

ORDINANCE NO. O-24-19

AN ORDINANCE AMENDING ORDINANCE 23-24, THE 2035 WINTER HAVEN COMPREHENSIVE PLAN, BY AMENDING THE SANITARY SEWER SUB-ELEMENT TO ADDRESS SEPTIC TO SEWER CONVERSIONS; REPEALING ALL ORDINANCES IN CONFLICT HEREWITH; PROVIDING FOR THE ADMINISTRATIVE CORRECTION OF SCRIVENER'S ERRORS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Chapter 163 of Florida Statutes requires all local governments to adopt and maintain a Comprehensive Plan; and,

WHEREAS, the Florida Legislative, during its 2023 Regular Session, passed House Bill (HB) 1379 relating to pollutant load reductions, which was subsequently signed into law by the Governor; and

WHEREAS, HB 1379 includes provisions requiring local governments to study the feasibility of converting existing septic systems to sanitary sewer, and to address the conversions of septic systems in the Comprehensive Plan; and

WHEREAS, proposed amendments to the Sanitary Sewer Sub-element relating to septic to sewer conversions, have been studied, documented, advertised, and heard by the Winter Haven Planning Commission; and,

WHEREAS, the proposed amendment has been transmitted to, and returned from, the State of Florida in accordance with Chapter 163 of the Florida Statutes;

WHEREAS, the City Commission of the City of Winter Haven, Florida, deems it appropriate to amend the 2035 Winter Haven Comprehensive Plan in order to further the public interest and the general welfare of the citizens of the City of Winter Haven, and;

WHEREAS, the request implements requirements contained in Part II, Chapter 163 of Florida Statutes, and therefore is exempt from requiring a Business Impact Estimate as set forth by Chapter 2023-309, Laws of Fla. (CS/CS/SB 170 (2023)).

NOW THEREFORE, BE IT ENACTED BY THE PEOPLE OF THE CITY OF WINTER HAVEN, FLORIDA, AS FOLLOWS:

1. The Sanitary Sewer Sub-element is hereby revised as shown in Exhibit "A" which is hereby attached hereto and made a part hereof this ordinance.
2. The 2021 Winter Haven Septic to Sewer Masterplan as shown in Exhibit "B" shall be adopted by reference into the 2035 Winter Haven Comprehensive Plan.
3. If any provision or portion of this Ordinance is declared by any court of competent jurisdiction to be void, unconstitutional, or unenforceable, then all remaining provisions and portions of this Ordinance shall remain in full force and effect.

4. This Ordinance shall not be codified, but the City Clerk shall retain this Ordinance as a permanent record of action taken by the City Commission. The correction of typographical and/or scrivener's errors which do not affect the intent may be authorized by the City Manager or designee, without need of public hearing, by filing a corrected or recodified copy of same with the City Clerk.
5. All ordinances in conflict herewith are hereby repealed.
6. The effective date of this plan amendment shall be: the date a final order is issued by the State Land Planning Agency (Department of Commerce's Bureau of Community Planning and Growth) finding the amendment to be in compliance in accordance with Chapter 163.3184, F.S.; or the date a final order is issued by the Administration Commission finding the amendment to be in compliance in accordance with Chapter 163.3184, F.S.

INTRODUCED on first reading this 22<sup>nd</sup> day of April, 2024.

PASSED on second reading this \_\_\_\_ day of \_\_\_\_\_, 2024.

CITY OF WINTER HAVEN, FLORIDA

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MAYOR-COMMISSIONER  
Nathaniel J. Birdsong, Jr.

ATTEST:

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CITY CLERK  
Vanessa Castillo, MMC

Approved as to form:

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CITY ATTORNEY  
Frederick J. Murphy, Jr.

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(New language is underlined and deleted language is ~~stricken through~~)



# **SANITARY SEWER SUB-ELEMENT**

## **Goals, Objectives, and Policies**

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**GOAL ONE: Ensure adequate sanitary sewer treatment capacity and facilities are available to meet the needs of the City's wastewater customers.**

*Objective 1.1: Sanitary sewer facilities shall operate at ~~the~~ Level of Service standards appropriate ~~to~~ for efficient operation of the system and ~~realistic~~ provision of capacity needed to meet future demands.*

**Policy 1.1.1:** The Level of Service for sanitary sewer treatment shall be as follows:

Year	Current	By 2028	By 2035
Wastewater LOS (gallons/person/day)	100.00 gallons	95.0 gallons	85.0 gallons

**Policy 1.1.2:** The City shall supply sufficient sanitary sewer capacity to meet future demand prior to, or concurrent with, the impact of development.

**Policy 1.1.3:** Annually assess the City's wastewater treatment plant treatment capacity capacities and projected population growth to ~~be able to~~ plan for capital improvements to expand facilities. Projects that are required to maintain the adopted level of service standard shall be included in the 5-year Schedule of Capital Improvements.

**Policy 1.1.4:** Continue to prioritize improvements to the sanitary sewer collection system and wastewater treatment plants based on the findings and recommendations of the most recently adopted *Winter Haven Utility Master Plan*. Periodically review, and update as necessary, the *Master Plan* to ensure it continues to reflect the needs of the City, the sanitary system collection system, and wastewater treatment plants.

*Objective 1.2: The City shall extend sanitary sewer service throughout the City Limits and Utility Service Area in a manner that enhances a compact urban growth pattern.*

**Policy 1.2.1:** All new development shall be connected to sanitary sewer.

**Policy 1.2.2:** Continue the practice of requiring all new development to construct and dedicate public sewer collection facilities to the City.

**Policy 1.2.3:** Update, Mmaintain, and enforce ~~the~~ existing ordinances requiring ~~the~~ connection to the public sewer system of all existing residences residential, commercial, industrial, and institutional uses and businesses that have where gravity, pressure, or vacuum sewer service available is located within 200 feet of the nearest property line.



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Require any new residential, commercial, industrial, or institutional use located on a parcel immediately adjacent to a force main to connect to the force main unless there is a City-approved engineering challenge to making the connection. Furthermore, require all new multi-family developments and residential subdivisions proposing a net density of 1.0 unit per acre and greater, to connect to the nearest force main or gravity sewer line, regardless of the subdivision's distance from the force main or gravity sewer line.

**Policy 1.2.4:** Extend water service at the same time sewer service is extended, if public water is not already provided.

**Policy 1.2.5:** Continue to coordinate the City's Franchise Agreement with Polk County that establishes the geographic service area for the provision of water and sewer service.

~~**Policy 1.2.6:** Coordinate all new development proposals adjacent to the Winter Haven Utility Service area. Require the exchange of detailed information on each development proposal between Polk County's Planning and Utility Departments, and the City's Economic Opportunity & Community Investment and Water Departments, in order to prevent new development from using private septic systems or package treatment plants.~~

**Policy 1.2.76:** Coordinate the locations of sewer line extensions with the objectives and policies contained in the Future Land Use and Conservation Elements, as well as current City of Winter Haven Engineering Standards and Specifications.

**Policy 1.2.87:** To achieve economies of scale, coordinate sewer line rehabilitation and expansion projects with major roadway construction or resurfacing projects.

**GOAL TWO: Highly restrict the use of on-site wastewater treatment systems in and around the City.**

*Objective ~~1.32.1~~: To reduce the potential for environmental damage to the City's lakes and other hydrologic features, limit the installation of new and replacement septic systems and ~~work towards the connection of existing septic systems and~~ package wastewater treatment plants ~~to the City's sanitary sewer system.~~*

**Policy ~~1.3.12.1.1~~:** The City shall coordinate the extension of sewer lines and other facilities to meet future demand prior to, or concurrent with, the impact of development in areas with soils unsuitable for septic tanks.

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**Policy 2.1.2:** Coordinate all new development proposals adjacent to the Winter Haven Utility Service area. Require the exchange of detailed information on each development proposal between Polk County's Planning and Utility Departments, adjacent municipalities, and the City's Economic Opportunity & Community Investment and Utility Departments, in order to prevent new development from using private septic systems or package treatment plants.

