

1981 Dry Year

Concern	Tools	System Status		Priority	
		Historic	Baseline WQCP	Action	Evaluation
Yearling salmon migrants Oct-Jan	<ul style="list-style-type: none"> Increase inflow Reduce export Close DCC 	12,000 cfs 6000 cfs Closed Nov	12,000 8000 Closed Dec-Jan	A/B	A 2 weeks in early Nov B 1 week in late Dec Spring-run escapement low
Winter run survival Dec-Mar	<ul style="list-style-type: none"> Increase inflow Reduce export Close DCC 	>20000 cfs 3000-9000 cfs Closed	20000 11,000 allowed Closed	A	A - Feb-Mar • Other salmon present • Winter-run escapement 1000
Delta Smelt Adults Jan-Mar	<ul style="list-style-type: none"> Reduce export 	8000>5000 cfs	11000 Feb, 8000 Mar	A	A - Jan-Mar, high salvage numbers • FMWT index in 1980 was 3000
Steelhead Feb-May	<ul style="list-style-type: none"> Reduce export 	5000>10,000 cfs	8000-10000	A if wild	A - Mar/Apr: High salvage in Mar and Apr escapement - unknown origin
X2 Feb - June	<ul style="list-style-type: none"> Increase inflow Reduce export 	RM 85 in May	RM 75-80 May and June	OK	
Salmon Fry Feb-Mar				OK	Low numbers of fry in dry years.
DS Young Apr-Jul	<ul style="list-style-type: none"> X2 placement Reduce exports 	83 in May - similar to regs in June 4000 in May 8000-10000 mid July - mid Aug	75-80 May June 1500 May 12,000 July-August	A/B	B - Low salvage in April, potential for larval entrainment. A - High salvage May B - High salvage late July and early August
San Joaquin smolts Apr-Jun	<ul style="list-style-type: none"> Reduce exports Increase SJ flow Close HOR 	8000-10,000 cfs April, 4000 May 3000 Apr, 2000 May Open	4450 4450 closed	A/B	B - from April 1-15 A - from April 16-May 15 B - from May 16-31 ▪ SJ escapement 3500
Striped Bass Young May-Aug	<ul style="list-style-type: none"> X2 placement Increase Sac flow Reduce exports 	4000-5000 cfs	4000-5000	B	B - June Salvage high at 100,000-400,000 per day in June. Summer Tow-net Index of 29.
Splittail May-Jul	<ul style="list-style-type: none"> Reduce exports 	4000-5000 cfs		OK	Low salvage (5,000-10,000) mid May to mid June. Only low numbers in dry years.

1982 Wet Year

Concern	Tools	System Status		Priority	
		Historic	Baseline WQCP	Action	Evaluation
Yearling salmon migrants Oct-Jan	<ul style="list-style-type: none"> Increase inflow Reduce export Close DCC 	20,000 cfs + 5000-6000 cfs Closed late Oct	20,000 cfs + 12,000 Closed late Oct	B	B - Concern begins in late Dec and extends for 4 weeks. Salmon come with hydrologic cue. Deer and Mill spring run escapement good at 2000.
Winter run survival Dec-Mar	<ul style="list-style-type: none"> Increase inflow Reduce export Close DCC 	50,000-200,000 cfs 10,000 cfs Closed	50,000-200,000 12,000-13,000 Closed	A	A - mid-Feb to end of Mar Winter run escapement 20000; but lower 3 years later- suggests poor spawning conditions in 82 - - also poor Ocean conditions (El Nino)
Delta Smelt Adults Jan-Mar	<ul style="list-style-type: none"> Reduce export 	5000 cfs in Jan-Feb, 10,000 Feb-Mar	10,000	A	A - Adult salvage very high late Jan through 2 nd week in Mar Largest decline in FMWT index - 800 in fall of 81, fallen from 3000 in 80.
Steelhead Feb-May	<ul style="list-style-type: none"> Reduce export 	10,000 cfs	11000	B	B - Apr, salvage density >100/TAF
X2 Feb - June	<ul style="list-style-type: none"> Increase inflow Reduce export 			OK	
Salmon Fry Feb-Mar	<ul style="list-style-type: none"> Reduce export 	10,000 cfs	11,000	B	B - fry present 15 Feb-Mar
DS Young Apr-Jul	<ul style="list-style-type: none"> X2 placement Reduce exports 			OK	Very low salvage under high outflows.
San Joaquin smolts Apr-Jun	<ul style="list-style-type: none"> Reduce exports Increase SJ flow Close HOR 	10,000 cfs April 6000 May-June >20,000 cfs Open	11,000 >20,000 close	A/B	A - mid April to mid May SJ escapement high = 25,000 B - mid May to mid June High salvage from last week of Apr - first week of June.
Striped Bass Young	<ul style="list-style-type: none"> X2 placement Increase Sac flow Reduce exports 	6000-8000 cfs	12,000	C	C - Moderate salvage in July STN Index 48.7.
Splittail May-Jul	<ul style="list-style-type: none"> Reduce exports 			OK	Moderate salvage mid May through August

