ESPAM2.1 Final Report Tables

Table 1. Managed recharge volumes for the eastern Snake Plain aquifer.

Table 2. Start and end dates for model stress periods.

Table 3. River cells.

Table 4. Drain cells.

Table 5. General head boundary cells.

Table 6. Reduction factors for non-irrigated lands by year.

Table 7. Irrigation entities.

Table 8. List of canals represented by entity.

Table 9. Sprinkler percentages for irrigation entities.

Table 10. Assignment of return flow sites to irrigation entities.

Table 11. Apportionment of Mud Lake fixed point pumping.

Table 12. Summary of fixed point extraction rates by stress period.

Table 13. Offsite well pumping for each model stress period.

Table 14. Underflow from tributary basins.

Table 15. Silver Creek annual flows and normalized flux ratios.

Table 16. List of non-Snake River sources of surface-water seepage.

Table 17. Adjustable water budget parameters.

Table 18. List of springs used as calibration targets (Group A and B).

Table 19. Model cells representing springs used as transient (Group A and B) calibration targets.

Table 20. Group C spring targets.

Table 21. Miscellaneous USGS measurements at Box Canyon Springs.

Table 22. Model calibrated scalars used to adjust non-irrigated recharge.

Table 23. Starting, adjusted, and percent change for ET on sprinkler and gravity irrigated lands.

Table 24. Adjustments to seepage from non-Snake River sources.

Table 25. Adjustments to underflow from tributary basins.

Table 26. Adjustments to canal seepage.

Table 27. Calibrated Dpin and Dpex values.

Table 28. Adjustable parameter values impacting the soil moisture reservoir.

Table 29. List of ESPAM2 Design Documents.

Table 1. Managed recharge volumes for the eastern Snake Plain aquifer.

Year	Volume of Recharge (Acre-Feet)
1995	180,000
1996	169,000
1997	230,000
1998	201,000
1999	153,000
2000	70,000
2001	0
2002	0
2003	0
2004	0
2005	0
2006	37,160
2007	27,360
2008	6,065

Table 2. Start and end dates for the model stress periods.

Stress Period	Month-Year	Stress Period	Month-Year	Stress Period	Month-Year
SP001	May-80	SP040	Aug-83	SP079	Nov-86
SP002	Jun-80	SP041	Sep-83	SP080	Dec-86
SP003	Jul-80	SP042	Oct-83	SP081	Jan-87
SP004	Aug-80	SP043	Nov-83	SP082	Feb-87
SP005	Sep-80	SP044	Dec-83	SP083	Mar-87
SP006	Oct-80	SP045	Jan-84	SP084	Apr-87
SP007	Nov-80	SP046	Feb-84	SP085	May-87
SP008	Dec-80	SP047	Mar-84	SP086	Jun-87
SP009	Jan-81	SP048	Apr-84	SP087	Jul-87
SP010	Feb-81	SP049	May-84	SP088	Aug-87
SP011	Mar-81	SP050	Jun-84	SP089	Sep-87
SP012	Apr-81	SP051	Jul-84	SP090	Oct-87
SP013	May-81	SP052	Aug-84	SP091	Nov-87
SP014	Jun-81	SP053	Sep-84	SP092	Dec-87
SP015	Jul-81	SP054	Oct-84	SP093	Jan-88
SP016	Aug-81	SP055	Nov-84	SP094	Feb-88
SP017	Sep-81	SP056	Dec-84	SP095	Mar-88
SP018	Oct-81	SP057	Jan-85	SP096	Apr-88
SP019	Nov-81	SP058	Feb-85	SP097	May-88
SP020	Dec-81	SP059	Mar-85	SP098	Jun-88
SP021	Jan-82	SP060	Apr-85	SP099	Jul-88
SP022	Feb-82	SP061	May-85	SP100	Aug-88
SP023	Mar-82	SP062	Jun-85	SP101	Sep-88
SP024	Apr-82	SP063	Jul-85	SP102	Oct-88
SP025	May-82	SP064	Aug-85	SP103	Nov-88
SP026	Jun-82	SP065	Sep-85	SP104	Dec-88
SP027	Jul-82	SP066	Oct-85	SP105	Jan-89
SP028	Aug-82	SP067	Nov-85	SP106	Feb-89
SP029	Sep-82	SP068	Dec-85	SP107	Mar-89
SP030	Oct-82	SP069	Jan-86	SP108	Apr-89
SP031	Nov-82	SP070	Feb-86	SP109	May-89
SP032	Dec-82	SP071	Mar-86	SP110	Jun-89
SP033	Jan-83	SP072	Apr-86	SP111	Jul-89
SP034	Feb-83	SP073	May-86	SP112	Aug-89
SP035	Mar-83	SP074	Jun-86	SP113	Sep-89
SP036	Apr-83	SP075	Jul-86	SP114	Oct-89
SP037	May-83	SP076	Aug-86	SP115	Nov-89
SP038	Jun-83	SP077	Sep-86	SP116	Dec-89
SP039	Jul-83	SP078	Oct-86	SP117	Jan-90

Table 2. Start and end dates for the model stress periods. (continued)

Stress Period	Month-Year
SP118	Feb-90
SP119	Mar-90
SP120	Apr-90
SP121	May-90
SP122	Jun-90
SP123	Jul-90
SP124	Aug-90
SP125	Sep-90
SP126	Oct-90
SP127	Nov-90
SP128	Dec-90
SP129	Jan-91
SP130	Feb-91
SP131	Mar-91
SP132	Apr-91
SP133	May-91
SP134	Jun-91
SP135	Jul-91
SP136	Aug-91
SP137	Sep-91
SP138	Oct-91
SP139	Nov-91
SP140	Dec-91
SP141	Jan-92
SP142	Feb-92
SP143	Mar-92
SP144	Apr-92
SP145	May-92
SP146	Jun-92
SP147	Jul-92
SP148	Aug-92
SP149	Sep-92
SP150	Oct-92
SP151	Nov-92
SP152	Dec-92
SP153	Jan-93
SP154	Feb-93
SP155	Mar-93
SP156	Apr-93

Stress Period	Month-Year
SP157	May-93
SP158	Jun-93
SP159	Jul-93
SP160	Aug-93
SP161	Sep-93
SP162	Oct-93
SP163	Nov-93
SP164	Dec-93
SP165	Jan-94
SP166	Feb-94
SP167	Mar-94
SP168	Apr-94
SP169	May-94
SP170	Jun-94
SP171	Jul-94
SP172	Aug-94
SP173	Sep-94
SP174	Oct-94
SP175	Nov-94
SP176	Dec-94
SP177	Jan-95
SP178	Feb-95
SP179	Mar-95
SP180	Apr-95
SP181	May-95
SP182	Jun-95
SP183	Jul-95
SP184	Aug-95
SP185	Sep-95
SP186	Oct-95
SP187	Nov-95
SP188	Dec-95
SP189	Jan-96
SP190	Feb-96
SP191	Mar-96
SP192	Apr-96
SP193	May-96
SP194	Jun-96
SP195	Jul-96

Stress Period	Month-Year
SP196	Aug-96
SP197	Sep-96
SP198	Oct-96
SP199	Nov-96
SP200	Dec-96
SP201	Jan-97
SP202	Feb-97
SP203	Mar-97
SP204	Apr-97
SP205	May-97
SP206	Jun-97
SP207	Jul-97
SP208	Aug-97
SP209	Sep-97
SP210	Oct-97
SP211	Nov-97
SP212	Dec-97
SP213	Jan-98
SP214	Feb-98
SP215	Mar-98
SP216	Apr-98
SP217	May-98
SP218	Jun-98
SP219	Jul-98
SP220	Aug-98
SP221	Sep-98
SP222	Oct-98
SP223	Nov-98
SP224	Dec-98
SP225	Jan-99
SP226	Feb-99
SP227	Mar-99
SP228	Apr-99
SP229	May-99
SP230	Jun-99
SP231	Jul-99
SP232	Aug-99
SP233	Sep-99
SP234	Oct-99

Table 2. Start and end dates for the model stress periods. (continued)

Stress Period	Month-Year
SP235	Nov-99
SP236	Dec-99
SP237	Jan-00
SP238	Feb-00
SP239	Mar-00
SP240	Apr-00
SP241	May-00
SP242	Jun-00
SP243	Jul-00
SP244	Aug-00
SP245	Sep-00
SP246	Oct-00
SP247	Nov-00
SP248	Dec-00
SP249	Jan-01
SP250	Feb-01
SP251	Mar-01
SP252	Apr-01
SP253	May-01
SP254	Jun-01
SP255	Jul-01
SP256	Aug-01
SP257	Sep-01
SP258	Oct-01
SP259	Nov-01
SP260	Dec-01
SP261	Jan-02
SP262	Feb-02
SP263	Mar-02
SP264	Apr-02
SP265	May-02
SP266	Jun-02
SP267	Jul-02
SP268	Aug-02
SP269	Sep-02
SP270	Oct-02
SP271	Nov-02

Stress Period	Month-Year
SP272	Dec-02
SP273	Jan-03
SP274	Feb-03
SP275	Mar-03
SP276	Apr-03
SP277	May-03
SP278	Jun-03
SP279	Jul-03
SP280	Aug-03
SP281	Sep-03
SP282	Oct-03
SP283	Nov-03
SP284	Dec-03
SP285	Jan-04
SP286	Feb-04
SP287	Mar-04
SP288	Apr-04
SP289	May-04
SP290	Jun-04
SP291	Jul-04
SP292	Aug-04
SP293	Sep-04
SP294	Oct-04
SP295	Nov-04
SP296	Dec-04
SP297	Jan-05
SP298	Feb-05
SP299	Mar-05
SP300	Apr-05
SP301	May-05
SP302	Jun-05
SP303	Jul-05
SP304	Aug-05
SP305	Sep-05
SP306	Oct-05
SP308	Dec-05
SP307	Nov-05

Stress Period	Month-Year
SP309	Jan-06
SP310	Feb-06
SP311	Mar-06
SP312	Apr-06
SP313	May-06
SP314	Jun-06
SP315	Jul-06
SP316	Aug-06
SP317	Sep-06
SP318	Oct-06
SP319	Nov-06
SP320	Dec-06
SP321	Jan-07
SP322	Feb-07
SP323	Mar-07
SP324	Apr-07
SP325	May-07
SP326	Jun-07
SP327	Jul-07
SP328	Aug-07
SP329	Sep-07
SP330	Oct-07
SP331	Nov-07
SP332	Dec-07
SP333	Jan-08
SP334	Feb-08
SP335	Mar-08
SP336	Apr-08
SP337	May-08
SP338	Jun-08
SP339	Jul-08
SP340	Aug-08
SP341	Sep-08
SP342	Oct-08

Table 3. River cells.

Row	Column	River Bed Conductance (ft^2/day)	River Bottom Elevation (ft)	River Reach
52	200	68316.65	5020.45	Ashton-Rexburg
52	201	68316.65	5034.25	Ashton-Rexburg
53	197	68316.65	4977.65	Ashton-Rexburg
53	198	68316.65	4993.48	Ashton-Rexburg
53	199	68316.65	5005.63	Ashton-Rexburg
54	182	68316.65	4790.52	Ashton-Rexburg
54	183	68316.65	4792.48	Ashton-Rexburg
54	184	68316.65	4800.14	Ashton-Rexburg
54	185	68316.65	4803.99	Ashton-Rexburg
54	186	68316.65	4812.76	Ashton-Rexburg
54	187	68316.65	4823.79	Ashton-Rexburg
54	188	68316.65	4831.10	Ashton-Rexburg
54	189	68316.65	4842.16	Ashton-Rexburg
54	190	68316.65	4867.95	Ashton-Rexburg
54	191	68316.65	4880.70	Ashton-Rexburg
54	192	68316.65	4912.51	Ashton-Rexburg
54	193	68316.65	4928.95	Ashton-Rexburg
54	194	68316.65	4942.81	Ashton-Rexburg
54	195	68316.65	4954.97	Ashton-Rexburg
54	196	68316.65	4967.19	Ashton-Rexburg
55	180	68316.65	4781.67	Ashton-Rexburg
55	181	68316.65	4786.41	Ashton-Rexburg
56	178	68316.65	4777.38	Ashton-Rexburg
56	179	68316.65	4779.12	Ashton-Rexburg
56	168	160408.1	4730.46	Heise-Shelley
56	169	160408.1	4735.15	Heise-Shelley
56	170	160408.1	4739.28	Heise-Shelley
57	166	160408.1	4723.57	Heise-Shelley
57	167	160408.1	4726.23	Heise-Shelley
57	170	160408.1	4743.82	Heise-Shelley
57	177	160408.1	4775.62	Heise-Shelley
58	166	160408.1	4724.34	Heise-Shelley
58	167	160408.1	4724.80	Heise-Shelley
58	171	160408.1	4750.30	Heise-Shelley

Table 3. River cells. (continued)

Row	Column	River Bed Conductance (ft^2/day)	River Bottom Elevation (ft)	River Reach
58	174	160408.1	4766.88	Heise-Shelley
58	175	160408.1	4769.74	Heise-Shelley
58	176	160408.1	4772.55	Heise-Shelley
59	165	160408.1	4722.56	Heise-Shelley
59	166	160408.1	4724.40	Heise-Shelley
59	171	160408.1	4754.03	Heise-Shelley
59	174	160408.1	4774.50	Heise-Shelley
60	164	160408.1	4719.36	Heise-Shelley
60	172	160408.1	4757.04	Heise-Shelley
60	173	160408.1	4762.07	Heise-Shelley
60	174	160408.1	4778.50	Heise-Shelley
61	164	160408.1	4718.46	Heise-Shelley
61	175	160408.1	4797.00	Heise-Shelley
62	164	160408.1	4715.76	Heise-Shelley
62	175	160408.1	4804.50	Heise-Shelley
63	164	160408.1	4713.72	Heise-Shelley
63	175	160408.1	4811.50	Heise-Shelley
64	164	160408.1	4709.61	Heise-Shelley
64	176	160408.1	4832.50	Heise-Shelley
65	164	160408.1	4705.43	Heise-Shelley
65	176	160408.1	4840.50	Heise-Shelley
65	177	160408.1	4851.00	Heise-Shelley
66	163	160408.1	4700.60	Heise-Shelley
66	177	160408.1	4863.50	Heise-Shelley
67	163	160408.1	4699.08	Heise-Shelley
67	178	160408.1	4879.50	Heise-Shelley
68	163	160408.1	4697.22	Heise-Shelley
68	178	160408.1	4893.50	Heise-Shelley
69	162	160408.1	4682.79	Heise-Shelley
69	178	160408.1	4755.82	Heise-Shelley
70	161	160408.1	4669.82	Heise-Shelley
70	179	160408.1	4737.50	Heise-Shelley
71	161	160408.1	4664.52	Heise-Shelley
71	180	160408.1	4753.00	Heise-Shelley

Table 3. River cells. (continued)

Row	Column	River Bed Conductance (ft^2/day)	River Bottom Elevation (ft)	River Reach
72	161	160408.1	4654.02	Heise-Shelley
72	180	160408.1	4764.00	Heise-Shelley
73	160	160408.1	4641.10	Heise-Shelley
73	180	160408.1	4776.00	Heise-Shelley
74	157	160408.1	4612.60	Heise-Shelley
74	158	160408.1	4622.86	Heise-Shelley
74	159	160408.1	4630.04	Heise-Shelley
74	180	160408.1	4783.00	Heise-Shelley
74	181	160408.1	4785.00	Heise-Shelley
75	156	160408.1	4594.46	Heise-Shelley
75	181	160408.1	4785.00	Heise-Shelley
75	153	85735.32	4572.26	Shelley-nr Blackfoot
76	154	160408.1	4576.84	Heise-Shelley
76	155	160408.1	4583.20	Heise-Shelley
76	181	160408.1	4785.00	Heise-Shelley
76	152	85735.32	4561.11	Shelley-nr Blackfoot
77	151	85735.32	4548.08	Shelley-nr Blackfoot
77	152	85735.32	4556.51	Shelley-nr Blackfoot
78	150	85735.32	4532.01	Shelley-nr Blackfoot
79	149	85735.32	4526.38	Shelley-nr Blackfoot
80	147	85735.32	4510.25	Shelley-nr Blackfoot
80	148	85735.32	4517.62	Shelley-nr Blackfoot
81	139	85735.32	4453.90	Shelley-nr Blackfoot
81	140	85735.32	4461.96	Shelley-nr Blackfoot
81	141	85735.32	4472.78	Shelley-nr Blackfoot
81	142	85735.32	4478.88	Shelley-nr Blackfoot
81	143	85735.32	4484.18	Shelley-nr Blackfoot
81	144	85735.32	4491.21	Shelley-nr Blackfoot
81	145	85735.32	4497.10	Shelley-nr Blackfoot
81	146	85735.32	4503.68	Shelley-nr Blackfoot
82	116	28.0784	4315.00	American Falls Reservoir
82	115	28.0784	4315.00	American Falls Reservoir
82	128	85735.32	4383.03	Shelley-nr Blackfoot
82	129	85735.32	4388.80	Shelley-nr Blackfoot

