Comparison of STA Design & Restudy Index BMP Performance: 51% (1995-1997) WY 1979-1988

Conceptual Design (WY 1979-1988 flows & loads):

1	Without IAP & Makeup	original design assumptions, ignores IAP & BMP makeup water
2	With IAP & Makeup	designs modified to reflect IAP & BMP makeup water
		50% of makeup water through STA-34, remainder to historical inflow points
		IAP = reduction in backpumping to Lake Okeechobee

Restudy Alternatives:

- 50Base
- ALT-A
- ALT-B
- ALT-C
- ALT-D

Comparisons of Water & Phosphorus Balances:

- STA-1E
- STA1-W
- STA-2
- STA-34
- STA-5
- STA-6
- STA Inflows + Bypasses
- Outflows + Bypasses
- EAA Runoff - by Term
- EAA Runoff - by STA
- EAA Runoff - By Basin
- STA & Res. Inflow Sources
- Outflow Destinations
- Net Reduction (In - Out)

07/16/98

Comparison of STA Design & Restudy | STA-1E | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup		
Source	Flow	Load	Conc	Flow	Load	Conc
S5A	29.1	7.6	212	29.1	7.6	212
S5A-East	1.8	0.4	180	1.8	0.4	180
C51W Diversion	90.0	20.8	187	90.0	20.8	187
C51W Base Pd	3.9	0.7	149	3.9	0.7	149
S5A Makeup	0.0	0.0	0	4.9	0.4	70
S5A IAP	0.0	0.0	0	0.2	0.0	99
Total Inflow	124.8	29.5	191	129.9	29.9	187
STA Outflow	126.2	7.8	50	131.3	8.0	50

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
ST1EI1(fr EAA)	1.4	0.3	162	1.4	0.3	162	1.4	0.3	162	1.4	0.3	162	1.0	0.2	162	1.0	0.2	162
ST1EI1 (fr Lake)	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
S319	117.4	26.8	185	124.8	28.5	185	124.8	28.5	185	124.8	28.5	185	117.4	26.8	185	117.3	26.8	185
WSST1E	0.0	0.0	122	0.0	0.0	122	0.0	0.0	122	0.0	0.0	122	0.0	0.0	122	0.0	0.0	122
TOTALIN	118.8	27.1	185	126.3	28.8	185	126.3	28.8	185	126.2	28.8	185	118.3	27.0	185	118.3	27.0	185
ST1EQ1	124.3	6.7	43	132.0	7.7	47	132.0	7.7	47	132.0	7.7	47	123.8	6.6	43	123.7	6.6	43
S319WS	0.1	0.0	43	0.0	0.0	47	0.0	0.0	47	0.0	0.0	47	0.0	0.0	43	0.0	0.0	43
TOTALOUT	124.4	6.7	43	132.0	7.7	47	132.0	7.7	47	132.0	7.7	47	123.8	6.6	43	123.7	6.6	43
NET	-5.6	20.4	141	-5.7	21.1	138	-5.7	21.1	138	-5.7	21.1	138	-5.4	20.4	142	-5.4	20.4	142

Comparison of STA Design & Restudy | STA1-W | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup		
Source	Flow	Load	Conc	Flow	Load	Conc
S5A	117.4	30.7	212	117.4	30.7	212
S5A-East	7.3	1.6	180	7.3	1.6	180
S5A Lake Rel	2.3	0.6	200	2.3	0.6	200
S5A Makeup	0.0	0.0	0	19.7	1.7	70
S5A IAP	0.0	0.0	0	0.9	0.1	99
C51W Diversion	11.0	2.5	187	11.0	2.5	187
C51W Base Pd	0.5	0.1	149	0.5	0.1	149
East Beach WCD	4.3	2.1	390	4.3	2.1	390
Total Inflow	142.8	37.6	213	163.5	39.4	195
STA Outflow	144.6	8.8	49	165.3	10.7	52

