### Heather W. Baxter, P.E.

#### Principal, WET Engineering Inc.



Years of Experience

15 Total

3 With Firm

#### **Professional Experience**

# Florida Department of Environmental Protection,

Northeast District Jacksonville, Florida Water Facilities Engineer (1996 – 2000)

#### North Beach Engineering, Inc. Jacksonville, Florida Project Manager (2000 – 2005)

Dyer, Riddle, Mills, & Precourt, Inc.
Jacksonville, Florida
Senior Project Manager
(2005 – 2008)

WET Engineering Inc. Jacksonville, Florida Principal (2009 – Present)

#### **Education**

Master's of Science in Environmental Engineering, University of Central Florida, 2000

Bachelor's of Science in Environmental Engineering, University of Florida, 1996

#### **Professional Affiliation**

American Water Works Association Water Environment Federation Florida Water Environment Association **Heather W. Baxter, P.E.** is a Professional Engineer and principal at WET Engineering, Inc. in Jacksonville. Ms. Baxter's municipal and private utility project management and design experience over the past fifteen years includes water and wastewater treatment facilities, water distribution and wastewater collection systems, hydraulic modeling, capital improvement plans, pump stations, permitting on the federal, state and local levels, utility system capacity analyses, feasibility studies, plan review, and negotiating rates and intralocal agreements. In addition, her previous experience in the regulatory arena provides insight into various environmental and permitting issues surrounding the utility market.

#### **Project Experience**

Cross City Water Treatment Plant Improvements, Cross City, Florida: Project Manager responsible for providing funding assistance, rate study, design, and permitting services for a 1.2 MGD membrane upgrade to the existing water treatment plant. The membrane improvement includes pretreatment filters, nanofiltration skids, chemical injection and storage, concentration transmission, and land application facilities for concentrate and backwash disposal.

City of Lake Butler Water Main Extensions, Lake Butler, Florida: Project included the design and permitting of new 6" and 2" water mains to replace aging existing 6" and 1 ½" lines. The lines were installed to improve service and to boost pressure in the distribution system. The new water mains were routed to prevent extended water outages to existing customers and to minimize pavement repair. Additional hydrants were also added to ensure the City's fire suppressions needs were met.

Cross City Water Use Permit, Cross City, Florida: Provided permitting services for the Water Use Permit renewal through the Suwannee River Water Management District. The renewal process included in-depth evaluations of historic water use, 20 year water demand projections, development of water conservation and Well Management Plan, and the creation of environmental guidelines for the determination of long term impacts from the proposed well withdrawal rates.

Crystal River Wastewater Treatment Plant Expansion, Crystal River, Florida: The wastewater plant expansion included master planning, designing, and permitting a 1.0 MGD plant expansion to the existing 1.5 biological nutrient removal facility. The project included a new influent headworks with mechanical screens and grit removal, one 1.3 Mgal Eimco Carrousel®, two 50 foot diameter clarifiers with RAS / WAS pumping station, two 35,000 gallon chlorine contact chambers, upgraded hypochlorite pumping and storage facility, effluent pump station, an expanded restricted access sprayfield for application of treated effluent, and a 1.0 Mgal aerobic digester for sludge stabilization.

**SR 200 Utility Extension, JEA, Jacksonville, Florida:** Provided design, permitting, and construction administration services for this utility extension project, which included 2 miles of 16" force main and 20" waterman along the FDOT right-of-way. The extension also includes approximately 3200 feet of 18" and 24" directional boring under creek, stormwater structures, and an interstate interchange. Additional design concerns included petroleum contamination and ongoing FDOT road widening.

## Heather W. Baxter, P.E.

#### Principal, WET Engineering Inc.



Town of Cross City Effluent Sprayfield Expansion, Cross City, Florida: The sprayfield expansion included providing funding assistance, design, permitting, and construction administration services for the 30 acre expansion to the Town's existing effluent sprayfield to accommodate the disposal of the membrane concentrate waste stream from the water plant. The expansion included adding four additional irrigation zones, 164 spray heads, and approximately 16,000 ft of HDPE pipe, varying between 3"and 10". HDPE pipe was used in this application because of its flexibility in routing irrigation lines around large diameter trees. The project was funded through the Department of Economic Opportunity's CDBG program.

North Grid, South Grid and Satellite Water Treatment Facilities Capacity Analysis, JEA, Jacksonville, Florida: Performed evaluations on 37 existing water treatment facilities to determine the individual plant, distribution network and overall grid capacities based on existing equipment, historical flow data, and storage capacities.

**Spencer's Water Treatment Plant, Orange Park, Florida:** Design engineer responsible for providing permitting, design, and construction administration services for this \$900,000 water treatment plant upgrade that included a 530,000 gallon ground storage tank, three 1,250 gpm high service pumps and building, 10,000 gallon hydropneumatic tank, and the conversion of the existing gaseous chlorination system to liquid hypochlorite disinfection.

**CR 351 Water Main Extension, Cross City, Florida:** Project Manager responsible for the permitting, design and construction administration of this 4,500 ft water main extension funded through the Department of Economic Opportunity's CDBG program. The project included approximately 4,200 feet of DR 18 PVC water main and 350 feet of 8" HDPE DR 11 directional drills to accommodate driveways and road crossings. The water main was been routed to avoid existing utilities and structures, to include multiple fiber optic cables, overhead power poles, and stormwater culverts in the 40 foot agricultural ditch. The main is located in the county right-of-way of a heavily traveled road between Cross City and Horseshoe Beach.

**Spencer's Wastewater Treatment Plant, Orange Park, Florida**: The wastewater plant project included permitting, design for the \$1.1 million wastewater treatment plant expansion from 0.25 to 0.50 MGD. The expansion included a 250,000 gallon AWT steel ring package plant, a 0.5 MGD rotating disk filter, one chlorine contact chamber, a 530,000 gallon reuse storage tank, a 5,000 gallon hydropneumatic tank, 2 wetland cells, effluent pump station, generator, and the necessary control equipment for monitoring public access reuse water.

**Peters Creek Regional WWTP, Green Cove Springs, Florida**: Provided master planning, design, permitting and construction administration services for the \$2.5 million wastewater treatment plant located in a high growth area of Clay County. The project included influent headworks with a 0.5 MGD mechanical screen and grit separation, a single steel ring package plant with nitrogen removal, clarification and aerobic digestion, one 21,700 gallon chlorine contact chamber with integrated reuse and effluent pumping, and eight percolation ponds. Controls and provisions were installed to allow for the future generation of public access reuse water.

**Keystone Heights WWTF, Keystone Heights, Florida**: Project Manager responsible for preparing the Facility Plan, as required by the FDEP Small Communities Disadvantaged Grant Program, and for executing the subsequent design and construction administration for the \$1.0 million wastewater plant. The treatment plant included influent screening, aerated activated sludge tanks with centrifugal blowers, one 28 foot diameter steel ring clarifier, one RAS / WAS pump station, two 1.2 acre rapid infiltration basins and a hypochlorite storage and pumping facility.