

Appendix A

Culverts

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Culverts

SiteID	RoadName	MilePost	Stream	TribTo	RM	Qsec	Section	Township	Range	FishUse	FUCriteria	Species	Location	SiteComments	OwnerType	Barrier	RepairStatus
980566	Chiliwist Rd	0.86	Chiliwist Cr	Okanogan R	1.04	SW	18 32N	25E	yes	physical				Installed at a 45 degree angle with the road.	county	yes	RR
980567	Chiliwist Rd	1.24	Chiliwist Cr	Okanogan R	1.44	SW	18 32N	25E	yes	physical				Small fill, though the road is asphalt.	county	yes	RR
980568	Chiliwist Rd	1.44	Unnamed	Chiliwist Cr		SW	18 32N	25E	no	physical					state		
980569	Unnamed		Unnamed	Chiliwist Cr		NE	13 32N	24E	no	physical				Road drainage culvert.	state		
980570	Chiliwist Rd	1.71	Unnamed	Chiliwist Cr		NE	13 32N	24E	no	physical				Road drain	state		
980571	Chiliwist Rd	1.76	Unnamed	Chiliwist Cr		NE	13 32N	24E	no	physical				Road cross-drain.	state		
980572	Chiliwist Rd	2.09	Unnamed	Chiliwist Cr		NE	13 32N	24E	no	physical				Dry	state		
980573	Chiliwist Rd	2.18	Unnamed	Chiliwist Cr		NE	13 32N	24E	no	physical				Road cross-drain.	state		
980574	Unnamed		Unnamed	Chiliwist Cr		NW	18 32N	25E	no	physical				Non fish bearing culvert	state		
980575	Unnamed	0.16	Unnamed	Chiliwist Cr		SE	13 32N	24E	no	physical				Non fish bearing road drain.	state		
980576	Unnamed	0.01	Unnamed	Chiliwist Cr		SW	18 32N	25E	no	physical				Non fish bearing.	state		
980578	Cook Mountain Rd	1.51	Unnamed	Unnamed		NW	35 33N	24E	no	physical				Road cross-drain.	state		
980579	Cook Mountain Rd	1.74	Unnamed	Unnamed		NW	35 33N	24E	no	physical				Road cross-drain.	state		
980580	Cook Mountain Rd	2.05	Unnamed	Unnamed		NW	35 33N	24E	no	physical				Road cross-drain.	state		
980581	Cook Mountain Rd	2.28	Unnamed	Unnamed		SW	26 33N	24E	no	physical				Road cross-drain.	state		
980582	Unnamed		Unnamed	Unnamed		NW	2 32N	24E	no	physical				Dry channel; fully vegetated.	state		
980605	Unnamed		Chiliwist Cr	Okanogan R	0.14	SW	17 32N	25E	yes	physical	CK/CO/SH/CT/RB/DB/EB			Only 312 meter upstream to impassable falls.	unknown	yes	RR
980607	Chiliwist Rd		Chiliwist Cr	Okanogan R	0.81	SE	18 32N	25E	yes	physical	CT/RB/DB/EB				county	yes	RR
980609	Unnamed		Chiliwist Cr	Okanogan R	1.88	SE	13 32N	24E	yes	physical	CT/RB/DB/EB				unknown	no	OK
980612	Unnamed		Chiliwist Cr	Okanogan R	2.79	NW	13 32N	24E	yes	physical	CT/RB/DB/EB				unknown	no	OK
980614	Unnamed		Chiliwist Cr	Okanogan R	3.51	NW	14 32N	24E	yes	physical	CT/RB/DB/EB			Screening not an issue.	unknown	yes	RR
980616	Xanadu Rd		Unnamed	Chiliwist Cr	0.21	NW	14 32N	24E	yes	physical	CT/RB/DB/EB			Huge outfall drop.	unknown	yes	RR
980617	Unnamed		Unnamed	Chiliwist Cr	0.06	NW	14 32N	24E	yes	physical	CT/RB/DB/EB			Culvert installed last year for logging private property purposes, incorrectly.		yes	RR
980618	Unnamed		Unnamed	Chiliwist Cr	0.46	NW	14 32N	24E	yes	physical	CT/RB/DB/EB			Totally undersized and perched.		yes	RR
980619	Unnamed		Unnamed	Chiliwist Cr	0.47	NW	14 32N	24E	yes	physical	CT/RB/DB/EB			Crossing is a driveway. 980620 is 100 m upstream.		yes	RR
980620	Unnamed		Unnamed	Chiliwist Cr	0.52	NW	14 32N	24E	yes	physical	CT/RB/DB/EB			Private driveway.	unknown	yes	RR
980623	Unnamed		Ramsey Cr	Chewuch R	3.43	NW	12 35N	22E	yes	physical	CT/RB/DB/EB			No downstream check. Property owner downstream (at E. Chewuch Rd) will not permit access to his property; for now, we will assume that there is anadromous access up to the WDFW boundary, where the Ramsey Creek survey started.	federal	yes	RR
