Comparison of STA Design & Restudy Index BMP Performance: 25% (ECP Design) 1965-1995

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: 25% (ECP Design) | 1965-1995 | 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)	2.3	0.6	209	2.4	0.6	209	2.4	0.6	209	2.4	0.6	209	2.1	0.5	209	2.1	0.5	209
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	114.4	26.1	185	122.2	27.9	185	122.5	28.0	185	122.4	28.0	185	120.2	27.4	185	120.1	27.4	185
WSST1E	0.3	0.0	122	0.2	0.0	122	0.2	0.0	122	0.2	0.0	122	0.2	0.0	122	0.2	0.0	122
TOTALIN	116.9	26.7	185	124.7	28.5	185	125.0	28.6	185	125.0	28.6	185	122.5	28.0	185	122.4	28.0	185
ST1EQ1	122.4	6.4	43	130.4	7.5	46	130.7	7.5	46	130.7	7.5	46	127.8	7.1	45	127.8	7.1	45
S319WS	0.1	0.0	43	0.0	0.0	46	0.0	0.0	46	0.0	0.0	46	0.0	0.0	45	0.0	0.0	45
TOTALOUT	122.5	6.4	43	130.5	7.5	46	130.7	7.5	46	130.7	7.5	46	127.8	7.1	45	127.8	7.1	45
NET	-5.6	20.3	143	-5.7	21.1	139	-5.7	21.1	139	-5.7	21.1	139	-5.4	20.9	140	-5.4	20.9	140

Comparison of STA Design & Restudy | STA1-W | BMP Performance: 25% (ECP Design) | 1965-1995 | 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)	160.8	41.5	209	166.2	42.9	209	165.5	42.7	209	166.3	42.9	209	178.5	46.0	209	178.5	46.1	209
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	160.8	41.5	209	166.2	42.9	209	165.5	42.7	209	166.3	42.9	209	178.5	46.0	209	178.5	46.1	209
ST1WQ1	162.2	11.0	55	167.4	11.7	57	166.8	11.7	57	167.5	11.8	57	179.6	13.8	62	179.6	13.8	62
TOTALOUT	162.2	11.0	55	167.4	11.7	57	166.8	11.7	57	167.5	11.8	57	179.6	13.8	62	179.6	13.8	62
NET	-1.4	30.5	154	-1.3	31.1	152	-1.3	31.0	152	-1.3	31.1	152	-1.1	32.2	147	-1.1	32.3	147
ST1BYP	0.0	0.0	209	0.0	0.0	209	0.0	0.0	209	0.0	0.0	209	0.0	0.0	209	0.0	0.0	209
ST1WQ1	162.2	11.0	55	167.4	11.7	57	166.8	11.7	57	167.5	11.8	57	179.6	13.8	62	179.6	13.8	62
Outflow+Bypass	162.2	11.0	55	167.4	11.7	57	166.8	11.7	57	167.5	11.8	57	179.6	13.8	62	179.6	13.8	62

Comparison of STA Design & Restudy | STA-2 | BMP Performance: 25% (ECP Design) | 1965-1995 | 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	213.9	43.0	163	183.3	36.9	163	182.3	36.7	163	183.0	36.8	163	186.7	37.6	163	186.6	37.6	163
298ST2	12.9	3.2	204	10.6	2.7	204	10.5	2.7	204	10.8	2.7	204	10.7	2.7	204	10.8	2.7	204
FLIMPH	11.1	1.1	78	27.9	2.7	78	36.0	3.5	78	42.4	4.1	78	40.4	3.9	78	9.4	0.9	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	237.8	47.3	161	221.8	42.2	154	228.9	42.8	152	236.1	43.6	150	237.9	44.2	150	206.8	41.2	161
ST2OT1	232.7	19.5	68	216.7	16.3	61	223.7	17.1	62	230.9	17.9	63	232.6	18.2	63	201.8	14.8	60
TOTALOUT	232.7	19.5	68	216.7	16.3	61	223.7	17.1	62	230.9	17.9	63	232.6	18.2	63	201.8	14.8	60
NET	5.1	27.9	93	5.2	25.9	93	5.2	25.8	90	5.3	25.7	87	5.3	26.0	87	5.0	26.3	102
ST2BYP	21.1	4.2	163	4.4	0.9	163	7.9	1.6	163	7.8	1.6	163	7.6	1.5	163	7.8	1.6	163
ST2OT1	232.7	19.5	68	216.7	16.3	61	223.7	17.1	62	230.9	17.9	63	232.6	18.2	63	201.8	14.8	60
Outflow+Bypass	253.8	23.7	76	221.0	17.2	63	231.6	18.6	65	238.7	19.4	66	240.2	19.7	67	209.6	16.4	63

