



Hi I'm
Matt

MATT'S NEWSFLOW

2014 Newsletter



The Mattabassett District

A message from the Chairman.....

The Mattabassett Upgrade is nearly 75% complete. The official “expected” date of completion is June 15, 2015. As you may know, in its present state, although being one of the most efficient wastewater plants in New England, the new EPA standards could not be met without the upgrade to The District. Consequently, The District was forced to perform a \$100,000,000 upgrade necessary to meet the new standards. Financing for the project came from Connecticut’s Clean Water Fund in the form of an \$83 million dollar - 2% loan, and, a \$25 million dollar grant, which does not have to be repaid to the State.

The second bit of good news is that the three “constituent towns” (New Britain, Cromwell, Berlin), approved the necessary Charter Revision thus permitting the City of Middletown to become the fourth (4th) member of The District. As best we can tell, the issue of Middletown becoming a member of The District has been *discussed* for more than twenty years. The benefit to Middletown is that they no longer have to build a new wastewater treatment plant required by the State, thereby enabling them to develop the prime piece of waterfront property that their wastewater treatment plant now occupies. The benefit to the ratepayers of New Britain, Cromwell, and Berlin, is that the cost of the present upgrade, as well as future capital improvements and operational costs, are now shared by four communities instead of three.

It is important to note that without the support of a dedicated Board of Directors (listed throughout this newsletter), a strong and unwavering Executive Director, Brian Armet, area legislators, Chief Executive of each Constituent town, as well as the legislative bodies of those towns, and former DEEP Commissioner Dan Esty, this project would have failed!

The underlying concern of every person involved in the operation of The Mattabassett District is the future of the Connecticut River and Long Island Sound. I know growing up, I enjoyed the Sound, as did many of you. Now, I want our children, our grandchildren, and our great grandchildren to enjoy Long Island Sound just as we did! Our charge at Mattabassett is to ensure that future.... and we take that charge very seriously! Thank you.



William P. Candelori, Ph.D.

William P. Candelori, Ph.D.
District Chairman

Brian W. Armet, P.E.
Executive Director

Member Towns and Representation:

New Britain

William P. Candelori, Ph.D.
Louis G. Amodio Jr
Peter Centurelli
Angelo D’Alfonso
John P. Valengavich

Cromwell

Bonnie Anderson
Doug Sienna
Thomas Tokarz

Berlin

John S. Dunham, P.E.
Ed Kindelan
James McNair

Middletown

Dale Aldieri
David Bauer
Joseph Samolis
Thomas Serra

Letter from Dan Esty

Former DEEP Commissioner

One of the most memorable moments of my three years as Commissioner of Connecticut's Department of Energy and Environmental Protection (DEEP) was a chilly October day in 2012 when Senator Paul Doyle and I along with other notables including Middletown Mayor Dan Drew, Riverkeeper Jacqueline Talbot, and David Sutherland of The Nature Conservancy kayaked down the Mattabessett River and onto the Connecticut River in the pouring rain. We saw an incredible river system with amazing wildlife - topped off by an eagle soaring above us.

Having now returned to my professorship at Yale University, one of the things of which I am proudest as I look back on my tenure as Commissioner is the expansion of the Mattabessett District to include Middletown and the \$100 million dollar upgrade and expansion of the sewage treatment facility that it manages. After decades of discussion, it is a great joy to see this project nearing completion.

The upgraded plant that has emerged represents a triumph for the people of Cromwell, New Britain, Berlin, and Middletown - and for Long Island Sound. The citizens across the new District will get a cutting-edge treatment facility that promises to reduce pollution, protect water quality, and improve recreational opportunities (fishing, boating, bird watching, etc.) along the Mattabessett and Connecticut Rivers as well as Long Island Sound - and while minimizing the burden on ratepayers.

The path toward getting this project done involved many twists and turns. Local politics, historic slights, divergent views over who should pay what, and disputes over the proper structure of governance all made for a challenging decision process. But real LEADERSHIP was shown by a number of people - who knew that the communities involved would be better for working together and getting the project done.

In addition to Senator Doyle, Representatives Joe Serra and Christie Carpino as well as Senator Terry Gerratana pushed and pulled to make sure that the necessary political support came together at the State Capitol - assisted by New Britain Alderman Michael Trueworthy. Environmental leaders from a number of organizations highlighted the ecological upside of the investment being made. Brian Armet, the dedicated Executive Director of the District, made sure that everyone - from top political leaders to everyday citizens - understood the value and cost-effectiveness of the facility upgrade. And a dedicated staff at DEEP, led by Betsey Wingfield and Rob LaFrance, worked with Brian and his team to structure the project and ensure that the funding was in place.

Worthy of special note and leading the charge for action for more than a decade was Mattabessett District Chairman Bill Candelori. Bill was tireless in his efforts to garner the support of not just the Mattabessett Board but all of the mayors, selectmen, and state legislators who needed to be part of the decision process. With his political background (not to mention a PhD in psychology), Bill was able to cajole the disparate groups and factions into working together as a team. Without his leadership, the project would have died. And with his guidance a compromise of the many disputed perspectives was fashioned and a deal was struck - and the citizens of Cromwell, New Britain, Berlin, and Middletown today and into the future will be better for it.

