

ENTERPRISE ODMS PROJECT UPDATE

Board of Public Utilities
June 12, 2017

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Presentation Overview

1. Background
2. Project Overview
3. Accomplishments
4. Recommendations

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Background

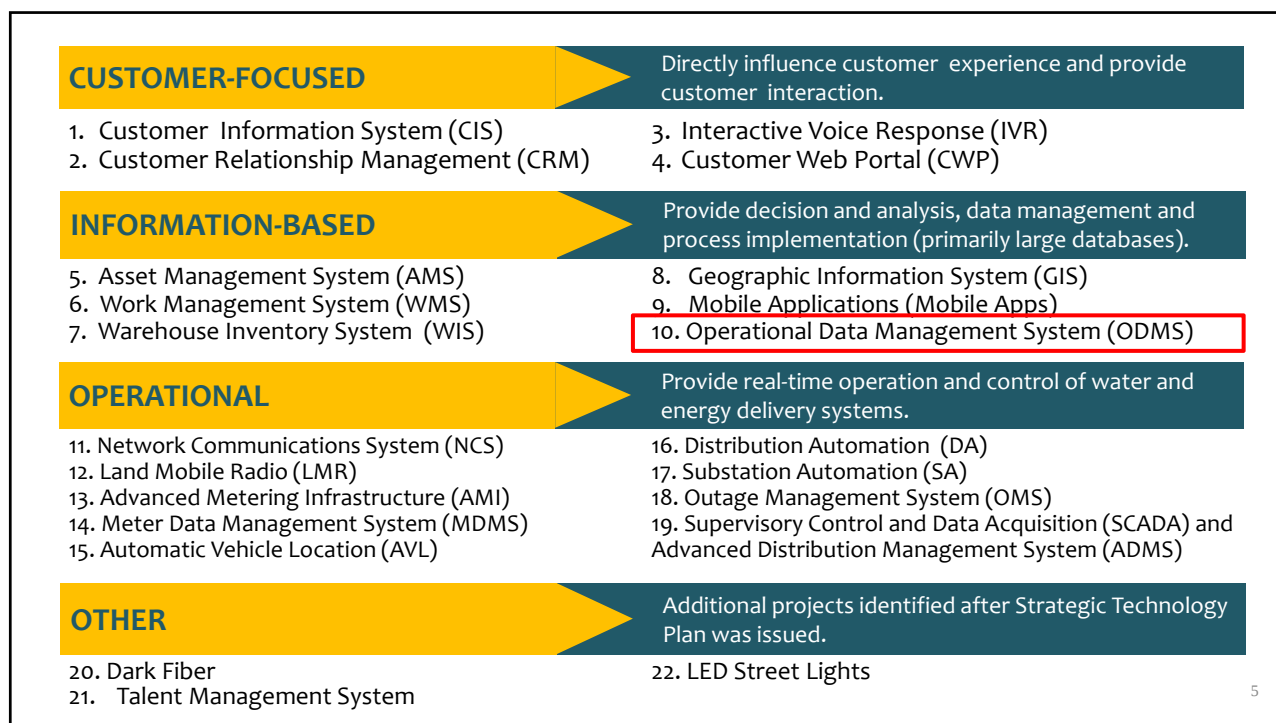
DATE	DESCRIPTION	Status
10-7-2015	OT/IT Gate 0 Presentation	Approved
2-17-2016	OT/IT Approved Gate 1	Approved
5-9-2016	Board Presentation / Action - Work order approval • OSIssoft, LLC agreement in the amount of \$2,079,832; • PSA with Industrial Evolution in the amount of \$698,000; • Work Order No. 1619634 in the amount of \$3,557,000	Approved
5-18-2016	AGM/GM Update	Inform
8-17-2016	OT/IT Project Update	Inform
8-31-2016	Project kickoff meeting	Inform
11-28-2016	Board Presentation / Action – Purchase of OSII Integrator with Open Systems International	Approved
3-15-2017	OT/IT Project Update	Inform
6-12-2017	Board Presentation/Recommendations – Update, contract extension & year 2 plan	Pending

