

12-4-2009

Ex. 280-US-452

Unknown

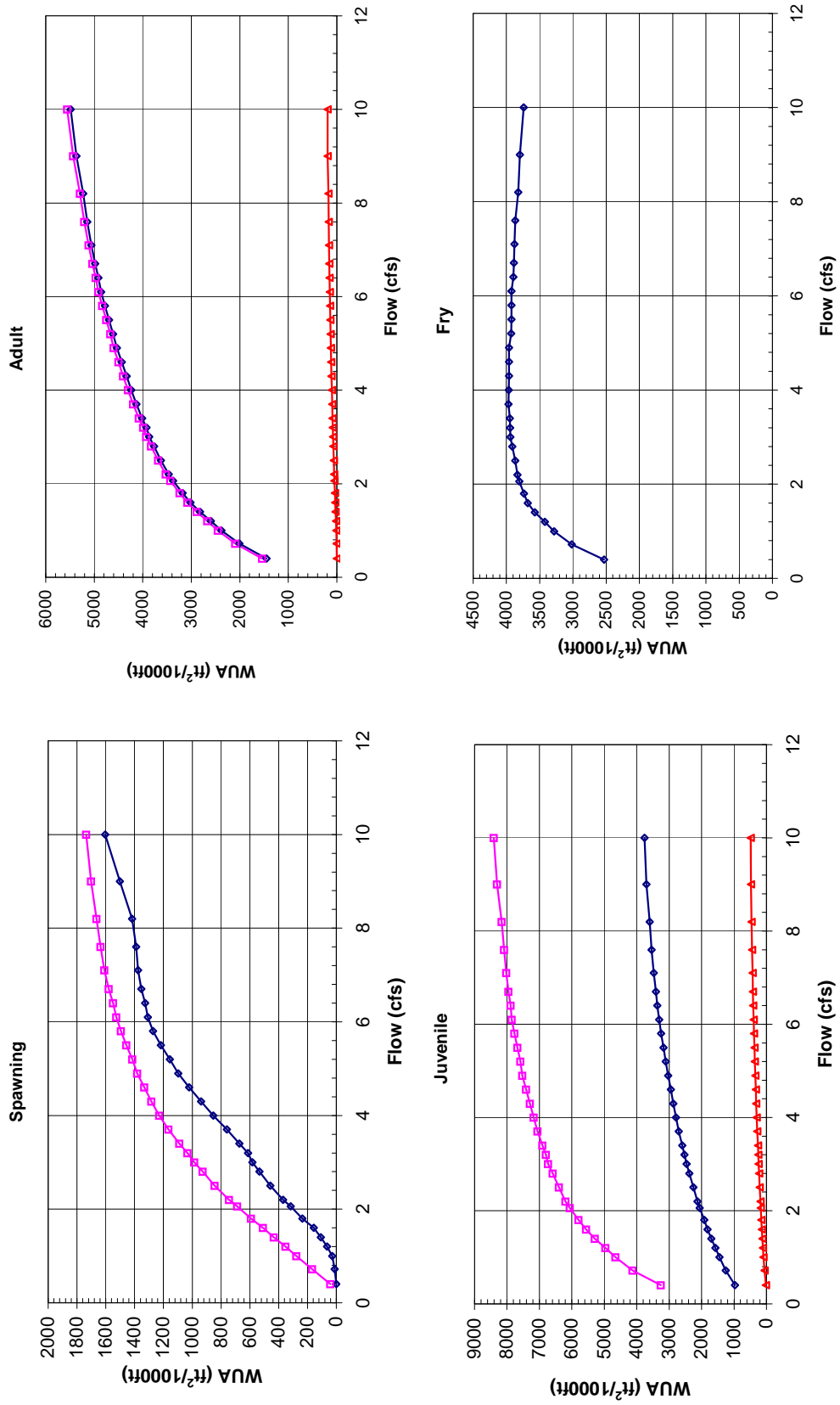
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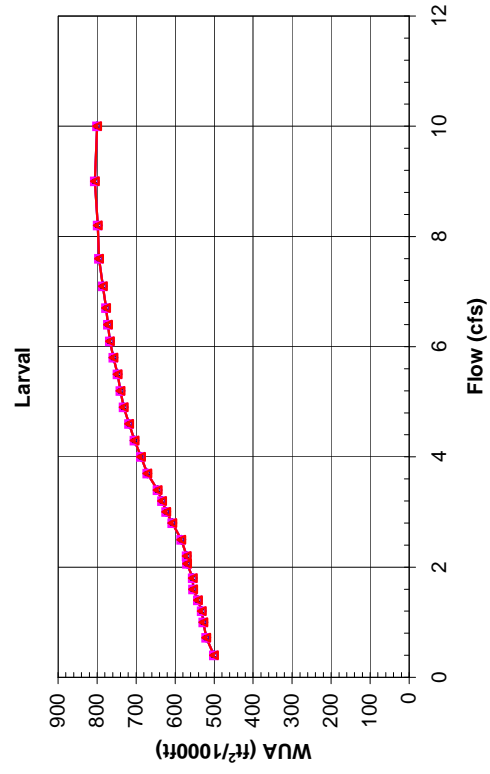
