

Vivek Galav, P.E.
Director of Public Utilities

July 26, 2021

Mr. Chris Weller
Water Facilities Environmental Manager
Florida Department of Environmental Protection, Southeast District
3301 Gun Club Road, MSC 7210-1
West Palm Beach, FL 33406

Re: City of Hollywood Southern Regional WWTP
Permit Number FL 0026255
Ocean Outfall Compliance Report

Dear Mr. Weller,

The City of Hollywood is pleased to submit the Ocean Outfall Compliance Report for the Southern Region Wastewater Treatment Plant (Permit Number FL 0026255). This document is intended to satisfy the reporting requirements for our permit as further defined in Section 403.086(9)(f), Florida Statutes.

Please contact us should you have any questions or require additional information.

Very truly yours,

CITY OF HOLLYWOOD



Vivek Galav, P.E.
Director of Public Utilities

cc: Norva Blandin, Program Administrator, DEP Southeast District Office
Michael Bechtold, P.E., DEP Southeast District Office
Feng Jiang, P.E., ECSD Assistant Director
Coy Mathis, Public Utilities Manager - Wastewater
Joel Blanco, WWTP Operations Superintendent
Kassandra Myers, Acting Deputy Director, Operations

Attachments (1)
Ocean Outfall Compliance Report for the Southern Region Wastewater Treatment Plant
(Permit Number FL 0026255)

1621 N. 14 Avenue
P.O. Box 229045
Hollywood, Florida
33022-9045

hollywoodfl.org

Southern Regional Wastewater Treatment Plant



July 2021

A photograph of a golf course landscape. In the foreground, there is a body of water reflecting the sky and trees. A grassy area with several tall pine trees is in the background. A yellow flag is visible on a green in the distance. The text "Ocean Outfall Compliance Report Update" is overlaid on the right side of the image.

Ocean Outfall
Compliance Report Update

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SRWWTP 2019 Ocean Outfall Compliance Report Update

1.0 Background

The City of Hollywood's (City) Southern Regional Wastewater Treatment Plant (SRWWTP), operated under permit FL0026255, utilizes an ocean outfall and two Class I Deep Injection Wells (DIWs) as the primary means of treated effluent disposal. Secondary effluent from two sources (brackish and fresh) is additionally reclaimed and utilized for both onsite (brackish process water) and irrigation reuse applications (using fresh effluent supplied from the Town of Davie and Cooper City). Florida Statute 403.086(9), referred to as the Ocean Outfall Legislation (OOL), affects this facility. The OOL requires nutrient reduction, the elimination of effluent discharges to the ocean (with limited exceptions for peak flows), and the implementation of functional reuse of 60 percent of the base condition flow discharged through the ocean outfall by the year 2025. The statute describes a functional reuse system as one that is environmentally, technically and economically feasible and achieves the minimum required level of reuse. The base condition flow was established using outfall flow data from 2003 to 2007, as defined in the OOL.

Through an amendment (in 2013) of the original OOL, provisions have been incorporated into the legislation to provide increased system operational flexibility in how compliance may be achieved. Key provisions incorporated by amendment include allowing utilities impacted by the statute to contract with other systems for implementation of reuse, and to allow for the discharge of peak flows limited to 5% of the base condition flow on a rolling five-year average basis.

The City has diligently investigated its options for complying with the requirements of the OOL and has developed a plan for meeting the nutrient reduction, outfall closure and reuse requirements in a manner that is feasible. Due to the high chloride levels of the City's effluent that renders the effluent unsuitable for typical reuse irrigation applications, and stringent local Broward County nutrient limits, both of which would require desalination, the development of a feasible reuse compliance plan was particularly challenging. As the plan was being developed, the City explored options that included implementation of a dual irrigation system at an estimated cost of \$1 billion and invested \$3 million in a pilot study that assessed the technology requirements to implement recharge of the Floridan Aquifer. These alternatives faced significant challenges that limited their feasibility.

In a status report (mandated by the OOL) to the Governor and State Legislature, the FDEP acknowledged that Hollywood faced unique challenges to its development of a feasible reuse program and indicated its intent to work with the City to ensure that the most feasible reuse options are implemented by December 31, 2025. The City worked to develop a refined functional reuse compliance plan and closely coordinated with the FDEP to solicit its input at various stages during the development phase. FDEP, in a letter dated January 13, 2016, documented its evaluation of the City's compliance efforts and identified allowable elements of the City's compliance plan that form the basis for the City's compliance requirements relating to the development of feasible reuse.

2.0 AWT and Management Requirements

2.1 Plan

The Ocean Outfall Legislation requires the effluent discharged through the outfall meet advanced wastewater treatment (AWT) standards by December 31, 2018 or the equivalent cumulative nutrient (nitrogen and phosphorus) loading reduction that would be achieved by the operation of AWT through December 31, 2025. The City's approved compliance approach relies on the equivalent cumulative nutrient reduction method with nutrient reduction being achieved by diverting flows from the ocean outfall to its existing deep injection wells. The City initiated its effluent diversion approach in 2009, shortly after passage of the OOL, and continues to monitor and document diverted flows and phosphorus/nitrogen concentrations discharged to the outfall. From an analysis of baseline condition flows and nutrient concentrations, the City previously established the following maximum cumulative nitrogen and phosphorus loads that may be discharged to the outfall between 2009 and 2025:

- Allowable Cumulative Total Nitrogen Load – 21,885,779 lbs.
- Allowable Cumulative Total Phosphorus Load – 2,404,628 lbs.

