MEETING MINUTES GENESEE COUNTY WATER RESOURCES AGENCY OCTOBER 10, 2023



A meeting of the Genesee County Water Resources Agency was held in the Legislature Chamber of the Old Courthouse, 7 Main Street, Batavia, NY 14020 on Tuesday, October 10, 2023 at 8:00 AM.

<u>Members Present</u>: Bruno DeFazio (chair), Diane Fowler (vice-chair), Shelley Stein, Gary Maha, Christian Yunker, Steve Mountain, and Hiedi Librock.

Members Absent: Steve Ferry (GAM rep.), Danielle Cummins.

Others Present: Tim Hens, Genesee County Highway; Matt Landers, Genesee County Manager; Felipe Oltramari, Genesee County Planning; Tom Carpenter, Clark Patterson Lee (CPL); Brett Frank, City of Batavia Public Works; Justin Gerace, Genesee County Highway; Jim Wujcik, Genesee County Attorney; Scott German, Genesee County Treasurer; Tom Phelps, Superintendent City of Batavia Bureau of Water & Wastewater; Nelson Weibel, Chief Water Plant Operator City of Batavia; Tod Ferguson, Monroe County Water Authority (MCWA).

Mr. DeFazio called the meeting to order at 8:03 AM.

- 1) <u>Approval of Minutes</u> A motion was made by Ms. Stein to approve the meeting minutes of July 11, 2023, seconded by Ms. Fowler and carried 7-0.
- 2) Phase 2 Construction Update Mr. Hens gave an update on the existing pump station upgrades. The Morgan Road Pump Station construction on the addition began in May. CP Ward will begin installing roof trusses this week. The generator pad has been poured. Motor Control Center (MCC) delivery date currently sits at August 2024. For the Riga, Scottsville, and North Rd Pump Stations, CP Ward and Concord are finalizing a sequencing plan to be submitted to MCWA this week for review as well as submitting the remaining MCC's for approval. The goal is to possibly have North Rd complete before peak summer 2024 demands. Tentative substantial completion date is June 2025 for all 4 pump stations. Mr. Hens said there is other work ongoing by the Town. Alexander Water District #6, which the County funded a portion of the water main installation, is complete. The Town opened bids for the Halstead Rd Water Storage Tank, and the bids came in on target. There are some add-ons that the County would like to pursue such as a Supervisory Control and Data Acquisition (SCADA) system. This would allow one to control and monitor the wholesale part of the water system, especially during peak times. It is about a \$250,000 add-on to the water storage tank project. There are other water districts, such as Bergen Water Improvement Benefit Area (WIBA) #1 which have been completed and restoration will be taking place this spring. The Byron WIBA #1, is in progress. The work is split into two contracts (A and B). Work begun in May on Contract B with water installations to be completed in January 2024. Contract A work begins this month. Stafford Water District #12 is underway. Genesee County's contributed a share to upsize Prole Road Extension, Byron Road, and Fotch Road waterlines from 8 inches to 12 inches. The substantial completion date for this project is in August of 2024. There was further discussion on the benefits of having a SCADA system. Ms. Stein

made a motion to support obtaining a SCADA system, pending funding discussions with the County Manager and County Treasurer, seconded by Mr. Yunker and carried 6-0. Mr. Mountain abstained.