Table 3. River cells. (continued)

Row	Column	River Bed Conductance (ft^2/day)	River Bottom Elevation (ft)	River Reach
82	130	85735.32	4396.07	Shelley-nr Blackfoot
82	131	85735.32	4400.34	Shelley-nr Blackfoot
82	132	85735.32	4407.11	Shelley-nr Blackfoot
82	133	85735.32	4412.20	Shelley-nr Blackfoot
82	134	85735.32	4419.38	Shelley-nr Blackfoot
82	135	85735.32	4425.76	Shelley-nr Blackfoot
82	136	85735.32	4433.43	Shelley-nr Blackfoot
82	137	85735.32	4438.74	Shelley-nr Blackfoot
82	138	85735.32	4447.49	Shelley-nr Blackfoot
83	115	28.0784	4314.81	American Falls Reservoir
83	116	28.0784	4315.00	American Falls Reservoir
83	126	108201700	4365.84	nr Blackfoot-Neeley
83	127	85735.32	4372.24	Shelley-nr Blackfoot
84	113	28.0784	4300.00	American Falls Reservoir
84	114	28.0784	4305.00	American Falls Reservoir
84	115	28.0784	4310.00	American Falls Reservoir
84	117	28.0784	4317.00	American Falls Reservoir
84	116	28.0784	4317.00	American Falls Reservoir
84	125	108201700	4354.98	nr Blackfoot-Neeley
84	126	108201700	4361.92	nr Blackfoot-Neeley
85	112	28.0784	4293.00	American Falls Reservoir
85	113	28.0784	4294.00	American Falls Reservoir
85	114	28.0784	4298.00	American Falls Reservoir
85	115	28.0784	4302.00	American Falls Reservoir
85	116	28.0784	4308.00	American Falls Reservoir
85	68	1625.975	4123.20	Neeley-Minidoka
85	69	1625.975	4125.00	Neeley-Minidoka
85	70	1625.975	4127.00	Neeley-Minidoka
85	122	108201700	4336.98	nr Blackfoot-Neeley
85	123	108201700	4342.12	nr Blackfoot-Neeley
85	124	108201700	4347.59	nr Blackfoot-Neeley
86	111	28.0784	4290.00	American Falls Reservoir
86	112	28.0784	4292.00	American Falls Reservoir
86	113	28.0784	4296.00	American Falls Reservoir

Table 3. River cells. (continued)

Row	Column	River Bed Conductance (ft^2/day)	River Bottom Elevation (ft)	River Reach
86	114	28.0784	4300.00	American Falls Reservoir
86	115	28.0784	4305.00	American Falls Reservoir
86	116	28.0784	4310.00	American Falls Reservoir
86	71	1625.975	4129.00	Neeley-Minidoka
86	72	1625.975	4130.00	Neeley-Minidoka
86	73	1625.975	4132.00	Neeley-Minidoka
86	117	108201700	4315.00	nr Blackfoot-Neeley
86	118	108201700	4320.66	nr Blackfoot-Neeley
86	119	108201700	4323.18	nr Blackfoot-Neeley
86	120	108201700	4325.32	nr Blackfoot-Neeley
86	121	108201700	4332.18	nr Blackfoot-Neeley
87	110	28.0784	4286.00	American Falls Reservoir
87	111	28.0784	4288.00	American Falls Reservoir
87	112	28.0784	4293.00	American Falls Reservoir
87	113	28.0784	4296.00	American Falls Reservoir
87	114	28.0784	4300.00	American Falls Reservoir
87	115	28.0784	4305.00	American Falls Reservoir
87	116	28.0784	4313.00	American Falls Reservoir
87	74	1625.975	4134.00	Neeley-Minidoka
88	109	28.0784	4280.00	American Falls Reservoir
88	110	28.0784	4282.00	American Falls Reservoir
88	107	28.0784	4285.00	American Falls Reservoir
88	111	28.0784	4290.00	American Falls Reservoir
88	112	28.0784	4292.00	American Falls Reservoir
88	113	28.0784	4296.00	American Falls Reservoir
88	114	28.0784	4300.00	American Falls Reservoir
88	115	28.0784	4305.00	American Falls Reservoir
88	116	28.0784	4313.00	American Falls Reservoir
88	117	28.0784	4316.00	American Falls Reservoir
88	74	1625.975	4136.00	Neeley-Minidoka
89	106	28.0784	4272.00	American Falls Reservoir
89	107	28.0784	4274.00	American Falls Reservoir
89	108	28.0784	4277.00	American Falls Reservoir
89	109	28.0784	4280.00	American Falls Reservoir

Table 3. River cells. (continued)

Row	Column	River Bed Conductance (ft^2/day)	River Bottom Elevation (ft)	River Reach
89	110	28.0784	4284.00	American Falls Reservoir
89	105	28.0784	4285.00	American Falls Reservoir
89	111	28.0784	4290.00	American Falls Reservoir
89	112	28.0784	4292.00	American Falls Reservoir
89	113	28.0784	4295.00	American Falls Reservoir
89	114	28.0784	4300.00	American Falls Reservoir
89	115	28.0784	4305.00	American Falls Reservoir
89	116	28.0784	4314.00	American Falls Reservoir
89	117	28.0784	4316.00	American Falls Reservoir
89	75	1625.975	4138.00	Neeley-Minidoka
90	104	28.0784	4266.00	American Falls Reservoir
90	105	28.0784	4268.00	American Falls Reservoir
90	106	28.0784	4272.00	American Falls Reservoir
90	107	28.0784	4274.00	American Falls Reservoir
90	108	28.0784	4278.00	American Falls Reservoir
90	109	28.0784	4280.00	American Falls Reservoir
90	110	28.0784	4284.00	American Falls Reservoir
90	111	28.0784	4290.00	American Falls Reservoir
90	114	28.0784	4300.00	American Falls Reservoir
90	115	28.0784	4305.00	American Falls Reservoir
90	117	28.0784	4314.00	American Falls Reservoir
90	118	28.0784	4314.00	American Falls Reservoir
90	116	28.0784	4314.00	American Falls Reservoir
90	103	28.0784	4316.00	American Falls Reservoir
90	75	1625.975	4138.09	Neeley-Minidoka
91	102	28.0784	4262.00	American Falls Reservoir
91	103	28.0784	4264.00	American Falls Reservoir
91	104	28.0784	4266.00	American Falls Reservoir
91	105	28.0784	4268.00	American Falls Reservoir
91	106	28.0784	4272.00	American Falls Reservoir
91	107	28.0784	4274.00	American Falls Reservoir
91	108	28.0784	4278.00	American Falls Reservoir
91	109	28.0784	4280.00	American Falls Reservoir
91	110	28.0784	4282.00	American Falls Reservoir

Table 3. River cells. (continued)

Row	Column	River Bed Conductance (ft^2/day)	River Bottom Elevation (ft)	River Reach
91	75	1625.975	4136.65	Neeley-Minidoka
92	102	28.0784	4262.00	American Falls Reservoir
92	103	28.0784	4264.00	American Falls Reservoir
92	104	28.0784	4266.00	American Falls Reservoir
92	109	28.0784	4280.00	American Falls Reservoir
92	75	1625.975	4135.82	Neeley-Minidoka
92	100	1625.975	4254.00	Neeley-Minidoka
92	101	1625.975	4258.00	Neeley-Minidoka
93	102	28.0784	4262.00	American Falls Reservoir
93	78	1625.975	4133.16	Neeley-Minidoka
93	76	1625.975	4134.87	Neeley-Minidoka
93	99	1625.975	4250.00	Neeley-Minidoka
93	100	1625.975	4254.00	Neeley-Minidoka
93	101	1625.975	4258.00	Neeley-Minidoka
94	77	1625.975	4132.94	Neeley-Minidoka
94	79	1625.975	4133.16	Neeley-Minidoka
94	80	1625.975	4133.49	Neeley-Minidoka
94	99	1625.975	4250.00	Neeley-Minidoka
95	81	1625.975	4134.13	Neeley-Minidoka
95	95	1625.975	4140.24	Neeley-Minidoka
95	96	1625.975	4147.47	Neeley-Minidoka
95	97	1625.975	4163.29	Neeley-Minidoka
95	98	1625.975	4188.00	Neeley-Minidoka
95	99	1625.975	4196.00	Neeley-Minidoka
96	90	1625.975	4133.79	Neeley-Minidoka
96	82	1625.975	4134.81	Neeley-Minidoka
96	93	1625.975	4135.54	Neeley-Minidoka
96	83	1625.975	4135.79	Neeley-Minidoka
96	94	1625.975	4137.93	Neeley-Minidoka
97	91	1625.975	4133.79	Neeley-Minidoka
97	92	1625.975	4135.33	Neeley-Minidoka
97	84	1625.975	4135.79	Neeley-Minidoka
97	85	1625.975	4136.22	Neeley-Minidoka
97	86	1625.975	4136.67	Neeley-Minidoka

Table 3. River cells. (continued)

Row	Column	River Bed Conductance (ft^2/day)	River Bottom Elevation (ft)	River Reach
97	87	1625.975	4137.15	Neeley-Minidoka
97	88	1625.975	4137.50	Neeley-Minidoka
97	89	1625.975	4137.54	Neeley-Minidoka

Table 4. Drain cells.

Row	Col	Drain Conductance (ft^2/day)	Drain Elevation (ft)	A&B Spring	Reach
25	6	8755.34	2530		LowerSalmonFalls-to-KingHill
30	13	309.34	2856		LowerSalmonFalls-to-KingHill
30	13	339.23	2883		LowerSalmonFalls-to-KingHill
31	13	1519.89	2700		LowerSalmonFalls-to-KingHill
31	13	180.70	2800		LowerSalmonFalls-to-KingHill
31	14	891.54	2750		LowerSalmonFalls-to-KingHill
31	14	1042.88	2993		LowerSalmonFalls-to-KingHill
32	13	307.34	2680		LowerSalmonFalls-to-KingHill
32	14	4619.97	2875		LowerSalmonFalls-to-KingHill
32	14	1774.90	2929		LowerSalmonFalls-to-KingHill
33	13	26.29	2700		LowerSalmonFalls-to-KingHill
33	14	2444.27	2825		LowerSalmonFalls-to-KingHill
33	14	8452.11	2880		LowerSalmonFalls-to-KingHill
34	14	4478.21	2700		LowerSalmonFalls-to-KingHill
34	14	25574.20	2975		LowerSalmonFalls-to-KingHill
35	14	423.95	2725		LowerSalmonFalls-to-KingHill
35	14	3442.60	2975		LowerSalmonFalls-to-KingHill
36	14	539.52	2730		LowerSalmonFalls-to-KingHill
36	14	3639.30	2975		LowerSalmonFalls-to-KingHill
36	15	97835.41	2860	Malad	LowerSalmonFalls-to-KingHill
36	15	38440.43	2990	Malad	LowerSalmonFalls-to-KingHill
36	16	15066348.00	3040	Malad	LowerSalmonFalls-to-KingHill
36	16	1.00	3090	Malad	LowerSalmonFalls-to-KingHill
37	14	1132.92	2950		Buhl-to- LowerSalmonFalls
37	14	1623.45	2975		Buhl-to- LowerSalmonFalls
37	15	1259.36	3010		Buhl-to- LowerSalmonFalls
38	14	15341.51	3055		Buhl-to- LowerSalmonFalls
38	14	1682.55	3121		Buhl-to- LowerSalmonFalls
39	14	102977.90	3088		Buhl-to- LowerSalmonFalls
39	14	19790.43	3120		Buhl-to- LowerSalmonFalls
40	13	1398.28	3110		Buhl-to- LowerSalmonFalls
40	13	120.39	3131		Buhl-to- LowerSalmonFalls
40	14	548.53	3115		Buhl-to- LowerSalmonFalls

Table 4. Drain cells. (continued)

Row	Col	Drain Conductance (ft^2/day)	Drain Elevation (ft)	A&B Spring	Reach
40	14	13572.02	3140		Buhl-to- LowerSalmonFalls
41	13	13886.21	3095	ThreeSp	Buhl-to- LowerSalmonFalls
41	13	232246.80	3136	ThreeSp	Buhl-to- LowerSalmonFalls
42	12	33531.50	2958		Buhl-to- LowerSalmonFalls
42	12	1219.83	3045		Buhl-to- LowerSalmonFalls
42	13	419036.20	3138	Rangen	Buhl-to- LowerSalmonFalls
43	12	75008.54	2961	NFH	Buhl-to- LowerSalmonFalls
43	12	476766.10	3100	NFH	Buhl-to- LowerSalmonFalls
44	12	920.37	2951	KSpgs	Buhl-to- LowerSalmonFalls
44	12	300000000.00	3075	KSpgs	Buhl-to- LowerSalmonFalls
45	11	70.22	3002		Buhl-to- LowerSalmonFalls
45	12	816.74	2885		Buhl-to- LowerSalmonFalls
45	12	1282.55	3010		Buhl-to- LowerSalmonFalls
46	12	4.05	3136	SndSpg	Buhl-to- LowerSalmonFalls
46	13	655834.30	3150	SndSpg	Buhl-to- LowerSalmonFalls
47	11	10848.44	3114		Buhl-to- LowerSalmonFalls
47	12	8846.26	2950	BoxCan	Buhl-to- LowerSalmonFalls
47	12	10447001.00	3130	BoxCan	Buhl-to- LowerSalmonFalls
47	13	12761.19	3060	BoxCan	Buhl-to- LowerSalmonFalls
48	11	257005.20	3105		Buhl-to- LowerSalmonFalls
49	11	85472.96	3035	Briggs	Buhl-to- LowerSalmonFalls
50	12	828.05	3030	ClrLk	Buhl-to- LowerSalmonFalls
50	12	68061178.00	3130	ClrLk	Buhl-to- LowerSalmonFalls
50	13	4551.97	3025	ClrLk	Buhl-to- LowerSalmonFalls
50	13	362620.50	3130	ClrLk	Buhl-to- LowerSalmonFalls
50	14	6.98	3028		Buhl-to- LowerSalmonFalls
50	14	3.07	3030		Buhl-to- LowerSalmonFalls
51	14	10.86	2995		Buhl-to- LowerSalmonFalls
51	14	25.54	3071		Buhl-to- LowerSalmonFalls
53	17	67.84	3050	Niagara	Kimberly-to-Buhl
53	17	742370.30	3180	Niagara	Kimberly-to-Buhl
54	18	69813.40	3040	Crystal	Kimberly-to-Buhl
54	18	40350231.00	3180	Crystal	Kimberly-to-Buhl
57	20	160.46	3079		Kimberly-to-Buhl
57	20	312.24	3117		Kimberly-to-Buhl

Table 4. Drain cells. (continued)

Row	Col	Drain Conductance (ft^2/day)	Drain Elevation (ft)	A&B Spring	Reach
58	20	132.83	3066		Kimberly-to-Buhl
58	20	4.38	3375		Kimberly-to-Buhl
58	21	418.36	3041		Kimberly-to-Buhl
58	21	472.50	3062		Kimberly-to-Buhl
59	21	6.60	3070		Kimberly-to-Buhl
59	22	24.87	3059		Kimberly-to-Buhl
59	22	143.26	3065		Kimberly-to-Buhl
61	23	3496.46	3141		Kimberly-to-Buhl
62	23	1319.73	3220		Kimberly-to-Buhl
62	24	1227184.00	3294	BlueLk	Kimberly-to-Buhl
64	26	661.65	3370		Kimberly-to-Buhl
64	26	2221.85	3400		Kimberly-to-Buhl
65	27	856.09	3509		Kimberly-to-Buhl
65	27	827.99	3581		Kimberly-to-Buhl
65	28	8577.80	3475	DevCoral	Kimberly-to-Buhl
65	28	11734.21	3556	DevCoral	Kimberly-to-Buhl
66	28	13027.65	3666	DevWash	Kimberly-to-Buhl
68	29	38.45	3604		Kimberly-to-Buhl
68	29	32.47	3612		Kimberly-to-Buhl
69	29	54.89	3580		Kimberly-to-Buhl
69	29	50.04	3601		Kimberly-to-Buhl
70	30	97.91	3609		Kimberly-to-Buhl

Table 5. General head boundary cells.

