

Water Department

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Key Public Service Areas

The Department's mission is to provide high-quality potable water in sufficient quantity to address citizen and business demand, while ensuring customer satisfaction and maintaining the environmental integrity of the source through efficient operation and water conservation.

Scope of Department Operations

Water Department has 267 employees with an annual budget of \$61.9 million. It supplies an average of 71 million gallons of fully treated potable water daily to over 450,000 customers in Tampa and portions of Hillsborough County. The department also spearheads water conservation education and the South Tampa Area Reclaimed Water Project. The Water Department maintains 2,212 miles of transmission mains and distribution pipes ranging in size from 2" to 54" in diameter, and more than 11,450 fire hydrants and 35,000 valves. In FY'01, the department installed 140,000 ft. of water mains, 58,766 meters serviced and received 14,234 line locator service calls.

Current Initiatives

- Upgrading water system security
- Continuing main replacement to provide for adequate water pressure and fire protection
- Continuing and refining the High Performance Organization Implementation
- Continuing with replacement programs to provide for improved water quality
- Continuing Aquifer Storage Recovery activities for Phase 2

Critical Issues and Areas of Concern

- Homeland Security / Water System
- Maintain Adequate Water Pressure for Fire Protection
- High Performance Organization (HPO)
- Improving Water Quality through System Renewal and Replacement
- Water Rates and Fees
- Aquifer Storage Recovery (ASR)
- Reclaimed Water Projects
- Acquisition of Water Easements
- Water Conservation Program
- Blue Sink

Status Report

Homeland Security / Water System. A vulnerability assessment was prepared as required by the federal government. As a result, it was determined that security of the City's water infrastructure and resources needs to be significantly increased due to its current vulnerability to potential domestic terrorist acts. The department has encumbered \$1.3 million to take the necessary precautions and safeguard the City's water system and anticipates an additional \$2 million to be spent in FY 03-04. [[CR-52](#) & [CR-79](#)]

Maintain Adequate Water Pressure for Fire Protection.

Replacement of undersized mains within the system faces significant problems due to shortage of funds and a backlog of improvements that were supposed to be made in previous years. Improvements will cost approximately \$34 million. It is expected that the department will need approximately \$2 million (adjusted for inflation) each year for a period of fifteen (15) years to address this issue. A master plan is under development (to be published during 2003) to determine the cost of these improvements. Infrastructure improvements and replacements, together with homeland security concerns, will require significant amounts of money and the engagement of projects based on a priority schedule.

High Performance Organization (HPO). High Performance Organization (HPO) is a model for large-scale organizational change based upon theory and applications drawn from high performing organizations. High performance is defined as simultaneously delivering high product and service quality, outstanding customer value and sound financial performance. The HPO approach engages work teams at all levels of the organization over a relatively long period of time to gradually shift from a hierarchical, autocratic, control oriented industrial model to a more inclusive, team-based

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networked talent model. Structural and attitudinal barriers to initiative, creativity and personal growth are gradually removed resulting in a more energized and engaged organization. Employees gain the knowledge and skills to diagnose their own sections, institute performance measures, begin identifying opportunities for introducing positive change while simultaneously assuming more authority and accountability for the management of their micro-business. The forms, beliefs and functions of Leadership are explored at length and integrated with the five other change levers (Vision, Values, Strategy, Structures and Systems) to provide a holistic framework from which to continuously fine-tune the organization toward a shared vision of higher performance. In FY02, the department expanded the training, facilitation and development of at least 3 Process Improvement Teams and implemented technology enhancements. The estimated cost for this program is \$262,798 and remains unfunded.

