per day.

2. SOLID WASTE

- Broward County Disposal Facilities (BIC Landfill and Resource Recovery Facility)
8.9 pounds per capita per day.
- Tamarac Collection (Contractual Service Providers)
All solid waste collection provided by City contracted service providers.

3. DRAINAGE - CANALS

FEMA criteria for minimum floor elevation and protection of floodplains;

Standards as established by the Broward County Department of Natural Resources Protection, South Florida Water Management District, Broward County Water Management Division, and the City of Tamarac for off-site discharge, on-site retention, and best management practices for pollutant discharge; and

Ten (10) year storm will produce a headwater no higher than four (4) inches above the lowest catch basin rim in parking lots or two (2) inches below the edge of pavement in subdivisions.

4. POTABLE WATER

- Western Service Area (Tamarac Water Treatment Plant)
110 gallons per capita per day.
- Eastern Service Area (Fort Lauderdale Water Treatment Plants)
179 gallons per capita per day.
- BCU Service Area (Broward County Water Treatment Plants) 131
115 gallons per capita per day

5. TRANSPORTATION

The City of Tamarac shall uphold the following Level of Service Standards consistent with Broward County's Transit Oriented Concurrency System:

In areas of Tamarac within the North Central Transit Concurrency District, the

level of service is as follows:

- Achieve headways of 30 minutes or less on 90 percent of routes.
- Establish at least one neighborhood transit center

In areas of Tamarac within the Central Transit Concurrency District, the level of service is as follows:

- Achieve headways of 30 minutes or less on 80 percent of routes.
- Establish at least one neighborhood transit center.

In all areas of Tamarac, the level of service is as follows:

- Increase the number of bus shelters by 30 percent, and maintain the maximum service volumes on arterial roadways within each District, as displayed below:

Two-lane arterials: 2,555
Four-lane arterials: 5,442
Six-lane arterials: 8,190
Eight-lane arterials: 10,605

The City of Tamarac shall maintain the following Level of Service Standards in addition to Broward County's Transit Oriented Concurrency System:

- Florida Turnpike – LOS "D" two-way peak hour
- Sawgrass Expressway – LOS "D" two-way peak hour
- County collector roadways, LOS "D" two-way peak hour
- City collector roadways, LOS "D" two-way peak hour
- City local roadways, LOS "C" two-way peak hour

6. RECREATION AND OPEN SPACE

Public parks, recreation, and open space shall be provided at a LOS of 3.0 acres/ per 1,000 population.

Private parks, recreation, and open space shall be provided at a LOS of 3.5 acres per 1,000 population; exclusive of stormwater management areas; up to fifteen percent of this may be met by golf course land.

Policy 4.2 The City of Tamarac shall ensure adequate facility capacity is available or will be available when needed prior to the issuance of a development order. Developments orders shall be issued by the City in accordance with the adopted concurrency management system and with 163.3202(2)(g), F.S. To do so, the City may approve a proposal, reject a proposal, or require that a development be phased in accordance with availability of specific facilities or services as provided in this element.

Policy 4.3 Requests for development permit or Land Use Plan amendments shall be reviewed to

examine what affect upon the public facilities the request shall have per the following criteria:

1. Whether the proposal is consistent with, supports, or contributes to the achievement of the goals and objectives in this plan.
2. Whether it affects any existing condition of a public facility as outlined in the Transportation Element, Recreation and Open Space Element, and Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Ground Water Recharge Sub-Elements.
3. Can the plan amendment or proposed development be provided with the necessary public facilities that are planned in the five–year schedule of improvements.
4. Whether the proposal conforms to the Future Land Use Map of the Future Land Use Element.
5. Whether the plan amendment or development is in conformity with county, state agencies, water management district’s plans, and those of other regulatory agencies with management or regulatory authority.

Development orders shall be issued by the City in accordance with the adopted concurrency management system and with 163.3202(2)(g), F.S.

- Policy 4.4 The Public Works, Utilities and Community Development Departments will continue to monitor and improve the established criteria the City employs to evaluate capital improvement projects to accommodate new development and redevelopment needs. These criteria will be used by the City during its annual capital budgeting process.
- Policy 4.5 The Public Works and Utilities Departments will continue to maintain and improve the adopted LOS standards for potable water as guided by the City’s 10-Year Water Supply Facilities Work Plan and other relevant jurisdictions.
- Policy 4.6 The City will maintain its water supply system through improvements to water facilities as needed when identified in the Capital Improvements Program.
- Policy 4.7 The Financial Services Director will review all proposals for capital projects and make a recommendation to the City Manager concerning the City’s ability to finance such proposals. The recommendation shall include a review of the following:
1. Ability to use impact fees.
 2. Ability to use an existing revenue stream.
 3. Assessment of likelihood of getting a bond approved by Tamarac voters.
 4. Availability of grant funds.

- Policy 4.8 During the planning period, the City shall use the following criteria for the consideration of the plans of state agencies and the South Florida Water Management District during the City's evaluation of capital improvement projects." These criteria include the following:
1. Project is needed by the city;
 2. Project is funded by appropriate agency; and
 3. City has funds available to meet any required local match.
- Policy 4.9 Public facilities to serve developments for which development orders were issued prior to the adoption of the Tamarac Comprehensive Plan, provided those development orders meet all provisions of the Land Development regulations, shall be available. The Concurrency Management System, as identified in the Tamarac Code of Ordinances, already provides for facilities monitoring and development permit monitoring which will ensure availability as required during the planning period.
- Policy 4.10 City of Tamarac traffic impact fees shall only be used for city streets. Since Broward County collects regional traffic impact fees (for the County road system) the city shall not collect fees for those same roads. Any state roads in Tamarac are covered by the regional road system and not eligible for city impact fees.

Objective 5

The City, in collaboration with the School Board, Broward County and non-exempt municipalities shall ensure that public school facilities are available for current and future students consistent with available financial resources and the adopted LOS.

Monitoring and Evaluation:

- School enrollment projections compared to the School District's Adopted Five-Year District Educational Facilities Plan, as adopted by reference into the Capital Improvement Element.

- Policy 5.1 Consistent with policies and procedures within the ILA, the DEFP shall contain a 5-year financially feasible schedule of capital improvements to address existing deficiencies and achieve and maintain the adopted LOS in all CSAs.
- Policy 5.2 The uniform, district-wide LOS shall be 110% of the permanent FISH capacity for each public elementary, middle, and high school.
- Policy 5.3 The adopted LOS shall be applied consistently by Broward County, the municipalities and the School Board, district-wide to all schools of the same type.

Objective 6

To formally adopt the capital improvement plans/schedules of all governmental agencies which

schedule and fund improvements needed to maintain City-adopted level of service standards.

Monitoring and Evaluation:

- Periodic review of all interlocal agreements and related capital improvements work plans to ensure that they are current.

- Policy 6.1 The City of Tamarac hereby adopts by reference the Broward County School Board's District Education Facilities Plan FY 2007-2008 to 2011-2012, adopted by the School Board on August 1, 2007.
- Policy 6.2 The City of Tamarac hereby adopts by reference the Transportation Improvement Plan 2007-2011 formally adopted by the Broward County Metropolitan Planning Organization on July 12, 2007.
- Policy 6.3 The City of Tamarac hereby adopts the City of Tamarac's 2017-2022 Capital Improvements Program as originally adopted on September 22, 2016.
- Policy 6.4 The City hereby adopts by reference the Ft. Lauderdale 2015 Water Supply Facilities Work Plan.
- Policy 6.5 The City hereby adopts by reference the Broward County 2015 10-Year Water Supply Facilities Work Plan.

