CASE STUDY

Water Service Operations Dashboard

DRMcNatty developed a customized central dashboard with powerful tracking and drill-down capabilities for the specific organizational needs of San Diego County Water Authority. Real-time data, custom alerts, and secure collaboration are all built in to deliver reliable, accurate results.

PROJECT AT A GLANCE

COMPANY



SERVICES PROVIDED

Custom Designed Dashboard Hosting

TECHNOLOGIES USED

Web Framework Ruby on Rails Database PostgreSQL Charting Library Highcharts

Overview

The Water Authority delivers water through more than 300 miles of pipeline to 6 cities, 17 special districts and to Marine Corps Base Camp Pendleton. Three times a day, with over 100 pipeline connections, the Water Authority evaluates the flow rate at each of these connections and establishes the demand needed for each of its clients. The reporting system is based on Excel spreadsheets and the data is tabulated twice a day and sent to key individuals, apprising them of current operating demands.

Challenges

San Diego County Water Authority needed a centralized database in order to access the data via a Web-based dashboard and for maintaining a historical record. In addition, they needed to display information related to the Water Authority pipeline operations that will also allow "drill-down" functionality to display specific information as well as provide alerts and reports to stakeholders via email. It must use and store the data in their existing PostgreSQL database.

Solution

DRMcNatty worked closely with San Diego County Water Authority's project and IT departments to assess and determine the requirements of the WSO Dashboard. We gathered existing data into a prototype that we internally tested and evaluated. The WSO Dashboard was presented to the user groups for evaluation and any enhancements were documented and refined. A secured prototype environment was hosted by DRMcNatty, which allowed access to the Water Authority users. The user groups had access to this entire process as the Dashboard and reports were vetted and refined. Historical data was also tested.

Results

Within a short time frame, DRMcNatty developed the WSO Dashboard and complemented this with community modules to provide a secure and flexible system. The dashboard is fully integrated so that San Diego County Water Authority has the option to create new reports, or modify existing ones. This is the type of flexibility we provide to our water systems clients that is well appreciated.

The administrative interface of the WSO Dashboard allows for key administration to adjust the frequency of reports, customize report triggers and the administration of reports. By using Excel as an environment to extract warehouse data, the client can distribute verified data via internal email to produce graphic comparison reports that all share a common data source.

This same data can also be accessed through a unique dashboard element that is actually a visual schematic of the system and by hovering their pointers above a key connection on the graphic, allows them to view a live data summary of the flow rate and other key values they need to monitor.





877-367-7990 info@drmcnatty.com 26300 La Alameda, Ste. 250 Mission Viejo, CA 92691 www.drmcnatty.com