

RIO GRANDE DIVERSION INFRASTRUCTURE INVENTORY

Structure Name: INDEPENDENT D

Reported By: Daniel Boyes

Date: April 10, 2019

Headgate	Latitude	Longitude
Location:	37.51016667	-106.90928333

Headgate Type: Manually operated 3' wide steel slide gates (3)

Headgate Condition:	A <input type="checkbox"/>	Diversion and Other Condition:	A <input type="checkbox"/>	River Miles from New Mexico State Line (Point of Diversion):	Structure Submerged: Yes <input checked="" type="checkbox"/>
	B <input checked="" type="checkbox"/>		B <input checked="" type="checkbox"/>	56.22 mi	No <input type="checkbox"/>
	C <input type="checkbox"/>		C <input type="checkbox"/>		
	D <input type="checkbox"/>		D <input type="checkbox"/>		
	F <input type="checkbox"/>		F <input type="checkbox"/>		

Repair(s) or Improvement(s) Completed Since 2006: None

Structure Description: A Large concrete diversion dam consisting of a pair of radial gates and a concrete weir diverts river flow to the headgate. The headgate sits along a short feeder channel on the east bank of the Rio Grande that comes off of the river just upstream of the diversion dam. There is a steel trash rack just upstream of the headgate. The measurement structure is a rated steel box and functions moderately well. This structure is owned by the City of Alamosa. There is potential for a meander to be cut off approximately 0.25 miles upstream of the diversion dam. This would cause the diversion to become dysfunctional. Significant sedimentation and debris accumulation occurs at this structure. Despite debris accumulation, the headgate itself functions well. Although the channel has remained fairly stable in the last 45 years, bank erosion has occurred both upstream and downstream of the structure, particularly upstream on the east bank.

Repair(s) or Improvement(s) Currently Needed: The Technical Advisory Team (TAT) recommends installing a new trash rack in front of the structure's headgate. CPW recommends fish passage in this reach and the TAT also recommends creating safe boat passage and increasing sediment transport capacity at the diversion. Additionally, the TAT recommends bank stabilization upstream of the diversion. An improved trash rack in front of the headgate would mitigate debris accumulation and reduce ditch maintenance. If the diversion is replaced in the future, increasing its sediment transport capacity and creating boat passage would improve ditch function, enhance river health, and provide new recreational opportunities. Riparian revegetation and/or bank stabilization structures would increase bank stability and mitigate erosion and sediment input.

Comments: This ditch is a priority 166. This structure is owned by the City of Alamosa. The measurement structure is a rated steel box. This structure can "sweep" the river during low flows.

Notes:

Estimated Range of Cost: Medium

Headgate looking downstream



Headgate outlet



Rio Grande upstream of headgate



Diversion dam



Diversion dam looking downstream



Rated box looking downstream

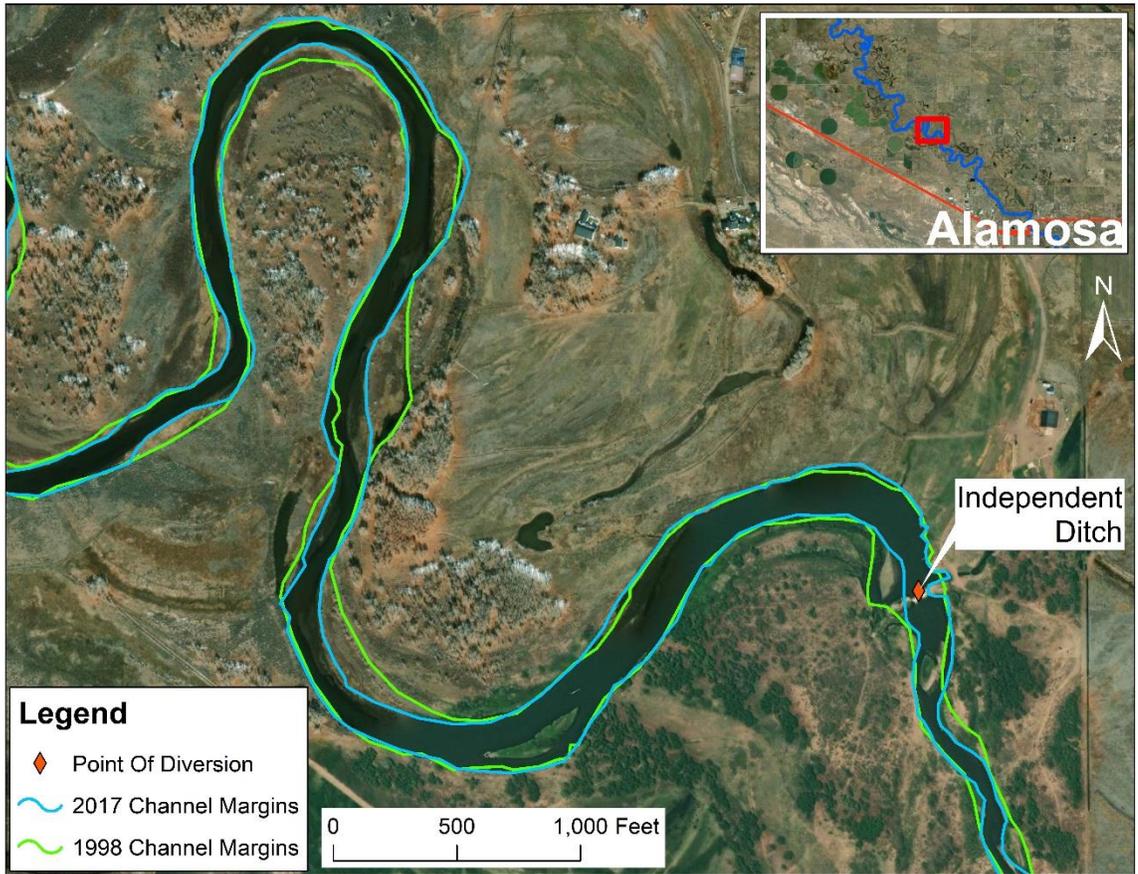


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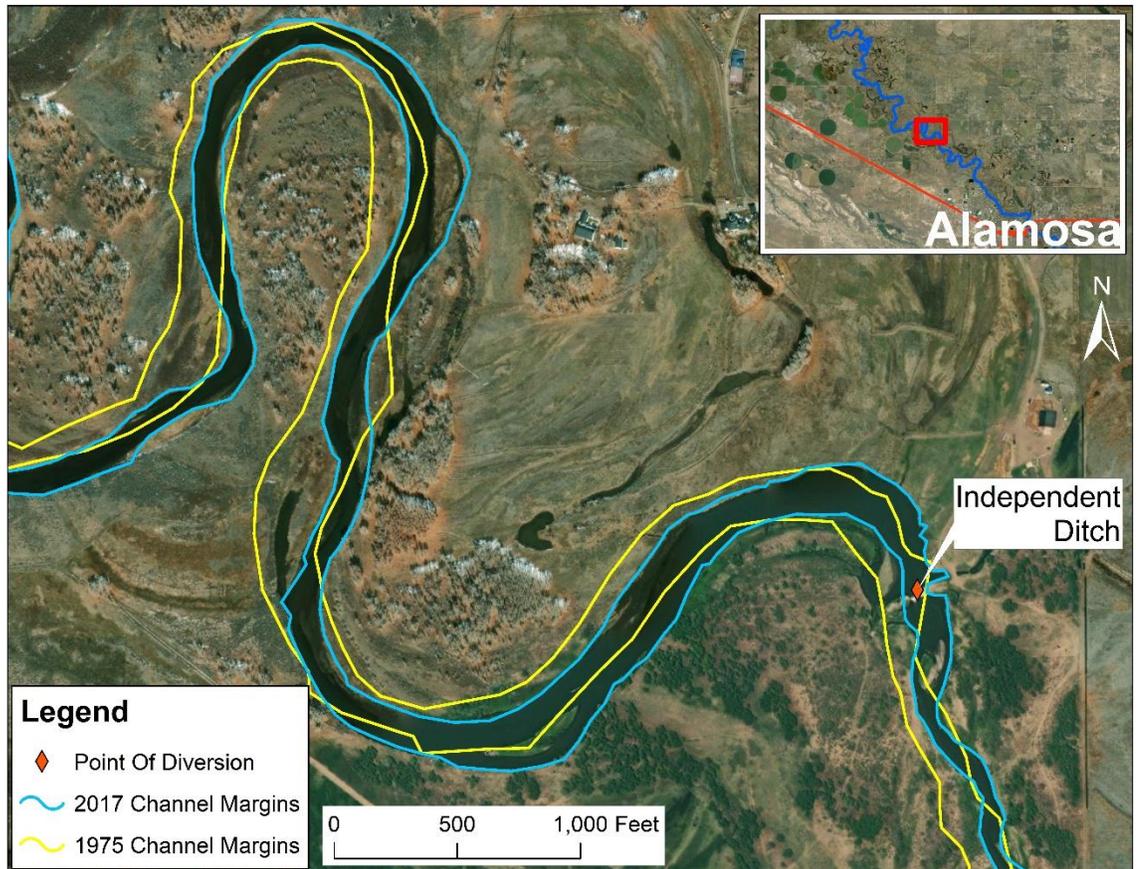
INDEPENDENT DITCH

PHOTO LOG

**Rio Grande Stream
Management Plan**



Headgate location with 1998 and 2017 channel margins overlaid



Headgate location with 1975 and 2017 channel margins overlaid