CAPITAL IMPROVEMENTS PROGRAM							TOTAL FY 2017
DEPARTMENT	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	THRU FY 2022
COMMUNITY DEVELOPMENT							
Corridor Walls	-	-	-	-	-	-	-
Phase 1: Tamarac Lakes South	-	-	-	-	-	-	-
Phase 2A: Mainlands 7	-	-	-	-	-	-	-
Phase 2B: Woodlands	1,249,519	-	-	-	-	-	1,249,519
Phase 2B: Woodlands	425,419	-	-	-	-	-	425,419
Phase 3: Westwood 3, 4, & 7	2,200,000	-	-	-	-	-	2,200,000
Phase 4: Woodmont-Southgate & Pine Island Road	-	-	-	210,522	-	-	210,522
Phase 4: Woodmont-Southgate & Pine Island Road	-	-	-	250,000	-	-	250,000
Phase 5: Mainlands 8,9,11&12	-	-	-	-	951,338	-	951,338
Comprehensive Signage Program	-	-	-	-	-	-	-
Neighborhood Signage Program	-	260,000	-	-	-	-	260,000
Bus Benches (21)	52,500	-	-	-	-	-	52,500
Decorative Hardscape	-	1,789,500	-	-	-	-	1,789,500
INFORMATION TECHNOLOGY							
Security System Improvements	608,118	-	-	-	-	-	608,118
PUBLIC WORKS							
Colony West Club House	5,000,000	-	-	-	-	-	5,000,000
Pine Island Pedestrian Crossing	382,000	-	-	-	-	-	382,000
Fire Station #36: University Drive	-	-	-	-	-	-	-
Fire Station #36: University Drive	500,000	-	-	-	-	-	500,000
Fire Station #36: University Drive	200,000	-	-	-	-	-	200,000
Caporella Aquatics Center Pump Room Renovations	390,384	-	-	-	-	-	390,384
Bikeways Path Phase 4	-	70,000	-	-	-	-	70,000
Bikeways Path Phase 4	-	790,169	-	-	-	-	790,169
Bikeways Path Phases 5 & 6	-	775,100	-	-	-	-	775,100
Bikeways Path Phases 5 & 6	-	400,000	-	-	-	-	400,000
Waters Edge Park	2,775,207	-	-	-	-	-	2,775,207
Caporella Aquatic Center Main Pool & Sprayground Resurf	115,500	-	-	-	-	-	115,500
Caporella Aquatic Center Large Slide Replacement	251,750	-	-	-	-	-	251,750
Sports Field Sod at Tamarac Park	62,160	-	-	-	-	-	62,160
Material Storage Bins - TSC & Rec Center	63,000	-	-	-	-	-	63,000
Boulevards Sidewalk Extension	59,875	-	-	-	-	-	59,875
Tamarac Park Playground Project	-	290,350	-	-	-	-	290,350
Waterview Park	-	88,800	-	-	-	-	88,800
Tamarac Sports Complex Concession Bldg/Site Improv's	-	1,562,525	-	-	-	-	1,562,525
Tephrford Park	-	-	146,313	-	-	-	146,313
Sabel Palm Parcel	-	-	3,733,634	-	-	-	3,733,634
Swim Central Annex	-	-	664,748	-	-	-	664,748
Tamarac Village - Park	-	-	-	-	630,489	-	630,489
Caporella Park Improvements	-	-	-	-	4,423,497	-	4,423,497
PUBLIC SERVICES - STORMWATER							
Citywide Culvert & Headwall Improvements	800,000	-	800,000	-	800,000	-	2,400,000
SCADA Upgr. For Stormwater Pump Stations	85,000	-	-	-	-	-	85,000
Colony West Club House	-	-	-	-	-	-	-
UTILITIES							
WTP Well Upgrade Project	250,000	350,000	25,000	25,000	25,000	25,000	700,000
SCADA Upgr for Water Plant Wells & Wastewater PS	850,000	-	-	-	-	-	850,000
WTP Stormwater Improvements	600,000	-	-	-	-	-	600,000
Wastewater Pump Station Renewal	-	-	350,000	-	350,000	-	700,000
WTP Renewal/Replacement	100,000	100,000	100,000	125,000	125,000	125,000	675,000
Electrical/Mechanical Pump Station Renewal	125,000	125,000	125,000	125,000	125,000	125,000	750,000
Irrigation Replacement	75,000	75,000	75,000	75,000	75,000	75,000	450,000
Tamarac West System Rehabilitation	240,000	240,000	240,000	240,000	300,000	300,000	1,560,000
Water Distribution System Upgrade	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
WTP- Bldg Envelope Improvements/Stucco	220,000	-	-	-	-	-	220,000
Shaker Village Pipe Bursting Project	1,000,000	-	-	-	-	-	1,000,000
Replace Greenleaf Filter Media/Sandblast/Paint	750,000	-	-	-	-	-	750,000
Install Mixers in Grant's Plaza& Tr 27 Water Tanks	20,000	200,000	-	-	-	-	220,000
Sewer Main Rehabilitation (I & T)	12,000,000	-	-	-	-	-	12,000,000
Rehab Accelerators - Internals	-	350,000	-	-	-	-	350,000
Grants/TAM Sq. WM Replacement	-	450,000	-	-	-	-	450,000
Replace Tr 27 pumps with VFD's and New MCC	-	100,000	1,150,000	-	-	-	1,250,000
Relocate Backyard Water Mains - Tamarac East	-	100,000	1,050,000	-	-	-	1,150,000
Tract 27 Generator & ATS Replacement	-	50,000	450,000	-	-	-	500,000
Water Master Plan Study	-	-	250,000	-	-	-	250,000
Replace WTP Package Filter Media - Filters 3 & 4	-	-	350,000	-	-	-	350,000
Grants Shopping Center Generator Replacement	-	-	50,000	450,000	-	-	500,000
Replace Wastewater Force Mains	-	-	-	500,000	-	-	500,000
Replace Lime Silos and Slaker Systems	-	-	-	75,000	750,000	-	825,000
Rate Study	-	-	-	-	55,000	-	55,000
MIXEX @ Pretreatment System	-	-	-	-	500,000	5,000,000	5,500,000
McNab Force Main, 92nd Ave/Nob Hill Rd. (US03E)	-	-	-	-	-	750,000	750,000
Wastewater System Master Plan (Study)	-	-	-	-	-	300,000	300,000
Replace Package Filters 1-2 (Remove 4MG Accelerator)	-	-	-	-	-	150,000	150,000
TOTAL	\$ 16,730,000	\$ 2,640,000	\$ 4,715,000	\$ 2,115,000	\$ 2,805,000	\$ 7,350,000	\$ 36,355,000
	\$ 31,950,432	\$ 8,666,444	\$ 10,059,695	\$ 2,575,522	\$ 9,610,324	\$ 7,350,000	\$ 70,212,417

Objective 7

The Capital Improvement Element, and the five-year Capital Improvements Schedule and Plan incorporated into the Element by reference, shall be used as the basis for detailing the City's public facility deficiencies and planning corrective capital projects.

Monitoring and Evaluation:

- Update on the Capital Improvements Schedule

Policy 7.1 Appropriate mechanisms will be developed and adopted with the South Florida Water Management District, Broward County and Fort Lauderdale in order to assure that adequate water supplies are available to all water users. Furthermore, the City will be responsible for monitoring the availability of water supplies for all water users and for implementing a system that links water supplies to the permitting of new development. Prior to approval of a building permit or its functional equivalent, the City shall consult with Broward County and Fort Lauderdale to determine whether adequate water supplies to serve new development will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or its functional equivalent.

Policy 7.2 The City shall provide monthly data to Broward County and Fort Lauderdale, as required by such entity, to track the amount of water to be allocated for new use.

Policy 7.3 The City shall incorporate capital improvements affecting City levels of service by referencing the Capital Improvements Schedules of Broward County and Fort Lauderdale, state agencies, regional water supply authorities and other units of government providing services but not having regulatory authority over the use of land into its 5-Year Schedule of Capital Improvements. The City Capital Improvement Element Schedule shall be maintained and updated and shall demonstrate that level of service standards will be maintained during the next five-year (2016/2017 through 2021/2022) planning period.



7525 NW 88th Avenue
Tamarac, Florida 33321

CITY OF TAMARAC PLANNING BOARD AGENDA

November 3, 2021

ITEM 3.	TO 2491 - Specialty Automotive Treatments, Inc. - Land Development Code Text Amendment
Case No.:	2-LUA-21
Project Name:	Specialty Automotive Treatments, Inc. - Land Development Code Text Amendment
Commission District:	1
Location:	3705 W Commercial Boulevard, Tamarac, Florida 33309
Petitioner:	Requesting approval of a Text Amendment to Section 10-6.2 (C)(9)(g) of the Land Development Code to incorporate the following text into the Vehicle Service and Repair, Minor definition: minor interior vehicle repair/installations, including prefabricated parts, audio equipment, window tint, vehicle wraps, and seat covers that do not require the use of heavy machinery or a vehicle lift to install.

ATTACHMENTS:

Description	Upload Date	Type
1 - TO 2491 - Memo - Text Amendment	10/29/2021	Cover Memo
2 - TO2491 - Specialty Automotive Ordinance	10/29/2021	Ordinance
3 - Justification Letter	10/29/2021	Ordinance

CITY OF TAMARAC
INTEROFFICE MEMORANDUM 21-10-009M
COMMUNITY DEVELOPMENT

TO: Planning Board
Meeting of November 3, 2021

FROM: Maxine Calloway
Director of Community Development

DATE: October 11, 2021

RE: Ordinance amending Chapter 10, Article 6, Section 10-6.2 (C)(9) entitled "Vehicle and Equipment" Subsection 10-6.2(C)(9)(g) amending the definition of the use Vehicle Service and Repair, Minor– **Temp. Ordinance No. 2491**

RECOMMENDATION: The Director of Community Development recommends that the Planning Board forward a favorable recommendation of approval for the adoption of the proposed text amendment to Chapter 10, Article 6, Section 10-6.2(C)(9) entitled "Vehicle and Equipment", Subsection 10-6.2(C)(9)(g) in the City of Tamarac Code of Ordinances to the City Commission on First Reading at its December 8, 2021 meeting (see attached Temporary Ordinance No. 2491).