These allowable cumulative loads reflect discharges that would be equivalent to the cumulative loadings that would be achieved through December 2025 if AWT is implemented by December 31, 2018. The City's early action to initiate flow diversion to utilize available injection well capacity has been successful in achieving the necessary nutrient reductions and eliminating the need to implement AWT by 2018.

2.2 Status

In its most recent Cumulative Outfall Loadings Compliance Report (2009 to 2020) to the FDEP, prepared as a requirement of Administrative Order No. 17-002 DW 06 SED, the City updated the status of the actual nitrogen and phosphorus loads discharged through the outfall. This report, the results of which are summarized below in Table 2-1, demonstrate that though 71% of the time has lapsed until compliance must be achieved, the City's actual cumulative nitrogen and phosphorus loads discharged through the outfall amount to 36% and 35%, respectively, of the allowable maximum loadings. Consequently, the City of Hollywood is on track to achieve compliance with the AWT requirements of the Ocean Outfall Legislation.

Table 2-1. City of Hollywood SRWWTP Cumulative Outfall Loadings Compliance (2009-2020)

Years	Allowable Max Cum. Loading (lbs.) (2009 to 2025)	Interim Cum. Loading (lbs.) (2009 to 2017)	% of Allowable Max Discharged	% of time Lapsed till 2025
TN	21,885,779	7,922,498	36%	71%
TP	2,404,628	850,363	35%	71%

3.0 Effluent Disposal Compliance

3.1 Plan

Shortly after the OOL was passed, the City conducted an assessment (Southern Regional Wastewater Treatment Plant Ocean Outfall Compliance Report, December 2009) of its effluent disposal alternatives to meet the OOL requirement for the elimination of all effluent disposal (with the exception of allowable wet weather peak flows) through the outfall. The assessment recommended the use of Class 1 deep injection wells (DIWs) and associated facilities of sufficient capacity to dispose of the peak hour flows. The requirements of the OOL were subsequently amended to allow for the disposal of peak flows (typically anticipated to be wet weather flows) through the outfall in an amount up to 5 percent of the outfall baseline flow on a 5-year moving average basis. This reduces the required expanded DIW capacity needed for disposal of peak flows. Collectively, these provisions have the impact of reducing the number of DIWs that would otherwise be required.

The City also has approximately 8mgd of available disposal capacity in its recently commissioned industrial class concentrate injection well (CIW) that is located at its Water Treatment Plant (WTP) and interconnected with the effluent disposal outfall at the SRWWTP. Based on limitations with its permit with Broward County Environmental Protection and Growth Management Department, the City will not be allowed to continue relying on the ocean outfall for backup disposal of concentrate. Consequently, City has developed and is in the process of implementing an integrated effluent and concentrate disposal system that achieves a high degree of operational readiness and flexible disposal options. This integrated approach relies on two new industrial class wells that offer the benefits of less process, operational and mechanical complexity coupled with significantly improved integrity that would result in significant cost savings and enhanced operational flexibility. The following are benefits of the City's approach that exceed the capabilities of an alternate system that does not provide for concentrate integration (i.e., relies on the use of high-level disinfection as pretreatment to Class 1 municipal wells):

1. Concentrate Blending with Effluent Increases the Salinity of the Blended Stream and Reduces the Tendency for Vertical Migration of Injection Fluids.
 - a. Blended total dissolved solids increase to the range of 3200 to 5800 mg/L – almost tenfold the level typically observed in municipal effluent.
 - b. Reduced buoyant force due to high salinity reduces migration risks.
2. Reduced Risk of Leakage Through Casings – use of inert material and reinforced materials
 - a. The final casing is lined with a 1.08-inch-thick inert fiberglass tube with a cemented annular space, thereby eliminating the risk corrosive fluid contact.
 - b. All casings are encapsulated in cement – both front and back.
 - c. Besides the final casing, all casings are made of thicker steel that required.
3. Proposed Capacity (39 mgd) is Approximately Twice the Minimum Required (20 mgd)
 - a. Minimizes the frequency and volume of peak flows that may be discharged to the ocean to less than one-tenth the amount allowed

- b. Permits reduced reliance on existing municipal injection wells that are not similarly configured under non-peak conditions – reduces risk of migration

In addition to the noted benefits, the City's existing site has nearly two decades of secondary effluent injection operating history that demonstrates excellent confinement with no indication of migration. The proposed wells, by increasing the salinity of the injection fluids while enhancing the mechanical integrity of the well design, will further reduce the risk of leakage – whether through the casing or vertical migration. The increased salinity of the injection fluids coupled with the characteristics of the receiving groundwater environment are expected to additionally attenuate microbial activity within and beyond the injection zone.