Comparison of STA Design & Restudy | STA-34 | BMP Performance: 25% (ECP Design) | 1965-1995 | 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	383.9	75.3	159	188.9	37.1	159	183.8	36.1	159	184.1	36.1	159	184.1	36.1	159	184.6	36.2	159
LKTST3	261.0	21.4	67	155.9	12.8	67	213.4	18.2	69	214.3	18.4	70	210.4	18.1	70	213.0	18.4	70
G136ST3	11.7	0.8	53	12.7	0.8	53	13.2	0.9	53	12.7	0.8	53	12.7	0.8	53	12.7	0.8	53
S236SO	4.8	0.8	135	6.3	1.0	135	7.7	1.3	135	7.3	1.2	135	7.3	1.2	135	7.4	1.2	135
298ST3	3.4	0.4	102	4.9	0.6	102	5.9	0.7	102	5.9	0.7	102	5.9	0.7	102	5.9	0.7	102
WCS4				326.5	22.5	56	312.8	21.9	57									
WCS4N										182.4	13.0	58	189.1	13.3	57	197.0	13.7	56
WCS4S										60.6	5.4	73	63.7	5.6	71	67.1	5.8	70
EVBLSN										4.4	0.3	58	4.2	0.3	57	3.9	0.3	56
EVBLSS										7.0	0.6	73	7.2	0.6	71	5.6	0.5	70
TOTALIN	664.8	98.8	120	695.2	74.8	87	736.8	79.0	87	678.8	76.7	92	684.7	76.8	91	697.2	77.8	90
ST3TL4	5.4	0.4	55	1.1	0.1	42	317.5	17.0	43	214.0	11.4	43	217.7	11.6	43	227.6	12.2	43
ST3NEA	188.2	12.8	55	163.1	8.4	42	131.9	7.1	43	127.6	6.8	43	128.5	6.8	43	132.2	7.1	43
ST3TNW	113.1	7.7	55	169.3	8.7	42	120.2	6.4	43	103.4	5.5	43	103.9	5.5	43	104.5	5.6	43
ST3TS8	300.6	20.4	55	291.2	15.0	42	96.5	5.2	43	167.8	8.9	43	166.4	8.8	43	166.4	8.9	43
ST3TS7	38.3	2.6	55	35.9	1.9	42	49.6	2.7	43	44.4	2.4	43	46.4	2.5	43	44.4	2.4	43
S7TCA3	0.0	0.0	55	13.5	0.7	42	0.0	0.0	43	0.0	0.0	43	0.0	0.0	43	0.0	0.0	43
ST3THL	0.0	0.0	55	2.6	0.1	42	2.3	0.1	43	2.5	0.1	43	2.6	0.1	43	2.7	0.1	43
TOTALOUT	645.7	43.8	55	676.7	34.9	42	717.9	38.4	43	659.6	35.0	43	665.6	35.3	43	677.7	36.2	43
NET	19.1	54.9	65	18.5	39.9	45	18.8	40.6	44	19.2	41.7	49	19.1	41.5	48	19.5	41.5	47
TOTALOUT	645.7	43.8	55	676.7	34.9	42	717.9	38.4	43	659.6	35.0	43	665.6	35.3	43	677.7	36.2	43
ST3BYP	0.0	0.0	159	19.9	3.9	159	27.7	5.4	159	27.7	5.4	159	28.0	5.5	159	27.8	5.4	159
Outflow+Bypass	645.7	43.8	55	696.6	38.9	45	745.6	43.9	48	687.4	40.5	48	693.6	40.8	48	705.5	41.7	48

