Marina Coast Water District

Draft
Technology Plan

Appendix 2016 for
FY 2016-2017

Prepared for the
Marina Coast Water District Board of Directors

March 2016

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Executive Summary

The District Technology Plan (DTP) Appendix outlines the tasks and funding requirements associated with meeting the goals described in the DTP for fiscal year 2016-2017. Budgetary requirements are also presented for each Category.

The District currently has a Local Area Network (LAN) and a Wide Area Network (WAN) between the Beach and Ord Community offices thru recently upgraded 10M fiber-optic lines.

Most of the objectives listed under "Billing/Financial Needs" in the DTP have been completed. Focus remains on automating additional functions and processes, and replacing and consolidating the old hardware as listed in the DTP.

The objectives under "Technology Maintenance" form the basis of a long-term program that ensures the maintenance of existing District technology through the continued incorporation of improved hardware and software, and the enhanced ability of staff to use the technology. Planned replacement of outdated and aged hardware and software will keep the District systems effective.

While training is budgeted as part of District operations, training costs are referenced in the DTP for a comprehensive look at costs associated with District Technology.

The objectives listed under "Communications and System Augmentation" focus on the assessment of the current communications technology and any augmentations needed both in hardware and equipment and staffing needs.

Document Storage System (DSS) implementation began in FY 2010-2011. The DSS helps the District towards green sustainability practices. Once fully implemented, the DSS system will save the District substantial time and money. In addition, it creates improved customer service, efficient collaboration between departments, sharing of information internally and externally, easier document storage and retrieval, and reduced storage space.

The objectives listed within the category "Document Storage System" will be achieved FY 2016-2017.

Category: LAN Implementation
Proposed FY 2016-2017 Budget: $2,000

The implementation of a Local Area Network (LAN) has greatly benefited the District. This LAN has enabled staff to share computer resources and network printers and other functions among staff members. The LAN has enabled the District staff members to communicate with one another via electronic mail, thus reducing the use of paper to move documents from one location to another, as well as increasing staff response time. Both sites are protected with firewalls within a dedicated Virtual Private Network.

The LAN enables the District to save money on needed software, as network licenses are purchased at a lower cost than multiple stand-alone packages; and to run the billing/financial software and provide access to staff.

Goal and Long- and Short-Term Objectives
Improving the direct access speed of the Ord office computers to the servers located at the Beach office:

Connection between two offices is now established through fiber-optic lines (approx. 10Mps speed). Since this line carries both access to the servers at the beach office and provides Internet access, the speed slows down periodically due to congestion caused by high demand Internet traffic (webinars, video streaming, etc.) While installation of the new fiber-optic Internet connection with 10Mbps has improved the speed, there is a definite need to increase the band-width to 20Mbps.

Proposed Costs for FY 2016-2017

Expense Type	Estimated Cost	Comments
Fiber-optic internet connection upgrade to 20Mbps	$2,000	Included in operating equipment budget

Category: Billing/Financial Needs
Proposed FY 2016-2017 Budget: $15,000

This category addresses the need to upgrade the application system that maintains billing and financial data. With the implementation of this goal, the District will maintain the integrated system for billing/financial needs, the meter reading system, the back-flow system, and the automated work order process system to track customer requests. These systems are critical for District operations and the information they produce is relied upon heavily for key analysis. The implementation of this system has greatly improved the ability of the District to provide timely and quality services to customers. The Customer Internet Account program has enabled District customers to access their account information online, pay bills using credit cards, and input service requests over the Internet.

The current Billing/Finance System contains the following features:
- Process credit cards via the Internet
- Merge and automate Work Order Process
- Merge and automate Back Flow Process
- Attach parcel maps to individual customer account (GIS)

Goal and Long- and Short-Term Objectives
- *Improving the billing/financial application beneficial to the District*
  - Implement Springbrook work order module for better tracking and billing of development projects.
  - Implement Springbrook human resources module to establish and maintain employee database for better tracking and reporting.

Proposed Costs for FY 2016-2017

Expense Type	Estimated Cost	Comments
Billing and Financial Software upgrade	$10,000	Included in capitalized equipment budget
Staff training on and new modules	$5,000	Staff training included in budgeted operating costs

Category: Technology Maintenance
Proposed FY 2016-2017 Budget: $27,000

To sustain the efficiency and effectiveness of the District's technological systems, hardware and software upgrades and additions will be required. If ongoing systems maintenance is not a priority, District systems will gradually become less effective. Objectives for planned computer replacements and desktop-operating system changes are presented below.

