

Schedule 13 Funding Request for the 2013-14 Budget Cycle

Department: Natural Resources
Request Title: Division of Water Resources Satellite Monitoring System
Priority Number: R-4

Dept. Approval by: Will H. Levin 10/15/2012
 Date
OSPB Approval by: [Signature] 10/23/12
 Date

- | |
|--|
| <input checked="" type="checkbox"/> Decision Item FY 2013-14 |
| <input type="checkbox"/> Base Reduction Item FY 2013-14 |
| <input type="checkbox"/> Supplemental FY 2012-13 |
| <input type="checkbox"/> Budget Amendment FY 2013-14 |

Line Item Information		FY 2012-13		FY 2013-14		FY 2014-15
		1	2	3	4	6
	Fund	Appropriation FY 2012-13	Supplemental Request FY 2012-13	Base Request FY 2013-14	Funding Change Request FY 2013-14	Continuation Amount FY 2014-15
Total of All Line Items	Total	399,857	-	399,857	100,000	100,000
	FTE	2.0	-	2.0	-	-
	GF	194,968	-	194,968	-	-
	GFE	-	-	-	-	-
	CF	204,889	-	204,889	100,000	100,000
	RF	-	-	-	-	-
	FF	-	-	-	-	-
(8) Water Resources Division, Satellite Monitoring System	Total	399,857	-	399,857	100,000	100,000
	FTE	2.0	-	2.0	-	-
	GF	194,968	-	194,968	-	-
	GFE	-	-	-	-	-
	CF	204,889	-	204,889	100,000	100,000
	RF	-	-	-	-	-
	FF	-	-	-	-	-

Letternote Text Revision Required? Yes: No: If yes, describe the Letternote Text Revision:

Cash or Federal Fund Name and COFRS Fund Number: Satellite Monitoring System Cash Fund (Fund #166)

Reappropriated Funds Source, by Department and Line Item Name:

Approval by OIT? Yes: No: Not Required:

Schedule 13s from Affected Departments:

Other Information:



DEPARTMENT OF NATURAL RESOURCES

John W. Hickenlooper
Governor

*FY 2013-14 Funding Request
November 1, 2012*

Mike King
Executive Director

11-1-2012

Signature

Date

Department Priority: R-4
Division of Water Resources Satellite Monitoring System

Summary of Incremental Funding Change for FY 2013-14	Total Funds	General Fund	Cash Funds	FTE
Division of Water Resources – Satellite Monitoring System	\$100,000	\$0	\$100,000	N/A

Request Summary:

The Division of Water Resources requests an increase of \$100,000 cash funds for the Satellite Monitoring System for fiscal year 2013-14. The request will help the Division meet increasing operational expenses including maintenance, technological improvements, and possibly an expansion of the system.

Brief Background

The Satellite Monitoring System line item in the budget of the Division of Water Resources supports satellite-linked water resource monitoring stations throughout the state. This system provides real-time stream flow information that is used by the Division, consumptive water users such as agricultural users, and other interested persons such as rafters and anglers. Stations record stream flow and transmit the information to a database housed at the Division of Water Resource's main office. Once in the database, the information is accessible via computer, telephone, and the Internet.

This line item is cash funded through voluntary fees from local water conservancy districts, water users, user associations, and municipalities pursuant to Section 37-80-111.5, C.R.S. The Division of Water Resources has fully expended the spending authority of the Satellite Monitoring System Cash Fund appropriation in each of the last several fiscal years for operation and maintenance purposes. However, excess revenue (that is, revenue in excess of current spending authority) is accruing in the Satellite Monitoring System Cash Fund account, resulting primarily from an effort by the Division to increase the number of cooperators paying the voluntary fees.

Anticipated Outcomes:

Increased spending authority will result in improved operations and maintenance on the existing system and functionally reliable equipment and gage infrastructure, leading to increased data accuracy and reliability; this, in turn, will ultimately lead to improved water management and water rights administration.

The Division will use the increased spending authority to help pay for the operations and maintenance on the system. This includes spare inventory for gage failures, support to maintain and repair hydrographic discharge measurement equipment due, and additional mileage to service the added gages, which are often located in very remote areas.

Stage sensing equipment utilizing older technology will be replaced with newer technology (radar water level sensors); similar replacements have already resulted in significantly improved stage data at mainstem South Platte and Arkansas River gages in eastern Colorado. On average 4-8 gage conversions will occur per year statewide.

The ability of hydrographers to visit gages at prescribed intervals due to increased mileage support will result in better definition of stage-discharge relationships, ultimately producing more accurate streamflow data for water rights administration decisions.

Older data collection platforms will be replaced on current schedules (every 8-10 years) rather than forcing the use of older technology platforms or platforms that do not operate reliably.

Assumptions for Calculations:

Costs for the necessary hydrographic and electronic equipment are estimated based on information from vendors that the Division uses on a regular basis. The current cost of specified supplies and materials considered consumable (batteries, solar panels, etc.) on an annual basis are those used by the Division's Hydrographic and Satellite Monitoring branch.

Consequences if not Funded:

The Division of Water Resources began operating the Satellite-Linked Monitoring System in 1985; the system has become one of the most important and integral tools for the administration and management of Colorado's water resources. The

data collected from over 500 stations are used by clients that include the Division of Water Resources personnel, other state and federal agencies including the Colorado Water Conservation Board and the United States Geological Survey, municipalities, canal companies, attorneys, and consulting engineers.

A large number of flow measurement locations are essential to the early flood warning system, low flow warning system, critical water rights, and interstate compacts. Failing to maintain this system could impact the Division's ability to meet its most basic function: the administration of water rights on a statewide basis. Streamflow data quality and accuracy would decrease due to fewer gauge visits for maintenance purposes, lack of spare equipment to replace problem equipment, increased gauge downtime, and fewer discharge measurements to keep stage-discharge relationships calibrated and accurate.

The Satellite Monitoring System reduces the cost of providing accurate water rights administration by avoiding the costs of additional FTE and operating expenses. If the Satellite Monitoring System is not maintained and expanded on a regular basis, additional field personnel would be required to take daily readings of gauge height for data collection purposes. Lack of adequate funding for this program could result in inefficient water allocation and potential injury to senior water rights leading to increased conflicts, potential intra and interstate court action and damage payments.

Cash Fund Projections:

See Attachment A on the next page.

Relation to Performance Measures:

DWR-1 Water Administration Effectiveness.

Current Statutory Authority or Needed Statutory Change: Section 37-80-111.5, C.R.S. No statutory authority needs to be changed to increase spending authority in the Satellite Monitoring System Cash Fund.

Attachment A – Cash Fund Projections

Cash Fund Name	Cash Fund Number	FY 2010-11 Expenditures	FY 2010-11 End of Year Cash Balance	FY 2011-12 End of Year Cash Balance Estimate	FY 2012-13 End of Year Cash Balance Estimate	FY 2013-14 End of Year Cash Balance Estimate
Satellite Monitoring	166	\$505,299	\$180,923	\$162,000	\$143,000	\$125,000