

IMMOKALEE
WATER
&
SEWER
DISTRICT

PUBLIC FACILITIES REPORT

Immokalee Water and Sewer District

2021

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Abbreviations

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

IMMOKALEE WATER & SEWER DISTRICT 2021 PUBLIC FACILITIES REPORT

INTRODUCTION

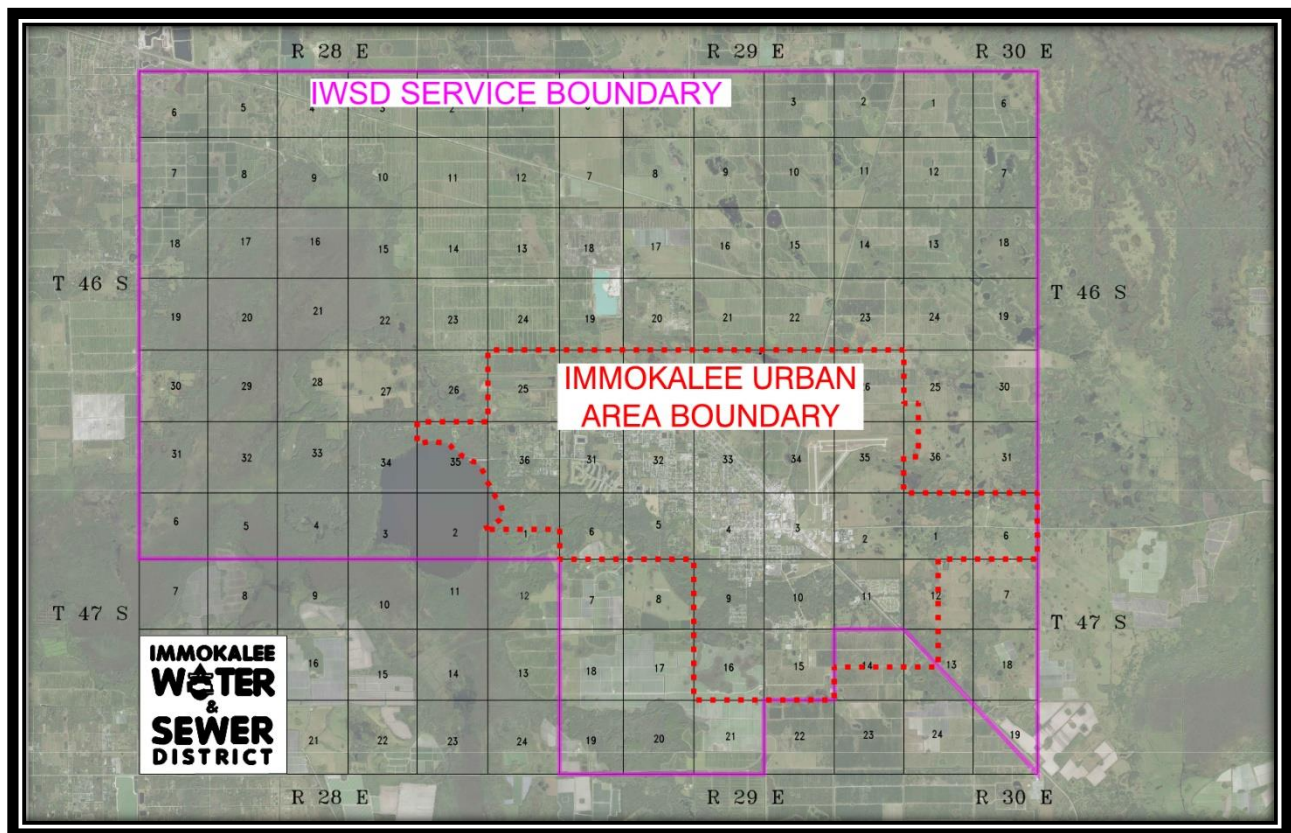
One of the purposes of the Uniform Special District Accountability Act (Section 189.08, Florida Statutes), is to improve local government comprehensive planning. Special districts must ensure that the construction, expansion and alterations of public facilities are consistent with the applicable local 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 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 plants and systems as a special district of the state of Florida. The District is governed by up to 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 40 employees.

Immokalee Water and Sewer District Board of Commissioners (2022)	
Joseph Brister	Chairman
Anne Goodnight	Vice Chairman
Robert Halman	Treasurer
Bonnie Keen	Secretary
Magda Ayala	Commissioner
Jack Johnson, Jr.	Commissioner
Vacant Seat	Commissioner

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.



