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GSA Supplemental Information

Morphologic signatures of autogenic waterfalls: A case study in the San Gabriel Mountains, California

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SUPPLEMENTAL INFORMATION

Removal of Check Dams and Roads

The San Gabriel Mountains (SGM) contain check dams and other human-built structures that can be falsely identified as waterfalls using our automated method. We used slopeshade maps created from Lidar DEMs, as well as Google Earth imagery to identify check dams. Check dams had straight crests perpendicular to the channel (Fig. S1a) in contrast to waterfalls which often had arcuate planform shapes (Fig. S1b). Excluding the Santa Anita watershed, our automated method identified 56 straight-crested drops as waterfalls, and we were able to visually confirm the presence of concrete, human made structures for 53 of these cases using Google Earth (Fig. S1c). We removed both the 53 Google Earth confirmed concrete structures from our analyses, as well as the 3 structures we were not able to visually confirm in Google Earth, as the morphology of structures in both of these groups was similar in the Lidar DEMs (Table S1). In the main stem and tributaries to Santa Anita Canyon, there were greater than 40 structures that had a morphologic appearance consistent with a check dam; however, image resolution, image angle, and shading from trees prevented us from confirming these as concrete structures in Google Earth imagery. We removed all tributaries with suspected check dams in Santa Anita Canyon from our analysis, thereby limiting our database to cases where we had high confidence in separating waterfalls and check dams.

Cyclic Step Survey in the Ruby Mountains, NV

To explore cyclic step and autogenic waterfall formation at an intermediate scale between laboratory experiments and river channels, we surveyed cyclic steps eroded into granitic hillslopes near Harrison Pass in the Ruby Mountains, NV (Fig. S2, Table S3). These decimeter-scale steps formed in succession on hillslopes of varying slope and aspect, and had no water flow at the time of the survey. Most of the pool-like structures were partially filled with sand-sized sediment while the step-like structures had exposed bedrock. We used a tape measure to measure step height and pool length as a proxy for the spacing between steps (Fig. S2). To measure the

slope of each group of steps, we laid an inclinometer across the length of steps or, if the slope changed within the group, across sections with the same slope and averaged those values.

Influence of Threshold Values on Waterfall Metrics

We identify waterfalls using three threshold variables: a threshold drainage area set to 1 km^2 to identify the channel head, a threshold waterfall slope set to 30°, and a threshold step height set to 1.5 m. We evaluated the influence of these thresholds on our results by repeating our analyses and individually varying each of the three threshold values. We examined the impact of using a threshold drainage area of 2 km^2 and 0.5 km^2 (Fig. S3), a threshold step height of 1 m and 2 m (Fig. S4), and threshold step slope of 25° and 40° (Fig. S5). In all cases, changes to the threshold values do not result in large changes to our results, and do not change our primary interpretations (Figs. S3-5).

Statistical Comparison of Front Range and Big Tujunga Waterfall Morphology

We performed a two-sample Kolmogorov-Smirnov (K-S) statistical test comparing the distribution of waterfall spacing, waterfall height, and ratio of waterfall height to spacing for the Front Range and Big Tujunga (Fig. S6). The K-S test compares two datasets to test whether the datasets are from the same continuous distribution The K-S test revealed that there was no statistically significant difference in the distribution of waterfall spacing between the Front Range and Big Tujunga watershed; however, waterfalls in the Big Tujunga tended to be slightly taller than in the Front Range (Fig. S6).

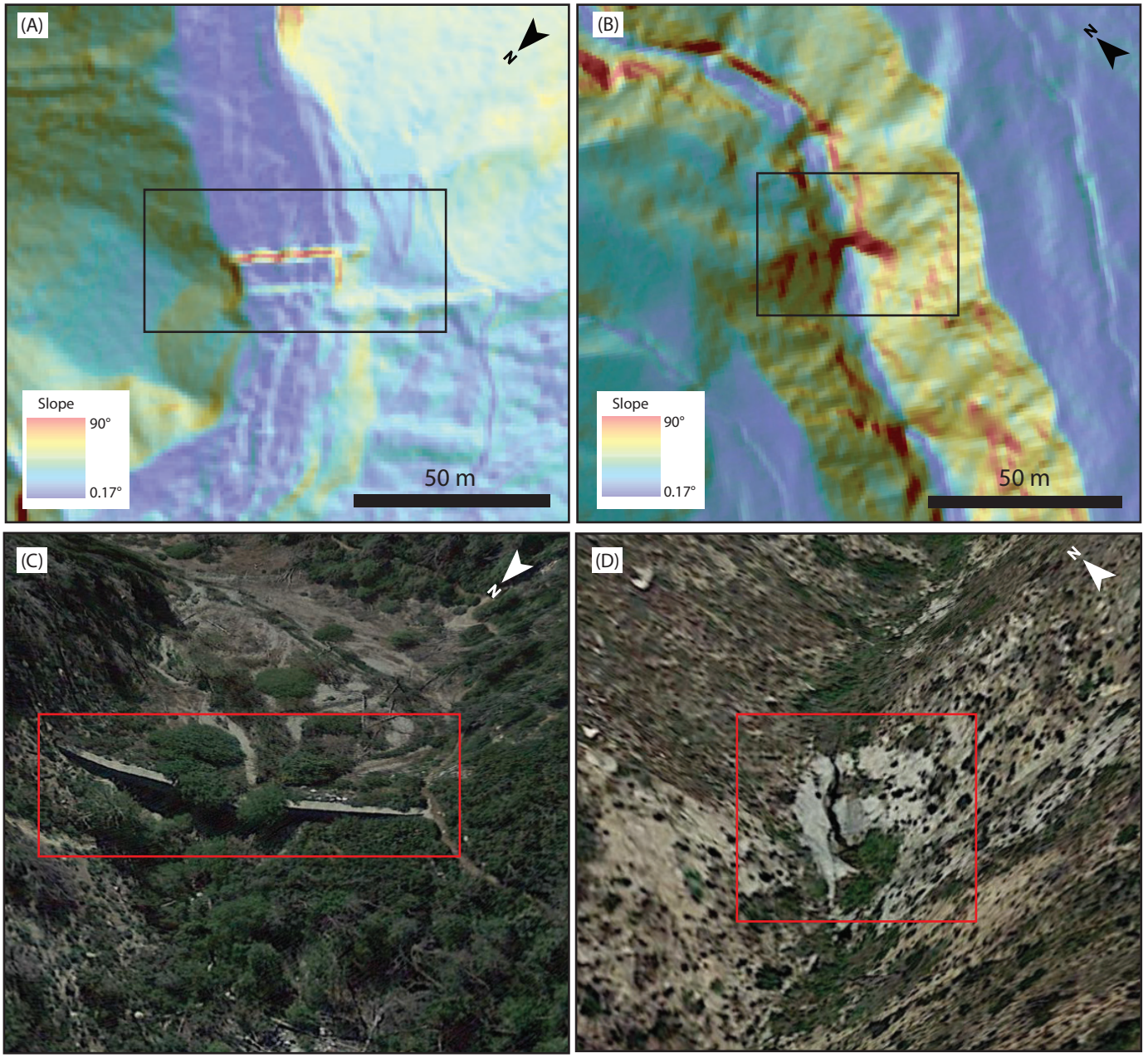

Figure S1: Slopeshade showing check dam on Arroyo Secco (A) and waterfall on Ybarra Canyon (B) in 1m^2 resolution Lidar. (C and D) Google Earth imagery showing visual confirmation of check dam and waterfall from panels (A) and (B), respectively. Channel-perpendicular width of check dam in panel (C) is 64 m for scale. Channel-perpendicular width of waterfall in panel (D) is 15 m for scale.

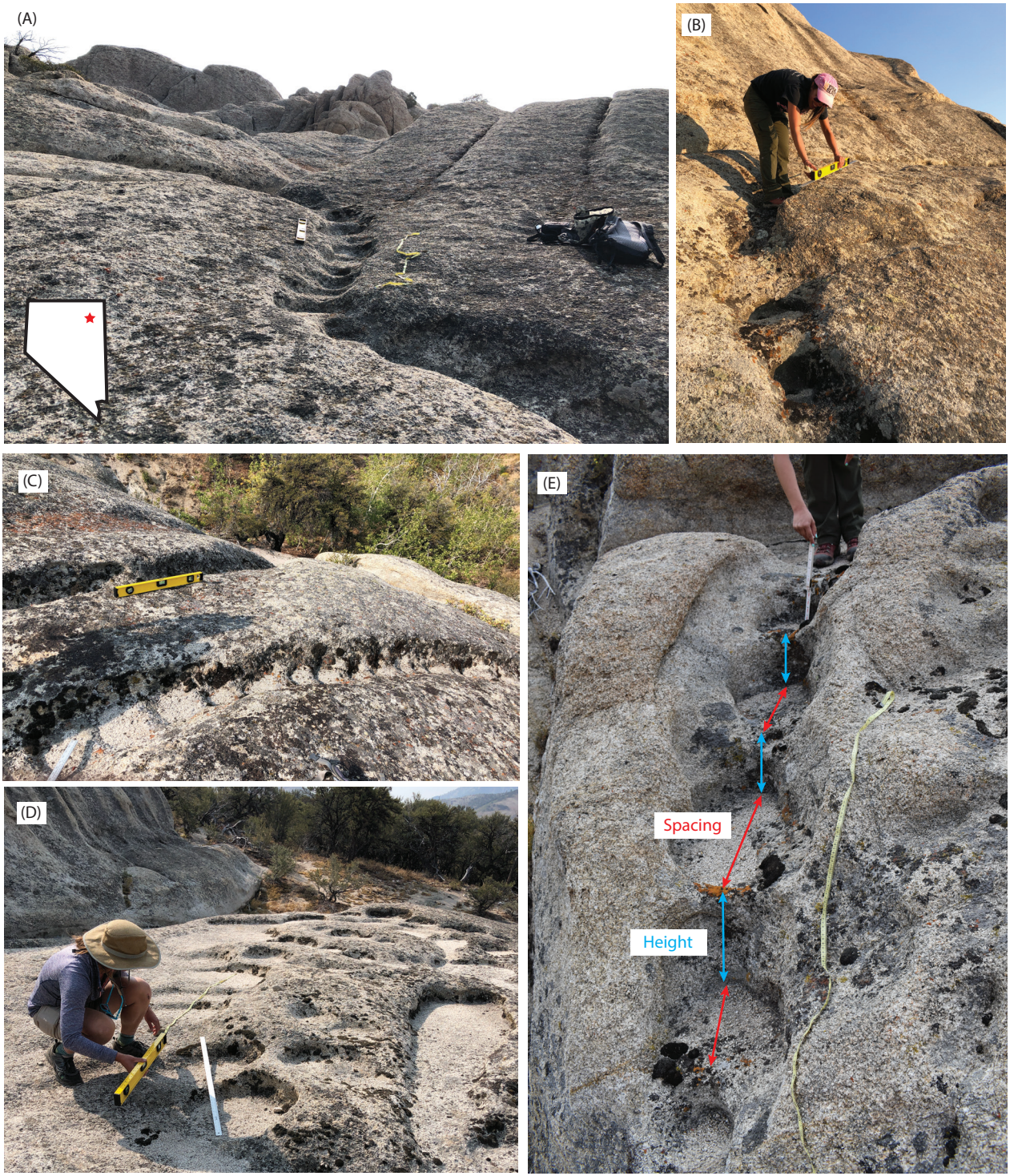

Figure S2: (A-D) Example photos showing cyclic steps formed via overland flow on granitic hillslopes in the Ruby Mountains, NV. Insert in panel (A) shows the location of the Ruby Mountains in Eastern Nevada. (E) Annotated photo defining how step height and spacing were measured for the Ruby Mountains cyclic step survey (See Table S3).

