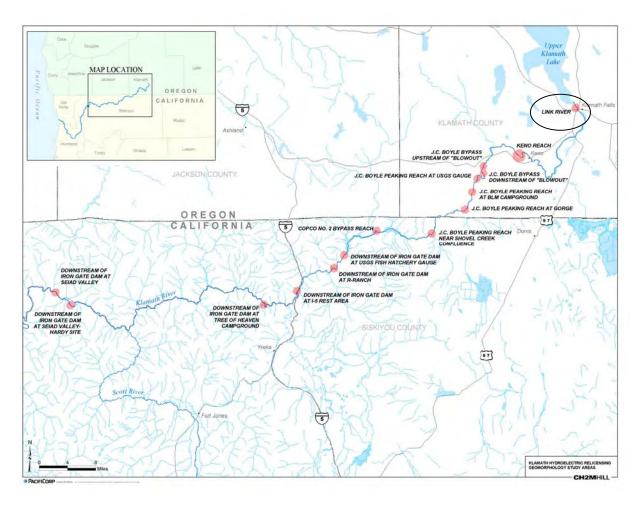
APPENDIX 6A

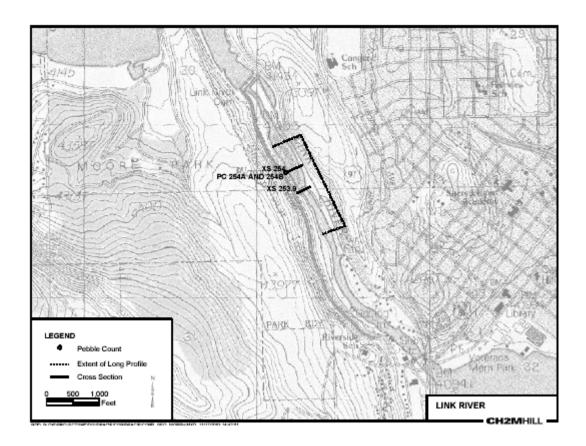
STUDY SITE FIELD SURVEY DATA SUMMARIES

APPENDIX 6A

Study Site Field Survey Data Summaries

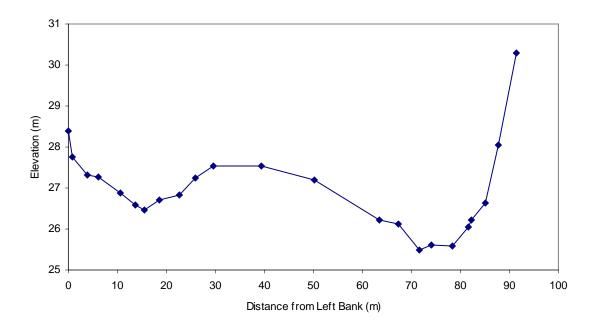


Link River Study Reach Location

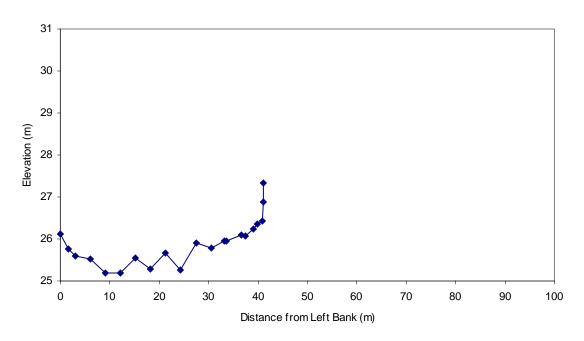




Cross Section RM 254



Cross Section RM 253.9

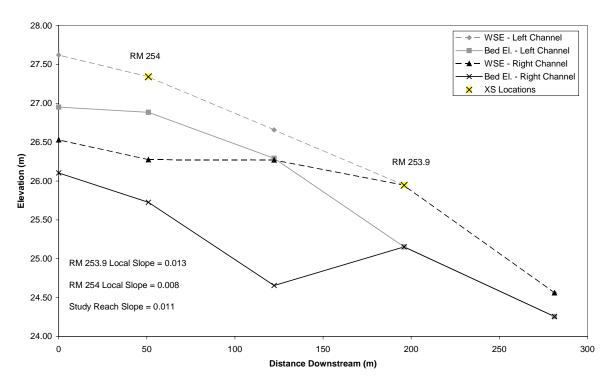


Study Reach Cross Sections

Link River *Pebble Count Summary*

Geomorphic						
Reach Name	River Mile	D ₅₀	D ₈₄	Feature	Location	
Link River	254	52.9	118.2	Bar	On Bar (Perp. To flow near XS1)	
					On Bar (Parallel to flow 50 ft aove and 50 ft	
Link River	254	32.4	121.1	Bar	below XS1)	

Long Profile Link River



Long Profile

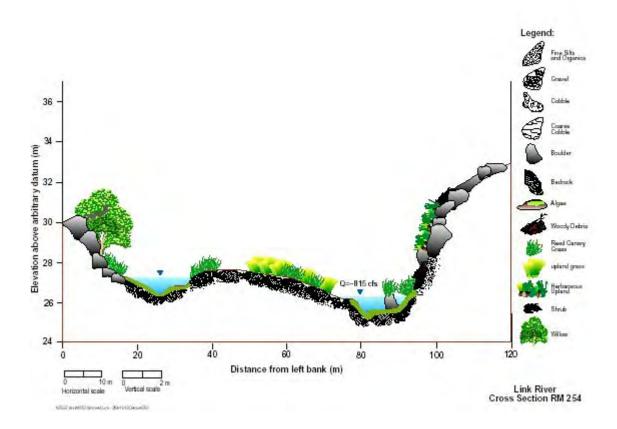
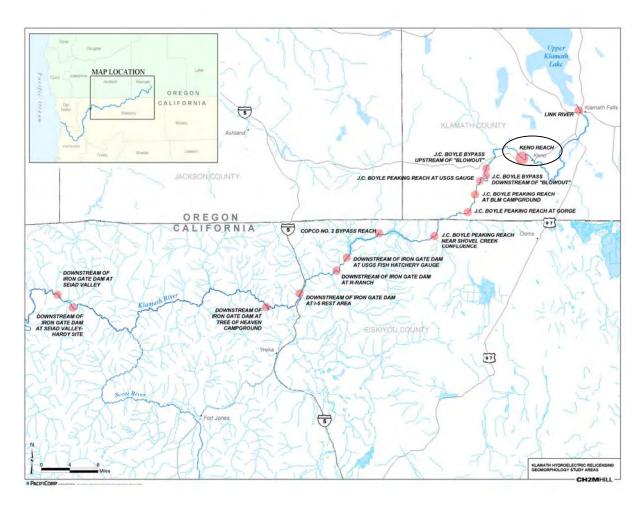




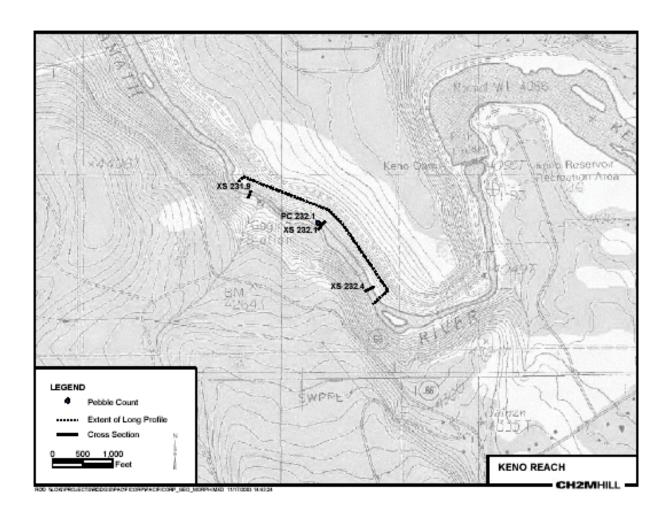
Photo of River Mile 254 cross section looking from right bank to left bank.

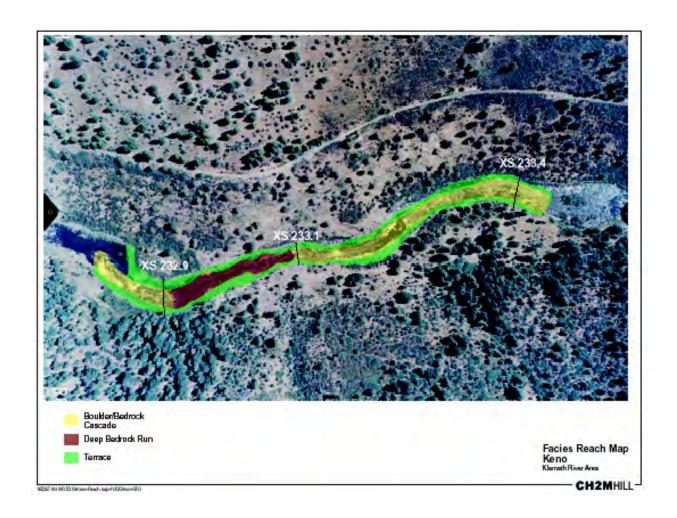


Photo of River Mile 253.9 cross section looking from right bank to left bank.

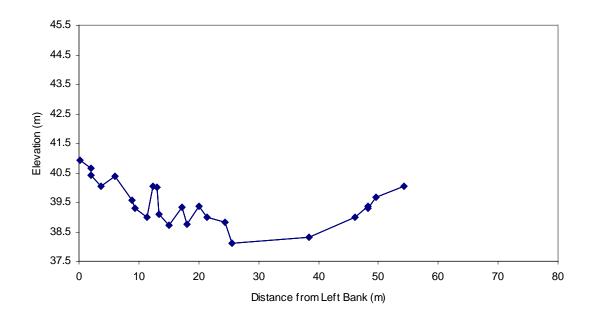


Keno Study Reach Location

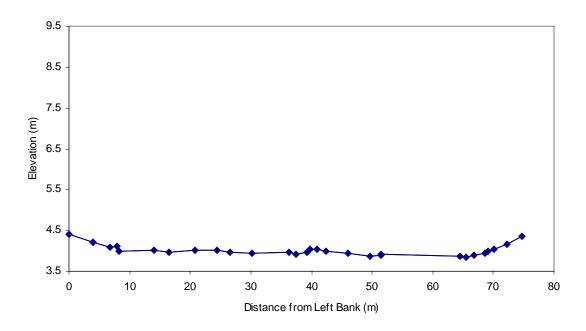




Cross Section RM 232.4



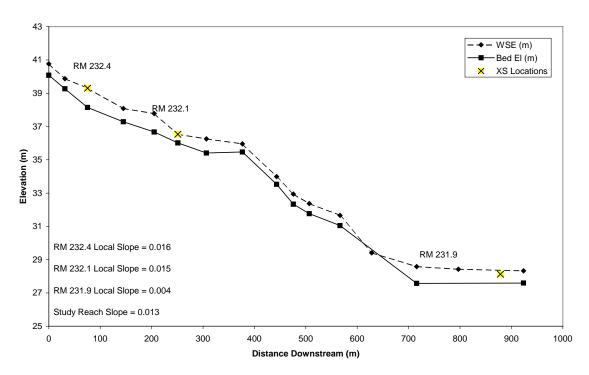
Cross Section RM 232.1



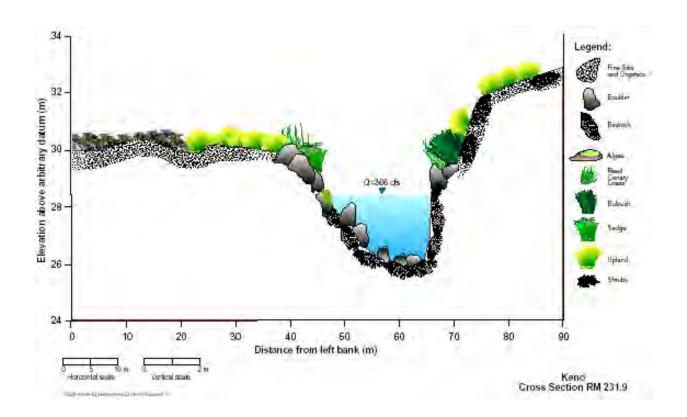
Study Reach Cross Sections

				Geomorphic	
Reach Name	River Mile	D ₅₀	D ₈₄	Feature	Location
Keno	232	336.1	717.4	Bar	Location - Keno Bar at XS2
Keno	229.75	129.8	219.5	Toe of slope	
					pockect gravel - look at Marks hard cover field book for a better location descritpion - this was from their trip down the river in the
Keno	229.75	9.3	14.6	Pocket Gravel	boat
Keno	228.25	145.2	298.6	Bank	Boyle resevior head

Long Profile Keno



Long Profile



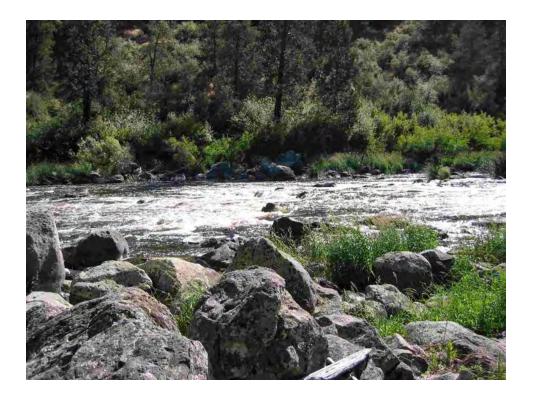


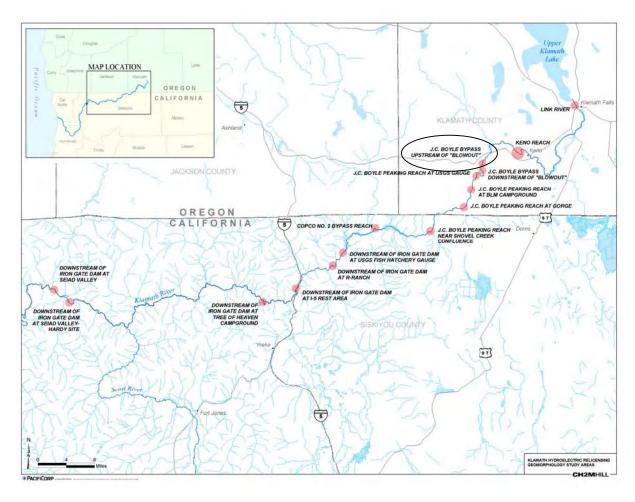
Photo of River Mile 232.4 cross section looking from left bank to right bank