Row	Col	Elevation (ft)	Conductance (ft^2/day)	Reach
25	6	2522.66	9524.729	Lower Salmon Falls-King Hill
30	13	2650.94	9524.729	Lower Salmon Falls-King Hill
31	13	2650.94	9524.729	Lower Salmon Falls-King Hill
32	13	2650.94	9524.729	Lower Salmon Falls-King Hill
33	13	2650.94	9524.729	Lower Salmon Falls-King Hill
34	14	2650.94	9524.729	Lower Salmon Falls-King Hill
35	14	2650.94	9524.729	Lower Salmon Falls-King Hill
36	14	2650.94	9524.729	Lower Salmon Falls-King Hill
37	14	2808.29	7651.892	Buhl-Lower Salmon Falls
38	14	2808.36	7651.892	Buhl-Lower Salmon Falls
39	14	2808.36	7651.892	Buhl-Lower Salmon Falls
40	13	2808.36	7651.892	Buhl-Lower Salmon Falls
41	13	2808.36	7651.892	Buhl-Lower Salmon Falls
42	12	2877.35	7651.892	Buhl-Lower Salmon Falls
43	12	2877.35	95690.04	Magic
44	12	2877.42	95690.04	Thousand Springs
45	11	2877.42	7651.892	Buhl-Lower Salmon Falls
46	12	2877.75	21148.65	BluHrt
47	11	2877.42	7651.892	Buhl-Lower Salmon Falls
48	11	2877.75	7651.892	Buhl-Lower Salmon Falls
49	11	2880.54	7651.892	Buhl-Lower Salmon Falls
50	12	2912.66	7651.892	Buhl-Lower Salmon Falls
50	13	2922.17	7651.892	Buhl-Lower Salmon Falls
50	14	2937.49	7651.892	Buhl-Lower Salmon Falls
51	14	2937.49	7651.892	Buhl-Lower Salmon Falls
53	17	2973.91	2677.363	Kimberly-Buhl
54	18	2973.91	49152.48	Crystal
57	20	2982.57	2677.363	Kimberly-Buhl
58	20	2982.57	2677.363	Kimberly-Buhl
58	21	2982.7	2677.363	Kimberly-Buhl
59	21	2982.77	2677.363	Kimberly-Buhl
59	22	2982.77	2677.363	Kimberly-Buhl
61	23	3116.62	2677.363	Kimberly-Buhl
62	23	3122.6	2677.363	Kimberly-Buhl
62	24	3143.95	2677.363	Kimberly-Buhl
64	26	3143.95	2677.363	Kimberly-Buhl
65	27	3339.26	2677.363	Kimberly-Buhl

Table 5. General head boundary cells. (continued)

Row	Col	Elevation (ft)	Conductance (ft^2/day)	Reach
65	28	3365.41	2677.363	Kimberly-Buhl
66	28	3365.41	2677.363	Kimberly-Buhl
68	29	3535.82	2677.363	Kimberly-Buhl
69	29	3554.16	2677.363	Kimberly-Buhl
70	30	3598.91	2677.363	Kimberly-Buhl

Table 6. Reduction (RED) factors for non-irrigated lands by year.

Year	RED factor
1980	0.07
1986	0.05
1992	0.06
2000	0.06
2002	0
2006	0

Table 7. Irrigation entities.

Entity	Model Name	Description
IESW000	Null	(Represents surface-water irrigated lands that have not been mapped to other entities)
IESW001	A&B	A & B Irrigation District
IESW002	AbSpring	Aberdeen Springfield Canal Company
IESW005	BigLost	Big Lost River diversions
IESW008	BlaineCo	Blaine County Canal Company (Little Lost River; now in Butte County)
IESW009	Burgess	Burgess Canal and others, Rigby Fan
IESW010	Burley	Burley Irrigation District
IESW011	ButteMrk	Butte-Market Lake Canal, Roberts
IESW012	Canyon	Canyon Creek Canal, Newdale
IESW014	Blckfoot	Two canals in the Blackfoot area
IESW015	Dewey	Dewey Canal, St. Anthony
IESW016	Egin	Egin area near St. Anthony
IESW018	Falls	Falls Irrigation District, American Falls
IESW019	FortHall	Fort Hall
IESW020	Harrison	Harrison Canal and others, Rigby Fan area
IESW022	Idaho	Idaho Canal, east of Bonneville County
IESW025	LitlWood	Little Wood River above Richfield
IESW027	Milner	Milner Irrigation District
IESW028	Minidoka	Minidoka Irrigation District, Owsley Canal Company, Holley Water Users Association
IESW029	MudLake	Mud Lake Water Users and other diverters from Mud Lake
IESW030	NewSwedn	New Sweden Canal and canals in Osgood area
IESW032	NrthSide	North Side Canal Company
IESW034	Peoples	Watson Slough Ditch and Irrigation Companies, Peoples Canal and Irrigation Company, Parsons Ditch Company, Wearyrick Ditch Company, Trego Ditch Company, Danskin Ditch Company, New Lavaside Ditch Company Limited, Riverside Canal Company.
IESW035	Progress	Canals in the Progressive Irrigation District area (Ririe, Milo, Iona)
IESW036	Liberty	Canals in the Liberty area southwest of Rexburg
IESW037	Reno	Reno Ditch Company, Birch Creek, north of Monteview
IESW038	Rexburg	Canals near Rexburg
IESW039	Chester	Canals near Chester, north of St. Anthony
IESW040	Oakley	Oakley Canal Company
IESW044	Montview	Producers and Monteview Canal Co., Jefferson Irrigation District
IESW051	Dubois	Diversions from Camas Creek and Beaver Creek
IESW052	Small	Diversions from Medicine Lodge Creek

Table 7. Irrigation entities. (continued)

Entity	Model Name	Description
IESW053	Howe	Private rights (not in Blaine County Canal Company) from Little Lost
IESW055	Labelle	Rigby Fan area
IESW056	Sugrcity	Canals on the SE of the Henrys Fork, in the Sugar City area
IESW057	Blk_Chub	Canals in the Blackfoot-Chubbuck area
IESW058	AmFalls2	American Falls Reservoir District 2
IESW059	Good_Rch	Gooding-Richfield area, including Milner-Gooding water below IESW058 plus Big Wood and Little Wood water including releases from Magic Reservoir

Table 8. List of canals represented by entity.

Entity	Model Name	Common Name	Canal Name
IESW001	A&B	A&B	
IESW002	AB-S_hi	AbSpring_hi	Aberdeen Springfield Canal
IESW002	AB-S_hi	AbSpring_hi	Aberdeen Springfield Highline
IESW002	AB-S_lo	AbSpring_lo	Aberdeen Springfield Lowline
IESW002	Rvr_MoreLand	AbSpring_Rvr_MoreL	Aberdeen Springfield
IESW002	Rvr_MoreLand	AbSpring_Rvr_MoreL	Aberdeen Springfield
IESW002	Rvr_MoreLand	AbSpring_Rvr_MoreL	Aberdeen Springfield
IESW002	Rvr_MoreLand	AbSpring_Rvr_MoreL	Aberdeen Springfield
IESW002	Rvr_MoreLand	AbSpring_Rvr_MoreL	Aberdeen Springfield
IESW005	Big_Lost	BigLost	Burnett Ditch
IESW005	Big_Lost	BigLost	Roger Ditch
IESW005	Big_Lost	BigLost	Blaine Canal
IESW008	Blaine_Co	BlaineCo	Blaine County Canal (Howe)
IESW009	Burgess5	Burgess	
IESW010	Burley	Burley	South Side Canal
IESW010	Burley	Burley	Low Line Canal
IESW011	ButteMktLake	ButteMrk	Bell Larsen Canal
IESW011	ButteMktLake	ButteMrk	McCarthy Ditch
IESW012	Canyon_Cr	Canyon	Canyon Creek Canal
IESW014	Corbett_4	Blckfoot	
IESW015	Dewey	Dewey	
IESW016	Egin	Egin	
IESW018	Falls	Falls	
IESW019	Ft_Hall	FortHall	
IESW020	Harrison6	Harrison	Rudy canal
IESW020	Harrison6	Harrison	Anderson Canal
IESW022	Idaho	Idaho	Idaho Canal
IESW022	Idaho	Idaho	Butte Arm Canal
IESW025	Carey	LitlWood	
IESW027	Milner	Milner	
IESW028	Minidoka	Minidoka	Main Northside Canal
IESW028	Minidoka	Minidoka	South Side Canal
IESW029	Mud_Lake_Cnls	MudLake	
IESW030	NewSwed_Osgd	NewSwedn	Great Western Canal
IESW030	NewSwed_Osgd	NewSwedn	Osgood Canal
IESW032	NS_L_1	NrthSide_L_1	Nside Laterals ESPAM1.1
IESW032	NS_L_2	NrthSide_L_2	Lateral Canal X-1
IESW032	NS_L_2	NrthSide_L_2	W Canal

Table 8. List of canals represented by entity. (continued)

Entity	Model Name	Common Name	Canal Name
IESW032	NS_L_2	NrthSide_L_2	X Canal
IESW032	NS_Main	NrthSide_Main	North Side Main Canal
IESW032	Wilson	NrthSide_Wilson	Wilson Lake
IESW034	Peoples	Peoples	Peoples Canal
IESW035	Progressive	Progress	Idaho Canal
IESW035	Progressive	Progress	Hillside Canal
IESW035	Progressive	Progress	Anderson Canal
IESW036	Archer	Liberty	
IESW037	Reno	Reno	
IESW038	Rexburg	Rexburg	
IESW039	Silkey	Chester	
IESW040	Oakley	Oakley	Birch Creek
IESW040	Oakley	Oakley	Goose Creek
IESW044	Entity_44_cnls	Montview	Producers
IESW044	Entity_44_cnls	Montview	Monteview
IESW044	Entity_44_cnls	Montview	Jefferson Canal
IESW053	B33_Private	Howe	
IESW055	Lorenzo	Labelle	
IESW056	H_Fork_Cnls	Sugrcity	
IESW057	Blackfoot	Blk_Chub	Little Indian Canal
IESW057	Blackfoot	Blk_Chub	Main Canal
IESW058	MilnerG_2	AmFalls2	Milner Gooding (upper)
IESW059	Entity_59_Other	Good_Rch_MG	Milner Gooding Canal
IESW059	Entity_59_Other	Good_Rch_MG	Dietrich Main Canal
IESW059	Entity_59_Other	Good_Rch_Other_a	Gooding Main Canal
IESW059	Entity_59_Other	Good_Rch_Other_a	Milner Gooding Canal
IESW059	Entity_59_Upper	Good_Rch_Other_a	North Shoshone Canal
IESW059	Entity_59_Upper	Good_Rch_Other_a	Richfield Canal
IESW059	Entity_59_Upper	Good_Rch_Other_a	East Main Canal
IESW059	Entity_59_Upper	Good_Rch_Other_a	West Main Canal
IESW059	Entity_59_Other	Good_Rch_Other_a	X-Waste
IESW059	Entity_59_Other	Good_Rch_Other_b	Milner Gooding Canal
IESW059	Entity_59_Upper	Good_Rch_Other_b	North Shoshone Canal
IESW059	Entity_59_Other	Good_Rch_Other_b	Dietrich Main Canal
IESW059	Entity_59_Upper	Good_Rch_Other_b	East Main Canal
IESW059	Entity_59_Upper	Good_Rch_Other_b	West Main Canal
IESW059	Entity_59_Other	Good_Rch_Other_b	X-Waste

Table 9. Sprinkler percentages for irrigation entities.

Entity	May-80	May-82	May-87	May-92	May-97	Oct-00	Oct-08*
IEGW501	0.150	0.254	0.520	0.686	0.710	0.720	0.744
IEGW502	0.200	0.230	0.310	0.389	0.500	0.550	0.669
IEGW503	0.875	0.885	0.910	0.934	0.960	0.975	1.000
IEGW504	0.981	0.982	0.986	0.989	0.992	0.994	0.999
IEGW505	0.983	0.986	0.992	0.997	0.999	1.000	1.000
IEGW506	0.770	0.803	0.880	0.917	0.945	0.960	0.996
IEGW507	0.580	0.657	0.830	0.904	0.920	0.930	0.955
IEGW508	0.530	0.617	0.840	0.940	0.963	0.970	0.986
IEGW509	0.640	0.692	0.810	0.864	0.880	0.890	0.915
IEGW600	1.000	1.000	1.000	1.000	1.000	1.000	1.000
IESW000	0.333	0.373	0.499	0.555	0.610	0.634	0.695
IESW001	0.150	0.311	0.520	0.676	0.710	0.720	0.745
IESW002	0.825	0.847	0.900	0.919	0.930	0.936	0.952
IESW005	0.700	0.731	0.810	0.880	0.934	0.970	1.000
IESW008	0.540	0.570	0.650	0.729	0.800	0.840	0.937
IESW009	0.015	0.050	0.130	0.185	0.220	0.250	0.322
IESW010	0.010	0.150	0.600	0.733	0.850	0.910	1.000
IESW011	0.440	0.467	0.530	0.560	0.590	0.610	0.658
IESW012	0.867	0.870	0.875	0.879	0.897	0.897	0.909
IESW014	0.210	0.286	0.450	0.545	0.640	0.700	0.850
IESW015	0.000	0.000	0.010	0.015	0.025	0.030	0.041
IESW016	0.050	0.136	0.750	0.808	0.860	0.890	0.962
IESW018	1.000	1.000	1.000	1.000	1.000	1.000	1.000
IESW019	1.000	1.000	1.000	1.000	1.000	1.000	1.000
IESW020	0.050	0.082	0.190	0.226	0.260	0.280	0.328
IESW022	0.250	0.384	0.650	0.763	0.850	0.900	1.000
IESW025	0.210	0.318	0.600	0.700	0.800	0.860	1.000
IESW027	0.000	0.000	0.230	0.307	0.360	0.380	0.428
IESW028	0.130	0.219	0.550	0.714	0.800	0.840	0.937
IESW029	0.035	0.068	0.150	0.240	0.320	0.420	0.661
IESW030	0.290	0.387	0.680	0.828	0.923	0.966	1.000
IESW032	0.000	0.000	0.600	0.750	0.840	0.900	1.000
IESW034	0.540	0.582	0.690	0.741	0.800	0.830	0.902
IESW035	0.020	0.056	0.190	0.278	0.360	0.410	0.529
IESW036	0.020	0.049	0.120	0.149	0.180	0.195	0.231
IESW037	0.145	0.229	0.420	0.608	1.000	1.000	1.000
IESW038	0.251	0.286	0.251	0.216	0.251	0.251	0.251
IESW039	0.270	0.296	0.270	0.243	0.270	0.270	0.270
IESW040	0.400	0.528	0.800	0.921	1.000	1.000	1.000

*Final stress period sprinkler percentage based on linear interpolation.

Table 9. Sprinkler percentages for irrigation entities. (continued)

Entity	May-80	May-82	May-87	May-92	May-97	Oct-00	Oct-08*
IESW044	0.020	0.041	0.100	0.161	0.300	0.370	0.528
IESW051	0.000	0.000	0.000	0.000	0.040	0.070	0.142
IESW052	0.000	0.000	0.000	0.000	0.040	0.070	0.142
IESW053	0.530	0.560	0.610	0.630	0.645	0.660	0.696
IESW055	0.000	0.007	0.026	0.041	0.059	0.072	0.103
IESW056	0.451	0.468	0.507	0.536	0.571	0.584	0.619
IESW057	0.648	0.676	0.767	0.813	0.813	0.813	0.817
IESW058	0.147	0.165	0.215	0.239	0.263	0.276	0.309
IESW059	0.187	0.211	0.274	0.303	0.333	0.349	0.390

*Final stress period sprinkler percentage based on linear interpolation.

Table 10. Assignment of return flow sites to irrigation entities.