ISSUE: Keith M. Poliakoff, Esq., designated agent for the property owner, NRNS Acquisition 3705 Commercial, LLC, is requesting the approval of a Text Amendment to Land Development Code to incorporate the following text into the Vehicle Service and Repair, Minor definition: minor interior vehicle repair/installations, including prefabricated parts, audio equipment, window tint, vehicle wraps, and seat covers that do not require the use of heavy machinery or a vehicle lift to install (see attached Justification Letter).



Aerial Photograph

Planning Board

Specialty Automotive Treatments, Inc., Land Development Code Text Amendment

2-LUA-21 – Temp. Ordinance No. 2491

October 11, 2021 – Page 2

LOCATION: The subject property is located on the north side of NW 50th Street/W Commercial Boulevard, west of NW 37th Avenue, at 3705 West Commercial Boulevard, in the previous AMC Liquidator's Building (see Aerial Photograph above and attached Location Map). The subject property is 2.04 acres in size, has a current City of Tamarac Future Land Use designation of "Commercial" and a zoning classification of MU-C (Mixed Use Corridor).

Surrounding Land Use and Zoning:

North: RV Kozy Kamper Park – City of North Lauderdale

East: MU-C (Mixed-Use Corridor) – Commercial Office/Warehouse Building

West: MU-C (Mixed-Use Corridor) – Vacant Parcel

South: MU-C (Mixed-Use Corridor) – W. Commercial Blvd. then Commercial Building

BACKGROUND: The subject property previously known as the AMC Liquidator's Building was constructed in 1983 and generally designed as a commercial structure with storage area in the rear. Located at 3705 W. Commercial Boulevard, the property was zoned B-3 (General Business District) under the City's previous Land Development Code. Pursuant to the City-wide rezoning and revised Land Development Code adoption by the City Commission on July 12, 2018, the property was rezoned to the MU-C (Mixed Use Corridor) which, similar to the previous zoning designation, permits the use of a minor vehicle repair facility subject to Special Exception approval. Legally described as lots 10 and 11 of the Tamarac Business Center Plat, the property has a Future Land Use Designation of Commercial and is encumbered by a twenty-five (25) foot alley easement on the north and a 50' foot drainage easement on the south property lines. As such, the nearest part of the existing 30,656 square foot structure is setback approximately seventy (70) feet from the Commercial Boulevard right-of-way.

The City's Mixed Used Districts, and specifically the Mixed-Use Corridor (MU-C) zoning designation is intended to encourage the development of mixed-use activity centers along the City's primary transportation corridors and gateways. The district is distinguished from the other Mixed-Use Districts, as it's designed to accommodate a mix of retail, office, and service, institutional, cultural/public, and entertainment developments that meet local and regional needs and are sensitively designed to reflect a positive image of the City. Land uses such as vehicle repair facilities are considered service-based entities and as a result, are appropriate for location in the MU-C zoning districts subject to evaluation of their impacts on the surrounding environment through the special exception process.

The applicant, Specialty Automotive Treatments, Inc., has been providing vehicle customization products within the auto industry for over 40 years. Family owned and operated, the company is currently located at 700 W. Sunrise Boulevard, in the City of Fort Lauderdale, and desires to relocate its headquarters to the City of Tamarac. In an effort to secure a permanent location for the operation of the family's business, the applicant is currently under contract to purchase the subject property and desires to operate a minor vehicle repair facility. Upon review, Staff noted that services provided by the facility are not currently defined under the Vehicle Service and Repair provisions within the City's Code. The applicant provides unique customization services to automotive dealerships and vehicle owners which include: custom wheels, rims, interior seat covers, vehicle wraps, LED lighting and interior audio

equipment. As a result, the applicant is seeking approval of a text amendment to the City's Land Development Code to permit the services outlined above as part of a minor vehicle repair facility.

Accompanying this application is a request for Special Exception approval. As previously mentioned, the subject property is zoned MU-C (Mixed Use Corridor) and pursuant to the City's Code, minor vehicle repair facilities are permitted in the zoning district subject to Special Exception approval by the City Commission. The purpose of the Special Exception is to provide for individualized review of certain uses that due to their nature, relationship to the Comprehensive Plan, and potential adverse impacts on surrounding areas require special consideration of their location, design, and methods of operation, as well as the imposition of conditions to mitigate concerns, before they can be deemed appropriate in a zoning district and compatible with their surroundings. Furthermore, the use must be consistent with Section 10-5.4(G)(4) of the Land Development Code and conform to all City ordinances and other applicable regulations for the uses in the district in which the Special Exception is located. Staff has reviewed the application submitted by the applicant for Special Exception approval and determined that the criteria established for granting the request has been met as outlined in the City's Code.

ANALYSIS: The proposed amendment to Section 10-6.2 (C)(9)(g) of the City's Land Development Code expands the definition of *Vehicle Service and Repair, Minor* to include services provided by vehicle customization facilities that are considered minor in nature. These services may include the installation of custom wheels, rims, interior seat covers, vehicle wraps, LED lighting and interior audio equipment all of which do not require the use of heavy machinery such as auto lifts and do not generate hazardous waste like automotive fluids. Approval of the amendment will allow the applicant to not only close on the purchase of the subject property, but also continue with the relocation of the headquarters of the business to the City of Tamarac lending to the support of its economic development initiatives. Additionally, Section 10-5.4(D)(3) of the City's Land Development Code establishes criteria by which an amendment to the text of the Code may be considered.

Such applications shall demonstrate compliance with the following standards:

Amendment to Text of Development Code

(a) Is consistent with the Comprehensive Plan;

The City's adopted Comprehensive Plan, *Future Land Use Element*, Objective 1 requires the City to administer and adopt appropriate land development code revisions, amending them as needed to respond to changing conditions. Staff finds that an amendment to the City's Land Development Code is appropriate in this instance to prevent the undermining of revitalization efforts in its Mixed-Use Districts and further finds the applicant's request in alignment with the goals and objectives contained within the Economic Development Strategic Plan Element of the City's Comprehensive Plan.

In addition, the proposed text amendment supports Future Land Use Element Policy 10.8 by ensuring that commercial land uses are located in a manner compatible with adjacent land uses so as not to adversely affect the health, safety, welfare or aesthetics of the existing or future built environment. Further, the proposed amendment supports Policy 1.5 of the Comprehensive Plan by promoting “quality development” in all land use categories through the establishment of policies that promote the highest standards of urban design and community aesthetics.

(b) Conflicts with any other provisions of this Code or the Tamarac City Code;

The proposed use of the subject property as a minor vehicle repair facility is consistent with the provisions of the City’s Land Development Code subject to Special Exception approval by the City Commission. The intent of the district is met by the service-based facility and does not conflict with any other provisions of the City’s Code.

(c) Is required by changed conditions;

The applicant’s request for a text amendment to the City’s Land Development Code to expand the definition of Vehicle Service and Repair, Minor is necessary as a result of an evolving industry. LED lighting, vehicle wraps, and certain audio equipment are new innovative technologies that have been incorporated into the auto industry. These changing conditions resulting from technological advances contribute to changing conditions that require an amendment to the text of the City’s Code.

(d) Addresses a demonstrated community need;

The use a minor vehicle repair facility has the demonstrative evidence of serving a community need. The applicant is not only providing a service to the business community but is also revitalizing an otherwise vacant piece of property in need of several site improvements. The operations of the facility will also bring 40 new jobs to the City of Tamarac, new business and property tax revenue will be generated as well. These items are all economic drivers that help to fuel Tamarac’s local economy and further serves a community need.

(e) Is consistent with the purpose and intent of the zoning districts in this Ordinance, or would improve compatibility among uses and would ensure efficient development within the City;

As previously mentioned the intent of the MU-C (Mixed Use Corridor) zoning district is to provide for a variety of retail, service, entertainment and office uses along the City’s major commercial corridors. The proposed use of minor vehicle repair facility is consistent with the intent of the district and therefore in alignment with the City’s Ordinances.

(f) Would result in a logical and orderly development pattern; and

The proposed development would result in a logical and orderly development pattern along the Commercial Boulevard corridor. The use of the property is consistent with those outlined in the City's Code and does not require rezoning before occupancy is granted. The use is subject to Special Exception approval and Staff has determined that the requests meets the criteria established by the City's Code.

- (g) *Would avoid significantly adverse impacts on the natural environment—including, but not limited to, water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment.*

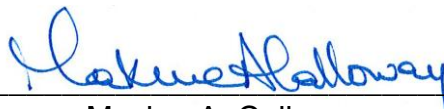
The proposed development will be conducted entirely within the existing structure. The applicant does not intend to nor has expressed an interest in expanding the building on site. The applicant will work with Staff to prepare and submit a separate site plan application for phased improvements of the façade, parking, drainage and landscape features of the property. The improvements will lend themselves to the enhanced aesthetic appearance and functionality of the site, thereby avoiding any significant adverse impacts to the site.

