



PAUL SMITH
PUBLIC SERVICES DIRECTOR

Public Services Department

Memorandum

Date: July 7, 2014
To: Mark LeCouris, City Manager
Through: Paul Smith, Public Services Director *PS*
From: Bob Robertson, Public Services Program Manager *BR*
Subject: Alternative Water Supply Project Status Update – **July 2014**

Below is a summary of the Alternative Water Supply Project status for **July 2014**.

I. Permitting

- Major environmental permitting has been completed.
- A bald eagle nest was discovered in the vicinity of a small portion of a pipeline construction area. The City has coordinated with the Florida Fish and Wildlife Conservation Commission which has approved the use of subsurface installation techniques (no construction activities on the surface) in the affected area to avoid disturbing the eagle's nest.

II. Duke Energy

- Approximately 15 feet of mangroves will require removal at the surface water discharge location. This impact will be mitigated as approved by the Florida Department of Environmental Protection.

III. Water Plant Construction and Management

A. Land Acquisition and Wellfield

- Brackish groundwater production well #13B is currently being drilled. This is the 15th production well. Staff continues to seek additional well sites. Future well sites would be used to rotate the wellfield.
- Wellfield water quality sampling is currently ongoing using in-house staff and equipment. This data will be used to meet permit requirements for data collection and to optimize the membrane system design.

B. Treatment Plant Construction

- Construction continues on the RO plant site by Wharton-Smith Construction Group. Foundation work and electrical for the RO Admin Building is currently at about 60% complete. Vertical construction of the building will begin in August.
- The post-treatment structure is currently at about 50% complete, and the dual-chambered above ground storage tank is currently at about 30% complete.
- Onsite stormwater treatment system is currently at about 25% complete.

C. Injection Well

- Construction continues on the City's deep injection exploratory well for disposal of the RO concentrate. So far drilling with the associated geophysical logging and water quality testing has been completed to a depth of 250 feet. The ultimate depth of the proposed injection zone will be between 900 – 1200 feet below the surface and will be confirmed through testing and demonstration.

IV. Financing and Construction Schedule

- SWFWMD grant reimbursements received to date total over \$6.3 million, leaving approximately \$13.8 million of grant funds available for construction.
- Construction schedule is approximately 3 weeks behind the targeted startup date. The contractor is seeking ways to reduce this delay by expediting certain construction elements and working Saturdays.

V. Operations and Staffing

- City staff has begun planning for staffing of the facility. This will be presented to the BOC for approval later this year.
- Expected staffing will begin early in 2015 so that ample training and experience is in place for smooth facility startup.
- RO facility staffing and operational expenses have been included in the FY2015 budget and in the utilities rate model.

VI. Other Items

- City staff will be presenting a RO project status update to the City Board of Commissioners at the July 15th Regular Session. An outline of that presentation is attached to this memorandum.

DRAFT Presentation Outline

Tarpon Springs RO Project Status Presentation July 15, 2014 Board of Commissioners

Presentation Outline

- Project Overview
- Project Staff and Team
- SWFWMD Partnership
- Construction Status
- Operations and Staffing

Project Overview

- Historically the City has relied on external water suppliers but has desired water supply independence
- Water supply independence allows the City to:
 - Decide projects required to maintain/improve water quality.
 - Control water quality entering the distribution system.
 - Choice of treatment and/or disinfectant procedures.
 - Planning for growth and more economical production of water
- March 2006 - Achieved 72% Voter Approval in referendum for Water Project Financing, Purchases and entering Contracts for water plant.
- This approval rating was an important indicator of the public's interest in achieving our own, local alternative water supply.

Project Staff and Team

- A team of Public Services Department Staff with specific areas of expertise was assembled to complete the project.
 - Public Services Director Paul Smith: a professional engineer with a Master's Degree in Engineering and experience in water supply development.
 - Program Manager Bob Robertson: a professional engineer with a Master's Degree in Engineering and expertise in Reverse Osmosis (RO) treatment. Bob is also a member of the American Membrane Technology Association (AMTA), a trade organization for RO treatment.
 - Utilities Superintendent Raymond Page: an "A" licensed wastewater treatment facility operator with experience and certification in RO operations and overall utility operations, permitting, and compliance

SWFWMD Partnership

- The SWFWMD has recognized the importance of Alternative Water Supplies as part of their recent Strategic and Regional Water Supply Plans.
- The SWFWMD is currently funding the project with a \$20.1 million grant.
- This grant is in the form of an annual appropriation and is being administered on a reimbursement basis now that construction is underway.
- As of June 2014, approximately \$6.3M of grant reimbursements have been received for construction and design work completed.

Construction Status

- Treatment Plant Construction
- Injection Well
- Financing and Schedule Status

Operations and Staffing Plan

- Planning for staffing of the facility
- Staffing and operational expenses included in FY2015 Budget

Questions