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
ST1WI1 (fr EAA)	150.9	30.2	162	153.0	30.6	162	152.8	30.6	162	152.9	30.6	162	165.8	33.2	162	165.9	33.2	162
ST1WI1 (fr Lake)	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
WSST1W	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
TOTALIN	150.9	30.2	162	153.0	30.6	162	152.8	30.6	162	152.9	30.6	162	165.8	33.2	162	165.9	33.2	162
ST1WQ1	153.2	7.5	40	155.3	7.7	40	155.1	7.7	40	155.2	7.7	40	167.9	9.2	45	168.0	9.3	45
TOTALOUT	153.2	7.5	40	155.3	7.7	40	155.1	7.7	40	155.2	7.7	40	167.9	9.2	45	168.0	9.3	45
NET	-2.3	22.7	122	-2.3	22.9	122	-2.3	22.8	122	-2.3	22.9	122	-2.1	23.9	117	-2.1	23.9	117
ST1BYP	0.0	0.0	162	0.0	0.0	162	0.0	0.0	162	0.0	0.0	162	0.0	0.0	162	0.0	0.0	162
ST1WQ1	153.2	7.5	40	155.3	7.7	40	155.1	7.7	40	155.2	7.7	40	167.9	9.2	45	168.0	9.3	45
Outflow+Bypass	153.2	7.5	40	155.3	7.7	40	155.1	7.7	40	155.2	7.7	40	167.9	9.2	45	168.0	9.3	45

Comparison of STA Design & Restudy | STA-2 | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup		
Source	Flow	Load	Conc	Flow	Load	Conc
S5A	30.0	7.9	212	30.0	7.9	212
S5A-East	1.9	0.4	180	1.9	0.4	180
S6	131.4	23.1	143	131.4	23.1	143
S6 Lake Rel	2.9	0.3	82	2.9	0.3	82
298 Dist (2)	8.4	2.1	204	8.4	2.1	204
S5A Makeup	0.0	0.0	0	5.1	0.4	70
S6 Makeup	0.0	0.0	0	11.0	1.0	70
S5A IAP	0.0	0.0	0	0.2	0.0	99
S6 IAP	0.0	0.0	0	24.0	5.7	192
Total Inflow	174.6	33.8	157	214.9	40.9	154
STA Outflow	176.3	10.8	50	216.6	15.7	59

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
RUNS562	196.8	24.1	99	165.5	20.2	99	165.5	20.2	99	165.6	20.2	99	169.3	20.7	99	169.3	20.7	99
298ST2	11.6	2.9	204	9.2	2.3	204	9.3	2.4	204	9.4	2.4	204	9.4	2.4	204	9.5	2.4	204
FLIMPH	10.1	1.0	78	26.1	2.5	78	29.5	2.8	78	33.0	3.2	78	31.2	3.0	78	5.6	0.5	78
HLSBRG	0.0	0.0	78	0.0	0.0	78	0.0	0.0	78	0.0	0.0	78	0.0	0.0	78	0.0	0.0	78
WSSTA2	0.0	0.0	78	0.0	0.0	78	0.0	0.0	78	0.0	0.0	78	0.0	0.0	78	0.0	0.0	78
TOTALIN	218.4	27.9	104	200.8	25.0	101	204.3	25.4	101	207.9	25.8	100	210.0	26.1	101	184.4	23.6	104
ST2OT1	211.4	10.8	41	193.6	8.9	37	197.1	9.2	38	200.7	9.5	38	202.8	9.7	39	177.5	7.7	35
TOTALOUT	211.4	10.8	41	193.6	8.9	37	197.1	9.2	38	200.7	9.5	38	202.8	9.7	39	177.5	7.7	35
NET	7.0	17.1	62	7.2	16.1	64	7.2	16.2	63	7.3	16.3	62	7.1	16.4	62	6.9	15.9	69
ST2BYP	23.3	2.8	99	6.1	0.7	99	9.5	1.2	99	9.4	1.1	99	9.3	1.1	99	9.3	1.1	99
ST2OT1	211.4	10.8	41	193.6	8.9	37	197.1	9.2	38	200.7	9.5	38	202.8	9.7	39	177.5	7.7	35
Outflow+Bypass	234.7	13.6	47	199.7	9.7	39	206.5	10.4	41	210.0	10.6	41	212.1	10.8	41	186.8	8.8	38

