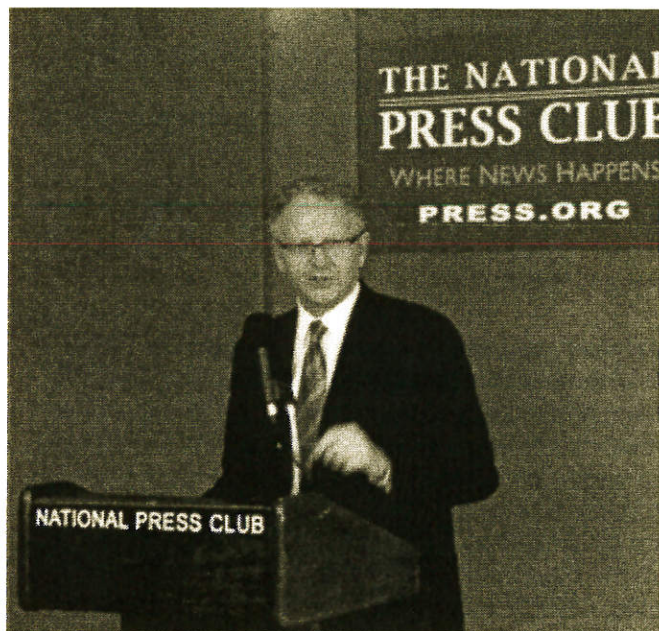


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Newsletter

Federal Water Quality Association

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Deane Keynotes 21st Awards Luncheon

by K. Jack Kooyoomjian, PhD

At our final event for the FWQA year, Mr. Michael Deane (pictured at left), Executive Director of the National Association of Water Companies (NAWC) addressed a room full of scholarship and science fair winners, their parents and teachers from the metropolitan Washington, DC area schools, as well as FWQA members, friends and colleagues at the National Press Club in Washington, DC.

Michael started with the topic of infrastructure needs and the challenges of the future, focusing on the opportunities as well as the challenges that these bright young students will face in their upcoming educational pursuits and professional careers. He noted that we are witnessing national disasters in the face of such dramatic drivers such as climate change, population growth, increasing urbanization, land-use changes and planetary stresses. At the same time we have higher expectations for a cleaner environment and a healthier planet. He acknowledged that we are working with the infrastructure we have in place, but it is not enough to just keep up with the existing infrastructure. We also need to meet the significant infrastructure challenges of the future.

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Mark Your Calendar for the 22nd FWQA National Capital Environmental Scholarship Golf Tournament on October 25 at Bretton Woods Country Club in Maryland!



Gazing at the very young, eager faces in the crowd, he remarked that before they were born, the infrastructure, technology, design and construction of treatment plants to deliver clean, safe water to people was in place (continued on Page 3)

Executive Board

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Vice President	TBD
Secretary	Sharon Nye 703-444-1777
Treasurer	Jim Wheeler 202-564-0662
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Members at Large:	TBD

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Government Affairs & Technical 5S	Jack Kooyoomjian
Membership	TBD
Science Fairs	Janet Goodwin
Scholarships	Sharon Nye
By-Laws	John Tucker

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President's Corner

Dear FWQA Members,

Hello FWQA members! I hope that you have all enjoyed your summer and are ready to participate in FWQA activities! Thank you to all of the members that voted in our elections last spring. We have already planned a year of events. We are currently lining up luncheon speakers, helping to plan the 22nd Annual National Capital Environmental Scholarship Fund golf tournament, and preparing to give funds to science fair winners with environmental themes throughout the region. The theme of our luncheons this year is "**Maximizing Innovation for Water Quality Improvements.**" The Board believes that in these times of federal sequestration wastewater and stormwater funding sources are being squeezed and engineers and scientists will have to continue to provide superior water treatment, with shrinking or stagnant funding. Utilization of cutting edge technology in innovative ways will be the way to meet these goals.

The 22nd Annual Scholarship Golf tournament will be held Friday, October 25, 2013 at the beautiful Bretton Woods Country Club. If you have never played this course you are missing a true golfer's delight! Unfortunately I will not be able to play this year as I will still be recovering from tearing my Achilles tendon, but I will be there to enjoy the barbecue and a tasty beverage! Please consider sponsoring a team or competing with a group of colleagues. All of the proceeds from the event go to the National Capital Environmental Scholarship Fund, which provides scholarships for exceptional students pursuing an undergraduate degree in environmental disciplines.