990217	US 97	299.03	Johnson Cr	Okanogan R		SE	25 35N	26E	yes	mapped	RB/EB/BT			If this site is physical surveyed in the future, electroshocking is recommended to verify species present. Rainbow trout and steelhead are present in Okanogan R. Linda Hoffman, WDFW Hab Mgr, confirmed presence of brown trout and eastern brook trout.	state	yes	RR
990247	SR 20	223.18	Little Loup Cr	Loup Loup Cr		SW	8 33N	25E	yes	biological	CT/RB				state	yes	NG
990251	SR 20	222.24	Loup Loup Cr	Okanogan R			8 33N	25E	yes	biological				WSDOT considers this crossing to be a bridge. Used gravel probe, seems to have bottom. Several trout, juvs in and near culvert. One 5 inch EB. 100% passable.	state	no	OK
990288	SR 155	75.81	Mission Cr	Omak Cr		SE	4 33N	27E	yes	biological	RB/CT/SH/EB			Stream may experience summer drying. Rechecked by Collins and Bell on 6/15/2000. Photo not taken.	state	yes	RR
990406	SR 20	219.38	Summit Cr	Loup Loup Cr	1.4	NE	10 33N	24E	yes	biological	RT			Salmonids observed, could be resident rainbow or brook trout. Streamnet shows rainbow below falls DS. Bookies also observed below falls DS in Loup Loup Cr. No anadromous access.	state	yes	RR
990418	SR 20	224.49	Tallant Cr	Okanogan R		NW	16 33N	25E	yes	mapped				Tallant Cr is part of a large diversion system that takes water from Summit, Loup Loup, Little Loup and other creeks, holds it in Leader Lake then releases water into Tallant Cr to irrigate orchards downstream.	state	yes	RR
990419	SR 20	226.27	Tallant Cr	Okanogan R		SE	21 33N	25E	yes	mapped				Tallant Cr is part of a large diversion system that takes water from Summit, Loup Loup, Little Loup and other creeks, holds it in Leader Lake then releases water into Tallant Cr to irrigate orchards downstream.	state	yes	RR
990420	SR 20	226.96	Tallant Cr	Okanogan R		NW	27 33N	25E	yes	mapped				Tallant Cr is part of a large diversion system that takes water from Summit, Loup Loup, Little Loup and other creeks, holds it in Leader Lake then releases water into Tallant Cr to irrigate orchards downstream.	state	yes	RR
990421	SR 20	227.22	Tallant Cr	Okanogan R		SE	27 33N	25E	yes	mapped				Tallant Cr is part of a large diversion system that takes water from Summit, Loup Loup, Little Loup and other creeks, holds it in Leader Lake then releases water into Tallant Cr to irrigate orchards downstream.	state	yes	RR
990879	SR 215	3.11	Unnamed	Okanogan R		NW	3 33N	26E	unknown	physical				100% Passable.	state	no	OK
990880	SR 215	3.91	Unnamed	Okanogan R		SE	34 34N	26E	yes	physical				Re-check for passability at high flow. Does not appear to be a barrier currently (09-14-2000), but may be during high flow.	state	unknown	UD
991643	US 97	325.87	Unnamed	Okanogan R	0.06	NW	26 39N	27E	unknown	physical				Original inventory 7/7/92; reevaluated by Soncarty/Espie, 9/14/00. At that time: minimal flow downstream, which is murky and seemingly polluted (oily sheen & heavy algal growth). Surface flow only continues 4 m upstream.	state	yes	UD
991687	SR 20	220.1	Unnamed	Summit Cr (Okanogan R)	0.13	NE	11 33N	24E	yes	biological	RT			Boulders 3m DS create barrier also. See photo. Salmonids observed, could be resident rainbow, or brook trout. Streamnet shows rainbow below falls DS. Brookies also observed below falls DS in Loup Loup Cr.	state	yes	RR
992053	US 97	288.47	Unnamed	Okanogan R		NW	3 33N	26E	no	physical					state		
992054	Edwards St		Johnson Cr	Okanogan R		NE	7 35N	26E	yes	physical	RB/BT/EB			If this site is physical surveyed in the future, electroshocking is recommended to verify species present. Rainbow trout are present in Okanogan R. Linda Hoffman, WDFW Habitat Manager, confirmed presence of brown trout and eastern brook trout.	county	yes	RR