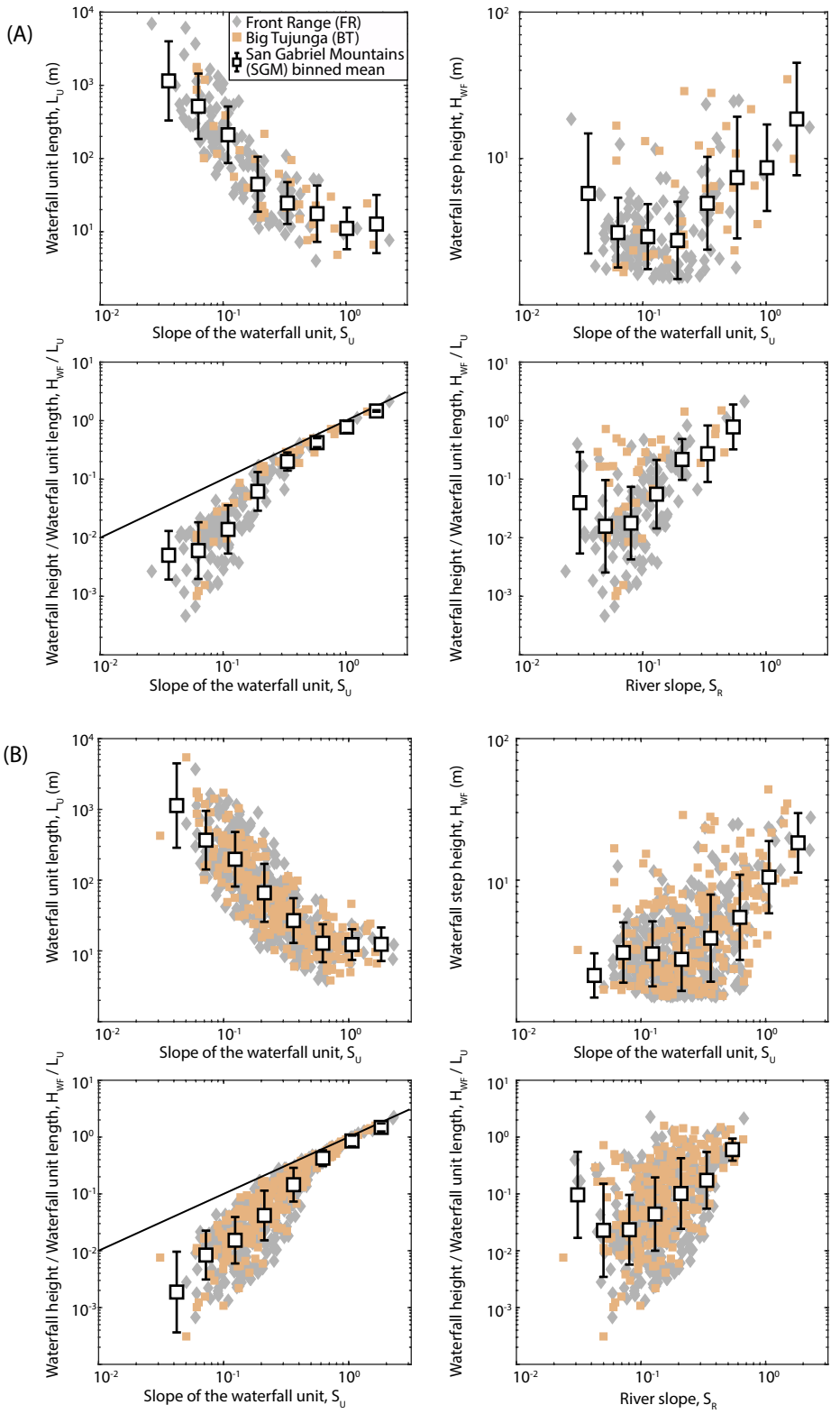

Figure S3: Plot of waterfall metrics versus slope varying threshold drainage area from (A) 2 km^2 to (B) 0.5 km^2 while holding threshold step height and slope constant at 1.5 m and 30°, respectively.

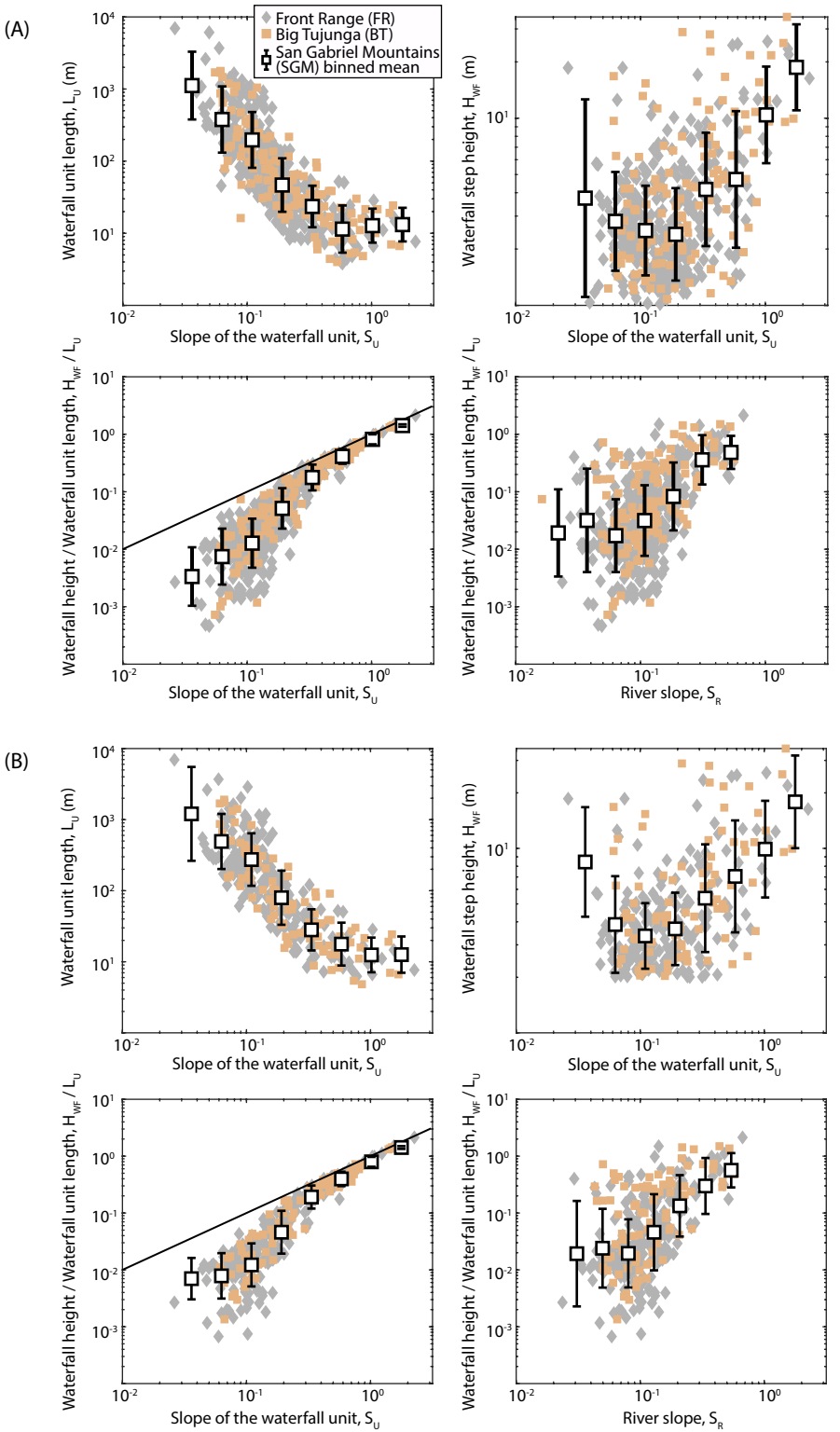

Figure S4: Plot of waterfall metrics versus slope varying threshold step height from (A) 1 m to (B) 2 m while holding threshold drainage area and slope constant at 1 km^2 and 30°, respectively.

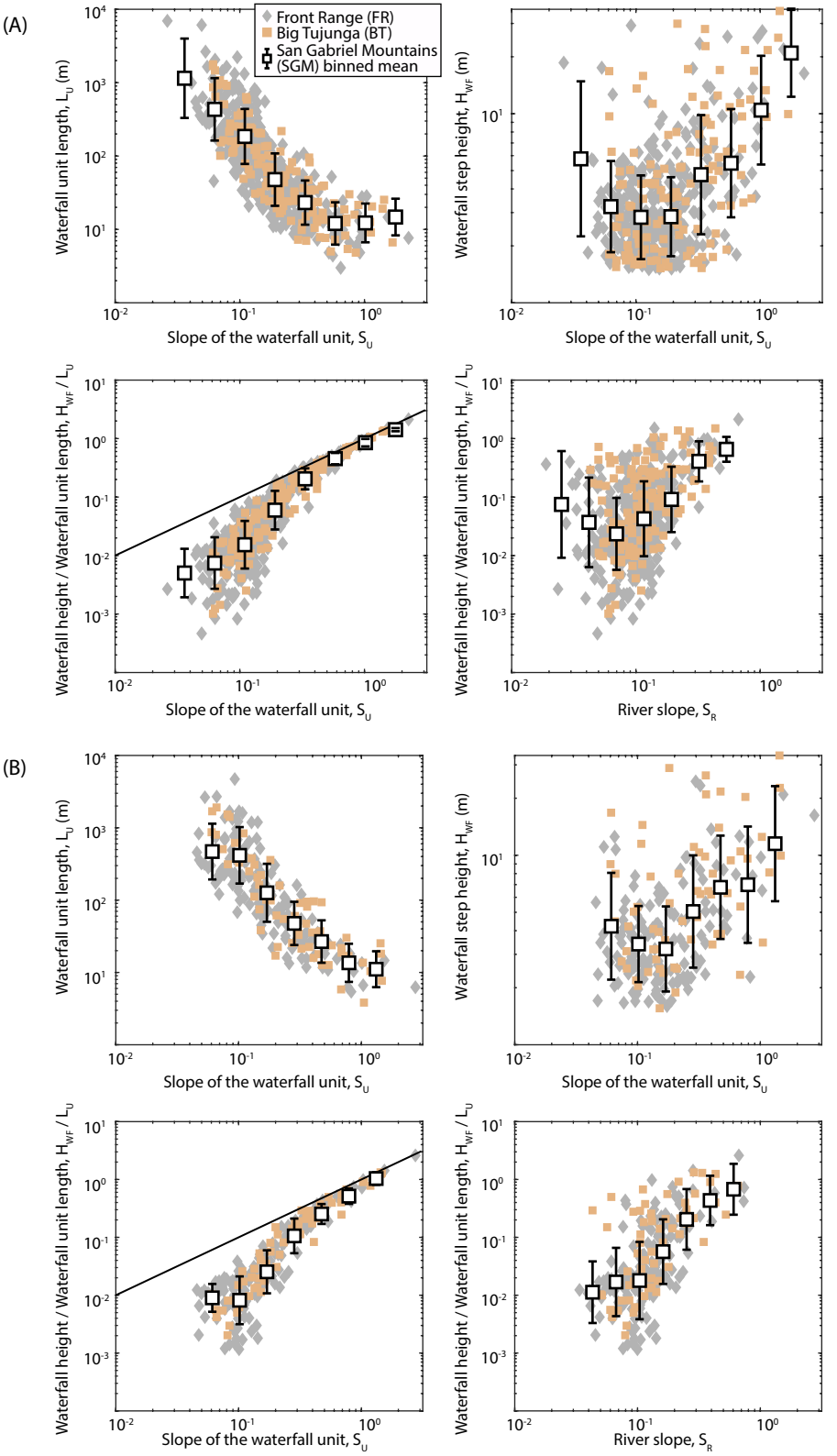

Figure S5: Plot of waterfall metrics versus slope varying threshold slope from (A) 25° to (B) 40° while holding threshold step height and drainage area constant at 1.5 m and 1 km^2, respectively.