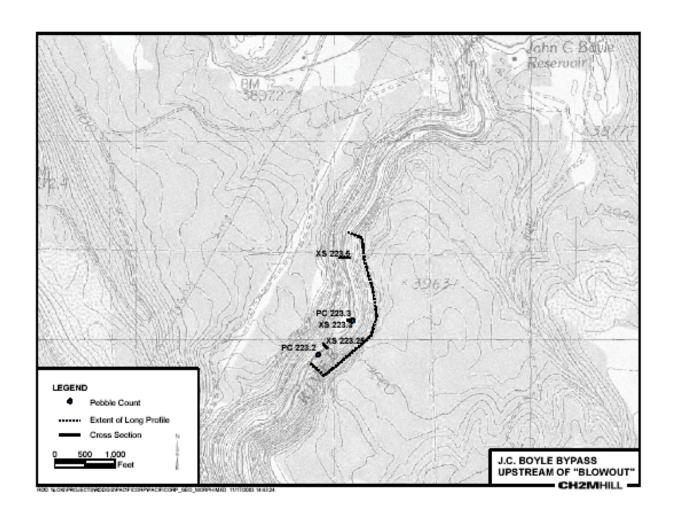
Photo of River Mile 232.1 cross section looking from left bank to right bank

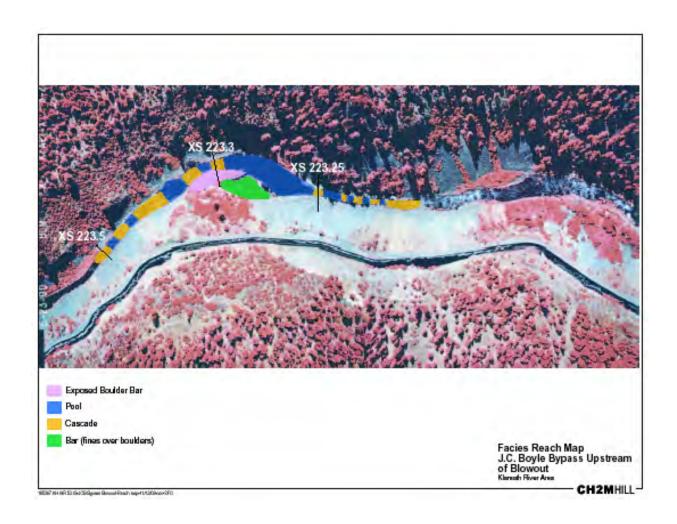


Photo of River Mile 231.9 cross section looking from right bank to left

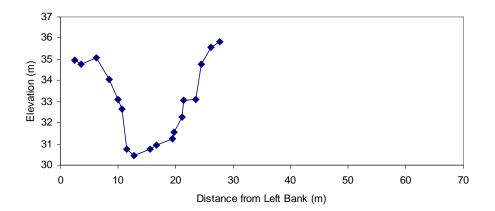


J.C. Boyle Bypass Upstream of "Blowout" Study Reach Location

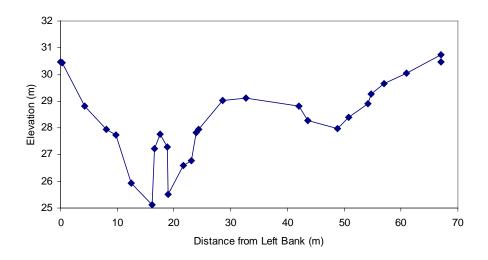




Cross Section RM 223.5

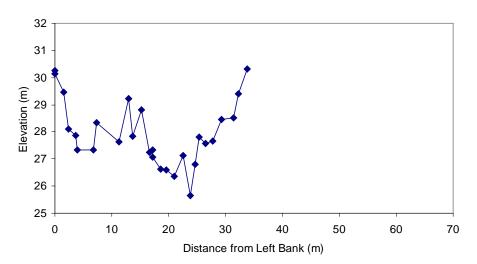


Cross Section RM 233.5



Study Reach Cross Sections

Cross Section RM 233.25

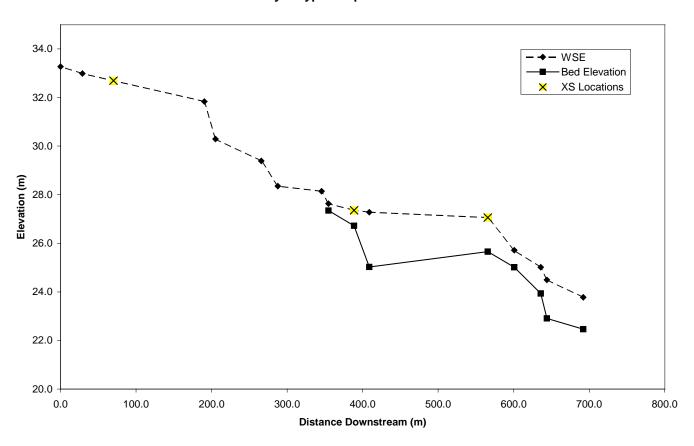


Study Reach Cross Sections

J.C. Boyle Bypass Upstream of "Blowout" *Pebble Count Summary*

Reach Name	River Mile	D ₅₀	\mathbf{D}_{84}	Geomorphic Feature	Location
J.C. Boyle Bypass – Above Blowout	224.4	172.5	314	Terrace	100 ft across XS2 parallel to flow
J.C. Boyle Bypass – Above Blowout	224.3	55	81.8	Pocket Gravel	DS of XS3 Near RB in water, just DS of large boulders in riffle

Long Profile
JC Boyle Bypass Upstream of Blowout



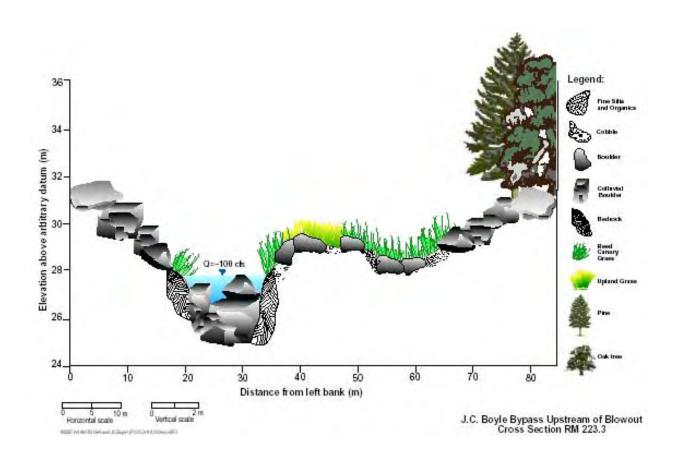




Photo of River Mile 223.5 cross section looking downstream from right bank to left

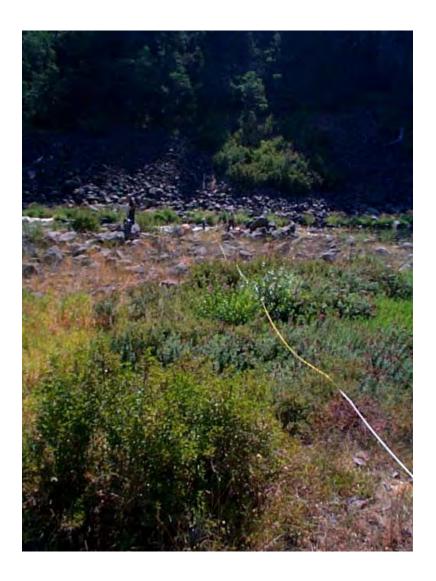
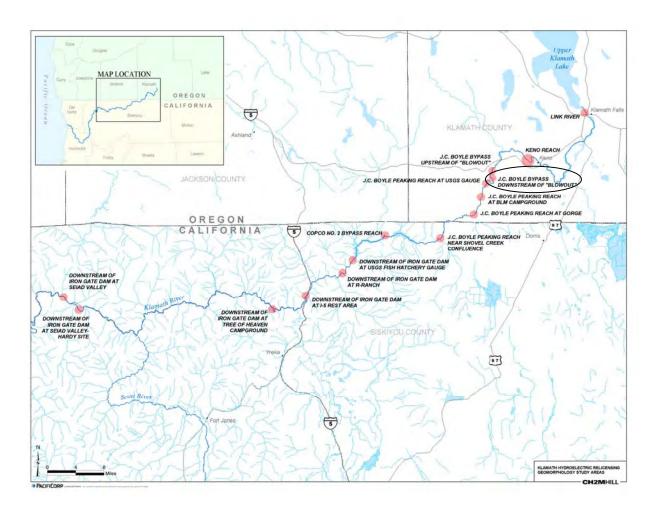


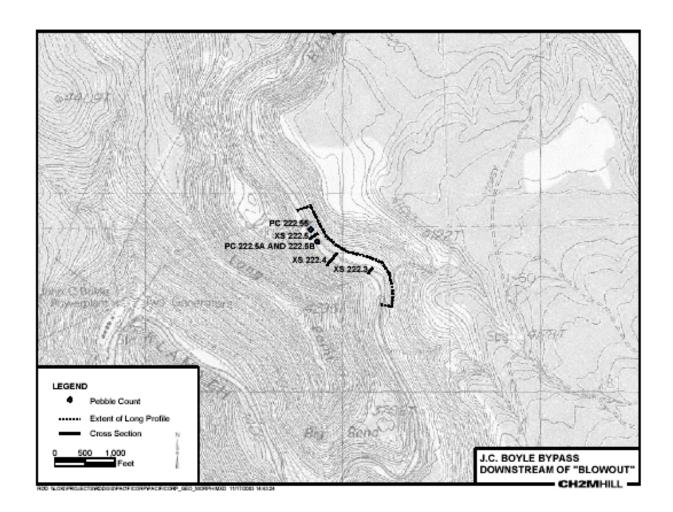
Photo of River Mile 223.3 cross section looking from right bank to left

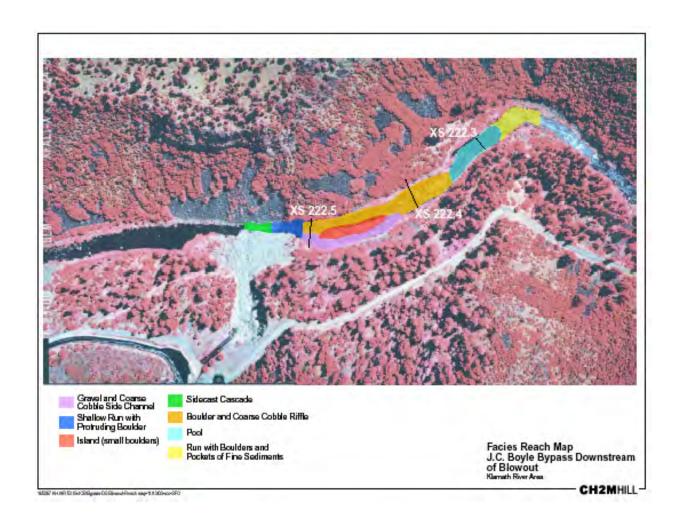


Photo of River Mile 223.2 cross section looking downstream from right bank to left

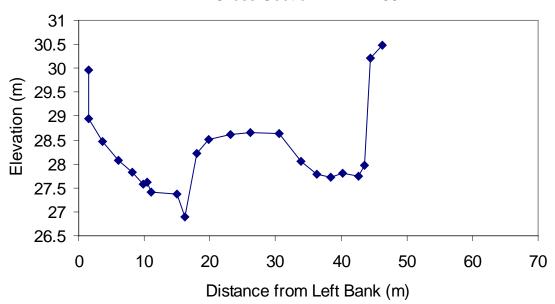


J.C. Boyle Bypass Downstream of "Blowout" Study Reach Location

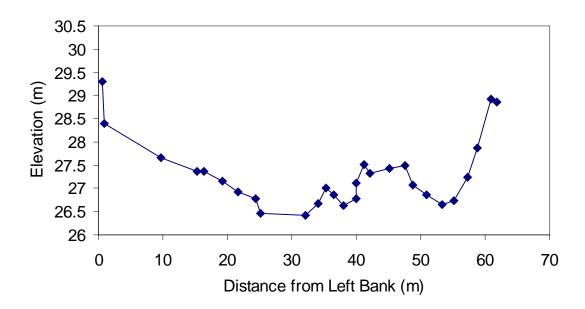




Cross Section RM 222.55



Cross Section RM 222.4

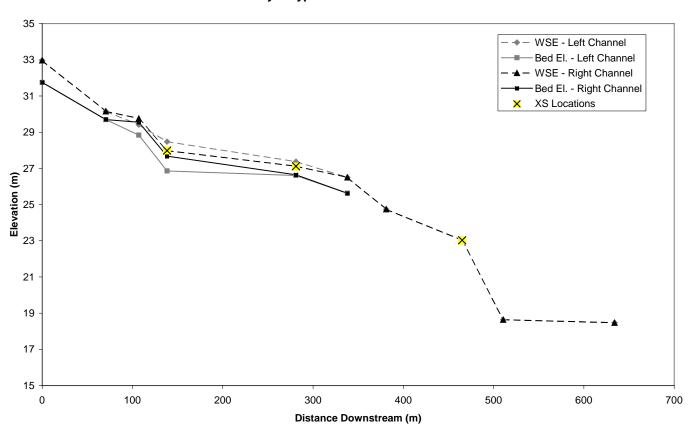


Study Reach Cross Sections

J.C. Boyle Bypass Downstream of "Blowout" *Pebble Count Summary*

Reach Name	River Mile	\mathbf{D}_{50}	\mathbf{D}_{84}	Geomorphic Feature	Location
Below Boyle Blowout	222.5	474.6	1111.4	Side Cast	On side cast below blowout
Below Boyle Blowout	222.4	128	313.4	Island/Mid- channel bar	Top of island, parallel to flow, US and DS of XS1
Below Boyle Blowout	222.4	19.7	43.6	Bar	On fine sediment bar on right bank, DS end of island, parallel to flow

