

IMMOKALEE
WATER
&
SEWER
DISTRICT

PUBLIC FACILITIES REPORT

Immokalee Water and Sewer District

2020

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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 2020 PUBLIC FACILITIES REPORT

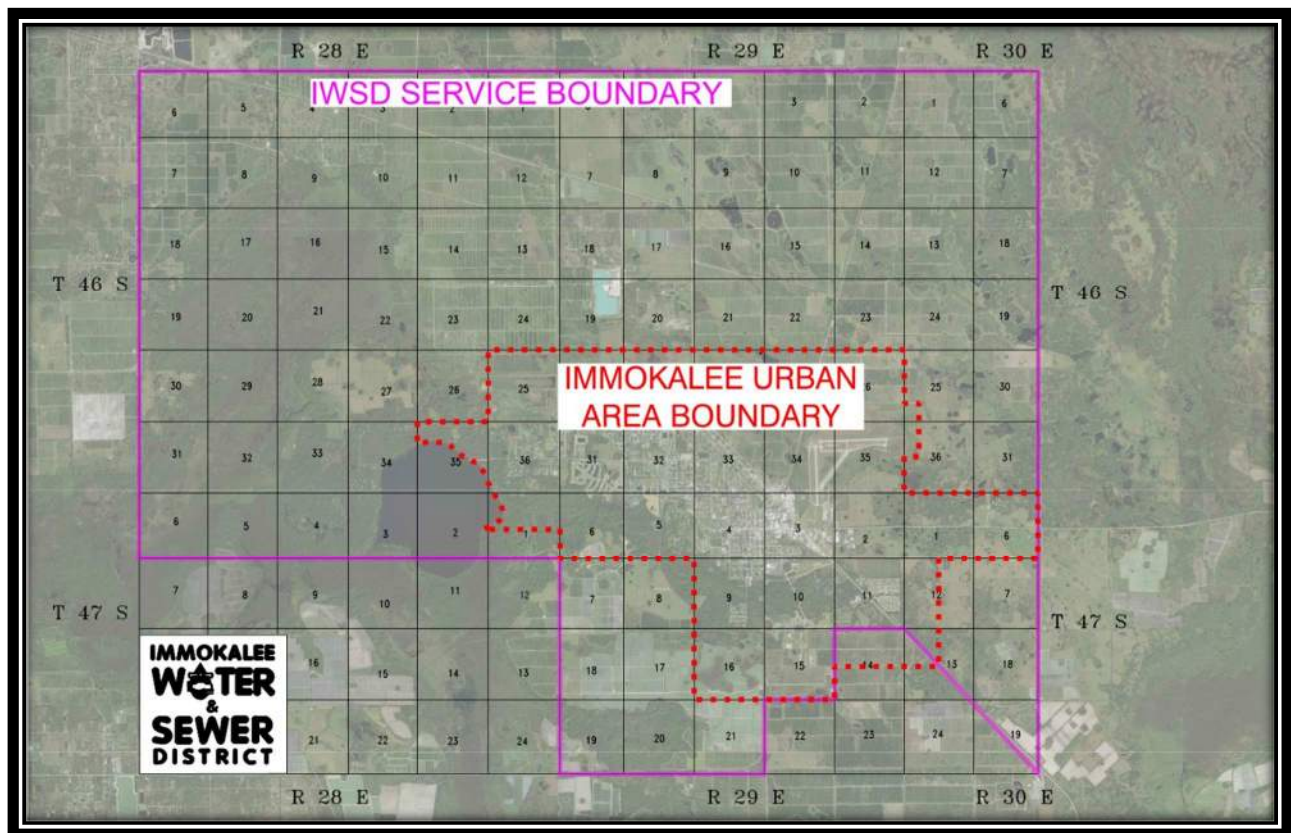
INTRODUCTION

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 (2020)	
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 Northeastly 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 Northeastly 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.



