APPENDIX B
Water Balance

Water Management Summary - No Action Alternative

Badger Hills CBNG POD (1/5/04; ALB)

Month	0	1	2	3	4	5	6	7	8	9	10	11	12
Badger Hills Water Prod. (gpm)													
Badger Hills Federal	0	0	0	0	0	0	0	0	0	0	0	0	0
Badger Hills State and Fee	0	1302	1278	1254	1231	1209	1186	1165	1143	1122	1101	1081	1061
CX Field Prod. (gpm)	*984*	*955*	*927*	*900*	*873*	*848*	*823*	*798*	*775*	*752*	*730*	*708*	*688*
Total Water Production (gpm)	984	2257	2205	2154	2105	2056	2009	1963	1918	1874	1831	1790	1749
Management Methods													
Discharge Permit													
Volume of Water Discharged	984	1600	1600	1600	1501	1451	1404	1358	1313	1269	1226	1185	1144
Off Site Beneficial Use													
Spring Creek Mine	0	235	235	235	235	235	235	235	235	235	235	235	235
Decker Mine	0	370	370	370	370	370	370	370	370	370	370	370	370
MPDES + Coal Mines	984	2205	2205	2205	2106	2056	2009	1963	1918	1874	1831	1790	1749
diff	0	52	0	-51	-1	0	0	0	0	0	0	0	0
Basins (71.57 Acres, 410 Acre-feet)													
Δ Storage (gpm)	0	52	0	-51	-1	0	0	0	0	0	0	0	0
In Storage (gal)	0	2.3E+06	2.3E+06	5.0E+04	-1.0E+03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
In Storage Ac-ft (568 max)	0	7.0	7.0	0.2	0	0	0	0	0	0	0	0	0

Badger Hills CBNG POD (1/5/04; A

Month	13	14	15	16	17	18	19	20	21	22	23	24
Badger Hills Water Prod. (gpm)												
Badger Hills Federal	0	0	0	0	0	0	0	0	0	0	0	0
Badger Hills State and Fee	1042	1022	1004	985	967	949	932	914	898	881	865	849
CX Field Prod. (gpm)	*667*	*648*	*629*	*610*	*592*	*575*	*558*	*541*	*526*	*510*	*495*	*481*
Total Water Production (gpm)	1709	1670	1632	1595	1559	1524	1489	1456	1423	1391	1360	1329
Management Methods												
Discharge Permit												
Volume of Water Discharged	1104	1065	1027	990	954	919	884	851	818	786	755	724
Off Site Beneficial Use												
Spring Creek Mine	235	235	235	235	235	235	235	235	235	235	235	235
Decker Mine	370	370	370	370	370	370	370	370	370	370	370	370
MPDES + Coal Mines	1709	1670	1632	1595	1559	1524	1489	1456	1423	1391	1360	1329
diff	0	0	0	0	0	0	0	0	0	0	0	0
Basins (71.57 Acres, 410 Acre-feet)												
Δ Storage (gpm)	0	0	0	0	0	0	0	0	0	0	0	0
In Storage (gal)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
In Storage Ac-ft (568 max)	0	0	0	0	0	0	0	0	0	0	0	0

Water Management Summary - No Action Alternative

Badger Hills CBNG POD (1/5/04; A

Month	25	26	27	28	29	30	31	32	33	34	35	36
Badger Hills Water Prod. (gpm)												
Badger Hills Federal	0	0	0	0	0	0	0	0	0	0	0	0
Badger Hills State and Fee	833	818	803	788	774	759	745	732	718	705	692	679
CX Field Prod. (gpm)	*466*	*453*	*439*	*426*	*414*	*402*	*390*	*378*	*367*	*356*	*346*	*336*
Total Water Production (gpm)	1300	1271	1242	1214	1187	1161	1135	1110	1085	1061	1038	1015
Management Methods												
Discharge Permit												
Volume of Water Discharged	695	666	637	609	582	556	530	505	480	456	433	410
Off Site Beneficial Use												
Spring Creek Mine	235	235	235	235	235	235	235	235	235	235	235	235
Decker Mine	370	370	370	370	370	370	370	370	370	370	370	370
MPDES + Coal Mines	1300	1271	1242	1214	1187	1161	1135	1110	1085	1061	1038	1015
diff	0	0	0	0	0	0	0	0	0	0	0	0
Basins (71.57 Acres, 410 Acre-feet)												
Δ Storage (gpm)	0	0	0	0	0	0	0	0	0	0	0	0
In Storage (gal)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
In Storage Ac-ft (568 max)	0	0	0	0	0	0	0	0	0	0	0	0