Comparison of STA Design & Restudy | STA-5 | BMP Performance: 25% (ECP Design) | 1965-1995 | 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)	130.7	42.3	262	130.6	42.2	262	130.6	42.2	262	130.7	42.3	262	130.6	42.2	262	130.6	42.2	262
STA5IQ (Lake)	0.9	0.1	64	28.7	2.3	64	28.8	2.3	64	29.0	2.3	64	29.1	2.3	64	29.0	2.3	64
TOTALIN	131.6	42.3	261	159.3	44.5	226	159.4	44.5	226	159.6	44.5	226	159.7	44.5	226	159.6	44.5	226
ST5OT1	128.6	15.4	97	155.7	18.9	98	155.8	18.9	98	156.0	18.9	98	156.1	19.0	98	156.0	18.9	98
TOTALOUT	128.6	15.4	97	155.7	18.9	98	155.8	18.9	98	156.0	18.9	98	156.1	19.0	98	156.0	18.9	98
NET	3.0	26.9	163	3.6	25.6	128	3.6	25.6	128	3.6	25.6	128	3.6	25.6	128	3.6	25.6	128
ST5OT1	128.6	15.4	97	155.7	18.9	98	155.8	18.9	98	156.0	18.9	98	156.1	19.0	98	156.0	18.9	98
ST5BYP	0.3	0.1	262	0.4	0.1	262	0.4	0.1	262	0.3	0.1	262	0.4	0.1	262	0.4	0.1	262
Outflow+Bypass	128.9	15.5	98	156.0	19.0	99	156.1	19.0	99	156.3	19.1	99	156.4	19.1	99	156.3	19.1	99

Comparison of STA Design & Restudy | STA-6 | BMP Performance: 25% (ECP Design) | 1965-1995 | 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	21.6	5.2	197	23.3	5.7	197	23.2	5.6	197	23.3	5.7	197	23.3	5.7	197	23.4	5.7	197
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	262	0.0	0.0	262	0.0	0.0	262	0.0	0.0	262	0.0	0.0	262	0.0	0.0	262
WSSTA6	2.4	0.2	64	2.9	0.2	64	2.8	0.2	64	2.8	0.2	64	3.0	0.2	64	3.0	0.2	64
TOTALIN	23.9	5.4	184	26.2	5.9	182	26.0	5.9	183	26.1	5.9	183	26.3	5.9	182	26.3	5.9	182
ST6SEM	1.1	0.1	61	1.5	0.1	61	1.4	0.1	61	1.5	0.1	61	1.5	0.1	60	1.5	0.1	60
ST6WCA	21.3	1.6	61	22.7	1.7	61	10.2	0.8	61	13.1	1.0	61	12.7	0.9	60	12.9	1.0	60
ST6TL4	0.0	0.0	61	0.1	0.0	61	12.5	0.9	61	9.7	0.7	61	10.2	0.8	60	10.0	0.7	60
TOTALOUT	22.5	1.7	61	24.2	1.8	61	24.1	1.8	61	24.3	1.8	61	24.4	1.8	60	24.4	1.8	60
NET	1.5	3.7	123	2.0	4.1	121	1.9	4.0	121	1.8	4.0	121	1.9	4.1	122	1.9	4.1	122
STA6 Outflow	22.5	1.7	61	24.2	1.8	61	24.1	1.8	61	24.3	1.8	61	24.4	1.8	60	24.4	1.8	60
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	22.5	1.7	61	24.2	1.8	61	24.1	1.8	61	24.3	1.8	61	24.4	1.8	60	24.4	1.8	60