Group	Entity	Site No.	Assigned Return flows	Water Supply: Historic Diversions	Group Returns to:
1	IESW032	13152450	Irr. Ditch nr Bliss	13087000 T. F. Northside	Group 1 returns to Milner to Kimberly, Kimberly to Buhl, & Buhl to Lower Salmon Falls reaches.
		13152895	W. Dr. Nr Tuttle (to Malad)	13086510 'A' Lateral in Gooding	
		13133785	Drain Nr Bickel Srings	13086520 N. Side Cross-cut	
		13094050	J8 at Rivers Edge		
		13095490	Irr. Drain to Blind Canyon		
		13095360	S. Coulee(Ceder Draw)		
		13093150	Sonnickson drain		
		13091733	Jerome Golf drain		
2	IESW028	13085060	D-17 drain nr Heyburn	13080000 Minidoka Northside	Group 2 returns to Minidoka to Milner reach. Reach is not connected to ESPAM and reach gain is not used in ESPAM. Return flow data are used for calibration of return flow from IESW028.
		13085065	Main drain North nr Heyburn		
		13084707	B drain nr Heyburn		
		13084705	D-16 drain nr Heyburn		
		13082064	D-4 drain nr Rupert		
		13082062	D-5 drain nr Rupert		
		13082032	D-3 drain		
3	IESW010	13082060	F drain nr Declo	13080500 Minidoka South	Group 3 returns to Minidoka to Milner reach. Reach is not connected to ESPAM and reach gain is not used in ESPAM. Return flow data are used for calibration of return flow from IESW010.
		13082320	Marsh Creek nr Declo		
		13082330	Spring Creek nr Declo		
		13085070	G drain nr Burley		
		13085080	J drain nr Burley		
4	None	13089690	Irr drain nr Hansen	13087500 Twin Falls Southside Ca.	Group 4 returns to Milner to Kimberly, Kimberly to Buhl, & Buhl to Lower Salmon Falls reaches. Irrigated lands are outside of ESPAM boundary. Return flow data used in calculation of reach gains.
		13089695	Twin Falls Coulee		
		13090370	Fish Hatchery Waste 0		
		13090460	Perrine Coulee nr Twin Falls		
		13093190	Sucker Flat drain nr Filer (LSLQ)		
		13093550	Cedar Draw nr Filer		
		13093900	Waste I nr Buhl		
		13094700	Mud Creek nr Buhl		
		13095061	Fish Hatchery drain lower		
		13095060	Fish Hatchery drain upper		

Table 10. Assignment of return flow sites to irrigation entities. (continued)

Group	Entity	Site No.	Assigned Return flows	Water Supply: Historic Diversions	Group Returns to:
	Additional Group 4 sites:				
4 (continued)		13093000	Rock Creek at Poleline Rd.		
		13094725	Deep Creek		
		13108011	S2 Coulee		
		13108022	L10 power plant into Salmon Falls Creek		
			N coulee into Salmon Falls Creek		
5	IESW002	13069548	Sterling Waste	13061610 Aberdeen Springfield Ca.	Group 5 returns to Near Blackfoot to Neeley reach.
		13069565	Aberdeen Waste Drain		
		13076210	Tartar Waste		
7	IESW016	13050543	Independent Canal drain	13049725 St Anthony canal	Group 7 returns to Ashton to Rexburg reach.
				13049550 Last Chance	
				13050525 Egin Canal	
				13050530 St Anthony Union Fdr	
				13050535 Independant Canal	
8	IESW011	13057045	Butte Market Lake Canal	13057025 Butte Market Lake	Group 8 returns to Heise to Shelley reach.
9	IESW036	13056550	Texas Slough Canal nr Thornton	13038392 Sunnydell Ca	Group 9 returns to Heise to Shelley reach.
		13056650	Liberty Park Canal	13038426 Lenroot Ca	
		13056850	Bannock Jim Spring Slough	13038431 Reid Canal	
		13055337	Rexburg Canal drain nr Thornton**	13038435 Bannock Jim	
		13056600	Texas Slough nr Rexburg	13038436 Hill Pitinger	
				13038437 Nelson Cory	
		** Rexburg District Removed (no data from IPCO)		13038434 Texas Feeder	
10	IESW009	13056900	Scott's Slough	13038110 Burgess	Group 10 returns to Heise to Shelley reach.
	IESW020	13057020	Dry Bed	13038115 Clark & Edwards	
	IESW055	13057030	South Parks	13038180 Rigby Ca	
		13057100	Burgess drain nr Idaho Falls	13037975 Eagle Rock	
				13037977 Eagle Rock ab Will Cr	
				13037985 Enterprise	
				13038025 Butler Island	
`				13038030 Ross and Rand	
				13038050 Steele Ca.	
				13038055 Harrison Ca.	
				13038065 Cheny Ca	
				13038080 Butler Island #2	

Table 10. Assignment of return flow sites to irrigation entities. (continued)

Group	Entity	Site No.	Assigned Return flows	Water Supply: Historic Diversions	Group Returns to:
10 (continued)				13038095 Boomer Ca 13038098 Kite & Nord 13038145 Croft Pump 13038387 Nelson Ca 13038388 Mattson Creg 13038150 East Labelle 13038205 Dilts Ca 13038225 W. Labelle Long Is 13038340 White Ca 13038360 Bramwell 13038362 Ellis Ca 13038210 Island Ca	Group 10 returns to Heise to Shelley reach.

Table 11. Apportionment of Mud Lake fixed point pumping.

Fixed Point Pumping Well No.	Source Name	Percent of Source
F1	North Lake (E)	31% of North Lake
F2	North Lake (W)	69% of North Lake
F3	Buck Springs	75% of Independent Ditch
F4	Holley	37% of what remains from (well water total - the Independent Ditch - North Lake)
F5	Bybee	63% of what remains from (well water total - the Independent Ditch - North Lake)
F6	Jackett	25% of Independent Ditch

Table 12. Summary of fixed point extraction rates by stress period.

Stress Period	Teton/Snake River Exchange Wells (ac-ft)	Mud Lake Exchange Wells (ac-ft)	Wetlands Recharge/Discharge (ac-ft)	Urban Extraction (ac-ft)
SP001	0	-9131	473	-2375
SP002	-238	0	-38547	-7124
SP003	-3798	-9076	-52784	-11873
SP004	-3318	-12618	-42015	-11873
SP005	-68	-6048	-20096	-7124
SP006	0	-1982	-5461	-2375
SP007	0	0	2623	-2375
SP008	0	0	-61	-2375
SP009	0	0	1991	-2375
SP010	0	0	-731	-2375
SP011	0	0	866	-2375
SP012	0	0	-610	-2375
SP013	0	-5684	2994	-2375
SP014	-764	-6516	-23219	-7124
SP015	-6315	-14063	-54069	-11873
SP016	-3860	-15652	-56329	-11873
SP017	-1630	-11464	-27600	-7124
SP018	-881	-5302	1253	-2375
SP019	0	0	4514	-2375
SP020	0	0	7532	-2375
SP021	0	0	4631	-2375
SP022	0	0	830	-2375
SP023	0	0	2923	-2375
SP024	0	0	-2469	-2375
SP025	0	0	-1280	-2375
SP026	-57	-8296	-14566	-7124
SP027	-72	-11150	-38472	-11873
SP028	-1377	-13294	-47453	-11873
SP029	-37	-4107	-17777	-7124
SP030	0	-1466	1123	-2375
SP031	0	0	3190	-2375
SP032	0	0	6006	-2375
SP033	0	0	1283	-2375
SP034	0	0	3190	-2375
SP035	0	0	3365	-2375
SP036	0	0	-2577	-2375
SP037	0	-1114	-821	-2375

Table 12. Summary of fixed point extraction rates by stress period. (continued)

Stress Period	Teton/Snake River Exchange Wells (ac-ft)	Mud Lake Exchange Wells (ac-ft)	Wetlands Recharge/Discharge (ac-ft)	Urban Extraction (ac-ft)
SP038	-77	-6603	-14876	-7124
SP039	-177	-1208	-43816	-11873
SP040	-684	-2512	-42179	-11873
SP041	0	-1560	-13286	-7124
SP042	0	-4328	-1884	-2375
SP043	0	0	9012	-2375
SP044	0	0	10553	-2375
SP045	0	0	1886	-2375
SP046	0	0	4041	-2375
SP047	0	0	-688	-2375
SP048	0	0	1558	-2375
SP049	0	-2480	-2998	-2375
SP050	0	-1800	-13620	-7124
SP051	-47	-4502	-34779	-11873
SP052	-651	0	-41330	-11873
SP053	0	-1072	-19142	-7124
SP054	0	-2060	349	-2375
SP055	0	0	3273	-2375
SP056	0	0	1463	-2375
SP057	0	0	2316	-2375
SP058	0	0	1900	-2375
SP059	0	0	2040	-2375
SP060	0	-2547	-3287	-2375
SP061	0	-1304	-3522	-2375
SP062	0	-2460	-34868	-7124
SP063	-5228	-15230	-54578	-11873
SP064	-507	-8052	-40726	-11873
SP065	0	-2725	-8631	-7124
SP066	0	-2547	-1039	-2375
SP067	0	0	7501	-2375
SP068	0	0	2236	-2375
SP069	0	0	1252	-2375
SP070	0	0	6503	-2375
SP071	0	0	-435	-2375
SP072	0	-1970	1782	-2375
SP073	0	-2774	-853	-2375
SP074	0	-1990	-24741	-7124

Table 12. Summary of fixed point extraction rates by stress period. (continued)

Stress Period	Teton/Snake River Exchange Wells (ac-ft)	Mud Lake Exchange Wells (ac-ft)	Wetlands Recharge/Discharge (ac-ft)	Urban Extraction (ac-ft)
SP075	-871	-5964	-46170	-11873
SP076	-890	-9476	-50610	-11873
SP077	0	-5508	-17552	-7124
SP078	0	-2998	-3301	-2375
SP079	-825	0	1773	-2375
SP080	0	0	-12	-2375
SP081	0	0	1935	-2375
SP082	0	0	53	-2375
SP083	0	0	-78	-2375
SP084	0	0	-3077	-2375
SP085	0	-13568	-3817	-2375
SP086	-317	-8486	-44142	-7124
SP087	-1194	-9878	-43140	-11873
SP088	-682	-10800	-42852	-11873
SP089	-12	-10198	-21054	-7124
SP090	0	-4074	-5017	-2375
SP091	0	0	1805	-2375
SP092	0	0	2426	-2375
SP093	0	0	2043	-2375
SP094	0	0	-1353	-2375
SP095	0	0	-1328	-2375
SP096	0	0	-865	-2375
SP097	0	-10432	-3974	-2375
SP098	-143	-20000	-35440	-7124
SP099	-9163	-17754	-60856	-11873
SP100	-6586	-17986	-49608	-11873
SP101	-4882	-12016	-21046	-7124
SP102	-1803	-6674	-8935	-2375
SP103	0	0	9759	-2375
SP104	0	0	3747	-2375
SP105	0	0	1182	-2375
SP106	0	0	2904	-2375
SP107	0	0	3055	-2375
SP108	0	-11008	-3711	-2375
SP109	0	-13558	-7911	-2375
SP110	-181	-17366	-30966	-7124
SP111	-3442	-11116	-57517	-11873

Table 12. Summary of fixed point extraction rates by stress period. (continued)

Stress Period	Teton/Snake River Exchange Wells (ac-ft)	Mud Lake Exchange Wells (ac-ft)	Wetlands Recharge/Discharge (ac-ft)	Urban Extraction (ac-ft)
SP112	-3529	-16916	-42534	-11873
SP113	-242	-8897	-11658	-7124
SP114	0	-5684	-1943	-2375
SP115	0	0	1766	-2375
SP116	0	0	-1124	-2375
SP117	0	0	1757	-2375
SP118	0	0	-840	-2375
SP119	0	-6860	-572	-2375
SP120	0	-17034	-956	-2375
SP121	0	-19528	-3467	-2375
SP122	-349	-18062	-23437	-7124
SP123	-1969	-16632	-50631	-11873
SP124	-1036	-10664	-50092	-11873
SP125	-361	-9926	-39832	-7124
SP126	0	-5992	-4627	-2375
SP127	0	0	1426	-2375
SP128	0	0	2826	-2375
SP129	0	0	706	-2375
SP130	0	0	248	-2375
SP131	-2936	-12894	1777	-2375
SP132	-6174	-18042	774	-2375
SP133	-7280	-8016	5557	-2375
SP134	-6223	-17360	-16627	-7124
SP135	-4081	-14922	-55110	-11873
SP136	-868	-15012	-51437	-11873
SP137	-55	-12598	-27151	-7124
SP138	0	-5614	-4910	-2375
SP139	0	0	2708	-2375
SP140	0	0	-666	-2375
SP141	0	0	-298	-2375
SP142	0	0	119	-2375
SP143	0	-5658	-2162	-2375
SP144	-3105	-20154	-2689	-2375
SP145	-8364	-18950	-16581	-2375
SP146	-12054	-15798	-35632	-7124
SP147	-10153	-14640	-52793	-11873
SP148	-8499	-13872	-45248	-11873

Table 12. Summary of fixed point extraction rates by stress period. (continued)

Stress Period	Teton/Snake River Exchange Wells (ac-ft)	Mud Lake Exchange Wells (ac-ft)	Wetlands Recharge/Discharge (ac-ft)	Urban Extraction (ac-ft)
SP149	-4176	-12046	-9810	-7124
SP150	-3885	-7252	-4196	-2375
SP151	0	0	3584	-2375
SP152	0	0	5489	-2375
SP153	0	0	5768	-2375
SP154	0	0	4769	-2375
SP155	0	-2318	1237	-2375
SP156	0	-18646	595	-2375
SP157	0	-2250	1959	-2375
SP158	0	-538	-19965	-7124
SP159	-283	-14012	-41444	-11873
SP160	-717	-10348	-34229	-11873
SP161	0	-6520	-16574	-7124
SP162	0	-5672	-3033	-2375
SP163	0	0	172	-2375
SP164	0	0	1505	-2375
SP165	0	0	679	-2375
SP166	0	0	2118	-2375
SP167	0	-8814	-3632	-2375
SP168	0	-20468	-1113	-2375
SP169	0	-16706	-9361	-2375
SP170	-822	-16372	-45621	-7124
SP171	-8440	-15062	-58035	-11873
SP172	-3197	-14454	-51930	-11873
SP173	-3398	-13214	-27575	-7124
SP174	-3400	-3362	-5630	-2375
SP175	0	0	3277	-2375
SP176	0	0	4561	-2375
SP177	0	0	4752	-2375
SP178	0	0	-639	-2375
SP179	0	0	4472	-2375
SP180	0	0	1642	-2375
SP181	0	0	3613	-2375
SP182	-51	0	-12532	-7124
SP183	-157	0	-43436	-11873
SP184	-180	-5662	-46416	-11873
SP185	-59	-9136	-20289	-7124

Table 12. Summary of fixed point extraction rates by stress period. (continued)

Stress Period	Teton/Snake River Exchange Wells (ac-ft)	Mud Lake Exchange Wells (ac-ft)	Wetlands Recharge/Discharge (ac-ft)	Urban Extraction (ac-ft)
SP186	-5	-2598	-1355	-2375
SP187	0	0	1970	-2375
SP188	0	0	5205	-2375
SP189	0	0	4155	-2375
SP190	0	0	-252	-2375
SP191	0	-1827.2	-749	-2375
SP192	0	-7324.6	-1136	-2375
SP193	0	-10052	1434	-2375
SP194	-12	-13098	-19720	-7124
SP195	-279	-20224	-49766	-11873
SP196	-314	-16262	-52694	-11873
SP197	-73	-12956	-12286	-7124
SP198	0	-2866	-720	-2375
SP199	0	0	5380	-2375
SP200	0	0	9983	-2375
SP201	0	0	4524	-2375
SP202	0	0	-1037	-2375
SP203	0	-1827.2	-1303	-2375
SP204	0	-7324.6	-1166	-2375
SP205	0	0	-2069	-2375
SP206	0	-4906	-22712	-7124
SP207	-132	-20970	-46908	-11873
SP208	-205	-9068	-44558	-11873
SP209	-22	-7691.05	-26084	-7124
SP210	0	-3870.15	-2730	-2375
SP211	0	0	1296	-2375
SP212	0	0	2471	-2375
SP213	0	0	7195	-2375
SP214	0	0	3551	-2375
SP215	0	-1827.2	34	-2375
SP216	0	-7324.6	-1968	-2375
SP217	0	-1714	501	-2375
SP218	0	0	-8491	-7124
SP219	-109	0	-41872	-11873
SP220	-103	-15564	-51735	-11873
SP221	-70	-8712	-28826	-7124
SP222	0	-408	-2322	-2375

Table 12. Summary of fixed point extraction rates by stress period. (continued)

Stress Period	Teton/Snake River Exchange Wells (ac-ft)	Mud Lake Exchange Wells (ac-ft)	Wetlands Recharge/Discharge (ac-ft)	Urban Extraction (ac-ft)
SP223	0	0	4160	-2375
SP224	0	0	2040	-2375
SP225	0	0	6777	-2375
SP226	0	0	4701	-2375
SP227	0	0	-2163	-2375
SP228	0	-7324.6	1394	-2375
SP229	0	0	2151	-2375
SP230	0	0	-10661	-7124
SP231	-183	-8960	-48259	-11873
SP232	-145	-13820	-45967	-11873
SP233	-13	-2390	-26947	-7124
SP234	-3	-6208	-2612	-2375
SP235	0	0	-526	-2375
SP236	0	0	1289	-2375
SP237	0	0	4634	-2375
SP238	0	0	2708	-2375
SP239	0	-1827.2	-1881	-2375
SP240	0	-7324.6	-2194	-2375
SP241	0	-16398	-5015	-2375
SP242	-115	-22268	-31411	-7124
SP243	-6233	-20296	-53396	-11873
SP244	-744	-20040	-50581	-11873
SP245	-54	-2728	-22052	-7124
SP246	0	-316	1651	-2375
SP247	0	0	1658	-2375
SP248	0	0	984	-2375
SP249	0	0	2674	-2375
SP250	0	0	1073	-2375
SP251	0	-2500	-1462	-2375
SP252	-433	-19254	-2220	-2375
SP253	-7790	-22242	-7389	-2375
SP254	-12859	-22544	-35413	-7124
SP255	-12823	-17616	-52984	-11873
SP256	-8826	-17766	-55192	-11873
SP257	-5484	-5743	-24128	-7124
SP258	-3988	-2792	-1802	-2375
SP259	-189	0	3315	-2375

Table 12. Summary of fixed point extraction rates by stress period. (continued)