To that end, the Director of Community Development has determined that the established criteria for the granting of Text Amendment to the Land Development Code has been met and the Legislative Draft Ordinance is attached hereto as part of the record (see attached Temporary Ordinance 2491).

CONCLUSION: This item supports the City's Strategic Plan Goal #3 "Tamarac is Economically Resilient" by establishing land development policies that are responsive to evolving industry needs the City will continue to foster pro-growth development practices that will not only retain, but also attract new businesses to Tamarac.

The Director of Community Development recommends that the Planning Board forward a favorable recommendation of approval for the adoption of the proposed text amendment to Chapter 10, Article 6, Section 10-6.2, entitled "Vehicle and Equipment", Sub-Section 10-6.2 (C)(9)(g) in the City of Tamarac Code of Ordinances to the City Commission on First Reading at its December 8, 2021 meeting.

FISCAL IMPACT: There will be no direct budgetary impact.



Maxine A. Calloway,
Director of Community Development

Attachments: Temporary Ordinance No. 2491
Justification Letter

Planning Board

Specialty Automotive Treatments, Inc., Land Development Code Text Amendment

2-LUA-21 – Temp. Ordinance No. 2491

October 11, 2021 – Page 6

MAC:AJ

CITY OF TAMARAC, FLORIDA

ORDINANCE NO. 2021 - _____

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF TAMARAC, FLORIDA; AMENDING CHAPTER 10, ARTICLE 6, ENTITLED "RULES OF CONSTRUCTION AND DEFINITIONS", SPECIFICALLY SECTION 10-6.2(C)(9), ENTITLED "VEHICLE AND EQUIPMENT", MORE SPECIFICALLY SUBSECTION 10-6.2(C)(9)(g) OF THE CITY OF TAMARAC CODE OF ORDINANCES, AMENDING THE DEFINITION OF THE USE "VEHICLE SERVICE AND REPAIR, MINOR; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Keith M. Poliakoff, Esq., designated agent for the property owner, NRNS Acquisition 3705 Commercial, LLC, is requesting the approval of a Text Amendment to Land Development Code to incorporate the following text into the Vehicle Service and Repair, Minor definition: minor interior vehicle repair/installations, including prefabricated parts, audio equipment, window tint, vehicle wraps, and seat covers that do not require the use of heavy machinery or a vehicle lift to install.; and

WHEREAS, the applicant, herein identified as Specialty Automotive Treatments, Inc. is under contract to purchase the subject property previously known as the AMC Liquidators Building located at 3705 W. Commercial Boulevard in the City of Tamarac and desires to operate a minor vehicle repair facility; and

WHEREAS, pursuant to the City-wide rezoning and revised Land Development Code adoption by the City Commission on July 12, 2018, the property was rezoned to the MU-C (Mixed Use Corridor) which permits the use of a minor vehicle repair facility subject to Special Exception approval by the City Commission; and

WHEREAS, the City's Mixed Used Districts, and specifically the Mixed-Use

CODING: Words in ~~strike-through~~ type are deletions from the existing law;
Words in underscore type are additions.

Corridor (MU-C) zoning designation is intended to encourage the development of mixed-use activity centers along the City's primary transportation corridors and gateways; and

WHEREAS, the district is distinguished from the other Mixed-Use Districts, as it's designed to accommodate a mix of retail, office, and service, institutional, cultural/public, and entertainment developments that meet local and regional needs and are sensitively designed to reflect a positive image of the City; and

WHEREAS, Section 10-6.2(C)(9)(g) of the City's Land Development Code defines the use *Vehicle Service and Repair, Minor* to include light maintenance activities such as engine tune-ups; oil change or lubrication; carburetor cleaning; muffler replacement; brake repair; and tire shops. Vehicle parts are sold and are ordinarily installed on the premises; and

WHEREAS, due to the uniqueness of the applicant's business model providing customized wheels, LED lighting, audio equipment, vehicle wraps, and interior seat covers, the services are not classified under the current definition of *Vehicle Service and Repair, Minor* in the City's Land Development Code; and

WHEREAS, after review of the applicant's request staff determined that an amendment to Chapter 10, Article 6, Section 10-6.2-(C)(9)(g) of the City's Code is necessary to expand the definition of services provided under the *Vehicle Service and Repair, Minor* classification to allow for growing development in this unique service-based industry and;

WHEREAS, the City's adopted Comprehensive Plan, *Future Land Use Element*, Objective 1 requires the City to administer and adopt appropriate land development code revisions, amending them as needed to respond to changing conditions; and

CODING: Words in ~~strike through~~ type are deletions from the existing law;
Words in underscore type are additions.

WHEREAS, Policy 10.8 of the Future Land Use Element of the City's Comprehensive Plan requires commercial land uses to be located in a manner compatible with adjacent land uses so as not to adversely affect the health, safety, welfare or aesthetics of existing or future residential areas; and

WHEREAS, Section 10-5.4(D)(3) of the City's Land Development Code establishes criteria by which an amendment to the text of the Code may be considered; and

WHEREAS, Staff has reviewed the applicant's request for an amendment to the text of the Land Development Code and has determined that the criteria have been met for granting approval of the application; and

WHEREAS, the Director of Community Development recommends approval of the ordinance; and

WHEREAS, the proposed amendment supports the City's Strategic Plan Goal #3 "Tamarac is Economically Resilient" by establishing land development policies that are responsive to evolving industry needs, the City will continue to foster pro-growth development practices that will not only retain, but also attract new businesses to Tamarac; and

WHEREAS, the City Commission of the City of Tamarac deems it to be desirable and in the best interest of the citizens, businesses, and development stakeholders of the City of Tamarac to amend Chapter 10, Article 6, Section 10-6.2(C)(9) entitled, "Vehicle and Equipment-Judicial Matters", Subsection 10-6.2(C)(9)(g) by amending the definition of the use *Vehicle Service and Repair, Minor* to include certain minor vehicle customization services that do not require the use of heavy machinery or a vehicle lift to

install.

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

SECTION 1. The foregoing recitals are hereby ratified and confirmed as being true and correct and are hereby made a specific part of this Ordinance upon adoption hereof.

SECTION 2. That Chapter 10, Article 6, Section 10-6.2 (C)(9) entitled "Vehicle and Equipment", Subsection 10-6.2(C)(9)(g) of the Tamarac Code of Ordinance is hereby amended to read as follows:

(9) **Vehicle and Equipment.** Uses include a broad range of uses for the maintenance, sale, or rental of motor vehicles and related equipment. Accessory uses may include incidental repair and storage and offices. Specific use types include:

- (a) **Boat and Marine Sales.** An establishment primarily engaged in the display, sale, or lease of boats and other marine vehicles.
- (b) **Vehicle Fuel Sales.** Buildings and premises where gasoline and similar fuels for automotive use are supplied and dispensed at retail (or in connection with a private operation where the general public is excluded from use of facilities).
- (c) **Vehicle Rental.** An establishment engaged in the rental of new or used motor vehicles. Vehicles included, but are not limited to, automobiles, light trucks, vans, trailers, recreational vehicles, motorcycles, personal watercraft other than boats, utility trailers, all-terrain vehicles, and mobile homes. Minor vehicle repair is allowed as an accessory use.
- (d) **Vehicle Sales, New.** An establishment engaged in the display, sale, or leasing of new motor vehicles. Vehicles included, but are not limited to, automobiles, light trucks, vans, trailers, recreational vehicles, motorcycles, personal watercraft other than boats, utility trailers, all-terrain vehicles, and mobile homes. Vehicle repair is allowed as an accessory use.
- (e) **Vehicle Sales, Used.** An establishment engaged in the retail sale of more than five used motor vehicles a year, or the display of two more used motor vehicles for sale in any month. Vehicle repair is allowed as an accessory use.

CODING: Words in ~~strike through~~ type are deletions from the existing law;
Words in underscore type are additions.

- (f) **Vehicle Service and Repair, Major.** An establishment engaged in the major repair and maintenance of automobiles, motorcycles, trucks, vans, trailers, recreational vehicles, or mobile homes. Services include engine, transmission, or differential repair or replacement; body, fender, or upholstery work; and painting.
- (g) **Vehicle Service and Repair, Minor.** An establishment engaged in light maintenance activities such as engine tune-ups; oil change or lubrication; carburetor cleaning; muffler replacement; brake repair; ~~and tire shops;~~ minor interior vehicle repair/installations; including prefabricated parts; audio equipment; window tint; vehicle wraps; and seat covers that do not require the use of heavy machinery or a vehicle lift to install. Vehicle parts are sold and are ordinarily installed on the premises.

SECTION 3. Codification. It is the intention of the City Commission of the City of Tamarac that the provisions of this Ordinance shall become and be made a part of the Code of Ordinances of the City of Tamarac, Florida, and that the Sections of this ordinance may be renumbered, re lettered and the word "Ordinance" may be changed to "Section", "Article" or such other word or phrase in order to accomplish such intention.