- 3) Impeller Investigation Plan Mr. Hens said that the attachment included with the agenda is a roadmap for CPL to undertake to figure out what is causing the corrosion of the impellers at the Churchville and Mumford Pump Stations. There is a financial component because for the warranty, we have to figure out who/what is responsible for the early failure of the pumps. We want to get this done as quickly as possible for the warranty but also for the fact that there are other pump stations that have to be built with the same pumps. Also, further delays could push the timeline of Phase 2 completion into 2026 to avoid peak season. Progress is being made. Representatives from the County, CPL, Arcadis, MCWA, Pioneer Pumps and Patterson were on site for pump inspections at Churchville, Mumford, and Golden Road Pump Stations. Deposits observed on all four pump impellers at Mumford and Churchville (some more severe than others), but no deposits observed at the Golden Road pumps. Mr. Carpenter said that it is a problem that no one involved has seen before. The deposits are causing a variable frequency drive (VFD) fault at the pumps which affects their use, so there is an urgency to get this figured out. Right now the thought is that it is an incompatibility between the metal alloy and the water. An interesting twist is that the deposits seem to be mostly aluminum instead of iron. Impellers are made of a limited number of materials, and these seem to be aluminized bronze. Unless we get a lot more information on what exactly happened, we are looking to avoid anything with aluminum. The pump manufacturer has recommended going with stainless steel. If the decision is made to do that, the manufacturer would have to test and certify the efficiency of that material and also give an extended warranty so that Genesee County and MCWA are not at risk. Any change of impeller has a lead time of 4-6 months for delivery.
- 4) Source Supply Change Study Update Mr. Gerace said that the County executed a contract with Arcadis effective in June to perform Water Source Change Evaluation for Genesee County. The agreement includes regulatory meeting coordination, sampling plan development, water quality sampling memo, and a desktop Corrosion Control Treatment (CCT) Analysis. Kickoff meetings have been held with water operators as well as GCDOH and NYSDOH. Arcadis will be sending a draft of the Water Sampling Plan this week for review before sending to the Health Department for comments. Total scope of services is approximately 35 weeks.
- 5) Phase 3 Basis of Design & Master Plan Update Mr. Carpenter said that they received comments back from MCWA on a couple of subprojects of Phase 3, including the Union Street Pump Station, North Road Water Storage Tank, North Road Pump Station, and the area on Griswold Road with lower water pressure. Through the comments, it was determined that the Union Street Pump Station location should be closer to the tank than the other alternative near North Rd. CPL is working on the land acquisition tasks for the North Rd. tank and pump station, advancing appraisal work and geotechnical testing. A draft of the Master Plan will be submitted to MCWA for comments at the end of October. The Basis of Design report is also being worked on with the assistance of Arcadis with the goal of submitting a report to MCWA for review by the end of the year.
- 6) <u>Proposal from CPL for Phase 3 Program Management</u> Mr. Hens said that this item was briefly mentioned at the last meeting. A copy of the proposal was included with the agenda. It is for CPL to

continue to provide Phase 3 support in program management similar to the program management that we had in place for Phase 2. It covers everything from grants to meeting attendance, feasibility studies, hydraulic studies, evaluating alternatives, etc. Financially, the unspent Phase 3 SEQR funds could be used to offset this contract. Ms. Stein said that the term of the contract is not defined, it only speaks to a lump sum of \$250,000 to be billed monthly based on a percent completion of the project. Mr. Hens explained how the Phase 2 contract and CPL billing was done and said that a defined term would be beneficial. Mr. Wujcik said that usually a contract would have a term defined. Mr. Mountain suggested the contract state "not to exceed \$250,000." Mr. Carpenter said that language is fair since it is the intent of the contract. Mr. Christian suggested putting December 31, 2027 as the expiration date of the contract. **A Motion was made by Mr. Maha to recommend the contract to the County Legislature with the recommended changes to the language, seconded by Ms. Fowler and carried 7-0.**

- 7) <u>Water Supply & Demand Forecasts</u> Mr. Hens said that the updated tables were included with the agenda. They are similar to previous versions but have a few changes. The demands are broken out by hydraulic grade zones; they are also projected for years 2024, 2025 and 2026. The bottom line is that after Phase 2 is completed we still are short on peak days a few hundred thousand gallons. Currently, we make that up by bringing additional Erie County water, so the situation would not change. The additional supply brought in by Phase 2 is used up by the planned districts going in, Bethany District #5, the Byron and Bergen WIBAs, and others. Once Phase 3 is completed, there would be a 3 Million Gallon per Day (MGD) surplus. Phase 4 would increase that surplus to 5.7 MGD on a peak day. Mr. Landers asked if there are any economic development carve-outs for in the demand projections. Mr. Hens said that there are not until Phase 3. Mr. Carpenter reminded the group that Phase 3 improvements are being proposed with a Phase 4 in mind, meaning that Phase 3 upgrades can easily be scaled up with a Phase 4 improvement and without much waste. Mr. DeFazio asked when we get to a point that we have to ask municipalities to stop pursuing new water districts. Mr. Hens said that most of the proposed districts are mainly small residential and do not have a big demands. We have to be cognizant of them and make sure there are not too many, but we are probably not at the point where we ask them to stop. Mr. Landers said that we have to make sure that the Towns are aware that there is a limit to how much demand can be place on the system. Mr. Hens said that the water supply and demand chart is a good reference for the Towns to use when planning water districts. Mr. Hens proposed making a presentation to the Genesee Association of Municipalities (GAM). Ms. Librock said she will look at the GAM agenda and suggest a date for the discussion.
- 8) <u>Cash Flow Projections</u> Mr. Hens said that a draft version of the cash flow was emailed to the members. It is not to be shared publicly, as it is only a draft. There are several scenarios; there is the original Phase 3 cash flow which shows a dramatic shortfall. There are several variations of the Phase 3 cash flow with different increases in the surcharge, 60 cents and 90 cents. There are also scenarios with no Phase 4, no Phase 3, and with grants factored in and a scenario with sales tax increases. It is a work in progress, and it needs to be discussed with the County Manager, County Treasurer and the City of Batavia.
- 9) <u>Proposed 2024 Meeting Schedule/Next Meeting</u> A motion to approve the proposed meeting schedule was made by Ms. Stein, seconded by Ms. Librock and carried 7-0.