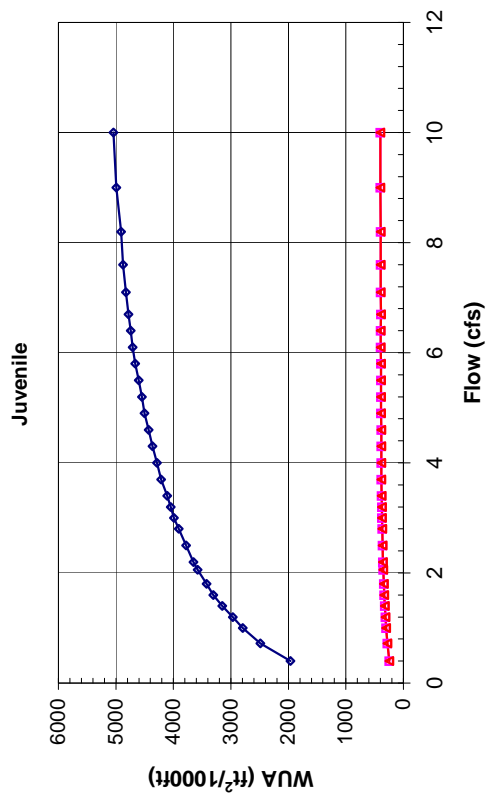
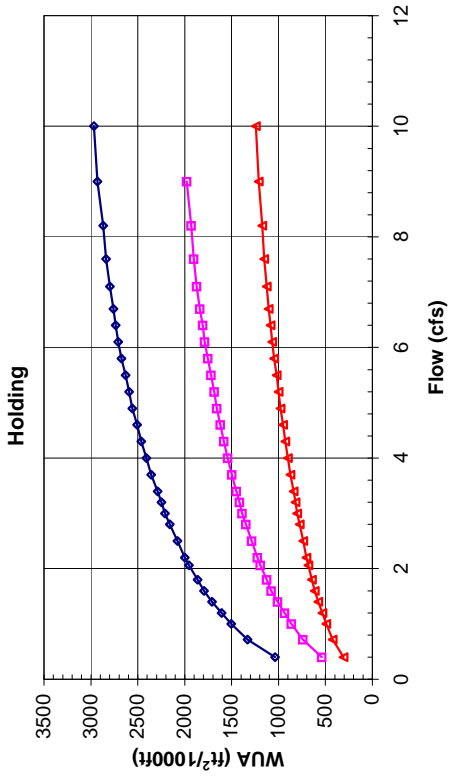
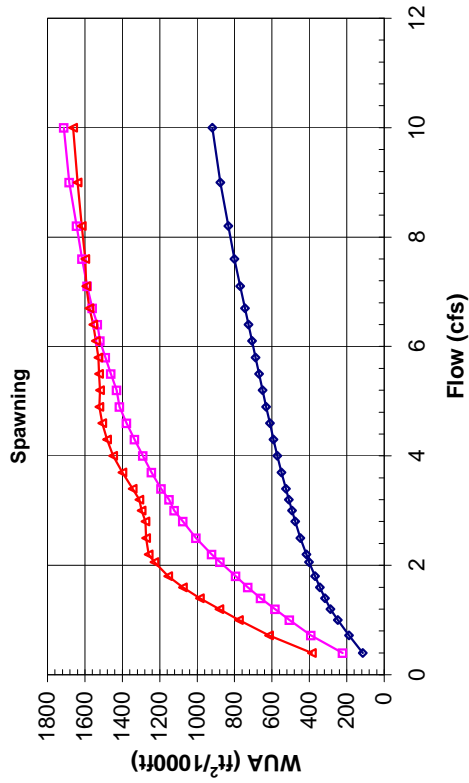
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