**Policy 2.1.3:** Require any existing septic system which requires septic tank or drain field replacement to connect to any gravity, pressure, or vacuum wastewater line located immediately adjacent to the property or within 200 feet of the nearest property line.

**Policy 2.1.4:** Require any new septic system be setback a minimum of 150 feet from the regulatory high water elevation. In no case, shall new septic systems be located within the 100-year floodplain.

**Policy 2.1.5:** Any permitted septic system shall be designed to allow for future connection to the City's sanitary sewer system when gravity or pressure lines are installed adjacent to the property served by the septic system.

**Policy 2.1.6:** To help prevent installation of new septic systems, and to facilitate conversion of existing septic systems, study and evaluate alternative sewer systems as low-cost options for connection to the City's wastewater system. Adopt standards allowing the use of vetted alternative sewer systems into the City's Code or Engineering Design Standards and Specifications.

*Objective 2.2: Identify and maintain maps of areas with high concentrations of existing septic systems, both inside the City and in the surrounding Utility Service Area located in unincorporated Polk County, and develop a cost feasible plan to convert identified septic systems to the City's sanitary sewer system.*

**Policy 2.2.1:** Prepare and maintain a Septic to Sewer Master Plan which is updated, at a minimum, every five (5) years. The Septic to Sewer Master Plan shall be adopted as an Exhibit to the 2035 Winter Haven Comprehensive Plan.

**Policy 2.2.2:** Maintain as part of the Sanitary Sewer Sub-element, maps illustrating the locations, both inside the City limits and outside of the City limits in the Utility Service Area, where high concentrations of septic systems are located. These maps shall be updated periodically to reflect changing conditions.

**Policy 2.2.3:** Ensure the City's wastewater treatment plants provide sufficient treatment capacity to accommodate flows from identified areas with high concentrations of septic systems and wastewater package plants located within the City's Utility Service Area.

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**Policy 2.2.4:** Strive to annually fund capital projects in support of converting areas with high concentrations of septic systems to the sanitary sewer system. These projects should include line extensions, wastewater treatment plant upgrades, and lift-stations.

**Policy ~~1.3.22.2.5~~:** In conjunction with Polk County, seek grants to aid in connecting septic systems located in residential ~~older, unincorporated~~ neighborhoods within the City's Utility Service Area to the sanitary sewer system.

**Policy ~~1.3.32.2.6~~:** ~~Work with the~~ Require owners/operators of package wastewater treatment plants that are located within the City's Utility Service Area ~~on~~ to connection to the City's sanitary sewer system.

**Policy 2.2.7:** Maintain a program to assist existing residential and commercial customers to pay the Sewer Connection Fee associated with connection to the City's sewer system.







**SEPTIC-TO-SEWER  
MASTER PLAN REPORT  
FOR THE  
CITY OF WINTER HAVEN**



**JANUARY 2021**

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**SEPTIC-TO-SEWER  
MASTER PLAN REPORT  
FOR THE  
CITY OF WINTER HAVEN**

**JANUARY 2021**

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MASTER PLAN REPORT  
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**SECTION 1**  
**INTRODUCTION**

The City of Winter Haven's utility service area encompasses approximately 78 square miles and serves customers both inside and outside of the incorporated City limits. While the population within the service area is approximately 74,675, there are approximately 36,970 water accounts which include 33,600 residential and 3,080 commercial accounts. While there are approximately 22,900 accounts with sewer service, there are other customers that have septic systems.

The wastewater collection system is comprised of 330 miles of sewer mains and 198 lift stations. The wastewater is treated at one of the two wastewater treatment plants. Wastewater Treatment Plant No. 2 (WWTP No. 2) is permitted for 1.7 MGD Annual Average Daily Flow (AADF). Wastewater Treatment Plant No. 3 (WWTP No. 3) is permitted for 7.5 MGD AADF.

There are fifty lakes with a total area of eight square miles, within or bordering the City and a remarkable chain of lakes that are a centerpiece of the City. The City has been proactive in planning and developing projects that maintain or improve the quality of its lakes. With that in mind, the City has identified the elimination of septic systems as an important element in maintaining the health of the lakes by improving water quality.

Remediation areas have been delineated to convert septic systems to conventional collection systems. The delineations were based on size and anticipated construction costs for the remediation areas to generally outlay a plan for the City to use to implement the conversion. The plan will identify the prioritization of the remediation areas based upon a specific set of criteria to be evaluated.

This master plan report focuses on establishing remediation criteria and scoring, evaluating project costs and funding opportunities, and establishing a project implementation schedule.



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**SECTION 2**  
**SEPTIC-TO-SEWER REMEDIATION AREA CRITERIA AND SCORING**

**2.1 PRIORITIZATION RANKING METHODOLOGY**

The remediation area prioritization ranking is based on the following criteria:

1. Proximity to lakes,
2. age of septic system,
3. nutrient loading density, and
4. length of potable water AC pipe withing the remediation area.

Each criterion carries a raw score from 0 to 5. Raw scores are multiplied by a weighing factor to calculate the weighed scores. The weighing factors are summarized in Table 2-1 and were adjusted with input from the City. The total score for a remediation area is the sum of the average weighed scores. Remediation areas were sorted by total score to develop the prioritization list, as shown in Appendix A.

**TABLE 2-1**  
**WEIGHING FACTORS**

<b>Scoring Factor</b>	<b>Weighing Factor</b>
<b>Proximity to Impaired Lakes</b>	6
<b>Proximity to Semi-Impaired Lakes</b>	4
<b>Proximity to Non-Impaired Lakes</b>	2
<b>Nutrient Loading Density</b>	2
<b>Age of Septic System</b>	1
<b>Length of Potable Water AC Pipe</b>	1

**2.2 PROXIMITY TO LAKES**

This criterion is the proximity of a lake to a parcel. There are existing lakes that are designated as "impaired" for water quality, those that are trending downward ("semi-impaired"), and those that

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are not impaired. The assigned score is based upon how near the lake is from the parcel. For semi-impaired lakes, the scoring range is two times higher than for a non-impaired lake. For an impaired lake, the scoring range is three times higher than for a non-impaired lake. This scoring range adjustment is to effectively “weight” the scores of impaired or semi-paired lakes higher than being near a non-impaired lake. This scoring is cumulative, such that if a parcel is withing 2,500-feet of multiple lakes, the scores are additive for each lake in proximity.

**TABLE 2-2  
 PRIORITIZATION LIST**

<b>Proximity to Lake</b>	<b>Raw Score</b>	<b>Not Impaired Weighed Score</b>	<b>Semi Impaired Weighed Score</b>	<b>Impaired Weighed Score</b>
<b>≤500 feet</b>	5	10	20	30
<b>≤1,000 feet</b>	4	8	16	24
<b>≤1,500 feet</b>	3	6	12	18
<b>≤2,000 feet</b>	2	4	8	12
<b>≤2,500 feet</b>	1	2	4	6
<b>&gt;2,500 feet</b>	0	0	0	0

**2.3 NUTRIENT LOADING DENSITY**

Each septic system was estimated to contribute a quantity of wastewater to the existing collection system. Using data collected by the City, each gallon of wastewater was applied an estimated concentration of nitrogen and phosphorous. As such, the higher the quantity of nitrogen and phosphorous, the higher the scoring for this criterion. The two primary contributors to lake water quality degradation are nitrogen and phosphorous. By removing those two constituents, the lake water quality can be protected or improved. The scoring will be based on the below formula.

