

# STATE OF COLORADO

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## Colorado Water Conservation Board Department of Natural Resources

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TO: Colorado Water Conservation Board

FROM: Dan McAuliffe, Deputy Director  
Susan Lesovsky, Database Coordinator

DATE: November 10, 2008

SUBJECT: **Agenda Item 27k, November 18-19, 2008 Board Meeting**  
**Water Supply Planning & Finance Section –**  
**En-bloc Non-Reimbursable Investments**  
**Water Information Resources Center and the Data Harvesting Initiative**

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### Introduction

The CWCB staff is requesting funding for the Water Resources Information Center (WRIC) and the Data Harvest Initiative (DHI) in the amount of \$550,000 to be used to (1) cover operating costs of the WRIC, including office/training space, telephone and computer support for five to seven years, (2) adopt and implement a standard for sharing/harvesting data among document management systems, (3) integrate the CWCB and Colorado State University's (CSU) systems using the above standard, (4) join with other interested water entities who want to share their water-related information, and (5) provide funding for furthering CSU's digitization of documents, such as the Delph Carpenter collection.

### Recommendation

Staff recommends that the Board request the General Assembly authorize \$550,000 from the Construction Fund to be appropriated to the Department of Natural Resources for allocation to the CWCB to continue the Water Resources Information Center and to implement the Data Harvest Initiative.

### Background

The WRIC was authorized by the General Assembly in 1993 to "assemble and make available to water users in Colorado a consolidated water resources information center" (Sec. 6, HB 93-1273). In November of 2000, the CWCB secured office space at 1580 Logan Street (the same building where the Colorado Water Congress and the Colorado Foundation for Water Education are located) to house the WRIC's bound volumes. Furthering the goal of making a truly accessible and useful WRIC, the CWCB Imaging Project was initiated in 1999 with the adoption of SB99-173, which provides online access to imaged, water-related documents.

The Data Harvesting Initiative (DHI), a joining of CWCB and CSU's document management systems, will provide statewide access to the myriad of water-related records, including: publications, maps, Board Meeting audio files, reports, water right decrees, historical documents (Delph Carpenter papers and other collections), flood insurance studies and other water information. The DHI is an extension of the WRIC and the CWCB Imaging Project.

A study was conducted by Solany™ Document Management to investigate the feasibility of joining document management systems, providing the ability to search multiple water information collections at one time. The findings and recommendations are available in a final report entitled "*Colorado Water Conservation Board's Data Initiative: Design Recommendations & Cost Submission*" (the Report).

To continue the Water Resources Information Center and to implement the Data Harvest Initiative, funding is hereby requested for the following items (see attached Project Data Sheet and Table):

#### Operations of Office/Training Space

In order to provide an accessible, up-to-date training center, as well as access to bound and imaged documents, the CWCB will need to provide adequate space and equipment for these needs. The CWCB Space committee estimates the costs of lease space (at ~\$60,000/year) and equipment to be \$385,000 over the next 5 to 7 years.

#### Adopt and Implement a Standard for Sharing/Harvesting Data among Document Management Systems

Work with CSU and other water entities to generate interest in the DHI, and to define the common data to be shared, using the standard put forth in the Report (the Dublin Core Metadata Initiative and XML). Prepare the CWCB's system for integrated search and retrieval functionality by translating all existing data and performing database enhancements as necessary. The Report estimates this phase could be performed within 6 months, at a cost estimated at \$75,000.

#### Integrate the CWCB and Colorado State University's (CSU) Systems Using the Standard

Prepare CSU's system for integrated search and retrieval functionality by translating all existing data and performing database enhancements as necessary. Integrate the systems so that CSU's collection is searchable and retrievable from CWCB's system and vice versa. The Report estimates this phase could be complete within 3 months, at a cost of \$40,000.

#### Provide Funding for Furthering CSU's Digitization of Documents

CSU has been working to digitize as much of their water information as possible, now available through the Water Resources Archive. They have received grants from various donors, including the CWCB. The CWCB has received a list of outstanding items from CSU, which outlines the collections still to be digitized. This list includes the Delph E. Carpenter papers, the Groundwater Data and McComb Big Thompson Flood collections, records of the Poudre River Trust and the papers of Robert E. Glover, James L. Ogilvie, Ralph L. Parshall and Gilbert G. Stamm. The CSU and CWCB staff estimates the digitization could be performed within a year, at the cost of \$50,000.

#### Join with Other Interested Water Entities Who Want to Share their Water-related Information

The CWCB staff anticipates other water entities being interested in the DHI, where they have the ability to search multiple water information collections from their system while providing their information in return. The Report estimates the integration of each entity to cost \$10,000, which would be funded by interested entities (not by the CWCB).

