TOWN OF WELAKA
REGULAR TOWN COUNCIL MEETING

February 14, 2023, at 6:00 PM
Honorable Willie Washington, Jr. Town Council Room
400 4th Avenue, Welaka, FL 32193

(This meeting will be broadcasted, for view only, on the Town of Welaka's Facebook Page)

1. **CALL TO ORDER**
2. **PLEDGE OF ALLEGIANCE & INVOCATION**
3. **ROLL CALL BY TOWN CLERK** , Meghan Allmon
4. **ADOPTION OF PREVIOUS MINUTES**:

   a. January 10, 2023, Regular Meeting Minutes
5. **APPROVAL OF CURRENT AGENDA**
6. **RECOGNITIONS**

   1. None
7. **PUBLIC HEARINGS**

   1. ORDINANCE 2023-01 Town of Welaka Park Regulations (Second Reading)
8. **RESOLUTIONS**

   1. None
9. **PROCLAMATIONS**

   1. None
10. **PUBLIC COMMENTS**

A 'Request To Speak Form' shall be completed and submitted to the Town Clerk to officially address the Town Council. There will be no response to the speaker by Council or Town Staff, except the Council Members desiring to address a comment made during this part of the meeting may do so under Section 13 of this section. One specific issue per Form may be submitted, and you will have up to 3 minutes to address the Council.

11. PRESENTATIONS / REPORTS TO TOWN COUNCIL

1.a. Katherine Van Zant (Saltus) - Capacity Fee Study
1.b. Katherine Van Zant (Saltus) - Capacity Fee Study PowerPoint Presentation
2.a. Patrick Dangelo (FRW) - Asset Management Plan (Drinking Water)
2.b. Patrick Dangelo (FRW) - Asset Management Plan (WasteWater)
3. Citizens Advisory Committee Update

Presentations are scheduled by individuals or businesses to inform the Town Council of issues, projects, etc. The Council shall not take formal action upon issues or matters presented under presentations at the same meeting. If formal action is desired, such matters shall be deferred and scheduled for a subsequent or future Council Meeting for consideration. Council may, however, by a majority vote, act on items they deem necessary and appropriate. Items not requiring Council action shall be directed to the mayor for consideration and further action.

12. CONSENT AGENDA ITEMS

1. Sewer Credits for Businesses on Welaka Utility System

13. NON-CONSENT AGENDA ITEMS

1. TOWN MATTERS

2. ZONING RECOMMENDATIONS

3. UTILITY MATTERS

14. DEPARTMENT REPORTS

1. PUBLIC WORKS DEPARTMENT REPORT: JOHN STUART, Supervisor

a. Report on overall Maintenance of the Town

2. UTILITY DEPARTMENT REPORT: TYLER BUFORD, Supervisor

a. Report on Town Utility System

3. POLICE CHIEF MICHAEL PORATH

4. TOWN ATTORNEY PATRICK KENNEDY REPORT

5. TOWN CLERK MEGHAN ALLMON REPORTS

15. MAYOR & TOWN COUNCIL REPORTS

1. MAYOR WATTS

a. Utility District Conversation with Putnam County.

2. COUNCIL PRESIDENT JESSICA FINCH

3. COUNCILWOMAN MARIANNE MILLEDGE

4. COUNCILWOMAN TONYA LONG

5. COUNCILWOMAN KATHY WASHINGTON

16. ADJOURN

SECTION 4.a.

(January 10, 2023 Meeting Minutes)

1/10/2023 Town Council Meeting Minutes

1. Mayor called Meeting to order at 6:00 PM.

2.1. Everyone stood and said the pledge of allegiance.

2.2. Council President Finch gave the invocation.

3. Roll Call: Mayor Watts present, Council President Jessica Finch present, Councilwoman Marianne Milledge present, Councilwoman Tonya Long Absent, Councilwoman Kathy Washington present, and Town Attorney, Patrick Kennedy present.

4. a. Finch motioned to accept 12/13/22 Meeting Minutes and Milledge seconded. Passed 4/0.

5. Motion to accept current Agenda made by Milledge and Washington seconded. Passed 4/0.

6. None.

7. ORD 2023-01 – Town of Welaka Park Regulations Ordinance - Mayor read the header aloud.
Milledge made a motion to accept ORD on its First Reading and Finch Seconded. Passed 4/0.

Discussions: Washington asked about the porta-potty park necessity if under a certain amount of people. She said most people will go home to use the bathroom. She asked John Stuart if there were any problems with the porta-potties. Mayor said it was just a discretionary thing.
Washington asked about the garbage bin that was to be built and what about the overflow of garbage over the weekend. Mayor said Public Works can empty the trash every Monday morning. John Stuart said we're looking into a portable, covered dumpster being purchased and we can re-locate it as needed and it's picked up with our forklift and dumped in our dumpster. Washington asked where this would be placed at. Mayor and John said it wouldn't be a permanent fixture in the park, we'd relocate it to the compound and use it as needed for reserved park parties or Town events.
Milledge asked about having to get a permit for parking. Mayor said we'll add some verbiage for loitering. Town Attorney mentioned that he will review and change where needed. Section 2 – Parking After Hours, no loitering after hours.
Town Attorney mentioned grammar and typographical edits were made and added Chief of Police to the authorities also, along with the Mayor. If they are absent, they can give the Town Clerk the authority to issue a permit, if more than 50 people.
Town Attorney said he added a provision that states no gambling allowed in the parks. He read the section aloud as he enhanced it to allow fund-raisers to help others but cannot gamble.
If it requires a permit, it requires 2 weeks prior to the Town Council Meeting to have it in their Agenda Packet for the Meeting.
Public Comment – Desouza asked question about permits – will the person requesting a permit, will they sync with the events committee? Mayor said yes. Desouza asked that they be updated and the calendar be updated.
She asked about no loitering in the parking lots and what about the rights-of-way. Town Attorney said this ORD is for the parks only.
She also asked about the trash dumpster. Will it have a lock on it so that other people do not fill it up and have less work on the Public Works crew. Mayor said this may be inconvenient with a lock because different people need to access it to dump it. She also asked about the porta-potties. Do we need to have them? Mayor said if there's a large amount of people for the event, yes, we need them.

Chief said Town Clerk of the Office Clerks could fill out the permit paperwork with the inquiry prior to the Chief or Mayor seeing it. Calendar can then be updated and issued once the Mayor and Chief have signed it.

Laurie Porath asked if the ORD can be on the Town website. The Mayor said we have a link on our website that goes to Municode and you can see all docs. Town Clerk will put the edited ORD on Municode.

Pam Washington said that the County uses Municode also and it's very easy and she can help anyone that needs help.

Councilwoman Washington asked if the Events Committee trumps the residents? She used Harriet's family reunion that always has her event there, and the park was double booked. Finch mentioned that holidays fall on different dates per year, and it would be hard to schedule in the future for planned resident parties and events. She said Friends of Welaka schedules their Townwide cleanup for the 2nd Saturday of each quarter.

Washington said it seems to be set in stone that the Food Truck Fridays are scheduled for the first Friday of the month. Desouza mentioned that the events committee looked at the calendar and the 4/7/23 date was not marked on the calendar. FTF goes from April – August. They market it all year long. She's absolutely not meaning to go over the 30-year tradition and the events committee came to the conclusion to share the park. Mayor said April-August, first Friday of those months. Christmas parade it set along with the Halloween parade, movies in the park, jazz event, etc. He said certain events are set in stone and are on the calendar.
Milledge spoke and thanked Desouza very much for syncing with Harriet and Greg Clemons to share the park.
Pam Washington said that if Harriet is doing their event in the park, it shouldn't be shared, and she said it doesn't sit right with her. Mayor said the whole park will not be shared, just the field. Mayor said the calendar dates were entered incorrectly. Pam Washington said whoever reserved Harriet's dates in the calendar did not do their job. Mayor agreed.
Finch asked and Mayor agreed that the calendar should not be booked out more than 12 months.
John Stuart asked if we could move the Food Truck Friday event to Downtown Park. Mayor said it's not possible. Chief mentioned we have to close down streets, there's no room, no lighting, etc.

All agreed. Motion carries 4/0.

8. None.

9. PROC 2023-01 – Arbor Day set as 1/20/2023 – Mayor read entire Proclamation aloud.

Milledge made a motion to accept PROC 2023-01 and Finch seconded. Passed 4/0.
Desouza said the events committee will be planting 4 trees in Downtown Park on Saturday, 1/21/23.
Joy Hadley spoke about the monthly learning series and plant clinic. They plant and travel and beautify the community. She'll send the Town Clerk items for the monthly newsletter.

10. Public Comment – None.

11.1. NEFRC – Jack Shad spoke, and the Town Clerk presented their PowerPoint slides on the TV screen. He mentioned approximately 60 residents came out to the Women's Club in November and they did a survey and was on the Town's Facebook page to weigh in on the visionary plan for the downtown. The vision is intended to help the residents to state clearly what they want Downtown to become. They did the visual and flip-chart presentation in the November Meeting. They met with the Citizens Advisory Committee on Friday, 1/6/23 for 2 hours and the Meeting was very helpful.
Park images and pathways were described. We don't want it to look like every other place with a CVS, etc. The first project will be looking at the entrance to the Downtown area. Possibly some round-abouts at Palmetto and Oak. Some streets will be called shared streets with narrow lanes where people can drive on it but would prefer not to as it may be bumpy with pavers.
Proposing that the Town's public boat ramp be moved to the end of Oak Street so that we can move the boat trailers out of the center of Downtown and the existing boat ramp be converted into a kayak parking and launch area. Also propose to move the tennis courts in the downtown area to somewhere else.
He said the Town needs to do a historic survey so that someone can come here and mark the historic sites. Also, do a tree

survey in the Town as there's historic trees here. They'd like to develop a CRA for the Town so that we can save money for some of these projects.
In March, 2023, they'd like to bring some state people here to the Town to possibly get state funding. They're here to help but this is our plan and not theirs. They go off our recommendations.
Martha Cohen in audience was introduced. Jack mentioned that the Town can be, look and feel appealing. If we can bring in people from outside the Town, we'll earn more money to fund projects to improve Downtown.
Milledge asked about the round-abouts and they'll both be on 309? Jack said yes. This will slow people down. Palmetto and Oak street are very close together. Jack said it looks like there's enough land for a single lane road to do these.

Town Attorney asked where the parking would be if we moved the boat ramp. Jack said the Town could lease some lady at the end of the Town area and to have a turnaround spot for trucks and trailers. Finch said she's thinking outside the box.
Lenore Toole spoke and said the 2 round-abouts are not feasible. RPS and Shrimps are right there and a new ramp is not feasible or a good idea at all. The state of FL protects the top of the boat ramp. If they take away RPS from the Town and other people's property of the Town, you'll take away funds from the Town and their livelihood. The roundabout should be at 308 and 309. Mayor said if we don't do something and RPS leaves Town, then what do we do if we don't do the round-abouts? Mayor said to carry forward with their presentation. Town Clerk will pos this presentation on the Town's website. Finch will post this on Facebook also for public comment also.
Town Attorney asked about the March 2023 Meeting. Is this to discuss this again? Jack said no, not really, it's so they can get the DEP, State, Water Mngt. District, Historical groups, etc. folks here to see what they can accomplish.
We'd like to have a public Meeting before the April Meeting.
Milledge asked if the street lights will be taken away with the round-abouts. Jack said yes, possibly, since the round-abouts have lights in them.
Mayor asked if we need to have a stakeholder Meeting or not? Jack said March would be a great time for another Community Input Meeting. Not March Finch and the Mayor said because the elections are in March.
Pam Washington asked what the deadline is. Jack said the end of May 2023. Can we put this in the gazette? Mayor said we can condense it down and put it in the February gazette and print some to be picked up at the Town Hall too.
Town Attorney said there's more than one option built into the vision.
Chief said round-abouts are horrible. People get into accidents more. A traffic engineer study should be done. The roads are too skinny for Chief to even turn around now, and the roads are too narrow for these roundabouts.
Martha Cohen recommended to generate the options with a traffic engineer.

Mayor said possibly Mid-March, we could have another workshop to get Town input. The Council agreed.

Mayor said the election is on 3/7/23 and we have a Meeting on Friday for the swearing in. Third Tuesday of March will be the next NEFRC Workshop. Possibly The Church or the Div. of Forestry building can be booked for 3/21/23 6:00 PM.

Are any of the boundaries changed of the Downtown? Jack said it should at least come up to Town Hall and go possibly further east but it's the Town decision. Finch confirmed that we could go further for signage, even if we don't utilize it right away.

11.3. Citizens Advisory Committee - Scott Turnbull spoke – Jim King Trail – Mayor asked Finch if she spoke to Fred Fox yet? Finch said yes, he said his assumption was correct. We need to start a plan and go ahead to start that. If there was any plan, he'd let us know. A picnic area is considered an active space. Mayor said we will reach out tomorrow to Fred Fox.
Town Attorney said he's started working on the map and architectural provisions and we will have some Zoning Board meetings soon. He's hopeful to have a Meeting this month. Mayor said sometimes things are brought t the Boards that don't need to be.
Mayor said there's a few properties that need to be addresses in Town and we're working through those cases also. The Mayor said that Pauline is addressing some Code issues and they're being addressed and she's being reactive and not

proactive. The Council was asked if she should be proactive or not. Finch said people are hesitant to make a code complaint because they have to submit their name and information. Mayor said once Pauline starts being
Chief said that the law enforcement office wrote up 26 Town issues that are eye sores and submitted to Pauline and are long-standing. Town Attorney said these issues need to be submitted by someone turning in the issue. The Chief said he and Officer Todd submitted the list to her under their names.
Mayor asked the Council again if they agree to make Pauline proactive rather than reactive.
Milledge said there's multiple locations that have not been cleaned up and have never received fines and we need a magistrate to intervene so that our neighbors and friends are not named as complaints don't want to be under someone's name and address.

Kim Dugger – audience. It will be wonderful to have a vision statement so that the Town all knows it. Once we have that, all of our practices go along with that. Mayor agreed, yes, we should develop that.

Washington said that we live in a small, rural area and the neighbors and friends that live near one another, they don't want to report a code complaint. The Harbor area had grass up to the windows in their yard and she called all county contacts for a code complaint and it got nowhere.
Scott asked if the yard with junk vehicles is the same complaint as the tall grass? Town Attorney said we can designate a target for the bigger issues first and work on those first.

Finch said the Magistrate replaces the Code Board. Pam Washington said for us to come and visit. A complaint comes in, 30 days is given for someone to come in, and if they don't, it goes to the Magistrate. Pam Washington will send us the next time and Meeting date. There's a fine set after 30 days. Their Palatka Magistrate is out of St. Augustine. There's administrative fees added also and it adds up fast and issues get resolved so that fines do not add up.

Mayor said we'll pull the list and tackle some of the big stuff and have Pauline be proactive.
Washington said her husband is a mechanic and if they have a car in their yard with an expired tag, will she get violation?
Chief said that homes that have longevity junk in their yards, and have not cleaned it up in a long time, these are the homes that need to have code violations and followed through with.
Finch asked if we have a fine schedule? Town Attorney said we normally have a $25 per day fee.
Mayor said there's stuff in the past, along with the law passing last year, a few things have happened and we can have Pauline be more proactive in the Town. Lenore Toole said the fines used to be up to the Town Attorney and were increased if not paid. She asked if Trail-Boss ever pay their fines from the past? They had some from the past and we don't think they were ever paid.

12. Sewer Credits – Finch made a motion to accept sewer credits. Milledge seconded. Passed 5/0.

13.1. None.

13.2. None.

13.3. None.

14.1.a. John Stuart spoke – Grass isn't growing this time of year so he's cleaning up the Town. Planting 4 crape myrtle trees on 1/21/23 for Arbor Day. Needs new dump truck and bush hog. Park bathrooms are always plugged up, toilet paper and paper towels are all ruined and painted on and vandalized. John would like to lock the bathrooms up when we're not using them. When we lock the parks, the bathrooms should be locked also. Chief said once we get the other Officer, they can help lock the bathrooms also.
Tree budget may need to be a little more because there's some trees in the Town that need to be taken down as a few have already, especially in the cemetery.
Washington asked John if there could be hand dryer blowers in the bathrooms possibly? John said that may be a good

idea. Town Attorney said that those might get vandalized also.
Janis Browning thanked John for trimming the tree on her road.

14.2.a. Tyler Buford is absent. Mayor spoke – The WWTP Metal Plant is offline, and the concrete plant is fully functional. Three feet of sand will be pumped out. Mayor approved $2,900 of repairs today for the door to be repaired. We're fixing the plant and not just replacing parts.

14.3.1. Chief Porath spoke: On 1/18/23, the new police vehicle will be ready. He already test drove it. Officer Bryant is off of probation also and he received a pay raise.

14.3.1 Chief Porath presented and spoke – Radio Proposal - We must purchase radios with ARPA funds, and this is needed because the county is updating their radio system. Motorola said they are hopeful to get this done before October 2023. They're telling him 4-6 months for shipping and all the other county orders are piling up with larger orders from the County and we have a small order. Would like to get these ordered ASAP.

Finch made a motion to accept this $42,173.76 Motorola Proposal using ARPA funds and Milledge seconded. Passed 4/0.

Chief said to even order a new police vehicle, it takes months and months as they're on back order.
The lack of High risk pay and poor retirement plans that we have here, Chief lost 2 good 10-year and 17-year experienced officer applicants. Doing the work-study would help to get these items in place

14.3.2. Chief Porath presented and spoke - Public Safety Complex can be broken into one complex with the police and fire on each side. He'd like to have rooms available to interview, hold people, etc. He'd prefer to have up to 7 officers patrolling for a true 24x7 Police Department that would have 1 officer on duty every 12 hours every day of the week. He's still looking for land options here in the Town. Mayor presented this to Rep. Payne yesterday also for Legislative Appropriations to be drawn up.

14.3.3. Chief Porath presented and spoke – Work Compensation Study – We've never done this before and down south pays much more and the Council Members are all paid different rates all over the state. Two proposals are included with a big difference in price. Finch asked if he's taken into account for growth as the Charter Review Committee is possibly adding a city manager salary. Chief said not to add that possible future cost here since it's not active here yet. There's a FL City Managers resource for future needs also.
The tricky part is that our close-by cities and towns do not have some of these departments, so we'll try to reach out to the NE areas to compare, but not too far into the Jacksonville rates as it's so much larger.

Finch made a motion to accept the $4,200 Lagom Proposal using ARPA funds and Milledge seconded. Passed 4/0.

Chief completed his FL Police Chief

FMIT Advisory Council, Region 2 appointment received. Training, etc. He made number 3 out of the 5 in this region. FMIT pays for upcoming meetings.

14.4. Town Attorney – None.

14.5. Town Clerk – None.

15.1. Mayor spoke – FEMA Meeting today from Hurricane Ian. About $82,000 Harbor vacuum system damage. We're working towards getting the reimbursement very soon. Hopefully around $100,000.
The Supervisor of Elections, Charles Overturf, will be here tomorrow, 1/11/23, he will be at Town Hall with candidate packets from 1:30 - 3:30 PM and to answer any questions.

15.2. Council President Finch – Taking cats in on January 23rd. Townwide Cleanup on Saturday, meet at Town pavilion 8AM and group by 9AM to canvass the whole Town. Need volunteers also.
February 8, 2023, Shrimp R Us – Candidate Forum, 6:00 PM
CivicPlus info will be sent to me for some new options available.

15.3. Councilwoman Milledge - None

15.4 Councilwoman Long - Absent

15.5 Councilwoman Washington – Asked if we can start doing Zoom with the Town Meeting so that the public can interact and interject. Mayor and Town Attorney said this may not be the best idea since we need to know the names and info of people interacting. This may be an IT issue also.
Vision of Welaka – we want to see it grow, however, the fact everyone knows Teresa who walks everyone here in Town, once she cannot safely walk around in the Town, then we really need to address it.

16. Adjourned 8:51 PM.

SECTION 7.1.

(ORD 2023-01 Second Reading)

ORDINANCE NO. 2023-01

AN ORDINANCE OF THE TOWN COUNCIL FOR THE TOWN OF WELAKA FLORIDA, ADOPTING REGULATIONS FOR THE PUBLIC USE AND CARE OF THE TOWN'S PARKS, PUBLIC PROPERTIES AND RECREATIONAL FACILITIES; PROVIDING FOR REPEAL OF PRIOR ORDINANCES AND RESOLUTIONS IN CONFLICT, PROVIDING FOR SEVERABILITY AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Town Council for the Town of Welaka Florida, is authorized under Section 166.021 Florida Statutes and the Town Charter for the Town of Welaka to adopt certain regulations necessary to protect the health, safety and welfare of the citizens of Town; and

WHEREAS, the Town Council recognizes that the public parks, properties and recreational facilities provide an invaluable contribution to the health and general welfare of the citizens of Welaka; and

WHEREAS, the Town Council recognizes that improper usage of these parks, properties and facilities can and does have a detrimental impact on the health, safety and general welfare; and

WHEREAS, the Town Council further recognizes that improper usage of the Town's parks, properties and facilities result in a financial cost to the taxpayers and an unnecessary diversion of resources to address damages resulting from improper use of the such facilities; and

WHEREAS, the Town Council desires to establish reasonable regulations and guidelines to promote user friendly parks with an emphasis on maintenance, security and community involvement;

NOW THEREFORE, BE IT ENACTED by the Town Council of the Town of Welaka, Florida, in a meeting assembled on the 14th day of February 2023:

SECTION 1. SHORT TITLE

This Ordinance shall be known as and may be cited by the short title of "Town of Welaka Park Regulations".

SECTION 2. REGULATIONS

The regulations established by this ordinance are set forth in attached Exhibit A, which is hereby incorporated and adopted.

SECTION 3. CONFLICT AND REPEAL OF PRIOR FEE ORDINANCES AND RESOLUTIONS

This Ordinance shall serve to repeal and supersede all prior fee ordinance and resolutions, or portions thereof, in conflict with this Ordinance.

SECTION 4. SEVERABILITY

If any portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed separate and such holdings shall not affect the validity of the remaining portions.

SECTION 5. EFFECTIVE DATE

This Ordinance shall take effect upon adoption.

PASSED by the Town Council for the Town of Welaka on FIRST READING on the 10th day of January 2023.

DONE, ORDERED AND ADOPTED by the Town Council for the Town of Welaka on SECOND READING on the 14th day of February 2023.

ATTEST: **SIGNED:**

Meghan E. Allmon, Town Clerk **Jamie D. Watts, Mayor**

Approved as to form and legality:

Patrick Kennedy, Town Attorney **Jessica Finch, Council President**

EXHIBIT A - ORDINANCE 2023-01

Town of Welaka Park Regulations

SECTION 1 Damaging, Injuring or Removing Items from Park and Recreational Facilities is Unlawful.

(a) General Disfiguration and Removal – It shall be unlawful for any person in a park to mark, deface, disfigure, injure, tamper with, displace or remove, any buildings; bridges; tables; benches; fireplaces; railings; paving or paving materials; water lines or other public utilities or parts or appurtenances thereof; signs, notices or placards, whether temporary or permanent; monuments; stakes; posts; or other boundary markers, or other structures or equipment, facilities or park property or appurtenances whatsoever, either real or personal.

(b) Injury or Removal of Natural Features

(1) **Trees, shrubbery, lawns.** It shall be unlawful for any person in a park to damage, cut, carve, transplant, or remove any tree or plant, or injure the bark, or pick the flowers or seeds of any tree or plant. Nor shall any person attach any rope, wire, or other contrivance to any tree or plant. A person shall not dig in or otherwise disturb grass areas, wetlands, or in any other way injure or impair the natural beauty or usefulness of any area.

(2) **Removal, excavation of natural resources.** It shall be unlawful for any person in a park to dig or remove any beach sand, whether submerged or not, or any soil, rock, stones, trees, shrubs or plants, down timber or other wood or materials, or make any excavation by tool, equipment, blasting, or other means or agency, except by specified written permit issued hereunder.

(c) Climbing Trees, Monuments, Fences, etc. – It shall be unlawful for any person in a park to climb any tree or walk, stand or sit upon monuments, vases, fountains, railings, fences or gun carriages or upon any other property not designated or customarily used for such purposes.

(d) Restrooms and Washrooms – It shall be unlawful for any person in a park to fail to cooperate in maintaining park restrooms and washrooms in a neat and sanitary condition.

(e) Discarding Refuse and Trash – It shall be unlawful for any person in a park to bring, or have brought in, or to dump, deposit or leave any bottles, broken glass, ashes, paper, boxes, cans, dirt, rubbish, waste, garbage, refuse, or other trash on park property. No such refuse or trash shall be placed in any waters in or contiguous to any park, or left anywhere on the grounds thereof, but shall be placed in the proper receptacles where these are provided; where receptacles are not so provided, all such rubbish or waste shall be carried away from the park by the person responsible for its presence, and properly disposed of elsewhere.

(f) Water Pollution and Contamination – It shall be unlawful for any person in a park to throw, discharge, or otherwise place or cause to be placed in the waters of any fountain, pond, lake

stream, bay or other body of water in or adjacent to any park or any tributary, stream, storm sewer, or drain flowing into such waters, any substance, matter or thing, liquid or solid, which will or may result in the pollution, discoloration or contamination of said waters.

SECTION 2 Vehicle Usage and Parking.

(a) Vehicle Operation Confined to Designated Roads and Parking Areas – It shall be unlawful for any person in a park to drive any vehicle on any area except on designated park roads or parking areas.

(b) Parking.

(1) Parking in Designated Lots Only. It shall be unlawful for any person in a park to park a vehicle in other than a designated parking area, and such use shall be in accordance with the posted directions.

(2) Parking Areas for Loading and Unloading Only. It shall be unlawful to gather or loiter in a designated parking area except for purposes of loading and unloading the vehicle.

(3) Parking After Hours Prohibited. Parking, stopping, or standing in a vehicle either in a designated off-street parking area for the park or in the right-of-way abutting the park boundaries after established park hours is prohibited. Subject to the prohibitions under section 2(b)(2) above, parking after established hours may be allowed if approved under a special written permit issued under this Article or for temporary usage by residents in the neighborhood adjacent to the park to support overflow parking for a lawful gathering at their place of residence.

(4) Off-Street Parking. Use of designated off-street parking for the parks or right-of-way abutting the parks for overnight parking shall be strictly prohibited.

SECTION 3 Proper Usage and Activities in Public Parks and Recreational Facilities.

(a) Erection of Structures – It shall be unlawful for any person in a park to construct or erect any building or structure of whatever kind, whether permanent or temporary in character, or run or string any public service utility into, upon, or across park lands, except for special written permit issued under this Article.

(b) Swimming and Bathing. [Reserved for Future Use]

(c) Fishing.

(1) Fishing Defined. In addition to the activity of catching fish, either for food or as a sport, fishing as used here shall include catching crab or shrimp for food or sport.

(2) **Commerce prohibited.** It shall be unlawful for any person in a park to engage in commercial fishing, or the buying or selling of fish caught in any waters inside the Town limits.

(3) **Fishing Prohibited in Boat Ramps.** It shall be unlawful for any person in a park to fish in areas designated for boat ramps.

(4) **Fishing Prohibited in Designated Swimming Areas.** It shall be unlawful for any person in a park to fish offshore from the beaches designated for swimming or bathing.

(5) **Fishing Prohibited Outside of Established Park Hours.** It shall be unlawful for any person to fish from the shore of any park, including any public Town pier or dock facility, except during established hours of operation under Section 4 below.

(d) Picnic Areas.

(1) **Availability.** Individual picnic amenities such as tables and benches shall follow the general rule of "first-come, first-served," except in those cases where prior reservations have been made pursuant to a permit issued under Section 5 below.

(2) **Non-exclusivity.** It shall be unlawful for any person in a park to use any portion of the picnic areas or any of the buildings or structures therein for the purpose of holding picnics to the exclusion of other persons, or to use such area and facilities for an unreasonable time if the facilities are crowded, except in those cases where prior reservations have been made pursuant to a permit issued under Section 5 below.

(e) Camping – No person shall be allowed in the parks after the established hours for public access provided for under Section 4 below. This shall be interpreted to mean that, in addition to being unlawful to be present in a park after established hours, it shall be unlawful to set up sleeping bags, hammocks, tents, shacks or any other temporary shelter for the purpose of overnight camping in any parks, right of ways or other public spaces, nor shall any person leave any movable structure or special vehicle to be used or that could be used for such purpose, such as a house-trailer, camp-trailer, RV camper, camp-wagon or the like, except by as expressly provided under a permit issued by the Town Council under Section 5, below, and then only in specified areas that must be specifically designated in the permit.

(f) Use of Weapons – All parks, recreational facilities, or other properties owned by the Town of Welaka are public places within the meaning of section 790.15, Florida Statutes, as amended.

(1) No person shall carry a firearm on such properties unless properly licensed or authorized to carry firearms under Chapter 790, Florida Statutes.

(2) It shall be unlawful to discharge a firearm in or into public places except for lawful purposes as defined by Chapter 790, Florida Statutes.

(3) Air rifles, spring-guns, bow and arrows, slings, or any other forms of weapons potentially inimical to wildlife and dangerous to human safety, or any instrument that can be loaded with and fire blank cartridges, or any kind of trapping device, except a person lawfully defending life or property.

(g) Fireworks and Explosives – It shall be unlawful for any person in a park to bring, or have in his possession, or set off, or otherwise cause to explode or discharge or burn, any firecrackers, torpedo, rocket, or other fireworks or explosives of inflammable material, or discharge them or throw them into any park area from land or a highway adjacent thereto. This prohibition includes any substance, compound, mixture, or article that, in conjunction with any substance or compound, would be dangerous from any of the foregoing standpoints, except under the sponsorship of organized groups and with the permission of the Town Council after application to and a public hearing before the Town Council.

(h) Fires – It shall be unlawful for any person in a park to build or attempt to build a fire except in areas designated for outdoor grilling, and then only in a proper grilling apparatus. Open fire pits or trash barrel fires are prohibited. No person shall drop, throw, or otherwise scatter lighted matches, burning cigarettes or cigars, tobacco paper or other flammable material, within any park area or on any highway, road, or street abutting or contiguous thereto.

(i) Loitering, Disorderly Conduct – It shall be unlawful for any person in a park to sleep or protractedly lounge on seats, on benches, in vehicles or in other areas; or to engage in loud, boisterous, threatening, abusive, insulting, or indecent language; or to engage in any disorderly conduct or behavior tending to a breach of the public peace.

(j) Restricted Areas – It shall be unlawful for any person in a park to enter an area posted as "Closed to the Public"; nor shall any person use or abet the use of any area in violation of posted notices. Any park or section or part of any park may be declared closed to the public by the Mayor or the Chief of Police at any time and for any interval of time, either temporarily or at regular and stated intervals (daily or otherwise) and either entirely or merely to certain uses, as the Mayor or the Chief of Police shall find reasonably necessary.

(k) Intoxicating Substances Prohibited – It shall be unlawful for any person to consume any beer, wine, or liquor, as defined in the beverage law of the State of Florida, or any in any park, boat ramp, or recreation area owned or maintained by the Town, except for a special event authorized and permitted by the Town Council pursuant to the Town's special event policies and procedures.

(l) Gambling – It shall be unlawful for any person in a park to gamble or participate in or abet any game of chance. A raffle conducted in Town parks pursuant to a permit issued hereunder that serves as a legitimate fund-raising event for civic and religious organizations located in Town, or a charity fundraiser for a Town resident, where all the proceeds are used to support the civic and religious organization or charitable purpose are not considered gambling under this section.

(m) Advertising Generally – It shall be unlawful for any person in a park to announce, advertise or call the public attention in any way to any article or service for sale or hire without the express permission of the Town Council.

(n) Vending and Peddling – It shall be unlawful for any person in a park to expose or offer for sale any article or thing, or to station or place any stand, cart, or vehicle for the transportation, sale or display of any such article or thing, or to engage in any commercial business activity. An exception is made as to any regularly licensed concessionaire acting by and under the authority and regulation of a special permit issued hereunder.

(o) Dogs and other pets in parks.

(1) It shall be unlawful for any person keeping, harboring, owning or responsible for a dog or other pet to permit the dog to be in a public park unless the dog is held, by a competent person, on a leash that is no more than eight [8] feet in length.

(2) Exceptions.

(a) It is a defense to a charge of violating this section that the dog involved is a working dog trained to assist disabled individuals and that the dog is under the control of a competent person and obedient to the command of such person.

(b) It is a defense to a charge of violating this section that the dog involved was participating in an organized competition or that the dog involved was engaged in an organized training exercise under the supervision of a person competent to provide such training.

(c) It is a defense to a charge of violating this section that the dog involved is a trained police dog and that the dog is under the control of a competent person and obedient to the command of such person.

(d) It is a defense to a charge of violating this section that the dog is located inside an established dog park where dogs have been expressly permitted or required by the Town to be off their leash while in the designated dog park.

(3) No person owning or responsible for a dog shall permit the dog to defecate on any public property or right of way. It is a specific defense to a charge of violating this section that the person keeping, harboring, owning or responsible for the dog or other pet has and makes use of equipment to remove animal waste and dispose of it in a sanitary and lawful manner or that the dog involved is a certified working dog trained to assist disabled individuals and that the person charged has a disability which prevents the individual from removing the excrement and properly disposing of it in a sanitary manner.

(p) Posting Signs – It shall be unlawful for any person in a park to paste, glue, tack or otherwise post any sign, placard, advertisement, or inscription whatsoever, or to erect or cause to be erected any sign whatsoever on any public lands, parks or highways or roads adjacent to such parks or public lands. A temporary sign posted to advertise a special event at the park approved by a permit issued hereunder may be posted on the day of the event at or near the area to be occupied by the event.

(q) Extinguish Grills and Remove Trash – It shall be unlawful for any person in a park to leave the park area before any grill fire is completely extinguished or before all his or her trash, garbage or other refuse is placed in the disposal receptacles where provided. If no such trash receptacles are available, then the person shall be responsible for carrying away all his or her refuse and trash away from the park area to be properly disposed of elsewhere.

(r) Use of Vehicles – It shall be unlawful to operate motorized vehicles of any kind inside a public park except in designated parking areas, unless expressly permitted pursuant to a special event permit under Section 5, below, or such vehicle is being operated by a Town employee or authorized contractors in the normal course of their official duties for the Town. This includes but shall not be limited to cars, trucks, golf carts, and off-road vehicles of any size or type.

(s) Docking Watercraft – It shall be unlawful to dock any motorized or non-motorized watercraft over night at a public dock or pier owned and maintained by the Town except when expressly authorized by the Town. The Town may, by resolution and in its discretion, establish additional rules and regulations concerning the use of its docks and piers.

SECTION 4 Hours of Operation.

(a) Establishing the Hours of Operation – The Town Council may set and establish from time to time by Resolution the permissible times or hours in which the Town's various parks, public lands, or other recreational facilities may be used. Except for unusual and unforeseen emergencies, or when reserved pursuant to a permit issued under Section 5 below, parks shall be open to the public every day of the year during the designated hours. The opening and closing hours for each individual park shall be posted at Town Hall for public information. The default designated hours for all Town parks shall be sunrise to sunset, unless altered by Resolution and posted as provided for in the section or closure pursuant to Section 3(j), above.

(b) It shall be unlawful and a violation of this ordinance to be in a Town park or recreational facility outside of the established hours.

(c) The Mayor or the Chief of Police are hereby authorized, in their discretion, to close a park or parks or reduce the hours of said park or parks based on a determination that it is in the best interest of the health, safety and general welfare of the public. Valid purposes for closure or reduced hours may include but are not limited to:

(1) Over-crowding, excessive traffic and/or noise.

(2) Damage to support facilities such bathrooms, parking areas, playground equipment, etc.

(3) Unsafe conditions due to current or impending weather events.

(4) Person or persons violating the provisions of this Ordinance in blatant disregard to direction given by the Mayor, the Chief of Police or such other person authorized by the Mayor or the Chief of Police to provide such direction.

SECTION 5 Park Permits.

(a) Permit Required – A permit shall be obtained before holding or participating in any special event or activity in a park. A special event or activity as used in this section shall mean a gathering of more than 50 people for a single purpose or event such as a birthday party, wedding, family reunion, organized sporting event, rally, festival, etc. The Mayor or the Chief of Police or their respective designees, may review and determine whether to issue a permit under this Section, unless said permit or usage requires the approval of the Town Council under this or any other Ordinance of the Town, Copies of park permits issued pursuant to this Section, whether issued by the Mayor, the Chief of Police or the Town Council, will be provided to the Chief of Police; and shall be subject to review by the Chief of Police to determine whether the proposed use is allowed under local or state laws and whether additional public safety measures are necessary, including but not limited to additional traffic control and the provision of additional law enforcement or safety measures.

(b) Application – A person seeking issuance of a permit hereunder shall submit an application on a form provided by Town Hall. The application shall include, at a minimum:

(1) The name and address of the applicant.

(2) The name and address of the person sponsoring the activity, if any.

(3) The day and hours for which the permit is desired.

(4) The park or portion thereof for which such permit is desired.

(5) An estimate of the anticipated attendance.

(6) The nature of the activity and whether there will be amplified sound.

(7) Any other information which the permit issuer shall find reasonably necessary to a fair determination as to whether a permit should be issued hereunder.

(c) Standards for issuance – Permits issued under this Section may issue when it is determined:

(1) That the proposed activity or use of the park will not unreasonably interfere with or detract from the public enjoyment of the park.

(2) That the proposed activity and use will not unreasonably interfere with or detract from the promotion of public health, welfare, safety, and recreation.

(3) That the proposed activity or use is not reasonably anticipated to incite violence, crime or disorderly conduct.

(4) That the proposed activity will not entail unusual, extraordinary, or burdensome expense or police operation by the Town.

(5) That the facilities desired have not been reserved for other use at the day and hour required in the application.

(6) The proposed activity and use will not extend past the established hours of operation for the park, unless the permit has been brought before the Town Council for approval and the Town Council expressly approves a waiver of the hours of operation.

(7) The proposed use will not violate the Town's Noise Ordinance unless the permit has been brough before the Town Council for approval and the Town Council expressly approves decibel levels more than the levels established by ordinance.

(8) The application or request is timely as described in Section 9, below.

(9) The application demonstrates sufficient planning and resources to support the proposed use, including proper arrangements for the applicant to provide management and removal of trash and debris from the park, public safety of the attendees, and the provision portable toilet facilities if deemed necessary by the Town due to the size, length, or general nature of the event.

(d) Liability of permittee. The person to whom a permit is issued shall be liable for any applicable ordinances as fully as though the same were inserted in said permits.

(e) Revocation. The Mayor or the Chief of Police shall have the authority to revoke a permit upon finding a violation of any rule or ordinance, or upon good cause shown.

(f) Display of Permit Required. It shall be unlawful for any person in a park to fail to produce and exhibit any permit he claims to have upon request of any authorized person who shall desire to inspect the same for the purpose of enforcing compliance with any ordinance or rule.

(g) Interference with Permittees. It shall be unlawful for any person in a park to disturb or interfere unreasonably with any person or party occupying any area or participating in any activity under the authority of a permit.

SECTION 6 Fees.

The Town Council shall have the authority to implement and collect usage fees and deposit requirements by Resolution for events or occasions other than Town-sponsored events on or in the Town's parks and public properties.

SECTION 7 Insurance.

For special events that want to make use of a bounce house or similar apparatus, that are commercial in nature, or involve the use of sporting facilities for organized sports camps or leagues, or at the discretion of the Mayor or the Town Council due to the nature of the proposed use, the host organization or person shall be required to carry an occurrence form general liability policy that shall name the Town as an additional insured with a right of defense, with minimum coverage protection of sufficient to cover the maximum liability of the Town under state law. Special events, or use of sporting facilities involving more than 1,000 persons, the limits will be no less than $1,000,000 / $2,000,000. Any request to waive or reduce the amount of insurance coverage shall require the approval of the Town Council.

SECTION 8 Security and traffic control.

The Chief of Police shall determine whether security and traffic control devices may be mandated due to the size and nature of the proposed event. Unless expressly waived by the Town Council, the costs associated with any additional security and traffic control shall be borne by the festival organizers and shall be paid prior to the event, in addition to any required permit fee or deposit.

SECTION 9 Application required, minimum time to review, and right to refuse.

(a) Application Required. In addition to the uses described therein, the following shall require a permit as provided for in Section 5 above:

(1) Any use of a Town Park, public property, or public facility that will draw more than 1000 persons; which shall also require the approval of the Town Council.

(2) Any event or use that will involve bringing in elements not already provided at the park or public facilities (i.e., staging, booths, bounce houses, amplification devices other than a personal radio or handheld portable speaker, etc.).

(3) Any use of a commercial nature.

(4) Any use of sporting facilities for organized sports camps or leagues.

(b) Timeframe for Submittal of Applications. For purposed of events that will bring 150 or more participants that do not require Town Council approval, the application must be submitted a minimum of two weeks prior to the event to be considered timely. All other applications that do not require Town Council approval shall be submitted at least 72 hours prior to the event to be considered timely. For events or activities that require Town Council approval, the special event

application must be submitted no later than two weeks prior to date of the Town Council meeting where such application will be reviewed.

(c) Right to Refuse. The permit reviewer, whether it be the Mayor, the Chief of Police or the Town Council, shall have the discretion to refuse or deny the use of Town parks, or other public facilities, if the reviewer determines that the proposed use is inappropriate for the facilities such that it has the potential to damage the facilities and prevent normal use thereof; or if there is a conflict with events or uses already permitted for that same date or dates; or if the person(s) using or proposing to use the facilities have demonstrated improper use of the facilities in the past; or if the person(s) proposing to use the facilities is unable to provide the required fee, deposit or insurance in a timely fashion.

SECTION 10 Penalties.

(a) A violation of this Ordinance shall be punishable by any enforcement action or legal remedy permitted by law including, but not limited, to (i) prosecution as a misdemeanor with imposition of a fine not to exceed $500.00, imprisonment for a term not to exceed 60 days, or by both fine and imprisonment; (ii) imposition of civil fines or penalties; and (iii) pursuit of injunctive relief or declaratory relief from a court of competent jurisdiction. Nothing stated in this paragraph shall prevent the Town from taking any lawful action that may be necessary for it to enforce or to remedy any violation of this Ordinance.

(b) Each violation of the ordinance is a separate infraction for which a separate penalty may be imposed. Violations of a continuing nature shall constitute a separate violation for each day such violation continues and a separate fine whether imposed pursuant to a misdemeanor prosecution, civil penalty, or otherwise, may be imposed for each day such violation continues or occurs.

(c) The Town’s law enforcement officers, or if Town law enforcement is unavailable, any on duty law enforcement officer responding to a situation at any of the Town parks or recreational facilities are authorized to remove an ordinance violator and their personal property from any Town park, property or recreational area. The enforcement officer(s) shall first warn the violator and request that the violator immediately leave the area with their personal property. A violator's failure to timely comply with the request shall constitute a trespass after warning which may be prosecuted in accordance with applicable criminal sanctions.

SECTION 11.1.a.

(Katherine Van Zant Presentation – Capacity Fee Study)

FLORIDA RURAL WATER ASSOCIATION

2970 Wellington Circle • Tallahassee, FL 32309-7813
(850) 668-2746

EMAIL
frwa@frwa.net

WEBSITE
www.frwa.net

January 30, 2023

Mayor Jamie D. Watts
Town of Welaka
400 Fourth Avenue
Welaka, FL 32193
Phone: (386) 467-9800
Email: jwatts@welaka-fl.gov

RE: Water & Wastewater Capacity Fee Study
Town of Welaka, Putnam Co., PWS: 2544392, Facility ID: FLA011705

Dear Mayor Watts:

Florida Rural Water Association is pleased to provide this Water and Wastewater Capacity Fee Study and recommendations to the Town of Welaka as a membership benefit. FRWA is dedicated to assisting water and wastewater systems to provide Floridians with an ample affordable supply of high quality water and wastewater services, while protecting natural systems.

You should be congratulated for your water and wastewater system and operations staff. With unfunded mandates continuing to roll down from state and federal governments along with the aging of pipes, pumps and plants, you have risen to the challenge and continue to operate the system providing safe drinking water and consistent sewer services. To make a very difficult job more difficult, revenues have lagged behind expenses. Utility operators have done more with less each year, as measured in real dollars. They have shouldered the responsibility of running the system in a responsible manner and in compliance with state rules and regulations.

