ecoletter WINTER 2011 ISSUE

As Winter Ends, **New Challenges are Blooming**



A Publication of the Water and Waste Operators Association of Maryland, Delaware, and the District of Columbia, and the Chesapeake Water Environment Association





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PRESIDENT'S MESSAGE



CWEA President

-Craig Murray

Share: To have or use something in common with other people

We all live in the electronic age, seemingly constantly

connected to everyone and everything all the time (or at least can be if we choose). We can have our blackberrys, iphones, aircards, facebook pages, and twitter accounts all designed to share information to our friends, coworkers, families or even complete strangers. As a society we have the ability to share information like no other time in history.

But how can we find a way to share the valuable information that each of us gathers every day? Whether it be a lesson learned on a construction project, new and exciting performance data on a technology or process, or a clever new approach or idea relating to a regulatory issue; we all have the opportunity to gather and share useful data that could benefit others.

I had the opportunity to attend and present at the NACWA 2011 Winter Conference in February. The conference was titled *Understanding the New Paradigm for Wet Weather & Collection System Management*. One of the major recurring themes (after money of course) was the lack of information sharing between municipalities, states and regulatory agencies. Seems we are collectively facing the same challenges across the country yet we are not working in concert to overcome them.

One of WEFs functions is to help us organize an approach to these national issues. They continue to establish new pathways to access information, such as the *WaterBlog* and the *Access Water Knowledge* web pages. These are great sites to learn and interact.

WEF is also present on Facebook and Twitter. The CWEA recently established its own Facebook and Twitter pages (thank you Shelley Pitter). These are able to be accessed from the CWEA–WWOA website. We are *Continued on page 25*



WWOA President

-Rose Marie Cline-Lowe

appy New Year to our members and especially to our dedicated operators! We have all experienced and been plagued by the cold, snow and wet weather as it comes roaring in

like a lion. Our operators have shown their dedication by keeping their facilities in tip top shape. Congratulations on your hard work 24/7.

Speaking of operators, this past year the Executive Committee of WWOA agreed that the incumbent president should count the returned nominations forms. Some of the forms had return addresses and one was even from an operator serving in Iraq.

A card and letter was sent to John Mesmer for his dedication in keeping his membership active while over seas. John sent a reply letter in October, 2010 thankful for the card and how it gave him such uplift. In his letter, he shared a lot of interesting things. The temperature in October during the day is 93 F down from 113 F a few weeks earlier.

He is assigned to the Army Corps of Engineers, working with them on lift stations, emergency water services and as the night shift operator for the wastewater plant. The work schedule is 12 to 14 hours a day, 7 days a week for 12 weeks. He then receives 3 weeks of R/R.

John has been stationed in the country since September, 2004 working as a civilian for DOD as a water and wastewater treatment operator (that's what I call wearing 2 hats). He has been assigned to various locations throughout Iraq and has been with the Air Forces Civil Engineering Squadron as well. Now that the Air Force has left Iraq, he now is attached to the Army in Kirkuk. Kirkuk is about 139 miles north of Baghdad in the Kurdistan region. He says that it isn't bad duty there and the Kurds are a proud and peaceful people.

The board mailed a goody package to John for Christmas which was a pleasant surprise!

He writes they are in their final stages of building *Continued on page 25*

ecoletter

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CALENDAR OF EVENTS Spring–Summer 2011

CSAWWA-CWEA Spring Meeting and Water Reuse Seminar

May 12 from 8am - 4pm Maritime Institute, Linthicum, Maryland

CWEA Collection Systems Committee Seminar May 17 from 8am - 4:30pm Maritime Institute, Linthicum, Maryland

> **Tri-Association Conference** August 30 - September 2 **Roland Powell Convention Center** Ocean City, Maryland

www.wwoa-cwea.org

TO ALL MEMBERS:

When completing membership renewals, make sure all information is correct and current. We use WMBA (WEF Membership By Access) for membership information. If there is an e-mail address, please include it.

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EDITOR'S CORNER

ennsylvania is by far the largest natural gas producing state, and many of those wells are in the Chesapeake Bay watershed, without a severance tax. In the most recently completed legislative session lawmakers were unable to pass a severance tax and the incoming Governor is opposed to such a tax, so things don't look to change anytime soon. One of our editors grew up in a small Western Pennsylvania town called Export. It got that name because its mines were the first in the area to export coal out of the region. The streams around Export are full of nasty smelling, rotten tasting "egg water", yellow stained rocks and not much else. No fish, no invertebrates, no amphibians, no reptiles, no life. Seventy years after the last mine closed, many of streams still are lifeless. That a state that's already been raped by the coal industry can let another energy taking industry off without paying for their actions in taking something that can never be replaced is nothing short of repugnant. When will they ever learn? When will they ever learn?

$\bullet \bullet \bullet \bullet \bullet \bullet$

On the cover of the December 2010 issue of The Furrow magazine the headline said, "Bay Watch," and yes they were talking about the Chesapeake. Renwood Farms along the James River was high-lighted as a bay friendly agriculture operation. This farm uses continuous no-till farming with crop rotations and as the farmer says, "Spoon feeding the crops to get the most efficient use of nutrients." The farm has been very successful at achieving prize winning yields with these methods that have reduced sediment, nitrogen and phosphorus runoff by over 90% when compared to traditional tilling practices. There was other hopeful information in the article.