Water Management Summary - No Action Alternative

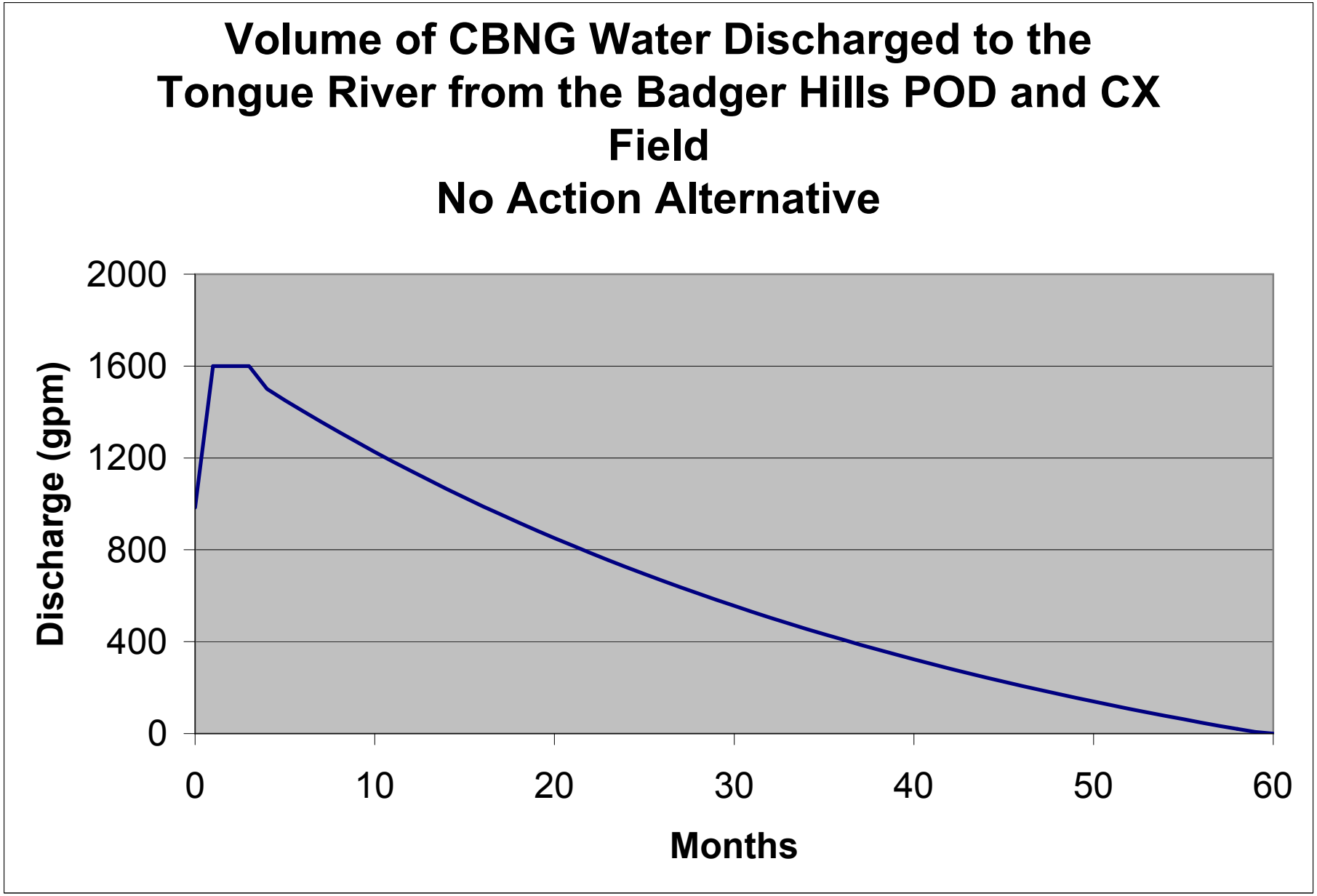
Badger Hills CBNG POD (1/5/04; A

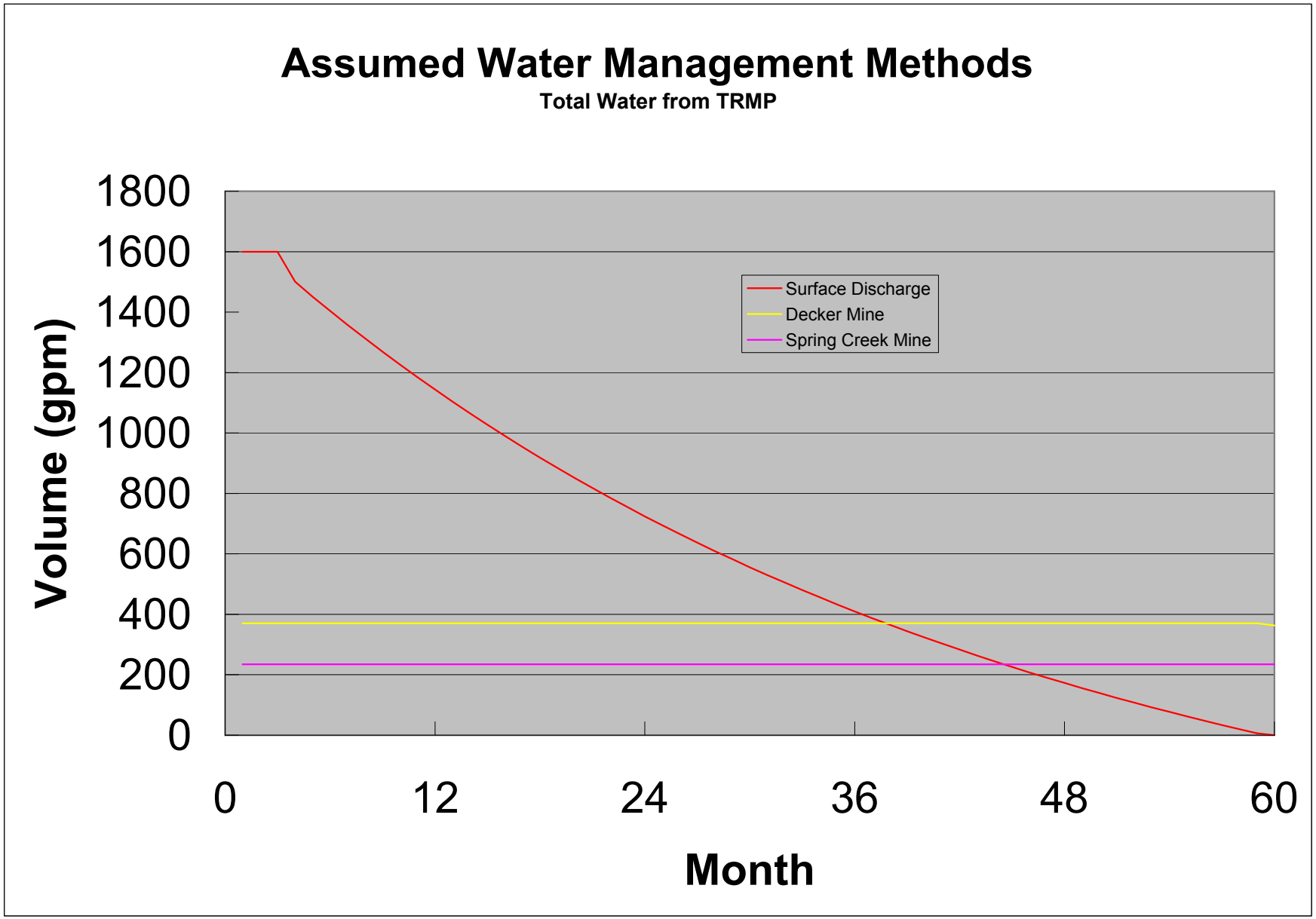
Month	37	38	39	40	41	42	43	44	45	46	47	48
Badger Hills Water Prod. (gpm)												
Badger Hills Federal	0	0	0	0	0	0	0	0	0	0	0	0
Badger Hills State and Fee	667	654	642	630	619	607	596	585	574	564	553	543
CX Field Prod. (gpm)	*326*	*316*	*307*	*298*	*289*	*281*	*272*	*264*	*257*	*249*	*242*	*235*
Total Water Production (gpm)	992	971	949	928	908	888	869	850	831	813	795	778
Management Methods												
Discharge Permit												
Volume of Water Discharged	387	366	344	323	303	283	264	245	226	208	190	173
Off Site Beneficial Use												
Spring Creek Mine	235	235	235	235	235	235	235	235	235	235	235	235
Decker Mine	370	370	370	370	370	370	370	370	370	370	370	370
MPDES + Coal Mines	992	971	949	928	908	888	869	850	831	813	795	778
diff	0	0	0	0	0	0	0	0	0	0	0	0
Basins (71.57 Acres, 410 Acre-feet)												
Δ Storage (gpm)	0	0	0	0	0	0	0	0	0	0	0	0
In Storage (gal)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
In Storage Ac-ft (568 max)	0	0	0	0	0	0	0	0	0	0	0	0