SECTION 4. Conflicts. That all Ordinances or parts of Ordinances, Resolutions or parts thereof in conflict herewith, be and the same are hereby repealed to the extent of such conflict.

SECTION 5. Severability. Should any section, provision, paragraph, sentence, clause or word of this Ordinance or portion hereof be held or declared by any court of competent jurisdiction to be unconstitutional or invalid, in part or application, it shall be considered as eliminated and shall not affect the validity of the remaining portions or applications of this Ordinance.

SECTION 6. Effective Date. This Ordinance shall become effective upon adoption.

THE REST OF THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK.

PASSED, FIRST READING this day of , 2021.

PASSED, SECOND READING this day of , 2021.

MICHELLE J. GOMEZ,
MAYOR

ATTEST:

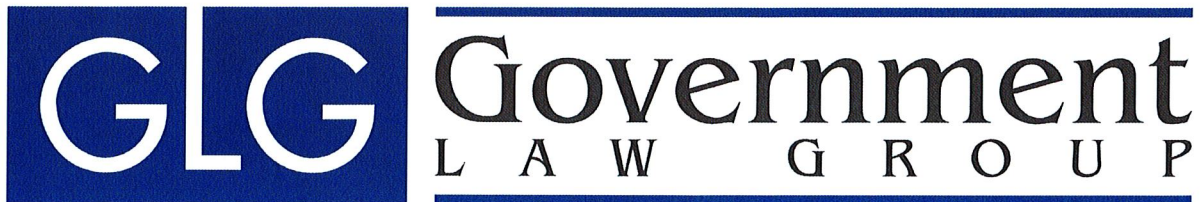
JENNIFER JOHNSON, CMC
CITY CLERK

I HEREBY CERTIFY that I
have approved this
ORDINANCE as to form.

JOHN R. HERIN, JR.
CITY ATTORNEY

This Ordinance was filed in the Office of the City Clerk on this ____ day of _____ 202__.

CODING: Words in ~~strike through~~ type are deletions from the existing law;
Words in underscore type are additions.



W W W . G O V L A W G R O U P . C O M

Keith Poliakoff, Esq. | (954) 909-0590 office | kpoliakoff@govlawgroup.com

September 7, 2021

Robert W. Johnson, III
Planning and Zoning Manager
City of Tamarac
7525 NW 88th Avenue
Tamarac, Florida 33321

**Re: Specialty Automotive Treatments, Inc., – 3705 West Commercial Blvd.
Special Exception - Justification Letter**

Dear Mr. Johnson:

As the attorney of record for the above referenced project, this shall serve as our justification letter in support of our Special Exception Application. The project consists of relocating the headquarters of Specialty Automotive Treatments, Inc., ("SAT") from Fort Lauderdale to Tamarac. SAT is a 40-year corporation and industry leader specializing in interior vehicle customization and accessories. The project site is located at 3705 West Commercial Boulevard in the Tamarac Business Center, just West of 441 on Commercial Boulevard. The site is approximately 2.04 acres, and is currently zoned MU-C, with a Commercial land use. The project will provide much needed redevelopment to the area while phasing in updated landscaping, drainage, parking and façade, within 24 months of approval.

The following represents our justification for the Special Exception encompassing the review standards of Section 10-5.4 (G)(4):

1. The proposed development will be consistent with the Comprehensive Plan.

The proposed use as a vehicle customization center and retail showroom/office is permitted as a Special Exception within the MU-C zoning district and meets the following goals and objectives of the Comprehensive Plan.

200 S. Andrews Avenue, Suite 601
Ft. Lauderdale, FL 33301

Government Law Group, PLLC

Robert W. Johnson, III
Planning and Zoning
September 7, 2021

Objective 1

The City of Tamarac intends to promote orderly growth and development through the adoption, maintenance, and implementation of its Future Land Use Element.

Objective 17

Development in the Tamarac Commerce Park shall comply with goals and objectives of the City's Economic Development Strategy.

Policy 17.1 The Community Development Department will work with the property owners, developers, Planning Board, City Commission and interested members of the public to ensure the proper planning of this area with the goal of establishing a world class Business Center.

Policy 17.2 The City Commission, Planning Board, City Manager and the Community Development Department will continue to promote the economic development of the Tamarac Commerce Park, by actively recruiting business and industry to provide employment opportunities for Tamarac residents while building the community's tax base.

2. The proposed development will comply with applicable zoning district, use, and development standards of this Code.

The proposed use as a vehicle customization center and retail showroom/office is permitted as a Special Exception within the MU-C zoning district. With the Special Exception and accompanying proposed text amendment, the project will not conflict with any provisions of the City's Code.

3. The proposed development will be compatible with the existing natural environment and community character of the properties within the immediate neighborhood.

The proposed use as a vehicle customization center and retail showroom/office is a less intensive use as permitted within the MU-C zoning district and is compatible with the community character of the surrounding properties. Specifically, uses surrounding the property include a coin laundry, a tile and marble distributor, a bank, and a warehouse.

4. The proposed development will be desirable for public convenience, and not injurious or otherwise detrimental to the public health, safety, comfort, and welfare.

The project consists of relocating the headquarters of Specialty Automotive Treatments,

Government Law Group, PLLC

Robert W. Johnson, III
Planning and Zoning
September 7, 2021

Inc., ("SAT") from Fort Lauderdale to Tamarac. SAT is a 40-year corporation and industry leader specializing in interior car customization and accessories, this will provide a destination facility to the City, create local jobs, and provide a unique business to residents and visitors alike. The project will not be detrimental to the public's health, safety, comfort and welfare.

5. The proposed development will minimize adverse effects, including noise, light, dust, or other potential nuisances, on adjacent properties to the greatest extent practicable.

SAT specializes in interior customization of vehicles, with the addition of custom wheels and rims. SAT does not engage in paint/body work, engine repair, transmission repair, used tires, new sunroof installations, oil changes, preventative maintenance. Accordingly, with the vehicle customization being conducted indoors, in a fully air-conditioned facility, the project will minimize any visual and audible adverse effects, on adjacent properties to the greatest extent possible.

6. The proposed development will include adequate provisions for safe and convenient vehicular and pedestrian traffic movement to, from, and through the site that minimizes traffic congestion in the public streets.

The project is being proposed to include adequate provisions for safe and convenient vehicular and pedestrian movement to and from the site in order to minimize traffic congestion.

7. The site area is sufficient, appropriate, and adequate for the use and any reasonably anticipated expansion of the use.

The site is approximately 2.0432 acres, and its proposed use as a vehicle customization center is permitted as a Special Exception within the MU-C zoning district. With the Special Exception and accompanying proposed text amendment, the project is sufficient, appropriate and adequate for the use and any reasonably anticipated expansion of the use.

8. The Special Exception shall only remain valid during the period of which the certificate of occupancy and business license remains active.

Agreed.

9. The Special Exception is transferable administratively pursuant to compliance with City Codes, submitting documentation and payment of fees only after the previous condition has been met.

Agreed.

Government Law Group, PLLC

Robert W. Johnson, III

Planning and Zoning

September 7, 2021

10. Any pre-existing code violations shall be satisfied before a certificate of occupancy is issued for the proposed use.

Agreed. Any pre-existing code violations shall be satisfied before a certificate of occupancy is issued for the proposed use.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Poliakoff", written over the printed name.

Keith M. Poliakoff



7525 NW 88th Avenue
Tamarac, Florida 33321

CITY OF TAMARAC PLANNING BOARD AGENDA

November 3, 2021

ITEM 4. **TBO 49 - Specialty Automotive
Treatments, Inc.- Special
Exception**

Case No.: 3-Z-21

Project Name: Specialty Automotive Treatments,
Inc. - Special Exception

Commission District: 1

Location: 3705 W Commercial Boulevard, Tamarac,
Florida 33309

Petitioner: Requesting approval of a Special
Exception to allow for the use of a minor
vehicle service and repair facility in the MU-
C (Mixed-Use Corridor) Zoning District.

ATTACHMENTS:

Description	Upload Date	Type
1 - Specialty Automotive Treatments, Inc SE Memo 3-Z-21	10/29/2021	Cover Memo
2 - SE - Board Order	10/29/2021	Board Orders
3 - Justification Narrative Specialty Automotive Treatments, Inc	10/29/2021	Backup Material
4 - Site Location Map	10/29/2021	Backup Material

CITY OF TAMARAC
INTEROFFICE MEMORANDUM 21-10-008
COMMUNITY DEVELOPMENT DEPARTMENT

TO: Planning Board
Meeting of November 3, 2021

FROM: Maxine A. Calloway,
Director of Community Development

DATE: October 15, 2021

RE: **Specialty Automotive Treatments, Inc. – Special Exception**
TEMP BOARD ORDER NO.49; CASE#: 3-Z-21; MF#: 18-83

RECOMMENDATION: The Director of Community Development recommends that the Planning Board forward a favorable recommendation of approval of the Special Exception for Specialty Automotive Treatments, Inc., to allow for the use of a minor vehicle repair facility in the MU-C (Mixed Use Corridor) Zoning District with conditions of approval to the City Commission at its December 8, 2021 meeting.

