2978

D-062108

Diversion Effects on Delta Smelt: Existing Conditions WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-1	-1	-2	-3	-2	-2	-1	0	-14
Entrainment (export)	0	0	-1	-1	-1	-1	-2	-3	-2	-2	-1	0	-14
CCF predation	0	0	-1	-1	-1	-1	-2	-3	-2	-2	-1	0	-14
Handling	0	0	0	0	0	0	-1	-2	-1	-1	0	0	-5
Hydrodynamics	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Cross -Delta Flow	0	0	0	0	0	0	0	0	0	0	0	0	0
Qwest	0	0	0	0	0	0	0	0	0	0	0	0	0
Old River @Bacon Island	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Sac River @ Rio Vista	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ River @ Antioch	0	0	0	0	0	0	0	0	0	0	0	0	0
Predation	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Food supply	0	0	0	0	0	0	0	0	0	0	0	0	0
Shallow/ nearshore habitat	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0	-5
Salinity/X2	0	0	0	0	0	0	0	0	0	-1	-1	-1	-3
Agricultural diversions	0	0	0	0	0	0	0	-1	-2	-2	-2	0	-7
Total	0	0	-7	-7	-7	-7	-11	-16	-12	-13	-9	-1	-90

Diversion Effects on Delta Smelt: Existing Conditions DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Entrainment (export)	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
CCF predation	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Handling	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Hydrodynamics	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Cross -Delta Flow	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Qwest	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Old River @Bacon Island	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Sac River @ Rio Vista	0	0	0	0	0	0	-1	-2	-2	-2	-1	0	-8
SJ River @ Antioch	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Predation	0	0	-1	-1	-1	-1	-2	-2	-2	-2	-2	0	-14
Food supply	0	-1	-1	-1	-2	-3	-3	-3	-3	-3	-2	-1	-23
Shallow/ nearshore habitat	0	0	-1	-1	-1	-1	-1	-1	-1	0	0	0	-6
Salinity/X2	-1	-1	0	0	1	1	1	-1	-1	-1	-1	-1	-3
Agricultural diversions	0	0	0	0	0	0	-2	-2	-3	-3	-2	0	-12
Total	-1	-2	-12	-12	-12	-22	-26	-38	-35	-38	-26	-2	-229

Diversion Effects on Delta Smelt: No Action Conditions WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-2	-2	-2	-3	-2	-3	-2	0	-18
Entrainment (export)	0	0	-1	-1	-2	-1	-2	-3	-2	-2	-1	0	-16
CCF predation	0	0	-1	-1	-1	-1	-2	-3	-2	-2	-1	0	-14
Handling	0	0	0	0	-1	-1	-1	-2	-1	-2	-1	0	-9
Hydrodynamics	0	0	-1	-1	-2	-2	-1	-2	-2	-2	-2	0	-15
Cross -Delta Flow	0	0	0	0	0	0	0	0	0	0	0	0	0
Qwest	0	0	0	-1	-1	-1	0	0	0	-1	-1	0	-5
Old River @Bacon Island	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Sac River @ Rio Vista	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ River @ Antioch	0	0	0	0	0	0	0	0	0	0	0	0	0
Predation	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Food supply	0	0	0	0	0	0	0	0	0	0	0	0	0
Shallow/ nearshore habitat	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0	-5
Salinity/X2	0	0	0	0	0	0	0	0	0	-1	-1	-1	-3
Agricultural diversions	0	0	0	0	0	0	0	-1	-2	-2	-2	0	-7
Total	0	0	-8	-8	-7	-7	-11	-17	-13	-12	-9	-1	-93

Diversion Effects on Delta Smelt: No Action Conditions DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-2	-2	-2	-3	-2	-3	-3	-3	-2	0	-22
Entrainment (export)	0	0	-2	-2	-2	-2	-2	-3	-3	-3	-2	0	-20
CCF predation	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Handling	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Hydrodynamics	0	0	-2	-2	-2	-3	-2	-3	-3	-3	-2	0	-22
Cross -Delta Flow	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Qwest	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Old River @Bacon Island	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Sac River @ Rio Vista	0	0	0	0	0	0	-1	-2	-2	-2	-1	0	-8
SJ River @ Antioch	0	0	-2	-2	-1	-1	-1	-2	-2	-2	-1	0	-14
Predation	0	0	-1	-1	-1	-1	-2	-2	-2	-2	-2	0	-14
Food supply	0	-1	-2	-2	-2	-3	-3	-3	-3	-3	-2	-1	-25
Shallow/ nearshore habitat	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0	-6
Salinity/X2	-1	-1	0	0	1	1	1	-1	-1	-1	-1	-1	-3
Agricultural diversions	0	0	0	0	0	0	-2	-2	-3	-3	-2	0	-12
Total	-1	-2	-17	-17	-16	-23	-25	-37	-37	-37	-26	-2	-238