Stress Period	Teton/Snake River Exchange Wells (ac-ft)	Mud Lake Exchange Wells (ac-ft)	Wetlands Recharge/Discharge (ac-ft)	Urban Extraction (ac-ft)
SP260	0	0	5410	-2375
SP261	0	0	3108	-2375
SP262	0	0	-526	-2375
SP263	0	-5058	-97	-2375
SP264	0	-20232	-699	-2375
SP265	-3361	-19631	-2557	-2375
SP266	-8170	-19711	-25938	-7124
SP267	-12816	-17147	-55223	-11873
SP268	-10371	-15686	-49978	-11873
SP269	-4999	-4149	-25675	-7124
SP270	-4038	-265	-1297	-2375
SP271	-81	0	886	-2375
SP272	0	0	2639	-2375
SP273	0	0	492	-2375
SP274	0	0	1013	-2375
SP275	0	-5691.4	-1692	-2375
SP276	0	-22765.6	2166	-2375
SP277	-2352	-11689	-2595	-2375
SP278	-10114	-19839	-24877	-7124
SP279	-11696	-18083	-62044	-11873
SP280	-11304	-18944	-52300	-11873
SP281	-5751	-4981	-14817	-7124
SP282	-4161	-5086	-2457	-2375
SP283	-70	0	2144	-2375
SP284	0	0	5698	-2375
SP285	0	0	2515	-2375
SP286	0	0	4349	-2375
SP287	0	-5824.4	-3316	-2375
SP288	-1918	-23297.6	-1229	-2375
SP289	-4396	-19268	-1533	-2375
SP290	-9746	-17416	-14622	-7124
SP291	-12265	-15138	-46731	-11873
SP292	-8562	-7309	-43763	-11873
SP293	-4315	-6747	-10952	-7124
SP294	-3970	-914	653	-2375
SP295	0	0	-1177	-2375
SP296	0	0	2460	-2375

Table 12. Summary of fixed point extraction rates by stress period. (continued)

Stress Period	Teton/Snake River Exchange Wells (ac-ft)	Mud Lake Exchange Wells (ac-ft)	Wetlands Recharge/Discharge (ac-ft)	Urban Extraction (ac-ft)
SP297	0	0	2511	-2375
SP298	0	0	317	-2375
SP299	0	-4690	-9	-2375
SP300	-3129	-18760	-104	-2375
SP301	-5317	-2926	3436	-2375
SP302	-1135	-7213	-18956	-7124
SP303	-2530	-21997	-51835	-11873
SP304	-820	-18047	-48938	-11873
SP305	-111	-1945	-24433	-7124
SP306	0	-2529	1523	-2375
SP307	0	0	2776	-2375
SP308	0	0	6951	-2375
SP309	0	0	6280	-2375
SP310	0	0	157	-2375
SP311	0	-1518	2434	-2375
SP312	0	-6072	1447	-2375
SP313	0	0	-5399	-2375
SP314	-23	-7416	-32682	-7124
SP315	-1736	-19910	-60319	-11873
SP316	-886	-20061	-51713	-11873
SP317	-151	-6018	-14879	-7124
SP318	-57	0	-845	-2375
SP319	0	0	1399	-2375
SP320	0	0	4963	-2375
SP321	0	0	-107	-2375
SP322	0	0	1266	-2375
SP323	0	-5006.4	-2580	-2375
SP324	0	-20025.6	-596	-2375
SP325	-1067	-20784	-8125	-2375
SP326	-11670	-21697	-38088	-7124
SP327	-15493	-20056	-59330	-11873
SP328	-9749	-8672	-49397	-11873
SP329	-7444	-5249	-25999	-7124
SP330	-5157	-788	-1540	-2375
SP331	0	0	99	-2375
SP332	0	0	4308	-2375
SP333	0	0	2299	-2375

Table 12. Summary of fixed point extraction rates by stress period. (continued)

Stress Period	Teton/Snake River Exchange Wells (ac-ft)	Mud Lake Exchange Wells (ac-ft)	Wetlands Recharge/Discharge (ac-ft)	Urban Extraction (ac-ft)
SP334	0	0	1514	-2375
SP335	0	-2570	-436	-2375
SP336	0	-10280	-2824	-2375
SP337	-976	-16705	-1311	-2375
SP338	-11443	-20101	-25857	-7124
SP339	-15403	-21668	-52459	-11873
SP340	-9954	-15705	-52428	-11873
SP341	-7357	-974	-27494	-7124
SP342	-5121	-3028	-4015	-2375

Table 13. Offsite pumping for each model stress period.

Stress Period	Well 1 (ac-ft)	Well 2 (ac-ft)	Well 3 (ac-ft)	Well 4 (ac-ft)	Well 5 (ac-ft)	Well 6 (ac-ft)	Well 7 (ac-ft)	Well 8 (ac-ft)	Well 9 (ac-ft)	Total (ac-ft)
SP001	-3099	-3099	-3099	-1536	-1536	-1536	-1424	-1424	0	-16752
SP002	-4177	-4177	-4177	-2070	-2070	-2070	-1919	-1919	0	-22578
SP003	-5283	-5283	-5283	-2618	-2618	-2618	-2427	-2427	0	-28558
SP004	-3688	-3688	-3688	-1827	-1827	-1827	-1694	-1694	0	-19933
SP005	-1433	-1433	-1433	-710	-710	-710	-658	-658	0	-7743
SP006	-553	-553	-553	-274	-274	-274	-254	-254	0	-2990
SP007	0	0	0	0	0	0	0	0	0	0
SP008	0	0	0	0	0	0	0	0	0	0
SP009	0	0	0	0	0	0	0	0	0	0
SP010	0	0	0	0	0	0	0	0	0	0
SP011	0	0	0	0	0	0	0	0	0	0
SP012	-915	-915	-915	-453	-453	-453	-420	-420	0	-4945
SP013	-2922	-2922	-2922	-1448	-1448	-1448	-1342	-1342	0	-15793
SP014	-4184	-4184	-4184	-2073	-2073	-2073	-1922	-1922	0	-22617
SP015	-5581	-5581	-5581	-2765	-2765	-2765	-2564	-2564	0	-30168
SP016	-3872	-3872	-3872	-1919	-1919	-1919	-1779	-1779	0	-20930
SP017	-1000	-1000	-1000	-495	-495	-495	-459	-459	0	-5405
SP018	-553	-553	-553	-274	-274	-274	-254	-254	0	-2990
SP019	0	0	0	0	0	0	0	0	0	0
SP020	0	0	0	0	0	0	0	0	0	0
SP021	0	0	0	0	0	0	0	0	0	0
SP022	0	0	0	0	0	0	0	0	0	0
SP023	0	0	0	0	0	0	0	0	0	0
SP024	-567	-567	-567	-281	-281	-281	-261	-261	0	-3067
SP025	-2014	-2014	-2014	-998	-998	-998	-925	-925	0	-10887
SP026	-3730	-3730	-3730	-1848	-1848	-1848	-1714	-1714	0	-20163
SP027	-4532	-4532	-4532	-2245	-2245	-2245	-2082	-2082	0	-24495
SP028	-4581	-4581	-4581	-2270	-2270	-2270	-2105	-2105	0	-24763
SP029	-1908	-1908	-1908	-945	-945	-945	-876	-876	0	-10312
SP030	-546	-546	-546	-271	-271	-271	-251	-251	0	-2952
SP031	0	0	0	0	0	0	0	0	0	0
SP032	0	0	0	0	0	0	0	0	0	0
SP033	0	0	0	0	0	0	0	0	0	0
SP034	0	0	0	0	0	0	0	0	0	0
SP035	0	0	0	0	0	0	0	0	0	0
SP036	-589	-589	-589	-292	-292	-292	-270	-270	0	-3182
SP037	-2276	-2276	-2276	-1128	-1128	-1128	-1046	-1046	0	-12305
SP038	-3716	-3716	-3716	-1841	-1841	-1841	-1707	-1707	0	-20087

Table 13. Offsite pumping for each model stress period. (continued)

Stress Period	Well 1 (ac-ft)	Well 2 (ac-ft)	Well 3 (ac-ft)	Well 4 (ac-ft)	Well 5 (ac-ft)	Well 6 (ac-ft)	Well 7 (ac-ft)	Well 8 (ac-ft)	Well 9 (ac-ft)	Total (ac-ft)
SP039	-4893	-4893	-4893	-2425	-2425	-2425	-2248	-2248	0	-26450
SP040	-4305	-4305	-4305	-2133	-2133	-2133	-1978	-1978	0	-23268
SP041	-1702	-1702	-1702	-843	-843	-843	-782	-782	0	-9200
SP042	-879	-879	-879	-436	-436	-436	-404	-404	0	-4753
SP043	0	0	0	0	0	0	0	0	0	0
SP044	0	0	0	0	0	0	0	0	0	0
SP045	0	0	0	0	0	0	0	0	0	0
SP046	0	0	0	0	0	0	0	0	0	0
SP047	0	0	0	0	0	0	0	0	0	0
SP048	-922	-922	-922	-457	-457	-457	-424	-424	0	-4983
SP049	-1624	-1624	-1624	-805	-805	-805	-746	-746	0	-8778
SP050	-3631	-3631	-3631	-1799	-1799	-1799	-1668	-1668	0	-19627
SP051	-4759	-4759	-4759	-2358	-2358	-2358	-2186	-2186	0	-25722
SP052	-4234	-4234	-4234	-2098	-2098	-2098	-1945	-1945	0	-22885
SP053	-1433	-1433	-1433	-710	-710	-710	-658	-658	0	-7743
SP054	-355	-355	-355	-176	-176	-176	-163	-163	0	-1917
SP055	0	0	0	0	0	0	0	0	0	0
SP056	0	0	0	0	0	0	0	0	0	0
SP057	0	0	0	0	0	0	0	0	0	0
SP058	0	0	0	0	0	0	0	0	0	0
SP059	0	0	0	0	0	0	0	0	0	0
SP060	-199	-199	-199	-98	-98	-98	-91	-91	0	-1073
SP061	-2049	-2049	-2049	-1016	-1016	-1016	-942	-942	0	-11078
SP062	-4390	-4390	-4390	-2175	-2175	-2175	-2017	-2017	0	-23728
SP063	-5297	-5297	-5297	-2625	-2625	-2625	-2434	-2434	0	-28635
SP064	-3588	-3588	-3588	-1778	-1778	-1778	-1649	-1649	0	-19397
SP065	-1383	-1383	-1383	-685	-685	-685	-635	-635	0	-7475
SP066	-191	-191	-191	-95	-95	-95	-88	-88	-738	-1773
SP067	0	0	0	0	0	0	0	0	0	0
SP068	0	0	0	0	0	0	0	0	0	0
SP069	0	0	0	0	0	0	0	0	0	0
SP070	0	0	0	0	0	0	0	0	0	0
SP071	0	0	0	0	0	0	0	0	0	0
SP072	-1603	-1603	-1603	-794	-794	-794	-736	-736	0	-8663
SP073	-2830	-2830	-2830	-1402	-1402	-1402	-1300	-1300	0	-15295
SP074	-4666	-4666	-4666	-2312	-2312	-2312	-2144	-2144	0	-25223
SP075	-5170	-5170	-5170	-2562	-2562	-2562	-2375	-2375	0	-27945
SP076	-4262	-4262	-4262	-2112	-2112	-2112	-1958	-1958	0	-23038

Table 13. Offsite pumping for each model stress period. (continued)

Stress Period	Well 1 (ac-ft)	Well 2 (ac-ft)	Well 3 (ac-ft)	Well 4 (ac-ft)	Well 5 (ac-ft)	Well 6 (ac-ft)	Well 7 (ac-ft)	Well 8 (ac-ft)	Well 9 (ac-ft)	Total (ac-ft)
SP077	-1503	-1503	-1503	-745	-745	-745	-691	-691	0	-8127
SP078	-184	-184	-184	-91	-91	-91	-85	-85	0	-997
SP079	0	0	0	0	0	0	0	0	0	0
SP080	0	0	0	0	0	0	0	0	0	0
SP081	0	0	0	0	0	0	0	0	0	0
SP082	0	0	0	0	0	0	0	0	0	0
SP083	0	0	0	0	0	0	0	0	0	0
SP084	-418	-418	-418	-207	-207	-207	-192	-192	0	-2262
SP085	-3057	-3057	-3057	-1514	-1514	-1514	-1404	-1404	0	-16522
SP086	-4524	-4524	-4524	-2242	-2242	-2242	-2079	-2079	0	-24457
SP087	-4900	-4900	-4900	-2428	-2428	-2428	-2252	-2252	0	-26488
SP088	-3695	-3695	-3695	-1831	-1831	-1831	-1698	-1698	0	-19972
SP089	-1312	-1312	-1312	-650	-650	-650	-603	-603	0	-7092
SP090	-390	-390	-390	-193	-193	-193	-179	-179	0	-2108
SP091	0	0	0	0	0	0	0	0	0	0
SP092	0	0	0	0	0	0	0	0	0	0
SP093	0	0	0	0	0	0	0	0	0	0
SP094	0	0	0	0	0	0	0	0	0	0
SP095	0	0	0	0	0	0	0	0	0	0
SP096	-1050	-1050	-1050	-520	-520	-520	-482	-482	0	-5673
SP097	-2957	-2957	-2957	-1465	-1465	-1465	-1359	-1359	0	-15985
SP098	-5007	-5007	-5007	-2481	-2481	-2481	-2300	-2300	0	-27063
SP099	-5517	-5517	-5517	-2734	-2734	-2734	-2535	-2535	0	-29823
SP100	-2971	-2971	-2971	-1472	-1472	-1472	-1365	-1365	0	-16062
SP101	-1177	-1177	-1177	-583	-583	-583	-541	-541	0	-6363
SP102	-972	-972	-972	-481	-481	-481	-446	-446	0	-5252
SP103	0	0	0	0	0	0	0	0	0	0
SP104	0	0	0	0	0	0	0	0	0	0
SP105	0	0	0	0	0	0	0	0	0	0
SP106	0	0	0	0	0	0	0	0	0	0
SP107	0	0	0	0	0	0	0	0	0	0
SP108	-546	-546	-546	-271	-271	-271	-251	-251	0	-2952
SP109	-2702	-2702	-2702	-1339	-1339	-1339	-1241	-1241	0	-14605
SP110	-4482	-4482	-4482	-2221	-2221	-2221	-2059	-2059	0	-24227
SP111	-5581	-5581	-5581	-2765	-2765	-2765	-2564	-2564	0	-30168
SP112	-3227	-3227	-3227	-1599	-1599	-1599	-1483	-1483	0	-17442
SP113	-1092	-1092	-1092	-541	-541	-541	-502	-502	0	-5903
SP114	-773	-773	-773	-383	-383	-383	-355	-355	0	-4178

Table 13. Offsite pumping for each model stress period. (continued)

Stress Period	Well 1 (ac-ft)	Well 2 (ac-ft)	Well 3 (ac-ft)	Well 4 (ac-ft)	Well 5 (ac-ft)	Well 6 (ac-ft)	Well 7 (ac-ft)	Well 8 (ac-ft)	Well 9 (ac-ft)	Total (ac-ft)
SP115	0	0	0	0	0	0	0	0	0	0
SP116	0	0	0	0	0	0	0	0	0	0
SP117	0	0	0	0	0	0	0	0	0	0
SP118	0	0	0	0	0	0	0	0	0	0
SP119	0	0	0	0	0	0	0	0	0	0
SP120	-1099	-1099	-1099	-545	-545	-545	-505	-505	0	-5942
SP121	-2950	-2950	-2950	-1462	-1462	-1462	-1355	-1355	0	-15947
SP122	-4617	-4617	-4617	-2288	-2288	-2288	-2121	-2121	0	-24955
SP123	-5439	-5439	-5439	-2695	-2695	-2695	-2499	-2499	0	-29402
SP124	-3397	-3397	-3397	-1683	-1683	-1683	-1561	-1561	0	-18362
SP125	-1759	-1759	-1759	-871	-871	-871	-808	-808	0	-9507
SP126	-475	-475	-475	-235	-235	-235	-218	-218	0	-2568
SP127	0	0	0	0	0	0	0	0	0	0
SP128	0	0	0	0	0	0	0	0	0	0
SP129	0	0	0	0	0	0	0	0	0	0
SP130	0	0	0	0	0	0	0	0	0	0
SP131	0	0	0	0	0	0	0	0	0	0
SP132	-738	-738	-738	-365	-365	-365	-339	-339	0	-3987
SP133	-2603	-2603	-2603	-1290	-1290	-1290	-1196	-1196	0	-14068
SP134	-4113	-4113	-4113	-2038	-2038	-2038	-1890	-1890	0	-22233
SP135	-5290	-5290	-5290	-2621	-2621	-2621	-2431	-2431	0	-28597
SP136	-4383	-4383	-4383	-2172	-2172	-2172	-2014	-2014	0	-23690
SP137	-1475	-1475	-1475	-731	-731	-731	-678	-678	0	-7973
SP138	-383	-383	-383	-190	-190	-190	-176	-176	0	-2070
SP139	0	0	0	0	0	0	0	0	0	0
SP140	0	0	0	0	0	0	0	0	0	0
SP141	0	0	0	0	0	0	0	0	0	0
SP142	0	0	0	0	0	0	0	0	0	0
SP143	0	0	0	0	0	0	0	0	0	0
SP144	-1234	-1234	-1234	-611	-611	-611	-567	-567	0	-6670
SP145	-4049	-4049	-4049	-2006	-2006	-2006	-1861	-1861	0	-21888
SP146	-4688	-4688	-4688	-2323	-2323	-2323	-2154	-2154	0	-25338
SP147	-5191	-5191	-5191	-2572	-2572	-2572	-2385	-2385	0	-28060
SP148	-2737	-2737	-2737	-1356	-1356	-1356	-1258	-1258	0	-14797
SP149	-291	-291	-291	-144	-144	-144	-134	-134	0	-1572
SP150	-99	-99	-99	-49	-49	-49	-46	-46	-738	-1275
SP151	0	0	0	0	0	0	0	0	0	0
SP152	0	0	0	0	0	0	0	0	0	0