ISSUE: Keith M. Poliakoff, Esq., designated agent for the property owner, NRNS Acquisition 3705 Commercial, LLC, is requesting the approval of a Special Exception to allow for the use of a minor vehicle repair facility in the MU-C (Mixed Use Corridor) Zoning District pursuant to the Table of Allowed Uses, Section 10-3.2, Code of Ordinances (see attached Justification Letter).



Aerial Photograph

LOCATION: The subject property is located on the north side of NW 50th Street/W Commercial Boulevard, west of NW 37th Avenue, at 3705 West Commercial Boulevard, in the previous AMC Liquidator's Building (see Aerial Photograph above and attached Location Map). The subject property is 2.04 acres in size, has a current City of Tamarac Future Land Use designation of

“Commercial” and a zoning classification of MU-C (Mixed Use Corridor).

Surrounding Land Use and Zoning:

North: RV Kozy Kamper Park – City of North Lauderdale
East: MU-C (Mixed-Use Corridor) – Commercial Office/Warehouse Building
West: MU-C (Mixed-Use Corridor) – Vacant Parcel
South: MU-C (Mixed-Use Corridor) – W. Commercial Blvd. then Commercial Building

BACKGROUND: The subject property previously known as the AMC Liquidator’s Building was constructed in 1983 and generally designed as a commercial structure with storage area in the rear. Located at 3705 W. Commercial Boulevard, the property was zoned B-3 (General Business District) under the City’s previous Land Development Code. Pursuant to the City-wide rezoning and revised Land Development Code adoption by the City Commission on July 12, 2018, the property was rezoned to the MU-C (Mixed Use Corridor) which, similar to previous zoning designation, permits the use of a minor vehicle repair facility subject to Special Exception approval. Legally described as lots 10 and 11 of the Tamarac Business Center Plat, the property has a Future Land Use Designation of Commercial and is encumbered by a 25’ foot alley easement on the north and a 50’ foot drainage easement on the south property lines. As such, the nearest part of the existing 30,656 sq. ft. structure is setback approximately 70’ feet from the Commercial Boulevard roadway.

The applicant, Specialty Automotive Treatments, Inc., has been providing vehicle customization products within the auto industry for over 40 years. Family owned and operated, the company is currently located at 700 W. Sunrise Boulevard, in the City of Fort Lauderdale, and desires to relocate its headquarters to the City of Tamarac. In an effort to secure a permanent location for the operation of the family’s business, the applicant is currently under contract to purchase the subject property and desires to operate a minor vehicle repair facility providing custom wheels, rims, interior seat covers, vehicle wraps, LED lighting and interior audio equipment to its customers.

The entirety of the facility’s operations will be conducted indoors and will not generate the typical hazardous waste products associated with heavy vehicle repair such as used parts, oil, transmission, and other vehicular fluids. Further, the applicant does not engage in the sale of motor vehicles and only provides customization products for each unique order. The business currently employs approximately 45 employees and expects to hire more local employees as the business continues to grow. The hours of operation will be Monday through Friday from 8:30 am – 6:00 pm and the facility will be closed on the weekends.

Moreover, the applicant desires to further enhance the aesthetic appearance and functionality of the site. Within 24 months of obtaining development approvals, the applicant desires to upgrade the subject property with several improvements. The improvements do not include any plans to expand the existing structure, and staff has determined that the sixty-three (63) parking spaces provided on the site are sufficient for the operation. However, in an effort to redevelop the property and further the longevity of its functionality, the applicant proposes to upgrade the landscaping, façade, drainage, and parking design features via a separate site plan application within in the aforementioned time frame.

Accompanying this application is a request for a text amendment to the Land Development Code. While the City's Code permits the operation of a minor vehicle repair facility in the MU-C (Mixed Use Corridor) zoning district subject to special exception approval, upon further staff review the proposed operation was not clearly defined under the permissible uses for the category. As such, the applicant has submitted an application for a text amendment to Section 10-6.2(C)(9)(g) of the Land Development Code to allow for the incorporation of the following text: minor interior vehicle repair and installations; including prefabricated parts; audio equipment; window tint; vehicle wraps; and seat covers that do not require the use of heavy machinery or a vehicle lift to install, to the *Vehicle Service and Repair*, Minor classification as defined in the City's Code.

ANALYSIS: The applicant is requesting approval of a Special Exception to allow for the operation of a minor vehicle repair facility in the MU-C (Mixed Use Corridor) zoning district. Per Section 10-3.2, Table of Allowed Uses, in the City's Land Development Code, minor vehicle repair facilities are a permitted use in the zoning district subject to Special Exception approval by the City Commission. Additionally, minor vehicle repair facilities are also subject to use standards as outlined in Section 10-3.3 (D)(18) of the City's Land Development Code. To that end, the facility must also be at least 50 feet away from any residentially zoned property and screened from view by either a fence, wall or hedge. Upon staff review, the subject property was found to be in compliance with this provision of the City's Code as there are no residentially zoned parcels abutting the site for the proposed facility. While the Kozy Kamper RV Park is located to the north of property, the jurisdiction of the City's Code would apply to parcels located in the City of Tamarac. As the adjacent RV Park is located in the City of North Lauderdale and is zoned CR (Commercial Recreation) the provisions of the City's Code would not be applicable to the parcel.

The purpose of the Special Exception is to provide for individualized review of certain uses that due to their nature, relationship to the Comprehensive Plan, and potential adverse impacts on surrounding areas require special consideration of their location, design, and methods of operation, as well as the imposition of conditions to mitigate concerns, before they can be deemed appropriate in a zoning district and compatible with their surroundings. Furthermore, the use must be consistent with Section 10-5.4(G)(4) of the Land Development Code and conform to all City ordinances and other applicable regulations for the uses in the district in which the Special Exception is located. Such applications shall demonstrate compliance with the following standards:

Review Standards for Special Exception

(a) The proposed development will be consistent with the Comprehensive Plan;

The proposed use of a minor vehicle repair facility is consistent with the uses identified in the City's Land Development Code for special exception consideration within the MU-C zoning district and therefore inherently consistent with the intent of the City's Comprehensive Plan. The proposed development is specifically consistent with, Objectives 1 and 17 within the City's Future Land Use Element which promotes the orderly growth of development and ensure its strategic alignment with the City's economic development goals and initiatives. To that end, the applicant's proposal is also in alignment with the goals and objectives contained within the Economic Development Element of the City's Comprehensive Plan as the development will help to revitalize an otherwise vacant commercial building along one of the City's major corridors.

- (b) The proposed development will comply with applicable zoning district, use, and development standards of this Code;*

The applicant desires to operate a minor vehicle repair facility in the MU-C (Mixed Use Corridor) zoning district. Per the City's Land Development Code, minor vehicle repair facilities are permitted in the MU-C (Mixed Use Corridor) zoning district subject to Special Exception approval by the City Commission. The applicant has submitted the appropriate applications and the proposed development complies with the applicable zoning district, use and development standards as outlined in the City's Code.

- (c) The proposed development will be compatible with the existing natural environment and community character of the properties within the immediate neighborhood;*

The applicant desires to operate a minor vehicle repair facility within an existing commercial structure located on the subject property. The applicant has also proposed to make future modifications to the existing site to further enhance its aesthetic appearance and operational design under a separate site plan application. City staff will continue to work with the applicant through the site plan review process to ensure the proposed development is compatible with the existing natural environment and surrounding community character.

- (d) The proposed development will be desirable for public convenience, and not injurious or otherwise detrimental to the public health, safety, comfort, and welfare;*

Per the City's Code, the MU-C (Mixed Use Corridor) zoning district is intended to encourage the development of mixed use activity centers along the City's primary transportation corridors and gateways. The district is intended to accommodate a mix of retail, office, service, institutional and entertainment needs in the local and regional area. The applicant is proposing to operate a minor vehicle repair facility as a service to patrons of the business. The applicant has been informed of the use standards for the facility in the zoning district and will further adhere to the City's design, building, and development standards. The applicant has further agreed to work with City staff in the future to enhance the aesthetic appearance and functionality of the existing site. As such the proposed use is desirable for public convenience, and not injurious or detrimental to the public health, safety, comfort, and welfare.

- (e) The proposed development will minimize adverse effects, including noise, light, dust, or other potential nuisances, on adjacent properties to the greatest extent practicable;*

As previously mentioned, the applicant desires to operate a minor vehicle repair facility within an existing commercial structure. Additionally, the applicant does not propose to perform any work outside of the premise which would be considered injurious or classified as harmful to the surrounding area. The impact of the business operations would be minimal and pose no significant impact to existing built environment. The applicant will work with City staff to facilitate a site plan application to enhance the operation and aesthetics of the existing property. To that end, staff will work with the applicant to ensure that the impacts to the surrounding area during redevelopment are mitigated to greatest extent practicable. Thereby,

minimizing any adverse effects on the adjacent properties.