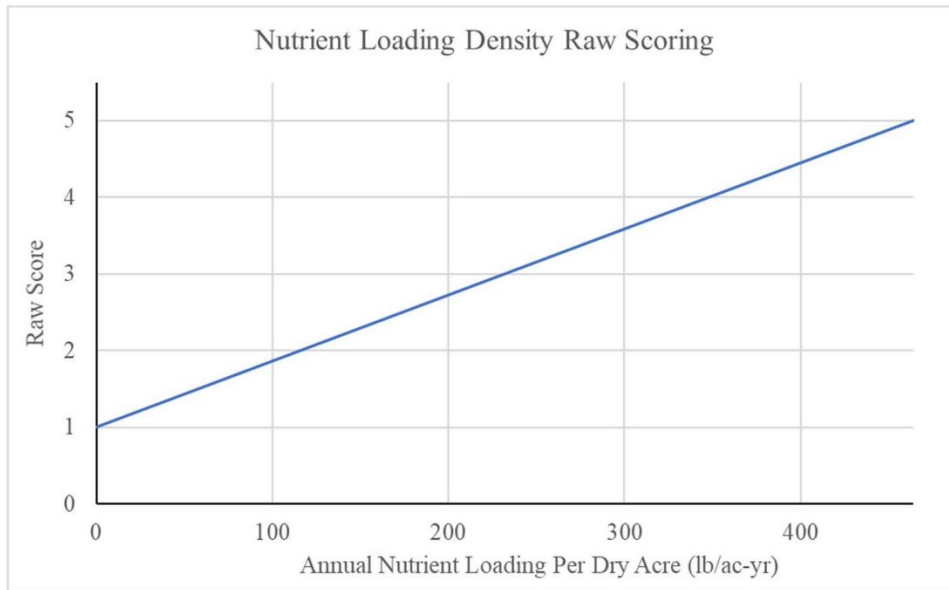
$$Raw\ Score = \frac{(\dot{m}_N + \dot{m}_P)}{Dry\ Area} \times 0.008626 + 1$$

$\dot{m}$ =Pounds per year, Nitrogen and Phosphorus

Area = Dry Area, Acres

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**FIGURE 2-1  
 NUTRIENT LOADING DENSITY RAW SCORING**



$$\text{Weighed Score} = \text{Raw Score} \times \text{Weighing Factor}$$

**TABLE 2-3  
 NUTRIENT LOADING DENSITY**

Nutrient Loading Density, lb/ac-yr	Raw Score	Weighed Score
463	5	10
348	4	8
232	3	6
116	2	4
0	1	0

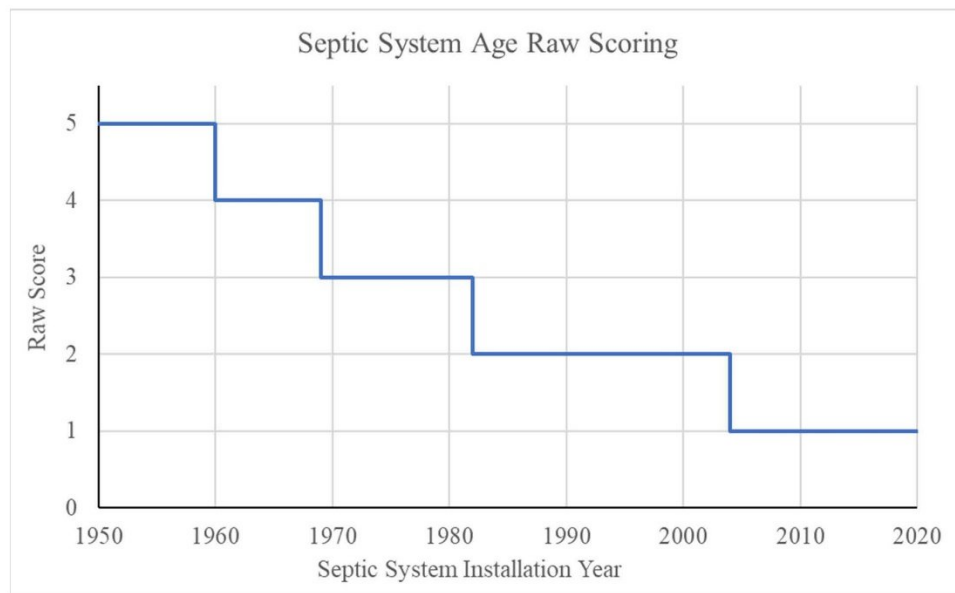
**2.4 ESTIMATED AGE OF SEPTIC SYSTEM**

This criterion represents the age of the septic system for each parcel. The older the system, the higher the likelihood that the system has leaks or does not operate as well as a newer system. As

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such, older septic systems receive a higher score. The age is based upon the Property Appraiser database for each parcel and the year which the building was constructed on that parcel. The years associated with changes in scoring correspond to certain milestones where septic tank technology was improved.

**FIGURE 2-2  
SEPTIC SYSTEM AGE RAW SCORING**



**TABLE 2-4  
SEPTIC SYSTEM AGE RAW SCORING**

Installation Year	Raw Score	Weighed Score
Before 1960	5	5
1960 - 1969	4	4
1970 - 1982	3	3
1983 - 2004	2	2
After 2005	1	1

**2.5 LENGTH OF AC POTABLE WATER PIPE WITHIN REMEDIATION AREA**

This criterion is not parcel-based but linked to the individual remediation area. For each remediation area, the quantity (linear footage) of asbestos-cement water mains in the area has been

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calculated. The more AC pipe in the remediation area, the higher the score. This criterion represents the ability of the City to meet two goals with one project; the conversion of septic tanks to City sewer and to replace AC water mains with ductile iron or PVC.

**TABLE 2-5  
LENGTH OF AC POTABLE WATER PIPE WITHIN REMEDIATION AREA**

<b>Lower Bound</b>	<b>Upper Bound</b>	<b>Weighed Score</b>
	> 2 Miles	5
> 1.5 Miles	< 2.0 Miles	4
> 1.0 Miles	< 1.5 Miles	3
> 0.5 Miles	< 1.0 Miles	2
> 0 Miles	< 0.5 Miles	1
	0 Miles	0

**2.6 REMEDIATION AREA PRELIMINARY SCORING**

Scoring was determined for each remediation area based on the four scoring criteria:

- Lake proximity,
- nutrient loading density,
- septic tank age,
- and length of AC pipe.

For parcel-based score criteria (lake proximity, nutrient loading density, septic tank age) remediation areas received the average weighed score of their corresponding parcels. For the remediation area-based scoring criterium (length of AC pipe) remediation areas received the full weighed score, as described in Section 2-5. After summing together the weighed scores from the four criteria, the results of the ranking of the remediation areas is tabulated in Appendix A and displayed in Appendix B.



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**SECTION 3**  
**FUNDING EVALUATION**

The cost of conversion from septic-to-sewer is relatively expensive due to collection system installation and surface restoration. In order to pay for the conversions, funding can come from both external and internal sources. External sources comprise of grants, loans, and/or matching funds which provide for the planning, design, and construction of septic-to-sewer conversions. These external sources available to a local government or utility are impacted by their population, demographics, and/or environmental demands. Internal sources that are available to a local government or utility depend on the resources of the community and the level of financial investment the community members are willing or able to make. Internal sources are utilized to cover all current and future costs that are not covered by external sources through either community-wide responsibility or individual home/ business owner responsibility.

**3.1 EXTERNAL FUNDING ALTERNATIVES**

**3.1.1 Southwest Florida Water Management District (SWFWMD) Cooperative Funding**

Currently the SWFWMD will only fund septic-to-sewer projects through the Cooperative Funding Initiative (CFI) in areas protected by the Florida Springs and Aquifer Protection Act. The fund is available through the water management district as a grant with matching funds. Public, private, and non-profit entities are eligible for the fund. The fund is available annually as identified through the water management district. The City should monitor this funding program to see if changes are made in the future to provide funding in areas outside of those protected by the Florida Springs and Aquifer Act.

