HB12-1278

Colorado Legislative Council Staff Fiscal Note

FINAL FISCAL NOTE

Drafting Number:	LLS 12-0710	**Date:**	July 3, 2012
Prime Sponsor(s):	Rep. Fischer Sen. Renfroe	**Bill Status:**	Signed into Law
		Fiscal Analyst:	Lauren Ris (303-866-3264)

TITLE: CONCERNING THE AUTHORIZATION OF A STUDY OF THE SOUTH PLATTE RIVER ALLUVIAL AQUIFER, AND, IN CONNECTION THEREWITH, MAKING AN APPROPRIATION.

Fiscal Impact Summary	FY 2012-2013	FY 2013-2014
State Revenue		
State Expenditures Cash Funds CWCB Construction Fund	$910,900	
FTE Position Change		
Effective Date: The bill was signed into law by the Governor and took effect May 30, 2012.		
Appropriation Summary for FY 2012-2013: See State Appropriations section.		
Local Government Impact: None.		

Summary of Legislation

The bill requires the Colorado Water Conservation Board (CWCB) in consultation with the State Engineer and the Colorado Water Institute, to conduct a comprehensive study to compile and evaluate available historical hydrologic data in the South Platte River Basin. The bill directs the CWCB to contract with the Colorado Water Institute, which will conduct the study independently. The results of the study must be reported to the General Assembly by December 31, 2013.

State Expenditures

In FY 2012-13, the bill is expected to increase expenditures in the Department of Natural Resources by $910,900. The study required in the bill can be broken down into 12 components. Each component and its associated cost is shown in Table 1 and is further explained below.

Table 1. Cost of Study Required Under HB 12-1278	
Study Component	**Cost**
1. Evaluate current laws and rules that guide water administration in the South Platte River Basin.	$61,000
2. Identify areas within the basin adversely impacted by high groundwater levels and evaluate the causes of these adverse impacts.	$40,000
3. Provide information to use as a basis for implementation of measures to mitigate adverse impacts in areas experiencing high groundwater levels.	$40,000
4. Determine the number and location of alluvial wells that are currently withdrawing ground water and wells that are curtailed from pumping.	No impact
5. Determine the number and location of existing artificial recharge facilities and the historical volume of water recharged.	No impact
6. Identify the historical volumes of water pumped for each high-capacity irrigation, municipal, industrial, or other non-exempt well.	No impact
7. Identify historical amounts of water leaving the state in excess of river compacts and the Platte River Cooperative Agreement of 1997.	No impact
8. Identify historical water deliveries to surface water rights.	$10,000
9. Evaluate groundwater level data available from existing observation wells and historical fluctuations of groundwater levels.	$7,400
10. Evaluate the South Platte Decision Support System's existing phreatophyte groundwater evapotranspiration module and the relationship between high groundwater levels and non-beneficial consumptive use by phreatophytes.	$2,500
11. Evaluate the number and size of augmentation plans, the impact of transbasin supplies, and the impacts of well pumping on surface streams.	$750,000
12. To what extent augmentation plans are preventing injury to other water rights holders, whether additional useage of alluvial aquifers could be permitted while protecting senior surface water rights, and whether the use of water in the basin could be improved or maximized.	No impact
TOTAL	**$910,900**

The first study component — determining whether the current administrative framework achieves the state's goals of protecting senior rights and maximizes the beneficial use of water of the state — will require contracting with a specialized independent source to ensure transparency and objectivity. The contractor will require $5,000 for travel and public meetings, and approximately 160 hours at $350 per hour, for a total of $61,000.

Addressing the second study component, delineating areas impacted by high groundwater levels and conducting a feasibility level evaluation, will require field work and analysis of geology, geography and water management facilities. It is estimated that this will require 320 hours at $125 per hour, for a total of $40,000.

The third study component, providing information to use as a basis for implementation of measures to mitigate adverse impacts in areas experiencing high groundwater levels, the South Platte Decision Support System (SPDSS), a water management modeling tool, will be used to model the mitigation strategies to determine if they work as intended. This will require approximately 320 contractor hours at $125 per hour for a total of $40,000.

No fiscal impact is expected for study components 4 through 7. The division already has access to the information required to address these issues and no additional resources are required.

Identifying historical water deliveries to surface water rights, the eighth study component, will involve a detailed analysis of current and historical water deliveries. This will require 80 hours of professional work at $125 per hour for a total of $10,000.

In order to use the groundwater data available from existing observation wells to evaluate the historical fluctuations of groundwater levels, study component nine, the division will have to digitize and standardize all groundwater data older than 40 years that is not currently available in digital format. This will require 120 hours of contractor time at $20 per hour and 40 hours of professional engineering time at $125 per hour for a total cost of $7,400.

To determine the relationship between high groundwater levels and nonbeneficial consumptive use by phreatophytes as required in the tenth study component, a contractor will use the SPDSS and will require 20 hours at $125 per hour for a total cost of $2,500.

The eleventh study component — evaluating the number and size of augmentation plans, the impact of transbasin supplies, and the impacts of well pumping on surface streams — will be accomplished by using the SPDSS. The estimated cost of this component could be as much as $750,000, assuming the need for 6,000 hours of modeling work at $125 per hour for a total of $750,000.

The last study component — to what extent augmentation plans are preventing injury to other water rights holders; whether additional useage of alluvial aquifers could be permitted while protecting senior surface water rights; and whether the use of water in the basin could be improved or maximized — is required in the bill to be completed without expending additional funds. The Colorado Water Institute will use existing tools and resources to address these issues with no additional impact. It should be noted however, that restricting the use of money may affect the scope of the study and the comprehensiveness of the results.

State Appropriations

In FY 2012-13, the Department of Natural Resources requires a CWCB Construction Fund appropriation of $910,900.

Departments Contacted

Natural Resources Judicial Law