# City of Green Cove Springs

CAPACITY CONNECTION FEE STUDY

NOVEMBER 17, 2025

# Capacity Connection Fees

Capacity Connection Fees are developed to offset infrastructure costs required to serve new development that connects to the utility system.

Local governments charge these fees for several reasons including but not limited to:

1. To obtain revenue to pay for some of the new public facilities cost.
2. To implement a public policy that new development should pay all or a portion of the facilities cost that it requires and that existing development should not pay all of the costs of such facilities.
3. To assure that public facilities will be constructed concurrently to serve new development in accordance with Florida's growth management laws.

# Capacity Connection Fees

Components of review:

1. Treatment and 'Backbone' System Components

2. Level of Service (LOS) and Equivalent Residential Unit (ERU)

3. Equity vs. Incremental Capital Costs

   System review pursuant to American Water Works Association (AWWA) Manual M1 *Principles of Water Rates, Fees, and Charges.*

# Capacity Connection Fees

Components of review:

1. Water System

2. Sewer System

   *Reclaimed water system is currently built out and provides essential effluent disposal requirements. Costs for this system are part of Sewer System review.*

# Water Capacity Connection Fee

| TABLE 1<br>WATER SYSTEM LOS REVIEW | | |
|---|---|---|
| **Fiscal Year** | **Residential Water Customers** | **Avg Residential Use 'ERU' (gpd/ERU)** |
| 19 | 3,960 | 217 |
| 20 | 4,104 | 223 |
| 21 | 4,202 | 207 |
| 22 | 4,239 | 226 |
| 23 | 4,279 | 220 |
| 24 | 4,300 | 219 |
| | **AVG** | **219** |

Based on historic use, the City's current LOS will be defined as follows:

- 220 gpd/Water-ERU for residential water use.

# Water Capacity Connection Fee

| | | |
|---|---|---|
| Existing System Excess Capacity | = | 0.86 million gallons per day (MGD)<br>annual average daily flow basis (AADF) |
| Audited Water System Value | = | $5,748,200<br>(Harbor Road WTP + Reynolds WTP) |
| Capacity Connection Fee (Equity) | = | $5,748,200/860,000 gpd-AADF |
| | = | $6.68/gpd-AADF |
| Water-ERU (Equity) | = | $6.68/gpd-AADF * 220 gpd/ERU |
| | = | $1,470/ERU |

# Water Capacity Connection Fee

The City's Capital Improvement Plan (CIP) identified the following Water System improvements scheduled for completion within the next five years:

- Harbor Road WTP and Water System Upgrades
  Capital Budget = $5,346,000

- Reynolds WTP and Water System Upgrades
  Capital Budget = $7,600,000

# Water Capacity Connection Fee

The denoted improvements would expand the City's total Water System capacity as follows:

- Harbor Road WTP & Water System Upgrades
  0.80 MGD-MDF capacity increase (4.96 MGD less existing 4.16 MGD)
  0.40 MGD-ADF on system storage basis.

- Reynolds WTP & Water System Upgrades
  3.03 MGD-MDF capacity increase (7.49 MGD less existing 4.46 MGD)
  1.52 MGD-ADF on a groundwater delivery system basis.

# Water Capacity Connection Fee

| | | |
|---|---|---|
| Incremental Capacity Costs | = | ($5,346,000/400,000 gpd-AADF) + ($7,600,000/1,520,000 gpd-AADF) |
| | = | $13.37/gpd + $5.00/gpd |
| | = | $18.37/gpd-AADF |
| Water-ERU (Incr.) | = | $18.37/gpd-AADF * 220 gpd/ERU |
| | = | $4,041/ERU |

# Water Capacity Connection Fee

Blended Capacity Connection Fee:

[Equity Value * (Excess Equity Capacity/Total Excess Capacity)] + [Incremental Value * (Incremental Capacity/Total Excess Capacity)]

= $6.68/gpd-AADF (0.860 MGD-AADF/1.324 MGD-AADF) + $18.37/gpd-AADF (0.464 MGD-AADF/1.324 MGD-AADF)

= $4.34/gpd-AADF + $6.44/gpd-AADF

= $10.78/gpd-AADF

Water-ERU = $10.78/gpd-AADF * 220 gpd/ERU
= $2,372/ERU

# Water Capacity Connection Fee

Consideration should be given to modifying the Water System capacity connection fee values as follows:

$2,372/ERU @ LOS = 220 gpd/ERU | $10.78/gpd [Residential water meter]

[*$1,000 existing @ LOS = 300 gpd/ERU | $3.33/gpd*]

# Sewer Capacity Connection Fee

| TABLE 5<br>SEWER SYSTEM LOS REVIEW | | |
|---|---|---|
| **Fiscal Year** | **Residential Sewer Customers** | **Avg Residential Use 'ERU' (gpd/ERU)[a]** |
| 19 | 2,921 | 203 |
| 20 | 3,153 | 195 |
| 21 | 3,395 | 177 |
| 22 | 3,530 | 181 |
| 23 | 3,607 | 179 |
| 24 | 3,668 | 178 |
| | **AVG** | **186** |

*a: Average Residential Use based on City's billing records for residential sewer customers.*

A 185 gpd/ERU basis is recommended.