Table 13. Offsite pumping for each model stress period. (continued)

Stress Period	Well 1 (ac-ft)	Well 2 (ac-ft)	Well 3 (ac-ft)	Well 4 (ac-ft)	Well 5 (ac-ft)	Well 6 (ac-ft)	Well 7 (ac-ft)	Well 8 (ac-ft)	Well 9 (ac-ft)	Total (ac-ft)
SP153	0	0	0	0	0	0	0	0	0	0
SP154	0	0	0	0	0	0	0	0	0	0
SP155	0	0	0	0	0	0	0	0	0	0
SP156	-830	-830	-830	-411	-411	-411	-381	-381	0	-4485
SP157	-2305	-2305	-2305	-1142	-1142	-1142	-1059	-1059	0	-12458
SP158	-3801	-3801	-3801	-1883	-1883	-1883	-1746	-1746	0	-20547
SP159	-4064	-4064	-4064	-2013	-2013	-2013	-1867	-1867	0	-21965
SP160	-4000	-4000	-4000	-1982	-1982	-1982	-1838	-1838	0	-21620
SP161	-1553	-1553	-1553	-770	-770	-770	-714	-714	0	-8395
SP162	-525	-525	-525	-260	-260	-260	-241	-241	0	-2837
SP163	0	0	0	0	0	0	0	0	0	0
SP164	0	0	0	0	0	0	0	0	0	0
SP165	0	0	0	0	0	0	0	0	0	0
SP166	0	0	0	0	0	0	0	0	0	0
SP167	0	0	0	0	0	0	0	0	0	0
SP168	-745	-745	-745	-369	-369	-369	-342	-342	0	-4025
SP169	-3177	-3177	-3177	-1574	-1574	-1574	-1460	-1460	0	-17173
SP170	-4602	-4602	-4602	-2281	-2281	-2281	-2115	-2115	0	-24878
SP171	-5475	-5475	-5475	-2713	-2713	-2713	-2515	-2515	0	-29593
SP172	-3447	-3447	-3447	-1708	-1708	-1708	-1584	-1584	0	-18630
SP173	-1532	-1532	-1532	-759	-759	-759	-704	-704	0	-8280
SP174	-1035	-1035	-1035	-513	-513	-513	-476	-476	0	-5597
SP175	0	0	0	0	0	0	0	0	0	0
SP176	0	0	0	0	0	0	0	0	0	0
SP177	0	0	0	0	0	0	0	0	0	0
SP178	0	0	0	0	0	0	0	0	0	0
SP179	0	0	0	0	0	0	0	0	0	0
SP180	-681	-681	-681	-337	-337	-337	-313	-313	0	-3680
SP181	-2801	-2801	-2801	-1388	-1388	-1388	-1287	-1287	0	-15142
SP182	-3830	-3830	-3830	-1898	-1898	-1898	-1760	-1760	0	-20700
SP183	-4404	-4404	-4404	-2182	-2182	-2182	-2023	-2023	0	-23805
SP184	-3964	-3964	-3964	-1964	-1964	-1964	-1821	-1821	0	-21428
SP185	-1298	-1298	-1298	-643	-643	-643	-596	-596	0	-7015
SP186	-397	-397	-397	-197	-197	-197	-182	-182	0	-2147
SP187	0	0	0	0	0	0	0	0	0	0
SP188	0	0	0	0	0	0	0	0	0	0
SP189	0	0	0	0	0	0	0	0	0	0
SP190	0	0	0	0	0	0	0	0	0	0

Table 13. Offsite pumping for each model stress period. (continued)

Stress Period	Well 1 (ac-ft)	Well 2 (ac-ft)	Well 3 (ac-ft)	Well 4 (ac-ft)	Well 5 (ac-ft)	Well 6 (ac-ft)	Well 7 (ac-ft)	Well 8 (ac-ft)	Well 9 (ac-ft)	Total (ac-ft)
SP191	0	0	0	0	0	0	0	0	0	0
SP192	-915	-915	-915	-453	-453	-453	-420	-420	0	-4945
SP193	-2291	-2291	-2291	-1135	-1135	-1135	-1052	-1052	0	-12382
SP194	-4361	-4361	-4361	-2161	-2161	-2161	-2004	-2004	0	-23575
SP195	-4915	-4915	-4915	-2435	-2435	-2435	-2258	-2258	0	-26565
SP196	-3730	-3730	-3730	-1848	-1848	-1848	-1714	-1714	0	-20163
SP197	-1397	-1397	-1397	-692	-692	-692	-642	-642	0	-7552
SP198	-610	-610	-610	-302	-302	-302	-280	-280	0	-3297
SP199	0	0	0	0	0	0	0	0	0	0
SP200	0	0	0	0	0	0	0	0	0	0
SP201	0	0	0	0	0	0	0	0	0	0
SP202	0	0	0	0	0	0	0	0	0	0
SP203	0	0	0	0	0	0	0	0	0	0
SP204	-496	-496	-496	-246	-246	-246	-228	-228	0	-2683
SP205	-2170	-2170	-2170	-1075	-1075	-1075	-997	-997	0	-11730
SP206	-3787	-3787	-3787	-1876	-1876	-1876	-1740	-1740	0	-20470
SP207	-4560	-4560	-4560	-2259	-2259	-2259	-2095	-2095	0	-24648
SP208	-3844	-3844	-3844	-1905	-1905	-1905	-1766	-1766	0	-20777
SP209	-1759	-1759	-1759	-871	-871	-871	-808	-808	0	-9507
SP210	-688	-688	-688	-341	-341	-341	-316	-316	0	-3718
SP211	0	0	0	0	0	0	0	0	0	0
SP212	0	0	0	0	0	0	0	0	0	0
SP213	0	0	0	0	0	0	0	0	0	0
SP214	0	0	0	0	0	0	0	0	0	0
SP215	0	0	0	0	0	0	0	0	0	0
SP216	-355	-355	-355	-176	-176	-176	-163	-163	0	-1917
SP217	-2631	-2631	-2631	-1304	-1304	-1304	-1209	-1209	0	-14222
SP218	-3347	-3347	-3347	-1659	-1659	-1659	-1538	-1538	0	-18093
SP219	-4744	-4744	-4744	-2351	-2351	-2351	-2180	-2180	0	-25645
SP220	-3936	-3936	-3936	-1950	-1950	-1950	-1808	-1808	0	-21275
SP221	-1830	-1830	-1830	-907	-907	-907	-841	-841	0	-9890
SP222	-582	-582	-582	-288	-288	-288	-267	-267	0	-3143
SP223	0	0	0	0	0	0	0	0	0	0
SP224	0	0	0	0	0	0	0	0	0	0
SP225	0	0	0	0	0	0	0	0	0	0
SP226	0	0	0	0	0	0	0	0	0	0
SP227	0	0	0	0	0	0	0	0	0	0
SP228	-886	-886	-886	-439	-439	-439	-407	-407	0	-4792

Table 13. Offsite pumping for each model stress period. (continued)

Stress Period	Well 1 (ac-ft)	Well 2 (ac-ft)	Well 3 (ac-ft)	Well 4 (ac-ft)	Well 5 (ac-ft)	Well 6 (ac-ft)	Well 7 (ac-ft)	Well 8 (ac-ft)	Well 9 (ac-ft)	Total (ac-ft)
SP229	-2659	-2659	-2659	-1318	-1318	-1318	-1222	-1222	0	-14375
SP230	-3787	-3787	-3787	-1876	-1876	-1876	-1740	-1740	0	-20470
SP231	-4546	-4546	-4546	-2252	-2252	-2252	-2089	-2089	0	-24572
SP232	-3936	-3936	-3936	-1950	-1950	-1950	-1808	-1808	0	-21275
SP233	-1418	-1418	-1418	-703	-703	-703	-652	-652	0	-7667
SP234	-92	-92	-92	-46	-46	-46	-42	-42	0	-498
SP235	0	0	0	0	0	0	0	0	0	0
SP236	0	0	0	0	0	0	0	0	0	0
SP237	0	0	0	0	0	0	0	0	0	0
SP238	0	0	0	0	0	0	0	0	0	0
SP239	0	0	0	0	0	0	0	0	0	0
SP240	-645	-645	-645	-320	-320	-320	-297	-297	0	-3488
SP241	-2986	-2986	-2986	-1479	-1479	-1479	-1372	-1372	0	-16138
SP242	-4290	-4290	-4290	-2126	-2126	-2126	-1971	-1971	0	-23192
SP243	-5085	-5085	-5085	-2519	-2519	-2519	-2336	-2336	0	-27485
SP244	-3319	-3319	-3319	-1645	-1645	-1645	-1525	-1525	0	-17940
SP245	-1177	-1177	-1177	-583	-583	-583	-541	-541	0	-6363
SP246	-447	-447	-447	-221	-221	-221	-205	-205	0	-2415
SP247	0	0	0	0	0	0	0	0	0	0
SP248	0	0	0	0	0	0	0	0	0	0
SP249	0	0	0	0	0	0	0	0	0	0
SP250	0	0	0	0	0	0	0	0	0	0
SP251	0	0	0	0	0	0	0	0	0	0
SP252	-504	-504	-504	-249	-249	-249	-231	-231	0	-2722
SP253	-2943	-2943	-2943	-1458	-1458	-1458	-1352	-1352	0	-15908
SP254	-4163	-4163	-4163	-2063	-2063	-2063	-1913	-1913	0	-22502
SP255	-4822	-4822	-4822	-2389	-2389	-2389	-2216	-2216	0	-26067
SP256	-3475	-3475	-3475	-1722	-1722	-1722	-1597	-1597	-738	-19521
SP257	-1447	-1447	-1447	-717	-717	-717	-665	-665	-714	-8534
SP258	-248	-248	-248	-123	-123	-123	-114	-114	-738	-2080
SP259	0	0	0	0	0	0	0	0	0	0
SP260	0	0	0	0	0	0	0	0	0	0
SP261	0	0	0	0	0	0	0	0	0	0
SP262	0	0	0	0	0	0	0	0	0	0
SP263	0	0	0	0	0	0	0	0	0	0
SP264	-702	-702	-702	-348	-348	-348	-323	-323	0	-3795
SP265	-2425	-2425	-2425	-1202	-1202	-1202	-1114	-1114	0	-13110
SP266	-4149	-4149	-4149	-2056	-2056	-2056	-1906	-1906	0	-22425

Table 13. Offsite pumping for each model stress period. (continued)

Stress Period	Well 1 (ac-ft)	Well 2 (ac-ft)	Well 3 (ac-ft)	Well 4 (ac-ft)	Well 5 (ac-ft)	Well 6 (ac-ft)	Well 7 (ac-ft)	Well 8 (ac-ft)	Well 9 (ac-ft)	Total (ac-ft)
SP267	-4872	-4872	-4872	-2414	-2414	-2414	-2238	-2238	0	-26335
SP268	-3347	-3347	-3347	-1659	-1659	-1659	-1538	-1538	-738	-18831
SP269	-1695	-1695	-1695	-840	-840	-840	-779	-779	-714	-9876
SP270	-447	-447	-447	-221	-221	-221	-205	-205	-738	-3153
SP271	0	0	0	0	0	0	0	0	0	0
SP272	0	0	0	0	0	0	0	0	0	0
SP273	0	0	0	0	0	0	0	0	0	0
SP274	0	0	0	0	0	0	0	0	0	0
SP275	0	0	0	0	0	0	0	0	0	0
SP276	-1546	-1546	-1546	-766	-766	-766	-710	-710	0	-8357
SP277	-2943	-2943	-2943	-1458	-1458	-1458	-1352	-1352	0	-15908
SP278	-4354	-4354	-4354	-2158	-2158	-2158	-2001	-2001	0	-23537
SP279	-5546	-5546	-5546	-2748	-2748	-2748	-2548	-2548	0	-29977
SP280	-2858	-2858	-2858	-1416	-1416	-1416	-1313	-1313	0	-15448
SP281	-823	-823	-823	-408	-408	-408	-378	-378	-714	-5161
SP282	-43	-43	-43	-21	-21	-21	-20	-20	-738	-968
SP283	0	0	0	0	0	0	0	0	0	0
SP284	0	0	0	0	0	0	0	0	0	0
SP285	0	0	0	0	0	0	0	0	0	0
SP286	0	0	0	0	0	0	0	0	0	0
SP287	0	0	0	0	0	0	0	0	0	0
SP288	-1135	-1135	-1135	-562	-562	-562	-521	-521	0	-6133
SP289	-2737	-2737	-2737	-1356	-1356	-1356	-1258	-1258	0	-14797
SP290	-4234	-4234	-4234	-2098	-2098	-2098	-1945	-1945	0	-22885
SP291	-4985	-4985	-4985	-2470	-2470	-2470	-2291	-2291	0	-26948
SP292	-3220	-3220	-3220	-1595	-1595	-1595	-1479	-1479	0	-17403
SP293	-993	-993	-993	-492	-492	-492	-456	-456	0	-5367
SP294	-993	-993	-993	-492	-492	-492	-456	-456	0	-5367
SP295	0	0	0	0	0	0	0	0	0	0
SP296	0	0	0	0	0	0	0	0	0	0
SP297	0	0	0	0	0	0	0	0	0	0
SP298	0	0	0	0	0	0	0	0	0	0
SP299	0	0	0	0	0	0	0	0	0	0
SP300	-993	-993	-993	-492	-492	-492	-456	-456	0	-5367
SP301	-2993	-2993	-2993	-1483	-1483	-1483	-1375	-1375	0	-16177
SP302	-4071	-4071	-4071	-2017	-2017	-2017	-1870	-1870	0	-22003
SP303	-5368	-5368	-5368	-2660	-2660	-2660	-2467	-2467	0	-29018
SP304	-3411	-3411	-3411	-1690	-1690	-1690	-1567	-1567	0	-18438

Table 13. Offsite pumping for each model stress period. (continued)

Stress Period	Well 1 (ac-ft)	Well 2 (ac-ft)	Well 3 (ac-ft)	Well 4 (ac-ft)	Well 5 (ac-ft)	Well 6 (ac-ft)	Well 7 (ac-ft)	Well 8 (ac-ft)	Well 9 (ac-ft)	Total (ac-ft)
SP305	-1184	-1184	-1184	-587	-587	-587	-544	-544	0	-6402
SP306	-1007	-1007	-1007	-499	-499	-499	-463	-463	0	-5443
SP307	0	0	0	0	0	0	0	0	0	0
SP308	0	0	0	0	0	0	0	0	0	0
SP309	0	0	0	0	0	0	0	0	0	0
SP310	0	0	0	0	0	0	0	0	0	0
SP311	0	0	0	0	0	0	0	0	0	0
SP312	-1234	-1234	-1234	-611	-611	-611	-567	-567	0	-6670
SP313	-2447	-2447	-2447	-1212	-1212	-1212	-1124	-1124	0	-13225
SP314	-4532	-4532	-4532	-2245	-2245	-2245	-2082	-2082	0	-24495
SP315	-5297	-5297	-5297	-2625	-2625	-2625	-2434	-2434	0	-28635
SP316	-2957	-2957	-2957	-1465	-1465	-1465	-1359	-1359	0	-15985
SP317	-1156	-1156	-1156	-573	-573	-573	-531	-531	0	-6248
SP318	-851	-851	-851	-422	-422	-422	-391	-391	0	-4600
SP319	0	0	0	0	0	0	0	0	0	0
SP320	0	0	0	0	0	0	0	0	0	0
SP321	0	0	0	0	0	0	0	0	0	0
SP322	0	0	0	0	0	0	0	0	0	0
SP323	0	0	0	0	0	0	0	0	0	0
SP324	-1454	-1454	-1454	-720	-720	-720	-668	-668	0	-7858
SP325	-3418	-3418	-3418	-1694	-1694	-1694	-1571	-1571	0	-18477
SP326	-4617	-4617	-4617	-2288	-2288	-2288	-2121	-2121	0	-24955
SP327	-5375	-5375	-5375	-2664	-2664	-2664	-2470	-2470	0	-29057
SP328	-2149	-2149	-2149	-1065	-1065	-1065	-987	-987	0	-11615
SP329	-1213	-1213	-1213	-601	-601	-601	-557	-557	0	-6555
SP330	-1021	-1021	-1021	-506	-506	-506	-469	-469	0	-5520
SP331	0	0	0	0	0	0	0	0	0	0
SP332	0	0	0	0	0	0	0	0	0	0
SP333	0	0	0	0	0	0	0	0	0	0
SP334	0	0	0	0	0	0	0	0	0	0
SP335	0	0	0	0	0	0	0	0	0	0
SP336	-248	-248	-248	-123	-123	-123	-114	-114	0	-1342
SP337	-1425	-1425	-1425	-706	-706	-706	-655	-655	-738	-8443
SP338	-4617	-4617	-4617	-2288	-2288	-2288	-2121	-2121	0	-24955
SP339	-5106	-5106	-5106	-2530	-2530	-2530	-2346	-2346	0	-27600
SP340	-4064	-4064	-4064	-2013	-2013	-2013	-1867	-1867	0	-21965
SP341	-1638	-1638	-1638	-812	-812	-812	-753	-753	0	-8855
SP342	-269	-269	-269	-134	-134	-134	-124	-124	0	-1457

Table 14. Underflow from tributary basins.