3

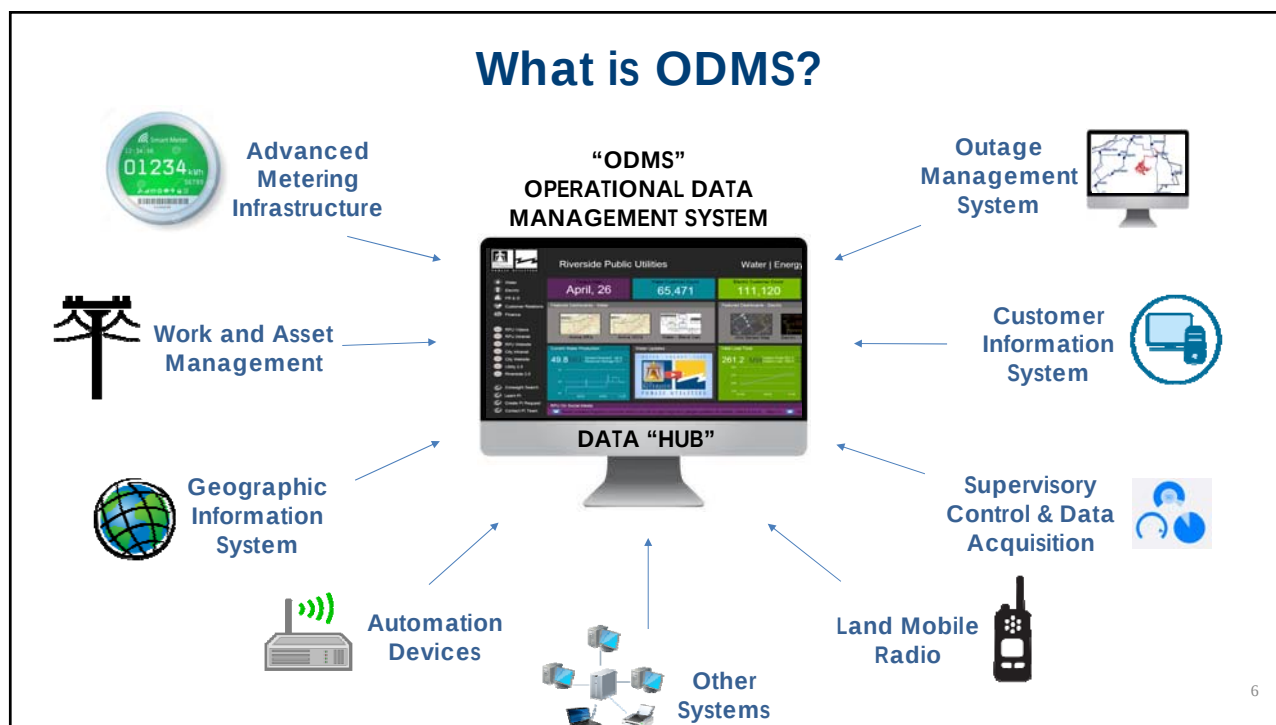
Strategic Technology Plan

1. In 2015, the Strategic Technology Plan was completed and adopted by the Board of Public Utilities.
2. The Plan outlines the strategic technology vision recognizing the crucial role of technology in improving operational efficiency, reliability, and customer satisfaction.
3. Twenty-two advanced operational technology projects were outlined in the Plan, including the Operational Data Management System (ODMS).