Water Management Summary - No Action Alternative

Badger Hills CBNG POD (1/5/04; A

Month	49	50	51	52	53	54	55	56	57	58	59	60
Badger Hills Water Prod. (gpm)												
Badger Hills Federal	0	0	0	0	0	0	0	0	0	0	0	0
Badger Hills State and Fee	533	523	514	504	495	486	477	468	460	451	443	435
CX Field Prod. (gpm)	*228*	*221*	*215*	*208*	*202*	*196*	*190*	*185*	*179*	*174*	*169*	*164*
Total Water Production (gpm)	761	744	728	713	697	682	667	653	639	625	612	599
Management Methods												
Discharge Permit												
Volume of Water Discharged	156	139	123	108	92	77	62	48	34	20	7	0
Off Site Beneficial Use												
Spring Creek Mine	235	235	235	235	235	235	235	235	235	235	235	235
Decker Mine	370	370	370	370	370	370	370	370	370	370	370	364
MPDES + Coal Mines	761	744	728	713	697	682	667	653	639	625	612	599
diff	0	0	0	0	0	0	0	0	0	0	0	0
Basins (71.57 Acres, 410 Acre-feet)												
Δ Storage (gpm)	0	0	0	0	0	0	0	0	0	0	0	0
In Storage (gal)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
In Storage Ac-ft (568 max)	0	0	0	0	0	0	0	0	0	0	0	0


Volume of CBNG Water Discharged to the Tongue River from the Badger Hills POD and CX Field
No Action Alternative
Discharge (gpm)
2000
1600
1200
800
400
0
0
10
20
30
40
50
60
Months


Assumed Water Management Methods
Total Water from TRMP
Volume (gpm)
1800
1600
1400
1200
1000
800
600
400
200
0
0
12
24
36
48
60
Month
Surface Discharge
Decker Mine
Spring Creek Mine

Water Management Summary - Proposed Action Alternative

Badger Hills CBNG POD (1/6/04; ALB)

Month	0	1	2	3	4	5	6	7	8	9	10	11	12
Badger Hills Water Prod. (gpm)													
Badger Hills Federal	0	1204	1182	1160	1139	1118	1097	1077	1057	1038	1018	1000	981
Badger Hills State and Fee	0	1302	1278	1254	1231	1209	1186	1165	1143	1122	1101	1081	1061
CX Field Prod. (gpm)	*984*	*955*	*927*	*900*	*873*	*848*	*823*	*798*	*775*	*752*	*730*	*708*	*688*
Total Water Production (gpm)	984	3461	3387	3314	3243	3174	3106	3040	2975	2912	2850	2789	2730
Management Methods													
Discharge Permit													
Volume of Water Discharged	984	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Off Site Beneficial Use													
Spring Creek Mine	0	235	235	235	235	235	235	235	235	235	235	235	235
Decker Mine	0	370	370	370	370	370	370	370	370	370	370	370	370
Land Application (170 Acres during 6mo/year)													
Plant Use per month (gpm)	0	0	0	0	128	481	705	577	224	0	0	0	0
Evaporation	0	0	0	0	322	409	521	459	279	149	0	0	0
Leaching Fraction	0	0	0	0	316	316	316	316	316	316	0	0	0
Total	0	0	0	0	767	1206	1542	1352	819	465	0	0	0
Basins (71.57 Acres, 410 Acre-feet)													
Evaporation Less precip	0	22	71	98	129	186	319	280	146	62	31	13	9
Δ Storage (gpm)	0	1234	1111	1012	143	-423	-960	-796	-196	180	614	571	516
In Storage (gal)	0	5.4E+07	1.0E+08	1.5E+08	1.5E+08	1.3E+08	9.3E+07	5.8E+07	4.9E+07	5.7E+07	8.4E+07	1.1E+08	1.3E+08
Storage Left (gal)	1.9E+08	1.3E+08	8.2E+07	3.8E+07	3.2E+07	5.0E+07	9.2E+07	1.3E+08	1.4E+08	1.3E+08	1.0E+08	7.6E+07	5.4E+07
In Storage Ac-ft (568 max)	0	166	315	451	470	413	284	177	151	175	258	334	404
Storage Left (Ac-ft)	568	402	253	117	98	155	284	391	417	393	310	234	164
remainder	0	0	0	0	0	0	0	0	0	0	0	0	0
Evaporation Rate ("/mo)	0.6	0.9	2.2	3.7	5.2	6.6	8.4	7.4	4.5	2.4	1.2	0.7	0.6
Precip ("/mo)	0.4	0.4	0.6	1.5	2.3	2.4	1.2	1.1	1.2	1	0.5	0.4	0.4
Effective Evaporation ("/mo)	0.2	0.5	1.6	2.2	2.9	4.2	7.2	6.3	3.3	1.4	0.7	0.3	0.2
Plant use determined from The Montana Irrigator's Pocket Guide (MT-DNRC)													
Avg Monthly Temps	19	26	33	44	55	63	71	70	59	48	34	25	19
Plant use per day (in/day)	0	0	0	0	0.04	0.15	0.22	0.18	0.07	0	0	0	0
Plant Use per month (in/mo)	0	0	0	0	1.2168	4.563	6.6924	5.4756	2.1294	0	0	0	0
Plant use per month (ac-ft/mo)	0	0	0	0	17.238	64.6425	94.809	77.571	30.1665	0	0	0	0