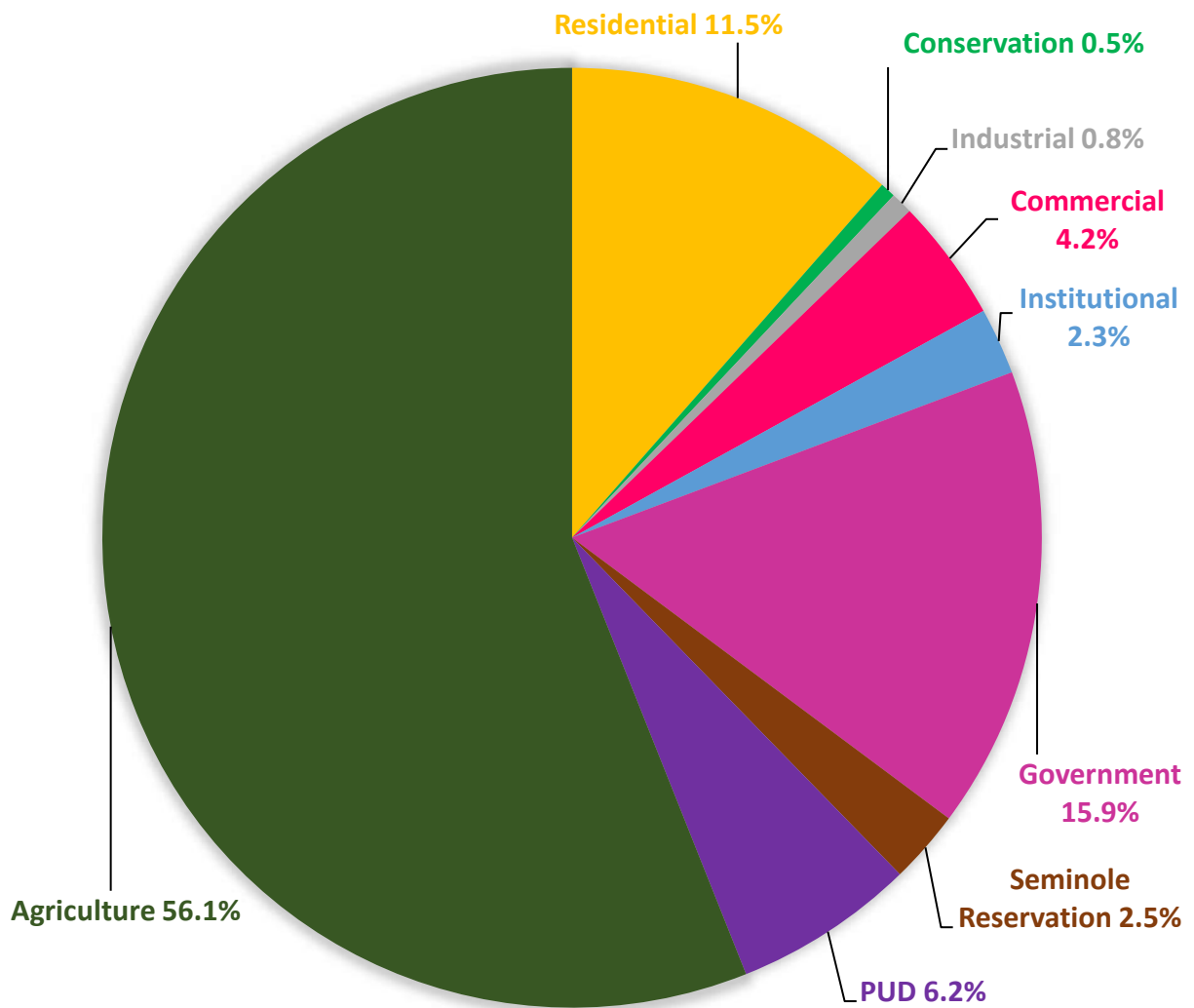
IWSD Service Area Boundary and Immokalee Urban Area Boundary

