

# RIO GRANDE DIVERSION INFRASTRUCTURE INVENTORY

---

**Structure Name:** WESTSIDE D

---

**Reported By:** Daniel Boyes

---

**Date:** April 11, 2019

Headgate	Latitude	Longitude
Location:	37.46663333	-106.85586667

---

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

---

<b>Headgate Condition:</b>	A <input type="checkbox"/>	<b>Diversion and Other Condition:</b>	A <input type="checkbox"/>	<b>River Miles from New Mexico State Line (Point of Diversion):</b>	<b>Structure Submerged:</b> Yes <input type="checkbox"/>
	B <input type="checkbox"/>		B <input type="checkbox"/>		No <input checked="" type="checkbox"/>
	C <input type="checkbox"/>		C <input type="checkbox"/>	49.95 mi	
	D <input checked="" type="checkbox"/>		D <input checked="" type="checkbox"/>		
	F <input type="checkbox"/>		F <input type="checkbox"/>		

---

**Repair(s) or Improvement(s) Completed Since 2006:** Ditch maintenance, including debris removal.

**Structure Description:** A corrugated sheet metal diversion with a 20 ft steel weir and a 20 ft radial gate spanning the river directs river flow to a short feeder channel and services the headgates. There is a log trash boom across the entrance of the feeder channel. At the headgates, which are aging and difficult to operate, the ditch enters a culvert before passing through the flume. Upstream of the diversion, the channel has migrated south (see 1975 and 1960 channel margin maps), although significant migration is limited by the levees and thus lateral migration has not affected the diversion's ability to function. The diversion gates do not have sufficient capacity to pass flood flows. For this reason, during high flow events, the river bank north of the structure can fail, leading to significant flows bypassing the structure via the failed bank. High flow scenarios could also potentially lead to flooding upstream of the diversion or in East Alamosa due to a backwater effect. Significant debris and sediment are deposited upstream of this diversion due to the structure's limited sediment transport capacity along with regularly low river velocities. This structure impacts the sediment transport regime and channel capacity of the river upstream of the diversion. The diversion effectively diverts water, however it is difficult and time consuming to operate. During 2019 spring runoff, the levee forming the bank north of the diversion washed out (see report card) and has occurred in the past.

---

**Repair(s) or Improvement(s) Currently Needed:** Given the poor condition of the infrastructure and its impact on river function, the SMP Technical Advisory Team (TAT) recommends replacing the diversion and headgate with new structures. Colorado Parks and Wildlife (CPW) recommends fish passage at this location and the TAT recommends boat passage and increased sediment transport capacity, especially considering the increasing popularity of recreational boating in the Alamosa area. A new headgate would reduce water user maintenance needs and increase ditch efficiency. A new diversion would allow for fish and boat passage, reduce the risk of flooding in East Alamosa, and would reestablish natural sediment transport processes in this location. Diversion structure improvements were also identified in the 2017 Rio Grande River Corridor Feasibility Study. If improvements are made that allow for boat passage, a safe takeout location adjacent to or downstream of the diversion is also recommended.

