

PUBLIC FACILITES REPORT

Immokalee Water and Sewer District

2019

Table of Contents

IMMOKALEE WATER & SEWER DISTRICT 2019 PUBLIC FACILITIES REPORT	3
INTRODUCTION	3
BOUNDARIES	4
CURRENT POPULATION	5
PREDOMINANT TYPES OF LAND USE	5
WATER PLANT AND DISTRIBUTION	6
Jerry V. Warden Water Treatment Facility	7
Airport Water Plant	7
Carson Road Plant	8
WASTEWATER PLANT	9
WASTEWATER COLLECTION	10
CUSTOMER SERVICE & ADMINISTRATION	10
MAINTENANCE	10
UPCOMING PROJECTS	11
SOURCES	11

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 2019 PUBLIC FACILITIES REPORT

INTRODUCTION

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 40 employees.

Immokalee Water and Sewer District Board of Commissioners (2019)	
Joseph Brister	Chairman
Anne Goodnight	Vice Chairman
Robert Halman	Treasurer
Bonnie Keen	Secretary
Magda Ayala	Commissioner
Jack Johnson, Jr.	Commissioner
Monica Villa	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.



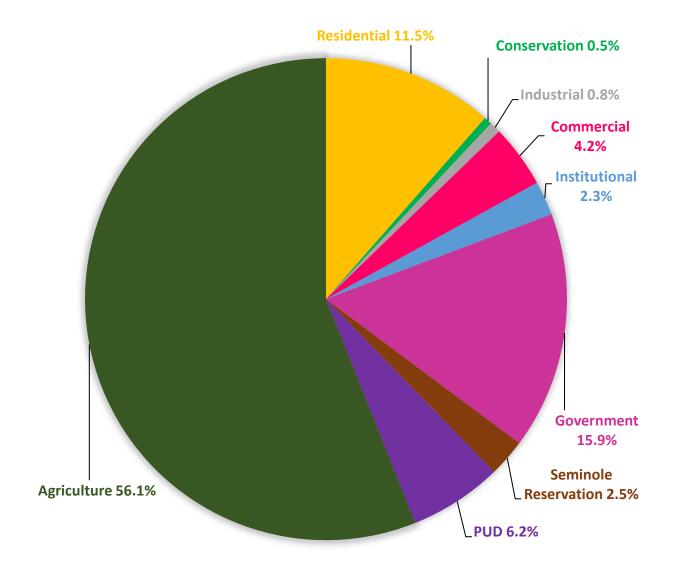
IWSD Service Area Boundary and Immokalee Urban Area Boundary

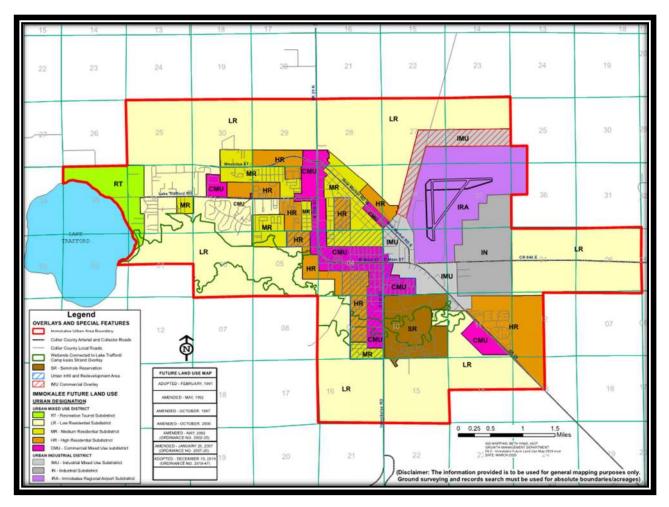
CURRENT POPULATION

According to US Census Bureau the population of the Immokalee, Florida census designated place (CDP) is 26,597 people as of 2019.

PREDOMINANT TYPES OF LAND USE

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





Immokalee Future Land Use Map 2019 Update

WATER PLANT AND DISTRIBUTION

IWSD Department 10

Supervisor James Jean-Louis (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. 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 2019 - Average Daily Flow

Month	MGD
January	0.907
February	0.84
March	0.918
April	1.274
May	1.191
June	1.146

Month	MGD
July	1.149
August	1.12
September	1.164
October	1.147
November	1.152
December	1.168

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 2019 - Average Daily Flow

Month	MGD
January	0.718
February	0.614
March	0.736
April	0.606
May	0.503
June	0.402

Month	MGD
July	0.409
August	0.401
September	0.431
October	0.535
November	0.597
December	0.683

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 2019 - Average Daily Flow

Month	MGD
January	0.877
February	0.814
March	0.856
April	0.829
May	0.729
June	0.609

Month	MGD
July	0.585
August	0.642
September	0.673
October	0.684
November	0.719
December	0.763

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's 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 2019

Month	MGD
January	1.80
February	1.72
March	1.82
April	1.76
May	1.83
June	1.87

Month	MGD
July	1.93
August	2.44
September	1.78
October	1.74
November	1.76
December	1.77

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 two master lift stations with installed onsite backup generators, forty two regular lift stations with generator receptacles, and more than eighty miles of wastewater collection system piping.

CUSTOMER SERVICE & ADMINISTRATION

IWSD Department 40

Supervisor Ofelia Gonzalez

Address 1020 Sanitation Road, Immokalee, FL 34142

MAINTENANCE

IWSD Department 50

Supervisor Derys Maldonado

Address 140 White Way, Immokalee, FL 34142

<u>UPCOMING PROJECTS</u>

AC AND UNDERSIZED REPLACEMENT PROJECT

Project construction started in 2017 and is ongoing. The project involves removing the asbestos cement water lines throughout the District and upgrading the two-inch and three-inch water mains throughout the community. The total construction cost is over \$20,000,000.

IWSD Clarifier Rehab

The Clarifier Rehab project is in the planning phase and 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.

SOURCES

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

Current Population & Seasonal Population – U.S. Census Bureau 2019 estimate https://www.census.gov/data/developers/data-sets/acs-5year.html

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

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