

Description of Gaging Station on FORDYCE CREEK BELOW FORDYCE DAM NEAR
CISCO, CA.

1. Location.--Lat 39°22'48", long 120°29'54", in NW 1/4 SE 1/4 sec.34, T.18N., R.13E., Nevada County, Hydrologic Unit 18020125, on right bank 850 ft downstream from Fordyce Dam, and 5.3 mi northeast of Cisco.

Elevation of gage is 6,250 ft, from topographic map.

Drainage area is 31.7 mi².

Road log, see next page.

Water-stage recorder in 48 inch CMP shelter on right bank. A second concrete block house on right bank houses RTU transmitter. It has a silent alarm on door. Call Drum PH before entering.

2. Established.--June 9, 1966 by Pacific Gas & Electric Co.
3. Gage.--Stevens A-71 recorder and ACRO systems data logger on separate floats. RTU signal runs through conduit to 8x8 concrete block house.
The outside gage is on downstream face of gage well; limits 0 to 6.67 ft.
The well gage is in one section; limits 0 to 6.67 ft.
Tape float drive with index.
The well is one 8 ft and one 6 ft section.
The gage height of the bottom of the well is -1.0 ft, top of shelf is 16.7 ft, top of house walls 21.0 ft, and the top of the roof 23.0 ft. There is no clean out door. There is a 12 inch diameter metal oil cylinder. The gage height of the top of the cylinder is 7.8 ft.
There is one 2 inch intake 1.5 ft long with a static tube on the end at an elevation of 0.0 ft.
There is no flushing system.

Observer, Pacific Gas & Electric Co. personnel.

4. Bench marks.-*RM1* is the top of the bolt in the upstream pipe tieback located 10 ft upstream and 10 ft shoreward. Elev.=15.784 ft. (Levels of 7/12/2000). *RM2*: Concrete slab of communication bldg (near cable car platform @ RB) below door hinge. Elev.=15.833 ft (Levels of 7/12/2000).
5. Control.--At low flows the control is a bedrock outcrop about 40 ft downstream. At high flows there is some effect from brush and trees especially on the left bank. There is a slight bend downstream from the control.
6. Discharge measurements.--Wade just above cableway below a gage height of 2.8 ft. High water measurements are made from the cableway. The cable car is the aluminum sitdown type with an A-reel bracket. Accuracy of discharge measurements should be good to fair. A 75C and 50 C weight with hanger bar are stored in the gage house. The cableway is 7/8 inch

galvanized improved plow steel 6x17 wire rope. Span between supports is 111 ft. Total length is 186 ft. Sag, 1.0 ft. The supports are steel A-frames with platforms. Both anchors are rock. The initial point is the left bank A-frame. The cable is marked every 2 ft.

CHANNEL CONDITIONS AT CABLE

Bed of stream is bedrock with cobbles. One channel at all stages. Greatest depth is 0.5 ft greater than gage height, ordinarily. Flow at high stages, straight and fast. Horizontal angle corrections possible near left bank. Main channel is straight 200 ft downstream and 150 ft upstream. Right bank, bedrock steep. Left bank, bedrock, low with some willow growth. Auxiliary gage, none.

7. Floods.--4660 ft³/s July 9, 1975, gage height in well 7.90 ft.
8. Point of zero flow.
9. Winter flow.--May be affected by ice.
10. Regulation.--Flow regulated by Fordyce Dam.
11. Diversion.--None.
12. Accuracy.--Good.
13. Cooperation.--Pacific Gas & Electric Co. pays cost of operation.
14. Indirect measurement site.--The 1975 peak was computed based on a slope area measurement made 200 ft downstream.
15. Land ownership.--Pacific Gas & Electric Co. owns the land the gage is on.
16. Purpose of record.--Required under FERC license 2310 to measure release and spill from Fordyce Lake. Minimum release is 5 ft³/s in summer and 3 ft³/s in winter.
17. Quadrangle.--Webber Peak, 7 1/2 minute.
18. Quality assurance- Make 8-10 discharge measurements per year, covering the full range of flow. Read all staffs and recorders during each visit and document. Survey levels every 3-5 years. Levels should include 3 RMs, all staffs, pzf, and present water surface. These are minimum quality assurance procedures. Much more may need to be done if unusual events occur.

ROAD LOG

Distance	Difference	Remarks
0		Interstate 80 East to Reno. Take Cisco Grove off-ramp, go left across I-80 and cross South Yuba River.
	.05	
.05		Turn left (old US 40).
	.05	
.10		Turn right, KOA campground straight ahead.
	.40	
.50		Bridge over Rattlesnake Creek.
	2.4	
2.9		Continue straight. (Woodchuck Campground sign).
	1.7	
4.6		"Y", keep left.
	.65	
5.25		"Y", keep left. (Fordyce and Lake Sterling sign, turn right to go to Lake Sterling).
	.20	
5.45		Fordyce Summit. Need 4-wheel drive to continue down hill.
	2.25	
5.7		Continue straight.
	.05	
5.75		Continue straight - PG&E camp on left.
	.30	
6.05		Fordyce Lake gage on right. Park near Fordyce Dam left abutment in large area just below dam. Follow road downstream across borrow area. Trail marked with yellow arrows. Can see flow from parking area to determine necessary measuring gear.