Marina Coast Water District

Technology Plan

Appendix 2012 for
FY's 2011-2012 and 2012-2013

Prepared for the
Marina Coast Water District Board of Directors

February 2012

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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 years 2011-2012 and 2012-2013. Budgetary requirements are also presented for each Category and for each Fiscal Year.

The District has a Local Area Network (LAN) and a Wide Area Network (WAN) between the Beach and Ord Community offices thru two dedicated T-1 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 Planned replacement of outdated and aged hardware and software will keep the District systems effective.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.

Document Storage System (DSS) implementation began in FY 2010-2011. The DSS will help the District towards green sustainability practices. The DSS system will save the District substantial time and money. In addition, it will create 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 2012-2013..

Category: LAN Implementation
FY 2011-2012 Budget: $0
Proposed FY 2012-2013 Budget: $500

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.

Maintenance of existing LAN and WAN connections is included in the Technology Communications Section of this plan.

Goal and Long- and Short-Term Objectives
- *Improving the Internet access speed for the Ord Office:*
    - The connection between two offices is established by two T-1 lines (approx. 2.8Mps speed). Since this line carries both access to the servers in the beach office and also the Internet access, sometimes the speed slows down due to congestion caused by high demand Internet traffic (webinars, video streaming,..)
    - Acquisition of a new Internet firewall router and a DSL service for the Ord office, will direct the Internet speed thru the DSL router and have the double T-1 line reserved for the office communication and server applications.

Proposed Costs for FY 2012-2013

Expense Type	Est External Cost	Comments
Ord Office Internet Access	$0	$600 ($50 monthly subscription included in operating budget)
DSL Firewall/Router	$500	

Category: Billing/Financial Needs
FY 2011-2012 Budget: $0
Proposed FY 2012-2013 Budget: $32,000

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 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 ability to install radio read meter reading system – *On-Going (88% is done as of February 2012-* 6,231 converted to AMR meters out of 7,105
- *Upgrade the billing and financial software to the latest web-based version (V7) – FY 2012-2013*

Proposed Costs for FY 2012-2013

Expense Type	Est External Cost	Comments
Billing and Financial Software upgrade	$24,000	Staff training on upgrade = $15,600 included in budgeted operating costs.
Custom Programming for CMMS/Springbrook integration	$8,000	Update integration software

Category: Technology Maintenance
FY 2011-2012 Budget: $50,000 (plus $10,000 O&M Budget)
Proposed FY 2012-2013 Budget: $18,000

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

- *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

- *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 will replace/consolidate aging server hardware with the latest technology hardware and software for a robust and safer computing environment in FY 2011-2012.

Costs for FY 2011-2012

Expense Type	Est External Cost	Comments
Upgrade/Consolidate File Server and Exchange Server (8yrs old)	$20,000	Microsoft Small Business Server 2011
Upgrade/Replace PCs and monitors	$1,500	
Upgrade/consolidate CMMS/CityWorks, Billing/Finance, Terminal Services Servers (4-8yrs old)	$18,500	New MS Windows 2008 APPS server with Hyper-V virtualization feature
CMMS/SpringBrook Custom program development, data migration and test	$4,500	New APPS server custom program adaptation to the new server environment
Network equipment and peripherals replacements	$1,500	Replace broken network equipment and peripherals
Network Server software upgrades	$4,000	Antivirus and other server software upgrades
Inframap Software	$10,000	Software and integration for valve exercising and map edits *NOTE: Included in O&M Budget – should have been part of TECH Budget*

Proposed Costs for FY 2012-2013

Expense Type	Est External Cost	Comments
Upgrade/Replace PCs and monitors	$6,000	
CMMS/SpringBrook Custom program development, data migration and test	$5,000	Ongoing custom program adaptation to the new server environment
Network equipment and peripherals replacements	$3,000	Budget for broken network equipment and peripherals
Network Server software upgrades	$4,000	Antivirus and other server software upgrades

Category: Communications and System Augmentations
FY 2011-2012 Budget: $0
FY 2012-2013Budget: $0

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 has the following communications enhancements in place:
- FAX server
- 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

Category: Document Storage System
FY 2011-2012 Budget: $0
Proposed FY 2012-2013 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 2012-2013.

Proposed Costs for FY 2012-2013

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

Summary

Summary of FY 2011-2012 Budget: $50,000 plus $10,000 O&M Budget

Category Type	Est External Cost
LAN Implementation	$0
Billing/Financial Needs	$0
Technology Maintenance	$60,000
Communications & System Augmentations	$0
Document Storage System	$0
TOTAL:	$60,000

Summary of FY 2011-2012 Budget: $60,500

Category Type	Est External Cost
LAN Implementation	$500
Billing/Financial Needs	$32,000
Technology Maintenance	$18,000
Communications & System Augmentations	$0
Document Storage System	$10,000
TOTAL:	$60,500

Appendix 2012 represents a comprehensive plan with identified funding requirements necessary for the continued implementation of the District Technology Plan for FY 2012-2013. 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.