Comparison of STA Design & Restudy | STA Inflows + Bypasses | BMP Performance: 25% (ECP Design) | 1965-1995 | 07/16/98

Conceptual Design (WY 1979-1988)

	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	116.9	26.7	185	124.7	28.5	185	125.0	28.6	185	125.0	28.6	185	122.5	28.0	185	122.4	28.0	185
STA1-W	160.8	41.5	209	166.2	42.9	209	165.5	42.7	209	166.3	42.9	209	178.5	46.0	209	178.5	46.1	209
STA-2	258.9	51.6	161	226.2	43.1	154	236.8	44.4	152	243.9	45.2	150	245.5	45.7	151	214.6	42.7	161
STA-34	664.8	98.8	120	715.1	78.8	89	764.4	84.4	89	706.5	82.1	94	712.7	82.3	94	724.9	83.2	93
STA-5	131.9	42.4	261	159.6	44.6	226	159.7	44.6	226	159.9	44.7	226	160.0	44.7	226	159.9	44.6	226
STA-6	23.9	5.4	184	26.2	5.9	182	26.0	5.9	183	26.1	5.9	183	26.3	5.9	182	26.3	5.9	182
Total	1357.2	266.4	159	1418.0	243.8	139	1477.4	250.6	137	1427.7	249.3	141	1445.4	252.6	142	1426.7	250.6	142

Comparison of STA Design & Restudy | Outflows + Bypasses | BMP Performance: 25% (ECP Design) | 1965-1995 | 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	122.5	6.4	43	130.5	7.5	46	130.7	7.5	46	130.7	7.5	46	127.8	7.1	45	127.8	7.1	45
STA1-W	162.2	11.0	55	167.4	11.7	57	166.8	11.7	57	167.5	11.8	57	179.6	13.8	62	179.6	13.8	62
STA-2	253.8	23.7	76	221.0	17.2	63	231.6	18.6	65	238.7	19.4	66	240.2	19.7	67	209.6	16.4	63
STA-34	645.7	43.8	55	696.6	38.9	45	745.6	43.9	48	687.4	40.5	48	693.6	40.8	48	705.5	41.7	48
STA-5	128.9	15.5	98	156.0	19.0	99	156.1	19.0	99	156.3	19.1	99	156.4	19.1	99	156.3	19.1	99
STA-6	22.5	1.7	61	24.2	1.8	61	24.1	1.8	61	24.3	1.8	61	24.4	1.8	60	24.4	1.8	60
Total	1335.4	102.2	62	1395.7	96.1	56	1454.9	102.5	57	1404.8	100.1	58	1422.0	102.4	58	1403.2	99.9	58