992055	State St		Johnson Cr	Okanogan R		NE	7 35N	26E	yes	physical	RB/BT/EB			If this site is physical surveyed in the future, electroshocking is recommended to verify species present. Rainbow trout are present in Okanogan R. Linda Hoffman, WDFW Habitat Manager, confirmed presence of brown trout and eastern brook trout.	county	yes	RR
992845	SR 155	66.94	Stapaloop Cr	Omak Cr	0.31	NW	13 33N	28E	yes	biological	SH/CT/RB/EB			Site reviewed by Collins and Bell on 6/14/2000. Reported as a barrier by Chris Fisher with the Colville Nation. ID'd by CCT	state	yes	RR
993815	SR 20	215.96	Summit Cr	Loup Loup Cr	5.18	SE	31 34N	24E	yes	biological	RT			Very long culvert; approx. 7 m of fill. Streamnet shows rainbow trout DS of falls and brook trout were observed DS of falls. Either or both could be US of falls.	state	yes	RR
993816			Summit Cr	Loup Loup Cr		SE	31 34N	24E	yes	physical	SH/RT/EB				unknown	yes	RR
993817	SR 20	218.48	Summit Cr	Loup Loup Cr	2.57	SE	4 33N	24E	yes	biological	RT			Streamnet shows rainbow trout DS of falls and brook trout were observed DS of falls. Either or both could be US of falls.	state	yes	RR

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993818	SR 20	220.85	Summit Cr	Loup Loup Cr	0.16	NW	12	33N	24E	yes	biological	RT/EB		Three sections of PCC culvert broken off and sitting on ends, in plunge pool and further DS. Gradient/ waterfall barrier, 200 m downstream; NO GAIN. Trout seen US, EB seen below falls, may or may not be above falls.	state	yes	NG
993819	SR 20	221.42	Unnamed	Loup Loup Cr		SE	12	33N	24E	no	physical			< 3' OHW.	state		
993820	SR 20	223.12	Unnamed	Loup Loup Cr		SW	8	33N	25E	no	other			Old, dry diversion ditch that empties into a larger diversion ditch. Diversion channel not mapped.	state		
993822	SR 20	223.23	Diversion Ditch	Leader Lk		SW	8	33N	25E	unknown	other			Diversion ditch; mapped as type 3.	state	no	OK
993823	SR 20	223.71	Diversion Ditch	Leader Lk		NE	17	33N	25E	unknown	other			Diversion ditch; mapped as type 3.	state	no	OK
993824	SR 20	225.6	Tallant Cr	Okanogan R		NE	21	33N	25E	yes	mapped			Tallant Cr is part of a large diversion system that takes water from Summit, Loup Loup, Little Loup and other creeks, holds it in Leader Lake then releases water into Tallant Cr to irrigate orchards downstream.	state	yes	RR
993916	US 97	261.36	Unnamed	Unnamed		SW	12	30N	24E	no	physical			X-drain	state		
993917	US 97	261.64	Unnamed	Unnamed		SE	12	30N	24E	no	physical			X-drain	state		
993919	US 97	262.03	Unnamed	Unnamed		SW	7	30N	25E	no	physical			Small, steep, vegetated channel.	state		
993921	US 97	263.81	Unnamed	Okanogan R		NE	17	30N	25E	no	physical			Steep, dry channel	state		
993922	US 97	265.13	Unnamed	Okanogan R		NW	15	30N	25E	no	physical			Dry basin, no channel.	state		
993923	US 97	266.54	Unnamed	Okanogan R		SE	3	30N	25E	no	physical			X-drain	state		
993924	US 97	266.88	Unnamed	Okanogan R		NE	3	30N	25E	no	physical			Dry basin, no channel upstream.	state		
993925	US 97	267.99	Unnamed	Okanogan R		SE	34	31N	25E	no	physical			X-drain	state		
993926	US 97	268.23	Unnamed	Okanogan R		NE	34	31N	25E	no	physical			Steep, dry channel.	state		
993927	US 97	268.55	Unnamed	Okanogan R		SW	26	31N	25E	no	physical			Dry basin, no channel.	state		
993928	US 97	268.71	Unnamed	Okanogan R		SW	26	31N	25E	no	physical			Dry basin, no channel.	state		
993929	US 97	269.1	Dan Canyon Cr	Okanogan R		NW	26	31N	25E	unknown	physical			Dry, but well scoured channel. Big basin upstream (as shown on map).	state	no	OK