Large scale poultry production began on the Eastern Shore in the 1920's and now more than 750,000 tons of poultry litter is produced every year. As a result of this some lands have a build-up of phosphorus. The University of Maryland—Eastern Shore has developed a way to deal with this legacy phosphorus using synthetic gypsum installed near field drainage ditches. Soluble calcium in the gypsum captures up to half the phosphorus before it enters surface water. And at Penn State University, researchers are looking at low-protein diets for dairy cattle. They think low protein diets supplemented with amino acids could reduce nitrogen losses and ammonia emissions from manure, while reducing feed costs. Finally a US Department of Agriculture study has found fall cover crops can cut nitrogen leaching into groundwater by up to 50%.

....

Maryland uses money from the Bay Restoration Fund to provide incentives for state farmers to plant cover crops and plant cover crops they did. Last year nearly 400,000 acres were planted with grains such as rye, wheat and barley and the state will pay out around \$20 million to the farmers. Another measure, banning fertilizer application in the fall, is under consideration by the Agriculture Department.

$\bullet \bullet \bullet \bullet \bullet \bullet$

Not everything is hunky dory on the agriculture front. In January the American Farm Bureau sued EPA over the Bay-wide TMDL. At least partially motivated by a fear that farm practices in the TMDL could be imposed nationwide, the Bureau alleges; the TMDL to be unlawful since regulation of farms, homes and businesses should be handled at the state level, EPA used inaccurate science to develop requirements, and the 45 day comment period on the TMDL was inadequate to review the massive proposal.

••••

\$200 million. That's the price tag to upgrade 13 West Virginia WWTPs in the Bay watershed and with little or no assistance from the state, the bill will fall on rate payers. In Martinsburg, \$40-45 million will be needed to upgrade the WWTP and rate payers could see their bills increase 60–100%.

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Stormwater Issues Around the Bay, Oct. 19 2010



Photo collage by Susan MacNeil, PE, Parsons Brinckerhoff, CWEA CSC Vice Chair



Stormwater Issues Around the Bay

How the Region is Preparing for the Oncoming Challenges

—By Laurie L. Perkins, RJN Group, Inc., CWEA MD Trustee

The Chesapeake Water Environment Association's Technical Education Committee and Collection Systems Committee presented a full day seminar October 19, 2010 at the Maritime Institute of Technology and Graduate Studies (MITAGS) in Linthicum, Maryland. The seminar, entitled "Stormwater Issues Around the Bay" featured top stormwater professionals and regulators representing Virginia, Pennsylvania, Delaware, Maryland and the District of Columbia.

The seminar included three sessions: "The View From 8 Miles High" which provided an overview of the health of the Chesapeake Bay and federal goals, followed by "Facing the Regulatory Challenge" which included a panel of regulators from the region discussing the status of stormwater guidelines and regulations at the state level, and ended with "Paying for Increasingly Complex Stormwater Programs" which included case studies on different ways to approach funding for stormwater projects at a local level.

Jenn Aiosa, a MD Senior Scientist, for the Chesapeake Bay Foundation kicked off the morning session explaining how the Bay is NOT meeting water quality standards and is a "water body that needs to be on a diet". She explained that the settlement for a lawsuit brought against the EPA required States to develop Watershed Improvement Plans (WIPs) to support the Bay total maximum daily loads (TMDLs) and that the EPA must impose penalties on those that fail. The settlement included specific deadlines for compliance as well as the development of an accessible tracking system by EPA. To date, the EPA has received draft WIPs from each watershed state.

In May of 2009, President Obama issued Executive Order (EO) 13508 for the Protection and Restoration of the Chesapeake Bay. Jim Edward, Acting Director of EPA's Chesapeake Bay Program discussed their FY2011 Action Plan and its strategy to address the EO. Major initiatives identified include completing and implementing Bay TMDLs, initiating rulemaking for the reduction of nutrient and sediment pollution loads, grant support, compliance and enforcement, and incorporation of Section 502 stormwater guidance considerations. It is estimated that 78% of the \$490.5M Action Plan will go toward water quality initiatives.

To provide a local perspective, Randy Bartlett, Deputy Director for the Department of Public Works and Environmental Services, presented information on the progression of stormwater funding for Fairfax County, VA. He summarized the County's challenges as 1) having too many top priorities, 2) the amount of funding needed and the impact it has on tax payers, 3) local impairments make trading difficult, and 4) the confusion between urban communities and MS4 communities, as not all developed areas in an urban community are MS4 communities, but contribute to urban stormwater.