4



5



6

Phase I Project Scope

1. Procure hardware and software to support the PI system
2. Deploy the PI system
3. Integrate 10 data sets/systems
4. Develop dashboards
5. Provide training

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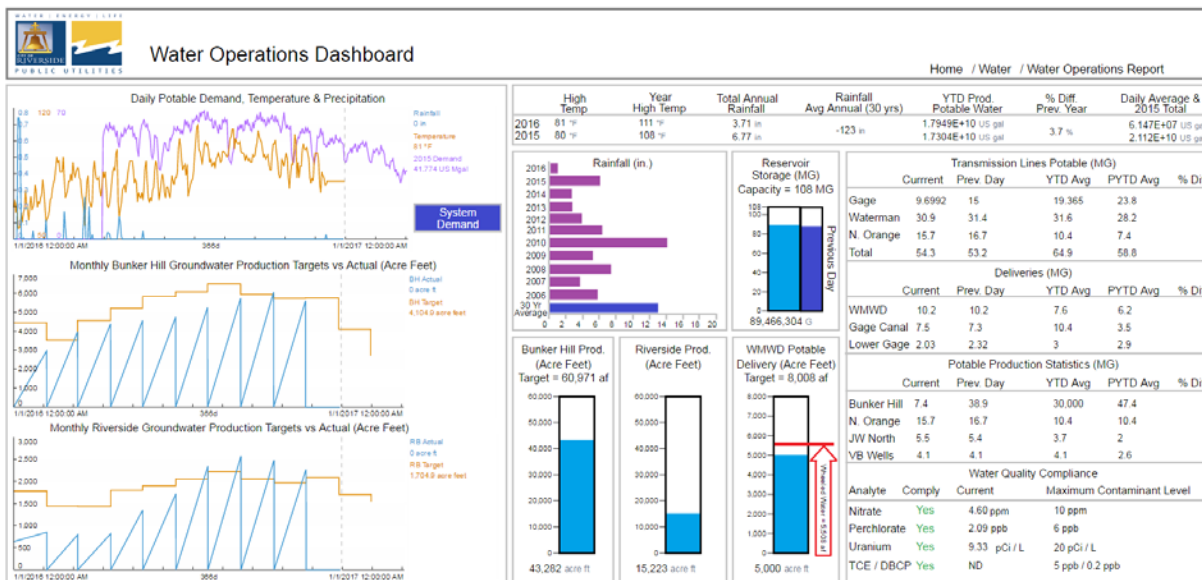
7

Phase I Project Systems/Data

No.	System	Data/Description
1	Supervisory Control and Data Acquisition (SCADA) - Water	Water production data
2	Utility Work and Asset Management (UWAM)	Year-to-date and lifetime cost of wells, well information, active service request and work orders
3	WaterTrax	Water quality data
4	Grid Sensors	Electric circuit fault data
5	Weather (California Irrigation Management Information System, Riverside Airport Weather Station and UCR Weather Station)	Consolidated weather data including pressure, relative humidity, temperature, and wind direction
6	Substation Monitoring Devices	Test results from relay data, fluid levels, gas variables, moisture variables and alarms
7	Supervisory Control and Data Acquisition (SCADA) - Electric	Electric operations data
8	Outage Management and Reporting (OMAR)	Outage data including location, cause, total customers impacted, total minutes out of power, and restoration times
9	Land Mobile Radio (LMR)	Vehicle radio location
10	SAS	Analytics software used by Power Resources. All data pushed to SAS, primarily Electric SCADA data.
11	Synergi	Analytics software used by Electric System Planning. All data pushed to Synergi, primarily Electric SCADA data.
12	ArcGIS	All data made available to be accessed through ArcGIS

