SB14-195

Colorado Legislative Council Staff Fiscal Note

STATE and LOCAL FISCAL IMPACT

Drafting Number:	LLS 14-0925	**Date:**	April 21, 2014
Prime Sponsor(s):	Sen. Nicholson; Renfroe Rep. Singer; Sonnenberg	**Bill Status:**	Senate Local Government
		Fiscal Analyst:	Clare Pramuk (303-866-2677)

SHORT TITLE: SOUTH PLATTE RIVER POST-FLOOD PHREATOPHYTE STUDY

Fiscal Impact Summary*	FY 2014-2015	FY 2015-2016
State Revenue		
State Expenditures	**$149,920**	
Cash Funds	149,920	
FTE Position Change		
Appropriation Required: $149,919 - Department of Natural Resources (FY 2014-15)		

** This summary shows changes from current law under the bill for each fiscal year.*

Summary of Legislation

This bill, ***recommended by the Flood Disaster Study Committee***, requires the Colorado Water Conservation Board (CWCB) to commission a study to evaluate the growth and identification of phreatophytes in a portion of the watershed along the South Platte River affected by the September 2013 flood. The purpose of the study is to determine the relationship between high groundwater and nonbeneficial consumptive water use by phreatophytes, and to develop a cost analysis for removal of unwanted phreatophytes.

The CWCB may contract with Colorado State University's (CSU) Bioagricultural Sciences and Pest Management Program to conduct the study. CSU will coordinate with the Department of Agriculture and weed management specialists from affected local governments. The CWCB is required to prepare and present a progress report to a joint meeting of the House and Senate Agriculture committees during the 2016 session, and a final report to the General Assembly by December 31, 2016. The study is repealed July 1, 2017.

Background

Phreatophytes are deep-rooted plants that absorb water from the water table or the layer of soil just above the water. Examples of phreatophytes in Colorado include salt cedars or tamarisks, Russian olives, and cottonwoods.

State Expenditures

This bill is expected to increase cash fund expenditures by **$149,920 in FY 2014-15** for the CWCB in the Department of Natural Resources. Although the bill does not specify a funding source, the fiscal note assumes the CWCB Construction Fund will be used. Table 1 summarizes the study expenditures, which are detailed in Table 2.

Assumptions. The fiscal note is based on the following assumptions:

- the study area includes the South Platte River, Bear Creek, Clear Creek, Boulder Creek, St. Vrain Creek, Big Thompson River, Little Thompson River, and Cache Le Poudre River reaches from the foothills to confluence with the South Platte River;
- other than from 20 field sites, no new hydrologic data will be collected;
- contract work by CSU is estimated at $1,337 per week plus mileage and per diem;
- mileage is estimated at $0.62 per mile, per diem is estimated at $130;
- each trip is 150 miles;
- groundwater well installation costs are included in the contracting cost estimates;
- an indirect cost fee of 15 percent of total study costs; and
- satellite imagery and aerial photography are available from government sources at no cost to the project.

Table 1. Expenditures Under SB14-195

Cost Components	FY 2014-15	FY 2015-16
CSU contracting	$104,273	
Travel and per diem	26,092	
15 percent indirect costs for CSU	19,555	
TOTAL	**$149,920**	**$0**

Table 2. Expenditures by Task Under SB14-195

Task	Cost
1. *Evaluate a portion of the watershed along the South Platte River that was affected by the September 2013 flood to determine the relationship between high groundwater and non-beneficial consumptive use by phreatophytes.*	
a. Complete a literature review regarding flood hydrology and its impact on invasive phreatophyte spread and establishment. (4 weeks CSU contracting)	$5,347
b. Assemble existing data from non-study sources on groundwater elevation changes due to flooding. (4 weeks CSU contracting)	5,347
c. Create GIS layers of water table information and 2013 flood inundation, and using existing research, identify likely areas of new phreatophyte establishment (6 weeks CSU contracting, 2 days field work)	8,467
d. In consultation with local weed control agencies, select 20 sites of approximately 10 acres each for intensive field assessment of new phreatophyte growth. Install shallow groundwater monitoring wells at each site. (40 weeks CSU contracting, 20 weeks field work)	75,773
e. Analyze site information to determine short- and long-term effects of high water tables and inundation on the spread of invasive phreatophytes. (4 weeks CSU contracting)	10,695

Table 2. Expenditures by Task Under SB14-195 (Cont.)	
Task	**Cost**
2. Utilize compiled data to develop a cost analysis for the removal of unwanted phreatophytes along the South Platte River.	
a. Present findings to local communities and land owners to assess interest levels for phreatophyte removal. (3 weeks CSU contracting, 5 days traveling to communities)	$5,126
b. Improve the existing inventory of phreatophyte coverage using existing aerial and satellite images. Perform sufficient ground truthing (collect data in the field to compare with satellite images) to assure 80-90% accuracy. Create GIS layers showing phreatophyte density and land ownership as public or private. (8 weeks CSU contracting, 10 days field work)	12,925
c. Determine the most effective phreatophyte control strategies and costs for three to five categories of stand density, location, and land ownership. (2 weeks CSU contracting)	2,674
d. Design suitable re-vegetation standards and costs. (1 week CSU contracting)	1,337
e. Using updated inventory data, develop control project costs by county or watershed reach. (2 weeks CSU contracting)	2,674
TOTAL	**$130,365**

Beginning in FY 2014-15 through FY 2016-17, the CWCB staff will have an increase in workload to monitor the contract, track CSU's progress, and prepare reports to the General Assembly This workload will not require new appropriations.

Local Government Impact

Local weed control agencies in the study area will have a minimal increase in workload to advise the CSU contractors on potential study locations.

Effective Date

The bill takes effect upon signature of the Governor, or upon becoming law without his signature.

State Appropriations

For FY 2014-15, the Department of Natural Resources requires an appropriation of $149,920 from the CWCB Construction Fund with spending authority through the conclusion of the study.

State and Local Government Contacts

Agriculture Natural Resources Higher Education Law