One of the luncheon topics we are considering include having scientists and engineers from Limnotech present their findings on a study of the Bloomingdale neighborhood of Washington D.C. Bloomingdale has experienced extensive flooding during heavy storm events for years. The sewer line in the area is over 100 years old and cannot handle the runoff created during large storms, resulting in repeated flooding. The solution to the problem will include a new storm sewer line, addition of green infrastructure, and eventually the completion of large storage tunnels that are being built as a part of the Clean Rivers Project by DC Water. My goal this year is to continue all of our programs and complete my plan to expand our membership and improve the marketing of our events. We will continue to refine our e-mail distribution list in an effort to improve our luncheon attendance and increase our presence on social media. At the end of last year we saw some progress in this arena and are looking forward to continuing our advancement.

I hope that you all will join me and the Board in moving FWQA forward in the coming year.

Best regards,
Charles C. Glass, Ph.D.

Awards Keynote (contd.)

following the passage of the Clean Water Act in the 1970s. Mr. Deane reflected that we have met those challenges to deliver clean, safe water very well. In fact, we have set the bar so high, that it has become an expectation in the United States to have clean, safe drinking water everywhere.

He observed that some of the crises we are witnessing these days, such as the sequester issue, seems to be driven more by politics, rather than technical issues and challenges. Water utilities are just as much a part of the landscape as the watersheds that they are in. Simply put, whether the challenges are technical, conventional or political, those barriers will continue to exist, but should be viewed simply as challenges that have to be met. Today's science is now able to detect organisms that need ever more science to design the solutions and build the technology to remove these pollutants. We have emerging challenges, such as pharmaceuticals in our drinking water, inter-species fish, ecological change, global climate issues, and others that have to be met.

Mr. Deane noted that in addition to celebrating the achievement of the FWQA awards, students will have to face the challenges of today, as well as the challenges and the promises of the future. There is nothing that brings everyone together more than water. Everyone has a collective responsibility to bring science to the table, along with other disciplines, such as business, law and finance and to bring together those cost-effective, sustainable solutions to today's problems and tomorrow's challenges.

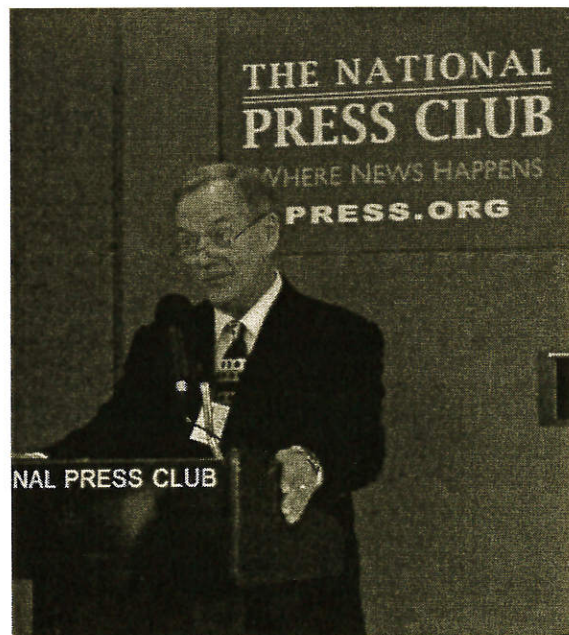
Michael proudly claimed that he grew up in the 10,000 Lakes area in Minnesota, and he believes that his outlook and optimism is influenced positively from his experiences growing up in that very special place. He referred to the "magic" that exists in this planet. In conclusion, he urged the young science fair and scholarship winners, as they pursue their educational aspirations, their dreams and professional careers to take time to "appreciate and enjoy the magic."

Scholarship Award Winners Honored *by Sharon Nye*

Congratulations to the FWQA 21st Annual National Capital Environmental Scholarship Program scholarship winners, Christopher Farrow (South River High School, Anne Arundel County, MD), Erika Koontz (Glenelg High School, Howard County, MD), Erin Falvey (Severna Park High School, Anne Arundel County, MD), and Elizabeth DeRycke (South River H.S., Anne Arundel County, MD).

