**NEWWA Women Presidents**

This has got to be my favorite change... Did you know that NEWWA is on its way to having three women presidents in succession? In a couple of years, five women will have held the position of president of NEWWA. Nan Crossland was NEWWA’s first woman president in 2000; what a great way to start the century! Carol Harris was the second woman president in 2014. I am the third woman president and then in succession we will have Lisa Gove and Erica Lotz. I am very proud to be part of this change at NEWWA and urge our membership to continue to embrace diversity. Change it up!

**New England Water Works Association**

Every February we have a NEWWA board meeting in Maine that coincides with the Maine Water Utilities Association’s (MWUA) Annual Conference. This year MWUA decided to change it up and move the conference from Portland to the Augusta Civic Center. The conference was a great success in the new location. So, accolades go out to the MWUA board, Bruce Berger, and the membership for supporting this change! One of my goals this year is to continue collaborating with state associations throughout New England. As part of this goal, Kirsten King and I attended an informal MWUA meeting with state associations throughout New England. As part of the meeting, Bruce Berger, and the membership for supporting this change, Carol Harris was the second woman president in 2014. I am the third woman president and then in succession we will have Lisa Gove and Erica Lotz. I am very proud to be part of this change at NEWWA and urge our membership to continue to embrace diversity. Change it up!

**Curling Demonstration**

If you didn’t attend NEWWA’s January Monthly Meeting in Nashua, you missed a first! The Program Committee and Chris Hodgson coordinated our first curling demonstration after the technical presentations, lunch, and awards at the Nashua Country Club. Change it up!

**November Monthly Meeting in July?**

We sometimes struggle with attendance at NEWWA’s November Monthly Meeting, which is typically held in Rhode Island or southeastern Massachusetts. Because of this, our Site Selection Committee, chaired this year by Erica Lotz, has decided to change it up. This year our November Monthly Meeting will be held July 14th, at Ochre Court at Salve Regina University in Newport, Rhode Island. Who wouldn’t want to go to Newport in July? Hope to see you there.

**Membership Survey & Planning Session**

NEWWA recently conducted a membership survey at the end of 2019. The Planning Committee and the board are working on digging into the results of the survey to help us steer the future of the organization. The Planning Committee is just starting to formulate ideas for the Planning Session scheduled for July 26 and 27, at Mill Falls at the Lake in Meredith, NH. The Planning Session is one of my favorite NEWWA events, because we get to roll up our sleeves, stretch our brains, and hang out with a lot of really cool volunteers as well as really cool NEWWA staff. Planning Sessions have been the heart of many positive changes for NEWWA and we need to embrace change to help keep us a vibrant organization. Everyone is welcome to attend the Planning Session, so please save the dates in your calendar and plan to join us.

**Save the Dates — 2020 Major Events**

- Annual Golf Classic — May 4 — Sterling National Golf Club — Sterling, MA
- Annual Water Quality Symposium — May 6 — Doubletree Hotel — Milford, MA
- MWUA ACE20 — June 14-17 — Orlando, FL
- RESCHEDULED “Spring” Joint Regional Conference & Exhibition — June 22-23, 2020 — DUC Center — Worcester, MA
- Joint Luncheon with CWA2WA at ACE20 — June 15 — Cuba Libre — Orlando, FL
- July Membership Meeting with RIWWA — July 14 — Salve Regina — Newport, RI
- Annual Planning Session — July 26-27 — Inn at Mills Falls — Meredith, NH
- Annual Conference — September 19-24 — Omni Mt. Washington — Bretton Woods, NH

**NEWWA 34th Annual Ski Classic**

By David Polcari

The 34th Annual Ski Classic was back at Gunstock Mountain Resort in Gilford, NH, on January 17, 2020. The mountain boasted 8 inches of fresh snow the day before, and despite some cold conditions, a hearty contingent of water works professionals took part in the event!

The day began with registration and free coffee and pastries, as skiers and boarders prepared to hit the slopes and do battle on the race course. The renowned Water Pumpers Ski Race kicked off at 11:00 a.m. with close to 20 participants. Racers included alpine and telemark skiers and snowboarders fighting it out for the top prizes and bragging rights for the fastest men and women on the slopes. Last year’s winners were all in the house to defend their titles to add to the excitement. Racers got 2 runs on the course with the best time determining position. Prizes included L.L. Bean gift cards: $50 1st place, $30 2nd place, and $20 3rd place.