Comparison of STA Design & Restudy | STA-34 | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup		
Source	Flow	Load	Conc	Flow	Load	Conc
S7	159.7	20.2	103	159.7	20.2	103
S8 - SDR	169.9	42.8	204	169.9	42.8	204
S7 Lake Reg	8.2	0.7	70	8.2	0.7	70
S8 Lake Reg	7.7	0.7	72	7.7	0.7	72
G136	10.6	0.7	53	10.6	0.7	53
S-236/298	9.4	1.6	135	9.4	1.6	135
South/298	2.8	0.4	102	2.8	0.4	102
Lake Release	236.4	20.4	70	176.0	15.2	70
S7+S8 Makeup	0.0	0.0	0	124.5	10.8	70
S7 IAP	0.0	0.0	0	27.6	6.7	195
S8 IAP	0.0	0.0	0	25.3	5.0	160
Total Inflow	604.8	87.4	117	721.8	104.6	117
STA Outflow	609.2	37.9	50	726.2	50.6	56

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
R78ST3	330.8	37.6	92	123.9	14.1	92	122.8	13.9	92	119.5	13.6	92	118.4	13.4	92	118.7	13.5	92
LKTST3	255.8	20.7	66	112.8	9.2	66	170.0	14.1	67	146.9	12.3	68	136.5	11.4	68	138.9	11.7	68
G136ST3	10.5	1.8	141	11.3	2.0	141	11.8	2.0	141	11.6	2.0	141	11.6	2.0	141	11.6	2.0	141
S236SO	4.9	0.8	135	6.1	1.0	135	7.8	1.3	135	7.4	1.2	135	7.5	1.2	135	7.5	1.3	135
298ST3	2.8	0.4	102	4.3	0.5	102	5.2	0.7	102	5.2	0.7	102	5.2	0.7	102	5.2	0.7	102
WCS4				344.4	23.4	55	371.8	26.1	57									
WCS4N										277.8	19.8	58	294.8	20.7	57	309.8	21.4	56
WCS4S										50.4	5.3	85	52.4	5.4	83	58.6	5.8	81
EVBLSN										4.9	0.4	58	5.5	0.4	57	4.7	0.3	56
EVBLSS										11.7	1.2	85	12.5	1.3	83	7.5	0.7	81
TOTALIN	604.8	61.3	82	602.8	50.2	67	689.3	58.1	68	635.4	56.4	72	644.4	56.5	71	662.4	57.3	70
ST3TL4	8.8	0.4	36	0.0	0.0	30	367.0	15.0	33	266.6	10.7	33	273.7	11.0	33	285.7	11.6	33
ST3NEA	176.2	7.7	36	140.5	5.1	30	103.6	4.2	33	109.3	4.4	33	111.7	4.5	33	114.2	4.6	33
ST3TNW	115.9	5.1	36	182.0	6.6	30	140.7	5.7	33	131.1	5.3	33	131.5	5.3	33	134.3	5.5	33
ST3TS8	254.3	11.2	36	233.1	8.5	30	19.3	0.8	33	71.8	2.9	33	68.8	2.8	33	69.9	2.8	33
ST3TS7	23.5	1.0	36	13.8	0.5	30	29.1	1.2	33	27.1	1.1	33	29.0	1.2	33	27.3	1.1	33
S7TCA3	0.0	0.0	36	4.5	0.2	30	0.0	0.0	33	0.0	0.0	33	0.0	0.0	33	0.0	0.0	33
ST3THL	0.0	0.0	36	4.7	0.2	30	5.1	0.2	33	4.8	0.2	33	4.7	0.2	33	5.0	0.2	33
TOTALOUT	578.5	25.4	36	578.8	21.1	30	664.7	27.1	33	610.5	24.6	33	619.3	24.9	33	636.4	25.9	33
NET	26.2	35.9	47	24.0	29.1	38	24.6	31.0	35	24.9	31.8	39	25.1	31.6	38	26.1	31.5	37
TOTALOUT	578.5	25.4	36	578.8	21.1	30	664.7	27.1	33	610.5	24.6	33	619.3	24.9	33	636.4	25.9	33
ST3BYP	0.0	0.0	92	14.7	1.7	92	22.6	2.6	92	22.9	2.6	92	23.1	2.6	92	22.9	2.6	92
Outflow+Bypass	578.5	25.4	36	593.5	22.8	31	687.3	29.7	35	633.4	27.2	35	642.4	27.6	35	659.2	28.5	35