Long Profile
JC Boyle Bypass Downstream of Blowout



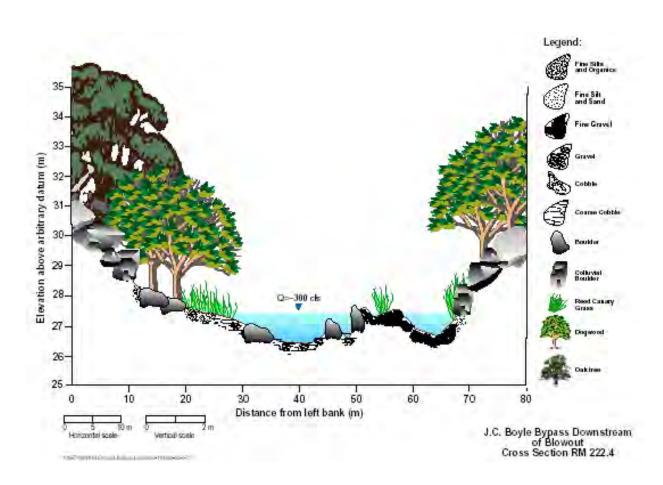




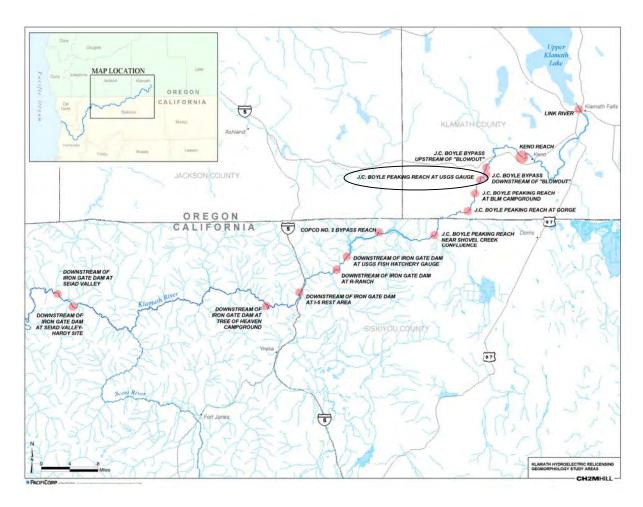
Photo of River Mile 222.5 cross section looking downstream from right bank to left



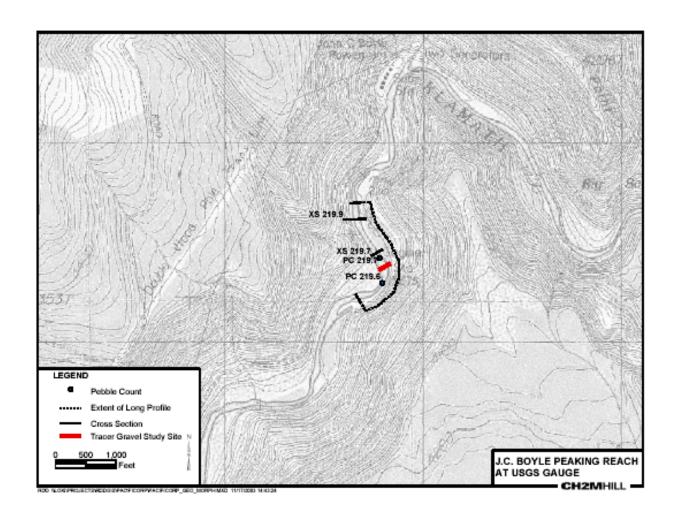
Photo of River Mile 222.4 cross section looking downstream from right bank to left

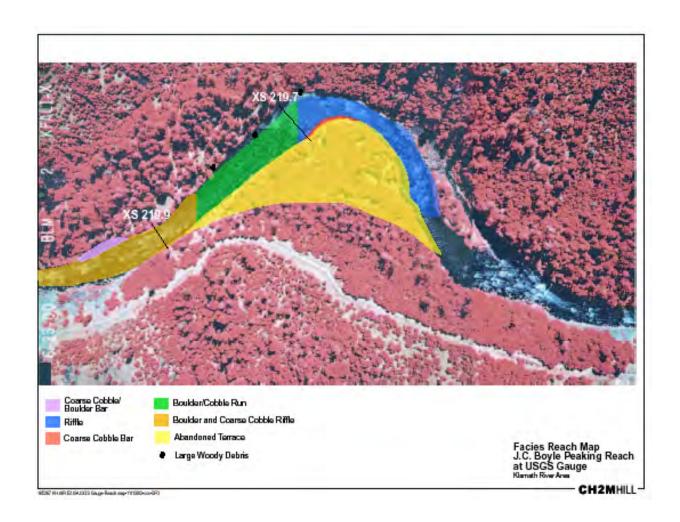


Photo of River Mile 222.3 cross section looking from right bank to left

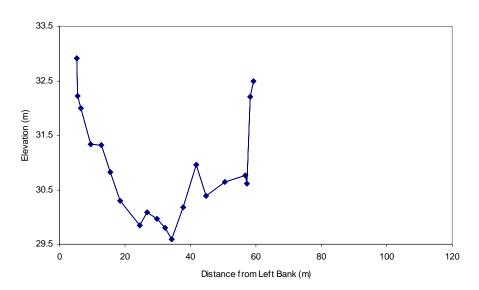


J.C. Boyle Peaking Reach at USGS Gauge Study Reach Location

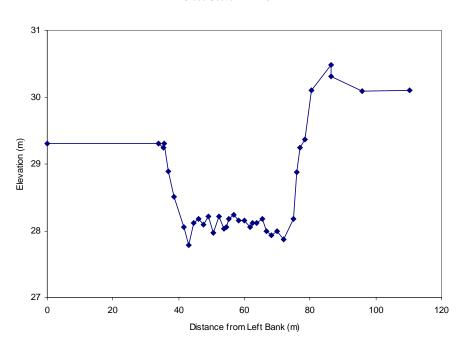




Cross Section RM 219.9



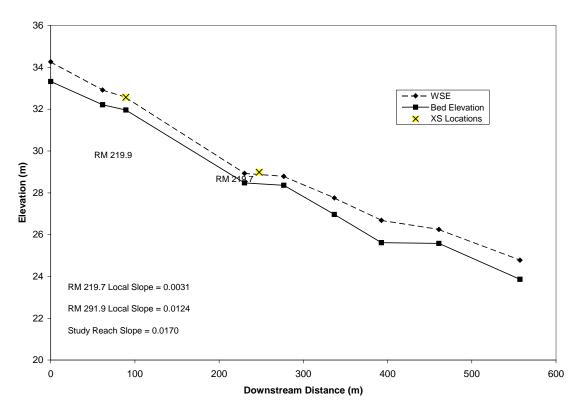
Cross Section RM 219.7



Study Reach Cross Sections

J.C. Boyle Peaking Reach at USGS Gauge *Pebble Count Summary*

				Geomorphic	
Reach Name	River Mile	D ₅₀	D ₈₄	Feature	Location
Boyle DS of Power					
Plant at USGS					At XS2 (at USGS gage) approc 50 ft US and
Gage	219.7	100.8	163	Pool	DS of cable way
Boyle DS of Power					
Plant at USGS					On a point bar DS of USGS gage, at head
Gage	219.6	136.2	219.5	Point Bar	of riffle



Long Profile

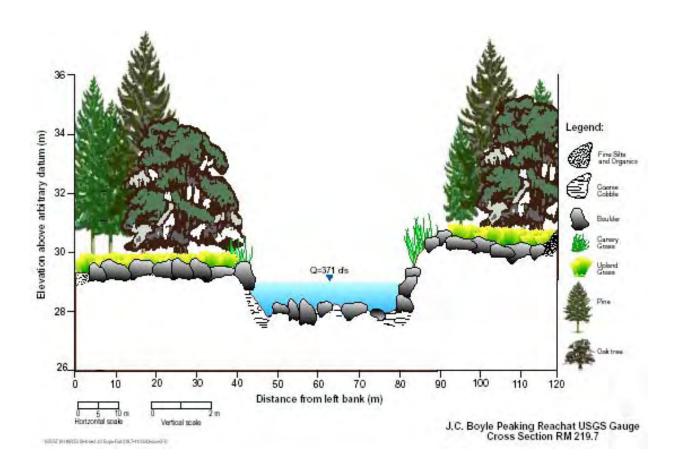




Photo of River Mile 219.9 cross section looking from right bank to left

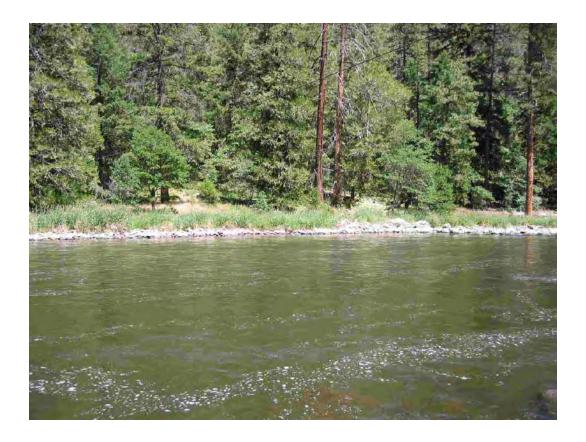
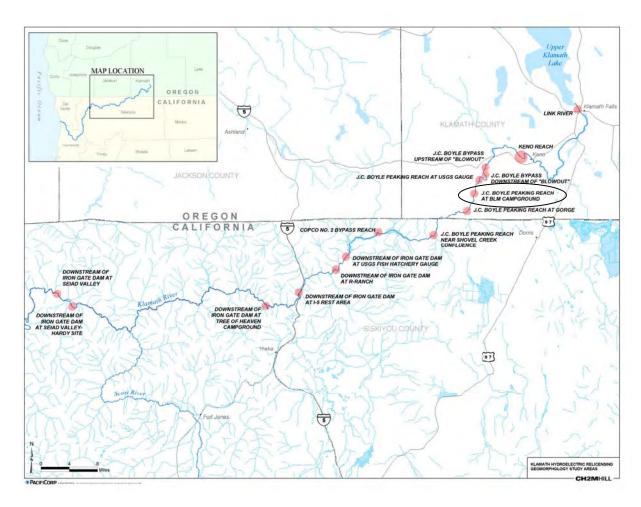
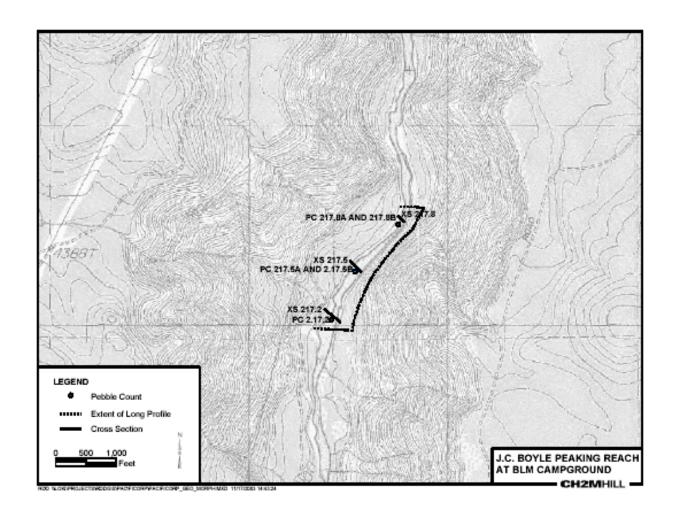
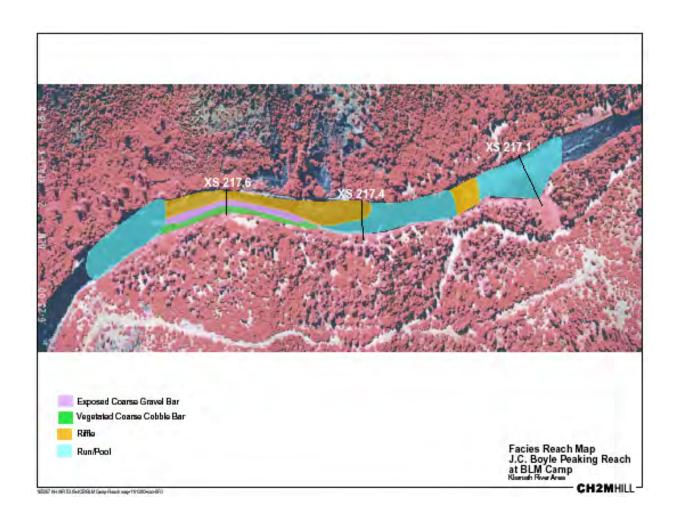


Photo of River Mile 219.7 cross section looking downstream along right bank

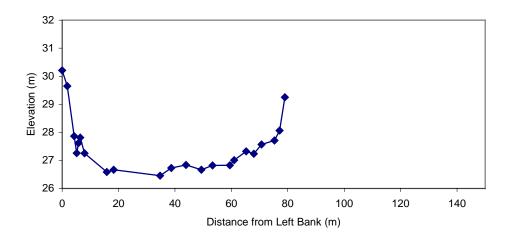


J.C. Boyle Peaking Reach at BLM Campground Study Reach Location

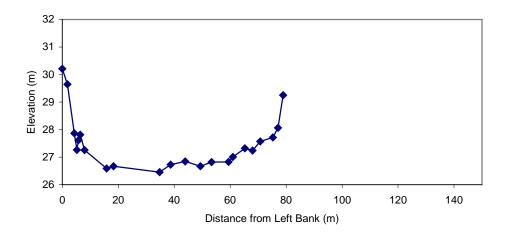




Cross Section RM 217.8

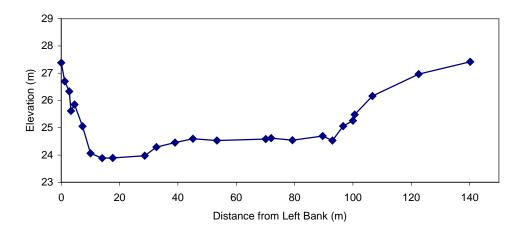


Cross Section RM 217.8



Study Reach Cross Sections

Cross Section 217.2



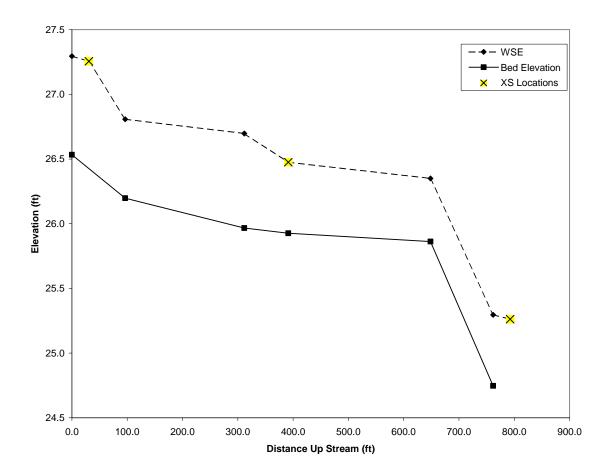
Study Reach Cross Sections

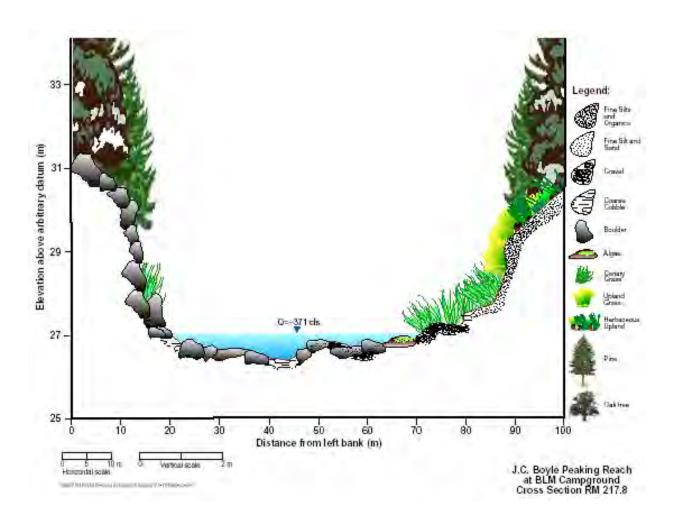
J.C. Boyle Peaking Reach at BLM Campground