Capacity Fees. Capacity Fees are one-time charges assessed to the new development or connections to reimburse utility systems for current and proposed infrastructure required to supply water, collect, treat, and dispose of wastewater. Capacity Fees are proportional to the capacity set aside for the new customer, development, or connection. In some systems these charges are called Capacity Fees while in others they be called Impact Fees, Benefit Assessments, User Fees, Contributions In Aid of Construction (CIAC) or Connection Charges. [1]

The other goals and objectives considered in the study include the following:

- ✓ Proposed Capacity Fees should be equitable among customer classes;
- ✓ Proposed Capacity Fees should minimize “shock” to customers if possible;
- ✓ Proposed Capacity Fees should provide for growth paying for growth; and
- ✓ Proposed Capacity Fees should provide for capital needs.

[1] AWWA, *Manual M1 - Principles of Water Rates, Fees and Charges*, 5th Edition, American Water Works Association, Denver CO., 2012, pp. 181-187

Executive Summary

Findings & Recommendations.
The Town of Welaka has two options for setting Capacity Fees:

Option A – Use the **Remaining Useful Life Basis** to capture the existing depreciated value of the Town's Water and Wastewater Utility assets for charging new customers, see definition below.

Option B – Use the **Replacement Value Basis** to capture the true and sustainable cost value of the Town's Water and Wastewater Utility assets for charging new customers, see definition below.

Remaining Useful Life (RUL) is the length of time the utility infrastructure, piping, pumps, tanks, and equipment is likely to be functional before it requires replacement. A piece of equipment may last longer than its estimated useful life, but it will need more and more maintenance as it reaches that point. It may become obsolete or require major repairs. An especially old asset, while technically functional, may be more of a liability than a benefit if it requires frequent repair work.

The Remaining Useful Life basis for computing Capacity Fees provides a value to existing utility assets based on their current condition, estimated based on the years it is expected to continue to function. This basis does not provide for the cost of replacing the pipe or equipment when it reaches the end of its useful life, the cost that the utility will have to bear to serve the development being added to the utility.

As an example of the implication of Remaining Use Life Basis, in Welaka most of the wastewater pump stations are about 31 years old, well past the Florida Public Service Commission designation of pump station useful life as 22 years. These pump stations have almost no value when computing Capacity Fees based on Remaining Useful Life Basis. For this portion of the Capacity Fee, the new user will have almost no Capacity Fee to pay. However, the true, sustainable value to the utility is the replacement cost for the pump stations because this is the cost the utility will have to bear to keep working pump stations available for new users as they are added to the system.

Replacement Value is the cost to the utility to install new infrastructure, piping, pumps, tanks, and equipment in today's dollars. The Replacement Value recognizes the expense the utility must incur to purchase new piping and equipment as the existing piping and equipment have become unusable due to age and wear. This is the cost the existing users have been incurring for all the previous years in keeping sufficient and usable piping and equipment available for the users now coming onto the system. With Capacity Fees based on Replacement Value, the new users are paying for the true, sustainable value of the capacity that the utility has purchased and kept available for them until now to use.

1. **Water Capacity Fee Finding.**

The Town of Welaka currently charges a Hook-Up Fee of $750 for Residential Users and $2,000 for Commercial Users. Special Improvement Properties are charged a $750 Hook-Up Fee. In addition, a $50 Inspection Fee is charged to all new users.

The Town has the option of using the evaluated Fee of **$880 per ERC** using the Remaining Useful Life Basis –or- **$2,970 per ERC** using the Replacement Value Basis to capture the true and sustainable cost of running its Water Utility. FRWA recommends using the Replacement Value.

2. **Wastewater Capacity Fee Findings.**

The Town currently charges a Hook-Up Fee of $750 for Residential Users and $2,000 for Commercial Users. Special Improvement Properties are charged a $750 Hook-Up Fee. In addition, a $50 Inspection Fee is charged to all new users.

The Town has the option of using the evaluated Fee of **$1,040 per ERC** using the Remaining Useful Life Basis –or- **$6,350 per ERC** using the Replacement Value Basis to capture the true and sustainable cost of running its Water Utility. FRWA recommends using the Replacement Value.

3. **Water & Wastewater Capacity Fee Findings.**

In combination both the Water and Wastewater Capacity Fees are:

Equivalent Residential Water & Wastewater Connection (ERC) Calculation Comparison

Category	Current Connection Fees		Option A Current Value	Option B Replacement Value
	Residential	Nonresidential		
Water	$750	$2000	$880/ ERC	$2,970/ ERC
Wastewater	$750	$2000	$1,040/ ERC	$6,350/ ERC
Totals	**$1,500**	**$4,000**	**$1,920 / ERC**	**$9,320/ ERC**

4. **Water and Wastewater Capacity Fee Recommendations.**

FRWA recommends that the Town use the evaluated fees to capture the true and sustainable cost of running its Water and Wastewater Utility and to maintain and protect the Town's vital infrastructure. We recommend and can assist with establishing a 5 and 10-year Capital Improvement Program to keep the Town's utility financially sound.

5. **Other Capacity Fee Recommendations**

- Fees for turn-ons, turn-offs, and late fees might need to be increased for inflation. Fees should be reviewed / updated at least annually by staff based on actual time and material costs for meters, fittings, boxes, equipment costs, fuel costs, and salaries
- The Utility's policies on payments, late charge fees, illegal turn on penalty, or returned check penalty should also be reviewed / updated at least annually by staff.
- FRWA recommends implementing annual adjustments in accordance with the Florida Public Service Commission. The Florida Public Service Commission current Price Index is found at

http://www.psc.state.fl.us/utilities/waterwastewater/, click on "Price Index and Pass Through Application for Water and Wastewater Utilities".

Year	Commission Approved Index	Year	Commission Approved Index
2011	1.18%	2017	1.51%
2012	2.41%	2018	1.76%
2013	1.63%	2019	2.36%
2014	1.41%	2020	1.79%
2015	1.57%	2021	1.17%
2016	1.29%	2022	4.53%

- It is recommended that you revisit this Capacity Fee study every 3 to 5 years or as needed. Indicators of need include changes to revenue or CIP expense predictions, current financial position and, other indicators during the annual budget approval process. In addition, construction and implementation of major capital infrastructure improvements, such as the planned Wastewater Treatment Plant Improvements, will warrant updating the Capacity Fees.

Capacity Fee Evaluation

Capacity Fee Study Standards.

FRWA uses contemporary industry standards for recommending and establishing utility Capacity Fees, these include: American Water Works Association (AWWA) Manuals of Practice, Generally Accepted Accounting Principles (GAAP), Governmental Accounting Standards Board (GASB), and Florida Public Service Commission guidelines.

Capacity Fee Calculations.

Capacity Fee Calculations are performed in accordance with the American Water Works Association *Manual M1 - Principles of Water Rates, Fees and Charges* guidelines for calculating and allocating Capacity Fees to new customers.[2] FRWA uses a rational and conservative approach when performing these evaluations. This approach is transparent, defendable, and complies with statute and case law. Since there is a rational nexus of allocating Capacity Fees to customer groups it also follows the intent of the Florida Statutes that set the basis for rates and Capacity Fees by counties and municipalities. Such fees shall be just and equitable. [3]

Capacity Fees are evaluated and set using the following criteria:

- The water / wastewater system has the legal authority to charge Capacity Fees.
- Costs are allocated to specific customer classes based on use of the water / wastewater system infrastructure.
- New customers add incremental capital costs to the utility and the fees are set to recapture their impacts to the system.
- The evaluation of system data is sufficient to reasonably estimate the value of water / wastewater system infrastructure and support charges to new customers. The evaluation includes water / wastewater consumption, historical flow trends, growth, and inventories of water lines, wells, treatment, collection, manholes, lift stations, and etc.
- Justification of capital costs are clearly provided in the calculation of fees.
- Affordability is taken into consideration for all classes of customers and particularly to economically disadvantaged customers.
- The capital costs / fee requirements for new customers are consistent, predictable, and uniform.
- Each customer class equitably pays its own way. No undue burden is placed on one class over another customer class.

Cost Savings and Benefits.

Capacity Fees provide a revenue source for replacement and upgrade of existing infrastructure as new customers are added to the system. This revenue is intended to be used for funding major expansions as well as minimizing debt or reducing the need for future debt. Capacity Fees also provide for the utility to maintain an appropriate level of retained earnings and cash reserves to meet capital needs. Utilities that are committed to regular renewal and replacement of aging infrastructure regularly see cost savings in their O&M budget, avoid unnecessary costly emergency repairs and minimize community health and safety concerns due to critical water and wastewater equipment failures.

[2] AWWA, *Manual M1 - Principles of Water Rates, Fees and Charges*, 6th Edition, American Water Works Association, Denver CO., 2012, pp. 181-187

[3] See Florida Statutes Chapter 153 for County Water & Sewer Systems and Chapter 180 - Municipal Public Works.

Accuracy of Revenue Predictions.

We have performed our analyses using the data and information obtained; we have relied upon such information to be accurate. Projected Capacity Fee revenue precision is limited by the accuracy of the financial information provided – good information "in" equals good information "out", and *vice versa*. Should you find that these recommended Capacity Fees are not in-line with your needs, please let us know ASAP. We will work with you to carefully review and update financial records, revisit our calculations, valuation parameters, assumptions, etc. **We are always happy to return, revisit your Capacity Fees, and adjust the analyses as necessary, please call me anytime.**

The original mission for creation and ownership of public water and wastewater utilities includes many compelling objectives: (1) health and safety of citizens; (2) protect most vulnerable residents (aged, young, poor health, economically disadvantaged, etc.); (3) the ability to return the profit ordinarily collected by a private entity to the customer in the form of lower Capacity Fees; (4) provide fire protection; (5) a tool to expand the tax base; (6) the ability to shape, facilitate or control growth; and (7) promote home rule and self-determination.

Growth should pay for Growth.

New development causes the need for expansion and should therefore pay its fair share for the costs incurred. These connections are plant expansions and water / sewer line extensions -- requiring significant cost. Existing ratepayers have supported and maintained the existing facilities, and so new customers should support any new, additional or expanded facilities plus pipelines.

Some officials and new customers have argued incorrectly that the utility should allow new customers on the system without charge or at original plant costs (not adjusted for inflation). It's not fair to existing ratepayers and it is not a prudent utility practice. Nor would it be good business practice. Public officials may be tempted at times to trim budgets; lower utility rates below operational costs; and keep Capacity Fees below actual capital investment needs -- but this seriously reduces utilities' ability to perform its central mission, shortchanges ratepayers by delaying costs, sets up unrealistic expectations, and undermines the future vitality of the community.

Dealing with Growth & Infrastructure Decay.

Florida law requires communities to maintain adequate levels of service for public facilities and to anticipate and prepare for growth.[4] In addition to keeping pace with growth, water and wastewater utilities must maintain the infrastructure in good operating condition. This requires adequate funding and continual repair and replacement (R&R) just to keep up with normal usage and aging. Proper management, training and hiring practices are also essential for efficient utility operation.

As new customers come online more and more of the treatment capacity is used up until the plant is at capacity and must be expanded. Further, the Florida Department of Environmental Protection (FDEP) requires that when a water plant reaches 75% of capacity that the supplier of water must submit source/treatment/storage capacity analysis reports by a professional engineer documenting projected flows. If the operating capacity of the water treatment plant or finished water storage will be exceeded in less than 5 years, documentation of timely design, permitting, and construction must be submitted with the report (Rule 62-555.348 F.A.C.). Additionally, FDEP Rule 62-555.350 F.A.C. requires that suppliers of water operate and maintain their public water systems so as to comply with applicable standards, in good condition, and under the plant's permitted operating capacity. Similarly, for wastewater treatment plants, FAC 62-600.405 requires timely planning, design, and construction of needed wastewater treatment facility expansion. This requirement includes a statement signed and sealed by a professional engineer that planning and preliminary design of the necessary expansion has been initiated if the

4 Florida's Community Planning Act 2021 Florida Statute 163.3161(4) - requiring local government will facilitate the adequate and efficient provision of transportation, water, sewerage, schools, parks, recreational facilities, housing, and other requirements and services.

Capacity Analysis Report documents that the permitted capacity of the facility will be exceeded within the next five years.

Existing Water System Demand.

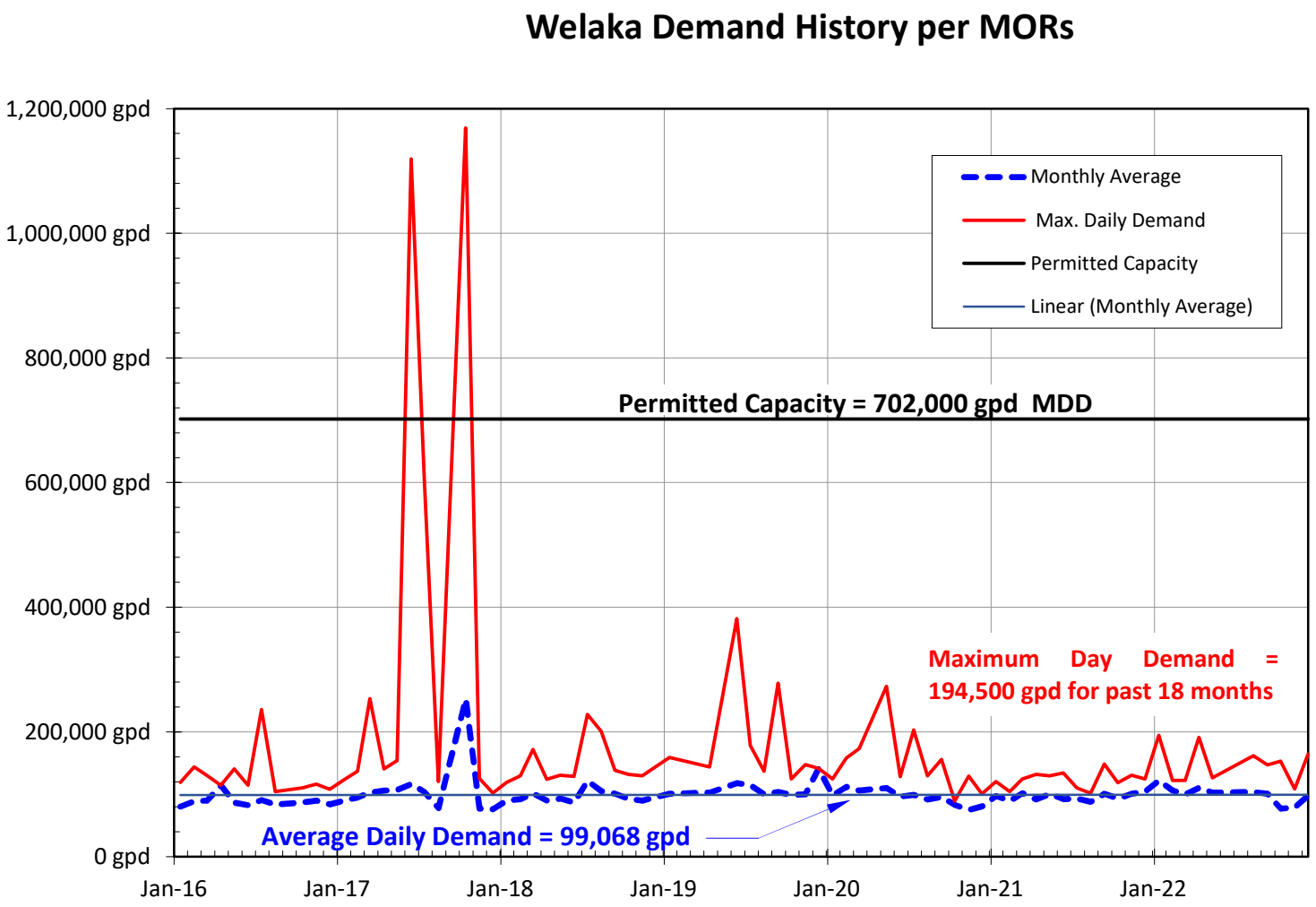


Figure 1 ~ Historic Water Demands
(gpd denotes gallons per day)

The amount of water used by the customers on the system is provided below, see Figure 1 for flow records:

Estimated Population Served..... 1,951[a]
Equivalent Residential Connections (ERC) 880
Average Daily Demand (ADD) per MORs (July 2021 – December 2022) .....98,782 gpd
Maximum Daily Demand (MDD) per MORs (July 2021-December 2022) .....194,500 gpd
Permitted Plant Capacity .....702,000 gpd
Percentage of water treatment plant used 28%
Water used per Equivalent Residential Connection (MDD / ERC).....221 gpd
Water used per Equivalent Residential Connection (ADD / ERC).....112 gpd

[a] For 803 residential connections at 2.43 people per household (2020 census value for Putnam County)

Raw water is provided to the Town from groundwater wells. There is a 12-inch well, an 8-inch well and a 4-inch well. The Water Treatment Plant provides, hypo-chlorination (disinfection) and aeration, plus polyphosphate for iron/magnesium control. The Town has two steel ground storage tanks, 138,000 gallons each, and one 50,000 gallon elevated tank.

As shown on Figure 1, the maximum daily water demand for the Town is currently approximately 30% of the plant capacity. This is well below the FDEP requirement that planning for an expansion be evaluated when a plant reaches 75% capacity.

The average demand for July 2021 through December 2022 was 98,782 gpd. This average daily demand provides a factor of 112 gpd/ERC for current water use, which demonstrates a higher level of water conservation than planning water use values used by Saint Johns River Water Management District (SRWMD) for Welaka. The North Florida Regional Water Supply Plan by SJRWMD, SRWMD and DEP (January 2017) showed a gross per capita water use for the Town of Welaka of 63 gpcd. At 2.43 people per household (the 2020 census value for Putnam County), this equates to 153 gpd/ERC, much higher than the current water use.

Existing Wastewater System Demand

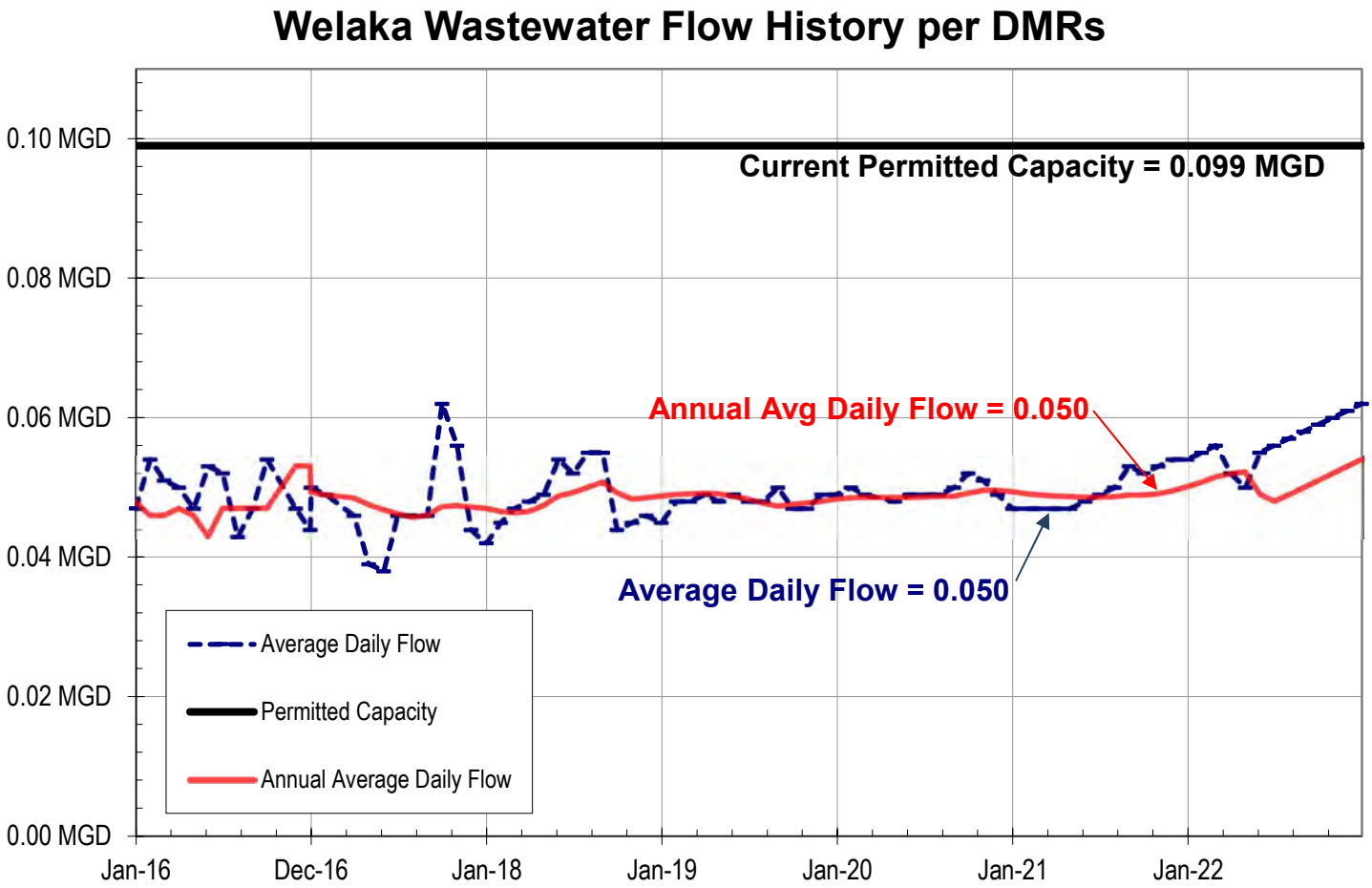


Figure 2 ~ Historic Wastewater Flows
(mgd denotes million gallons per day)

Estimated Population Served..... 1,711[a]

Equivalent Residential Connections.....781

Annual Average Daily Flow per DMRs (January 2021 – December 2022) .....0.053 mgd

Three Month Average Daily Flow per DMRs (January 2021 – March 2022).....0.056 mgd

Permitted Plant Capacity (Annual Average Day Demand).....0.099 mgd

Percentage of wastewater treatment plant used.....56%

Wastewater flow per Equivalent Residential Connection (ADD / ERC).....112 gpd

[a] For 704 residential connections at 2.43 people per household (2020 census value for Putnam County)

Welaka has an extended aeration activated sludge Wastewater Treatment Facility (WWTF), originally constructed in 1991 and expanded in 1993. The WWTF consists of an influent pumping station, a flow equalization tank and a flow splitter box where the flow is divided between two treatment trains operated in parallel. Each treatment train has an aeration tank and a secondary clarifier and an aerobic digester. Effluent from the two treatment trains is combined and disinfected in two chlorine contact chambers operated in series. Effluent from the chlorine contact chambers is discharged to Rapid Infiltration Basins. Biosolids from the treatment process are discharged to a dewatering box and then transported for disposal at the Putnam County landfill.

The current wastewater flow to the WWTF is approximately 60% of the plant capacity. However, the WWTF has well exceeded the expected service life of approximately 27 years (Florida Public Service Commission Average Service Life Guidelines and F.A.C. 25-30.140) and is in need of numerous structural and process repairs and improvements. The Town has received funding for wastewater treatment improvements and is beginning planning and design for replacement of the plant.

The wastewater collection system for the Town is comprised of gravity sewers and lift stations with force mains, primarily constructed in the late 1980s and early 1990s. The Sportsman's Harbor area on the Saint Johns River in the northwest section of the town has a vacuum sewer system. This vacuum system was originally installed in 2004-2006 to replace the existing gravity sewer system in this low-lying area along the river that has had ongoing flooding problems.

Utilities are Capital Intensive.

The water supply and wastewater treatment industry are very capital intensive because almost every component of these systems requires fixed capital investments in long-term infrastructure. Water facilities include water supply, treatment, storage, distribution, and disposal of treatment residuals. Wastewater facilities include sewage collection, pumping (lift stations), transmission, treatment, disposal of treated effluent, and disposal of sludge.

Funding Utilities.

Utilities typically operate for many years without fully recovering the initial construction costs. Loans and grants supported by rates are used to finance capital facilities. In addition to paying the debt obligation for existing facilities, rates support operation, maintenance, salaries, chemicals, power, vehicles, equipment, repair and replacement. Rates frequently cannot be structured to accommodate new or expanded facilities for new customers. So, Capacity Fees are used to assess new customers for capital construction costs and allow new customers to "buy-in" to the system. Capacity Fees bridge the funding gap needed to build the new facilities to provide service to new residents and businesses. Capacity Fees cannot be used for operation, maintenance, repair, replacement, or normal utility administrative costs. Capacity Fees should be held in a separate account from water/wastewater revenue and general funds.

It is just too easy to neglect existing facilities and run them into the ground instead of being proactive in their repair and replacement. Problems with this approach are:

1. Cost for replacement is several times greater than for repair and maintenance;
2. Real cost of utility operation is hidden from the ratepayer and governing board;
3. Assets are not properly valued and preserved;
4. Improper stewardship of public assets;
5. Grants never cover all replacement costs; and
6. Diversion of public funds from more worthy uses.

FRWA Capacity Fees Rules-of-Thumb.

Twenty years ago conventional lime softening plants would cost about $4 to $6 per gallon to construct, today you would expect to spend approximately $6 to $15 per gallon to construct. Actual costs vary greatly by community, by region, and between design consultants. Plus, any estimate must include unique site-specific needs like new raw water wells, piping, land, instrumentation & controls, emergency power generation, or deep wells. Welaka has a Category IV Aeration and Disinfection system which has an estimated construction cost of approximately $5.00 per gallon for the plant size.

Costs of New Wastewater Treatment Capacity.

Establishing the cost for new wastewater treatment capacity is just as difficult for wastewater treatment plants. Rules-of-thumb to help you estimate Capacity Fees for wastewater plants are provided, but do not include collection systems, lift stations, force mains, land acquisition, offices, SCADA, controls, emergency power generation, sprayfields, percolations ponds, or deep wells for disposal.

Twenty years ago, conventional extended aeration secondary treatment plant would cost about $3 to $5 per gallon to construct, today you would expect to spend approximately $20 per gallon to construct. Actual costs vary greatly by community, by region, and between design consultants. Estimates for the extended aeration activated sludge wastewater treatment facility used by the Town are approximately $20/gallon.

Scheduling Presentation of Capacity Fees Study Findings and Recommendations.

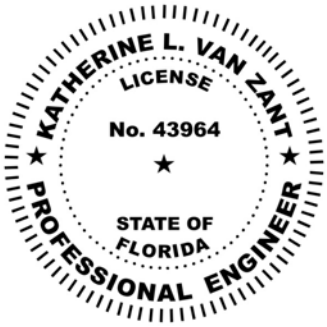
We are happy to come to your next utility commission meeting to explain our analysis and report. We anticipate that you will have questions to discuss and options to consider. Our presentation is between 20 to 30-minutes in length, which would be followed by commission discussion. This activity typically takes about 60 to 90-minutes and can be held during a special workshop or a normal commission meeting. This is an informative meeting and decisions about Capacity Fees are usually taken at subsequent meetings. It is important that all commission members be in attendance since the adoption of Capacity Fees increases can produce public comment.

We have enjoyed serving you and wish your water and wastewater system the best. Please feel free to contact us if you have any further questions.

Sincerely,

Katherine Van Zant

Katherine Van Zant, P.E.
Saltus Engineering, Inc.



This item has been digitally signed and sealed by Katherine Van Zant, PE, on 1/30/2023.

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Water & Wastewater Impact Fee Report

Town of Welaka

FRWA Member:

Address: PO Box 1098
Welaka Fl, 32193

Telephone: (386)-467-9800

Contact: Mayor Jamie Watts

E-mail: jwatts@welaka-fl.gov

County: **Putnam**

Population Served: 1,951

Connections:	Water:	751	Wastewater:	685
PWS:		**2544392**	Facility ID:	FLA011705
Capacity:		702,000 gpd	Capacity:	0.0990 MGD
ADD:		98,762 gpd	AADF	0.050 MGD
MDD:		194,500 gpd		

Revision: **January 30, 2023**

Version: **FINAL**

Prepared by: Katherine Van Zant, P.E. / Saltus Engineering, Inc.

This item has been digitally signed and sealed by Katherine Van Zant, PE, on 1/30/2023.

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KATHERINE L. VAN ZANT
LICENSE
No. 43964
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Florida Rural Water Association

2970 Wellington Circle
Tallahassee, Florida 32309-6885
Phone: 850-668-2746

Florida Rural Water Association

2970 Wellington Circle, Tallahassee, Florida 32309

Member: **Town of Welaka**
Contact: **Mayor Jamie Watts**
Address: **Welaka Fl, 32193**

Date: **30-Jan-23**
Version: **FINAL**
Conn: **751**
PWS: **2544392**

Water Impact Fee Recommendations

Water Impact Fee Calculation

Remaining Useful Life

	Wells	Water Treatment	Elevated Storage Tank	Distribution System	Per Gallon
Cost per gal	$528,000	$1,334,900	$30,000	$890,300	**$3.96 / gal**
Remaining Useful Life =		702,000 gpd			
Cost per gal Replacement Value =	$1,730,000	$3,513,000	$300,000	$3,884,100	**$13.43 / gal**
		702,000 gpd			

Where:

Total Treatment Capacity =	702,000 gpd	
Max Day Demand from MORs =	194,500 gpd	for past 18 months
Percentage of WTP used =	27.7%	
Avg Day Demand from MORs =	98,762 gpd	for past 18 months

Category	Remaining Useful Life		Replacement Value
Wells	**$528,000**	31%	$1,730,000
Water Treatment	**$1,334,900**	38%	$3,513,000
Elevated Storage Tank	**$30,000**	10%	$300,000
Distribution System	**$890,300**	23%	$3,884,100
Totals	**$2,783,200**	30%	**$9,427,100**
	$3.96 / gal		$13.43 / gal

Equivalent Residential Water Connection (ERC) Calculation

Where:	Remaining Useful Life Basis	Replacement Value Basis	
System Value ($) =	$2,783,200	$9,427,100	
Max Daily Demand for past 18 mo.s =	194,500 gpd	194,500 gpd	
ERCs =	880	880	*see ERC calculation worksheet*
Max Daily Demand / Connection =	**221 gpd/ERC**	**221 gpd/ERC**	
Avg Daily Demand / Connection =	**112 gpd/ERC**	**112 gpd/ERC**	

ERC Costs = System Value ($) x MDD / ERC ÷ Total Treatment Capacity gpd

ERC Costs = $2,783,200 × 221 gpd/ERC ÷ 702,000 gpd = **$876.28 / ERC** Remaining Useful Life Basis

Use **$880 / ERC**

ERC Costs = $9,427,100 × 221 gpd/ERC ÷ 702,000 gpd = **$2,968.10 / ERC** Replacement Value Basis

Use **$2,970 / ERC**

Remaining Equivalent Residential Water Connections Available

Where:

Max Daily Demand / ERC =	221 gpd/ERC	880	= ERCs
Total Treatment Capacity =	702,000 gpd		
Max Day Demand =	194,500 gpd	**507,500 gpd**	= Capacity Remaining
Percentage of WTP used =	27.7%	72.3%	
		2,296	**= ERCs Remaining**

Note: Useful life values based on Florida Public Service Commission Average Service Life Guidelines, F.A.C. 25-30.140

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Conn: **685**
GMS: FLA011705

Wastewater Impact Fee Recommendations

Wastewater Impact Fee Calculation

	WWTF and Effluent Disposal System	Lift Stations	Collection System	Per Gallon
Cost per gal Remaining Useful Life =	$198,000	$411,364	$994,332	**$16.20 / gal**
	99,000 gpd			
Cost per gal Replacement Value =	$1,980,000	$2,150,000	$5,684,985	**$99.14 / gal**
	99,000 gpd			

Where:

Total Treatment Capacity =	99,000 gpd	AADF
AADF from DMRs =	50,000 gpd	
Percentage of WWTF used =	50.5%	

Category	Remaining Useful Life		Replacement Value	
WWTF	**$198,000**	10%	$1,980,000	$20.00 / gal
Lift Stations	**$411,364**	19%	$2,150,000	
Collection System	**$994,332**	17%	**$5,684,985**	
Totals	**$1,603,695**	16%	**$9,814,985**	
	$16.20 / gal		$99.14 / gal	

Equivalent Residential Water Connection (ERC) Calculation

Where:

	Remaining Useful Life Basis	Replacement Value Basis	
System Value ($) =	$1,603,695	$9,814,985	
AADF from DMRs =	50,000 gpd	50,000 gpd	
ERCs =	781	781	*see ERC calculation worksheet*
AADF / Connection =	**64 gpd/ERC**	**64 gpd/ERC**	

ERC Costs = System Value ($) x ERC / Total Treatment Capacity gpd

ERC Costs = $1,603,695 / 99,000 gpd × 64 gpd/ERC = **$1,037.06 / ERC** Remaining Useful Life Basis

Use **$1,040 / ERC**

ERC Costs = $9,814,985 / 99,000 gpd × 64 gpd/ERC = **$6,347.07 / ERC** Replacement Value Basis

Use **$6,350 / ERC**

Remaining Equivalent Residential Wastewater Connections Available

Where:

Monthly ADF / ERC =	64 gpd/ERC	781	= ERCs
Total Treatment Capacity =	99,000 gpd		
Monthly ADF from DMRs	50,000 gpd	**49,000 gpd**	= Capacity Remaining
Percentage of WWTF used =	50.5%	49.5%	
		765	**= ERCs Remaining**

Note: Useful life value based on Florida Public Service Commission Average Service Life Guidelines, F.A.C. 25-30.140

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PWS: **2544392**

Wellfield & Source Water

Replacement Value at today's cost: $ 665,000

Well	Year Drilled	Casing Dia (inches)	Capacity (gpm)	Approx. Useful Value	Estimated ($)	
1	1990	8-in	250	10%	$ 67,000	$665,000
2	1989	4-in	80	10%	$ 67,000	$400,000
5	2006	12-in	500	59%	$ 394,000	$665,000
			830 gpm	27-yrs	**$ 528,000**	**$1,730,000**

1.195 MGD

Projected Replacement Value at today's cost: **$ 1,730,000**

Note: Useful life value based on Florida Public Service Commission Average Service Life Guidelines, F.A.C. 25-30.140, Class C Utility (27-years)

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Estimated WTP Construction Costs vs. Plant Size & Type

Water Treatment Plant Size (MGD) **0.702 MGD**

FDEP Permitted Category per Rule 62-699.310(2)(e), F.A.C. **IV**

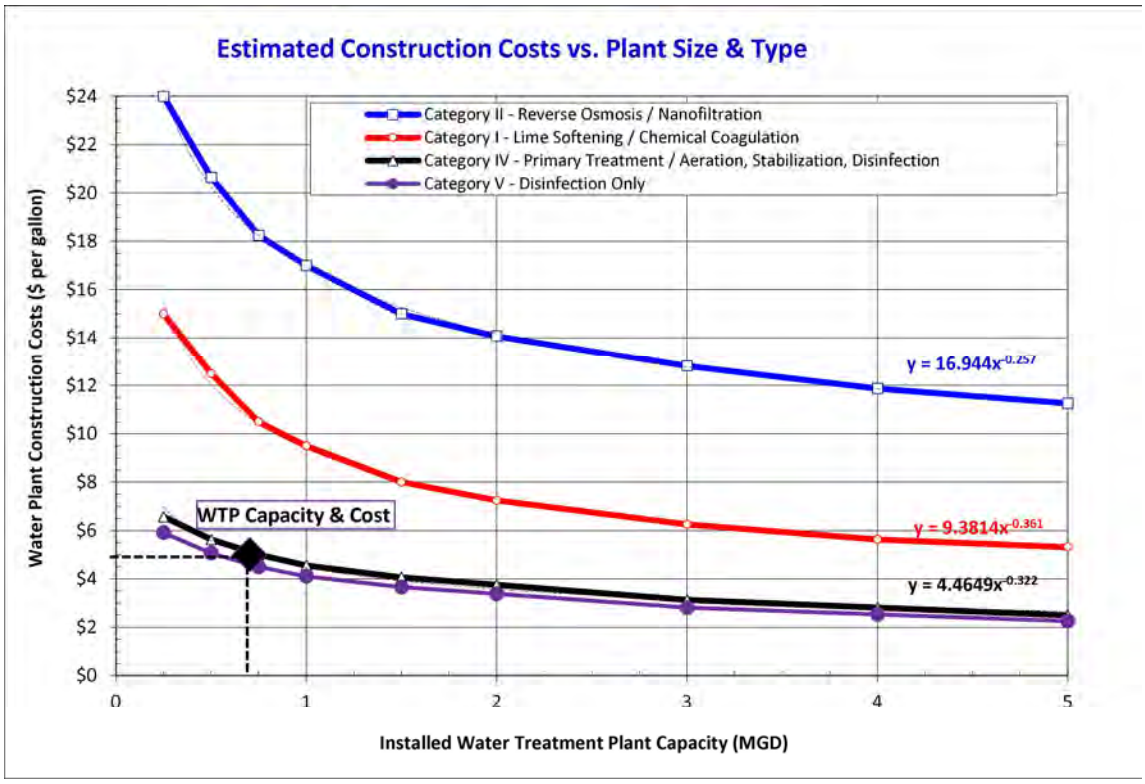
FDEP Permitted Staffing Classification per Rule 62-699.310(2)(e), F.A.C. **C**

Construction Year WTP: 1991, Storage Tank 1: 2006, Storage Tank 2: 2009

Water Plant Category

Category II - Reverse Osmosis / Nanofiltration	**No**	$0.00
Deep Well Injection for Brine Disposal	**No**	$0.00
Category I - Lime Softening / Chemical Caogulation	**No**	$0.00
Category IV - Primary Treatment / Aeration, Stabilization, Disinfection	**Yes**	$5.00
Category V - Disinfection Only	**No**	$0.00

Water Plant Construction Costs ($ per gallon)	**$5.00**	
Water Plant Construction Costs Estimate	**$3,513,000**	Replacement Cost
	$1,334,940	Useful Value



Notes:

1. Useful life value based on Florida Public Service Commission Average Service Life Guidelines (27 years), F.A.C. 25-30.140, Class C Utility,

2. Ground Storage Tanks 1 and 2 are included in these costs

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Distribution System Piping - Inventory, Condition & Current Value

Replacement Value at today's cost price per inch-diameter per foot: $8.50

Pipe Dia (inches)	Pipe Material	Length (feet)	Length (miles)	Approximate Average Age	Approx. Useful Value	Value ($ per ft)	Estimated ($)	
2-in	PVC	18,994-ft	3.60 mi	30-yrs	25%	$17.00 /ft	$80,725	$322,898
4-in	PVC	17,664-ft	3.35 mi	30-yrs	25%	$34.00 /ft	$150,144	$600,576
6-in	PVC	13,216-ft	2.50 mi	30-yrs	25%	$51.00 /ft	$168,504	$674,016
8-in	PVC	33,627-ft	6.37 mi	30-yrs	25%	$68.00 /ft	$571,659	$2,286,636
						Weighted Average		
		83,501-ft	15.81 mi			$46.52 /ft	**$890,307**	$3,884,126

Replacement Value at today's cost: **$3,884,126**

NOTES:

1. Age of pipelines are based on interviews with operations staff. 2-inch through 8-inch pipe mostly installed mid 1980's to early 1990's.