Comparison of STA Design & Restudy — STA-5 — BMP Performance: 51% (1995-1997) — WY 1979-1988 — 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup		
Source	Flow	Load	Conc	Flow	Load	Conc
C139	103.9	33.6	262	103.9	33.6	262
Total Inflow	103.9	33.6	262	103.9	33.6	262
STA Outflow	105.0	9.6	74	105.0	9.6	74

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
STA5IQ (C139)	102.3	30.0	238	102.3	30.0	238	102.3	30.0	238	102.3	30.0	238	102.3	30.0	238	102.3	30.0	238
STA5IQ (Lake)	0.9	0.1	64	31.3	2.5	64	30.6	2.4	64	31.0	2.4	64	31.8	2.5	64	31.7	2.5	64
TOTALIN	103.1	30.1	237	133.6	32.5	197	132.9	32.5	198	133.3	32.5	198	134.1	32.6	197	134.0	32.5	197
ST5OT1	97.5	8.2	68	127.6	11.6	74	126.9	11.5	74	127.3	11.6	74	128.1	11.7	74	128.0	11.6	74
TOTALOUT	97.5	8.2	68	127.6	11.6	74	126.9	11.5	74	127.3	11.6	74	128.1	11.7	74	128.0	11.6	74
NET	5.7	21.9	169	6.0	20.9	124	6.0	20.9	124	6.0	20.9	124	6.0	20.9	123	6.0	20.9	123
ST5OT1	97.5	8.2	68	127.6	11.6	74	126.9	11.5	74	127.3	11.6	74	128.1	11.7	74	128.0	11.6	74
ST5BYP	0.0	0.0	238	0.0	0.0	238	0.0	0.0	238	0.0	0.0	238	0.0	0.0	238	0.0	0.0	238
Outflow+Bypass	97.5	8.2	68	127.6	11.6	74	126.9	11.5	74	127.3	11.6	74	128.1	11.7	74	128.0	11.6	74

Comparison of STA Design & Restudy | STA-6 | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup		
Source	Flow	Load	Conc	Flow	Load	Conc
So Div Ranch	17.9	4.4	197	17.9	4.4	197
C139	0.0	0.0	262	0.0	0.0	262
C139 Annex	0.0	0.0	70	0.0	0.0	70
S8 SDR Makeup	0.0	0.0	0	2.5	0.2	70
Total Inflow	17.9	4.4	198	20.4	4.6	182
STA Outflow	18.1	1.0	43	20.7	1.2	48

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
SUGRST6	17.8	2.2	100	19.2	2.4	100	19.2	2.4	100	19.2	2.4	100	19.3	2.4	100	19.3	2.4	100
U1TST6	0.0	0.0	70	0.0	0.0	70	0.0	0.0	70	0.0	0.0	70	0.0	0.0	70	0.0	0.0	70
C139ST6	0.0	0.0	238	0.0	0.0	238	0.0	0.0	238	0.0	0.0	238	0.0	0.0	238	0.0	0.0	238
WSSTA6	2.9	0.2	64	3.0	0.2	64	2.8	0.2	64	2.7	0.2	64	2.9	0.2	64	2.9	0.2	64
TOTALIN	20.7	2.4	95	22.2	2.6	95	22.0	2.6	95	21.9	2.6	96	22.1	2.6	95	22.2	2.6	95
ST6SEM	1.2	0.0	27	1.4	0.0	28	1.3	0.0	29	1.3	0.0	28	1.4	0.0	28	1.4	0.0	28
ST6WCA	16.7	0.5	27	17.8	0.6	28	6.5	0.2	29	8.0	0.3	28	7.0	0.2	28	8.0	0.3	28
ST6TL4	0.0	0.0	27	0.0	0.0	28	11.3	0.4	29	9.8	0.3	28	10.8	0.4	28	9.8	0.3	28
TOTALOUT	17.9	0.6	27	19.2	0.7	28	19.1	0.7	29	19.2	0.7	28	19.2	0.7	28	19.2	0.7	28
NET	2.8	1.8	68	3.1	1.9	67	2.9	1.9	67	2.8	1.9	67	2.9	1.9	67	2.9	1.9	67
STA6 Outflow	17.9	0.6	27	19.2	0.7	28	19.1	0.7	29	19.2	0.7	28	19.2	0.7	28	19.2	0.7	28
STA6BYP	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Outflow+Bypass	17.9	0.6	27	19.2	0.7	28	19.1	0.7	29	19.2	0.7	28	19.2	0.7	28	19.2	0.7	28

