

ATTACHMENT L
Levee Encroachment Table

Nicolaus SCFRR Feasibility Study
RD 1001 LEVEES ENCROACHMENT LIST

Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
13.27	1001	Feather River	0+00	West end of Garden Highway Bridge crossing Natomas Cross Canal.	Bridge	5659	1967		County of Sutter	USACE - EGIS System
13.35	1001	Feather River	0+50	Landside paved vehicle access ramp from levee toe to crown.	Access			2/28/2012		USACE - PI Report
13.33	1001	Feather River	2+00	Overhead powerline crossing over levee. Utility pole with guy wire located at waterside hinge.	Overhead Utility			2/28/2012		USACE - PI Report
13.32	1001	Feather River	2+74	10-inch steel irrigation discharge pipe running through levee, at an unknown depth. Pump on the riverbank. Shutoff valve and siphon breaker on the waterside. (Not field verified). F	Irrigation	2388	1956	4/2/2019	Perry H. Stinnett	DWR - Utility Crossing Inventory Program / USACE - EGIS System
13.30	1001	Feather River	3+00	Waterside vehicle access ramp and gate from levee toe to crown with vehicle access gate.	Access			2/28/2012		USACE - PI Report
13.28	1001	Feather River	4+00	Residence, fence, landscaping, patio and pool built on overbuilt portion of landside crown.	Residence			2/28/2012		USACE - PI Report
13.14 - 11.74	1001	Feather River	11+50 - 86+32	Utility poles located within 15 feet of landside levee toe with supporting guy wires on landside slope at several locations.	Overhead Utility			2/28/2012		USACE - PI Report
13.13	1001	Feather River	12+10	Waterside vehicle access ramp and gate from levee toe to crown with vehicle access gate.	Access	10408	1975		John E Gartland	USACE - EGIS System
13.01	1001	Feather River	18+20	Landside vehicle access ramp to residence and orchard with vehicle access gate under CVFPB permit 2295. Permit 2295 also includes installation of pipe running through levee. Exact location and depth is unknown. (Not field verified)	Access	2295	1956		Perry H. Stinnett	USACE - EGIS System / USACE - PI Report
12.90	1001	Feather River	24+50	Landside vehicle access ramp from levee toe to crown. Metal gatepost near hinge.	Access			2/28/2012		USACE - PI Report
12.88	1001	Feather River	25+54	Underground telephone cable running along levee, within 10 feet of landside toe. End point of cable is unknown.	Telephone			2/28/2012		USACE - PI Report
12.76 - 12.63	1001	Feather River	32+00 - 39+00	Recreational vehicle camping area, including 60 recreational vehicle spaces, camping and picnic areas, building complex supported by driven timber piles, sewage holding tank, gabion type retaining wall along the riverbank, concrete boat ramp, and docks. 12-foot wide boat launching ramp from waterward toe of levee. Sewer, water, and electrical services through left bank berm. Water supplied from well on landward side of levee by a 1-inch pipe crossing the levee. Locations of utility crossings unknown. Power pole located near waterside levee toe. Several permits issued for this encroachment.	Other	11733, 6545, 13081, 7141, 4045, 15588	1962- 1990			USACE - EGIS System
12.71	1001	Feather River	34+50	Side approach access ramp on waterside slope. Ramp has crown width of 30 feet and extends downstream for a distance of 95 feet.	Access	14118	1985		Steve Campouris	USACE - EGIS System
12.71	1001	Feather River	34+50	Steel access gate at access ramp on waterside slope.	Access	11788	1976		Gary S. Kaveney	USACE - EGIS System
12.70	1001	Feather River	34+89	Steel access gate across levee crown.	Access	11788	1976		Gary S. Kaveney	USACE - EGIS System
12.68	1001	Feather River	36+50	Utility tower at levee crown. Tower foundation is approximately 50 feet wide. USACE benchmark located in foundation.	Overhead Utility			2/28/2012		USACE - PI Report
12.67	1001	Feather River	37+00	Proposed water well at Verona Marina next to existing water well which is to be abandoned. Construction status currently unknown (4/11/2019).	Water Supply	6545-1	2019		Greg Walker	USACE - EGIS System
12.65	1001	Feather River	38+30	Overhead utility lines crossing over levee. Utility pole located near waterside hinge.	Overhead Utility			2/28/2012		USACE - PI Report

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12.65	1001	Feather River	38+49	Electrical conduit and water line of an unknown size or material running through levee, at an unknown depth. (Not field verified)	Other	13081	1981	4/2/2019	Ed Loftis	DWR - Utility Crossing Inventory Program / USACE - EGIS System
12.65	1001	Feather River	38+50	Two metal posts at and within 15 feet of waterside toe.	Other			2/28/2012		USACE - PI Report
12.63	1001	Feather River	39+50	Vehicle access gate across levee crown.	Access	11788		2/28/2012		USACE - EGIS System / USACE - PI Report
12.62	1001	Feather River	40+00	Two vehicle access ramps, one from waterside toe to levee crown, one from landside toe to levee crown. Steel access gate at landside levee toe.	Access	7956, 13081	1972, 1981	2/28/2012	William Nunez, Ed Loftis	USACE - EGIS System / USACE - PI Report
12.60	1001	Feather River	40+30	Three-story, 2,800 square-foot concrete block and wood frame house on landside of levee.	Other	18712	2012		Jeffrey and Patricia Crowder	USACE - EGIS System
12.59	1001	Feather River	40+90	Barbed wire fence and waterside toe. Fence is perpendicular to levee alignment.	Fence			2/28/2012		USACE - EGIS System / USACE - PI Report
12.58	1001	Feather River	41+20	Vehicle access gate across levee crown.	Access	11787	1976	2/28/2012	William Nunes	USACE - PI Report
12.57	1001	Feather River	42+00	Residence, landscaping, fence, retaining wall, shed, and doghouse within 15 feet of landside toe for 250 foot stretch.	Residence	4746		2/28/2012		USACE - PI Report
12.46	1001	Feather River	43+00	Waterside vehicle access ramp from levee toe to crown with vehicle access gate at crown.	Access	13570	1983		Bob James, Buzz Maguire	USACE - EGIS System
12.51	1001	Feather River	45+50	Steel pipe access gate across levee crown at levee and Garden Highway confluence. Barbed wire fence running along landside slope.	Access	11787	1976	2/28/2012	William Nunes	USACE - EGIS System / USACE - PI Report
12.38	1001	Feather River	52+00	Farming activity within 15 feet of landside levee toe for 500 foot stretch.	Farming Activity			2/28/2012		USACE - PI Report
	1001	Feather River		Vehicle access gate located at waterside toe, with metal sign located 10 feet from waterside toe. Exact location of the encroachment is unknown.	Access			2/28/2012		USACE - PI Report
12.03	1001	Feather River	70+67	Waterside pedestrian footpath from levee toe to crown. Path is cut into slope up to 2 feet deep and 10 feet wide.	Access			2/28/2012		USACE - PI Report
	1001	Feather River		Two 1.5-inch capped metal piezometers near landside hinge. Exact location of the encroachment is unknown.	Other			2/28/2012		USACE - PI Report
11.87	1001	Feather River	79+19	Two 1.5-inch capped metal piezometers near waterside hinge.	Other			2/28/2012		USACE - PI Report
11.70	1001	Feather River	88+50	Landside vehicle access ramp from levee toe to crown.	Access			2/28/2012		USACE - PI Report
11.68 - 10.79	1001	Feather River	89+43 - 136+21	Underground telephone cable running along levee, located near landside toe.	Telephone			2/28/2012		USACE - PI Report
11.66	1001	Feather River	90+05	5-foot wide rock-revetment wall extending from waterside hinge to toe.	Other			2/28/2012		USACE - PI Report
11.65 - 11.23	1001	Feather River	91+21 - 113+15	Farming activity (tilling) within 15 feet of landside toe.	Farming Activity			2/28/2012		USACE - PI Report
11.38	1001	Feather River	105+04	16-inch irrigation discharge pipe of an unknown material running through levee, 3 feet below the crown. 40-horsepower slant pump mounted on a steel structure on the riverbank. Pipe discharges into a 36-inch concrete standpipe at the landside toe.	Irrigation	3489, 3489-1	1960	4/2/2019	Kirtland Brothers, Global AG Properties USA LLC c/o WGIM, Inc.	DWR - Utility Crossing Inventory Program / USACE - EGIS System / USACE - PI Report