1983 Wet Year

Concern	Tools	System Status		Priority	
		Historic	Baseline WQCP	Action	Evaluation
Yearling salmon migrants Oct-Jan	• Increase inflow	50+ kcfs outflow	50+ kcfs outflow	B	B - Peaks in salvage in mid November through December with outflow and export rises, but most are yearling hatchery smolts.
	• Reduce export	7000-10,000 cfs	13,000-15,000		
	• Close DCC	Closed after late Nov.	Closed		
Winter run survival Dec-Mar	• Increase inflow			OK	Few winter run sized salmon.
	• Reduce export				
	• Close DCC				
Delta Smelt Adults Jan-Mar	• Reduce export	10,000 cfs	15,000	B	B - January FMWT Index = 600
Steelhead Feb-May	• Reduce export			OK	
X2 Feb - June	• Increase inflow	Outflow 150-400 kcfs	Outflow 150-400	OK	High outflow.
	• Reduce export				
Salmon Fry Feb-Mar	• Reduce export	10,000 cfs	15,000 cfs (unless San Luis if spilling)	B	B - mid January to mid March 100-500/TAF
DS Young Apr-Jul	• Increase outflow			OK	High outflow and low salvage.
	• Reduce exports				
San Joaquin smolts Apr-Jun	• Reduce exports	3000-4000 cfs	7000-9000	A/B	A - mid April-mid May B - mid May through June.
	• Increase SJ flow	>25,000 cfs	>25,000		
	• Close HOR	Open	Open		
Striped Bass Young	• Increase outflow			OK	Low salvage through summer with high outflow.
	• Increase Sac flow				
	• Reduce exports				
Splittail May-Jul	• Reduce exports	4000-6000 cfs	8000	B	B - Peak salvage in June - 1000/TAF

1984 Wet Year

Concern	Tools	System Status		Priority	
		Historic	Baseline WQCP	Action	Evaluation
Yearling salmon migrants Oct-Jan	• Increase inflow			OK	Low salvage. Deer and Mill escapement = 1200 Sacto R escapement = 23,000
	• Reduce export				
	• Close DCC				
Winter run survival Dec-Mar	• Increase inflow	High	High	B	B - March low salvage. Winter run escapement 1800
	• Reduce export	6000-8000 cfs	7000		
	• Close DCC	Closed	Closed		
Delta Smelt Adults Jan-Mar	• Reduce export			OK	Despite 83 FMWT index of 250, because salvage very low
Steelhead Feb-May	• Reduce export			OK	Low salvage.
X2 Feb - June	• Increase inflow			OK	High outflow
	• Reduce export				
Salmon Fry Feb-Mar	• Reduce export			OK	Very low salvage
DS Young Apr-Jul	• X2 placement			OK	Very low salvage under high outflow
	• Reduce exports				
San Joaquin smolts Apr-Jun	• Reduce exports	5000-10,000 cfs	6000-8000	A/B	A - mid April to mid May. B - 15 days before and B - 15 days after; salmon salvage high in period. SJ fall run escapement = 33,000
	• Increase SJ flow	3000-4000 cfs	3000-4000		
	• Close HOR	Open	Closed		
Striped Bass Young	• X2 placement			C	C - Very high salvage mid May - mid July Index = 26.3
	• Increase Sac flow				
	• Reduce exports	6000-10,000 cfs	7000-12,000 cfs		
Splittail May-Jul	• Reduce exports	6,000-10,000 cfs	7000-12,000 cfs	B	B - moderate salvage June and July, more abundant in wet years.