Comparison of STA Design & Restudy Conceptual Design (WY 1979-1988) | STA Inflows + Bypasses | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

	Without IAP & Makeup			With IAP & Makeup				
STA	Flow	Load	Conc	Flow	Load	Conc		
STA-1E	124.8	29.5	191	129.9	29.9	187	1.04	1.02
STA1-W	142.8	37.6	213	163.5	39.4	195	1.14	1.05
STA-2	174.6	33.8	157	214.9	40.9	154	1.23	1.21
STA-34	604.8	87.4	117	721.8	104.6	117	1.19	1.20
STA-5	103.9	33.6	262	103.9	33.6	262	1.00	1.00
STA-6	17.9	4.4	198	20.4	4.6	182	1.14	1.05
Total	1168.7	226.2	157	1354.4	253.0	151		

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
STA-1E	118.8	27.1	185	126.3	28.8	185	126.3	28.8	185	126.2	28.8	185	118.3	27.0	185	118.3	27.0	185
STA1-W	150.9	30.2	162	153.0	30.6	162	152.8	30.6	162	152.9	30.6	162	165.8	33.2	162	165.9	33.2	162
STA-2	241.7	30.8	103	206.9	25.8	101	213.8	26.6	101	217.3	26.9	100	219.2	27.2	101	193.7	24.8	104
STA-34	604.8	61.3	82	617.5	51.9	68	711.8	60.6	69	658.3	59.0	73	667.5	59.1	72	685.3	59.9	71
STA-5	103.1	30.1	237	133.6	32.5	197	132.9	32.5	198	133.3	32.5	198	134.1	32.6	197	134.0	32.5	197
STA-6	20.7	2.4	95	22.2	2.6	95	22.0	2.6	95	21.9	2.6	96	22.1	2.6	95	22.2	2.6	95
Total	1240.0	181.9	119	1259.5	172.2	111	1359.5	181.6	108	1309.9	180.3	112	1327.0	181.6	111	1319.2	180.0	111

Comparison of STA Design & Restudy Outflows + Bypasses BMP Performance: 51% (1995-1997) WY 1979-1988 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup		
STA	Flow	Load	Conc	Flow	Load	Conc
STA-1E	126.2	7.8	50	131.3	8.0	50
STA1-W	144.6	8.8	49	165.3	10.7	52
STA-2	176.3	10.8	50	216.6	15.7	59
STA-34	609.2	37.9	50	726.2	50.6	56
STA-5	105.0	9.6	74	105.0	9.6	74
STA-6	18.1	1.0	43	20.7	1.2	48
Total	1179.4	75.9	52	1365.0	95.8	57

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
STA-1E	124.4	6.7	43	132.0	7.7	47	132.0	7.7	47	132.0	7.7	47	123.8	6.6	43	123.7	6.6	43
STA1-W	153.2	7.5	40	155.3	7.7	40	155.1	7.7	40	155.2	7.7	40	167.9	9.2	45	168.0	9.3	45
STA-2	234.7	13.6	47	199.7	9.7	39	206.5	10.4	41	210.0	10.6	41	212.1	10.8	41	186.8	8.8	38
STA-34	578.5	25.4	36	593.5	22.8	31	687.3	29.7	35	633.4	27.2	35	642.4	27.6	35	659.2	28.5	35
STA-5	97.5	8.2	68	127.6	11.6	74	126.9	11.5	74	127.3	11.6	74	128.1	11.7	74	128.0	11.6	74
STA-6	17.9	0.6	27	19.2	0.7	28	19.1	0.7	29	19.2	0.7	28	19.2	0.7	28	19.2	0.7	28
Total	1206.1	61.9	42	1227.2	60.1	40	1326.9	67.6	41	1277.0	65.4	42	1293.5	66.5	42	1284.9	65.4	41