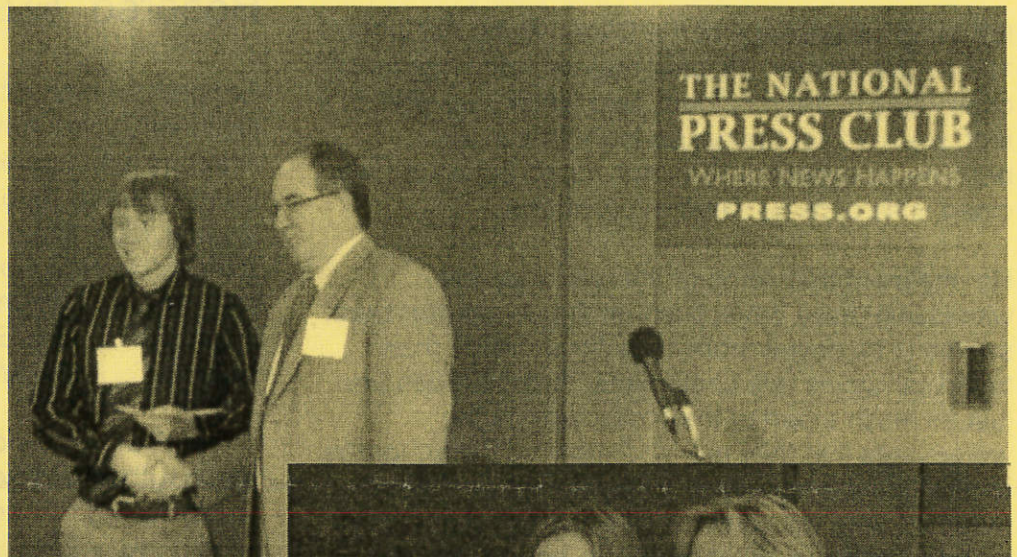
These four outstanding students were honored along with local science fair winners at FWQA's yearly Award's Luncheon at the National Press Club on May 23rd (see related article on page 1 and pictures on page 4). Each of the winners was awarded a \$2,000 check. They will go on to pursue their environmental studies at the University of Virginia (Erin), St. Mary's College of Maryland (Chris), McDaniel College (Elizabeth), and Washington College (Erika).

Thank you to our scholarship committee judges Christian Davies-Venn, Barry Benroth, Sheila Olem, and Sharon Nye for their continued hard work and dedication to this program.



Ken Kirk, FWQA Fundraising Co-Chair,
Emceeding the Award Presentations

Scholarship winners receiving their Awards at the FWQA 21st Annual National Capital Environmental Scholarship Program Awards Luncheon at the National Press Club in Washington, DC (top three photos). Science Fair Winners at the Award Luncheon (bottom photo).



Reflections on Sustainable Water and Wastewater Infrastructure

By K. Jack Kooyoomjian, PhD

At the Spring luncheon, Mr. James Hanlon, former Director of the U.S. Environmental Protection Agency's (EPA) Office of Wastewater Management (OWM) provided his reflections from the past four decades on sustainable water and wastewater infrastructure in the United States (U.S.). Jim was hired at the U.S. EPA only five weeks before Public Law 92-500, the Clean Water Act (CWA), was passed. As Jim explained the way things played out, President Nixon had actually vetoed the bill on October 17th, and the House & Senate promptly overrode the President's veto on October 18th, putting the CWA in place. To put things in perspective, the U.S. Congress (the House & Senate) viewed the waters of the U.S. as being in such dire circumstances that it required "an Act of Congress," creating a major federal initiative to turn things around in the United States. In the 1970's, only 80 million people (40% out of a total U.S. population of 200 million) had secondary treatment of their wastewater.

Also, in the 1973/74 time frame, the President impounded \$9 million of the \$18 million of legislated funding, causing a lawsuit between New York City and EPA (*NYC vs. Russell Train*). The Courts ruled that it was illegal to impound \$9 million dollars, and in 1976 re-instated the \$9 million in funding for wastewater infrastructure. In those days, it was common to have the EPA Construction Grants Program to have federally funded projects up to the 90 to 95% level, so the incentive for seeking Federal funding for water & wastewater infrastructure was very strong, and positive activities occurred across the U.S.