2. Useful life based Florida Public Service Commission Average Service Life Guidelines, and F.A.C. 25-30.140 (40 years)

3. Cost per linear foot based on recent similar construction in Florida

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Finished Water Storage Tanks

Steel Elevated Storage Tanks have an estimated 30-years useful life	$6.00/gal
Concrete Ground Storage Tanks have an estimated 37-years useful life	$7.50/gal
Steel Ground Storage Tanks have an estimated 33-years useful life	$6.00/gal
Hydropneumatic Tanks have an estimated 30-years useful life	$6.00/gal

Tank	Name / Location	Year Installed	Type & Material	Capacity (gal)	Approx. Useful Value	Estimated ($)	
1	Ground Storage 1	2006	Steel	138,000	57%	$469,946	$828,000
2	Ground Storage 2	2009	Steel	138,000	65%	$537,081	$828,000
3	Elevated Storage Tank	1995	Steel	50,000	10%	$30,000	$300,000
				776,000 gal	37-yrs	**$1,037,027**	**$1,956,000**

Replacement Value at today's cost: **$1,956,000**

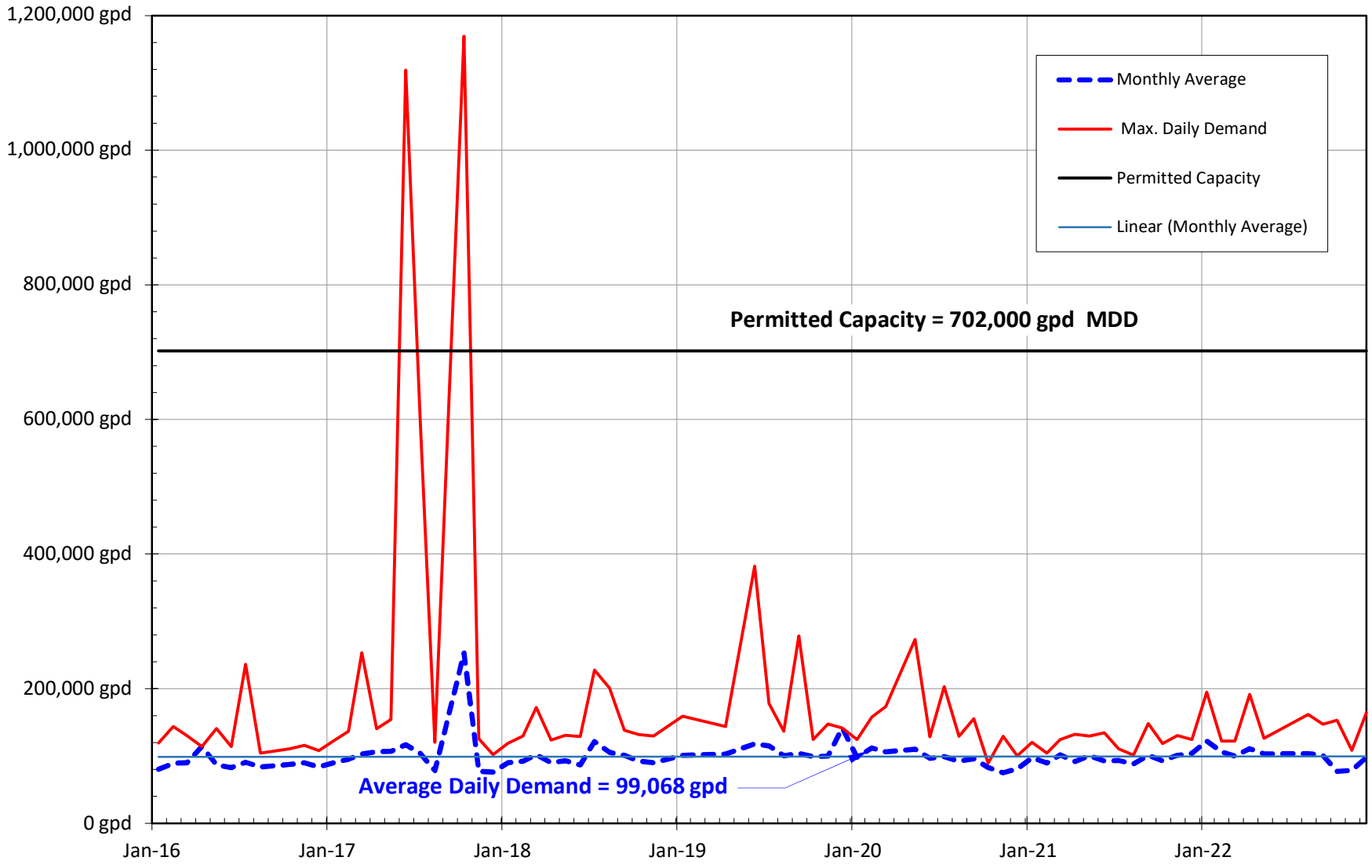
Notes:

1. Useful life value based on Florida Public Service Commission Average Service Life Guidelines, and F.A.C. 25-30.140

2. Year Installed based on FDEP permits

3. Ground Storage Tanks 1 and 2 are included in Water Treatment Plant costs, only the Elevated Storage Tank is used for Impact Fee calculations for storage

Welaka Demand History per MORs



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Historic Water Treatment Plant Flow Data from MORs

from Monthly Operation Reports per 62-555.900(2), (3), (4) (6) or (5) (in GPD)

Month	Monthly Average	ADD (Annual)	Max. Daily Demand	MDD (Annual)	Ratio MDD:ADD	Permitted Capacity
Jan-16	80,210		119,100		1.485	702,000
Feb-16	89,054		143,700		1.614	702,000
Mar-16	89,784		129,900		1.447	702,000
Apr-16	114,100		114,100		1.000	702,000
May-16	86,887		140,700		1.619	702,000
Jun-16	82,790		114,100		1.378	702,000
Jul-16	90,658		236,000		2.603	702,000
Aug-16	83,584		104,200		1.247	702,000
Sep-16						702,000
Oct-16	87,235		110,300		1.264	702,000
Nov-16	89,870		116,000		1.291	702,000
Dec-16	83,855	**88,912**	108,000	**236,000**	1.288	702,000
Jan-17	89,926		122,700		1.364	702,000
Feb-17	95,218		136,700		1.436	702,000
Mar-17	102,813		253,400		2.465	702,000
Apr-17	106,257		140,600		1.323	702,000
May-17	106,739		153,900		1.442	702,000
Jun-17	116,580		1,119,000		9.599	702,000
Jul-17	103,952		604,000		5.810	702,000
Aug-17	78,135		120,200		1.538	702,000
Sep-17						702,000
Oct-17	252,968		1,169,200		4.622	702,000
Nov-17	77,237		125,500		1.625	702,000
Dec-17	76,042	**109,624**	102,100	**1,169,200**	1.343	702,000
Jan-18	90,113		119,000		1.321	702,000
Feb-18	92,307		129,400		1.402	702,000
Mar-18	101,506		171,800		1.693	702,000
Apr-18	89,897		123,800		1.377	702,000
May-18	93,048		130,600		1.404	702,000
Jun-18	86,623		128,700		1.486	702,000
Jul-18	121,468		227,800		1.875	702,000
Aug-18	105,352		200,800		1.906	702,000
Sep-18	100,790		138,400		1.373	702,000
Oct-18	92,523		131,700		1.423	702,000
Nov-18	89,900		129,600		1.442	702,000
Dec-18		**96,684**		**227,800**		702,000
Jan-19	101,000		159,000		1.574	702,000
Feb-19						702,000
Mar-19						702,000
Apr-19	102,913		143,700		1.396	702,000
May-19						702,000
Jun-19	118,000		381,800		3.236	702,000
Jul-19	114,750		178,300		1.554	702,000
Aug-19	100,087		136,800		1.367	702,000
Sep-19	103,697		278,300		2.684	702,000
Oct-19	99,000		124,300		1.256	702,000
Nov-19	100,000		147,600		1.476	702,000
Dec-19	141,600	**109,005**	141,600	**381,800**	1.000	702,000
Jan-20	98,000		124,300		1.268	702,000
Feb-20	112,000		157,900		1.410	702,000
Mar-20	106,000		173,000		1.632	702,000
Apr-20						702,000
May-20	110,000		272,900		2.481	702,000
Jun-20	96,563		128,300		1.329	702,000
Jul-20	99,000		203,000		2.051	702,000
Aug-20	92,000		129,300		1.405	702,000
Sep-20	95,920		155,600		1.622	702,000
Oct-20	83,071		89,300		1.075	702,000
Nov-20	75,000		129,000		1.720	702,000
Dec-20	80,770	**95,302**	100,300	**272,900**	1.242	702,000
Jan-21	97,342		120,300		1.236	702,000
Feb-21	89,675		104,300		1.163	702,000
Mar-21	101,816		124,300		1.221	702,000
Apr-21	91,603		132,000		1.441	702,000
May-21	100,297		129,400		1.290	702,000
Jun-21	92,377		134,300		1.454	702,000
Jul-21	93,126		110,300		1.184	702,000
Aug-21	88,000		101,300		1.151	702,000
Sep-21	101,037		148,300		1.468	702,000
Oct-21	93,000		118,600		1.275	702,000
Nov-21	101,000		130,300		1.290	702,000
Dec-21	104,000	**96,106**	124,300	**148,300**	1.195	702,000
Jan-22	122,000		194,500		1.594	702,000
Feb-22	106,000		122,300		1.154	702,000
Mar-22	100,000		122,300		1.223	702,000
Apr-22	110,830		191,300		1.726	702,000
May-22	103,000		126,300		1.226	702,000
Jun-22						702,000
Jul-22						702,000
Aug-22	103,525		161,583		1.561	702,000
Sep-22	101,000		147,000		1.455	702,000
Oct-22	77,132		153,000		1.984	702,000
Nov-22	78,695		108,168		1.375	702,000
Dec-22	97,839	**100,002**	164,432	**194,500**	1.681	702,000
Average	99,068		179,172		1.715	

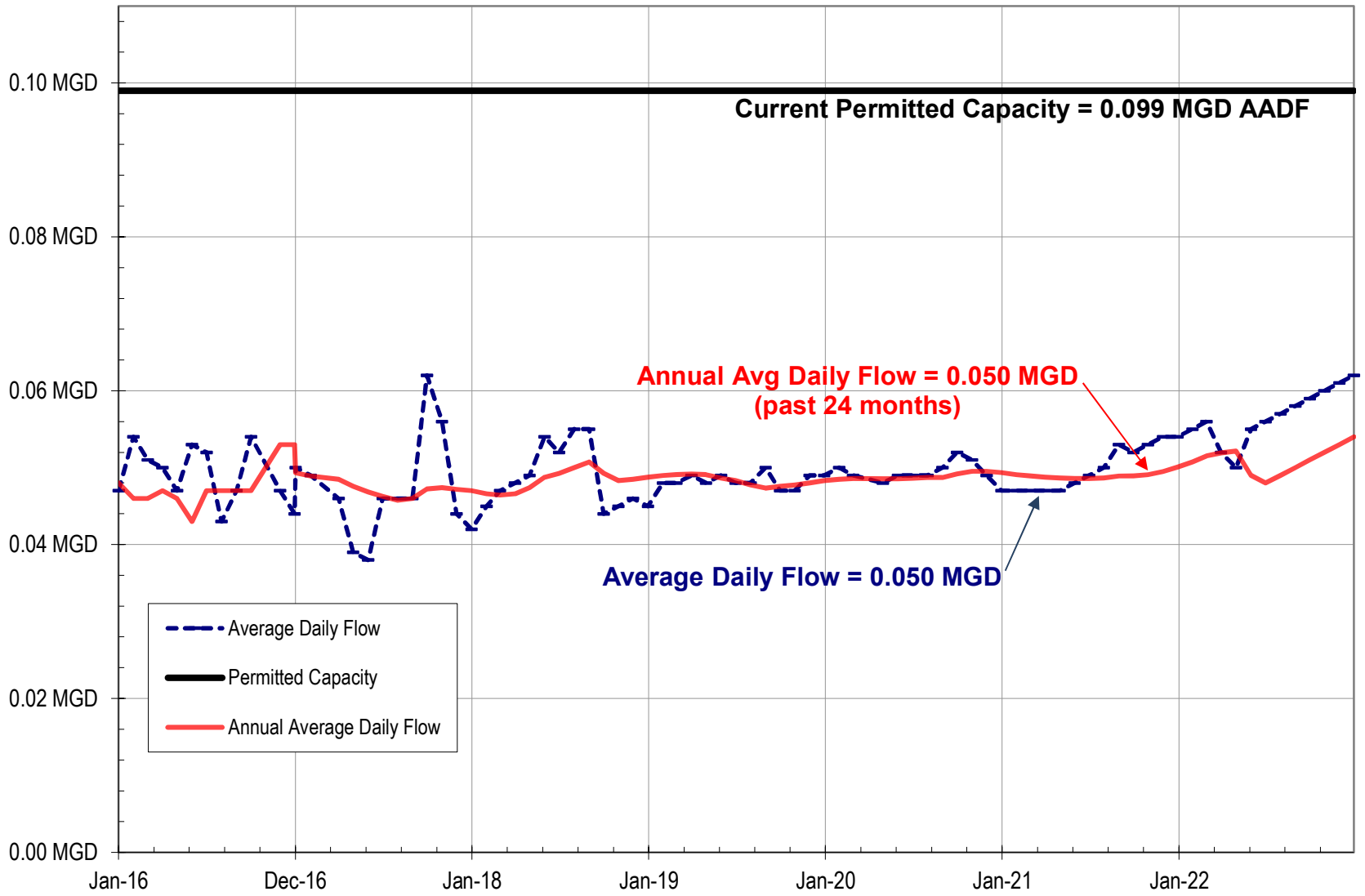
Average Day Demand (MGD) from MORs **98,762** Avg for past 18 months

Max Daily Demand (MGD) from MORs **194,500** Max for past 18 months

(to Line 4 on Water Charges)

	ADD	MDD	TPC
2016	88,912	236,000	702,000
2017	109,624	1,169,200	702,000
2018	96,684	227,800	702,000
2019	109,005	381,800	702,000
2020	95,302	272,900	702,000

Welaka Wastewater Flow History per DMRs



Florida Rural Water Association

2970 Wellington Circle, Tallahassee, Florida 32309

Member: **Town of Welaka**

Contact: **Mayor Jamie Watts**

Address: **Welaka Fl, 32193**

Date: **30-Jan-23**

Version: **FINAL**

Conn: **751**

GMS: **FLA011705**

Historic Wastewater Treatment Plant Flow Data from DMRs

from Discharge Monitoring Reports per 62-620.910(10) (in MGDs)

Month	Days/Month	Year	Monthly Average	3 Month Average Day Flow	Annual Average Daily Flow	Annual Average Permitted Capacity	
Jan-16	31	**2016**	0.047	0.047	0.048	0.099	
Feb-16	28		0.054	0.040	0.046	0.099	
Mar-16	31		0.051	0.051	0.046	0.099	
Apr-16	30		0.050	0.052	0.047	0.099	
May-16	31		0.047	0.049	0.046	0.099	
Jun-16	30		0.053	0.050	0.043	0.099	
Jul-16	31		0.052	0.051	0.047	0.099	
Aug-16	31		0.043	0.049	0.047	0.099	
Sep-16	30		0.047	0.047	0.047	0.099	
Oct-16	31		0.054	0.048	0.047	0.099	
Nov-16	30		0.047	0.049	0.053	0.099	
Dec-16	31		0.044	0.048	0.053	0.099	
Jan-17	31	**2017**	0.050	0.047	0.049	0.099	
Feb-17	28		0.049	0.048	0.049	0.099	
Mar-17	31		0.046	0.048	0.049	0.099	
Apr-17	30		0.039	0.045	0.048	0.099	
May-17	31		0.038	0.041	0.047	0.099	
Jun-17	30		0.046	0.041	0.046	0.099	
Jul-17	31		0.046	0.043	0.046	0.099	
Aug-17	31		0.046	0.046	0.046	0.099	
Sep-17	30		0.062	0.051	0.047	0.099	
Oct-17	31		0.056	0.055	0.047	0.099	
Nov-17	30		0.044	0.054	0.047	0.099	
Dec-17	31		0.042	0.047	0.047	0.099	
Jan-18	31	**2018**	0.045	0.044	0.047	0.099	
Feb-18	28		0.047	0.045	0.046	0.099	
Mar-18	31		0.048	0.047	0.047	0.099	
Apr-18	30		0.049	0.048	0.047	0.099	
May-18	31		0.054	0.050	0.049	0.099	
Jun-18	30		0.052	0.052	0.049	0.099	
Jul-18	31		0.055	0.054	0.050	0.099	
Aug-18	31		0.055	0.054	0.051	0.099	
Sep-18	30		0.044	0.051	0.049	0.099	
Oct-18	31		0.045	0.048	0.048	0.099	
Nov-18	30		0.046	0.045	0.049	0.099	
Dec-18	31		0.045	0.045	0.049	0.099	
Jan-19	31	**2019**	0.048	0.046	0.049	0.099	
Feb-19	28		0.048	0.047	0.049	0.099	
Mar-19	31		0.049	0.048	0.049	0.099	
Apr-19	30		0.048	0.048	0.049	0.099	
May-19	31		0.049	0.049	0.049	0.099	
Jun-19	30		0.048	0.048	0.048	0.099	
Jul-19	31		0.048	0.048	0.048	0.099	
Aug-19	31		0.050	0.049	0.047	0.099	
Sep-19	30		0.047	0.048	0.048	0.099	
Oct-19	31		0.047	0.048	0.048	0.099	
Nov-19	30		0.049	0.048	0.048	0.099	
Dec-19	31		0.049	0.048	0.048	0.099	
Jan-20	31	**2020**	0.050	0.049	0.049	0.099	
Feb-20	28		0.049	0.049	0.049	0.099	
Mar-20	31					0.099	
Apr-20	30		0.048	0.049	0.049	0.099	
May-20	31		0.049	0.049	0.049	0.099	
Jun-20	30		0.049	0.049	0.049	0.099	
Jul-20	31		0.049	0.049	0.049	0.099	
Aug-20	31		0.050	0.049	0.049	0.099	
Sep-20	30		0.052	0.050	0.049	0.099	
Oct-20	31		0.051	0.051	0.050	0.099	
Nov-20	30		0.049	0.051	0.050	0.099	
Dec-20	31		0.047	0.049	0.049	0.099	
Jan-21	31	**2021**	0.047	0.048	0.049	0.099	
Feb-21	28		0.047	0.047	0.049	0.099	
Mar-21	31		0.047	0.047	0.049	0.099	
Apr-21	30		0.047	0.047	0.049	0.099	
May-21	31		0.048	0.047	0.049	0.099	
Jun-21	30		0.049	0.048	0.049	0.099	
Jul-21	31		0.050	0.049	0.049	0.099	
Aug-21	31		0.053	0.051	0.049	0.099	
Sep-21	30		0.052	0.052	0.049	0.099	
Oct-21	31		0.053	0.053	0.049	0.099	
Nov-21	30		0.054	0.053	0.050	0.099	
Dec-21	31		0.054	0.054	0.050	0.099	
Jan-22	31	**2022**	0.055	0.054	0.051	0.099	
Feb-22	28		0.056	0.055	0.052	0.099	
Mar-22	31		0.052	0.054	0.052	0.099	
Apr-22	30		0.050	0.053	0.052	0.099	
May-22	31		0.055	0.063	0.049	0.099	
Jun-22	30		0.056	0.064	0.048	0.099	
Jul-22	31		0.057	0.065	0.049	0.099	
Aug-22	31		0.058	0.066	0.05	0.099	
Sep-22	30		0.059	0.067	0.051	0.099	
Oct-22	31		0.06	0.068	0.052	0.099	
Nov-22	30		0.061	0.069	0.053	0.099	
Dec-22	31		0.062	0.070	0.054	0.099	
Average			0.053 MGD	0.056 MGD	0.050 MGD		24 month period
Maximum			0.062 MGD				24 month period
Average			0.050 MGD	0.051 MGD	0.049 MGD	0.099 MGD	full period

Florida Rural Water Association

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Conn: **685**

GMS: FLA011705

Estimated WWTF Construction Costs

Year built: 1991 (Train 1), 1993 (Train 2)

	Capacity	Construction Cost	$/gallon
Extended Aeration with Aerobic Digestion, Dewatering Box and RIBs	0.099 MGD	$1,980,000	$20.00 / gal
Replacement Value at today's cost:		$1,980,000	
Useful Life Value at today's cost:		**$198,000**	

Notes: 1. WWTP cost based on similar construction in Florida and engineer estimate

2. Useful life based on Florida Public Service Commission Average Service Life Guidelines and F.A.C. 25-30.140 (27 years)

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Wastewater Lift Stations

Average Year Built 1991, LS#1 and LS#2 modified 2013

Main LS Built 1991

		Estimated Construction Cost	Average Age	Useful Life Value	Unit Cost
Submersible Pump Stations (#1 and #2)	2	$400,000	9-yrs	$236,364	$200,000 / ea
Dry-Well Pump Stations	5	$1,750,000	31-yrs	$175,000	$350,000 / ea
			Useful Life Value:	$411,364	
			Replacement Value at today's cost:	**$2,150,000**	

1. Age estimated based on interviews with operations staff and historical permits

2. Useful life based Florida Public Service Commission Average Service Life Guidelines, F.A.C. 25-30.140 (22 years) and interviews with operations staff

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Wastewater Transmission System - Inventory, Condition & Current Value

Replacement Value for FM at today's cost price per inch-diameter per foot: $7.50

Pipe Dia (inches)	Pipe Material	Length (feet)	Length (miles)	Approximate Age	Approx. Useful Value	Value ($ per ft)	Estimated ($)	
4-in Vacuum	SDR-21 PVC Vacuum	5,136-ft	0.97 mi	17	37%	$50.00 /ft	$95,111	$256,800
6-in FM	PVC	12,228-ft	2.32 mi	32	10%	$45.00 /ft	$55,026	$550,260
6-in Vacuum	SDR-21 PVC Vacuum	1,425-ft	0.27 mi	17	37%	$61.00 /ft	$32,194	$86,925
		18,789-ft	3.56 mi				**$182,332**	**$893,985**

Replacement Value at today's cost: **$893,985**

NOTES:

1. Age of pipelines are based on interviews with operations staff. 2-inch through 6-inch pipe mostly installed late 1980's to early 1990's. Vaccum System built 2004-2006.

2. Useful life based Florida Public Service Commission Average Service Life Guidelines, and F.A.C. 25-30.140 (27 years), interviews with operations staff and engineering opinion

3. Cost per linear foot based on recent similar construction in Florida, Vaccum System proposal from manufacturer, and engineer estimate

Florida Rural Water Association

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Wastewater Collection System - Inventory, Condition & Current Value

Manholes

Pipe Dia (inches)	Pipe Material	Length[1] (feet)	Length (miles)	Average Age (Years)[2]	Approx Useful Value[3]	Value ($ per ft)	Estimated ($)	
8-in	PVC	44,358-ft	8.40 mi	31-yrs	23%	$60.00 /ft	$598,833	$2,661,480
		44,358-ft	**8.40 mi**			Rounded	**$599,000**	$2,661,480
						Replacement Value at today's cost:	$2,661,000	
						$7.50/ft-dia		

Manholes

Category	Material	Quantity		Average Age (Years)[2]	Approx Useful Value[3]	Value ($ per unit)	Estimated ($)	
Manholes	Concrete	142		31-yrs	10%	$15,000	$213,000	$2,130,000
							$213,000	$2,130,000
						Replacement Value at today's cost:	$2,130,000	

NOTES:

1. Length of pipe and number of manholes based on system maps provided by Town maintenance and operations staff

2. Age of pipelines are based on interviews with operations staff, mostly installed late 1980's to early 1990's

3. Approximate Useful Value of existing piping and manholes based on Florida Public Service Commission Average Service Life Guidelines and F.A.C. 24-30.140 (40 years gravity sewers, 27 years manholes)

4. Costs based on similar construction in Florida and engineer estimate

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GMS: FLA011705

Update number of 5/8

Equivalent Residential Connection (ERC) Worksheet

WATER ERCS

Water Meter Breakdown by Size

Type	Quantity	Size	ERC Factor	Total ERCs
Residential	714	3/4"	1	714
Residential	1	6"	50	50
Commercial	32	3/4"	1	32
Commercial	4	2"	8	32
FGUA	52		1	52
Total	**803**			**880**

Ratio ERCs / Service Connection: 1.10

880 Water ERCs

WASTEWATER ERCS

Type	Quantity	Size	ERC Factor	Total ERCs
Residential	659	3/4"	1	659
Residential	1	6"	50	50
Commercial	21	3/4"	1	21
Commercial	4	2"	8	32
FGUA	19		1	19
Total	**704**			**781**

Ratio ERCs / Service Connection: 1.11

781 Wastewater ERCs

Source: Emma Sledge / Welaka Utility Clerk 1/25/23 and Tyler Buford /Welaka Utility Supervisor 6/15/22

SECTION 11.1.b.

(Katherine Van Zant – Capacity Fee Study PowerPoint Presentation)

TOWN OF WELAKA
CAPACITY FEES

SALTUS
ENGINEERING, INC.

Katherine Van Zant, PE

Florida Rural Water Association

- Specialize water & wastewater rates and financing
- Serving over 1,400 cities, towns, special districts, and utilities throughout Florida
- Completed over 1,000 financing & rate studies.
- 30+ yrs advising Florida water & wastewater systems
  1. FRWA rate / fee studies have **never had legal challenge**
  2. Performed sound rational and methodical procedures
  3. Use tested utility industry standards – AWWA, GASB…
  4. Strong legal footing under Florida Statutes & case law

Water Revenues

Four Categories

1. **Rates**
   - Monthly charges for services used including fixed costs such as debt repayment
2. **Capacity Fees**
   - One time capacity buy-in
3. **Connection Charges**
   - Placement of new water meter or sewer stub-out
4. **Other Fees**
   - Late charges, turn offs / ons, etc.

What are Capacity Fees

- **One-time Charge Assessed**
  - new connections to reimburse utility systems for capital / fixed costs needed to provide capacity to be used
- **Fixed Costs for Water and Wastewater Service**
  - wells, treatment plants, storage tanks, pumps, pipes, etc.
- **Utility Capital Expenses, not Operations**

Growth Pays For Growth

Always-present questions:

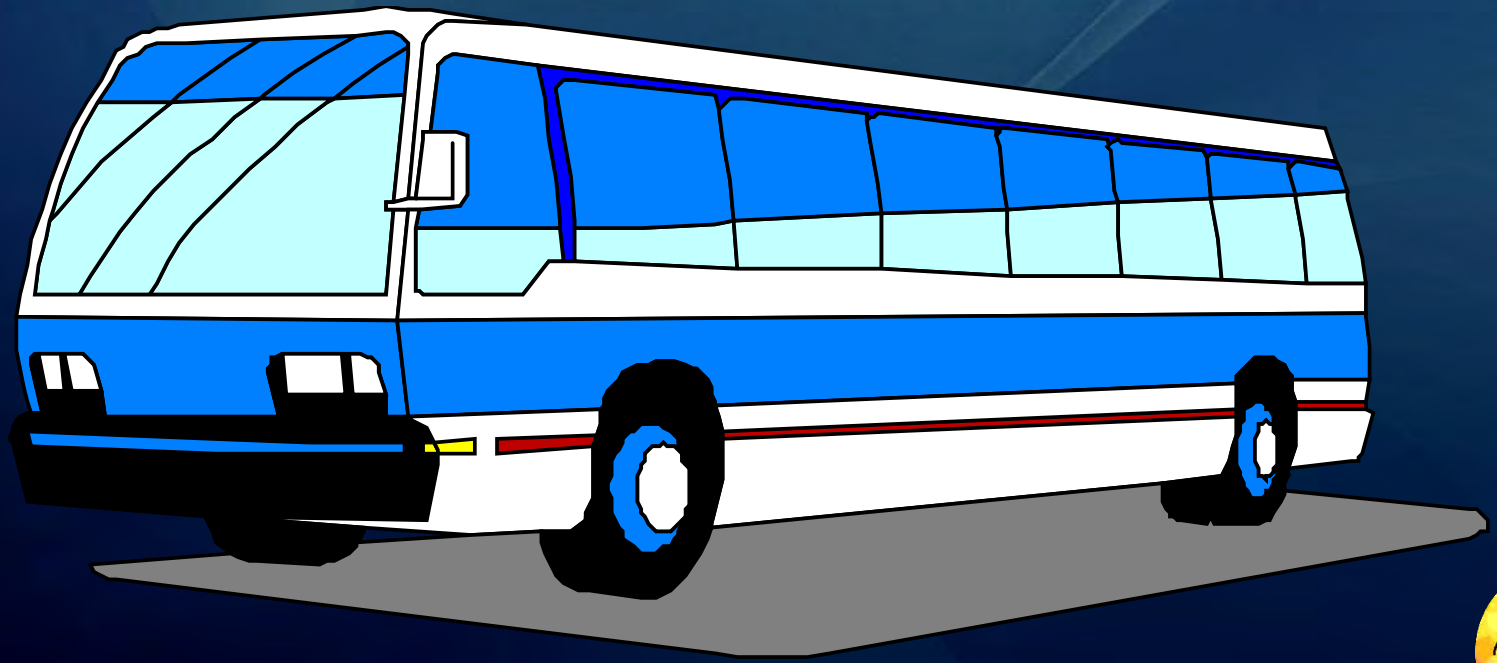
1. How shall we pay for growth?
2. Should existing utility rate payers support system expansion to accommodate growth?

- Capacity fees are designed to make it possible for new customers to pay for their proportion of the system and capacity they use up that has been provided in the system for them

Growth Pays For Growth

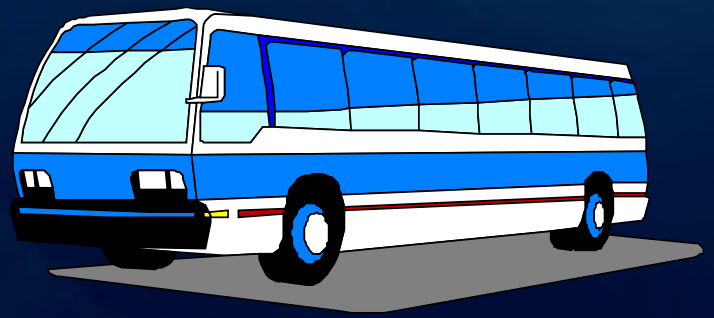
Example

Limited number of seats on the bus (capacity)



Growth Pays For Growth

- Rates pay for operation and debt
  - ✓ Gas, tires, driver, repairs, etc.
  - ✓ Existing rate payers are paying and have paid for their seat on the bus
- Capacity fees by new passengers pay for
  - ✓ Their own seat on the bus
  - ✓ Principles of equity & fairness
  - ✓ Cost is justifiable



Capacity Fee Objectives

- New development pay its own way
- Fund major expansions
- Minimize debt or reduce need for future debt
- Maintain an appropriate level of retained earnings and cash reserves to meet capital needs

IS ONE MORE FEE REALLY NEEDED?

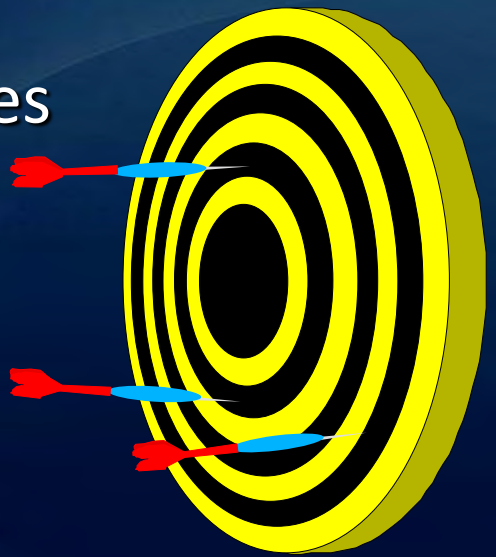
Dealing with Growth & Infrastructure Decay

- Florida statute requires communities to maintain adequate levels of service for public facilities and **to anticipate and prepare for growth**
- It takes **many years to build capacity** into a system, it's impossible to provide it at the same time the new growth happens
- In addition, water and wastewater utilities must maintain infrastructure in **good operating condition**
- Requires adequate funding and continual **repair and replacement** (R&R) just to keep up with normal usage and aging

HOW TO DETERMINE CAPACITY FEES

Pseudo-Rate / Fee Making Process

- Sampling of neighbors to confirm rates are *comparative only*
- Quick & Easy Method
  - Polling Surrounding Communities
  - Not Rational Basis
  - Not Defensible to Challenges
  - Don’t rely on comparisons



Capacity Fee Determination

$$\frac{\text{Capacity Cost (\$)}}{\text{ERC}} \times \text{No. of ERCs represented by new user}$$

Capacity Cost per ERC:

- **$/ERC** = $\frac{\text{Total Treatment Cost (\$)}}{\text{Total Treatment Capacity (gpd)}} \times \text{gpd/ERC}$

Capacity Fee Options

Option A

- The **Remaining Useful Life Basis** provides a value to existing assets based on current condition, based on years they are expected to continue to function.

Option B

- The **Replacement Value Basis** captures the true and sustainable costs or running (and replacing) Welaka's Water and Wastewater Utilities.

RECOMMENDED CAPACITY FEES

Recommended Water Capacity Fees

Current Connection Fee – $500 to $750 Residential,
$1,500 to $2,000 Nonresidential

Capacity Fees Option A – Remaining Useful Life Basis

- **$880** per Equal Residential Connection (ERC).

Capacity Fees Option B – Replacement Value Basis

- **$2,970** per Equal Residential Connection (ERC).

⇨ **FRWA Recommends Option B to capture true & sustainable costs**

Water Capacity Fee Recommendations

- $13.43 per gallon water system capital cost
- 28% of water treatment plant is being used
- 2,296 more service connections at 100% capacity
- Up to $6,819,000 in Capacity fees
  - can be collected up to 100% capacity

Recommended Wastewater Capacity Fees

Current Connection Fee - $500 to $750 Residential,

$1,500 to $2,000 Nonresidential

Capacity Fees Option A – Remaining Useful Life Basis

- **$1,040** per Equal Residential Connection (ERC).

Capacity Fees Option B – Replacement Value Basis

- **$6,350** per Equal Residential Connection (ERC).

⇨ **FRWA Recommends Option B to capture true & sustainable costs**

Wastewater Capacity Fee Recommendations

- $99.14 per gallon wastewater system capital cost
- 51% of WWTP capacity is being used
- 765 more service connections at 100% capacity
- Up to $4,858,000 in Capacity Fees
  - can be collected up to 100% capacity

QUESTIONS ?

SALTUS
ENGINEERING, INC.

SECTION 11.2.a.

(Patrick Dangelo Presentation – Asset Management Plan)
(Drinking Water)

FLORIDA RURAL WATER ASSOCIATION

2970 WELLINGTON CIRCLE • TALLAHASSEE, FL 32309-7813
(850) 668-2746

EMAIL
frwa@frwa.net

WEBSITE
www.frwa.net

October 26, 2022

Mayor Jamie Watts
Town of Welaka
400 4th Avenue
Welaka, Florida 32193

Dear Mayor Watts:

The Florida Rural Water Association (FRWA) is pleased to submit the first draft of the Water System Asset Management and Fiscal Sustainability (AMFS) plan to the Town of Welaka. FRWA prepared this Plan in partnership with the FDEP Safe Drinking Water State Revolving Fund (SDWSRF) Program to identify your system's most urgent and critical needs.

Water and wastewater systems represent critical infrastructure designed to protect the public health and the environment. This report assesses the current conditions of your water fixed capital assets (e.g. water treatment plant, distribution system, hydrants and valves), and more importantly provides recommendations, procedures and tools to assist with long range asset protection and water utility reinvestment. FRWA will be available to support the Town's AMFS plan recommendations and implementation.

The following report is considered a living document with tools for your use which must be updated at least annually (quarterly updates are recommended) by the Town's utility management. FRWA will provide electronic copies for your use and future modification and will remain available to assist in updating and revising the AMFS plan.

As a valued FRWA member, it is our goal to help make the most effective and efficient use of your limited resources. This tool is an unbiased, impartial, independent review and is solely intended for achievement of drinking water and wastewater system fiscal sustainability and maintaining your valuable utility assets. Florida Rural Water Association has enjoyed serving you and wishes your system the best in all its future endeavors.

Sincerely,

Patrick Dangelo
FRWA Utility Asset Management Team

Copy: Shanin Speas-Frost, DWSRF State Revolving Fund
Gary Williams, Florida Rural Water Association, Executive Director

Town of Welaka
Water System Asset Management and Fiscal Sustainability Plan

Prepared for:

Town of Welaka
PWS # 2544392

Prepared by:

FLORIDA RURAL WATER ASSOCIATION
Asset Management Program
In partnership with
Florida Department of Environmental Protection
and
State Revolving Fund Program

Table of Contents

Executive Summary

Asset Management Plan Defined

Asset Management Plan (AMP): The International Infrastructure Management Manual defines an asset management plan as a "plan developed for the management of one or more infrastructure assets that combines multi-disciplinary management techniques (including technical and financial) over the life cycle of the asset in the most cost-effective manner to provide a specific level of service."

Lowest life cycle cost refers to the best appropriate cost for rehabilitating, repairing, or replacing an asset. While the level of service is determined by the utility consisting of its staff, customers, board members and regulators. Asset management is implemented through an asset management program and includes a written asset management plan.

Benefits of an AMP

Implementing and maintaining an active Asset Management Plan will provide numerous benefits to the Utility and its Customers, such as:

- Prolonging asset life and aiding in rehabilitation/repair/replacement decisions.
- Increased operational efficiencies.
- Informed operational and management decisions.
- Increased knowledge of asset criticality.
- Meeting consumer demands with a focus on system sustainability and improved communication.
- Setting rates based on sound operational and financial planning.
- Budgeting by focusing on activities critical to sustained performance.
- Meeting system service expectations and regulatory requirements.
- Improving responses to emergencies.
- Improving security and safety of assets.
- Capital improvement projects that meet the true needs of the system and community.
- Provides an impartial unbiased report to help explain rate sufficiency to the community.

State Revolving Fund Requirement

An active Asset Management Plan (AMP) is a requirement for participation in the State Revolving Fund Program (SRF). Asset Management and Fiscal Sustainability (AMFS) program details are identified in Florida Administrative Code (FAC) 62-503.700(7). To be accepted for the interest rate adjustment and to be eligible for reimbursement, an asset management plan must be

adopted by ordinance or resolution and written procedures must be in place to not only implement the plan, but to do so in a timely manner.

The plan must include each of the following:

(a) Identification of all assets within the project sponsor's system;

(b) An evaluation of the current age, condition, and anticipated useful life of each asset;

(c) The current value of the assets;

(d) The cost to operate and maintain all assets;

(e) A capital improvement plan based on a survey of industry standards, life expectancy, life cycle analysis, and remaining useful life;

(f) An analysis of funding needs;

(g) An analysis of population growth and drinking water use projections, as applicable, for the sponsor's planning area, and a model, if applicable, for impact fees; commercial, industrial and residential rate structures;

(h) The establishment of an adequate funding rate structure;

(i) A threshold rate set to ensure the proper operation of the utility; if the sponsor transfers any of the utility proceeds to other funds, the rates must be set higher than the threshold rate to facilitate the transfer and proper operation of the utility; and,

(j) A plan to preserve the assets; renewal, replacement, and repair of the assets, as necessary; and a risk-benefit analysis to determine the optimum renewal or replacement time.

AMP Development Stakeholders

The development of this AMFS plan involved the collective efforts of the Utility Management and Staff, the Florida Department of Environmental Protection State Revolving Fund (FDEP-SRF), and the Florida Rural Water Association (FRWA). Resources included Engineers (technical and financial), Certified Operators (operation and maintenance), Rate Sufficiency Analysts and utility staff with first-hand experience with the system.

Critical Assets and Priority Action List

The Table located below contains a listing of the Town of Welaka Critical Assets and Processes that were found to need Capital and/or Operational funding to operate as designed and within Regulatory Compliance. Please see Section 4 for a detailed description of the asset improvements listed below.

Town of Welaka CRITICAL ASSETS LIST				
Asset	**Installed**	**Design Life**	**Condition**	**COF**
Various Hydro tanks	Various Dates	50	Failed	Minor
High service pump #3	2010	25	Failed	Moderate
Well#1	1990	50	Poor	Moderate
Well #2	1989	50	Poor	Moderate
1 Poor Condition Hydrant	1990	30	Poor	Moderate
99 System Valve Replacement	Various dates	25	Poor	Moderate
24 Hydrant valve replacement	Various dates	25	Poor	Moderate

Based on the list of Critical Assets and Processes that were found to need Capital and/or Operational funding and the State requirements for participation in the State Revolving Fund Program (SRF), a Priority Action List was developed to help prioritize action items and establish target dates for timely completion. The Priority Action List is found on the following page.

Town of Welaka PRIORITY ACTION LIST				
Action Item	**Target Date(s)**	**Cost Type**	**Cost**	**Responsible Party or Parties**
1. Pass Resolution Adopting AMFS Plan and Rate Schedule	Within 60 Days from Receipt of Final Plan	Administrative	No Cost	Mayor and Board
2. Determine Level of Service (LOS) Attributes, Goals, Targets, and Metrics and Prepare LOS Agreement	90 Days after Adoption	Planning	No Cost *	Mayor, Board, Staff and Public
3. Purchase, Train Staff and Begin Using AMFS Tools (Diamond Maps or similar).	90 Days after Adoption	Equipment	Equipment - $2500 Annual Cost - $400 (costs may very) + local provider charge Training – No Cost * **equipment and service costs may vary	Mayor, Utility Supervisor, Plant Operator, and FRWA
4. Develop Valve Exercising and Replacement Program	Within 6 Months after Adoption	Planning	No Cost *	Utility Supervisor and Plant Operator
5. Develop Hydrant Flushing and Maintenance Program	Within 6 months after Adoption	Planning	No Cost *	Utility Supervisor and Plant Operator
6. Develop Well 1 and 2 Rehab Plans	Within 1 year after adoption	Planning	Costs vary on scope ($35,000)	Mayor, Board, Utility Supervisor and Plant Operator
7. Engage a Registered Engineer to create plans to Modify existing piping and remove old hydro tanks at water treatment plant.	FY 2023	Planning	TBD	Mayor. Utility Supervisor, Plant operator, Engineer, Town Clerk
8. Develop Operation and Maintenance Program and Procedures	Within 6 months after Adoption	Planning	No Cost *	Utility Supervisor and Plant Operator
9. Develop Change Out/Repair and Replacement Program for Critical Assets	Within 1 Year after Adoption	Administrative	No Cost *	Mayor, Board, Utility Supervisor and Plant Operator
10. Explore Financial Assistance Options	On-going beginning in FY 2022-2023	Administrative	No Cost	Mayor, Board and Town Clerk

11. Engage a Registered Engineer to Review, Plan, Design, Permit, and Construct Capital and Operational Projects	Began at start of AMP Assessment FY 2022 – 2023	Capital	Costs vary on scope	Mayor and Board
12. Replace 1 Hydrant and 24 Hydrant Valves in POOR Condition	FY 2022 and 2024	Capital	$32,300	Utility supervisor and Staff
13. Locate and assess valves that were noted as buried and could not be located and assessed.	FY 2022 and 2023	Planning	No Cost	Utility Supervisor and staff
14. Replace High Service Pump # 3	FY 2022	Capital	$12,500	Utility Supervisor and Staff, Outside Contractor
15. Replace 99 Valves in POOR Condition	FY 2023 and 2027	Capital	$118,800 ($23,760 annually for 5 years)	Utility Supervisor and Staff
16. Review recommendations once evaluation is complete for old water plant and begin planning for rehab project	FY 2023	Planning	TBD	Mayor, Utility Supervisor, Town Clerk & Engineer
17. Electronic Meter Installation	FY 2022 – 2027	Capital	Total Installation Cost - $300,000	Utility Supervisor, Staff or Designee
18. Update Water System Mapping	On-going	Administrative	No Cost	Utility Supervisor, Plant Operator or Designee
19. Provide Additional Staff Training Opportunities	On-going	Administrative	Cost May Vary *	Mayor, Board and Utility Supervisor
20. Implement Annual Asset Replacement Program	Annually	Operational	Cost will Vary Based on Asset Replacement Program and Strategy	Mayor, Board, Utility Supervisor and Plant Operator
21. Complete Energy Assessment	Annually	Operational	No Cost*	Mayor, Utility Supervisor, Clerk, and FRWA
22. Update RevPlan	Annually	Planning	No Cost *	Mayor, Board, Town Clerk & FRWA
23. Revise AMFS Plan	Annually	Administrative	No Cost	Mayor and Board

*** As a member of the Florida Rural Water Association, FRWA is able to assist Town of Welaka with this Service.**

Fiscal Strategy and AMP Process Recommendations.

Based on this asset management and fiscal sustainability study, **specific recommendations** related to capital expenditures and operating expenditures over the next five years found in the Preliminary Action Plan are as follows:

1. Adopt this Asset Management and Fiscal Sustainability Plan (AMFS) study in the form of a Resolution. Appendix A contains a sample AMFS Resolution for the Town of Welaka.

2. Engage a Florida Registered Engineer to support the Utility in review, funding, planning, design, permitting, and construction of critical capital and operational action items as recommended in this AMFS study.

3. Make funding applications to the following programs/agencies in support of Utility System Upgrades/Improvements as recommended by this AMFS study. A synopsis of water utility funding programs can be found at the following link: http://www.frwa.net/funding.html.

    a. FDEP-State Revolving Fund (SRF)
    b. Regional Water Management District
    c. Florida Department of Economic Opportunity Community Development Block Grant (CDBG)
    d. USDA Rural Development Direct Loan/Grant (USDA RD)
    e. FDEO Rural Infrastructure Fund Grant (RIF)
    f. Local Funding Initiative Requests

4. Evaluate and Adopt a Utility rate structure that will ensure rate sufficiency as necessary to implement capital improvements.

5. Begin using Diamond Maps for Asset Management Planning (AMP) and Computerized Maintenance Management System (or another CMMS of your choice).

6. Continue to build your asset management program by:
    a. Collecting critical field data and attributes on any new or remaining assets;
    b. Improving on processes which provide cost savings and improved service;
    c. Implementing a checklist of routine maintenance measures;
    d. Benchmarking critical processes annually;
    e. Develop policies that will support funding improvements;
    f. Develop manuals, SOPs and guidelines for critical processes;
    g. Identify responsible persons or groups to implement processes to protect critical assets;
    h. Attend asset management training annually.

1. Introduction

In accordance with FDEP Rule 62-503.700(7), F.A.C., State Revolving Fund (SRF) recipients are encouraged to implement an Asset Management Plan for all funded assets to promote the utility system's long-term sustainability. To be accepted for the ***financing rate adjustment and to be eligible for principal forgiveness/reimbursement***, an asset management plan must:

A. Be adopted by Resolution or Ordinance;
B. Have written procedures in place to implement the plan;
C. Be implemented in a timely manner.

The plan must include each of the following:

1. Identification of all assets within the project sponsor's (utility) system;

2. An evaluation of the utility system assets' current:

    a. Age
    b. Condition
    c. Anticipated useful life of each asset

3. Current value of utility system assets;

4. Operation and maintenance cost of all utility system assets;

5. A Capital Improvement Program Plan (CIPP) based on a survey of industry standards, life expectancy, life cycle analysis and remaining useful life;

6. An analysis of funding needs;

7. The establishment of an adequate funding rate structure;

8. An asset preservation plan:

    a. Renewal
    b. Replacement
    c. Repair
    d. A risk-benefit analysis to determine optimum renewal or replacement timing

9. An analysis of population growth and water treatment demand projections for the utility's planning area and an impact fee model, if applicable, for commercial, industrial and residential rate structures; and

10. A threshold rate set to ensure proper water system operation and maintenance; if the potential exists for the project sponsor to transfer *any* of the system proceeds to other funds, rates must be set higher than the threshold rate to facilitate the transfer and maintain proper operation of the system.

Fiscal Sustainability represents the accounting and financial planning process needed for proper management of system assets. It assists in determining such things as:

a. Asset maintenance, repair, or replacement cost
b. Accurate and timely capital improvement project budgeting
c. Forecasting near and long-term capital improvement needs
d. Whether the system is equipped for projected growth
e. Whether adequate reserves exist to address emergency operations.

Fiscal sustainability analysis requires a thorough understanding of the system's assets' current condition and needs. Therefore, fiscal sustainability follows asset management and is improved by sound asset management. Conversely, asset management requires a healthy fiscal outlook, since servicing and care of current assets is not free. Timely expenditures for proper servicing and care of current assets are relatively small when compared to repair and replacement expenditures that inevitably occur with component failure due to neglect.

Having a solid AMFS plan in place will benefit the system in determining which assets are to be insured and for what amount, and to more effectively and efficiently identify its capital improvement needs and solutions. Additionally, the State Revolving Fund (SRF) requires a system to adopt and implement an AMFS plan to qualify for loan interest rate reduction if funding is sought. An AMFS helps a system more effectively and efficiently identify its capital improvement needs and solutions.

