

SUMMARY OF CLIMATE CHANGE IMPACTED RESULTS

Resource indicator (measurement)	Future without Integrated Plan NRNI	Integrated Plan NRNI	Change from FWIP	Integ Plan - Moderately Adverse	Change from FWIP	Integ Plan - Least Adverse	Change from FWIP	Integ Plan - More Adverse	Change from FWIP
WATER RESOURCES									
<i>Average for water years 1981–2005 (maf)</i>									
Water supply April 1 total water supply available (TWSA)	2.33	3.02	0.69	2.49	0.16	2.80	0.15	2.00	0.16
Water distribution April–September Parker flow volume	0.45	0.59	0.14	0.42	-0.03	0.52	-0.02	0.30	-0.03
April–September diversion September 30 reservoir contents	1.55	1.64	0.09	1.62	0.07	1.74	0.05	1.44	0.11
April–September flow volume at mouth of Yakima River	0.09	0.59	0.50	0.15	0.06	0.39	0.25	-0.03	-0.08
Irrigation proration level	0.71 64%	0.99 92%	0.28 28%	0.82 74%	0.11 10%	0.98 91%	0.14 10%	0.63 53%	0.11 14%
<i>1994 dry-year (maf)</i>									
Water supply April 1 total water supply available (TWSA)	1.51	2.22	0.71	1.59	0.08	2.22	0.48	1.43	0.12
Water distribution April–September Parker flow volume	0.27	0.24	-0.03	0.26	-0.01	0.21	-0.01	0.20	-0.02
April–September diversion September 30 reservoir contents	1.16	1.53	0.37	1.21	0.05	1.57	0.24	1.10	0.06
April–September flow volume at mouth of Yakima River	0.03	-0.05	-0.08	-0.17	-0.20	-0.05	-0.09	-0.14	-0.18
Irrigation proration level	0.40 21%	0.46 70%	0.06 49%	0.52 26%	0.12 5%	0.53 70%	0.14 28%	0.44 15%	0.11 10%

FWIP FWIP FWIP
HADCM CGSM HADGEM1

2.33 2.65 1.84

0.45 0.54 0.33
1.55 1.69 1.33

0.09 0.14 0.05

0.71 0.84 0.52
64% 81% 39%

1.51 1.74 1.31

0.27 0.22 0.22
1.16 1.33 1.04

0.03 0.04 0.04

0.4 0.39 0.33
21% 42% 5%

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	ANADROMOUS FISH								
<i>Rate of change in flow during flip-flop (average cfs/day August 16–September 14)</i>									
Easton reach	-16.0	-7.0	9.0	-5.4	10.6	-6.0	9.0	-11.0	12.0
Ellensburg reach	-83.0	-52.0	31.0	-56.9	26.1	-60.0	26.0	-22.0	45.0
Lower Naches River reach	30.0	22.0	-8.0	25.5	-4.5	25.0	-5.0	-1.0	-27.0
<i>Pre- (August 1-15) and post- (September 14-28) flip-flop flow and absolute change in flow</i>									
Easton reach									
Pre-flip-flop flow (cfs)	736	475	-261	530	-206	531	-236	567	-319
Post-flip-flop flow (cfs)	280	262	-18	372	92	346	22	235	22
Absolute change in flow (cfs)	-456	-212	244	-157	299	-185	258	-332	342
Ellensburg reach									
Pre-flip-flop flow (cfs)	3397	2585	-812	3245	-152	3290	-564	1547	-1064
Post-flip-flop flow (cfs)	990	1077	87	1594	604	1560	193	918	243
Absolute change in flow (cfs)	-2407	-1508	899	-1651	756	-1730	757	-629	1307
Lower Naches River reach									
Pre-flip-flop flow (cfs)	697	1019	322	736	39	881	87	1260	565
Post-flip-flop flow (cfs)	1566	1647	81	1475	-91	1594	-58	1238	-209
Absolute change in flow (cfs)	870	629	-241	739	-131	713	-144	-22	-774

FWIP HADCM	FWIP CGSM	FWIP HADGEM1
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-16	-15	-23
-83	-86	-67
30	30	26

736	767	886
280	324	213
-456	-443	-674

3397	3854	2611
990	1367	675
-2407	-2487	-1936

697	794	695
1566	1652	1447
870	857	752