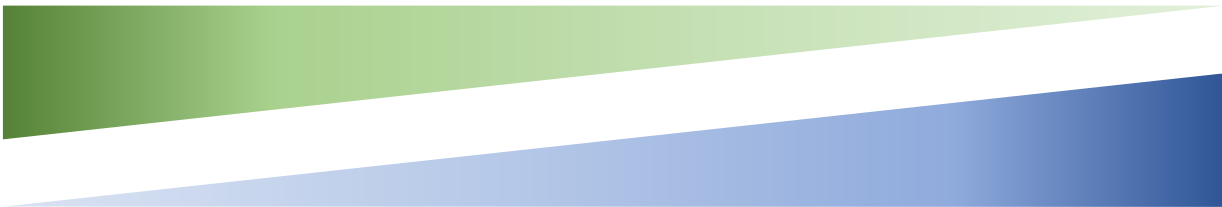




**IMMOKALEE**  
**WATER & SEWER**  
DISTRICT



**PUBLIC FACILITIES REPORT**  
**Immokalee Water and Sewer District**

**2024**

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### Abbreviations

CDP	Census Designated Place		
IWSD	Immokalee Water and Sewer District	MGD	Million Gallons Per Day
kW	Kilowatt	WTP	Water Treatment Plant
MG	Million Gallons	WWTP	Wastewater Treatment Plant

# **IMMOKALEE WATER & SEWER DISTRICT 2024 PUBLIC FACILITIES REPORT**

## **1. INTRODUCTION**

One of the purposes of the Uniform Special District Accountability Act (Section 189.08, Florida Statutes), is to improve local government comprehensive planning. Special Districts must ensure that the construction, expansion, and alterations of public facilities are consistent with the applicable local government comprehensive plan. Annually, independent Special Districts must submit a notice of change or updated report to each county and/or municipality in which it is located. This notice describes changes or updates, if any, that may need to be made to the Public Facilities Initial Report.

The Public Facilities Report specified in the Uniform Special District Accountability Act has the following requirements.

### **Public Facilities Report Content**

#### **1. Existing Facilities**

- Description of facilities owned, operated, under lease or agreement by the district.
- Details required – Current capacity, Current demand, Location

#### **2. Future Projects**

- Description of facilities planned for building, improvement, or expansion within the next 7 years.
- Inclusion of facilities the district assists another entity in developing.
- Financing plans for these facilities.

#### **3. Facility Replacements:**

- Timeline for replacing identified facilities within the next 10 years.

#### **4. Construction Timeline:**

- Anticipated completion time for the construction, improvement, or expansion of each facility.

#### **5. Capacity and Demand:**

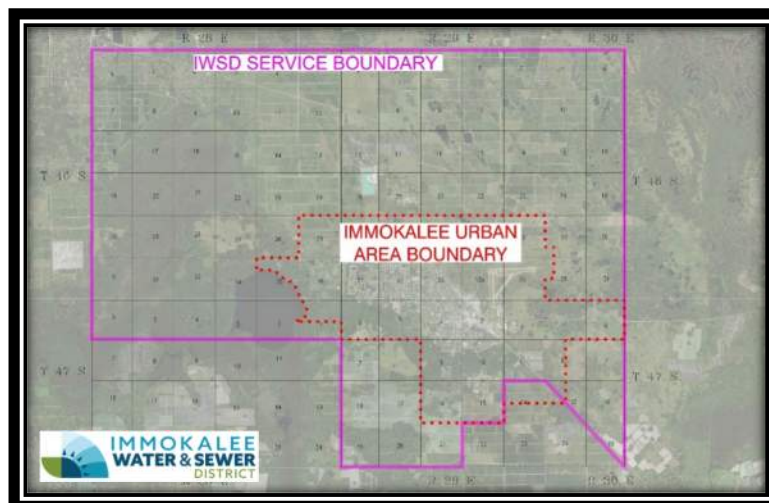
- Expected capacity and demand for facilities after completion.
- For improvements or expansions, both existing and anticipated capacity must be included.

