

PROJECT:

**Roza Irrigation
District Main Canal
Rehabilitation Project**

LOCATION:

Sunnyside, WA

CONTRACTOR:

Matheson Painting

SYSTEM:

Aqualastic™

TOTAL AREA:

**Numerous cracks
in 7,200 Linear Feet
in main canal**

COMPLETION DATE:

Winter 2006

PROBLEM:

Two 3,600 linear ft. sections of the main canal had substantial leaks due to a number of cracks in the concrete. The cracks were caused by expansion and contraction from seasonal freeze thaw cycles.

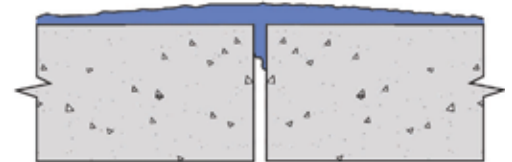
SOLUTION:

The project involved spray applying Aqualastic™ on the cracks, which has now been successfully fielded for 9 years. The objective was to eliminate enough leakage, before the next water shortage, to make application of the product cost effective. The project would have to eliminate at least 88% of leaks to be successful.

Project preparation entailed sand blasting a 3 to 4 inch wide strip on each side of the cracks in the concrete. The contractor then applied approximately 80 mils (2 mm) of Aqualastic™ to the cleaned strips, bridging the cracks to create a water-tight seal to eliminate the water loss.

RESULTS:

After completion of the project it was calculated that Aqualastic™ eliminated 99% of leaks, far exceeding the required 88%. Wayne Sonnichsen, of Roza Irrigation District, reported that prior to the project, the estimated water loss was 1,220 acre-feet per irrigation season. During the 2007 irrigation season total water loss was approximately 14 acre-feet, for a net savings of 1,206 acre-feet. Sonnichsen estimated net water savings from this project will have a monetary value of \$143,500.00 annually. The project will more than pay for itself during the next drought season.



AQUALASTIC™ BRIDGES CRACKS TO ACCOMMODATE EXPANSION AND CONTRACTION FROM FREEZE-THAW CYCLES UNLIKE CONVENTIONAL CAULK/JOINT FILL PRODUCTS.

