

Memo for Board Discussion

From: Jerome D. Schad, Chair

Date: May 9, 2019

RE: Comprehensive Infrastructure Strategic Planning:

Setting ECWA’s Long-Term Goals	-	[By 6/6/19 – Review/Approval at 6/13/19 Board Meeting]
Consensus on Infrastructure Prioritizing Criteria	-	[By 6/20/19 – Review/Approval at 6/27/19 Board Meeting]
Identifying 3 to 5 Large Projects for Design Work in 2019-2020 to achieve long-term goals	-	[By 8/1/19 – Review/Approval at 8/8/19 Board Meeting]

For some time, I have been advocating for a written Comprehensive Infrastructure Strategic Plan (hereafter the “CISP”). To achieve that objective, this memo is to ask that the Board and Senior Staff take three steps in that direction prior to the start of our 2020 budget process.

First, Set ECWA’s Goals:

The Office of the New York State Comptroller’s Local Government Management Guide to “Multiyear Capital Planning” emphasizes that the first step in effective capital planning is consensus on goals and objectives. ECWA’s goals are more than a statement of its mission or a static description of capital needs at a single moment in time.

Our mission will not change. It will remain that: *“The mission of the Erie County Water Authority is to provide all of its customers a plentiful supply of safe, high quality and affordable drinking water through a reliable infrastructure.”*

Our goals are our vision of the road we want the Authority to travel.

Below are my goals for the Authority. I hope these will provoke discussion among the Commissioners and Senior Staff and that you might concur that these are goals we should pursue.

1. **Expansion:** Expand through cooperative projects that lead to (a) either consolidation of local water systems into the ECWA or (b) create expanded bulk water sales.
2. **Redundancy in every aspect of ECWA’s plant and Distribution System.** Achieve this through additional plant capacity or a shared plant or new interconnections with other water suppliers so that “peak” capacity demands, or single point-of-failure incidents cannot interrupt supply to any large group of customers from more than a few hours.

3. **Automation and Cyber Security of our production and distribution system.** Achieve maximum automated efficiency using a secure computer and/or cloud-based system with necessary redundancy to avoid a system-wide failure.
4. **Annually invest \$20 - \$25,000,000 in new transmission and distribution lines** [approximately 20 miles yearly] **in our direct service areas** [approximately 2,085 miles of pipe] **with priority to replace cast iron pipe first** [approximately 921 miles].

Second, Agree on an Infrastructure Prioritizing Criteria:

In several discussions that I have had with our Executive Engineer, I think his prioritizing criteria captured the key elements to enable the Authority to start strategic infrastructure planning. Those six elements are:

1. Safety Concerns
2. Impact of Failure
3. Redundancy of facilities
4. Process Reliance
5. Ability to Meet Current and Future Regulations
6. Urgency in terms of Time

I would apply these criteria to the Goals to help identify the top 3-to-5 projects for design work going into our 2020 budget year.

Third, Identify 3 to 5 Large Projects for Design Work in 2019-2020 to further our long-term goals:

If we were to achieve consensus on goals, I would like to identify 3-to-5 priority large projects to design so that the Authority could position itself to successfully obtain financing from state or federal sources to help make each project a reality.

By way of example, if we were to conclude that Goal # 2 was most important, we would apply a prioritizing criterion to define the size and scope of the project that needed to achieve that goal. For Goal #1, if we were to collaborate to expand bulk sales to Genesee County, we would do the same to define the size and scope of the project. Those projects could then be scheduled for design now as we go into our budget process on August 19, 2019.

I seek to achieve consensus on Goals as the first step.

A Note on existing infrastructure planning:

Several years ago, our staff has provided helpful documentation about infrastructure needs over a 50-plus year period. The “Long Term Waterline Replacement Plan,” the “Long Term Capital Plan (Plants),” and “Long Term Capital Plan (Pump Station & Tanks)” that were prepared by

former Executive Engineer, Wes Dust, in 2014-2015 laid the ground-work for our initial consideration.

I suggest that one good use of our allocated budget for studies would be to build out an Authority-wide asset management data system that builds on the ground work done by Wendel. The Authority would then have up-to-date and detailed data on the life cycle and functional life expectancy of every component of our plant and distribution system. Does CitiWorks have the capacity to capture this information if we do the necessary data input?

Currently, for a re-cap on where we are, we have the following studies ongoing which will likely provide information for the upcoming budget process related to infrastructure:

1. Hydraulic Integrity – Reliability of Water Supply & Alternative Sources [Contract OBG-13]. This study should help us identify the transmission and distribution system redundancy solutions to reduce the risk of supply interruption to large group of customers;
2. Optimal Corrosion Control Treatment Study [Contract MP-79] which is at the draft report stage, but which has potential capital expenditure implications;
3. Van de Water Tracer Study [Contract W-28] that will be helpful in assessing disinfection levels at Van de Water;
4. Van de Water Residuals Dewatering and Processing Study [Contract W-29] that is 90% complete but which appears to have limited impact on capital needs beyond the recommended filter belt press trial; and
5. Ball Pump Station Capital Improvement Study [Contract MP-080] that will likely impact capital budgeting in 2020-2021.

I believe that our very talented staff can help us achieve consensus and identify 3-to-5 projects in time for design commitments for the August 19, 2019 start of the 2020 budget process.

A note on our role in protecting Western New York's Future:

I believe that ECWA, and others who control infrastructure decisions for electrical power, natural gas, electronic communications, transportation, roads and bridges, are obligated to our children and grandchildren to leave them with a viable and vibrant place in which to live. That means we must do everything we can to protect a clean water supply and everything we can to assure that those who follow us have the same benefit of a reliable infrastructure that will guarantee a continuous 24/7 flow of clean water. We owe it to the generations who follow.

Additionally, I can think of no more important investment incentive for businesses than having a robust infrastructure in place to support investments in our community. ECWA is only one part of that broader infrastructure, but I think we should lead the way.