Pebble Count Summary

Reach Name	River Mile	\mathbf{D}_{50}	\mathbf{D}_{84}	Geomorphic Feature	Location
BLM Campsite	217.8	141.1	281	Bar	At XS1, closer to RB
BLM Campsite	217.8	153.6	254.9	Bar	At XS1, closer to channel
BLM Campsite	217.5	24.4	116.2	Bar	Across XS2 at bar, closer to RB
BLM Campsite	217.5	122	228.6	Bar	Across XS2 at bar
BLM Campsite	217.2	131.5	234	Bar	XS3 on bar

Long Profile





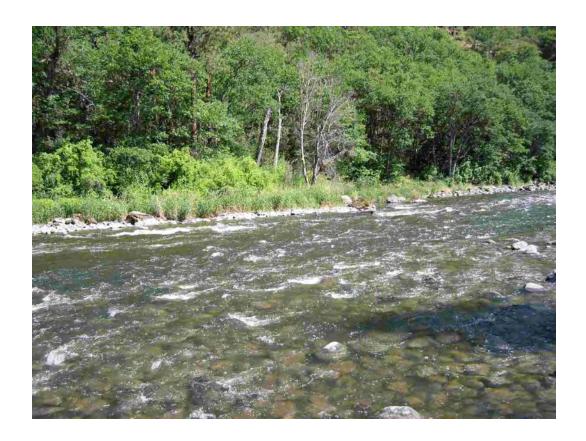


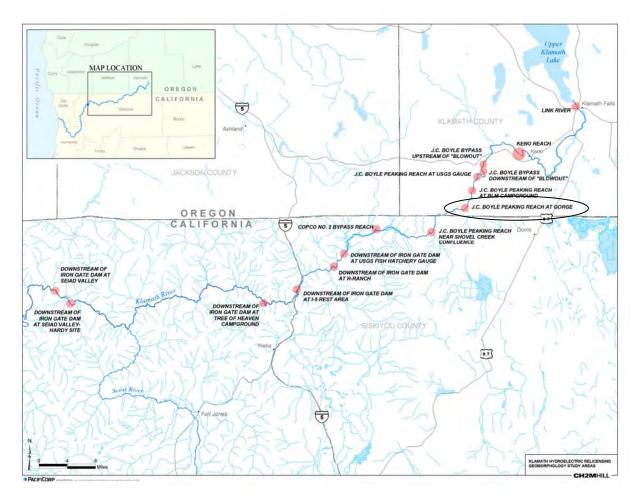
Photo of River Mile 217.8 cross section looking downstream from right bank to left bank



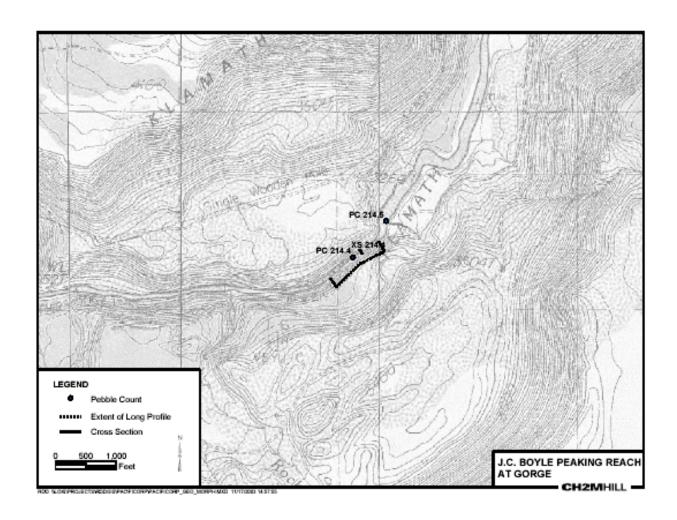
Photo of River Mile 217.5 cross section looking downstream from right bank to left bank

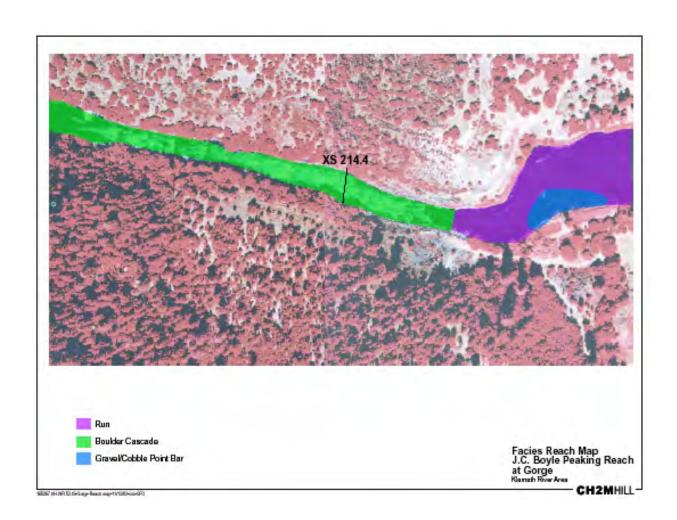


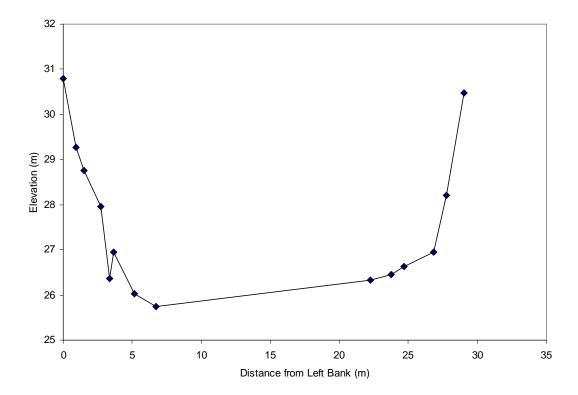
Photo of River Mile 217.2 cross section looking downstream from right bank



J.C. Boyle Peaking Reach at Gorge Study Reach Location







Study Reach Cross Section

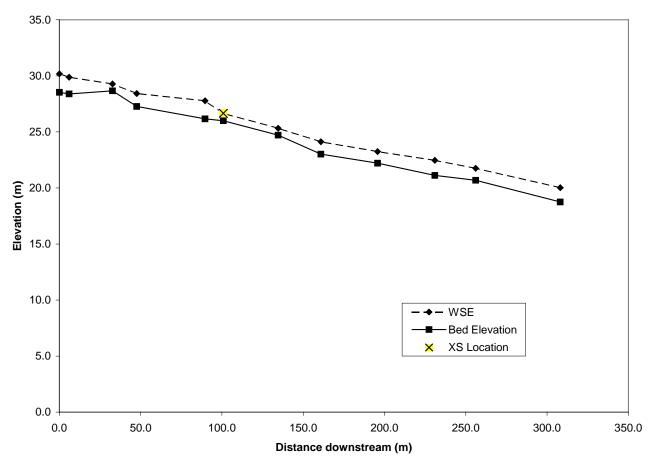
J.C. Boyle Peaking Reach at Gorge

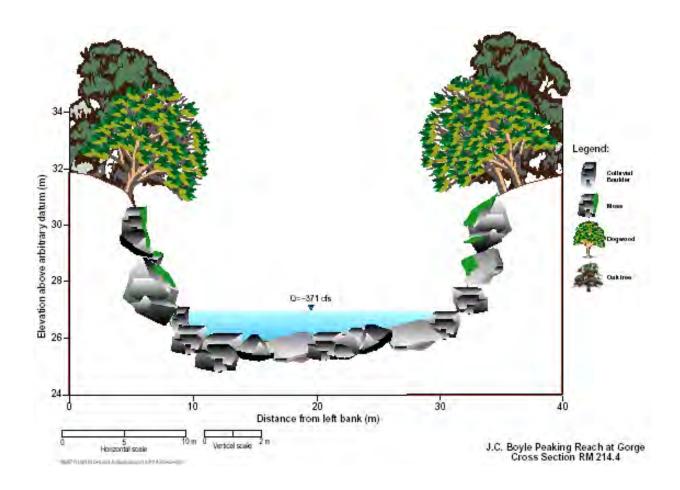
Pebble Count Summary

Reach Name	River Mile	D ₅₀	\mathbf{D}_{84}	Geomorphic Feature	Location
Gorge Reach	214.4	41.2	71.5	Point Bar	Point bar downstream of Frain Ranch upstream of gorge
Gorge Reach	214.4	40.2	80.34	Point Bar	Point bar below Frain Ranch upstream of gorge - higher on bar, at stream confluence
Gorge Reach	214.2	13.7	27.7	Pocket Gravel	In gorge, in boulder pocket on LB approximately 75 ft downstream of XS 1

Long Profile

J.C. Boyle Peaking Reach at Gorge





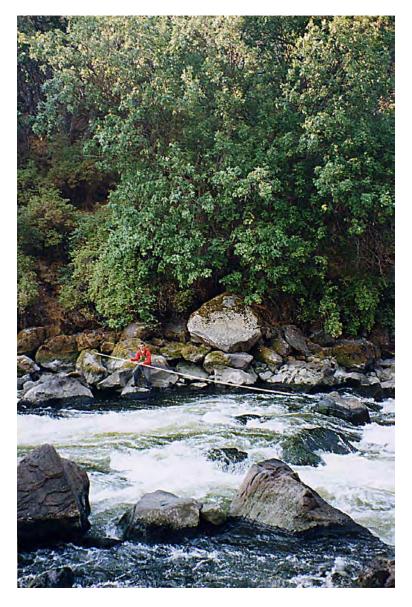
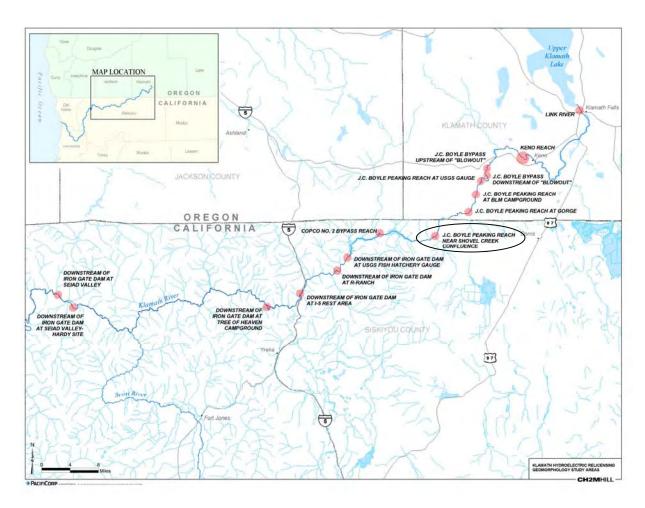


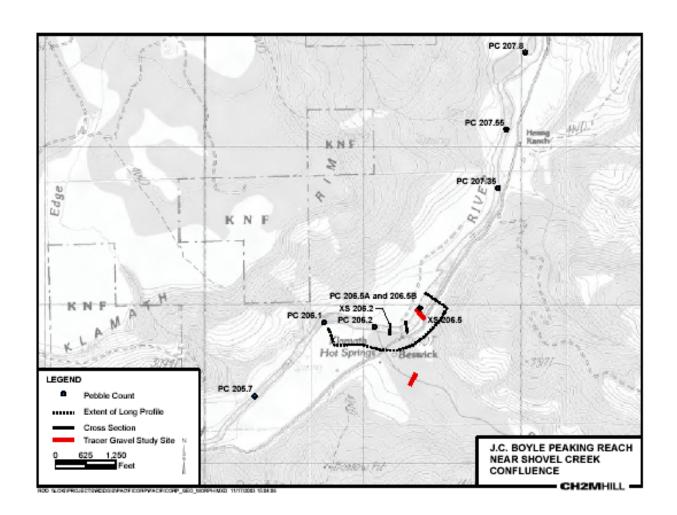
Photo of River Mile 214.4 cross section looking from right bank to left bank