**3.1.2 Community Development Block Grant (CDBG)**

The CDBG program is a federal program which provides funding for the development of low-income communities. Septic-to-Sewer can be funded in part through the Neighborhood Revitalization and Housing Program. The fund is available through the Department of Economic Opportunity. The fund has state allocations with project allocations up to \$750,000 available annually through grants. Counties with a population of less than 200,000 and cities less than 50,000

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not participating in an entitlement program are eligible for the fund. These projects are competitively scored and in order to receive a score that qualifies you for funding, typically design plans and permits need to be completed prior to application submittal.

**3.1.3 FDEP State Revolving Fund (SRF) Loan**

The FDEP manages the Clean Water SRF loan program which offers loans at low financing rates to provide funding for public sewer projects. Federal law requires FDEP to include Davis-Bacon wage rates and American Iron and Steel provision in all loan agreements. To offset the additional costs that result from these new requirements, the base financing rate are reduced by 1 percent in all construction agreements. Additionally, these amendments will require the development and implementation of a fiscal sustainability plan for all construction loans. The fund is administered through FDEP, with \$250 million available annually through a loan/grant. The Clean Water SRF is available for local government, authorities, special districts, and agencies. This method of funding will be the most likely to be available for the City to utilize and is recommended that the City investigate its use. Additionally, this funding can be used for both the design and construction phases of the project.

**3.1.4 FDEP 319 Grant**

The FDEP Section 319(h) Nonpoint Source Grant funds can be used to implement projects or programs that will help to reduce nonpoint sources of pollution including failing septic systems. The fund is available through the FDEP. The fund has \$5 to \$6 million allocated to the state of Florida through the Federal Clean Water Act. State agencies, local government, state universities and colleges, and water management districts are eligible for the fund. With impaired waters near specific remediation areas, it is recommended that the City apply for these grants to help offset costs to reduce nutrient loading to these impaired water bodies. For septic-to-sewer projects this program will fund the cost of construction for the sewer lateral from the sewer main to the residence/business, connection to the house/business, and demolition of the existing septic tank. This funding is provided through the USEPA to FDEP and thus it takes longer for the approval of this funding than most of the other referenced funding sources. If this funding is to be pursued, consideration should be given to prioritizing this application process early in the design process.

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**3.1.5 State Appropriations**

In Florida, in accordance with Section 216.052, Florida Statutes, a local, county or regional government entity, private organization, or nonprofit organization may submit a funding request for a state appropriation to members of the Legislature for and initiative that is local or regional in scope, is intended to meet a documented need, addresses and statewide interest, is intended to produce measurable results, and has tangible community results. The City would need to lobby the state representatives to include specific funding in the budget cycle for appropriation of funds. This would provide the greatest amount of funding for the project however it is the least likely to be approved. It is recommended that the City initiate discussions with their local state representative to see how receptive they are to this project and allocating funds, even if it's a small portion of funds.

**3.2 INTERNAL FUNDING ALTERNATIVES**

**3.2.1 System Rate Structure**

A system rate structure is a method of distributing the costs of operating and maintaining the utility to the customers. To set up an effective system rate structure, a utility should adopt a full-cost pricing strategy in order to cover all current and future costs that are not covered by external sources of revenue. A system rate structure based on full-cost pricing needs to provide adequate revenue for O&M costs, routine repairs and replacements, debt service, and capital improvements. The City's current rate structure is based upon potable water use, meter size, and use type. There is a base charge dependent upon meter size followed by a usage charge. The base and usage rates are higher for larger potable water meters, as it is indicative of the ability to use more water and reserve capacity for the sewer collection system. There are three primary use types that have varying rates: residential, commercial, and municipal/enterprise. The City also has separate rates for consumers within City limits and outside of City limits. The current rate structures could be reviewed and adjusted, if needed, to provide additional revenue to fund the septic-to-sewer conversions.

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**3.2.2 Local Option Sales Tax**

Under Florida Statute Section 212.055, the governing authority in each Florida county may charge a discretionary sales surtax of 0.5 or 1 percent to fund infrastructure projects, contingent on a successful referendum. Proceeds from the discretionary sales tax may be used toward capital costs associated with planning, designing, and construction of facilities that have a life expectancy of 5 years or more. While this would raise funds for the project without the City accruing debt, it is typically not a politically viable method for raising funds.

**3.2.3 Connection Fees/ Impact Fees**

Utility Connection Fees are fees on development used to pay for its proportionate share of the capital costs and installation of a local government's utility infrastructure. Utility Connection Fees are charged for new construction and/or when upgrading an existing service. Impact fees are a one-time tax imposed on all new residential and commercial construction by local governments to defray the cost of growth's "impact" on vital services such as schools, water, wastewater, roads, and other infrastructure needs. Connection fees and impact fees function similarly with existing facilities versus new growth being the major differentiator. The City generally charges an impact fee on new development based upon an equivalent residential unit (ERU) calculation. An ERU for wastewater is 275 gallons per day. A single-family home is considered equal to one ERU. Multi-family homes, commercial properties, and others use the equivalent wastewater production to calculate the ERUs and the impact fees are levied against the new property. There are different impact fees for properties inside the City and outside the City. It is recommended that this be discussed with City leadership to determine their desire to implement, even at some minimal level, the willingness to increase impact fees on new development to help fund these improvements.

**3.2.4 Ad Valorem**

Ad valorem or "property" tax is based on the taxable value of the property (not based on purchase price). Ad valorem taxes are assessed annually by each county's property appraiser for the county's tax collector's office. While not a traditional source of funding for utilities infrastructure, ad valorem taxes are a major financial resource and can be used by the county government flexibly.

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**3.2.5 Municipal Service Taxing Unit / Benefit Unit (MSTU/BU)**

Florida Statutes Chapter 125.01(1)(a) authorizes a Board of County Commissioners to create Municipal Service Benefit Units to provide specific municipal services to any specified portion or all of the unincorporated area of the county. Florida Statutes Chapter 197.3632 authorizes such MSBU non-ad valorem assessments to be billed and collected in a uniform manner with ad valorem taxes. Services are paid for by non-ad valorem assessments levied against property within benefited areas. Because of the localized nature of the costs and benefits of central sewer installation, local governing bodies often impose special assessments on the property and typically collect such assessments through the annual tax bill administered through the tax collector's office. The procedure for imposing special assessments in Florida is set forth in Chapter 197, FS. This could be applied to each parcel that is being retrofitted with new City sewer and applied to their tax bill. This could be used to raise some or all of the funds to implement the projects, however, excessive use of this could create a negative political atmosphere. It is recommended that this be discussed with City leadership to determine the viability of utilizing this method as an avenue of funds.



Exhibit “B”  
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**SECTION 4**  
**IMPLEMENTATION SCHEDULE**

A plan was developed to determine the order of which the septic-to-sewer projects are designed and constructed. While the septic system service area was initially divided up into 130 different remediation areas for ranking, the actual design projects will encompass larger regional areas comprising of multiple remediation areas, referred to as planning zones. Remediation areas were grouped together based on proximity and criticality ranking to form planning zones. The intent of planning zones is to establish an area that will be planned and designed together under a single design project, and then constructed in phases over multiple years. There are twelve planning zones; refer to Table 4-1 for a summary of the planning zones.