10) Other Business – Ms. Stein asked for an update on the Town of Bethany's water issues. Ms. Fowler said that there are dairy farms in the Town that have dry wells with approximately 6,000 cows. Mr. Hens said he is working with Eric Wies of CPL (Town engineering consultant) and Carl Hyde, the Town Supervisor. There are three farms that are hauling 28-30,000 gallons a day. They are pulling that from a hydrant in our system. There are also 42 residences that have dry wells. There is a severe drought affecting the southern part of our County but centered in Wyoming County. The forecast does not include significant rainfall, at least not enough to break the drought. However, the groundwater should seasonally begin to rise in December. Ms. Fowler said that funding is holding the Town up from moving forward with District #5. The Town did not get the Water Infrastructure Improvement Act (WIIA) grant and there is a shortfall of \$5 Million. The Town is at the point that they will have to ask the residents to absorb the extra costs, but that would mean a new NYS Comptroller review of the district financing which would further slow the district development.

Ms. Stein asked if there was an update on the Seneca Powers case. Mr. Hens said that we do not yet have a ruling. If the judge upholds DEC's decision to modify the permit, Seneca indicated that they would take the water from the City of Batavia. The City is working on some language to restrict usage.

11) <u>Adjournment</u> - A motion to adjourn was made by Ms. Stein, seconded by Mr. Yunker and carried. The meeting was adjourned at 9:14 AM.



<u>MEMO</u>

DATE: September 6, 2023

FROM: Genesee County, CPL & Arcadis

RE: GENESEE COUNTY PHASE 2 WATER SUPPLY MUMFORD AND CHURCHVILLE PUMP STATIONS IMPELLER INVESTIGATION

The following is a proposed list of items to investigate and sample to help determine the cause of the "corrosion" to the impellers and other materials within the pumps at Golden Road, Mumford and Churchville Pump Stations:

*Results from the field observations and materials testing may dictate the need and timing of the water sampling and data review.

1. <u>Churchville Pump Station</u>

- a. Field Observations:
 - i. Pump #2:
 - 1. Disassemble the suction and discharge piping and inspect the pipe interior and valve components for "corrosion". Take photos and samples of any "corrosion", if present.
 - ii. Meter Vault:
 - 1. Disassemble the dismantling joint. Inspect the pipe interior and injection quill components for "corrosion". Confirm injection quill material. Take photos and samples of any "corrosion", if present.
 - iii. Surge Valve:
 - 1. Disassemble the dismantling joint and inspect the pipe interior and surge valve components for "corrosion". Take photos and samples of any "corrosion", if present.
- b. Materials Testing:
 - i. PMI Testing for Pump #2: impellers, wear rings, casing rings, shaft sleeves.
- c. Perform Water Sampling (While in operation, both pumps)*.
 - i. Suction Piping (from upstream hydrant):
 - 1. pH.
 - 2. Redox potential.
 - 3. Chlorine residual.
 - 4. Iron.
 - 5. Temperature.

- ii. Pump Casing (from existing air release tap)
 - 1. pH.
 - 2. Redox potential.
 - 3. Chlorine residual.
 - 4. Iron.
 - 5. Temperature.
- iii. Discharge Piping (from small existing tap in discharge piping or downstream hydrant):
 - 1. pH.
 - 2. Redox potential.
 - 3. Chlorine residual.
 - 4. Iron.
 - 5. Temperature.
- iv. Temperature (utilize air release for continual monitoring and data logging for 1 month in both pumps).
- d. Obtain data from MCWA (for all pumps since initial startup)*
 - i. Pump run times.
 - ii. Pump speeds.
 - iii. Current.
 - iv. Chlorine residual.
 - v. Flow.
 - vi. Control valve position.