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Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
11.37	1001	Feather River	105+60	480 V overhead utility lines crossing levee. 45 foot tall pole located on the waterside berm with guy and anchor, 74 feet from the centerline of the levee.	Overhead Utility	3669	1961		PG&E	USACE - EGIS System
	1001	Feather River		Heavy cable sticking out of waterside slope, approximately 3 inches below hinge. Cable may extend below levee crown. Exact location of the encroachment is unknown.	Other			2/28/2012		USACE - PI Report
11.26	1001	Feather River	111+57	4-inch steel natural gas pipeline bored under Feather River and both levees. Depth is unknown. (Not field verified)	Gas	17819		4/2/2019	Towne Exploration Company	DWR - Utility Crossing Inventory Program / USACE - EGIS System
11.19	1001	Feather River	115+50	Landside vehicle access ramp from levee toe to crown.	Access			2/28/2012		USACE - PI Report
11.10	1001	Feather River	120+00	100-foot long, 15-foot wide overbuilt section of landside embankment.	Other			2/28/2012		USACE - PI Report
10.95	1001	Feather River	127+75	Landside vehicle access ramp from levee toe to crown.	Access			2/28/2012		USACE - PI Report
10.92	1001	Feather River	129+46	Utility pole with guy wire and anchor located on landside slope.	Overhead Utility			2/28/2012		USACE - PI Report
10.91	1001	Feather River	130+24	Abandoned 8-inch pipe of unknown material or purpose running through the levee, 7.7 feet below the crown. Capped at the waterside end in 1955. Standpipe, pump and utility pole located within 15 feet over landside toe.	Pipeline			4/2/2019		DWR - Utility Crossing Inventory Program / USACE - PI Report
10.91	1001	Feather River	130+75	Landside vehicle access ramp from levee toe to crown.	Access			2/28/2012		USACE - PI Report
10.79	1001	Feather River	136+25	Utility pole located on lower third of landside slope.	Overhead Utility			2/28/2012		USACE - PI Report
10.76	1001	Feather River	138+05	5-foot wide rock-revetment wall extending from waterside hinge to toe.	Other			2/27/2012		USACE - PI Report
10.71	1001	Feather River	140+49	7-foot tall concrete headwall surrounding groundwater pump cut into landside slope. Pump feeds 36-inch standpipe located within 15 feet of landside toe.	Irrigation			2/27/2012		USACE - PI Report
10.70	1001	Feather River	141+00	100-foot long barn located at landside toe.	Other			2/27/2012		USACE - PI Report
10.67	1001	Feather River	142+50	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
10.60		Feather River	146+30	6-inch diameter metal standpipe located 10 feet from landside toe. Unknown if pipe is running through levee.	Pipeline			2/27/2012		USACE - PI Report
10.60	1001	Feather River	146+50	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
10.31	1001	Feather River	162+17	Waterside pedestrian footpath from levee toe to crown. Path is cut into slope less than 2 inches deep.	Access			2/27/2012		USACE - PI Report
10.25	1001	Feather River	165+43	18-inch steel irrigation discharge pipe running through levee, 5 feet below the crown. Slant pump mounted on a pile structure on the riverbank. Gate valve on the waterside slope. Siphon breaker on the landside shoulder. Pipe discharges into a concrete box at the landside toe. Utility poles on landside slope and near waterside toe.	Irrigation	1881	1954	4/2/2019	L.G. Kipp and R.B. Reith	DWR - Utility Crossing Inventory Program / USACE - EGIS System
10.25	1001	Feather River	165+50	Waterside vehicle access ramp from levee toe to crown with vehicle access gate.	Access			2/24/2012		USACE - PI Report
10.24 - 9.47	1001	Feather River	165+65 - 206+34	Underground telephone cable running along levee, approximately 10 feet from landside toe.	Telephone			2/27/2012		USACE - PI Report

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10.24	1001	Feather River	165+70	Overhead utility crossing over levee. One utility pole located on landside slope. One utility pole located at slant pump on waterside.	Overhead Utility	2219	1955		PG&E	USACE - EGIS System
10.14	1001	Feather River	171+25	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
10.10	1001	Feather River	173+20	Utility pole and guy wire with anchor within 15 feet of landside toe.	Overhead Utility			2/27/2012		USACE - PI Report
10.07	1001	Feather River	174+75	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
10.02	1001	Feather River	177+00	Utility pole and guy wire with anchor within 15 feet of landside toe.	Overhead Utility	3364	1960	2/27/2012	PG&E	USACE - EGIS System / USACE - PI Report
10.02	1001	Feather River	177+13	12-inch steel irrigation discharge pipe running through levee, 3 feet below the crown. Slant pump mounted on a steel structure on the riverbank. Siphon breaker on the landside shoulder. Pipe discharges into a 24-inch concrete standpipe at the landside toe.	Irrigation	3297	1960	4/2/2019	Albert Linggi	DWR - Utility Crossing Inventory Program / USACE - EGIS System / USACE - PI Report
9.99	1001	Feather River	179+00	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
9.90	1001	Feather River	183+60	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
9.79	1001	Feather River	189+50	Landside paved vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
9.76	1001	Feather River	191+00	Waterside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
9.74	1001	Feather River	192+00	Dwelling on waterward berm of the levee. Well 55 feet from the centerline of the levee. Permit 7344-B states septic tank and leach lines will be a minimum distance of 64 feet from levee centerline and 35 feet from the riverbank.	Other	7344, 7344-A 7344-B	1972		Alex Johnston	USACE - EGIS System / USACE - PI Report
9.74	1001	Feather River	192+30	Two abandoned utility poles located on landside slope and toe.	Overhead Utility			2/27/2012		USACE - PI Report
9.74	1001	Feather River	192+35	2.5-foot deep, 3.5 foot wide hole on landside hinge, possibly due to a removed gate foundation.	Other			2/27/2012		USACE - PI Report
9.74 - 9.44	1001	Feather River	193+00 - 202+45	Utility poles located on waterside slope and hinge, spaced 500 feet apart.	Overhead Utility			2/27/2012		USACE - PI Report
9.71	1001	Feather River	194+50	Waterside vehicle access ramp from levee toe to crown with access cable gate.	Access			2/27/2012		USACE - PI Report
9.70	1001	Feather River	195+00	Landside vehicle access ramp from levee toe to crown.	Access	2103	1955	2/27/2012	Inez and Thomas J. Johnston	USACE - PI Report
9.70	1001	Feather River	195+50	One story dwelling, 24 feet from the waterside edge of levee crown. Pump house with appurtenances on a mound on waterside.	Other	1271	1948		Inez and Thomas J. Johnston	USACE - EGIS System / USACE - PI Report
9.63	1001	Feather River	198+00	Overhead utility crossing over levee. Utility pole and guy anchor located at waterside slope. Utility pole located near landside levee toe near access ramp to residence.	Overhead Utility	9210	1944	2/27/2012	PG&E	USACE - EGIS System / USACE - PI Report
9.63	1001	Feather River	198+00	Waterside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
9.63	1001	Feather River	198+00	Landside vehicle access ramp from levee toe to crown.	Access	2103	1955	2/27/2012	Inez and Thomas J. Johnston	USACE - PI Report
9.44	1001	Feather River	202+45	Overhead utility crossing over levee. Utility pole located at waterside shoulder of crown, with two guy anchors in the waterside slope.	Overhead Utility	971	1974		PG&E	USACE - EGIS System

