

5 THINGS YOU CAN DO TO PREPARE FOR TMDLs

1. Determine your potential sources of pollutants.
2. Evaluate options to reduce the loads of those pollutants.
3. Seek sources of funding to implement projects to meet the TMDL.
4. Coordinate with other entities in the area to determine if there is potential for water quality credit trading.
5. Discuss your efforts with FDEP and the WMD.

Welcome to the inaugural issue of *Pipelines*. Our intent is to provide useful information about what small/mid-sized cities and counties are doing, show how we can help you, and share a little about the personal side of ATM. We hope you enjoy it!

Meeting TMDLs, A Cost Comparison for Mid-Sized Communities

Similar to other mid-sized communities situated near water bodies, the City of Atlantic Beach, Florida, is facing the challenge of addressing impending Total Maximum Daily Load (TMDL) limits. Located in northeast Florida, the nearly built-out City discharges both treated wastewater and stormwater to the St. Johns River. These discharges are in excess of the City's anticipated TMDL nitrogen allocation, and improvements to reduce the potential costs for nitrogen load are substantial. ATM assisted the City by evaluating improvements to both the wastewater treatment system and its stormwater system to assess the most cost-effective means of complying with the legislation.



The City found a significant disparity between the cost for removal of nitrogen through WWTP upgrades (\$31-\$52/kg-N) versus stormwater upgrades (\$12,000-\$16,500/kg-N).

The City's best option for meeting the overall nitrogen reduction allocation proposed for inclusion in the Lower St. Johns River Basin Management Action Plan (BMAP) is to maximize the amount of nitrogen removed through WWTP upgrades. By completing the WWTP upgrades, the City can trade internally between the wastewater and stormwater utilities to meet the required 67.6% nitrogen reduction. ●



Accommodating Growth in a Changing Housing Market

Like most small communities in Florida, the City of LaBelle is facing significant future population growth. Accommodating the anticipated population increase requires significant expansion of the City's utility infrastructure. Recognizing the hardships created for other cities during previous real-estate booms and over-expansion of utility systems, the City is trying to balance the realistic needs of growth without accepting unnecessary risk.

To do this, ATM and the City are identifying best- and worst-case growth scenarios and phasing projects accordingly. For instance, ATM is designing the City's new reverse osmosis (RO) treatment plant to be easily expandable from 2.5 to 4.5 to 7.0 to 10.0 mgd as development occurs. Additionally, water and sewer

CONSIDERING A STORMWATER UTILITY

- Provides a dedicated and stable revenue source.
- Funds both capital and O&M projects.
- Can be charged on an ERC basis.
- Let ATM help by preparing a Feasibility Analysis.

ATM is a water resources, environmental, marine, and coastal engineering firm. Our staff of over 125 takes pride in developing customized and practical solutions that meet the functional, regulatory, and economic needs of our clients.

City of LaBelle (continued)

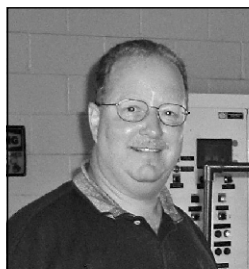
extensions to newly annexed areas are sized to meet normal growth, but easily implementable secondary projects are identified if growth occurs faster than expected.

This approach has already saved the City time and money, as planning for the new WTP easily shifted gears down from 4.5 mgd to 2.5 mgd based on the changing housing market. ☉

Employee Spotlight

Mike Hersey, P.E., M.B.A.

ATM's Jacksonville Beach office welcomes the newest addition to our already growing Municipal Services group.



With nearly 30 years of experience helping utilities throughout the Southeast, Mike's experience ranges from water and wastewater systems to landfill design. He is among the leading experts in the implementation of water reuse systems in Florida. Mike currently serves on the steering committee for First Coast FWEA, was a past FWEA chapter president, and received the 2007 Jim Miller Award for outstanding performance and professionalism.

Outside of the office, Mike keeps very busy. He's a collector of antique poker chips and recently stumbled across one of the rarest in the world among an inexpensive group he purchased online. When he's not searching for rare finds, he's playing racquetball, camping, or cheering for the Gators. (His oldest daughter now attends UF.) Mike's a great compliment to our team, and as you might guess, a great poker player too!

Jacksonville Beach Dune Protection Program

In the aftermath of Hurricane Floyd in 1999, the City of Jacksonville Beach moved to provide additional protection and enhance the City's almost 4 miles of beachfront. Wave run-up during the storm caused flooded streets and filled stormwater inlets with sand. The run-up occurred mostly along low points in the dune system caused by previous pedestrian impacts and stormwater outfalls.

To help encourage the establishment of a protective sand dune, ATM assisted the City with the planning, funding, permitting, and design of a beach protection system. The protection system includes installation of 49 pedestrian dune walkovers and improvement of the stormwater outfall system along the beach. These improvements were complimented by installation of sand fencing and planting of sea oats, which have resulted in a significant increase in the overall size of the dune system.



To fund these improvements, the City took advantage of several cost-share programs. Over the past seven years, the FDEP's Beach Erosion Control Program contributed significantly to the establishment of dune walkovers, sand fencing, and sea oat planting and FEMA's Hazard Mitigation Grant Program financed improvements to the stormwater outfalls. Although it took time, the City's initial planning efforts with ATM, combined with patience and persistence, resulted in the majority of this program being funded by State and Federal dollars. ☉

ATM News

Our New Corporate Headquarters

Over the past 23 years, our small consulting firm has grown from just a few individuals working in Gainesville, Florida, to over 125 people worldwide. To accommodate this continued growth, ATM developed a new and larger corporate headquarters. Besides housing Gainesville staff, it also provides plenty of room for future expansion on the 22-acre site!



Your Feedback is Important to Us!

What topics or concerns would you like to see explored in upcoming issues of *Pipelines*?

If you have suggestions, would like to be interviewed for *Pipelines*, or added to our mailing list, please call Grant Mysterly at (904) 249-8009 or email gmysterly@appliedtm.com