CONEJOS RIVER
DIVERSION INFRASTRUCTURE INVENTORY

Structure Name: NEW JB ROMERO D

Reported By: Daniel Boyes

Date: April 15, 2019

Headgate Location:	**Latitude**	**Longitude**
	37.058885	-106.110729

Headgate Type: Manually operated 4' wide steel slide gate

Headgate Condition: A ☐ B ☐ C ☐ D ☐ F ☒

Diversion and Other Condition: A ☐ B ☐ C ☐ D ☐ F ☒

River Miles from Rio Grande Confluence (Point of Diversion): 37.9 mi

Structure Submerged: Yes ☐ No ☒

Repair(s) or Improvement(s) Completed Since 2006: N/A

Structure Description: This structure is located approximately 150 ft upstream of the North Eastern Ditch diversion. Water is diverted off Conejos River into an approximately 0.25 mile feeder channel that delivers water to the main headgate. There is no formal diversion dam on Conejos River, but a small side channel on the river, formed by a gravel bar, diverts water to the feeder channel. Flow in the feeder channel is controlled by stacked boulders located approximately 80 ft off the river. Any water not diverted by this ditch returns to the North Eastern/Bernardo Romero carrier channel. The river channel has migrated in the past, especially upstream of the diversion. During a high flow event, the river could migrate to its historic channel, beginning at the Antonito Ditch point of diversion (see maps in report card), thereby bypassing the point of diversion. Even a small shift in the river channel could result in flows to the feeder channel being cut off. The main headgate is washed out and the measurement structure could not be located at the time of inspection.

Repair(s) or Improvement(s) Currently Needed: Given the issues identified at this structure, the SMP Technical Advisory Team (TAT) recommends resetting the main headgate, installing a flume, improving adjustment capabilities for the feeder channel, improving the conveyance capacity of the feeder channel, and improving upstream channel conditions on Conejos River. Additionally, the TAT recommends installing a river headgate at the point of diversion to reduce maintenance and a small stacked rock diversion dam to more effectively divert water. As an alternate solution, the point of diversion and feeder channel could be combined with that of the North Eastern/Bernardo Romero Ditch to reduce maintenance and impacts to the river. The TAT also recommends maintaining fish passage to preserve aquatic habitat connectivity in this reach.

Comments: New JB Romero Ditch is a priority 170.

Notes:

Estimated Range of Cost: Medium

Headgate and diversion dam

Headgate and feeder ditch looking upstream

Debris diversion dam on feeder ditch

Rock control structure on feeder ditch

Feeder ditch looking upstream

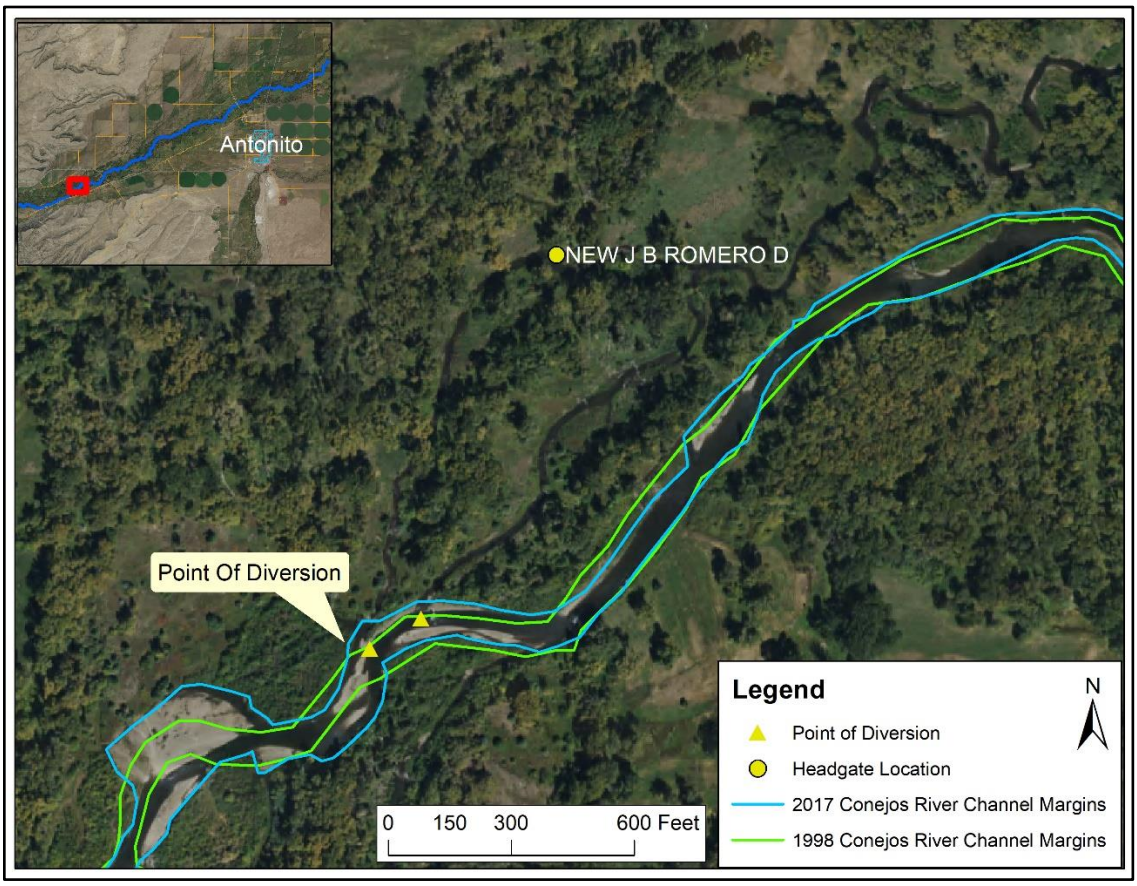
Feeder ditch and rock control structure looking stream