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9.44	1001	Feather River	202+58	12-inch steel irrigation discharge pipe running through levee, 5 feet below the crown. Pipe exposed on waterside and landside slopes. Pipe is breached with holes on waterside. Pump on the riverbank. Pipe discharges into a 48-inch steel tank at the landside toe.	Irrigation			4/2/2019	Johnston	DWR - Utility Crossing Inventory Program / USACE - PI Report
9.38	1001	Feather River	211+00	Landside vehicle access ramp from levee toe to crown, with vehicle access gate with wooden gate poles near hinge.	Access			2/27/2012		USACE - PI Report
9.35	1001	Feather River	212+67	5- to 10-foot wide, 1- to 2-foot deep steps cut into landside slope.	Access			2/27/2012		USACE - PI Report
9.33	1001	Feather River	213+65	Landside vehicle access ramp from levee toe to crown, with vehicle access gate with wooden gate poles near hinge.	Access			2/27/2012		USACE - PI Report
9.26	1001	Feather River	217+66	16-inch asphalt coated steel irrigation discharge pipe running through levee, 4.3 feet below the crown. Siphon break at landside hinge. Pipe discharges to distribution box at landside toe. Service pole for pump located 10 feet from toe. 30-horsepower slant pump and platform on the riverbank.	Irrigation	12828	1979	4/2/2019		DWR - Utility Crossing Inventory Program / USACE - EGIS System / USACE - PI Report
8.91	1001	Feather River	236+33	16-inch steel irrigation discharge pipe running through levee. 30-horsepower slant pump and platform on the riverbank. 18-inch standpipe near landside toe. Distribution concrete vault on landside. 30-inch CMP riser with valve on waterside hinge.	Irrigation	16288	1996	4/2/2019	Rose A. Blattman	DWR - Utility Crossing Inventory Program / USACE - EGIS System / USACE - PI Report
8.87	1001	Feather River	238+50	Waterside vehicle access ramp from levee toe to crown with vehicle access gate.	Access			2/27/2012		USACE - PI Report
8.76	1001	Feather River	244+10	High water marker located on waterside slope.	Other			2/27/2012		USACE - PI Report
8.73	1001	Feather River	245+50	Landside paved vehicle access ramp from levee toe (Catlett Road) to crown.	Access			2/27/2012		USACE - PI Report
8.73 - 6.45	1001	Feather River	245+83 - 365+35	Fiber optic conduit running along levee along the toe.	Fiber Optic Line			2/24/2012		USACE - PI Report
8.72 - 6.05	1001	Feather River	246+00 - 386+65	Utility poles running along levee, at and within 10 feet of landside toe.	Overhead Utility			2/24/2012	PG&E	USACE - PI Report
8.69	1001	Feather River	247+50	Landside paved vehicle access ramp from levee toe (Catlett Road) to crown.	Access			2/27/2012		USACE - PI Report
8.55	1001	Feather River	254+75	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
8.52	1001	Feather River	256+25	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
	1001	Feather River		Metal debris embedded in waterside slope. Exact location of encroachment is unknown.	Debris			2/27/2012		USACE - PI Report
8.43	1001	Feather River	261+82	Waterside vehicle access ramp from levee toe to crown that cuts into embankment up to 2 inches deep.	Access			2/27/2012		USACE - PI Report
8.20 - 8.00	1001	Feather River	273+97 - 284+17	Farming activity (tilling) within 15 feet of landside toe.	Farming Activity			2/27/2012		USACE - PI Report
8.19 - 7.79	1001	Feather River	274+22 - 295+30	Barbed wire fence running along levee, within 5 to 10 feet of landside toe.	Fence			2/27/2012		USACE - PI Report
8.09	1001	Feather River	279+30	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
8.07	1001	Feather River	280+40	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report

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8.05	1001	Feather River	281+50	Overhead utility lines crossing over levee, approximately 20 feet above crown. Utility pole with guy wire and anchor at waterside levee toe. Utility pole with guy wire and anchor located on landside slope. Utility pole located at landside levee toe.	Overhead Utility	3027, 3027-A	1959		PG&E	USACE - EGIS System / USACE - PI Report
8.04	1001	Feather River	282+70	DWR UCIP - 18-inch steel irrigation discharge pipe running through levee, 4.9 feet below the crown. 18-inch, 50-horsepower slant pump mounted on a steel structure on the riverbank. Siphon breaker in a 6-inch steel riser on the landside shoulder. Pipe discharges into a 36-inch corrugated metal pipe riser on the landside slope. USACE PIR - 14-inch pipe running through levee, 2 feet below levee crown. Pipe exposed along landside slope.	Irrigation	2931	1958	4/2/2019	Aileen Marty	DWR - Utility Crossing Inventory Program / USACE - EGIS System / USACE - PI Report
7.78	1001	Feather River	296+00	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
7.76	1001	Feather River	297+12	100-foot long, 2- to 4-foot tall wooden retaining wall cut into landside slope.	Retaining Wall			2/27/2012		USACE - PI Report
7.74	1001	Feather River	298+50	Landside vehicle access ramp from levee toe to crown.	Access			2/27/2012		USACE - PI Report
7.72	1001	Feather River	299+28	14-inch diameter standpipe located 11 feet from landside toe, extending 10 feet into the ground. Does not appear to tie into any pipe running through levee.	Pipeline			2/27/2012		USACE - PI Report
7.71 - 6.93	1001	Feather River	299+92 - 340+20	Barbed wire fence running along levee located on landside slope and five feet from landside toe.	Fence			2/24/2012		USACE - PI Report
	1001	Feather River		1-inch diameter metal rod sticking 3 feet out of landside slope. Exact location of encroachment is unknown.	Other			2/27/2012		USACE - PI Report
7.71	1001	Feather River	300+00	Waterside vehicle access ramp from levee toe to crown with vehicle access gate.	Access			2/27/2012		USACE - PI Report
7.67	1001	Feather River	301+96	200-foot stretch of above ground 8-inch steel pipe located within 10 feet of landside toe. Unknown of use of pipe, but appears abandoned.	Pipeline			2/27/2012		USACE - PI Report
7.55	1001	Feather River	308+10	Landside access ramp from levee toe to crown. Vehicle access gate at bottom of ramp.	Access			2/24/2012		USACE - PI Report
7.47	1001	Feather River	312+00	Landside access ramp from levee toe to crown. Vehicle access gate at bottom of ramp.	Access			2/24/2012		USACE - PI Report
7.41	1001	Feather River	315+34	3-inch vent pipe located at landside toe. Pipe encased in 12 inches of concrete. 10-inch diameter hole lined with concrete located at landside about, approximately 12 inches from vent pipe. Unknown if ties to a pipe running through levee.	Pipeline			2/24/2012		USACE - PI Report
7.26	1001	Feather River	322+52	12-inch irrigation discharge pipe of an unknown material running through the levee, 4.7-feet below the crown. Slant pump mounted on a steel structure on the river bank. Butterfly valve on the waterside. Pipe discharges into 36-inch concrete standpipe at landside toe. Air break valve at landside toe. Two service poles for pump.	Irrigation			4/2/2019	Toledo	DWR - Utility Crossing Inventory Program / USACE - PI Report
7.26	1001	Feather River	322+60	Landside vehicle access ramp from levee toe to crown.	Access			2/24/2012		USACE - PI Report
7.24	1001	Feather River	323+43	Overhead utility lines crossing over levee.	Overhead Utility	2223	1956	2/24/2012	PG&E	USACE - EGIS System / USACE - PI Report
7.22	1001	Feather River	324+25	Landside vehicle access ramp from levee toe to crown.	Access			2/24/2012		USACE - PI Report
7.12	1001	Feather River	330+20	Waterside access ramp from levee toe to levee crown with vehicle access gate.	Access			2/24/2012		USACE - PI Report