Average Monthly Temperatures, evaporation rates, and precipitation rates are from the MAPS website at http://stone.msu.montana.edu/ma6/basemap/viewer.htm

Water Management Summary - Proposed Action Alternative

Badger Hills CBNG POD (1/6/04; A

Month	13	14	15	16	17	18	19	20	21	22	23	24
Badger Hills Water Prod. (gpm)												
Badger Hills Federal	963	945	928	911	894	878	861	846	830	815	800	785
Badger Hills State and Fee	1042	1022	1004	985	967	949	932	914	898	881	865	849
CX Field Prod. (gpm)	*667*	*648*	*629*	*610*	*592*	*575*	*558*	*541*	*526*	*510*	*495*	*481*
Total Water Production (gpm)	2672	2616	2560	2506	2453	2402	2351	2302	2253	2206	2160	2114
Management Methods												
Discharge Permit												
Volume of Water Discharged	1600	1600	1600	1600	1600	1025	1025	1025	1025	800	800	800
Off Site Beneficial Use												
Spring Creek Mine	235	235	235	235	235	235	235	235	235	235	235	235
Decker Mine	370	370	370	370	370	370	370	370	370	370	370	370
Land Application (170 Acres during 6												
Plant Use per month (gpm)	0	0	0	128	481	705	577	224	0	0	0	0
Evaporation	0	0	0	322	409	521	459	279	149	0	0	0
Leaching Fraction	0	0	0	316	316	316	316	316	316	0	0	0
Total	0	0	0	767	1206	1542	1352	819	465	0	0	0
Basins (71.57 Acres, 410 Acre-feet)												
Evaporation Less precip	22	71	98	129	186	319	280	146	62	31	13	9
Δ Storage (gpm)	445	340	258	-594	-1144	-1090	-910	-294	96	770	741	701
In Storage (gal)	1.5E+08	1.7E+08	1.8E+08	1.5E+08	1.0E+08	5.3E+07	1.3E+07	5.8E+05	4.8E+06	3.9E+07	7.1E+07	1.0E+08
Storage Left (gal)	3.4E+07	1.9E+07	7.9E+06	3.4E+07	8.4E+07	1.3E+08	1.7E+08	1.8E+08	1.8E+08	1.5E+08	1.1E+08	8.3E+07
In Storage Ac-ft (568 max)	464	509	544	464	310	164	41	2	15	118	218	312
Storage Left (Ac-ft)	104	59	24	104	258	404	527	566	553	450	350	256
remainder	0	0	0	0	0	0	0	0	0	0	0	0
Evaporation Rate ("/mo)	0.9	2.2	3.7	5.2	6.6	8.4	7.4	4.5	2.4	1.2	0.7	0.6
Precip ("/mo)	0.4	0.6	1.5	2.3	2.4	1.2	1.1	1.2	1	0.5	0.4	0.4
Effective Evaporation ("/mo)	0.5	1.6	2.2	2.9	4.2	7.2	6.3	3.3	1.4	0.7	0.3	0.2
Plant use determined from The Mon												
Avg Monthly Temps	26	33	44	55	63	71	70	59	48	34	25	19
Plant use per day (in/day)	0	0	0	0.04	0.15	0.22	0.18	0.07	0	0	0	0
Plant Use per month (in/mo)	0	0	0	1.2168	4.563	6.6924	5.4756	2.1294	0	0	0	0
Plant use per month (ac-ft/mo)	0	0	0	17.238	64.6425	94.809	77.571	30.1665	0	0	0	0

Average Monthly Temperatures, evaporatio

Water Management Summary - Proposed Action Alternative

Badger Hills CBNG POD (1/6/04; A

Month	25	26	27	28	29	30	31	32	33	34	35	36
Badger Hills Water Prod. (gpm)												
Badger Hills Federal	771	756	742	729	715	702	689	676	664	652	640	628
Badger Hills State and Fee	833	818	803	788	774	759	745	732	718	705	692	679
CX Field Prod. (gpm)	*466*	*453*	*439*	*426*	*414*	*402*	*390*	*378*	*367*	*356*	*346*	*336*
Total Water Production (gpm)	2070	2027	1985	1943	1903	1863	1824	1786	1749	1713	1678	1643
Management Methods												
Discharge Permit												
Volume of Water Discharged	800	800	800	690	690	690	690	690	690	400	400	400
Off Site Beneficial Use												
Spring Creek Mine	235	235	235	235	235	235	235	235	235	235	235	235
Decker Mine	370	370	370	370	370	370	370	370	370	370	370	370
Land Application (170 Acres during 6												
Plant Use per month (gpm)	0	0	0	128	481	705	577	224	0	0	0	0
Evaporation	0	0	0	322	409	521	459	279	149	0	0	0
Leaching Fraction	0	0	0	316	316	316	316	316	316	0	0	0
Total	0	0	0	767	1206	1542	1352	819	465	0	0	0
Basins (71.57 Acres, 410 Acre-feet)												
Evaporation Less precip	22	71	98	129	186	319	280	146	62	31	13	9
Δ Storage (gpm)	643	551	482	-247	-785	-1293	-1102	-474	-73	677	659	629
In Storage (gal)	1.3E+08	1.5E+08	1.8E+08	1.6E+08	1.3E+08	7.3E+07	2.5E+07	4.2E+06	1.0E+06	3.1E+07	6.0E+07	8.7E+07
Storage Left (gal)	5.5E+07	3.1E+07	1.0E+07	2.1E+07	5.5E+07	1.1E+08	1.6E+08	1.8E+08	1.8E+08	1.5E+08	1.3E+08	9.8E+07
In Storage Ac-ft (568 max)	398	473	537	504	399	225	77	13	3	94	183	267
Storage Left (Ac-ft)	170	95	31	64	169	343	491	555	565	474	385	301
remainder	0	0	0	0	0	0	0	0	0	0	0	0
Evaporation Rate ("/mo)	0.9	2.2	3.7	5.2	6.6	8.4	7.4	4.5	2.4	1.2	0.7	0.6
Precip ("/mo)	0.4	0.6	1.5	2.3	2.4	1.2	1.1	1.2	1	0.5	0.4	0.4
Effective Evaporation ("/mo)	0.5	1.6	2.2	2.9	4.2	7.2	6.3	3.3	1.4	0.7	0.3	0.2
Plant use determined from The Mon												
Avg Monthly Temps	26	33	44	55	63	71	70	59	48	34	25	19
Plant use per day (in/day)	0	0	0	0.04	0.15	0.22	0.18	0.07	0	0	0	0
Plant Use per month (in/mo)	0	0	0	1.2168	4.563	6.6924	5.4756	2.1294	0	0	0	0
Plant use per month (ac-ft/mo)	0	0	0	17.238	64.6425	94.809	77.571	30.1665	0	0	0	0