This AMFSP's intended approach is to assist the Town of Welaka with conducting a basic inventory and condition assessment of its current assets. It is expected that the system will periodically re-evaluate the condition of its assets, at least annually, to determine asset remaining useful life. A reminder can be established for staff that a given component is nearing time for servicing, repair, or replacement. Furthermore, major capital improvement needs can be reassessed periodically as they are met or resolved. In short, **this plan is not designed to be set in stone, but is intended to be a living, dynamic, evolving document**. It is recommended that the system conduct at least an annual plan review and revise it as necessary throughout the year, resulting in a practical and useful tool for staff.

2. Asset Management Plan

Components of Asset Management

Asset Management can be described as 'a process for maintaining a desired level of customer service at the best appropriate cost.' Within that statement, 'a desired level of service' is simply what the utility wants their assets to provide. 'Best appropriate cost' is the lowest cost for an asset throughout its life. The goal is providing safe, reliable service while at the same time being conscious of the costs involved both short and long term.

Asset Management includes building an inventory of the utility's assets, developing and implementing a program that schedules and tracks all maintenance tasks, generally through work orders, and developing a set of financial controls that will help manage budgeted and actual annual expenses and revenue. By performing these tasks, targeting the system's future needs will be much easier.

Asset Management provides documentation that helps the utility understand the assets they have, how long these assets will last, and how much it will cost to maintain or replace these assets. The Plan also provides financial projections which show the utility whether rates and other revenue mechanisms are sufficient to supply the utility's future needs, 5, 10, even 20 years ahead.

Asset Management is made up of five core questions:

1. What is the current status and condition of the utility's assets?
2. What is Level of Service (LOS) required?
3. What assets are considered critical to meeting the required LOS?
4. What are the utility's Capital Improvement Program Plan (CIPP), Operations and maintenance plan (O&M), and asset's Minimum Life Cycle Cost strategies?
5. What is the utility's long term financial strategy?

Implementation

In developing this plan, FRWA has collected information on most of the water system assets. The information has been entered into Diamond Maps; a cloud based geographical information system (GIS). FRWA, in partnership with FDEP has contracted with Diamond Maps to develop Asset Management software specifically for small systems at an affordable cost

The software is easy to use, as it is set up for small communities and for water/wastewater systems. Since Town of Welaka has around 807 customers, the cost would be close to $30/month for unlimited users.

Meter Count	Unlimited Use Subscription
250	$15/month
500	$20/month
1000	$30/month
2000	$45/month
3000	$60/month
4000	$75/month
5000	$90/month
10,000	$165/month

There is no obligation to continue this service if the Town of Welaka desires to purchase alternative software. Diamond Maps can be explored at http://diamondmaps.com. If the system decides to use Diamond Maps as their asset management tool, it will be easy to move the data collected by FRWA to the system's account.

Having an asset management tool to keep data current is essential for tracking the utility's assets into the future, to assist with planning and funding for asset rehabilitation or replacement, to schedule and track asset maintenance by issuing work orders and assigning tasks to personnel who will perform the work and update in the system.

In addition to the CMMS tool, Diamond Maps, the Florida Rural Water Association (FRWA) has partnered with the Florida Department of Environmental Protection (FDEP) State Revolving Loan (SRF) program and Raftelis Financial Consultants to create an online financial tracking and revenue sufficiency modeling tool, RevPlan.

RevPlan is designed to enhance asset and financial management for small/medium Florida water and wastewater utilities. It provides a free-to-member online tool to achieve financial resiliency, and to maintain utility assets for long-term sustainability. Additionally, RevPlan is programmed to populate asset information directly from Diamond Maps.

By inputting your accurate budgetary, operation and maintenance costs, capital improvement plan costs, existing asset and funding information, this tool assists the user in identifying any rate adjustments and/or external funding necessary to meet the utility finance requirements, and the impact rate increases/borrowing may have on customers.

There are a few important elements of a successful RevPlan outcome:

- The tool is only as accurate as the information used.
- One person should be assigned the task of annual RevPlan updates.
- Updating asset information in Diamond Maps is essential.

FRWA staff has entered a preliminary model into RevPlan to help the utility get started. The assets collected along with financial information provided by the system were entered to create the model. Each year (or as projects come about) the system is encouraged to update RevPlan and use it to help understand the impacts of future projects and rate increases. Details from the model are located in the financial section of the plan.

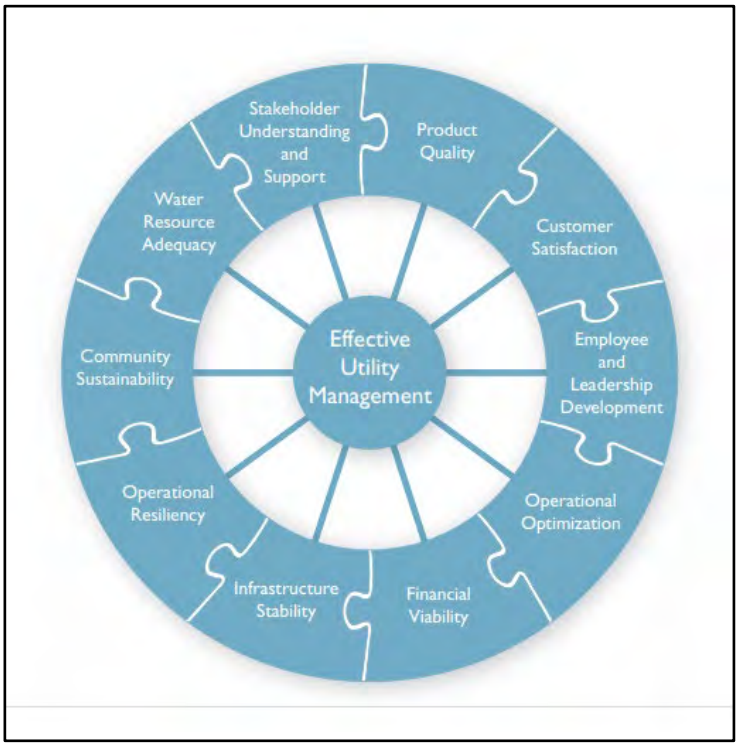
Level of Service (LOS)

As a provider of water services, a utility must decide what Level of Service (LOS) is required for its customers. When setting these goals, most importantly, the utility must decide the level of service it will provide. Ideally, these goals would be conveyed to the utility's customers via a 'Level of Service Agreement'. This document demonstrates the utility's accountability in meeting the customer's needs and its commitment to do so. There are four key elements regarding LOS:

1. Provide safe and reliable water service while meeting regulatory requirements;
2. Budget improvement projects focused on assets critical to sustained performance based on sound operational and financial planning;
3. Maintain realistic rates and adjust as necessary to ensure adequate revenue reserves for targeted asset improvement; and,
4. Ensure long-term system resilience and sustainability.

Targets must be set for individual parameters. Metrics should be created to help the utility direct efforts and resources toward predetermined goals. The established goals must include consideration of costs, budgets, rates, service levels, and level of risk. These goals are set in an agreement between the utility and its customers.

In 2008, a unique coalition representing the "Collaborating Organizations," which include the U.S. Environmental Protection Agency and a growing number of major water sector associations supported an approach developed by water sector leaders for water utility management. The approach is based around the Ten Attributes of an Effectively Managed Utility and Five Keys to Management Success—known as Effective Utility Management (EUM). These Attributes provide a clear set of reference points and are intended to help utilities maintain a balanced focus on all important operational areas rather than reactively moving from one problem to the next or focusing on the "problem of the day."



The Ten Attributes of an Effectively Managed Utility provide useful and concise goals for water sector utility managers seeking to improve organization-wide performance. The Attributes describe desired outcomes that are applicable to all water and wastewater utilities. They comprise a comprehensive framework related to operations, infrastructure, customer satisfaction, community sustainability, natural resource stewardship, and financial performance.

Water and wastewater utilities can use the Attributes to select priorities for improvement, based on each organization's strategic objectives and the needs of the community it serves. The Attributes are not presented in a particular order, but rather can be viewed as a set of opportunities for improving utility management and operations.

To begin, the utility will assess current conditions by ranking the importance of each Attribute to the utility, based on the utility's vision, goals, and specific needs. The ranking should reflect the interests and considerations of all stakeholders (managers, staff, customers, regulators, elected officials, community interests, and others). Once you have chosen to improve one or more Attributes, the next step is to develop and implement a plan for making the desired improvements. Improvement plans support the implementation of effective practices in your chosen attribute area(s). An effective improvement plan will:

1. Set Near- and Long-term Goals: Set goals as part of the improvement plan to help define what is being worked toward. Near- and long-term goals for the utility should be linked to the strategic business plan, asset management plan, and financial plan. Goals should also be "SMART."

    - **S – Specific**: What exactly will be achieved? Make the goals specific and well defined. Each goal should be clear to anyone with even a basic knowledge of the utility.

    - **M – Measurable**: Can you measure whether you are achieving the objective? You must be able to tell how close you are to achieving the goal. You must also be able to determine when success is achieved

- **A – Assignable and Attainable**: Can you specify who is responsible for each segment of the objective? Is the goal attainable? Setting a goal to have zero water outages is great, but unrealistic. A better choice might be to set a goal that states no outage will exceed six hours.

- **R – Realistic**: Do you have the capacity, funding, and other resources available? The staff and resources of the utility must be considered when setting goals. Available personnel, equipment, materials, funds, and time play a role in setting realistic targets.

- **T – Time-Based**: What is the timeframe for achieving the objective? There must be a deadline for reaching the goal. Adequate time must be included to meet the target. However, too much time can lead to apathy and negatively affect the utility's performance.

2. Identify Effective Practices: Each Attribute area for improvement will be supported by effective practices implemented by the utility. A substantial number of water sector resources exist that detail effective utility practices for each of the Attributes.

3. Identify Resources Available and Resources Needed: For each practice/activity to be implemented as part of the improvement plan, identify resources (financial, informational, staff, or other) that exist on-hand, and those that are needed, to support implementation.

4. Identify Challenges: For the overall improvement plan and for specific practices/activities to be implemented, identify key challenges that will need to be addressed.

5. Assign Roles and Responsibilities: For each improvement action, identify roles and responsibilities for bringing the implementation to completion.

6. Define a Timeline: Establish start date, milestones, and a completion target for each activity/improvement action.

7. Establish Measures: Establish at least one (or more) measure of performance for items to be implemented under the improvement plan.

More information and resources on Effective Utility Management (EUM) can be found at www.WaterEUM.org.

The idea is to set goals and meet them. Reaching the goals should not be overly easy. Effort should be involved. The goals should target areas where a need exists. If the bar is set too low, the process is pointless. Most importantly, the utility must decide the level of service it will provide. The following table shows examples of what might be included as Level of Service goals. The LOS items for the Town of Welaka must be specific to the system and ideally, conveyed to the utility's customers a 'Level of Service Agreement'. This document demonstrates the utility's accountability in meeting the customer's needs and its commitment to do so.

Town of Welaka Drinking Water (DW) Level of Service Goals			
Attribute and Service Area	**Goal**	**Performance Targets**	**Timeframe/ Reporting**
Service Delivery - Health, Safety and Security	Reduce "down time" for water outages and reduce the number and duration of Boil Water Notices	Provide water distribution employees with training necessary to be proactive in water system maintenance and to rapidly and efficiently make emergency water system repairs.	Annual report to Mayor, Utility Supervisor
Infrastructure Stability - Asset Preservation and Condition	Improve system wide preventive maintenance (PM)	Develop a comprehensive Preventive Maintenance weekly schedule for equipment and water system components (including valve exercising) and complete all preventative maintenance tasks as scheduled.	Monthly report to Supervisor / Mayor
Infrastructure Stability - Asset Preservation and Condition	Establish a Predictive Maintenance Schedule (PdMS)	Develop a weekly PdMS to continuously monitor equipment for signs of unexpected problems. Adjust the PdMS as needed.	Weekly report to Director/ Monthly report to Utility Supervisor
Infrastructure Stability - Asset Preservation and Condition	Develop an Asset Replacement Strategy	Develop an asset replacement strategy to be updated at least annually, including financing options.	Monthly report to Mayor/ Annual Report to Manager and Board
Financial Viability - Service Quality and Cost	Assure that the utility is financially self-sustaining.	Perform an annual utilities rate analysis and make any needed rate adjustments every three to five years.	Annual Report to Mayor , Clerk, and Board
Financial Viability – Service Quality and Cost	Enact automatic inflationary rate adjustments	Annual evaluation of the adequacy of inflationary rate adjustments	Mayor , Clerk, and Board
Financial Viability - Service Quality and Cost	Minimize Life of Asset Ownership costs	Bi-annual evaluation of unexpected equipment repairs compared to the Preventive Maintenance Schedule (PMS). Adjust the PMS if warranted.	Mayor , Clerk, and Board
Infrastructure Stability - Conservation, Compliance, Enhancement	Improve reliability of water distribution through the distribution system	Annual evaluation of the water distribution system, including piping, valves, and fire hydrants. Develop a long-range plan for replacements and improvements with timelines and funding options.	Monthly report to Mayor/ Annual report to Clerk and Board

Best Management Practices (BMP)

Utility owners, managers, and operators are expected to be responsible stewards of the system. Every decision must be based on sound judgment. Using Best Management Practices (BMPs) is an excellent tool and philosophy to implement. BMPs can be described as utilizing methods or techniques found to be the most effective and practical means in achieving an objective while making optimum use of the utility's resources.

The purpose of an Asset Management and Fiscal Sustainability plan is to help the utility operate and maintain their system in the most effective and financially sound manner. An AMFS plan is a living document and is not intended to sit on a shelf. It must be maintained, updated, and modified as conditions and situations change. Experience will help the utility fine tune the plan through the years.

3. System Description

Overview

Welaka is a town situated on the St. Johns River in Putnam County, Florida, United States. The town is part of the Palatka Micropolitan Statistical Area. Welaka is approximately 90 miles south of Jacksonville and is accessible by highway or the Atlantic Ocean via the St. Johns River. It is located at 29°28'54"N 81°40'18"W (29.481556, –81.671555). The present Mayor is Jamie D. Watts, who assumed office on March 5, 2021.

It is not known when the area was first settled, but the nearby Mount Royal archaeological site is a possible remnant of a Timucua Indian village from c. 1250 CE to 1500 CE, and may have a connection to the town of Enacape, an important center of the Utina tribe.

The Town of Welaka was incorporated in 1887. By 1907, Welaka was famous for its "healing waters" which could possibly come from a subterranean spring located 329 feet below ground level and bottled for sale to tourist. The Mineral Water Company established in 1907 claimed that physicians reported that Welaka's healing waters were able to cure ailments as a result of stimulating the biliary circulation modifying conditions believed to be incurable. Welaka use to have grape vines and orange groves until the "Big Freeze" in 1895. Thankfully the town was able to recover due to its abundant fishing industry which is still thriving today.

Based on the 2020 census data, the total population was 714 for the area that is incorporated into the Town of Welaka. The average household size is 2.5. The median income per household is $44,167.00.

The Drinking Water system currently is comprised of 752 metered connections to the system's water supply. The water is supplied from three wells in service located on Persimmon and Citrus

Circle. The system's designed storage capacity is 776,000 gallons. There is an old water system located outside of the town that is offline currently.

Water Treatment is achieved by the use of the following process: Hypochlorination, aeration, and polyphosphate for iron/manganese control.

Form of Government

The Town of Welaka's Town Council is composed of a Mayor and four Council members who are elected. The Mayor serves a term of four years and the council members serve two years. The Town Council is the legislative body of the town with the power to adopt ordinances (including the annual budget), resolutions and regulations governed by the town's charter which is the driving document behind the procedures governing the Town Councils actions. The council meets the second Tuesday of every month at 6:00pm. All meetings are open to the public.

Government and Management

Town of Welaka	
Jamie Watts	**Mayor**
Jessica Finch	**Council President**
Marianne Milledge	**Council Member**
Kathy Washington	**Council Member**
Tonya Long	**Council Member**

Water Staff

The success of the Town of Welaka Public Works Department results from the partnerships among its divisions and the diverse skills and unselfish contributions of their respective staff. The Town of Welaka Public Works Department is staffed by 9 fulltime employees and managed by the Mayor and Utilities Supervisor. FRWA appreciates the assistance of those employees that helped in the preparation of this Plan.

Name	Department
Tylor Buford	Utility Supervisor
Two-Fold (Outside Contractor)	Water Plant Operator
Pauline Kinney	Utility Worker/Code Enforcement Officer
John Stuart	General Department Supervisor
Kendra Welch	Utilities Clerk
Meghan Allmon	Town Clerk
Open Position	Utility Worker
Alfred Johnson Jr.	General Worker
Michael Scott	General Worker

System Components

The System's water is supplied from three wells located on Citrus Circle. There are also two wells located on West Main Street that are currently under evaluation to be placed online to accommodate current projected growth. The System has a capacity of 776,000 gallons with an average daily demand of 0.094 MGD and a maximum daily demand of .112 MGD and is not to exceed .223 MGD or a yearly use of 81.7 MG allowing for incremental growth increase every five years (SJRWMD permit # 8168). The Drinking Water system currently is comprised of 807 metered connections to the system's water supply. There is an old water system located outside of the town that is offline currently.

Water Treatment is achieved by the use of the following process: Hypochlorination, aeration, and polyphosphate for iron/manganese control. Storage components for water equal .764 gallons. These include the following:

Name	Capacity	Material
Ground Storage Tank (2008)	132,000 Gallons	Steel
Ground Storage Tank (2008)	132,000 Gallons NOT IN SERVICE	Steel
Elevated Tank (1963)	500,000 Gallons	Steel
Hydropneumatic Tank	50,000 Gallons NOT IN SERVICE	Steel
Hydropneumatic Tank	10,000 Gallons NOT IN SERVICE	Steel
Hydropneumatic Tank	3,000 Gallons	Steel

The chlorinated storage tanks are required to be inspected regularly which at this time only includes the 500,000 gallon Elevated Tank. The required 2022 inspection was completed by Learly Construction in June of 2022. The report showed that tank was in good working order. The interior was sandblasted, primed and repainted; the exterior was touched up in some areas. The prior inspection for the 500,000-gallon elevated tank was in 2017 and reported to be in good condition and no anomalies were detected. The two 132,000 Gallon Ground Storage Tanks, one of which is not currently in service, do not require inspection due to currently being used for storage of raw water. While neither tank is required to be officially inspected both tanks should be drained and properly cleaned during the fiscal year of 2022-2023 and annually thereafter. There are three Hydropneumatic tanks located at Citrus Way. These Hydropneumatic tanks were converted by the previous operation staff to operate outside of their intended purpose in 1993. The 50,000 gallon and 10,000 gallon tank are currently empty, and the 3,000 gallon tank installed in 1995 is full of raw water that is transferred to the Ground Storage Tank in operation. It is this evaluator's recommendation that these Hydropneumatic tanks be removed and replaced with direct piping from well #1 and Well #2 to the ground storage tanks. Due to their above mentioned capacity these tanks are not significantly adding to the capacity of the facility, and not a part of the official capacity of the facility. These tanks potentially increase cost and possible equipment failure. The installation of direct piping would benefit the facility aesthetic appeal as well as increase efficiency.

The distribution system was installed in the 1960's and 1970's, there have been some upgrades of valves and fire hydrants in the 1990's. The system is comprised of various materials. The piping sizes range primarily from two inches to ten inches used in the transmission of the finished water. The treatment process is achieved through Hypochlorination, aeration, and polyphosphate for iron/manganese control.

According to the last sanitary survey there have been no recent MCL violation. The sanitary survey does however indicate that once the population served increases to over 2,500 the system must begin to perform three distribution samples rather than the current two. NO1's, NO2's and DBP's are due annually. Pu-Cu are due tri annually and should be collected between June and September of 2023. Inorganics, asbestos (or submitted approved asbestos waiver), secondary's, VOC and SOC are due in 2024.

The latest consumer confidence report from 2020, indicates that the water quality and plant equipment were both satisfactory and met all standards. An engineering evaluation is currently underway on the Water Plant located on West Main to determine what is needed to bring the plant back online. Once recommendations are received, a forecast model may be created utilizing Revplan to see potential impacts on current and future budgets.

4. Current Asset Conditions

Assets Critical to Sustained Performance

The System's water utility is composed of ***critical infrastructure***. The utility provides essential services for the community. Proper provision of these services protects the public health and the environment. The Florida Department of Environmental Protection has strict requirements for the proper operation and maintenance of the utility system, and the System is responsible for meeting these requirements.

Every water and wastewater system are made up of assets. Some you can see, while some you cannot. These are the physical components of the system, such as blowers, pumps, valves, pipes, tanks, motors, manholes, and buildings. Each is important in its own way and serves a function to make the system operate as it should.

One trait common to all assets is that they lose value over time. With age comes deterioration; with deterioration comes a decreased ability to provide the level and type of service the utility should give to its customers. Another trait common to assets is that they must be maintained. Maintenance costs increase as these assets age. Operation costs can rise with age as equipment becomes worn and less efficient. At some point, it is wiser to replace components rather than continue with more frequent and costly repairs. Failed or failing equipment can cause inadequate treatment, customer complaints, and damage to private property, negative environmental impacts, permit violations, and regulatory fines.

Another unfortunate reality is that all assets will ultimately fail, and if not properly maintained, some will fail prematurely. How the utility manages the consequences of these failures is vital. Not every asset presents the same failure risk. Not every asset is equally critical to the performance of the utility.

Factors that contribute to asset failure are numerous and include age, environment (e.g., weather, corrosive environments), excessive use and improper or inadequate maintenance.

Replacement versus rehabilitation is always a consideration. What is best for the utility? What is best for the customer? The proper decision must be made based on information gleaned from all available resources.

Implementing a Computerized Maintenance Management System (CMMS) will ensure the System's assets last longer, perform better, and provide more reliable service. Utilizing data contained in Diamond Maps, maintenance schedules can be created following both manufacturer's recommendations as well as those of industry professionals. Work orders should be created and scheduled to ensure that work is assigned and completed. Tracking and recording maintenance tasks encourage accountability of staff assigned to maintain the equipment. Diamond Maps can do this for you and is included with an active account. FRWA staff can assist the System in creating these schedules as well as provide training in Diamond Maps.

Water Production Facilities

At the facility located on Citrus Way the Town of Welaka currently has in service three active wells, one elevated tank, one ground storage tank and one Hydropneumatic tank. A Ground storage tank and a Hydropneumatic tank are currently not in use. The water system production facility currently online and servicing the public is in overall average condition

An offline facility located on Old Welaka Road, there are two inactive wells with one Hydropneumatic tank. These assets are currently under evaluation by an engineering company to be placed back online. Located at the offline facility are two wells – Well #3, Well # 4 and a Hydropneumatic tank. Due to this facility being offline for several years there is no current information available until completion of the engineering evaluation that is currently in process.

At the online facility located at Citrus Way are the following major components: Well #1 is a 4 inch well that was drilled in 1990 to a depth of 102 feet and cased to 62 feet. Pumping 250 gpm. It is used as a backup well. Its components are in poor to average condition and some components require rehabilitation. Due to age, replacement of this well should be prepared for in the upcoming future. Well #1 is tied in with Well #2 which was constructed in 1989 to a depth of 160 feet and cased to 60 feet. Well #2 pumps 65 gallons per minute. Well # 2's pump was replaced in 2006. Its components are in poor to average condition and require some minor rehabilitation or repairs. Replacement of this well should also be considered to begin on or before 2037. The wells are nearing the end of their useful life, regular maintenance and upkeep of the equipment will help to ensure continued usefulness.

Well #1 and Well #2 (Citrus Way) require some minor rehabilitation and are over half past their life usefulness.

Well # 5 is a 6 inch well drilled in 2006 at a depth of 135 feet. This well is utilized as the main well and produces 500 GMP. The components of this well are in average condition and require little rehabilitation.

There are Hydropneumatic tanks on site that are not in use, and do not appear on facility schematics therefore it is this evaluator's recommendation that removal is required. The town should engage a registered engineer to develop plans to remove the tanks and modify the plant piping. The two Ground Storage Tanks have not been inspected nor serviced in several years. Though not required by DEP, the tanks should be inspected regularly to ensure their structural integrity and remaining useful life. The current Elevated tank is reported by engineer to be in good to average operating condition. The electrical components, chemical feeders and generator are in average to good condition.

During the assessment of the production assets the items that were found to be in poor or failed condition are as follows:

Asset Name	Condition	Reported Issue
Well #1	Poor	Rust, poor production capability, evidence of leaks, require painting, requires engineering evaluation
Well #2	Poor	Rust, poor production capability, evidence of leaks, require painting requires engineering evaluation
High service pump # 3	Failed	Off-line needs replaced
Ground Storage Tank	Unknown	Requires cleaning and inspected if intention is to utilize for chlorinated water
Ground Storage Tank	Unknown	Requires cleaning and inspected if intention is to utilize for chlorinated water
3000 Gallon Hydro Tank	Failed	Not utilized as Hydro tank rather as raw water storage, not present on schematics, requires removal by qualified vender
10000 Gallon Hydro Tank	Failed	Not utilized as Hydro tank currently empty, not present on schematics, requires removal by qualified vender
50000 Gallon Hydro Tank	Failed	Not utilized as Hydro tank currently empty, not present on schematics, requires removal by qualified vender

Online Water Facility

Offline Water Facility

Hydrants

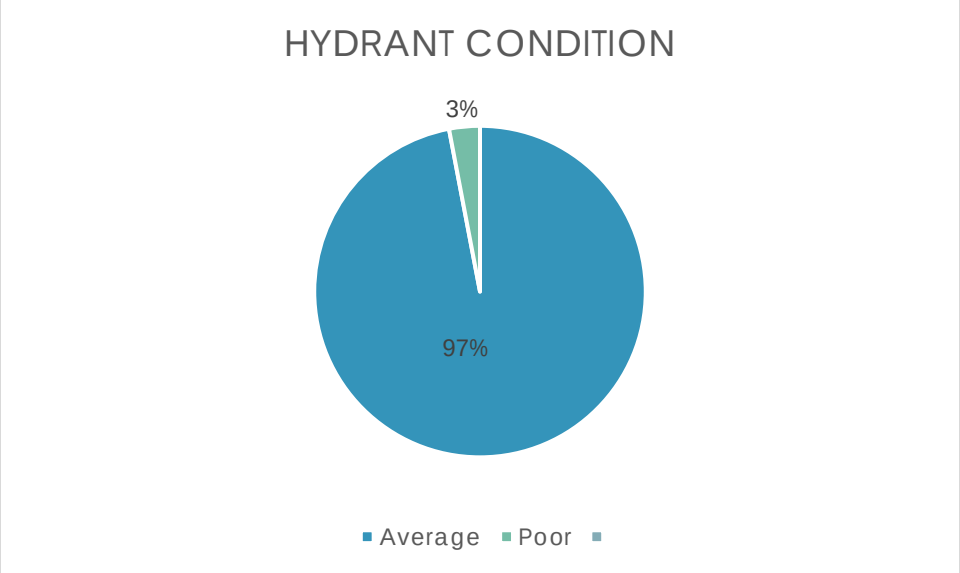
FRWA assessed all of the known 45 fire hydrants. The majority of the hydrants assessed were in average working order and did not require any need for repairs. The majority of the Hydrants were installed in the 1990's and early to mid-2000's and have a design life of 50 years with continued preventative maintenance such as an exercising plan, rust removal, painting, chain repair, gasket replacement and regular routine maintenance to include spot checking for leaks or other minor deficiencies. The system could expect to utilize the current 45 hydrants for their full life expectancy.

Preventative maintenance is key to preserving this equipment.

The fire hydrants serve as a critical tool for firefighting and flushing water from dead-end lines. The hydrants should be inspected and exercised at least annually. The flow should be measured and recorded for each hydrant. Records of the flows and dates assessed and exercised can then be updated into Diamond Maps to create a historic data base and a good record of work that has been or needs to be done. The work order feature in Diamond Maps may be utilized for the task of creating a hydrant maintenance and exercising program.

During the course of the assessment, FRWA assessed 45 hydrants. Of these:

- 44 hydrants were in average condition (97%) – Minor to moderate corrosion, broken chains, and minor leaks during flushing, needs painting and/or minor maintenance deficiencies.
- 1 Hydrant in poor condition (3%)-Tilted



Hydrant ID	Condition	Reported Issue	GPS Location	GPS Location
Hydrant - 18	Poor	Tilted has been obstructed by outside force	29.4862943	-81.6714392

Poor condition hydrants need to be serviced, repaired or replaced within two years. A minimum of $3,500 should be budgeted for each hydrant replacement and an additional $1,200 for hydrants without valves or valves that have failed. This amount at a minimum should be budgeted for hydrant replacements until all hydrants have been repaired or replaced that are in a failed or poor condition. Poor condition hydrants need to be evaluated and repaired as needed. In some instances, the repair may be as simple as adding grease, while other repairs may include rebuilding or placing the hydrant above grade. A minimum of $500 should be placed aside for repair of each hydrant rated as poor.

For future assessments of the hydrants, a flow test should be performed annually, and a report should be presented to the System with the findings. Typically, this is done by the local or county fire departments. Having the hydrants flow tested is a crucial piece of information needed for

fire protection. Simply flowing the hydrant is not the same as a flow test. A special meter must be used to accurately measure the flow and gallons per minute (gpm) for each hydrant.

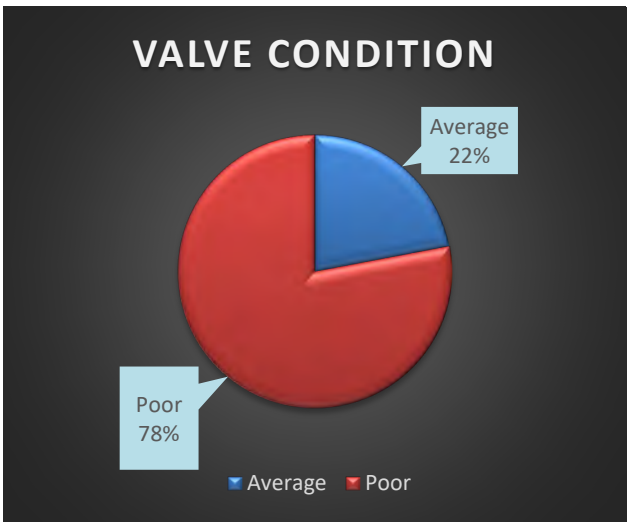
It is recommended that the System replace or repair the poor condition hydrant in year one and develop an annual hydrant replacement program.

- **Estimated cost to repair 1 poor condition hydrants: $3500.**

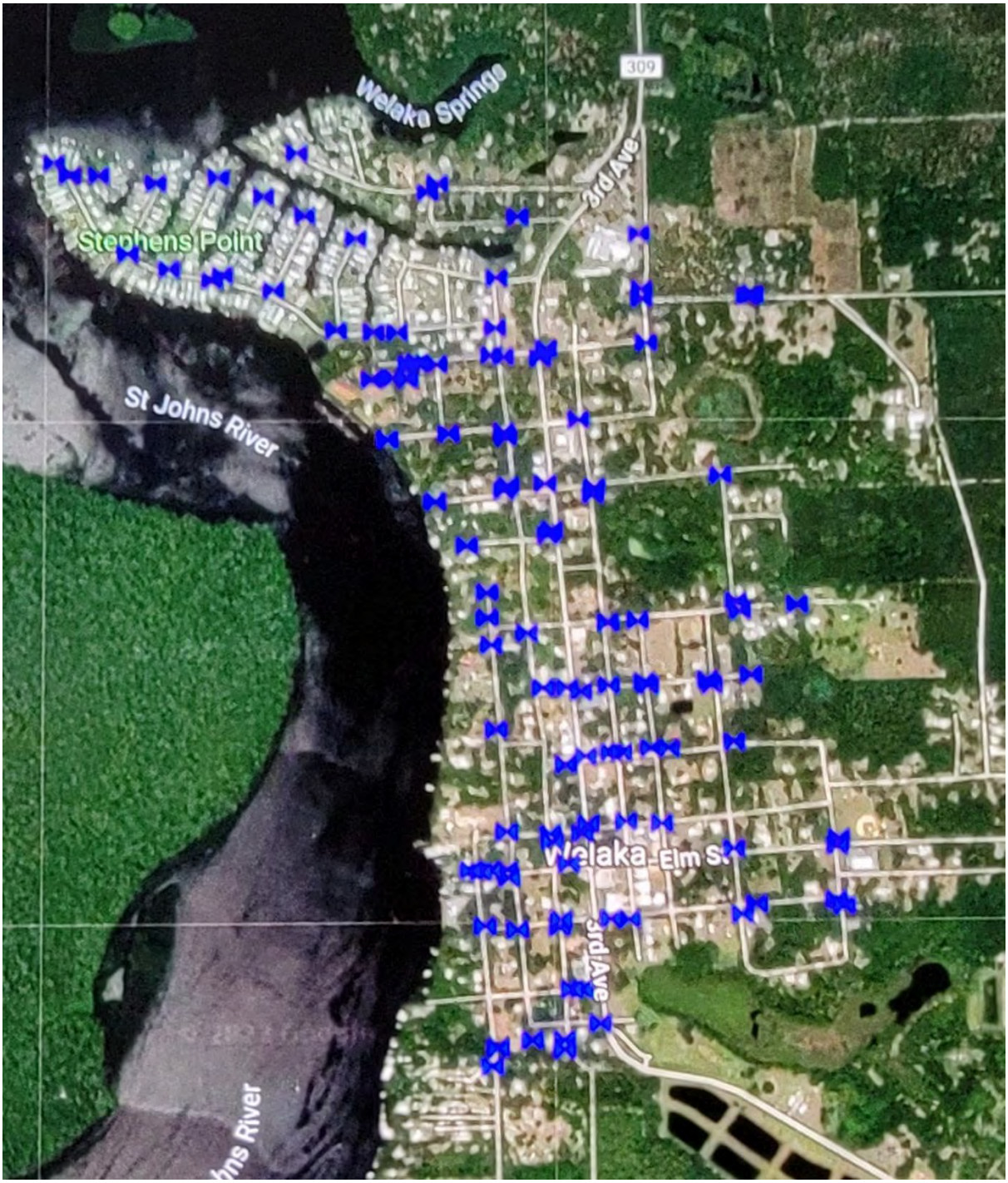
System and Hydrant Valves

A total of 128 System Valves and 35 Hydrant Valves were collected and assessed by FRWA. During the course of the assessment:

- 25 system valves were in average condition
- 103 system valves were in poor condition
- 12 Hydrant Valves were in average condition
- 23 Hydrant Valves were in poor condition



SYSTEM VALVE MAP



HYDRANT VALVE MAP

FDEP requires a valve exercising program be administered where all valves are turned in accordance with manufactures requirements, Quarterly is ideal. Doing this will not only extend the life span of the valves but will help ensure that they are operational in a time of need. As the System begins exercising, repairing and replacing valves, the ratings can be updated in Diamond Maps. Notating in Diamond Maps valves that are not operational and those that require repairs or replacement is useful information when they are used during emergencies and flushing programs.

Water valves used for the isolation of water are a crucial asset when dealing with water line breaks and to help direct flushing of clean water to a certain point or side of the system. These valves have a life span of 25 years or more and can continue to remain operational after that with

proper exercising. During exercising, valves can be assessed or evaluated by closing off valves and checking flows at hydrants and other flush points. Some valves are required to be turned up and down multiple times if not exercised, to properly operate. While exercising valves, it is good practice to have a flush point open if possible (hydrant or other flushing device fitting), to help wash out the buildup and deposits that form inside the seat of the valve.

Most of the system valves were installed in the 1970's and 1980's and have since been paved over or buried. Any valve that has not been utilized in that time frame should be dug up and assessed (replaced if necessary). Those that were located had been installed in the 1990's and used regularly by staff and still in operating condition. Most buried valve locations were confirmed with metal detector however they were more than 6 inches underground. After speaking with staff, who confirms that theses valves have not been operated in years, it is this evaluators recommendation that the below listed valve be replaced to ensure efficiency of the system during emergency water shut off situations or directional flushing.

System Valve ID	Condition	Reported Issue	GPS Location Latitude	GPS Location Longitude
5	Poor	Buried	29.4921446	-81.6795736
6	Poor	Buried	29.4917804	-81.6785812
7	Poor	Buried	29.490655	-81.6815584
8	Poor	Buried	29.4903562	-81.6806733
9	Poor	Buried	29.4902301	-81.6795092
10	Poor	Buried	29.4913975	-81.6776799
12	Poor	Buried	29.4909445	-81.6765802
13	Poor	Buried	29.4891562	-81.6770094
17	Poor	Buried	29.4891141	-81.6761886
20	Poor	Buried	29.4891842	-81.6735386
21	Poor	Buried	29.4884838	-81.6748207
22	Poor	Buried	29.4884791	-81.6754215
23	Poor	Buried	29.4886612	-81.6736298
24	Poor	Buried	29.4886425	-81.6733616
25	Poor	Buried	29.4926288	-81.6778708
26	Poor	Buried	29.491835	-81.6749954
27	Poor	Buried	29.4920311	-81.6747809
29	Poor	Buried	29.4910225	-81.6703498
30	Poor	Buried	29.4899299	-81.6703069
31	Poor	Buried	29.4897711	-81.6703177
32	Poor	Buried	29.4887719	-81.6724312
33	Poor	Buried	29.4885944	-81.6725493

System Valve ID	Condition	Reported Issue	GPS Location Latitude	GPS Location Longitude
System Valve ID	Condition	Reported Issue	GPS Location Latitude	GPS Location Longitude
35	Poor	Buried	29.4871469	-81.6745448
36	Poor	Buried	29.4870348	-81.6758967
38	Poor	Buried	29.4870815	-81.673311
39	Poor	Buried	29.487399	-81.6717338
40	Poor	Buried	29.4858487	-81.6748667
41	Poor	Buried	29.4860262	-81.6733754
42	Poor	Buried	29.4861808	-81.6724527
43	Poor	Buried	29.4861102	-81.6714013
44	Poor	Buried	29.4859515	-81.6714227
46	Poor	Buried	29.4849895	-81.6741693
47	Poor	Buried	29.485167	-81.6723991
48	Poor	Buried	29.4852884	-81.6723132
49	Poor	Buried	29.4838781	-81.6683436
50	Poor	Paved Over	29.4837194	-81.6682363
54	Poor	Buried	29.4832804	-81.6728711
56	Poor	Buried	29.4840929	-81.6737616
57	Poor	Buried	29.4835886	-81.6737509
58	Poor	Buried	29.4830563	-81.6736758
59	Poor	Buried	29.4822344	-81.67256
60	Poor	Buried	29.4822344	-81.672045
61	Poor	Buried	29.482169	-81.6717124
62	Poor	Buried	29.4822718	-81.6711223
63	Poor	Buried	29.4823558	-81.6703713
64	Poor	Buried	29.4822718	-81.670264
65	Poor	Buried	29.4823932	-81.6689658
67	Poor	Buried	29.4824866	-81.6680431
68	Poor	Buried	29.4838314	-81.6670239
69	Poor	Buried	29.4814592	-81.6735578
70	Poor	Buried	29.4808137	-81.6720711
71	Poor	Buried	29.4809495	-81.6716426
72	Poor	Buried	29.4810056	-81.6710954
74	Poor	Buried	29.4811083	-81.6702156
75	Poor	Buried	29.4810803	-81.6698401
77	Poor	Buried	29.4795371	-81.6733413

System Valve ID	Condition	Reported Issue	GPS Location Latitude	GPS Location Longitude
78	Poor	Buried	29.4795205	-81.6733586
79	Poor	Sealed Shut	29.4795005	-81.6723987
System Valve ID	**Condition**	**Reported Issue**	**GPS Location Latitude**	**GPS Location Longitude**
80	Poor	Buried	29.4793207	-81.6723593
81	Poor	Buried	29.4794982	-81.6717263
82	Poor	Buried	29.4796618	-81.6715805
83	Poor	Buried	29.4797182	-81.6707833
84	Poor	Buried	29.4796757	-81.6699882
85	Poor	Buried	29.4791993	-81.6684433
86	Poor	Buried	29.4793861	-81.6662009
87	Poor	Buried	29.4792367	-81.6662117
88	Poor	Buried	29.4782093	-81.6662653
89	Poor	Buried	29.4781066	-81.6661044
90	Poor	Buried	29.4781252	-81.6679926
92	Poor	Buried	29.4778731	-81.6707178
94	Poor	Buried	29.4789191	-81.6720053
96	Poor	Buried	29.4788164	-81.6733463
97	Poor	Buried	29.4786576	-81.6733249
98	Poor	Buried	29.4787977	-81.6737004
99	Poor	Buried	29.4787603	-81.6739042
100	Poor	Buried	29.4788257	-81.6741081
101	Poor	Buried	29.4777797	-81.6738184
102	Poor	Buried	29.477712	-81.6731437
103	Poor	Buried	29.4776907	-81.6731365
104	Poor	Buried	29.47774	-81.6722413
105	Poor	Buried	29.4778987	-81.6721876
106	Poor	Buried	29.4778987	-81.6711255
107	Poor	Buried	29.4765911	-81.6717799
108	Poor	Paved Over	29.4765725	-81.6719623
109	Poor	Buried	29.4759467	-81.671383
110	Poor	Buried	29.4756478	-81.6721662
111	Poor	Buried	29.4756291	-81.6728314
112	Poor	Buried	29.4755438	-81.6735773
113	Poor	Buried	29.4754947	-81.6735907
114	Poor	Buried	29.4897813	-81.6679972

System Valve ID	Condition	Reported Issue	GPS Location Latitude	GPS Location Longitude
115	Poor	Buried	29.4898233	-81.667863
118	Poor	Buried	29.4861262	-81.6732523
120	Poor	Buried	29.4754679	-81.6721671
124	Poor	Buried	29.4881792	-81.6754724
Hydrant Valve ID	**Condition**	**Reported Issue**	**GPS Location Latitude**	**GPS Location Longitude**
125	Poor	Buried	29.4882406	-81.6757535
132	Poor	Broken	29.4806271	-81.644008
136	Poor	Buried	29.4807523	-81.6441951
138	Poor	Buried	29.4901336	-81.679719
139	Poor	Buried	29.4863373	-81.6686347
1	Poor	Buried	29.4788878	-81.6722733
2	Poor	Buried	29.4850612	-81.6730417
3	Poor	Buried	29.4860686	-81.6734019
5	Poor	Buried	29.487498	-81.6715922
6	Poor	Buried	29.4872332	-81.6746299
7	Poor	Buried	29.4879708	-81.6751388
8	Poor	Buried	29.4881774	-81.6760655
9	Poor	Buried	29.4874063	-81.675815
10	Poor	Buried	29.4892627	-81.6735275
14	Poor	Buried	29.4901867	-81.6794028
15	Poor	Buried	29.490328	-81.6805266
16	Poor	Buried	29.49064	-81.6815162
17	Poor	Buried	29.4921546	-81.6828351
19	Poor	Buried	29.489819	-81.6680513
20	Poor	Buried	29.4778892	-81.6713458
21	Poor	Broken	29.4781005	-81.6682634
22	Poor	Buried	29.4784425	-81.6662002
23	Poor	Buried	29.4793971	-81.6650542
24	Poor	Buried	29.479426	-81.6733731
25	Poor	Buried	29.4796966	-81.6685574
26	Poor	Broken	29.4802418	-81.6663554
28	Poor	Buried	29.4863136	-81.6686832
29	Poor	Buried	29.4766434	-81.6737646
30	Poor	Buried	29.4808216	-81.6719058
31	Poor	Buried	29.4821212	-81.6726457

System Valve ID	Condition	Reported Issue	GPS Location Latitude	GPS Location Longitude
35	Poor	Buried	29.4804866	-81.6629651
39	Poor	Buried	29.4775184	-81.6566441

Estimated cost to repair 99 System valves in poor condition: TBD after buried valves are assessed and sizes verified.