Goals and Long- and Short-Term Objectives
- *Improve productivity by replacing outdated hardware technology*
    - Upgrade or replace 25% of PCs connected to LAN each year
    - Upgrade and maintain file server performance
    - Upgrade or replace output devices: printers, etc.
    - Perform a needs analysis annually to determine budgetary framework – *Ongoing*
    - Upgrade uninterrupted power supply (UPS) backup system *Completed FY 15/16*
    - Obtain a Plotter/Scanner to enable Engineering/O&M Departments to store plans and maps electronically and for in-house printing *Completed FY 14/15*

- *Improve productivity by replacing outdated software technology*
    - Maintain compatibility of desktop operating systems – *Ongoing*
    - Perform a needs analysis annually to determine budgetary framework – *Ongoing*
    - Upgrade server operating system (OS) software *Ongoing*

- *Improve and maintain computer training opportunities*
    - Identify District staff training needs – *Ongoing*
    - Develop training plans – *Ongoing*
    - Develop matrix showing benefits of technology training - *Ongoing*

Based on a needs analysis performed by the District's Information Technology consultant, the District replaced/consolidated aging server hardware with the latest technology hardware and software for a robust and safer computing environment in FY 2011-2012. Replacement of the application server for Laserfiche and Finance (Springbrook) was completed in FY 2015-2016.

Proposed Costs for FY 2016-2017

Expense Type	Estimated Cost	Comments
Upgrade/Replace PCs and monitors	$12,000	Replacement of 9 PCs with monitors & MS Office Software included in operating budget.
CMMS/Springbrook Custom program development	$5,000	Ongoing custom programming included in operating budget
Network equipment and peripherals replacements	$5,000	For broken network equipment and peripherals included in operating budget.
Network Server software upgrades	$5,000	Antivirus and other server software upgrades included in operating budget

Category: Communications and System Augmentations
FY 2016-2017 Budget: $171,600

The District attempts to keep abreast of innovative communication technologies and strives to implement them to effectively communicate with the public and other agencies. Throughout the life span of any system, additions or upgrades are necessary to sustain productivity. In addition to LAN system maintenance, other improvements will increase efficiency and decrease staff costs. The District also strives to maximize usage of current communication and business software in order to provide the clear and useful information to the Board for decision making regarding policy and to be as transparent to the public as possible.

The District has the following communications enhancements in place:
- Voice Over Internet Protocol (VOIP) phone system, and expansion of the District's Internet presence.
- Expansion of the Internet presence includes real-time customer account information, and online payment options.
- Board Room presentations with the recently purchased laptop and projector

Goals and Long- and Short-Term Objectives
- *Improve productivity and reliability of existing VOIP phone system by replacing the current outdated system installed March 2007.*
  - Upgrade internal wiring and network switches to new technology standards as needed
  - Purchase/subscribe of new phone equipment
- *Add a Applications Systems Analyst position to the District Staff*
  - The Application Systems Analyst will perform routine to complex technical duties related to developing, managing and supporting District software systems at the enterprise level. The Analyst will develop, implement, support and manage computer applications such as Financial, Customer Information, Utility Billing, Geographic Information, Content Management, Database Management, System Integration, and others as provided by the District. In addition, the Analyst will evaluate user requirements and procedures, make recommendations to improve existing system capabilities and workflow, and develop technical solutions as needed.

Proposed Costs for FY 2016-2017

Expense Type	Estimated Cost	Comments
Replace/Upgrade phone system and network infrastructure	$29,600	Upgrade 10-year old phone system.
New hire of Systems Analyst	$142,000	Position included in the proposed Draft FY 2016-2017 Admin. Operating Budget.

Category: Document Storage System
Proposed FY 2016-2017 Budget: $10,000

A Document Storage System includes the strategies, methods and tools used to capture, manage, store, preserve, and deliver documents related to organizational processes. DSS tools and strategies allow the management of an organization's unstructured information, wherever that information exists. It reduces or eliminates the need for paper documents and allows for remote access of documents by employees. The DSS will help the District move towards green sustainability practices. The DSS systems will save the District substantial time and money. In addition, it will enhance customer service, efficient collaboration between departments, sharing of information internally and externally, easier document storage and retrieval, reduced storage space, and other benefits.

Laser Fiche Document Management/Storage System provides the following capabilities:
- Improve efficiency of document access
- Allow for remote document access
- Reduce storage space required to store paper files
- Enhance customer service, improved collaboration

Goals and Long- and Short-Term Objectives

- *Laser Fiche development*
    - Full implementation and use of the DSS throughout the District – FY 2016-2017.

Proposed Costs for FY 2016-2017

Expense Type	Estimated Cost	Comments
Laser Fiche Development	$10,000	Implementation and set-up costs.

Summary

Summary of FY 2016-2017 Budget: $225,600

Category Type	Estimated Cost	Operating Budget	Capitalized Equipment Budget
LAN Implementation	$2,000	$2,000	$0
Billing/Financial Needs	$15,000	$5,000	$10,000
Technology Maintenance	$27,000	$27,000	$0
Communications & System Augmentations	$171,600	$151,600	$20,000
Document Storage System	$10,000	$10,000	$0
TOTAL:	$225,600	$195,600	$30,000

This Appendix 2016 represents a comprehensive plan with identified funding requirements necessary for the continued implementation of the District Technology Plan for FY 2016-2017. The approval and implementation of this appendix document will support the District's efforts of technology maintenance; technological enhancements to improve staff efficiency while continuing to better respond to the needs of the public.