**TABLE 4-1**  
**PLANNING ZONES**

<b>Planning Zone</b>	<b>Remediation Areas</b>	<b>Construction Cost</b>
<b>Zone A Phase I</b>	14, 15, 16, 17, 18, 19, 20	\$21.5 M
<b>Zone A Phase II</b>	21, 22, 23, 27, 28	\$13.4 M
<b>Zone A Phase III</b>	24, 25, 26, 507	\$12.8 M
<b>Zone B</b>	4, 5, 6, 7, 8, 9, 10, 13	\$20.6 M
<b>Zone C</b>	1, 2, 3, 11, 12, 501, 502, 503, 504, 505	\$16.4 M
<b>Zone D</b>	36, 37, 46, 506	\$7.3 M
<b>Zone E</b>	38, 39, 40, 41, 42, 43, 44	\$12.0 M
<b>Zone F</b>	45, 59, 67, 68, 72, 73, 74, 509	\$11.8 M
<b>Zone G Phase I</b>	47, 48, 49, 50, 51, 52, 53	\$19.3 M
<b>Zone G Phase II</b>	54, 75, 76, 77, 78, 79	\$17.0 M
<b>Zone H</b>	55, 56, 57, 58, 60, 61, 64, 65, 69, 70, 71, 80, 510	\$23.0 M
<b>Zone I</b>	29, 30, 31, 32, 33, 34, 35, 89, 90, 508	\$16.0 M
<b>Zone J</b>	83, 84, 85, 86, 87, 88	\$11.3 M
<b>Zone K</b>	62, 63, 66, 93, 94, 512, 513	\$16.4 M
<b>Zone L</b>	81, 82, 95, 96, 511	\$6.7 M

A planning zone implementation schedule was developed in five-year increments. Given that the City has \$4 million dollars of annual funding, it was assumed that the City can implement \$20 million dollars of septic-to-sewer upgrades for every five-year increment. Planning zones with construction cost significantly greater than \$20 million were broken into multiple phases. Planning zones with construction costs less than \$20 million were paired with other planning zone with construction costs less than \$20 million. Refer to Table 4-2 and Appendix C for the proposed implementation schedule.

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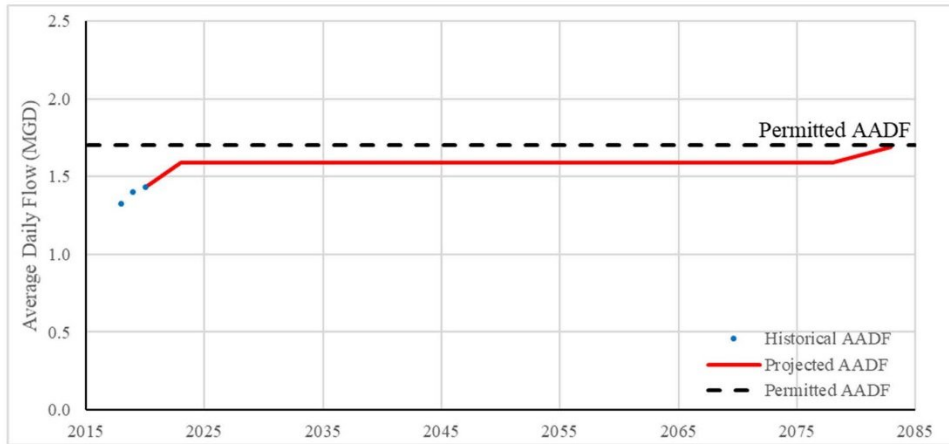
**TABLE 4-2  
IMPLEMENTATION SCHEDULE**

<b>Planning Period</b>	<b>Planning Zone</b>	<b>Remediation Areas</b>	<b>Flow (GPD)</b>	<b>Tributary Treatment Plant</b>
2021 to 2025	Zone B	4, 5, 6, 7, 8, 9, 10, 13	159,555	WWTP 2
2026 to 2030	Zone A Phase I	14, 15, 16, 17, 18, 19, 20	143,124	WWTP 3
2031 to 2035	Zone G Phase I	47, 48, 49, 50, 51, 52, 53	130,374	WWTP 3
2036 to 2040	Zone A Phase II	21, 22, 23, 27, 28	88,451	WWTP 3
2041 to 2045	Zone G Phase II	54, 75, 76, 77, 78, 79	104,718	WWTP 3
2046 to 2050	Zone H	55, 56, 57, 58, 60, 61, 64, 65, 69, 70, 71, 80, 510	166,446	WWTP 3
2051 to 2055	Zone I	29, 30, 31, 32, 33, 34, 35, 89, 90, 508	96,019	WWTP 3
2056 to 2060	Zone L & Zone J	81, 82, 95, 96, 511, 83, 84, 85, 86, 87, 88	91,960	WWTP 3
2061 to 2065	Zone K	62, 63, 66, 93, 94, 512, 513	98,427	WWTP 3
2066 to 2070	Zone E and Zone D	38, 39, 40, 41, 42, 43, 44, 36, 37, 46, 506	100,464	WWTP 3
2071 to 2075	Zone A Phase III	24, 25, 26, 507	89,273	WWTP 3
2076 to 2080	Zone F	45, 59, 67, 68, 72, 73, 74, 509	71,462	WWTP 3
2081 to 2085	Zone C	1, 2, 3, 11, 12, 501, 502, 503, 504, 505	101,057	WWTP 2

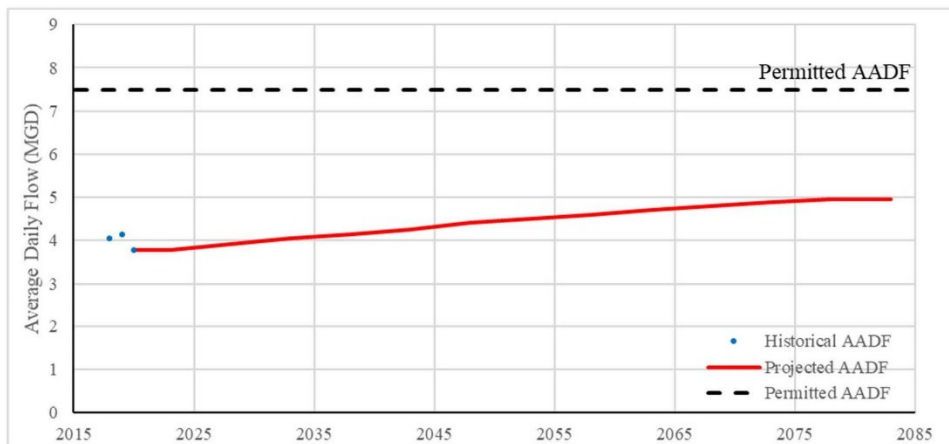
Winter Haven’s WWTP No. 2 and WWTP No. 3 will receive additional flows as sewer replaces existing septic systems. The existing annual average daily flows for each treatment plant was determined from historical DMR data on file with FDEP. Remediation areas were assigned to treatment plants based on the existing treatment plant service area delineations. The projected AADF for each treatment plant was estimated by adding the existing AADF to the septic-to-sewer flows, in the sequence defined by the implementation schedule. Refer to Figure 4-1 and Figure 4-2 for the projected AADF for Wastewater Treatment Plant No. 2 and No. 3, respectively. Based on the proposed implementation schedule and historical flows, the existing permitted AADF will not be exceeded due to the proposed septic-to-sewer projects for either treatment plant.