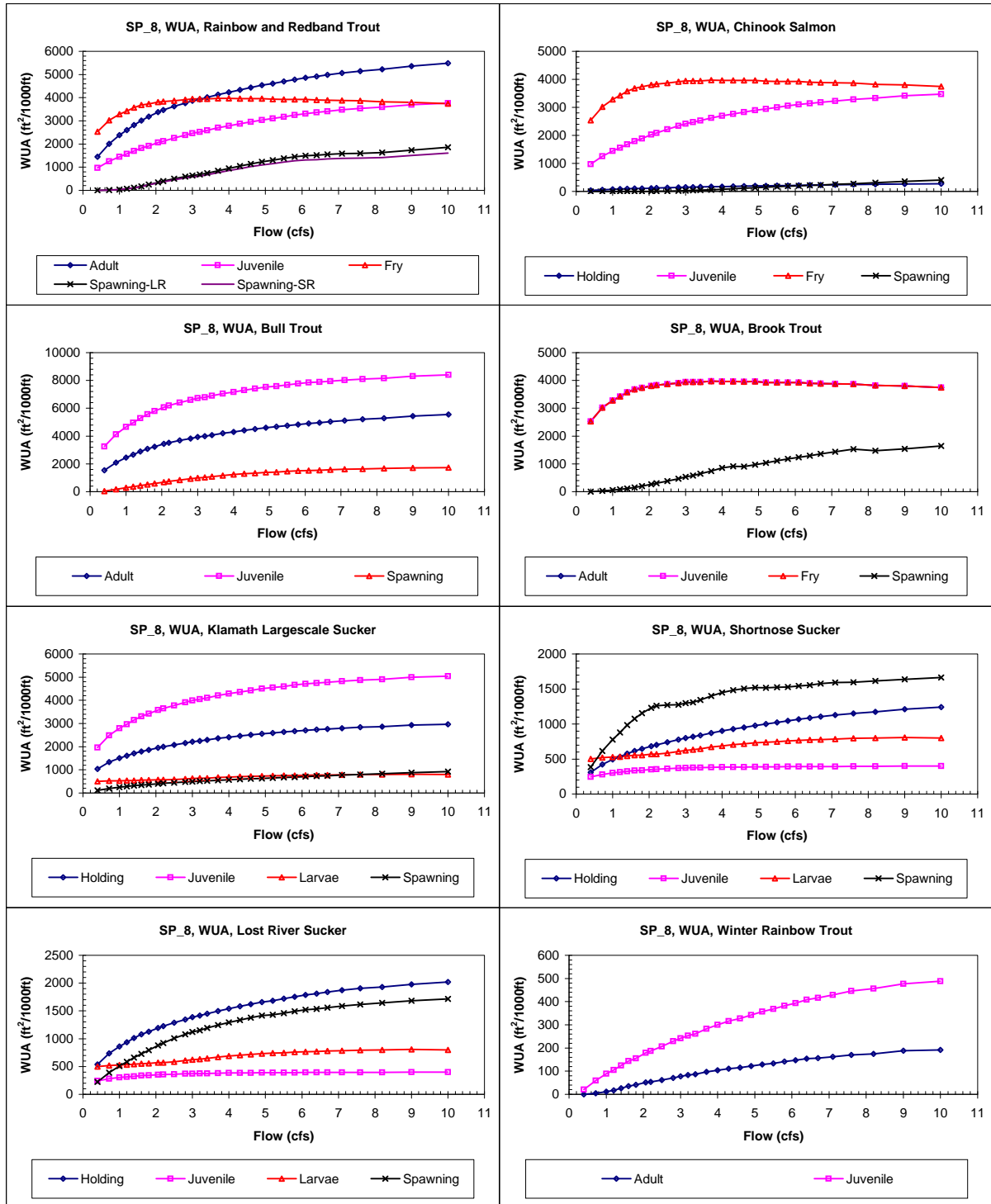
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Site 648 Priority Species Habitat - Flow Curves