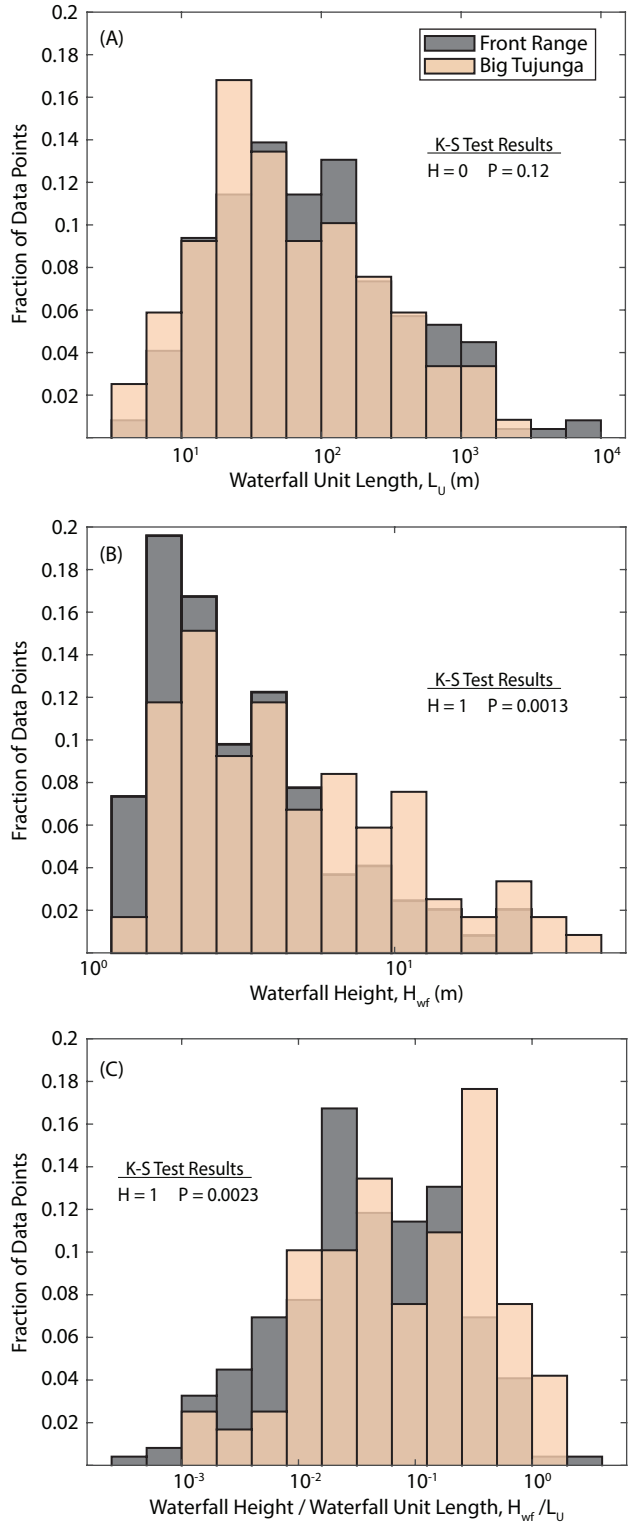

Figure S6: Distribution of waterfall morphology observed in the Front Range and Big Tujunga. (A) Waterfall unit length. (B) Waterfall height. (C) Waterfall height / Waterfall unit length. Kolmogorov-Smirnov (K-S) statistical test results reported where H = 1 indicates the distributions are statistically distinct and H = 0 indicates the data are statistically indistinguishable at the $P < 0.05$ significance level.

TABLE S1. REMOVED CHECK DAMS AND ROADS

Watershed Name	Dam ID	UTM East	UTM North
Arroyo Secco	AS D1	391182.5	3789153.5
Arroyo Secco	AS D2	397158.5	3792298.5
Arroyo Secco	AS D3	397213.5	3792194.5
Arroyo Secco	AS D4	397199.5	3792182.5
Arroyo Secco	AS D5	397125.5	3791788.5
Arroyo Secco	AS D6	396806.5	3791938.5
Arroyo Secco	AS D7	396783.5	3791908.5
Arroyo Secco	AS D8	396631.5	3791837.5
Arroyo Secco	AS D9	396488.5	3791907.5
Arroyo Secco	AS D10	396282.5	3792010.5
Arroyo Secco	AS D11	396055.5	3792030.5
Arroyo Secco	AS D12	395849.5	3792132.5
Arroyo Secco	AS D13	395486.5	3792171.5
Arroyo Secco	AS D14	395286.5	3792264.5
Arroyo Secco	AS D15	394892.5	3792317.5
Arroyo Secco	AS D16	397547.5	3791581.5
Arroyo Secco	AS D17	397419.5	3791611.5
Arroyo Secco	AS D18	397226.5	3791664.5
Arroyo Secco	AS D19	396959.5	3791764.5
Arroyo Secco	AS D20	397091.5	3791463.5
Clear Creek	CL D1	392990.5	3792900.5
Dunsmore Canyon	D D1	385410.5	3791200.5
El Prieto Canyon	EL D1	394009.5	3787600.5
El Prieto Canyon	EL D2	393967.5	3787463.5
El Prieto Canyon	EL D3	393875.5	3787185.5
El Prieto Canyon	EL D4	393765.5	3787230.5
El Prieto Canyon	EL D5	393476.5	3787153.5
El Prieto Canyon	EL D6	393349.5	3787197.5
El Prieto Canyon	EL D7	393236.5	3787107.5
El Prieto Canyon	EL D8	393128.5	3786967.5
El Prieto Canyon	EL D9	392974.5	3786967.5
El Prieto Canyon	EL D10	392862.5	3786775.5
El Prieto Canyon	EL D11	392791.5	3786674.5
El Prieto Canyon	EL D12	392688.5	3786537.5
El Prieto Canyon	EL D13	392530.5	3786379.5
Fern Canyon	FE D1	392816.5	3788072.5
Fern Canyon	FE D2	392693.5	3787993.5
Fern Canyon	FE D3	392118.5	3786723.5
Fern Canyon	FE D4	392107.5	3786726.5
Fern Canyon	FE D5	392088.5	3786625.5
Fern Canyon	FE D6	391955.5	3786514.5
Little Santa Anita Wash	LSA D1	403896.5	3782177.5
Little Santa Anita Wash	LSA D2	403827.5	3781859.5
Millard Creek	M D1	392930.5	3786100.5

Pasadena Canyon	PA D1	400560.5	3782668.5
Pasadena Canyon	PA D2	400558.5	3782656.5
Pasadena Canyon	PA D3	400570.5	3782589.5
Pasadena Canyon	PA D4	400568.5	3782373.5
Sutton Canyon	SU D1	387323.5	3789680.5
Sutton Canyon	SU D2	387293.5	3789513.5
Sutton Canyon	SU D3	387211.5	3789321.5
Sutton Canyon	SU D4	387192.5	3789292.5
Sutton Canyon	SU D5	387142.5	3790518.5
Sutton Canyon	SU D6	387160.5	3790435.5
Sutton Canyon	SU D7	387229.5	3790131.5
Sutton Canyon	SU D8	387323.5	3790011.5

TABLE S2. CYCLIC STEP EXPERIMENTAL DATA

Slope*	L_U** (m)	H_{wf}# (m)	H_{wf} / L_U
Brooks (2001)			
0.16	0.52	0.04	0.08
0.20	0.52	0.05	0.09
0.24	0.26	0.04	0.14
0.29	0.19	0.04	0.21
0.15	0.39	0.03	0.07
0.15	0.40	0.06	0.14
0.16	0.27	0.04	0.13
0.20	0.31	0.03	0.11
0.20	0.27	0.05	0.17
0.25	0.27	0.04	0.14
0.25	0.27	0.05	0.18
0.25	0.32	0.05	0.14
0.29	0.41	0.06	0.14
0.36	0.31	0.07	0.23
0.15	0.28	0.03	0.11
0.20	0.29	0.04	0.13
0.25	0.30	0.06	0.19
0.25	0.37	0.06	0.17
0.30	0.34	0.08	0.23
0.30	0.36	0.07	0.20
Ashida and Sawai (1977)			
0.23	0.09	0.01	0.10
0.23	0.06	0.01	0.15
0.23	0.06	0.01	0.21
0.44	0.04	0.00	0.09
0.44	0.04	0.01	0.18
0.44	0.05	0.01	0.20
0.71	0.04	0.01	0.14
0.71	0.03	0.01	0.22
0.55	0.06	0.02	0.34
0.56	0.15	0.06	0.40
0.20	0.14	0.01	0.07
Koyama and Ikeda (1998)			
0.05	0.83	0.00	0.01
0.11	0.23	0.01	0.03
0.18	0.17	0.01	0.07
0.27	0.14	0.03	0.17
0.36	0.26	0.04	0.16
0.47	0.16	0.03	0.20
0.58	0.23	0.07	0.29
0.70	0.12	0.03	0.26
0.84	0.16	0.04	0.24

1.00	0.13	0.02	0.19
1.19	0.12	0.06	0.47
1.43	0.14	0.03	0.22
0.11	0.17	0.00	0.02
0.36	0.11	0.01	0.05
0.84	0.13	0.01	0.10
0.11	0.16	0.01	0.05
0.36	0.14	0.02	0.11
0.84	0.16	0.02	0.09
0.11	0.16	0.01	0.03
0.36	0.15	0.02	0.11
0.84	0.14	0.02	0.13
Scheingross et al. (2019)			
0.20	0.37	0.15	0.40
Taki and Parker (2005)			
0.04	1.30	0.03	0.02
0.04	0.75	0.04	0.05
0.03	1.35	0.04	0.03
0.04	1.07	0.04	0.04
0.05	0.99	0.04	0.04
0.06	0.64	0.03	0.04
0.05	0.63	0.03	0.05
0.05	0.57	0.05	0.09
0.06	0.74	0.03	0.04
0.05	0.95	0.02	0.03
0.06	0.65	0.03	0.05
0.05	0.79	0.03	0.04
0.04	1.02	0.02	0.02
0.09	1.24	0.02	0.02
0.09	1.20	0.03	0.03
Yokokawa et al. (2016)			
0.09	0.45	0.03	0.07
0.09	0.58	0.02	0.03
0.09	0.37	0.03	0.08
0.36	0.45	0.04	0.09
0.09	1.25	0.02	0.02
0.09	0.47	0.04	0.08
0.36	0.34	0.06	0.18

Note: Each line is a separate experimental run with averaged values for that experiment.

*Slope represents the slope at wich the flume was tilted.

**L_U is the waterfall unit length which was measured from hydraulic jump to hydraulic jump then averaged for each experimental run.

#H_{wf} is the waterfall height averaged for each experimental run.

TABLE S3. FIELD SURVEY FROM RUBY MOUNTAINS, NV CYCLIC STEP METRICS

Survey #	Section #*	Average slope of section** (degrees)	Step #	Pool length[#] (cm)	Step height (cm)
1	1	27.1	1	22	10
1	1	27.1	2	13.5	15
1	1	27.1	3	20.5	11.5
1	1	27.1	4	20	13.5
1	1	27.1	5	19.5	19
1	1	27.1	6	14.5	10
1	1	27.1	7	15	7
1	1	27.1	8	11.5	10.5
1	1	27.1	9	14.5	10
1	2	15.7	1	16.5	12
1	2	15.7	2	18.5	7
1	2	15.7	3	25.5	10.5
1	2	15.7	4	34	7
1	3	6.2	1	35	5
1	3	6.2	2	39	5.5
1	3	6.2	3	50	4
1	3	6.2	4	64	2
2	1	9.4	1	57.5	15.5
2	1	9.4	2	70	17
2	1	9.4	3	64	6.5
2	1	9.4	4	61	12.5
3	1	36.0	1	25.5	24
3	1	36.0	2	28	12
3	1	36.0	3	12	22
3	1	36.0	4	15	12
3	1	36.0	5	11	17
3	1	36.0	6	8	13
3	1	36.0	7	17	27
3	1	36.0	8	20	23
3	1	36.0	9	21	24
4	1	19.4	1	27	14
4	1	19.4	2	46	15
4	1	19.4	3	19.5	12
4	2	24.0	1	50	42
4	2	24.0	2	15	16.5
4	2	24.0	3	13	17
4	3	46.5	1	21	22.5
4	3	46.5	2	20	26
4	3	46.5	3	28	80
5	1	15.4	1	38	19
5	1	15.4	2	39	16.5
5	1	15.4	3	27	8

5	1	15.4	4	50	11
5	1	15.4	5	17.5	14
5	2	30.0	1	26	17
5	2	30.0	2	22	26
5	2	30.0	3	31	34
5	2	30.0	4	16.5	26.5
5	2	30.0	5	15	10
5	3	33.0	1	37	34
5	3	33.0	2	48	13
5	3	33.0	3	20	36
6	1	27.2	1	22	12
6	1	27.2	2	26	26.5
6	1	27.2	3	51	22
6	1	27.2	4	42	21
6	1	27.2	5	24	16
7	1	33.5	1	14.5	9.5
7	1	33.5	2	8	12.5
7	1	33.5	3	8.5	13
8	1	19.2	1	18	7
8	1	19.2	2	21	5
8	1	19.2	3	14.5	8
8	1	19.2	4	11.5	8
8	1	19.2	5	15	8.5
8	1	19.2	6	30.5	5
8	1	19.2	7	16	6.5
8	1	19.2	8	21	9
8	1	19.2	9	22	10
8	2	15.5	1	27	8.5
8	2	15.5	2	24.5	4
8	2	15.5	3	8.5	9
8	2	15.5	4	12	7
8	2	15.5	5	38	24
8	2	15.5	6	40	14.5
8	2	15.5	7	35	15
8	2	15.5	8	29	70
9	1	16.8	1	24	8.5
9	1	16.8	2	15	7
9	1	16.8	3	7.5	3.5
9	1	16.8	4	8	6.5
9	1	16.8	5	14	5
9	1	16.8	6	13.5	6
9	1	16.8	7	14	5
9	2	10.0	1	15	5
9	2	10.0	2	20	5
9	2	10.0	3	20	2.5
9	2	10.0	4	19.5	6.5
9	3	26.2	1	14	18

9	3	26.2	2	40	35
9	3	26.2	3	41	33
9	3	26.2	4	16.5	8.5
9	4	23.5	1	16	13
9	4	23.5	2	30	4.5
9	4	23.5	3	14	14
9	4	23.5	4	23	18
9	4	23.5	5	32	9
9	5	7.4	1	52	8
9	5	7.4	2	33	17
9	5	7.4	3	38	4.5
9	5	7.4	4	22	5
9	5	7.4	5	70	10.5
9	6	20.7	1	39	17
9	6	20.7	2	24	15.5
9	6	20.7	3	27	14
9	6	20.7	4	28	10.5
9	6	20.7	5	10	6
9	6	20.7	6	18	11

Note: Location of hillslope for surveys is 40.3030726,-115.5089211

*Surveys were split into sections where the slope changed within a group of steps.