993930	US 97	272.07	Unnamed	Okanogan R		SW	10	31N	25E	no	physical			Dry basin, no channel	state		
993931	US 97	272.35	Unnamed	Okanogan R		SE	9	31N	25E	no	physical			Somewhat of a scoured mineral channel, but very steep, and basin (on map) very small.	state		
993932	US 97	272.61	Unnamed	Okanogan R		NE	9	31N	25E	no	physical			Defined swale, but with much vegetation and little evidence of scour/seasonal flow.	state		
993933	US 97	273.47	Unnamed	Okanogan R		SW	4	31N	25E	no	physical			Cattle x-ing.	state		
993934	US 97	277.36	Unnamed	Okanogan R		NW	30	32N	25E	no	physical			Cattle x-ing	state		
993935	US 97	278.72	Unnamed	Okanogan R		SE	9	32N	25E	no	physical			Dry basin, no channel.	state		
993936	US 97	278.78	Unnamed	Okanogan R		SE	9	32N	25E	no	physical			Dry basin, no channel.	state		
993937	US 97	278.96	Unnamed	Okanogan R		SE	9	32N	25E	no	physical			Dry basin, no channel.	state		
993938	US 97	279.2	Unnamed	Okanogan R		SE	9	32N	25E	no	physical			X-drain	state		
993939	US 97	279.26	Unnamed	Okanogan R		SE	9	32N	25E	no	physical			Steep, dry, vegetated channel.	state		
993940	US 97	279.34	Unnamed	Okanogan R		SE	9	32N	25E	no	physical			Steep, dry, vegetated channel.	state		
993941	US 97	280.66	Unnamed	Okanogan R		SE	3	32N	25E	no	physical			Cross drain	state		
993942	US 97	280.78	Unnamed	Okanogan R		SW	2	32N	25E	no	physical			Cross drain	state		
993943	US 97	280.87	Unnamed	Okanogan R		SW	2	32N	25E	no	physical			Somewhat of a defined channel, choked with woody vegetation and not much evidence of scour/seasonal flow.	state		
993944	US 97	281.27	Unnamed	Okanogan R		SE	2	32N	25E	no	physical			Cross drain	state		
993945	US 97	282.46	Unnamed	Okanogan R		NE	1	32N	25E	no	physical			Cross drain	state		
993946	US 97	282.58	Unnamed	Okanogan R		NE	1	32N	25E	no	physical			Somewhat of a scoured, defined channel. However, vegetation too thick and substrate too angular to suggest more than a few weeks of flow per year.	state		
993947	US 97	282.95	Unnamed	Okanogan R		SE	36	33N	25E	no	physical			Big, dry basin with no defined channel.	state		
993948	US 97	283.21	Unnamed	Okanogan R		SW	31	33N	26E	no	physical			Dry basin; o defined channel.	state		
993949	US 97	283.46	Unnamed	Okanogan R		NE	31	33N	26E	no	physical			Cross drain	state		
993950	US 97	283.74	Unnamed	Okanogan R		NE	31	33N	26E	no	physical			Dry basin; no defined channel.	state		
993951	US 97	283.96	Unnamed	Okanogan R		NE	31	33N	26E	no	physical			Dry channel, approx. 0.9 m OHWW, not much evidence of even a seasonal stream, neither on map (type 9 stream listed) nor in real life.	state		
993952	US 97	284.06	Unnamed	Okanogan R		NE	31	33N	26E	no	physical			Dry basin; no channel.	state		
993953	US 97	284.19	Unnamed	Okanogan R		NE	31	33N	26E	no	physical			Dry basin; no channel.	state		
993954	US 97	284.41	Felix Cr	Okanogan R		SW	29	33N	26E	no	physical			Dry basin, with no defined channel at all. Might originally have been Felix Cr (mapped as type 4), but it must have been entirely diverted somewhere upstream.	state		
993955	US 97	285.14	Unnamed	Okanogan R		SE	30	33N	26E	no	physical			Dry basin; no defined channel	state		
993956	US 97	285.86	Unnamed	Okanogan R		NW	20	33N	26E	no	physical			Dry basin; no channel	state		
993957	US 97	285.93	Unnamed	Okanogan R		NW	20	33N	26E	no	physical			Dry basin; no channel	state		
993958	US 97	318.33	Unnamed	Okanogan R		NE	34	38N	27E	no	physical			< 3' OHWW; cross drain	state		