CONEJOS RIVER DIVERSION INFRASTRUCTURE INVENTORY

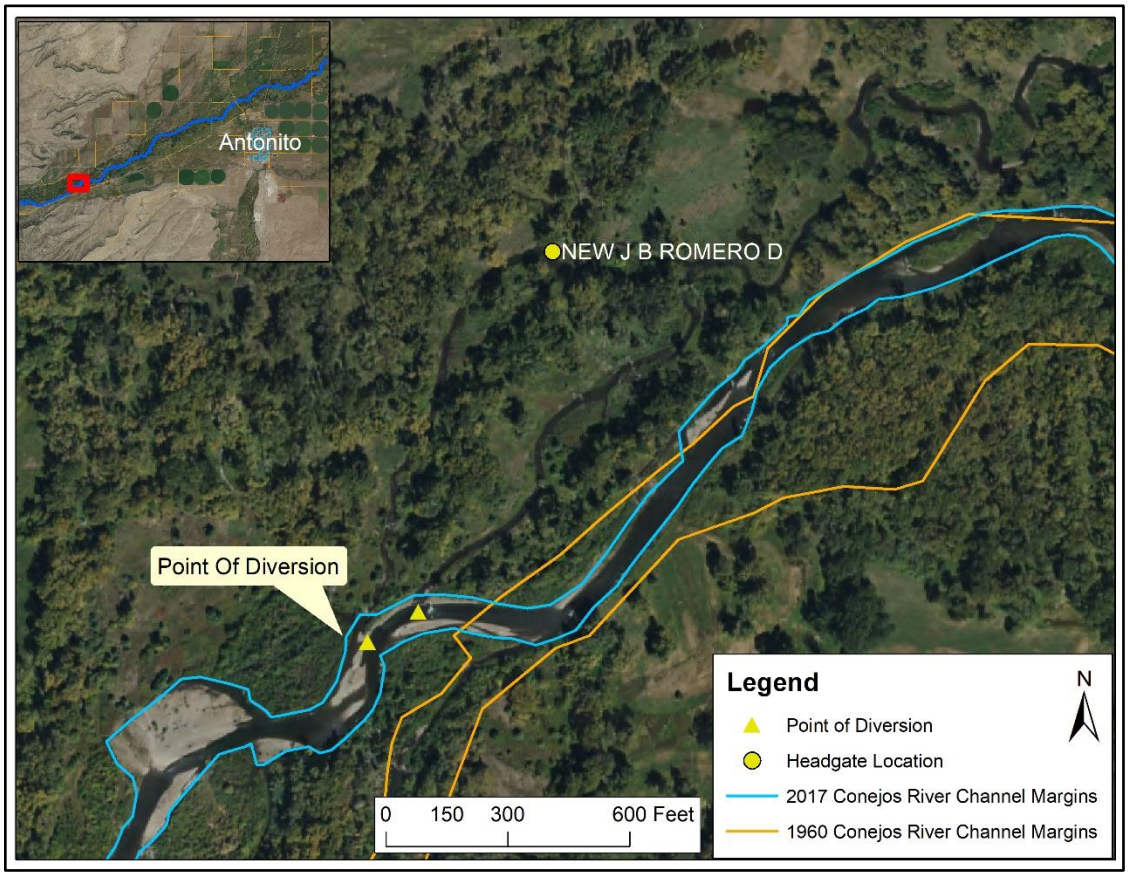
NEW JB ROMERO DITCH

PHOTO LOG

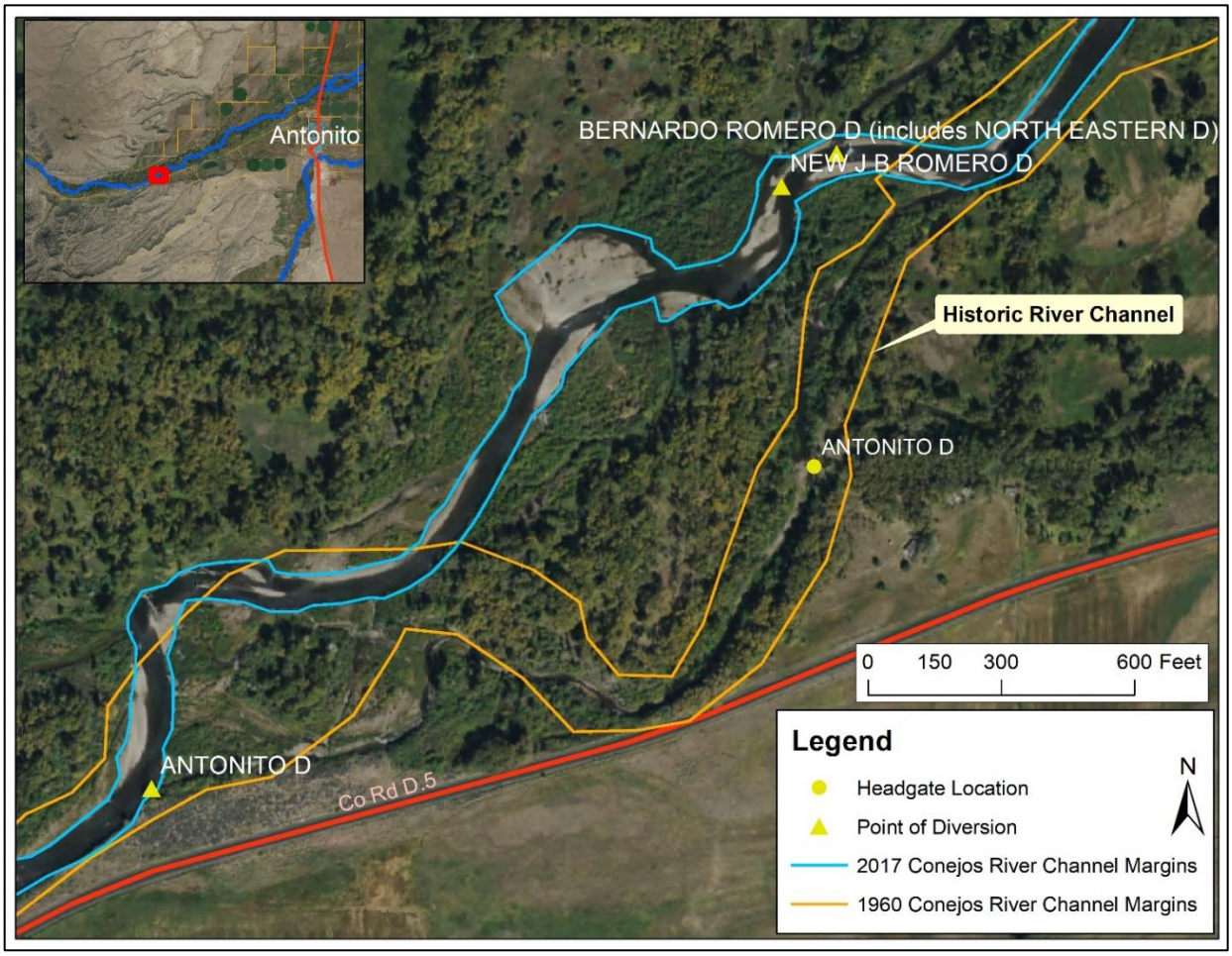
Conejos River Stream Management Plan



Point of diversion and headgate locations with 1998 and 2017 channel margins overlaid



Point of diversion and headgate locations with 1975 and 2017 channel margins overlaid



Historic river channel (1960), showing potential for river to migrate and bypass the point of diversion in the future

River channel upstream of diversion (looking upstream)