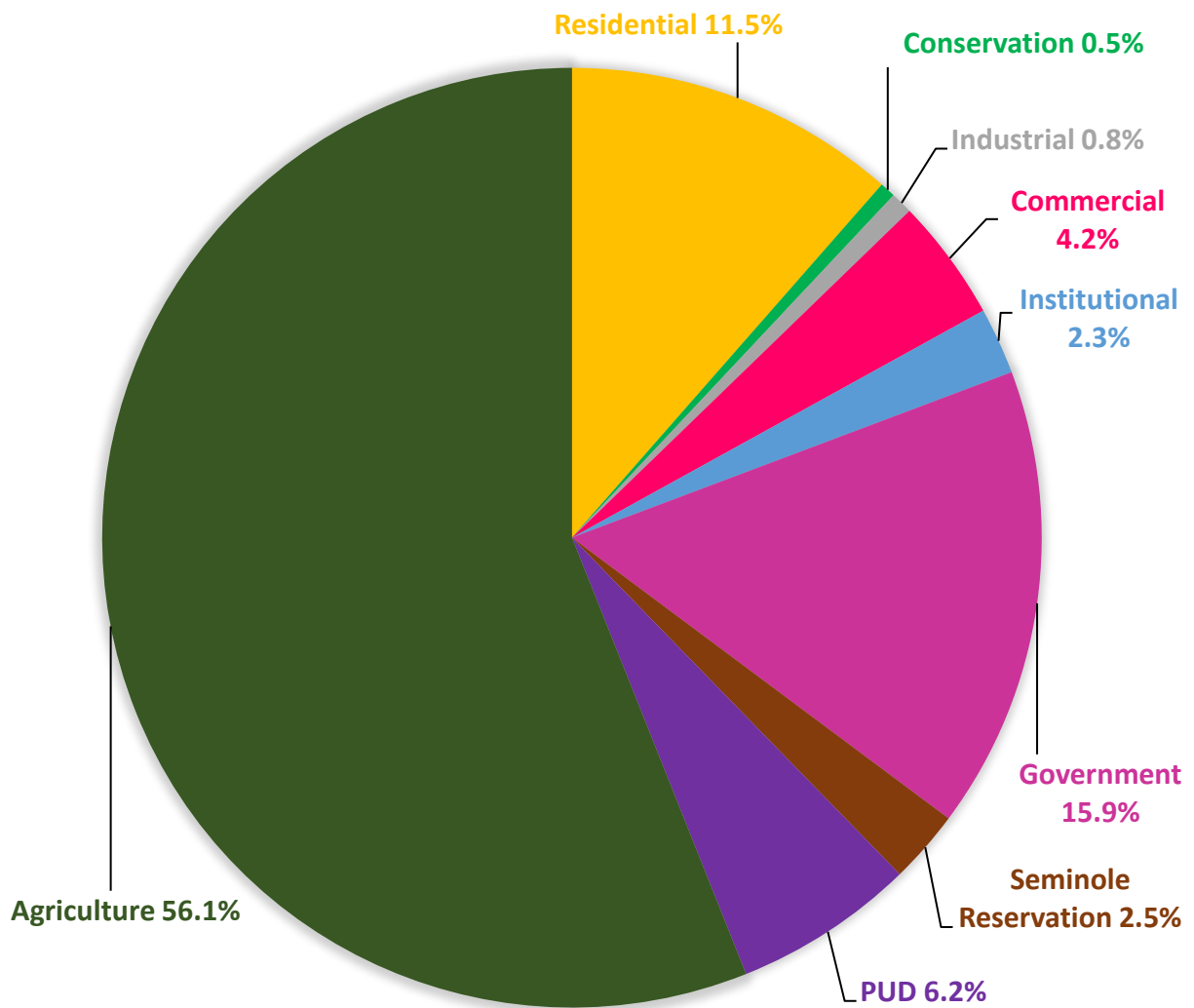
IWSD Service Area Boundary and Immokalee Urban Area Boundary