*Source – Uniform Special District Accountability Act – Section 189.08, Florida Statutes*

The Immokalee Water and Sewer District (the "District") was created by an Act of the Florida Legislature on July 5, 1978, for the purpose of providing water and sewer services to Immokalee, Florida, an unincorporated area of Collier County, Florida. The District operates and maintains the water and sewer facilities and systems as a Special District of the State of Florida. The District is governed by a seven-member Board of Commissioners appointed by the Governor of the State of Florida. The Board of Commissioners administers the District, independent from any other local governing body. The District currently has approximately 44 employees.

## 2. BOUNDARIES

Sections 1 through 36 of Township 46 South, Range 28 East; together with Sections 1 through 6 of Township 47 South, Range 28 East; together with Sections 1 through 36 of Township 46 South, Range 29 East; together with Sections 1 through 12, Sections 15 through 21 and that part of Section 13 lying Northeasterly of a diagonal line from the Northwest Corner to the Southeast Corner of said Section 13, Township 47 South, Range 29 East; together with Sections 6, 7, 18, 19, 30 and 31 of Township 46 South, Range 30 East; together with Sections 6, 7, 18, and that part of Section 19 lying Northeasterly of a diagonal line from the Northwest corner to the Southeast corner of said Section 19, Township 47 South, Range 30 East. All the lands described being in Collier County, Florida. These boundaries were expanded during the 2005 Legislative Session, [senhist.pdf \(state.fl.us\)](#).



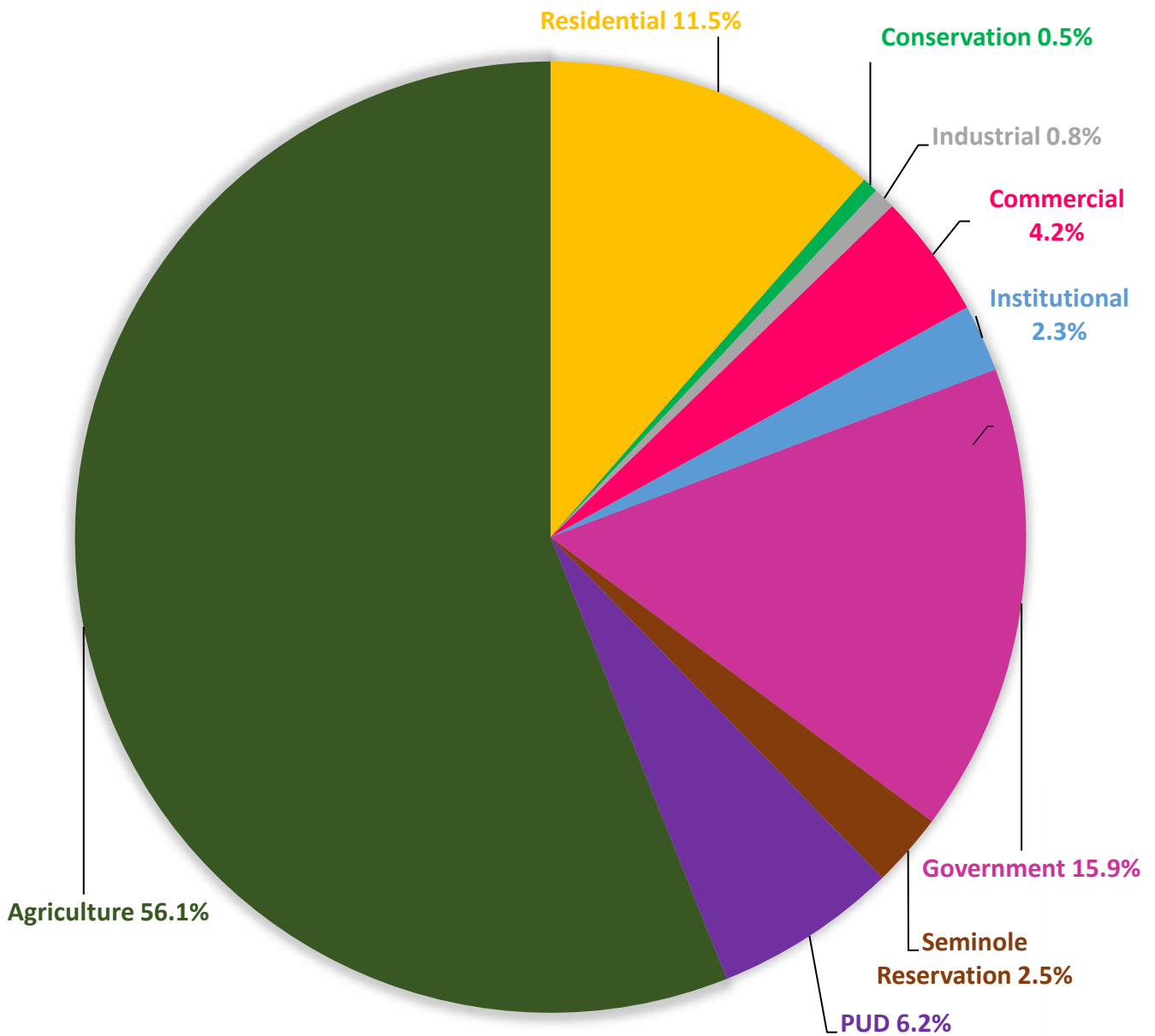
*IWSD Service Area Boundary and Immokalee Urban Area Boundary*