- (f) The proposed development will include adequate provisions for safe and convenient vehicular and pedestrian traffic movement to, from, and through the site that minimizes traffic congestion in the public streets;*

The applicant will be utilizing the existing structure to operate a minor vehicle repair facility. Staff has conducted the necessary parking analysis and ensured that there is adequate parking on site per the city's Land Development Code. The proposed use does not impact the existing vehicular traffic circulation pattern and does not require any roadway modifications. As such, the use will have minimal impact on the existing transportation network and possesses adequate provisions for safe and convenient vehicular and pedestrian traffic movement to, from, and through the site that minimizes traffic congestion in the public streets.

- (g) The site area is sufficient, appropriate, and adequate for the use and any reasonably anticipated expansion of the use;*

The subject property is approximately 2.04 acres in size and will accommodate the use of a minor vehicle repair facility. The business operations will be conducted within the existing 30,656 sq. ft. structure and is sufficient for the current operation of the use. The applicant has expressed that plans to expand the existing structure are not being considered at this time. As such, the site area is also sufficient as there is no reasonably anticipated expansion of the use.

- (h) The Special Exception shall only remain valid during the period of which the certificate of occupancy and business license remains active;*

The applicant is aware that the approval of Special Exception shall only remain valid during the period of which the certificate of occupancy and business license remain active.

- (i) The Special Exception is transferable administratively pursuant to compliance with City Codes, submitting documentation and payment of fees only after the previous condition has been met.*

The applicant has acknowledged that in case the business is sold, the special exception can only be transferable pursuant to compliance with city codes and submitting proper documentation as well as all payment of fees.

- (j) Any pre-existing code violations shall be satisfied before a certificate of occupancy is issued for the proposed use.*

The applicant has agreed that any pre-existing violations will be addressed prior to the business receiving a Certificate of Occupancy.

CONCLUSION: This item supports the City's Strategic Plan Goal "Tamarac is Economically Resilient." The applicant proposes to purchase, redevelop and occupy an otherwise vacant commercial structure within the City's Mixed-Use Corridor. Thereby, creating an opportunity to attract new business to the City and further its economic development initiatives. As such, the Director of Community Development recommends that the Planning Board forward a favorable recommendation of approval of the Special Exception to allow for the use of a minor vehicle repair

facility in the MU-C (Mixed Use Corridor) Zoning District to the City Commission at its December 8, 2021 meeting with the following conditions of approval:

1. The applicant shall not service vehicles in a manner that is visible in the front setback area.
2. The applicant shall not store or display derelict vehicles on the subject property at any time.
3. The applicant shall not store or display any vehicles for sale on the subject property at any time.
4. The applicant shall agree to submit to the City's Community Development Department an application for site plan approval to upgrade the landscaping, drainage, parking, and façade design of the development within 24 months from the date of City Commission approval of the Special Exception.

FISCAL IMPACT: There will be no direct budgetary impact. This application is funded by an application/processing fee.



Maxine A. Calloway,
Director of Community Development

Attachments: Board Order for Special Exception – Temp Board Order No. 49
 Justification Letter
 Location Map

Return to:
 City Attorney
 CITY OF TAMARAC
 7525 NW 88TH Avenue
 Tamarac, Florida 33321-2401

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Space Above This Line for Recording

FINAL BOARD ORDER FOR DEVELOPMENT PERMIT

BEFORE THE CITY COMMISISON
 CITY OF TAMARAC, FLORIDA
 BO - 2021 - _____

HEARING DATE: December 8, 2021
CASE NO. 3-Z-21

IN RE: The Application of: Specialty Automotive Treatments, Inc.
 Location: 3705 W Commercial Blvd,
 Tamarac, Florida

Property Identification Number: 494218020100

Property Legal Description: TAMARAC BUSINESS CENTER 61-27 B LOT 10,11 LESS S 10
 FOR RD THEREOF

ORDER APPROVING SPECIAL EXCEPTION

Order granting Special Exception approval (with conditions) for Specialty Automotive Treatments, Inc., to allow for the operation of a minor vehicle repair facility in the MU-C (Mixed Use Corridor) zoning district pursuant to the Tamarac Code of Ordinances.

Keith M. Poliakoff, Esq., Designated Agent of the Property Owner, NRNS Acquisition 3705 Commercial, LLC, is requesting approval of a Special Exception to allow for the use of a minor vehicle repair facility at the subject property, legally described as LOT 10,11 LESS S 10, 61-27B on the Plat of TAMARAC BUSINESS CENTER, located at 3705 W Commercial Blvd, Tamarac, Florida.

Notice of the request for Special Exception approval was given pursuant to Chapter 2, Article X and Chapter 10, Section 10-5.3(F) of the City of Tamarac Code of Ordinances. The City Commission of the City of Tamarac (“Commission”) has identified that the property located at 3705 W Commercial Blvd, Tamarac, Florida (the “Property”) is located in the MU-C (Mixed Use Corridor) Zoning District.

Pursuant to the authority contained in Section 10-5.4(G) of the City of Tamarac Code of Ordinances, the Planning Board has reviewed the application, held a quasi-judicial public hearing on **November 3, 2021**, and recommend to the City Commission, **APPROVAL OF THE APPLICATION WITH CONDITIONS.**

Pursuant to Sections 2-369, 2-370, 10-5.3(G) and 10-5.3(H) of the City of Tamarac Code of Ordinances, and following the consideration of all testimony and evidence presented at the City Commission hearing on **December 8, 2021**, the City Commission finds as follows:

1. That the proposed development will be consistent with the Comprehensive Plan.
2. That the proposed development will comply with applicable district, use, and development standards in the City of Tamarac Code of Ordinances.
3. That the proposed development will be compatible with the existing natural environment and community character of the properties within the immediate neighborhood;
4. That the proposed development will be desirable for public convenience, and not injurious or otherwise detrimental to the public health, safety, comfort, and welfare;
5. That the proposed development will minimize adverse effects, including noise, light, dust, or other potential nuisances, on adjacent properties to the greatest extent practicable;
6. That the proposed development will include adequate provisions for safe and convenient vehicular and pedestrian traffic movement to, from, and through the site that minimizes traffic congestion in the public streets;
7. That the site area is sufficient, appropriate, and adequate for the use and any reasonably anticipated expansion of the use;
8. That the Special Exception shall only remain valid during the period of which the certificate of occupancy and business license remains active;
9. That the Special Exception is transferable administratively pursuant to compliance with City Codes, submitting documentation and payment of fees only after the previous condition has been met; and

10. Any pre-existing code violations shall be satisfied before a certificate of occupancy is issued for the proposed use.

Pursuant to the authority contained in Sections 2-369, 2-370, 10-3.2, 10-5.3 (G) and (H) and 10-5.4 (G) of the City of Tamarac Code of Ordinances, the Applicant's request for Special Exception Approval to allow for the operation of a minor vehicle repair facility in the MU-C (Mixed Use Corridor) Zoning District located at 3705 W Commercial Blvd, is hereby **APPROVED** subject to the following conditions:

1. The applicant shall not service vehicles in a manner that is visible in the front setback area.
2. The applicant shall not store or display derelict vehicles on the subject property at any time.
3. The applicant shall not store or display any vehicles for sale on the subject property at any time.
4. The applicant shall agree to submit to the City's Community Development Department an application for site plan approval to upgrade the landscaping, drainage, parking, and façade design of the development within 24 months from the date of City Commission approval of the Special Exception.

[INTENTIONALLY LEFT BLANK]

This document shall be recorded in the public records of Broward County, Florida.

DONE and ORDERED this _____ day of _____, 2021, in Tamarac, Florida.

CITY COMMISSION
CITY OF TAMARAC, FLORIDA

By: _____
MICHELLE J. GOMEZ, MAYOR

ATTEST:

Jennifer Johnson, City Clerk

STATE OF FLORIDA)
) §§
COUNTY OF BROWARD)

I hereby certify that on this day, before me, by means of ☒ **physical presence** or ☐ **online** notarization, appeared Tamarac City Commission Mayor, _____, to me personally known, who acknowledged that she is the Mayor of the City of Tamarac ("Commission") City Commission, a Florida municipal corporation, and that this instrument was signed for the purposes contained on behalf of the City and by the authority of the City, and that she further acknowledges the instrument to be the free act and deed of the Commission.

Sworn to and subscribed before me this _____ day of _____, 2021.

NOTARY PUBLIC, STATE OF FLORIDA

My Commission Expires:

This Board Order was filed in the Office of the City Clerk on this ____ day of _____ 202__.