1985 Dry Year

Concern	Tools	System Status		Priority	
		Historic	Baseline WQCP	Action	Evaluation
Yearling salmon migrants Oct-Jan	• Increase inflow	QWEST < 0 during peak	QWEST << 0	B	B - mid Oct through mid Dec; after first fall flow pulse. Spring Run escapement low
	• Reduce export	10,000 cfs at peak.	12,000		
	• Close DCC	Open	Closed		
Winter run survival Dec-Mar	• Increase inflow	QWEST -2,000 to -5000 cfs	QWEST -2,000 to -5000 cfs	A	A - mid February-March • Winter run escapement = 2700 • Relatively high salvage of winter run size fish in March under high exports and low outflow
	• Reduce export	8000-10,000 cfs	8000-10,000		
	• Close DCC	Open	Open		
Delta Smelt Adults Jan-Mar	• Reduce export	6000-10,000 cfs	8000-12,000	B	B - Jan-Mar low and sporadic salvage • INDEX = 300 (poor) • Salvage low at historic export.
Steelhead Feb-May	• Reduce export	6000-10,000 cfs	5000-8000	B	B - moderate salvage March and April • Salvage density > 10/TAF for several days in April
X2 Feb - June	• Increase inflow			OK	
	• Reduce export				
Salmon Fry Feb-Mar	• Reduce export			OK	Dry year - few fry in salvage.
DS Young Apr-Jul	• X2 placement	80 km	76-77 km	B	B - mid April - mid Jun salvage moderate, but not over take limit.
	• Reduce exports	5000-8000 cfs	5000-6000		
San Joaquin smolts Apr-Jun	• Reduce exports	6000-10,000 cfs	5000-6000	A/C	A - mid April to mid May B - 15 days early April C - 15 days late May
	• Increase SJ flow	3000 cfs	3000		
	• Close HOR	Open	Closed		
Striped Bass Young	• X2 placement	80-85 km	76-83	B	B - Salvage very high late May through July. Index 6.3 (very bad)
	• Increase Sac flow	Outflow 4-10 kcfs			
	• Reduce exports	6000-10,000 cfs	5000-12,000		
Splittail May-Jul	• Reduce exports	6000-10,000 cfs	5000-12,000	B	Salvage moderate mid May through mid July.
	• Close HOR				

1986 Wet Year

Concern	Tools	System Status		Priority	
		Historic	Baseline WQCP	Action	Evaluation
Yearling salmon migrants Oct-Jan	• Increase inflow	QWEST < 0	Pulsed to 20,000	A/C	A - December peak after first flow pulse B - Jan lesser peak C - Last week of Oct and first week of Nov - 100+/TAF. Some hatchery fish.
	• Reduce export	6000-10,000 cfs	6000-12,000		
	• Close DCC	Open in Oct Closed after	Closed in Nov		
Winter run survival Dec-Mar	• Increase inflow	Pulsed to 20,000 cfs	Pulsed to 20,000	B	B - Some in Feb pulse. • Escapement low at 5000.
	• Reduce export	6000-8000 cfs	14,000		
	• Close DCC	Open Oct - Closed after	Open Oct - Closed after		
Delta Smelt Adults Jan-Mar	• Reduce export	6000-10,000 cfs	12,000-15,000	A	A - moderate salvage in January and during February flood. • Low FMWT index.
Steelhead Feb-May	• Reduce export	8000 cfs Feb, 6000-8000 Apr-May	12,000 Feb, 7000-8000 Apr-May	C	• Some in Feb pulse and Apr to mid May (5-20/TAF)
X2 Feb - June	• Increase inflow			OK	
	• Reduce export				
Salmon Fry Feb-Mar	Reduce export	6000-8000 cfs	12,000-15,000	A/B	A - Two weeks in late Feb above 1000/TAF B - Two weeks in early Feb and two weeks in early March 100+/TAF
DS Young Apr-Jul	• Increase outflow			OK	• Low salvage
	• Reduce exports				
San Joaquin smolts Apr-Jun	• Reduce exports	6000-8000 cfs	5000-7000	A/B	A - Mid April-mid May 1000/TAF B - early April >100/TAF B - late May >100/TAF C - early June >100/TAF
	• Increase SJ flow	>20kcfs Apr 5-10 May and June	>20kcfs Apr 5-10 May and June		
	• Close HOR	Open	Open		
Striped Bass Young	• Increase outflow	6000-8000 cfs	6000-8000 kcfs	B/C	B - June above 10,000/TAF C - July 5000-10000/TAF
	• Increase Sac flow				
	• Reduce exports	4000-7000 cfs June 8000-9000 cfs July	7000 June 4000 July		
Splittail May-Jul	Reduce export	4000-8000 cfs	6000	A/B	A - 10,000/TAF May - 1 st week of June B - last three weeks of June ~1000/TAF