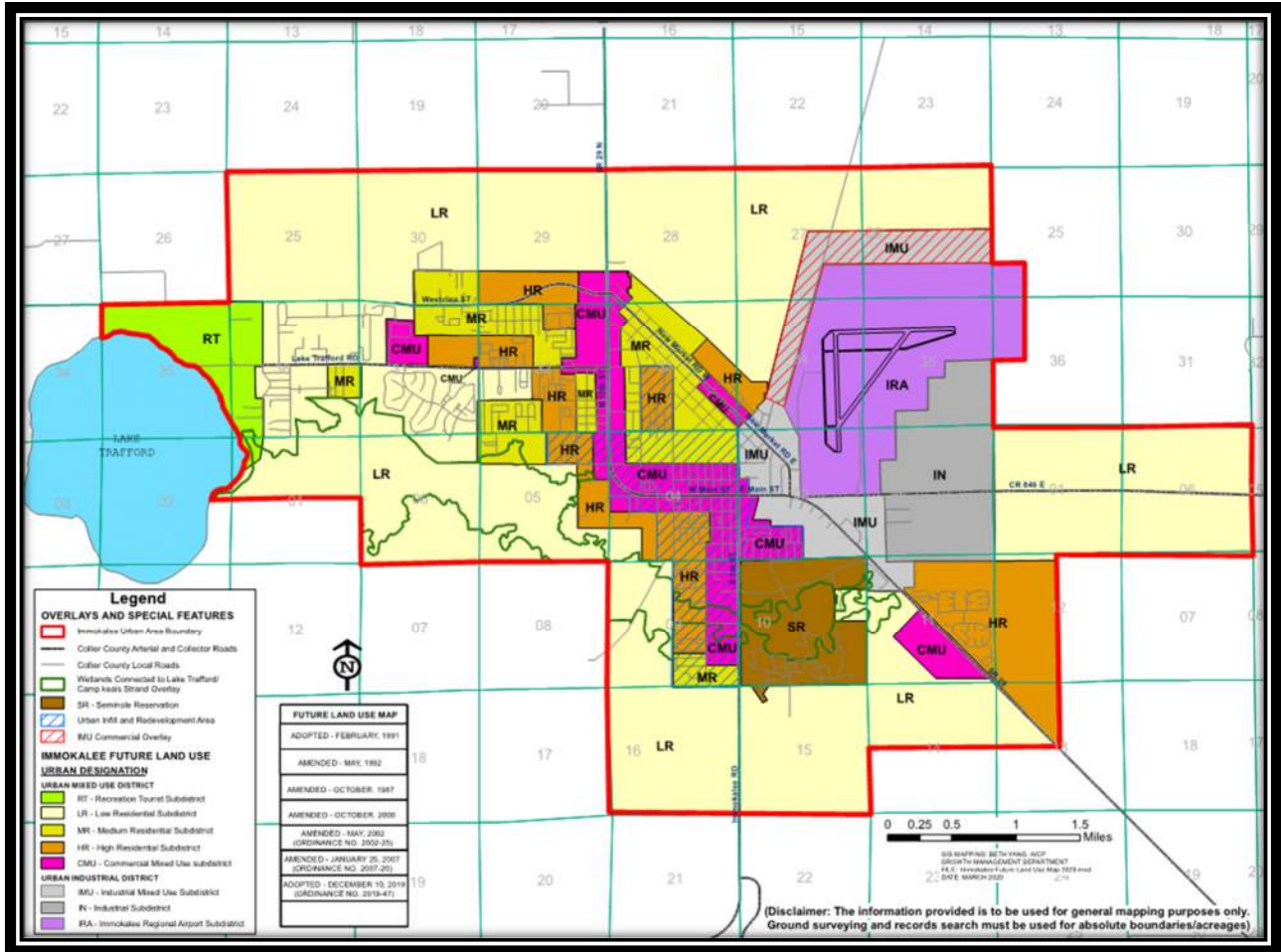
### 3. CURRENT POPULATION

According to the Census Reporter, that references the U.S. Census Bureau, the 5-year American Community Survey (ACS) reported that the population in Immokalee is 27,753 people as of 2022.

### 4. PREDOMINANT TYPES OF LAND USE

The Immokalee CDP approximate types of land usage are shown below.





*Immokalee Future Land Use Map 2019 Update*

## 5. WATER PLANTS

IWSD Department 10  
 Supervisor James Jean-Louis  
 SFWMD CUP # 11-00013  
 PWS ID # 5110142

### Water Treatment Plant Facilities

The South Florida Water Management District Consumptive Use Permit allows the Immokalee Water and Sewer District to withdraw up to 1,515 MG of groundwater a year, with a specific limit of 1,261 MG per year from the Lower Tamiami aquifer.

## Jerry V. Warden Water Treatment Facility

### Facility Information

Address	1020 Sanitation Road, Immokalee, FL 34142
Initial Construction	1967
Capacity Increase	1996 and 2005
Permitted Capacity	2.25 MGD

### Facility Description

The facility’s treatment process utilizes aeration, chloramination for disinfection, polyphosphate for iron control and adds fluoride to support public health from the raw water drawn from eight wells connected to the Hawthorne, Upper Sandstone, and the Lower Tamiami Aquifer. The facility has 1.50 million gallons of storage capacity for finished water. Backup power is provided by a 300 kW Model 3406 Caterpillar diesel powered generator.

### Jerry V. Warden Water Treatment Facility

#### Finished Water Demand 2024 - Average Daily Flow

Month	MGD	Month	MGD
January	0.94	July	1.00
February	0.83	August	0.98
March	0.83	September	0.96
April	0.87	October	1.00
May	0.98	November	1.00
June	0.96	December	0.95

## Airport Water Treatment Facility

### Facility Information

Address	1107 Airport Access Road, Immokalee FL 34142
Initial Construction	1985
Capacity Increase	1992, 1996, and 2005
Permitted Capacity	1.39 MGD

### Facility Description

The facility’s treatment process utilizes aeration, chloramination for disinfection, polyphosphate for iron control and adds fluoride to support public health from the raw water drawn from three wells connected to the Lower Tamiami Aquifer. The facility has 0.75 million gallons of storage capacity for finished water. Backup power is provided by a 200 kW Model DSHAC Cummins diesel powered generator.

