



City of Lake Helen

Volusia County, Florida

Mayor Vernon Burton
Commissioner Heather Rutledge
Commissioner Roger Eckert
Commissioner Lyn Donato
Commissioner Charlene Bishop

March 14, 2024

Evelyn Beccera
Florida Department of Environmental Protection
Basin Management Action Plan

Via E-mail – Evelyn.Becerra@FloridaDEP.gov

Re: Lake Helen
Basin Management Action Plan – Remediation Plan
Lake Harney, Lake Monroe, and Middle St. Johns River Basin

Dear Evelyn,

On behalf of the City of Lake Helen, Please accept the following as Lake Helen's Remediation Plan ("Plan") for our Onsite Sewage Treatment and Disposal System (OSTDS). Lake Helen does not have a wastewater treatment facility nor a collection system to collect and treat sanitary flows from the users in Lake Helen.

Per the requirements for the Plan, the OSTDS Plan must address at a minimum the following:

1. An inventory of the OSTDS (including locational information, such as GIS shape files, if available, or an excel spreadsheet with addresses and/or latitude and longitude) within the local government's jurisdiction or service area based on the best information available;
 - a. See Plan action below
2. An estimate of future growth in new OSTDS over the next 20 years in the local government's jurisdiction or service area (including locational information, such as GIS shape files, if available, or an excel spreadsheet with addresses and/or latitude and longitude);
 - a. See Plan action below
3. An inventory of OSTDS that are expected to be eliminated over the next 20 years through connection to central sewer lines of a domestic wastewater facility or other distributed wastewater system with additional nutrient reduction (including locational information, such as GIS shape files, if available, or an excel spreadsheet with address and/or latitude and longitude);
 - a. See Plan action below
4. Identification of deadlines and interim milestones for the planning, design, and construction of new/extended central sewer lines and replacement of OSTDS by connection to the new/extended lines (including locational information, such as GIS shape files, if available, or an excel spreadsheet with address and/or latitude and longitude)
 - a. See Plan action below
5. The estimated costs associated with the projects in 4) above;
 - a. See Plan action below
6. For OSTDS that are not expected to be eliminated over the next 20 years through connection to central sewer lines, an estimate of the number of these OSTDS that will require upgrading to enhanced nutrient-reducing OSTDS or participating in a distributed wastewater treatment system with additional nutrient reduction (including locational information, such as GIS shape files, if available, or an excel

spreadsheet with addresses and/or latitude and longitude) within the local government's jurisdiction, in order to meet the water quality objectives of the BMAP;

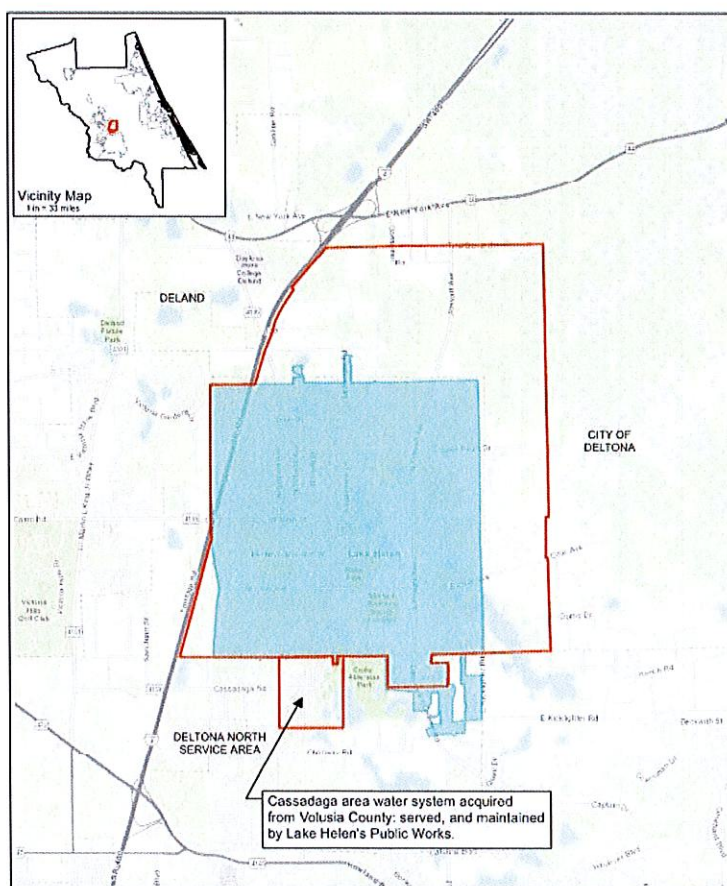
- a. See Plan action below
7. The estimated costs associated with upgrading to enhanced nutrient-reducing OSTDS that are identified in 6); and,
 - a. See Plan action below
8. Any other cost-effective and financially feasible projects necessary to achieve the nutrient load reductions for OSTDS in order to meet the water quality objectives of the BMAP with estimated costs, timelines, and locational information.
 - a. See Plan action below

Action Plan

Lake Helen understands the needs of the BMAP program and the need to reduce loading of nutrients to our states water systems. The Following are our responses and plans for the items above:

1. Inventory – See Figure 1, the City's Limits along with the City's Water Service Territory. Within the limits of the City, each commercial, institutional, and residential use currently operates private septic systems with drain fields. The City does not keep records of the location of Septic systems within our limits. The Volusia County Department of Health (VCHD) Permits the Septic systems outside of the City's permitting process.