Tributary Basin	Average Annual Tributary Underflow (acre-ft)	Average Underflow per Stress Period (acre-ft/month)
American Falls	18,764	1,646
Beaver Creek	55,517	4,870
Big Lost River	46,076	4,042
Big Wood River	8,528	748
Birch Creek	66,490	5,832
Blackfoot River	11,086	972
Camas Creek	129,540	11,363
Clover Creek	8,528	748
Goose Creek	23,025	2,020
Henrys Fork	27,344	2,399
Lincoln/Ross Creek	3,411	299
Little Lost River	132,244	11,600
Little Wood River	20,463	1,795
Medicine Lodge Creek	7,678	673
Palisades	5,970	524
Portneuf River	18,689	1,639
Raft River	71,614	6,282
Rattle/Pine	66,407	5,825
Rexburg Bench	15,351	1,347
Rock Creek	43,516	3,817
Silver Creek	45,237	3,968
Teton River	2,558	224
Thorn Creek	5,118	449
Willow Creek	24,728	2,169

Table 15. Silver Creek annual flows and normalized flux ratios.

Year	Silver Creek Annual Discharge (cfs)	Silver Creek Normalized Flux Ratio	Silver Creek Dampened, Normalized Flux Ratio
1980	1887	1.17	1.06
1981	1892	0.96	0.99
1982	2044	1.39	1.13
1983	2659	1.39	1.13
1984	2334	1.29	1.09
1985	2138	1.12	1.04
1986	2142	1.14	1.05
1987	1854	0.82	0.94
1988	1358	0.75	0.92
1989	1445	0.84	0.95
1990	1441	0.76	0.92
1991	1364	0.76	0.92
1992	1283	0.67	0.89
1993	1486	0.99	1.00
1994	1521	0.66	0.89
1995	1488	1.13	1.04
1996	2047	1.16	1.05
1997	2258	1.22	1.07
1998	2210	1.20	1.07
1999	2055	1.08	1.03
2000	1748	0.82	0.94
2001	1427	0.69	0.90
2002	1274	0.73	0.91
2003	1273	0.73	0.91
2004	1364	0.75	0.92
2005	1473	0.97	0.99
2006	1867	1.01	1.00
2007	1721	0.77	0.92
2008	1225	0.72	0.91

Table 16. List of non-Snake River sources of surface-water seepage.

Non-Snake River Seepage Reach	Average Annual Non-Snake River Seepage (ft^3)	Average Annual Non-Snake River Seepage (acre-ft)	Average Non-Snake River Seepage per Stress Period (ft^3/mon)	Average Non-Snake River Seepage per Stress Period (acre-ft/mon)
Big Lost River Reach 1	3,129,859,789	71,852	274,549,104	6,303
Big Lost River Reach 2	272,436,410	6,254	23,897,931	549
Big Lost River Reach 3	290,623,219	6,672	25,493,265	585
Big Lost River Reach 4	388,549,980	8,920	34,083,332	782
Little Wood River - Carey to Richfield	4,839,856,781	111,108	424,548,840	9,746
Malad River	5,003,200,471	114,858	438,877,234	10,075
Birch Creek	360,196,532	8,269	31,596,187	725
Birch Creek Hydropower	391,007,254	8,976	34,298,882	787
Camas Creek	1,879,407,447	43,145	164,860,302	3,785
Medicine Lodge Creek	1,289,679,383	29,607	113,129,770	2,597
Little Lost	964,202,756	22,135	84,579,189	1,942
Big Lost Flood Control	419,730,358	9,636	36,818,452	845
Lone Tree Flood Control (Camas Creek)	7,241,278	166	635,200	15
Basin 31 Flood Control	138,781,116	3,186	12,173,782	279
Mud Lake	351,957,208	8,080	30,873,439	709
Camas National Wildlife Refuge	314,229,657	7,214	27,564,005	633
Little Lost Flood Control	381,234,821	8,752	33,441,651	768
Murtaugh Lake	95,472,000	2,192	8,374,737	192
Milner-Picketts (TFCC)	141,400,000	3,246	12,403,509	285
Beaver Creek Reach 1	176,211,614	4,045	15,457,159	355
Beaver Creek Reach 2	708,598,664	16,267	62,157,778	1,427
Big Wood River and part of the Little Wood River	4,368,760,238	100,293	383,224,582	8,798

Table 17. Adjustable water budget parameters.

Water Budget Component	Adjustable Range of Scalar Multipliers	Zonation
Recharge on non-irrigated lands	1×10^{-6} to 2.0	11 soil zones
ET on sprinkler and gravity irrigated lands	0.95 to 1.05	48 irrigation entities, one each for sprinkler and gravity
Seepage from non-Snake River sources	0.8 to 1.2	22 reaches
Tributary underflow	0.25 to 2.0 (1×10^{-6} to 2.0 for Camas; 0.25 to 13 for Henrys Fork)	24 tributary basins
Canal seepage	0.95 to 1.05 (0.10 to 1.05 for Mud Lake canals)	35 irrigation entities
On-Farm incidental recharge	0.6 to 0.98	48 irrigation entities

Table 18. List of springs used as calibration targets (Group A and B).

Reach	Target	Status	Comments
Kimberly-to-Buhl	Devil's Washbowl Spring (A)	Monitored by USGS	Data on USGS web site. USGS 13089500. IDWR procured equipment for real time data transmission.
Kimberly-to-Buhl	Devil's Corral Spring (A)	Monitored by USGS.	Data on USGS web site. USGS 13089600
Buhl-to-Lower Salmon Falls	Briggs Spring (A)	Monitored by USGS	Data on USGS web site. USGS 13095175. IDWR procured equipment for real time data transmission.
Buhl-to-Lower Salmon Falls	Box Canyon Springs (A)	Monitored by USGS	Data on USGS web site. USGS 13095500. IDWR procured equipment for real time data transmission. Data scaled up for ESPAM2.1 target to account for downstream discharge.
Kimberly-to-Buhl	**Crystal Springs Complex (B)**		
	Crystal Springs Main (+)	Calculated from stage height using rating curves adopted by ESHMC	Stage height through 7/2010 from Brockway Engineering. Source of future stage data TBD. IDWR SiteID 36041033.
	Crystal Springs No. 2 (+)	Hatchery submits data to Water District 130	IDWR SiteID 306410034
	Crystal Springs No 3 (+)	Hatchery submits data to Water District 130	IDWR SiteID 360410035
	Crystal Springs No 4 (+)	Hatchery submits data to Water District 130	IDWR SiteID 360410036
	Magic Valley Hatchery (+)	Owned by USFWS, operated by IDFG, hatchery submits data to Water District 130	IDWR SiteID 360410061 Spilled directly to the Snake R. during cleaning/restocking (1-2 mos.) each spring and is not measured.
Kimberly-to-Buhl	**Niagara Springs Complex (B)**		
	IPCO hatchery (+)	Data submitted to WD130.	IDWR SiteID 360410060. Owned by IPCo, operated by IDFG.
	Rimview hatchery (+)	Hatchery submits data to Water District 130	IDWR SiteID 360410059. Data represents total diversions. See Rimview Bypass diversion.
	Wildlife Management Area Pipe (+)	WMA submits data to Water District 130	WMIS # 410208; irrigation diversion operated by IDFG.
	Wildlife Management Area Ditch (+)	WMA submits data to Water District 130	IDWR SiteID 360410209; diversion for IDFG wetland.

Table 18. List of springs used as calibration targets (Group A and B). (continued)

Reach	Target	Status	Comments
Kimberly-to-Buhl	**Niagra Springs Complex (B) - continued**		
	Rimview bypass diversion (-)	IPCO submits data to Water District 130.	Not recorded separately; subtracted from Rimview total diversions.
	Pugmire Park (+)	Data obtained from Water District 130	WMIS # 410212. Irrigated in summer; operated by IDPR.
	Idaho Power Company Park (+)	Data obtained from Water District 130	WMIS # 400237. Public park along Niagara Crk, summer irrigated; IDFG operates.
	Lower Falls Instream Flow (+)	Data obtained from Water District 130	Not a diversion. IDPR maintains, but flows reported by IPCO.
	5 cfs seepage allowance (+)	Data obtained from Water District 130	Not a diversion
Kimberly-to-Buhl	**Blue Lakes Spring Complex (B)**		
	City of Twin Falls Blue Lakes Pumping Plant (+)	Diversion monitored by IDWR, meter data collected by WD130.	2 pipes with COTF insertable flow meters. WMIS # 101620 (East Line), 1000545 (West Line) Before 2005, data combined in WMIS # 101620. USGS 13090998.
	Silver Creek Farms Diversion (+)	Non-totalized data reported to Water District 130 from insertable flow meter.	WMIS 410029 (1995-2000). IDWR SiteID 360410029 (2001+) Diverted from Alpheus Cr and piped across Snake R. .
	Blue Lakes CC Diversion (+)	Data obtained from Water District 130 via a flow meter on pump	WMIS # 410204. Diverted from Alpheus Creek.
	Blue Lakes Trout Diversion (+).	Data from Water District 130. Broad crested weir confirmed by rated section. See note.	IDWR SiteID 360410026 (East Inlet) and 360410027 (West Inlet, abandoned). Prior to 2001, records added for BLT total. After 2001, diversions combined in 360410026.
	Pristine Springs Fresh Water Diversion (+)	Orifice re-diversion above BLT hatchery. Data obtained from WD130. **See note.**	IDWR SiteID 360410028

Table 18. List of springs used as calibration targets (Group A and B). (continued)

Reach	Target	Status	Comments
Buhl-to-Lower Salmon Falls	**Clear Lakes Springs Complex (B)**		
	CSF Clear Lake Farm (+)	Hatchery submits data to Water District 130	IDWR SiteID 360410030
	Clear Lakes Trout Co (+)	Hatchery submits data to Water District 130	IDWR SiteID 360410079
	CSF Snake River Farm (+)	Hatchery submits data to Water District 130	IDWR SiteID 360410031
Buhl-to-Lower Salmon Falls	**Sand Springs Creek (B)**		
	Sand Springs Ranch/Nature Conservancy Diversions (+)	Irrigation diversions above rim and IPCo diversion; will be required to report to WD130.	IDWR SiteID 36041201 and SiteID 36041202.
	IPCO Sand Springs Diversion (+)	Monitored by IPCO and reported to WD130	IDWR SiteID 360410076. Flow is conveyed through a flume and wooden pipe to a main collection canal; used at Thousand Springs power plant. No power generated at this location.
Buhl-to-Lower Salmon Falls	**Thousand Springs Power Plant Complex (B)**		
	Thousand Springs Power Plant (+)	Monitored by IPCO. Reported to WD130.	WMIS # 410063 Flow based on power generation; includes diversions from Thousand Springs, Sand Springs, and Snowbank Springs
	Snowbank Springs Power Plant (0)	Monitored by IPCO. Reported to WD130.	WMIS # 410064 in Thousand Springs model cell. No power generated. Discharge pumped to head of collection canal for Thousand Springs power plant; no need to account separately.
	IPCO Sand Springs Diversion (-)	Monitored by IPCO and reported to WD130	IDWR SiteID 360410076. Flow is conveyed through a flume and wooden pipe to a main collection canal; used for power generation at Thousand Springs power plant.
Buhl-to-Lower Salmon Falls	**National Fish Hatchery Complex (B)**		
	Riley Creek (+)	Monitored by USFWS, Reported to WD36A	IDWR SiteID 360410049
	Bickel Lake (+)	Monitored by USFWS, Reported to WD36A	IDWR SiteID 360410024
	Main Spring (+)	Monitored by USFWS, Reported to WD36A	IDWR SiteID 360410053 Includes springs 11-14.
	Springs 8 & 9 (+)	Monitored by USFWS, Reported to WD36A	IDWR SiteID 360410052

Table 18. List of springs used as calibration targets (Group A and B). (continued)

Reach	Target	Status	Comments
Buhl-to-Lower Salmon Falls	**National Fish Hatchery Complex (B) - continued**		
	Spring 10 (Tunison) (+)	Monitored by USFWS, Reported to WD36A	IDWR SiteID 360410050
	Spring 15 (+)	Monitored by USFWS, Reported to WD36A	IDWR SiteID 360410057
	Spring 16 (Len Lewis) (+)	Monitored by USFWS, Reported to WD36A	IDWR SiteID 360410025
	Spring 17 (+)	Monitored by USFWS, Reported to WD36A	IDWR SiteID 360410058
Buhl-to-Lower Salmon Falls	**Rangen Hatchery Complex (B)**		
	Rangen Hatchery (+)	Hatchery monitors flows, reportsto WD36A.	IDWR SiteID 360410089
	Candy Pipe (+)	Flows provided by consultant to Rangen Inc. Monitored by WD36A.	IDWR SiteID 360410038. Irrigation diversion
	Crandelmire Pipe (+)	Flows provided by consultant to Rangen Inc. Monitored by WD36A.	Irrigation diversion WMIS # 410039 for PCC data until 2007. see Candy comments above.
	Musser Pipe (+)	Flows provided by consultant to Rangen Inc. Monitored by WD36A.	Irrigation diversion WMIS # 410040 for PCC data until 2007. see Candy comments above.
	Rangen Pipe (+)	Flows provided by consultant to Rangen Inc. Reported to WD36A.	IDWR SiteID 360410041. Hatch house, domestic, and irrigation diversions, repoted as non-totalized flows.

Table 18. List of springs used as calibration targets (Group A and B). (continued)

Reach	Target	Status	Comments
Buhl-to-Lower Salmon Falls	**Three Springs, Weatherby Springs, Hoagland Tunnel, and Spring Creek Spring (B)**		
	Jones Hatchery (+)	Hatchery submits data to WD36A.	IDWR SiteID 360410067. Total diversions to hatchery. Sum of raceways and inflow from Three/Weatherby Pipe through 10/2006. Sum of discharge to Billingsley Creek, Bar S Ditch, and Jones Irrigation Pumps after 11/2006.
	Pipe from Three/Weath-erby (+)	Water users submit data to WD36A.	IDWR SiteID 360410066. Includes diversions to hatchery and for irrigation/domestic.
	Hoaglund Tunnel Ditch (+)	Water users submit data to WD36A.	IDWR SiteID 360410069. Irrigation diversion.
	Jones Hatchery inflow from Three/Weathe rby Pipe (-)	Measured by Jones Hatchery through 10/2006. Estimated after 11/2006.	Included in both IDWR SiteID 360410066 and IDWR SiteID 360410067. Assumed monthly average after 11/2006.
	Undiverted flow from Lower Weatherby Spring (+)	Not measured regularly. IDWR miscellaneous measurements available in 1993 and 2009.	Total discharge observed to be approximately 3.5 cfs during IDWR site visits in 1993 and 2009. When pump is running, approximately 3 cfs is diverted to hatchery and is included in IDWR SiteID 360410067.
	Lee Hatchery (+)	Hatchery submits data to WD36A.	IDWR SiteID 360410072. Diversion from Spring Creek Spring.
	Musser Pump at Spring Creek (+)	Annual volume calculated from power records.	WMIS # 410037. Irrigation diversion.
	Spring Creek Spring Pipe (+)	Not measured regularly. IDWR miscellaneous measurement available for one date in 2004.	WMIS # 410074. Diversion for domestic and irrigation use in residential subdivision. Assumed 0.25 cfs average flow May-Oct and 0.1 cfs flow Nov-April
Lower-Salmon Falls-to-King Hill	**Malad River Reach Gains (B)**		
	Malad River near Bliss (+)	Monitored by IPCO	Data on USGS and IPCO web sites. USGS 13153500
	Lwr Malad Power Canal nr Bliss (+)	Monitored by IPCO, reported to WD130	IDWR SiteID 370410107. Data on USGS and IPCO web sites. USGS 13152950.
	Malad River near Gooding (-)	Monitored by USGS	Data on USGS web site. USGS 13152500

Table 19. Model cells representing springs used as transient (Group A and B) calibration targets.

Name	Group	Model Cell(s) (Row, Column)	Number of Observations	Date Range
Blue Lake	B	62,24	71	1/15/1996 - 7/15/2008
Box Canyon	A	47,12; 47,13	342	5/15/1980 - 10/15/2008
Briggs Springs	A	49,11	234	5/15/1998 - 10/15/2008
Clear Lake	B	50,12; 50,13	286	1/15/1985 - 10/15/2008
Crystal Springs	B	54,18	122	3/15/1995 - 10/15/2008
Devils Corall	A	65,28	40	11/6/1980 - 3/18/2008
Devils Washbowl	A	66,28	277	10/15/1985 - 10/15/2008
Malad Springs	B	36,15; 36,16	138	7/1/1994 - 10/31/2008
National Fish Hatchery	B	43,12	342	5/1/1980 - 10/1/2008
Niagara Springs	B	53,17	86	11/15/1980 - 4/15/2008
Rangen Springs	B	42,13	342	5/15/1980 - 10/15/2008
Three Springs	B	41,13	149	6/15/1996 - 10/15/2008
Sand Springs	B	46,12; 46,13	127	1/15/1997 - 10/15/2008
Thousand Springs	B	44,12	155	1/15/1997 - 10/15/2008

Table 20. Group C spring targets.