1987 Dry Year

Concern	Tools	System Status		Priority	
		Historic	Baseline WQCP	Action	Evaluation
Yearling salmon migrants Oct-Jan	• Increase inflow	Outflow 7-10 kcfs	6000-8000	B	B - Dec low levels of salvage (10/TAF). No flow pulses.
	• Reduce export	6000-8000 cfs	8000		
	• Close DCC	Open	Closed		
Winter run survival Dec-Mar	• Increase inflow	Pulses up to 40kcfs	Pulses up to 40kcfs	A/B	B - Low numbers in Feb-mid Mar A - late March two weeks • Coincident with flow pulses
	• Reduce export	4000-8000 cfs	8000-9000		
	• Close DCC	Closed by early Jan	Closed Dec		
Delta Smelt Adults Jan-Mar	• Reduce export	4000-8000 cfs	5000	B	B - Sporadic low numbers salvaged in Dec and Feb/Mar. Previous FMWT index of 400 (low)
Steelhead Feb-May	• Reduce export	4000-8000 cfs	4000-9000	B	B - Mar-Apr 10+/TAF
X2 Feb - June	• Increase inflow • Reduce export	Outflow 3000-7000 cfs		OK	
Salmon Fry Feb-Mar	• Reduce export				
DS Young Apr-Jul	• Delta outflow	3000-8000 cfs	7000-10,000 for X2 WQCP	A/B	A - Apr 16 - Jun 15 B - Apr 1-15
	• Reduce exports	3000-8000 cfs	3000-7000		
San Joaquin smolts Apr-Jun	• Reduce exports	3000-8000 cfs	3000-7000	A/B/C	B - Early April 100/TAF A - Mid April-mid May 1000/TAF C - mid May-mid June 100-1000/TAF
	• Increase SJ flow	2500 cfs	3200		
	• Close HOR	Open	Closed		
Striped Bass Young	• Outflow	3000-5000 cfs May-Jun 3000-4000 July	7000-10000 cfs May/June 4000 in July	B/C	B - May - June 100/AF C - July 10/AF
	• Increase Sac flow	3500 cfs July			
	• Reduce exports	4000-6000 cfs in May-June, 8000-10,000 July	3000-7000 May-June 12,000 July		
Splittail May-Jul	• Reduce exports			OK	Low salvage

1988 Critical Year

Concern	Tools	System Status		Priority	
		Historic	1A Baseline WQCP	Action	Evaluation
Yearling salmon migrants Oct-Jan	• Increase inflow	No pulses	No pulses	A/B	A - 2 nd and 3 rd weeks in Dec during high exports (100-1000/TAF) B Jan-Feb
	• Reduce export	10,000-11,000 cfs	12,000 unless San Luis fills		
	• Close DCC	Open	Closed		
Winter run survival Dec-Mar	• Increase inflow	13,000 cfs		A/C	A - Mar-Apr relatively high numbers C - Jan-Feb lower numbers
	• Reduce export	8-10 kcfs Dec-Feb 6-10 kcfs Mar-Apr	12kcfs Dec-Jan, 3000-4000 Feb-Apr		
	• Close DCC	Open	Closed		
Delta Smelt Adults Jan-Mar	• Reduce export	10,000 cfs	12000	A	A - Two weeks at end of Dec and Jan. 100/TAF
Steelhead Feb-May	• Reduce export	6000-10,000 cfs	12,000 Feb 3000-4000 Mar-May	B	B - Feb-May 10-50/TAF
X2 Feb - June	• Increase inflow • Reduce export			OK	
Salmon Fry Feb-Mar	• Reduce export			OK	Few fry
DS Young Apr-Jul	• X2 placement			A	A - Mid May through June salvage often near 1000/TAF
	• Reduce exports	3000-8000 cfs	3000-6000		
San Joaquin smolts Apr-Jun	• Reduce exports	6000-10,000 cfs	3000	A/B	A - Mid April to mid May B - late May to mid June 500-1000/TAF C - early April 100/TAF
	• Increase SJ flow				
	• Close HOR				
Striped Bass Young	• X2 placement			B	B - June through Mid July 1000-10000/TAF
	• Increase Sac flow				
	• Reduce exports	3000-8000 cfs	5000-6000		
Splittail May-Jul	• Reduce exports	3000-10,000 cfs	3000-6000	B	B - Mid April through June 100-500/TAF