2. <u>Mumford Pump Station</u>

- a. Field Observations:
 - i. Pump #1:
 - 1. Disassemble the suction and discharge piping and inspect the pipe interior and valve components for "corrosion". Take photos and samples of any "corrosion", if present.
 - ii. Meter Vault (suction):
 - 1. Disassemble the dismantling joint. Inspect the pipe interior and injection quill components for "corrosion". Confirm injection quill material. Take photos and samples of any "corrosion", if present.
 - iii. Surge Valve:
 - 1. Disassemble the dismantling joint and inspect the pipe interior and surge valve components for "corrosion". Take photos and samples of any "corrosion", if present.
 - iv. Meter Vault (Village Line):
 - 1. Disassemble the dismantling joint. Inspect the pipe interior and injection quill components for "corrosion". Confirm injection

quill material. Take photos and samples of any "corrosion", if present.

- b. Materials Testing:
 - i. PMI Testing for Pump #1: impellers, wear rings, casing rings, shaft sleeves.
- c. Perform Water Sampling (While in operation, both pumps)*
 - i. Suction Piping (from upstream hydrant):
 - 1. pH.
 - 2. Redox potential.
 - 3. Chlorine residual.
 - 4. Iron.
 - 5. Temperature.
 - ii. Pump Casing (from existing air release tap)
 - 1. pH.
 - 2. Chlorine residual.
 - 3. Iron.
 - 4. Temperature.
 - iii. Discharge Piping (from small existing tap in discharge piping or downstream hydrant):
 - 1. pH.
 - 2. Chlorine residual.
 - 3. Iron.
 - 4. Temperature.
 - iv. Temperature (utilize air release for continual monitoring and data logging for 1 month in both pumps).
- d. Obtain data from MCWA (for all pumps since initial startup)*
 - i. Pump run times.
 - ii. Pump speeds.
 - iii. Current.
 - iv. Chlorine residual.
 - v. Flow.
 - vi. Control valve position.

3. Golden Road Pump Station

- a. Field Observations:
 - i. Pump #1 & 2:
 - 1. Disassemble the suction and discharge piping and inspect the pipe interior and valve components for "corrosion". Take photos and samples of any "corrosion", if present.
 - ii. Meter Vault (suction):
 - 1. Disassemble the dismantling joint. Inspect the pipe interior and injection quill components for "corrosion". Confirm injection

quill material. Take photos and samples of any "corrosion", if present.

- iii. Surge Valve:
 - 1. Disassemble the dismantling joint and inspect the pipe interior and surge valve components for "corrosion". Take photos and samples of any "corrosion", if present.
- b. Materials Testing:
 - i. PMI Testing for Pump #1 & #2: impellers, wear rings, casing rings, shaft sleeves.
- c. Perform Water Sampling (Prior to startup, both pumps)*
 - i. Pump Casing (from existing air release tap)
 - 1. pH.
 - 2. Chlorine residual.
 - 3. Iron.
 - 4. Temperature.

Notes:

- 1. All the materials testing and sampling will be coordinated by CPL.
- 2. All field observations will be attended by representatives from CPL, Arcadis, Genesee County, Patterson and MCWA.
- 3. The disassembly, reassembly and disinfection of piping and fittings will be completed by CP Ward.



July 5, 2023

Mr. Timothy J. Hens, P.E. Highway Superintendent Genesee County 153 Cedar Street Batavia, NY 14020

RE: GENESEE COUNTY PHASE 3 WATER SUPPLY PROPOSAL FOR ENGINEERING SERVICES PROGRAM MANAGEMENT

Dear Tim:

CPL is very pleased to submit our proposal to provide additional engineering services related to Program Management of the proposed Genesee County Phase 3 Water Supply Project.

We are very proud to have provided engineering support for the Genesee County Water Supply Program Project and the Genesee County Water Resource Agency for well over 20 years. This includes being involved in the proposed Phase 3 Water Supply Project's Master Planning, Basis of Design & Supply Source Evaluation, and SEQR (recently completed).

As you are aware Phase 3 is a very large, complex, critical project with many dynamic variables that evolve over time. It is expected to continue to require significant teamwork to complete over the course of the next several years.

CPL proposes to provide the following Program Management services to continue to support this critical County project effectively.