3.2 Status

The construction of the injection wells is currently underway and are scheduled to be completed by the end of 2021. Since an initial meeting on December 12th, 2019, the City and has engaged FDEP representatives on multiple occasions to review the design approach and its environmental benefits. A pre-permit application submittal to FDEP was made in February 2020 and a follow-up review meeting was held on February 27, 2020. During the meeting, the overall effluent disposal approach and its supporting basis were reviewed and FDEP's preliminary input was received and discussed. Permitting of the proposed pump station and associated facilities has been completed with issuance of a notice of Substantial Permit Revision (FDEP) on April 9, 2021.

The proposed facility design will be implemented in two bid packages (BP) with phased implementation of BP 1 to facilitate expedited commissioning of the proposed injection wells. Phase 1 (of BP 1) construction will prioritize the implementation of piping modifications required to place Injection Wells 3 and 4 in service with the use of the existing pump station to deliver effluent flow. This phase will allow the operating testing period and subsequent permitting to commence prior to the completion of the proposed pump station. Specific elements of BP 1 - Phase 1 identified in the permit include the following:

- Extend the 20" WTP concentrate to IW diversion Box (54" pipe)
- Extend 42" discharge FM from existing Injection Well PS to New Injection Wells no.3 and No.4 with isolation valve near existing PS
- Add tee and valve connections for two future surge tanks (BP-1, Phase 2)
- Add Concentrate Check valve and vault between new and existing Injection wells
- Add tee and valves to future BP-1, Phase 2 IWPS2 for Secondary effluent and WTP Concentrate
- Add Well Head concrete pads at IW-3 and IW-4
- Add Flow meters at IW-3 and IW-4 and tie into existing SCADA system with temp power from existing IWPS - Flow data will need to be recorded for reporting to FDEP
- Add Control valves to IW-3 and IW-4 - Power and controls are temporary and will be transferred to IWPS2 in BP-1, Phase 2
- Concrete pad around Monitoring well No. 2
- Sampling pumps and controls for monitoring well
- Drain line for sampling water from monitoring well to gravity plant drain MH 1

BP 1 - Phase 2 construction will focus on the proposed pump station and associated systems

required to complete the integrated system and include the following elements:

- Injection Well Electrical Service Center
- Injection Well Pump Station No. 2
- Plant Drain Pump Station
- Secondary effluent diversion provisions
- WTP concentrate piping extension
- Surge tanks
- Strainers
- Fuel Storage
- IW-1 and IW-2 control valves

Bid Package 2 will provide for the installation of a check valve on the outfall as a protective measure to reduce the likelihood of excessive siltation when not in use. To accommodate inspection of the outfall required to develop the design requirements for the check valve, construction of BP 1 must be completed to facilitate full diversion of outfall flows to the expanded injection well system. Consequently, the design and installation of this check valve will commence after the completion of BP 1.

Key implementation schedule milestones for BP 1 are summarized below (Table 3-1). Based on the current schedule, the proposed IWs are anticipated to be placed in service by March 2024.

Table 3-1. Proposed Effluent Disposal Implementation Schedule

Activity	Date*
Design NTP	April 2020
Complete Bid Set (Phases 1 & 2)	February 2022
Start Construction	March 2023
Complete Phase 1 Construction	March 2024
IW No. 3/4/DZMW2 – Construction Completion	December 2021
IW No. 3 and IW No. 4. Operational Testing & Permitting Period	March 2024 to April 2025
Complete Phase 2 Construction & Commission Integrated System Operation	November 2025

* Construction completion dates are conservative estimates

A layout of the proposed injection wells and pump station facilities is shown below.