Improving Water Quality through System Renewal and Replacement. Replacement and renewal of unlined cast iron water mains will cost approximately \$36.5 million dollars (adjusted for inflation) over a ten (10) year period. Characteristics of materials will influence the frequency of renewal/replacement and costs. For example, PVC (polyvinyl chloride) and HDPE (high-density polyethylene) pipes have a life span of approximately 50 years, whereas concrete and cast iron pipes can be replaced every 100 years. Replacement and renewal of asbestos-cement water mains will cost approximately \$5 million dollars over a ten (10) year period. The infrastructure renewal and replacement schedule will likely take approximately \$8 million dollars (adjusted for inflation) for over fifteen (15) additional years (\$8 million X 15 years) in order to have all City mains replaced by the year 2017. Right now, the department receives Budget allocations totaling \$3 million to address these issues. As a result, the renewal and replacement schedule is compromised, which affects service delivery. The costs of replacing and upgrading water system infrastructure are becoming extraordinarily excessive and more difficult to control. A priority-based renewal/replacement infrastructure program is needed for future water infrastructure-related projects. Infrastructure replacement and upgrades will likely involve rate increases. Bonds are not foreseen as sources of revenue for these projects.

Water Rates and Fees. New residential development in New Tampa has added demand for additional water system services. However, fees collected from this development do not generate adequate revenue to cover the cost for services that the area demands. Thus, these services have to be subsidized and a review of the Water Rate Fee Schedule is warranted. [[CR-63](#) & [CR-67](#)]

Acquifer Storage Recovery (ASR). Phase Two of the Acquifer Storage Recovery program (2 billion-gallon storage capacity) needs to begin now in order to have it complete by 2003.

Reclaimed Water Projects. Programs associated to this function (STAR Phases I and II, North Tampa Regional Reclaimed Water Pipeline) are quite important since they address water reduction efforts. The department believes that all phases of these programs should proceed without delay.

Acquisition of Water Easements. Purchase of water infrastructure easements from FDOT is quite costly. Nonetheless, this is the most affordable option in the long run. However, the department usually has to take money from its Capital Improvements Program to be able to purchase easements. This affects scheduled projects and service delivery. These and other extraordinary costs should be funded (and budgeted) in the Reserve Account.

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Water Conservation Program. The Water Conservation Initiative consists of five major components: Residential Water Savings Kit Program; Landscaping and Sprinkling Program; Water Conservation Education Programs; Water Conservation Incentives; and Water use Restorations. In 2002, funding was provided for each component of the Water Conservation Program. However, there is an existing unfunded need of \$818,000 to complete outlined initiatives related to the program.

Additionally, many activities such as public educational outreach, testing and evaluation, and planning activities related to the Southwest Florida Water Management District (SWFWMD) are not considered as activities related to this section. Nonetheless, these are functions that the department undertakes and for which no funding sources are attached to.

Blue Sink. In 2002, the tasks of monitoring well installation and subsequent testing for the major clog in the underground system is north of the Hondaland sinks and south of the Blue Sink. Several tests have been completed and construction plans have been developed to alleviate the problems. The Construction phase is currently estimated at \$3,000,000 and remains unfunded.