Program Management:

- 1. Meetings and coordination with the Project Team (CPL, Genesee County, MCWA, & Arcadis), municipalities, agencies, other stakeholders , and the internal CPL team.
- 2. Technical, funding, financing, budgeting, scheduling and implementation support and strategy assistance to Genesee County.
- 3. Meetings and coordination with the Funding Team, funding agencies, and various funding stakeholders.
- 4. Assistance with funding and grant applications, paperwork, reports, and annual IUP (Intended Use Plan) updates, including preparing a 2023 NYS IMG (Intermunicipal Grant) application.



- 5. Source Water Change and LCRR (Lead and Copper Rule Revisions) support to Arcadis and Genesee County, including coordination and meetings with regulatory agencies, water suppliers, and operators.
- 6. Assist Genesee County with management and coordination with various other consultants and stakeholders involved in the overall Phase 3 Project/Program.
- 7. Feasibility reviews (technical and financial), conceptual maps, hydraulic modeling, and cost estimating of various project and source supply options, alternatives, and changes.
- 8. Annual Master Plan updates for County coordination with the towns and villages within the County.
- 9. Other various relatively minor support services, as requested by the County, which are not covered under the scope of another CPL Phase 3 contract and/or are not related to a specific Phase 3 subproject's design, bidding, or construction efforts.

We propose to provide these **Program Management services for a lump sum amount of \$250,000**. Invoicing will be on a monthly and percentage of completion basis.

Upon your acceptance of this letter proposal, we will prepare an EJCDC Standard Form of Agreement Between Owner and Engineer, consistent with this letter.

We appreciate the opportunity to submit our proposal and look forward to continuing to assist Genesee County in this endeavor. Please contact me at (585) 402-7595 or <u>tcarpenter@cplteam.com</u> should you have any questions or require additional information.

Very truly yours,

CPL

thom a anto

Thomas A. Carpenter, P.E. Senior Vice President

Proposal Accepted By:

Signature:

Date:

Genesee County

Genesee West Water Demands and Capacities

	Past De	emand	Past D	emand	Past D	emand	Current	Demand	Projected	Demand	Projected	Demand	Projected	Demand	Future D	Demand	Future I	Demand
	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024	2025	2025	2026	2026	2028	2028	2032	2032
	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak
Genesee West Demands	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD
1030 HGZ (Pembroke, Corfu, Alabama, Darien N of BPS)	0.288	0.432	0.273	0.410	0.254	0.381	0.254	0.381	0.254	0.381	0.281	0.422	0.383	0.575	0.287	0.431	0.317	0.476
1180 HGZ (Darien S of BPS)	0.102	0.408	0.202	0.808	0.174	0.696	0.174	0.696	0.177	0.708	0.177	0.708	0.177	0.708	0.202	0.808	0.398	1.592
Unaccounted (+/-10%)	0.039	0.084	0.048	0.122	0.043	0.108	0.043	0.108	0.043	0.109	0.046	0.113	0.056	0.128	0.049	0.124	0.072	0.207
Total Demand	0.429	0.924	0.523	1.339	0.471	1.185	0.471	1.185	0.474	1.198	0.504	1.242	0.616	1.411	0.538	1.362	0.787	2.275

									Projected N	ew Demands								
									2024	2024	2025	2025	2026	2026	2028	2028	2032	2032
									Avg	Peak								
Projected New Demands in Genesee West									MGD	MGD								
Darien Townwide District (1180)																	0.171	0.257
Darien District #11 (1180)									0.003	0.005								
Darien Lake Development Reserve (1180)															0.025	0.100	0.025	0.100
Pembroke District #4 (1030)													0.102	0.153				
Pembroke District #5 (1030)											0.027	0.041						
Pembroke EDC Reserve (1030)															0.033	0.050	0.033	0.050
Total New Demand	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.005	0.027	0.041	0.102	0.153	0.058	0.150	0.229	0.406

NOTES: Darien and Dairen Lake peaking factor = 4.0 due to theme park & campground seasonality, all other areas use 1.5

	Past Capacity	Past Capacity	Past Capacity	Current Capacity	Projected Capacity	Projected Capacity	Projected Capacity	Future Capacity (PH3)	Future Capacity (PH4)
	2020	2021	2022	2023	2024	2025	2026	2028	2032
Genesee West Capacities	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD
ECWA Purchases	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400	1.400
Corfu Treatment Plant Production	0.180	0.180	0.180	0.180	0.180	0.180	0.180	0.180	0.180
Total Capacity	1.580	1.580	1.580	1.580	1.580	1.580	1.580	1.580	1.580

