

APPENDIX D
ECONOMICS

Estimated Economic Costs for Recommended Plan

A cost estimate for the Preferred Alternative was completed based on April 2016 prices and conditions.

Recommended Plan (Alternative Plan A)	
Annual Project Cost based upon \$2,676,000 project cost (at 3.125 % for 50 year project life)	\$106,486
Annual Operations & Maintenance Cost	\$5,000
Total Annual Economic Cost	\$111,486
Relocation Alternative	
Annual Project Cost based upon \$4,100,000 project cost (at 3.125% for 50 year project life)	\$163,151
Annual Operations and Maintenance	\$0
Total Annual Economic Cost	\$163,151

*Costs are subject to change as a result of Agency Technical Review.

ECONOMIC JUSTIFICATION FOR SELECTED ALTERNATIVE

The benefits for the project are the lesser of:

1. The least cost relocation alternative; or
2. The value of the infrastructure benefits forgone if no corrective action is taken.

The benefit-cost ratio (BCR) of the protection alternative is based on the comparison of the annual cost of the Relocation Alternative with the annual cost of the Recommended Plan.

$$\text{BCR} = \frac{\text{Annual Economic Cost of Relocation Alternative}}{\text{Annual Economic Cost of Recommended Plan}}$$

$$\text{BCR} = \frac{\$163,151}{\$111,486}$$

$$\text{BCR} = 1.46$$