

## **ENHANCING THE VALUE OF WATER MONITORING DATA THROUGH DATA INTEGRATION AND COLLABORATION**

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### **ABSTRACT**

This presentation will discuss the preliminary results of a regional project that will bring together diverse organizations and data sets to improve our understanding of water quality and pollution abatement strategies from an integrated watershed perspective in the San Diego area.

The San Diego Regional Water Quality Control Board (SDRWQCB) collects and maintains a extensive repository of information on various aspects of water quality. Examples include sources and types of contaminants, abatement actions, regulatory decisions, best management practices (BMPs), municipal stormwater permit reports, bioassessment monitoring, and the Clean Water Act Section 401 project data. Other watershed stakeholders (environmental NGOs, government agencies, industry) also collect and maintain numerous data sets for their own purpose.

All this data are being stored, and used, almost exclusively within its programmatic or regulatory “silo” with little integration between programs or organizations. Traditional storage methods, operational processes, and watershed governance models make it very cumbersome and expensive to share data or enable collaboration. This has posed a challenge to the SDRWQCB and community it serves. First, the data is not readily accessible to everyone. Second, it becomes impossible to use diverse data sets in any integrated or holistic way from an overall watershed perspective. And finally, such a program must become sustainable, economically and organizationally, over the long term to earn the trust and credibility of all stakeholders.

We will discuss how leadership, stakeholder empowerment, new watershed governance models, and advanced web-based technologies can cost-effectively address these challenges. The ultimate objective is to shift all stakeholders’ collective emphasis from studying ambient conditions to the causes of pollution, leading to regulations, stakeholder behavior and abatement strategies that address pollution at the source.

### **KEY WORDS**

Pollution abatement, integrated watershed management, stakeholder collaboration