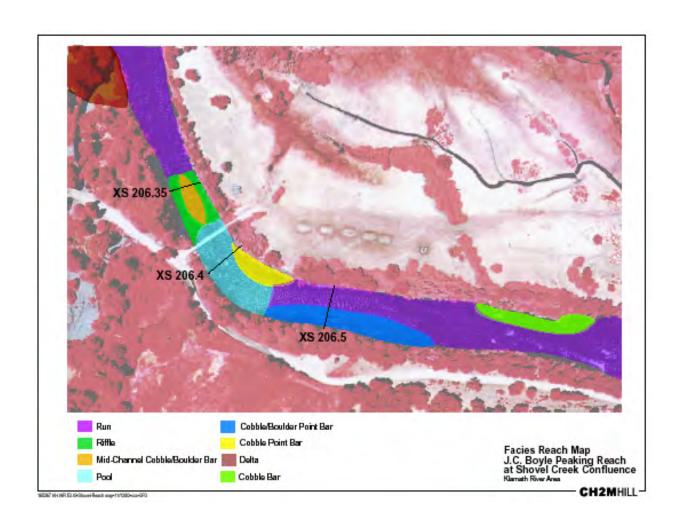


Photo of River Mile 214.4 cross section looking downstream from right bank

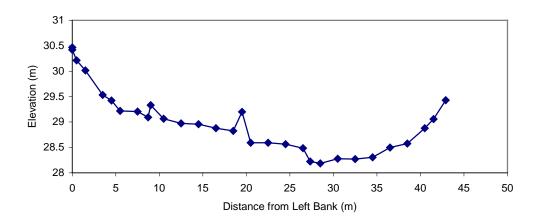


J.C. Boyle Peaking Reach Near Shovel Creek Confluence Study Reach Location

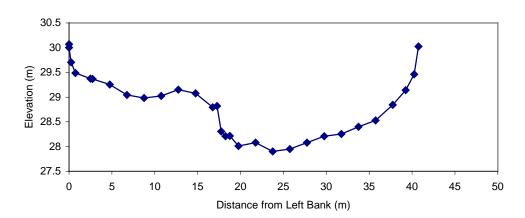




Cross Section RM 206.5

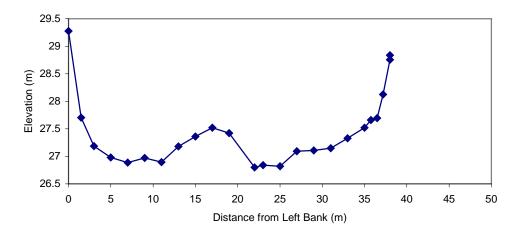


Cross Section RM 206.4



Study Reach Cross Sections

Cross Section RM 206.2



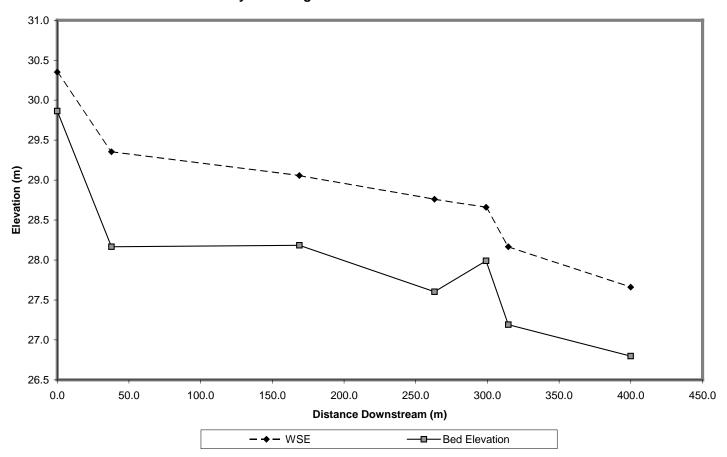
Study Reach Cross Sections

J.C. Boyle Peaking Reach Near Shovel Creek Confluence Pebble Count Summary

Reach Name	River Mile	\mathbf{D}_{50}	\mathbf{D}_{84}	Geomorphic Feature	Location
Shovel Creek	207.8	187.1	313.1	Bar	Bar length 26.3 m. Located next to large island. Particles are loose, slightly embarkated. Bar half exposed, half submerged. Rocky Riffle just US. Most particles sub-rounded, some well-rounded, some sub-angular
Shovel Creek	207.6	119.3	190.8	Bar	Bar length 30.2 m. Next Large Bar DS from PC A. Bar separates side channel from main at low flow. Material loose. Same shapes as in PC A. Material appears finer DS.
Shovel Creek	207.4	131.6	247.4	Bar	Bar length >100 ft. Rocks very greasy. Water not moving interstitially. Fine gravel under boulders. Rocks same shape as A and B.
Shovel Creek	206.5	64.4	107.8	Bar	On bar at tracer transect
Shovel Creek	206.5	121.5	183.6	Channel	In channel just upstream of tracer transect
Shovel Creek	206.5	122.5 6	184.15	Bar	At tracer transect
Shovel Creek	206.5	64.43	107.67	Bar	At tracer transect
Shovel Creek	206.5	49.64	85.48	Bar	
Shovel Creek	206.3	138	225.1	Bar	'Model T Bar' – recent bulldozer action building up control at irrigation return flow. Cut bank LB across from bar is Ph 23. Cobble and boulders, 2 meters high, 6meterslong.
Shovel Creek	206.2	108.5	216.4	Bar	DS of island of pebble count D
Shovel Creek	205.7	56.5	95.7	Bar	Left bank bar DS and opposite of eroding right bank. Bar is composed of material from eroding RB.

Long Profile

J.C. Boyle Peaking Reach Near Shovel Creek Confluence



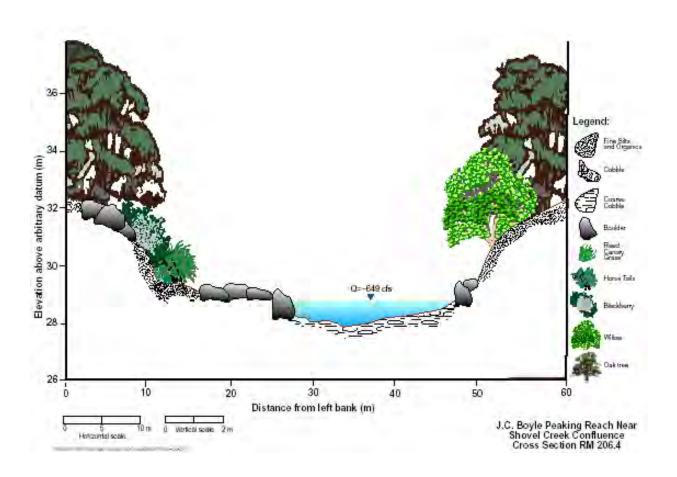




Photo from bridge near River Mile 214.4 cross section looking upstream

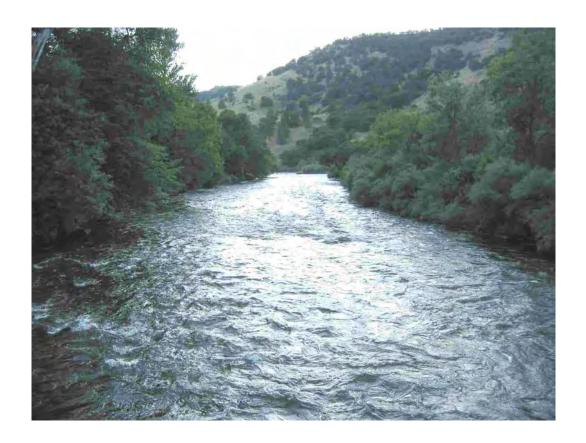
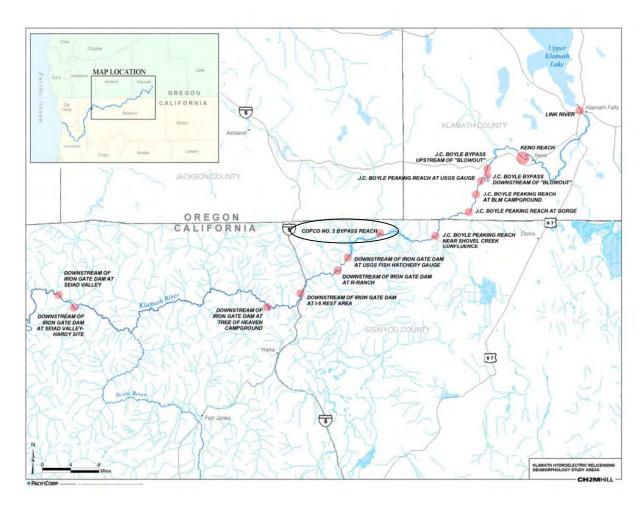
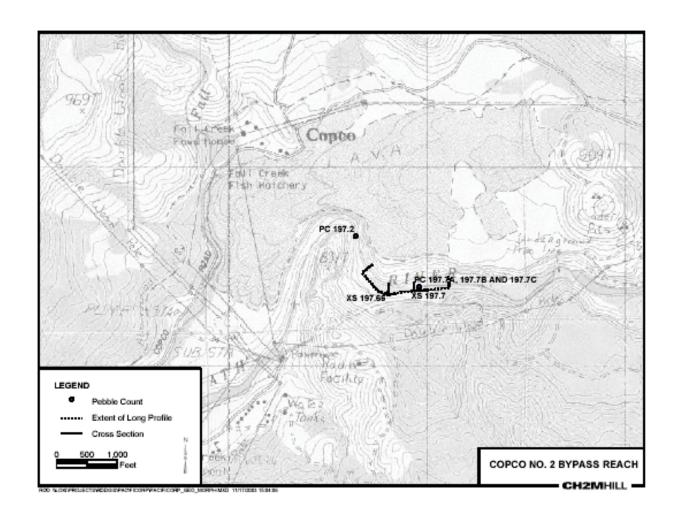
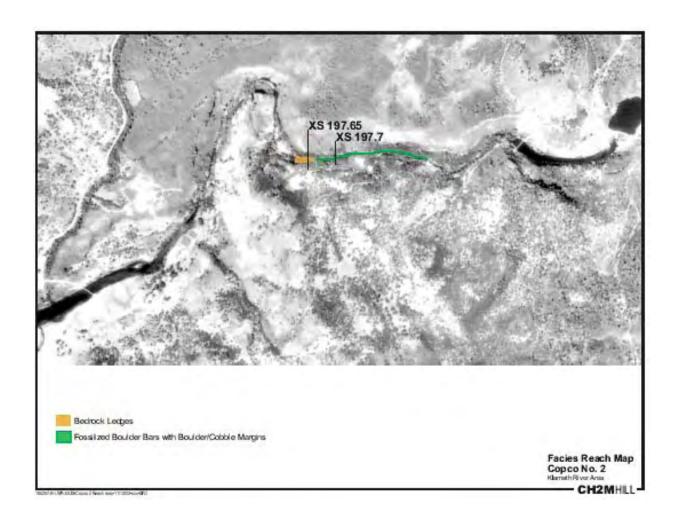


Photo from bridge near River Mile 214.4 cross section looking downstream

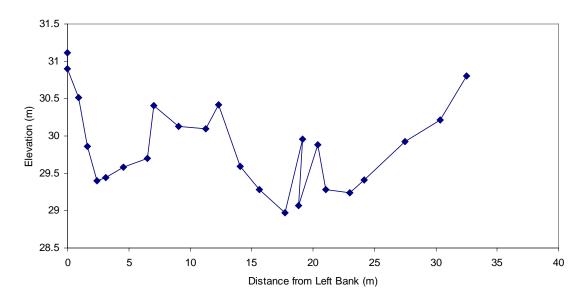


Copco No. II Bypass Reach Study Reach Location

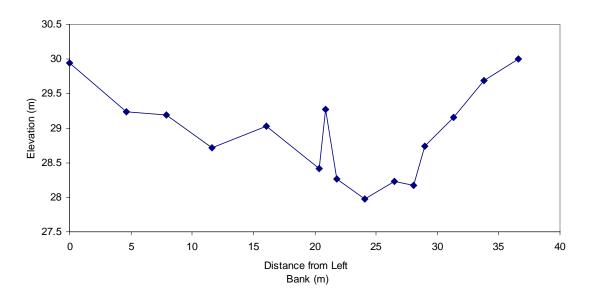




Cross Section RM 197.7



Cross Section RM 197.66



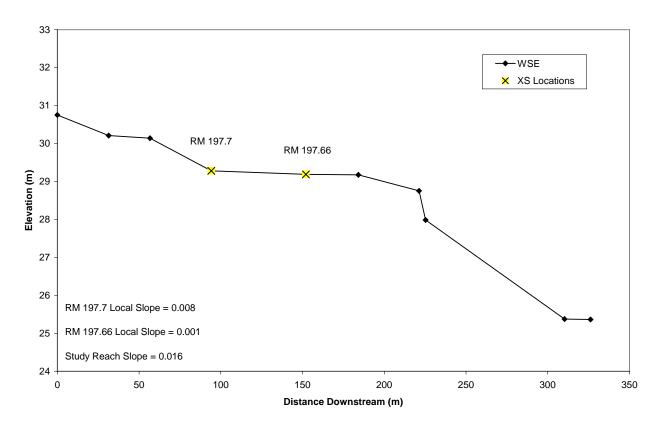
Study Reach Cross Sections

Copco No. II Bypass Reach

Pebble Count Summary

Reach Name	River Mile	D ₅₀	D ₈₄	Geomorphic Feature	Location
Copco 2 Bypass	197.7	132	344.9	Channel	On RB near XS1
Copco 2 Bypass	197.7	175.6	344.4	Channel	In main channel near XS1
Copco 2 Bypass	197.7	252.3	548.3	Fossilized Bar	On Bar near XS1
Copco 2 Bypass	197.2	85.7	148.2	Currently mobile bar	Currently mobile bar. Approximately 0.5 miles DS of Copco 2 Bypass site

Long Profile Copco No. II Bypass



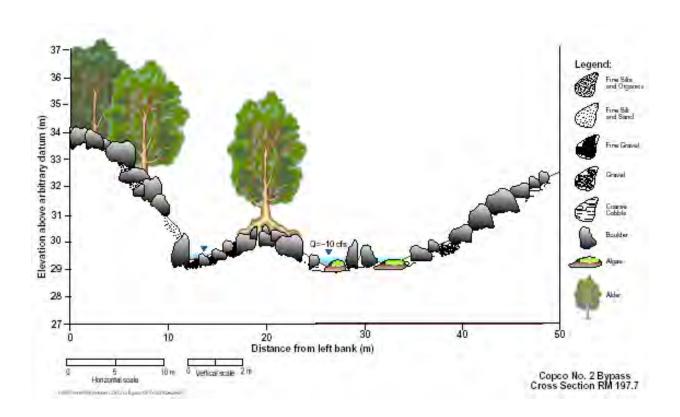
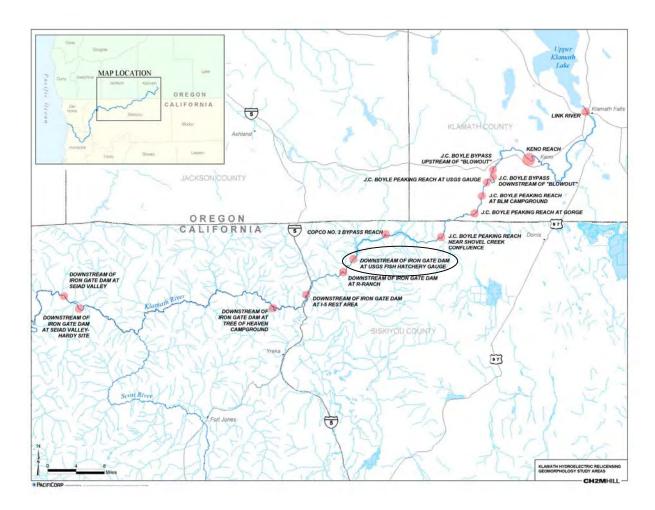