Comparison of STA Design & Restudy | EAA Runoff - by Term | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup		
	Flow	Load	Conc	Flow	Load	Conc
S5A->Lake	9.9	2.3	188	8.5	2.1	200
S6->Lake	33.5	7.9	191	9.6	2.3	194
S7->Lake	38.7	9.3	195	11.0	2.7	199
S8->Lake	35.5	7.0	160	10.1	2.0	160
S5A->STA-1E	30.9	8.0	210	31.1	8.0	209
S5A->STA-1W	124.7	32.3	210	125.6	32.4	209
S5A->STA-2	31.9	8.3	210	32.1	8.3	209
S6 ->STA-2	131.4	23.1	143	155.4	28.8	150
S7->STA-34	159.7	20.2	103	187.3	26.9	116
S8->STA-34	169.9	42.8	204	195.3	47.8	198
S8->STA-6	17.9	4.4	198	17.9	4.4	198
Total	784.0	165.5	171	783.9	165.7	171

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
S2PMP	29.0	6.6	183	9.5	2.1	183	0.5	0.1	183	0.5	0.1	183	0.5	0.1	183	0.5	0.1	183
S3PMP	0.9	0.2	146	0.0	0.0	146	0.0	0.0	146	0.0	0.0	146	0.0	0.0	146	0.0	0.0	146
R5AST1	152.4	30.5	162	154.6	30.9	162	154.4	30.9	162	154.6	30.9	162	167.3	33.4	162	167.4	33.5	162
ST1BYP	0.0	0.0	162	0.0	0.0	162	0.0	0.0	162	0.0	0.0	162	0.0	0.0	162	0.0	0.0	162
RUNS562	196.8	24.1	99	165.5	20.2	99	165.5	20.2	99	165.6	20.2	99	169.3	20.7	99	169.3	20.7	99
ST2BYP	23.3	2.8	99	6.1	0.7	99	9.5	1.2	99	9.4	1.1	99	9.3	1.1	99	9.3	1.1	99
ST3BYP	0.0	0.0	92	14.7	1.7	92	22.6	2.6	92	22.9	2.6	92	23.1	2.6	92	22.9	2.6	92
R78ST3	330.8	37.6	92	123.9	14.1	92	122.8	13.9	92	119.5	13.6	92	118.4	13.4	92	118.7	13.5	92
R78EAAR	0.0	0.0	92	182.4	20.7	92	179.7	20.4	92	183.0	20.8	92	184.3	20.9	92	184.5	20.9	92
WLES8	1.0	0.1	92	1.7	0.2	92	0.0	0.0	92	0.0	0.0	92	0.0	0.0	92	0.0	0.0	92
WLES7	0.2	0.0	92	0.4	0.0	92	1.2	0.1	92	1.2	0.1	92	1.3	0.1	92	1.2	0.1	92
WLES6	0.0	0.0	99	0.0	0.0	99	0.0	0.0	99	0.0	0.0	99	0.0	0.0	99	0.0	0.0	99
SUGRST6	17.8	2.2	100	19.2	2.4	100	19.2	2.4	100	19.2	2.4	100	19.3	2.4	100	19.3	2.4	100
ST6BYP	0.0	0.0	100	0.0	0.0	100	0.0	0.0	100	0.0	0.0	100	0.0	0.0	100	0.0	0.0	100
TOTAL	752.1	104.0	109	678.1	93.1	110	675.3	91.8	110	675.7	91.8	110	692.6	94.9	111	693.0	95.0	111

Comparison of STA Design & Restudy Conceptual Design (WY 1979-1988) | EAA Runoff - by STA | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

	Without IAP & Makeup			With IAP & Makeup		
	Flow	Load	Conc	Flow	Load	Conc
STA-1E	30.9	8.0	210	31.1	8.0	209
STA 1W	124.7	32.3	210	125.6	32.4	209
STA-2	163.3	31.4	156	187.5	37.1	160
STA-34	329.6	63.0	155	382.6	74.7	158
STA-6	17.9	4.4	198	17.9	4.4	198
Total	666.4	139.0	169	744.7	156.6	170