The opening session speakers were followed by regulators in each of the surrounding Chesapeake Bay areas of Pennsylvania, Delaware, Maryland, and D.C. Ken Murin, Environmental Program Manager from the PA Department of Environmental Protection (presented by Eric Harold of Malcolm Pirnie); Brian Clevenger, Program Administrator of MDE's Stormwater Division; Diane Davis, Coordinator for the Districts' Stormwater Management Division; and Elaine Webb from DNREC's Sediment & Stormwater Program, provided updates on stormwater regulations and highlighted some local efforts like the Riversmart Program in DC. Jenny Molloy, Chesapeake Bay Stormwater Coordinator (EPA Region III), spoke from a federal viewpoint, noting that the goal is to provide a single set of consistent requirements for all MS4 communities in place of the Phase 1 and Phase 2 requirements while considering special provisions for the Chesapeake Bay. Ms. Molloy also highlighted the stormwater rulemaking website (www.epa.gov/npdes/stormwater/rulemaking) for current information and updates.

The afternoon portion of the seminar focused on how to fund stormwater programs in a case-study format. Funding structures ranged from the creation of a stormwater user fee and ordinance to a separate *Continued on page 18*

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Stormwater Issues

Continued from page 17

stormwater tax to an increase in sewer rates to pay for stormwater projects.

Steve Shofar of Montgomery County's Department of Environmental Protection described their fee as the "Water Quality Protection Charge" and also talked about their Rainscapes program which rewards projects that help to reduce stormwater volumes. The City of Rockville's Chief of Environmental Management, Mark Charles, offered some great suggestions on implementing a stormwater utility fee with a strong legal backbone in place to help make it work including sending violation notices for those not in compliance. Steve Marsh (GMB), City Engineer, representing the small community of Seaford, DE described local efforts to address flooding problems by adjusting the sewer user fee to pay for capital stormwater improvements. The fastest growing Virginia County, Loudon, was represented by Randall Williford, Chief of Stormwater Management. Loudon County adopted its stormwater ordinance in 2003 and assumed responsibility for all stormwater features in County easements. Closing out the case studies was Ms. Lauren A. Preston, Director of Customer Service for the DC Water Authority. DC Water has a \$2B budget for stormwater management over 20 years and is funded by an impervious surface area charge. Impervious surface areas are calculated for each parcel by expert IT and GIS support staff.

A common point addressed during the case studies was the importance of educating both the public sector that will be directly impacted by the cost of a stormwater program and the political sector that will need to support and assist with implementation of the program.

The seminar was concluded with a summary by Larry Jaworski, Vice-President of Brown & Caldwell, who highlighted the importance of shifting the focus to non-point sources and that using volumetric rates based on water consumption is not the way to go about financing stormwater improvements. As Randy Williford commented during his presentation, "Everyone has some responsibility for the water pollution problem... and everyone benefits when it is solved."

Mr. Jeff Cantwell has accepted the position of Chair for the newly created Stormwater Committee of CWEA. If you are interested in joining this new committee, please feel free to contact Jeff at 610-918-3857 or jcantwell@flowassessment.com. The next stormwater seminar will focus on Water Quality and Remediation, Spring 2011.

Note: Presentations from this one-day seminar are available at http://www.wwoa-cwea.com/presenta-tions.html.

Upcoming Stormwater Event

—By Paul Hlavinka, EIT

The Chesapeake Bay Foundation recently reported their 2010 Analysis "State of the Bay" (December 2010) with an indication that the overall health index of the Bay is 31 out of 100, which means it is still a system dangerously out of balance. The report actually shows an increase in nitrogen and phosphorous loading of the bay, even with the significant work done on point sources such as waste water treatment. They reported that "66 percent of phosphorus loads to the Anacostia River come from stormwater."

Based on the significant interest in improving the watershed health, and the positive response to Chesapeake Water Environment Association's (CWEA) October seminar, the CWEA Stormwater Committee has announced their next seminar (May 17, 2011) "Bay-Area MS4—Discussions of the New Regs, Cutting-Edge Academic Research and Area Case-Studies." The session features many Chesapeake Bay area leaders. In this seminar they will explore what the regulators expect in the near future, how Chesapeake Bay communities plan to address these concerns, and what cutting-edge research is offered from leading universities in Stormwater management. The topic is very timely as several factors are driving increased action by states to insure significant reductions in harmful pollutants.

A little background for those not intimately familiar with MS4 permitting. The most significant push for action relates to the court ordered mandate that the EPA take specific actions to enforce the Clean Water Act (CWA). The EPA is taking the lead through the development of a pollutant diet for the watershed, called a Total Maximum Daily Load (TMDL). EPA is calling for annual reductions of approximately 25 percent in nitrogen and phosphorus and at least 16 percent in sediment flowing into the Bay and its tidal waters from the Chesapeake's six-state watershed. As part of the implementation of the TMDL, EPA has required each state and the District of Columbia to prepare jurisdiction specific, pollution-reduction plans, called Watershed Implementation Plans (WIPs). Polluted stormwater runoff is commonly channeled through Municipal Separate Storm Sewer Systems (MS4s), from which it is often discharged untreated into local waterways. To prevent harmful pollutants from being sent into an MS4, municipalities must obtain an NPDES permit and develop a stormwater

management program. WIPs do include stormwater controls, enforced through MS4 NDPES permits.