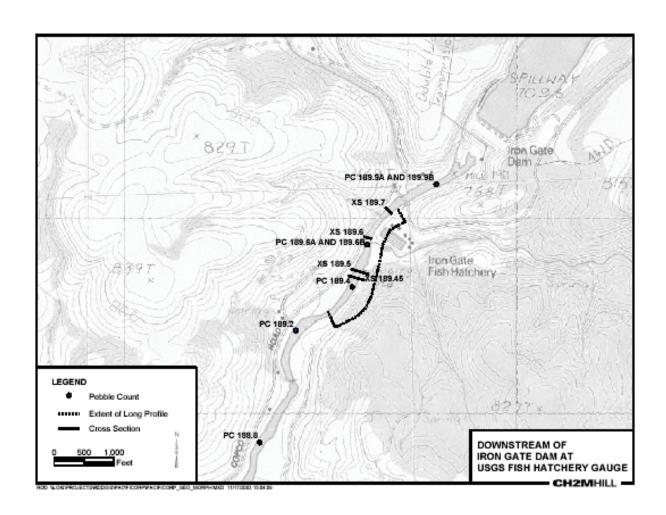
Photo at River Mile 197.7 cross section looking from left bank to right bank

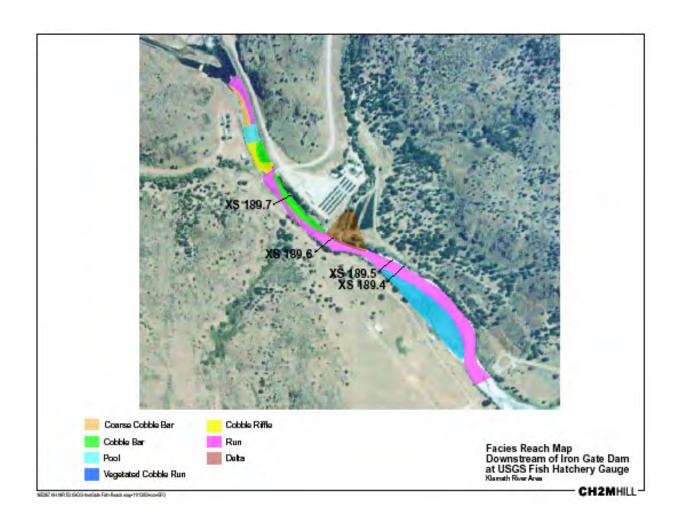


Photo at River Mile 197.66 cross section looking from left bank to right bank

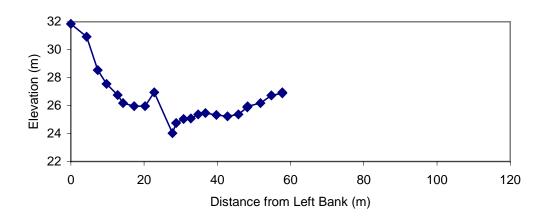


Downstream of Iron Gate Dam at USGS Fish Hatchery Gauge Study Reach Location

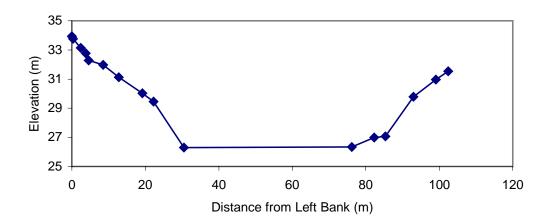




Cross Section RM 189.45

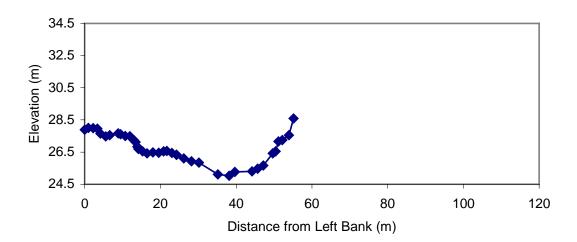


Cross Section RM 189.5

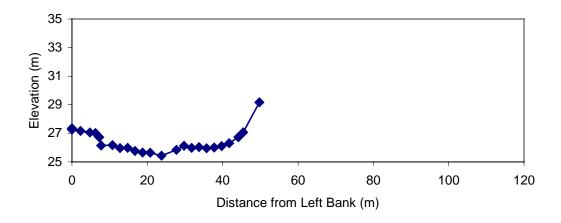


Study Reach Cross Sections

Cross Section RM 189.6



Cross Section RM 189.7

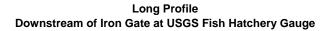


Study Reach Cross Sections

Downstream of Iron Gate Dam at USGS Fish Hatchery Gauge

Pebble Count Summary

Reach Name	River Mile	D ₅₀	\mathbf{D}_{84}	Geomorphic Feature	Location
DS Iron Gate dam	189.9	101.6	209.8	Bar	DS Iron Gate dam on exposed gravel bar
DS Iron Gate dam	189.9	113.8	220.8	Bar	DS Iron Gate dam on exposed gravel bar
DS Iron Gate dam	189.9	97.2	158.9	Bar	LB Bar Below IGD just US of hatchery bridge
DS Iron Gate dam	189.6	47.1	81.2	Tributary delta deposit	Bogus Creek Delta Deposit
DS Iron Gate dam	189.6	47.3	85.3	Channel	In Main channel flow adjacent to Bogus Creek Delta
DS Iron Gate dam	189.4	52.9	105.4	Bar	Bar downstream of USGS Gauge
DS Iron Gate dam	189.2	96.8	141.7	Point Bar	DWR Site 43. US end bend point bar
DS Iron Gate dam	188.8	96.8	147	Submerged bar	DWR Site 42. Submerged bar, left side



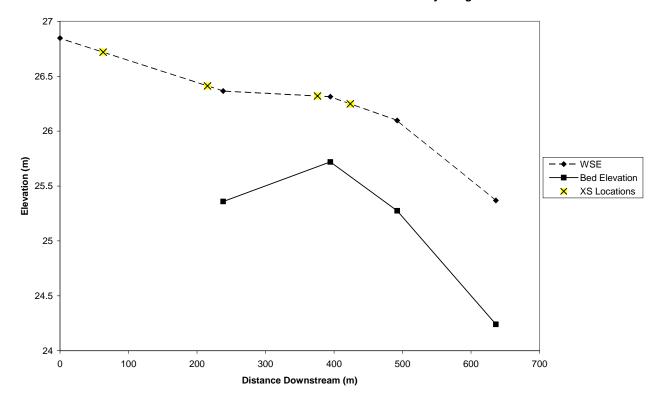
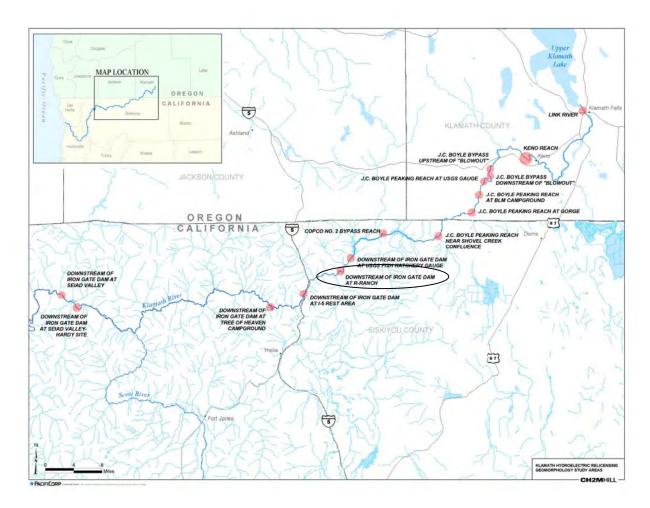


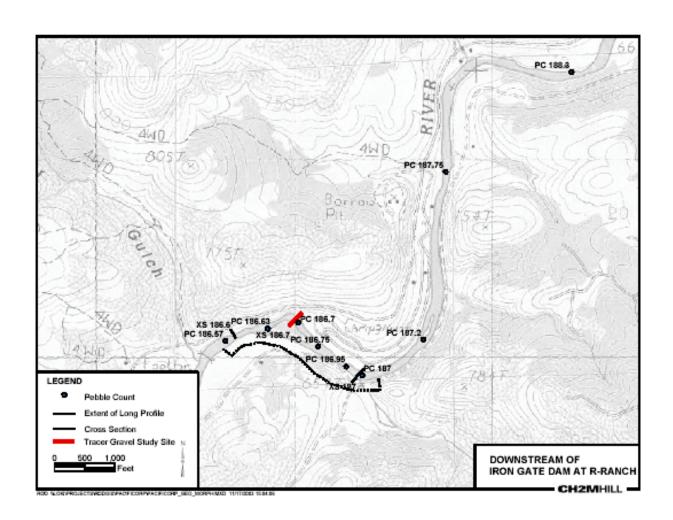


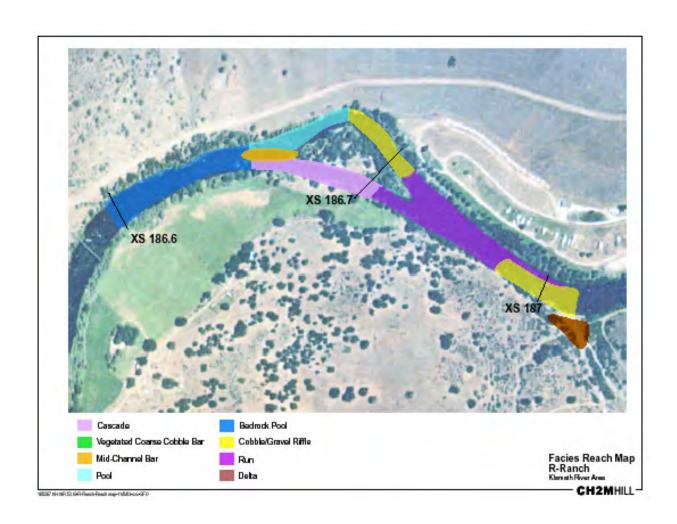


Photo at River Mile 189.5 section looking from left bank to right bank

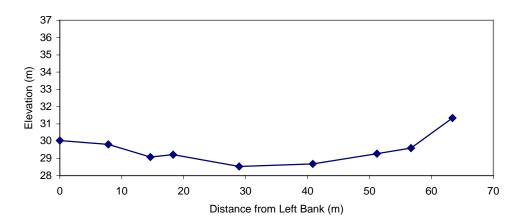


Downstream of Iron Gate Dam at R-Ranch Study Reach Location

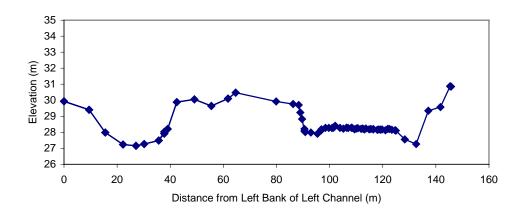




Cross Section RM 187

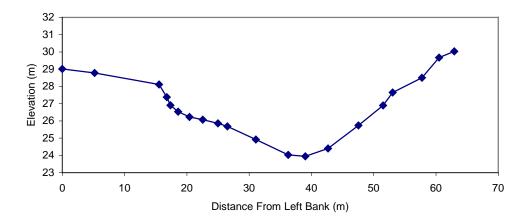


Cross Section RM 186.7



Study Reach Cross Sections

Cross Section RM 186.6



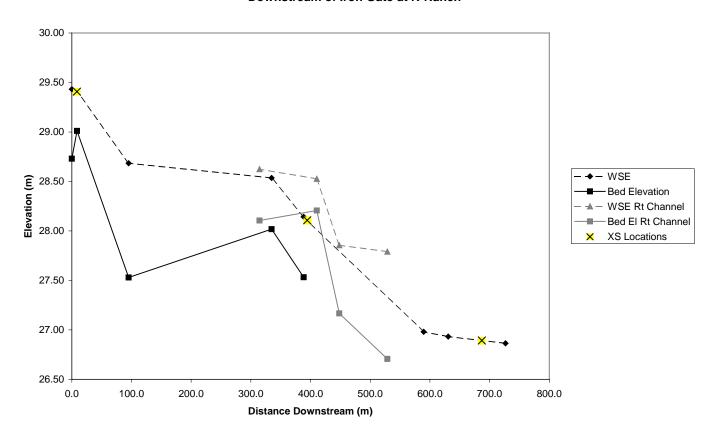
Study Reach Cross Sections

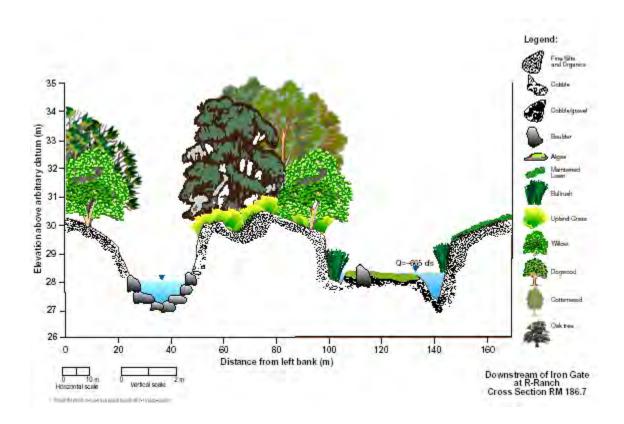
Downstream of Iron Gate Dam at R-Ranch

Pebble Count Summary

Reach Name	River Mile	\mathbf{D}_{50}	\mathbf{D}_{84}	Geomorphic Feature	Location
R-Ranch	188.3	90	130.4	Bar	PC on Bar at downstream end of bend with new construction
R-Ranch	187.8	59.5	83.9	Bar	PC along LB exposed bar. US of tributary confluence
R-Ranch	187.2	72.6	110.7	Bar at head of island	Head of island opposite R-Ranch. US from gravel bar head of island.
R-Ranch	187	35.9	76.3	Tributary delta deposit	Delta of Little Bogus Creek, in channel
R-Ranch	186.9	107.6	162.2	Bar	Bar DS of Little Bogus Creek
R-Ranch	186.9	41.5	100	channel	US of island at arroyo mouth, US from constriction on LB
R-Ranch	186.8	37.1	71.9	Bar	Head of bar / island at gravel bar
R-Ranch	186.7	67.45	106.44	Channel	Tracer gravel - across channel
R-Ranch	186.7	50.9	71.6	Riffle	Right channel next to island
R-Ranch	186.6	41.7	86.1	Bar	DS end of bar / island
R-Ranch	186.6	87.9	151.4	Channel	In main channel DS of island