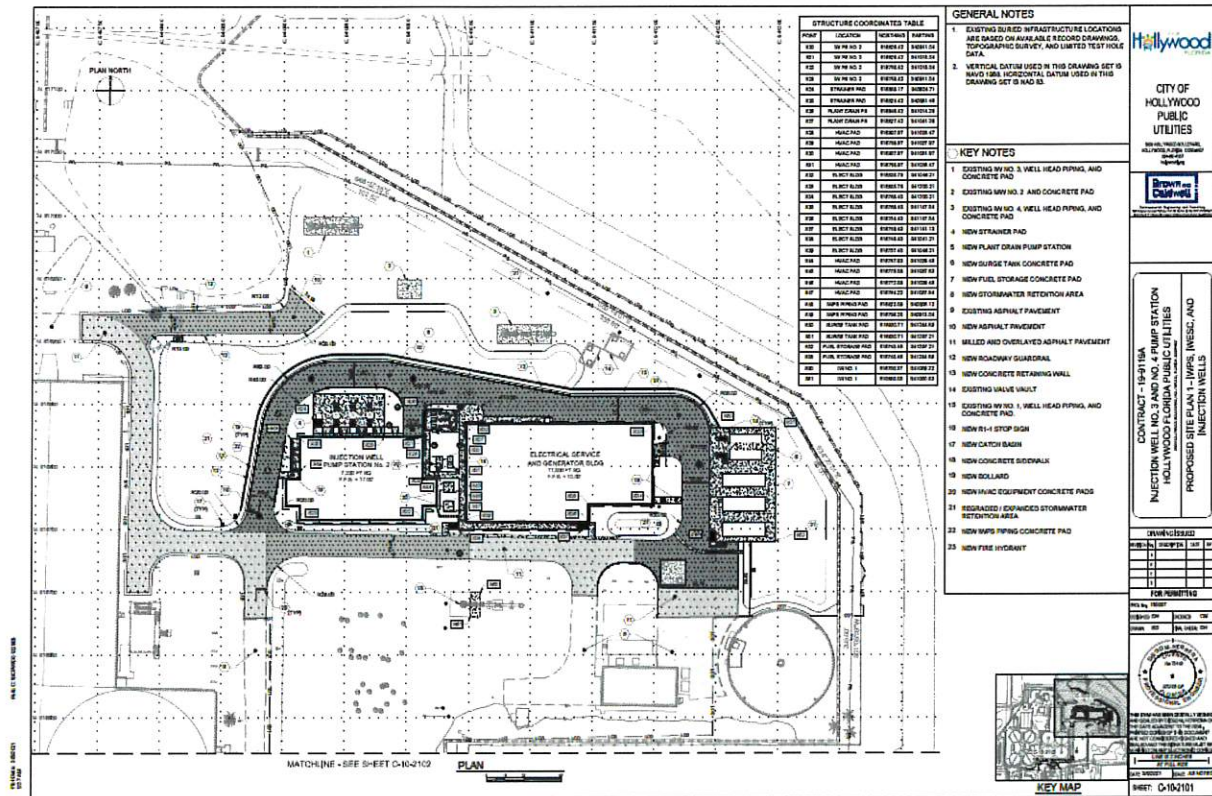


Figure 3.1. Preliminary Layout of Proposed Injection Wells, Pump Station and Associated Facilities

4.0 Reuse Compliance

4.1 Plan

Based on an exhaustive assessment of alternatives for meeting the reuse requirements of the OOL, the combination of a brackish secondary effluent and stringent local (Broward County) limits on phosphorus levels limited the range of feasible alternatives for implementing increased wastewater reclamation. FDEP conducted an in-depth evaluation of the City's recommendations and concurred that the City faced unique challenges that impacted the feasibility of implementing conventional reuse applications.

In a letter dated January 13th, 2016, the FDEP documented the results of its evaluation and identified the elements of the City's plan that constitute feasible reuse. The FDEP findings were based on the review of several documents/studies furnished by the City and the outcome of several meetings between the FDEP, the City and its consultant (Brown and Caldwell). Key elements of the City's compliance plan that were determined to constitute feasible reuse and meet the legislative requirements include the following:

- Onsite Process Reuse – 4mgd (filtered brackish effluent)
- Additional Reuse within the City – 1.5mgd (committed customer capacity)
- Contracted Reuse – 4.5mgd

These efforts correspond to a total of 10 mgd of feasible reuse to be accomplished by the December 2025 deadline.

4.2 Status

4.2.1 Existing Onsite Reuse

The existing 4mgd brackish effluent filtration capacity has been fully utilized based on recent operating history (since 2012). Consequently, no further action or capital investment is required to receive the 4mgd credit for process water reuse applications.

4.2.2 Additional Actual Reuse within the City

The City is committed to develop additional reclaimed water supply and new committed customer demand to satisfy the 1.5mgd expanded reuse capacity commitments required to maximize the existing 4 mgd system capacity. References herein to reuse capacity commitments refers to the capacity to treat and transmit reclaimed water to target customers that have the capacity to receive committed flows. Target customers are generally large users such as parks, athletic fields and cemeteries that control/manage significant acreage that could benefit from available reclaimed water.

Since the OOL was passed, the City has taken steps to develop expanded reuse applications including system extensions for irrigation applications that correspond to an additional customer demand capacity commitment of approximately 0.207mgd. Reuse applications implemented in the period from July 1st, 2008 to the time the 2016 Status Report was submitted, that may be credited to the expansion goal include the following:

1. Rotary Park
2. Lincoln Park
3. David Park
4. Park Road median (11 zones)
5. Hollywood Blvd. median
6. US-1 median
7. McKinley St. median
8. Memorial Hospital
9. West Lake Village
10. Sheridan Station
11. Charles F. Vollman Park

Building on this expanded customer base, the City has identified additional conventional reuse applications that may be developed to meet its commitment and continues to seek opportunities to further expand its actual reuse program. Through the City's ongoing efforts, an additional 0.582mgd of future potential customer demand (TY Park and Joe Scavo Park in Hallandale Beach) has been identified for connection to the existing system. Joe Scavo Park has since been connected to the system and discussions are ongoing with Broward County to plan for the connection of TY Park. For these and other potential customers, reclaimed water transmission infrastructure is in place and accessible to deliver the estimated demand but transmission connectivity to the system has not yet been made. Additionally, there is another 0.293mgd of uncommitted potential applications with relatively small demand potential such as residential and roadway median irrigation that may be connected in the future. Collectively, the implemented infrastructure expansion that has the capacity to supply 1.083mgd (i.e., 0.207 + 0.582 + 0.293) of the required 1.5mgd of new reuse commitments.