993959	US 97	319.26	Unnamed	Okanogan R		SW	26	38N	27E	no	physical			< 3' OHWW; cross drain	state		
993960	US 97	319.9	Unnamed	Okanogan R		NW	26	38N	27E	no	physical			< 3' OHWW; cross drain	state		
993961	US 97	322.37	Unnamed	Okanogan R		NW	11	38N	27E	no	physical			< 3' OHWW; cross drain	state		
993962	US 97	323.2	Unnamed	Okanogan R		SW	2	38N	27E	yes	physical	SH/RT/EB		Approximately 30 m upstream, stream enters (emits from) long pipe under orchard.	state	no	OK
993963	US 97	324.12	Unnamed	Okanogan R		SW	35	39N	27E	yes	mapped			Mapped as type 3 upstream, and nothing downstream. US is wetland, and DS is wetland, and then DS of nearby RR crossing is defined channel.	state	no	OK
993964	US 97	324.67	Mosquito Cr	Okanogan R	0.18	NE	34	39N	27E	yes	physical			No channel/stream coming from where Mosquito Creek should be; only water is outlet of Borst Lake, which is not quite flowing strongly enough to sample habitat now. Recheck in spring for ETD.	state	yes	RR
993965	US 97	325.18	Unnamed	Okanogan R		SE	27	39N	27E	no	physical			< 3' OHWW; cross drain.	state		
993966	US 97	325.98	Unnamed	Okanogan R		SW	26	39N	27E	no	physical			< 3' OHWW; cross drain.	state		
993967	US 97	326.84	Unnamed	Okanogan R		NE	22	39N	27E	no	physical			< 3' OHWW; cross drain.	state		
993968	US 97	326.98	Unnamed	Okanogan R		NE	22	39N	27E	no	physical			< 3' OHWW; cross drain.	state		
993969	US 97	327.19	Unnamed	Okanogan R		SW	15	39N	27E	no	physical			< 3' OHWW; cross drain.	state		
993970	US 97	327.59	Unnamed	Okanogan R		NW	15	39N	27E	no	physical			< 3' OHWW; dry wash; in need of maintenance (plugged w/gravel).	state		
993971	US 97	328.16	Whistler Canyon Cr	Okanogan R	0.16	NW	10	39N	27E	yes	physical	RT/EB			state	yes	RR
993972	US 97	328.87	Unnamed	Okanogan R		NW	10	39N	27E	no	physical			< 3' OHWW; cross drain.	state		
993973	US 97	330.08	Unnamed	Okanogan R		NW	3	39N	27E	no	physical			< 3' OHWW; cross drain.	state		
993974	US 97	330.33	Unnamed	Okanogan R		SW	34	40N	27E	no	physical			< 3' OHWW; dry wash.	state		

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993975	US 97	331.08	Unnamed	Okanogan R			NW 34	40N	27E	unknown	other			Dry wetlands (basically, just fields of cattails) on both sides of road; "tide"-gate at DS end. Recheck at high flow for culvert eval/ETD. No TD done; 200 m visible US and DS.	state	unknown	UD
993976	US 97	332.49	Unnamed	Okanogan R			SE 21	40N	27E	no	physical			USGS map shows dashed blue line ("siphon"); DNR water type map shows nothing. Seems to no longer be used as siphon, even. No channel at all DS. Culvert not found at US.	state		
993977	US 97	335.64	Unnamed	Osoyoos Lk			SE 5	40N	27E	no	physical			< 3' OHWW; spring fed, from a point approx. 10 m up-slope of culvert.	state		
993978	US 97	335.82	Unnamed	Osoyoos Lk			SE 5	40N	27E	no	physical			< 3' OHWW; cross drain.	state		
993979	Gavin Rd	0.49	Whistler Canyon Cr	Okanogan R	0.13		NW 10	39N	27E	yes	physical	RT/EB		Near trailer with dogs chained throughout "yard".	county	yes	RR
993980			Whistler Canyon Cr	Okanogan R	0.12		NW 10	39N	27E	yes	biological	RT/EB		Fish observed just downstream of culvert; no positive ID.	private	yes	RR
993982	private		Whistler Canyon Cr	Okanogan R	0.29		NW 10	39N	27E	yes	physical	RT/EB		This was first barrier encountered during upstream ETD for DOT site ID 993971. Significant reach not verified for this pipe, since we were close to the end of the first 200 m and landowner informed us of high numbers of rattlesnakes in immediate area.	private	yes	UD
