

12-4-2009

Ex. 281-US-431

Unknown

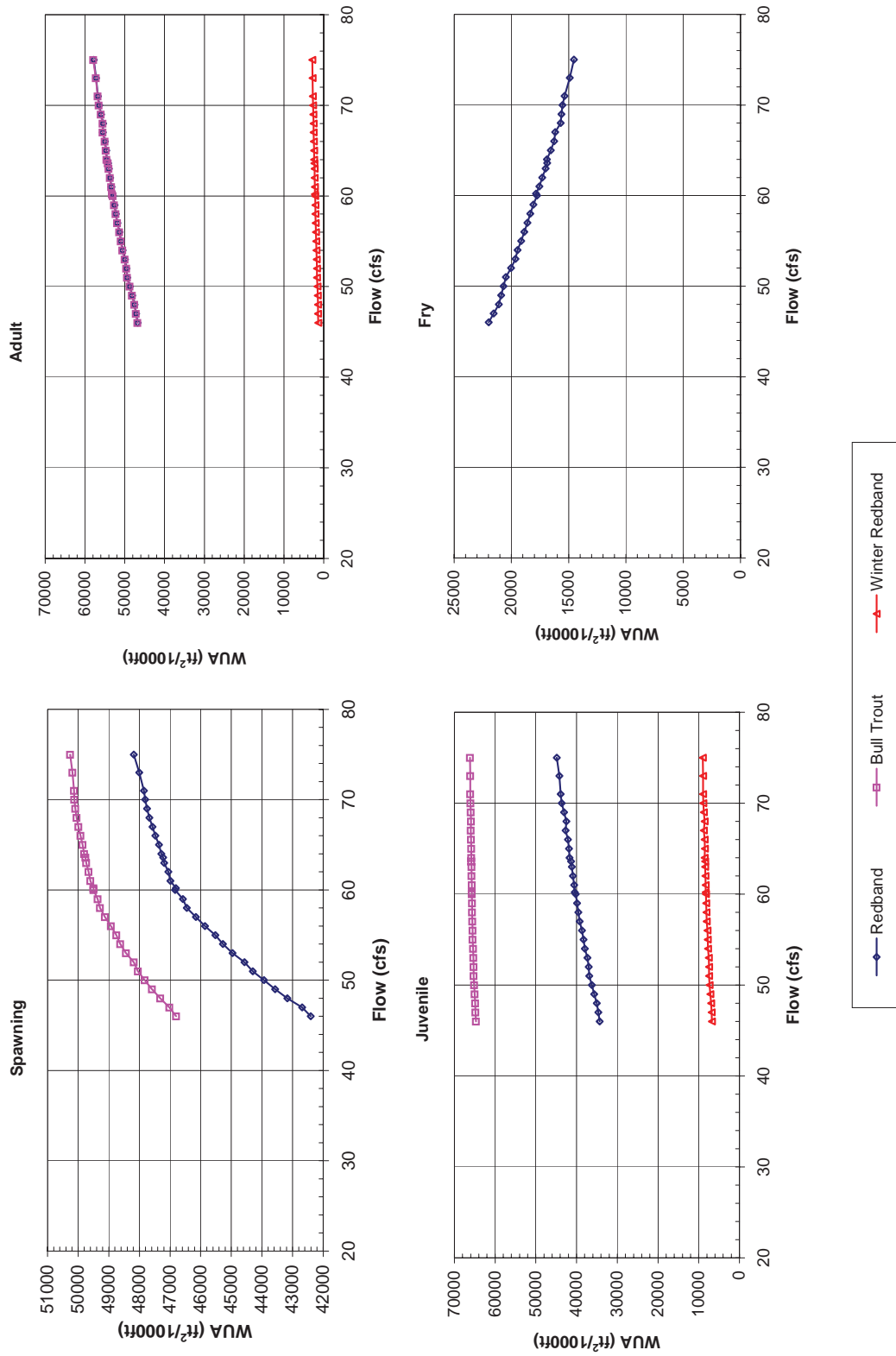
Follow this and additional works at: <https://digitalcommons.law.uidaho.edu/klamath>