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**FIGURE 4-1**  
**WWTP NO. 2 PROJECTED ANNUAL AVERAGE DAILY FLOW**



**FIGURE 4-2**  
**WWTP NO. 3 PROJECTED ANNUAL AVERAGE DAILY FLOW**



**Appendix A**  
**Remediation Area Scoring Matrix**

Exhibit "B"  
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Rank	Remediation Area	Technology Type	Construction Cost	GPD	Nitrogen Loading Lb N / yr	Phosphorus Loading Lb P / yr	Cost Per Nutrient Removed S/(Lb N/yr)	Priority Scoring			Total
								Lake Proximity	Nutrient Loading Density	AC Pipe Proximity	
1	8	Gravity Sewer	\$3,732,000	18,031	3842	439	971	36.2	3.0	5	48.2
2	1001	Gravity Sewer	\$24,000	262	56	6	430	34.0	2.8	0	41.8
3	1011	Gravity Sewer	\$30,000	629	134	15	224	34.0	4.1	0	40.1
4	10	Gravity Sewer	\$3,195,000	26,594	5667	648	564	27.2	4.1	2	38.3
5	50	Gravity Sewer	\$3,195,000	25,224	5375	614	680	23.2	3.8	3	34.0
6	6	Gravity Sewer	\$5,086,000	46,608	9932	1135	512	22.9	3.7	1	32.6
7	17	Gravity Sewer	\$2,714,000	17,668	3765	430	721	21.2	4.2	2	32.4
8	21	Gravity Sewer	\$2,933,000	19,169	4085	467	718	20.9	4.2	2	32.1
9	9	Gravity Sewer	\$3,397,000	42,283	9010	1030	377	22.8	4.7	1	31.5
10	52	Gravity Sewer	\$3,168,000	22,034	4695	537	675	17.4	3.9	5	30.3
11	7	Gravity Sewer	\$749,000	1,863	397	45	1886	24.5	2.4	0	29.8
12	20	Gravity Sewer	\$4,149,000	29,092	6199	708	669	17.1	4.2	3	29.3
13	79	Gravity Sewer	\$3,552,000	20,223	4309	492	824	18.7	2.9	3	28.5
14	60	Gravity Sewer	\$2,126,000	9,158	1951	223	1089	19.7	2.6	3	28.2
15	1005	Gravity Sewer	\$100,000	1,598	341	39	294	14.0	10.0	0	28.0
16	14	Gravity Sewer	\$2,858,000	17,000	3622	414	789	19.7	4.1	0	27.7
17	49	Gravity Sewer	\$2,393,000	16,093	3429	392	698	16.9	3.4	4	27.3
18	1010	Gravity Sewer	\$57,000	104	22	3	2584	20.0	2.2	0	27.2
19	48	Gravity Sewer	\$1,950,000	12,759	2719	311	717	19.0	3.2	1	26.2
20	40	Gravity Sewer	\$830,000	1,879	400	46	2073	15.8	2.5	2	25.3
21	12	Gravity Sewer	\$1,251,000	6,041	1287	147	972	19.3	2.9	0	25.2
22	4	Gravity Sewer	\$1,426,000	5,143	1096	125	1301	18.9	2.6	0	24.6
23	78	Gravity Sewer	\$3,223,000	21,952	4678	535	689	14.1	3.2	3	24.3
24	16	Gravity Sewer	\$2,672,000	18,330	3906	446	684	15.5	4.1	0	23.6
25	5	Gravity Sewer	\$2,389,000	18,254	3890	445	614	14.9	4.6	0	23.5
26	1012	Gravity Sewer	\$18,000	131	28	3	643	16.0	2.5	0	23.5
27	15	Gravity Sewer	\$3,340,000	23,469	5001	572	668	13.2	4.3	1	22.6
28	38	Gravity Sewer	\$1,903,000	10,589	2256	258	843	13.7	3.7	1	22.4
29	1007	Gravity Sewer	\$94,000	266	57	6	1658	16.0	3.3	0	22.3
30	22	Gravity Sewer	\$3,318,000	24,068	5129	586	647	9.4	4.4	3	21.8
31	76	Gravity Sewer	\$2,695,000	16,042	3418	391	788	12.0	3.6	2	21.6
32	82	Gravity Sewer	\$2,400,000	11,121	2370	271	1013	15.8	2.7	0	21.5
33	56	Gravity Sewer	\$3,128,000	26,532	5654	646	553	7.3	4.4	5	20.7
34	55	Gravity Sewer	\$2,928,000	19,431	4140	473	707	10.3	3.4	4	20.7
35	23	Gravity Sewer	\$3,027,000	21,734	4631	529	654	8.9	4.7	2	20.6
36	83	Gravity Sewer	\$785,000	4,698	1001	114	782	12.8	3.6	0	20.4
37	58	Gravity Sewer	\$2,544,000	16,530	3522	403	722	7.3	3.8	5	20.0
38	77	Gravity Sewer	\$3,037,000	19,902	4241	485	716	12.7	3.1	1	19.8
39	54	Gravity Sewer	\$3,920,000	24,187	5154	589	761	9.0	3.5	4	19.6
40	28	Gravity Sewer	\$1,542,000	7,128	1519	174	1015	9.6	3.7	1	19.3
41	1014	Gravity Sewer	\$401,000	212	45	5	8879	15.0	2.0	0	19.0

Exhibit "B"  
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Rank	Remediation Area	Technology Type	Construction Cost	GPD	Nitrogen Loading Lb N / yr	Phosphorus Loading Lb P / yr	Cost Per Nutrient Removed \$(Lb N/yr)	Priority Scoring				Total
								Lake Proximity	Nutrient Loading Density	AC Pipe Proximity	Septic System Age	
42	39	Gravity Sewer	\$955,000	3,624	772	88	1237	7.9	3.1	3	5	19.0
43	80	Gravity Sewer	\$3,406,000	23,582	5025	574	678	11.8	3.1	1	3	18.9
44	18	Gravity Sewer	\$2,463,000	14,546	3100	354	795	8.7	4.2	1	5	18.8
45	36	Gravity Sewer	\$2,219,000	7,745	1650	189	1345	13.0	2.4	0	3	18.4
46	1004	Gravity Sewer	\$95,000	375	80	9	1188	8.0	5.1	1	4	18.1
47	511	Gravity Sewer	\$278,000	5,038	1074	123	259	10.0	4.8	0	3	17.8
48	510	Gravity Sewer	\$278,000	7,394	1575	180	176	10.0	4.3	0	3	17.3
49	32	Gravity Sewer	\$2,471,000	18,043	3845	439	643	7.4	3.8	1	5	17.2
50	13	Gravity Sewer	\$662,000	780	166	19	3984	9.6	2.2	0	5	16.7
51	51	Gravity Sewer	\$3,490,000	22,876	4875	557	716	8.1	3.3	3	2	16.4
52	70	Gravity Sewer	\$462,000	590	126	14	3675	10.0	3.4	0	3	16.4
53	65	Gravity Sewer	\$1,129,000	24,426	5205	595	217	8.4	5.8	0	2	16.2
54	3	Gravity Sewer	\$1,267,000	3,393	723	83	1752	9.6	2.5	0	4	16.1
55	1015	Gravity Sewer	\$230,000	324	69	8	3331	9.0	2.1	0	5	16.1
56	506	Gravity Sewer	\$278,000	1,262	269	31	1034	12.0	2.0	0	2	16.0
57	502	Gravity Sewer	\$278,000	13,925	2967	339	94	6.3	6.7	0	3	16.0
58	27	Gravity Sewer	\$2,570,000	16,352	3484	398	738	6.0	3.9	2	4	15.9
59	75	Gravity Sewer	\$545,000	2,412	514	59	1060	5.9	4.0	1	5	15.9
60	41	Gravity Sewer	\$2,474,000	16,375	3489	399	709	3.5	4.0	4	4	15.6
61	503	Gravity Sewer	\$278,000	13,116	2795	319	99	8.2	4.3	0	3	15.5
62	61	Gravity Sewer	\$967,000	4,269	910	104	1063	8.9	3.4	0	3	15.3
63	88	Gravity Sewer	\$893,000	1,367	291	33	3065	10.0	2.1	0	3	15.1
64	57	Gravity Sewer	\$2,501,000	14,673	3127	357	800	4.4	3.7	4	3	15.1
65	504	Gravity Sewer	\$278,000	11,050	2355	269	118	8.0	5.0	0	2	15.0
66	42	Gravity Sewer	\$3,124,000	23,488	5005	572	624	2.7	4.1	4	4	14.8
67	81	Gravity Sewer	\$1,519,000	5,056	1077	123	1410	10.4	2.4	0	2	14.8
68	47	Gravity Sewer	\$918,000	3,591	765	87	1200	8.1	2.6	1	3	14.7
69	66	Gravity Sewer	\$1,804,000	10,561	2250	237	802	7.5	4.2	0	3	14.7
70	1006	Gravity Sewer	\$113,000	217	46	5	2442	9.0	2.6	1	2	14.6
71	63	Gravity Sewer	\$406,000	672	143	16	2835	9.7	2.8	0	2	14.5
72	69	Gravity Sewer	\$512,000	708	151	17	3394	10.0	2.4	0	2	14.4
73	19	Gravity Sewer	\$3,323,000	23,018	4905	561	677	4.0	4.4	2	4	14.4
74	24	Gravity Sewer	\$3,900,000	33,750	7192	822	542	2.3	4.9	3	4	14.2
75	31	Gravity Sewer	\$2,964,000	24,145	5145	588	576	3.7	4.5	1	5	14.2
76	95	Gravity Sewer	\$796,000	2,437	519	59	1533	11.0	2.2	0	1	14.2
77	1003	Gravity Sewer	\$79,000	121	26	3	3074	6.0	3.6	1	3	13.6
78	33	Gravity Sewer	\$4,019,000	22,631	4822	551	833	4.5	3.1	2	4	13.6
79	37	Gravity Sewer	\$2,905,000	12,865	2741	313	1060	9.2	2.3	0	2	13.5
80	71	Gravity Sewer	\$559,000	2,615	557	64	1003	8.5	2.5	0	2	13.1
81	508	Gravity Sewer	\$278,000	8,882	1893	216	147	3.6	5.0	1	3	12.6
82	501	Gravity Sewer	\$278,000	29,086	6198	708	45	7.1	3.1	0	2	12.2