### **Airport Water Treatment Facility**

#### **Finished Water Demand 2024 - Average Daily Flow**

Month	MGD	Month	MGD
January	0.49	July	0.52
February	0.65	August	0.52
March	0.66	September	0.53
April	0.63	October	0.53
May	0.61	November	0.76
June	0.52	December	0.79

### **Carson Road Water Treatment Facility**

#### Facility Information

Address	1201 Carson Road, Immokalee FL 34142
Initial Construction	1975
Capacity Increase	1992, 1996, 2006, and 2008
Permitted Capacity	2.0 MGD

#### Facility Description

The facility’s treatment process utilizes aeration, chloramination for disinfection, polyphosphate for iron control and adds fluoride to support public health from the raw water drawn from five wells connected to the Lower Tamiami Aquifer. The facility has 1.5 million gallons of storage capacity for finished water. Backup power is provided by a 400 kW Model DFEH Cummins diesel powered generator.

## Carson Road Water Treatment Facility

### Finished Water Demand 2024 - Average Daily Flow

Month	MGD	Month	MGD
January	0.95	July	0.78
February	0.99	August	0.77
March	0.97	September	0.73
April	1.06	October	0.75
May	0.98	November	0.73
June	0.80	December	0.72

## WATER DISTRIBUTION

IWSD Department 60  
 Supervisor Wilbert Jean  
 SFWMD CUP # 11-00013  
 PWS ID # 5110142

### Distribution System

The District owns and maintains more than 100 miles of water distribution lines and serves 6,541 connections. The water lines range in size from 2” to 12” in diameter and consist of a variety of materials, including PVC, HDPE, asbestos concrete, and ductile iron. The water mains provide fire protection for the areas served by the district with installed fire hydrants and fire department connections.

## 6. WASTEWATER PLANT

IWSD Department 20  
 Supervisor Lance York  
 Permit Number FLA014132

### Facility Information

Address 140 White Way, Immokalee, FL 34142  
 Initial Construction 1982  
 Capacity Increase 1990 and 2013  
 Permitted Capacity 4.0 MGD

### Facility Description

The facility utilizes the extended aeration treatment process using four oxidation ditches. Effluent is disposed of using a 4.867 MGD deep injection well with a backup system in place consisting of a 260-acre spray field and three percolation ponds. The facility’s biosolids are converted into a Class AA fertilizer product by utilizing the Schwing Bioset Process. Backup power is provided by an 800 kw Model 800DS4 Spectrum Detroit Diesel generator and a 500 kw Model DS00550D6S Detroit Diesel/MTU Onsite Energy Corp. generator.

### **IWSD Wastewater Treatment Plant**

#### **Average Daily Flow 2024**

Month	MGD	Month	MGD
January	2.07	July	1.91
February	1.97	August	2.24
March	1.89	September	1.97
April	1.80	October	1.95
May	1.48	November	1.69
June	2.00	December	1.64

## **7. WASTEWATER COLLECTION**

IWSD Department 30  
 Supervisor Hector Ramos  
 Permit Number FLA014132  
 Main Office 140 White Way, Immokalee, FL 34142

### Facility Information

The system consists of several master lift stations with installed onsite backup generators, approximately forty-one (41) lift stations with generator receptacle connections for portable generators, and more than ninety (90) miles of wastewater collection system piping.

## 8. CUSTOMER SERVICE & ADMINISTRATION

IWSD Department 40  
Supervisor Jeff Carpenter / Sarah Catala  
Address 1020 Sanitation Road, Immokalee, FL 34142

### Department Information

The District maintains the utility systems and serves numerous residents and businesses in Immokalee. The customer service and administration department uphold the relationship between the community and the IWSD operations for both the water system and the wastewater system.

## 9. MAINTENANCE

IWSD Department 50  
Supervisor Hector Ramos  
Address 140 White Way, Immokalee, FL 34142

### Department Information

The maintenance department covers the water treatment plants, the wastewater treatment plant, the wastewater collection system, and the water distribution system. This includes repairs on damaged or failing piping as well as any other immediate or miscellaneous maintenance that is required to keep the systems in operation.