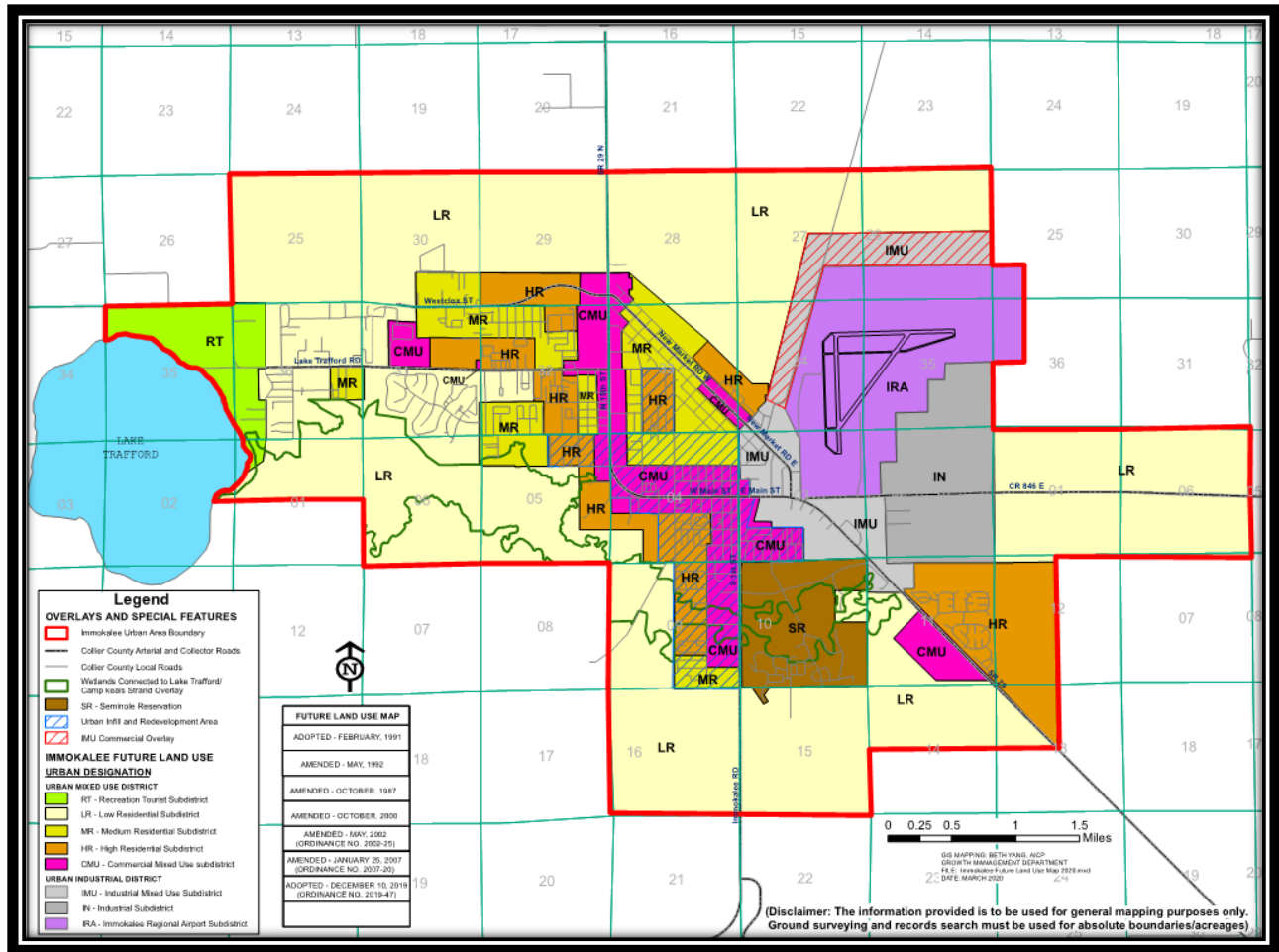
CURRENT POPULATION

According to US Census Bureau the population of the Immokalee, Florida census designated place (CDP) is 24,557 people as of 2021.

PREDOMINANT TYPES OF LAND USE

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





Immokalee Future Land Use Map 2019 Update

WATER PLANTS

IWSD Department 10
 Supervisor James Jean-Louis (IWSD)
 Permit Number 5110142

Water Treatment Plant Facilities

The SFWMD Consumptive Use Permit allows the District to withdraw up to 1515 MG of groundwater a year, with a specific limit of 1261 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 for 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 Model 3406 Caterpillar 300 kw diesel powered generator.

Jerry V. Warden Water Treatment Facility

Finished Water Demand 2021 - Average Daily Flow

Month	MGD	Month	MGD
January	0.90	July	0.74
February	0.89	August	0.93
March	0.87	September	0.89
April	0.86	October	0.97
May	0.82	November	0.98
June	0.78	December	0.99

Airport Water Plant

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 for 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 Model DSHAC Cummins 200 kw diesel powered generator.