Comparison of STA Design & Restudy | EAA Runoff - by Term | BMP Performance: 25% (ECP Design) | 1965-1995 | 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	29.2	7.0	194	10.3	2.5	194	0.7	0.2	194	0.7	0.2	194	0.7	0.2	194	0.6	0.1	194
S3PMP	3.4	0.7	160	0.2	0.0	160	0.2	0.0	160	0.2	0.0	160	0.2	0.0	160	0.2	0.0	160
R5AST1	162.9	42.0	209	168.6	43.5	209	167.8	43.3	209	168.7	43.5	209	181.0	46.7	209	181.0	46.7	209
ST1BYP	0.0	0.0	209	0.0	0.0	209	0.0	0.0	209	0.0	0.0	209	0.0	0.0	209	0.0	0.0	209
RUNS562	213.9	43.0	163	183.3	36.9	163	182.3	36.7	163	183.0	36.8	163	186.7	37.6	163	186.6	37.6	163
ST2BYP	21.1	4.2	163	4.4	0.9	163	7.9	1.6	163	7.8	1.6	163	7.6	1.5	163	7.8	1.6	163
ST3BYP	0.0	0.0	159	19.9	3.9	159	27.7	5.4	159	27.7	5.4	159	28.0	5.5	159	27.8	5.4	159
R78ST3	383.9	75.3	159	188.9	37.1	159	183.8	36.1	159	184.1	36.1	159	184.1	36.1	159	184.6	36.2	159
R78EAAR	0.0	0.0	159	162.1	31.8	159	164.1	32.2	159	164.9	32.4	159	166.0	32.6	159	165.5	32.5	159
WLES8	1.1	0.2	159	1.9	0.4	159	0.0	0.0	159	0.0	0.0	159	0.0	0.0	159	0.0	0.0	159
WLES7	0.2	0.0	159	0.4	0.1	159	1.2	0.2	159	1.3	0.3	159	1.3	0.3	159	1.6	0.3	159
WLES6	0.0	0.0	163	0.0	0.0	163	0.0	0.0	163	0.0	0.0	163	0.0	0.0	163	0.0	0.0	163
SUGRST6	21.6	5.2	197	23.3	5.7	197	23.2	5.6	197	23.3	5.7	197	23.3	5.7	197	23.4	5.7	197
ST6BYP	0.0	0.0	197	0.0	0.0	197	0.0	0.0	197	0.0	0.0	197	0.0	0.0	197	0.0	0.0	197
TOTAL	837.2	177.8	171	763.3	162.7	172	758.9	161.4	172	761.7	162.0	172	778.9	166.1	173	779.1	166.2	173

Comparison of STA Design & Restudy | EAA Runoff - by STA | BMP Performance: 25% (ECP Design) | 1965-1995 | 07/16/98

Conceptual Design (WY 1979-1988)

	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	2.3	0.6	209	2.4	0.6	209	2.4	0.6	209	2.4	0.6	209	2.1	0.5	209	2.1	0.5	209
STA 1W	160.8	41.5	209	166.2	42.9	209	165.5	42.7	209	166.3	42.9	209	178.5	46.0	209	178.5	46.1	209
STA-2	235.0	47.3	163	187.7	37.8	163	190.3	38.3	163	190.8	38.4	163	194.3	39.1	163	194.4	39.1	163
STA-34/EAA Res.	383.9	75.3	159	370.9	72.8	159	375.5	73.7	159	376.8	73.9	159	378.1	74.2	159	377.8	74.2	159
STA-6	21.6	5.2	197	23.3	5.7	197	23.2	5.6	197	23.3	5.7	197	23.3	5.7	197	23.4	5.7	197
Total	803.5	169.9	171	750.4	159.7	172	756.8	160.9	172	759.4	161.5	172	776.3	165.6	173	776.2	165.5	173

Comparison of STA Design & Restudy — EAA Runoff - By Basin — BMP Performance: 25% (ECP Design) — 1965-1995 — 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	397.9	89.3	182	356.3	81.3	185	358.1	81.6	185	359.5	81.9	185	375.3	85.8	185	375.4	85.8	185
S7+S8	406.7	80.8	161	396.4	78.9	161	399.9	79.6	161	401.3	79.9	161	402.7	80.1	161	402.8	80.2	161
Backpump	32.6	7.7	190	10.5	2.5	193	0.9	0.2	188	0.9	0.2	185	0.9	0.2	186	0.8	0.2	185
Total	837.2	177.8	172	763.3	162.7	173	758.9	161.4	172	761.7	162.0	172	778.9	166.1	173	779.1	166.2	173