Recommended Citation

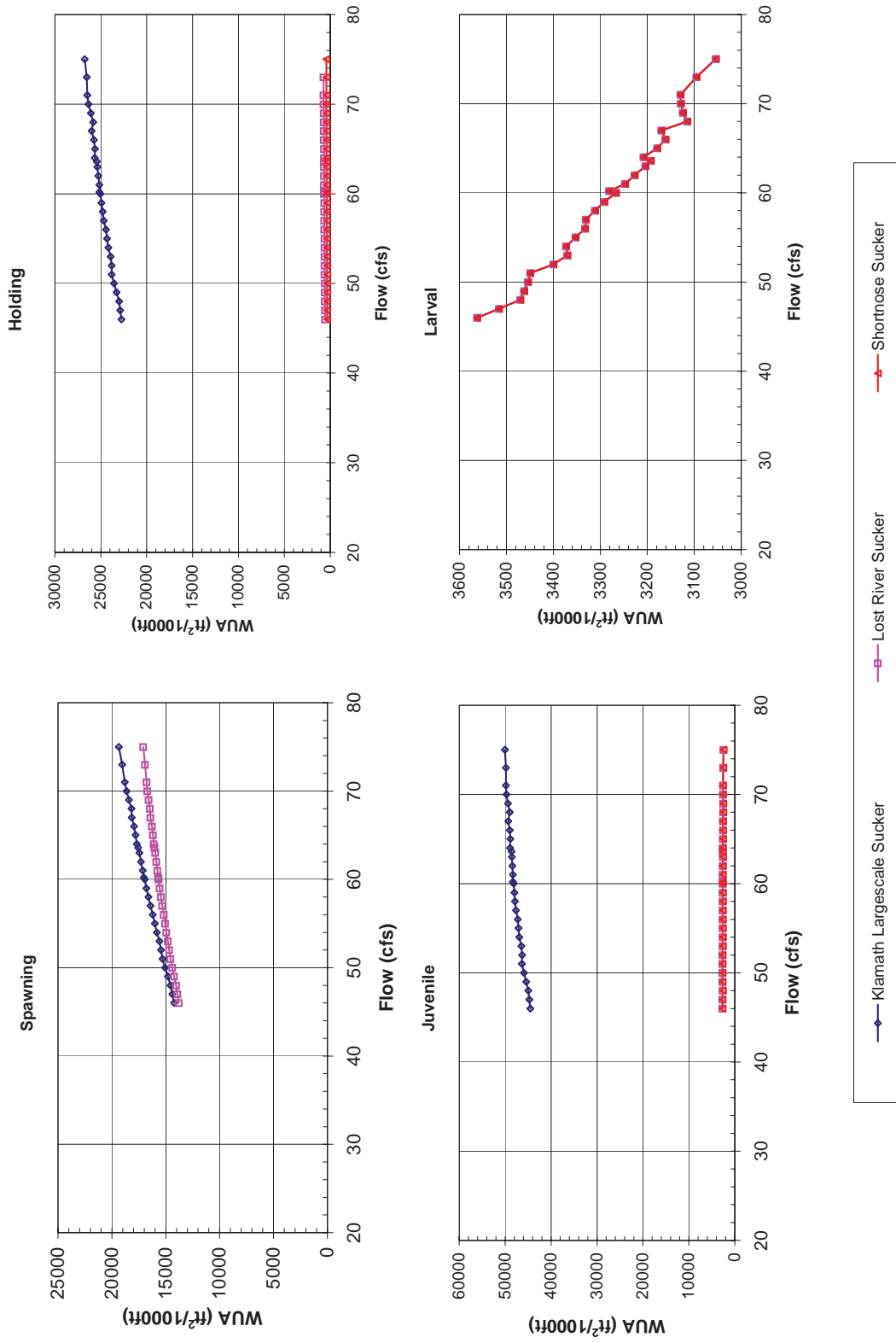
Unknown, "Ex. 281-US-431" (2009). *In re Klamath River (Klamath Tribe)*. 248.
<https://digitalcommons.law.uidaho.edu/klamath/248>