Airport Water Treatment Facility

Finished Water Demand 2021 - Average Daily Flow

Month	MGD	Month	MGD
January	0.46	July	0.38
February	0.42	August	0.40
March	0.53	September	0.35
April	0.53	October	0.34
May	0.50	November	0.42
June	0.45	December	0.44

Carson Road Plant

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 for 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 Model DFEH Cummins 400 kw diesel powered generator.

Carson Road Water Treatment Facility
Finished Water Demand 2021 - Average Daily Flow

Month	MGD
January	0.96
February	0.93
March	0.92
April	0.98
May	0.99
June	0.82

Month	MGD
July	0.78
August	0.72
September	0.87
October	0.92
November	0.92
December	0.93

WATER DISTRIBUTION

IWSD Department 60
 Supervisor Lance York (IWSD)
 Permit Number 5110142

Distribution System

The District owns and maintains more than 100 miles of water distribution lines, and serves 6,436 connections or 7,641 equivalent dwelling units.

WASTEWATER PLANT

IWSD Department 20
 Supervisor Fernando Ramirez (IWSD)
 Permit Number FLA14132

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 through the use of four oxidation ditches. Effluent is disposed of by either a 350-acre spray field, three percolation ponds, and a 4.985 MGD deep injection well. The facility’s biosolids are converted into a Class AA fertilizer product by utilizing the Schwing Bioset Process. Backup power is provided by a Model 800DS4 Spectrum Detroit Diesel 800 kW diesel powered generator and a Model DS00550D6S Detroit Diesel/MTU Onsite Energy Corp. 550 kW diesel powered generator.

IWSD Wastewater Treatment Plant

Average Daily Flow 2020

Month	MGD
January	1.93
February	1.78
March	1.59
April	1.72
May	1.66
June	1.43

Month	MGD
July	1.82
August	2.07
September	2.40
October	2.04
November	2.30
December	1.90

WASTEWATER COLLECTION

IWSD Department 30
Supervisor Hector Ramos (IWSD)
Permit Number FLA14132 / 50725
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 (40) lift stations with generator receptacle connections for portable generators, and more than eighty (80) miles of wastewater collection system piping.

CUSTOMER SERVICE & ADMINISTRATION

IWSD Department 40
Supervisor Brian Stewart
Address 1020 Sanitation Road, Immokalee, FL 34142

Department Information

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

MAINTENANCE

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

Department Information

The maintenance department covers the water treatment plant, 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 in order to keep systems in operation.

UPCOMING PROJECTS

IWSD Clarifier Rehab

The Clarifier Rehab project was awarded in May 2020 and construction began on October 1, 2020. The anticipated construction completion is set for July of 2022. The project involves the replacement of three clarifier mechanisms, the modification and replacement of the clarifier's floor, and various modifications to the WWTP related to the Clarifier rehabilitation. The project is funded by the US Department of Agriculture.

Oxidation Ditch Bridges

The oxidation ditch bridge project was designed in March 2021. By the end of 2021, the first of the bridges was close to complete. This project is set for completion by April 2022. The project involves replacing the bridges that reside over the oxidation ditches at the wastewater treatment plant. This includes ramp access at each ditch for lawn servicing equipment as well as stairs for pedestrian traffic. The new bridges will incorporate a more resilient design for safety and efficiency.

IWSD WWTP Effluent Disposal Options

The wastewater treatment plant has several options that are currently being evaluated to alter the current effluent disposal methods. These options include the addition of a second deep injection well, direct/indirect potable reuse, and public access reclaimed water use.

Rehabilitation of Clay Piping in the Collection System

The sanitary sewer collection system that IWSD operates and maintains has several existing lines that are clay pipe sewers. The District is looking to rehabilitate these sections of the existing system to remove the clay piping and replace it with material that is safe and resilient.

Utility Relocations for upcoming FDOT/Collier County projects

Within the next year, Collier County and FDOT are expected to begin construction of several transportation and drainage related projects. Due to potential conflicts, utility relocations of portions of the District's facilities are anticipated in these project locations.

SOURCES

Boundaries - State of Florida, Laws of Florida, Chapter 2005-298, (House Bill 733).

Current Population & Seasonal Population – U.S. Census Bureau 2021 estimate

<https://www.census.gov/quickfacts/immokaleecdflorida>

Existing and Future Land Use – Collier County IMMOKALEE AREA MASTER PLAN DATA
& ANALYSIS – December 2019

An aerial photograph of a city grid, likely Immokalee, Florida. The image shows a dense network of streets and buildings. A prominent feature is a large, circular stadium or arena located in the center-right portion of the image. The overall scene is a top-down view of an urban area.

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