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
STA-1E	1.4	0.3	162	1.4	0.3	162	1.4	0.3	162	1.4	0.3	162	1.0	0.2	162	1.0	0.2	162
STA 1W	150.9	30.2	162	153.0	30.6	162	152.8	30.6	162	152.9	30.6	162	165.8	33.2	162	165.9	33.2	162
STA-2	220.1	26.9	99	171.6	21.0	99	175.0	21.4	99	174.9	21.4	99	178.6	21.8	99	178.6	21.8	99
STA-34/EAA Res.	330.8	37.6	92	321.0	36.5	92	325.1	36.9	92	325.3	36.9	92	325.8	37.0	92	326.1	37.0	92
STA-6	17.8	2.2	100	19.2	2.4	100	19.2	2.4	100	19.2	2.4	100	19.3	2.4	100	19.3	2.4	100
Total	720.9	97.1	109	666.3	90.7	110	673.6	91.5	110	673.8	91.6	110	690.4	94.5	111	690.8	94.6	111

Comparison of STA Design & Restudy | EAA Runoff - By Basin | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup		
	Flow	Load	Conc	Flow	Load	Conc
S5A	187.5	48.6	210	188.9	48.7	209
S6	131.4	23.1	143	155.4	28.8	150
S7	159.7	20.2	103	187.3	26.9	116
S8	187.8	47.1	203	213.2	52.1	198
S5A+S6	318.9	71.7	182	344.2	77.5	182
S7+S8	347.5	67.4	157	400.5	79.0	160
Backpump	117.6	26.5	183	39.2	9.1	188
Total	784.0	165.5	171	783.9	165.7	171

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
S5A+S6	372.5	57.4	125	326.2	51.9	129	329.4	52.3	129	329.5	52.3	129	345.9	55.3	129	346.0	55.3	129
S7+S8	349.7	39.9	92	342.3	39.1	92	345.5	39.4	92	345.7	39.5	92	346.3	39.5	92	346.5	39.5	92
Backpump	29.9	6.7	182	9.5	2.2	183	0.5	0.1	183	0.5	0.1	183	0.5	0.1	183	0.5	0.1	183
Total	752.1	104.0	112	678.1	93.1	111	675.3	91.8	110	675.7	91.8	110	692.6	94.9	111	693.0	95.0	111

Comparison of STA Design & Restudy | STA & Res. Inflow Sources | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup			ECP - Historical Inflows		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
EAA	666.4	139.0	169	744.7	156.6	170	883.3	195.8	180
Lake	257.6	22.7	71	364.9	32.0	71	21.2	2.3	86
C139	114.5	34.3	243	114.5	34.3	243	114.5	34.3	243
298	24.9	6.1	199	24.9	6.1	199	0.0	0.0	0
C51W	105.4	24.1	185	105.4	24.1	185	4.9	0.9	149
L8	0.0	0.0	0	0.0	0.0	0	50.7	3.5	56
Total Inflow	1168.7	226.2	157	1354.4	253.0	151	1074.6	236.8	179

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
EAA	720.9	97.1	109	666.3	90.7	110	673.6	91.5	110	673.8	91.6	110	690.4	94.5	111	690.8	94.6	111
Lake	269.6	22.0	66	549.0	45.2	67	621.1	51.4	67	549.5	45.5	67	558.2	46.1	67	551.7	45.0	66
C139	112.8	31.9	229	113.6	32.0	228	114.0	32.1	228	113.9	32.1	228	113.9	32.1	228	113.9	32.1	228
298	19.3	4.1	172	19.6	3.9	160	22.3	4.3	156	22.0	4.2	157	22.0	4.3	157	22.2	4.3	157
C51W	117.4	26.8	185	124.8	28.5	185	124.8	28.5	185	124.8	28.5	185	117.4	26.8	185	117.3	26.8	185
Total Inflow	1240.0	181.9	119	1473.2	200.2	110	1555.8	207.9	108	1483.9	201.9	110	1501.8	203.8	110	1495.8	202.7	110

