

NORTH POUDRE IRRIGATION COMPANY

3729 Cleveland Avenue, P.O. Box 100, Wellington, CO 80549 | (970)568-3612

December 4, 2015

Jonathon Hernandez, P.E.
Water Project Loan Program
Finance Section
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203

Dear Mr. Hernandez:


The North Poudre Irrigation Company is requesting additional funding for the Reservoir No. 4 Rehabilitation project (Contract Number C150378). The request for additional funds is due to additional costs associated with the removal of trees, enlargement of the spillway in anticipation of a future change in the Hazard Classification of the dam, recent price increases for riprap, land acquisition, construction agreements, and easements to resolve boundary issues, and a change in scope of work to include grading of the perimeter of the reservoir.

Details regarding the project are outline in the attached Memo prepared by our Engineer, Ronald H. Slosson, P.E. We are requesting an additional \$739,450 for project costs plus any applicable loan service fees.

We will provide a Board Resolution authorizing the increase and an Attorney Opinion Letter when requested.

Thank you for your consideration of this matter and if you have any questions please feel free to contact me.

Sincerely,


Scott Hummer
Manager, NPIC.

Memo

To: Jonathon Hernandez
From: Ron Slosson
CC: Scott Hummer
Date: December 4, 2015
Re: NPIC Reservoir No. 4 Rehabilitation Cost Increases

The North Poudre Irrigation Company (NPIC) applied to the Colorado Water Conservation Board (CWCB) for a loan for the Reservoir No. 4 Rehabilitation Project. The loan was approved (Contract Number C150378) by the CWCB on November 20, 2013 for an amount not to exceed \$1,636,200 ((\$1,620,000 for project costs and \$16,200 for 1% Loan Service Fee). The loan terms were for 30 years at the blended interest rate of 2.35% per annum.

The loan request was based on the Engineer's cost estimate as described in the initial feasibility study. Several factors have led to substantial increases in cost for the project:

- The project required the removal of an estimated 400 mature cottonwood trees. Because of the sensitivity of tree removal on any project, a local professional arborist was hired to conduct a study and inventory of all trees and make recommendations for both the removal and saving of trees. The inventory showed a total of over 800 trees which included all live, as well as dead and downed trees. Tree removal was a large and specialized aspect of the overall project and it was recommended by the study to limit removal operations to winter months to minimize wildlife impacts. To induce bids from specialized contractors and avoid conflicts with construction scheduling, the tree removal was completed under a contract separate from the dam rehabilitation work. Nearly 800 trees were removed from the site during the winter of 2014-2015 and approximately 40 selected trees remain. The tree removal project was completed with very minimal public resistance. The total cost of the tree removal was approximately \$235,000. The initial feasibility study estimated the cost at \$120,000, a cost difference of **\$115,000**.
- The feasibility study level design was based on the dam's classification as a Small, Significant Hazard Dam. The required Design Report for this classification was submitted to the State Engineers Office (SEO) in October of 2014. The SEO had four to six months backlog of design reviews but responded immediately to the report stating that the hazard classification might change to High Hazard in the near future so NPIC might want to resubmit a design based on the possible change and avoid an expensive re-design in the near future. The spillway was re-designed for the High Hazard classification which added approximately **\$93,000** in costs for drop structures and overflow structures in the spillway.

- Riprap is always a major expense on earthen dams and riprap costs have risen dramatically in the past two years, partially because of demand, and partially because the local quarry is not currently producing riprap. The feasibility cost estimate anticipated riprap and bedding costs of \$173,250 for the project. The bid price under the current contract is \$450,200, a cost difference of **\$276,950**. A portion of the cost difference is due to an increase in quantity of riprap for the High Hazard spillway.
- A design feature not included in the feasibility study was a grading plan that moves the high water line and flood inundation level on to NPIC property. This grading will eliminate the need for flood easements on all but one of the adjacent properties. NPIC has reached agreement with seven of the eight adjacent landowners through Construction Agreements, land trades, or outright purchase of land. Engineering costs associated with the grading plan and production of drawings for individual land parcels has been approximately **\$60,000**. The cost of purchases and Agreements for seven of the eight adjacent parcels has been **\$29,500** with an offer of **\$40,000** budgeted for the final and most difficult Agreement. Attorney's fees are not included in these figures. The grading plan, including the rehabilitation of the inlet ditch, cannot be implemented until an agreement is reached with the final landowner. The estimated construction cost for implementation of the grading plan is **\$125,000**.

The total cost increase for the above (bold) items is \$739,450.