

PECOS BASIN EAST INFLOW CHANNEL
FCD GAGE ID# 69507

STATION DESCRIPTION

LOCATON - The gage is located east of 48th Street on an ADOT freeway drainage channel, south of Frye Road. Latitude 33° 17' 48.0 North; Longitude 111° 58' 41.5" West. Located in S32 T1S R4E, in the Guadalupe 7.5-minute quadrangle.

ESTABLISHMENT - The gage was installed January 21, 2009.

DRAINAGE AREA – Undetermined

GAGE - The gage is a pressure transducer type instrument. The PT diaphragm is at gage height 0.73 feet, levels of March 21, 2018. The PT is located on the north bank of the channel.

There is no crest-stage gage at this site.

There is no staff gage at this site.

ZERO GAGE HEIGHT – Zero gage height is near the left toe of the channel at the gage, and is defined as 1,165.922 feet NAVD88, levels of March 21, 2018.

HISTORY – Gaging established on January 21, 2009. No previous gaging history at this location.

REFERENCE MARKS

BM-6533 is an FCDMC brass cap located near the station tube. It is at elevation 9.002 feet gage height and 1,174.924 feet NAVD88, levels of March 21, 2018.

RM-1 is a chiseled 'X' on top of the right downstream side of the transducer conduit. It is at elevation 8.993 feet gage height and 1,174.915 feet NAVD88, levels of March 21, 2018.

RM-2 is a chiseled 'X' on top of the left bank in the gage cross section. It is at elevation 8.650 feet gage height and 1,174.572 feet NAVD88, levels of March 21, 2018.

RP-1 is the west bolt of the top bracket of the transducer conduit. It is at elevation 8.760 feet gage height and 1,174.682 feet NAVD88, levels of March 21, 2018.

RP-2 is the upstream, northeast bolt on the right bank transducer conduit. It is at elevation 1.117 feet gage height and 1,167.039 feet NAVD88, levels of March 21, 2018.

CHANNEL AND CONTROL – The channel is trapezoidal and rough concrete lined. It is of uniform dimension downstream from the gage cross section for about 200 feet. Top width is 65 feet and bottom width is 30 feet with a maximum depth of about 9.0 feet.

The control for the gage is not defined at low flows. The channel is the control at higher stages.

RATING - The current rating is Rating #1, dated January 28, 2009. The rating was developed from a survey of two cross sections (upstream, at the gage, and downstream). Data were input into a HEC-RAS model for evaluation. The model used profiles up to 3,000 cfs, after which water spills out of the channel. The flows were sub-critical.

DISCHARGE MEASUREMENTS – Low flow measurements could be made. However, the sides of the channel are steep, and caution should be exercised.

POINT OF ZERO FLOW - The PZF is at about 0.00 feet gage height.

FLOODS – The peak discharge recorded to date occurred on September 8, 2014, with a peak discharge of 261 cfs and peak stage of 1.86 feet gage height.

REGULATION – None known.

DIVERSIONS - None known.

ACCURACY - Fair

JUSTIFICATION – Monitor flows into Pecos Basin

UPDATED - May 28, 2020
D E Gardner