Genesee West Remaining Capacity 1.151 0.656 1.058 0.241 1.109 0.395 1.109 0.395 1.106 0.382 1.076 0.338 0.964 0.169 1.042 0.218 0.793 (0.65

Genesee East Water Demands and Capacities

	Past De	emand	Past D	emand	Past D	emand	Current	Demand	Projected	Demand	Projected	Demand	Projected	d Demand	Future I	Demand	Future I	Demand
	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024	2025	2025	2026	2026	2028	2028	2032	2032
	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak
Genesee East Demands	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD
820 (Bergen, North Byron)	0.265	0.398	0.224	0.336	0.248	0.372	0.248	0.372	0.248	0.372	0.248	0.372	0.248	0.372	0.248	0.372	0.248	0.372
1070 HGZ (LeRoy, Stafford, Byron, Bethany, Caledonia)	0.930	1.395	0.880	1.320	0.860	1.290	0.860	1.290	1.214	1.821	1.320	1.980	1.320	1.980	1.920	2.880	2.170	3.255
1044/1280/1102 HGZs (Pavilion, Covington)	0.084	0.126	0.081	0.122	0.091	0.137	0.091	0.137	0.091	0.373	0.091	0.137	0.091	0.137	0.101	0.152	0.101	0.152
Unaccounted (+/-10%)	0.101	0.152	0.096	0.144	0.095	0.143	0.095	0.143	0.131	0.219	0.141	0.212	0.141	0.212	0.202	0.303	0.227	0.341
Total East Demand	0.185	0.278	0.177	0.266	0.186	0.279	0.186	0.279	0.222	0.592	0.232	0.348	0.232	0.348	0.303	0.455	0.328	0.492
MCWA Seven Springs	0.797	1.196	0.852	1.278	0.837	1.256	0.742	1.113	0.742	1.113	0.742	1.113	0.742	1.113	6.420	9.629	7.782	11.674
MCWA Temperance Hill	0.051	0.077	0.806	1.209	0.894	1.341	0.755	1.133	0.755	1.133	0.755	1.133	0.755	1.133				
MCWA East Main	0.000	0.000	0.000	0.000	0.110	0.165	0.509	0.764	0.509	0.764	0.509	0.764	0.509	0.764				
Total Plus MCWA Wholesale Purchase	0.848	1.272	1.658	2.487	1.841	2.762	2.006	3.009	2.006	3.009	2.006	3.009	2.006	3.009	6.723	10.084	8.111	12.166

									Projected N	ew Demands	Projected N	ew Demands	Projected No	ew Demands	Projected N	ew Demands	Projected N	lew Demands
									2024	2024	2025	2025	2026	2026	2028	2028	2032	2032
									Avg	Peak	Avg	Peak	Avg	Peak	Avg	Peak	Avg	Peak
Projected New Demands in Genesee East									MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD
Byron WIBA #1 (1070)									0.175	0.236								
GCEDC - Appletree AcresRESERVE (1070)															0.100	0.150	0.100	0.150
Pavilion Dist West Valley (Future Tank) (1102)															0.002	0.004		
Pavilion WD#7 (1044)															0.008	0.012		
Stafford Dist #12 (1070)									0.020	0.030	0.020	0.030						
LeRoy Dist #12 (1070)											0.086	0.129						
GCEDC - LeRoy Business ParkRESERVE (1070)															0.500	0.750	0.150	0.225
Bethany Dist #5 (1070)									0.159	0.215								
Total New Demand	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.354	0.481	0.106	0.159	0.000	0.000	0.610	0.916	0.250	0.375

NOTES: Byron WIBA #1 and Bethany Dist #5 Peaking Factor = 1.35 due to large dairy farms constant draw

	Past Capacity	Past C	apacity	Past C	apacity	Current	Capacity	Projected Capacity	Projected Capacity	Projected Capacity	Future Capacity (PH3)	Future Capacity (PH4)
	2020	20	21	20)22	20)23	2024	2025	2026	2028	2032
Genesee East Capacities	MGD	м	GD	M	GD	M	GD	MGD	MGD	MGD	MGD	MGD
North Rd Booster Station	2.500	3.800	3.250	3.800	3.250	3.800	3.250	4.400	4.400	4.400	12.000	18.000
Bergen/Churchville BPS	0.050	0.224	0.336	0.248	0.372	0.248	0.372	0.372	0.372	0.372	0.372	0.372
Bergen/Sweden	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.250	0.250	0.250	0.250
Total Capacity	2.550	4.024	3.586	4.048	3.622	4.298	3.872	5.022	5.022	5.022	12.622	18.622