---

**Comments:** This ditch includes priorities 165, 234, 259, 274, 280, 304, 322, 346, and 363.

---

**Estimated Range of Cost:** High

---

Headgate looking downstream



Headgate outlet



Diversion dam looking downstream



Diversion dam looking upstream



Diversion dam and headgate



Measurement Structure



RIO GRANDE DIVERSION INFRASTRUCTURE INVENTORY

WESTSIDE DITCH

PHOTO LOG

Rio Grande Stream  
Management Plan



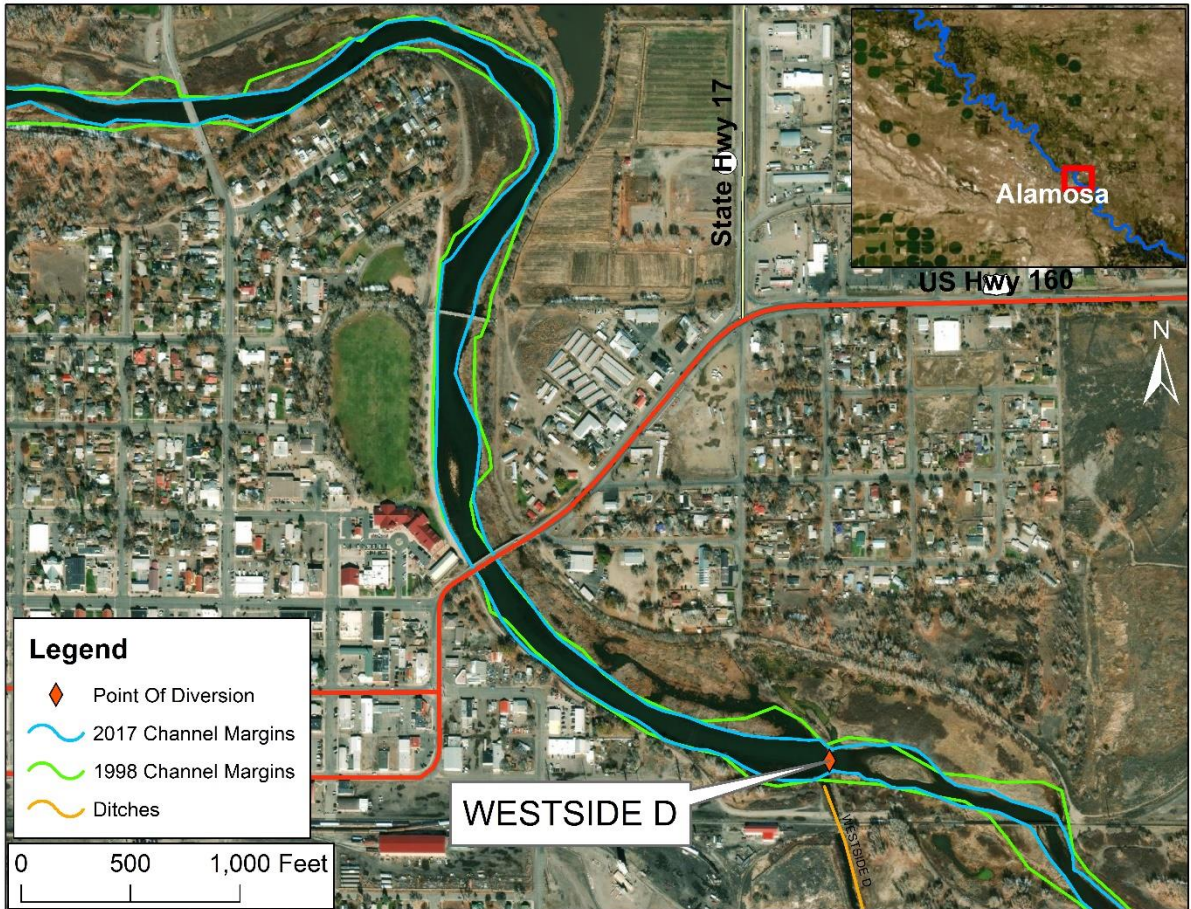


Failed levee north of diversion dam during Spring 2019 runoff

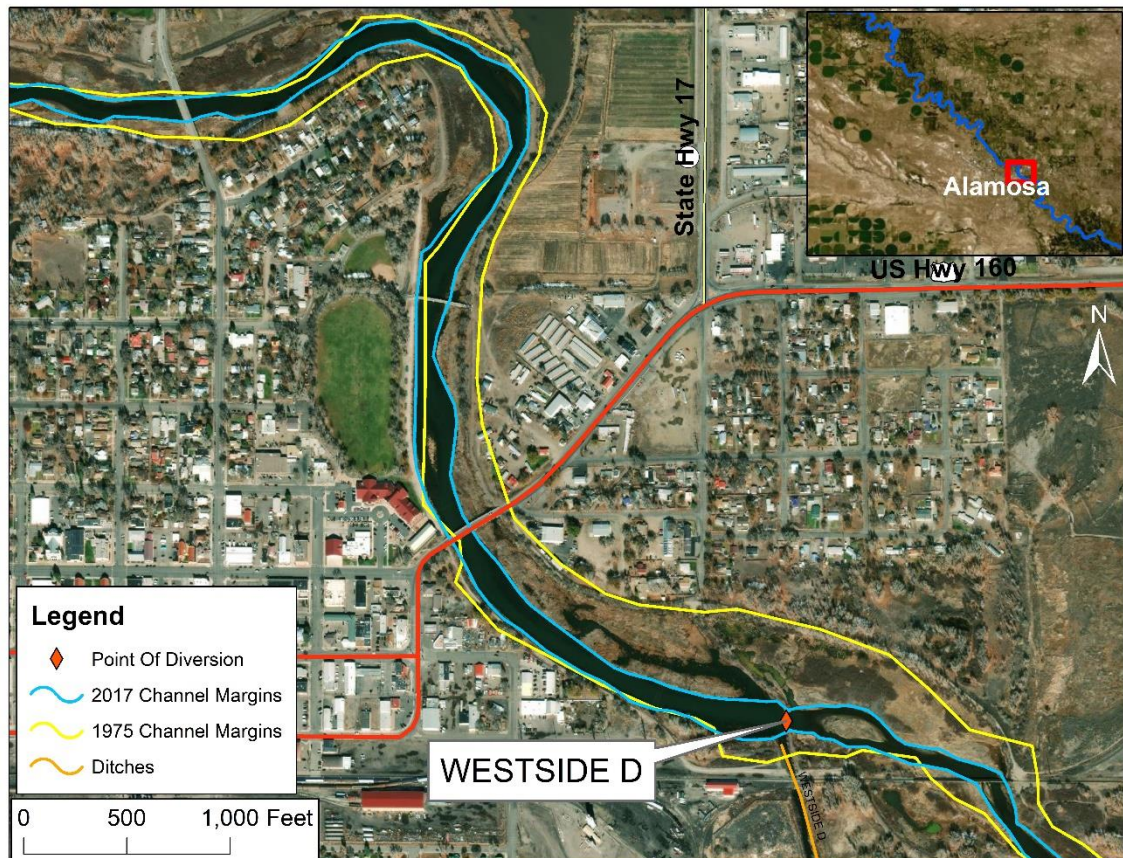


Flooded diversion dam during Spring 2019 runoff





Headgate location with 1998 and 2017 channel margins overlaid



Headgate location with 1975 and 2017 channel margins overlaid



