

ERIE COUNTY WATER AUTHORITY
AUTHORIZATION FORM
For Approval/Execution of Documents
(check which apply)

Contract: _____ **Project No.:** 201900212

Project Description: Comprehensive Strategic Plan

Item Description:

- | | | | |
|--|--|---|---------------------------------------|
| <input type="checkbox"/> Agreement | <input type="checkbox"/> Professional Service Contract | <input type="checkbox"/> Amendment | <input type="checkbox"/> Change Order |
| <input type="checkbox"/> BCD | <input type="checkbox"/> NYSDOT Agreement | <input type="checkbox"/> Contract Documents | <input type="checkbox"/> Addendum |
| <input type="checkbox"/> Recommendation for Award of Contract | <input type="checkbox"/> Recommendation to Reject Bids | | |
| <input type="checkbox"/> Request for Proposals | | | |
| <input checked="" type="checkbox"/> Other Comprehensive Strategic Plan | | | |

Action Requested:

- | | |
|---|--|
| <input type="checkbox"/> Board Authorization to Execute | <input checked="" type="checkbox"/> Legal Approval |
| <input type="checkbox"/> Board Authorization to Award | <input type="checkbox"/> Execution by the Chairman |
| <input type="checkbox"/> Board Authorization to Advertise for Bids | <input type="checkbox"/> Execution by the Secretary to the Authority |
| <input type="checkbox"/> Board Authorization to Solicit Request for Proposals | |
| <input checked="" type="checkbox"/> Other Plan Adoption by the Board | |

Approvals Needed:

APPROVED AS TO CONTENT:

- | | | |
|---|--------------------------------|---------------|
| <input checked="" type="checkbox"/> Department Head | <u><i>James F. Konalik</i></u> | Date: 9-10-19 |
| <input type="checkbox"/> Risk Manager | _____ | Date: _____ |
| <input type="checkbox"/> Director of Administration | _____ | Date: _____ |
| <input checked="" type="checkbox"/> Executive Engineer/Director | <u><i>Pursey Jones</i></u> | Date: 9/10/19 |

APPROVED AS TO FORM:

- | | | |
|---|----------------------------------|---------------|
| <input checked="" type="checkbox"/> Legal | <u><i>Margaret A. Murphy</i></u> | Date: 9/11/19 |
|---|----------------------------------|---------------|

APPROVED FOR BOARD RESOLUTION:

- | | | |
|--|-------------------------------|---------------|
| <input checked="" type="checkbox"/> Secretary to the Authority | <u><i>Athena Bendayes</i></u> | Date: 9/11/19 |
|--|-------------------------------|---------------|

Remarks: _____


Resolution Date: _____

Item No: _____



ERIE COUNTY WATER AUTHORITY
INTEROFFICE MEMORANDUM

September 10, 2019

To: Terrence D. McCracken, Secretary to the Authority
From: Russell J. Stoll, Executive Director 
Subject: Comprehensive Strategic Plan
ECWA Project No. 201900212

Please find a copy of the attached Comprehensive Strategic Plan of the Erie County Water Authority.

This Plan is being submitted for adoption by the Board as discussed at September 5, 2019 Board Meeting.

cc: K.Prendergast
T.Fabozzi
ECWA-854-1901

ERIE COUNTY WATER AUTHORITY COMPREHENSIVE STRATEGIC PLAN

September 2019

This Strategic Plan of the Erie County Water Authority has been created pursuant to Policy No. 18 – Long-term Strategic Planning, as a road map for the significant priorities of the Authority for the next twenty years and beyond. It supports the Mission Statement of the Authority which reads:

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.

Four overarching goals articulated by the Board and leadership staff are incorporated throughout the Plan: ***Expansion, Redundancy, Automation/Cyber Security, and Investment.***

Each initiative, listed below with equal importance, has specific objectives and measurable actions with implementation dates where applicable. This Plan will be reviewed at a minimum on an annual basis in advance of the start of the budget planning process, and our success in completing the seven strategic initiatives will be measured.

Strategic Initiative 1 – Resiliency of ECWA Infrastructure and Assets

Core Principals: Evaluate and maintain ECWA's infrastructure to reliably meet the service needs of our present and future customers in a cost-effective manner. Focus on the redundancy and resiliency of key ECWA assets through replacement, expansion, shared resources, and inter-community cooperation. Embrace the principles of environmental, social and economic sustainability and strive to make the best use of our water resources promoting conservation of water, energy, and other natural resources. Maintain a strategic financial model to predict short- and long-term cash flows to facilitate financial planning.

Objectives:

- Complete a biennial comprehensive condition assessment of all key components of the treatment, storage, pumping and transmission systems.
- Identify critical projects and prioritize the implementation of capital improvements to efficiently utilize funding and employee resources. Review the project list and prioritization on an annual basis.
- Maintain the comprehensive asset inventory database to optimize the maintenance and

replacement of assets to maximize their useful life. Complete the next update of the database by the end of 2021.

- Annually review federal and state grant funding opportunities. Improve ECWA's position for funding through the proactive preparation of accurate, "shovel ready" construction documents to allow ECWA to quickly respond to all grant opportunities.
- Develop, fund and execute a 20-year Capital Improvement Plan (CIP) and commit to investment to ensure ECWA's infrastructure will meet the operational demands of present and future customers. Review the CIP annually to coincide with the budget process with major updates completed at least once every five years. Target an annual replacement of 15 miles of new transmission and distribution lines representing approximately 0.75% of our direct service areas, and attain a similar investment in our treatment, pumping and storage facilities.
- Complete a system-wide master plan for meeting our current and projected personnel and operations space needs by the end of 2020.