**Slope was measured across the length of steps and across the hillslope beside the steps then averaged.

[#]Pool length was used as a proxy for the waterfall unit length and was measured from the base of the upstream step to the lip of the downstream step.

TABLE S4. SAN GABRIEL MOUTAINS, CA WATERFALL METRICS

Watershed Name	Waterfall ID	UTM East	UTM North	X_L*	X_B**	Z_L#	Z_B##	Drainage Area	Non-Dimensional Distance###	S_R*#	S_U**#	L_U+	H_{wf}++
				(m)	(m)	(m)	(m)	(km^2)				(m)	(m)
Arroyo Secco	AS1	396851.5	3789232.5	20909.1	20906.6	1217.8	1216.2	1.7	1.0	N.D.	N.D.	N.D.	N.D.
Arroyo Secco	AS2	395543.5	3789651.5	18682.2	18680.2	1005.6	1003.7	4.4	0.8	0.09	0.10	2226.42	1.86
Arroyo Secco	AS3	395517.5	3789637.5	18637.0	18634.6	998.7	997.1	4.4	0.8	0.12	0.14	45.63	1.60
Arroyo Secco	AS4	392983.5	3790219.5	12533.9	12530.9	698.2	695.3	24.3	0.6	0.05	0.05	6103.69	2.84
Arroyo Secco	AS5	391184.5	3789151.5	5587.0	5580.1	526.8	512.7	36.9	0.3	0.02	0.03	6950.76	14.06
Arroyo Secco	AS6	397195.5	3792182.5	23847.0	23835.0	1250.2	1242.2	1.6	1.0	N.D.	N.D.	N.D.	N.D.
Arroyo Secco	AS7	396800.5	3791932.5	22782.8	22757.4	1175.6	1159.9	1.7	0.9	0.06	0.08	1077.53	15.75
Arroyo Secco	AS8	395719.5	3793147.5	21919.5	21917.5	1182.7	1181.1	1.1	1.0	N.D.	N.D.	N.D.	N.D.
Arroyo Secco	AS9	395623.5	3793073.5	21728.0	21723.6	1163.3	1156.5	1.6	1.0	0.09	0.13	193.95	6.83
Arroyo Secco	AS10	395630.5	3793056.5	21707.3	21704.4	1155.2	1153.5	1.6	1.0	0.08	0.15	19.14	1.64
Arroyo Secco	AS11	395653.5	3793029.5	21665.2	21662.2	1149.1	1146.7	1.6	1.0	0.11	0.16	42.21	2.35
Arroyo Secco	AS12	395645.5	3793018.5	21650.3	21646.5	1143.4	1140.2	1.6	1.0	0.28	0.42	15.73	3.25
Arroyo Secco	AS13	395557.5	3792935.5	21492.7	21490.3	1126.0	1123.9	1.6	1.0	0.09	0.10	156.20	2.08
Arroyo Secco	AS14	395568.5	3792956.5	21464.9	21462.9	1121.9	1119.1	1.6	1.0	0.08	0.18	27.38	2.82
Arroyo Secco	AS15	395460.5	3792878.5	21251.8	21249.4	1100.4	1098.4	1.6	1.0	0.09	0.10	213.55	1.94
Arroyo Secco	AS16	395466.5	3792856.5	21224.5	21222.1	1096.4	1094.5	1.6	1.0	0.08	0.15	27.31	1.90
Arroyo Secco	AS17	395325.5	3792758.5	20961.7	20959.7	1074.7	1072.8	2.6	0.9	0.08	0.08	262.39	1.85
Arroyo Secco	AS18	395614.5	3791137.5	18118.9	18113.9	1129.2	1121.9	1.1	1.0	N.D.	N.D.	N.D.	N.D.
Arroyo Secco	AS19	395606.5	3791145.5	18105.2	18097.4	1120.0	1111.6	1.1	1.0	0.22	0.62	16.49	8.37
Arroyo Secco	AS20	395581.5	3791143.5	18073.2	18069.2	1108.6	1105.0	1.2	1.0	0.13	0.23	28.14	3.53
Arroyo Secco	AS21	395563.5	3791134.5	18050.9	18047.5	1102.6	1099.1	1.2	1.0	0.14	0.27	21.73	3.47
Arroyo Secco	AS22	395519.5	3791114.5	17995.5	17992.5	1090.3	1088.2	1.2	1.0	0.17	0.20	55.04	2.10
Arroyo Secco	AS23	395444.5	3791124.5	17908.9	17905.4	1071.5	1069.0	1.3	1.0	0.20	0.22	87.01	2.54
Arroyo Secco	AS24	395427.5	3791121.5	17888.1	17884.1	1067.1	1063.8	1.3	1.0	0.11	0.24	21.31	3.26
Arroyo Secco	AS25	395391.5	3791125.5	17840.1	17836.7	1055.5	1053.4	1.4	1.0	0.19	0.22	47.46	2.18
Arroyo Secco	AS26	395359.5	3791146.5	17795.9	17792.5	1043.0	1040.1	1.4	1.0	0.25	0.30	44.21	2.83
Arroyo Secco	AS27	394508.5	3790926.5	16601.4	16599.4	871.7	869.5	2.2	0.9	0.14	0.14	1193.07	2.16
Arroyo Secco	AS28	394195.5	3790713.5	16026.1	16023.7	812.0	809.7	2.5	0.9	0.10	0.10	575.74	2.24
Arroyo Secco	AS29	394182.5	3790709.5	16008.6	16006.2	807.6	806.1	2.5	0.9	0.14	0.21	17.49	1.56
Arroyo Secco	AS30	393895.5	3790298.5	15386.6	15379.9	822.5	817.8	1.1	1.0	N.D.	N.D.	N.D.	N.D.
Arroyo Secco	AS31	393885.5	3790305.5	15373.7	15368.9	814.8	811.3	1.1	1.0	0.47	0.58	11.07	3.48
Arroyo Secco	AS32	393887.5	3790315.5	15359.8	15340.5	807.5	781.8	1.1	1.0	0.42	1.04	28.38	25.72
Arroyo Secco	AS33	392176.5	3791536.5	10823.6	10820.6	746.5	743.3	1.0	1.0	N.D.	N.D.	N.D.	N.D.
Arroyo Secco	AS34	392171.5	3791534.5	10817.7	10814.3	742.1	738.5	1.0	1.0	0.42	0.78	6.24	3.65
Arroyo Secco	AS35	392159.5	3791511.5	10787.8	10782.5	735.1	727.6	1.2	1.0	0.13	0.34	31.80	7.45
Arroyo Secco	AS36	391993.5	3791125.5	10250.7	10247.3	678.3	675.8	1.4	0.9	0.09	0.10	535.22	2.50
Arroyo Secco	AS37	391666.5	3790710.5	9446.2	9436.6	609.2	598.8	3.9	0.9	0.08	0.10	810.75	10.44
Arroyo Secco	AS38	390671.5	3791113.5	10315.5	10312.5	740.8	738.4	1.4	1.0	N.D.	N.D.	N.D.	N.D.
Arroyo Secco	AS39	390693.5	3791093.5	10226.5	10224.5	727.1	724.9	1.4	1.0	0.13	0.15	87.91	2.16
Arroyo Secco	AS40	390719.5	3791077.5	10172.6	10169.2	721.7	717.4	1.4	1.0	0.06	0.14	55.36	4.33
Arroyo Secco	AS41	390878.5	3790959.5	9847.4	9843.9	690.5	687.6	1.6	1.0	0.08	0.09	325.25	2.86
Arroyo Secco	AS42	391278.5	3790643.5	9057.4	9055.0	636.1	634.4	1.8	0.9	0.07	0.07	788.92	1.69
Arroyo Secco	AS43	391413.5	3790537.5	8815.3	8812.8	617.9	615.9	1.9	0.9	0.07	0.08	242.18	2.05
Arroyo Secco	AS44	391435.5	3790540.5	8783.0	8780.6	611.8	610.1	1.9	0.8	0.14	0.18	32.21	1.67
Arroyo Secco	AS45	391481.5	3790522.5	8715.9	8713.9	606.1	603.5	1.9	0.8	0.06	0.10	66.70	2.61
Arroyo Secco	AS46	391476.5	3790477.5	8662.5	8658.6	599.5	591.1	1.9	0.8	0.08	0.22	55.28	8.43
Arroyo Secco	AS47	391466.5	3790464.5	8636.7	8634.7	588.4	586.8	1.9	0.8	0.12	0.18	23.90	1.61
Arroyo Secco	AS48	391480.5	3790449.5	8612.4	8608.4	584.5	580.6	1.9	0.8	0.11	0.24	26.31	3.89
Arroyo Secco	AS49	391834.5	3790860.5	9781.1	9778.1	675.5	672.9	1.1	1.0	N.D.	N.D.	N.D.	N.D.
Arroyo Secco	AS50	391834.5	3790853.5	9773.3	9763.4	672.2	650.3	1.1	1.0	0.14	1.54	14.66	21.89
Arroyo Secco	AS51	391832.5	3790831.5	9748.8	9741.4	649.1	639.4	1.1	1.0	0.08	0.50	22.07	9.73
Arroyo Secco	AS52	391831.5	3790797.5	9711.1	9701.6	636.8	629.3	1.1	0.9	0.08	0.26	39.73	7.59
Arroyo Secco	AS53	391853.5	3788973.5	5361.0	5355.2	548.8	543.4	1.3	0.9	N.D.	N.D.	N.D.	N.D.
Arroyo Secco	AS54	391702.5	3788938.5	5140.8	5137.4	526.6	522.9	1.5	0.9	0.08	0.09	217.79	3.69
Bailey Canyon	BA1	402243.5	3782679.5	1120.8	1118.4	513.6	511.5	1.0	1.0	N.D.	N.D.	N.D.	N.D.
Bailey Canyon	BA2	402242.5	3782675.5	1115.6	1106.9	510.4	499.1	1.0	1.0	0.38	1.08	11.49	11.29
Bailey Canyon	BA3	402232.5	3782667.5	1099.7	1095.2	498.5	493.5	1.0	1.0	0.08	0.48	11.66	5.06
Bailey Canyon	BA4	402196.5	3782642.5	1051.5	1047.7	486.7	481.6	1.1	0.9	0.16	0.25	47.53	5.08
Bailey Canyon	BA5	402203.5	3782585.5	978.3	974.9	469.2	465.6	1.1	0.9	0.18	0.22	72.84	3.61
Bailey Canyon	BA6	402208.5	3782561.5	950.6	947.7	462.6	460.7	1.1	0.8	0.12	0.18	27.14	1.96
Bailey Canyon	BA7	402156.5	3782482.5	835.3	831.9	450.9	444.6	1.1	0.7	0.09	0.14	115.81	6.29
Bailey Canyon	BA8	402129.5	3782451.5	790.2	785.4	440.2	431.1	1.1	0.7	0.11	0.29	46.53	9.07
Bryant Canyon	BR1	383047.5	3794910.5	1644.9	1641.1	694.8	692.5	1.3	0.7	N.D.	N.D.	N.D.	N.D.
Bryant Canyon	BR2	383038.5	3794914.5	1634.3	1632.3	691.9	689.4	1.3	0.7	0.09	0.35	8.83	2.46
Bryant Canyon	BR3	383008.5	3794909.5	1601.4	1598.0	686.1	682.6	1.3	0.7	0.11	0.20	34.31	3.42
Clear Creek	CL1	392990.5	3792943.5	5171.1	5165.9	1020.6	1015.9	1.3	1.0	N.D.	N.D.	N.D.	N.D.
Clear Creek	CL2	392722.5	3792876.5	4840.8	4838.4	985.3	983.2	1.4	0.9	0.09	0.10	327.49	2.05
Clear Creek	CL3	392655.5	3792951.5	4696.9	4693.9	970.0	967.7	1.9	0.9	0.09	0.11	144.47	2.35
Clear Creek	CL4	392500.5	3793188.5	4224.3	4220.3	930.6	925.5	2.8	0.8	0.08	0.09	473.62	5.04
Clear Creek	CL5	391482.5	3793448.5	2807.6	2804.2	810.5	806.2	4.9	0.5	0.08	0.08	1416.14	4.21
Clear Creek	CL6	390642.5	3793865.5	1338.0	1335.6	715.2	713.4	7.0	0.2	0.06	0.06	1468.55	1.81
Clear Creek	CL7	390428.5	3793857.5	1061.7	1058.7	692.6	690.2	7.1	0.2	0.08	0.08	276.94	2.35
Coldwater Canyon	COL1	397308.5	3796873.5	265.1	263.1	974.3	972.4	1.9	0.1	N.D.	N.D.	N.D.	N.D.
Cooks Canyon Channel	CO1	384482.5	3790895.5	561.1	558.6	753.0	748.8	1.2	0.5	N.D.	N.D.	N.D.	N.D.

