



CALIFORNIA

Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS



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Today

- CIWQS Review Panel Recommendations
- Status of Implementation
- Proposed Next Steps

- Input from CIWQS Steering Committee
 - Identify what's working
 - Identify challenges

Initial Recommendations

May 2007

- Reduce the project's scope
- Restructure CIWQS project management
- Validate the system requirements
- Rebuild key constituencies
- Address data quality issues
- Produce key reports
- Improve user interfaces

Final Recommendations

May 2008

- Address data quality issues
- Produce key reports
- Improve user interfaces
- Develop a formal deployment plan
- Develop system demonstration tests
- Build interface with EPA's Integrated Compliance Information System
- Fund CIWQS at an appropriate level

Reduce the project's scope

- An information management system to track permit and compliance information
 - Case workers
 - Regional Board Managers
 - State Board
- eSMR2
- Internet accessible public reports

Reduce the project's scope

- Continue focus on core regulatory programs
- Separate module for stormwater
 - Meet different business needs
 - Simplify core module
 - Significantly improve data quality
- New module for recycled water
 - Legislative mandate (AB1481)
 - Collateral benefits

Restructure CIWQS project management

- Initial panel recommendations:
 - Restructure CIWQS's project management
 - Rebuild key constituencies
- Water Board response
 - Agency Information Management Strategy
 - Governance structure established
 - Bring in internal and external stakeholders
- Takes time to do it right!!

Governance –

➤ Internal

- Management (MCC)
- Program RTs
- Business Rules Team
- Coordinators
- Reports
- Discoverer
- Data Entry Subcommittee
- Cleanup Committee
- eSMR2 Internal Staff

➤ Public

- SSO
- Public Reports
- eSMR
- Stormwater
- Steering Committee

Data Quality

Address data quality issues

- Data Quality Challenges
- Review Panel Recommendations
- Progress Addressing Recommendations

CIWQS Data Quality Challenges

- Data migration problems during transition from previous system
- Storm Water module operation – duplicate records
 - Storm Water module separating from CIWQS
- Business rules – incomplete or not followed
- No Quality Assurance Plan
- No routine data entry quality checks
- Insufficient Training

Review Panel Recommendations

- Perform data clean-up
- Complete business rules
- Develop standard data entry procedures with quality control checks
- Develop QA/QC process that addresses entire data flow
- Develop a formal system engineering process – IT considerations

Perform Data Clean Up

- Process

- Formal Data Clean Up Committee Initial focus on violations and enforcement
- MMP Initiative

- Results!

- 25,000 records corrected
- Violations Module: 5,952 record.
- Regulatory Module: 6,221 records

Complete Business Rules

- All modules have business rules
- All business rules reviewed annually
- Business rules accessible within CIWQS
- Document control procedure implemented
 - Revision control
 - Format
 - Approval process

Develop Standard Data Entry Procedures

- All modules have staff workbooks
- All workbooks reviewed annually
- Quality control checks
 - Error checking
 - Data entry wizards
 - Data of known and documented quality– not yet

Statewide CIWQS Data Quality Audit (2010)

- Verify data entry accuracy of random sample
 - Transcription from source data
 - Business rules followed
- All State and Regional Board offices audited
- Limit scope to recent data – prior six months
- Results will inform decision regarding routine independent review of data entry accuracy

Training

- Expand training tools for staff
 - Webinars
 - Recorded courses available online
- Implement mandatory training for data entry staff (2010)
 - Full course for new staff
 - Refresher course for experienced staff

Develop QA/QC Process for Entire Data Flow

- CIWQS Quality Assurance Plan finalized Dec 2009
- 2010 Update based on audit findings

Develop Formal System Engineering Process

- Standard Procedures Document describes process
 - New releases
 - Reporting, tracking, and resolving bugs
 - Helpdesk support
- Currently being updated

Reports

Panel Recommendations

Prioritizing and Scheduling

- List of prioritized reports [Complete]
- Report production schedule
 - On agenda for Sept. 23 Steering Committee Meeting

Panel Recommendations

Significant Development

Significant development of prioritized reports

- 1) Summary SMR Report
- 2) Detailed SMR Report
- 3) Summary ACL Report
- 4) Detailed ACL Report
- 5) Dismissed Violations Report
- 6) Summary Inspection Report
- 7) Detailed Inspection Report
- 8) General Order/Enrollee Report
- 9) Sewage Spill Incident Maps
- 10) Penalty Project Report (in progress)