Strategic Initiative 2 – Water Quality

Core Principals: Provide high quality drinking water through effective management and operation of our treatment and distribution system. Continue to meet and surpass all water quality standards. Anticipate and comply with regulatory and environmental changes to ensure ECWA preparedness to continue to provide high quality drinking water.

Objectives:

- Conduct bench and pilot testing of treatment technologies that will result in improved water treatment operations while maintaining the highest water quality.
- Investigate and implement appropriate technologies for future water treatment challenges including emerging contaminants and changing source water quality.
- Annually assess the chemical, energy, and process water usage at each treatment plant and make improvements where possible. Ensure optimization of all facets of the operation of the treatment and distribution systems.
- Evaluate and implement distribution system improvements for water quality including water storage tank operation and maintenance, chlorination booster stations, and waterline flushing. Review related Standard Operating Procedures annually. Utilize real-time monitoring through the SCADA system to effectively manage water age throughout the distribution system to reduce disinfection byproduct formation and enhance water quality.
- Provide educational materials through our website on our water quality and how ECWA is preparing for potential water quality challenges such as harmful algal blooms.

- Ensure all water quality reporting deadlines are continuously met with multiple, redundant laboratory services, utilizing both in-house and outside contract services.

Strategic Initiative 3 – Expand ECWA’s Regional Presence

Core Principals: Plan collaboratively to timely provide infrastructure to meet the needs of the Western New York Community. Expand ECWA’s service area through cooperative projects that lead to either consolidation of local water systems within Erie County or the creation of new bulk water sale customers.

- Coordinate with representatives of potential bulk water customers, including Genesee County, the Village of Alden, and the City of North Tonawanda to determine their water supply needs, whether on a daily or emergency supply basis. Analyze our treatment and distribution systems and identify required capital improvements and associated financial responsibility.
- Identify opportunities where consolidation/conversion of bulk and/or lease managed system to direct serve is feasible for the municipality and the Authority.
- Actively engage regional water utilities and collaborate where appropriate on common water treatment and supply water issues. Identify opportunities for shared resources including interconnection of distribution systems as emergency source of supply. Host/attend quarterly meetings with representatives of the adjoining City of Buffalo and Town of Tonawanda water systems.
- Communicate with regional utilities and proactively identify and coordinate waterline betterment opportunities on regional highway or infrastructure projects in the areas in which we provide direct water service.

Strategic Initiative 4 – Promote Technology

Core Principals: Maximize ECWA’s information technology infrastructure assets to assure reliability. Seek innovative opportunities in the overall production of water and service to our customers. Maintain a utility that is equipped and trained in the use of appropriate and advanced technology to enhance service, efficiency and effectiveness.

Objectives:

- Continue with the modernization of ECWA’s Supervisory Control and Data Acquisition (SCADA) system. Provide an optimized, consistent platform system-wide across the treatment and distribution systems by the end of 2021.
- Install a real-time monitoring system consisting of pressure, flow, and water quality information stations at key locations in the distribution system by the end of 2022. Utilize the information from each station to enhance daily operations and proactively identify any developing critical situations within the distribution system.

- Build and maintain a secure, redundant and modern IT system to ward against possible cyber security attacks.
- Further develop our water quality and hydraulic models of the treatment plants and distribution system. Integrate each model with the appropriate features of our SCADA, asset management, and work order software platforms.
- Complete an IT Master Plan including the implementation of an Enterprise Resource Planning (ERP) system to replace legacy systems and integrate the multiple software process needs of the Authority by 2024.

Strategic Initiative 5 – Enhance Customer Service

Core Principals: Provide exceptional service to our customers and community partners by being understanding, supportive and responsive to our user's needs and priorities. Promote customer confidence in ECWA through financial responsibility, professional character and ethical behavior. Engage our customers to understand their expectations to further build and maintain their trust. Educate and increase public awareness of the innovative technologies ECWA applies each day.

Objectives:

- Complete the transition to 100% radio read meters by 2026.
- Investigate the use of AMR software technology to identify individual locations of non-typical water use to aid in the overall reduction of non-revenue water by 2026.
- Establish customer service standards for response times.
- Expand Customer Service hours to better accommodate our customers by 2022.
- Enhance website access to allow for online application processing and service requests by 2022.

Strategic Initiative 6 – Employee Focus

Core Principals: Provide a work environment where employees are valued, empowered and informed. Recruit, develop, and retain a highly skilled and knowledgeable workforce and provide them with the resources to meet customer and ECWA needs and expectations. Mentor and encourage employees and reinforce succession planning through training, education, and promotion opportunities.

Objectives:

- Annually assess staffing requirements to anticipate and address retirements, promotions, and departures. Provide a staffing level consistent with the needs of the implementation of the Capital Improvement Plan.

- Develop and implement a succession plan for all critical positions across the organization. Project potential future critical vacancies with an emphasis on key positions. Employ an operational and institutional knowledge transfer strategy.
- Complete the update of Lock Out/Tag Out procedures for all ECWA facilities by 2020.
- Reinforce our continued commitment to safety training and awareness for all employees.

Strategic Initiative 7 – Emergency Preparedness

Core Principals: Verify the Authority's preparedness to meet the needs of our customers in the event of a local or regional emergency event.

Objectives:

- Conduct regular testing of all backup power and communication systems. Implement annually by 2020.
- Continue coordination with local emergency responders and participate in regional emergency response exercises biennially.
- Maintain and constantly re-examine our vulnerability assessments and emergency response plans.
- Develop a plan and practice measures needed to operate key components of the water treatment and distribution systems in the event of the loss of automated monitoring and control capabilities.
- Review cyber security awareness and plan for operation in the event of corruption/attack of our key IT systems.