Average Monthly Temperatures, evaporatio

Water Management Summary - Proposed Action Alternative

Badger Hills CBNG POD (1/6/04; A

Month	37	38	39	40	41	42	43	44	45	46	47	48
Badger Hills Water Prod. (gpm)												
Badger Hills Federal	616	605	594	583	572	562	551	541	531	521	512	502
Badger Hills State and Fee	667	654	642	630	619	607	596	585	574	564	553	543
CX Field Prod. (gpm)	*326*	*316*	*307*	*298*	*289*	*281*	*272*	*264*	*257*	*249*	*242*	*235*
Total Water Production (gpm)	1609	1576	1543	1511	1480	1450	1420	1391	1362	1334	1307	1280
Management Methods												
Discharge Permit												
Volume of Water Discharged	400	400	400	190	190	190	190	0	0	0	0	0
Off Site Beneficial Use												
Spring Creek Mine	235	235	235	235	235	235	235	235	235	235	235	235
Decker Mine	370	370	370	370	370	370	370	370	370	370	370	370
Land Application (170 Acres during 6												
Plant Use per month (gpm)	0	0	0	128	481	705	577	224	0	0	0	0
Evaporation	0	0	0	322	409	521	459	279	149	0	0	0
Leaching Fraction	0	0	0	316	316	316	316	316	316	0	0	0
Total	0	0	0	767	1206	1542	1352	819	465	0	0	0
Basins (71.57 Acres, 410 Acre-feet)												
Evaporation Less precip	22	71	98	129	186	319	280	146	62	31	13	9
Δ Storage (gpm)	582	500	441	-179	-707	-1207	-1006	-180	230	698	689	666
In Storage (gal)	1.1E+08	1.3E+08	1.5E+08	1.5E+08	1.1E+08	6.2E+07	1.8E+07	1.0E+07	2.0E+07	5.1E+07	8.1E+07	1.1E+08
Storage Left (gal)	7.3E+07	5.1E+07	3.1E+07	3.9E+07	7.0E+07	1.2E+08	1.7E+08	1.7E+08	1.6E+08	1.3E+08	1.0E+08	7.5E+07
In Storage Ac-ft (568 max)	345	413	472	448	353	191	55	31	62	156	249	338
Storage Left (Ac-ft)	223	155	96	120	215	377	513	537	506	412	319	230
remainder	0	0	0	0	0	0	0	0	0	0	0	0
Evaporation Rate ("/mo)	0.9	2.2	3.7	5.2	6.6	8.4	7.4	4.5	2.4	1.2	0.7	0.6
Precip ("/mo)	0.4	0.6	1.5	2.3	2.4	1.2	1.1	1.2	1	0.5	0.4	0.4
Effective Evaporation ("/mo)	0.5	1.6	2.2	2.9	4.2	7.2	6.3	3.3	1.4	0.7	0.3	0.2
Plant use determined from The Mon												
Avg Monthly Temps	26	33	44	55	63	71	70	59	48	34	25	19
Plant use per day (in/day)	0	0	0	0.04	0.15	0.22	0.18	0.07	0	0	0	0
Plant Use per month (in/mo)	0	0	0	1.2168	4.563	6.6924	5.4756	2.1294	0	0	0	0
Plant use per month (ac-ft/mo)	0	0	0	17.238	64.6425	94.809	77.571	30.1665	0	0	0	0

