

Fort Kearny Slough near Newark, Nebraska 06770240

LOCATION

Latitude and Longitude

40.64112 -98.98981

Road Log

South of I-80 exit 272 Kearney on State Highway 44 to State Highway Link L50A then 5 miles east or from I-80 exit 279 State Highway 10 south to State Highway Link L50A then 2.0 miles west. Shelter is located north of State Highway Link L50A.

Nearby Features

Flat farm ground near the flood plain of the Platte River 2 miles north of the gage.

Equipment Details

Recording Gage

A 4230 ISCO Bubble type flow meter. Flow meter connected to stream with a sand point. Communications are by Isco modem is connected to a phone land line.

External Gage

Staff Gage.

Bench Mark and Reference Marks

R.M.#3 unstable discontinued March 21, 2019.

R.M.# 1 is an X on center upstream culvert wall. Elevation of 9.82 feet from levels March 26, 2020.

R.M.#2 is on right downstream culvert corner. Elevation of 9.71 feet from levels March 26, 2020.

R.M.#4 Standard bronze tablet at downstream center of culvert. Elevation of 9.68 feet from levels September 9, 2017. ORIGIN.

R.M.#5 is an "X" in the top of the fare East cable anchor 68 feet east of shelter. Elevation of 12.57 feet by levels March 26, 20.

Staff Gage held 6.16 feet and set to 6.16 feet by levels March 26, 2020.

Hydrology

Drainage Area

Undetermined but most of the flow above gage is a result of ground water. Most irrigation above gage is from ground water.

Channel and Control

Is a double box culvert at the highway just upstream of the gage. The channel below the box culverts can become ponded due to aquatic growth and debris from farm fields in the area making poor measuring at low water.

Discharge Measurements

Low to mid flow discharged measurements can be made in vicinity of the gage. High flow can be measured from State Highway Link L50A culverts upstream from station.

Floods

NA

Extremes for Period of Record

Extremes for the period of record have not been computed. Minimum daily discharge 0 cubic feet per second many days each year.

Point of Zero Flow

Gage height of around a 3.43 feet is the point of zero flow on March 15, 2018. Creek can be dry during summer months.

Winter Flow

Minimal ice condition at this site due to the stream flows at or near 0 flow in the winter periods. Stream subject to flashy flows during rain events in spring and summer months.

Regulation and Diversions

There are no diversions from this creek.

Accuracy

Record can be considered FAIR and estimated record as POOR.

Cooperation:

Station maintained in cooperation with Nebraska Department of Natural Resources and the Tri-Basin Natural Resources District.

Establishment and History

Established October 7, 2003 by the State of Nebraska Department of Natural Resources.

On October 7, 2003 a cubical type shelter on a pipe pedestal was installed. A 4230 ISCO Bubble type flow meter was installed. Flow meter connected to stream with a sand point.

Levels were run on October 7, 2003. A staff gage was also established this will be used as base gage. The Isco modem is connected to a phone land line.

On February 18, 2016 the shelter was replaced in preparation for Sutron equipment; at the time of this revision (01/17/2019, the station was still using an Isco 4230 for data collection.)

Revision History

Original Description by: Andrew Leisy 10/21/2009

Revised by: J.A. Marburger 05/10/2017

Revised by: Trevor Massey 01/23/2018

Revised by: J.A. Marburger 01/17/2019

Revised by: J.A. Marburger 11/01/2019

Revised by: K.Schwager 11/01/2023