1989 Dry Year

Concern	Tools	System Status		Priority	
		Historic	Baseline WQCP)	Action	Evaluation
Yearling salmon migrants Oct-Jan	• Increase inflow/outflow	Outflow falling from 20-30 kcfs to <5000	Outflow falling from 20-30 kcfs to <5000	A	A - One week in Dec and Two weeks in Jan - salvage density of 10-50/TAF Peak following outflow peaks of 20-30 kcfs.
	• Reduce export	10,000 cfs	7000-9000		
	• Close DCC	Open	Closed		
Winter run survival Dec-Mar	• Increase inflow/outflow	Outflow pulse of 40-70 kcfs.	Outflow pulse of 40-70 kcfs.	A	A - Relatively high numbers in March 10-50/TAF
	• Reduce export	10,000 cfs	12,000		
	• Close DCC	Open	Closed		
Delta Smelt Adults Jan-Mar	• Reduce export	10,000 cfs	7000-9000	B	B - Mid December through 1 st week of Jan salvage pulse following outflow pulse under high export 10-50/TAF • Poor FMWT index
	• Increase outflow	Falling from 20,000 to 5000			
Steelhead Feb-May	• Reduce export	10,000 cfs	12,000 March 5500 April	B	• March-mid April 10-50/TAF, coincides with outflow pulse
X2 Feb - June	• Increase inflow			OK	
	• Reduce export				
Salmon Fry Feb-Mar	• Reduce exports	10,000 cfs	12,000	B	• Small pulse (10/TAF) in March with outflow pulse to 70 kcfs.
DS Young Apr-Jul	• Increase outflow	Declining		A/B	• A - Mid June - mid July 100+/TAF coincident with export peak >10,000 cfs. • B - April - mid May <100/TAF
	• Reduce exports	2,000-10,000 cfs	3000-5500 Apr-May 5500 June, 12,000 July		
San Joaquin smolts Apr-Jun	• Reduce exports	2000-10,000 cfs	3000-5500	A/B	• A - Mid April - mid May 100-1000/TAF • B - early April • B - Late May 100/TAF
	• Increase SJ flow	5000-10,000 cfs outflow			
	• Close HOR				
Striped Bass Young	• Increase outflow			B	• mid May to mid July 10,000+/TAF
	• Increase Sac flow				
	• Reduce exports	4000-10,000 cfs	5500 May-June, 12,000 July		
Splittail May-Jul				OK	Low salvage

1990 Critical Year

Concern	Tools	System Status		Priority	
		Historic	Baseline	Action	Evaluation
Yearling salmon migrants Oct-Jan	• Increase inflow	5,000-15,000 cfs	Increased	B	B - Late Dec - Jan (10-100/TAF)
	• Reduce export	10,000 cfs	6000-12,000		
	• Close DCC	Open	Closed?		
Winter run survival Dec-Mar	• Increase outflow	10,000 cfs >>>0	>5000	A	A - Mar relatively high numbers with outflow falling to zero and exports at 10,000+. Also included January salvage.
	• Reduce export	10,000 cfs	5000		
	• Close DCC	Open			
Delta Smelt Adults Jan-Mar	• Reduce export	10,000+ cfs	12,000	C	C - Late Jan. 10+/TAF after outflow pulse and high exports C - Late February during and after outflow pulse
	• Increase outflow	30,000>>0, QWEST to -4,000 cfs	Increase minimum.		
Steelhead Feb-May	• Reduce export	10,000 cfs	5000-6000	B	B - Feb-Mar 10-50/TAF
X2 Feb - June	• Increase outflow	0-30,000 cfs	Increased minimum	B	B - Outflow falling to zero Jan-Mar.
	• Reduce export	10,000 cfs	12,000 Jan, 5000-6000 Feb-Mar		
Salmon Fry Feb-Mar				OK	Few fry
DS Young Apr-Jul	• Increase outflow	<5000 cfs mid June-mid Jul, 2000-25,000 Apr-May,	Increased minimum	A/B	A - mid June to mid July 1000/TAF B - Mid April - mid June 100+/TAF
	• Reduce exports	10,000 cfs in April 2000-4000 May & Jun, 4000-6000 July	3000 April; 2500 May; 7000 June; 5000 July		
San Joaquin smolts Apr-Jun	• Reduce exports	10,000 cfs - Apr 2,000 mid May 2,000-4,000 mid May - mid Jun	3000 - Apr 2500 May 7000 June	A/B	A - Mid April to Mid May 500-1000/TAF B - Early April B - Mid May to Mid Jun 100/TAF
	• Increase SJ flow	Very low	Very low		
	• Close HOR	Open			
Striped Bass Young	• Increase outflow	<5000 cfs; 30,000 late May	Increased minimum	B/C	B - late July 10000/TAF C - Late May to mid July 1000-10000
	• Reduce exports	2000-5000 May-early Jul; 6000-8000 late July	2500 May; 5000 July		
Splittail May-Jul	Reduce exports	2000-5000 cfs	7000	B	• June 100-1000/TAF

