



PUBLIC WORKS DEPARTMENT
MEMORANDUM #2014 – 46

DATE: October 13, 2014
TO: Honorable Mayor Joyce Downing and City Council Members
FROM: John Pick, City Manager 
David H. Willett, Director of Public Works 
SUBJECT: Council Resolution 102
Standley Lake Dam – Valve House/By-pass Line Repair

BACKGROUND

In 1979 Northglenn entered into an agreement with the Cities of Thornton and Westminster, and the Farmers Reservoir and Irrigation Company (FRICO), for the shared responsibility of costs and maintenance associated with the operation of Standley Lake (re: 4-Way Agreement). The agreement states that each of the three cities will be responsible for 1/3 of the costs required to maintain the facility, including capital project costs and general maintenance activities.

One of the critical appurtenances located in the Standley Lake Dam valve house, are the two (2) by-pass lines. When the in-take pipes and valves that are used to deliver water from Standley Lake to the cities require inspection or maintenance, they must be completely drained. Following inspection or maintenance the line must be refilled. Each by-pass line allows for a controlled re-fill of the line without danger of cavitation and damage to the valves or piping.

In 2006 following a standard inspection of the in-take pipes, the by-pass lines experienced heavy vibration caused by cavitation during the refill of the pipes. Following an engineering evaluation of the by-pass lines, it was determined that a flow limiting screen would reduce vibration caused by cavitation in the by-pass lines during the refilling process. The recent improvements to the two by-pass lines included the installation of flow limiting (energy dissipation) screens and man-ways with platforms at the by-pass valves for safe access to the structures. Total cost to repair the by-pass lines and install the man-ways is \$91,610.28

BUDGET/TIME IMPLICATIONS

In accordance with the 4-Way Agreement, Northglenn's one third share of the total cost for the installation of flow limiting screens and man-ways with platforms at the by-pass valves is \$30,536.76. Funding is available in the 2014 Water/Wastewater Capital Improvement Fund.

RECOMMENDATION

Attached to this memorandum is a Resolution that, if approved, would authorize payment in the amount of **\$30,536.76** to the Farmers Reservoir and Irrigation Company for the City's share of the by-pass line repairs.

STAFF REFERENCE

Tamara Moon, Water Resources Administrator tmoon@northglenn.org or 303.450.4070

ATTACHMENTS

Exhibit A – Dam Spillway and Valve House
Drawing – By-pass Line with Energy Dissipation Device

Exhibit A



New By-pass line in Standley Lake Valve House



SPONSORED BY: MAYOR DOWNING

COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. CR-102
Series of 2014

Series of 2014

A RESOLUTION AUTHORIZING REIMBURSEMENT TO THE FARMERS RESERVOIR AND IRRIGATION COMPANY (FRICO) FOR THE STANDLEY LAKE DAM VALVE HOUSE BY-PASS LINE REPAIR PROJECT

WHEREAS, the Standley Lake Operating Committee (SLOC), which is comprised of representatives from the Farmers Reservoir and Irrigation Company, and the cities of Northglenn, Thornton and Westminster, has approved a capital improvement project for the repair of the by-pass lines located in the Standley Lake Dam Valve House; and

WHEREAS, under the provisions of the June 27, 1979 Four-Way Agreement, the cities of Northglenn, Thornton and Westminster are each responsible for one-third of the costs to operate and maintain the Standley Lake Reservoir.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO, THAT:

Section 1. The City Council of the City of Northglenn hereby approves the reimbursement of an amount not to exceed \$30,536.76 to the Farmers Reservoir and Irrigation Company (FRICO) for Northglenn's share of the Standley Lake Dam Valve House By-Pass Line Repair Project.

DATED at Northglenn, Colorado, this ____ day of _____, 2014.

JOYCE DOWNING
Mayor

ATTEST:

JOHANNA SMALL, CMC
City Clerk

APPROVED AS TO FORM:

COREY Y. HOFFMANN
City Attorney