Exhibit "B"  
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Rank	Remediation Area	Technology Type	Construction Cost	GPD	Nitrogen Loading Lb N / yr	Phosphorus Loading Lb P / yr	Cost Per Nutrient Removed \$(Lb N/yr)	Priority Scoring				
								Lake Proximity	Nutrient Density	AC Pipe Proximity	Septic System Age	
Total												
83	85	Gravity Sewer	\$2,386,000	13,750	2930	335	814	7.3	2.9	0	2	12.2
84	512	Gravity Sewer	\$278,000	\$3,413	11,382	1301	24	5.7	4.4	0	2	12.1
85	26	Gravity Sewer	\$3,342,000	30,220	6440	736	674	1.2	3.7	4	3	11.9
86	505	Gravity Sewer	\$278,000	3,930	837	96	332	4.0	4.9	0	3	11.9
87	513	Gravity Sewer	\$278,000	8,478	1807	206	154	5.0	3.9	0	3	11.9
88	53	Gravity Sewer	\$3,737,000	27,797	5923	677	631	4.9	3.8	1	2	11.6
89	64	Gravity Sewer	\$1,963,000	16,539	3524	403	557	4.9	4.7	0	2	11.6
90	86	Gravity Sewer	\$3,187,000	21,946	4676	534	682	6.3	3.1	0	2	11.4
91	1002	Gravity Sewer	\$130,000	603	128	15	1012	4.0	3.3	1	3	11.3
92	11	Gravity Sewer	\$2,594,000	18,597	3963	453	655	6.8	2.3	0	2	11.1
93	62	Gravity Sewer	\$4,358,000	19,156	4082	466	1068	6.1	2.8	0	2	10.9
94	34	Gravity Sewer	\$1,327,000	1,622	346	39	3841	4.4	2.2	0	4	10.5
95	46	Gravity Sewer	\$1,629,000	7,337	1563	179	1042	6.3	2.2	0	2	10.5
96	84	Gravity Sewer	\$874,000	1,296	276	32	3165	4.9	2.2	0	3	10.1
97	1008	Gravity Sewer	\$36,000	124	26	3	1359	0.0	5.1	0	5	10.1
98	25	Gravity Sewer	\$3,491,000	23,362	4978	569	701	0.1	4.0	2	4	10.0
99	87	Gravity Sewer	\$3,173,000	22,010	4690	536	677	5.0	3.0	0	2	10.0
100	44	Gravity Sewer	\$2,421,000	13,731	2926	334	827	1.6	4.1	0	4	9.7
101	91	Enhanced Septic	\$149,000	1,497	319	36	467	0.0	5.6	0	4	9.6
102	509	Gravity Sewer	\$278,000	23,601	5029	575	55	4.0	3.2	0	2	9.2
103	29	Gravity Sewer	\$1,262,000	5,312	1132	129	1115	0.6	3.5	1	4	9.1
104	2	Gravity Sewer	\$367,000	180	38	4	9386	4.0	2.3	0	2	8.3
105	35	Gravity Sewer	\$750,000	3,503	746	85	1005	0.0	4.1	0	4	8.1
106	89	Gravity Sewer	\$1,279,000	9,299	1982	226	645	0.3	3.7	0	4	8.1
107	9999	Enhanced Septic	\$615,000	7,110	1515	173	406	2.8	2.0	0	3	7.8
108	1009	Gravity Sewer	\$36,000	623	133	15	271	2.0	3.2	0	2	7.2
109	90	Gravity Sewer	\$477,000	870	185	21	2573	0.0	2.2	1	4	7.2
110	1	Gravity Sewer	\$794,000	1,739	371	42	2142	3.0	2.1	0	2	7.1
111	1013	Gravity Sewer	\$89,000	609	130	15	685	0.0	2.4	0	4	6.4
112	73	Gravity Sewer	\$539,000	1,261	269	31	2005	0.0	2.2	0	4	6.2
113	97	Enhanced Septic	\$340,000	1,484	316	36	1075	0.0	2.0	0	4	6.0
114	93	Gravity Sewer	\$1,197,000	5,299	1129	129	1060	1.6	2.4	0	2	6.0
115	45	Gravity Sewer	\$3,967,000	32,081	6836	781	580	0.0	2.8	0	3	5.8
116	30	Gravity Sewer	\$560,000	1,713	365	42	1534	0.0	2.7	0	3	5.7
117	1017	Gravity Sewer	\$974,000	2,953	629	72	1548	1.3	2.2	0	2	5.5
118	68	Gravity Sewer	\$1,135,000	3,229	688	79	1650	0.2	2.1	0	3	5.3
119	98	Enhanced Septic	\$1,528,000	10,491	2235	255	684	0.0	2.3	0	3	5.3
120	99	Enhanced Septic	\$1,019,000	7,055	1503	172	678	0.0	2.1	0	3	5.1
121	96	Gravity Sewer	\$1,493,000	3,240	690	79	2162	0.6	2.2	0	2	4.8
122	67	Gravity Sewer	\$1,415,000	2,967	632	72	2238	0.3	2.2	0	2	4.5
123	59	Gravity Sewer	\$2,281,000	7,404	1578	180	1446	0.0	2.2	0	2	4.2

Exhibit "B"  
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Rank	Remediation Area	Technology Type	Construction Cost	GPD	Nitrogen Loading Lb N / yr	Phosphorus Loading Lb P / yr	Cost Per Nutrient Removed \$(Lb N/yr)	Priority Scoring				
								Lake Proximity	Nutrient Loading Density	AC Pipe Proximity	Septic System Age	
												Total
124	92	Enhanced Septic	\$276,000	1,872	399	46	692	0.0	2.1	0	2	4.1
125	507	Gravity Sewer	\$278,000	1,941	413	47	672	0.0	2.1	0	2	4.1
126	94	Gravity Sewer	\$784,000	848	181	21	4340	0.0	2.1	0	2	4.1
127	74	Enhanced Septic	\$64,000	584	124	14	514	0.0	2.0	0	2	4.0
128	43	Enhanced Septic	\$255,000	1,569	334	38	763	0.0	2.0	0	2	4.0
129	72	Enhanced Septic	\$64,000	336	72	8	894	0.0	2.0	0	2	4.0
130	1016	Enhanced Septic	\$106,000	720	153	18	691	0.0	2.0	0	2	4.0



Exhibit "B"  
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**Appendix B**  
**Remediation Area Scoring Figure**

