

# STATE OF COLORADO

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## Colorado Water Conservation Board Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Jonathan Hernandez, P.E., Project Manager  
Kirk Russell, P.E., Chief  
Finance and Administration Section

DATE: January 17, 2014

SUBJECT: **Agenda Item 15a, January 27-28, 2014 Board Meeting**  
**Finance – New Water Project Loans**  
**Boxelder Basin Regional Stormwater Authority – County Road 52**  
**Improvements Project**

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John W. Hickenlooper  
Governor

Mike King  
DNR Executive Director

James Eklund  
CWCB Director

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### Introduction

The Boxelder Basin Regional Stormwater Authority (Authority), acting by and through its Water Activity Enterprise, is requesting a loan for the County Road 52 Improvements Project (Project). This Project is one of three projects to be concurrently constructed by the Authority for regional flood control improvements on Boxelder Creek. The total Project cost is estimated to be \$1,850,000. The Authority is requesting a loan from the CWCB for approximately 40% of Project costs. See attached Project Data Sheet for a location map and a project summary.

### Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$818,100 (\$810,000 for project costs and \$8,100 for the 1% Loan Service Fee) to the Boxelder Basin Regional Stormwater Authority, acting by and through its Water Activity Enterprise, for the County Road 52 Improvements Project from the Construction Fund. The loan terms shall be 15 years at the municipal middle income interest rate of 2.50% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Additionally, Staff recommends the following contract condition:

The Authority will not seek, and CWCB will not disburse, loan funds until the Authority has the right of possession to all property necessary for the East Side Detention Facility Project (CWCB Loan Contract No. C150352). If land is to be acquired through condemnation, this will be evidenced by an Order of Possession. If land is to be acquired through negotiated real estate contract(s), this will be evidenced by a binding real estate contract between the Authority and the property owner.

## **Background**

In 2005 the communities of Fort Collins, Wellington, Timnath, Windsor, and Larimer County formed an alliance to develop a regional solution to mitigate the flood hazard posed by Boxelder Creek. The Boxelder Creek watershed covers 265 square miles from roughly the Wyoming border on the north and the Poudre River on the south. Given the size of the watershed and the number of property owners, the local governments decided a regional mitigation plan would result in better management, problem resolution, design, construction, maintenance, and joint financing of stormwater facilities.

As a result of the alliance, the Boxelder Creek Regional Stormwater Master Plan, prepared by PBS&J Consulting Engineers, was completed in October of 2006. The 2006 Master Plan identified three regional flood control projects that, if completed, would reduce the threat of flood damage to existing homes, businesses, and public infrastructure, thereby protecting life and property.

The Authority was established in August of 2008 by an Intergovernmental Agreement (IGA) between Fort Collins, Larimer County, and Wellington (Member Entities) specifically to develop and construct the three regional flood control projects identified in the 2006 Master Plan. The first of these projects, the Coal Creek Flood Mitigation project, was successfully completed in 2012. This was a \$5.1M project that diverted stormwater flows from Coal Creek (a tributary to Boxelder Creek) into Clark Reservoir. The project was funded through a FEMA Pre-Disaster Mitigation Grant with matching funds from the Authority's service fees.

The remaining two projects are the East Side Detention Facility (Detention Facility) and the Larimer and Weld Canal Crossing Structure (Canal Crossing). In May 2013, the CWCB approved loans for these two projects (C150352 & C150353). The execution of these projects and the loan contracts have been delayed until concerns about roadway overtopping on County Road 52 (CR-52) immediately adjacent to the Detention Facility are resolved. This loan request is to fund the CR-52 Improvement Project which will allow the Authority to commence the Detention Facility and Canal Crossing projects.

## **Loan Feasibility Study**

The Authority and Pinnacle Consulting Group, Inc. prepared the Loan Feasibility Study titled "*Feasibility Study for County Road 52 Improvements & Grading*," dated November 1, 2013, with engineering support from Andrea Faucett, P.E., of Ayres Associates. The study was prepared in accordance with CWCB guidelines and includes an alternative analysis, engineering design, cost estimates, and financial statements audited by Poysti & Adams, CPA.

