

# Organization, Personnel and Technology

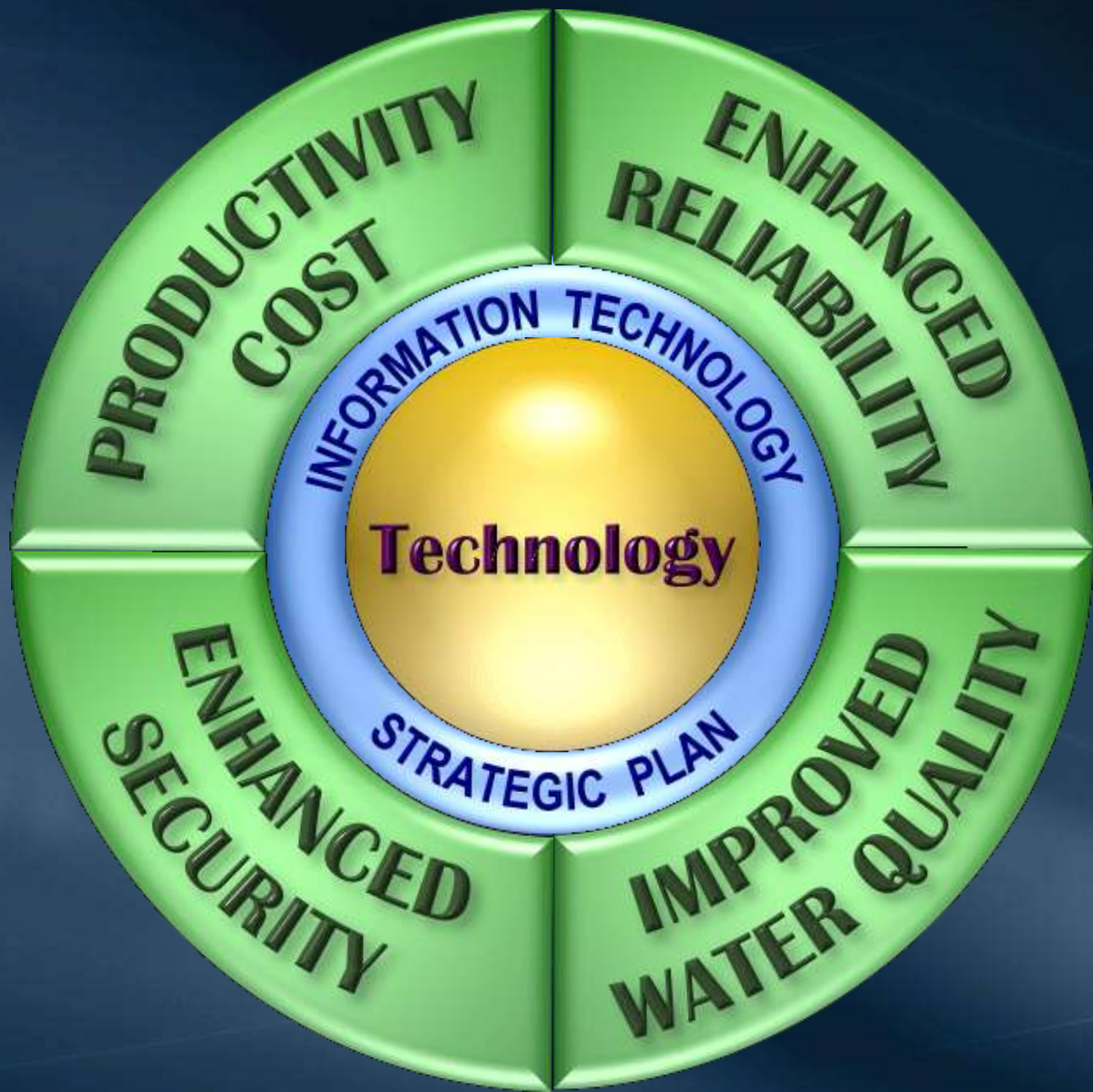
Item #7b

**Subject:** IT Strategic Plan Update

**Purpose:** Provides a quarterly update on progress to implement Metropolitan's Information Technology Strategic Plan and on information technology (IT) activities in general for the period ending June 2011