In the Women’s category, NEWWA (and Weston and Sampson)! President Barbara Cook successfully defended her title as champion. Barbara edged out Stacy Olson who claimed second place. With only two women competitors and an extra prize to give away, the race commissioner again threw a bone to the only snowboard racer — Shawn McArdle! Congrats Shawn!

There is always a bit of drama in the Men’s B category and this year was also the case. The B category is decided by splitting the men’s field at the midpoint and awarding those racers 1st, 2nd, and 3rd places in the group. With an odd number of men, the split was decided on a coin flip! Odd man out, in more ways than one, was Dave Polcari who ended up with 4th place and a free beer from the open bar. The coin bounced in favor of Paul Sussman who claimed 3rd place! Last year’s B winner Steve Clements took second place on telemark skis. Odd man Olson claimed first place and assured that every Olson racer won a prize! Well done Steve and Team Olson. You guys should use the winnings to get matching race suits for next year!

Finally, the Men’s A category had some familiar names with past champions and perennial contenders grining it up for top honors! When the powder settled Tom Gervais was the first place winner. The second place finisher was the third place finisher from last year, Brian McCall. This year MWUA decided to change it up. This year our November Monthly Meeting will be held July 14th, at Ochre Court at Salve Regina University in Newport, Rhode Island. Who wouldn’t want to go to Newport in July? Hope to see you there.

Membership Survey & Planning Session

NEWWA recently conducted a membership survey at the end of 2019. The Planning Committee and the board are working on digging into the results of the survey to help us steer the future of the organization. The Planning Committee is just starting to formulate ideas for the Planning Session scheduled for July 26 and 27, at Mill Falls at the Lake in Meredith, NH. The Planning Session is one of my favorite NEWWA events, because we get to roll up our sleeves, stretch our brains, and hang out with a lot of really cool volunteers as well as really cool NEWWA staff. Planning Sessions have been the heart of many positive changes for NEWWA and we need to embrace change to help keep us a vibrant organization. Everyone is welcome to attend the Planning Session, so please save the dates in your calendar and plan to join us.

**Editor’s Note**

We welcome letters by members on topics that are timely and of general interest to fellow members.
Recovering from a Crisis: The Final Critical Phase of Crisis Management – Part II

By Nonie Baccalingu

The previous “PR Perspectives” column introduced the last—but certainly not the least—phase of the crisis management process for any crisis including a cyber attack, the recovery phase.

“When the crisis is over, there is a temptation to heave a sigh of relief and return to (organizational) normality. But there is still much to do,” cautions Andrew Griffin, chief executive of Reverb, one of the recent national recovery management firms. “In Reputation Review: What’s Next After the Crisis Subsides?”

Handling the aftermath of a crisis during the recovery phase can be just as critical as handling the crisis itself, as research has repeatedly proven.

Two critical results can emerge from the recovery phase. First, an organization can conduct a real-time assessment of the recently resolved crisis. Based on these conclusions, adjustments and additions can be incorporated into crisis management plans, making the organization better prepared and better equipped for the next crisis.

Second, an organization can rehabilitate through its most valuable asset—its reputation, good name, and public trust—during the recovery stage. These assets take a hit during any crisis; sometimes, it’s a catastrophic blow. Overcoming such damage is often protracted and arduous, but essential to an organization’s future viability.

Some of these strategies include:

• Make amendments to those affected by a crisis. Oftentimes, those affected by a crisis can experience strong emotions, outrage, or a sense of injustice. Organizations should publicly acknowledge, show empathy, and apologize to those persons. Offer timely, credible, and sincere explanations for these actions as well as some form of compensation or restitution. These gestures can assuage animosity and restore trust.

• Pay special attention to winning back employees. “Recovery starts at home,” emphasizes Griffin. In the aftermath of a crisis, employee trust and morale can plummet. Years of effort to cultivate employees as loyal and effective ambassadors of an organization can be immediately negated. An intense internal communication campaign to rally the troops, rekindle motivation, and restore commitment is central to any effective recovery process.

• Continue to be transparent and accountable within and outside an organization after the crisis has been resolved. Disclose new information quickly and frequently: further explanation about the cause and extent of the crisis, preventative measures, and corrective action. Address, don’t duck, lingering on new thorny issues.” This approach allows the organization to significantly restore its reputation and trust.