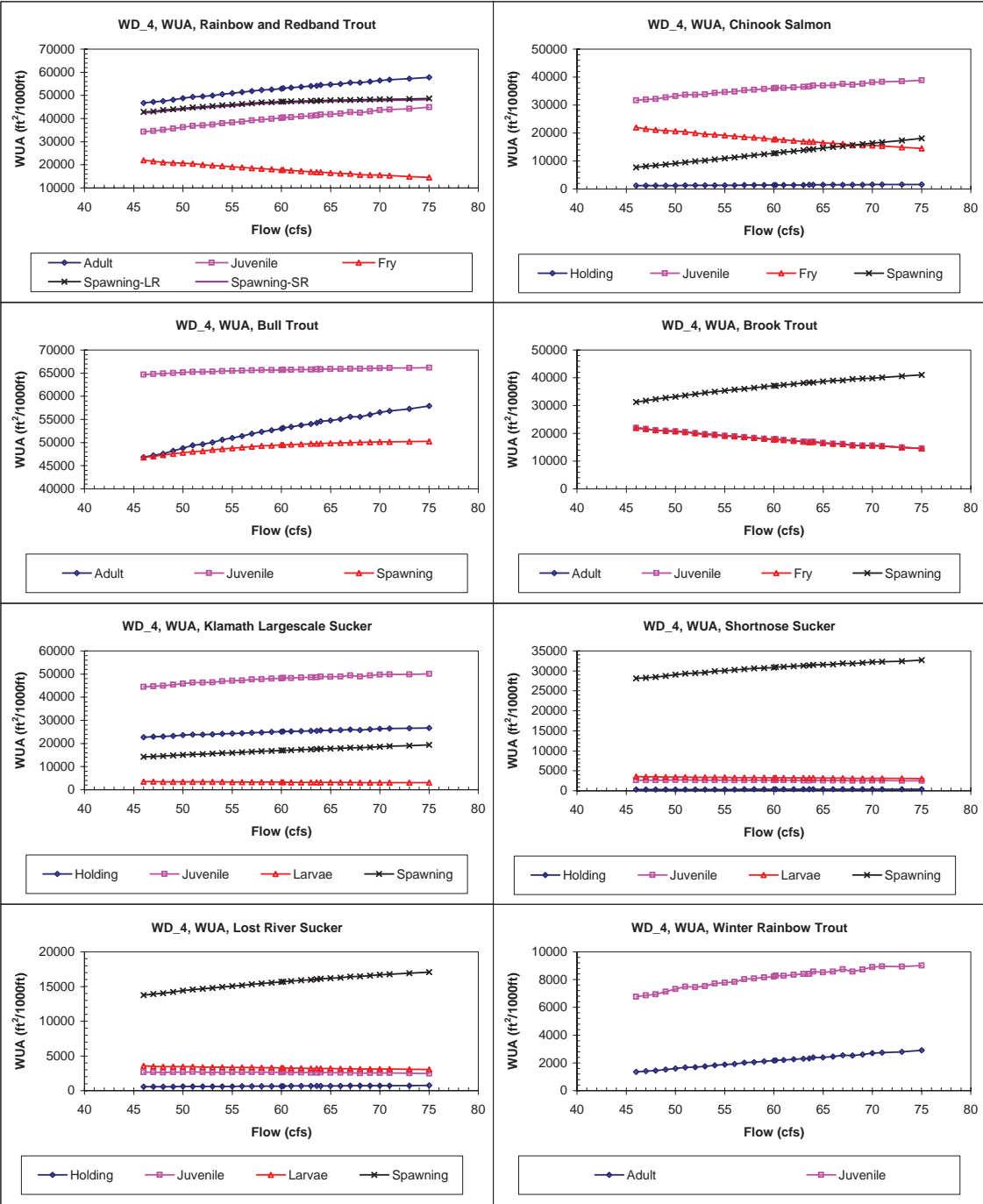
This Expert Report is brought to you for free and open access by the Hedden-Nicely at Digital Commons @ UIdaho Law. It has been accepted for inclusion in In re Klamath River (Klamath Tribe) by an authorized administrator of Digital Commons @ UIdaho Law. For more information, please contact annablaine@uidaho.edu.