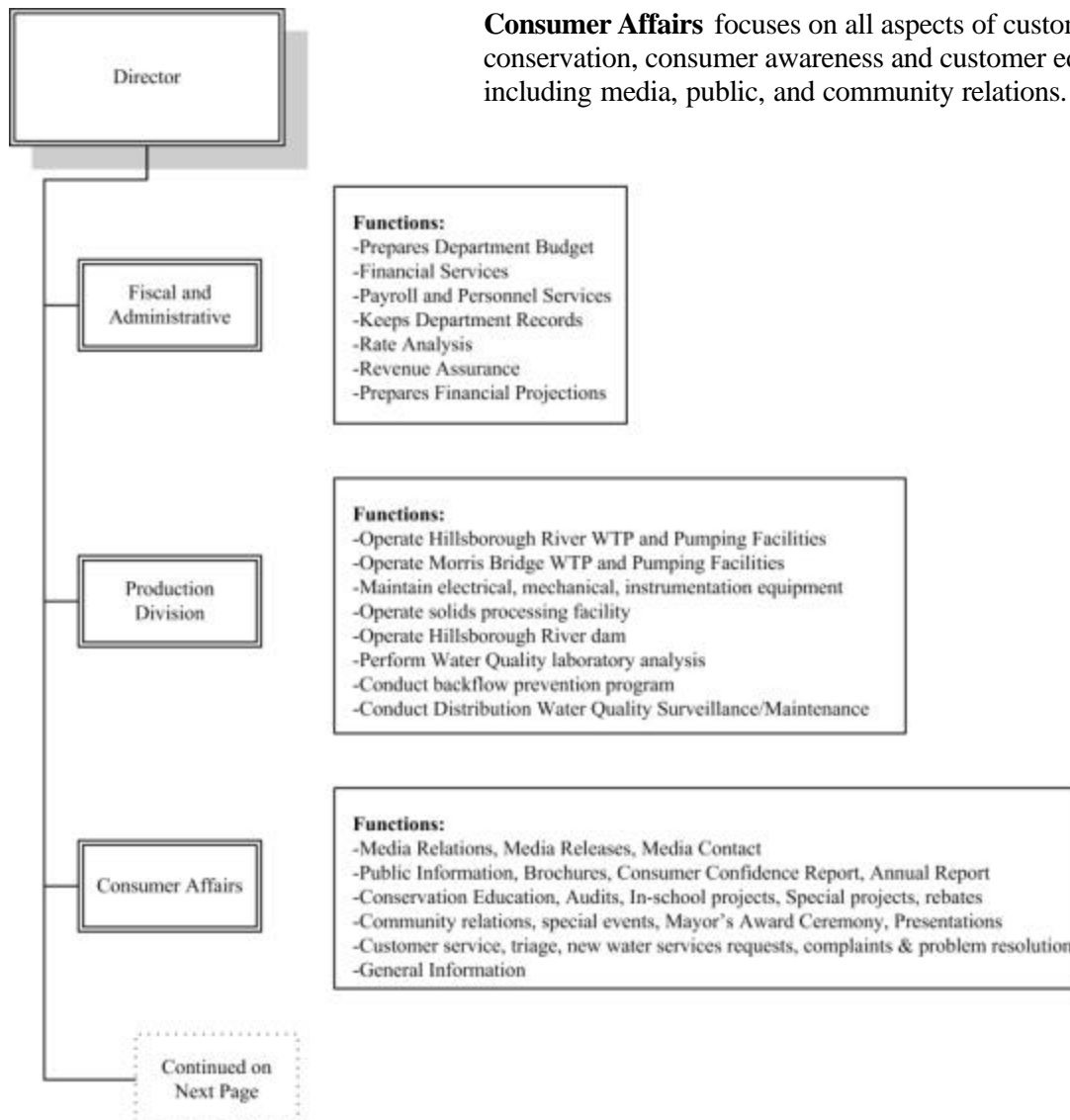
Water Department Organization Chart

The Water Department is organized into six main areas: Production, Information Technology & Environmental, Distribution, Engineering, Consumer Affairs, and Administration.