Exhibit "B"  
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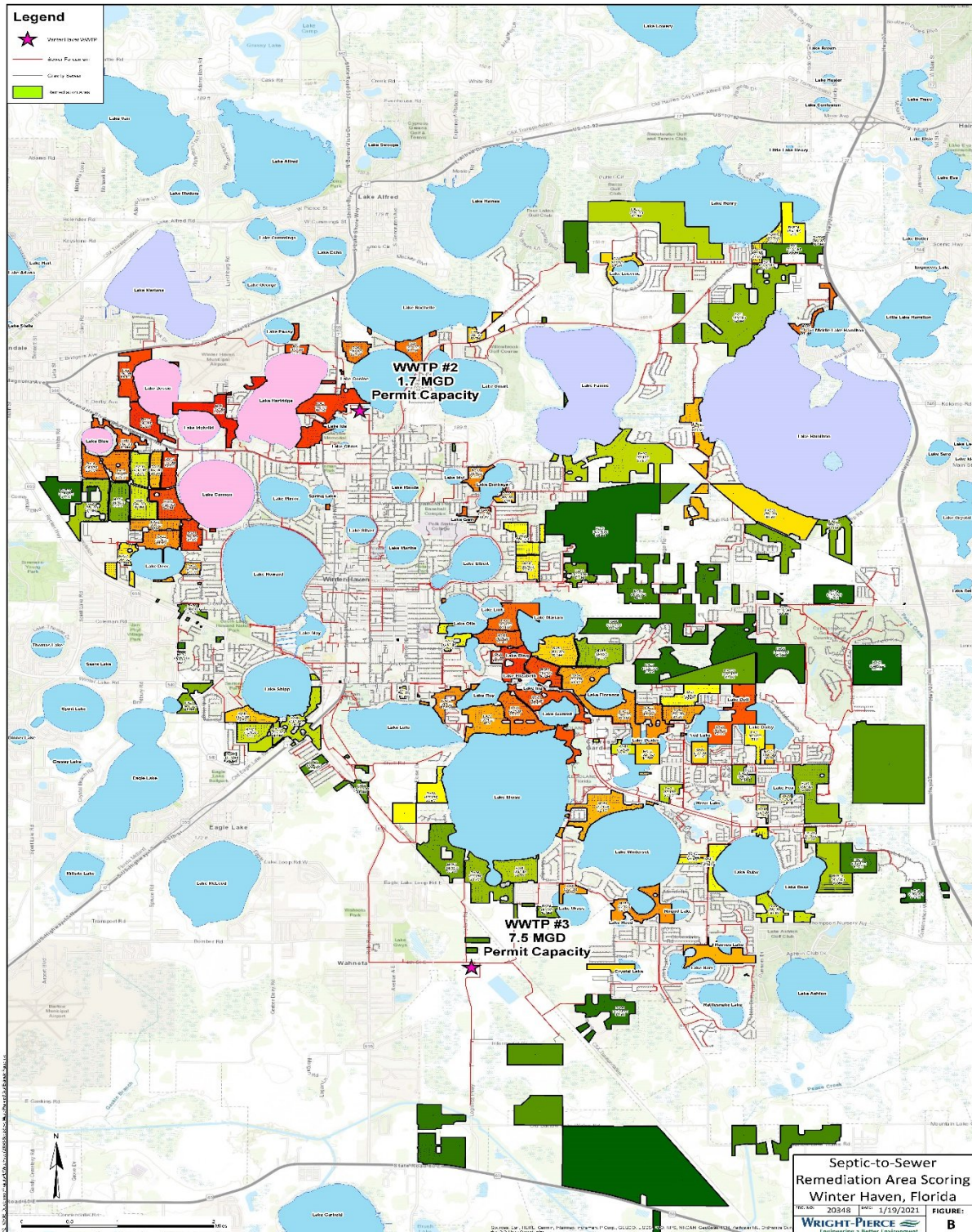
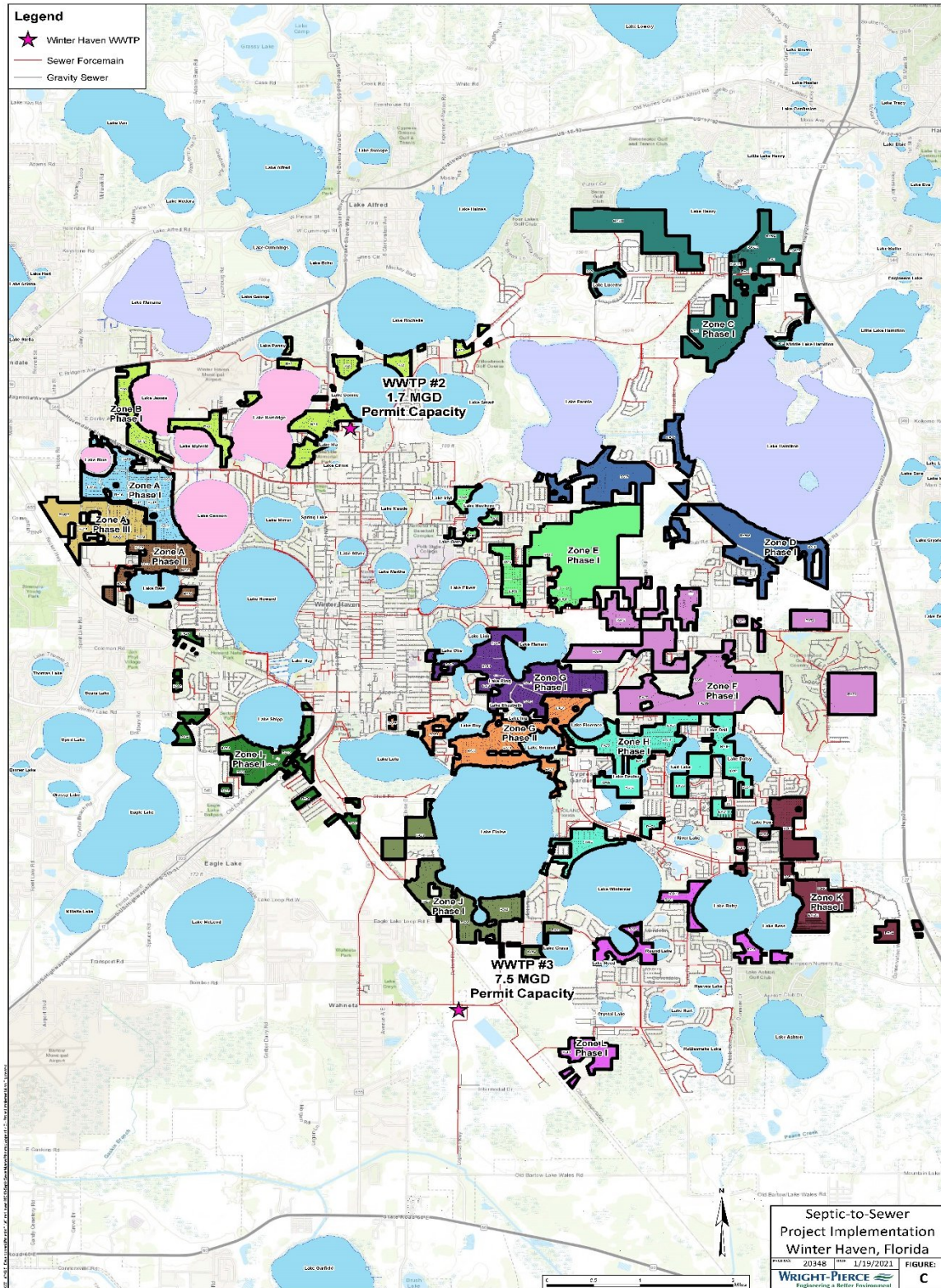


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**Appendix C**  
**Project Implementation Figure**



Exhibit "B"  
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**Appendix D**  
**Flow Allocation Figure**



Exhibit "B"  
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