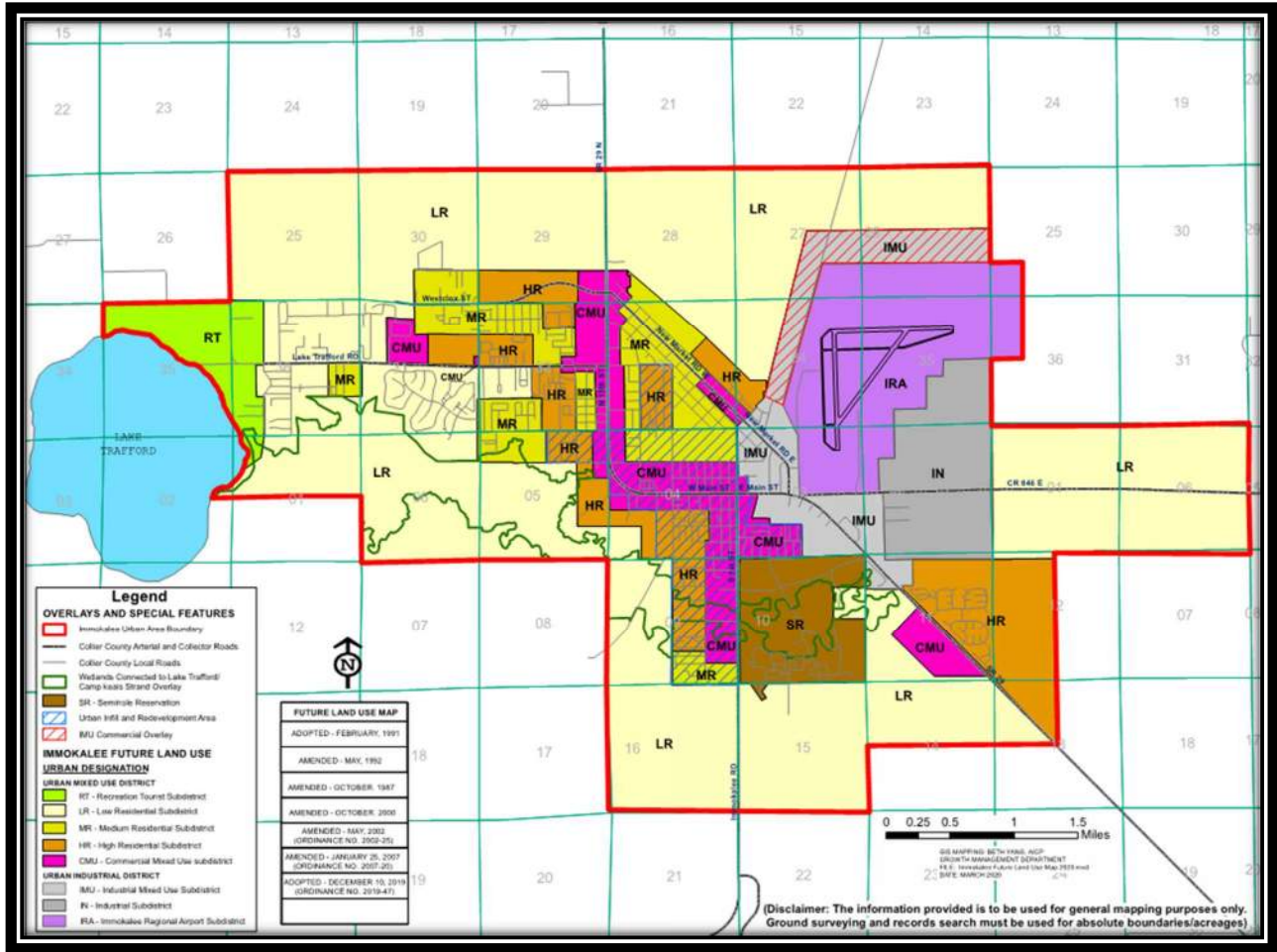
CURRENT POPULATION

According to US Census Bureau the population of the Immokalee, Florida census designated place (CDP) is 26,600 people as of 2020.

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	Month	MGD
January	1.17	July	0.85
February	1.11	August	0.9
March	1.19	September	0.84
April	1.07	October	0.79
May	1.19	November	0.86
June	0.94	December	0.86

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 2020 - Average Daily Flow

Month	MGD
January	0.68
February	0.65
March	0.79
April	0.61
May	0.59
June	0.65

Month	MGD
July	0.54
August	0.59
September	0.43
October	0.45
November	0.46
December	0.49

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 2020 - Average Daily Flow

Month	MGD
January	0.76
February	0.73
March	0.72
April	0.85
May	0.88
June	0.75

Month	MGD
July	0.73
August	0.89
September	0.82
October	0.83
November	0.87
December	0.93

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 2020

Month	MGD
January	1.67
February	1.70
March	2.02
April	1.86
May	1.67
June	1.79

Month	MGD
July	1.72
August	1.96
September	2.27
October	1.44
November	1.53
December	2.52*

**Due to Tropical Storm Eta*

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

UPCOMING PROJECTS

Master Lift Station X8

The project consists of force main modifications and the construction of a new master lift station. The project started construction in June 2020 and is scheduled to be completed in the first quarter of 2021. The project was funded through a cost share agreement between the IWSD and Habitat for Humanity of Collier County.

Lift Station H

The project consists of the modification and capacity increase of an existing lift station. The project was bid and construction was substantially completed in December 2020. The project was funded through a cost share agreement between the IWSD, Habitat for Humanity of Collier County, Rural Neighborhoods, Inc. and the Shelter for Abused Women & Children.

IWSD Clarifier Rehab

The Clarifier Rehab project was awarded on May 26, 2020 and construction began on October 1, 2020 with a scheduled final completion date of December 2021. 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.

SOURCES

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

Current Population & Seasonal Population – U.S. Census Bureau 2020 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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