In order for the EPA to carry out its' duties under the Clean Water Act, it must ensure that management plans are developed and implementation is begun by the Bay watershed States. The EPA will "review all State-issued NPDES permits in the watershed to ensure that such permits contain adequate, enforceable effluent limitations for total nitrogen and total phosphorous that are consistent with the agreed-to Bay allocations for nitrogen."

CWEA plans to push ahead as a key player in the improvement of water quality by continuing a focus on Stormwater, in this case focused on MS4 challenges. This session will focus on several strategies to treat runoff to meet the annual reduction goals. The session will start with several players in stormwater. Keynote Speaker will be Mark Charles of the City of Rockville, followed by Jim Foster of the Anacostia Watershed Society. Also invited to speak are the Maryland Department of the Environment (MDE) and the EPA Chesapeake Bay Office. Each of these will provide different perspectives of the issue. After this initial discussion, there will be 2 parallel break-out Sessions. One will feature several recent Case Studies. Steve Shofar of Montgomery County Maryland, Randy Bartlett of Fairfax County, Greenest Street in America, Edmonston Maryland, as well as Anne Arundel County and Arlington County Virginia. The other parallel session will be that of the cutting edge research with Dr. Robert Traver of Villanova, Jamie Houle, University of New Hampshire, Dr. Allen Davis, University of Maryland and Dr. David Sample, VA Tech. There is also a session on General Monitoring technologies. After these sessions, there is a more detailed session planned for those interested in calculations of nutrients.

In addition to the speakers and presentations, there will be vendors presenting products and services for implementing stormwater control measures. There will be some give aways, and network opportunities. This will be a good session for people interested in understanding the realities of implementing stormwater management. For more information, contact either Jeff Cantwell at jcantwell@flowassessment.com or Paul Hlavinka at phlavinka@gmail.com.

It will be held May 17, at the Maritime Institute of Technology from 8:00 a.m.-4:30 p.m. More info available at www.wwoa-cwea.com.



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—By Floyd B. Johnson, Ecoletter Co-Editor

As required by the Bay TMDL the political entities in the Bay watershed submitted to EPA Watershed Implementation Plans at the end of 2010 for nitrogen, phosphorus and sediment loading reductions.

To view these plans go to www.epa.gov/chesapeakebaytmdl. I did just that and using a seasonal analogy, found them to be tough sledding. The plans, with hundreds of pages and copious data and charts explaining what must be done and the massive costs associated with it, are anything but an easy read. But read we must for the ramifications will be wide sweeping. Here is a brief summary of what I found in the WIPs from the three jurisdictions in our territory.

MARYLAND

Maryland's plan has to get an A for ambition. EPA required a two phased approach, with 60% of the final loadings achieved by 2017 and the final loadings by 2025. Maryland's plan calls for reaching 70% of the final loadings by 2017 and achieving the final loadings five

years early in 2020. The following Chart (below) of nitrogen numbers shows Maryland is over half way to the 70% Interim goal. Take note of the Agriculture and WWTP & CSO numbers. The big reduction in Agriculture will take place after 2017 and the big reduction in WWTP & CSO takes place before 2017. In fact the later actually goes up from to 10.4 million pounds per year What all this

8.6 to 10.4 million pounds per year. What all this reflects is the plan to upgrade all 68 WWTPs over 0.5 mgd to ENR standards by 2017 and most of the nonpoint source measures to be implemented later. The reason the WWTP number goes up from 2017 to 2020 is offsetting the effects of connecting septic systems to WWTPs, an active nutrient trading program, and an allowance for growth. Maryland estimates that over 263,000 new households will be created from 2010 to 2020, 71% connected to WWTPs and 29% to septic systems. Smart Growth (growth within existing infrastructure) will be encouraged with incentives. Each new household septic system contributes 18.5 pounds of nitrogen per year, while each new household connected to an ENR plant contributes 3.9 pounds of nitrogen per year. One other note; the UrbanReg sector

Total Nitrogen Interim and Final Target Loads by Source Sector Total Nitrogen - By Sector (Million lbs/yr)					
Sector	2009 Progress	Final Target Load	% Reduction from 2009 Progress	Interim Target Load	% Reduction from 2009 Progress
UrbanReg	5.098	4.184	18%	4.650	9%
UrbanNonReg	0.551	0.444	19%	0.591	-7%
Agriculture	17.713	13.653	23%	16.606	6%
CAFO	0.080	0.070	12%	0.064	20%
Septic	4.007	2.454	39%	2.975	26%
Forest	7.133	7.133	0%	7.149	0%
Air	0.691	0.686	1%	0.698	-1%
WWTP & CSO	14.148	10.462	26%	8.587	39%
Total	49.421	39.086	21%	41.319	16%

chesapeake Wild

Chart 1

		lbs/yr)	1000 - 20		15
Sector	2009 Progress	Final Target Load	% Reduction from 2009 Progress	Interim Target Load	% Reduction from 2009 Progress
UrbanReg	0.581	0.383	34%	0.513	12%
UrbanNonReg	0.091	0.056	39%	0.095	-4%
Agriculture	1.364	1.196	12%	1.320	3%
CAFO	0.007	0.004	31%	0.005	28%
Forest	0.349	0.349	0%	0.348	0%
Air	0.041	0.040	2%	0.042	-1%
WWTP & CSO	0.871	0.686	21%	0.571	34%
Total	3.304	2.715	18%	2.892	12%

Chart 2

refers to stormwater runoff from impervious surfaces.