Long Profile Downstream of Iron Gate at R-Ranch





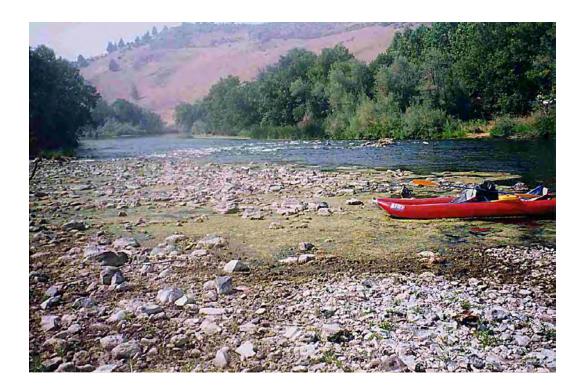


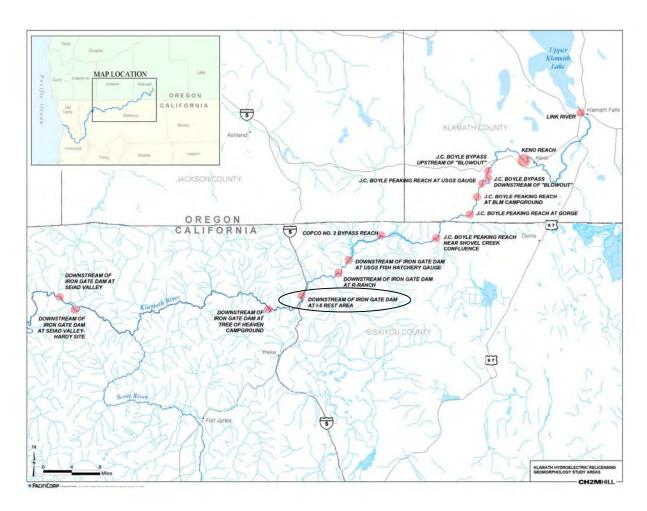
Photo at River Mile 187 cross section looking from left bank to right bank



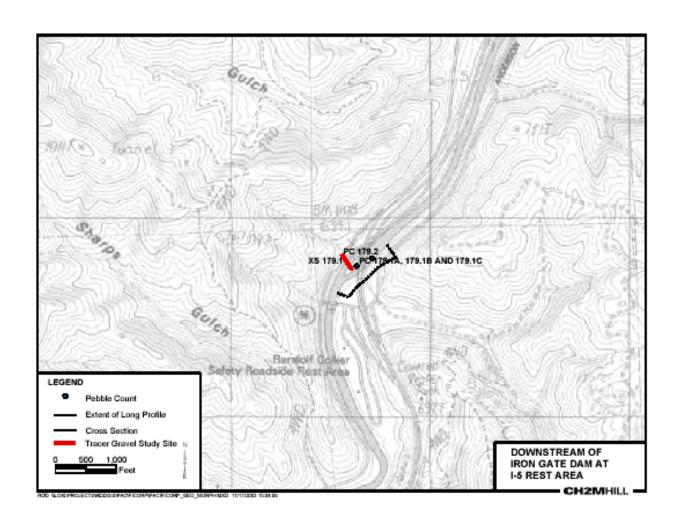
Photo at River Mile 186.7 section looking from left bank to right bank of left channel

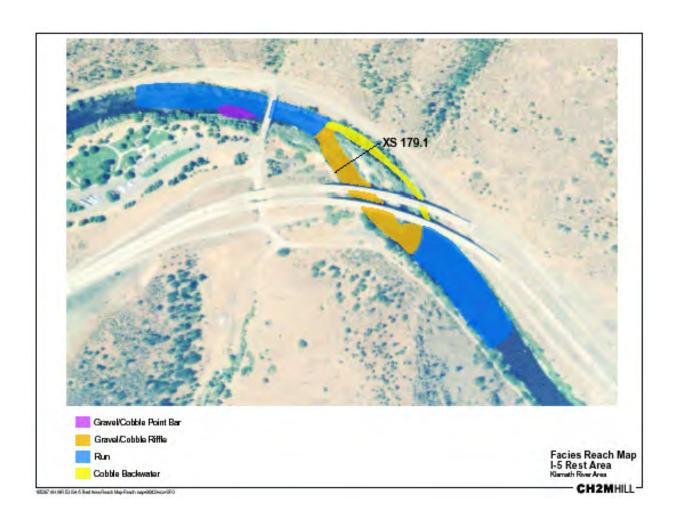


Photo at River Mile 186.6 section looking from left bank to right bank

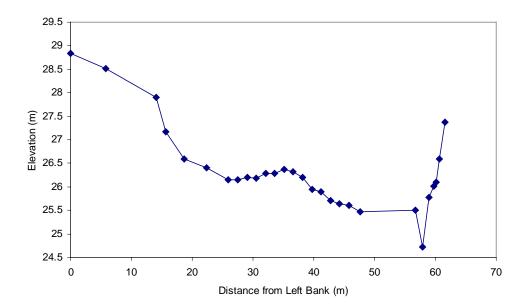


Downstream of Iron Gate Dam at I-5 Rest Area Study Reach Location





Cross Section RM 179.1



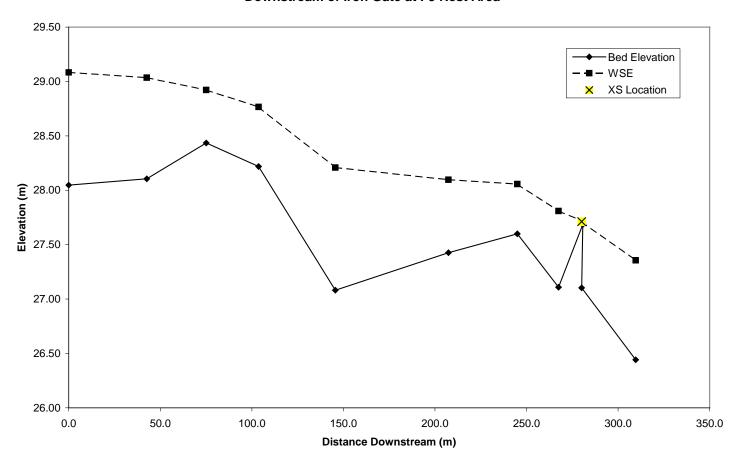
Study Reach Cross Section

Downstream of Iron Gate Dam at I-5 Rest Area

Pebble Count Summary

Reach Name	River Mile	D ₅₀	D ₈₄	Geomorphic Feature	Location
I-5 Rest Stop	179.2	45.3	77.8	Riffle	Riffle upstream of I-5 overpass
I-5 Rest Stop	179.1	49.4	93.5	Bar	Bar at XS
I-5 Rest Stop	179.1	100	161	Pool	Pool at XS
I-5 Rest Stop		76.43	116.53	Channel	I5 tracer gravel site at XS
I-5 Rest Stop	179.1	30.3	56.3	Channel	Side channel near XS

Long Profile Downstream of Iron Gate at I-5 Rest Area



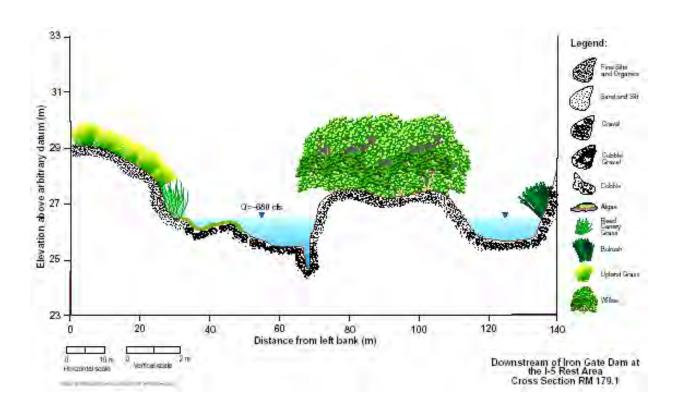
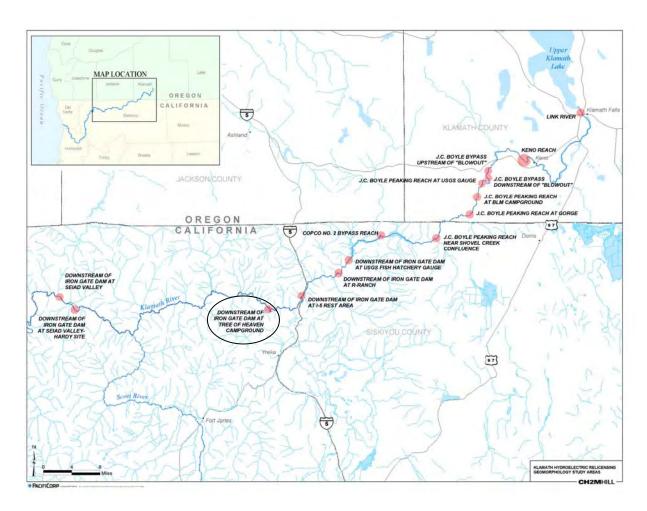
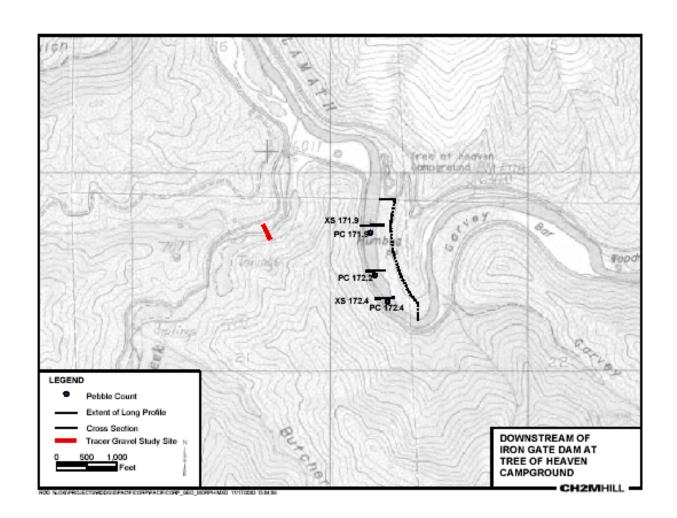




Photo at River Mile 179.1 section looking upstream from left bank to right bank

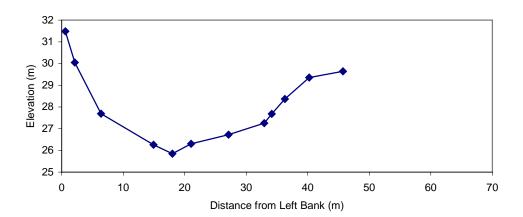


Downstream of Iron Gate Dam at Tree of Heaven Campground Study Reach Location

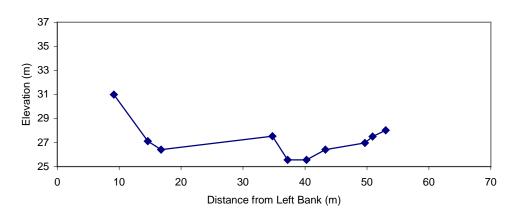




Cross Section RM 172.4

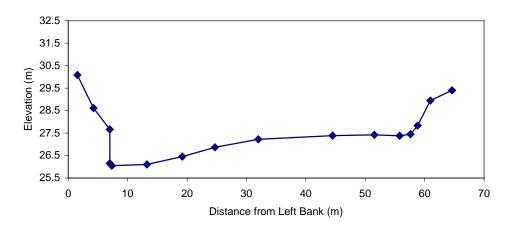


Cross Section RM 172.2



Study Reach Cross Sections

Cross Section RM 171.9



Study Reach Cross Sections

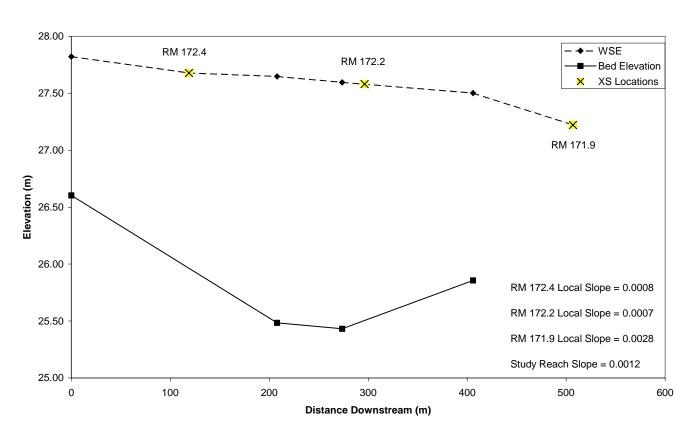
Downstream of Iron Gate Dam at Tree of Heaven Campground

Pebble Count Summary

Reach Name	River Mile	D ₅₀	D ₈₄	Geomorphic Feature	Location
Tree of Heaven	172.4	23.4	43.9	Bar	XS1 on bar
Tree of Heaven	172.2	41.7	63	Channel	XS2
Tree of Heaven	171.9	43.6	67.8	Bar	Near Tree of Heaven on RB bar XS3