NOTES: 2021-2023 Capacities limited on peak days due to incomplete Phase 2 pump stations

	4 700	4.070	2 266	4 505	0.007	4 907	0.000	4 9 9 9	0.046	0.040	0.046	0.040	0.046	0.040	5.000	2 529	40 544	6.456
Genesee East Remaining Capacity	1./02	1.278	2.366	1.537	2.207	1.287	2.292	1.289	3.016	2.013	3.016	2.013	3.016	2.013	5.899	2.538	10.511	6.456

Genesee County Wholesale Demands and Capacities

	Past D	emand	Past D	emand	Past D	emand	Current	Demand	Projected	Demand	Projected	Demand	Projected	Demand	Future I	Demand	Future	Demand
	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024	2025	2025	2026	2026	2028	2028	2032	2032
	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak
Genesee Co Wholesale Area Demands	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD
City of Batavia	2.019	3.029	1.974	2.961	2.097	3.146	2.146	3.219	2.146	3.219	2.146	3.219	2.146	3.219	2.125	3.187	2.104	3.156
Batavia/Alex/Beth/Elba/Alabama/STAMP	1.751	2.627	2.210	3.316	2.369	3.554	2.480	3.720	2.683	4.024	2.708	4.062	2.708	4.062	3.400	5.100	4.784	7.176
Elba (V)	0.040	0.060	0.376	0.564	0.393	0.589	0.393	0.589	0.393	0.589	0.393	0.589	0.393	0.589	0.393	0.589	0.393	0.589
Oakfield (T/V)	0.406	0.609	0.483	0.724	0.506	0.759	0.502	0.753	0.502	0.753	0.502	0.753	0.502	0.753	0.502	0.753	0.502	0.753
Total Demand	4.216	6.324	5.043	7.564	5.365	8.048	5.521	8.281	5.724	8.586	5.749	8.623	5.749	8.623	6.420	9.629	7.782	11.674

									Projected N	ew Demands	Projected N	lew Demands						
									2024	2024	2025	2025	2026	2026	2028	2028	2032	2032
									Avg	Peak								
Projected New Demands in Genesee Wholesale									MGD	MGD								
Alexander District #6									0.031	0.047								
Alexander District #7															0.025	0.038		
Village of Alexander																	0.050	0.075
Village of Attica																	0.667	1.0005
STAMP (Plug Power)									0.172	0.258								
GCEDC Reserve															0.667	1.0005	0.667	1.0005
Total New Demand	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.203	0.305	0.000	0.000	0.000	0.000	0.692	1.038	1.384	2.076

	Past C	apacity	Past Ca	apacity	Past Ca	apacity	Current	Capacity	Projected	l Capacity	Projected	d Capacity	Projected	d Capacity	Future Cap	acity (PH3)	Future Capacity (PH4)
	20	20	20	21	20	22	20)23	20	24	20)25	20)26	20	28	2032
Genesee Co Wholesale Area Capacities	M	GD	M	GD	M	GD	M	GD	М	GD	M	GD	M	GD	M	GD	MGD
City of Batavia WTP	4.5	500	4.5	600	4.5	500	4.5	500	4.5	500	4.5	500	4.5	500	()	0
MCWA Wholesale Available	0.848	1.272	1.658	2.487	1.841	2.762	2.006	3.009	2.006	3.009	2.006	3.009	2.006	3.009	6.723	10.084	8.111 12.166
Total Capacity	5.348	5.772	6.158	6.987	6.341	7.262	6.506	7.509	6.506	7.509	6.506	7.509	6.506	7.509	6.723	10.084	8.111 12.166

Genesee Co Wholesale Area Remaining Capacity	1.132	(0.552)	1.115	(0.577)	0.976	(0.787)	0.985	(0.772)	0.782	(1.077)	0.757	(1.114)	0.757	(1.114)	N/A	N/A	N/A	N/A
ADD City WTP Output Above 4.5 MGD Req'd	0.000	0.552	0.000	0.577	0.000	0.787	0.000	0.772	0.000	1.077	0.000	1.114	0.000	1.114	N/A	N/A	N/A	N/A