More recently, the City has made additional progress in identifying new reclaimed water customers that would allow it to meet or exceed its 1.5mgd commitment. Table 4.1 presents a summary of recently identified potential reuse customers that are primarily located in west Hollywood. The estimated irrigation demand was estimated to provide an additional 0.45mgd (based on an irrigation rate of 0.7 in/week) of committed reuse demand. This new reuse taken together with the previously established 1.083mgd base of potential reuse applications, meet the City's commitment to develop 1.5mgd of new reuse applications. Segments of the infrastructure required to serve these potential customers have been installed or is currently under design. However, important interconnecting infrastructure is required to connect these target customers into the source of reclaimed water supply. These customer commitments, once fully developed, could potentially maximize the capacity of the City's existing reclaimed water treatment facility.

Table 4-1. Updated RW Applications Since Prior FDEP Status Report

Potential RW Application Site	Acreage (acres)
McArthur High School	37.76
Apollo Middle School	8.36
Boulevard Heights Elementary School	8.52
Fred Hunter East	19.95
Fred Hunter West	13.45
Driftwood Park	9.24
Boulevard Heights Community Center	11.94
Linear Park East/West	8.74
NorthStar Cemetery	25.94
Fred Hunter Memorial	19.71
New Target Irrigable Acreage	167.43
New RW Demand (mgd)	0.45
Prior Actual/Proposed RW	1.08
Total New RW Commitment	1.53

A constraint to the City's ability to expand actual reuse within its service area is the limited availability of effluent of suitable quality (i.e., fresh/low chlorides secondary effluent). The City currently has agreements with the City of Cooper City and the Town of Davie to supply secondary effluent of suitable quality for treatment and reuse within Hollywood but will require an expansion of available supplies to meet increased potential demand.

In a previous Status Report, it was noted that the City of Hollywood intended to further engage Cooper City and the Town of Davie to amend the respective agreements to provide a reliable and adequate supply of secondary effluent. Since then, the Town of Davie has notified the Hollywood of its intent to eventually eliminate (by 2025) the supply of secondary effluent made available to Hollywood due to changes to the configuration of its system (refer to attached Exhibit for copy of communication). Hollywood is currently actively engaged with the Town of Davie to explore its options for securing continuity of supply. In parallel, the City of Hollywood has engaged Cooper City to secure an additional 1mgd (approx.) of secondary effluent needed to meet its current demand. Discussions were conducted with the Seminole Tribe of Florida to explore whether they have an adequate supply of effluent to replace the potential shortfall from the Town of Davie. Based on the discussions, that option does not appear to be feasible.

Other options are under consideration to improve the capture and utilization efficiency of the available secondary effluent. These options include:

1. Evaluating the potential benefit of influent flow equalization to capture and utilize diurnal peak flows from Davie and Cooper City that would otherwise exceed the capacity of the reclaimed water system. The City recently commissioned a study to evaluate the potential efficacy of equalization.
2. Improving the efficiency of the existing upflow filters to reduce water utilization (and loss) in the continuous backwashing process. The City plans to engage the filtration process vendor to install its upgraded EcoWash system that will permit intermittent backwash to improve the efficiency of the backwash process.

The need to develop a reliable supply of secondary effluent for its reclaimed water system remains a high priority for Hollywood. Prior to the recent development with the Town of Davie's effluent supply, the City has conducted planning and design of the expanded transmission and distribution infrastructure required to deliver on its OOL compliance commitment. Figure 4.1 presents a map of the existing and proposed reclaimed water transmission and distribution infrastructure. Until the noted uncertainties around the availability of an adequate supply of effluent of suitable quality are resolved, the City has elected to suspend construction of reclaimed water transmission projects that are not already in progress.