Long Profile

Downstream of Iron Gate Dam at Tree of Heaven Campground



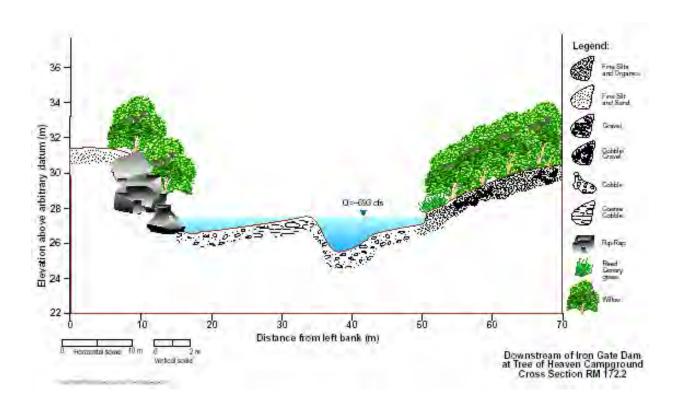




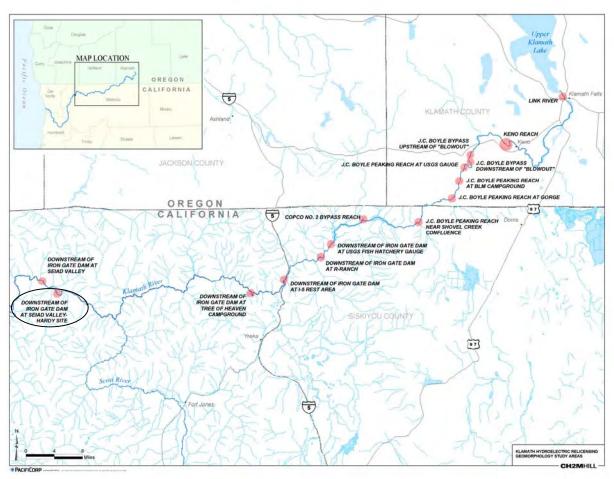
Photo at River Mile 172.4 section looking downstream from left bank to right bank



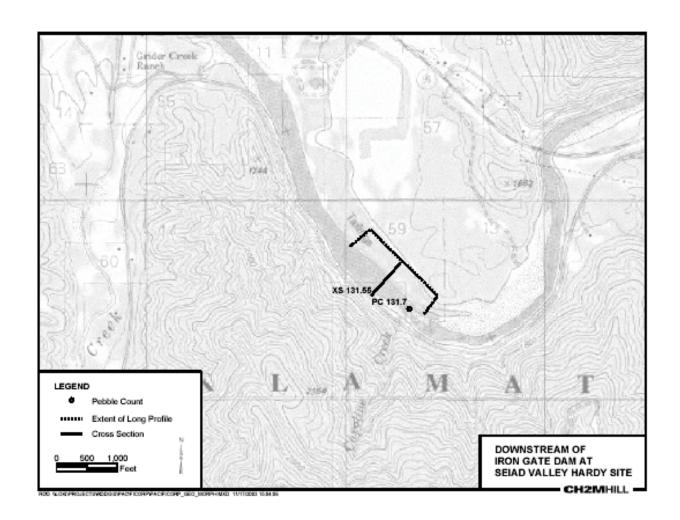
Photo at River Mile 172.2 section looking downstream from left bank to right bank

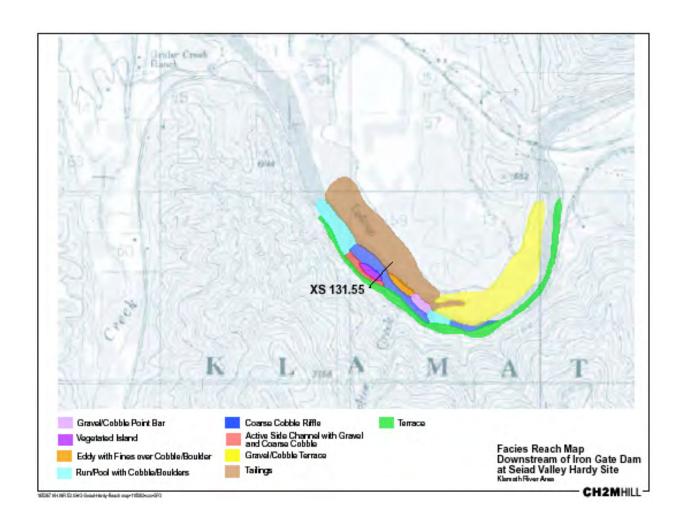


Photo at River Mile 171.9 section looking downstream from left bank to right bank

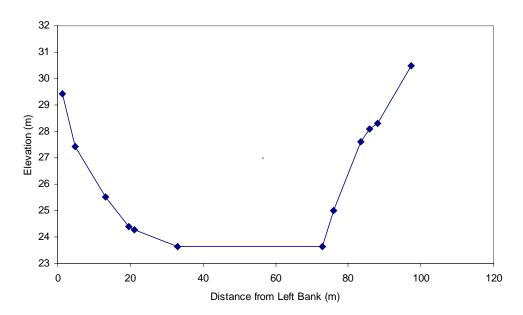


Downstream of Iron Gate Dam at Seiad Valley – Hardy Site Study Reach Location





Cross Section RM 128.5

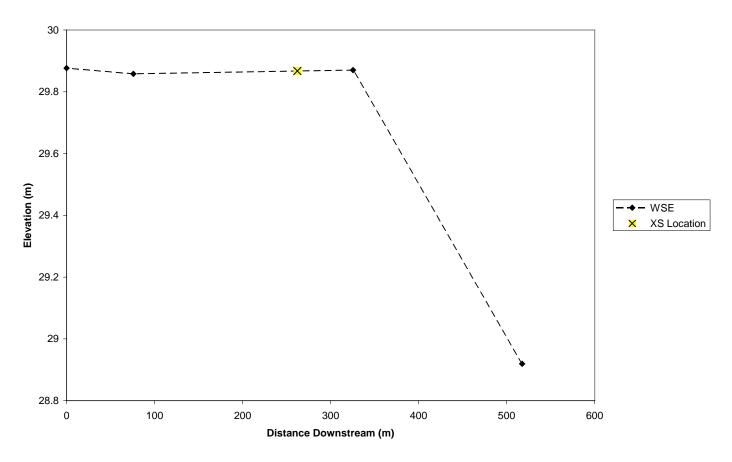


Study Reach Cross Section

Downstream of Iron Gate Dam at Seiad Valley – Hardy Site Pebble Count Summary

Reach Name	River Mile	D ₅₀	D ₈₄	Geomorphic Feature	Location
Seiad Valley	131	56	169.5	Bar	Hardy Site on bar US of XS
Seiad Valley	130.5	43.2	127.1	Riffle	Hardy Site in riffle in main channel near DS end of bar
Seiad Valley	130.5	33.1	60.9	Bar	Hardy Site on exposed bar near DS end of Bar
Seiad Valley	130.5	14.5	36.8	Riffle	Hardy Site. In Riffle near LB side channel Near US end of Bar

Long Profile Downstream of Iron Gate at Seiad Valley - Hardy Site



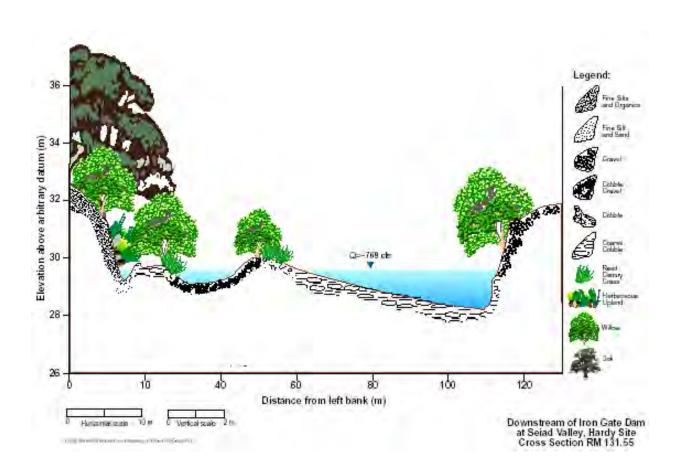
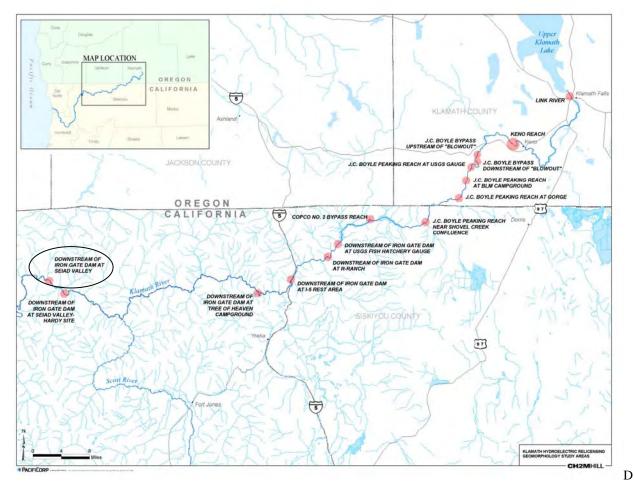
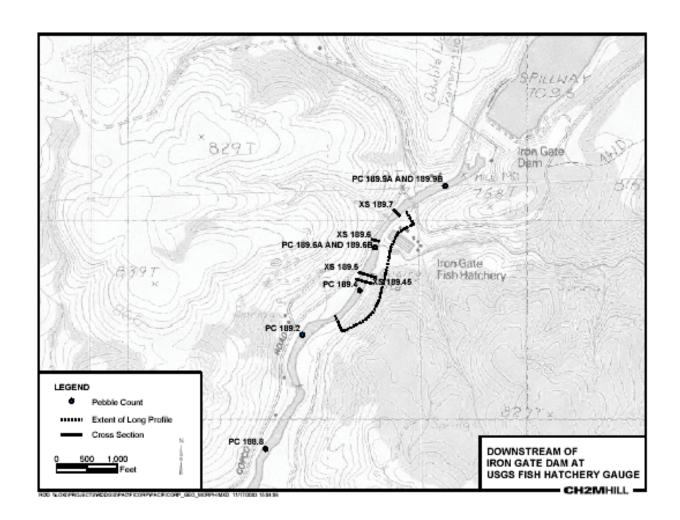


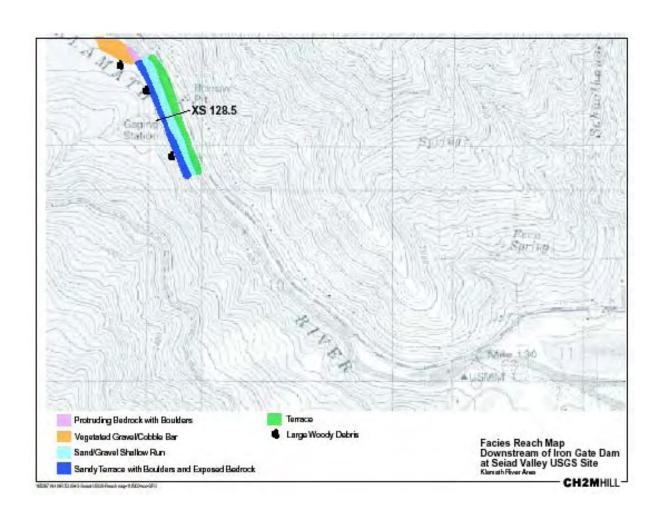


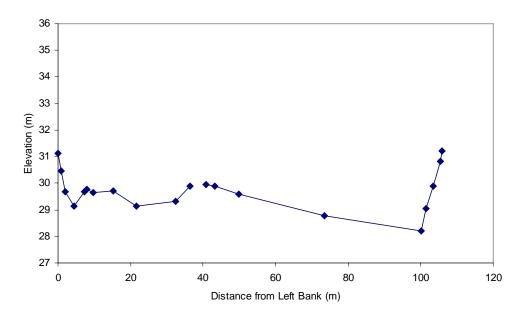
Photo at River Mile 131.55 cross section looking downstream



Downstream of Iron Gate Dam at Seiad Valley – USGS Gauge Study Reach Location







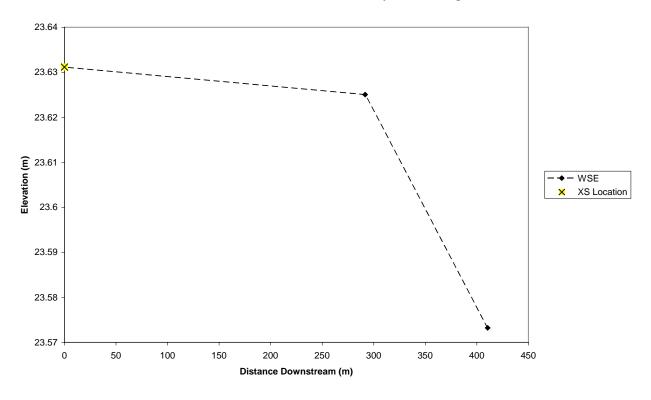
Study Reach Cross Section

Downstream of Iron Gate Dam at Seiad Valley – USGS Gauge Pebble Count Summary

Reach Name	River Mile	D ₅₀	\mathbf{D}_{84}	Geomorphic Feature	Location
Seiad Valley	128.5	43.5	79.4	Channel	USGS gauge station

Long Profile

Downstream of Iron Gate at Seiad Valley - USGS Gauge



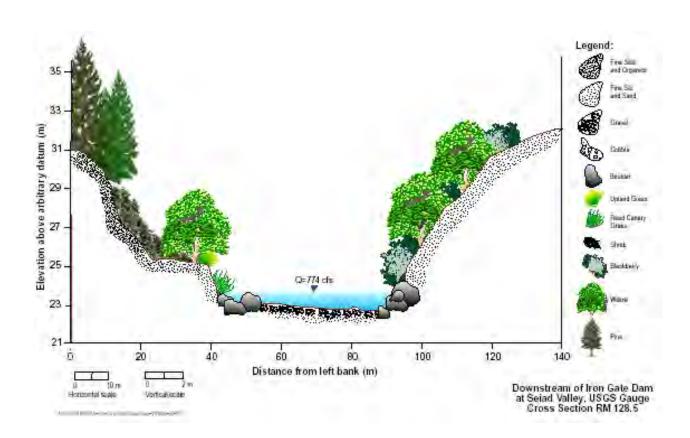




Photo at River Mile 128.5 cross section looking downstream from left bank to right bank