As Bill prepares to welcome a great-grandchild (and another fishing companion) to his family, I salute him for his leadership in bringing the Mattabessett District into the 21st Century in such a strong position. All of us who share the river system and Long Island Sound owe him a debt of gratitude.

Many political stories don't have a happy ending. I am glad that this one does - and I thank all those who played a part in making it happen.

Dan Esty
Hillhouse Professor at Yale University (former DEEP Commissioner)

The Mattabassett District



Construction Updates.....

Work performed by CH Nickerson to date:

The Mattabassett District Water Pollution Control Facility Upgrade project is into the 25th month of construction representing 70% of the contract time allowed for completion. The current schedule shows progress has reached 84% completion of construction work with major milestones achieved by completing the new Aeration Tanks, Final Settling Tanks and Pumping Stations. The existing Influent Pump Station, Primary Settling Tanks, Aeration Tanks and other facilities have also reached significant improvements. The progress to date is a reflection of the cooperative effort between The Mattabassett District, Wright-Pierce, C.H. Nickerson & Co., Inc. and many subcontractors to facilitate the successful working relationship necessary to achieve the goals on this complex construction project.

Stanley R. Bujalski, P.E.
Executive Vice President
C.H. Nickerson & Co., Inc.



Start of Construction 2012



Oct 2013 16 months of Const.

April 2014 Construction



Dec 2013 18 months of Construction



Construction Updates.....

The Mattabassett District Water Pollution Control Facility Upgrade Project is one of the biggest upgrade projects currently under construction in the State of Connecticut. The project qualified for a grant of \$25 million and a 2% loan over 20 years of the \$83 million.

The design phase was completed and publically bid by Wright-Pierce in 2011. The construction project, also publically bid, was awarded to C.H. Nickerson and a Notice to Proceed was issued on April 13, 2012.

The upgraded facility will be rated for an average flow of 35 MGD of enhanced nitrogen removal, which represents an increase from the current 20 MGD capacity. The peak hydraulic capacity will be increased from 80 MGD to 110 MGD. The upgrade will allow for the additional wastewater flow from the City of Middletown to be conveyed to Mattabassett District for treatment.

Because of the limited available space at this facility - a unique component of the design includes the construction of a side stream reactor, which will treat the recycle flows high in nitrogen in a much smaller footprint than would be required if additional aeration tanks were constructed.

Other major components of the upgrade include the installation and construction of:

- Complete new underground electric infrastructure service;
- new influent screening system;
- two new aeration tanks and side-stream-reactor;
- conversion of the activated sludge process to a 4-Stage Bardenpho configuration for nitrogen removal;
- three new high efficiency blowers;
- energy efficient fine bubble diffused aeration system;
- new final settling tanks and return sludge pumping station;
- a secondary effluent pump station that is designed to pump only at high plant flow and high river flow conditions;
- enhanced odor control throughout the site;
- three new centrifuges to replace the aging belt filter presses; and
- new fluidized bed incinerator and high efficiency pollution control equipment that will be the first sewage sludge incinerator in the United States designed to meet the newly promulgated EPA air emissions standards.

To date the Contractor has constructed the new screenings facility, aeration tanks, side stream reactor, final settling tanks, return sludge pump station and secondary effluent pump station. In addition, new odor control systems have been brought online, construction of the new incinerator is underway and the new electrical infra-structure has been in-stalled.

The project site often appears like multiple projects being constructed at one time, originally staffed with three site superintendents and often between 50-100 contractors and sub-contractors on site at any given time. With close to 70% of the contract duration past, the contractor is currently on schedule to be substantially complete by May 15, 2015.

Christine Kurtz, P.E.
Project Manager
Wright Pierce

The Mattabassett District



About the District.....

The *Mattabassett District's Water Pollution Control Facility*, one of Connecticut's most efficient *Publicly Owned Treatment Works (POTW)*, processes wastewater from New Britain, Berlin, Cromwell, Middletown, Newington, Rocky Hill and Farmington. Once treatment is provided, clean water is discharged into the nearby Connecticut River. *The District* began operation in 1968, as a physical/chemical treatment facility; then in 1987, the facility was upgraded to provide secondary treatment; and currently is undergoing a second upgrade to provide Nitrogen Treatment that will meet the new State and Federal Standards.

Behind the Science...

Behind the science....why is Nitrogen treatment required at the Mattabassett District?

In 2002, the *Connecticut Department of Energy and Environmental Protection (DEEP)* entered into an agreement with New York State DEC, NYC DEP and EPA Regions 1 & 2 to reduce the nitrogen discharged into *Long Island Sound*. CT DEEP's goal is to reduce Nitrogen discharged into the *Sound* from Connecticut's 79 PTOW's by 65% by the year 2014. Excessive Nitrogen in *Long Island Sound* has depleted dissolved oxygen levels impacting marine biogeochemical cycle and aquatic life.



A special note of thanks to our Executive Director, Brian W. Armet, and our staff for their unselfish commitment to the District.

For the latest newsletter please visit www.mattabassettdistrict.com
Upon completion of construction, we will once again offer tours of our facility.