993983	private		Unnamed	Mosquito Cr	0.02		NE 34	39N	27E	yes	physical			USGS quad/DNR hydro layer show this as being a trib to Mosquito Cr, but it might well be the actual flow of Mosquito Cr, diverted through Borst Lake; no actual Mosquito Cr channel, where one should be near to 993964.	private	yes	RR
993984			Unnamed	Mosquito Cr	0.05		NE 34	39N	27E	yes	physical			USGS quad/DNR hydro layer show this as being a trib to Mosquito Cr, but it might well be the actual flow of Mosquito Cr, diverted through Borst Lake; no actual Mosquito Cr channel, where one should be near to 993964.	private	yes	RR
993985	private		Unnamed	Mosquito Cr	0.11		NE 34	39N	27E	yes	physical			USGS quad/DNR hydro layer show this as being a trib to Mosquito Cr, but it might well be the actual flow of Mosquito Cr, diverted through Borst Lake; no actual Mosquito Cr channel, where one should be near to 993964.	private	yes	RR
993986	RR		Mosquito Cr	Okanogan R	0.15		NE 34	39N	27E	yes	physical			Minimal flow; recheck at high flow for ETD (for 993964).	private	yes	RR
993989	SR 155	59.66	Unnamed	Omak Cr			NW 2	32N	29E	no	physical			Small dry channel. No potential for seasonal fish use.	state		
993990	SR 155	59.81	Unnamed	Unnamed			NW 2	32N	29E	no	physical			Cross Drain.	state		
993991	SR 155	59.99	Unnamed	Unnamed			SW 35	33N	29E	no	physical			Culvert wetted. DS channel dry after 10m. OWH = 3' US. Channel deperses after 20m into moist swale.	state		
993992	SR 155	60.76	Omak Cr	Okanogan R	22.3		NE 34	33N	29E	yes	biological	SH/RT/EB		ETD conducted on 09/20/2000. Two salmonids observed in plunge pool.	state	yes	RR
993993	SR 155	60.92	Trail Cr	Omak Cr	0.12		NE 34	33N	29E	yes	biological	SH/RT/EB		Two brook trout observed in plunge pool.	state	yes	RR
993994	SR 155	61.83	Unnamed	Omak Cr			NW 27	33N	29E	yes	physical			100% passable.	state	no	OK
993995	SR 155	62.41	Unnamed	Omak Cr	0.19		NE 28	33N	29E	yes	physical	RB/EB			state	yes	RR
993996	SR 155	62.76	Unnamed	Omak Cr			SE 21	33N	29E	no	physical			2.13 CST, X-drain.	state		
993997	SR 155	65.05	Clark Cr	Omak Cr	0.1		NE 18	33N	29E	yes	physical			Stream is flowing on 09/20/2000.	state	yes	RR
993998	SR 155	65.59	Swimptkin Cr	Omak Cr	0.46		NW 18	33N	29E	yes	biological	SH/RT/EB		Stream is flowing on 09/20/2000, No rain recently. Lots of fish observed, assumed to be brookies mostly.	state	yes	RR
993999	SR 155	65.63	Unnamed	Omak Cr			NW 18	33N	29E	no	physical			NFB, <3' OHWW. Some water flow, but channel disintegrates ~20 to 30m US.	state		
994000	SR 155	66.56	Unnamed	Omak Cr			NW 13	33N	28E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994001	SR 155	67.66	Unnamed	Omak Cr			NW 14	33N	28E	no	physical			NFB, <3' OHWW, Dry wash, X drain.	state		
994002	SR 155	67.94	Unnamed	Omak Cr			NE 15	33N	28E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994003	SR 155	69.3	Unnamed	Haley Cr			NE 16	33N	28E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994004	SR 155	69.67	Unnamed	Haley Cr			SW 9	33N	28E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994005	SR 155	69.95	Unnamed	Haley Cr			NE 17	33N	28E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994006	SR 155	70.97	Unnamed	Haley Cr			SW 8	33N	28E	no	physical			NFB, Small wetland US of site. Continues US for ~100m at which point the stream channel becomes a dry wash and forks into three separate channels.	state		
994007	SR 155	71.07	Unnamed	Haley Cr			SE 7	33N	28E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994008	SR 155	71.1	Haley Cr	Omak Cr			SE 7	33N	28E	unknown	physical			Re-check for ETD. Stream dry as of 09/20/00. Channel moist at culvert, but dry both US and DS of site. Also re-check for barrier status and fish bearing status. Channel looks less fish bearing DS ~150m.	state	yes	UD