**Cost Summary**

<b>Task</b>	<b>Estimated Cost</b>
Operations of Office/Training Space	\$385,000
Adopt and Implement a Standard for Sharing/Harvesting Data among Document Management Systems	\$75,000
Integrate the CWCB and Colorado State University's (CSU) Systems Using the Standard	\$40,000
Provide Funding for Furthering CSU's Digitization of Documents	\$50,000
<b>Total</b>	<b>\$550,000</b>

**Recommendation**

Staff recommends that the Board request the General Assembly authorize \$550,000 from the Construction Fund to be appropriated to the Department of Natural Resources for allocation to the CWCB to continue the Water Resources Information Center and to implement the Data Harvest Initiative.

## Water Project Construction Program – Project Data Non-Reimbursable Investment

**Grantee:** Colorado Water Conservation Board

**County:** Statewide

**Project Name:** Water Resources Information Center and the Data Harvesting Initiative

**Project Type:** Operational Funds and Digital Information Access

**Drainage Basin:** Statewide

**Water Source:** N/A

**Total Study Cost:** \$550,000

**Funding Sources:** CWCB Const. Fund

**Type of Grantee:** State Government

**CWCB Non-Reimbursable Inv.:** \$550,000

### Summary

The WRIC was authorized by the General Assembly in 1993 to “assemble and make available to water users in Colorado a consolidated water resources information center” (Sec. 6, HB 93-1273). In November of 2000, the CWCB secured office space at 1580 Logan Street (the same building where the Colorado Water Congress and the Colorado Foundation for Water Education are located) to house the WRIC’s bound volumes. Furthering the goal of making a truly accessible and useful WRIC, the CWCB Imaging Project was initiated in 1999 with the adoption of SB99-173, which provides online access to imaged, water-related documents.

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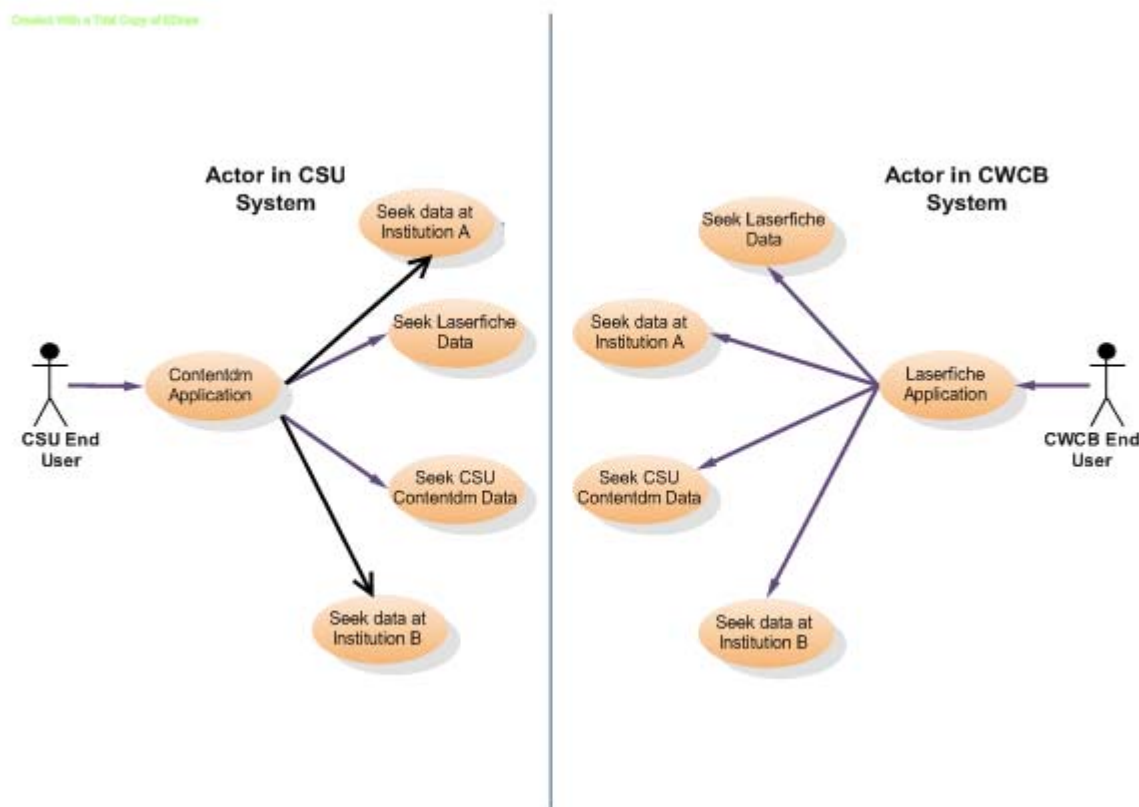


Figure 1: User accessing multiple systems through their "home" document management system.