Change in infrastructure funding took place in 1981, when amendments to the CWA during the Reagan Administration moved funding from the 95% level to the 75% level. The 1987 Amendments to the CWA set in place a phase out of the Construction Grants Program and devolved toward the State Revolving Fund (SRF) approach.

Funding for the Clean Water SRF has decreased, but survived throughout the 1990s and 2000s. A \$6-7 billion SRF is the current level. There have been a number of studies to get at least \$2.3 to \$2.5 billion "forever," even if not another nickel of Federal Funds were added. It is Jim's view that drinking water and waste treatment is segmented. The U.S. Conference of Mayors made recommendations in this area, and now a large portion of municipal bonds is dedicated for overall infrastructure needs.

The 2000's resulted with a series of analyses on the infrastructure, wastewater management, and the funding prioritization issue. In 2002, a Gap Analysis was completed by the EPA which raised the question of what to do on the demand side. In 2003, EPA released the "4 Pillars Report." Water organizations came together to define what is a well-managed utility. They developed and released the 10 attributes document, and it is a credit to the water & wastewater utility industry. Currently, systematic approaches to Asset Management have become an important part of the lexicon and overall conversation with government, water organizations, and the public. Today we see active conversations and actions taking place looking at energy conservation, such as Energy Star for fixtures, and practices that use less water.

Along with the legal and financial accomplishments from 1972 to the present, Mr. Hanlon touched on many accomplishments of the U.S. EPA, noting, for instance, that there currently are 56 guidelines for industrial pollution control for industry. He briefly touched on some of the new challenges such as management of pharmaceuticals and personal care products, the challenges with the "designer" pesticides, and the challenge to control nutrients and sediment in ecosystems and watersheds. He reflected that the first generation of waste treatment focused on such parameters as Biological Oxygen Demand (BOD), solids, etc. Now we are dealing with managing eutrophication of water bodies, issues with whole ecosystems, the Chesapeake Bay, the Great Lakes and the Gulf area, and other special places. In all of this, we know that management and reduction of nutrients across all sources, including point and non-point sources, is going to be a broad challenge that has to be met by many players. For instance, the U.S. fertilizer industry is a \$19.5 Billion business annually. There are 40 fertilizer plants, and 30 of them produce nutrients for farming and agricultural uses. The 2013 fertilizer plant

(Continued on Page 6)

Reflections (contd.)

explosion in Waco, Texas was at a storage plant, and there are some 6,000 storage and mixing plants in the U.S. In addition, we are seeing the cost of natural gas supplies being dramatically reduced primarily from increased hydraulic fracturing (fracking) capabilities, along with other technologies.

Mr. Hanlon's view regarding advice to policy-makers, to the extent that the federal government can make a difference, is in such areas as stormwater management, urban runoff, nutrient controls to water bodies, such as the Chesapeake Bay, the Great Lakes, and the Gulf area, where there is a growing need. However, these needs also compete with other areas such as airports, dams, roads, bridges, and drinking water infrastructure, that must be sorted out by the states and municipalities. In addition, government agencies need to do a robust cost-benefit analysis for better management and evaluation of agricultural controls, ecosystem benefits, avoided costs, contingent evaluation and other methods to better determine the value of clean water.

Jim's presentation was followed by a vigorous question & answer session on topics such as the Farm Act, management of pesticides, partnering with States, and priority setting.

Election Results

by James Wheeler

The FWQA is pleased to announce the official results of the 2013 Executive Board elections. The FWQA received 20 legal ballots. All candidates were unanimously elected. The ballot also requested nominations to fill the vacant position of Vice President. This position along with the four Members-at-Large will be appointed by the president to serve one year teams. The nominations to fill the vacant position of Vice President are listed below.

The new Executive Board was effective July 1, 2012

<i>President</i>	<i>Charles Glass</i>
<i>President Elect</i>	<i>Greg Mallon</i>
<i>Vice President</i>	<i>TBD</i>
<i>Secretary</i>	<i>Sharon Nye</i>
<i>Treasurer</i>	<i>Jim Wheeler</i>
<i>Director</i>	<i>Tim Schmitt</i>
<i>Past President</i>	<i>Adam Krantz</i>
<i>Member at Large</i>	<i>TBD</i>
<i>Member at Large</i>	<i>TBD</i>
<i>Member at Large</i>	<i>TBD</i>
<i>Member at Large</i>	<i>TBD</i>