- **Estimated cost to annually replace up to 25 System valves (6") throughout system: $30,000**
- **Estimated cost to replace 27 Hydrant valves in poor condition: $32,400**
- **Cost to evaluate, clean out and reset valve boxes: Free if done by system**
- **The valves listed as buried should be accessed and then reassessed to see if replacement if needed.**

4.2.4 Water Meters

The System currently has and maintains 752 residential and commercial meter connection. The guidelines for meter replacement varies from different manufactures but industry standards are set at replacement being done every 20 years or 1,000,000 gallons. Older meters slow down over time and lead to higher numbers of unaccounted for water and lost revenue. It is recommended that the System replace their meters with electronic meters that remotely transmit readings.

- **Estimated cost to replace all meters throughout the system (approximately 752 customers) : $300,000**

The numbers above are an illustration from a system that has went through a meter replacement project recently and incorporated newer technology that lets the system obtain meter readings remotely. The actual cost will vary by the vendor and technology that is chosen to best fit the Town's needs.

Water meters should be considered a critical component of the Town's revenue stream. Inaccurate meters can cost a system thousands of dollars over time. Therefore, making sure that meters are working properly, and replacing old and broken meters annually, is an industry standard and best management practice. Regular testing of large commercial/industrial meters (two inches and above) or meters installed at high use locations is also recommended. Meters testing below AWWA standards should be repaired or replaced ensuring accuracy and preventing lost revenue.

The Town has already begun to replace meters in the system. So far 152 meters have been changed out to the Zenner meter brand and will be capable of auto read when the Town gets the equipment needed. Out of these (1) is a 2" meter and the rest (151) are 3/4 "

4.2.5 Distribution System

The water distribution system was initially installed in the 1960's and 1970's and some updates performed in the 1990's. According to the system employees, the majority of the distribution pipes are in poor condition or obstructed by roots. The system is comprised of various materials ranging from two inches (2") to ten inches (10") piping. There have been numerous repairs, replacements and additions to the distribution system since it was installed. As lines begin to approach the end of their useful lives, many will begin to deteriorate making full repairs difficult. The combination of main breaks and system leaks have caused challenges for the system and in the future may cause higher than expected water loss.

As with most systems, water loss can be a significant portion of the water produced by a utility. The most commonly accepted maximum water loss is fifteen percent (10%) of water produced, with accepted ranges from 5% to 9%. While an assessment of the distribution piping was not conducted during this phase, the System should keep close records of the work conducted on the mains. This should include pictures of the interior of pipes, coupons when new taps are installed, and work orders of all service and main repairs. By compiling this data over the next few years, the System will be able to determine which areas of the distribution system need further evaluation and which may need replacement. This documentation can be compiled through the use of the work order component of Diamond Maps. The replacement of failing lines and older meters will help improve the System's water loss.

Regular maintenance, collecting coupons and documenting water main breaks and water quality complaints is a good way to monitor the existing conditions of the piping, as it is often difficult to adequately assess. This documentation will provide the System a good starting point on developing a replacement strategy for some of the older or problematic water mains. Issues like lead service line connections or lead poured joints are a common occurrence with older water mains and should be removed from service, as well as any asbestos pipe which also contain health risks.

It is recommended that The Town of Welaka work with FRWA to complete the initial steps of a water audit including conducting a leak survey, completing a data log of water use at the storage tanks and meter testing for accuracy. Other than the immediate recommendation for a valve replacement program found in Section 4.2.3, the system should begin a regular operational maintenance program, and plan for the replacement of specific lines following the creation of a Replacement Strategy or Capital Improvement Plan.

5. Operations and Maintenance Strategies (O&M)

O&M consists of preventive and emergency/reactive maintenance. The strategy for O&M varies by the asset, criticality, condition, and operating history. All assets have a certain risk associated

with their failure. This risk must be used as the basis for establishing a maintenance program to make sure that the utility addresses the highest risk assets. In addition, the maintenance program should address the level of service performance objectives to ensure that the utility is running at a level acceptable to the customer. Unexpected incidents could require changing the maintenance schedule for some assets. This is because corrective action must be taken in response to unexpected incidents, including those found during routine inspections and O&M activities. Utility staff will record condition assessments when maintenance is performed, at established intervals, or during scheduled inspections. As an asset is repaired or replaced, its condition will improve and therefore it can reduce the overall risk of the asset failing. This maintenance strategy should be revisited annually. Two important considerations in planning O&M strategies are:

- Unplanned repairs should be held at 30% or less of annual maintenance activities.
- Unplanned maintenance in excess of 30% indicates a need to evaluate causes and adjust strategies.

5.1 Staffing and Training

Utility maintenance is quite unique. It can involve one or a combination of water system repairs, customer service issues, troubleshooting and repair, pump and motor repairs and other technical work. This skill set is not common. Training staff, whether they are new or long-term employees, is very important. It is recommended that the system initiate or enhance their training program for its employees. In addition to technical training, safety training is also necessary. Treatment Plants and distribution/collection systems can be dangerous places to work. Electrical safety, troubleshooting panel boxes, trenching and shoring, and confined space entry are just a few of the topics that could benefit the System and its staff. FRWA personnel can provide some of the training needed for staff members. Training services that we offer to members are listed on our website http://www.frwa.net/ under the Training Tab.

There is no such thing as too much training. The more your staff knows, the more capable, safe, and professional they become. This enhanced sense of professionalism will improve the quality of overall service and accountability to the community.

5.2 Preventive Maintenance

Preventive maintenance is the day-to-day work necessary to keep assets operating properly, which includes the following:

1. Regular and ongoing annual tasks necessary to keep the assets at their required service level.

2. Day-to-day and general upkeep designed to keep the assets operating at the required levels of service.

3. Tasks that provide for the normal care and attention of the asset including repairs and minor replacements.

4. Performing the base level of preventative maintenance as defined in equipment owner's manuals.

These preventative maintenance guidelines are supplemented by industry accepted best management practices (BMPs).

Equipment must be maintained according to manufacturer's recommendations to achieve maximum return on investment. By simply following the manufacturer's suggested preventive maintenance the useful life of equipment can be increased two to three times when compared to "run till failure" mode of operation. Communities that have disregarded preventive maintenance practices can achieve positive returns from a relatively small additional investment. Deferred maintenance tasks that have not historically been performed due to inadequate funding or staffing must be programmed into future operating budgets. Proper funding provides staffing and supplies to achieve life expectancy projected by the manufacturer and engineer.

The table below is a sample O&M Program for this system and is based on best management practices, manufacturers' recommended service intervals, staff experience, and other sources. *This schedule is only an example.* The true schedule must be created by town staff, based on their historical knowledge and information gleaned from the O&M Manuals and other sources.

Diamond Maps can be used to schedule maintenance tasks. Recurring items (e.g. annual flow meter calibrations) can be set up in advance. In fact, all maintenance activities can be coordinated in Diamond Maps using its work order feature. The Table on the following page is a sample of work orders that are specific to the system.

Task Name	Frequency	Task Name	Frequency
Visually Inspect Plant Site for Damage or Tampering	Per Visit	Respond to any complaints	As they occur
Ensure proper operation of equipment (note any issues)	Per Visit	Decommission unnecessary equipment	As they occur
Calibrate all meters and necessary equipment	Per Visit	Inspect CL2 system and alarms	Every six months
Check plant as per DEP requirements	Per Visit	Perform P/M on pumps and motors	Manufacturer recommendation
Complete all log work	Per Visit	Perform P/M on plant and safety equipment	Manufacturer recommendation
Collect all samples	As required by Permit	Inspect storage tank	Annually
Perform general housekeeping on grounds and building.	Weekly	Calibrate meter and backflows	Annually
Exercise Generator	Monthly	Exercise hydrants and valves	Annually
Confirm submittal of monthly reports	Monthly	Update AMFS Plan	Annually

WO#	Status	Title	Description	Date Started	Date Completed	Notes
W1002	Planned	Hydrant Flow Test	Flow test hydrant and check for proper operation			
W1003	Planned	Hydrant Flow Test	Flow test hydrant and check for proper operation			
W1004	Planned	Hydrant Flow Test	Flow test hydrant and check for proper operation			
W1005	Planned	Hydrant Flow Test	Flow test hydrant and check for proper operation			
W1006	Planned	Hydrant Flow Test	Flow test hydrant and check for proper operation			
W1007	Planned	Hydrant Flow Test	Flow test hydrant and check for proper operation			
W1008	Planned	Hydrant Flow Test	Flow test hydrant and check for proper operation			
W1009	Planned	Hydrant Flow Test	Flow test hydrant and check for proper operation			
W1010	Planned	Hydrant Flow Test	Flow test hydrant and check for proper operation			

5.3 Proactive vs Reactive Maintenance

Reactive maintenance is often carried out by customer requests or sudden asset failures. Required service and maintenance to fix the customer's issue(s) or asset failure is identified by staff inspection and corrective action is then taken. Reactive maintenance is sometimes performed under emergency conditions, such as a main break at the treatment plant causing a water disruption. As mentioned above, if your system is responding to and performing reactive/emergency maintenance more than 30% of the time, you will need to adjust your maintenance schedules and increase proactive maintenance schedules.

Proactive maintenance consists of preventive and predictive maintenance. Preventive maintenance includes scheduled tasks to keep equipment operable. Predictive maintenance tasks try to determine potential failure points. An example of predictive maintenance is infrared analysis of electrical connections. Using special equipment, a technician can "see" loose or corroded connections that would be invisible to the naked eye. This allows the utility to "predict" and correct a potential problem early. Assets are monitored frequently, and routine maintenance is performed to increase asset longevity and prevent failure.

Upon adoption of this AMPFS plan or any DEP-approved AMP, the FRWA Utility Asset Management (UAM) team intends to upload asset data definition file into "Diamond Maps", described in Section 2.3, and will populate the field data. The appropriate System personnel will be trained on Diamond Maps functionality and can immediately begin using it for scheduling and tracking system asset routine and preventive maintenance.

6. Capital Improvement Plan

A Capital Improvement Plan (CIP) is a multi-year financial planning tool that looks into the future to forecast the System's asset needs. It encourages the system and the community to forecast not only what expenditures they intend and expect to make, but also to identify potential funding sources in order to more properly plan for the acquisition of the asset. The CIP is designed to be a flexible planning tool and is updated and revised on an annual basis.

Capital improvement projects generally create a new asset that previously did not exist or upgrades or improves an existing component's capacity. These projects are the consequence of growth, environmental needs, or regulatory requirements. Included in a CIP are typically:

1. Any expenditure that purchases or creates a new asset or in any way improves an asset beyond its original design capacity.
2. Any upgrades that increase asset capacity.
3. Any construction designed to produce an improvement in an asset's standard operation beyond its present ability.

Capital improvement projects will populate this list. Renewal expenditures do not increase the asset's design capacity, but restores an existing asset to its original capacity, such as:

1. Any activities that do not increase the capacity of the asset. (i.e., activities that do not upgrade and enhance the asset but merely restore them to their original size, condition and capacity, for example, rebuilding an existing pump).
2. Any rehabilitation involving improvements and realignment or anything that restores the assets to a new or fresh condition (e.g. distribution main repair or hydrant replacement).

In making renewal decisions, the utility considers several categories other than the normally recognized physical failure or breakage. Such renewal decisions include the following:

1. Structural
2. Capacity
3. Level of service failures
4. Outdated functionality
5. Cost or economic impact

The utility staff and management typically know of potential assets that need to be repaired or rehabilitated. Reminders in the Diamond Maps task calendar let the staff members know when the condition of an asset begins to decline according to the manufacturer's life cycle recommendations. The utility staff members can take these reminders and recommendations into account.

Because the anticipated needs of the utility will change each year, the CIP is updated annually to reflect those changes. Listed below is a sample CIP schedule taken from RevPlan and should be updated annually.

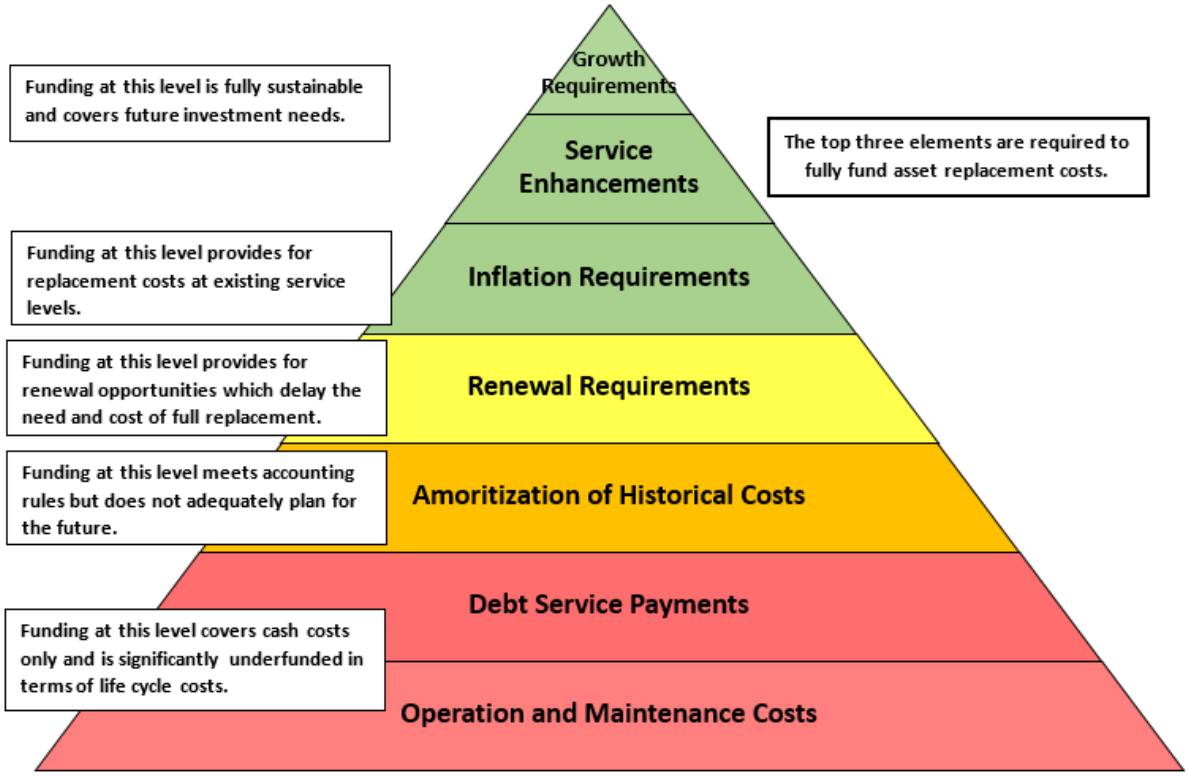
Welaka,Town of
S2 Welaka FY22 (2000 allowance)
Fiscal Year: 2022
CIP Schedule

Description	Funding Source	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Auto Read Meter System	Grant	$0	$0	$200,000	$0	$0	$0	$0	$0	$0	$0
Auto Read Meter System	Water Revenues	$0	$0	$150,000	$0	$0	$0	$0	$0	$0	$0
Capital Improvements	Water Revenues	$5,000	$0	$0	$0	$0	$0	$0	$0	$0	$0
New 40' x 60' metal building	Water Revenues	$0	$12,500	$12,500	$12,500	$12,500	$0	$0	$0	$0	$0
Radio Communication System for Utility Department	Grant	$0	$8,000	$0	$0	$0	$0	$0	$0	$0	$0
Side by Side for the Harbour	Water Revenues	$0	$0	$0	$0	$0	$0	$0	$12,000	$0	$0
Small Excavator Used	Water Revenues	$0	$7,700	$7,700	$7,700	$0	$0	$0	$0	$0	$0
Tower maintenance contract	Water Revenues	$0	$9,800	$9,800	$9,800	$9,800	$9,800	$9,800	$9,800	$9,800	$9,800
Trencher	Water Revenues	$0	$5,000	$0	$0	$0	$0	$0	$0	$0	$0
Utility Truck	Water Revenues	$0	$8,200	$8,200	$8,200	$8,200	$8,200	$0	$0	$0	$0
Water Asset Replacement Costs	Water Revenues	$0	$20,000	$40,000	$60,000	$80,000	$100,000	$106,900	$106,900	$106,900	$106,900
Water Plant Upgrades	Water Revenues	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Totaled by	**Funding Source**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
	Water Revenues	$5,000	$63,200	$228,200	$98,200	$110,500	$118,000	$116,700	$128,700	$116,700	$116,700
	Future Loan	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Grant	$0	$8,000	$0	$0	$0	$0	$0	$0	$0	$0
	Total	**$5,000**	**$71,200**	**$228,200**	**$98,200**	**$110,500**	**$118,000**	**$116,700**	**$128,700**	**$116,700**	**$116,700**

7. Financial

Budget/Financial Sufficiency

In order for an Asset Management Plan to be effectively put into action, it must be integrated with financial planning and long-term budgeting. The development of a comprehensive financial plan will allow the Town of Welaka to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service, and projected growth requirements. The pyramid below depicts the various cost elements and resulting funding levels that should be incorporated into Asset Plans that are based on best practices.



This report, with the assistance of RevPlan, helps develop such a financial plan by presenting several scenarios for consideration and culminating with final recommendations.

The assets collected, along with financial information provided by the system, were entered into RevPlan to create a preliminary financial sufficiency model for the Town. Each year the system is encouraged to update RevPlan and use it to help understand the impacts of future projects and rate increases. Details from the model are located in Appendix C.

The use of RevPlan allows the system to input current financial data and develop their own financial planning projections based on various time frames. The Town will have the ability to modify the rate structure to determine which proposed rate scenarios may support current and upcoming debt and expenses. Members of FRWA staff are available to assist the Town with RevPlan and updating financial models.

Asset Statistics

The table below summarizes the asset information from the Town collected by FRWA and found in RevPlan:

Town of Welaka Water System	
Total Replacement Cost of Water System	$ 4,398,669.46
Percent of Assets Needing Replacement	18.3 %
Cost of Replacing All Assets Needing Replacement	$ 805,012.25
Annual Replacement Cost of System	$ 134,089.71

Please note that the $4.4 million dollar replacement cost of the water system documented above, along with the annual replacement cost of $ 134,089.71 for the system is low. These figures do not include certain assets such as large equipment, water mains, vehicles, and some property improvements normally associated with maintaining a utility system. As a result, any proposed rate adjustments suggested by FRWA should be considered a minimum or a starting point for review and consideration by the Town.

Based on the findings of the Asset Management Plan, it is important for Town of Welaka to start setting aside reserves for the replacement of its assets, to make sure that the base charge is adequately covering operating costs and that its usage charges are sufficient to fund its capital improvement costs.

Existing Rates

A 'rule of thumb' FRWA subscribes to regarding rates is that base charges pay for fixed expenses and usage charges fund the variable expenses. Rates should generate sufficient revenue to cover the full cost of operating a water system. By charging customers the full cost of water, small water systems send a message that water is a valued commodity that must be used wisely and not wasted. When rates are set to cover the full cost of production, water systems are more likely to have financial stability and security.

The current residential and commercial rate structure is as follows:

Residential:

0-3000 gallons	$22.00 Water	$27.90 Sewer	$49.90 Total Bill
3001-3200 gallons	$23.47 Water	$29.76 Sewer	$53.23 Total Bill
3201-3400 gallons	$24.94 Water	$31.62 Sewer	$56.56 Total Bill
3401-3600 gallons	$26.41 Water	$33.48 Sewer	$59.89 Total Bill
3601-3800 gallons	$27.88 Water	$35.34 Sewer	$63.22 Total Bill
3801-4000 gallons	$29 .35 Water	$37.20 Sewer	$66.55 Total Bill
4001-4200 gallons	$30.82 Water	$39.06 Sewer	$69.88 Total Bill
4201-4400 gallons	$32.29 Water	$40.92 Sewer	$73.21 Total Bill
4401-4600 gallons	$33.76 Water	$42.78 Sewer	$76.54 Total Bill
460l-4800 gallons	$35.23 Water	$44.64 Sewer	$79.87 Total Bill
4801-5000 gallons	$36.70 Water	$46.50 Sewer	$83.20 Total Bill

Commercial:

0-3000 gallons	$25.00 Water	$33.48 Sewer	$58.48 Total Bill
3001-4000 gallons	$33.34 Water	$44.64	$77.98 Total Bill
4001-5000 gallons	$41.68 Water	$55.80	$97.48 Total Bill
5000 + gallons	$9.34 per 1,000 gallons of water over the 5,000 gallon consumption	$13.02 per 1K gals. for sewer over 5K gals. consumption	

Based on the Number of Connections and the Annual Gallons, the average monthly use per customer of the residential class is 2.73 thousand gallons per month (2,730 gallons per month). With a lower average usage the current rate structure is not sufficient to support the utility in the long term.

The current rate structure would also not cover capital expenditures and would require reserves to be depleted by FY23-24.

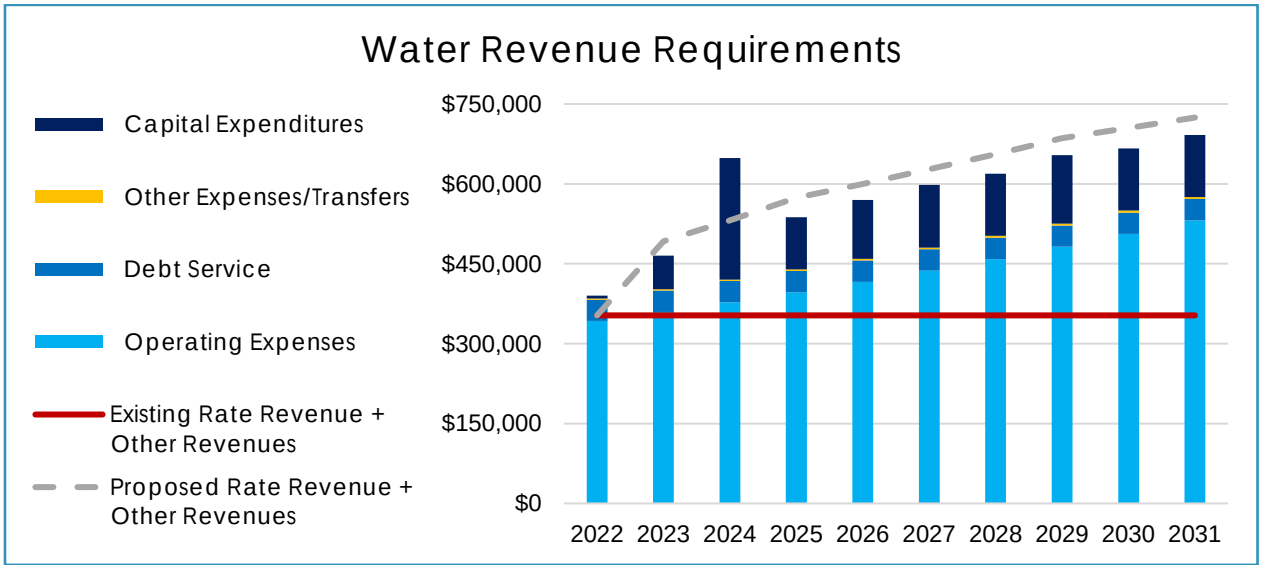
Recommended Rates

FRWA Finance team has developed the following Recommended Rate Scenario and is available to meet with the Town to further explain the proposed scenario and explore other scenarios or possibilities that would best meet the Town's needs. ***Please note that due to the length of time between delivery of this plan to the time of adoption, the suggested rates will be revised to reflect current conditions and should be implemented at the beginning of the next fiscal year.***

This rate scenario establishes a new rate structure and reduces the 3000-gallon allowance to 2000 gallons and shows the rate increases needed if the projects identified in the Capital Improvement Plan section do not change. This scenario also takes into consideration the additional costs for Annual Asset Maintenance as identified in the Asset Statistic section above and the Consumer Price Index of 5% annually to all Operating Expense.

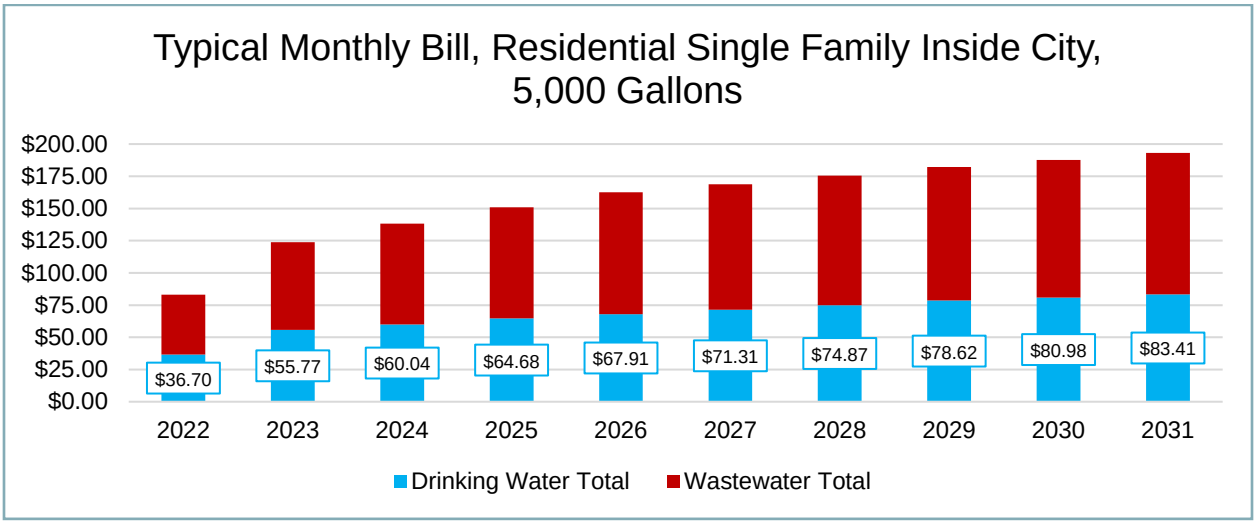
Listed below is the Drinking Water revenue requirements shown with the proposed rate structure and details the existing rate sufficiency

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Revenue Requirements:										
Operating Expenses	$342,400	$359,500	$377,500	$396,400	$416,200	$437,000	$458,900	$481,800	$505,900	$531,200
Debt Service	$40,100	$40,100	$40,100	$40,100	$40,100	$40,100	$40,100	$40,100	$40,100	$40,100
Other Expenses/Transfers	$2,500	$2,600	$2,800	$2,900	$3,000	$3,200	$3,400	$3,500	$3,700	$3,900
Capital Expenditures	$5,000	$63,200	$228,200	$98,200	$110,500	$118,000	$116,700	$128,700	$116,700	$116,700
Gross Revenue Requirements	$390,000	$465,400	$648,600	$537,600	$569,800	$598,300	$619,100	$654,100	$666,400	$691,900
Less: Other Revenue	$54,000	$54,000	$54,000	$54,000	$54,000	$54,000	$54,000	$54,000	$54,000	$54,000
Net Revenue Requirements	$336,000	$411,400	$594,600	$483,600	$515,800	$544,300	$565,100	$600,100	$612,400	$637,900
Existing Rate Sufficiency:										
Revenue from Existing Rates	$299,072	$299,072	$299,072	$299,072	$299,072	$299,072	$299,072	$299,072	$299,072	$299,072
Revenue Surplus/(Deficiency)	-$36,928	-$112,328	-$295,528	-$184,528	-$216,728	-$245,228	-$266,028	-$301,028	-$313,328	-$338,828
Proposed Rate Sufficiency:										
Revenue from Proposed Rates	$299,072	$438,294	$477,302	$519,969	$545,967	$573,266	$601,929	$632,025	$650,986	$670,516
Increase in Revenue	$0	$139,222	$178,229	$220,896	$246,895	$274,193	$302,857	$332,953	$351,914	$371,443
Cumulative %										
All Customer Classes										
Base Charges	0.00%	35.00%	48.50%	63.35%	71.52%	80.09%	89.10%	98.55%	104.51%	110.64%
Usage Charges	0.00%	10.00%	15.50%	21.28%	27.34%	33.71%	40.39%	47.41%	51.83%	56.39%
Current Year %										
All Customer Classes										
Base Charges	0%	35%	10%	10%	5%	5%	5%	5%	3%	3%
Usage Charges	0%	10%	5%	5%	5%	5%	5%	5%	3%	3%
Revenue Surplus/(Deficiency)	**-$36,928**	**$26,894**	**-$117,298**	**$36,369**	**$30,167**	**$28,966**	**$36,829**	**$31,925**	**$38,586**	**$32,616**



The proposed rate structure would be as follows:

Proposed Rate Structure	2023	2024	2025	2026	2027	2028	2029	2030	2031
Drinking Water									
Residential Single Family									
Base Charges Inside City									
5/8-inch	$29.70	$32.67	$35.94	$37.73	$39.62	$41.60	$43.68	$44.99	$46.34
Usage Charges Inside City									
2,001 to 4,000 gallons	$8.09	$8.49	$8.91	$9.36	$9.83	$10.32	$10.83	$11.16	$11.49
4,001 to 6,000 gallons	$9.90	$10.40	$10.91	$11.46	$12.03	$12.64	$13.27	$13.66	$14.07
6,001 gallons or more	$13.20	$13.86	$14.55	$15.28	$16.04	$16.85	$17.69	$18.22	$18.77
Commercial									
Base Charges Inside City									
5/8-inch	$37.13	$40.84	$44.92	$47.17	$49.53	$52.00	$54.60	$56.24	$57.93
Usage Charges Inside City									
2,001 to 4,000 gallons	$10.11	$10.61	$11.15	$11.70	$12.29	$12.90	$13.55	$13.95	$14.37
4,001 to 6,000 gallons	$12.38	$12.99	$13.64	$14.33	$15.04	$15.79	$16.58	$17.08	$17.59
6,001 gallons or more	$16.50	$17.33	$18.19	$19.10	$20.06	$21.06	$22.11	$22.77	$23.46
Outside City (Surcharge)									
Base Charges Inside City									
5/8-inch	$44.55	$49.01	$53.91	$56.60	$59.43	$62.40	$65.52	$67.49	$69.51
Usage Charges Inside City									
2,001 to 4,000 gallons	$9.90	$10.40	$10.91	$11.46	$12.03	$12.64	$13.27	$13.66	$14.07
4,001 to 6,000 gallons	$14.85	$15.59	$16.37	$17.19	$18.05	$18.95	$19.90	$20.50	$21.11
6,001 gallons or more	$19.80	$20.79	$21.83	$22.92	$24.07	$25.27	$26.53	$27.33	$28.15
Base Rate Only									
Base Charges Inside City									
5/8-inch	$31.05	$34.16	$37.57	$39.45	$41.42	$43.49	$45.67	$47.04	$48.45
FGUA									
Base Charges Inside City									
5/8-inch	$4,430.73	$4,873.80	$5,361.18	$5,629.24	$5,910.70	$6,206.24	$6,516.55	$6,712.04	$6,913.41
Usage Charges Inside City									
300,001 gallons or more	$8.58	$9.01	$9.46	$9.93	$10.43	$10.95	$11.50	$11.84	$12.20

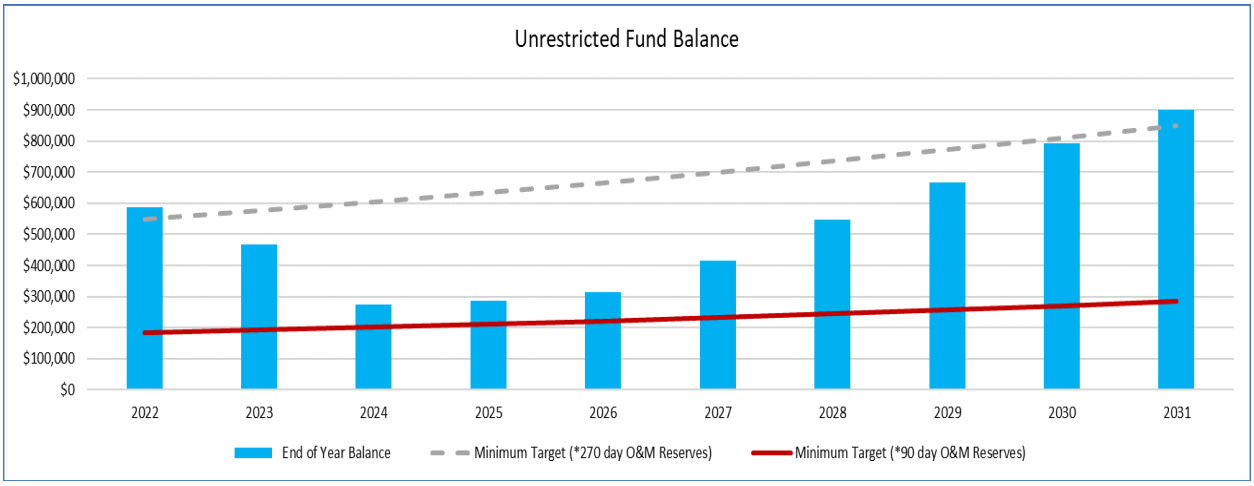


Reserves

Reserve balances for utility systems are funds set aside for a specific cash flow requirement, financial need, project, task, or legal covenant. All types of reserves can play a significant role in addressing current and future challenges facing utility systems, such as demand volatility, water supply costs, large capital requirements, asset replacements, natural disasters and potential liabilities from system failures associated with aged infrastructure. All utilities should establish formal financial policies relative to reserves. Such policies should articulate how these balances are established, their use, and how the adequacy of each respective reserve fund balance is determined. Once reserve targets are established, they should be reviewed annually during the budgeting process.

In the Town of Welaka, the unrestricted cash available at end of FY 2021 was $ 690,617.2, with annual operating expenses (without depreciation) of approximately $552,583 (DW and WW expenses) in FY 2021 giving the Town more than the recommended 270 days of cash on hand.

For planning purposes and without a stated reserve policy from the Town, FRWA builds the financial model by increasing the annual unrestricted reserve funding to 270 days of the current year operation and maintenance budget. While there is not a one size fits all approach to building reserves, FRWA cautions utilities about dropping below 90 days and encourages them to work towards a balance of cash on hand equal to or greater than 270 days. Cash reserves are essential to ensure a utility's long-term financial sustainability and resiliency. Each utility system has its own unique circumstances and considerations that should be factored into the selection of the types of reserves and corresponding policies that best meet its needs and objectives. In the proposed rate model that was used, the Town will use reserves through FY24, before building back up 270 day of O&M expense in FY30-31. These proposed rates will keep reserves above 90 days of O&M expense throughout this model.



Recommendation

Based on the preliminary financial sufficiency model developed by RevPlan, FRWA recommends that the Town pursue the presented scenario. In addition, FRWA encourages the Town to review RevPlan, growth projections, and Consumer Price Index (CPI) changes at least annually to determine if additional rate increases are needed as well as to pursue aggressively alternative revenue funding sources for the future capital projects identified in the Capital Improvements Plan. Listed below are items that are essential for the utility to pursue to ensure its fiscal sustainability:

- Reduce the number of gallons included in the base charge from 3,000 to 2,000 gallons
- Adopt and implement an annual CIP increase to keep up with growing expenses outside of the towns control
- Review and update RevPlan annually to ensure accuracy and future planning
- Increase rates / modify rate structure as specified above to ensure reserve requirements and debt services are covered

The use of RevPlan can allow the system to input current financial data and see a projection up to twenty years out for financial planning. Welaka will have the ability to modify the rate structure to determine different rate scenarios that support current and upcoming debt, revenue streams and expenses.

8. Energy Management

Energy costs often make up twenty-five to thirty percent of a utility's total operation and maintenance costs. They also represent the largest controllable cost of providing water and wastewater services. EPA's "*Ensuring a Sustainable Future: An Energy Management Guidebook for Wastewater and Water Utilities"* provides details to support utilities in energy management

and cost reduction by using the steps described in this guidebook. The Guidebook takes utilities through a series of steps to analyze their current energy usage, use energy audits to identify ways to improve efficiency and measure the effectiveness of energy projects.

8.1 Energy Conservation and Cost Savings

The System should ensure all assets, not just those connected to a power source, are evaluated for energy efficiency. It is highly recommended that staff conduct an energy assessment or audit. The following are common energy management initiatives the System should implement going forward:

1. Load management
2. Replace weather-stripping and insulation on buildings.
3. Installation of insulated metal roofing over energy inefficient shingle roofing
4. On-demand water heaters
5. Variable frequency driven pumps and electrical equipment
6. Energy efficient infrastructure
7. LED lighting
8. Meg electric motors
9. MCC electrical lug thermal investigation
10. Flag underperforming assets for rehabilitation or replacement

The above ten energy saving initiatives are just a start and most can be accomplished in-house. A more comprehensive energy audit, conducted by an energy consultant/professional, is recommended to evaluate how much energy is consumed system-wide and identify measures that can be taken to utilize energy more efficiently. The primary goal is reducing power consumption and cost through physical or operational changes.

Each system will have unique opportunities to reduce energy use or cost depending on system specific changes and opportunities within the power provider's rate schedules. For example, an audit of an individual water treatment plant (WTP) will attempt to pinpoint wasted or unneeded facility energy consumption.

With the cost of electricity rising, the reduction of energy use should be a priority for utility systems. A key deliverable of an energy audit is a thorough analysis of the effect of overdesign on energy efficiency. Plants are designed to perform at maximum flow and loading conditions. Unfortunately, most plants are not efficient at average conditions. Aging infrastructure is another source of inefficient usage of energy in WTPs across the country. The justification for addressing aging infrastructure related energy waste is also included in the energy audit process.

8.2 Energy Conservation Measures

The following table provides typical water and wastewater high-use energy operations and associated potential energy saving measures.

High Energy Using Operations	Energy Saving Measures
Lighting	• Motion sensors • T5 low and high bay fixtures • Pulse start metal halide • Indirect fluorescent • Super-efficient T8s • Comprehensive control for large buildings
Heating, Ventilation, Air Conditioning (HVAC)	• Water source heat pumps • Prescriptive incentives for remote telemetry units • Custom incentives for larger units • Low volume fume hood • Occupancy controls • Heat pump for generator oil sump

8.3 Energy Audit Approach

An energy audit is intended to evaluate how much energy is consumed and identify measures that can be taken to utilize energy more efficiently. The primary goal is reducing power consumption and cost through physical and operational changes. Each system will have unique opportunities to reduce energy use or cost depending on system specific changes an opportunity within the power provider's rate schedules. An audit of an individual treatment plant is an attempt to pinpoint wasted or unneeded facility energy consumption. It is recommended to perform an energy audit every two to three years to analyze a return on investment.

A water system energy audit approach checklist, similar to the one on the following page, can be a useful tool to identify areas of potential concern and to develop a plan of action to resolve them. FRWA offers Energy Assessments to our members and SRF recipients that are participating in the AMPFS program. Please contact your local Circuit Rider or FRWA team member Jason Golden at Jason.Golden@frwa.net to participate.

Minimum Equipment Information to Gather	Additional Equipment Information to Gather	Conditions to Consider
• Pump style • Number of pump stages • Pump and motor speed(s) • Pump rated head (name plate) • Motor rated power and voltage (name plate) • Full load amps • Rated and actual pump discharge • Operation schedules	• Pump manufacturer's pump curves • Actual pump curve • Power factor • Load profile • Analysis of variable frequency drives (vfd's) if present • Pipe sizes • Water level (source) • Motor current • Pump suction pressure • Discharge pressure	• Maintenance records • Consistently throttled values • Excessive noise or vibrations • Evidence of wear or cavitation on pump, impellers or pump bearings. • Out-of-alignment conditions • Significant flow rate/ pressure variations • Active by-pass piping • Restrictions in pipes or pumps • Restrictive/leaking pump shaft packing

9. Conclusions

Our conclusions are based on our observations during the data collection procedure, discussions with Town of Welaka staff, regulatory inspection data, and our experience related to similar assets.

Areas needing attention are detailed in Section 4 and include:

<u>Water Production and Distribution System:</u>

- Wells # 1 and #2 are more than halfway through their useful lives. They currently require rehabilitation and should be evaluated by an engineer to determine true efficiency. It is recommended that the System begin developing a replacement strategy for the remainder of the components at the wells and water production sites as well as replacement of Wells #1 and #2.
- Have Qualified vendor remove all Hydropneumatic Tanks that are on site and not in use.

- Have qualified vendor replace 3000 gallon Hydropneumatic tank with connective piping from wells to Ground Storage Tanks
- Establish cleaning regimen for Ground Storage Tanks and have inspected if intention is to utilize for storage of chlorinated water in the future.
- Work with FRWA to complete the initial steps of a water audit.
- Document water line condition and develop a replacement strategy for some of the older or problematic water mains.
- Update the Capital Improvement Plan to fund the replacement of specific lines following the creation of a Replacement Strategy.

Hydrants and Hydrant Valves:

- Develop a hydrant flushing and maintenance program and record any deficiencies inside Diamond Maps.
- Replace and / or repair 1 poor hydrant in the first year.
- Access and Reassess Poor Condition Hydrant valves in the first year to determine if replacement or repair is needed.
- Begin an annual hydrant and hydrant valve replacement program.
- Ensure operation of accompanying hydrant valves and install new valves with hydrant installation.

Water Valves:

- Implement quarterly valve exercising program.
- Access and Reassess Poor Condition system valves in the first year to determine if replacement or repair is needed
- Replace/repair poor condition valves within first 5 years.
- Clean out valve boxes and exercise.
- As old lines are replaced or water breaks necessitate, new valves should be installed in order to isolate sections of the system.

Water Meters:

- Continue to change out meters to be able to be able to use automatic meter reading and select a vendor for equipment.

Other Areas:

- An Asset Management Planning (AP) and Computerized Maintenance Management System (CMMS) program must be implemented to maintain assets efficiently and effectively.
- Staff training on maintenance, safety, and use of the AMP/CMMS tool must be completed.
- Rates must be monitored to ensure adequate funding for operations and system improvements.
- An audit of Energy Saving initiatives is recommended. Even small changes in energy use can result in large savings.
- ***The Asset Management Plan must be adopted by Resolution or Ordinance.*** This demonstrates the utility's commitment to the plan. After adoption, implementation of the AMP must occur.

9.1 Implementing this Asset Management and Fiscal Sustainability Plan

Implementing an Asset Management and Fiscal Sustainability Plan requires several items:

1. **Assign specific personnel** to oversee and perform the tasks of Asset Management.

2. **Develop and use a Computerized Maintenance Management System (CMMS) program**. The information provided in this AMPFS plan will give the utility a good starting point to begin. Properly maintaining assets will ensure their useful life is extended and will ultimately save money. Asset maintenance tasks are scheduled and tracked, new assets are captured, and assets removed from service are retired properly using CMMS. Transitioning from reactive to preventive and predictive maintenance philosophies will net potentially large savings for the utility. Diamond Maps is one example among many options that are available. FRWA can help with set up and implementation.

3. **Develop specific Level of Service items**. Create a Level of Service (LOS) Agreement and inform customers of the Utility's commitment to providing the stated LOS. Successes can be shared with customers. This can dramatically improve customer relations. This also gives utility employees goals to strive for and can positively impact morale. We have included a draft LOS list in Section 2.4.

4. **Develop specific Change Out/Repair/Replacement Programs**. The System budgets for Repair and Replacement and should continue to evaluate the system to adjust the annual budgeted amounts accordingly. An example includes budgeting for a certain number of stepped system refurbishments each year.

5. **Modify the existing rate structure.** The System should make changes to their rate structure to capture all possible revenue and share the burden of maintaining the system among all classes of users. Continue to make sure adequate funds are available to properly operate and maintain the facilities. Rate increases, when required, can be accomplished in a stepped fashion rather than an 'all now' approach to lessen the resulting customer impact.

6. **Explore financial assistance options.** Financial assistance is especially useful in the beginning stages of Asset Management since budget shortfalls likely exist and high cost items may be needed quickly. For a table of common funding sources, see Section 9.2.

7. **Revisit the AMFS plan annually.** An Asset Management Plan is a living document. It can be revised at any time but must be revisited and evaluated at least once each year. Common updates or revisions include:

    - Changes to your asset management team;
    - Updates to the asset inventory;
    - Updates to asset condition and criticality ranking charts;
    - Updates to asset condition and criticality assessment procedures;
    - Updates to operation and maintenance activities; and
    - Changes to financial strategies and long-term funding plans.

The annual review should begin by asking yourself:

"What changes have occurred since our last AMPFS plan update?"