Cooks Canyon Channel	CO2	384383.5	3790873.5	428.5	425.1	735.1	731.0	1.3	0.4	0.10	0.13	133.54	4.15
Cooks Canyon Channel	CO3	384296.5	3790903.5	293.1	290.1	721.1	717.6	1.3	0.2	0.07	0.10	134.95	3.50
Cooks Canyon Channel	CO4	384136.5	3790814.5	66.9	63.9	703.2	700.4	1.4	0.1	0.06	0.08	226.28	2.80
Eaton Wash	EA1	399508.5	3787976.5	10486.2	10483.8	1116.2	1114.2	1.3	0.9	N.D.	N.D.	N.D.	N.D.
Eaton Wash	EA2	399507.5	3787929.5	10430.5	10425.2	1105.7	1100.8	1.6	0.9	0.16	0.23	58.53	4.83
Eaton Wash	EA3	399595.5	3787739.5	10181.7	10179.7	1071.0	1069.3	1.8	0.9	0.12	0.13	245.59	1.72
Eaton Wash	EA4	400050.5	3786843.5	8863.6	8861.6	927.6	925.8	2.5	0.8	0.11	0.11	1318.02	1.75
Eaton Wash	EA5	400101.5	3785894.5	7543.3	7540.9	808.0	805.8	7.4	0.7	0.09	0.09	1320.71	2.16
Eaton Wash	EA6	399632.5	3785291.5	6112.8	6109.4	705.0	702.3	12.5	0.6	0.07	0.07	1431.52	2.72
Eaton Wash	EA7	399543.5	3785314.5	6002.6	5999.8	696.2	694.2	12.6	0.5	0.06	0.07	109.64	1.98
Eaton Wash	EA8	399539.5	3785312.5	5997.8	5995.8	693.7	691.9	12.6	0.5	0.24	0.57	4.00	1.80
Eaton Wash	EA9	399440.5	3785354.5	5829.3	5826.9	680.5	678.0	12.6	0.5	0.07	0.08	168.85	2.53
Eaton Wash	EA10	399406.5	3785421.5	5715.6	5708.8	668.9	661.6	12.7	0.5	0.08	0.14	118.12	7.32
Eaton Wash	EA11	399381.5	3785414.5	5667.3	5664.9	657.4	655.2	12.7	0.5	0.10	0.15	43.87	2.20
Eaton Wash	EA12	399371.5	3785394.5	5640.4	5632.1	653.2	641.2	12.7	0.5	0.08	0.43	32.80	11.96
Eaton Wash	EA13	399346.5	3785377.5	5605.4	5603.4	638.7	637.0	12.7	0.5	0.09	0.15	28.73	1.72
Eaton Wash	EA14	399069.5	3784744.5	4468.2	4465.2	569.8	567.8	14.9	0.4	0.06	0.06	1138.18	2.02
Eaton Wash	EA15	399006.5	3784874.5	4270.4	4268.4	553.9	551.3	14.9	0.4	0.07	0.08	196.79	2.57
Eaton Wash	EA16	398969.5	3784927.5	4192.3	4189.9	546.2	544.0	14.9	0.4	0.07	0.09	78.50	2.21
Eaton Wash	EA17	398747.5	3784823.5	3739.6	3737.6	518.3	516.2	15.1	0.3	0.06	0.06	452.35	2.12
Eaton Wash	EA18	398441.5	3784832.5	3110.9	3108.5	486.2	484.5	15.8	0.3	0.05	0.05	629.07	1.76
Eaton Wash	EA19	398369.5	3784756.5	2940.2	2933.2	473.9	462.3	15.9	0.3	0.06	0.13	175.30	11.57
Eaton Wash	EA20	398425.5	3784496.5	2202.6	2196.2	426.9	414.4	16.2	0.2	0.05	0.07	737.01	12.52
Eaton Wash	EA21	399058.5	3786927.5	9959.8	9956.8	1084.1	1082.1	2.0	0.9	N.D.	N.D.	N.D.	N.D.
Eaton Wash	EA22	399442.5	3786558.5	8960.2	8958.2	994.2	992.2	2.5	0.9	0.09	0.09	998.63	1.95
Eaton Wash	EA23	399831.5	3786130.5	7935.2	7931.2	903.3	899.3	2.8	0.8	0.09	0.09	1026.95	3.92
Eaton Wash	EA24	399779.5	3785979.5	7700.2	7695.8	882.2	877.5	2.9	0.7	0.07	0.09	235.42	4.76
Eaton Wash	EA25	399787.5	3785974.5	7689.0	7686.5	876.3	874.5	2.9	0.7	0.18	0.32	9.24	1.75
Eaton Wash	EA26	399861.5	3785909.5	7561.0	7559.0	857.2	854.8	2.9	0.7	0.14	0.15	127.54	2.37
Eaton Wash	EA27	399886.5	3785903.5	7527.0	7524.6	851.4	849.8	2.9	0.7	0.11	0.15	34.38	1.56
Eaton Wash	EA28	399910.5	3785908.5	7497.1	7494.1	847.0	844.1	2.9	0.7	0.10	0.19	30.56	2.92
Eaton Wash	EA29	399951.5	3785898.5	7447.4	7439.8	836.2	822.5	3.0	0.7	0.17	0.40	54.28	13.71
Eaton Wash	EA30	399981.5	3785879.5	7408.4	7403.6	815.8	809.6	3.0	0.7	0.21	0.36	36.21	6.22
Eaton Wash	EA31	399991.5	3785867.5	7391.7	7387.8	808.2	804.4	3.0	0.7	0.11	0.33	15.73	3.80
Eaton Wash	EA32	400001.5	3785851.5	7368.1	7366.1	802.0	800.3	3.0	0.7	0.12	0.19	21.73	1.71
Eaton Wash	EA33	400007.5	3785841.5	7355.6	7353.6	799.1	797.4	3.0	0.7	0.12	0.24	12.49	1.73
Eaton Wash	EA34	400012.5	3785833.5	7344.4	7342.4	797.1	795.2	3.0	0.7	0.03	0.20	11.24	1.89
Eaton Wash	EA35	400850.5	3786209.5	9148.1	9145.1	1009.5	1007.4	1.6	0.9	N.D.	N.D.	N.D.	N.D.
Eaton Wash	EA36	400866.5	3786188.5	9116.1	9113.7	1002.7	1000.9	1.6	0.9	0.16	0.21	31.38	1.83
Eaton Wash	EA37	400761.5	3786165.5	8798.5	8795.5	965.0	962.4	1.7	0.9	0.11	0.12	318.19	2.64
Eaton Wash	EA38	400562.5	3786202.5	8462.2	8457.2	929.6	924.4	1.7	0.9	0.10	0.11	338.29	5.17
Eaton Wash	EA39	400534.5	3786264.5	8369.2	8367.2	913.1	911.3	1.9	0.9	0.13	0.15	90.01	1.80
Eaton Wash	EA40	400459.5	3786259.5	8264.4	8262.0	899.8	897.9	1.9	0.9	0.11	0.13	105.23	1.92
Eaton Wash	EA41	400458.5	3786251.5	8253.8	8250.3	896.8	893.1	1.9	0.9	0.13	0.41	11.66	3.65
Eaton Wash	EA42	400370.5	3786145.5	8078.5	8075.5	876.8	875.0	1.9	0.8	0.09	0.10	174.82	1.83
Eaton Wash	EA43	400352.5	3786169.5	8042.1	8037.7	871.2	867.2	1.9	0.8	0.11	0.21	37.80	4.06
Eaton Wash	EA44	400337.5	3786181.5	8019.8	8013.4	863.6	850.9	1.9	0.8	0.20	0.67	24.31	12.76
Eaton Wash	EA45	400282.5	3786170.5	7951.3	7949.3	843.7	841.9	1.9	0.8	0.11	0.14	64.11	1.85
Eaton Wash	EA46	400433.5	3785804.5	7808.4	7799.0	854.4	844.3	1.1	1.0	N.D.	N.D.	N.D.	N.D.
Eaton Wash	EA47	400430.5	3785814.5	7796.6	7794.2	843.3	841.4	1.1	1.0	0.41	0.60	4.83	1.93
El Prieto Canyon	EL1	394009.5	3787600.5	3742.5	3738.1	692.9	689.8	1.1	1.0	N.D.	N.D.	N.D.	N.D.
El Prieto Canyon	EL2	393967.5	3787463.5	3582.3	3578.5	669.6	665.7	1.2	0.9	0.13	0.15	159.61	3.83
Fall Creek	F1	393154.5	3798486.5	2663.6	2659.6	1008.8	1003.0	2.1	0.8	N.D.	N.D.	N.D.	N.D.
Fall Creek	F2	393157.5	3798481.5	2656.7	2652.9	1001.7	991.8	2.1	0.8	0.44	1.68	6.66	9.95
Fall Creek	F3	393169.5	3798447.5	2613.0	2605.6	986.1	975.0	2.1	0.8	0.14	0.35	47.28	11.08
Fall Creek	F4	393099.5	3798280.5	2388.3	2385.3	953.6	951.5	2.4	0.7	0.10	0.11	220.31	2.14
Fall Creek	F5	392939.5	3797466.5	1198.7	1196.3	869.0	867.1	3.5	0.3	0.07	0.07	1189.00	1.85
Fall Creek	F6	392921.5	3797386.5	1098.2	1095.3	861.7	860.1	3.5	0.3	0.05	0.07	100.98	1.67
Fall Creek	F7	392935.5	3797372.5	1077.2	1071.8	854.7	850.3	3.5	0.3	0.29	0.42	23.56	4.46
Fall Creek	F8	392948.5	3797349.5	1046.5	1033.2	848.6	831.9	3.5	0.3	0.07	0.48	38.56	16.64
Fall Creek	F9	392953.5	3797333.5	1028.4	1025.0	829.7	827.3	3.5	0.3	0.46	0.55	8.24	2.36
Fall Creek	F10	392959.5	3797327.5	1018.7	1013.9	824.9	818.4	3.5	0.3	0.39	0.81	11.07	6.52
Fall Creek	F11	392881.5	3796773.5	150.8	145.4	775.1	765.4	4.2	0.0	0.05	0.06	868.55	9.68
Fall Creek	F12	392884.5	3796757.5	130.5	122.6	763.4	752.5	4.2	0.0	0.14	0.57	22.73	10.83
Fall Creek	F13	392889.5	3796746.5	114.0	110.0	752.0	745.7	4.2	0.0	0.06	0.54	12.66	6.31
Fall Creek	F14	392894.5	3796727.5	88.7	79.8	744.6	722.9	4.2	0.0	0.05	0.76	30.14	21.71
Falls Canyon	FA1	400724.5	3789761.5	1487.9	1485.5	1214.5	1212.9	1.2	0.9	N.D.	N.D.	N.D.	N.D.
Falls Canyon	FA2	400875.5	3790275.5	820.2	817.7	1129.2	1127.7	1.8	0.5	0.13	0.13	667.78	1.51
Falls Canyon	FA3	400905.5	3790286.5	782.5	773.3	1124.1	1116.4	1.8	0.5	0.10	0.25	44.46	7.78
Fern Canyon	FE1	392574.5	3787922.5	2210.6	2206.6	607.0	604.7	1.7	0.8	N.D.	N.D.	N.D.	N.D.
Fox Creek	FO1	391430.5	3797424.5	2495.4	2493.4	903.5	901.8	8.8	0.3	N.D.	N.D.	N.D.	N.D.
Fox Creek	FO2	391463.5	3797390.5	2438.5	2431.7	896.5	884.2	8.8	0.3	0.10	0.29	61.77	12.28
Fox Creek	FO3	391481.5	3797388.5	2418.0	2416.0	883.6	881.1	8.8	0.3	0.04	0.20	15.66	2.56
Fox Creek	FO4	391495.5	3797398.5	2397.0	2393.5	879.1	872.6	8.8	0.3	0.10	0.38	22.49	6.47
Fox Creek	FO5	391501.5	3797417.5	2374.1	2371.1	871.6	867.9	8.8	0.3	0.05	0.21	22.49	3.71
Fox Creek	FO6	391559.5	3797458.5	2287.3	2275.8	861.7	833.7	8.8	0.3	0.07	0.36	95.23	28.04
Fox Creek	FO7	391579.5	3797472.5	2259.8	2254.5	833.0	826.7	8.8	0.3	0.04	0.33	21.31	6.24
Fox Creek	FO8	391595.5	3797478.5	2239.9	2236.4	825.9	822.9	8.8	0.3	0.06	0.21	18.07	3.02
Fox Creek	FO9	391606.5	3797484.5	2226.4	2221.5	821.3	816.6	8.8	0.3	0.15	0.42	14.90	4.71
Fox Creek	FO10	391611.5	3797487.5	2220.1	2216.7	816.1	812.5	8.8	0.3	0.39	0.85	4.83	3.56