1991 Critical Year

Concern	Tools	System Status		Priority	
		Historic	Baseline (WQCP)	Action	Evaluation
Yearling salmon migrants Oct-Jan	<ul style="list-style-type: none"> Increase inflow Reduce export Close DCC 			OK	<ul style="list-style-type: none"> Very few salvaged Small numbers in March
Winter run survival Dec-Mar	<ul style="list-style-type: none"> Increase outflow Reduce export Close DCC 	10,000 cfs >>>0 10kcfs Mar Open		A	A - Mar relatively high numbers with outflow falling to zero and exports at 10,000+.
Delta Smelt Adults Jan-Mar	<ul style="list-style-type: none"> Reduce export 	3000-10,000 cfs	4,000-12,000	C	Small numbers in Jan-Feb < 10/TAF
Steelhead Feb-May	<ul style="list-style-type: none"> Reduce export 	10,000 cfs	4,000-12,000	B	B - Mar-mid Apr 10-50/TAF
X2 Feb - June	<ul style="list-style-type: none"> Increase outflow Reduce export 	Outflow 60,000>>>0 in Apr; 2,0000>>>0 May		B	Outflow falling to zero Apr & May.
Salmon Fry Feb-Mar				OK	Small numbers in March
DS Young Apr-Jul	<ul style="list-style-type: none"> Increase outflow Reduce exports 	2000-6000 cfs Jun-Jul 2000-4000 cfs Jun-Jul	Increased minimum 500 cfs	C	C - Late June-July 100+/TAF
San Joaquin smolts Apr-Jun	<ul style="list-style-type: none"> Reduce exports Increase SJ flow and outflow Close HOR 	10,000>2000 cfs Apr-May zero outflow periods in Apr and May after 60k in early April Open	3000-4000	A/B	A - mid April - mid May 500-1000/TAF; B - early April and late May
Striped Bass Young	<ul style="list-style-type: none"> Increase outflow Reduce exports 	<5000 cfs; 30000 late May 2000-4000 cfs Jun-early Jul	500 cfs	B/C	B - mid June to mid July 10000/TAF C - Late May and late July 1000-10000
Splittail May-Jul	Reduce exports	2000-4000 cfs	500 cfs	C	C - late June 100-1000/TAF

1992 Critical Year

Concern	Tools	System Status		Priority	
		Historic	Baseline	Action	Evaluation
Yearling salmon migrants Oct-Jan	<ul style="list-style-type: none"> Increase inflow Reduce export Close DCC 	QWEST <0 Jan events; falling in Feb. 6000-10,000 cfs in Jan 10,000 in late Feb Open	QWEST <0 falling in Feb. 3000-12,000 Closed	B/A	B - January after small flow pulses. A - last two weeks of February high numbers with first major inflow of year..
Winter run survival Dec-Mar	<ul style="list-style-type: none"> Increase outflow Reduce export Close DCC 	QWEST <0 10,000 cfs Open		A	A - Mar relatively high numbers with outflow falling to zero and exports at 10,000+.
Delta Smelt Adults Jan-Mar	<ul style="list-style-type: none"> Reduce export 	10,000 cfs	6,000-12,000	C	C - Feb/Mar. 10+/TAF after outflow pulse and high exports
Steelhead Feb-May	<ul style="list-style-type: none"> Reduce export 	10,000 cfs	8,000	B	B - mid Feb-mid Mar 10-50/TAF
X2 Feb - June	<ul style="list-style-type: none"> Increase outflow Reduce export 	QWEST <0 Feb and Mar. Outflow near 0. Exports at 10,000 cfs Mar.	Outflow and QWEST improved with lower exports	B	Outflow falling to zero Jan-Mar.
Salmon Fry Feb-Mar				OK	Few fry
DS Young Apr-Jul	<ul style="list-style-type: none"> Increase outflow Reduce exports 	QWEST <0 mid May-mid June 10,000 cfs in early April & Jun	7,000 in early Apr, 1000-3000 May-Jun	C	C - mid May -mid June
San Joaquin smolts Apr-Jun	<ul style="list-style-type: none"> Reduce exports Increase SJ flow Close HOR 	10,000cfs in early Apr 1000-2000 late Apr/May Very low Open	8000 in early Apr 500-1500 mid Apr to mid May	A/B	A - Mid April to Mid May 500-1000/TAF B - Early April
Striped Bass Young	<ul style="list-style-type: none"> Increase outflow Reduce exports 	<5000 cfs; 30000 late May 2000-4000 cfs Jun-early Jul	500-3000	B	B - mid June to mid July 10000/TAF
Splittail May-Jul	Reduce exports	2000-4000 cfs	1000-3000	C	June 100-1000/TAF