## 10. UPCOMING PROJECTS

### A. Reclaimed Water Project

**Description:** The first phase of the project involves adding filters and high-level disinfection at the existing WWTP facility. The initial upgrades at the wastewater treatment plant (WWTP) are currently in the design stage and construction of this phase is anticipated to be completed in FY 2028. These upgrades aim to achieve high-level disinfection to support expanded effluent reuse options. The second phase of this project involves design and construction of additional transmission infrastructure to deliver reclaimed water to future customers. The timing for the Phase

two portion will be determined as the Phase 1 portion proceeds but is anticipated to be completed within the next seven years. The District has secured state appropriations funding for Phase 1.

**Type:** Improvement

**Financing:** State appropriations funding has been obtained.

**Construction Timeline:** Planning and design currently underway, Construction commencing upon design completion.

**Expected Capacity and Demand:** Capacity is not anticipated to change.

## **B. Water Softening and Emerging Contaminants Treatment Upgrades**

**Description:** Hard water is a common issue in Florida that can diminish the efficiency of appliances, restrict water flow over time, and leave stains on dishes and clothing. To address this, the District has entered the design phase to evaluate various technologies for reducing hardness levels at its three water treatment plants, aiming to improve overall water quality. The design process also includes exploring treatment methods to enhance the removal of emerging contaminants. Additionally, the District has secured state appropriations funding for the water softening portion of this project and is seeking additional appropriations for the emerging contaminants treatment portion. The grant funding deadline for the water softening appropriations is November 30, 2028. The deadline for emerging contaminants treatment compliance is expected to be 2029 but may be revised.

**Type:** Improvement

**Financing:** State appropriations funding has been obtained for Water Softening portion of the project. Additional appropriations are being sought for emerging contaminants treatment portion of the project.

**Construction Timeline:** Planning and design currently underway, Construction commencing upon design completion.

**Expected Capacity and Demand:** Capacity is not anticipated to change.

### **C. AMI For Water Distribution System**

**Description:** This project focuses on implementing Advanced Metering Infrastructure (AMI) within the water distribution system to eliminate the need for manual meter readings. AMI will enhance utility operations by improving efficiency, supporting water conservation efforts, and enabling faster leak detection. Additionally, it will bolster the system's security and resilience. The District has secured state appropriations funding to support the advanced water distribution system improvements phase of the project.

**Type:** Improvement

**Financing:** State appropriations funding has been obtained.

**Construction Timeline:** Planning and design currently underway, Construction commencing upon design completion.

**Expected Capacity and Demand:** Capacity is not anticipated to change.

### **D. AMI For Wastewater Collection System**

**Description:** This project involves implementing Advanced Metering Infrastructure (AMI) in the wastewater collection system to identify sources of inflow and infiltration, optimize operations and administration, and improve infrastructure performance. Additionally, the project aims to enhance the system's security and resilience. The District has secured state appropriations funding to support the advanced wastewater collection system improvements phase of the project.

**Type:** Improvement

**Financing:** State appropriations funding has been obtained.

**Construction Timeline:** Construction is nearing completion.

**Expected Capacity and Demand:** Capacity is not anticipated to change.

### **E. Rehabilitation of Clay Piping in the Collection System**

**Description:** The District is addressing the remaining sections of the wastewater system constructed with clay pipes. Plans include rehabilitating these sections by

either replacing the clay pipes with a more durable material or lining the existing pipes to seal and strengthen them.

**Type:** Improvement

**Financing:** CDBG funding has been obtained.

**Construction Timeline:** Bid advertisement is anticipated for the first quarter of 2025, with construction expected to be completed by early 2026.

**Expected Capacity and Demand:** Capacity is not anticipated to change.

## **F. Utility Relocations for Upcoming FDOT/Collier County Projects**

**Description:** In the coming years, Collier County and FDOT are expected to initiate several transportation, sidewalk, and drainage projects. These projects will necessitate significant investment by the District to upgrade stormwater infrastructure. Potential conflicts with these developments may require relocating portions of the District's utility facilities. The most practical and cost-effective methods will be used for these relocations, including techniques such as jack-and-bore, horizontal directional drilling, traditional open-cut methods, or other approaches, depending on site-specific conditions.