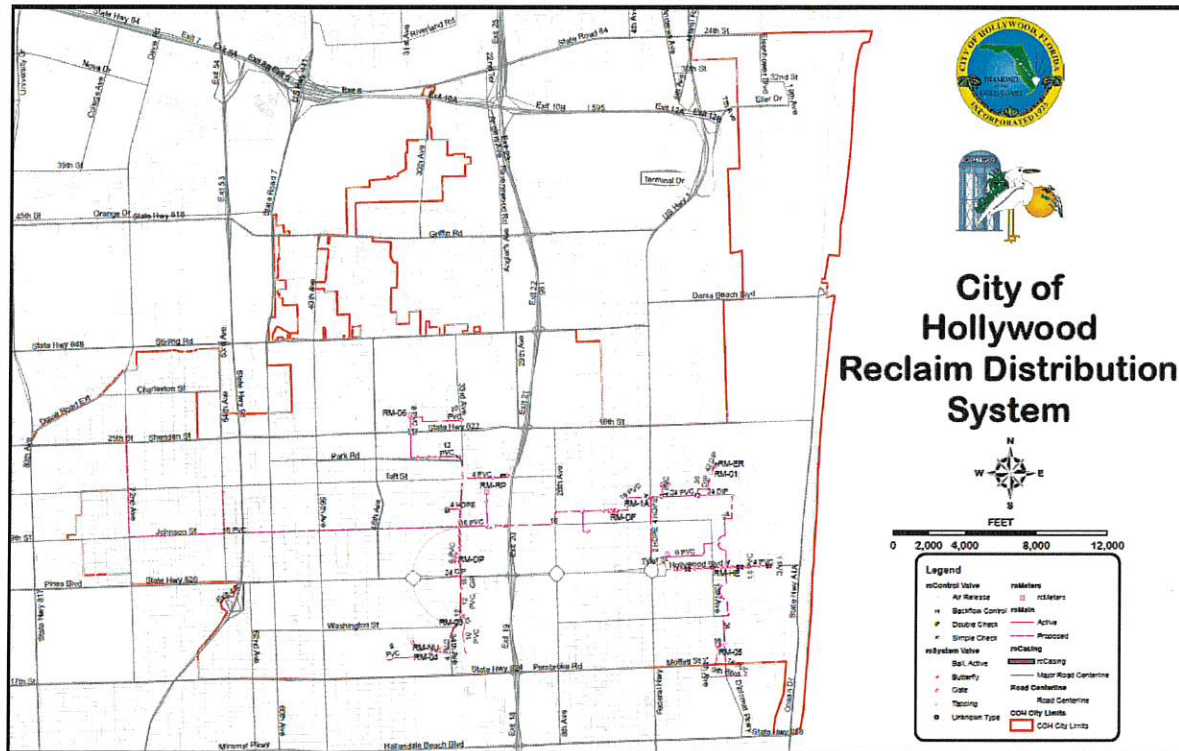


Figure 4.1. Existing and Proposed Reclaimed Water Transmission Infrastructure

4.2.3 Contracted Reuse

The City of Hollywood has conducted an extensive review of Contract Reuse (CR) opportunities that served as the basis for the established 4.5mgd goal. The details of this review are presented in a report entitled Assessment of Contract Reuse Developmental Opportunities for Compliance with Reuse Requirements of the Ocean Outfall Legislation, September 2015 (2015 CR Study). From this review, two systems were identified as potentially promising candidates for development of a CR reuse program – the City of Miramar and the City of Sunrise. The City has engaged each system to further discussions regarding the interest, scope and terms of a potential CR arrangement, the results of which are summarized below.

Miramar Contract Reuse Status

The City of Miramar owns and operates a wastewater system that serves utility customers

within its municipal boundaries. Prior to 1997 when the City commissioned its wastewater treatment facility to serve areas in the western area (west of Palm Avenue), all wastewater collected within the City was transmitted to the Hollywood Southern Regional Wastewater Treatment Plant (SRWWTP) for treatment and disposal. The remaining wastewater flow from east Miramar to Hollywood (except for limited backup transmission of flow) was terminated in 2011 after a phased transition to its own WWTP that was made possible after the city implemented a diversion force main and repumping system. Though Miramar no longer contributes wastewater to Hollywood's SRWWTP, it remains a Large User of the regional wastewater system and retains the flexibility to discharge to Hollywood as a backup.

In 1999, the City of Miramar commissioned a reclaimed water treatment system that had an initial capacity of 2 mgd and a service area that extended from Palm Avenue to the Interstate 75. Throughout its western service area (particularly West of the I-75), the City mandated that all new development implement irrigation piping that is compatible with reclaimed water use (i.e., purple pipes) with the expectation that potential future users would be connected as the limits of the reclaimed water transmission system expanded. In 2010, the City expanded its reclaimed water treatment capacity to 4mgd. A recently completed upgrading process raised this capacity to 5 mgd. The City additionally plans to further expand its treatment capacity to 7.5 mgd as part of a phased expansion program that will connect areas west of the I-75 to the reclaimed water system.

Since early 2016, the Cities of Hollywood and Miramar have engaged in discussions regarding the prospect for entering into a CR agreement and have exchanged pertinent information regarding the requirements and opportunity. Miramar has expressed interest in CR and has successfully negotiated a mutually beneficial agreement with Hollywood. On August 14, 2019, the two cities executed an Interlocal Agreement (IA) that defines the terms of a contracted reuse agreement between the two cities. Key provisions of the IA include:

1. "Miramar shall expand its system to provide a minimum of 2.0mgd annual average daily flow (AADF) of contracted reuse water by December 31, 2015, which shall be credited to Hollywood for the purpose of satisfying 2.0mgd of Hollywood's reuse water requirement..."
2. Miramar is responsible for securing all permits and completing the expansion of its system from 5 mgd to 7.5 mgd to serve additional customers located on the west side of the Interstate 75.
3. Miramar shall be solely responsible for operating, maintaining, repairing and replacing the reuse system and any improvements necessary to satisfy the Reuse System Obligation and taking all steps necessary to remain in compliance with applicable laws.
4. In compensation for Miramar fulfilling its obligation, Hollywood made a lump sum payment of \$7 million.

Since execution of the Interlocal Agreement, both cities have been in discussions with FDEP to develop Administrative Orders that would apportion the respective contracted reuse obligations into the requirements of their respective Operating Permits. Under the City of Miramar's current plan, the 2020 system expansion will include additional treatment capacity

and transmission improvements that will allow the City to connect potential customers located west of the I-75. Figure 4.2 below shows existing reclaimed water piping throughout the City of which the infrastructure located west of the I-75 has not yet been connected to the City's reclaimed water supply. The 2020 expansion will be the first phase of improvements that will connect customers west of the I-75 in the vicinity of Dykes Road.