Run Reports

- **AFBS**
 - [Aq Waiver Billing Problematic Report](#)
 - [Aq Waiver Pre-Billing Invoice Report](#)
 - [Annual Billing Problematic Reports](#)
 - [Annual Pre-Billing Invoice Report](#)
 - [Stormwater Billing Hold Report](#)
 - [Stormwater Quarterly Billing Problematic Report](#)
 - [Stormwater Quarterly Pre-Billing Invoice Report](#)
- **At-A-Glance**
 - [Facility At-A-Glance](#)
 - [Facility-At-A-Glance \(public\)](#)
 - [Regulatory Measure At-A-Glance](#)
- **Enforcement**
 - [ACL Report \(public\)](#)
 - [Enforcement Actions by Region/Program/Action \(public\)](#)
 - [Enforcement Orders \(public\)](#)
 - [Violations with/without Enforcement \(public\)](#)
- **Facilities**
 - [Interactive Regulated Facilities Report \(public\)](#)
- **Financial**
 - [Accounts Receivable Report](#)
- **Inspection**
 - [Inspection Detail Report](#)
 - [Inspection Summary Report](#)
- **Misc.**
 - [Detailed SMR Search](#)
 - [General Order Report \(public\)](#)
 - [Interactive Expired NPDES Report \(public\)](#)
 - [Summary SMR Report \(public\)](#)
- **SSO**
 - [Interactive SSO Report \(public\)](#)
 - [SSO Incident Map - Private Laterals](#)
 - [SSO Incident Map - Public Collection Systems](#)
- **SWARM**
 - [Interactive SWARM Report \(public\)](#)
 - [Storm Water Annual Reports Module - Reports](#)
- **Violations**
 - [Detailed Violation Report](#)
 - [Dismissed Violations Report by Region/Program/Violation Type \(public\)](#)
 - [Interactive Violation Report by Region/Program/Violation Type \(public\)](#)
 - [MMP Report \(public\)](#)
 - [Summary Violation Report](#)

31 reports

- Summary drills to Detail
- Links to Glossary
- Includes key definitions and search tips
- Printable
- Exportable
- Pop ups when multiple values exist

Improved web site

Fact sheets

Training

Panel Recommendations

Ad Hoc Reports

- Methods for ad hoc report production implemented and evidence that users are creating their own reports with these tools provided
 - Flat file “data warehouse”
 - New Regulatory Measures Business Area in Discoverer
 - Report of NPDES Permits (including storm water) in Excel

Panel Recommendations

Validity of Database Design

- Reports used to demonstrate validity of database design
 - Reports now exist from every CIWQS Area

Next Steps

- Enhance new Business Area
- Train Water Board staff to build their own Business Areas
- Implement Report schedule
- Expand data warehouse
- Coordinate stormwater reporting

Improve User Interfaces

Improvements

➤ Wizards

- Enforcement Action
- Violations from Inspection
- Inspection
- Enforcement Projects and Liabilities

Entry of an inspection record now takes about 2 minutes instead of 10!

Improvements – Screen Changes

➤ Streamlining Data Entry

- Drop down menus
- Enforcement Tab
- Violation Module

Eliminated an unnecessary tab

Improvements - Tools

- SMR Receipt Tool
 - Download to Excel and upload to CIWQS
- My Records Page
 - One-stop shop of workload
 - Can also help with data quality

User Interface

- Next Maintenance Contract
 - Regulatory Measure Wizard
 - Violation Wizard
 - Continued drop down menu cleanup

Final Recommendations

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Build interface with EPA's Integrated Compliance Information System

- eSMR2 rollout
- DMR data to US EPA (eSMR2.5)
 - Issue paper on approach
 - Applying for EPA grant
 - Begin FY10 - 11

Fund CIWQS at an appropriate level

➤ Waste Discharge Permit Fees

- 8 PYs (State Board)
 - 1 - Coordination
 - 2 - Reports
 - 1 - Quality Assurance
 - .5 – Data Clean up
 - 1.5 - eSMR2; eSMR2.5
 - 1 – Training
 - 1 – SSO module
- DIT and RB staff
- Contract (\$350,000/yr)
 - Maintenance & Enhancements eSMR2 and core
 - eSMR 2.5

Reductions:

- 15% furlough
- Contract \$\$
- SSO staff?

Moving Ahead

- Continue user groups
- Improve data quality & data quality systems
- More reports
- Continue fixes and enhancements
- eSMR 2 training and implementation
- eSMR2.5

- Feedback?