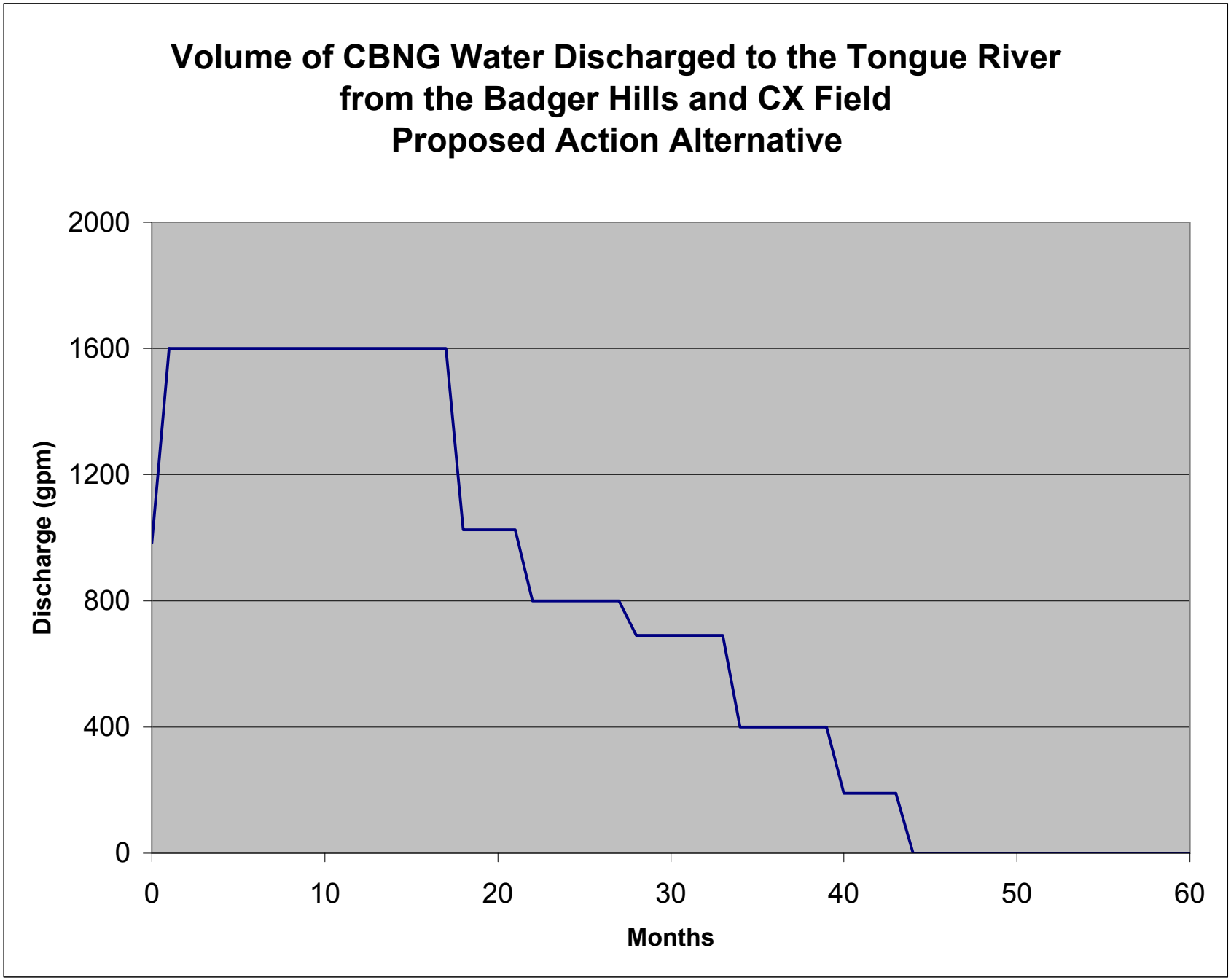
Average Monthly Temperatures, evaporatio

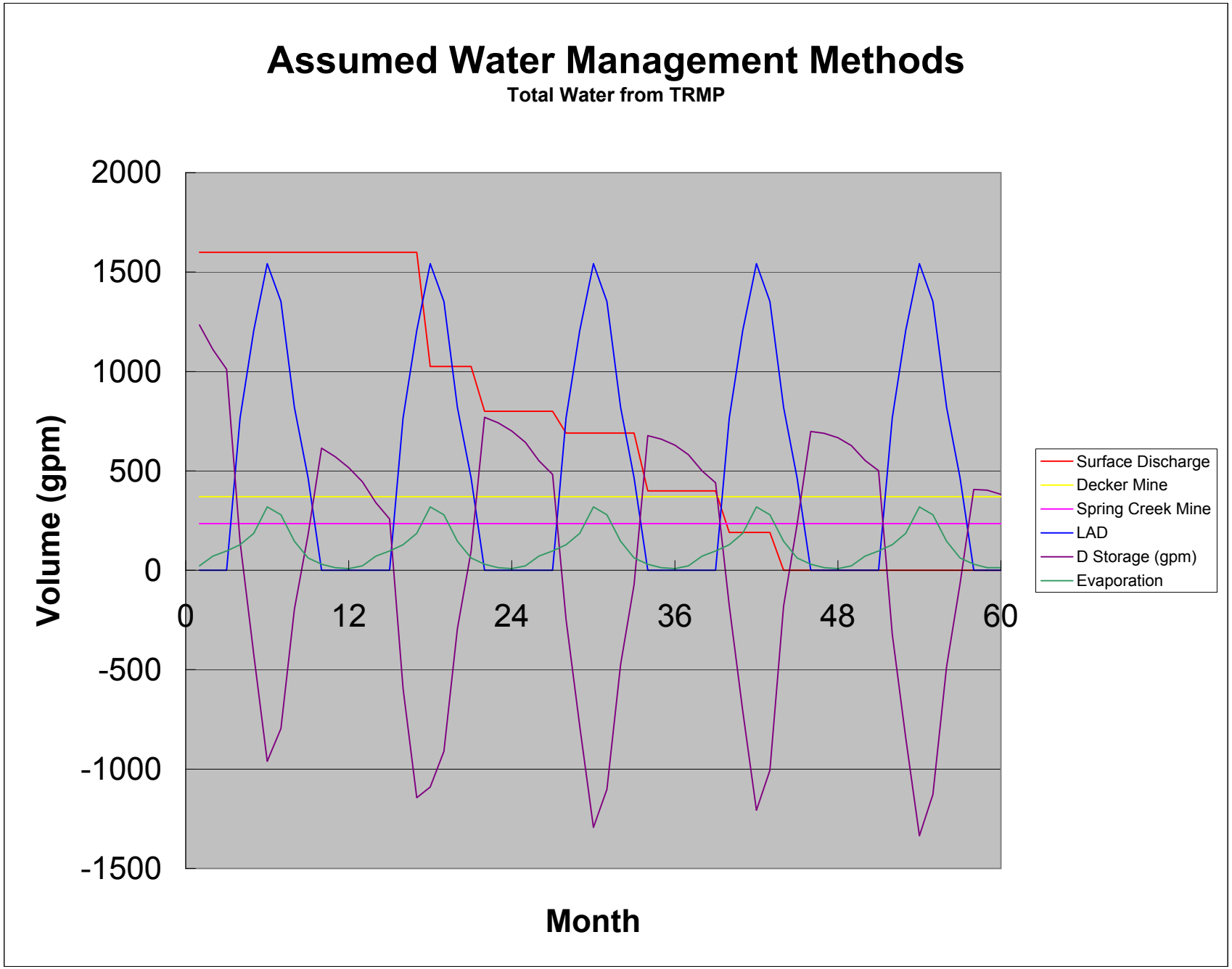
Water Management Summary - Proposed Action Alternative