As **Chart 2** *(above)* shows the picture with phosphorus is brighter. Maryland has already reached 80% of the Interim goal. Like nitrogen, the WWTP & CSO reductions take place by 2017 and most of the Agriculture after 2017. And like nitrogen, the final target load for WWTPs goes up from 2017 to 2020. Unlike nitrogen, septic systems are not a noticeable source of phosphorus.

The final category requiring reductions is sediment. Aside from erosion control measures in the Agriculture and UrbanReg sectors, the measures taken to control phosphorus will yield the needed results for sediment. See **Chart 3** (below).

Maryland estimates that it could take upwards of \$10 billion just to reach the Interim goals by 2017. Costs for various measures are detailed in the plan and four big ticket items stick out. ENR upgrades to WWTPs will cost \$2.9 billion, emission controls to power plants \$1.8 to \$3.0 billion, \$3.6 billion to provide the equivalence to treatment of 30% of pre-1985 impervious surfaces and \$1.8 billion to eliminate CSO and SSO. As you can imagine the state will be looking at all sorts of funding sources including increasing the Bay Restoration Funding mechanism.

DELAWARE

The First State reported that its Chesapeake watershed was 50% agriculture, 40% forests& wetlands, and 10% developed. Not surprisingly, 77% of the nitrogen, 82% of the phosphorus and 68% of the sediment came from Agriculture. Point sources only accounted for 3% of the nitrogen and 2% of the phosphorus. Urban runoff accounted for 24% of the sediment leaving Delaware headed for the Bay. In 2009 Delaware discharged 4.18 million tons of nitrogen, 0.32 million tons of phosphorus and 32,269 tons of sediment. Unlike Maryland, Delaware will follow EPA requirements and will achieve an interim goal of 60% of the final goal by 2017 and reach the final goal in 2025. The final loads will be 2.95 million pounds of nitrogen *Continued on page 24*

Sector	2009 Progress	Final Target Load	% Reduction from 2009 Progress	Interim Target Load	% Reduction from 2009 Progress
UrbanReg	382	240	37%	307	20%
UrbanNonReg	18	9	49%	20	-11%
Agriculture	787	700	11%	670	15%
CAFO	0.11	0.04	66%	0.10	8%
Forest	191	191	0%	187	2%
WWTP & CSO	8	78	-889%	62	-677%
Total	1,387	1,218	12%	1,246	10%

Chart 3

Chesapeake WIPs

Continued from page 23

and 0.26 million pounds of phosphorus per year. The final sediment load will be 28,911-31,803 tons per year.

To meet the final loadings goal, Delaware will allow its nitrogen Point Source load to increase from 140,000 to 222,000 pounds per year to accommodate growth and former septic system tie-ins. Point Source phosphorus will increase from 5,330 to 10,985 pounds per year. All other categories will show fairly linear decreases over time. On the other hand, Agriculture will see nitrogen decrease from 3,211,000 to 1,873,000 pounds per year and phosphorus decrease from 259,000 to 172,000 pounds per year.

Since Agriculture is by far the largest source of nutrients and sediment, much effort is focused here. Animal feeding operations, in particular poultry, is one area of focus. In the Bay watershed there are 725 poultry feeding operations, with 537 operations having more than 16,500 turkeys, or 9,000 hens/broilers with a liquid manure operation, or 25,000 hens or 37,500 broilers without a liquid manure operation. Currently only 240 of the 725 poultry feeding operations have NPDES permits and Delaware is accelerating their program to include all operations. Interestingly, the state does not think the number of poultry feeding operations will increase between now and 2025. They say it may even decrease. An expanded manure relocation program from high phosphorus soils and a nutrient trading program are two areas of many where the state plans to reduce nutrient loads.

Air deposition of nitrogen is an area Delaware called EPA out on. Based on results from compliance with the Clean Air Act requirements, EPA assigned a basin wide cap of 1.4 million tons per year of nitrogen from air deposition. Delaware feels this number could be reduced to 0.9 million tons per year because EPA does not fully account for highly cost effective and reasonable control technologies. A lower cap for air deposition would be higher caps for water source nitrogen.

Under existing programs, Delaware funds \$4.7 million annually in agriculture. To meet the final goals, an additional \$7.5 million will be needed. Also new programs will need \$33 million to meet the goals and that does not include costs for nutrient management and other areas where costs are unknown. Like Maryland, Delaware will be looking for new funding sources including the federal government.