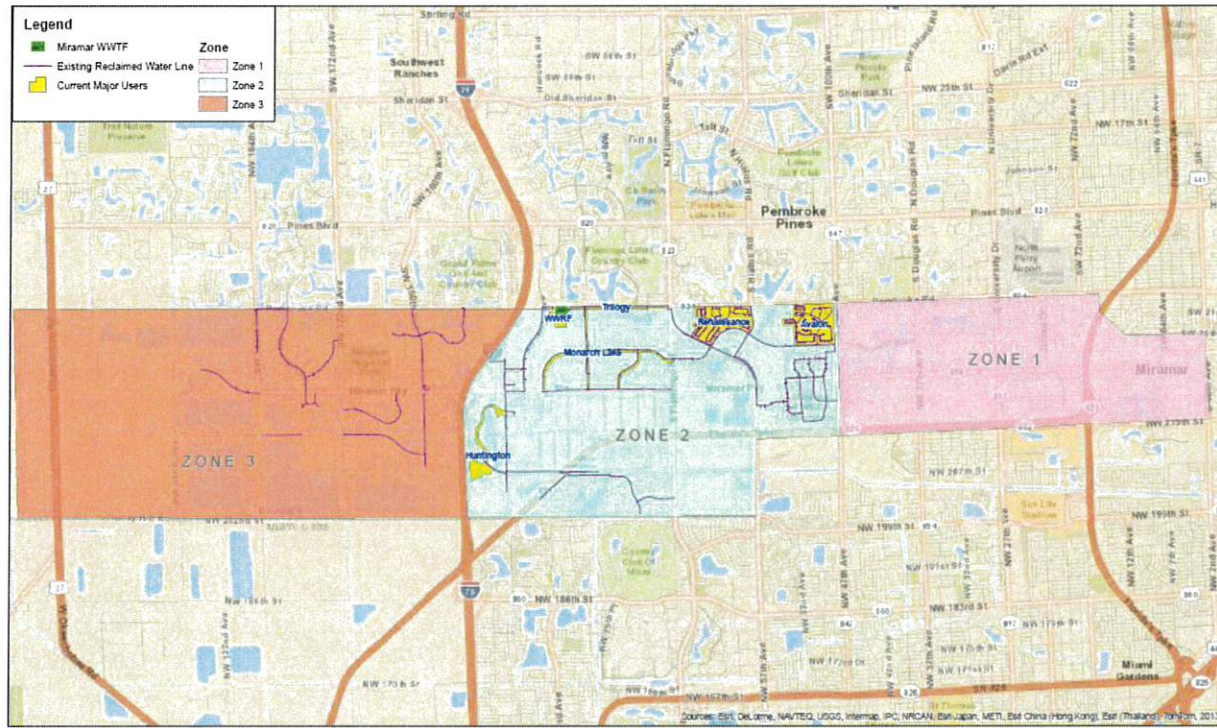


Figure 4.2. Existing RW Distribution Mains and Infrastructure West of I-75 to be Connected by Planned Expansion Project (from City of Miramar Regional Reclaimed Water System Expansion Feasibility Study and Conceptual Design, September 2014, prepared by GAI Consultants, Inc.).

Sunrise Contract Reuse Status

The City of Hollywood has not made much progress with the City of Sunrise to advance discussions regarding a prospective contracted reuse collaborative effort. Consequently, it does not appear that the City of Sunrise's timing will allow for the City of Hollywood to develop a CR that can be integrated into ongoing compliance planning. Furthermore, given the progress made with the City of Miramar towards development of an actionable plan to collaborate on a contracted reuse program, the City of Hollywood does not intend to further pursue opportunities with the City of Sunrise. Further investigation is required by Hollywood to identify new contract reuse opportunities that may have emerged since the 2015 CR Study.

5.0 Compliance Reporting

As an outfall utility, the City of Hollywood is required to provide detailed plans and updates. The City continues to be on track with its reporting including:

- City of Hollywood, Florida, South Regional Wastewater Treatment Plant Ocean Outfall Compliance Report, December 2009 (403.086(9f) FS)
- City of Hollywood, Florida, Outfall Rule Compliance Plan, June 2013 (403.086(9e) FS)
- City of Hollywood, Florida, Southern Regional Wastewater Treatment Plant Ocean Outfall Compliance Report Update, December 2014(403.086(9f) FS)
- City of Hollywood, Florida, Assessment of Contract Reuse Developmental Opportunities for Compliance with Reuse Requirements of the Ocean Outfall Legislation, September 2015
- City of Hollywood, Florida, Southern Regional Wastewater Treatment Plant Ocean Outfall Compliance Report Update, June 2016 (403.086(9f) FS)
- City of Hollywood, Florida, Southern Regional Wastewater Treatment Plant Ocean Outfall Compliance Report Update, June 2018 (403.086(9f) FS)
- City of Hollywood, Florida, Southern Regional Wastewater Treatment Plant Ocean Outfall Compliance Report Update, June 2021 (403.086(9f) FS)

6.0 Compliance Schedule and Financing

The City of Hollywood is on track to meet the OOL compliance schedule and intends to appropriately fund the required improvements.