## **Borrower - Boxelder Basin Regional Stormwater Authority**

The Authority was established as a drainage authority pursuant to section 29-1-204.2, C.R.S. (2013), by the Board of Commissioners of Larimer County, Fort Collins, and Wellington. The Authority operates as a Water Activity Enterprise and receives funding from stormwater service fees and system development fees from the portions of Larimer County, Fort Collins, and Wellington that lie within its 56-square mile service area. These fees are currently assessed and collected by the Member Entities which are passed through to the Authority. Any delinquent amount may be enforced by assessment upon the property and premises served, and certification to the County Treasurer for collection as provided by law. The service area includes approximately 5,600 residences and 300 commercial and industrial properties.

The Authority is governed by a five-member Board of Directors consisting of one each selected by the Member Entities, and two unaffiliated members representing the public at large. The Board has

the power to enter into contracts, incur debts, and set fees and rates. The Authority has no employees and all operations and administrative functions are contracted.

### **Project Description**

The purpose of this Project is to reduce the overtopping of CR-52 during flood events along Boxelder Creek. Current flood models show overtopping at this location would exceed 5 feet in a 100-year flood event. The 2006 Master Plan's preliminary location of the Detention Facility would have reduced CR-52 flood overtopping to 2.5 feet in a 100-year flood event. With the final location of the Detention Facility just downstream of CR-52, the Member Entities agreed to fund this Project with a goal of reducing the overtopping to 2.5 feet. Larimer County has future plans to eventually reduce the overtopping to 6 inches which they will fund separately. Three alternatives were evaluated to accomplish this goal:

**Alternative 1 - Raise Roadway and Install Box Culverts:** This alternative would install box culverts under CR-52. To provide minimal impacts to the neighboring golf course, CR-52 would be raised to fit the box culverts under the roadway. This layout would be inefficient for water conveyance and require nine box culverts. At an estimated cost of \$3 million, the Authority determined the cost to be prohibitive and did not select this alternative.

**Alternative 2 – Maintain Roadway Grade and Install Drop Box Inlet:** This alternative would install a drop box inlet upstream of CR-52. This alternative would have minimal impacts on the neighboring golf course as the use of a drop box inlet would not require re-grading along CR-52. The estimated project cost is \$1.4 million. This alternative was not selected because the drop box inlet structure could not accommodate the ultimate improvements to be undertaken by the County.

**Selected Alternative 3 – Maintain Roadway Grade and Install Box Culverts:** This alternative will install box culverts under CR-52 while maintaining the roadway's current grade. Only four box culverts will be required because grading will occur on the neighboring golf course to allow for an efficient conveyance of water. The Authority and the golf course owner have begun discussions and have developed a conceptual plan to re-grade the affected fairway and provide for the required construction and drainage easement. This alternative will accommodate the County's ultimate improvements.

Additionally, completion of the Project, and the associated Detention Facility and Canal Crossing projects, will allow Fort Collins and Timnath to move forward with two additional flood control projects that will further reduce the downstream floodplain. Altogether, these five projects will significantly reduce the flood hazard to downstream properties. The Authority's flood control projects are expected to reduce downstream flows in Boxelder Creek from over 7,000 cfs to less than 2,400 cfs during a 100-year storm event. The Authority, Fort Collins, and Timnath are planning on joint submittals of the Conditional Letter of Map Revision and the Physical Letter of Map Revision to FEMA to revise the flood hazard data on the Flood Insurance Rate Maps through the improved reach of Boxelder Creek.

The estimate Project cost is \$1,850,000 and is broken down in Table 1. Combined, the estimated benefit/cost ratio for the Authority's three drainage projects is 3.95 (Benefit: \$46.2 million/Cost: \$11.7 million)

**TABLE 1: PROJECT COST SUMMARY**

Task	Cost
Engineering Design	\$155,000
Easement Acquisition	\$55,000
Construction	\$1,200,000
Construction Management, Testing, Survey	\$190,000
Subtotal	\$1,600,000
Contingency (~20% of Construction)	\$250,000
<b>Total</b>	<b>\$1,850,000</b>

**Schedule:** Final design is scheduled to be completed in April 2014 with construction expected to start October 2014. Construction is expected to be completed April 2015, concurrent with the Detention Facility and Canal Crossing projects completion.

#### **Financial Analysis**

Table 2 shows a summary of the financial aspects of the Project. Based on the median household income of its members, the Authority's interest rate is the municipal middle income rate of 2.75% for a 30-year term. The Authority is applying for a 15-year term; therefore, the interest rate is reduced by 0.25% to 2.50% per CWCB Loan Policy #7.