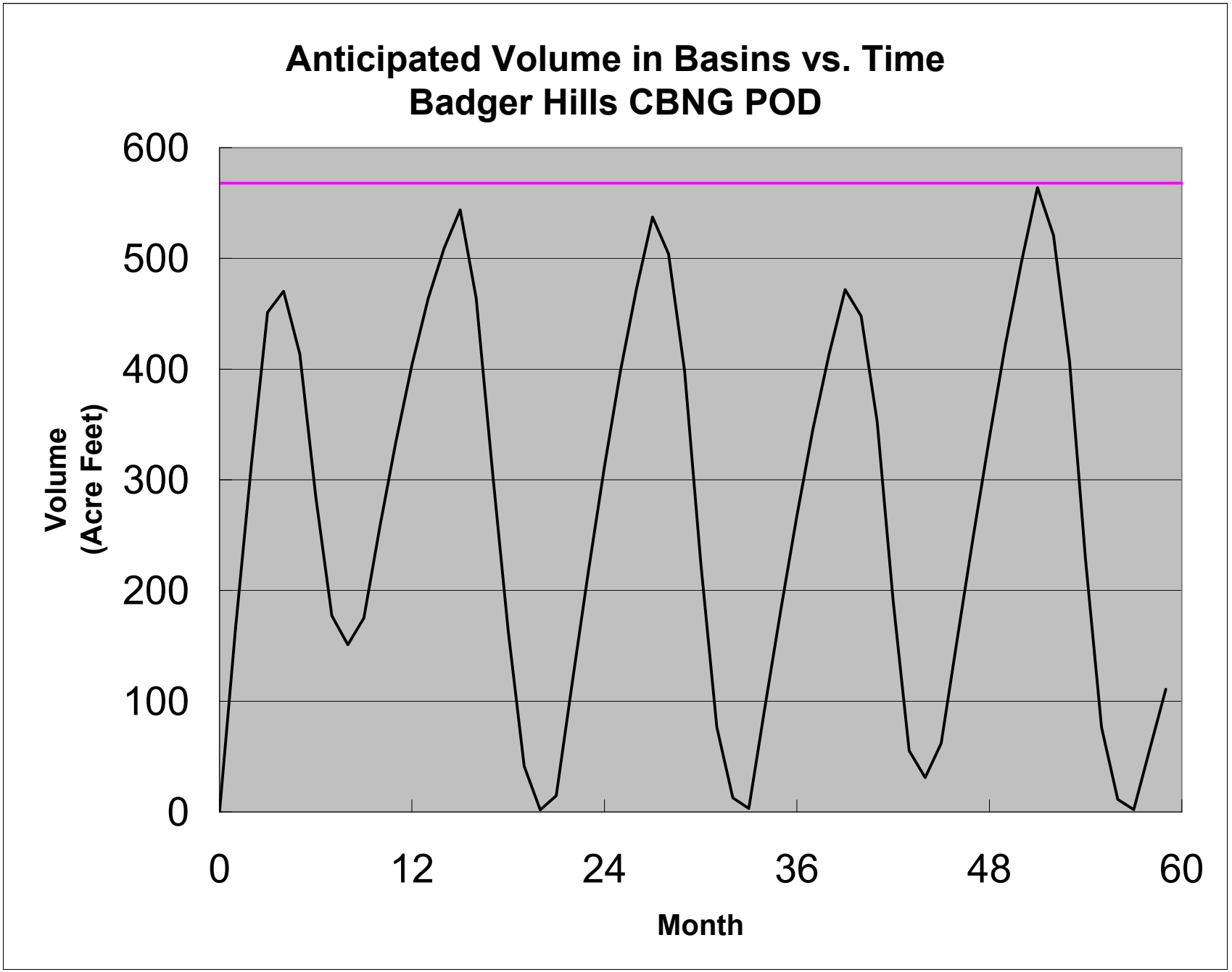
Badger Hills CBNG POD (1/6/04; A

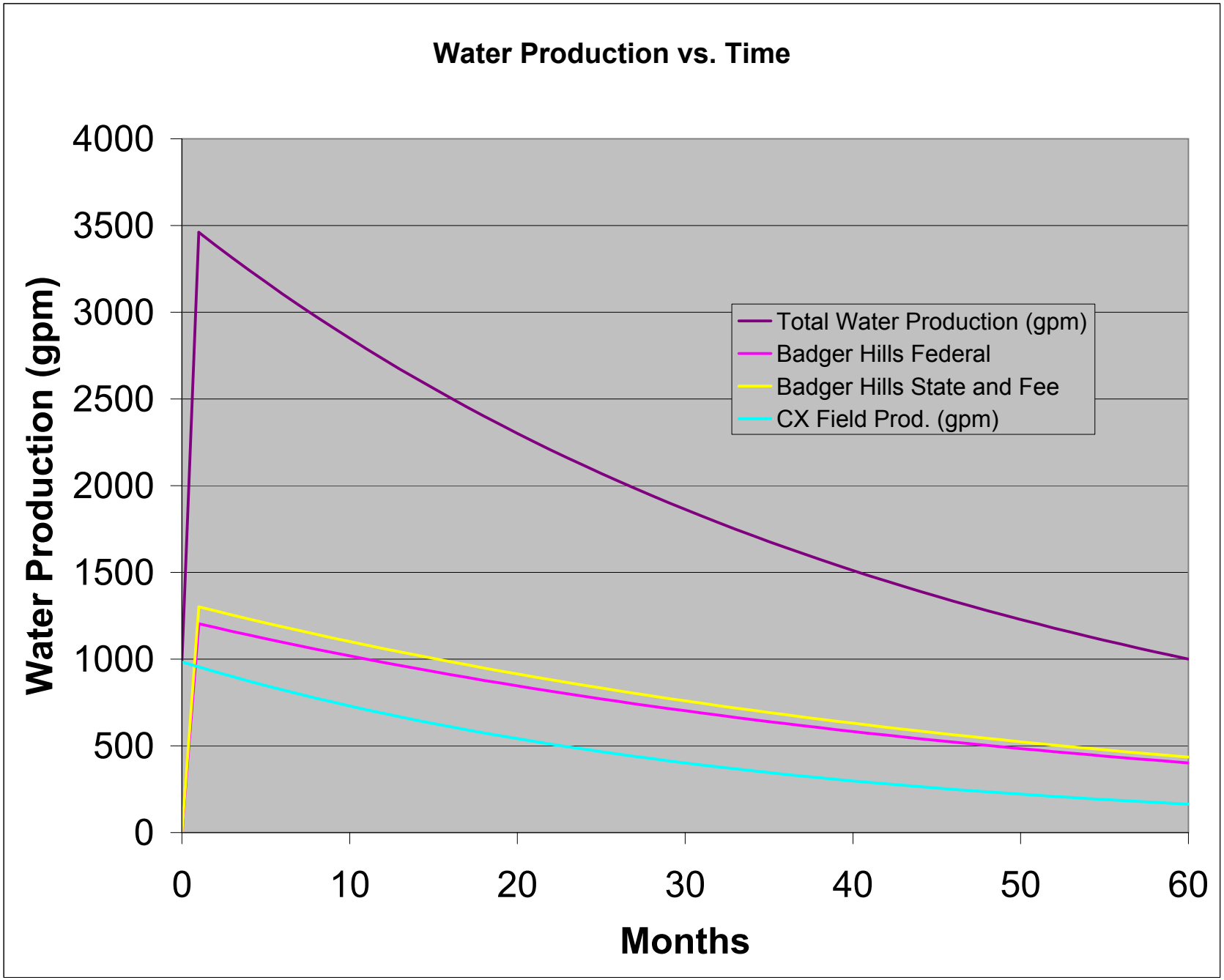
Month	49	50	51	52	53	54	55	56	57	58	59	60
Badger Hills Water Prod. (gpm)												
Badger Hills Federal	493	484	475	466	458	449	441	433	425	417	409	402
Badger Hills State and Fee	533	523	514	504	495	486	477	468	460	451	443	435
CX Field Prod. (gpm)	*228*	*221*	*215*	*208*	*202*	*196*	*190*	*185*	*179*	*174*	*169*	*164*
Total Water Production (gpm)	1254	1228	1203	1179	1155	1131	1108	1086	1064	1042	1021	1000
Management Methods												
Discharge Permit												
Volume of Water Discharged	0	0	0	0	0	0	0	0	0	0	0	0
Off Site Beneficial Use												
Spring Creek Mine	235	235	235	235	235	235	235	235	235	235	235	235
Decker Mine	370	370	370	370	370	370	370	370	370	370	370	370
Land Application (170 Acres during 6												
Plant Use per month (gpm)	0	0	0	128	481	705	577	224	0	0	0	0
Evaporation	0	0	0	322	409	521	459	279	149	0	0	0
Leaching Fraction	0	0	0	316	316	316	316	316	316	0	0	0
Total	0	0	0	767	1206	1542	1352	819	465	0	0	0
Basins (71.57 Acres, 410 Acre-feet)												
Evaporation Less precip	22	71	98	129	186	319	280	146	62	31	13	13
Δ Storage (gpm)	627	553	501	-321	-842	-1335	-1128	-485	-68	406	403	382
In Storage (gal)	1.4E+08	1.6E+08	1.8E+08	1.7E+08	1.3E+08	7.4E+07	2.5E+07	3.7E+06	6.9E+05	1.8E+07	3.6E+07	5.3E+07
Storage Left (gal)	4.7E+07	2.3E+07	1.3E+06	1.5E+07	5.2E+07	1.1E+08	1.6E+08	1.8E+08	1.8E+08	1.7E+08	1.5E+08	1.3E+08