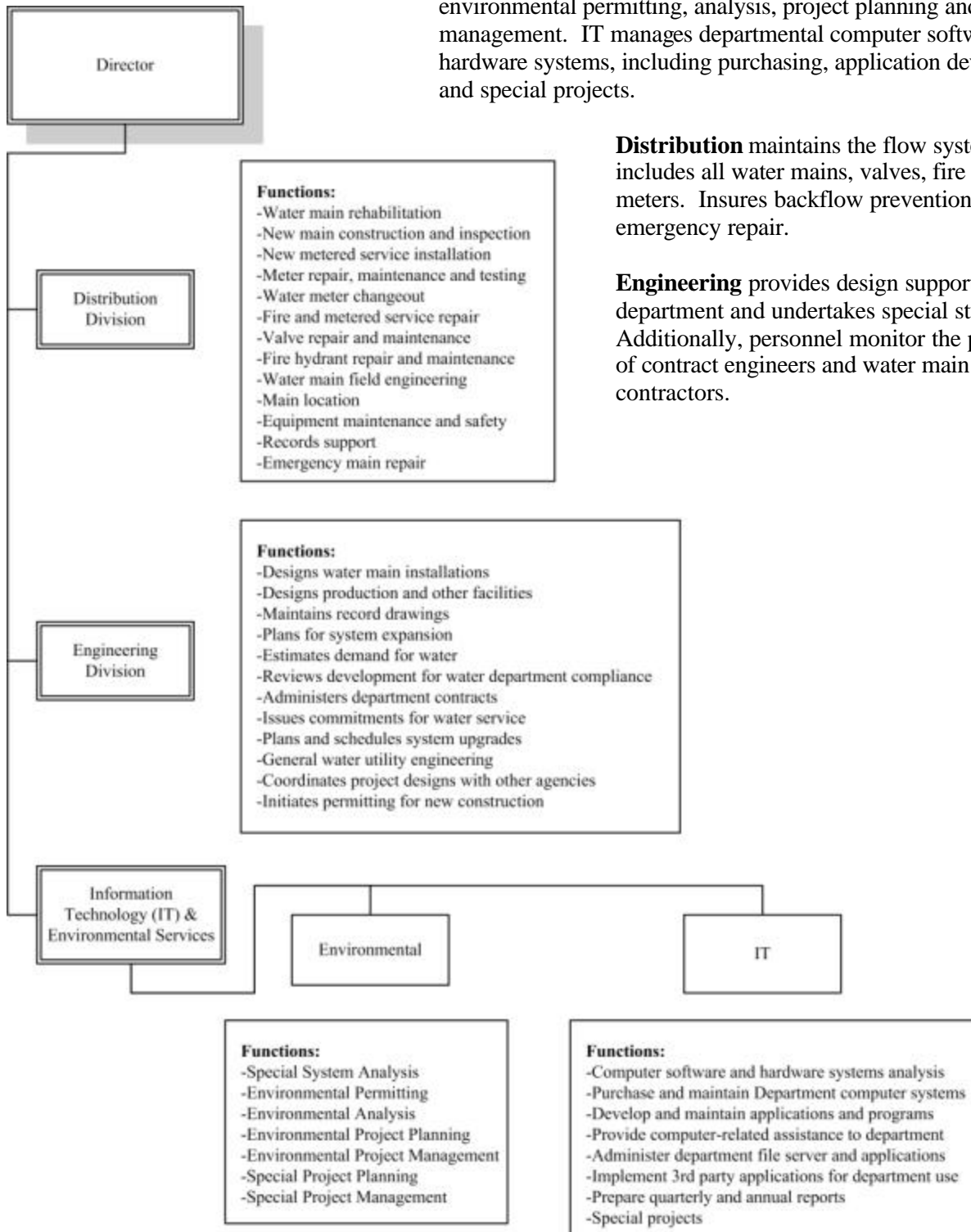
Fiscal and Administration provides financial, personnel customer service, and management support to the department.

Production Division operates and maintains the treatment plants, reservoir, wellfield, repumping stations, and the ground and elevated storage tanks. Additionally, the division is responsible for water quality assurance.

Consumer Affairs focuses on all aspects of customer service, water conservation, consumer awareness and customer education, including media, public, and community relations.



Water Department Organization Chart (continued)



Information Technology & Environmental has two sections: Environmental and IT. Environmental is responsible for environmental permitting, analysis, project planning and management. IT manages departmental computer software and hardware systems, including purchasing, application development, and special projects.

Distribution maintains the flow system that includes all water mains, valves, fire hydrants, and meters. Insures backflow prevention and provides emergency repair.

Engineering provides design support to the department and undertakes special studies. Additionally, personnel monitor the performance of contract engineers and water main installation contractors.