• Get delivering again. “Reputation is in delivery, not promise...it’s about showing more than telling,” believes Griffin. To rebuild its reputation, an organization must first demonstrate that its performance, operations, products, and commitment are once again meeting pre-crisis expectations and standards.

After an organization has “delivered,” it should then “tell its key stakeholders, via a comprehensive, multi-media communication campaign the particular achievements, supported by facts and documentation.”

• Monitor various channels of communication for repair opportunities. During a crisis, an organization’s crisis response and recovery activities correlate immediately any inaccurate, incomplete, or misleading information, rumors, or speculation.

• Create alternative content to online crisis stories. Online stories about the crisis may remain in a user’s search results for years, sometimes decades. As a result, internet users searching for an organization’s name may find information about a recent—or not so recent—crisis, preventative measures, and corrective action. Address, don’t duck, lingering on new thorny issues. This approach allows the organization to significantly restore its reputation and trust.

• “Get delivering again.” “Reputation is in delivery, not promise...it’s about showing more than telling,” believes Griffin. To rebuild its reputation, an organization must first demonstrate that its performance, operations, products, and commitment are once again meeting pre-crisis expectations and standards.

During the recovery phase, an organization can develop and implement strategies to neutralize negative fallout, rebuild trust and confidence among key stakeholders, and restore— or even enhance—its reputation and image.

Some of these strategies include:

• Build a “reservoir of goodwill” before a crisis strikes. An organization can create this reservoir of enhanced credibility, trust, and confidence among employees, key stakeholders, the news media, and the public by being open, honest, and accessible in its day-to-day interactions with these groups.

When a crisis does occur, an organization can draw on this reservoir of goodwill when relationships with these groups are likely to become strained, tense, and even hostile. As a result, research indicates, these groups are more likely to give an organization a more fair hearing and to believe its voice through the crisis, hastening recovery and trust.

• Monitor various channels of communication for repair opportunities. During a crisis, an organization’s crisis response and recovery activities correlate immediately any inaccurate, incomplete, or misleading information, rumors, or speculation.

• Create alternative content to online crisis stories. Online stories about the crisis may remain in a user’s search results for years, sometimes decades. As a result, internet users searching for an organization’s name may find information about a recent—or not so recent—crisis, preventative measures, and corrective action. Address, don’t duck, lingering on new thorny issues. This approach allows the organization to significantly restore its reputation and trust.

• “Get delivering again.” “Reputation is in delivery, not promise...it’s about showing more than telling,” believes Griffin. To rebuild its reputation, an organization must first demonstrate that its performance, operations, products, and commitment are once again meeting pre-crisis expectations and standards.

After an organization has “delivered,” it should then “tell its key stakeholders, via a comprehensive, multi-media communication campaign the particular achievements, supported by facts and documentation.”

• Monitor various channels of communication for repair opportunities. During a crisis, an organization’s crisis response and recovery activities correlate immediately any inaccurate, incomplete, or misleading information, rumors, or speculation.

• Create alternative content to online crisis stories. Online stories about the crisis may remain in a user’s search results for years, sometimes decades. As a result, internet users searching for an organization’s name may find information about a recent—or not so recent—crisis, preventative measures, and corrective action. Address, don’t duck, lingering on new thorny issues. This approach allows the organization to significantly restore its reputation and trust.

• “Get delivering again.” “Reputation is in delivery, not promise...it’s about showing more than telling,” believes Griffin. To rebuild its reputation, an organization must first demonstrate that its performance, operations, products, and commitment are once again meeting pre-crisis expectations and standards.

During the recovery phase, an organization can develop and implement strategies to neutralize negative fallout, rebuild trust and confidence among key stakeholders, and restore— or even enhance—its reputation and image.

Some of these strategies include:

• Build a “reservoir of goodwill” before a crisis strikes. An organization can create this reservoir of enhanced credibility, trust, and confidence among employees, key stakeholders, the news media, and the public by being open, honest, and accessible in its day-to-day interactions with these groups.