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7.11 - 7.06	1001	Feather River	330+92 - 333+50	Wire fence running along levee, within 15 feet of waterside toe.	Fence			2/24/2012		USACE - PI Report
6.95	1001	Feather River	338+90	5-foot wide rock-revetment wall extending from waterside hinge to toe.	Other			2/24/2012		USACE - PI Report
6.88	1001	Feather River	342+50	Waterside vehicle access ramp from levee toe to crown with access gate.	Access			2/24/2012		USACE - PI Report
6.88	1001	Feather River	342+62	Farming activity within 15 feet of landside levee toe.	Other			2/24/2012		USACE - PI Report
6.87	1001	Feather River	343+41	20-inch welded steel irrigation discharge pipe running through levee, 8.2 feet below the crown. 16-inch propeller pump and platform on the riverbank. Pressure breakers on the landside corrugated metal pipe riser. Pipe discharges into a steel standpipe in the landside toe.	Irrigation	3903	1962	4/2/2019	White Oak Ranch	DWR - Utility Crossing Inventory Program / USACE - EGIS System
6.87	1001	Feather River	343+41	30 horsepower inclined pump on Feather River bank. 24-inch pipe crossing the levee, discharging into field ditch.	Irrigation	9238	1974		Fred Holmes	USACE - EGIS System
6.87	1001	Feather River	343+41	DWR UCIP - 14-inch steel irrigation discharge pipe running through levee, 4 feet below the crown. Pump mounted on a piling structure in the channel. Pressure valve on the landside slope. Pipe discharges into a steel standpipe on the landside toe. USACE PIR - Two-14-inch pipes running through levee. Shutoff valves located on waterside slope. Hole in slope above exposed pipe. (2/24/2012).	Irrigation	2062	1955	4/2/2019	Domingos Rocha and Domingos Ernest Toledo	DWR - Utility Crossing Inventory Program / USACE - PI Report
6.87	1001	Feather River	343+50	Retaining wall constructed of wood piling that cuts into waterside slope.	Retaining Wall			2/24/2012		USACE - PI Report
6.87	1001	Feather River	343+50	Landside vehicle access ramp from levee toe to crown.	Access			2/24/2012		USACE - PI Report
6.87	1001	Feather River	343+61	18-inch steel irrigation discharge pipe running through levee, 6.7 feet below the crown. Siphon breakers on landside shoulder. Pipe discharges into a 48-inch concrete standpipe on landside. (Not field verified)	Irrigation		1969	4/2/2019		DWR - Utility Crossing Inventory Program
6.81	1001	Feather River	347+00	Landside vehicle access ramp from levee toe to crown with cable-gate.	Access			2/24/2012		USACE - PI Report
6.60	1001	Feather River	357+00	Four 1-inch steel pipe piezometers. Two piezometers located in landside slope 15 feet deep, one 1.5 feet from levee shoulder, one 1 foot from levee shoulder. Two piezometers located in waterside slope 30 feet deep, one 1.5 feet from levee shoulder, one 1 foot from the levee shoulder. Piezometers grout plugged four years after installation.	Other	4194	1963		California Department of Water Resources	USACE - EGIS System
6.59	1001	Feather River	357+70	5-foot wide rock-revetment wall extending from waterside hinge to toe.	Other			2/24/2012		USACE - PI Report
6.55	1001	Feather River	360+10	Landside vehicle access ramp from levee toe to crown.	Access			2/24/2012		USACE - PI Report
6.54	1001	Feather River	360+67	14-inch steel irrigation pipe running through levee. Invert elevation of 40.1 feet (USED Datum). Butterfly valve on the waterside. (Not field verified)	Irrigation		1955	4/2/2019		DWR - Utility Crossing Inventory Program
6.50	1001	Feather River	362+90	Landside vehicle access ramp from levee toe to crown.	Access			2/24/2012		USACE - PI Report
6.45	1001	Feather River	365+35	Cable junction box and fiber optic cable marker located at landside levee toe.	Fiber Optic Line			2/24/2012		USACE - PI Report
6.30	1001	Feather River	373+50	Landside vehicle access ramp from levee toe to crown.	Access			2/24/2012		USACE - PI Report