Comparison of STA Design & Restudy | STA & Res. Inflow Sources | BMP Performance: 25% (ECP Design) | 1965-1995 | 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	803.5	169.9	171	750.4	159.7	172	756.8	160.9	172	759.4	161.5	172	776.3	165.6	173	776.2	165.5	173
Lake	275.6	22.8	67	566.0	46.6	67	613.4	51.4	68	545.5	45.9	68	551.7	46.4	68	532.5	44.4	68
C139	142.7	43.1	245	143.7	43.2	243	144.1	43.2	243	143.7	43.2	243	143.7	43.2	243	143.7	43.2	243
298	21.1	4.5	172	21.8	4.3	161	24.2	4.7	157	24.0	4.7	158	24.0	4.7	158	24.1	4.7	158
C51W	114.4	26.1	185	122.2	27.9	185	122.5	28.0	185	122.4	28.0	185	120.2	27.4	185	120.1	27.4	185
Total Inflow	1357.2	266.4	159	1604.0	281.7	142	1660.9	288.2	141	1595.1	283.3	144	1615.9	287.3	144	1596.6	285.2	145

Comparison of STA Design & Restudy Outflow Destinations BMP Performance: 25% (ECP Design) 1965-1995 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	284.6	17.4	49.6	297.9	19.2	52.2	297.4	19.1	52.2	298.2	19.3	52.4	307.4	20.9	55.1	307.4	20.9	55.0
WCA-2A	292.1	26.3	73.0	274.8	22.6	66.5	306.7	26.3	69.5	308.9	26.9	70.5	312.7	27.3	70.8	279.9	23.9	69.1
WCA-3A	628.7	42.8	55.2	662.9	35.1	42.9	690.9	37.8	44.3	637.4	34.6	44.0	641.3	34.8	44.0	655.4	35.8	44.3
EAA	0.0	0.0	0.0	145.6	16.7	93.1	144.1	16.6	93.4	146.7	16.7	92.4	148.1	16.8	92.0	146.9	16.7	92.2
Rotenb.	128.9	15.5	97.7	156.0	19.0	98.7	156.1	19.0	98.7	156.3	19.1	98.7	156.4	19.1	98.8	156.3	19.1	98.7
Holeyland	0.0	0.0	0.0	2.6	0.1	41.8	2.3	0.1	43.4	2.5	0.1	43.0	2.6	0.1	43.0	2.7	0.1	43.3
Seminoles	1.1	0.1	60.9	1.5	0.1	61.3	1.4	0.1	61.3	1.5	0.1	61.4	1.5	0.1	60.3	1.5	0.1	60.4
C51W	0.1	0.0	42.5	0.0	0.0	46.4	0.0	0.0	46.5	0.0	0.0	46.5	0.0	0.0	45.1	0.0	0.0	45.1
Total	1335.4	102.2	62.0	1541.3	112.8	59.3	1599.0	119.1	60.3	1551.6	116.8	61.0	1570.0	119.2	61.5	1550.0	116.6	60.9

Comparison of STA Design & Restudy | Net Reduction (In - Out) | BMP Performance: 25% (ECP Design) | 1965-1995 | 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	20.3	143	-5.7	21.1	139	-5.7	21.1	139	-5.7	21.1	139	-5.4	20.9	140	-5.4	20.9	140
STA1-W	-1.4	30.5	154	-1.3	31.1	152	-1.3	31.0	152	-1.3	31.1	152	-1.1	32.2	147	-1.1	32.3	147
STA-2	5.1	27.9	86	5.2	25.9	91	5.2	25.8	87	5.3	25.7	84	5.3	26.0	84	5.0	26.3	98
STA-34	19.1	54.9	65	18.5	39.9	44	18.8	40.6	42	19.2	41.7	46	19.1	41.5	46	19.5	41.5	45
STA-5	3.0	26.9	163	3.6	25.6	128	3.6	25.6	128	3.6	25.6	127	3.6	25.6	127	3.6	25.6	127
STA-6	1.5	3.7	123	2.0	4.1	121	1.9	4.0	121	1.8	4.0	121	1.9	4.1	122	1.9	4.1	122
Total	21.8	164.3	97	22.3	147.7	84	22.6	148.1	80	22.9	149.3	84	23.5	150.3	83	23.5	150.7	85