Comparison of STA Design & Restudy Outflow Destinations BMP Performance: 51% (1995-1997) WY 1979-1988 07/16/98
Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup			ECP - Historical flows		
STA	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
WCA-1	270.8	16.6	50	296.6	18.7	51	472.5	105.6	181
WCA-2A	176.3	10.8	50	216.6	15.7	59	229.0	30.5	108
WCA-3A	627.3	38.9	50	746.9	51.8	56	373.0	100.7	219
EAA	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Rotenb.	105.0	9.6	74	105.0	9.6	74	0.0	0.0	0
Holeyland	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Seminoles	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
C51W	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0
Total	1179.4	75.9	52	1365.0	95.8	57	1074.6	236.8	179

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
WCA-1	277.5	14.1	41.3	287.3	15.4	43.4	287.1	15.4	43.4	287.2	15.4	43.4	291.7	15.8	43.9	291.7	15.8	44.0
WCA-2A	258.2	14.7	46.0	227.7	11.8	41.9	257.4	14.0	44.1	259.3	14.3	44.5	263.2	14.5	44.7	236.4	12.4	42.7
WCA-3A	571.7	24.9	35.3	578.5	21.1	29.6	649.2	26.4	33.0	597.1	24.0	32.6	604.5	24.3	32.6	622.6	25.2	32.9
EAA	0.0	0.0	0.0	166.5	14.3	69.4	156.5	13.6	70.5	159.4	13.7	69.9	161.0	13.8	69.7	161.0	13.8	69.4
Rotenb.	97.5	8.2	67.9	127.6	11.6	73.7	126.9	11.5	73.5	127.3	11.6	73.6	128.1	11.7	73.8	128.0	11.6	73.7
Holeyland	0.0	0.0	0.0	4.7	0.2	29.5	5.1	0.2	33.0	4.8	0.2	32.6	4.7	0.2	32.6	5.0	0.2	32.9
Seminoles	1.2	0.0	26.5	1.4	0.0	28.5	1.3	0.0	28.6	1.3	0.0	28.4	1.4	0.0	28.4	1.4	0.0	28.4
C51W	0.1	0.0	43.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	1206.1	61.9	41.6	1393.7	74.4	43.2	1483.3	81.2	44.3	1436.3	79.2	44.7	1454.5	80.4	44.8	1445.9	79.2	44.4

Comparison of STA Design & Restudy | Net Reduction (In - Out) | BMP Performance: 51% (1995-1997) | WY 1979-1988 | 07/16/98

Conceptual Design (WY 1979-1988)

	Without IAP & Makeup			With IAP & Makeup		
STA	Flow	Load	Conc	Flow	Load	Conc
STA-1E	-1.4	21.7	141	-1.4	21.9	137
STA1-W	-1.8	28.8	164	-1.8	28.7	143
STA-2	-1.7	23.0	107	-1.7	25.2	95
STA-34	-4.4	49.5	67	-4.4	54.1	61
STA-5	-1.1	24.0	188	-1.1	24.0	188
STA-6	-0.2	3.4	154	-0.2	3.4	133
Total	-10.6	150.3	105	-10.6	157.2	94

Restudy	50Base			ALT-A			ALT-B			ALT-C			ALT-D			A-D13R		
	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc	Flow	Load	Conc
STA-1E	-5.6	20.4	141	-5.7	21.1	138	-5.7	21.1	138	-5.7	21.1	138	-5.4	20.4	142	-5.4	20.4	142
STA1-W	-2.3	22.7	122	-2.3	22.9	122	-2.3	22.8	122	-2.3	22.9	122	-2.1	23.9	117	-2.1	23.9	117
STA-2	7.0	17.1	56	7.2	16.1	62	7.2	16.2	60	7.3	16.3	59	7.1	16.4	59	6.9	15.9	65
STA-34	26.2	35.9	47	24.0	29.1	37	24.6	31.0	34	24.9	31.8	38	25.1	31.6	37	26.1	31.5	36
STA-5	5.7	21.9	169	6.0	20.9	124	6.0	20.9	124	6.0	20.9	124	6.0	20.9	123	6.0	20.9	123
STA-6	2.8	1.8	68	3.1	1.9	67	2.9	1.9	67	2.8	1.9	67	2.9	1.9	67	2.9	1.9	67
Total	33.8	120.0	77	32.3	112.1	71	32.7	114.0	67	32.9	114.9	70	33.5	115.1	69	34.3	114.6	69