# Sewer Capacity Connection Fee

After consolidation, the City's Wastewater Treatment Capacity will be as follows, which is scheduled to occur prior to 2030:

| | | |
|---|---|---|
| South WWTP Capacity | = | 0.00 MGD (AADF) |
| Harbor Rd WRF Capacity | = | 1.25 MGD (AADF) |
| **Total** | **=** | **1.25 MGD (AADF)** |

**TABLE 6**

**EXISTING WASTEWATER SYSTEM FLOWS**

| Fiscal Year | South WWTP (MGD-AADF) | Harbor Road WWTP (MGD-AADF) |
|---|---|---|
| 20 | 0.27 | 0.50 |
| 21 | 0.28 | 0.50 |
| 22 | 0.25 | 0.50 |
| 23 | 0.26 | 0.49 |
| 24 | 0.26 | 0.51 |
| **Average** | **0.27** | **0.50** |

Future Excess Treatment Capacity = 1.25 MGD - 0.50 MGD - 0.27 MGD
= 0.48 MGD (AADF)

# Sewer Capacity Connection Fee
## Treatment Capacity

The City's investment (less grant funding) into the Harbor Road WRF improvements was as follows:

| | | | |
|---|---|---|---|
| • | Planning | = | $ 44,006 |
| • | Design | = | $ 765,985 |
| • | Construction | = | $ 1,846,863 (Ph. 1) + $12,535,652 (Ph. 2) |
| | **TOTAL** | | **$15,192,506** |

The above construction costs should also include the land value that remains. Per the Clay County Property Appraiser, the 2025 land value is recorded as $230,952. Since the facility is serving the City's Utility Service Area and replacing existing capacity with upgraded treatment capabilities, the capacity connection fee is calculated as follows:

Capacity Connection Fee

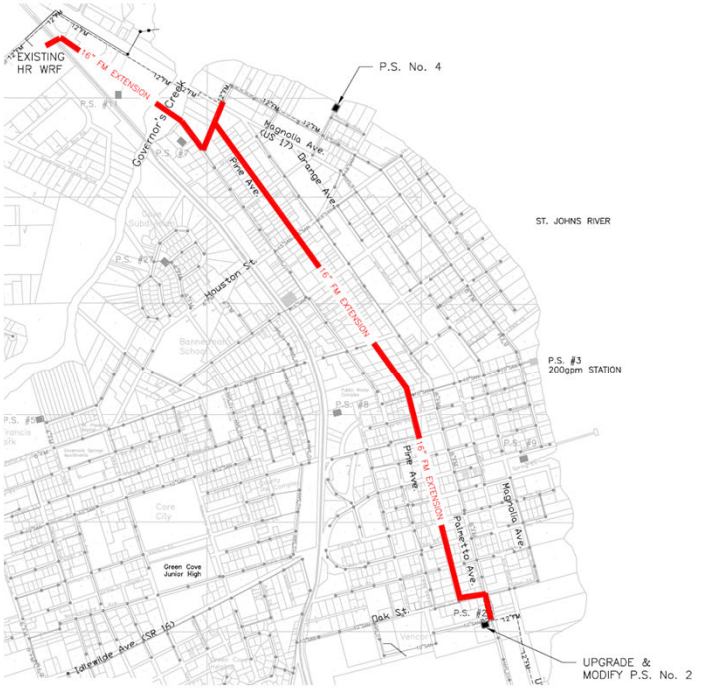
| | | |
|---|---|---|
| (Treatment - Incremental) | = | ($15,192,506 + $230,952)/1,250,000 gpd |
| | = | $12.34/gpd-AADF |

# Sewer Capacity Connection Fee
## Effluent Disposal – Surface Water Elimination

The City is currently pursuing projects to expand reclaimed water delivery capacity via extensions within their Utility Service Area or through a bulk delivery agreement with neighboring Clay County Utility Authority (CCUA). The City has spent the following related to these capital needs with additional projects to be identified:

- Capital Costs = $2,195,000
- Capacity = 341,000 gpd-AADF
  [Targeted effluent disposal capacity]
- Capacity Costs = $6.44/gpd-AADF

# Sewer Capacity Connection Fee
## System Consolidation




Design Capacity = 1.488 MGD-AADF

Current Flows = 0.270 MGD-AADF

Excess Capacity = 1.218 MGD-AADF

The following capital investment is calculated for the transmission system:

Capital Cost = $4,537,000 (*CIP Budget*)

The capacity connection fee is calculated as follows:

<u>Capacity Connection Fee</u>

Transmission = $4,537,000/1,488,000 gpd-AADF
= $3.05/gpd-AADF

# Sewer Capacity Connection Fee

*Wastewater Treatment*

Capacity Connection Fee-Treatment:

Capacity Connection Fee * (Excess Treatment Capacity/Total Capacity)

= $12.34/gpd-AADF * (480,000 gpd-AADF/1,250,000 gpd-AADF)
= $4.74/gpd-AADF

*Wastewater Disposal - Surface Water Elimination*

Capacity Connection Fee-Surface Water Elimination:

= $6.44/gpd-AADF

*Wastewater Transmission (Backbone Main)*

Capacity Connection Fee-Transmission:

Capacity Connection Fee * (Excess Capacity/Total Capacity)

= $3.05/gpd-AADF * (1,218,000 gpd-AADF/1,488,000 gpd-AADF)
= $2.50/gpd-AADF

# Sewer Capacity Connection Fee

*Wastewater System (Total)*

Capacity Connection Fee-Total:

Treatment + Surface Water Elimination + Transmission System (Backbone Main)

= $4.74/gpd-AADF + $6.44/gpd-AADF + $2.50/gpd-AADF
= $13.68/gpd-AADF

On an ERU basis, the Capacity Connection Fee is calculated as follows:

= $13.68/gpd-AADF * 185 gpd/ERU

= $2,531/ERU

# Sewer Capacity Connection Fee

Consideration should be given to modifying the capacity connection fee values as follows:

$2,531/ERU @ LOS = 185 gpd/ERU | $13.68/gpd
[*$2,000 existing @ LOS = 300 gpd | $6.67/gpd*]

# Questions