994009	SR 155	73.07	Unnamed	Mission Cr			SW 12	33N	27E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994010	SR 155	73.29	Unnamed	Mission Cr			NE 11	33N	27E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994011	SR 155	73.33	Unnamed	Mission Cr			NE 11	33N	27E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994012	SR 155	73.43	Unnamed	Mission Cr			NE 11	33N	27E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994013	SR 155	73.66	Unnamed	Mission Cr			NW 11	33N	27E	no	physical			Maintenance required, DS end buried.	state		
994014	SR 155	75.64	Unnamed	Mission Cr			SE 4	33N	27E	no	physical			NFB, <3' OHWW, Dry wash.	state		
994015	SR 155	77.53	Unnamed	Okanogan R			NE 6	33N	27E	no	physical			NFB, <3' OHWW, X drain.	state		
994016	SR 155	77.73	Unnamed	Okanogan R			SE 31	34N	27E	no	physical			NFB, <3' OHWW, X drain.	state		
994020	SR 20	263.4	Bonaparte Cr	Okanogan R			SW 22	37N	27E	yes	biological	RT/EB		Same size and type of pipe as 994021 and 994022.	state	yes	RR
994021	SR 20	263.62	Bonaparte Cr	Okanogan R			SE 22	37N	27E	yes	biological	RT/EB		Same size pipe as 994020 and 994022.	state	yes	RR
994022	SR 20	264.08	Bonaparte Cr	Okanogan R			SW 23	37N	27E	yes	biological	RT/EB		Same culvert type as 994020 and 994021.	state	yes	RR
994023	SR 20	265.13	Unnamed	Bonaparte Cr			NE 26	37N	27E	no	physical			Wide dry channel; thick vegetation. Appears to be a very old channel of Bonaparte Cr. Creek no longer has the short trans-highway meander bend shown on the USGS quad/DNR hydro layer (Bonaparte stays on south side of highway here).	state		
994024	SR 20	265.43	Unnamed	Bonaparte Cr			NW 25	37N	27E	no	physical			Cross-drain.	state		
994025	SR 20	265.57	Unnamed	Bonaparte Cr	0.02		NW 25	37N	27E	unknown	other			Scoured mineral channel, suggesting seasonal flows; > 3' at OHW; some riparian veg. Recheck for fish use/photo/ETD. Lack of anadromous access confirmed: 2 falls on Bonaparte Cr (> 12'), between here and Okanogan R.	state	yes	UD
994026	SR 20	265.66	Unnamed	Bonaparte Cr			SE 25	37N	27E	no	physical			Cross-drain	state		
994027	SR 20	265.8	Unnamed	Bonaparte Cr			SE 25	37N	27E	no	physical			<3' OHWW; dry wash.	state		
994028	SR 20	265.92	Unnamed	Bonaparte Cr			SE 25	37N	27E	no	physical			<3' OHWW; dry wash.	state		
994029	SR 20	265.95	Unnamed	Bonaparte Cr			SE 25	37N	27E	no	physical			<3' OHWW; dry wash.	state		
994030	SR 20	266.09	Bonaparte Cr	Okanogan R			SE 25	37N	27E	yes	physical	RT/EB		5 m waterfall, approx. 30 m downstream; total barrier; NO GAIN. Photo of waterfall: 994030_00b.jpg	state	yes	NG
994031	SR 20	266.22	Bonaparte Cr	Okanogan R			SE 25	37N	27E	yes	biological	RT/EB		The habitat gain is DS. 222m DS is site ID 994030. Approx. 30 m DS of that site is a >12 vertical feet barrier falls. Physical survey, not ETD, due to the fact that 160 m out of a total of 222 m sampled.	state	yes	RR

Appendix A

Culverts

SiteID	RoadName	MilePost	Stream	TribTo	RM	Qsec	Section	Township	Range	FishUse	FUCriteria	Species	Location	SiteComments	OwnerType	Barrier	RepairStatus
994032	SR 20	275.72	Unnamed	Bonaparte Cr		NW	33 37N		29E	no	physical			Cattle crossing.	state		
994033	SR 20	277.6	Unnamed	Bonaparte Cr		NE	27 37N		29E	no	physical			Cross drain	state		
994034	SR 20	278.15	Bonaparte Cr	Okanogan R		NW	26 37N		29E	yes	biological	RT/EB		Fish observed from road.	state	no	OK