Site WD 4 Priority Species Habitat - Flow Curves

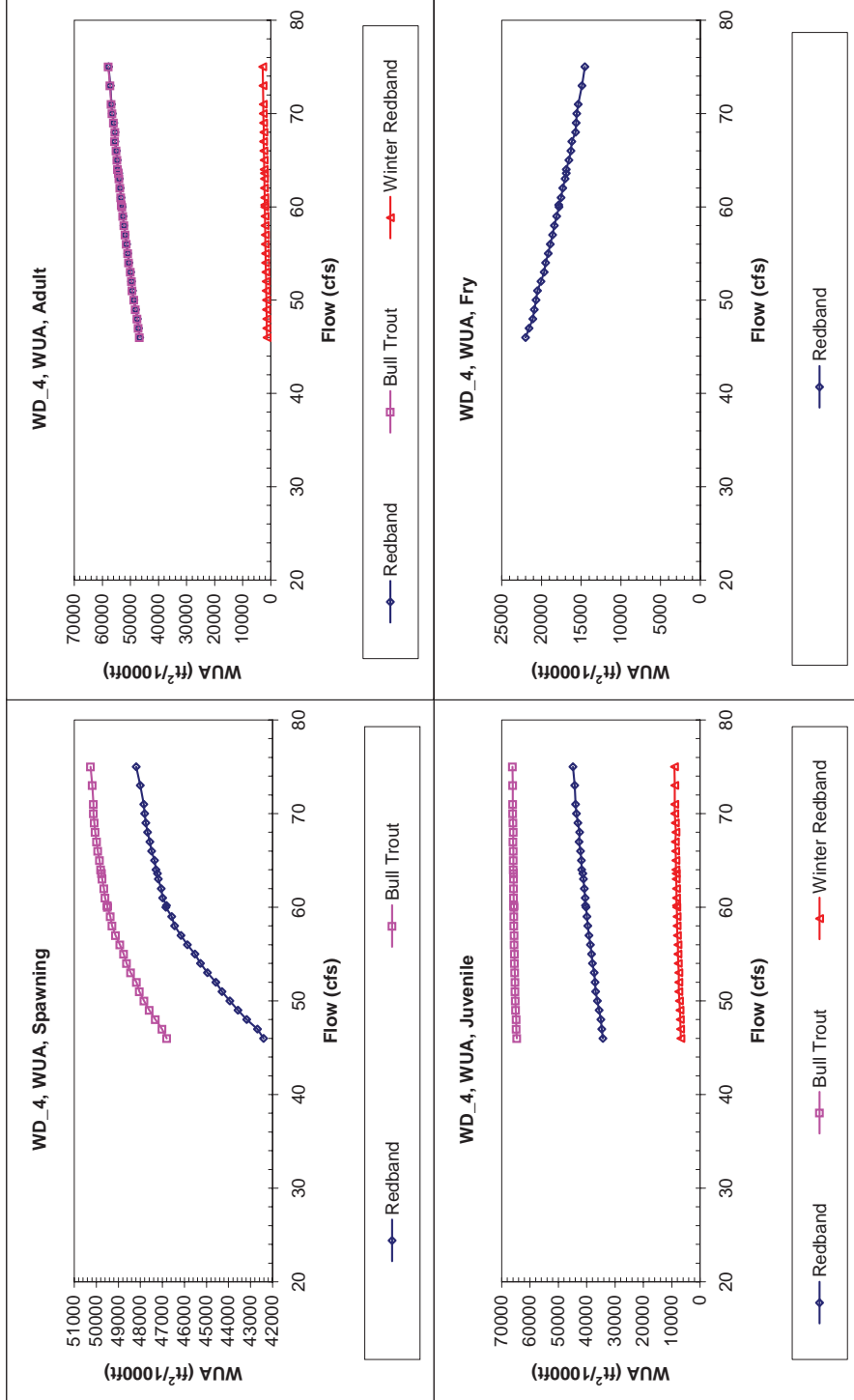


Site WD 4
Priority Species Habitat - Flow Curves





SITE WD 4
PRIORITY SPECIES HABITAT - FLOW CURVES



Claim Reach 670 Wood River, Site 4, Composite WUA

	WUA (ft ² /1000ft)				
	Q (cfs)	Adult	Juvenile	Spawning -	
				Large River	Small River
46	46748	34308	21984	42839	42411
47	47153	34666	21556	43117	42689
48	47530	35042	21090	43603	43168
49	48136	35649	20883	44007	43566
50	48738	36256	20679	44383	43936
51	49339	36863	20482	44744	44296
52	49588	37002	20041	45019	44572
53	49953	37357	19648	45411	44962
54	50545	37955	19469	45728	45278
55	50929	38300	19151	45972	45522
56	51353	38672	18880	46311	45860
57	51842	39212	18609	46608	46155
58	52263	39575	18364	46905	46451
59	52596	39895	18084	47032	46579
60	52927	40212	17774	47293	46838
60.2	53129	40435	17844	47267	46813
61	53328	40567	17550	47444	46988
62	53653	40879	17300	47516	47060
63	53979	41184	17006	47646	47189
63.6	54168	41354	16872	47682	47225
64	54500	41748	16891	47745	47287
65	54678	41852	16556	47820	47361
66	54991	42144	16276	47942	47484
67	55495	42698	16173	48032	47573
68	55469	42521	15704	48137	47679
69	55959	43072	15627	48205	47747
70	56440	43624	15547	48270	47812
71	56723	43910	15368	48307	47849
73	57174	44249	14898	48464	48006
75	57820	44859	14544	48642	48184

	WUA (ft ² /1000ft)			
	Q (cfs)	Holding	Juvenile	Spawning
46	1198	31745	21984	7768
47	1212	31986	21556	8081
48	1225	32207	21090	8430
49	1246	32699	20883	8779
50	1266	33188	20679	9131
51	1287	33677	20482	9487
52	1294	33665	20041	9863
53	1308	33876	19648	10230
54	1328	34363	19469	10596
55	1342	34596	19151	10934
56	1356	34834	18880	11348
57	1376	35266	18609	11655
58	1390	35503	18364	12075
59	1404	35718	18084	12411
60	1417	35901	17774	12782
60.2	1424	36121	17844	12855
61	1431	36130	17550	13207
62	1445	36336	17300	13531