DISTRICT OF COLUMBIA

Having no agriculture, the District's WIP is unique for it is almost entirely devoted to point sources and urban runoff. Point sources, Blue Plains WWTP and its collection system, account for 94% of the nitrogen, 75% of the phosphorus and 62% of the sediment coming from the District. On a much smaller scale, urban runoff accounts for 5% of the nitrogen, 24% of the phosphorus and 36% of the sediment. The District intends to follow EPA guidelines and meet 60% of the final goals by 2017 and the final goals by 2025. The numbers, all in pounds per year and rounded off, are:

	<u>Nitrogen</u>	<u>Phosphorus</u>	<u>Sediment</u>
Current	2,873,000	146,900	34,051,000
2017 goal	2,534,000	131,000	19,419,000
2025 goal	2,320,000	121,000	11,158,000

Following what they call a Long Term Control Plan (LTCP), point sources will be reduced. Some of the LTCP is already underway to address requirements of a 2005 Consent Decree. The LTCP consists of; consolidate/separate CSOs, implement low impact development retrofits, rehabilitate pumping stations, construct storage tunnels and improve excess flow treatment at Blue Plains WWTP. The estimated cost of the LTCP, which will decrease CSOs by 96%, is \$2.7 billion. At Blue Plains, \$977 million will be spent on ENR treatment and their permit issued in September 2010 mandates that treatment level to be on-line by July 2014.

To better deal with runoff, the District plans a variety of measures. A revision of the stormwater regulations will call for any site disturbing more than 5,000 square feet will have to contain runoff from a 1.2" storm. By planting over 4,000 trees a year they plan on increasing the tree canopy in the district from 35 to 40%. Green roofs will be greatly expanded by giving property owners up to \$20,000 to install a green roof. Currently 600,000 square feet of roofs are green. Another financial incentive will be giving homeowners up to \$1,200 towards landscaping to reduce runoff. Taken as a whole, the measures should reduce nitrogen by 18%, phosphorus by 44% and sediment by 47%.

Funding for the non-point source programs will come from and increased impervious area charge from \$2.20 to \$3.45/equivalent residential unit. Also they plan on charging \$2.67/1,000 square feet of impervious surface. Presently the District is upset with the Federal Government because they are refusing to pay these fees. Since 30% of the land in the District is in Federal hands this is a significant loss of revenue.

An interesting piece of information was the District projecting the population to increase from a present 601,000 to 704,000 in 2025. This will continue an increase that started in 2000, when for the first time in half a century the population did not decrease. In 1950, 802,000 people lived in the District.

CWEA President Message

Continued from page 3

still looking at how best to populate and control the information on these sites. We welcome suggestions from those of you who use these social media networks on a regular basis.

But as our online social sites develop, we should all continue to help the information exchange. The Tricon is a great venue for this, so hopefully a majority of you will be able to attend. We have received lots of great abstracts designed to provide everyone with useful information. But there is no need to wait until then. If we are all aware, we can find ways to help this exchange every day.

WWOA President Message

Continued from page 3

the water and wastewater systems in Kirkuk by the Years end.

John has been a member of WWOA since 1979, and says "it's a great association!"

I'm sure all members have received the 2011 award nominations as well as the 2011 Gerald H. Slattery Short Course Scholarship Program that will be awarded to eligible WWOA members. Please take time to nominate a WWOA member that has done a great job!

Again, I wish everyone a Very Prosperous, Healthy, and Safe New Year!

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Green is Gold: KCI's Headquarters Achieves LEED Gold Certification

CI Technologies Inc.'s (KCI) headquarters located in Sparks, Md., has earned the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) gold certification, the second-highest award given. A nationally accepted benchmark for the design, construction and operation of high-performance green buildings, LEED promotes sustainable development practices through a tiered recognition program that measures five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor air quality.

Building developer Cignal Corp was instrumental in reaching LEED gold status. The firm incorporated recycled elements throughout the construction of 120,000 square-foot structure and diverted more than 75 percent of building debris away from local landfills for production into recycled materials. The completed facility uses resources more efficiently than traditional office buildings and offers employees a healthier and more comfortable work environment. The building features a white solar reflective roof, water-efficient landscaping, and high-performance climate control, plumbing and electrical systems, designed by KCI's engineers and LEED specialists.

Cignal Vice President Joe Moranto believes the environmental benefits of building to green standards will have a positive impact on future generations. He is grateful KCI had the acumen to incorporate LEED certification as a condition of the firm's building lease.



CHESAPEAKE

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CSAWWA / CWEA JOINT SPRING MEETING

Welcome the warming days of spring with the CWEA & CSAWWA! Join us for an exciting program: "Managing a Utility in a Difficult Economy". Water and Wastewater utility leaders from Delaware, Maryland and Washington DC will share measures they have taken to adjust to a challenging economy.

Chance to earn a total of 4.5 CEUs! Continental breakfast and lunch are included.

The 2010 Joint Spring Meeting will include a Keynote Speaker, technical sessions addressing both water and wastewater issues and a Small Systems track in the afternoon. Don't forget to enter your water in the Annual Water Taste Test! An optional tour of Camden Yards will be held 2:30 p.m. to 4:00 p.m. - cost is \$ 6.00, following a Roundtable Discussion.