Name	Cell Integer	Cell (cfs)	Ratio[1]	Reach
1057020	1057020	1.75	0.1699	Kimberly-to-Buhl
1058020	1058020	0.6	0.05825	Kimberly-to-Buhl
Ellison S	1058021	4.3	0.41748	Kimberly-to-Buhl
1059021	1059021	0.02	0.00194	Kimberly-to-Buhl
1059022	1059022	0.8	0.07767	Kimberly-to-Buhl
1061023	1061023	10.3	1	Kimberly-to-Buhl
1062023	1062023	2	0.19417	Kimberly-to-Buhl
1064026	1064026	3.72	0.36117	Kimberly-to-Buhl
1065027	1065027	2.24	0.21748	Kimberly-to-Buhl
1068029	1068029	0.2	0.01942	Kimberly-to-Buhl
1069029	1069029	0.3	0.02913	Kimberly-to-Buhl
1070030	1070030	0.25	0.02427	Kimberly-to-Buhl
1037014	1037014	6.73	0.05341	Buhl-to-LowerSalmonFalls
Birch Cr	1037015	2.23	0.0177	Buhl-to-LowerSalmonFalls
1038014	1038014	21.8333	0.17328	Buhl-to-LowerSalmonFalls
Big Sp	1039014	107.6765	0.85458	Buhl-to-LowerSalmonFalls
1040013	1040013	1.01	0.00802	Buhl-to-LowerSalmonFalls
1040014	1040014	3.5	0.02778	Buhl-to-LowerSalmonFalls
Tucker Sp	1042012	83.7	0.66429	Buhl-to-LowerSalmonFalls
1045011	1045011	0.1	0.00079	Buhl-to-LowerSalmonFalls
1045012	1045012	5	0.03968	Buhl-to-LowerSalmonFalls
1047011	1047011	3.7	0.02937	Buhl-to-LowerSalmonFalls
Banbury S	1048011	126	1	Buhl-to-LowerSalmonFalls
1050014	1050014	0.02	0.00016	Buhl-to-LowerSalmonFalls
1051014	1051014	0.03	0.00024	Buhl-to-LowerSalmonFalls
Bancroft	1025006	17	0.46575	LowerSalmonFalls-to-KingHill
1030013	1030013	1.1	0.03014	LowerSalmonFalls-to-KingHill
1031013	1031013	5.1	0.13973	LowerSalmonFalls-to-KingHill
1031014	1031014	3.16	0.08658	LowerSalmonFalls-to-KingHill
1032013	1032013	1	0.0274	LowerSalmonFalls-to-KingHill
1032014	1032014	10	0.27397	LowerSalmonFalls-to-KingHill
1033013	1033013	0.1	0.00274	LowerSalmonFalls-to-KingHill
1033014	1033014	19	0.52055	LowerSalmonFalls-to-KingHill
1034014	1034014	36.5	1	LowerSalmonFalls-to-KingHill
1035014	1035014	4.4	0.12055	LowerSalmonFalls-to-KingHill
1036014	1036014	5.46	0.14959	LowerSalmonFalls-to-KingHill

[1] Ratio of estimated discharge to discharge of largest Group C spring in reach.

Table 21. Miscellaneous USGS measurements at Box Canyon Springs.

Date	Above Diversion (cfs)	Diversion (cfs)	At mouth (cfs)	Ratio[2]
15-May-75	360	300	354	1.82
31-Mar-78	360	300	369	1.86
30-Mar-79	335	300	440	2.21
			Average:	1.97

[2] Ratio of measurement above diversion to diversion plus measurement at mouth.

Table 22. Model calibrated scalars used to adjust non-irrigated recharge.

Zone	Scalar
nonirrch1	0.61903
nonirrch2	0.71908
nonirrch3	1.15037
nonirrch4	1.43209
nonirrch5	1.24544
nonirrch6	0.95872
nonirrch7	0.80950
nonirrch8	1.25635
nonirrch9	0.86542
nonirrch10	0.91396
nonirrch11	0.61607
wetlands	1.00181

Table 23. Starting, adjusted, and percent change for ET on sprinkler and gravity irrigated lands.

	Sprinkler ET Adjustment Factor			Gravity ET Adjustment Factor		
Entity	**Starting**	**Adjusted**	**% Change**	**Starting**	**Adjusted**	**% Change**
Null	0.901	0.901	0.0%	0.847	0.847	0.0%
A&B	0.949	0.949	0.0%	0.896	0.896	0.0%
AbSpring	1.108	1.108	0.0%	1.056	1.056	0.0%
BigLost	0.944	0.944	0.0%	0.891	0.891	0.0%
BlaineCo	0.921	0.921	0.0%	0.868	0.868	0.0%
Burgess	1.128	1.128	0.0%	1.076	1.076	0.0%
Burley	1.071	1.071	0.0%	1.018	1.017	-0.1%
ButteMrk	1.092	1.092	0.0%	1.039	1.039	0.0%
Canyon	0.937	0.937	0.0%	0.883	0.883	0.0%
Blckfoot	1.075	1.075	0.0%	1.022	1.022	0.0%
Dewey	1.13	1.130	0.0%	1.077	1.077	0.0%
Egin	0.924	0.923	-0.1%	0.87	0.870	0.0%
Falls	1.159	1.159	0.0%	1.107	1.107	0.0%
FortHall	1.102	1.102	0.0%	1.05	1.050	0.0%
Harrison	1.107	1.107	0.0%	1.054	1.054	0.0%
Idaho	1.058	1.058	0.0%	1.006	1.006	0.0%
LitlWood	0.998	0.998	0.0%	0.946	0.946	0.0%
Milner	1.002	1.002	0.0%	0.949	0.949	0.0%
Minidoka	1.1	1.101	0.1%	1.047	1.039	-0.8%
MudLake	1.143	1.143	0.0%	1.09	1.090	0.0%
NewSwedn	1.045	1.045	0.0%	0.993	0.993	0.0%
NrthSide	1.049	1.074	2.4%	0.996	1.000	0.4%
Peoples	1.121	1.121	0.0%	1.068	1.068	0.0%
Progress	1.041	1.041	0.0%	0.989	0.989	0.0%
Liberty	1.136	1.136	0.0%	1.082	1.082	0.0%
Reno	1.234	1.234	0.0%	1.181	1.181	0.0%
Rexburg	1.085	1.085	0.0%	1.031	1.031	0.0%
Chester	0.984	0.984	0.0%	0.93	0.930	0.0%
Oakley	0.976	0.976	0.0%	0.924	0.924	0.0%
Montview	1.216	1.216	0.0%	1.164	1.164	0.0%
Dubois	0.926	0.926	0.0%	0.872	0.873	0.1%
Small	1.104	1.104	0.0%	1.051	1.051	0.0%
Howe	1.04	1.040	0.0%	0.989	0.989	0.0%
Labelle	1.228	1.228	0.0%	1.176	1.176	0.0%
Sugrcity	1.099	1.099	0.0%	1.046	1.046	0.0%
Blk_Chub	0.978	0.975	-0.3%	0.926	0.926	0.0%

Table 23. Starting, adjusted, and percent change for ET on sprinkler and gravity irrigated lands.

	Sprinkler ET Adjustment Factor			Gravity ET Adjustment Factor		
Entity	**Starting**	**Adjusted**	**% Change**	**Starting**	**Adjusted**	**% Change**
AmFalls2	1.059	1.059	0.0%	1.007	1.007	0.0%
Good_Rch	1.051	1.049	-0.2%	0.999	0.996	-0.3%
Max			**2.397%**			**0.406%**
Min			**-0.278%**			**-0.766%**

Table 24. Adjustments to seepage from non-Snake River sources.

Reach	Factor
Basin 31 Flood Control	0.9875
Beaver Creek Reach 1	1.0003
Beaver Creek Reach 2	0.9873
Big Lost Reach 1	1.0026
Big Lost Reach 2	0.9961
Big Lost Reach 3	0.9916
Big Lost Reach 4	1.0029
Big Lost Flood Control	1.0097
Big and Little Wood River	0.9489
Birch Creek	0.9745
Birch Hydropower	1.0107
Camas Creek	1.0057
Camas NWR	0.9940
Little Lost	1.0102
Little Lost Flood Control	0.9961
Lone Tree Diversions	0.9986
Little Wood - Carey to Richfield	1.0372
Malad River	1.1819
Medicine Lodge Creek	0.9911
Milner-Pickets (TFCC)	1.0000
Mud Lake	1.2000
Murtaugh Lake	1.0006

Table 25. Adjustments to underflow from tributary basins.

Tributary Basin	Factor
Little Lost	1.359
Medicine Lodge	1.023
Birch	1.100
Beaver	1.019
Blackfoot	1.061
Silver	1.469
Little Wood	1.173
Big Wood	1.173
Teton	1.068
Rexburg Bench	1.110
Palisades	1.073
Willow	1.108
American Falls	1.082
Raft	1.014
Big Lost	1.388
Henrys Fork	4.664
Thorn	1.112
Clover	1.370
Lincoln-Ross	1.098
Portneuf	1.091
Rockland	0.592
Goose	1.241
Rattle-Pine	1.070
Camas	0.945

Table 26. Adjustments to canal seepage.

Canal No.	Name	Factor
cnl001	A&B	1.0000
cnl002	AbSpring	0.9807
cnl005	BigLost	0.9991
cnl008	BlaineCo	1.0000
cnl009	Burgess	0.9982
cnl010	Burley	1.0000
cnl011	ButteMrk	1.0000
cnl012	Canyon	1.0001
cnl014	Blckfoot	1.0001
cnl015	Dewey	0.9998
cnl016	Egin	0.9952
cnl018	Falls	0.9999
cnl019	FortHall	0.9993
cnl020	Harrison	0.9999
cnl022	Idaho	1.0006
cnl025	LitlWood	1.0002
cnl027	Milner	1.0000
cnl028	Minidoka	1.0000
cnl029	MudLake	0.2662
cnl030	NewSwedn	1.0002
cnl032	NrthSide	1.0000
cnl034	Peoples	0.9998
cnl035	Progress	1.0003
cnl036	Liberty	1.0002
cnl037	Reno	1.0001
cnl038	Rexburg	1.0002
cnl039	Chester	1.0002
cnl040	Oakley	1.0003
cnl044	Montview	0.9999
cnl053	Howe	1.0001
cnl055	Labelle	1.0000
cnl056	Sugrcity	0.9942
cnl057	Blk_Chub	1.0005
cnl058	AmFalls2	1.0000
cnl059	Good_Rch	1.0099

Table 27. Calibrated Dpin and Dpex values.

Entity (Common Name)	DPin	DPex
Null	1.0000	1.0000
A&B	1.0000	1.0000
AbSpring	0.6991	0.7154
BigLost	1.0000	1.0000
BlaineCo	1.0000	1.0000
Burgess	0.7131	0.6667
Burley	0.7800	0.6992
ButteMrk	0.9800	0.9800
Canyon	1.0000	1.0000
Blckfoot	0.7365	0.7384
Dewey	1.0000	1.0000
Egin	0.8273	0.9707
Falls	1.0000	1.0000
FortHall	0.9695	0.9800
Harrison	0.7131	0.6667
Idaho	0.7367	0.7427
LitlWood	1.0000	1.0000
Milner	0.9664	0.9668
Minidoka	0.7691	0.9371
MudLake	1.0000	1.0000
NewSwedn	0.7382	0.7445
NrthSide	0.7894	0.8765
Peoples	0.7369	0.7312
Progress	0.7387	0.7463
Liberty	0.6141	0.6000
Reno	1.0000	1.0000
Rexburg	0.6186	0.6178
Chester	0.6143	0.6167
Oakley	1.0000	1.0000
Montview	1.0000	1.0000
Dubois	1.0000	1.0000
Small	1.0000	1.0000
Howe	1.0000	1.0000
Labelle	0.7131	0.6667
Sugrcity	0.9800	0.9800
Blk_Chub	0.7354	0.7401
AmFalls2	1.0000	1.0000
Good_Rch	1.0000	1.0000

Table 28. Adjustable parameter values impacting the soil moisture reservoir.

Entity (Model Name)	Wilting Point	Field capacity	Crop Rooting Depth (feet)
Null	0.020	0.200	3.000
A&B	0.020	0.200	3.000
AbSpring	0.020	0.200	3.000
BigLost	0.020	0.200	3.000
BlaineCo	0.020	0.200	3.000
Burgess	0.020	0.200	3.000
Burley	0.020	0.200	3.000
ButteMrk	0.020	0.200	3.000
Canyon	0.020	0.200	3.000
Blckfoot	0.020	0.200	3.000
Dewey	0.020	0.200	3.000
Egin	0.020	0.200	3.000
Falls	0.020	0.200	3.000
FortHall	0.020	0.200	3.000
Harrison	0.020	0.200	3.000
Idaho	0.020	0.200	3.000
LitlWood	0.020	0.200	3.000
Milner	0.020	0.200	3.000
Minidoka	0.020	0.200	3.000
MudLake	0.020	0.400	5.000
NewSwedn	0.020	0.200	3.000
NrthSide	0.020	0.200	3.000
Peoples	0.020	0.200	3.000
Progress	0.020	0.200	3.000
Liberty	0.020	0.200	3.000
Reno	0.020	0.200	3.000
Rexburg	0.020	0.200	3.000
Chester	0.020	0.200	3.000
Oakley	0.020	0.200	3.000
Montview	0.020	0.200	3.000
Dubois	0.020	0.200	2.998
Small	0.020	0.200	3.000
Howe	0.020	0.200	3.000
Labelle	0.020	0.200	3.000
Sugrcity	0.020	0.199	2.990
Blk_Chub	0.020	0.200	3.000
AmFalls2	0.020	0.200	3.000
Good_Rch	0.020	0.201	3.012

Table 29. List of ESPAM2 Design Documents.

ESPAM2 No.	Design Document Name
DDW-V2-01	Representation of Recharge from Canal Leakage Calibration of Eastern Snake Plain Aquifer Model Version 2, As Built, Revision 1
DDW-V2-02	Determination of Source of Irrigation for Calibration of Eastern Snake Plain Aquifer Model Version 2
DDW-V2-03*	Estimating Perched River Seepage in the Big Wood River, Little Wood River, Big Lost River, Little Lost River, Birch Creek, Medicine Lodge Creek, Beaver Creek, and Camas Creek for Calibration of the Eastern Snake Plain Aquifer Model Version 2
DDW-V2-06*	Representation of Soil Type for Calibration of Eastern Snake Plain Aquifer Model Version 2, As Built Revision 1
DDW-V2-07	Irrigation Diversions and Returns and Surface-Water Irrigation Entities for Calibration of Eastern Snake Plain Aquifer Model Version 2, As Built
DDW-V2-08	Fixed Point and Offsite Point Recharge and Discharge for Calibration of Eastern Snake Plain Aquifer Model Version 2, As Built
DDW-V2-09	Surface-Water Irrigation Entities and Ground-water Polygons for Calibration of Eastern Snake Plain Aquifer Model Version 2, As Built
DDW-V2-10	Use of PRISM Data for Precipitation Estimates in ESPAM2, As Built
DDW-V2-11	ET Adjustment and the Entity File (*.ent) for the Eastern Snake Plain Aquifer Model Version 2, As Built
DDW-V2-12	Irrigated Land Sprinkler Fractions for the Eastern Snake Plain Aquifer Model Version 2, As Built
DDW-V2-13	Estimates of Tributary Basin Underflow for the Eastern Snake Plain Aquifer Model Version 2, As Built
DDW-V2-14	Estimation of Ground Water Contribution from the South Side of the Snake River, Milner to King Hill, Eastern Snake Plain Aquifer Model Version 2
DDW-V2-15	Irrigation Return Flows and Snake River Reach Gains for Calibration of Eastern Snake Plain Aquifer Model Version 2
DDM-V2-01	Decisions on Stress Periods to be Used in Calibration of Eastern Snake Plain Aquifer Model Version 2
DDM-V2-02	Model Boundary Revision 2
DDM V2-03	Representation of MODFLOW-2000 River Cells for the Snake River above Milner Dam and American Falls Reservoir for Calibration of the Eastern Snake Plain Aquifer Model Version 2, As Built
DDM V2-04	Representation of Irrigated Lands and Source of Irrigation Water, Eastern Snake Plain Aquifer Model Version 2, As Built

*Note that there is a numbering gap between DDW-V2-03 and DDW-V2-06. DDW-V2-04 is a design document that was currently out-dated due to the current model conditions. DDW-V2-05 is a non-existent design document.