When a crisis does occur, an organization can draw on this reservoir of goodwill when relationships with these groups are likely to become strained, tense, and even hostile. As a result, research indicates, these groups are more likely to give an organization a more fair hearing and to believe its voice through the crisis, hastening recovery and trust.
Executive Director’s Message
By Kirsten King

Results of the 2019 Membership Survey

In the fall of 2019 NEWWA conducted its first full-scale professional membership survey since 2011. The survey utilized both quantitative and qualitative (one-on-one interviews) data collection to gauge satisfaction with and perceptions of NEWWA, its events, communications, and member resources. Our main goals were to assess the effectiveness of NEWWA’s ability to serve our members, identify areas in need of improvement, and isolate areas that may increase engagement.

Data obtained (which is discussed in brief below) will be used to help us more clearly understand, and ultimately set member expectations, act on near-term opportunities for improvement, and assist with our planning and success for both our long- and short-term strategic plans. Results of the survey will also be a big focus of our Annual Planning Session, taking place this year from July 26-27 at the Inn at Millis Falls in Meredith, NH. All members are welcome to attend the Planning Session to help guide the future of our organization. If interested, please contact Katelyn Todosek at ktodosek@newwa.org.

For full details on how the member survey results will be utilized, please read Vice President Erica Lotz's article, also on this page in the Executive Director’s Message.

By Kirsten King

Before diving into the results, for the reader's information, NEWWA solicited the survey to approximately 5,000 individuals consisting of members, certified individuals, and students (who may or may not be members). The response rate was 7.2 percent, which is well above the average survey response rate of 2.3 percent, and makes the data statistically significant at a 95 percent confidence level.

Key Issues NEWWA Should Focus on To Better Support Members

The top three key issues identified by respondents were:

- Aging infrastructure (63.1%)
- Water quality issues (55.2%)
- Public outreach and education (46.2%)

NEWWA will be exploring more options on how to assist its utilities with these issues—past support includes participation in the Washington, D.C., Fly In to advocate for continued funding for the State Revolving Fund loan programs and Water Infrastructure Finance and Innovation Act, expansion and diversification of its highly regarded Annual Water Quality Symposium; and extensive public outreach and education via billboards, transit ads, expanded social media presence, and website.

NEWWA is always looking to enhance and diversify all its educational initiatives and bring these valuable resources to our members. Some enhancements this year include:

- Adding a “Diversity and inclusion” breakfast and panel to Thursday morning of the Spring Conference.
- Moving the Wednesday afternoon reception at the Spring Conference to the exhibit hall.
- Moving the (former) NOWA Monthly Membership meeting (which is joint with the Rhode Island Water Works Association) to July in Newport, RI, to hopefully enhance attendance.

Communications

Nine out of 10 respondents (93.7%) reported being satisfied with overall communications from NEWWA. Digital methods of communication are most preferred, including email (58.8%), website (51.6%), and newsletter (50.3%).NEWWA takes communication with its members and students very seriously, and strives to maintain a manageable balance between print and electronic means to satisfy the variety of preferred methods by all.

NEWWA’s Strengths

When asked to name NEWWA’s primary strengths, respondents were largely in agreement, most frequently mentioning NEWWA’s education and training programs, opportunities to network with others in the field, and NEWWA’s strong service and staff. There were pleased to see these results and will continue to always ensure these remain a top priority for staff.

I’d like to thank all who participated in the survey, and those who will work to ensure a lot of the results (the above was a high-level view of the 50 questions that were asked) are integrated and implemented into NEWWA’s future planning efforts. Our member volunteers play a key role in ensuring initiatives are followed through, and I encourage all to become involved in one of our many committees. Please contact me any time to discuss how you can become more involved in our association. I can be reached at 508-893-7979 or kling@newwa.org. ■

Dark Waters
By George R. Allan

We are all familiar with PFAS, the so called “forever chemicals” that have been found in our environment since the 1950s and are found in such consumer products as non-stick coatings (i.e. Teflon®), cleaning products, stain resistant fabrics, fire-fighting foam and personal care products. Because they don’t break down over time, they are ubiquitous in our environment.

Recently PFAS have been the subject of studies and regulations by federal and state environmental agencies. The Massachusetts DEP has a draft MCL of 20 ppb for PFAS out for public comment. Vermont has a standard of 20 ppb for the combination of 4 PFAS. New Hampshire has draft levels and there have been presentations at waterworks meetings, as well as articles in the media.