Site 648
 Priority Species Habitat - Flow Curves





Claim Reach 648 Sprague River, Site 8, Composite WUA

	WUA (ft ² /1000ft)				
	Q	Adult	Juvenile	Spawning -	
	(cfs)			Large River	Small River
0.4	1451	970	2533	0	0
0.72	2012	1259	3018	11	11
1	2379	1451	3284	30	29
1.2	2598	1571	3421	70	65
1.4	2819	1699	3572	117	108
1.6	3016	1820	3679	170	157
1.8	3180	1916	3734	256	236
2.06	3374	2059	3806	346	317
2.2	3467	2125	3835	404	369
2.5	3626	2254	3869	502	458
2.8	3769	2381	3910	588	533
3	3867	2462	3942	644	582
3.2	3925	2527	3944	679	613
3.4	4013	2591	3948	746	673
3.7	4131	2700	3971	844	760
4	4236	2787	3966	949	853
4.3	4335	2871	3963	1047	939
4.6	4433	2949	3959	1142	1022
4.9	4534	3035	3959	1232	1097
5.2	4609	3102	3930	1304	1156
5.5	4695	3171	3923	1379	1219
5.8	4781	3247	3926	1446	1272
6.1	4856	3311	3924	1493	1308
6.4	4914	3362	3896	1518	1327
6.7	4981	3408	3888	1553	1354
7.1	5062	3474	3881	1583	1376
7.6	5142	3541	3865	1602	1389
8.2	5228	3597	3823	1636	1417
9	5366	3697	3798	1735	1502
10	5486	3762	3741	1855	1605

	WUA (ft ² /1000ft)				
	Q	Holding	Juvenile	Spawning	
	(cfs)			Fry	Spawning
0.4	41	970	2533	0	0
0.72	61	1257	3018	0	0
1	74	1441	3284	0	0
1.2	83	1555	3421	0	0
1.4	92	1678	3572	0	0
1.6	100	1795	3679	0	0
1.8	107	1887	3734	1	1
2.06	117	2025	3806	3	3
2.2	122	2087	3835	5	5
2.5	132	2214	3869	13	13
2.8	142	2336	3910	22	22
3	148	2413	3942	28	28
3.2	153	2473	3944	34	34
3.4	158	2529	3948	43	43
3.7	167	2626	3971	57	57
4	174	2699	3966	73	73
4.3	181	2767	3963	91	91
4.6	187	2826	3959	110	110
4.9	194	2893	3959	131	131
5.2	200	2945	3930	150	150
5.5	205	2996	3923	168	168
5.8	212	3056	3926	184	184
6.1	218	3105	3924	199	199
6.4	223	3146	3896	214	214
6.7	228	3181	3888	230	230
7.1	235	3231	3881	251	251
7.6	243	3284	3865	275	275
8.2	250	3326	3823	312	312
9	264	3411	3798	358	358
10	276	3469	3741	404	404

	WUA (ft ² /1000ft)			
	Q	Adult	Juvenile	Spawning
	(cfs)			
0.4	1536	3256	42	42
0.72	2092	4126	168	168
1	2453	4652	277	277
1.2	2668	4964	353	353
1.4	2887	5291	434	434
1.6	3080	5562	510	510
1.8	3241	5794	592	592
2.06	3434	6064	687	687
2.2	3525	6196	744	744
2.5	3685	6399	844	844
2.8	3830	6592	928	928
3	3929	6732	987	987
3.2	3990	6796	1032	1032
3.4	4078	6909	1090	1090
3.7	4199	7061	1165	1165
4	4305	7176	1228	1228
4.3	4404	7291	1284	1284
4.6	4501	7411	1333	1333
4.9	4599	7529	1381	1381
5.2	4670	7588	1415	1415
5.5	4753	7677	1457	1457
5.8	4838	7768	1494	1494
6.1	4913	7850	1527	1527
6.4	4969	7883	1549	1549
6.7	5035	7949	1579	1579
7.1	5118	8024	1609	1609
7.6	5203	8091	1637	1637
8.2	5292	8165	1664	1664
9	5435	8304	1702	1702

	WUA (ft ² /1000ft)			
	Q	Adult	Juvenile	Spawning
	(cfs)			
0.4	2533	2533	2533	3
0.72	3018	3018	3018	26
1	3284	3284	3284	53
1.2	3421	3421	3421	84
1.4	3572	3572	3572	115
1.6	3679	3679	3679	149
1.8	3734	3734	3734	198
2.06	3806	3806	3806	262
2.2	3835	3835	3835	304
2.5	3869	3869	3869	384
2.8	3910	3910	3910	470
3	3942	3942	3942	531
3.2	3944	3944	3944	582
3.4	3948	3948	3948	651
3.7	3971	3971	3971	746
4	3966	3966	3966	852
4.3	3963	3963	3963	910
4.6	3959	3959	3959	906
4.9	3959	3959	3959	967
5.2	3930	3930	3930	1038
5.5	3923	3923	3923	1110
5.8	3926	3926	3926	1178
6.1	3924	3924	3924	1240
6.4	3896	3896	3896	1293
6.7	3888	3888	3888	1357
7.1	3881	3881	3881	1436
7.6	3865	3865	3865	1530
8.2	3823	3823	3823	1477
9	3798	3798	3798	1536

10	5559	8404	1737
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10	3741	3741	3741	1647
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Claim Reach 648 Sprague River, Site 8, Composite WUA