In Storage Ac-ft (568 max)	422	497	564	521	408	228	76	11	2	57	111	162
Storage Left (Ac-ft)	146	71	4	47	160	340	492	557	566	511	457	406
remainder	0	0	0	0	0	0	0	0	0	0	0	0
Evaporation Rate ("/mo)	0.9	2.2	3.7	5.2	6.6	8.4	7.4	4.5	2.4	1.2	0.7	0.7
Precip ("/mo)	0.4	0.6	1.5	2.3	2.4	1.2	1.1	1.2	1	0.5	0.4	0.4
Effective Evaporation ("/mo)	0.5	1.6	2.2	2.9	4.2	7.2	6.3	3.3	1.4	0.7	0.3	0.3
Plant use determined from The Mon												
Avg Monthly Temps	26	33	44	55	63	71	70	59	48	34	25	25
Plant use per day (in/day)	0	0	0	0.04	0.15	0.22	0.18	0.07	0	0	0	0
Plant Use per month (in/mo)	0	0	0	1.2168	4.563	6.6924	5.4756	2.1294	0	0	0	0
Plant use per month (ac-ft/mo)	0	0	0	17.238	64.6425	94.809	77.571	30.1665	0	0	0	0

Average Monthly Temperatures, evaporatio


Volume of CBNG Water Discharged to the Tongue River
from the Badger Hills and CX Field
Proposed Action Alternative
Discharge (gpm)
2000
1600
1200
800
400
0
0
10
20
30
40
50
60
Months


Assumed Water Management Methods
Total Water from TRMP
Volume (gpm)
2000
1500
1000
500
0
-500
-1000
-1500
0
12
24
36
48
60
Month
Surface Discharge
Decker Mine
Spring Creek Mine
LAD
D Storage (gpm)
Evaporation


Anticipated Volume in Basins vs. Time
Badger Hills CBNG POD
Volume
(Acre Feet)
600
500
400
300
200
100
0
0
12
24
36
48
60
Month


Water Production vs. Time
Water Production (gpm)
4000
3500
3000
2500
2000
1500
1000
500
0
0
10
20
30
40
50
60
Months
Total Water Production (gpm)
Badger Hills Federal
Badger Hills State and Fee
CX Field Prod. (gpm)