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Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
6.25	1001	Feather River	376+00	Landside vehicle access ramp from levee toe to crown.	Access			2/24/2012		USACE - PI Report
6.23	1001	Feather River	376+86	12-inch diameter concrete standpipe at landside toe. Possibly associated with landside irrigation. No pipe running through levee.	Irrigation			2/24/2012		USACE - PI Report
6.21 - 6.05	1001	Feather River	378+45 - 386+45	800-foot long barbed wire fence located along landside toe.	Fence	11584	1976	2/24/2012	Ray S. Haymore	USACE - EGIS System / USACE - PI Report
6.19	1001	Feather River	379+60	5-foot wide rock-revetment wall extending from waterside hinge to toe.	Other			2/24/2012		USACE - PI Report
6.10	1001	Feather River	384+11	Power pole with guy wires, 48-inch diameter concrete standpipe and pump located at landside levee toe. Additional 12-inch concrete riser located approximately 100 feet from pump.	Other			2/24/2012		USACE - PI Report
6.05	1001	Feather River	386+50	Landside vehicle access ramp from landside levee toe to crown.	Access	18124	2006	2/24/2012	Edward Cathcart	USACE - PI Report
6.05	1001	Feather River	386+65	5-foot wide rock-revetment wall extending from waterside hinge to toe.	Other			2/24/2012		USACE - PI Report
5.99	1001	Feather River	390+00	Overhead utility lines crossing over levee. Utility town located on landside slope.	Overhead Utility	13039	1980	2/24/2012	PG&E	USACE -EGIS System / USACE - PI Report
5.96	1001	Feather River	391+50	Landside vehicle access ramp from landside levee toe to crown.	Access			2/24/2012		USACE - PI Report
5.88	1001	Feather River	395+53	12-inch irrigation discharge pipe of an unknown material running through the levee, 10 feet below the crown. 30-horsepower slant pump on the riverbank. Siphon breaker in a 24-inch corrugated metal pipe riser on the landside slope. Shutoff valve located on landside slope. Pipe discharges into 36-inch concrete standpipe at the landside toe. Pipe installed by USACE in 1963. Switch panel, pump house, and service pole at landside toe. Permit 10389-A-1 date agenda set for 7/26/2019 for removal and replacement of 12-inch pipe and existing 1.5-inch electrical conduit with 2-inch electrical conduit. Installation of 5'x5' vault housing, and new siphon breaker and butterfly valve.	Irrigation	10389-A, 10389-A-1	1976, 2019	4/2/2019	Pluma Orchards, Empire Land Company, LLC	DWR - Utility Crossing Inventory Program / USACE - EGIS System / USACE PI Report
5.84	1001	Feather River	397+00	Waterside vehicle access ramp from levee toe to crown with access gate .	Access			2/24/2012		USACE - PI Report
5.83	1001	Feather River	397+63	Utility pole with guy wire and anchor located 10 feet from landside levee toe.	Overhead Utility			2/24/2012		USACE - PI Report
5.80 - 5.76	1001	Feather River	399+25 - 401+54	Residence, landscaping, barbed wire fence, and abandoned utility poles on landside slope and within 15 feet of landside toe.	Other			2/24/2012		USACE - PI Report
5.71	1001	Feather River	403+50	Two landside vehicle access ramps from levee toe to crown.	Access			2/24/2012		USACE - PI Report
5.66	1001	Feather River	406+25	5-foot wide, 25-foot long overbuilt section of waterside embankment.	Other			2/24/2012		USACE - PI Report
5.61	1001	Feather River	409+33	Golf course landscaping and irrigation within 15 feet of landside toe.	Irrigation			2/24/2012		USACE - PI Report
5.61	1001	Feather River	409+40	10-inch irrigation discharge pipe of an unknown material running through levee, 2 feet below the crown. Siphon breaker in steel pipe riser on the landside shoulder. 36-inch standpipe on the landside with sensor gate. Slant pump on a platform on the riverbank. USACE PIR - 24-inch pipe running through levee.	Irrigation	15003	1988	4/2/2019	W. M. Laetsch	DWR - Utility Crossing Inventory Program / USACE - EGIS System / USACE - PI Report
5.61	1001	Feather River	409+60	Landside vehicle access ramp from levee toe to crown.	Access			2/24/2012		USACE - PI Report

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Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
5.58	1001	Feather River	411+25	40-foot long, 10-foot wide overbuilt section of waterside embankment.	Other			2/24/2012		USACE - PI Report
5.43	1001	Feather River	413+96	10-inch steel irrigation pipe running through the levee, invert elevation 49.9 feet, USED Datum. Gate valve on the waterside. (Not field verified)	Irrigation		1955	4/2/2019		DWR - Utility Crossing Inventory Program
5.28	1001	Feather River	426+80	Waterside vehicle access ramp with access gate from levee toe to crown.	Access			2/24/2012		USACE - PI Report
5.24	1001	Feather River	428+75	Chain link fence running along levee within 15 feet of landside toe for 100-foot stretch.	Fence			2/24/2012		USACE - PI Report
5.21	1001	Feather River	430+00	Vehicle access gate across levee crown. Pedestrian footpath extending down waterside slope from levee toe to crown.	Access			2/24/2012		USACE - PI Report
5.09	1001	Feather River	436+70	Waterside vehicle access ramp from levee toe to crown.	Access	11897	1978	2/24/2012	Esther Scheiber	USACE - EGIS System / USACE - PI Report
4.89	1001	Feather River	442+41	18-inch steel irrigation pipe running through levee, 3.5 feet below levee crown. 40-horsepower slant pump mounted on waterside slope. Siphon breaker on landside slope. Pipe discharges into a 36-inch concrete standpipe on the landside. 1.25-inch electrical conduit through the levee, 3 feet below the crown. Pump house serviced by utility poles on landside.	Irrigation	5342	1973	4/2/2019	Esther Scheiber	DWR - Utility Crossing Inventory Program / USACE - EGIS System / USACE - PI Report
	1001	Feather River		Fence post located on lower third of waterside slope. Exact location of the encroachment is unknown.	Fence			2/24/2012		USACE - PI Report
	1001	Feather River		Three metal fence posts located on waterside slope. Exact location of the encroachment is unknown.	Fence			2/24/2012		USACE - PI Report
	1001	Feather River		Fence post located on lower third of waterside slope. Exact location of the encroachment is unknown.	Fence			2/24/2012		USACE - PI Report
4.63 - 4.59	1001	Feather River	461+25 - 463+35	210-foot long, 20-foot wide overbuilt section of landside embankment.	Other			2/24/2012		USACE - PI Report
4.57	1001	Feather River	464+40	USGS gage station located at waterside hinge. Two 2-inch galvanized pipes running down the waterside slope.	Other	8805	1973	2/24/2012	United States Department of Interior Geological Survey, Water Resources Division	USACE - EGIS System / USACE - PI Report
	1001	Feather River		2-inch diameter, 2-foot tall steel post at landside hinge. Exact location of the encroachment is unknown.	Other			2/24/2012		USACE - PI Report
4.47	1001	Feather River	469+50	18-foot wide, 25-foot long overbuilt section of landside embankment.	Other			2/24/2012		USACE - PI Report
4.18	1001	Feather River	484+30	Vehicle access gate located at landside toe , extending to lower third of landside slope.	Access			2/24/2012		USACE - PI Report
4.15	1001	Feather River	485+73	Pedestrian footpath from landside toe to crown that cuts into slope up to 24 inches deep and up to 4 feet wide.	Access			2/24/2012		USACE - PI Report
3.84 - 3.81	1001	Feather River	502+00 - 503+60	Overhead utility lines crossing over levee.	Overhead Utility			2/23/2012		USACE - PI Report
	1001	Feather River		Metal fencepost located on waterside slope. Exact location of the encroachment is unknown.	Fence			2/23/2012		USACE - PI Report
3.55	1001	Feather River	517+50	Waterside vehicle access ramp.	Access			2/23/2012		USACE - PI Report

