



Cody, WY culvert before RCR® remediation

Cody, WY culvert after RCR® remediation during annual flush

PROJECT OVERVIEW

In Park County, Wyoming, Engineering Associates and Park County needed to protect an aging multi-plate culvert showing corrosion, wear, and undermining. ITL Reinforced Concrete Roll® was used to create a hard armored liner and help extend the culvert's service life.

PROJECT GOAL

- Protect the culvert from continued corrosion and hydraulic wear.
- Extend service life without replacing the entire culvert.
- Complete the work quickly using the county's own maintenance crew.

KEY TAKEAWAYS

- RCR® installation was fully completed in two days.
- Helped avoid full culvert replacement while protecting a critical roadway crossing.
- Performed successfully following the 2026 annual irrigation flush.

Hard Armoring an Aging Culvert

Engineering Associates and Park County were evaluating a multi-plate culvert that carried water beneath a county road. The invert plate section had significant corrosion, with areas where the metal had worn away and erosion had begun below the culvert. The roadway above served local transportation needs, while the culvert also carried a natural waterway supporting fish and wildlife habitat.

The annual hydraulic flush from Heart Mountain Irrigation District added another layer of concern. In addition to normal seasonal flows, the culvert experienced a higher annual flush that increased wear on an already compromised structure. Full culvert replacement was considered, but the project team looked for a way to add protection and extend service life without removing and replacing the entire system.

Extending Service Life Without Full Replacement

RCR® was selected to create a hard armored liner along the culvert base. While RCR® is not used to provide structural support, the undermined cavity was first filled with polyurethane before the material was placed over the base to protect the culvert from further wear. Water testing results for RCR® are within EPA acceptable levels and do not pose significant health risks.

The installation was completed in two days by the county's own maintenance group, with no specialized tools or training required. Following installation, the material performed successfully through the 2026 irrigation flush, helping Park County protect the culvert, maintain the roadway crossing, and avoid the cost and disruption of full replacement.

ITL RCR® | CULVERT APPLICATION, WYOMING



Remotely located culvert in Cody, WY



Unloading & prepping RCR®



Culvert before remediation



RCR lining outlet to fish run/wildlife habitat



Heat welding RCR® seams



Wall panels secured and sealed



Completed installation-unhydrated



Hydration to cure



Addition of riprap to enhance erosion control



Waterflow in newly remediated culvert



Closeup of RCR® and riprap working together



Annual flush after remediation