**Type:** Construction

**Financing:** Capital Expenditure

**Construction Timeline:** Construction is ongoing and expected to continue for an indeterminate duration.

**Expected Capacity and Demand:** Capacity is not anticipated to change.

## **G. Wastewater Collection System Upgrades**

**Description:** Plans are underway to enhance portions of the existing wastewater collection system to accommodate current flow demands and prepare for future infrastructure growth. These improvements include replacing outdated sewer force mains and gravity mains, as well as installing new mains where needed. Additionally, certain lift stations will be upgraded to handle increased demands in the coming years.

**Type:** Improvement

**Financing:** Capital Expenditure

**Construction Timeline:** Design and Construction are ongoing

**Expected Capacity and Demand:** Capacity is not anticipated to increase.

## **H. Wastewater Treatment Facility Operations Building**

**Description:** The existing administration building will be replaced with a new, resilient structure designed to meet the latest hurricane standards and withstand storm events. The new building will be fully ADA-compliant, feature dedicated space for a new laboratory, and offer additional accommodations for operators.

**Type:** Improvement

**Financing:** To Be Determined, The New building is contingent upon the District obtaining Grant funding.

**Construction Timeline:** RFQ for design services is anticipated to be issued in early 2025; construction timeframe is uncertain, depending on funding availability

**Expected Capacity and Demand:** Capacity is not anticipated to change.

## **I. New Customer Payment Center and Administration Building**

**Description:** The new building will be constructed at a new location to improve customer service, enhance security, optimize space utilization, and comply with ADA standards. It will also be built to meet current hurricane codes. Relocating the administration building will enable the adjacent water treatment facility to be better secured.

**Type:** Improvement

**Financing:** Capital Expenditure

**Construction Timeline:** Project is in the design stage

**Expected Capacity and Demand:** Capacity is not anticipated to change.

## **J. Feasibility Study for Service Area Expansion**

**Description:** In response to the recent surge in development project requests, especially from owners of larger tracts of land both within and outside the current

IWSD district boundary, the district is undertaking a comprehensive feasibility study. This study aims to evaluate the district's capacity to serve these areas effectively and to provide viable alternatives and recommendations. The study will encompass several key components including, demand projections, potential utility capacity expansions, and potential infrastructure locations while remaining flexible for unforeseen events.

**Type:** Expansion

**Financing:** Study (Capital Expenditure), Design and Construction are unknown

**Construction Timeline:** Project is in the study stage

**Expected Capacity and Demand:** Capacity is anticipated to increase for both water and wastewater facilities

## K. Lead Service Inventory

**Description:** The District is currently in the process of identifying potential lead water service lines. Once these lines are identified, the next step will be to replace them to ensure safe and clean water for all residents. Additionally, the District has compiled a comprehensive lead service inventory, which has been submitted to the Florida Department of Environmental Protection (FDEP) and the Environmental Protection Agency (EPA) for their review. The deadline for compliance with FDEP rule is 2034\*.

\*[https://www.epa.gov/system/files/documents/2024-10/final\\_lcri\\_fact-sheet\\_deferred-deadlines.pdf](https://www.epa.gov/system/files/documents/2024-10/final_lcri_fact-sheet_deferred-deadlines.pdf)

**Type:** Improvement

**Financing:** Capital Expenditure

**Construction Timeline:** Project is in the design stage

**Expected Capacity and Demand:** Capacity is not anticipated to change.

## 12. SOURCES

- Boundaries - State of Florida, Laws of Florida, Chapter 2005-298, (House Bill 733).
- Current Population & Seasonal Population – Census Reporter, U.S. Census Bureau  
<https://www.census.gov/quickfacts/immokaleecdplorida>  
<https://censusreporter.org/profiles/16000US1233250-immokalee-fl/>
- Existing and Future Land Use – Collier County IMMOKALEE AREA MASTER PLAN DATA & ANALYSIS – December 2019



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