994035	SR 20	278.6	Bonaparte Cr	Okanogan R		SW	23 37N		29E	yes	biological	RT/EB		Fish observed just DS of site. Stream runs through a canyon DS of site, as does SR 20, which channelizes the stream.	state	yes	RR
994036	SR 20	278.99	Unnamed	Bonaparte Cr		SE	23 37N		29E	no	physical			Cross-drain	state		
994037	SR 20	279.3	Bonaparte Cr	Okanogan R		SW	24 37N		29E	yes	biological	RT/EB		Dedrock cascade just US of culvert. 3.4m in height. The culvert apron runs right up to the base of the cascade, making both the culvert and the cascade total barriers.	state	yes	RR
994038	SR 20	279.94	Bonaparte Cr	Okanogan R		NW	24 37N		29E	yes	biological	RT/EB		Fry observed in DS end.	state	no	OK
994039	SR 20	280.32	Unnamed	Bonaparte Cr		SW	13 37N		29E	no	physical			Dry channel, < 3' OHWW	state		
994040	SR 20	280.52	Unnamed	Bonaparte Cr		NE	13 37N		29E	no	physical			X-drain.	state		
994041	SR 20	280.95	Bonaparte Cr	Okanogan R		NE	13 37N		29E	yes	biological	RT/EB		Fish observed just downstream.	state	no	OK
994042	SR 20	281.63	Unnamed	Bonaparte Cr		NW	18 37N		30E	no	physical			Cattle crossing	state		
994043	SR 20	283.52	Unnamed	Bonaparte Cr		NE	8 37N		30E	yes	biological	RT/EB		Fish observed at upstream end. Channel too shallow/stock-eroded for habitat measurements; recheck at higher flow for ETD. 200 m significant reaches visible US and DS, from road.	state	yes	RR
994044	SR 20	283.53	Unnamed	Unnamed		NE	8 37N		30E	no	physical			Overflow pipe for wetland created during higher flow.	state		
994045	SR 20	284.01	Unnamed	Bonaparte Cr		NW	9 37N		30E	yes	biological			Fish observed at DS end.	state	no	OK
994046	SR 20	284.25	Unnamed	Bonaparte Cr		NE	9 37N		30E	yes	physical	RB/EB			state	no	OK
994047	SR 20	284.52	Unnamed	Bonaparte Cr		NE	9 37N		30E	yes	physical			Channel too shallow & stock-eroded to measure habitat; recheck at high flow for ETD. 200 m of waterfall-free habitat visible from road, both US and DS.	state	yes	RR
994048	SR 20	285.11	Unnamed	Bonaparte Cr		NE	10 37N		30E	yes	physical	RB/EB			state	no	OK
994049	SR 20	285.66	Unnamed	Unnamed		SW	2 37N		30E	yes	physical	RB/EB		Pond US with moist channel DS, but no flow.	state	no	OK
994054	Private		Tallant Cr	Okanogan R		NE	21 33N		25E	yes	mapped			Tallant Cr is part of a large diversion system that takes water from Summit, Loup Loup, Little Loup and other creeks, holds it in Leader Lake then releases water into Tallant Cr to irrigate orchards downstream.	private	yes	RR
994057	Private		Tallant Cr	Okanogan R		SE	27 33N		25E	yes	mapped			Tallant Cr is part of a large diversion system that takes water from Summit, Loup Loup, Little Loup and other creeks, holds it in Leader Lake then releases water into Tallant Cr to irrigate orchards downstream.	private	yes	RR
994063	Private		Tallant Cr	Okanogan R		SE	21 33N		25E	yes	mapped			Tallant Cr is part of a large diversion system that takes water from Summit, Loup Loup, Little Loup and other creeks, holds it in Leader Lake then releases water into Tallant Cr to irrigate orchards downstream.	private	yes	RR
994064	Private		Tallant Cr	Okanogan R		SE	21 33N		25E	yes	mapped			Tallant Cr is part of a large diversion system that takes water from Summit, Loup Loup, Little Loup and other creeks, holds it in Leader Lake then releases water into Tallant Cr to irrigate orchards downstream.	private	yes	RR
994065			Tallant Cr	Okanogan R		SE	27 33N		25E	yes	mapped			Tallant Cr is part of a large diversion system that takes water from Summit, Loup Loup, Little Loup and other creeks, holds it in Leader Lake then releases water into Tallant Cr to irrigate orchards downstream.	private	yes	UD