9.2 Funding Sources for Water and Wastewater Systems

Florida Rural Water Association offers funding and technical assistance in the form of preparing funding documentation. These documents include Request for Inclusion (RFIs), Applications, and Disbursement Requests. The RFI is a document where you request to be put on the State Revolving Fund (SRF) funding priority list. If placed on the priority list, the application process can begin to receive funding through the SRF. Florida Rural Water Association offers this as a free service to communities in Florida with multiple, knowledgeable employees dedicated to assisting with funding. For more information on how your system can benefit from an RFI, contact Dyana Stewart at dyana@frwa.net

On the following page is a table of common funding sources, including web links and contact information. All systems should be making the effort to secure funding, which can be in the form of low or no interest loans, grants or a combination of both.

Agency/Program	Website	Contact
FDEP Drinking Water State Revolving Fund Program (DWSRF)	https://floridadep.gov/wra/srf/content/dwsrf-program	Shanin Speas-Frost shanin.speasfrost@dep.state.fl.us 850-245-2991
FDEP Clean Water State Revolving Fund Loan Program (CWSRF)	https://floridadep.gov/wra/srf/content/cwsrf-program	Mike Chase Michael.Chase@FloirdaDEP.gov 850-245-2966
USDA Rural Development- Water and Wastewater Direct Loans and Grants	https://www.rd.usda.gov/programs-services/rural-economic-development-loan-grant-program https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program	Jeanie Isler jeanie.isler@fl.usda.gov 352-338-3440
Economic Development Administration- Public Works and Economic Adjustment Assistance Programs	https://www.eda.gov/resources/economic-development-directory/states/fl.htm https://www.grants.gov/web/grants/view-opportunity.html?oppId=294771	Greg Vaday gvaday@eda.gov 404-730-3009
National Rural Water Association- Revolving Loan Fund	https://nrwa.org/initiatives/revolving-loan-fund/	Gary Williams Gary.Williams@frwa.net 850-668-2746
Florida Department of Economic Opportunity- Florida Small Cities Community Development Block Grant Program	http://www.floridajobs.org/community-planning-and-development/assistance-for-governments-and-organizations/florida-small-cities-community-development-block-grant-program	Roger Doherty roger.doherty@deo.myflorida.com 850-717-8417
Northwest Florida Water Management City - Cooperative Funding Initiative (CFI)	https://www.nwfwater.com/Water-Resources/Funding-Programs	Christina Coger Christina.Coger@nwfwater.com 850-539-5999

9.3 Closing

This Asset Management and Fiscal Sustainability plan is presented to the Town of Welaka for consideration and final adoption. Its creation would not be possible without the cooperation of the System staff and the Florida Department of Environmental Protection State Revolving Fund (FDEP-SRF).

As a valued FRWA member, it is our goal to help make the most effective and efficient use of your limited resources. The Asset Management and Fiscal Sustainability Plan is an unbiased, impartial, independent review and is solely intended for achievement of drinking water and wastewater system fiscal sustainability and maintaining your valuable utility assets. The Florida Rural Water Association has enjoyed serving you and will happily assist the Town of Welaka with any future projects to ensure your Asset Management Plan is a success.

APPENDIX A: Sample Resolution

RESOLUTION NO. 2023-_____

A RESOLUTION OF THE TOWN OF WELAKA, FLORIDA, APPROVING THE TOWN OF WELAKA WATER AND WASTEWATER UTILITY ASSET MANAGEMENT AND FISCAL SUSTAINABILITY PLANS; AUTHORIZING THE MAYOR, TOWN CLERK AND UTILITY SUPERVISOR TO TAKE ALL ACTIONS NECESSARY TO EFFECTUATE THE INTENT OF THIS RESOLUTION; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Florida Statutes provide for financial assistance to local government agencies to finance construction of the utility system improvements; and

WHEREAS, the Florida Department of Environmental Protection State Revolving Fund (SRF) has designated the Town of Welaka Utility System Improvements, identified in the Water and Wastewater Asset Management and Fiscal Sustainability Plans, as potentially eligible for available funding; and

WHEREAS, as a condition of obtaining funding from the SRF, the Town is required to implement a Water and Wastewater Asset Management and Fiscal Sustainability Plans for the Town's Utility System Improvements; and

WHEREAS, the Council of the Town of Welaka has determined that approval of the attached Water and Wastewater Asset Management and Fiscal Sustainability Plans for the proposed improvements, in order to obtain necessary funding in accordance with SRF guidelines, is in the best interest of the Town.

NOW, THEREFORE, BE IT RESOLVED BY THE Town of Welaka Commission the following:

Section 1. That the Town of Welaka Commission hereby approves the Town of Welaka Water and Wastewater Asset Management and Fiscal Sustainability Plans, attached hereto and incorporated by reference as a part of this Resolution.

Section 2. That the Mayor, Town Clerk, Utility Supervisor and designated staff are authorized to take all actions necessary to effectuate the intent of this Resolution and to implement the Water and Wastewater Asset Management and Fiscal Sustainability Plans in accordance with applicable Florida law and Council direction in order to obtain funding from the SRF.

Section 3. That the Town will annually evaluate existing rates to determine the need for any increase and will increase rates in accordance with the financial recommendations found in the Water and Wastewater Asset Management and Fiscal Sustainability Plans or in proportion to the Town's needs as determined by the Board in its discretion.

Section 4. That this Resolution shall become effective immediately upon its adoption.

PASSED AND ADOPTED on this _____ day of_____, 2023.

Town of Welaka, Florida:

_____
Jaime Watts, Mayor

ATTEST:

APPROVED AS TO FORM:

_____
Town Clerk

_____
Attorney

Appendix B: Master Asset List

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Buildings						
Electrical control room 1	1980	50	10725	Average	Moderate	2030
Electrical control room 2	1980	50	52500	Average	Moderate	2030

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Electrical Equipment						
Generator	2010	50	45000	Average	Moderate	2060
Electrical control panel wells	1990	50	2500	Average	Moderate	2040
Electrical control panel	2010	50	2000	Average	Moderate	2060
Electrical control room	1970	50	3000	Failed	Moderate	2020
Main Breaker	2010	50	3500	Average	Moderate	2060

Name	Install Year	Design Life	Condition	Replacement Cost	COF	Age EOL
Hydrants						
wHyd-1	1993	50	Average	3500	Moderate	2043
wHyd-3	1991	50	Average	3500	Moderate	2041
wHyd-4	1993	50	Average	3500	Moderate	2043
wHyd-5	2006	50	Average	3500	Moderate	2056
wHyd-6	1991	50	Average	3500	Moderate	2041
Name	**Install Year**	**Design Life**	**Condition**	**Replacement Cost**	**COF**	**Age EOL**
Hydrants						
wHyd-7	1993	50	Average	3500	Moderate	2043
wHyd-8	1993	50	Average	3500	Moderate	2043
wHyd-9	1992	50	Average	3500	Moderate	2042
wHyd-10	1992	50	Average	3500	Moderate	2042
wHyd-11	2006	50	Average	3500	Moderate	2056
wHyd-12	2006	50	Average	3500	Moderate	2056
wHyd-13	1993	50	Average	3500	Moderate	2043

Name	Install Year	Design Life	Condition	Replacement Cost	COF	Age EOL
Hydrants						
wHyd-14	1993	50	Average	3500	Moderate	2043
wHyd-16	1993	50	Average	3500	Moderate	2043
wHyd-17	1993	50	Average	3500	Moderate	2043
wHyd-18	1993	50	Average	3500	Moderate	2043
wHyd-19	1992	50	Poor	3500	Moderate	2042
wHyd-20	1992	50	Average	3500	Moderate	2042
wHyd-21	1993	50	Average	3500	Moderate	2043
wHyd-22	1992	50	Average	3500	Moderate	2042
wHyd-23	1993	50	Average	3500	Moderate	2043
wHyd-24	1989	50	Average	3500	Moderate	2039
wHyd-25	1993	50	Average	3500	Moderate	2043
wHyd-26	1992	50	Average	3500	Moderate	2042
wHyd-27	1999	50	Average	3500	Moderate	2049
wHyd-28	1989	50	Average	3500	Moderate	2039
wHyd-29	1992	50	Average	3500	Moderate	2042
wHyd-30	1993	50	Average	3500	Moderate	2043
wHyd-31	1992	50	Average	3500	Moderate	2042
wHyd-32	1992	50	Average	3500	Moderate	2042
wHyd-33	1993	50	Average	3500	Moderate	2043
wHyd-34	1993	50	Average	3500	Moderate	2043
wHyd-35	1993	50	Average	3500	Moderate	2043
wHyd-36	1991	50	Average	3500	Moderate	2041
wHyd-37	1989	50	Average	3500	Moderate	2039
wHyd-38	2003	50	Average	3500	Moderate	2053
wHyd-39	2003	50	Average	3500	Moderate	2053
wHyd-40	2000	50	Average	3500	Moderate	2050
wHyd-41	2003	50	Average	3500	Moderate	2053
wHyd-42	2007	50	Average	3500	Moderate	2057
wHyd-43	2007	50	Average	3500	Moderate	2057
wHyd-44	2007	50	Average	3500	Moderate	2057
wHyd-45	2007	50	Average	3500	Moderate	2057
wHyd-46	2007	50	Average	3500	Moderate	2057
wHyd-47	2007	50	Average	3500	Moderate	2057

Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Hydrant Valves						
wwValvInFac-1	1992	25	1200	Poor	Moderate	2017
wwValvInFac-2	1992	25	1200	Poor	Moderate	2017
wwValvInFac-3	1993	25	1200	Poor	Moderate	2018
wwValvInFac-4	1993	25	1200	Average	Moderate	2018
wwValvInFac-5	1993	25	1200	Poor	Moderate	2018
wwValvInFac-6	1993	25	1200	Poor	Moderate	2018
wwValvInFac-7	2006	25	1200	Poor	Moderate	2031
wwValvInFac-8	2006	25	1200	Poor	Moderate	2031
wwValvInFac-9	2006	25	1200	Poor	Moderate	2031
wwValvInFac-10	1991	25	1200	Poor	Moderate	2016
wwValvInFac-11	1993	25	1200	Average	Moderate	2018
wwValvInFac-12	1991	25	1200	Average	Moderate	2016
wwValvInFac-13	1993	25	1200	Average	Moderate	2018
wwValvInFac-14	1992	25	1200	Poor	Moderate	2017
wwValvInFac-15	1992	25	1200	Poor	Moderate	2017
wwValvInFac-16	1992	25	1200	Poor	Moderate	2017
wwValvInFac-17	1993	25	1200	Poor	Moderate	2018
wwValvInFac-18	1993	25	1200	Average	Moderate	2018
wwValvInFac-19	1993	25	1200	Poor	Moderate	2018
wwValvInFac-20	1993	25	1200	Poor	Moderate	2018

Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Hydrant Valves						
wwValvInFac-21	1993	25	1200	Poor	Moderate	2018
wwValvInFac-22	1989	25	1200	Poor	Moderate	2014
wwValvInFac-23	1993	25	1200	Poor	Moderate	2018
wwValvInFac-24	1992	25	1200	Poor	Moderate	2017
wwValvInFac-25	1991	25	1200	Poor	Moderate	2016
wwValvInFac-26	1991	25	1200	Poor	Moderate	2016
wwValvInFac-27	1992	25	1200	Average	Moderate	2017
wwValvInFac-28	1991	25	1200	Poor	Moderate	2016
wwValvInFac-29	1992	25	1200	Poor	Moderate	2017
wwValvInFac-30	1992	25	1200	Poor	Moderate	2017
wwValvInFac-31	1993	25	1200	Poor	Moderate	2018
wwValvInFac-32	1991	25	1200	Average	Moderate	2016
wwValvInFac-33	1991	25	1200	Average	Moderate	2016
wwValvInFac-34	1991	25	1200	Average	Moderate	2016
wwValvInFac-35	1991	25	1200	Poor	Moderate	2016
wwValvInFac-36	2003	25	1200	Average	Moderate	2028
wwValvInFac-37	2000	25	1200	Average	Moderate	2025
wwValvInFac-38	2003	25	1200	Average	Moderate	2028
wwValvInFac-39	2003	25	1200	Poor	Moderate	2028
wwValvInFac-40	2007	25	1200	Average	Moderate	2032
wwValvInFac-41	2007	25	1200	Average	Moderate	2032

Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Hydrant Valves						
wwValvInFac-42	2007	25	1200	Average	Moderate	2032
wwValvInFac-43	2007	25	1200	Average	Moderate	2032
wwValvInFac-44	2007	25	1200	Average	Moderate	2032
wwValvInFac-45	2007	25	1200	Average	Moderate	2032

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Hydro Tank						
Hydro tank	1970	25	250000	Average	Moderate	1995

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Instruments and Controls						
Variable Frequency Drive	2010	50	2000	Average	Moderate	2060
Variable Frequency Drive	2010	50	2000	Average	Moderate	2060
Electrical control panel/ SCADA	2010	50	3000	Average	Moderate	2060
Emergency Call out system	2010	50	2000	Average	Moderate	2060
Variable Frequency Drive	2010	50	2000	Average	Moderate	2060
Variable Frequency Drive	2010	50	2000	Average	Moderate	2060
Chlorine Analyzer	1990	50	6500	Average	Moderate	2040

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Pumps and Motors						
Well #3 (old welaka rd.)	1980	50	5000	Average	Minor	2030
HSP 1	2010	50	10000	Average	Moderate	2060
HSP 2	2010	50	10000	Average	Moderate	2060
HSP 3	2010	50	10000	Failed	Moderate	2060

Asset Name	Install Year	Replacement Cost	Design Life	Condition	COF	Age EOL
Storage Tanks						
GST 1	1980	660000	30	Average	Moderate	2010
GST 2	1980	660000	30	Average	Moderate	2010
Water tower gravity	1994	1500000	30	Average	Minor	2024

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Treatment Equipment						
Chlorine Pump	2010	50	1000	Average	Moderate	2060
Aqua Mag	2010	10	1000	Average	Minor	2020

AutoName	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
System Valves						
wwValvInFac-1	1990	25	1200	Average	Moderate	2015
wwValvInFac-2	1990	25	1200	Average	Moderate	2015
wwValvInFac-3	1990	25	1200	Average	Moderate	2015
wwValvInFac-4	1990	25	1200	Average	Moderate	2015
wwValvInFac-5	1990	25	1200	Poor	Moderate	2015
wwValvInFac-6	1990	25	1200	Poor	Moderate	2015
wwValvInFac-7	1990	25	1200	Poor	Moderate	2015
wwValvInFac-8	1990	25	1200	Poor	Moderate	2015
wwValvInFac-9	1990	25	1200	Poor	Moderate	2015
wwValvInFac-10	1990	25	1200	Poor	Moderate	2015
AutoName	**Install Year**	**Design Life**	**Replacement Cost**	**Condition**	**COF**	**Age EOL**
System Valves						
wwValvInFac-11	1990	25	1200	Average	Moderate	2015
wwValvInFac-12	1990	25	1200	Poor	Moderate	2015
wwValvInFac-13	1990	25	1200	Poor	Moderate	2015
wwValvInFac-14	1990	25	1600	Average	Moderate	2015
wwValvInFac-17	1990	25	1600	Poor	Moderate	2015

AutoName	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
System Valves						
wwValvInFac-20	1990	25	1600	Poor	Moderate	2015
wwValvInFac-21	1990	25	1200	Poor	Moderate	2015
wwValvInFac-22	1990	25	1200	Poor	Moderate	2015
wwValvInFac-23	1990	25	1200	Poor	Moderate	2015
wwValvInFac-24	1990	25	1200	Poor	Moderate	2015
wwValvInFac-25	1990	25	800	Poor	Moderate	2015
wwValvInFac-26	1990	25	800	Poor	Moderate	2015
wwValvInFac-27	1990	25	800	Poor	Moderate	2015
wwValvInFac-29	1990	25	500	Poor	Moderate	2015
wwValvInFac-30	1990	25	1600	Poor	Moderate	2015
wwValvInFac-31	1990	25	1600	Poor	Moderate	2015
wwValvInFac-32	1990	25	1600	Poor	Moderate	2015
wwValvInFac-33	1990	25	500	Poor	Moderate	2015
wwValvInFac-34	1990	25	1600	Average	Moderate	2015
wwValvInFac-35	1990	25	500	Poor	Moderate	2015
wwValvInFac-36	1990	25	500	Poor	Moderate	2015
wwValvInFac-37	1990	25	500	Average	Moderate	2015
wwValvInFac-38	1990	25	1200	Poor	Moderate	2015
wwValvInFac-39	1990	25	500	Poor	Moderate	2015
wwValvInFac-40	1990	25	500	Poor	Moderate	2015
wwValvInFac-41	1990	25	500	Poor	Moderate	2015

AutoName	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
System Valves						
wwValvInFac-42	1990	25	500	Poor	Moderate	2015
wwValvInFac-43	1990	25	1200	Poor	Moderate	2015
wwValvInFac-44	1990	25	1600	Poor	Moderate	2015
wwValvInFac-46	1990	25	500	Poor	Moderate	2015
wwValvInFac-47	1990	25	500	Poor	Moderate	2015
wwValvInFac-48	1990	25	500	Poor	Moderate	2015
wwValvInFac-49	1990	25	500	Poor	Moderate	2015
wwValvInFac-50	1990	25	500	Poor	Moderate	2015
wwValvInFac-51	1990	25	500	Average	Moderate	2015
wwValvInFac-52	1990	25	500	Average	Moderate	2015
wwValvInFac-53	1990	25	1600	Average	Moderate	2015
wwValvInFac-54	1990	25	500	Poor	Moderate	2015
wwValvInFac-56	1990	25	500	Poor	Moderate	2015
wwValvInFac-57	1990	25	500	Poor	Moderate	2015
wwValvInFac-58	1990	25	500	Poor	Moderate	2015
wwValvInFac-59	1990	25	500	Poor	Moderate	2015
wwValvInFac-60	1990	25	500	Poor	Moderate	2015
wwValvInFac-61	1990	25	800	Poor	Moderate	2015
wwValvInFac-62	1990	25	500	Poor	Moderate	2015
wwValvInFac-63	1990	25	500	Poor	Moderate	2015
wwValvInFac-64	1990	25	1600	Poor	Moderate	2015

AutoName	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
System Valves						
wwValvInFac-65	1990	25	500	Poor	Moderate	2015
wwValvInFac-66	1990	25	1600	Average	Moderate	2015
wwValvInFac-67	1990	25	500	Poor	Moderate	2015
wwValvInFac-68	1990	25	500	Poor	Moderate	2015
wwValvInFac-69	1990	25	800	Poor	Moderate	2015
wwValvInFac-70	1990	25	500	Poor	Moderate	2015
wwValvInFac-71	1990	25	500	Poor	Moderate	2015
wwValvInFac-72	1990	25	500	Poor	Moderate	2015
wwValvInFac-73	1990	25	500	Average	Moderate	2015
wwValvInFac-74	1990	25	500	Poor	Moderate	2015
wwValvInFac-75	1990	25	500	Poor	Moderate	2015
wwValvInFac-76	1990	25	500	Average	Moderate	2015
wwValvInFac-77	1990	25	800	Poor	Moderate	2015
wwValvInFac-78	1990	25	1200	Poor	Moderate	2015
wwValvInFac-79	1990	25	1200	Poor	Moderate	2015
wwValvInFac-80	1990	25	500	Poor	Moderate	2015
wwValvInFac-81	1990	25	500	Poor	Moderate	2015
wwValvInFac-82	1990	25	800	Poor	Moderate	2015
wwValvInFac-83	1990	25	1600	Poor	Moderate	2015
wwValvInFac-84	1990	25	1600	Poor	Moderate	2015
wwValvInFac-85	1990	25	1600	Poor	Moderate	2015

AutoName	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
System Valves						
wwValvInFac-86	1990	25	1600	Poor	Moderate	2015
wwValvInFac-87	1990	25	1600	Poor	Moderate	2015
wwValvInFac-88	1990	25	1600	Poor	Moderate	2015
wwValvInFac-89	1990	25	500	Poor	Moderate	2015
wwValvInFac-90	1990	25	1600	Poor	Moderate	2015
wwValvInFac-91	1990	25	500	Average	Moderate	2015
wwValvInFac-92	1990	25	500	Poor	Moderate	2015
wwValvInFac-94	1990	25	500	Poor	Moderate	2015
wwValvInFac-96	1990	25	1200	Poor	Moderate	2015
wwValvInFac-97	1990	25	500	Poor	Moderate	2015
wwValvInFac-98	1990	25	1200	Poor	Moderate	2015
wwValvInFac-99	1990	25	1600	Poor	Moderate	2015
wwValvInFac-100	1990	25	500	Poor	Moderate	2015
wwValvInFac-101	1990	25	1600	Poor	Moderate	2015
wwValvInFac-102	1990	25	1600	Poor	Moderate	2015
wwValvInFac-103	1990	25	500	Poor	Moderate	2015
wwValvInFac-104	1990	25	1600	Poor	Moderate	2015
wwValvInFac-105	1990	25	500	Poor	Moderate	2015
wwValvInFac-106	1990	25	1600	Poor	Moderate	2015
wwValvInFac-107	1990	25	500	Poor	Moderate	2015
wwValvInFac-108	1990	25	500	Poor	Moderate	2015

AutoName	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
System Valves						
wwValvInFac-109	1990	25	500	Poor	Moderate	2015
wwValvInFac-110	1990	25	500	Poor	Moderate	2015
wwValvInFac-111	1990	25	500	Poor	Moderate	2015
wwValvInFac-112	1990	25	1200	Poor	Moderate	2015
wwValvInFac-113	1990	25	1200	Poor	Moderate	2015
wwValvInFac-114	1990	25	1600	Poor	Moderate	2015
wwValvInFac-115	1990	25	1600	Poor	Moderate	2015
wwValvInFac-118	1990	25	500	Poor	Moderate	2015
wwValvInFac-119	1990	25	1200	Average	Moderate	2015
wwValvInFac-120	1990	25	500	Poor	Moderate	2015
wwValvInFac-121	1990	25	500	Good	Moderate	2015
wwValvInFac-122	1990	25	1200	Average	Moderate	2015
wwValvInFac-123	1990	25	1200	Average	Moderate	2015
wwValvInFac-124	1990	25	1200	Poor	Moderate	2015
wwValvInFac-125	1990	25	1200	Poor	Moderate	2015
wwValvInFac-126	1990	25	1200	Average	Moderate	2015
wwValvInFac-127	1990	25	800	Average	Moderate	2015
wwValvInFac-128	1990	25	1600	Average	Moderate	2015
wwValvInFac-130	1990	25	1200	Average	Moderate	2015
wwValvInFac-131	1990	25	1200	Average	Moderate	2015
wwValvInFac-132	1990	25	1200	Poor	Moderate	2015

AutoName	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
System Valves						
wwValvInFac-133	1990	25	1200	Average	Moderate	2015
wwValvInFac-134	1990	25	1200	Average	Moderate	2015
wwValvInFac-135	1990	25	1200	Average	Moderate	2015
wwValvInFac-136	1990	25	1200	Poor	Moderate	2015
wwValvInFac-137	1990	25	1200	Average	Moderate	2015
wwValvInFac-138	1990	25	1600	Poor	Moderate	2015
wwValvInFac-139	1990	25	1200	Poor	Moderate	2015
wwValvInFac-141	2018	25	1600	Good	Moderate	2043
wwValvInFac-142	2016	25	1600	Average	Moderate	2041
wwValvInFac-143	2016	25	1600	Average	Moderate	2041
wwValvInFac-144	2016	25	1600	Average	Moderate	2041
wwValvInFac-145	2003	25	1600	Average	Moderate	2028
wwValvInFac-146	2003	25	1200	Average	Moderate	2028
wwValvInFac-147	2003	25	1200	Average	Moderate	2028
wwValvInFac-148	2000	25	1200	Average	Moderate	2025
wwValvInFac-149	2003	25	1200	Average	Moderate	2028
wwValvInFac-150	2003	25	1600	Average	Moderate	2028
wwValvInFac-151	2010	25	1600	Average	Moderate	2035
wwValvInFac-152	2007	25	1600	Average	Moderate	2032
wwValvInFac-153	2007	25	1600	Average	Moderate	2032
wwValvInFac-154	2007	25	1600	Average	Moderate	2032

AutoName	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
System Valves						
wwValvInFac-155	2007	25	1600	Average	Moderate	2032
wwValvInFac-156	2007	25	1600	Average	Moderate	2032
wwValvInFac-157	2007	25	1600	Average	Moderate	2032
wwValvInFac-158	2007	25	1600	Average	Moderate	2032
wwValvInFac-159	2007	25	1600	Average	Moderate	2032
wwValvInFac-160	1990	25	1600	Average	Moderate	2015

Name	Install Year	Replacement Cost	Design Life	Condition	COF	Age EOL
Control Valves						
wControlValve-1	2018	1100	25	Good	Moderate	2043
wControlValve-2	1990	1100	25	Average	Moderate	2015
wControlValve-3	1990	1100	25	Average	Moderate	2015

Appendix C: RevPlan

Welaka,Town of
S2 Welaka FY22 (2000 allowance)
Fiscal Year: 2022

FLORIDA RURAL WATER ASSOCIATION
2970 WELLINGTON CIRCLE
TALLAHASSEE, FL 32309
850-668-2746
Completed by: Dyana Jo Stewart
November 1, 2022

SECTION 11.2.b.

(Patrick Dangelo Presentation – Asset Management Plan)
(WasteWater)

FLORIDA RURAL WATER ASSOCIATION

2970 WELLINGTON CIRCLE • TALLAHASSEE, FL 32309-7813
(850) 668-2746

EMAIL
frwa@frwa.net

WEBSITE
www.frwa.net

Mayor Jamie Watts
Town of Welaka
400 4th Avenue
Welaka, Florida 32193

October 25, 2022

Re: Wastewater Asset Management and Fiscal Sustainability Plan
Town of Welaka- Putnam County, FLA # 011705

Dear Mayor Watts:

The Florida Rural Water Association (FRWA) is pleased to submit the following Wastewater System Asset Management and Fiscal Sustainability Plan (AMFSP) to Welaka for your use and systematic implementation. The AMFSP is funded and supported by the Florida Department of Environmental Protection, State Revolving Fund (FDEP-SRF) program.

After an extensive review of your utility, the Professionals within FRWA have identified, quantified, and prioritized your wastewater system's most urgent needs. Welaka's *wastewater system represents critical infrastructure for the Town.* The identified needs are related to Capital, Operations & Maintenance, and Renewal & Replacement items. We ask that key stakeholders (Mayor, Council, Town Clerk, Utilities Supervisor, Finance Personnel, and others) carefully review the Preliminary Action List within the Executive Summary of this document. This outlines specific steps we recommend the Town implement to achieve program success. It is important that all stakeholders engage in a collaborative effort to achieve program success.

The following report is considered the initial phase of Welaka's ongoing, long-term AMFSP program. An electronic copy is provided for your review and use. If required, FRWA is available to assist Welaka staff in amending this AMFSP. It is in the Utility's interest to develop a strategic plan which accepts and implements this study to the maximum extent feasible.

Sincerely,

Patrick Dangelo

FRWA Utility Asset Management

cc: Raymond Chase, Clean Water State Revolving Fund
Gary Williams, FRWA Executive Director

Town of Welaka Wastewater System
Asset Management and Fiscal Sustainability Plan

Prepared for:

WELAKA WASTEWATER DEPARTMENT
WELAKA, FLORIDA
FLA

Prepared by:

FLORIDA RURAL WATER ASSOCIATION
Asset Management Program
In partnership with
Florida Department of Environmental Protection
&
Clean Water State Revolving Fund Program

Contents

Executive Summary

1. AMP Defined

An *Asset Management Plan* (AMP) is the systematic process of maintaining critical assets at the lowest life cycle cost within a predetermined desired level of service (as determined by Utility Staff, Customers, Commissioners, Regulators, etc.). Lowest life cycle cost refers to the best appropriate cost for rehabilitating, repairing or replacing an asset. Asset management is implemented through an ongoing, evolving program which includes a written plan and daily activities by utility staff using dedicated computerized software.

2. Benefits of an AMP

Implementing and maintaining an active Asset Management Plan will provide numerous benefits to the Utility and its Customers:

- Prolonging asset life and aiding in rehabilitate/repair/replacement decisions through efficient and focused operations and maintenance.
- Meeting consumer demands with a focus on system sustainability.
- Setting rates based on sound operational and financial planning.
- Budgeting focused on activities critical to sustained performance.
- Meeting service expectations and regulatory requirements.
- Improving response to emergencies.
- Improving security and safety of assets.
- Reducing overall costs for both operations and capital expenditures

3. State Revolving Fund Requirement

An active Asset Management Plan (AMP) is a recommended for participation in the State Revolving Fund Program (SRF). Asset Management and Fiscal Sustainability (AMFS) program details are identified in the Florida Administrative Code (FAC) 62-503.700(7).

4. AMP Development Stakeholders

The development of this AMP involved the collective efforts of the Florida Department of Environmental Protection, the State Revolving Fund (FDEP-SRF), Florida Rural Water Association (FRWA) personnel, and your utility staff.

5. Critical Assets and Preliminary Action List

The following tables contain a listing of Welaka's Critical Assets that were found to need Capital and/or Operational funding to operate as designed and within Regulatory Compliance and a recommended Priority list/Timeline for addressing these concerns. Please see Section 4 for a detailed description of the asset improvements listed below.

Asset name or type	Condition	Install Year	Design Life	Moderate COF
Manholes-19	Poor	Varies	50	Moderate
Drying Beds	Poor	1980	50	Moderate
Aeration Tank 1	Poor	1980	50	Moderate
Ls 6 pump 2 motor	Poor	2000	25	Moderate
Blower Motors (2)	Poor	2010	25	Moderate

NOTE: Costs in the Priority Action List below are based on numerous factors but are *estimates*. Actual costs associated with these items will vary based on project scope, materials and equipment chosen, labor costs, etc. Additionally, these numbers may differ from those listed in RevPlan due to RevPlan being much more in depth.

Town of Welaka PRIORITY ACTION LIST				
Action Item	**Target Date(s)**	**Cost Type**	**Cost**	**Responsible Party or Parties**
1. Pass Resolution Adopting AMFS Plan and Rate Schedule	Within 60 to 90 Days from Receipt of Final Plan	Administrative	No Cost	Board and Town Clerk
2. Determine Level of Service (LOS) Attributes, Goals, Targets, and Metrics and Prepare LOS Agreement	90 Days after Adoption	Planning	No Cost *	Board, Town Clerk, Mayor, Utility Supervisor
3. Train Staff and Begin Using AMFS Tools (Diamond Maps or similar).	90 Days after Adoption	Equipment/ Operational	Training – No Cost *	Town Clerk, Mayor, Utility Supervisor or Designee
4. Train Staff and Begin Using RevPlan.	90 Days after Adoption	Administrative	No Cost *	Town Clerk or Designee, FRWA
5. Explore Financial Assistance Options	On-going beginning in FY 2022	Administrative	No Cost	Town Clerk and Staff
6. Develop inspection plan utilizing cleaning and camera equipment (33% annually)	On-going beginning FY 2023-2026	Capital	Varies by scope and vendor ($40,000 annually for 3 years)	Utility Supervisor, Mayor, Outside Vendor
7. Engage a Registered Engineer To Review, Plan, Design, Permit, and Construct Capital Projects.	On-going beginning FY 2022	Capital	Professional Service and Construction Cost Varies by Scope	Town Clerk, Mayor, Utility Supervisor
8. Develop Operation and Maintenance Program and Procedures	Within 1 Year after Adoption	Planning	No Cost *	Town Clerk, Mayor, Utility Supervisor
9. Develop Change Out/Repair and Replacement Program for Critical Assets	Within 1 Year after Adoption	Planning	No Cost *	Town Clerk, Mayor, Utility Supervisor
10. Develop Updated Capital Improvement Plan	Within 1 Year after Adoption	Planning	No Cost *	Town Clerk, Mayor, Utility Supervisor
11. Locate, Clean Out and Evaluate Buried or Unlocated Manholes Shown on old System Maps.. Add to Diamond Maps	FY 2023	Operational	No Cost *	Utility Supervisor, staff

Action Item	Target Date(s)	Cost Type	Cost	Responsible Party or Parties
12. Develop Rehab/ Conversion project to update lift stations	Begin in FY 2023-2029	Capital	$75,000 annually for 4 years $300,000	Utility Supervisor, Mayor, Engineer
13. Clean and line 3 manholes annually	Begin if FY 2023	Capital	$15,000 annually	Utility Supervisor, Mayor, outside contractor
14. Wastewater Treatment Plant expansion Project	Beginning in FY 2023/2024	Grant/Capital	Total Cost - $9,800,000 SRF Loan - $TBD	Engineer, Mayor and Staff
15. Update Wastewater System Mapping	On-going	Administrative	No Cost	Utility Supervisor or Designee
16. Provide Additional Staff Training Opportunities	On-going	Administrative	Cost May Vary *	Mayor, Utility supervisor
17. Implement Annual Asset Replacement Program	Annually	Operational	Cost will Vary Based on Asset Replacement Program and Strategy	Board, Town Clerk, Mayor, and Staff
18. Conduct Rate Sufficiency Study and Adjust Rate Structure as Needed with RevPlan	Annually	Planning	No Cost *	Town Clerk and Mayor
19. Revise AMFS Plan and Update RevPlan Model	Annually	Administrative	No Cost *	Board, Town Clerk, Mayor, and Utility Supervisor
20. Update Energy Audit	Every 2 to 3 Years	Administrative	No Cost *	Mayor, Utility Supervisor

7. RevPlan

The Florida Rural Water Association has partnered with DEP & Raftelis to offer the systems of Florida a free online tool called RevPlan.

RevPlan is designed to enhance the asset and financial management for small wastewater utilities. The idea behind RevPlan is to provide an online tool for small wastewater utilities to achieve financial resiliency and to maintain their utility assets for long-term sustainability. RevPlan will assist users in identifying the various utility funding requirements over a five, ten, fifty or twenty-year planning window. These funding requirements include capital funding, operating costs, and debt repayment. RevPlan allows the user to identify any rate adjustments necessary to meet the utility funding requirements and the impact rate increases may have on ratepayers.

RevPlan is easy to use, integrates with Diamond Maps, and is financially feasible. RevPlan will help your system to:

- Replace aging asset management financial planning software supplied by the EPA
- Strengthen usage of web-based asset management mapping tool (Diamond Maps)
- Provide a reality check on the resources needed to maintain these small systems

Welaka asset data collected by FRWA staff along with financial information provided by the system were entered into RevPlan to create a preliminary financial sufficiency model for the utility. Each year (or as projects come up) the system is encouraged to update RevPlan and use it to help understand the impacts of future projects and rate increases. FRWA staff completed a financial sustainability study through Revplan. Complete details of Revplan models can be found in Appendix C. RevPlan models will be turned over to the system at no cost and Login credentials will be generated. System will then be able to access all Rate Study Models by going to https://frwa.revplan.net/Overview.

8. Fiscal Strategy and AMP Process Recommendations.

Based on this asset management and fiscal sustainability study, specific recommended action items related to Capital Expenditures (CAPEX) and Operating Expenditures (OPEX) and over the next five years are as follows:

1. Adopt this Asset Management and Fiscal Sustainability (AMFS) study in the form of a Resolution (see *Appendix A* for an example AMFS Resolution)
2. Engage a Florida Registered Engineer to support the Utility in review, funding, planning, design, permitting, and construction of critical CAPEX and OPEX as recommended in this AMFS study.

3. Make funding applications as needed to the following programs/agencies in support of Utility System Upgrades/Improvements as recommended by this AMFS study (a synopsis of these and other water and wastewater utility funding programs can be found at http://www.frwa.net/funding

   Also, explore these resources for potential funding:
   a. FDEP-State Revolving Fund
   b. Water Management District
   c. Community Development Block Grant
   d. Community Budget Issues Request
4. Evaluate and Adopt a Utility rate structure that will ensure rate sufficiency as necessary to implement capital improvements.
5. Begin Asset Management Planning (AMP) and begin a maintenance program utilizing a Computerized Maintenance Management System (CMMS) or similar method.
6. Continue to build your asset management program by:
   a. Collecting critical field data and attributes on any remaining assets not included in this report
   b. Improving on processes which provide cost savings and improved service
   c. Implementing a checklist of routine maintenance measures
   d. Benchmarking critical processes, annually
   e. Develop policies that will support funding improvements
   f. Develop manuals and guidelines for critical processes
   g. Identify responsible persons or groups to implement critical assets and processes
   h. Hold asset management training for staff annually.

1 Introduction

In accordance with FDEP Rule 62-503.700(7), F.A.C., State Revolving Fund (SRF) recipients are encouraged to implement an asset management plan to promote utility system long-term sustainability. Additionally, to be accepted for the ***financing rate adjustment and to be eligible for reimbursement***, an asset management plan must:

A. Be adopted by ordinance or resolution;
B. Have written procedures in place to implement the plan;
C. Be implemented in a timely manner.

The plan must include each of the following:

1. Identification of all assets within the project sponsor's (utility) system;

2. An evaluation of utility system assets' current:
    a. Age
    b. Condition and
    c. Anticipated useful life of each asset;
3. Current value of utility system assets;
4. Operation and maintenance cost of all utility system assets;
5. A Capital Improvement Program Plan (CIPP) based on a survey of industry standards, life expectancy, life cycle analysis and remaining useful life;
6. An analysis of funding needs;
7. The establishment of an adequate funding rate structure;
8. An asset preservation plan:
    a. Renewal
    b. Replacement
    c. Repair of asset as necessary and
    d. A risk-benefit analysis to determine optimum renewal or replacement timing;
9. An analysis of population growth and wastewater treatment demand projections for the utility's planning area and an impact fee model, if applicable, for commercial, industrial and residential rate structures and;
10. A threshold rate set to ensure proper wastewater system operation and maintenance; <u>if the potential exists for the project sponsor to transfer *any* of the system proceeds to other funds, rates must be set higher than the threshold rate to facilitate the transfer and maintain proper operation of the system.</u>

Fiscal Sustainability represents the accounting and financial planning process needed for proper management of WS assets. It assists in determining such things as:

a. Asset maintenance, repair, or replacement cost
b. Accurate and timely capital improvement project budgeting
c. Forecasting near and long-term capital improvement needs
d. Whether the WS is equipped for projected growth
e. Adequate reserves exist to address emergency operations.

Fiscal sustainability analysis requires a thorough understanding of the WS's assets' current condition and needs. Therefore, fiscal sustainability follows asset management and is improved by sound asset management. Conversely, asset management requires a healthy fiscal outlook, because servicing and care of current assets is not free. Timely expenditures for proper servicing and care of current assets are relatively small when compared to repair and replacement expenditures that inevitably occur with component failure due to neglect.

Having a solid AMFSP in place will also benefit Welaka in determining which assets are to be insured and for what amount. *Additionally, the Clean Water State Revolving Fund (CWSRF) recommends a WWS adopt and implement an AMFSP to qualify for loan interest rate reduction.* An AMFSP helps a system more effectively and efficiently identify its capital improvement needs and solutions.

The AMFSP's intended approach is to assist the WWS with conducting a basic inventory and condition assessment of its current assets. It is expected the WWS will periodically re-evaluate the condition of its assets (suggested at least annually) to determine asset remaining useful life. A reminder/tickler can be established to remind staff that a given component is nearing time for servicing, repair, or replacement. Furthermore, major capital improvement needs can be reassessed periodically as they are met or resolved. In short, this plan is not designed to be set in stone, but is intended to be a living, dynamic, evolving document. It is prudent for annual review and revision as necessary, resulting in a practical and useful tool for Welaka Staff.

Data collection and inspections were performed using Diamond Maps, our tool of choice for this purpose as well as CMMS and work order creation.

2 Asset Management Plan

2.1 Asset Management Defined

Asset Management can be described as *'a process for maintaining a desired level of customer service at the best appropriate cost'*. Within that statement, *'a desired level of service'* is simply what the utility wants their assets to provide. *'Best appropriate cost'* is the lowest cost for an asset throughout its life. The goal is providing safe, reliable service while at the same time being conscious of the costs involved both short and long term. In layman's terms, if you take care of your assets they will last longer and save you money.

Asset Management includes building an inventory of the utility's assets followed by developing and implementing a program that schedules and tracks all maintenance tasks (generally through work orders). Next, you must develop a set of financial controls that will help manage budgeted and actual expenses and revenue. By performing these tasks, targeting the system's future needs will be much easier.

Asset Management will give the utility documentation that aids in understanding what assets they have, how long these assets will last, and how much it will cost to maintain or replace these assets. It also provides financial projections which show the utility if rates and other revenue mechanisms are sufficient to supply the utility's needs for the future, 5, 10, even 20 years ahead.

Asset Management is made up of five core questions. They are:

1. What is the current status and condition of the utility's assets? (What assets do I have, where are they, and what is their condition?)
2. What Level of Service is required? (How do I want the utility to operate?)
3. What assets are considered critical to meeting the required Level of Service?

4. What are the utility's Capital Improvement Program Plan (CIPP), Operations and Maintenance plan (O&M), and asset's Minimum Life Cycle Cost strategies? (What is our plan to maintain and eventually replace our assets when needed?)
5. What is the utility's long term financial strategy? (How will we pay for all this?)

2.2 Why is Asset Management so Important?

There are many benefits when an Asset Management Plan is adopted and adhered to. These include:

- Your assets will last longer
- You can make operational decisions regarding maintaining and replacing your assets
- Your customers will have better service
- You can plan and pay for future repairs and replacements with confidence
- You'll know where your assets are
- You'll better understand which assets are critical to the utility and which are not
- Your utility will operate more efficiently
- You can be set rates based on sound information
- You can plan capital improvement projects that meet the true needs of the system
- You'll improve your response to emergencies

2.3 Implementation

Asset Management and Work Order Software (Required):

Asset Management (AM) and Work Order (WO) development requires dedicated software to manage the ongoing program. Without dedicated software, Utility Staff will be unable to access any infrastructure attribute data and maintenance management activities, hence rendering the entire AM and WO process unusable. The Utility may use an AMP and WO software of their choice. Florida Rural Water Association (FRWA) utilizes Diamond Maps, a cloud based geographical information system (GIS), to collect data within your system. FRWA, in partnership with FDEP has contracted with Diamond Maps to develop Asset Management software specifically for small systems at an affordable cost. Continuing with Diamond Maps will cost $30 per month for a single license, or as many licenses as necessary at the rates listed in the following table.

Meter Count	Unlimited Use Subscription
250	$15/month
500	$20/month
1000	$30/month
2000	$45/month
3000	$60/month
4000	$75/month
5000	$90/month
10,000	$165/month

Should a Utility choose to use an alternate software, integration of the attributes collected and populated by FRWA Staff, within Diamond Maps, may require an integrator/developer to transfer the data.

In addition to the CMMS tool, Diamond Maps, the Florida Department of Environmental Protection (FDEP) has partnered with the Florida Rural Water (FRWA) and Raftelis Financial Consultants to create an online financial tracking and revenue sufficiency modeling tool, RevPlan.

RevPlan is designed to enhance asset and financial management for small/medium Florida water and wastewater utilities. It provides a free-to-member online tool to achieve financial resiliency, and to maintain utility assets for long-term sustainability. Additionally, RevPlan is programmed to populate asset information directly from Diamond Maps, but can also be manually populated should you choose not to use Diamond Maps.

By inputting your accurate budgetary, operation and maintenance costs, capital improvement plan costs, existing asset and Revenue information, this tool assists the user in identifying any rate adjustments and/or external funding necessary to meet the utility finance requirements, and the impact rate increases/borrowing may have on customers.

There are a few important elements of a successful RevPlan outcome:

- The tool is only as accurate as the information entered.
- One to two people should be assigned the task of annual RevPlan updates.
- Updating asset information in Diamond Maps & RevPlan is essential.

FRWA staff has entered a preliminary model into Revplan to help the utility get started. The assets collected along with financial information provided by the system were entered to create the model. Each year (or as projects come about) the system is encouraged to update Revplan and use it to help understand the impacts of future projects and rate increases. Details from the model are located in the financial section of the plan.