Hollywood recently shined the spotlight on the subject of PFAS with the release of the film “Dark Waters” in late 2019. The film stars Mark Ruffalo and Anne Hathaway and chronicles the legal battle of the residents of Parkersburg, West Virginia versus chemical giant DuPont.

Ruffalo plays a corporate defense attorney, Robert Bilott, who takes up the case of a farmer, who is a family friend that believes his cows are dying because of contamination in the water. Driven by what he sees as corporate malfeasance, Bilott goes to work for the plaintiffs in 1999 and begins a 15-year battle against DuPont.

In a class action lawsuit, DuPont was accused of dumping toxic sludge containing perfluorooctanoic acid (PFOA) on land for over 40 years. EPA also filed a lawsuit against DuPont in 2010. The case was settled for $16.5 million. Over the years, DuPont eventually spent over $70 million in Parkersburg for community health and education initiatives.

DuPont’s response to the film denied that its chemical caused the death of the cows or cancer in humans. The company also said that the products and people featured in the film are no longer part of the new DuPont. PFOS is no longer manufactured in the U.S. and in May 2019, 180 countries agreed to ban production and use of PFOS.

“Dark Waters” is the latest film of a genre that is based on a true story of environmental pollution. Many of you probably read the book, A Civil Action, or saw the movie of the same title starring John Travolta that came out in 1999. It looks at the contamination of drinking water wells in Woburn, Massachusetts. This story hits closer home to me geographically and professionally.

A Civil Action follows Jan Schlichtmann, a personal injury lawyer, and residents of Woburn, Massachusetts who believed that a cluster of leukemia deaths in children were caused by the city’s drinking water. At issue were two of the city’s wells, referred to as Well 2 and Well 6, with 1976 and 1967, respectively. It wasn’t too many years later that residents were complaining of the taste and odor and adverse effects on their plumbing. As a result, the city cut back its use of both wells and they were used intermittently during periods of peak demand.

During the mid-1970s, the firm I was working with, Duflsen-Henry, Inc., was hired by Woburn to look at possible treatment techniques for Wells G and H. At the time, water samples were measured for TOC, which provided an indication of total organic and inorganic carbon compounds. It was only later that gas chromatography and mass spectrometry (GS/MS) became the standard to measure for toxic organic contaminants, such as trichloroethylene.

In May of 1979, the city shut down both wells. The TCE levels were measured at 267 ppb and 184 ppb in Wells G and H, respectively at the time.

The Woburn trial jury on the class action lawsuit established a precedent for corporate responsibility in dealing with the disposal of toxic compounds.

What we learned from these high-profile toxic tort cases is that when the public gets involved in bringing the subject of water pollution out of the dark, it can create a ripple effect. In addition, A Civil Action has shown to be effective in exposing corporate malfeasance and in generating government action. ■

Dark Waters is the latest film of a genre that is based on a true story of environmental pollution. Many of you probably read the book, A Civil Action, or saw the movie of the same title starring John Travolta that came out in 1999. It looks at the contamination of drinking water wells in Woburn, Massachusetts. This story hits closer home to me geographically and professionally.

A Civil Action follows Jan Schlichtmann, a personal injury lawyer, and residents of Woburn, Massachusetts who believed that a cluster of leukemia deaths in children were caused by the city’s drinking water. At issue were two of the city’s wells, referred to as Well 2 and Well 6, with 1976 and 1967, respectively. It wasn’t too many years later that residents were complaining of the taste and odor and adverse effects on their plumbing. As a result, the city cut back its use of both wells and they were used intermittently during periods of peak demand.

During the mid-1970s, the firm I was working with, Duflsen-Henry, Inc., was hired by Woburn to look at possible treatment techniques for Wells G and H. At the time, water samples were measured for TOC, which provided an indication of total organic and inorganic carbon compounds. It was only later that gas chromatography and mass spectrometry (GS/MS) became the standard to measure for toxic organic contaminants, such as trichloroethylene.

In May of 1979, the city shut down both wells. The TCE levels were measured at 267 ppb and 184 ppb in Wells G and H, respectively at the time.

The Woburn trial jury on the class action lawsuit established a precedent for corporate responsibility in dealing with the disposal of toxic compounds.