Keith Poliakoff, Esq. | (954) 909-0590 office | kpoliakoff@govlawgroup.com

September 7, 2021

Robert W. Johnson, III
Planning and Zoning Manager
City of Tamarac
7525 NW 88th Avenue
Tamarac, FL 33321

**Re: Specialty Automotive Treatments, Inc., – 3705 West Commercial Blvd.
Code Text Amendment - Justification Letter**

Dear Mr. Johnson:

As the attorney of record for the above referenced project, this shall serve as our justification letter in support of our Land Development Code Text Amendment Application. The project consists of relocating the headquarters of Specialty Automotive Treatments, Inc., (“SAT”) from Fort Lauderdale to Tamarac. SAT is a 40-year corporation and industry leader specializing in interior car customization and accessories. The project site is located at 3705 West Commercial Boulevard in the Tamarac Business Center, just West of 441 on Commercial Boulevard. The site is approximately 2.04 acres, and is currently zoned MU-C, with a Commercial land use. The project will provide much needed redevelopment to the area while phasing in updated landscaping, drainage, parking and façade, within 24 months of approval.

The applicant proposes the following text amendment to the City’s Land Development Code, **Section 10-6.2 (C)(9)(g) - Vehicle Service and Repair, Minor:**

An establishment engaged in light maintenance activities such as engine tune-ups; oil change or lubrication; carburetor cleaning; muffler replacement; brake repair; pre-manufactured automotive upholstery products, including headliners; and tire shops. Vehicle parts are sold and are ordinarily installed on the premises

The following represents our justification for the Code Text Amendment encompassing the review standards of Section 10-5.4 (D)(3):

200 S. Andrews Avenue, Suite 601
Ft. Lauderdale, FL 33301

1. Is consistent with the Comprehensive Plan.

The proposed use as a vehicle customization center and retail showroom/office is permitted as a Special Exception within the MU-C zoning district and meets the following goals and objectives of the Comprehensive Plan.

Objective 1

The City of Tamarac intends to promote orderly growth and development through the adoption, maintenance, and implementation of its Future Land Use Element.

Objective 17

Development in the Tamarac Commerce Park shall comply with goals and objectives of the City's Economic Development Strategy.

Policy 17.1 The Community Development Department will work with the property owners, developers, Planning Board, City Commission and interested members of the public to ensure the proper planning of this area with the goal of establishing a world class Business Center.

Policy 17.2 The City Commission, Planning Board, City Manager and the Community Development Department will continue to promote the economic development of the Tamarac Commerce Park, by actively recruiting business and industry to provide employment opportunities for Tamarac residents while building the community's tax base.

2. Conflicts with any other provisions of this Code or the Tamarac City Code.

The proposed use as a vehicle customization center and retail showroom/office is permitted as a Special Exception within the MU-C zoning district. With the proposed text amendment and accompanying special exception, the project will not conflict with any provisions of the City's Code.

3. Is required by changed conditions.

The proposed use as a vehicle customization center and retail showroom/office is a less intensive use as permitted within the MU-C zoning district and is required by the changed conditions within the business park.

4. Addresses a demonstrated community need.

The project consists of relocating the headquarters of Specialty Automotive Treatments, Inc., ("SAT") from Fort Lauderdale to Tamarac. SAT is a 40-year corporation and industry leader specializing in interior car customization and accessories, this will provide a destination facility to the City, create local jobs, and provide a unique business to residents and visitors alike. The project will provide much needed redevelopment to the area while phasing in updated landscaping, drainage, parking and façade, within 24 months of approval.

5. Is consistent with the purposes and intent of the zoning districts in this Ordinance, or would improve compatibility among uses and would ensure efficient development within the City.

The project is consistent with the purposes and intent of the MU-C zoning district which is intended to encourage the development of and accommodate a mix of retail, office, and service, institutional, cultural/public, and entertainment developments that meet local and regional needs and are sensitively designed to reflect a positive image of the City. The project will provide an industry leader new headquarters vehicle customization center and retail showroom/office, benefiting the residents and public, while reflecting a positive image of the City.

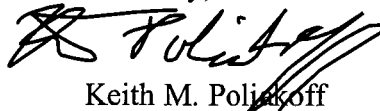
6. Would result in a logical and orderly development pattern.

The project would proceed in a time efficient and orderly development pattern, all while building a state of the art facility to house the new headquarters of SAT.

7. Would avoid significantly adverse impacts on the natural environment – including, but not limited to, water air., noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment.

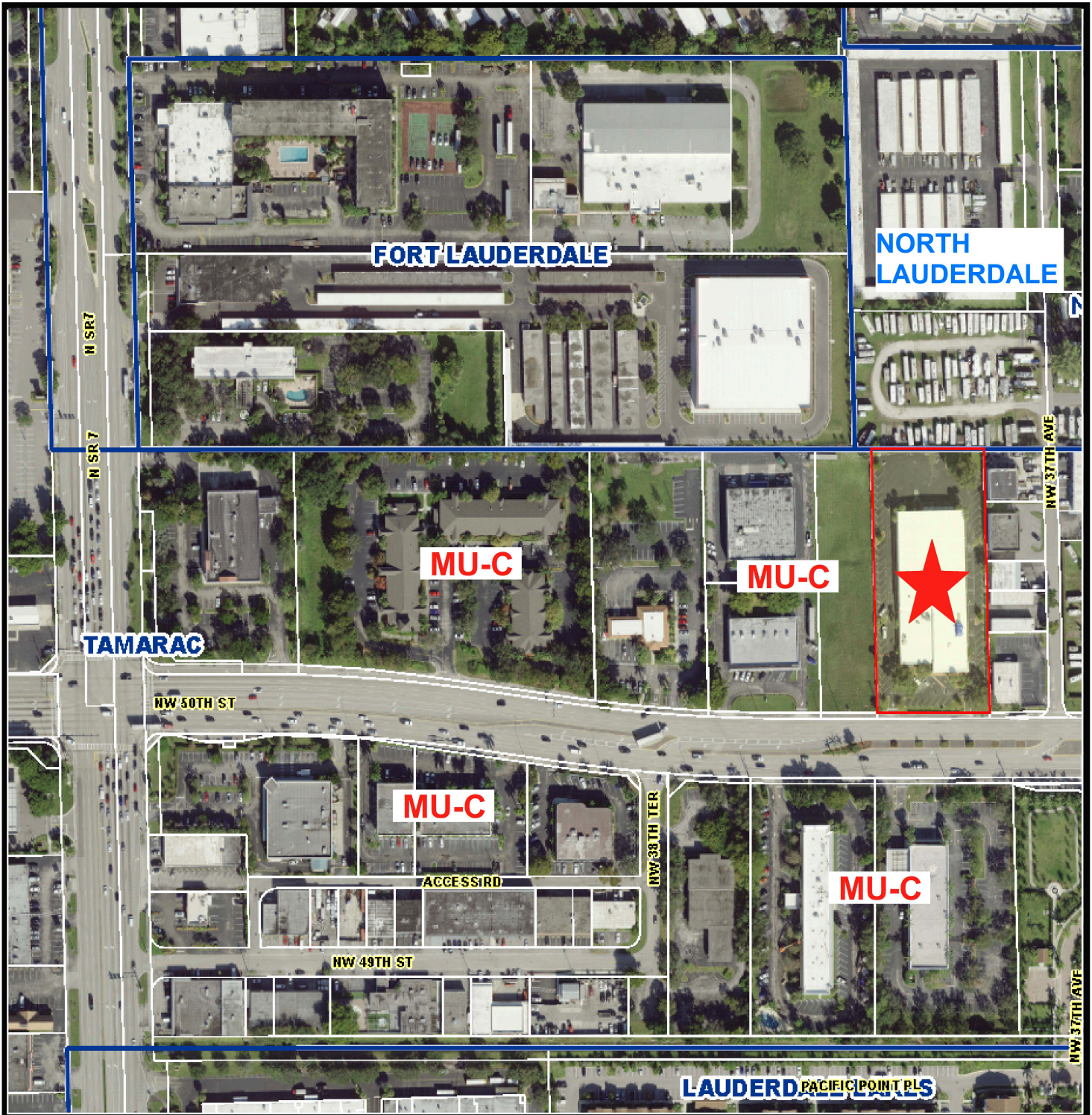
SAT specializes in interior customization of vehicles, with the addition of custom wheels and rims. SAT does not engage in paint/body work, engine repair, transmission repair, used tires, new sunroof installations, oil changes, preventative maintenance. Accordingly, with the vehicle customization being conducted indoors, in a fully air-conditioned facility, the project will minimize any visual and audible adverse effects to the greatest extent possible, and would not adversely impact the natural environment.

Sincerely,

A handwritten signature in black ink, appearing to read "Keith M. Poliakoff", written over a horizontal line.

Keith M. Poliakoff

Specialty Automotive Treatments, Inc.
Special Exception & Text Amendment to Land Development Code
Case No. 3-Z-21 & 2-LUA-21



Subject Property



Maxine Calloway, Director
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