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Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
3.52	1001	Feather River	519+00	Landside vehicle access ramp with access gate.	Access			2/23/2012		USACE - PI Report
3.37	1001	Feather River	526+82	Ramp cut into landside slope up to 8 inches deep.	Other			2/23/2012		USACE - PI Report
3.30	1001	Feather River	530+47	Two utility poles located at landside levee toe, spaced approximately 200 feet apart.	Overhead Utility			2/23/2012		USACE - PI Report
3.21	1001	Feather River	531+12	Two 3-foot by 5-foot by 3-foot splice boxes with the levee crown, and two 4-inch communications conduits of unknown material within the levee slopes and connected to the existing conduit attached to the State Highway 99 bridge across Feather River.	Communications	17201	2000	4/2/2019	Pacific Bell	DWR - Utility Crossing Inventory Program / USACE - EGIS System
3.21-3.19	1001	Feather River	531+20 - 532+15	Highway 99 Bridge crossing levee.	Bridge	2436, 18469	1957, 2009		California Department of Transportation	USACE - EGIS System
3.21	1001	Feather River	531+26	Abandoned USILF communications conduit of an unknown size or material running through levee, 3 feet below the crown. (Not field verified)	Communications	3511	1960	4/2/2019	United States Army District, Sacramento, Corps of Engineers	DWR - Utility Crossing Inventory Program / USACE - EGIS System
3.19	1001	Feather River	532+30	7-inch steel pipe of an unknown purpose running through levee, 0.5 feet below the crown. Open on both ends for electrical wire to the pump on the waterside. (Not field verified)	Pipeline			4/2/2019		DWR - Utility Crossing Inventory Program
3.19	1001	Feather River	532+66	Pump at waterside levee toe with 8-inch diameter intake to 12-inch gravity pipe into waterside slope. No observation on landside.	Pipeline			2/23/2012		USACE - PI Report
3.17	1001	Feather River	533+23	12-inch steel irrigation pipe running through levee, 6.2 feet below the crown. Portable pump mounted on riverbank during summer months. Siphon breaker on the landward slope. Pipe discharges into 24-inch concrete standpipe at landside toe. No control valves installed. (Not field verified)	Irrigation	2163	1955	4/2/2019	Leo and Shirley Muller	DWR - Utility Crossing Inventory Program / USACE - EGIS System
3.16	1001	Feather River	534+00	Waterside vehicle access ramp from levee toe to crown.	Access	16516	1996	2/23/2012	California Department of Transportation	USACE - EGIS System / USACE - PI Report
3.22 - 3.12		Feather River	534+50 - 539+57	Utility poles running along levee, within 10 feet of landside toe. Poles are spaced approximately 200 feet apart.	Overhead Utility			2/23/2012		USACE - PI Report
3.17		Feather River	537+00	Landside vehicle access ramp from levee toe to crown. Vehicle access gate located on ramp.	Access			2/23/2012		USACE - PI Report
3.01	1001	Feather River	545+35	Two utility poles with supporting guy wires and anchors located on landside slope and toe, spaced approximately 200 feet apart.	Overhead Utility			2/23/2012		USACE - PI Report
2.87	1001	Feather River	552+50	Garage/shed, fence propane tank within 15 feet of landside levee toe.	Other			2/23/2012		USACE - PI Report
2.87	1001	Feather River	553+00	Abandoned bridge abutment located at waterside hinge.	Bridge			2/23/2012		USACE - PI Report
2.85	1001	Feather River	554+00	Two vehicle access ramps, one from waterside levee toe to crown, one from landside levee toe to crown. Vehicle access gate located on landside access ramp.	Access			2/23/2012		USACE - PI Report
	1001	Feather River		Three lengths of fencing extending from landside hinge to landside toe, spaced at 50 to 100 feet apart. Exact location of the encroachment is unknown.	Fence			2/23/2012		USACE - PI Report
2.83 - 2.68	1001	Feather River	554+84 - 562+96	Fencing and several storage sheds within 15 feet of landside levee toe.	Other			2/23/2012		USACE - PI Report

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Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
2.74	1001	Feather River	559+47	4-inch steel swimming pool drainage pipe running through levee, 3 feet below the crown. Open on the waterside end. Swimming pool located approximately 8 feet from the landside toe.	Drainage			4/2/2019	Nate Wise	DWR - Utility Crossing Inventory Program / USACE - PI Report
2.74	1001	Feather River	559+47	Fence running along landside toe for 50 foot stretch.	Fence			2/23/2012		USACE - PI Report
2.73	1001	Feather River	560+18	Concrete stairs and railing from landside levee toe to hinge.	Other			2/23/2012		USACE - PI Report
2.73	1001	Feather River	560+20	Buried cable crossing levee, attached to north and south walls of Reclamation District's building near Sutter Street.	Telephone	1821	1953		Pacific Telephone and Telegraph Company	USACE - EGIS System
2.71	1001	Feather River	561+50	Landside vehicle access ramp from levee toe to crown. Vehicle access gate on ramp. Turnabout area build-out at landside hinge.	Access			2/23/2012		USACE - PI Report
2.51	1001	Feather River	571+68	Landside pedestrian footpath from levee toe to crown. Path is cut into slope up to 2 inches deep.	Access			2/23/2012		USACE - PI Report
2.37	1001	Feather River	579+00	Landside vehicle access ramp from levee toe to crown.	Access			2/23/2012		USACE - PI Report
2.34 - 1.50	1001	Feather River	580+39 - 624+12	Barbed wire fence running along the landside toe.	Fence			2/23/2012		USACE - PI Report
2.34	1001	Feather River	580+58	Vehicle access gate across levee crown, with barbed wire fencing running down landside and waterside slopes.	Access			2/23/2012		USACE - PI Report
2.33	1001	Feather River	581+00	Overhead utility lines crossing over levee. Utility tower and supporting guy wire located at landside slope.	Overhead Utility			2/23/2012		USACE - PI Report
2.03	1001	Feather River	596+52	1-inch diameter pipe vertically embedded in middle of landside slope.	Pipeline			2/23/2012		USACE - PI Report
1.97	1001	Feather River	599+57	1.5-inch diameter pipe embedded in middle of landside slope. Pipe rises 12 inches from the embankment.	Pipeline			2/23/2012		USACE - PI Report
1.77 - 0.96	1001	Feather River	610+42 - 652+27	Barbed wire fence running along waterside toe.	Fence			2/23/2012		USACE - PI Report
	1001	Feather River		Poles from abandoned gate located at waterside and landside hinges. Barbed wire extends down waterside and landside slopes. Exact location of the encroachment is unknown.	Fence			2/23/2012		USACE - PI Report
1.74	1001	Feather River	612+00	Two vehicle access ramps, one from waterside toe to levee crown, one from landside toe to crown.	Access			2/23/2012		USACE - PI Report
1.74 - 1.52	1001	Feather River	612+00 - 623+00	Barbed wire fence located at and within 15 feet of landside toe.	Fence	9653	1974	2/23/2012	Leslie Scheiber	USACE - EGIS System / USACE - PI Report
	1001	Feather River		Irrigation running along levee within 15 feet of landside toe, up to 6 feet wide and 2 feet deep. Exact location of the encroachment is unknown.	Irrigation			2/23/2012		USACE - PI Report
	1001	Feather River		Three metal fence posts located on the lower half of the waterside slope. Exact location of the encroachment is unknown.	Fence			2/23/2012		USACE - PI Report
1.43	1001	Feather River	628+00	Two vehicle access ramps, one from waterside toe to levee crown, one from landside toe to crown. Access gate across levee crown, with fencing along waterside and landside slopes.	Access			2/23/2012		USACE - PI Report
1.28	1001	Feather River	635+85	Irrigation pipe running through levee.	Irrigation	485	1930		Stark Brothers	USACE - EGIS System
1.05	1001	Feather River	638+12	Vehicle access gate across levee crown, with barbed wire fencing running down landside and waterside slopes.	Access			2/23/2012		USACE - PI Report