What we learned from these high-profile toxic tort cases is that when the public gets involved in bringing the subject of water pollution out of the dark, it can create a ripple effect. In addition, A Civil Action has shown to be effective in exposing corporate malfeasance and in generating government action. ■
In the Boardroom  By: Erica Lotz, PE, ENV SP, Vice President

Using Data to Plan for the Future

I am thrilled to be serving as NEWWA’s vice president this year! As an active member for almost 20 years I have had the pleasure of attending numerous Planning Sessions, and this year I get the honor of leading the efforts. For those who have not attended the Planning Session before, this event allows a group of NEWWA members to focus on brainstorming new ideas and setting the organization’s future course. Ideas and initiatives that have come out of past Planning Sessions include the Membership Program, Ambassador Program, University Outreach Committee, Sustainability Committee, Networking Committee, and many, many more. In the past, we have developed these initiatives by brainstorming new ideas that we believe will bring value to our membership and then we work to identify how to get these ideas implemented. Thanks to all of our members who responded to the Membership Survey which was completed last fall; this year our Planning Session can be guided by real data from our members.

As an engineer, I am excited to review the membership survey data from our members.

Preparing for the Annual Conference

September 19-24 – Omni Mt. Washington Resort – Bretton Woods, NH

If you have not attended a Planning Session in the past, I encourage you to attend this year so you can be a part of setting the direction for the organization. The Planning Session will be held July 26-27 at the Inn at Mills Falls in Meredith, NH. All NEWWA members are invited to attend. If this sounds interesting to you, please contact Katelyn Todesco at ktesco@newwa.org. I look forward to seeing you in Meredith, NH, this summer!

As an overview of AWWA operations, here is a quick recap from the Winter Board Meeting:

• Membership totals as of December 31, 2019, were 52,073. (This was the first time over 52,000 in 5 years.) Regarding membership, AWWA is currently evaluating a new “enterprise” membership model for utilities and other organizations. This will provide a more inclusive package with additional discounts and access to publications. More updates will be provided this year.

• AWWA ended 2019 in a strong financial position due in part to revenues higher than forecast. Specifically, grant revenues from USDA, RCAP, and EPA contributed to the positive results. The grant programs will be used by AWWA for training in areas of small system development programs, stormwater programs, cyber-security programs, etc.

• The transition to electronic standards sales through the “Envoi” platform has taken longer than expected. This will be accomplished in 2020. Other initiatives for 2020 include video streaming additions and a wastewater exam prepa-

For full updates on COVID-19 and NEWWA’s operations, please visit newwa.org

News from AWWA  By Chris Hodgson, AWWA Section Director

As your AWWA section director, I have the privilege to attend the recent AWWA Winter Boards of Directors meeting in January. The meeting was held over 3 days and was attended by the directors, officers, and senior staff of the organization. As usual, there was plenty on the agenda for AWWA due to our aggressive ongoing strategic and business goals to serve the water profession.

The highlight of the Winter Board Meeting each year is the election for association leadership positions including directors at large, vice presidents, and president-elect. I was most proud to personally witness the election of Dr. Chi Ho Sham, a NEWWA member, as the incoming AWWA president-elect. Chi Ho has been an active member of AWWA and our section for 30 years and is currently chair of AWWA’s Technical and Educational Council as well as the Stormwater Utility Management Committee. His election to the leadership position was well received by the AWWA board members. It is interesting to note that Chi Ho will be the first NEWWA president from the NEWWA Section since Fred Elwell, who served as AWWA President in 1999 (NEWWA member Steve Gorden from Maine was AWWA President in 1999 but represented the Michigan Section at that time).

We congratulate Chi Ho and look forward to supporting him as he moves up the leadership ladder of AWWA.

As an overview of AWWA operations, here is a quick re-cap from the Winter Board Meeting:

• Membership totals as of December 31, 2019, were 52,073. (This was the first time over 52,000 in 5 years.) Regarding membership, AWWA is currently evaluating a new “enterprise” membership model for utilities and other organizations. This will provide a more inclusive package with additional discounts and access to publications. More updates will be provided this year.

• AWWA ended 2019 in a strong financial position due in part to revenues higher than forecast. Specifically, grant revenues from USDA, RCAP, and EPA contributed to the positive results. The grant programs will be used by AWWA for training in areas of small system development programs, stormwater programs, cyber-security programs, etc.