Fox Creek	FO11	391529.5	3796512.5	534.4	527.7	726.3	709.6	10.5	0.1	0.05	0.06	1688.97	16.78
Fusier Canyon	FU1	389098.5	3796049.5	3469.4	3465.9	925.5	922.6	1.2	1.0	N.D.	N.D.	N.D.	N.D.
Fusier Canyon	FU2	389096.5	3796043.5	3461.9	3459.9	922.0	920.4	1.2	1.0	0.16	0.37	6.00	1.56
Fusier Canyon	FU3	388801.5	3795524.5	2555.2	2549.9	852.5	849.0	1.5	0.7	0.08	0.08	909.99	3.49
Fusier Canyon	FU4	388793.5	3795533.5	2542.3	2536.0	848.5	843.2	1.5	0.7	0.06	0.42	13.90	5.29
Fusier Canyon	FU5	388753.5	3795515.5	2468.7	2460.4	838.7	831.6	1.6	0.7	0.07	0.15	75.60	7.13
Fusier Canyon	FU6	388750.5	3795507.5	2459.4	2453.4	831.1	821.5	1.6	0.7	0.52	1.44	7.00	9.55
Fusier Canyon	FU7	388748.5	3795399.5	2307.3	2303.5	811.0	807.8	1.6	0.7	0.07	0.09	149.95	3.22
Fusier Canyon	FU8	388819.5	3795323.5	2142.6	2139.6	798.5	795.6	1.6	0.6	0.06	0.07	163.85	2.84
Fusier Canyon	FU9	388854.5	3795241.5	1988.2	1985.8	787.3	784.8	1.7	0.6	0.06	0.07	153.85	2.51
Fusier Canyon	FU10	388608.5	3795129.5	1343.2	1338.4	749.8	743.6	1.7	0.4	0.05	0.06	647.38	6.29
Grizzly Creek	G1	389088.5	3792773.5	1129.9	1125.7	762.8	759.8	1.3	1.0	N.D.	N.D.	N.D.	N.D.
Grizzly Creek	G2	389009.5	3792895.5	961.7	959.3	744.8	742.5	1.7	0.8	0.09	0.10	166.41	2.30
Grizzly Creek	G3	388994.5	3792909.5	938.6	935.1	739.1	736.7	1.8	0.8	0.16	0.24	24.14	2.44
Grizzly Creek	G4	388964.5	3792938.5	888.1	886.1	733.1	731.4	1.8	0.8	0.08	0.11	49.04	1.69
Grizzly Creek	G5	388948.5	3792948.5	864.8	862.0	728.9	727.2	1.8	0.7	0.12	0.17	24.14	1.64
Grizzly Creek	G6	388936.5	3792970.5	837.8	831.6	723.9	719.6	1.8	0.7	0.14	0.25	30.38	4.35
Grizzly Creek	G7	388886.5	3793002.5	770.0	766.6	706.9	704.2	1.8	0.7	0.21	0.24	65.01	2.68
Grizzly Creek	G8	388666.5	3793194.5	384.7	380.7	661.2	658.5	2.0	0.3	0.11	0.12	385.85	2.75
Grizzly Creek	G9	388653.5	3793200.5	369.2	359.2	654.8	639.2	2.0	0.3	0.32	0.89	21.56	15.58
Grizzly Creek	G10	388650.5	3793239.5	316.9	314.1	633.9	631.7	2.9	0.3	0.13	0.17	45.04	2.17
Grotto Creek	GR1	397047.5	3797035.5	122.6	120.2	952.5	950.4	1.4	0.3	N.D.	N.D.	N.D.	N.D.
Grotto Creek	GR2	397055.5	3797057.5	95.0	85.4	946.1	938.1	1.4	0.2	0.17	0.36	34.80	7.98
Haines Canyon	H1	383686.5	3792400.5	1859.9	1857.1	850.5	846.6	2.3	0.6	N.D.	N.D.	N.D.	N.D.
Haines Canyon	H2	383518.5	3792372.5	1654.0	1650.6	829.3	825.1	2.3	0.5	0.09	0.10	206.51	4.22
Haines Canyon	H3	383195.5	3792398.5	1245.8	1243.8	782.7	780.2	2.5	0.4	0.10	0.11	406.75	2.41
Haines Canyon	H4	382807.5	3791895.5	474.1	472.7	711.3	709.4	3.5	0.1	0.09	0.09	771.16	1.88
Haines Canyon	H5	382803.5	3791885.5	460.8	459.3	708.0	706.0	3.5	0.1	0.12	0.26	13.31	1.96
Haines Canyon	H6	382722.5	3791824.5	340.9	338.5	699.7	697.6	3.6	0.1	0.05	0.07	120.88	2.11
Haines Canyon	H7	382710.5	3791829.5	324.6	322.6	695.8	693.7	3.6	0.1	0.13	0.25	15.90	2.14
Little Santa Anita Wash	LSA1	402857.5	3785087.5	6839.2	6835.4	974.5	972.3	1.1	1.0	N.D.	N.D.	N.D.	N.D.
Little Santa Anita Wash	LSA2	403049.5	3784457.5	5913.2	5909.8	851.5	847.8	1.7	0.9	0.13	0.13	925.57	3.70
Little Santa Anita Wash	LSA3	403049.5	3784446.5	5898.3	5895.9	846.5	844.6	1.7	0.9	0.11	0.23	13.90	1.93
Little Santa Anita Wash	LSA4	403490.5	3784035.5	5118.5	5115.1	766.5	764.3	3.1	0.7	0.10	0.10	780.78	2.16
Little Santa Anita Wash	LSA5	403884.5	3783554.5	4225.6	4221.2	680.7	677.1	4.7	0.6	0.09	0.10	893.96	3.65
Little Santa Anita Wash	LSA6	403881.5	3783492.5	4149.5	4147.1	670.6	668.4	4.8	0.6	0.09	0.12	74.11	2.19
Little Santa Anita Wash	LSA7	403609.5	3782987.5	3126.9	3124.0	577.8	576.0	5.4	0.5	0.09	0.09	1023.02	1.79
Little Santa Anita Wash	LSA8	403679.5	3782945.5	3004.3	2996.9	563.7	556.3	5.5	0.4	0.10	0.15	127.15	7.35
Little Santa Anita Wash	LSA9	403680.5	3782922.5	2974.7	2970.9	552.5	548.2	5.5	0.4	0.17	0.31	25.97	4.31
Little Santa Anita Wash	LSA10	403697.5	3782896.5	2940.3	2938.3	545.7	544.2	5.5	0.4	0.08	0.12	32.63	1.52
Little Santa Anita Wash	LSA11	403698.5	3782882.5	2923.6	2920.2	541.8	538.8	5.5	0.4	0.17	0.30	18.07	3.01
Little Santa Anita Wash	LSA12	403706.5	3782850.5	2887.5	2881.7	535.3	527.2	5.5	0.4	0.11	0.30	38.56	8.10
Little Santa Anita Wash	LSA13	403703.5	3782826.5	2861.4	2857.0	524.0	518.4	5.5	0.4	0.16	0.36	24.66	5.66
Little Santa Anita Wash	LSA14	403709.5	3782757.5	2780.2	2777.8	507.5	505.7	5.6	0.4	0.14	0.16	79.18	1.79
Little Santa Anita Wash	LSA15	403721.5	3782715.5	2730.0	2724.1	499.6	494.2	5.6	0.4	0.13	0.21	53.70	5.43
Little Santa Anita Wash	LSA16	403675.5	3782677.5	2660.7	2656.7	484.7	480.6	5.6	0.4	0.15	0.20	67.43	4.06
Little Santa Anita Wash	LSA17	403690.5	3782584.5	2542.7	2539.9	463.6	461.7	5.7	0.4	0.15	0.16	116.81	1.92
Little Santa Anita Wash	LSA18	403700.5	3782459.5	2357.4	2354.0	442.1	437.6	5.7	0.3	0.11	0.13	185.89	4.54
Little Santa Anita Wash	LSA19	403870.5	3782431.5	1938.2	1936.2	394.1	391.3	5.8	0.3	0.10	0.11	417.79	2.85
Little Santa Anita Wash	LSA20	403907.5	3782490.5	1860.7	1854.9	384.4	379.3	5.8	0.3	0.09	0.15	81.33	5.10
Little Santa Anita Wash	LSA21	403896.5	3782176.5	1369.7	1365.7	340.2	336.1	6.4	0.2	0.08	0.09	489.19	4.12
Lukens Canyon	L1	386340.5	3794259.5	750.3	732.5	770.1	746.7	1.1	1.0	N.D.	N.D.	N.D.	N.D.
Lukens Canyon	L2	386346.5	3794281.5	725.2	718.8	745.2	732.7	1.1	0.9	0.22	1.03	13.66	12.50
Lukens Canyon	L3	386385.5	3794324.5	654.4	649.6	715.9	712.2	1.1	0.8	0.26	0.30	69.18	3.65
Lukens Canyon	L4	386389.5	3794330.5	646.8	644.4	710.6	708.7	1.1	0.8	0.56	0.67	5.24	1.92
Lukens Canyon	L5	386400.5	3794340.5	629.3	622.6	702.8	693.2	1.1	0.8	0.39	0.71	21.73	9.61
Lukens Canyon	L6	386436.5	3794371.5	573.2	568.9	684.6	681.6	1.1	0.7	0.17	0.22	53.70	2.94
Lukens Canyon	L7	386450.5	3794398.5	540.4	530.3	676.5	664.0	1.1	0.7	0.18	0.46	38.63	12.47
Lukens Canyon	L8	386462.5	3794415.5	517.8	513.4	661.2	656.2	1.2	0.7	0.23	0.46	16.90	4.99
Lukens Canyon	L9	386469.5	3794429.5	500.9	496.5	654.8	649.7	1.2	0.6	0.12	0.39	16.90	5.08
Lukens Canyon	L10	386476.5	3794440.5	486.4	480.6	647.3	636.5	1.2	0.6	0.24	0.83	15.90	10.81
Lukens Canyon	L11	386483.5	3794456.5	466.7	461.9	634.0	623.6	1.2	0.6	0.17	0.69	18.73	10.48
Millard Creek	M1	395836.5	3787997.5	6630.7	6628.7	948.5	946.7	2.7	0.8	N.D.	N.D.	N.D.	N.D.
Millard Creek	M2	395980.5	3787850.5	6340.2	6337.8	917.5	915.4	2.8	0.8	0.10	0.11	290.88	2.15
Millard Creek	M3	395961.5	3787734.5	6137.6	6134.6	889.2	886.5	2.8	0.8	0.13	0.14	203.17	2.79
Millard Creek	M4	395963.5	3787701.5	6097.7	6094.8	882.6	880.8	3.0	0.8	0.11	0.14	39.80	1.75
Millard Creek	M5	395659.5	3787359.5	5491.3	5488.3	801.7	799.5	3.4	0.7	0.13	0.13	606.51	2.27
Millard Creek	M6	395669.5	3787352.5	5475.2	5473.2	797.6	796.0	3.4	0.7	0.15	0.23	15.07	1.56
Millard Creek	M7	395671.5	3787338.5	5458.8	5455.3	795.6	792.6	3.4	0.7	0.03	0.19	17.90	3.00
Millard Creek	M8	395665.5	3787313.5	5429.0	5425.0	789.9	786.4	3.4	0.7	0.10	0.20	30.31	3.49
Millard Creek	M9	395661.5	3787286.5	5397.9	5394.9	778.9	776.9	3.5	0.7	0.28	0.32	30.14	2.01
Millard Creek	M10	395664.5	3787280.5	5390.1	5387.6	775.9	773.9	3.5	0.7	0.20	0.42	7.24	2.07
Millard Creek	M11	394834.5	3787038.5	3745.1	3742.7	647.5	645.1	5.1	0.5	0.08	0.08	1644.97	2.37
Millard Creek	M12	394831.5	3787036.5	3741.3	3735.0	644.1	627.8	5.1	0.5	0.67	2.26	7.66	16.34
Pasadena Canyon	PA1	401055.5	3783873.5	2803.9	2801.9	683.1	681.0	1.4	0.9	N.D.	N.D.	N.D.	N.D.
Pasadena Canyon	PA2	401019.5	3783823.5	2726.7	2721.5	673.7	668.9	1.4	0.9	0.10	0.15	80.40	4.83
Pasadena Canyon	PA3	401011.5	3783814.5	2713.8	2704.8	667.0	654.4	1.4	0.9	0.25	0.87	16.66	12.62
Pasadena Canyon	PA4	401012.5	3783800.5	2699.4	2696.4	654.1	651.8	1.4	0.8	0.04	0.31	8.41	2.36
Pasadena Canyon	PA5	401010.5	3783793.5	2691.6	2686.6	651.1	645.2	1.4	0.8	0.15	0.67	9.83	5.88
Pasadena Canyon	PA6	400946.5	3783723.5	2580.5	2578.5	635.6	633.2	1.5	0.8	0.09	0.11	108.05	2.42

