Preparing for the Unknown
An integrated Utility Resilience Plan

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OCWA has embarked on an All-Hazards approach as it prepares for the future.

While what we are preparing for is unknown, we have taken stock of where we have been and where we are, all with an eye on where we want to go!
OCWA’s All-Hazards Approach Includes:

• Succession Planning
• Sustainability
• Cybersecurity
• Asset Management
• Emergency Response Planning
• Vulnerability Assessment
Succession Planning

• OCWA recognized it has an aging workforce
  – We take proactive steps to make students aware of career prospects in the water industry
  – We are working toward a balance of seasoned workers and younger, entry level hires

• OCWA works in a restricting Civil Service Environment
  – We have developed in-house management development programs for both current and potential future managers
  – We proactively pursue potential candidates and encourage them to take Civil Service exams in anticipation of position openings.
Sustainability

• OCWA Developed and Implemented a 7G program to address:
  – Transportation
  – Energy Conservation
  – Supply Chain
  – Water Conservation
  – Recycling / Waste Reduction
Cybersecurity

- OCWA enhanced its Privacy Policy and Procedure to include Cybersecurity Awareness and Training for all Authority Personnel
- Taken steps to further secure OCWA’s SCADA system
- Taken steps to secure Business Enterprise Systems
- Obtained Cybersecurity Insurance
- Continues to look for more ways to secure digital Information
Asset Management

• Developed a program to proactively address infrastructure replacement and renewal needs on our own schedule

• To date our Water Plant has been upgraded and improved

• All pump stations and tanks have been rebuilt or replaced

• All major structures have been improved

• Area in need of additional investment is water main replacement, currently at $2 million per year, striving for $4-6 million per year

• This is a project with no end.
Emergency Response Planning

- OCWA, like most water utilities, has a robust ERP.
- In New York we are required to provide our Department of Health with an update every five years.
- OCWA’s ERP is updated quarterly with all employees receiving input for their personal copy of the plan.
- The five year update is not a concern, as we can pull a copy off the shelf and it is never more than three months old.
- The ERP is a living document widely distributed and used regularly.
Vulnerability Assessment

• New York requires submittal of updated VAs every five years
• OCWA is working on its 4th update
• We reviewed EPA’s VSAT tool along with others and given the nature of our system (100,000 connections spread over 35 towns, 15 villages in a 5 County region served by 2010 miles of main with 55 storage tanks and 42 pump stations) we determined those tools would not work for OCWA.
• Accordingly, OCWA has undertaken a project to develop its own in house Vulnerability Assessment tool.
OCWA’s Vulnerability Assessment Tool

• The tool is being designed to be compliant with the ANSI/AWWA’s J100-10 Standard for Risk and Resilience Management of Water and Wastewater Systems.
• The tool is designed on OCWA’s Maximo Work Management platform and is being integrated with our business enterprise systems.
• Facility assessments and evaluations are being completed on hand-held devices that feed into a spreadsheet that ranks the vulnerability of all the facilities.
• The VA incorporates the measures list from EPA’s VSAT program and the J100 threats information.
OCWA’s VA Tool (continued)

• In addition to collecting initial assessment information, the tool allows for:
  – Updates as changes are made
  – Issuance of work orders for maintenance and repairs when follow-up inspections are conducted
  – Reordering of vulnerable facilities when improvement are completed.
  – O&M Budget Planning
  – Capital Improvement Planning
With respect to capital budgeting, the OCWA VA tool also allows for what if scenario planning.

- We can enter in a planned project and review the impact of the improvement with respect to reordering of the sites.
- We can evaluate whether or not the investment is prudent and cost effective.
- The tool is used as a continuous improvement tool.
Finally, OCWA’s Vulnerability Assessment tool is being developed as a living tool.

Instead of scrambling to complete and updates every five years, the OCWA VA will be up-to-date and ready for submittal at anytime.
Why Has OCWA Taken These Steps?

- We prefer to do things on our own terms
- It allows for us to plan our expenditure of capital resources over time
- We have experienced favorable bond ratings because of our actions
- We have been able to keep our insurance premiums reasonable and steady for more than 20 years.
- In spite of our system nearly doubling in size over the past 25 years our annual energy use has remained level
- The impact on customer rates has been positive (OCWA’s average residential rate is less than $70 / quarter)
- We get to sleep at night, knowing we are doing our level best to provide safe, reliable water service to the 340,000 people we serve in Central New York.