• The transition to electronic standards sales through the “Envoi” platform has taken longer than expected. This will be accomplished in 2020. Other initiatives for 2020 include video streaming additions and a wastewater exam prepa-

For full updates on COVID-19 and NEWWA’s operations, please visit newwa.org
Before the MetroWest (tunnel) Aqueduct was built, the originally proposed project for a Redundant Aqueduct was a reconstruction of the Sudbury Aqueduct as a pressure aqueduct. The concept was simple: the upper portion of the brick and soil of the 100+ year-old tunnel, 7 ft diameter gravity aqueduct would be removed and a new 10 ft diameter pressure pipe would be cradled on the well-established base. In preparation for the RFQ, we planned a walk-thru for the benefit of any consultants who were considering to submit their entries. This was literally a walk-thru’ because we were going to walk inside the Sudbury Aqueduct for about 2.2 miles. A group of about 12 assembled at the terminal chamber on Beacon Street, just across from Chestnut Hill Reservoir. Rubber boots were provided for those who needed them, and large flashlights were distributed among the walkers. We descended on ladders to the aqueduct invert, and with a safety person from our operations force leading the way, the group began to move west, reverse to the flow of the aqueduct. We were soon walking under the Boston College campus and into the first tunnel section. A crew from the work force monitored our progress on the surface by opening manholes and other points along the route and to be available in case of emergency. All movement through the aqueduct was quite noticeable. We exited the Beacon Street tunnel near Dalton Street in Newton Center and proceeded to the Tyler Terrace waste weir with a dump invert and very little (maybe about an inch) flow. At the waste weir, wood stoplogs were in place and ladders were provided for the party to move further upstream. There was about 6 to 8 inches of water here and good use was made of the rubber boots. As we sloshed forward, making a little bow-wave from our foot movements, we soon entered a 2nd short tunnel under Bracerridge Road and Hancock Avenue. Our leading safety walker had stopped unexpectedly. I called out to everyone what was going on and asked if anything was wrong. He replied that he heard a sound from up ahead, and thought he saw someone standing in the dim light of his flashlight. Why would anybody be in the tunnel ahead of us? I kept the party back as I moved forward to see what he was looking at. Yes, there was indeed something up ahead, but with only flashlights it was still too gloomy to discern what it was. He and I began to move forward. The object took on the appearance, not of a man standing, but rather like a man hanging from a rope, with the tail end of the rope shredded and spooled in the water below. Suddenly, there was a movement in the water coming directly toward us, at a good speed. The two of us jumped to the side and called warnings to the waiting party. As the object passed us, we identified it as a Carp, almost 2-ft long. Our party’s sloshing had ‘chased’ it upstream, but there the water normally was more-shallow than the top of the invert. It was only trying to get back into deeper water near the waste weir. It shot past the group, accompanied by lots of “colorful language.”

But what of the “hanging man”? Moving forward, we soon saw that the object was nothing more than a tree root, nearly 2 inches in diameter, penetrating the brick masonry, which had dropped from the surface above. The “man” was really a mass of very fine roots (grey due to the lack of direct sunlight), which were spread to capture moisture within the air flow of the aqueduct and the “rope” was the same root extended into the water of the invert and spread with more fine roots. Many pictures of the “ghost” were taken by the party and lots of laughs were heard. But the object lesson about aqueduct maintenance with tree-cover was brought home, and why reconstruction was a practical choice.”

About a thousand feet further, our planned exit manhole awaited. The walk through had accomplished direct observation of the Terminal Chamber, 2 tunnel sections, the brick masonry of the main structure, one of the periodic waste weirs, and the manhole accesses along the length of the route of the 1878 original construction by the city of Boston. We were greeted by our monitoring work crew who closed all the access points, collected boots and flashlights, “counted noses” to be sure we all exited safely, and provided shuttles to return to the group’s vehicles at Chestnut Hill Pump Station. I’d like to report that this walk through resulted in a successful contract, but as the design phase progressed, the concept for the Redundant Aqueduct was changed to the MetroWest.
Thanks to all who attended our December Membership Meeting, where attendees enjoyed the technical program, networking, and awards luncheon.

Our highly successful January Membership Meeting, run jointly with the NH Water Works Association, had an extra fun activity coupled with it this year via a curling demonstration. Attendees learned about the art of ice making as well as the game itself.