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Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
0.98 - 1.16	1001	Feather River	641+83 - 651+29	Utility poles running along levee, within 15 feet of landside toe.	Overhead Utility			2/23/2012		USACE - PI Report
1.00	1001	Feather River	650+29	Valve box within 10 feet of landside toe. Unknown if valve is related to pipe running through levee or adjacent crop irrigation.	Other			2/23/2012		USACE - PI Report
0.96	1001	Feather River	652+35	Farming activity within 5 to 15 feet of landside toe.	Other			2/23/2012		USACE - PI Report
0.96	1001	Feather River	652+36	Vehicle access gate across levee crown, with barbed wire fencing running down landside and waterside slopes.	Access			2/23/2012		USACE - PI Report
	1001	Feather River		Poles from abandoned gate at waterside and landside hinges. Barbed wire fence extends down the waterside and landside slope. Exact location of the encroachment is unknown.	Access			2/23/2012		USACE - PI Report
	1001	Feather River		Poles from abandoned gate at waterside and landside hinges. Barbed wire fence extends down the landside slope. Exact location of the encroachment is unknown.	Access			2/23/2012		USACE - PI Report
0.59 - 1.23	1001	Feather River	638+28 - 671+90	Barbed wire fence running along levee, at and within 10 feet of landside toe.	Fence			2/23/2012		USACE - PI Report
0.40	1001	Feather River	661+00	Vehicle access ramps from waterside and landside toes to levee crown. Vehicle access gate at crown with fence along waterside and landside slopes.	Access	2529-A	1957	2/23/2012	Carl J. Scheiber	USACE - EGIS System / USACE - PI Report
0.21 - 0.60	1001	Feather River	671+16 - 691+53	Electric fence running along waterside hinge.	Fence			2/23/2012		USACE - PI Report
	1001	Feather River		Two metal fence posts located on middle third of waterside slope. Exact location of encroachment is unknown.	Fence			2/23/2012		USACE - PI Report
0.22 - 0.60	1001	Feather River	671+18 - 691+15	Barbed wire fence running along waterside slope and toe.	Fence			2/23/2012		USACE - PI Report
0.59	1001	Feather River	671+83	Vehicle access gate across levee crown, with barbed wire fencing running down landside and waterside slopes.	Access			2/23/2012		USACE - PI Report
0.43	1001	Feather River	680+00	Landside ATV access ramp from toe to levee that cuts into slope up to 1 inch deep.	Access			2/23/2012		USACE - PI Report
	1001	Feather River		High-water marker located on waterside slope. Exact location of the encroachment is unknown.	Other			2/23/2012		USACE - PI Report
0.21	1001	Feather River	691+56	Overhead utility lines crossing over levee.	Overhead Utility	13553	1983	2/23/2012	PG&E	USACE - EGIS System / USACE - PI Report
0.19	1001	Feather River	692+52	Vehicle access gate across levee crown, with barbed wire fencing running down landside and waterside slopes.	Access			2/23/2012		USACE - PI Report
0.01	1001	Natomas Cross Canal	0+30	Telephone conduit of an unknown size or material running through levee, 3 feet below the crown. The buried conduit also runs along the landside toe for an unspecified distance. (Not field Verified)	Telephone	5692	1967	4/2/2019	Pacific Telephone and Telegraph Company	USACE - EGIS System / DWR - Utility Crossing Inventory Program
0.01	1001	Natomas Cross Canal	0+48	Waterside earthfill access ramp immediately upstream from Garden Highway Bridge.	Access	6092	1968		Verona Boat Landing	USACE - EGIS System
0.02	1001	Natomas Cross Canal	1+30	Gate to residence driveway at landside toe.	Access			2/28/2012		USACE - PI Report
0.02 - 0.74	1001	Natomas Cross Canal	1+40 - 39+50	14 telephone utility poles running along the waterside crown shoulder, approximately 250 feet apart from each other.	Telephone	17456	2002		Pacific Bell	USACE - EGIS System / USACE - PI Report

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Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
0.05	1001	Natomas Cross Canal	3+00	Residence, landscaping, fruit trees, canopy structure, spa, utilities and sidewalk at landside toe.	Residence			2/28/2012		USACE - PI Report
0.09	1001	Natomas Cross Canal	5+00	Landside vehicle access ramp from levee toe to crown.	Access			2/28/2012		USACE - PI Report
0.11	1001	Natomas Cross Canal	6+00	Metal pipe gate across levee crown.	Access			2/28/2012		USACE - PI Report
0.15 - 0.87	1001	Natomas Cross Canal	8+00 - 45+72	Power poles running along levee within 10 feet from the landside toe.	Overhead Utility			2/28/2012		USACE - PI Report
0.69	1001	Natomas Cross Canal	36+57	Abandoned concrete foundation on crown at landside hinge. Steel rail on landside hinge.	Other			2/28/2012		USACE - PI Report
0.72	1001	Natomas Cross Canal	38+00	Two landside vehicle access ramps from levee toe to crown.	Access			2/28/2012		USACE - PI Report
0.74	1001	Natomas Cross Canal	39+60	Waterside vehicle access ramp from levee toe to crown.	Access			2/28/2012		USACE - PI Report
0.76	1001	Natomas Cross Canal	40+57	Domestic well on waterside of levee. Unknown if there is pipe crossing the levee.	Other			4/2/2019		DWR - Utility Crossing Inventory Program
0.78	1001	Natomas Cross Canal	40+97	PG&E substation located on waterside slope and hinge. Utility pole located on waterside crown. Various underground utilities.	Other			2/28/2012	PG&E	USACE - PI Report
0.78	1001	Natomas Cross Canal	41+09	42-inch & 36-inch steel drainage discharge pipes running through levee, both between 5 to 15 feet below the crown. Two vertical pumps mounted on a steel structure in the drainage canal on the landside. Metal walkway to the pumps. Concrete steps on the landside slope. Siphon breakers on the waterside shoulder. Flap gates on the waterside end.	Drainage	2835, 2835-A	1960	4/2/2019	RD 1001	DWR - Utility Crossing Inventory Program / USACE - EGIS System / USACE - PI Report
0.78	1001	Natomas Cross Canal	41+10	3-foot wide, 90.75-foot long steel walkway from top of levee to pump structure.	Access	2835-A	1960		RD 1001	USACE - EGIS System
0.78 - 0.79	1001	Natomas Cross Canal	41+71 - 42+29	Two 50-inch steel drainage discharge pipes running through levee, 25 feet below the crown. Five 60-inch by 84-inch reinforced concrete drainage tunnels running through levee, 25 feet below the crown. One tunnel has a 60-inch pump installed inside and is gated on the waterside end. One 24-inch reinforced concrete drainage discharge pipe, 25 feet below the crown. All tunnels and pipes are gated. Concrete headwall and railing along the landside.	Drainage			4/2/2019	RD 1001	DWR - Utility Crossing Inventory Program
0.79	1001	Natomas Cross Canal	42+00	100-foot wide canal running perpendicular to levee.	Drainage			2/28/2012		USACE - PI Report
0.82	1001	Natomas Cross Canal	43+50	Pump tender dwelling unit on waterside shoulder of levee. Septic system at waterward side of levee. Power to dwelling is buried in the landward slope of levee and through crown.	Residence	9787			RD 1001	USACE - EGIS System / USACE - PI Report