SUMMARY

	Past D	Past Demand		Past Demand		Past Demand		Current Demand		Projected Demand		Projected Demand		Projected Demand		Future Demand		Future Demand	
	2020	2020	2021	2021	2022	2022	2023	2023	2024	2024	2025	2025	2026	2026	2028	2028	2032	2032	
Genesee County Demand	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	Average	Peak	
Zone	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	MGD	
Genesee West	0.429	0.924	0.523	1.339	0.471	1.185	0.471	1.185	0.474	1.198	0.504	1.242	0.616	1.411	0.538	1.362	0.787	2.275	
Genesee Wholesale Area	4.216	6.324	5.043	7.564	5.365	8.048	5.521	8.281	5.724	8.586	5.749	8.623	5.749	8.623	0.000	0.000	0.000	0.000	
Genesee East	0.848	1.272	1.658	2.487	1.841	2.762	2.006	3.009	2.006	3.009	2.006	3.009	2.006	3.009	6.723	10.084	8.111	12.166	
TOTAL DEMAND	5.493	8.520	7.223	11.391	7.677	11.994	7.998	12.475	8.204	12.793	8.259	12.875	8.371	13.043	7.261	11.446	8.897	14.440	
																	1		
	Past Ca	Past Capacity		Past Capacity		Past Capacity		Current Capacity		Projected Capacity								Future Capacity (PH4)	
		-pacity	Fast Co	арасну	Past Ca	apacity	Current	Capacity	Projected	Capacity	Projected	Capacity	Projected	d Capacity	Future Cap	pacity (PH3)	Future Cap	acity (PH4)	
Genesee County Capacity	20		20	• •		apacity 122	Current 20	• •	Projected 20		Projected	• •	-	d Capacity)26		bacity (PH3) D28		acity (PH4) 132	
<u>Genesee County Capacity</u> Zone		20)21)22		23	-	24	-	25	20	• •	20		20		
	20	20 GD	20	021 GD	20	GD	20	23 6D	20	24 GD	20	25 GD	20 M	026	20	028 GD	20	932 GD	
Zone	20 M	20 3D 80	20 M	GD 680	20 M	GD 680	20 M	23 6D 80	20 M	24 GD 80	20 M	25 GD 80	20 M	GD 580	20 M	GD 580	20 M	GD 680	
Zone Genesee West	20 Mi 1.5	20 3D 80 52	20 M 1.5	GD 680 077	20 Mo 1.5	GD 880 887	20 Mo 1.5	23 6D 80 72	20 Mo 1.5	24 GD 80 77	20 Mo 1.5	25 5D 80 14	20 M	GD 580 514	20 M 1.5	GD 580 000	20 M 1.5	GD 600	
Zone Genesee West Genesee Wholesale Area	20 M 1.5 5.0	20 3D 80 52 50	20 Mi 1.5 5.0	GD 60 777 886	20 Mi 1.5 5.2	GD 80 87 522	20 Mi 1.5 5.2	23 5D 80 72 72	20 M(1.5 5.5	24 GD 80 77 22	20 M(1.5 5.6	25 3D 80 14 22	20 M 1.5 5.6	5 80 5 14 5 22	20 M 1.5 0.0	GD 580 000 622	20 M 1.5 0.0	32 GD 580 500 622	
Zone Genesee West Genesee Wholesale Area Genesee East	20 M 1.5 5.0 2.5	20 3D 80 52 50	20 Mi 1.5 5.0 3.5	GD 60 777 886	20 Mi 1.5 5.2 3.6	GD 80 87 522	20 Mi 1.5 5.2 3.8	23 5D 80 72 72	20 Mo 1.5 5.5 5.0	24 GD 80 77 22	20 Mo 1.5 5.6 5.0	25 3D 80 14 22	20 M 1.5 5.6 5.0	5 80 5 14 5 22	20 Mi 1.5 0.0 12.0	GD 580 000 622	20 M 1.5 0.0 18.0	32 GD 580 500 622	

Genesee County Water Resources Agency

2024 MEETING SCHEDULE

If unable to attend a meeting, please contact Felipe Oltramari at <u>Felipe.Oltramari@co.genesee.ny.us</u> or (585) 815-7901 to be excused.

Meeting Time: 8:00 AM Location: Legislature Chamber (3rd Floor), Old Courthouse, 7 Main Street, Batavia

MEETING DATES

Tuesday, January 9

Tuesday, April 9

Tuesday, July 9

Tuesday, October 8

Subcommittees will meet as called and additional meetings of the full Committee may be called if decisions are needed.