Pasadena Canyon	PA7	400799.5	3783519.5	2263.6	2261.6	594.9	593.3	1.7	0.7	0.12	0.13	316.89	1.58
Pasadena Canyon	PA8	400832.5	3783486.5	2211.7	2207.3	588.5	583.1	1.7	0.7	0.10	0.19	54.36	5.35
Pasadena Canyon	PA9	400825.5	3783425.5	2059.9	2057.1	569.3	566.8	1.7	0.6	0.09	0.11	150.20	2.48
Pasadena Canyon	PA10	400826.5	3783421.5	2054.7	2049.4	565.8	561.4	1.8	0.6	0.44	0.71	7.66	4.38
Pasadena Canyon	PA11	400806.5	3783340.5	1953.1	1950.7	553.5	551.2	1.8	0.6	0.08	0.10	98.74	2.27
Pasadena Canyon	PA12	400814.5	3783312.5	1919.0	1914.7	548.1	544.5	1.8	0.6	0.10	0.19	35.97	3.59
Pasadena Canyon	PA13	400876.5	3783292.5	1832.0	1829.0	536.3	533.8	1.8	0.6	0.10	0.12	85.77	2.53
Pasadena Canyon	PA14	400898.5	3783253.5	1775.5	1772.5	528.8	524.9	1.9	0.6	0.09	0.16	56.46	3.96
Pasadena Canyon	PA15	400844.5	3783217.5	1682.0	1679.6	517.5	515.4	2.0	0.5	0.08	0.10	92.91	2.10
Pasadena Canyon	PA16	400759.5	3783193.5	1558.0	1554.6	506.6	501.6	2.0	0.5	0.07	0.11	124.95	5.02
Pasadena Canyon	PA17	400734.5	3783190.5	1525.9	1522.5	499.1	493.8	2.0	0.5	0.09	0.24	32.14	5.23
Pasadena Canyon	PA18	400712.5	3783190.5	1496.7	1494.3	488.4	485.5	2.0	0.5	0.21	0.30	28.21	2.91
Pasadena Canyon	PA19	400646.5	3783095.5	1353.9	1351.5	464.3	462.2	2.0	0.4	0.15	0.16	142.78	2.15
Pasadena Canyon	PA20	400605.5	3783040.5	1264.8	1258.5	448.0	442.1	2.0	0.4	0.16	0.22	92.98	5.85
Pasadena Canyon	PA21	400567.5	3782372.5	462.0	459.6	380.0	378.4	2.2	0.1	0.08	0.08	798.90	1.65
Pipe Canyon	P1	381889.5	3795154.5	471.2	468.8	529.2	527.3	1.4	0.3	N.D.	N.D.	N.D.	N.D.
Pipe Canyon	P2	381886.5	3795159.5	464.9	460.5	526.2	521.5	1.4	0.3	0.28	0.70	8.24	4.73
Pipe Canyon	P3	381875.5	3795246.5	258.7	253.5	496.2	491.9	1.4	0.2	0.13	0.14	207.04	4.28
Pipe Canyon	P4	381675.5	3795288.5	6.2	2.4	464.0	460.9	1.5	0.0	0.11	0.12	251.08	3.10
Rubio Canyon	R1	397160.5	3786080.5	1743.8	1741.8	798.6	796.8	1.3	0.7	N.D.	N.D.	N.D.	N.D.
Rubio Canyon	R2	397176.5	3786037.5	1691.7	1688.7	792.5	789.5	1.3	0.7	0.09	0.14	53.11	3.07
Rubio Canyon	R3	397332.5	3785955.5	1446.2	1441.8	757.6	753.3	1.4	0.6	0.13	0.15	246.89	4.35
Rubio Canyon	R4	397280.5	3785907.5	1354.7	1352.3	741.2	738.8	2.2	0.6	0.14	0.16	89.50	2.41
Rubio Canyon	R5	397273.5	3785899.5	1342.6	1340.2	736.9	735.3	2.2	0.6	0.20	0.29	12.07	1.58
Rubio Canyon	R6	397230.5	3785830.5	1242.5	1231.3	723.3	699.8	2.3	0.5	0.12	0.33	108.91	23.47
Rubio Canyon	R7	397226.5	3785810.5	1220.0	1214.6	699.5	692.8	2.3	0.5	0.03	0.42	16.66	6.67
Rubio Canyon	R8	397225.5	3785790.5	1195.7	1192.3	689.0	685.2	2.3	0.5	0.20	0.34	22.31	3.78
Rubio Canyon	R9	397179.5	3785776.5	1128.1	1123.3	676.5	671.6	2.3	0.5	0.14	0.20	69.01	4.89
Rubio Canyon	R10	397173.5	3785770.5	1117.9	1113.9	670.4	662.6	2.3	0.5	0.23	0.96	9.41	7.77
Rubio Canyon	R11	397152.5	3785726.5	1063.2	1059.2	653.3	644.9	2.3	0.5	0.18	0.32	54.70	8.34
Rubio Canyon	R12	397151.5	3785716.5	1051.4	1047.4	643.2	638.9	2.3	0.5	0.22	0.51	11.83	4.31
Rush Creek	RU1	403087.5	3789368.5	911.5	905.5	1063.9	1057.6	1.0	1.0	N.D.	N.D.	N.D.	N.D.
Rush Creek	RU2	403134.5	3789405.5	828.2	810.1	1047.2	1030.2	1.0	0.9	0.13	0.29	95.43	17.06
Santa Anita Wash	SA1	409398.5	3785977.5	4797.6	4794.2	1229.1	1226.4	1.0	1.0	N.D.	N.D.	N.D.	N.D.
Santa Anita Wash	SA2	409344.5	3785882.5	4658.7	4655.7	1204.0	1201.6	1.3	1.0	0.17	0.18	138.47	2.37
Santa Anita Wash	SA3	409231.5	3785895.5	4519.1	4516.1	1176.3	1173.6	1.3	0.9	0.19	0.20	139.64	2.67
Santa Anita Wash	SA4	409188.5	3785896.5	4469.9	4467.9	1164.3	1162.8	1.6	0.9	0.20	0.22	48.21	1.51
Santa Anita Wash	SA5	409096.5	3785870.5	4357.3	4351.0	1148.7	1141.9	1.6	0.9	0.13	0.18	116.81	6.82
Santa Anita Wash	SA6	409067.5	3785859.5	4323.1	4320.1	1139.5	1137.1	1.6	0.9	0.09	0.16	30.90	2.46
Santa Anita Wash	SA7	408286.5	3785723.5	3167.0	3163.6	993.6	990.6	3.0	0.7	0.12	0.13	1156.51	3.00
Santa Anita Wash	SA8	408062.5	3785921.5	2626.1	2623.1	927.2	924.8	3.3	0.5	0.12	0.12	540.53	2.31
Santa Anita Wash	SA9	407298.5	3786129.5	1565.5	1562.1	821.2	818.2	4.2	0.3	0.10	0.10	1061.03	3.03
Santa Anita Wash	SA10	407217.5	3786171.5	1458.0	1454.2	801.6	798.9	4.2	0.3	0.16	0.18	107.88	2.71
Santa Anita Wash	SA11	407199.5	3786205.5	1416.0	1402.1	795.0	770.5	4.2	0.3	0.10	0.55	52.11	24.53
Santa Anita Wash	SA12	407107.5	3786144.5	1274.4	1271.4	760.2	758.1	6.3	0.3	0.08	0.09	130.71	2.14
Santa Anita Wash	SA13	407046.5	3786088.5	1177.9	1175.5	743.8	742.3	6.4	0.2	0.15	0.16	95.91	1.54
Santa Anita Wash	SA14	407032.5	3786077.5	1156.1	1151.9	738.8	733.0	6.4	0.2	0.18	0.39	23.56	5.78
Santa Anita Wash	SA15	406686.5	3785962.5	630.3	625.5	678.1	674.1	6.8	0.1	0.11	0.11	526.45	3.99
Santa Anita Wash	SA16	406683.5	3785914.5	568.5	564.7	671.4	668.8	6.9	0.1	0.05	0.09	60.77	2.61
Santa Anita Wash	SA17	406610.5	3785812.5	395.1	389.4	644.1	640.2	6.9	0.1	0.15	0.16	175.24	3.88
Santa Anita Wash	SA18	406397.5	3785753.5	91.4	87.4	613.2	610.1	7.0	0.0	0.09	0.10	302.05	3.19
Santa Anita Wash	SA19	407583.5	3786708.5	2352.7	2350.7	976.1	974.3	1.4	0.9	N.D.	N.D.	N.D.	N.D.
Santa Anita Wash	SA20	407579.5	3786673.5	2311.3	2308.4	971.8	969.9	1.4	0.8	0.06	0.10	42.21	1.82
Santa Anita Wash	SA21	407503.5	3786605.5	2162.8	2158.6	951.4	948.8	1.8	0.8	0.13	0.14	149.88	2.62
Santa Anita Wash	SA22	407493.5	3786599.5	2150.3	2147.9	947.3	945.3	1.8	0.8	0.18	0.33	10.66	2.07
Santa Anita Wash	SA23	407393.5	3786574.5	1987.6	1979.4	926.3	917.6	1.8	0.7	0.12	0.16	168.51	8.62
Santa Anita Wash	SA24	407292.5	3786505.5	1827.0	1824.0	899.8	895.5	1.9	0.7	0.12	0.14	155.37	4.34
Santa Anita Wash	SA25	407274.5	3786473.5	1783.2	1780.4	888.1	886.3	1.9	0.6	0.18	0.21	43.63	1.77
Santa Anita Wash	SA26	407266.5	3786461.5	1767.3	1763.9	886.3	881.8	1.9	0.6	0.00	0.28	16.49	4.55
Santa Anita Wash	SA27	407263.5	3786456.5	1761.1	1757.3	881.4	874.9	1.9	0.6	0.13	1.03	6.66	6.51
Santa Anita Wash	SA28	407222.5	3786376.5	1644.0	1641.6	855.8	853.3	1.9	0.6	0.17	0.19	115.67	2.47
Santa Anita Wash	SA29	407173.5	3786370.5	1587.2	1579.2	847.3	837.5	1.9	0.6	0.11	0.25	62.38	9.81
Santa Anita Wash	SA30	407158.5	3786318.5	1515.9	1511.1	827.4	823.6	2.0	0.6	0.16	0.20	68.11	3.71
Santa Anita Wash	SA31	407175.5	3786284.5	1471.7	1465.7	814.7	809.4	2.1	0.5	0.23	0.31	45.38	5.32
Santa Anita Wash	SA32	407170.5	3786260.5	1445.0	1441.6	805.2	801.0	2.1	0.5	0.20	0.35	24.07	4.21
Santa Anita Wash	SA33	407166.5	3786233.5	1413.9	1391.2	795.6	770.7	2.1	0.5	0.19	0.60	50.46	24.95
Silver Creek	SL1	388081.5	3792912.5	942.8	940.8	737.2	735.6	1.2	1.0	N.D.	N.D.	N.D.	N.D.
Silver Creek	SL2	388084.5	3792918.5	935.6	926.7	734.2	725.5	1.2	1.0	0.26	0.72	14.07	8.69
Silver Creek	SL3	388103.5	3792970.5	859.8	857.4	708.5	706.8	1.2	0.9	0.25	0.27	69.36	1.75
Silver Creek	SL4	388114.5	3792976.5	844.9	835.8	704.4	682.8	1.2	0.9	0.19	1.11	21.56	21.69
Silver Creek	SL5	388149.5	3793018.5	784.3	780.9	674.5	670.0	1.2	0.8	0.16	0.23	54.94	4.49
Silver Creek	SL6	388156.5	3793023.5	775.2	761.7	668.5	643.2	1.2	0.8	0.27	1.40	19.14	25.22
Strayns Canyon	ST1	401538.5	3789299.5	1957.6	1954.2	1209.2	1206.4	1.2	0.9	N.D.	N.D.	N.D.	N.D.
Strayns Canyon	ST2	401542.5	3789382.5	1867.2	1864.7	1191.2	1189.7	1.2	0.9	0.17	0.19	89.46	1.55
Strayns Canyon	ST3	401761.5	3789793.5	1317.3	1313.9	1104.8	1102.3	1.4	0.6	0.15	0.16	550.81	2.52
Strayns Canyon	ST4	401873.5	3789857.5	1133.8	1131.4	1079.0	1077.3	1.9	0.5	0.13	0.14	182.58	1.73
Strayns Canyon	ST5	402024.5	3789972.5	917.3	915.3	1049.6	1048.0	2.2	0.4	0.13	0.14	216.04	1.59
Strayns Canyon	ST6	402096.5	3790009.5	813.3	811.3	1035.5	1033.9	2.2	0.4	0.12	0.14	104.05	1.61
Sutton Canyon	SU1	388003.5	3790258.5	2374.4	2372.0	876.2	874.1	1.0	0.9	N.D.	N.D.	N.D.	N.D.
Sutton Canyon	SU2	387960.5	3790209.5	2301.7	2298.9	863.2	861.4	1.1	0.9	0.15	0.17	73.08	1.80