7.0 References

Broward County, Florida, Regional Reuse Master Plan, January 2014.

City of Hollywood, Florida, Cumulative Outfall Loadings Compliance Report (2009 to 2015), January 2016

City of Hollywood, Florida, Assessment of Contract Reuse Developmental Opportunities for Compliance with Reuse Requirements of the Ocean Outfall Legislation, September 2015

City of Hollywood, Florida, Cumulative Outfall Loadings Compliance Report (2009 to 2014), February 2015

City of Hollywood, Florida, Outfall Legislation Challenges faced by the City of Hollywood and Recommended Resolution, December 2014.

City of Hollywood, Florida, Southern Regional Wastewater Treatment Plant Ocean Outfall Compliance Report Update, December 2014.

City of Hollywood, Florida, Effluent Recharge Treatment Pilot Study: Final Report, March 2014.

City of Hollywood, Florida, Outfall Rule Compliance Plan, June 2013.

City of Hollywood, Florida, South Regional Wastewater Treatment Plant Ocean Outfall Compliance Report, December 2009.

South Florida Water Management District, Lower East Coast Water Supply Plan Update, Final, October 2013.

South Florida Water Management District, Lower East Coast Water Supply Plan Update, Final, October 2018.

FDEP Underground Injection Control Class 1 Injection Well System Construction and Testing Permit, UIC Permit Number 156419-008-0090UC/IX issued January 30, 2019

Interlocal Agreement to Satisfy Reuse System Obligation between the City of Miramar, Florida and The City of Hollywood, Florida (executed agreement)

Large User Agreement for Effluent Disposal, letter (April 10th, 2020) from Town of Davie to City of Hollywood re planned termination of effluent supply for reuse (see attached Exhibit)

8.0 Attachment

8.1 Large User Effluent Disposal Agreement



OFFICE OF THE TOWN ADMINISTRATOR

6591 Orange Drive • Davie, Florida 33314

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www.davie-fl.gov

April 10, 2020

TOWN COUNCIL

Judy Paul
MAYOR

Dr. Wazir Ishmael
City Manager
City of Hollywood
2600 Hollywood Boulevard Room 419
Hollywood, Florida 33022

COUNCILMEMBERS

Bryan Caletka
Councilmember
District 1

Caryl Hattan
Councilmember
District 2

Susan Starkey
Vice Mayor
District 3

Marlon Luis
Councilmember
District 4

RE: Large User Agreement Effluent Disposal Agreement

Dear Dr. ^{WAZ}Ishmael:

I hope this letter finds you, your family and associates in good spirits as we deal with the current global health crisis. We remain optimistic relief is in sight, and as government officials it is incumbent upon us to prepare and plan for recovery, both operationally and fiscally. The Town of Davie initiated an update to our Utilities Master Plan based on a number of significant changes beyond the Town's control. To this end, I am seeking to have dialogue regarding the existing Utilities Large Users Agreement; specifically, terms as outlined between the City of Hollywood (COH) and the Town of Davie (TOD). This is of utmost importance as the TOD is planning to decommission the System II Wastewater Treatment Facility.

As you are aware, the TOD and the COH are parties to the *Large User Effluent Disposal Agreement* signed in March 1985 and amended in June 1992. This agreement sets the parameters for the conveyance of treated sewer effluent from the TOD's System II (3500 NW 76 Ave.) Wastewater Treatment Plant to the COH South Regional Wastewater Treatment Plant for conversion to beneficial reclaimed water and final disposal via ocean outfall. Subsequent to the last revision in 1992, several events have occurred beyond the control of the TOD, placing a significant strain on the feasibility of the long-term operation of the System II Wastewater Treatment Facility, specifically, the ocean outfall elimination regulation in 2008 and the loss of the Seminole Hard Rock (large user) flows in March 2020.

The TOD's updated Utilities Master Plan has identified several areas of concern that need to be addressed for the long-term viability of the overall system. The existing Large User Agreement was identified as a challenge as the TOD cannot continue to provide flows as outlined in the Large User Agreement as the operation of its System

II facility is no longer financially feasible. We are aware that the loss of flows from System II will pose challenges for the COH Utilities Department. Although our current plans will decommission System II, the TOD is willing to work with the COH to find viable solutions acceptable to all the stakeholders.

These matters are time sensitive and involve matters of public health, safety and tremendous expense for the Town of Davie. As the timeline to adhere to Administrative Orders and State Laws will be upon us in the near future, the Town is providing a courtesy notification of our intent to decommission the System II Wastewater Treatment Facility, with the intent initiating a dialogue between the two respective Utilities.

I look forward to discussing how we can proceed constructively to enable both our municipalities to comply with administrative orders and laws in the most cost-effective manner while meeting our respective goals.

Sincerely,

A handwritten signature in blue ink, appearing to read "Richard J. Lemack".

Richard J. Lemack
Town Administrator

C: Macciano K. Lewis, Deputy Town Administrator
Phillip R. Holste, Assistant Town Administrator
Allan Weinthal, Acting Town Attorney
Renuka Mohammed, Utilities Director
Ronald Bolton, Assistant Utilities Director
William Ackerman, Budget & Finance Director