63	1459	36508	17006	13896
63.6	1466	36606	16872	14116
64	1479	36969	16891	14248
65	1487	36938	16556	14621
66	1500	37105	16276	14975
67	1521	37558	16173	15317
68	1521	37233	15704	15703
69	1541	37686	15627	16044
70	1562	38140	15547	16380
71	1576	38329	15368	16691
73	1597	38450	14898	17400
75	1624	38834	14544	18143

	WUA (ft ² /1000ft)		
	Q (cfs)	Adult	Spawning
46	46816	64701	46802
47	47220	64826	47021
48	47596	64910	47319
49	48203	65048	47592
50	48805	65151	47829
51	49406	65250	48049
52	49652	65293	48182
53	50018	65350	48435
54	50610	65434	48623
55	50993	65506	48756
56	51416	65559	48934
57	51909	65599	49127
58	52329	65646	49283
59	52665	65674	49366
60	52997	65694	49498
60.2	53200	65732	49495
61	53398	65743	49597
62	53726	65773	49657
63	54053	65793	49735
63.6	54243	65821	49763
64	54575	65860	49802
65	54754	65876	49851
66	55068	65898	49925
67	55574	65965	49988
68	55549	65937	50048
69	56041	66006	50090
70	56523	66068	50128
71	56810	66095	50133
73	57265	66127	50187
75	57913	66174	50263

	WUA (ft ² /1000ft)			
	Q (cfs)	Adult	Juvenile	Spawning
46	21984	21984	21984	31254
47	21556	21556	21556	31739
48	21090	21090	21090	32350
49	20883	20883	20883	32791
50	20679	20679	20679	33216
51	20482	20482	20482	33621
52	20041	20041	20041	34147
53	19648	19648	19648	34625
54	19469	19469	19469	34952
55	19151	19151	19151	35345
56	18880	18880	18880	35744
57	18609	18609	18609	36062
58	18364	18364	18364	36434
59	18084	18084	18084	36761
60	17774	17774	17774	37133
60.2	17844	17844	17844	37114
61	17550	17550	17550	37451
62	17300	17300	17300	37756
63	17006	17006	17006	38080
63.6	16872	16872	16872	38266
64	16891	16891	16891	38268
65	16556	16556	16556	38651
66	16276	16276	16276	38945
67	16173	16173	16173	39113
68	15704	15704	15704	39578
69	15627	15627	15627	39716
70	15547	15547	15547	39850
71	15368	15368	15368	40072
73	14898	14898	14898	40596
75	14544	14544	14544	41028