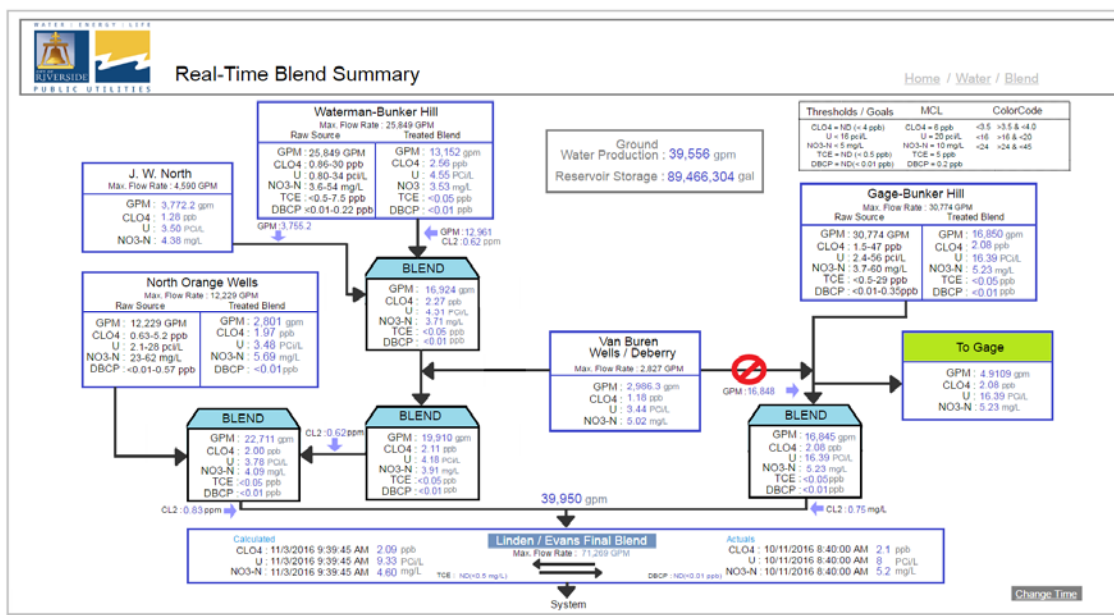
8

Water Operations Dashboard



9

Real-Time Blend Summary Dashboard



10

PI Homepage



11

Benefits of ODMS

1. Increased visibility into system and assets.
2. Better enterprise-wide decision making driven by real-time data.
3. Automation of manual workflow processes.
4. Reduced risks and costs associated with potential equipment failure.
5. Optimized operational processes.
6. Improved asset maintenance and field workforce management.

12

Phase II New Integrations

No.	Dataset/System	Description
1	Customer Information System (CIS)	Automate customer and billing processes / reports / dashboards
2	Market Operations/Settle Core	Automate marketing processes / reports / dashboards
3	RPU Finance	Automate financial processes / reports / dashboards
4	Electric Operations	Automate operations processes / reports / dashboards
5	Water Field	Automate operations processes / reports / dashboards

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13

Phase II Maintenance

No.	System	Data/Description
1	Supervisory Control and Data Acquisition (SCADA) - Water	Water production data
2	Utility Work and Asset Management (UWAM)	Year-to-date and lifetime cost of wells, well information, active service request and work orders
3	WaterTrax	Water quality data
4	Grid Sensors	Electric circuit fault data
5	Weather (California Irrigation Management Information System, Riverside Airport Weather Station and UCR Weather Station)	Consolidated weather data including pressure, relative humidity, temperature, and wind direction
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14

Phase II Project Budget

PROJECT BUDGET BREAKDOWN	PROJECT BUDGET
Labor/OH	1,045,000
Internal RPU Labor	-
City IT Labor	200,000
OSI Pi Consultants / Contractors (3)	724,000
Other Professional Services	121,000
Equipment & Materials	225,000
Hardware & Software	225,000
Services	80,000
OSI Soft Enterprise Agreement - Software	-
OSI Soft Enterprise Agreement - Services	-
Training, Workshops & Technical Support	80,000
Open Systems Integrator	-
Total	1,350,000

15

Recommendations

That the Board of Public Utilities:

1. Approve the amendment to the Professional Services Agreement with Industrial Evolution, Inc. for one additional year and authorize the City Manager or his designee to execute the agreement with an increase of \$724,000 for a total amount of \$1,422,000; and
2. Approve the increase to Work Order No. 1619634 in the amount of \$1,350,000 for Phase II of the Operational Data Management System Project, bringing the overall project and work order total to \$4,907,000.