	Q (cfs)	WUA (ft ² /1000ft)			
		Holding	Juvenile	Larvae	Spawning
Klamath Largescale Sucker	0.4	1036	1964	501	115
	0.72	1331	2485	520	188
	1	1505	2792	527	249
	1.2	1605	2966	531	287
	1.4	1709	3153	542	316
	1.6	1796	3306	553	345
	1.8	1864	3422	554	370
	2.06	1955	3576	569	401
	2.2	1998	3649	570	416
	2.5	2078	3779	584	448
	2.8	2159	3908	607	475
	3	2212	3993	623	493
	3.2	2248	4044	633	510
	3.4	2290	4110	644	525
	3.7	2357	4211	671	549
	4	2410	4288	688	571
	4.3	2462	4362	704	592
	4.6	2509	4431	718	611
	4.9	2558	4503	732	631
	5.2	2593	4548	740	650
	5.5	2631	4602	748	669
	5.8	2674	4662	758	688
	6.1	2709	4711	767	707
	6.4	2736	4743	772	726
	6.7	2761	4779	777	745
	7.1	2797	4826	785	770
	7.6	2837	4874	795	801
	8.2	2868	4911	798	834
	9	2929	4994	806	877
	10	2967	5044	800	919

	Q (cfs)	WUA (ft ² /1000ft)			
		Holding	Juvenile	Larvae	Spawning
Shortnose Sucker	0.4	308	245	501	386
	0.72	422	281	520	616
	1	493	302	527	777
	1.2	534	313	531	880
	1.4	578	325	542	986
	1.6	615	336	553	1076
	1.8	644	341	554	1155
	2.06	683	352	569	1229
	2.2	702	354	570	1260
	2.5	739	361	584	1273
	2.8	776	369	607	1277
	3	801	373	623	1296
	3.2	819	376	633	1310
	3.4	840	377	644	1345
	3.7	872	382	671	1400
	4	900	384	688	1449
	4.3	927	386	704	1482
	4.6	952	385	718	1507
	4.9	978	388	732	1522
	5.2	998	389	740	1519
	5.5	1021	390	748	1524
	5.8	1046	392	758	1527
	6.1	1068	393	767	1542
	6.4	1085	393	772	1556
	6.7	1104	392	777	1576
	7.1	1127	394	785	1592
	7.6	1152	396	795	1598
	8.2	1173	396	798	1616
	9	1210	401	806	1639
	10	1243	400	800	1664

	Q (cfs)	WUA (ft ² /1000ft)			
		Holding	Juvenile	Larvae	Spawning
Lost River Sucker	0.4	539	245	501	222
	0.72	739	281	520	391
	1	863	302	527	506
	1.2	934	313	531	583
	1.4	1011	325	542	661
	1.6	1077	336	553	728
	1.8	1127	341	554	795
	2.06	1193	352	569	878
	2.2	1225	354	570	923
	2.5	1286	361	584	1006
	2.8	1346	369	607	1077
	3	1387	373	623	1123
	3.2	1416	376	633	1150
	3.4	1449	377	644	1192
	3.7	1498	382	671	1244
	4	1541	384	688	1291
	4.3	1582	386	704	1335
	4.6	1619	385	718	1377
	4.9	1657	388	732	1415
	5.2	1684	389	740	1431
	5.5	1719	390	748	1461
	5.8	1755	392	758	1491
	6.1	1788	393	767	1520
	6.4	1809	393	772	1534
	6.7	1839	392	777	1561
	7.1	1872	394	785	1588
	7.6	1904	396	795	1616
	8.2	1931	396	798	1644

	Q (cfs)	WUA (ft ² /1000ft)			
		Adult	Juvenile	Fry	Spawning
Winter Rainbow Trout	0.4	0	20		
	0.72	4	60		
	1	11	88		
	1.2	17	105		
	1.4	26	124		
	1.6	36	144		
	1.8	41	156		
	2.06	51	179		
	2.2	53	187		
	2.5	61	207		
	2.8	71	229		
	3	77	242		
	3.2	84	253		
	3.4	87	261		
	3.7	97	283		
	4	103	300		
	4.3	110	315		
	4.6	116	328		
	4.9	122	342		
	5.2	129	357		
	5.5	134	368		
	5.8	141	382		
	6.1	147	394		
	6.4	154	409		
	6.7	156	416		
	7.1	162	429		
	7.6	169	446		
	8.2	175	457		

9	1979	401	806	1684
10	2021	400	800	1713

9	188	477
10	192	488