# IT Strategic Plan Update – Quarterly Report for Period Ending June 2011

Organization, Personnel and Technology  
Item # 7b  
October 11, 2011



# Key Highlights

- Completed Phase II Information Security Initiative
  - Completed separation of Business and SCADA Network
  - Implemented security assessment tools to continuously monitor vulnerability
  - Deployed secured wireless network
  - Updated Information Security Standards
- Completed System Requirements for Environmental and Safety Management Information System
  - Plan to replace 14 year old system
  - RFP issued to acquire Environmental System

# Key Highlights

- DVL Control System Upgrade Initiative
  - Completed initial investigation report documenting status of existing system
  - Produced conceptual design for new system
  - Issued RFP for prime consultant to design and implement new control system
- Conducted IT Disaster Recovery Exercises to recover critical IT systems in the event of a disaster
  - Business systems...Financial, Payroll, Water Billing
  - Operational Systems....Maximo, LIMS etc

# PC Replacement Program



# PC Replacement Program

- **Fiscal Year 2012-13 / 2013-14**
- **Business Driver – PCs will be 6 years old**
- **Hardware (Computers)**
- **Software (Operating System / Office Productivity Suite)**



# Options Being Evaluated

## Hardware

- Desktop, laptop, tablet, thin client
- Specs: processor speed, memory, disk drive, network connection

## Software

- Cloud-based / on-premise
- Reside on workstation / server
- Virtualization of desktop / applications



# Water Quality Monitoring and Rapid Event Detection System



# What is Rapid Event Detection System ?

Provides real-time analysis of water quality information and notification in the case of potential water quality contamination based upon surrogate parameters

- WQ data analysis tools
- Interfaces to the SCADA system

# Water Quality Rapid Event Detection System

## ● Purpose

- Enhance ability to detect contamination based on surrogate parameters
- Monitor water quality changes in distribution system
- Help respond to any Member Agency complaints

## ● Major components

- WQ data collection and management
- Analytical software to detect water quality events
- WQ alarming and visualization



Sitehawk

Home Page

Info Pages

Create a Chart

Data Catalog

Merlin Chart



## SITEHAWK

SiteHawk is a map-based presentation of monitoring data. The icon color shows alarm state, mouse over the icon to see a graph, right click or left click on the icon to see graphical or tabular time series data.