Claim Reach 670 Wood River, Site 4, Composite WUA

	WUA (ft ² /1000ft)				
	Q (cfs)	Holding	Juvenile	Larvae	Spawning
Klamath Largescale Sucker	46	22747	44535	3562	14218
	47	22884	44741	3516	14402
	48	23015	44936	3470	14555
	49	23286	45412	3462	14805
	50	23556	45881	3454	15055
	51	23823	46346	3449	15304
	52	23810	46297	3400	15433
	53	23926	46454	3370	15584
	54	24187	46897	3373	15833
	55	24312	47062	3353	16018
	56	24429	47261	3333	16214
	57	24690	47641	3331	16421
	58	24808	47843	3311	16617
	59	24934	47997	3291	16799
	60	25044	48120	3267	16946
	60.2	25162	48332	3281	17043
	61	25160	48301	3247	17134
	62	25282	48436	3227	17307
	63	25389	48551	3204	17455
	63.6	25436	48607	3193	17558
	64	25649	48941	3208	17685
	65	25627	48848	3179	17796
	66	25734	48958	3161	17939
	67	25996	49342	3170	18161
	68	25820	48976	3115	18191
	69	26082	49351	3124	18412
	70	26343	49718	3129	18634
	71	26465	49830	3129	18792
73	26536	49806	3095	19043	
75	26749	50043	3054	19347	

	WUA (ft ² /1000ft)				
	Q (cfs)	Holding	Juvenile	Larvae	Spawning
Shortnose Sucker	46	324	2671	3562	28108
	47	324	2668	3516	28282
	48	329	2640	3470	28462
	49	334	2658	3462	28755
	50	339	2675	3454	29043
	51	345	2692	3449	29330
	52	345	2665	3400	29446
	53	350	2637	3370	29615
	54	355	2654	3373	29891
	55	355	2651	3353	30044
	56	360	2652	3333	30251
	57	366	2646	3331	30442
	58	371	2647	3311	30644
	59	371	2646	3291	30727
	60	376	2621	3267	30865
	60.2	376	2653	3281	30951
	61	381	2621	3247	31057
	62	381	2620	3227	31140
	63	387	2595	3204	31273
	63.6	387	2600	3193	31336
	64	392	2614	3208	31498
	65	392	2593	3179	31537
	66	397	2568	3161	31659
	67	402	2587	3170	31873
	68	402	2521	3115	31817
	69	408	2540	3124	32017
	70	413	2558	3129	32208
	71	413	2556	3129	32264
73	418	2509	3095	32402	
75	428	2484	3054	32675	

	WUA (ft ² /1000ft)				
	Q (cfs)	Holding	Juvenile	Larvae	Spawning
Lost River Sucker	46	566	2671	3562	13782
	47	566	2668	3516	13909
	48	576	2640	3470	14047
	49	585	2658	3462	14224
	50	594	2675	3454	14399
	51	603	2692	3449	14572
	52	603	2665	3400	14676
	53	612	2637	3370	14796
	54	621	2654	3373	14954
	55	621	2651	3353	15057
	56	631	2652	3333	15190
	57	640	2646	3331	15320
	58	649	2647	3311	15453
	59	649	2646	3291	15551
	60	658	2621	3267	15657
	60.2	658	2653	3281	15704
	61	667	2621	3247	15782
	62	667	2620	3227	15878
	63	676	2595	3204	15978
	63.6	676	2600	3193	16042
	64	686	2614	3208	16113
	65	686	2593	3179	16194
	66	695	2568	3161	16286
	67	704	2587	3170	16415
	68	704	2521	3115	16458
	69	713	2540	3124	16579
	70	722	2558	3129	16695
	71	722	2556	3129	16777
73	731	2509	3095	16911	
75	750	2484	3054	17087	

	WUA (ft ² /1000ft)		
	Q (cfs)	Adult	Juvenile
Winter Rainbow Trout	46	1359	6770
	47	1407	6855
	48	1452	6939
	49	1521	7125
	50	1594	7312
	51	1671	7497
	52	1696	7460
	53	1746	7532
	54	1827	7710
	55	1878	7779
	56	1929	7834
	57	2011	8027
	58	2059	8082
	59	2109	8153
	60	2160	8220
	60.2	2188	8295
	61	2209	8270
	62	2257	8338
	63	2307	8400
	63.6	2328	8409
	64	2389	8568
	65	2404	8511
	66	2458	8570
	67	2543	8736
	68	2524	8569
	69	2608	8732
	70	2692	8895
	71	2736	8954
73	2797	8934	
75	2899	9015	