For More Information: See the registration form or contact Nicolle Boulay at 703-390-5040 or Joan Fernandez at (301)479-1251





What: 2011 CSAWWA / CWEA Joint Spring Meeting When: May 12, 2011

Time: 8:00 - 3:00

Location: The Conference Center at the Maritime Institute 692 Maritime Boulevard Linthicum Heights, MD 21090



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Jeff Eger Assumes Leadership of the Water Environment Federation

The former utility director begins as WEF's new Executive Director

ALEXANDRIA, Va.—Jeff Eger, former Executive Director of Sanitation District 1 (SD1) in Fort Wright, Kentucky, assumed leadership today of the Water Environment Federation (WEF), a not-for-profit technical and educational organization with 36,000 members representing water quality professionals around the world. WEF's Board of Trustees first announced Eger's hiring as the organization's new Executive Director in December.

"It is an extreme honor to join such a dedicated team of water professionals. The volunteer leadership and staff have been quite helpful during this transition," said Eger. "I couldn't be more optimistic about



WEF's future, and look forward to being a part of these efforts."

During his 16-year tenure with SD1—the second largest public sewer utility in Kentucky with \$1 billion in assets–Eger developed and implemented a regional stormwater management program to comply with U.S. EPA's regulations, and began taking responsibility of public stormwater collection systems in 2009. He also supervised the regionalization of 30 municipal sanitary sewer systems in response to pending federal environmental regulations and legislative changes.

In addition, Eger has vast experience in working with organizations active on the regional and national levels. He is a member and past chairman of The Ohio River Valley Water Sanitation Commission (the water pollution control agency for the Ohio River and its tributaries) and also chairs the Wet Weather Partnership, a national organization dedicated to seeking environmentally responsible solutions to urban wet weather issues. Eger earned a Communications degree from Northern Kentucky University.

"We are very excited to now have Jeff on board and look forward to working with him to further WEF's mission of preserving and enhancing the global water environment," said WEF President Jeanette Brown.

WEF Executive Director, Jeff Eger Questions & Answers

1 As the new Executive Director for the Water Environment Federation (WEF), what is your professional background and how do you plan to use your experience to further the organization's mission to preserve and enhance the global water environment?

Over the course of my career, I have been a small business owner, a chief operating officer of a non-profit statewide business association, and an executive director of a local government utility. What I have learned from all of those diverse experiences is that clean water is not only required to sustain life, but it is essential for economic prosperity. Our members are on the front line of clean water efforts. WEF's technical expertise, training, and ability to disseminate information could not be more important than now, especially during these difficult economic times. We must remember that global water environment sustainability efforts start with our local communities, and it is in these local communities that our members do their work. A keen understanding of local community issues combined with our ability to tap into the best information available worldwide will enable us to serve and support our member's important work.

2. As a former colleague, what do you think are the biggest challenges facing utility water professionals today?

By far the biggest challenge facing our utility professionals is gaining access to the resources needed to carry out their jobs. Specifically, the strained economy is making raising revenues very difficult for local utilities that are trying to deal with issues such as new regulations and aging infrastructure. Utilities are being forced to raise rates at increasingly high levels, and the public is struggling to understand and accept the need for these steep increases. Another resource issue revolves around an aging workforce. A growing number of utilities are losing their employees to retirement and are not able to easily replace the knowledge of these seasoned professionals, creating a brain drain and experience vacuum. Finally, I'm not sure industry-wide we have fully embraced the technology advances that can help utilities be more efficient. As a leading educational organization in the water

field, WEF has the opportunity to address many of these challenges through its excellent training programs and educational resources. Working in collaboration with our industry partners, we are also hoping to increase public knowledge and appreciation for the continued investment into our vital infrastructures.

3. What do you anticipate are WEF's highest priorities?

I believe that WEF's most important priorities are maintaining our status as a leading resource in the water quality field and continuing to fulfill our mission to preserve and enhance the global water environment by taking the lead in addressing the emerging water challenges of the twenty-first century. In recent years WEF has made great progress in helping to address important issues such as stormwater, the energy/water nexus, nutrients, operators training/distance learning, infrastructure education, and biosolids. As a membership organization, meeting the needs of our members and the overall water profession remains an important focus for the Federation. As we navigate a path forward, we will continue to find ways to enhance our services and products as we do business in a down economy.

4 Does WEF have a strategic plan, and if so, will it be changing under your leadership?

Our current strategic plan was developed about three years ago and although it has been working well, it is very important to recognize that the world is changing rapidly and we must adapt accordingly. Our leadership understands that a good path forward involves a review of priorities and activities every three to five years to make sure we are on the right track and addressing emerging issues in the best manner possible. WEF's Board recently initiated a new review process that included hiring a consultant firm to assist us in taking a broader look at stakeholders as well as the needs of our members and the water profession to determine high priority issues. As the new Executive Director, I will fully support this effort. While the new strategic plan will guide any upcoming changes, I will say that in my early Continued on page 32

New WEF Director

Continued from page 31

meetings with our volunteer leadership and staff, I am finding that a number of innovative ideas are being developed to better serve our membership, which is the lifeblood of WEF. Sustaining and growing that membership must always be our first priority and we remain committed to finding more creative ideas to provide a service and deliver our products.

5. As a leading educational resource in the water quality field, does WEF have any activities or programs designed to bring sound science to regulatory audiences?