1993 Wet Year

Concern	Tools	System Status		Priority	
		Historic	Baseline	Action	Evaluation
Yearling salmon migrants Oct-Jan	• Increase inflow	Outflow 0 rising to 40kcfs		A	A - mid Dec - mid Jan
	• Reduce export	6,000 cfs >>12,000	12,000-14,000		
	• Close DCC	Open			
Winter run survival Dec-Mar	• Increase outflow	Feb 20K >>100K Late Jan 40K >>120K		A/B	A - weeks 3 and 4 of Feb B - weeks 1 and 2 of Feb B - last half of Jan
	• Reduce export	8000-12,000 cfs	12,000-13,000		
	• Close DCC	Open			
Delta Smelt Adults Jan-Mar	• Reduce export	12,000-14,000 cfs	13,000	C	C - Late Jan. after outflow pulse and during high exports
Steelhead Feb-May	• Reduce export	4000-12,000 cfs	10,000-13,000	B	B - Feb-Mar
X2 Feb - June	• Increase outflow			OK	
	• Reduce export				
Salmon Fry Feb-Mar	• Reduce export			OK	Few fry
DS Young Apr-Jul	• Increase outflow	30K >>15K		B	B - mid May to mid June
	• Reduce exports	1500 >>6000 cfs	8000-12,000		
San Joaquin smolts Apr-Jun	• Reduce exports	2000-7000 cfs	8000 Apr/May 12,000 June	A/B	A - April / May B - First half of Jun
	• Increase SJ flow	Very low			
	• Close HOR	Open			
Striped Bass Young	• Increase outflow	20K cfs >>10K		B	B - June / July
	• Reduce exports	4000-9000 cfs	8000-12,000		
Splittail May-Jul	Reduce exports	4000-6000 cfs	8000-12,000	C	C - mid May to mid June

1994 Critical Year

Concern	Tools	System Status		Priority	
		Historic	Baseline		
Yearling salmon migrants Oct-Jan	• Increase inflow	25K cfs >>10K cfs		B	B - Dec
	• Reduce export	8000-11,000 cfs	9500		
	• Close DCC	Open			
Winter run survival Dec-Mar	• Increase outflow	35K cfs >>10K cfs		A	A - Feb-Mar
	• Reduce export	4000-10,000 cfs	10,000 Feb, 6000 Mar		
	• Close DCC	Open			
Delta Smelt Adults Jan-Mar	• Reduce export			OK	
Steelhead Feb-May	• Reduce export			OK	
X2 Feb - June	• Increase outflow			OK	
	• Reduce export				
Salmon Fry Feb-Mar				OK	
DS Young Apr-Jul	• Increase outflow	14K cfs >>3K cfs		A/B	A - May B - June
	• Reduce exports	1000-3000 cfs	4500 May 8000 June		
San Joaquin smolts Apr-Jun	• Reduce exports	1000-3000 cfs	4500 April/May	A/B	A - April B - May
	• Increase SJ flow	Very low			
	• Close HOR	Open			
Striped Bass Young	• Increase outflow	3000-6000 cfs		C	C - June/July
	• Reduce exports	2000-6000 cfs	8000-12,000		
Splittail May-Jul	Reduce exports			OK	