2.4 Level of Service (LOS)

As a provider of water and/or wastewater service, a utility must decide what Level of Service (LOS) is required for its customers.

There are four key elements regarding LOS:

1. Provide safe and reliable water/wastewater service while meeting regulatory requirements.
2. Budgeting improvement projects that are focused on assets critical to sustained performance and based on sound operational and financial planning.
3. Maintain realistic rates and adjust as necessary to ensure adequate revenue reserves for targeted asset improvement.
4. Ensure long-term wastewater system resilience and sustainability.

Setting targets for individual parameters and metrics will help the utility direct their efforts and resources towards a previously agreed on goal. Though not required, these goals can be set in an agreement between the utility and its customers appropriately called a 'Level of Service Agreement'.

The goals that are established take into account costs, budgets, rates, service levels, and level of risk.

Guidelines for setting these goals include:

- Make the goals specific and well defined. It should be clear to anyone with even a basic knowledge of the utility.
- Make the goals measurable. You have to know if you are successful or not and must be able to see where completion lies ahead. You must also be able to determine when success is achieved.
- The goals must be attainable. Setting a goal to have no sewer back-ups whatsoever is great but unrealistic. A better choice would be to set a goal that all back-ups would be responded to within a specified timeframe, for example.
- The goals must be realistic. The staff and resources of the utility must be considered when setting goals. Available personnel, equipment, materials, funds, and time play a huge part in setting realistic targets.
- The goals must be time based. Adequate time must be included to meet the target. However, too much time can lead to apathy and affect the utility's performance.

The idea is to set goals and meet them. They should not be terribly easy. Effort should be involved. They should also include areas that have been lacking and a need exists. If the bar is set too low, the process is pointless.

The following are sample Level of Service goals for Welaka. Each plays a role in improving the performance of the utility and is beneficial to both the utility and the utility's customers.

Level of Service Goals Examples			
Attribute and Service Area	**Goal**	**Performance Targets**	**Timeframe/ Reporting**
Service Delivery - Health, Safety and Security	Reduce the number and duration of sewer overflows	Provide employees with training necessary to be proactive in system Utility and to rapidly and efficiently make emergency system repairs.	Annual report to Board
Infrastructure Stability - Asset Preservation and Condition	Improve system wide preventive maintenance (PM)	Develop a comprehensive PreventiveMaintenance weekly schedule for equipment and system components and complete all preventative Utility tasks as scheduled.	Weekly report to Utility Supervisor, Mayor and Monthly report to Town Clerk
Infrastructure Stability - Asset Preservation and Condition	Establish a Predictive Utility Schedule (PdMS)	Develop a weekly PdMS to continuously monitor equipment for signs of unexpected problems. Adjust the PdMS as needed.	Weekly report to Utility Supervisor, Mayor and Monthly report to Town Clerk
Infrastructure Stability - Asset Preservation and Condition	Develop an Asset Replacement Strategy	Develop an asset replacement strategy to be updated at least annually, including financing options.	Annual report to Town Clerk, Mayor and Board
Financial Viability - Service Quality and Cost	Assure that the utility is financially self-sustaining.	Perform an annual utilities rate analysis and make any needed rate adjustments every three to five years.	Annual Report to Town Clerk, Mayor and Board
Financial Viability – Service Quality and Cost	Enact automatic inflationary rate adjustments	Annual evaluation of the adequacy of inflationary rate adjustments	Annual report to Utility Supervisor, Mayor, Town Clerk and Board
Financial Viability - Service Quality and Cost	Minimize Life of Asset Ownership costs	Bi-annual evaluation of unexpected equipment repairs compared to the Preventive Maintenance Schedule (PMS). Adjust the PMS if warranted.	Bi Annual report to Utility Supervisor, Mayor and Annual report to Town Clerk
Infrastructure Stability - Conservation, Compliance, Enhancement	Improve reliability of the collection system	Annual evaluation of the collection system, including piping, manholes, and lift stations. Develop a long range plan for replacements and improvements with timelines and funding options.	Annual report to Utility Supervisor, Mayor, Town Clerk and Board
Infrastructure Stability - Asset Preservation and Condition	Identify Inflow and Infiltration	Smoke test specific sections of the collection system	Annual report to Utility Supervisor, Mayor,Town Clerk and Board

2.5 Best Management Practices (BMP)

Utility owners, managers, and operators are expected to be good stewards of the system. Every decision must be based on sound judgment. Using Best Management Practices (BMP) is an excellent tool and philosophy to implement. BMP can be described as *utilizing methods or techniques found to be the most effective and practical means in achieving an objective while making optimum use of the utility's resources*.

The purpose of an Asset Management Plan (AMP) is to help the utility operate and maintain their system in the most effective and financially sound manner. An AMP is a living document and is not intended to sit on a shelf. It must be maintained, updated, and modified as conditions and situations change. Experience will help the utility fine tune the plan through the years.

3 System Description

3.1 Overview

Welaka is a town situated on the St. Johns River in Putnam County, Florida, United States. The town is part of the Palatka Micropolitan Statistical Area. Welaka is approximately 90 miles south of Jacksonville and is accessible by highway or the Atlantic Ocean via the St. Johns River. It is located at 29°28'54"N 81°40'18"W (29.481556, –81.671555). The present Mayor is Jamie D. Watts, who assumed office on March 5, 2021.

It is not known when the area was first settled, but the nearby Mount Royal archaeological site is a possible remnant of a Timucua Indian village from c. 1250 CE to 1500 CE, and may have a connection to the town of Enacape, an important center of the Utina tribe.

The Town of Welaka was incorporated in 1887. By 1907, Welaka was famous for its "healing waters" which could possibly come from a subterranean spring located 329 feet below ground level and bottled for sale to tourist. The Mineral Water Company established in 1907 claimed that physicians reported that Welaka's healing waters were able to cure ailments because of stimulating the biliary circulation modifying conditions believed to be incurable. Welaka use to have grape vines and orange groves until the "Big Freeze" in 1895. Thankfully the town was able to recover due to its abundant fishing industry which is still thriving today.

Based on the 2020 census data, the total population was 714 for the area that is incorporated into the Town of Welaka. The average household size is 2.5. The median income per household is $44,167.00.

Form of Government

The Town of Welaka's Town Council is composed of a Mayor and four Council members who are elected. The Mayor serves a term of four years and the council members serve two years. The Town Council is the legislative body of the town with the power to adopt ordinances (including the annual budget), resolutions and regulations governed by the town's charter which is the driving document behind the procedures governing the Town Councils actions. The council meets the second Tuesday of every month at 6:00pm. All meetings are open to the public. The Mayor is recognized as the official head of the Town for all ceremonial purposes.

Government and Management

Town of Welaka	
Jamie Watts	**Mayor**
Jessica Finch	**Council President**
Marianne Milledge	**Council Member**
Kathy Washington	**Council Member**
Tonya Long	**Council Member**

Staff

The success of the Town of Welaka Public Works Department results from the partnerships among its divisions and the diverse skills and unselfish contributions of their respective staffs. The Town of Welaka Public Works Department is staffed by 9 fulltime employees and managed by the Mayor and Utilities Supervisor. FRWA appreciates the assistance of those employees that helped in the preparation of this Plan.

Name	Department
Tylor Buford	Utility Supervisor
Randy Harris	Wastewater Operator
Pauline Kinney	Utility Worker/Code Enforcement Officer
John Stuart	General Department Supervisor
Kendra Welch	Utilities Clerk
Meghan Allmon	Town Clerk
Open Postion	Utility Worker
Alfred Johnson Jr.	General Worker
Michael Scott	General Worker

4 Current Asset Conditions

4.1 Assets Critical to Sustained Performance

Every water and wastewater system is made up of assets. Some you can see, some you can't. These are the physical items such as valves, pipes, tanks, motors, manholes, buildings, etc. Each is important in its own way and serves a function to make the system operate as it should.

One trait common to all assets is that they lose value over time. With age comes deterioration. With deterioration comes a lessened ability to provide the appropriate level and type of service to the utility's customers. Another trait common to assets is that they must be maintained. Maintenance costs increase as these assets age. Operation costs can rise with age as equipment becomes worn and less efficient. Increased equipment failure can lead to issues such as customer problems and negative environmental impacts. At some point, it is wise to replace components rather than continue with ever more frequent and costly repairs. Managing these assets properly helps a utility make better decisions regarding their system's many parts.

Another unfortunate fact is that all assets will fail if not properly maintained. How the utility manages the consequences of these failures is vital. Not every asset presents the same failure risk. Not every asset is equally critical to the performance of the utility. For example, a fence

surrounding a well site or lift station, though important, is not as vital or 'critical' to the utility as a well pump or lift station pump.

Factors that contribute to asset failure are numerous and include age, environment (weather, corrosive environments), excessive use, improper maintenance, etc.

Replacement versus rehabilitation is always a consideration. What is best for the utility? What is best for the customer? The proper decision must be made based on information gleaned from all available resources.

Implementing CMMS at this stage will ensure the Town's assets last longer, perform better, and provide more reliable service.

Maintenance schedules can be created following both manufacturer's recommendations as well as those of industry professionals. Work orders can be created and scheduled to make sure the work is assigned and completed. FRWA staff can assist Welaka in creating these lists.

4.2 Current Needs

4.21 Manholes

115 manholes were assessed during data collection and were found to be in overall average to good condition. Of those manholes 19 were found to be in poor condition. Annual inspections are recommended to reveal any issues that may develop. Manholes that were not able to be located, or accessed were given a poor condition until they are located and or assessed. The manholes that were in poor condition showed heavy signs of deterioration or excessive debris. Manholes that were sealed shut or were not able to be located should be reassessed once located or opened up.

Manhole ID	Comment	COF
wwManH-2	Unable to locate	Moderate
wwManH-3	Unable to locate	Moderate
wwManH-6	Unable to locate	Moderate
wwManH-8	Unable to locate	Moderate
wwManH-15	Unable to locate	Moderate
wwManH-19	Unable to locate	Moderate
wwManH-27	Unable to assess until uncovered	Moderate
wwManH-41	Constant pooling at bottom, manhole needs cleaned and lined.	Moderate
wwManH-50	Unable to locate	Moderate
wwManH-52	Moderate infiltration around incoming lateral. Bench is full of sand	Moderate
wwManH-53	Unable to locate	Moderate
wwManH-57	Needs cleaned and lined	Moderate

Manhole ID	Comment	COF
wwManH-58	Needs cleaning and lined	Moderate
wwManH-60	Needs cleaned and lined	Moderate
wwManH-66	Ring is deteriorated and previous liner is beginning to separate.	Moderate
wwManH-69	Heavy grease build up and deterioration starting	Moderate
wwManH-70	Intrusion around base, heavy dirt buildup	Moderate
wwManH-72	Unable to open	Moderate
wwManH-74	Sealed shut, couldn't open	Moderate

4.22 Lift Stations

7 lift stations were assessed during data collection. Listed in the following table are comments and deficiencies noted during the assessment. Of those, 4 are above ground can stations that should be converted into submersible duplex pumps. Converting to a submersible station will make maintenance easier and the equipment more secure. $75,000 should be budgeted for each conversion of the lift stations.

Lift Station	Recommendations or Deficiencies
1	Auto dialer or genset needed due to close location to water way
Master	Rehab with plant expansion. Should be converted to submersible.
4	Undersized, larger station would allow for more connections
5	Standpipes inside wet well have moderate to severe corrosion. Should be converted to submersible.
6	Pump and motor constantly running, multiple visits. Should be converted to submersible.
7	Should be converted to submersible.
Vac Station	Regular maintenance and upgrades already scheduled.

The collection system has moderate I&I based on the flow increases witnessed during and after rain events. The collection system should be cleaned and camera inspected to find sources of inflow and infiltration. FRWA circuit riders can help assesses the collection system utilizing smoke and blowers to help identify starting points and areas of concern for further inspections.

4.23 Wastewater Plant

The Welaka Wastewater Treatment Facility (WWTF) is located at 211 11th Street Welaka FL 32193. The WWTF is permitted for .099 MGD. The town has currently been awarded funding for Expansion of the WWTF. This will significantly increase the capacity and correct issues that

were found at the plant. This can be a lengthy process and the current plant will need to remain online until the completion of the new plant. Listed below are deficiencies noted during the assessment of the current WWTF.
Items of concern are listed below:

Wastewater Plant Recommendations:

- Areas of Safety Grates and handrails rusted and deteriorating.
- Aeration tanks and air header have moderate corrosion
- Drying beds need cleaned out
- All tanks need to be drained, cleaned, & pressure washed
- Materials and tools need organization.
- Regular servicing on blowers and motors (replacement may be needed before new plant is online)

5 Operations and Maintenance Strategies (O&M)

O&M consists of preventive and emergency / reactive maintenance. In this section, the strategy for O&M varies by the asset, criticality, condition and operating history.

All assets have a certain failure risk associated with them. This risk must be used as the basis for establishing a maintenance program to make sure that the utility addresses the highest risk assets. In addition, the maintenance program should address level of service requirements to ensure that the utility is running at a level acceptable to the customer. Unexpected incidents could require changing the maintenance schedule for some assets. This is because corrective action must be taken in response to unexpected incidents, including those found during routine inspections and O&M activities. Utility staff will record condition assessments when maintenance is performed, at established intervals, or during scheduled inspections. As an asset is repaired or replaced, its condition will improve and therefore it can reduce the overall risk of the asset failing. The maintenance strategy should be revisited annually by Welaka staff.

5.1 Preventive Maintenance

Preventive maintenance is the day-to-day work necessary to keep assets operating properly and includes the following:

1. Regular and ongoing annual tasks necessary to keep the assets at their required service level.
2. Day-to-day and general upkeep designed to keep the assets operating at the required levels of service

3. Tasks that provide for the normal care and attention of the asset including repairs and minor replacements
4. The base level of preventative maintenance is defined in the equipment owner's manual. These preventative maintenance guidelines are supplemented by industry accepted best management practices.

Equipment must be maintained according to manufacturer's recommendations to achieve maximum return on investment. By simply following the manufacturer's suggested preventive maintenance the useful life of equipment can be increased 2 to 3 times when compared to run till failure mode of operation. Communities that have eliminated preventive maintenance practices from their operating budget can achieve positive returns from a relatively small additional investment. Deferred maintenance tasks that have not historically been performed because of inadequate funding or staffing must be projected into future operating budgets to achieve life expectancy projected by the manufacturer and engineer.

Table 5.1 is a portion of a generic O&M Program and is based on BMPs, manufacturers' recommended service intervals, staff experience, and other sources. *This schedule is only an example*. The true schedule must be created by Welaka staff based on their historical knowledge, information gleaned from plant O&M Manuals, and other sources. Input from Welaka's operations and maintenance staff is vital.

Welaka staff should schedule all maintenance tasks. Recurring items (such as annual flow meter calibrations for instance) can be set up in advance. In fact, all maintenance activities should be coordinated in a work order format.

Table 5.2 is a **generic** example of a spreadsheet created using information FRWA will make available to Welaka to create a simple maintenance schedule. Such a schedule could be used to create work orders for employees for Asset Management tasks.

A Master Inventory Spreadsheet will be provided to Welaka containing all data collected during our work in the wastewater system. This will be useful in creating a myriad of tools needed for performing Asset Management tasks.

Performing the work is important. Tracking the work is also important. Being able to easily check on when specific maintenance tasks were performed or are scheduled will make the utility run more efficiently.

Table 5.1

Task Name	Frequency	Task Name	Frequency
Visually Inspect Plant and Lift Stations for Damage or Tampering	Per Visit	Respond to any complaints	As they occur
Ensure proper operation of equipment (note any issues)	Per Visit	Decommission unnecessary equipment	As they occur
Calibrate all meters and necessary equipment	Per Visit	Perform P/M on pumps and motors	Manufacturer recommendation
Check plant per DEP requirements	Per Visit	Perform P/M at plant and lift stations and on safety equipment	Manufacturer recommendation
Complete all log work	Per Visit	Exercise vales in system and at lift stations	Annually
Collect all samples	As required by Permit	Inspect storage tanks	Annually
Perform general housekeeping	Weekly	Calibrate meter and backflows	Annually
Exercise Generator	Monthly	Inspect manholes	Annually
Confirm submittal of monthly reports	Monthly	Update FSAMP	Annually

Table 5.2

WO#	Title	Description	Date Started	Date Completed	Recurring	Notes
RECU R1001	Lift Station #5 check	Check lift station for proper operation and record information			Weekly|Mo, We,Fr,	
RECU R1002	Lift station #4 check	check lift station for proper operation and record information			Weekly|Mo, We,Fr,	
RECU R1003	Lift Station #1 check	check lift station for proper operation and record information			Weekly|Mo, We,Fr,	
RECU R1004	Lift Station #6 check	check lift station for proper operation and record information			Weekly|Mo, We,Fr,	
RECU R1005	Lift Station #7 check	check lift station for proper operation and record information			Weekly|Mo, We,Fr,	
RECU R1006	Master Lift Station check	check lift station for proper operation and record information.			Weekly|Mo, Tu,We,Th,Fr ,Sa,Su,	
RECU R1007	Inspect Manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1008	Inspect Manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1009	Inspect Manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1010	Inspect Manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1011	Inspect manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1012	Inspect manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	

WO#	Title	Description	Date Started	Date Completed	Recurring	Notes
RECU R1013	Inspect Manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1014	Inspect Manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1015	Inspect Manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1016	Inspect manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1017	Inspect manhole and update information on Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1018	Inspect manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	
RECU R1019	Inspect manhole and update information in Diamond Maps	Inspect Lid, ring, chimney, and base. Update diamond maps information			Yearly|10/1	

5.2 Proactive vs Reactive Maintenance

Reactive maintenance is often carried out because of customer requests or sudden asset failures. The required service and maintenance to fix the customer's issue(s) or asset failure is identified by staff inspection and corrective action is then taken.

Proactive maintenance consists of preventive and predictive maintenance. Assets are monitored frequently and routine maintenance is performed to increase asset longevity and prevent failure.

Upon adoption of this Asset Management Plan or any DEP-approved WAMP, FRWA Utility Asset Management (UAM) intends to upload Welaka's asset data definition file into "Diamond Maps", described in Section 2.3, and populate with field data.

5.3 Staff Training

Utility maintenance is quite unique. It can involve water and sewer main repairs, customer service issues, lift station troubleshooting and repair, blower and motor repairs, and even tank repairs. This skill set is not common. Training staff, whether they are new or long-term employees, is very important. It is recommended that the Town initiate a training program for its employees. Electrical safety, troubleshooting panel boxes, trenching and shoring, confined space, etc. are just a few of the topics that could benefit Welaka and its staff.

FRWA personnel can provide some of this. Other options are also possible. For example, nearby municipalities might allow shadowing of their lift station crews to gain knowledge and experience.

You cannot receive too much training. A more knowledgeable and capable staff makes the utility even better.

6 Capital Improvement Plan

A Capital Improvement Plan is a vital asset for any utility. This is a short-range plan, typically 4 to 10 years, which identifies future capital projects. Capital improvement projects generally create a new asset that previously did not exist or upgrades or improves an existing component's capacity. The projects can result from growth or environmental needs, such as:

1. Any expenditure that purchases or creates a new asset or in any way improves an asset beyond its original design capacity.
2. Any upgrades that increase asset capacity.
3. Any construction designed to produce an improvement in an asset's standard operation beyond its present capacity.

Capital improvement projects will populate this list.

Renewal expenditures are anything that does not increase the asset's design capacity but restores an existing asset to its original capacity. Any improvement projects that require more than simply restoring an asset to its original capacity are deemed to be a renewal project, such as:

1. Any activities that do not increase the capacity of the asset. (i.e., activities that do not upgrade and enhance the asset but merely restore them to their original size, condition and capacity)
2. Any rehabilitation involving improvements and realignment or anything that restores the assets to a new or fresh condition.

In making renewal decisions, the utility considered several categories other than the normally recognized physical, failure or breakage. Such renewal decisions include the following:

1. Structural
2. Capacity
3. Level of service failures
4. Outdated functionality
5. Cost or economic impact

The utility staff and management typically know of potential assets that need to be repaired or rehabilitated. Reminders can be set up to let the staff members know when the condition of an asset begins to decline according to the manufacturer's life cycle recommendations. The utility staff can take these reminders and recommendations into account.

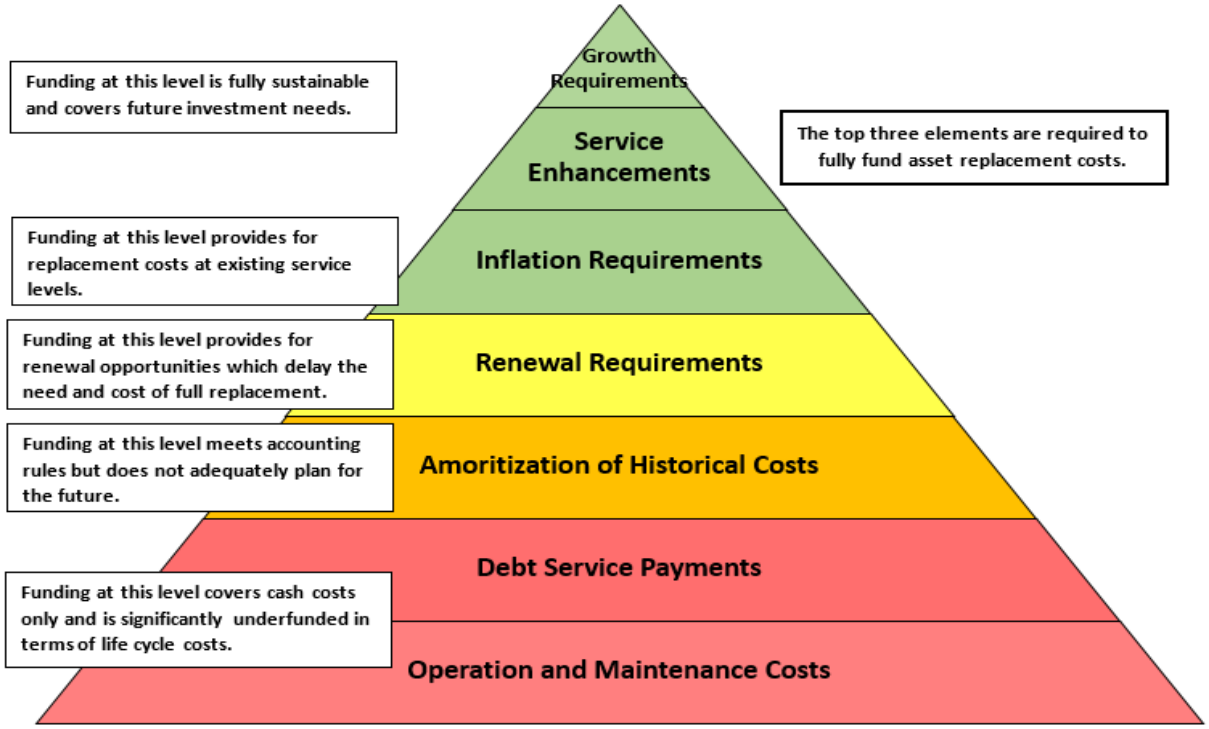
Because the anticipated needs of the utility will change each year, the CIP is updated annually to reflect those changes. Listed below is a sample CIP schedule taken from RevPlan and should be updated annually.

Welaka,Town of											
S2 Welaka FY22 (2000 allowance)											
Fiscal Year: 2022											
CIP Schedule											
Description	**Funding Source**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
ForceMain Shutoff Valve	Wastewater Revenues	$0	$6,000	$0	$0	$0	$0	$0	$0	$0	$0
Generator for Lift Stations	Wastewater Revenues	$0	$0	$0	$0	$50,000	$0	$0	$0	$0	$0
New 40' x 60' metal building	Wastewater Revenues	$0	$12,500	$12,500	$12,500	$12,500	$0	$0	$0	$0	$0
Callout system 5 lift stations	Wastewater Revenues	$0	$10,000	$10,000	$10,000	$0	$0	$0	$0	$0	$0
Capital Improvements	Wastewater Revenues	$5,000	$0	$0	$0	$0	$0	$0	$0	$0	$0
Small Escavator	Wastewater Revenues	$0	$7,700	$7,700	$7,700	$0	$0	$0	$0	$0	$0
Utility Truck	Wastewater Revenues	$0	$8,200	$8,200	$8,200	$8,200	$8,200	$0	$0	$0	$0
Vacuum Jeter Truck	Future Loan	$0	$0	$0	$0	$0	$0	$0	$0	$75,000	$0
Wastewater Asset Replacement Costs	Wastewater Revenues	$0	$10,000	$20,000	$30,000	$40,000	$50,400	$50,400	$50,400	$50,400	$50,400
Wastewater Treatment Plant Update	Grant	$0	$0	$0	$17,000,000	$0	$0	$0	$0	$0	$0
Water Asset Replacement Costs	Water Revenues	$0	$20,000	$40,000	$60,000	$80,000	$100,000	$106,900	$106,900	$106,900	$106,900
Totaled by	**Funding Source**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
	Wastewater Revenues	$5,000	$54,400	$58,400	$68,400	$110,700	$58,600	$50,400	$50,400	$50,400	$50,400
	Future Loan	$0	$0	$0	$0	$0	$0	$0	$0	$75,000	$0
	Grant	$0	$0	$0	$17,000,000	$0	$0	$0	$0	$0	$0
	Total	**$5,000**	**$54,400**	**$58,400**	**$17,068,400**	**$110,700**	**$58,600**	**$50,400**	**$50,400**	**$125,400**	**$50,400**

7 Financial

Budget/Financial Sufficiency

In order for an Asset Management Plan to be effectively put into action, it must be integrated with financial planning and long-term budgeting. The development of a comprehensive financial plan will allow the Town of Welaka to identify the financial resources required for sustainable asset management based on existing asset inventories, desired levels of service, and projected growth requirements. The pyramid below depicts the various cost elements and resulting funding levels that should be incorporated into Asset Plans that are based on best practices.



This report, with the assistance of RevPlan, helps develop such a financial plan by presenting several scenarios for consideration and culminating with final recommendations.

The assets collected, along with financial information provided by the system, were entered into RevPlan to create a preliminary financial sufficiency model for the Town. Each year the system is encouraged to update RevPlan and use it to help understand the impacts of future projects and rate increases. Details from the model are located in Appendix C.

The use of RevPlan allows the system to input current financial data and develop their own financial planning projections based on various time frames. The Town will have the ability to modify the rate structure to determine which proposed rate scenarios may support current and upcoming debt and expenses. Members of FRWA staff are available to assist the Town with RevPlan and updating financial models.

Asset Statistics

The table below summarizes the asset information from the Town collected by FRWA and found in RevPlan:

Town of Welaka Wastewater System	
Total Replacement Cost of Wastewater System	$2,716,798.89
Percent of Assets Needing Replacement	8.4 %
Cost of Replacing All Assets Needing Replacement	$228,090.88
Annual Replacement Cost of System	$78,567.70

Please note that the $2.7 million dollar replacement cost of the wastewater system documented above, along with the annual replacement cost of $78,567 for the system is low. These figures do not include certain assets such as large equipment, water mains, vehicles, and some property improvements normally associated with maintaining a utility system. As a result, any proposed rate adjustments suggested by FRWA should be considered a minimum or a starting point for review and consideration by the Town.

Based on the findings of the Asset Management Plan, it is important for Town of Welaka to start setting aside reserves for the replacement of its assets, to make sure that the base charge is adequately covering operating costs and that its usage charges are sufficient to fund its capital improvement costs.

Existing Rates

A 'rule of thumb' FRWA subscribes to regarding rates is that base charges pay for fixed expenses and usage charges fund the variable expenses. Rates should generate sufficient revenue to cover the full cost of operating a water system. By charging customers the full cost of water, small water systems send a message that water is a valued commodity that must be used wisely and not wasted. When rates are set to cover the full cost of production, water systems are more likely to have financial stability and security.

The current residential and commercial rate structure is as follows:

Residential:

0-3000 gallons	$22.00 Water	$27.90 Sewer	$49.90 Total Bill
3001-3200 gallons	$23.47 Water	$29.76 Sewer	$53.23 Total Bill
3201-3400 gallons	$24.94 Water	$31.62 Sewer	$56.56 Total Bill
3401-3600 gallons	$26.41 Water	$33.48 Sewer	$59.89 Total Bill
3601-3800 gallons	$27.88 Water	$35.34 Sewer	$63.22 Total Bill
3801-4000 gallons	$29 .35 Water	$37.20 Sewer	$66.55 Total Bill

Residential Continued:

4001-4200 gallons	$30.82 Water	$39.06 Sewer	$69.88 Total Bill
4201-4400 gallons	$32.29 Water	$40.92 Sewer	$73.21 Total Bill
4401-4600 gallons	$33.76 Water	$42.78 Sewer	$76.54 Total Bill
460l-4800 gallons	$35.23 Water	$44.64 Sewer	$79.87 Total Bill
4801-5000 gallons	$36.70 Water	$46.50 Sewer	$83.20 Total Bill

Commercial:

0-3000 gallons	$25.00 Water	$33.48 Sewer	$58.48 Total Bill
3001-4000 gallons	$33.34 Water	$44.64	$77.98 Total Bill
4001-5000 gallons	$41.68 Water	$55.80	$97.48 Total Bill
5000 + gallons	$9.34 per 1K gals of water over the 5Kgals consumption	$13.02 per 1K gals. for sewer over 5K gals. consumption	

Based on the Number of Connections and the Annual Gallons, the average monthly use per customer of the residential class is 2.63 thousand gallons per month (2,630 gallons per month). With a lower average usage the current rate structure is not sufficient to support the utility in the long term.

The current rate structure would also not cover capital expenditures and would require reserves to be depleted by FY23-24.

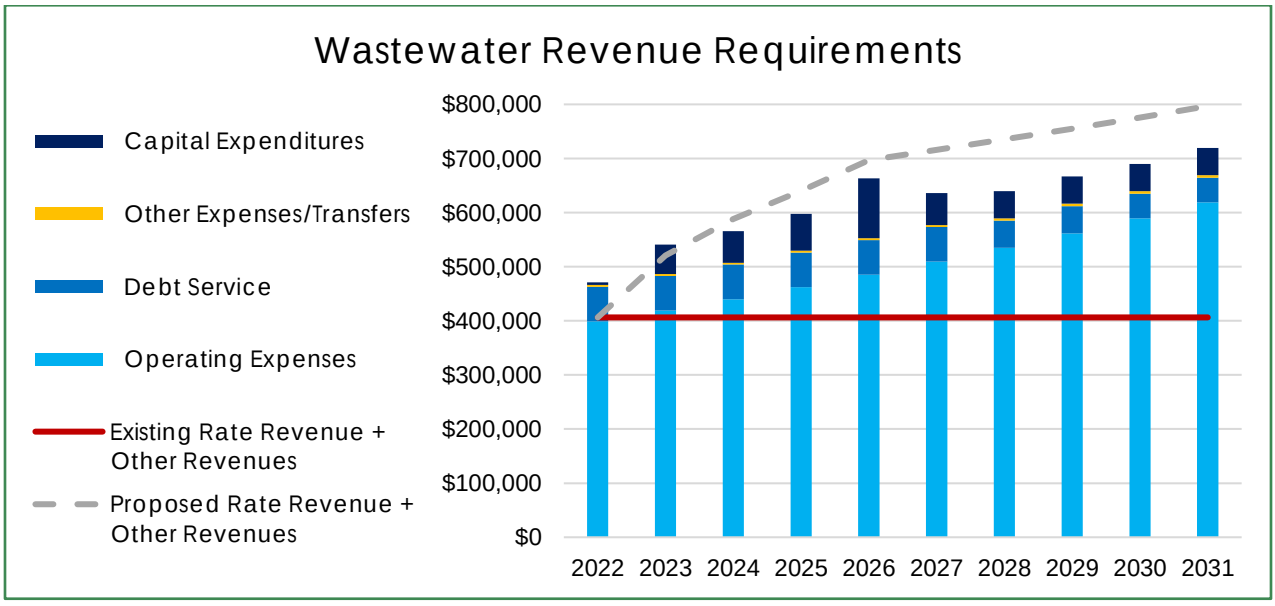
Proposed Rates

FRWA Finance team has developed the following Recommended Rate Scenario and is available to meet with the Town to further explain the proposed scenario and explore other scenarios or possibilities that would best meet the Town's needs. ***Please note that due to the length of time between delivery of this plan to the time of adoption, the suggested rates will be revised to reflect current conditions and should be implemented at the beginning of the next fiscal year***

This rate scenario establishes a new rate structure and reduces the 3000-gallon allowance to 2000 gallons and shows the rate increases needed if the projects identified in the Capital Improvement Plan section do not change. This scenario also takes into consideration the additional costs for Annual Asset Maintenance as identified in the Asset Statistic section above and the Consumer Price Index of 5% annually to all Operating Expense.

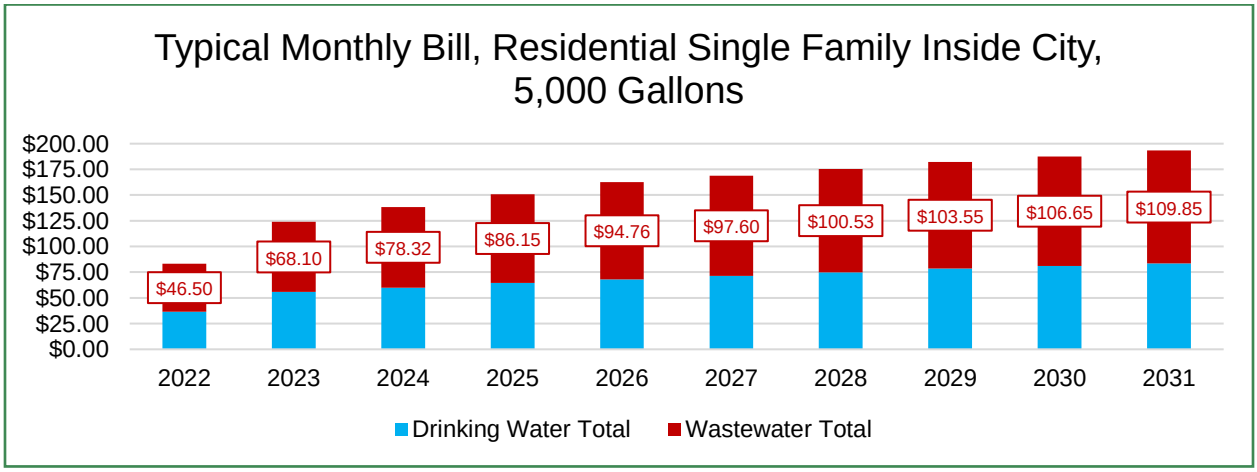
Listed below is the Wastewater revenue requirements shown with the proposed rate structure and details the existing rate sufficiency.

Welaka,Town of S2 Welaka FY22 (2000 allowance) Fiscal Year: 2022 Wastewater Revenue Requirements										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Revenue Requirements:										
Operating Expenses	$399,100	$419,000	$440,000	$462,000	$485,100	$509,400	$534,800	$561,600	$589,600	$619,100
Debt Service	$64,000	$64,000	$64,000	$64,000	$64,000	$64,000	$50,500	$50,500	$45,500	$45,500
Other Expenses/Transfers	$3,000	$3,200	$3,300	$3,500	$3,600	$3,800	$4,000	$4,200	$4,400	$4,700
Capital Expenditures	$5,000	$54,400	$58,400	$68,400	$110,700	$58,600	$50,400	$50,400	$50,400	$50,400
Gross Revenue Requirements	$471,100	$540,600	$565,700	$597,900	$663,400	$635,800	$639,700	$666,700	$689,900	$719,700
Less: Other Revenue	$70,300	$70,300	$70,300	$70,300	$70,300	$70,300	$70,300	$70,300	$70,300	$70,300
Net Revenue Requirements	$400,800	$470,300	$495,400	$527,600	$593,100	$565,500	$569,400	$596,400	$619,600	$649,400
Existing Rate Sufficiency:										
Revenue from Existing Rates	$335,993	$335,993	$335,993	$335,993	$335,993	$335,993	$335,993	$335,993	$335,993	$335,993
Revenue Surplus/(Deficiency)	-$64,807	-$134,307	-$159,407	-$191,607	-$257,107	-$229,507	-$233,407	-$260,407	-$283,607	-$313,407
Proposed Rate Sufficiency:										
Revenue from Proposed Rates	$335,993	$450,367	$517,923	$569,715	$626,686	$645,487	$664,852	$684,797	$705,341	$726,501
Increase in Revenue	$0	$114,374	$181,929	$233,722	$290,693	$309,494	$328,858	$348,804	$369,348	$390,508
Cumulative %										
All Customer Classes										
Base Charges	0.00%	15.00%	32.25%	45.48%	60.02%	64.82%	69.77%	74.86%	80.11%	85.51%
Usage Charges	0.00%	15.00%	32.25%	45.48%	60.02%	64.82%	69.77%	74.86%	80.11%	85.51%
Current Year %										
All Customer Classes										
Base Charges	0.00%	20%	15%	10%	10%	3%	3%	3%	3%	3%
Usage Charges	0.00%	20%	15%	10%	10%	3%	3%	3%	3%	3%
Revenue Surplus/(Deficiency)	**-$64,807**	**-$19,933**	**$22,523**	**$42,115**	**$33,586**	**$79,987**	**$95,452**	**$88,397**	**$85,741**	**$77,101**



The proposed rate structure would be as follows:

Proposed Rate Structure	2023	2024	2025	2026	2027	2028	2029	2030	2031
Wastewater									
Residential Single Family									
Base Charges Inside City									
5/8-inch	$33.48	$38.50	$42.35	$46.59	$47.99	$49.42	$50.91	$52.43	$54.01
Usage Charges Inside City									
2,001 to 4,000 gallons	$11.16	$12.83	$14.12	$15.53	$16.00	$16.47	$16.97	$17.48	$18.00
4,001 to 6,000 gallons	$12.30	$14.15	$15.56	$17.12	$17.63	$18.16	$18.70	$19.26	$19.84
6,001 gallons or more	$15.90	$18.29	$20.11	$22.12	$22.79	$23.47	$24.18	$24.90	$25.65
Commercial									
Base Charges Inside City									
5/8-inch	$40.18	$46.20	$50.82	$55.90	$57.58	$59.31	$61.09	$62.92	$64.81
Usage Charges Inside City									
2,001 to 4,000 gallons	$13.96	$16.05	$17.65	$19.42	$20.00	$20.60	$21.22	$21.86	$22.51
4,001 to 6,000 gallons	$15.37	$17.68	$19.45	$21.39	$22.03	$22.69	$23.37	$24.07	$24.80
6,001 gallons or more	$19.87	$22.85	$25.14	$27.65	$28.48	$29.34	$30.22	$31.12	$32.06
Outside City (Surcharge)									
Base Charges Inside City									
5/8-inch	$50.24	$57.78	$63.56	$69.91	$72.01	$74.17	$76.40	$78.69	$81.05
Usage Charges Inside City									
2,001 to 4,000 gallons	$16.75	$19.26	$21.19	$23.31	$24.01	$24.73	$25.47	$26.24	$27.02
4,001 to 6,000 gallons	$18.44	$21.21	$23.33	$25.66	$26.43	$27.23	$28.04	$28.89	$29.75
6,001 gallons or more	$23.84	$27.42	$30.16	$33.18	$34.17	$35.20	$36.26	$37.34	$38.46
Base Rate Only									
Base Charges Inside City									
5/8-inch	$34.68	$39.88	$43.87	$48.26	$49.70	$51.20	$52.73	$54.31	$55.94
FGUA									
Base Charges Inside City									
5/8-inch	$4,313.40	$4,960.41	$5,456.45	$6,002.10	$6,182.16	$6,367.62	$6,558.65	$6,755.41	$6,958.07
Usage Charges Inside City									
300,001 gallons or more	$13.39	$15.40	$16.94	$18.63	$19.19	$19.77	$20.36	$20.97	$21.60

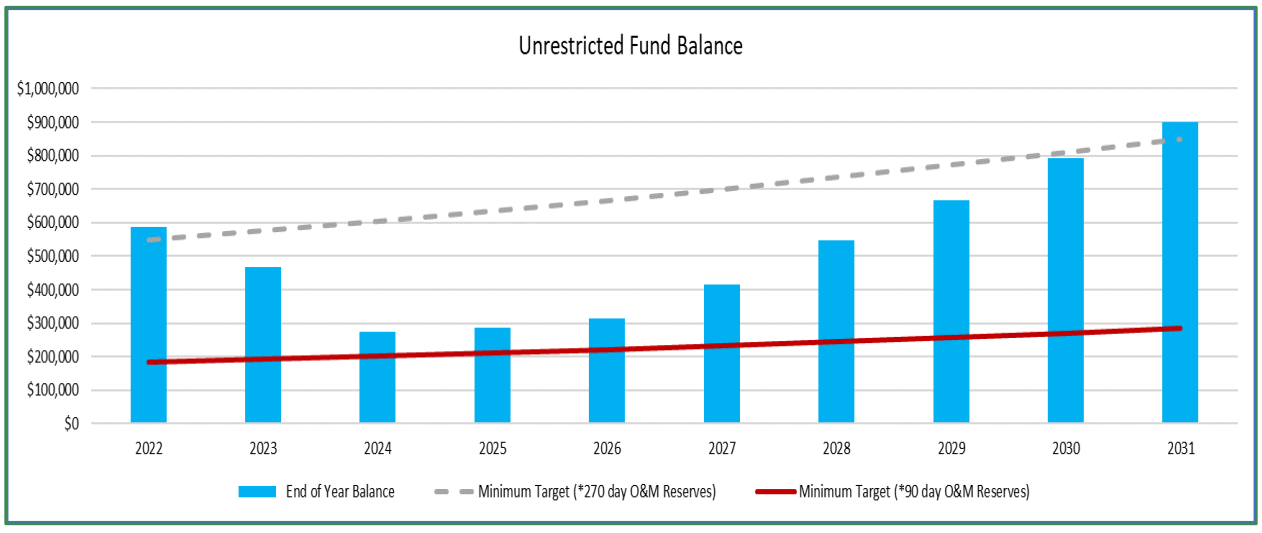


Reserves

Reserve balances for utility systems are funds set aside for a specific cash flow requirement, financial need, project, task, or legal covenant. All types of reserves can play a significant role in addressing current and future challenges facing utility systems, such as demand volatility, water supply costs, large capital requirements, asset replacements, natural disasters and potential liabilities from system failures associated with aged infrastructure. All utilities should establish formal financial policies relative to reserves. Such policies should articulate how these balances are established, their use, and how the adequacy of each respective reserve fund balance is determined. Once reserve targets are established, they should be reviewed annually during the budgeting process.

In the Town of Welaka, the unrestricted cash available at end of FY 2021 was $ 690,617.2, with annual operating expenses (without depreciation) of approximately $552,583 (DW and WW expenses) in FY 2021 giving the Town more than the recommended 270 days of cash on hand.

For planning purposes and without a stated reserve policy from the Town, FRWA builds the financial model by increasing the annual unrestricted reserve funding to 270 days of the current year operation and maintenance budget. While there is not a one size fits all approach to building reserves, FRWA cautions utilities about dropping below 90 days and encourages them to work towards a balance of cash on hand equal to or greater than 270 days. Cash reserves are essential to ensure a utility's long-term financial sustainability and resiliency. Each utility system has its own unique circumstances and considerations that should be factored into the selection of the types of reserves and corresponding policies that best meet its needs and objectives. In the proposed rate model that was used, the Town will use reserves through FY24, before building back up 270 day of O&M expense in FY30-31. These proposed rates will keep reserves above 90 days of O&M expense throughout this model.



Recommendation

Based on the preliminary financial sufficiency model developed by RevPlan, FRWA recommends that the Town pursue the presented scenario. In addition, FRWA encourages the Town to review RevPlan, growth projections, and Consumer Price Index (CPI) changes at least annually to determine if additional rate increases are needed as well as to pursue aggressively alternative revenue funding sources for the future capital projects identified in the Capital Improvements Plan. Listed below are items that are essential for the utility to pursue to ensure its fiscal sustainability

- Reduce the number of gallons included in the base charge from 3,000 to 2,000 gallons
- Adopt and implement an annual CPI increase to keep up with growing expenses outside of the towns control
- Review and update RevPlan annually to ensure accuracy and future planning

The use of RevPlan can allow the system to input current financial data and see a projection up to twenty years out for financial planning. Welaka will have the ability to modify the rate structure to determine different rate scenarios that support current and upcoming debt, revenue streams and expenses.