Figure 1- City Limits and Water Service Territory



2. Estimate of Future Growth – Lake Helen has historically not seen rapid growth as our town is typically anti growth and our elected official reflect the towns attitude towards growth. Our expected growth on an annual basis is two (2) to three (3) percent. See Table 1 for population projections.

Table 1- Population Projections - Growth

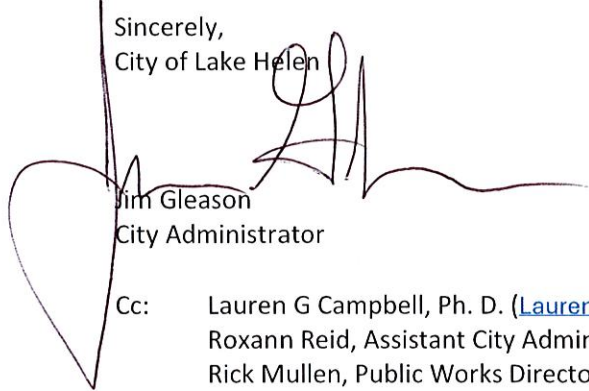
Lake Helen Population Projections										
Note: Bold and greyed values come from published population forecasts or census data. Remaining values are interpolated or extrapolated.										
Year	CUP Pop.	STEP	Percent	BEER Pop.	STEP	Percent	FDOT TAZ Pop.	STEP	Percent	Average Pop
2006	2893									
2007	2979	86	2.97							
2008	3038	59	1.98							
2009	3099	61	2.01							
2010	3161	62	2.00	2624						
2011	3224	63	1.99	2647		0.86				
2012	3289	65	2.02	2669		0.85				
2013	3354	65	1.98	2692		0.84				
2014	3421	67	2.00	2714		0.84				
2015	3490	69	2.02	2737		0.83	4740			
2016	3560	70	2.01	2759		0.82	4937		4.16	
2017	3631	71	1.99	2782		0.82	5134		3.99	
2018	3703	72	1.98	2804		0.81	5332		3.84	
2019	3778	75	2.03	2827		0.80	5529		3.70	
2020	3853	75	1.99	2849	22.5	0.80	5726	197	3.57	
2021	3930	77	2.00	2872		0.79	5747		0.37	
2022	4009	79	2.01	2894		0.78	5768		0.37	3452
2023	4089	80	2.00	2917		0.78	5789		0.36	3503
2024	4171	82	2.01	2939		0.77	5810		0.36	3555
2025	4254	83	1.99	2962		0.77	5831	21	0.36	3608
2026	4339	85	2.00	2984		0.76	5849		0.30	3662
2027	4426	87	2.01	3007		0.75	5866		0.30	3716
2028	4515	89	2.00	3029		0.75	5884		0.30	3772
2029	4605	90	2.00	3052		0.74	5901		0.30	3828
2030	4697	92	2.00	3074		0.74	5919	18	0.30	3885
2031	4791	94	2.00	3097		0.73	5935		0.28	3944
2032	4887	96	2.00	3119		0.73	5952		0.28	4003
2033	4984	98	2.00	3142		0.72	5968		0.28	4063
2034	5084	100	2.00	3164		0.72	5985		0.27	4124
2035	5186	102	2.00	3187		0.71	6001	16	0.27	4186
2036	5289	104	2.00	3209		0.71	6017		0.27	4249
2037	5395	106	2.00	3232		0.70	6034		0.27	4313
2038	5503	108	2.00	3254		0.70	6050		0.27	4379
2039	5613	110	2.00	3277		0.69	6067		0.27	4445
2040	5726	112	2.00	3299		0.69	6077	15	0.17	4512
2041	5840	115	2.00	3322		0.68	6092		0.25	4581
2042	5957	117	2.00	3344		0.68	6107		0.25	4650
2043	6076	119	2.00	3367		0.67	6123		0.25	4721
2044	6197	122	2.00	3389		0.67	6138		0.25	4793
2045	6321	124	2.00	3412		0.66	6142	13	0.07	4866
Avg annual growth percent	2.02			0.75			0.88			

3. 20 Year OSTDS Elimination – Lake Helen currently has no plan to assess it's residents and commercial properties for elimination of OSTDS.
4. Planning / Design/ Construction of Central Sewer - Lake Helen currently has no plan to assess it's residents and commercial properties for elimination of OSTDS and the construction of a wastewater treatment facility with a collection system.
5. Costs - Lake Helen currently has no plan to assess it's residents and commercial properties for elimination of OSTDS and the construction of a wastewater treatment facility with a collection system.

6. Upgrades to OSTDS which will remain within 20 Year elimination program. - Lake Helen currently has no plan to assess it's residents and commercial properties for elimination of OSTDS and the construction of a wastewater treatment facility with a collection system.
7. Upgrading Costs to OSTDS – Lake Helen will enforce and support VCHD's adoption of enhances nutrient reducing OSTDS when VCHD adopts such regulation.
8. Other Projects – At this time, Lake Helen does not have cost effective options available to it to for feasible projects to remove OSTDS and nutrient load reductions. When VCHD adopts enhanced nutrient removal system, Lake Helen will support and enforce the applications of those advanced systems.

Figure 1 and Table 1 are data collected from Lake Helen's Water System Master Plan, prepared by ECT, Inc. and published in 2022.

Sincerely,
City of Lake Helen



Jim Gleason
City Administrator

Cc: Lauren G Campbell, Ph. D. (Lauren.Campbell@FloridaDEP.gov)
Roxann Reid, Assistant City Administrator
Rick Mullen, Public Works Director
Derek M. Wainscott, P.E., Pond Company