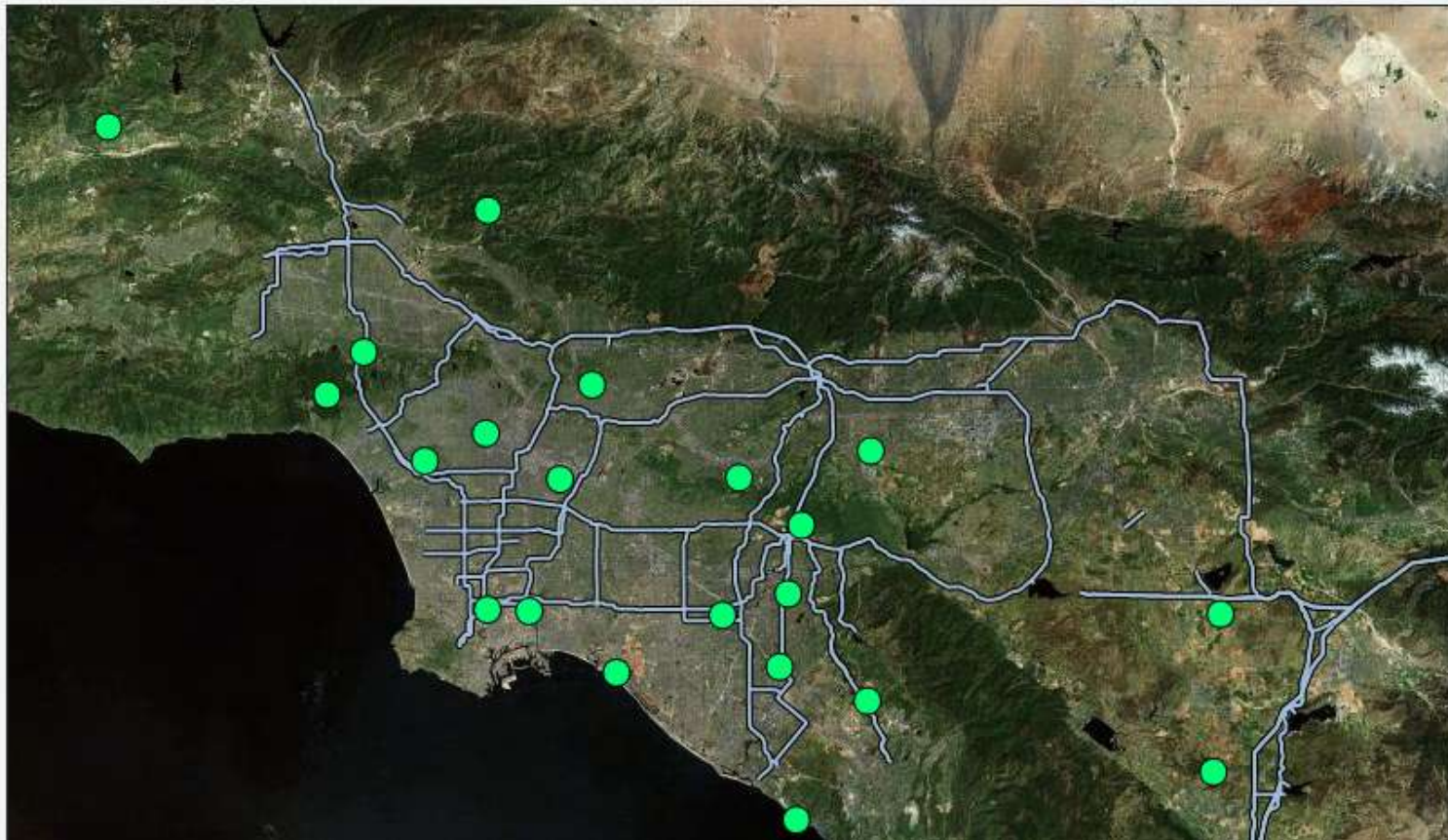


^ ALL ^ CL2 ^ Cond ^ NH3 ^ ORP ^ Pres ^ TOC ^ Temp ^ Turb ^ UV ^ pH

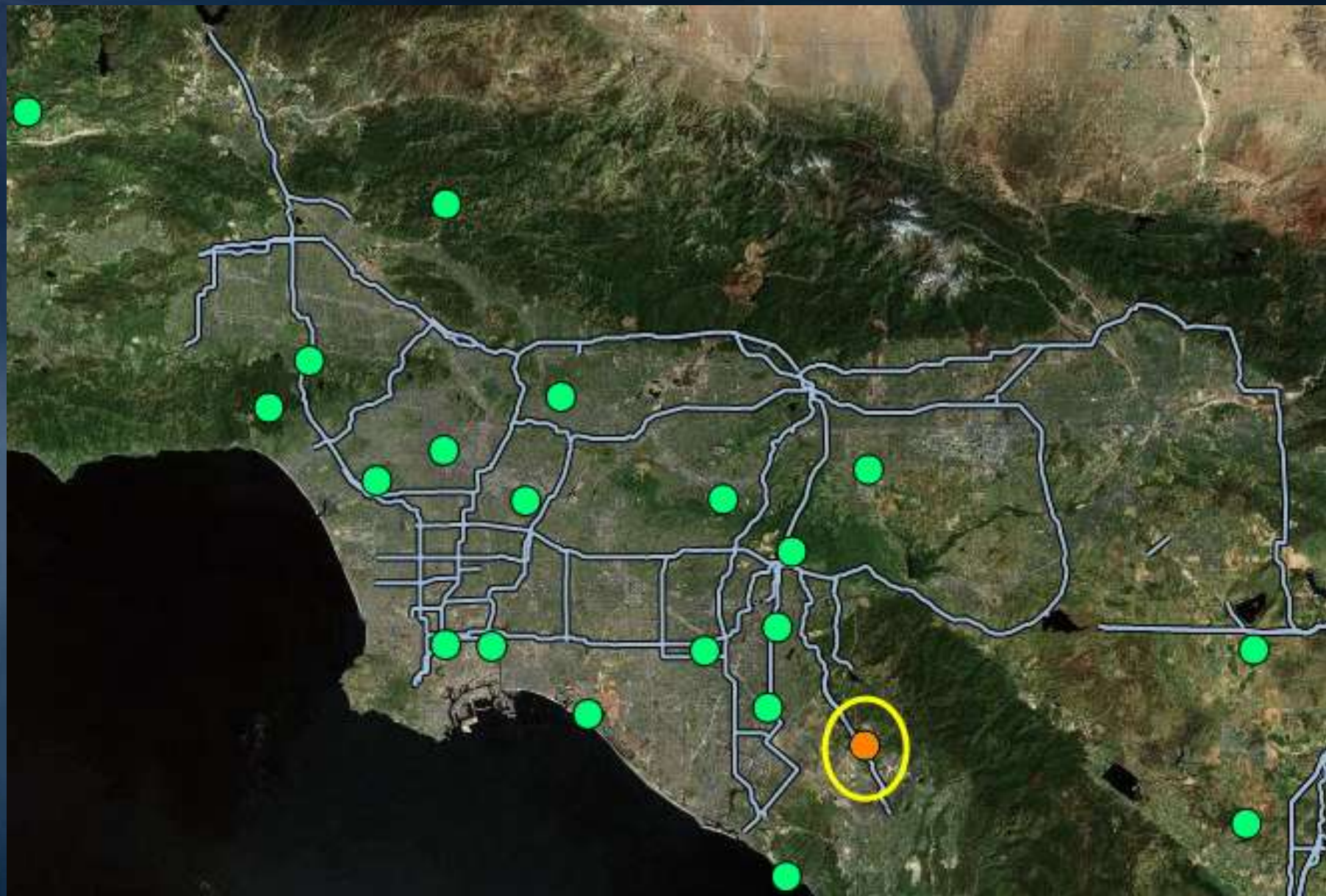
Filtering Map by: ALL Units: None

Refresh Alarms

Reload Map



0	Normal Operation
1	All Possible Alarms
111	Communications Error
211	Problem on Sync
311	Value out of QA Range
411	Source Fail
511	Problem on import
611	Warning Alarm
711	Threshold Exceeded
710	Canary Stale Event Alarm
730	Canary Event time out
811	Canary Event
911	Critical Alarm
912	Export CSV Alarm
1011	Node Inactive



## Site X



Parameter 1

Parameter 5

Parameter 4

Parameter 6

Parameter 2

Parameter 3

### Site X - [REDACTED]



Upper Limit

Lower Limit

Update


Clear


### QA QC Tool

This tool is used to set or clear QaFail flags in the database.

This tool defines the Lower and Upper limits of good data. All values outside this range will be flagged as QaFail.

-  Bad Data
-  Upper Limit
-  Good Data
-  Lower Limit
-  Bad Data

Start Date:  

End Date:  



Plot Chart



	A	B
1	<b>EVTDATE</b>	<b>PARAMETER 6</b>
634	9/30/2011 5:40	2.48
635	9/30/2011 5:45	2.48
636	9/30/2011 5:50	2.46
637	9/30/2011 5:55	2.47
638	9/30/2011 6:00	2.52
639	9/30/2011 6:05	2.5
640	9/30/2011 6:10	1.69
641	9/30/2011 6:15	0.83
642	9/30/2011 6:20	1.38
643	9/30/2011 6:25	2.54
644	9/30/2011 6:30	2.48
645	9/30/2011 6:35	2.52
646	9/30/2011 6:40	2.5

## Identify:

- Power Outage
- Instrument Failure
- Communication interruption
- **Potential contamination**

Corrective action / Response



# ITSP Milestones for Next Period

- **Complete upgrade of Windows Vista to strengthen security**
- **Complete requirements and system definition for the new Lease Management System**
- **Conduct final system acceptance for the Water Quality Monitoring and Rapid Event Detection System**