Funding Sources for Water and Wastewater Systems

Florida Rural Water Association offers funding and technical assistance in the form of preparing funding documentation. These documents include Request for Inclusion (RFIs), Applications, and Disbursement Requests. The RFI is a document where you request to be put on the State Revolving Fund (SRF) funding priority list. If placed on the priority list, the application process can begin to receive funding through the SRF. Florida Rural Water Association offers this as a free service to communities in Florida with multiple, knowledgeable employees dedicated to assisting with funding.

For more information on how your system can benefit from an RFI, contact Dyana Stewart at dyana@frwa.net

Below is a table of common funding sources, including web links and contact information. All municipal systems should be making the effort to secure funding, which can be in the form of low or no interest loans, grants or a combination.

Agency/Program	Website	Contact
FDEP Drinking Water State Revolving Fund Program (DWSRF)	https://floridadep.gov/wra/srf/content/dwsrf-program	Shanin Speas-Frost shanin.speasfrost@floridadep.gov 850-245-2991
FDEP Clean Water State Revolving Fund Loan Program (CWSRF)	https://floridadep.gov/wra/srf/content/cwsrf-program	Mike Chase Michael.Chase@FloirdaDEP.gov 850-245-2966
USDA Rural Development- Water and Wastewater Direct Loans and Grant s	https://www.rd.usda.gov/programs-services/rural-economic-development-loan-grant-program https://www.rd.usda.gov/programs-services/water-waste-disposal-loan-grant-program	Michael Langston michael.langston@fl.usda.gov 352-338-3440
Economic Development Administration- Public Works and Economic Adjustment Assistance Programs	https://www.eda.gov/resources/economic-development-directory/states/fl.htm https://www.grants.gov/web/grants/view-opportunity.html?oppId=294771	Greg Vaday gvaday@eda.gov 404-730-3009
National Rural Water Association- Revolving Loan Fund	https://nrwa.org/initiatives/revolving-loan-fund/	Gary Williams Gary.Williams@frwa.net 850-668-2746
Florida Department of Economic Opportunity- Florida Small Cities Community Development Block Grant Program	http://www.floridajobs.org/community-planning-and-development/assistance-for-governments-and-organizations/florida-small-cities-community-development-block-grant-program	Roger Doherty roger.doherty@deo.myflorida.com 850-717-8417
Northwest Florida Water Management Town- Cooperative Funding Initiative (CFI)	https://www.nwfwater.com/Water-Resources/Funding-Programs	Christina Coger Christina.Coger@nwfwater.com 850-539-5999

8 Energy Management

Energy Conservation and Cost Savings

Energy costs often make up 25 to 30 percent of a utility's total operation and maintenance (O&M) costs. They also represent the largest controllable cost of providing water and wastewater services. EPA's *Energy Management Guidebook for Wastewater and Water Utilities* provides details to support utilities in energy manage and cost reduction by using the steps described in this guidebook. The Guidebook takes utilities through a series of steps to analyze their current energy usage, use energy audits to identify ways to improve efficiency, and measure the effectiveness of energy projects.

Also available from the EPA in support of energy efficiency, "Ensuring a Sustainable Future": An Energy Management Guidebook for Wastewater and Water Utilities. *Ensuring a Sustainable Future: An Energy Management Guidebook for Wastewater and Water Utilities (PDF)*

Welaka's WS should ensure all assets, not just those connected to a power source, are evaluated for energy efficiency. It is highly recommended the Town conduct an energy assessment or audit. The following are common energy management initiatives Welaka should implement going forward:

1. Load management
2. Replace weather-stripping and insulation on buildings.
3. Installation of insulated metal roofing over energy inefficient shingle roofing
4. On-demand water heaters
5. Variable frequency driven pumps and electrical equipment
6. Energy efficient infrastructure
7. LED lighting
8. Meg electric motors
9. MCC electrical lug thermal investigation
10. Flag underperforming assets for rehabilitation or replacement

An energy audit is intended to evaluate how much energy is consumed and identify measures that can be taken to utilize energy more efficiently. The primary goal is reducing power consumption and cost through physical or operational changes. Each system will have unique opportunities to reduce energy use or cost depending on system specific changes and opportunities within the power provider's rate schedules. An audit of an individual wastewater treatment plant (WWTP) is an attempt to pinpoint wasted or unneeded facility energy consumption. With the cost of electricity on the rise, reducing energy use should be a priority for municipalities. A key part of energy audits is thorough analysis of the effects of overdesign on energy efficiency. Plants are designed to perform at maximum flow and loading conditions. Unfortunately, most plants are not efficient at average conditions. Aging infrastructure is another source of inefficient usage of energy in WWTPs across the country. The basis for addressing aging infrastructure related energy waste is also included in the energy audit process. It is recommended to perform an energy audit every 2-3 years to analyze return on investment.

Energy Conservation Measures

The following table provides typical water and wastewater high-use energy operations and associated potential energy saving measures.

High Energy Using Operations	Energy Saving Measures
Pumping	• Reduce load • Manage load • Water to wire efficiency • Pump selection • Motor and drive selection • Automated control
Aeration	• Fine bubble • Improved mechanical surface aerators • Premium motors • High efficiency motor drive • Blower variable frequency drives • Automatic DO control
Dewatering	• Replace vacuum systems • Premium motors • Variable frequency drives for plant water pump

High Energy Using Operations	Energy Saving Measures
Lighting	• Motion sensors • T5 low and high bay fixtures • Pulse start metal halide • Indirect fluorescent • Super-efficient T8s •Comprehensive control for large buildings
Heating, Ventilation, Air Conditioning (HVAC)	• Water source heat pumps • Prescriptive incentives for remote telemetry units • Custom incentives for larger units • Low volume fume hood • Occupancy controls • Heat pump for generator oil sump

Energy Audit Approach Checklist

A wastewater system energy audit approach checklist similar to the one below can be a useful tool to identify areas of potential concern and to develop a plan of action to resolve them.

Water System Energy Audit Approach Checklist

Determine type of audit

- ☐ Pumping, HVAC, lighting, and/or process

Determine audit team members, everyone will have different goals

- ☐ Engineers - reduce energy cost
- ☐ Plant staff - reduce disruption to system
- ☐ Electric utility - reduce peak demand

Collect data

- ☐ Power bills - get actual bills that show energy use, demand charges, cost adjustments, etc
- ☐ Electric rate schedules - get current rate schedules
- ☐ Alternative rate schedules - are alternate rates available that will benefit the water system?
- ☐ Flow data - include booster stations, wells, high service pumps, anything with a flow meter
- ☐ Meter data - sold vs produced, bulk purchases or sales, water loss data
- ☐ Pump curves - collect pump curves to verify pumps are operating near their design point
- ☐ Process flow diagrams, design summary - useful to help understand operation of the system
- ☐ Water quality standards - any unique processes required?
- ☐ Previous audit findings - have energy audits been performed in the past?
- ☐ System pressure - operating pressures with distribution system
- ☐ Pressure zones - how are different zones operated, how is water moved around the system?
- ☐ PRVs - amount of head removed, number in the system, any way to limit wasting head?
- ☐ Reservoirs - storage capacity, elevation, head range
- ☐ Compressed air systems - horsepower, receiver tank size, devices consuming compressed air
- ☐ HVAC - efficiency and performance of existing equipment
- ☐ Gas bills - HVAC audit
- ☐ Lighting - efficiency and performance of existing lights

Conduct Site Visit

- ☐ Meet with staff and operators
- ☐ Q&A session - discuss operations, gain understanding of how system is operated
- ☐ Seek input from operators and those familiar with the sytem
- ☐ Walk through - tour facilities, more Q&A
- ☐ Obtain any missing info, check motor sizes, observe valve positions
- ☐ Focus on big power consumers, they will offer best payback opportunity
- ☐ Raw water pumping, wells, HSP, air compressors - typically largest power consumers
- ☐ Seek energy efficiency ideas from plant staff

Develop Energy Conservation Measures

- ☐ Estimate energy or cost savings
- ☐ Determine capital cost
- ☐ Consider operational impacts to the plant
- ☐ Look for rebates or incentives

Conclusions

Conclusions are based on observations made during the data collection procedure, discussions with Welaka staff, regulatory inspection data, and our experience related to similar assets.

Areas needing attention (detailed in Section 4.2) include:

Manholes: Remaining manholes need located and assessed, liners and repairs needed to correct I&I

Collection system – Needs cleaning and camera inspection to identify areas of I&I and develop repair plan

Lift stations: Add logbook to each station to document run times and maintenance performed. (Add etm clock if none are present). Convert stations from above ground to duplex submersible (detailed in section 4.22).

Wastewater Plant: Continue routine maintenance and address safety issues with handrails and catwalk. Clean and drain tanks, clean and rehab drying beds, service blowers and motors. (detailed in section 4.23.)

General:

A CMMS program must begin to maintain assets efficiently and effectively. **Diamond Maps** is an excellent choice and is highly recommended.

Rates must be examined to make sure they continue to provide adequate funding for operations and system improvements. When provided, RevPlan information can be valuable in making financial and rate decisions.

An automatic Minimum annual Rate increase of the Consumer Price Index (CPI) should be applied and is recommended by the FRWA and should be reviewed by Welaka.

Energy Management is recommended as well. Even small changes in energy use can result in large savings. Additional information can be found in Section 9.3.

Full grants should be pursued for financing as much as possible to lessen the financial burden on the utility.

The Asset Management Plan must be adopted by resolution or ordinance. This demonstrates the utilities commitment to the plan.

After adoption, implementation of the AMP must occur.

Implementing the Asset Management Plan

Implementing an Asset Management Plan requires several items:

1. **Assign specific personnel** to oversee and perform the tasks of Asset Management.
2. **Develop and use a CMMS program (Computerized Maintenance Management System**). The information provided in this AMP will give the utility a good starting point to begin this. Utilize the exhaustive asset list provided to plan maintenance tasks. Properly maintaining assets will ensure their useful life is extended and will ultimately save money. Asset maintenance tasks are scheduled and tracked, new assets are captured, and assets removed from service are retired properly using CMMS. Transitioning from reactive to preventive and predictive maintenance philosophies will net potentially huge savings for the utility. FRWA can help with selection, set up, and implementation. Target the items listed in this AMP and devise a plan to address them.
3. **Develop specific Level of Service items**. Create a list of LOS items. You may want to inform customers of the Utility's commitment to providing the stated LOS. Successes can also be shared with customers. This can dramatically improve customer relations. This also gives utility employees goals to strive for and can positively impact morale.
4. **Develop specific Change Out/ Repair/ Replacement Programs**. With the Welaka wastewater system, manholes need work, inflow issues need to be addressed, and plant equipment needs to be repaired or replaced. All of these represent large monetary outlays. Examples might include budgeting for five manhole refurbishments each year or Phase 1 of a collection system inflow study to control I&I (Inflow and Infiltration).
5. **Modify the existing rate structure** as recommended to make sure adequate funds are available to properly operate and maintain the facility. Rate increases, when required, can be accomplished in a stepped fashion rather than an 'all now' approach to lessen the resulting customer impact.
6. **Explore financial assistance options.** This can be especially useful in the beginning stages of Asset Management since budget shortfalls likely exist and high-cost items may be needed quickly.
7. **Revisit the AMP annually.** An Asset Management Plan is a living document. It can be revised at any time but must be revisited and evaluated at least once each year. Updates may be needed such as changes to your asset management team, asset inventory, updating condition and criticality ranking charts, asset condition and criticality assessment procedures may need to be revisited, evolving O&M activities may warrant changes, financial strategies and long-term funding plan may need to change, etc.

Closing

This Asset Management and Fiscal Sustainability Plan is presented to The Town of Welaka for adoption and implementation. Its creation would not be possible without the cooperation of Welaka's excellent staff. Their assistance was invaluable and is greatly appreciated. The Florida Rural Water Association will assist in making a 'plan of action' to help make Welaka's Asset Management Plan a success.

FDEP Rule 62-552.700(7), F.A.C.

FISCAL SUSTAINABILITY PLAN/ASSET MANAGEMENT PLAN.

Section 603(d)(1)(E) of the Federal Water Pollution Control Act encourages a recipient of a Loan for a project that involves the repair, replacement, or expansion of a treatment works to develop and implement a Fiscal Sustainability Plan.

Also, subsection 62-552.50(4) and 62-552.350(5) of Florida Administrative Code requires recipients of principal forgiveness to develop and implement an **Asset Management Plan** that meets all the requirements in subsection 62-552.700(7), Florida Administrative Code.

The **Fiscal Sustainability/ Asset Management Plan** shall include, at minimum, the following elements:

An inventory of all the assets within the Local Government's system;

ii) An evaluation of the current age, condition, and anticipated useful life of each asset;

iii) The current value of the assets;

iv) The cost to operate and maintain all assets

v) a capital improvement plan based on a survey of industry standards, life expectancy, life cycle analysis, and remaining useful life;

vi) An analysis of funding needs

vii) an analysis of population growth and water flow projections, as applicable, for the sponsor's planning area, and a model, if applicable, for impact fees; commercial, industrial and residential rate structures; industrial pretreatment fees and parameters;

viii) The establishment of an adequate funding rate structure;

ix) a threshold rate set to ensure the proper operation of the utility (if the sponsor transfers any of the utility proceeds to other funds, the rates must be set higher than the threshold rate to facilitate the transfer and proper operation of the utility;

x) a plan to preserve the assets, as well as the renewal, replacement, and repair of the assets as necessary (such plan should incorporate a risk benefit analysis to determine the optimum renewal or replacement time); and

xii) Evaluation of water and energy conservation efforts and a certification the assistance recipient will be implementing water and energy conservation efforts a part of the plan.

Failure to adopt and implement the above plan prior to the final disbursement of the Loan will reduce the principal forgiveness percentage to 0%.

APPENDIX A: Sample Resolution

RESOLUTION NO. 2023-_____

A RESOLUTION OF THE TOWN OF WELAKA, FLORIDA, APPROVING THE TOWN OF WELAKA WATER AND WASTEWATER UTILITY ASSET MANAGEMENT AND FISCAL SUSTAINABILITY PLANS; AUTHORIZING THE MAYOR, TOWN CLERK AND UTILITY SUPERVISOR TO TAKE ALL ACTIONS NECESSARY TO EFFECTUATE THE INTENT OF THIS RESOLUTION; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Florida Statutes provide for financial assistance to local government agencies to finance construction of the utility system improvements; and

WHEREAS, the Florida Department of Environmental Protection State Revolving Fund (SRF) has designated the Town of Welaka Utility System Improvements, identified in the Water and Wastewater Asset Management and Fiscal Sustainability Plans, as potentially eligible for available funding; and

WHEREAS, as a condition of obtaining funding from the SRF, the Town is required to implement a Water and Wastewater Asset Management and Fiscal Sustainability Plans for the Town's Utility System Improvements; and

WHEREAS, the Council of the Town of Welaka has determined that approval of the attached Water and Wastewater Asset Management and Fiscal Sustainability Plans for the proposed improvements, in order to obtain necessary funding in accordance with SRF guidelines, is in the best interest of the Town.

NOW, THEREFORE, BE IT RESOLVED BY THE Town of Welaka Commission the following:

Section 1. That the Town of Welaka Commission hereby approves the Town of Welaka Water and Wastewater Asset Management and Fiscal Sustainability Plans, attached hereto and incorporated by reference as a part of this Resolution.

Section 2. That the Mayor, Town Clerk, Utility Supervisor and designated staff are authorized to take all actions necessary to effectuate the intent of this Resolution and to implement the Water and Wastewater Asset Management and Fiscal Sustainability Plans in accordance with applicable Florida law and Council direction in order to obtain funding from the SRF.

Section 3. That the Town will annually evaluate existing rates to determine the need for any increase and will increase rates in accordance with the financial recommendations found in the Water and Wastewater Asset Management and Fiscal Sustainability Plans or in proportion to the Town's needs as determined by the Board in its discretion.

Section 4. That this Resolution shall become effective immediately upon its adoption.

PASSED AND ADOPTED on this _____ day of_____, 2023.

Town of Welaka, Florida:

_____
Jaime Watts, Mayor

ATTEST:

APPROVED AS TO FORM:

_____
Town Clerk

_____
Attorney

Appendix B: Master Asset List

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Buildings						
Harbor Vac Station Lift Stations 8	2005	50	45000	Good	Moderate	2040
Wastewater	1980	50	10000	Average	Moderate	2030
Storage awning	1980	50	5000	Average	Moderate	2030
Concrete slab stainless awning	1990	50	25000	Good	Moderate	2040
Lime storage shed	2000	50	4000	Average	Moderate	2050
Electrical control room/ storage / office	1990	50	15000	Average	Moderate	2040
Storage Building (Material)	2022	50	15000	Excellent	Moderate	2072

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Control Valves (Harbor Vac System)						
158 moonlight control valve	2005	25	500	Average	Moderate	2030
194 sportsman control valve	2005	25	500	Average	Moderate	2030
192 sportsman control valve	2005	25	500	Average	Moderate	2030
197 sportsman control valve	2005	25	500	Average	Moderate	2030
190 sportsman control valve	2005	25	500	Average	Moderate	2030
189 sportsman control valve	2005	25	500	Average	Moderate	2030
199 sportsman control valve	2005	25	500	Average	Moderate	2030
sportsman control valve	2005	25	500	Average	Moderate	2030
201 sportsman control valve	2005	25	500	Average	Moderate	2030
204 sportsman control valve	2005	25	500	Average	Moderate	2030
206 sportsman control valve	2005	25	500	Average	Moderate	2030
208 sportsman control valve	2005	25	500	Average	Moderate	2030
209 sportsman control valve	2005	25	500	Average	Moderate	2030
184 sportsman control valve	2005	25	500	Average	Moderate	2030
211 sportsman control valve	2005	25	500	Average	Moderate	2030
213 sportsman control valve	2005	25	500	Average	Moderate	2030
181 sportsman control valve	2005	25	500	Average	Moderate	2030
216 sportsman control valve	2005	25	500	Average	Moderate	2030
180 sportsman control valve	2005	25	500	Average	Moderate	2030
217 sportsman control valve	2005	25	500	Average	Moderate	2030
220 sportsman control valve	2005	25	500	Average	Moderate	2030
221 sportsman control valve	2005	25	500	Average	Moderate	2030
223 sportsman control valve	2005	25	500	Average	Moderate	2030

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Control Valves (Harbor Vac System)						
228 sportsman control valve	2005	25	500	Average	Moderate	2030
228 sportsman control valve	2005	25	500	Average	Moderate	2030
230 sportsman control valve	2005	25	500	Average	Moderate	2030
231 sportsman control valve	2005	25	500	Average	Moderate	2030
233 sportsman control valve	2005	25	500	Average	Moderate	2030
235 sportsman control valve	2005	25	500	Average	Moderate	2030
238 sportsman control valve	2005	25	500	Average	Moderate	2030
sportsman / happiness control valve	2005	25	500	Average	Moderate	2030
241 sportsman control valve	2005	25	500	Average	Moderate	2030
244 sportsman control valve	2005	25	500	Average	Moderate	2030
245 sportsman control valve	2005	25	500	Average	Moderate	2030
54 sportsman control valve	2005	25	500	Average	Moderate	2030
33 Scott control valve	2005	25	500	Average	Moderate	2030
35 Scott control valve	2005	25	500	Average	Moderate	2030
30 Scott control valve	2005	25	500	Average	Moderate	2030
37 Scott control valve	2005	25	500	Average	Moderate	2030
29 Scott control valve	2005	25	500	Average	Moderate	2030
39 Scott control valve	2005	25	500	Average	Moderate	2030
27 Scott control valve	2005	25	500	Average	Moderate	2030
25 Scott control valve	2005	25	500	Average	Moderate	2030
41 Scott control valve	2005	25	500	Average	Moderate	2030
44 Scott control valve	2005	25	500	Average	Moderate	2030
24 Scott control valve	2005	25	500	Average	Moderate	2030
45 Scott control valve	2005	25	500	Average	Moderate	2030
22 Scott control valve	2005	25	500	Average	Moderate	2030
19 Scott control valve	2005	25	500	Average	Moderate	2030
18 Scott control valve	2005	25	500	Average	Moderate	2030
83 carefree control valve	2005	25	500	Average	Moderate	2030
57 carefree control valve	2005	25	500	Average	Moderate	2030
82 carefree control valve	2005	25	500	Average	Moderate	2030
60 carefree control valve	2005	25	500	Average	Moderate	2030
80 carefree control valve	2005	25	500	Average	Moderate	2030
62 carefree control valve	2005	25	500	Average	Moderate	2030
77 carefree control valve	2005	25	500	Average	Moderate	2030
63 carefree control valve	2005	25	500	Average	Moderate	2030
76 carefree control valve	2005	25	500	Average	Moderate	2030
66 carefree control valve	2005	25	500	Average	Moderate	2030

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Control Valves (Harbor Vac System)						
74 carefree control valve	2005	25	500	Average	Moderate	2030
67 carefree control valve	2005	25	500	Average	Moderate	2030
71 carefree control valve	2005	25	500	Average	Moderate	2030
69 carefree control valve	2005	25	500	Average	Moderate	2030
100 happiness control valve	2005	25	500	Average	Moderate	2030
99 happiness control valve	2005	25	500	Average	Moderate	2030
96 happiness control valve	2005	25	500	Average	Moderate	2030
103 happiness control valve	2005	25	500	Average	Moderate	2030
103 happiness control valve	2005	25	500	Average	Moderate	2030
94 happiness control valve	2005	25	500	Average	Moderate	2030
106 happiness control valve	2005	25	500	Average	Moderate	2030
92 happiness control valve	2005	25	500	Average	Moderate	2030
109 happiness control valve	2005	25	500	Average	Moderate	2030
91 happiness control valve	2005	25	500	Average	Moderate	2030
111 happiness control valve	2005	25	500	Average	Moderate	2030
88 happiness control valve	2005	25	500	Average	Moderate	2030
113 happiness control valve	2005	25	500	Average	Moderate	2030
88 happiness control valve	2005	25	500	Average	Moderate	2030
115 happiness control valve	2005	25	500	Average	Moderate	2030
135 paradise control valve	2005	25	500	Average	Moderate	2030
132 paradise control valve	2005	25	500	Average	Moderate	2030
130 paradise control valve	2005	25	500	Average	Moderate	2030
137 paradise control valve	2005	25	500	Average	Moderate	2030
128 paradise control valve	2005	25	500	Average	Moderate	2030
139 paradise control valve	2005	25	500	Average	Moderate	2030
126 paradise control valve	2005	25	500	Average	Moderate	2030
140 paradise control valve	2005	25	500	Average	Moderate	2030
125 paradise control valve	2005	25	500	Average	Moderate	2030
141 paradise control valve	2005	25	500	Average	Moderate	2030
117 paradise control valve	2005	25	500	Average	Moderate	2030
119 paradise control valve	2005	25	500	Average	Moderate	2030
146 paradise control valve	2005	25	500	Average	Moderate	2030
117 paradise control valve	2005	25	500	Average	Moderate	2030
149 paradise control valve	2005	25	500	Average	Moderate	2030
116 paradise control valve	2005	25	500	Average	Moderate	2030
150 paradise control valve	2005	25	500	Average	Moderate	2030
151 moonlite control valve	2005	25	500	Average	Moderate	2030

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Control Valves (Harbor Vac System)						
176 moonlite control valve	2005	25	500	Average	Moderate	2030
152 moonlite control valve	2005	25	500	Average	Moderate	2030
175 moonlite control valve	2005	25	500	Average	Moderate	2030
154 moonlite control valve	2005	25	500	Average	Moderate	2030
156 moonlite control valve	2005	25	500	Average	Moderate	2030
173 moonlite control valve	2005	25	500	Average	Moderate	2030
171 moonlite control valve	2005	25	500	Average	Moderate	2030
168 moonlite control valve	2005	25	500	Average	Moderate	2030
166 moonlite control valve	2005	25	500	Average	Moderate	2030
164 moonlite control valve	2005	25	500	Average	Moderate	2030
163 moonlite control valve	2005	25	500	Average	Moderate	2030
160 moonlite control valve	2005	25	500	Average	Moderate	2030

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Holding Tank (Harbor Vac System)						
158 moonlight holding tank	2005	50	3000	Average	Moderate	2055
233 sportsman holding tank	2005	50	3000	Average	Moderate	2055
231 sportsman holding tank	2005	50	3000	Average	Moderate	2055
230 sportsman holding tank	2005	50	3000	Average	Moderate	2055
228 sportsman holding tank	2005	50	3000	Average	Moderate	2055
228 sportsman holding tank	2005	50	3000	Average	Moderate	2055
223 sportsman holding tank	2005	50	3000	Average	Moderate	2055
221 sportsman holding tank	2005	50	3000	Average	Moderate	2055
220 sportsman holding tank	2005	50	3000	Average	Moderate	2055
217 sportsman holding tank	2005	50	3000	Average	Moderate	2055
216 sportsman holding tank	2005	50	3000	Average	Moderate	2055
213 sportsman holding tank	2005	50	3000	Average	Moderate	2055
211 sportsman holding tank	2005	50	3000	Average	Moderate	2055
209 sportsman holding tank	2005	50	3000	Average	Moderate	2055
208 sportsman holding tank	2005	50	3000	Average	Moderate	2055
206 sportsman holding tank	2005	50	3000	Average	Moderate	2055
204 sportsman holding tank	2005	50	3000	Average	Moderate	2055
201 sportsman holding tank	2005	50	3000	Average	Moderate	2055
199 sportsman holding tank	2005	50	3000	Average	Moderate	2055
197 sportsman holding tank	2005	50	3000	Average	Moderate	2055
194 sportsman holding tank	2005	50	3000	Average	Moderate	2055

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Holding Tank (Harbor Vac System)						
192 sportsman holding tank	2005	50	3000	Average	Moderate	2055
190 sportsman holding tank	2005	50	3000	Average	Moderate	2055
189 sportsman holding tank	2005	50	3000	Average	Moderate	2055
Sportsman holding tank	2005	50	3000	Average	Moderate	2055
184 sportsman holding tank	2005	50	3000	Average	Moderate	2055
181 sportsman holding tank	2005	50	3000	Average	Moderate	2055
180 sportsman holding tank	2005	50	3000	Average	Moderate	2055
176 moonlight holding tank	2005	50	3000	Average	Moderate	2055
175 moonlight holding tank	2005	50	3000	Average	Moderate	2055
173 moonlight holding tank	2005	50	3000	Average	Moderate	2055
171 moonlight holding tank	2005	50	3000	Average	Moderate	2055
168 moonlight holding tank	2005	50	3000	Average	Moderate	2055
166 moonlight holding tank	2005	50	3000	Average	Moderate	2055
164 moonlight holding tank	2005	50	3000	Average	Moderate	2055
163 moonlight holding tank	2005	50	3000	Average	Moderate	2055
160 moonlight holding tank	2005	50	3000	Average	Moderate	2055
156 moonlight holding tank	2005	50	3000	Average	Moderate	2055
154 moonlight holding tank	2005	50	3000	Average	Moderate	2055
152 moonlight holding tank	2005	50	3000	Average	Moderate	2055
151 moonlight holding tank	2005	50	3000	Average	Moderate	2055
150 paradise holding tank	2005	50	3000	Average	Moderate	2055
149 paradise holding tank	2005	50	3000	Average	Moderate	2055
146 paradise holding tank	2005	50	3000	Average	Moderate	2055
141 paradise holding tank	2005	50	3000	Average	Moderate	2055
117 paradise holding tank	2005	50	3000	Average	Moderate	2055
119 paradise holding tank	2005	50	3000	Average	Moderate	2055
117 paradise holding tank	2005	50	3000	Average	Moderate	2055
116 paradise holding tank	2005	50	3000	Average	Moderate	2055
54 sportsman holding tank	2005	30	3000	Average	Moderate	2035
245 sportsman dr holding tank	2005	30	3000	Average	Moderate	2035
244 sportsman dr holding tank	2005	30	3000	Average	Moderate	2035
241 sportsman dr holding tank	2005	30	3000	Average	Moderate	2035
238 sportsman holding tank	2005	50	3000	Average	Moderate	2055
235 sportsman holding tank	2005	50	3000	Average	Moderate	2055
140 paradise holding tank	2005	50	3000	Average	Moderate	2055
139 paradise holding tank	2005	50	3000	Average	Moderate	2055
137 paradise holding tank	2005	50	3000	Average	Moderate	2055

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Holding Tank (Harbor Vac System)						
135 paradise holding tank	2005	50	3000	Average	Moderate	2055
132 paradise holding tank	2005	50	3000	Average	Moderate	2055
130 paradise holding tank	2005	50	3000	Average	Moderate	2055
128 paradise holding tank	2005	50	3000	Average	Moderate	2055
126 paradise holding tank	2005	50	3000	Average	Moderate	2055
125 paradise holding tank	2005	50	3000	Average	Moderate	2055
115 happiness holding tank	2005	50	3000	Average	Moderate	2055
113 happiness holding tank	2005	50	3000	Average	Moderate	2055
111 happiness holding tank	2005	50	3000	Average	Moderate	2055
109 happiness holding tank	2005	50	3000	Average	Moderate	2055
106 happiness holding tank	2005	50	3000	Average	Moderate	2055
103 happiness holding tank	2005	50	3000	Average	Moderate	2055
103 happiness holding tank	2005	50	3000	Average	Moderate	2055
100 happiness holding tank	2005	50	3000	Average	Moderate	2055
99 happiness holding tank	2005	50	3000	Average	Moderate	2055
96 happiness holding tank	2005	50	3000	Average	Moderate	2055
94 happiness holding tank	2005	50	3000	Average	Moderate	2055
92 happiness holding tank	2005	50	3000	Average	Moderate	2055
91 happiness holding tank	2005	50	3000	Average	Moderate	2055
88 happiness holding tank	2005	50	3000	Average	Moderate	2055
88 happiness holding tank	2005	50	3000	Average	Moderate	2055
Sportsman/ happiness holding tank	2005	50	3000	Average	Moderate	2055
83 carefree holding tank	2005	50	3000	Average	Moderate	2055
82 carefree holding tank	2005	50	3000	Average	Moderate	2055
80 carefree holding tank	2005	50	3000	Average	Moderate	2055
77 carefree holding tank	2005	50	3000	Average	Moderate	2055
76 carefree holding tank	2005	50	3000	Average	Moderate	2055
74 carefree holding tank	2005	50	3000	Average	Moderate	2055
71 carefree holding tank	2005	50	3000	Average	Moderate	2055
69 carefree holding tank	2005	50	3000	Average	Moderate	2055
67 carefree holding tank	2005	50	3000	Average	Moderate	2055
66 carefree holding tank	2005	50	3000	Average	Moderate	2055
63 carefree holding tank	2005	50	3000	Average	Moderate	2055
62 carefree holding tank	2005	50	3000	Average	Moderate	2055
60 carefree holding tank	2005	50	3000	Average	Moderate	2055
57 carefree holding tank	2005	50	3000	Average	Moderate	2055
18 Scott holding tank	2005	50	3000	Average	Moderate	2055

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Holding Tank (Harbor Vac System)						
19 Scott holding tank	2005	50	3000	Average	Moderate	2055
22 scort holding tank	2005	50	3000	Average	Moderate	2055
24 Scott holding tank	2005	50	3000	Average	Moderate	2055
25 Scott holding tank	2005	50	3000	Average	Moderate	2055
27 Scott holding tank	2005	50	3000	Average	Moderate	2055
29 Scott holding tank	2005	50	3000	Average	Moderate	2055
30 Scott holding tank	2005	50	3000	Average	Moderate	2055
33 Scott holding tank	2005	50	3000	Average	Moderate	2055
35 Scott holding tank	2005	50	3000	Average	Moderate	2055
37 Scott holding tank	2005	50	3000	Average	Moderate	2055
39 Scott holding tank	2005	50	3000	Average	Moderate	2055
41 Scott holding tank	2005	50	3000	Average	Moderate	2055
44 Scott holding tank	2005	50	3000	Average	Moderate	2055
45 Scott holding tank	2005	50	3000	Average	Moderate	2055
Vac storage tank	2005	50	35000	Average	Major	2055

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Electrical Equipment						
Lift Station 7 Electrical panel	2000	20	3500	Average	Moderate	2020
Lift Station 4 Electrical panels	2006	20	7500	Average	Moderate	2026
Lift Station 1 Electrical control panel	2004	20	10000	Average	Moderate	2024
Lift Station 6 Electrical control panel	1990	20	5000	Average	Moderate	2010
Lift Station 6 Portable generator	2005	30	30000	Average	Moderate	2035
Harbor Vacuum System	2005	20	65000	Average	Moderate	2025
WWTP Control panel	2020	20	12000	Good	Moderate	2040
Lift Station 7 at WWTP	1996	20	15000	Average	Moderate	2016
Lift station 6	1990	30	5000	Average	Minor	2020
Lift station 5	2000	25	5000	Average	Moderate	2025
Vac station transfer switch	1995	20	7500	Average	Moderate	2015
Vac station control panel	2005	20	50000	Average	Moderate	2025

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Manholes						
wwManH-1	1990	50	3000	Average	Moderate	2040
wwManH-2	1990	50	3000	Poor	Moderate	2040

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Manholes						
wwManH-3	1990	50	5500	Poor	Moderate	2040
wwManH-4	1990	50	14000	Average	Moderate	2040
wwManH-5	1990	50	15000	Average	Moderate	2040
wwManH-6	1990	50	3000	Poor	Moderate	2040
wwManH-7	1990	50	12500	Average	Moderate	2040
wwManH-8	1990	50	3000	Poor	Moderate	2040
wwManH-9	1990	50	12500	Average	Moderate	2040
wwManH-10	1990	50	12000	Average	Moderate	2040
wwManH-11	1990	50	4500	Average	Moderate	2040
wwManH-12	1990	50	3000	Average	Moderate	2040
wwManH-13	1990	50	4500	Average	Moderate	2040
wwManH-14	1990	50	5500	Average	Moderate	2040
wwManH-15	1990	50	3000	Poor	Moderate	2040
wwManH-16	1990	50	10000	Average	Moderate	2040
wwManH-18	1990	50	3000	Average	Moderate	2040
wwManH-19	1990	50	3000	Poor	Moderate	2040
wwManH-20	1990	50	8500	Average	Moderate	2040
wwManH-21	1990	50	3000	Average	Moderate	2040
wwManH-22	1990	50	3000	Average	Moderate	2040
wwManH-23	1990	50	5500	Average	Moderate	2040
wwManH-25	1990	50	5500	Average	Moderate	2040
wwManH-26	1990	50	4500	Average	Moderate	2040
wwManH-27	1990	50	3000	Poor	Moderate	2040
wwManH-28	1990	50	3000	Average	Moderate	2040
wwManH-29	1990	50	3000	Average	Moderate	2040
wwManH-30	2000	50	7500	Average	Moderate	2050
wwManH-31	1990	50	3000	Average	Moderate	2040
wwManH-33	1990	50	3000	Average	Moderate	2040
wwManH-34	1990	50	3000	Average	Moderate	2040
wwManH-35	1990	50	3000	Average	Moderate	2040
wwManH-36	1990	50	4500	Average	Moderate	2040
wwManH-37	1990	50	5500	Average	Moderate	2040
wwManH-38	1990	50	12000	Average	Moderate	2040
wwManH-39	1990	50	7500	Average	Moderate	2040
wwManH-41	1990	50	15000	Poor	Moderate	2040

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Manholes						
wwManH-42	1990	50	6500	Average	Moderate	2040
wwManH-43	1990	50	3000	Average	Moderate	2040
wwManH-44	1990	50	3000	Average	Moderate	2040
wwManH-45	1990	50	3000	Average	Moderate	2040
wwManH-46	2000	50	7500	Good	Moderate	2050
wwManH-48	1990	50	6500	Average	Moderate	2040
wwManH-49	1990	50	5000	Average	Moderate	2040
wwManH-50	1990	50	3000	Poor	Moderate	2040
wwManH-51	1990	50	4800	Average	Moderate	2040
wwManH-52	1990	50	7500	Average	Moderate	2040
wwManH-53	1990	50	3000	Poor	Moderate	2040
wwManH-54	1990	50	3000	Good	Moderate	2040
wwManH-55	1990	50	3000	Good	Moderate	2040
wwManH-56	1990	50	6500	Average	Moderate	2040
wwManH-57	1990	50	5500	Poor	Moderate	2040
wwManH-58	1990	50	8500	Poor	Moderate	2040
wwManH-59	1990	50	15000	Good	Moderate	2040
wwManH-60	1990	50	9000	Poor	Moderate	2040
wwManH-61	1990	50	9000	Average	Moderate	2040
wwManH-63	1990	50	7500	Average	Moderate	2040
wwManH-64	1990	50	10000	Average	Moderate	2040
wwManH-65	1990	50	8500	Average	Moderate	2040
wwManH-66	1990	50	7500	Poor	Moderate	2040
wwManH-67	1990	50	3000	Average	Moderate	2040
wwManH-68	1990	50	3000	Average	Moderate	2040
wwManH-69	1991	50	3000	Poor	Moderate	2041
wwManH-70	1990	50	5500	Poor	Moderate	2040
wwManH-71	1991	50	4000	Average	Moderate	2041
wwManH-72	1991	50	5000	Poor	Moderate	2041
wwManH-73	1991	50	3500	Average	Moderate	2041
wwManH-74	1991	50	5000	Poor	Moderate	2041
wwManH-75	1991	50	3000	Average	Moderate	2041
wwManH-76	2010	50	5000	Good	Moderate	2060
wwManH-77	2010	50	5000	Good	Moderate	2060
wwManH-78	2010	50	5000	Good	Moderate	2060
wwManH-79	2010	50	5000	Good	Moderate	2060

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Manholes						
wwManH-80	2010	50	5000	Good	Moderate	2060
wwManH-81	2010	50	5000	Good	Moderate	2060
wwManH-82	2010	50	5000	Good	Moderate	2060
wwManH-83	2010	50	5000	Good	Moderate	2060
wwManH-84	2010	50	5000	Good	Moderate	2060
wwManH-85	2010	50	5000	Good	Moderate	2060
wwManH-86	2010	50	5000	Good	Moderate	2060
wwManH-87	2010	50	5000	Good	Moderate	2060
wwManH-88	2010	50	5000	Good	Moderate	2060
wwManH-89	2010	50	10000	Good	Moderate	2060
wwManH-90	2010	50	7500	Good	Moderate	2060
wwManH-91	2010	50	5000	Good	Moderate	2060
wwManH-92	2010	50	5000	Good	Moderate	2060
wwManH-93	2010	50	5000	Good	Moderate	2060
wwManH-94	2010	50	5000	Good	Moderate	2060
wwManH-95	2010	50	5000	Good	Moderate	2060
wwManH-96	2010	50	5000	Good	Moderate	2060
wwManH-97	2010	50	5000	Good	Moderate	2060
wwManH-98	2010	50	5000	Good	Moderate	2060
wwManH-99	2010	50	20000	Good	Moderate	2060
wwManH-100	2010	50	5000	Good	Moderate	2060
wwManH-101	2010	50	5000	Good	Moderate	2060
wwManH-102	2010	50	5000	Good	Moderate	2060
wwManH-103	2010	50	5000	Good	Moderate	2060
wwManH-104	2010	50	7500	Good	Moderate	2060
wwManH-105	2010	50	5000	Good	Moderate	2060
wwManH-106	2010	50	5000	Good	Moderate	2060
wwManH-107	2010	50	5000	Good	Moderate	2060
wwManH-108	1990	50	5000	Average	Moderate	2040
wwManH-109	1990	50	5000	Average	Moderate	2040
wwManH-110	1990	50	5000	Average	Moderate	2040
wwManH-111	1990	50	6500	Average	Moderate	2040
wwManH-112	1990	50	5000	Average	Moderate	2040
wwManH-113	1990	50	7500	Average	Moderate	2040
wwManH-114	1990	50	12000	Average	Moderate	2040
wwManH-115	1990	50	5000	Average	Moderate	2040

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Motors						
Lift station 7	2000	20	3500	Average	Minor	2020
Lift station 5	2000	30	3000	Average	Moderate	2030
Plant LS Motor 1	1996	20	5000	Average	Moderate	2016
Plant LS motor 2	1996	20	5000	Average	Moderate	2016
Blower Motor 1	2015	20	5000	Poor	Moderate	2035
Blower Motor 2	2015	20	5000	Poor	Moderate	2035
Lift station 5 motor #2	2000	20	3000	Average	Moderate	2020
Ls 6 pump 1 motor	2000	20	3500	Average	Moderate	2020
Ls 6 pump 2 motor	2000	20	3500	Average	Moderate	2020
Ls 7 pump 2 motor	2000	20	3500	Average	Moderate	2020

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Pumps						
Centrifugal pump	1996	20	5000	Average	Moderate	2016
Centrifugal pump	1996	20	5000	Average	Moderate	2016
Blower 1	2005	20	5000	Poor	Moderate	2025
Blower 2	2005	20	5000	Poor	Moderate	2025
Stenner pump	2015	20	500	Average	Moderate	2035
Lift station 7 pump 1	2000	30	7500	Average	Minor	2030
Lift station 5 pump 1	2000	30	7000	Average	Moderate	2030
Lift station 1 pump 1	2004	25	4500	Average	Major	2029
Discharge pump 2	2021	20	15000	Good	Moderate	2041
Discharge pump 1 (lsp sp#2)	2005	20	15000	Average	Moderate	2025
Vac pump 1	2005	20	15000	Average	Moderate	2025
Vac pump 2	2015	20	15000	Average	Moderate	2035
Vac pump 3	2015	20	15000	Average	Moderate	2035
Lift station 5 pump 2	2000	20	7000	Average	Moderate	2020
Lift station 4 pump 1	2004	20	3500	Average	Moderate	2024
Lift station 4 pump 2	2004	20	3500	Average	Moderate	2024
Lift station 1 pump 2	2004	25	4500	Average	Major	2029
Lift station 6 pump 1	2000	20	7500	Average	Moderate	2020
Lift station 6 pump 2	2000	20	7500	Average	Moderate	2020
Lift station 7 pump 2	2000	20	7500	Average	Moderate	2020

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Condition EOL
Storage Tanks (WWTP)						
Aeration bay	1970	30	100000	Average	Moderate	2037
Surge tank	1970	30	100,000	Average	Moderate	2037
Splitter box	1970	30	20,000	Average	Moderate	2037
Surge tank overflow	1970	30	35000	Average	Moderate	2037
Clarifier	1970	30	50000	Average	Moderate	2037
Aeration Train 1	1970	30	100,000	Poor	Moderate	2031
Clarifier	1970	30	100,000	Poor	Moderate	2031
Aeration Tank Train 1	1970	30	100,000	Very Poor	Moderate	2025
Aeration Train 2	1970	30	100000	Poor	Moderate	2031
Aeration Tank Train 1	1970	30	100,000	Very Poor	Moderate	2025
Chlorine Contact Chamber	1970	30	50,000	Poor	Moderate	2031

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Treatment Equipment						
Chlorine Tank @ WWTP	2000	30	20,000	Average	Moderate	2030
Drying Beds	1980	50	50,000	Poor	Moderate	2030

Asset Name	Install Year	Design Life	Replacement Cost	Condition	COF	Age EOL
Wetwells						
Lift station 4	2004	50	15000	Average	Minor	2054
Lift station 6 wetwell	1990	50	20000	Average	Minor	2040
Lift station 7	1990	50	30000	Average	Minor	2040
Lift station 5	2000	50	30000	Average	Moderate	2050
Lift station 1	2004	50	18000	Average	Minor	2054
Lift station @ plant (master)	1970	50	50000	Average	Moderate	2020

APPENDIX C: REV Plan

Welaka,Town of

S2 Welaka FY22 (2000 allowance)

Fiscal Year: 2022

FLORIDA RURAL WATER ASSOCIATION
2970 WELLINGTON CIRCLE
TALLAHASSEE, FL 32309
850-668-2746

Completed by: Dyana Jo Stewart

November 4, 2022