Sutton Canyon	SU3	387886.5	3790117.5	2160.5	2157.1	843.4	840.2	1.2	0.9	0.13	0.15	141.78	3.22
Sutton Canyon	SU4	387520.5	3789925.5	1517.0	1514.0	764.8	761.8	1.4	0.6	0.12	0.12	643.16	3.04
Sutton Canyon	SU5	387521.5	3789919.5	1510.6	1505.7	760.5	756.8	1.4	0.6	0.38	0.60	8.24	3.64
Sutton Canyon	SU6	387510.5	3789907.5	1492.8	1489.4	753.3	748.5	1.4	0.6	0.27	0.51	16.31	4.80
Sutton Canyon	SU7	387489.5	3789897.5	1467.1	1465.1	745.8	744.1	1.4	0.6	0.12	0.18	24.31	1.65
Vogel Canyon	V1	388403.5	3797178.5	4237.8	4233.4	991.2	984.4	1.4	1.0	N.D.	N.D.	N.D.	N.D.
Vogel Canyon	V2	388125.5	3796784.5	3405.0	3396.2	908.0	892.6	1.6	0.8	0.09	0.11	837.16	15.36
Vogel Canyon	V3	388100.5	3796791.5	3365.5	3360.7	888.6	881.2	1.6	0.8	0.13	0.32	35.56	7.34
Vogel Canyon	V4	387851.5	3796716.5	3010.4	3003.9	852.8	846.6	2.2	0.7	0.08	0.10	356.71	6.21
Vogel Canyon	V5	387846.5	3796705.5	2997.3	2979.6	845.1	810.3	2.2	0.7	0.22	1.49	24.31	34.78
Vogel Canyon	V6	387850.5	3796613.5	2867.4	2863.6	803.2	800.0	2.2	0.7	0.06	0.09	116.05	3.27
Vogel Canyon	V7	387865.5	3796610.5	2849.5	2845.7	798.7	796.1	2.2	0.7	0.09	0.22	17.90	2.59
Vogel Canyon	V8	387871.5	3796606.5	2841.9	2838.0	795.6	792.4	2.2	0.7	0.12	0.49	7.66	3.26
Vogel Canyon	V9	387761.5	3796502.5	2634.8	2620.7	774.1	745.2	2.3	0.6	0.09	0.22	217.28	28.86
Vogel Canyon	V10	387422.5	3795447.5	844.1	841.2	638.5	636.7	4.3	0.2	0.06	0.06	1779.51	1.81
Vogel Canyon	V11	387448.5	3795364.5	720.6	711.4	630.3	619.0	4.3	0.2	0.05	0.14	129.88	11.29
Ybarra Canyon	Y1	387007.5	3797414.5	3886.8	3881.6	942.3	934.9	1.0	1.0	N.D.	N.D.	N.D.	N.D.
Ybarra Canyon	Y2	387073.5	3797354.5	3784.6	3779.3	922.7	917.6	1.1	0.9	0.13	0.17	102.23	5.11
Ybarra Canyon	Y3	387082.5	3797324.5	3750.0	3744.6	910.9	903.7	1.1	0.9	0.23	0.40	34.73	7.21
Ybarra Canyon	Y4	387092.5	3797270.5	3687.4	3684.4	896.0	893.7	1.1	0.9	0.13	0.17	60.21	2.37
Ybarra Canyon	Y5	387079.5	3797189.5	3585.8	3581.8	884.0	879.7	1.1	0.9	0.10	0.14	102.60	4.28
Ybarra Canyon	Y6	387050.5	3797181.5	3553.5	3551.1	877.3	875.6	1.1	0.9	0.09	0.13	30.73	1.66
Ybarra Canyon	Y7	387028.5	3797162.5	3522.5	3520.5	869.1	867.2	1.1	0.9	0.23	0.27	30.63	1.89
Ybarra Canyon	Y8	386913.5	3797015.5	3302.9	3297.7	837.3	833.1	1.2	0.8	0.14	0.15	222.76	4.23
Ybarra Canyon	Y9	386755.5	3796801.5	2993.9	2990.5	796.1	792.1	1.8	0.7	0.12	0.13	307.23	4.08
Ybarra Canyon	Y10	386763.5	3796781.5	2969.4	2965.0	789.4	785.1	1.8	0.7	0.13	0.27	25.49	4.27
Ybarra Canyon	Y11	386769.5	3796744.5	2925.7	2922.7	777.9	775.9	1.8	0.7	0.18	0.22	42.31	1.97
Ybarra Canyon	Y12	386694.5	3796683.5	2812.0	2805.8	758.8	750.8	1.8	0.7	0.16	0.22	116.88	8.00
Ybarra Canyon	Y13	386689.5	3796671.5	2797.9	2793.1	749.4	744.7	1.8	0.7	0.17	0.48	12.66	4.71
Ybarra Canyon	Y14	386623.5	3796591.5	2661.8	2657.8	726.7	722.8	3.4	0.7	0.14	0.16	135.30	3.95
Ybarra Canyon	Y15	386594.5	3796607.5	2620.8	2618.0	718.5	716.5	3.4	0.7	0.12	0.16	39.87	2.03
Ybarra Canyon	Y16	386542.5	3796561.5	2524.5	2519.5	705.3	698.5	3.4	0.6	0.12	0.18	98.50	6.73
Ybarra Canyon	Y17	386503.5	3796544.5	2466.2	2463.2	693.8	691.6	3.4	0.6	0.09	0.12	56.28	2.22
Ybarra Canyon	Y18	386281.5	3796440.5	2084.2	2074.8	664.2	651.1	3.7	0.5	0.07	0.10	388.36	13.14
Ybarra Canyon	Y19	387625.5	3797160.5	4236.2	4230.3	916.2	909.5	1.0	1.0	N.D.	N.D.	N.D.	N.D.
Ybarra Canyon	Y20	387272.5	3796999.5	3729.4	3724.1	875.9	871.7	1.2	0.9	0.07	0.07	506.22	4.20
Ybarra Canyon	Y21	387049.5	3796891.5	3381.4	3378.9	838.3	836.0	1.5	0.8	0.10	0.10	345.19	2.28
Ybarra Canyon	Y22	387023.5	3796888.5	3351.6	3345.4	832.5	823.5	1.5	0.8	0.13	0.37	33.56	9.01
Ybarra Canyon	Y23	387000.5	3796867.5	3316.4	3312.4	820.5	817.1	1.5	0.8	0.10	0.19	32.97	3.40
Ybarra Canyon	Y24	386948.5	3796817.5	3235.8	3232.4	811.7	808.2	1.5	0.8	0.07	0.11	79.98	3.46
Ybarra Canyon	Y25	386946.5	3796812.5	3230.0	3227.0	806.8	804.2	1.5	0.8	0.57	0.73	5.41	2.60
Ybarra Canyon	Y26	386857.5	3796677.5	3014.8	3012.4	788.4	786.6	1.5	0.7	0.07	0.08	214.59	1.78
Ybarra Canyon	Y27	386856.5	3796649.5	2983.1	2980.3	783.6	781.9	1.5	0.7	0.10	0.15	32.14	1.68
Ybarra Canyon	Y28	386713.5	3796586.5	2791.6	2789.2	764.0	761.8	1.5	0.7	0.09	0.11	191.07	2.19
Ybarra Canyon	Y29	386665.5	3796581.5	2725.28	2707.03	754.7	732.0	1.5	0.6	0.11	0.36	82.18	22.76

Note: N.D. stands for No Data

*X_L is the horizontal distance of the waterfall lip from the outlet.

**X_B is the horizontal distance of the waterfall base from the outlet.

#Z_L is the elevation of the waterfall lip.

##Z_B is the elevation of the waterfall base.

###Non-dimensional distance of waterfalls calculated as the distance from the outlet divided by the total length of stream.

*#S_R is the slope of the river excluding relief from waterfalls measured for the reach above each waterfall unit.

**#S_U is the waterfall unit slope measured from the base of the upstream waterfall to the base of the downstream waterfall.

+L_U is the waterfall unit length measured as the horizontal distance from the base of the upstream waterfall to the base of the downstream waterfall.

++H_{wf} is the height of the waterfall step measured from lip to base.