Nicolaus SCFRR Feasibility Study
RD 1001 LEVEES ENCROACHMENT LIST

Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
0.85	1001	Natomas Cross Canal	45+00	Landside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
0.86	1001	Natomas Cross Canal	45+70	Abandoned access gate across levee crown.	Access			3/1/2012		USACE - PI Report
1.15	1001	Natomas Cross Canal	60+00	Landside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
1.16	1001	Natomas Cross Canal	60+65	Overhead powerlines crossing over levee. Power pole and guy wires located at landside hinge.	Overhead Utility			3/1/2012		USACE - PI Report
1.31	1001	Natomas Cross Canal	68+50	Landside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
1.59	1001	Natomas Cross Canal	76+00	Landside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
1.67	1001	Natomas Cross Canal	80+00	Landside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
2.83	1001	Natomas Cross Canal	148+25	Landside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
3.26	1001	Natomas Cross Canal	171+00	Landside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
3.59 - 3.84	1001	Natomas Cross Canal	188+28 - 201+88	Utility poles located on landside hinge with guy wires in slope.	Overhead Utility			3/1/2012		USACE - PI Report
3.63	1001	Natomas Cross Canal	190+57	16-inch vertical irrigation pumping plant and 20-inch diameter, eight gage steel discharge pipe through the levee. (Not field verified)	Irrigation	1371	1949		Roy Osterli	USACE - EGIS System
3.67	1001	Natomas Cross Canal	192+75	Landside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
3.67	1001	Natomas Cross Canal	193+00	Overhead utility lines crossing over levee. Utility pole located on waterside slope.	Overhead Utility			3/1/2012		USACE - PI Report
3.67	1001	Natomas Cross Canal	193+00	15-foot wide ditch running perpendicular to levee on landside.	Drainage			3/1/2012		USACE - PI Report
3.71	1001	Natomas Cross Canal	194+75	Waterside access ramp from levee toe to levee crown.	Access			3/1/2012		USACE - PI Report

Nicolaus SCFRR Feasibility Study
RD 1001 LEVEES ENCROACHMENT LIST

Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
	1001	Natomas Cross Canal		Guy wire anchor in waterside slope. Exact location of the encroachment is unknown.	Other			3/1/2012		USACE - PI Report
3.65	1001	Natomas Cross Canal	193+17	Two 24-inch irrigation discharge steel pipes running through the levee 2.5 to 4 feet below the crown. Two vertical pumps on a steel piling in the channel. Metal catwalk leading to pump. One pipe gated on the waterside. No control valve on the other pipe. Two siphon breakers on the landside shoulder. Both pipes discharge into an irrigation ditch at the landside toe.	Irrigation	1700		4/2/2019		DWR - Utility Crossing Inventory Program / USACE - PI Report
3.69	1001	Natomas Cross Canal	193+35	24-inch reinforced concrete pipeline of an unknown purpose and for an unknown distance along the landside toe, at an unknown depth. Pipeline does not cross the levee. (Not field verified)	Pipeline	1700		4/2/2019		DWR - Utility Crossing Inventory Program
3.72	1001	Natomas Cross Canal	194+91	Pumping plant used for rice irrigation. 24-inch pipe jacked through levee approximately 6 feet above the natural ground surface. Two concrete cutoff walls through the levee. (Not field verified)	Irrigation	648	1935		Natomas Company	USACE - EGIS System
3.73	1001	Natomas Cross Canal	195+14	24-inch pipeline that connects to an existing irrigation structure and existing pipe. (Not field verified, may have been removed under permit 16293).	Irrigation	2513	1957		B.J. and Persida Ukropina	USACE - EGIS System
3.73	1001	Natomas Cross Canal	195+42	PG&E pipe crossing levee. Two bollard markers on landside hinge.	Gas			3/1/2012		USACE - PI Report
3.73	1001	Natomas Cross Canal	195+50	Landside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
3.70	1001	Natomas Cross Canal	195+51	24-inch high-density polyethylene irrigation discharge pipe running through levee, 3.5 to 10 feet below the crown. Slide gate on waterside end. Vertical pump on wooden piling in the channel. Walkway to the pump structure. Pipe discharges into a concrete box at the landside slope, 10 feet long and 10 feet deep.	Irrigation	16293	1996	4/2/2019	E.D. Willey and Sons / RD 1001	DWR - Utility Crossing Inventory Program / USACE - EGIS System / USACE - PI Report
3.70	1001	Natomas Cross Canal	195+51	Abandoned 18-inch steel irrigation discharge pipe running through levee, 3.5 feet below the crown. Steel plate welded onto waterside end.	Irrigation	1537	1957	4/2/2019	Orlin F. Van Dyke	DWR - Utility Crossing Inventory Program / USACE - EGIS System
3.71 - 4.47	1001	Natomas Cross Canal	196+00 - 234+75	Concrete pipeline adjacent to landward toe of levee. Pipeline connects to a 42-inch pipe through the levee at levee mile 3.74. (Not field verified)	Irrigation	2673	1957		Roy Osterli	USACE - EGIS System
3.79	1001	Natomas Cross Canal	198+75	Waterside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
	1001	Natomas Cross Canal		USACE survey benchmark located on waterside shoulder. Exact location of the encroachment is unknown.	Other			3/1/2012	United States Army Corps of Engineers	USACE - PI Report
3.85	1001	Natomas Cross Canal	201+52	Fuel tank/trailer stored near landside toe. Concrete distribution box at landside toe. Small gas line crossing through levee.	Gas			3/1/2012		USACE - PI Report
3.85	1001	Natomas Cross Canal	201+66	Three abandoned 20-inch asbestos bonded corrugated metal irrigation discharge pipe running through the levee, 2.13 feet below the crown. Three vertical pumps on a wooden piling structure in the stream. Walkway to pumps. Slide gate in a concrete box on the waterside slope.	Irrigation	1896		4/2/2019		DWR - Utility Crossing Inventory Program / USACE - PI Report

Nicolaus SCFRR Feasibility Study
RD 1001 LEVEES ENCROACHMENT LIST

Levee Mile	Reclamation District	Project Reach	Project STA	Encroachment	Type	Permit No.	Year	Inspection Date	Owner Name	Data Source
3.85	1001	Natomas Cross Canal	201+80	Overhead utility lines crossing levee. Utility pole located on waterside hinge.	Overhead Utility			3/1/2012		USACE - PI Report
3.87	1001	Natomas Cross Canal	202+75	Waterside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
3.96	1001	Natomas Cross Canal	207+75	Waterside vehicle access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
4.39	1001	Natomas Cross Canal	230+50	Waterside fill access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
4.41	1001	Natomas Cross Canal	231+50	Landside fill access ramp from levee toe to crown.	Access			3/1/2012		USACE - PI Report
4.47 - 4.50	1001	Natomas Cross Canal	234+00 - 235+50	Highway 70/99 bridge crossing Natomas Cross Canal with waterside bridge abutment.	Bridge	8756, 1345, 14890	1973		State of California - Division of Highways, Bridge Department, Department of Transportation	USACE - EGIS System / USACE - PI Report
4.47 - 4.50	1001	Natomas Cross Canal	234+00 - 235+50	Floodwall structure at Highway 99 bridge crossing. Subsurface collector pipeline installed.	Other	16674	1996		Sacramento Area Flood Control Agency	USACE - EGIS System
4.52	1001	Natomas Cross Canal	236+50	Pipe gate across levee crown. Fences running down landside and waterside slopes.	Access			3/1/2012		USACE - PI Report
4.56	1001	Natomas Cross Canal	238+50	Landside and waterside vehicle access ramps from levee toes to crown.	Access			3/1/2012		USACE - PI Report
5.29	1001	Natomas Cross Canal	279+50	Overhead utility crossing over levee. High voltage transmission pole located landside of the levee.	Overhead Utility	18524	2010		USDOE, Western Area Power Administration	USACE - EGIS System / USACE - PI Report