Advocating for important legislative and regulatory issues affecting the water profession is an essential component of WEF's mission. To remain consistent with our status as 501(c)(3) organization, WEF concentrates its efforts on educating stakeholders and decision-makers at the national level. Priority issues for us include wet weather discharges, stormwater, nutrients, and biosolids.

The challenge is to maintain a focus on these issues while responding to a wider range of concerns to WEF members. Adding to this challenge is operating with limited resources, but we hope to overcome this by seeking appropriate partnerships to advance our policy goals. For example, in April, WEF is collaborating with AWWA on the first-ever "Water Matters Fly-In" that will join members from both organizations to strengthen the voice of the entire water community on Capitol Hill.

6. What are WEF's global interests and how do you plan to expand the organization's international activities?

WEF is primarily a North American organization with global interests. Our diverse membership includes professionals from nearly 30 different countries, so it's important for WEF to have an international presence where water policy challenges exist. An important component to this goal is collaborating with international partners such as the International Water Association and the Stockholm International Water Institute as well as continuing to grow and develop our globally focused programs and services. Some of our most notable efforts in this area include WEF Publishing UK Ltd., a wholly owned, London-based subsidiary of WEF that publishes our international publications (World Water, World Water: Chinese Edition, and the new World Water Reuse & Desalination); a suite of membership products designed around professional and global professional memberships that tailor to specific market segments; a successful pavilion program that offers exhibition space at high-profile water exhibitions around the world; and of course, World Water Monitoring Day, our highly successful global public outreach program.

7 Over the past decade, WEFTEC (WEF's annual technical exhibition and conference) has grown into the largest annual water quality conference and exhibition in the world. How do you plan to maintain this designation?

Last year's record exhibition and highly respected technical program are indicators that WEFTEC is the place to be for water professionals to keep up with the best water science and products. Our focus into the future will be on finding the "best of WEFTEC" by looking at new wavs to deliver our invaluable content and educational resources. For example, earlier this month we offered a special webcast called, "The Best of WEFTEC" that allowed those who were unable to attend the event in October access to some of the information and resources that were presented in New Orleans. In addition, the upcoming two-city rotation between Chicago and New Orleans (beginning in 2012) allows us to plan ahead and save money on the conference venue as well as provides a consistent central location, which generally translates to better overall attendance. Challenges to our continued success include travel and budget restrictions, especially for utilities, as well as competition from our own specialty conferences, MA meetings, and increasingly, from other global water conferences. We are addressing these challenges through efforts such as our successful Utility Partnership Program, pursuing the concept of a virtual WEFTEC, and improving the abstract submittal and review process through our new AMS system to ensure the maintenance of WEFTEC's highly respected technical program.

8 How has WEF been impacted by our nation's economic challenges and what will you do to ensure that the organization has a solid financial future?

Certainly, the impact of our country's economic downturn has not passed us by, but the Federation has adjusted accordingly, and I can say with total confidence that WEF's financial bottom line is strong. With ample cash flow to meet our operational and membership requirements, WEF is well positioned to be the organization of choice for water quality experts. As a membership organization dedicated to preserving and enhancing the world's water environment, meeting the knowledge needs of our members and the water profession remains the number one priority for WEF. That commitment—first established at our founding some eighty years ago—remains the basis for all of our outstanding technical and educational programs.

9. As a membership organization, WEF's members and Member Associations are integral to the Federation's success. How you intend to provide quality service to members while managing the bottom line?

As with any professional association, membership is the lifeblood of WEF and we recognize that an engaged and growing membership is essential for our long-term financial health, growth, and success. More importantly, WEF relies on the collective knowledge of its members to further a shared goal of improving water quality. Over the past five years, WEF has invested significant efforts into membership with excellent results.

Even during the recession, WEF has maintained its membership levels by continuing to strengthen our value proposition, increasing our retention efforts, and improving our customer service.

10. Recognizing that effective management of water resources requires cooperation on all levels, WEF has traditionally sought out special partnerships to further this common goal. What are your plans to continue this practice?

WEF has always made a concerted effort to partner with other likeminded organizations to find better ways to preserve and enhance the global water environment. In addition to developing a water reuse journal with the WaterReuse Association and a water careers Web site with AWWA last year, we have also continued our commitment to building the global Alliance for Water

Stewardship and partnered with the Johnson Foundation at Wingspread to develop a national call to action for improved freshwater management approaches. Most recently, we signed a resolution with AWWA to more closely collaborate on programs, services, and major policy issues.

11. Since its founding more than eighty years ago, WEF has developed into a leading technical and educational organization for water professionals. What are your plans to maintain this reputation and where do you see the Federation in five years?

WEF's success is rooted in an ongoing commitment to our mission and identity as a membership organization, which has served us well for more than eighty years. We have achieved this by maintaining a clear focus on our core business and continued pursuit of innovative ways to deliver our products and services in order to remain a relevant and timely resource in the water field.

The new strategic plan will outline a path forward over the next three to five years that will remain close to trends and new technology while continuing to meet the basic needs of the profession in areas such as wastewater treatment and biosolids.







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