For the three flood control projects the Authority has a \$9,000,000 debt cap per its IGAs. Therefore the requested Project loan amount is only \$810,000 which, when combined with the Detention Facility and Canal Crossing loans, and associated 1% fees, brings the total projected debt to \$8,999,100. The borrower match for this Project will be funded through contributions from Timnath, Fort Collins, and Larimer County.

**TABLE 2: PROJECT FINANCIAL SUMMARY**

	CR-52 Project	Combined 3 CWCB Loans
Total Project Cost	\$1,850,000	\$11,750,000
Borrower Match (2013 & 2014 Authority Fees)	\$0	\$1,119,000
Borrower Match (Authority's Cash Reserves)	\$0	319,000
Borrower Match (Timnath/Fort Collins/Larimer County)	\$1,040,000	\$1,402,000
CWCB Loan	\$810,000	\$8,910,000
CWCB Loan (Including 1% Service Fee)	\$818,100	\$8,999,100
CWCB Annual Loan Payment	\$66,075	\$739,038
CWCB Loan Obligation (including 10% debt reserve funding)	\$72,683	\$812,942

CWCB will disburse loan funds at a rate of no greater than 90% of Project Cost, up to the approved loan limit.

**Creditworthiness:** The Authority has \$985,484 in existing debt. When the Authority constructed the Coal Creek Flood Mitigation project, the federal grant it received had a local matching requirement. Fort Collins and Wellington advanced funds to the Authority for the project. It was agreed the Authority would repay the matching funds without interest at an unspecified future date. The Authority plans to pay off this debt after the CWCB loans are paid in full. As such, the Coal Creek Flood Mitigation project debt service is not included in the “Future w/ Project” financial ratios.

Financial ratios shown include all three flood drainage projects. It should be noted that the revenues and expenses of the Authority over the last three years are not representative of the revenues and expenses during the debt repayment phase. For instance, expenses associated with the Coal Creek Flood Mitigation project are included in the “Past 3 Years” analysis but will not continue in the future. Additionally the Authority’s operational expenses are expected to decrease because the Authority will largely function only to pay off its debt once the three projects are completed.

**TABLE 3: FINANCIAL RATIOS**

Financial Ratio	Past 3 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	104% (Average) \$969K/\$931K	104% (Average) \$984K/\$950K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A	104% (Average) (\$984K-\$137K)/ \$813K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	66% (Average) \$619K/\$931K	32% (Weak)* \$300K/\$950K

\* Percentage as shown is immediately after project completion. Cash Reserves to Current Expenses ratio is projected to reach 50%(average) in two years and exceed 100%(strong) in six years..

**Collateral** - Security for this loan will be a pledge of Stormwater and Development Fee revenues backed by a rate covenant and annual financial reporting. This security is in compliance with CWCB Loan Policy #5 (Collateral).

cc: Stan Myers, General Manager, Boxelder Basin Regional Stormwater Authority  
Susan Schneider/Jennifer Mele, Colorado Attorney General’s Office

Attachment: Water Project Loan Program – Project Data Sheet

**CWCB Water Project Loan Program  
Project Data Sheet**

**C150393**

**Borrower:** Boxelder Basin Regional  
Stormwater Authority

**County:** Larimer

**Project Name:** County Road 52 Improvements

**Project Type:** Flood Control

**Drainage Basin/ District:** South Platte / 3

**Water Source:** Boxelder Creek

**Total Project Cost:** \$1,850,000

**Funding Source:** Construction Fund

**Type of Borrower:** Middle Income Municipal

**Average Annual Diversion:** N/A

**CWCB Loan:** \$818,100  
(with 1% service fee)

**Interest Rate:** 2.50% **Term:** 15 years  
(Reduced from 2.75% for middle income municipal)

The Boxelder Basin Regional Stormwater Authority was formed in 2008, through an IGA between Fort Collins, Larimer County, and Wellington, to facilitate the construction of regional stormwater improvements to reduce the threat of flooding and remove areas from the FEMA floodplain in the Boxelder Creek basin. The County Road 52 Improvement Project will be completed in conjunction with the Authority's East Side Detention Facility (CWCB Loan Contract C150352) and Larimer and Weld Canal Crossing Structure (CWCB Loan Contract C150353). This Project will install box culverts under County Road 52 to reduce roadway overtopping in a 100-year storm event. Altogether, these projects are expected to reduce downstream flows in Boxelder Creek from over 7,000 cfs to less than 2,400 cfs during a 100-year storm event.