Diversion Effects on Delta Smelt: Common Programs WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-1	-1	-2	-3	-2	-2	-1	0	-14
Entrainment (export)	0	0	-1	-1	-1	-1	-2	-3	-2	-2	-1	0	-14
CCF predation	0	0	-1	-1	-1	-1	-2	-3	-2	-2	-1	0	-14
Handling	0	0	0	0	0	0	-1	-2	-1	-1	0	0	-5
Hydrodynamics	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Cross -Delta Flow	0	0	0	0	0	0	0	0	0	0	0	0	0
Qwest	0	0	0	0	0	0	0	0	0	0	0	0	0
Old River @Bacon Island	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Sac River @ Rio Vista	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ River @ Antioch	0	0	0	0	0	0	0	0	0	0	0	0	0
Predation	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Food supply	1	1	1	1	1	2	2	2	1	1	1	1	13
Shallow/ nearshore habitat	0	0	0	0	1	1	1	1	1	0	0	0	5
Salinity/X2	0	0	0	0	0	0	0	0	0	-1	-1	-1	-3
Agricultural diversions	1	1	1	1	1	1	1	2	2	2	2	1	16
Total	2	2	-4	-4	-3	-2	-3	0	-3	-3	-3	-1	-19

Diversion Effects on Delta Smelt: Common Programs DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Entrainment (export)	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
CCF predation	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Handling	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Hydrodynamics	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Cross -Delta Flow	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Qwest	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Old River @Bacon Island	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Sac River @ Rio Vista	0	0	0	0	0	0	-1	-2	-2	-2	-1	0	-8
SJ River @ Antioch	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Predation	0	0	-1	-1	-1	-1	-2	-2	-2	-2	-2	0	-14
Food supply	1	0	0	0	-1	-1	-1	-1	-1	-1	-1	0	-8
Shallow/ nearshore habitat	0	0	0	0	1	1	1	1	0	0	0	0	4
Salinity/X2	-1	-1	0	0	1	1	1	-1	-1	-1	-1	-1	-3
Agricultural diversions	1	1	1	1	1	1	1	2	2	2	2	1	16
Total	1	0	-9	-9	-8	-7	-9	-13	-11	-11	-8	0	-74

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Diversion Effects on Delta Smelt: Alternative 1 — WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-2	-2	-2	-3	-2	-3	-2	0	-18
Entrainment (export)	0	0	-1	-1	-2	-1	-2	-3	-2	-2	-1	0	-15
CCF predation	0	0	-1	-1	-1	-1	-2	-3	-2	-2	-1	0	-14
Handling	0	0	0	0	-1	-1	-1	-2	-1	-2	-1	0	-9
Hydrodynamics	0	0	-1	-1	-2	-2	-1	-2	-2	-2	-2	0	-15
Cross -Delta Flow	0	0	0	0	0	0	0	0	0	0	0	0	0
Qwest	0	0	0	-1	-1	-1	0	0	0	-1	-1	0	-5
Old River @Bacon Island	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Sac River @ Rio Vista	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ River @ Antioch	0	0	0	0	0	0	0	0	0	0	0	0	0
Predation	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Food supply	1	1	1	1	1	2	2	2	1	1	1	1	15
Shallow/ nearshore habitat	0	0	0	0	1	1	1	1	1	0	0	0	5
Salinity/X2	0	0	0	0	0	0	0	0	0	-1	-1	-1	-3
Agricultural diversions	1	1	1	1	1	1	1	2	2	2	2	1	16
Total	2	2	1	3	8	5	5	10	7	12	8	1	61

Diversion Effects on Delta Smelt: Alternative 1 — DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-2	-2	-2	-3	-2	-3	-3	-3	-2	0	-22
Entrainment (export)	0	0	-2	-2	-2	-2	-2	-3	-3	-3	-2	0	-21
CCF predation	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Handling	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Hydrodynamics	0	0	-2	-2	-2	-3	-2	-3	-3	-3	-2	0	-22
Cross -Delta Flow	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Qwest	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Old River @Bacon Island	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Sac River @ Rio Vista	0	0	0	0	0	0	-1	-2	-2	-2	-1	0	-8
SJ River @ Antioch	0	0	-2	-2	-1	-1	-1	-2	-2	-2	-1	0	-14
Predation	0	0	-1	-1	-1	-1	-2	-2	-2	-2	-2	0	-14
Food supply	1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-8
Shallow/ nearshore habitat	0	0	0	0	1	1	1	1	0	0	0	0	4
Salinity/X2	-1	-1	0	0	1	1	1	-1	-1	-1	-1	-1	-3
Agricultural diversions	1	1	1	1	1	1	1	2	2	2	2	1	16
Total	1	0	4	6	11	8	8	18	23	30	28	20	0	183

Diversion Effects on Delta Smelt: Alternative 2 — WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-2	-2	-2	-2	-2	-3	-2	-3	-2	0	-20
Entrainment (export)	0	0	-1	-1	-1	-1	-2	-3	-2	-1	-1	0	-13
CCF predation	0	0	-1	-1	-2	-2	-2	-3	-2	-2	-1	0	-16
Handling	0	0	0	0	-1	-1	-1	-2	-2	-1	0	0	-8
Hydrodynamics	0	0	-2	-2	-2	-2	-2	-3	-2	-3	-2	0	-20
Cross -Delta Flow	0	0	-2	-2	-2	-2	-2	-2	-2	-2	-2	0	-18
Qwest	0	0	0	0	0	0	0	0	0	0	0	0	0
Old River @Bacon Island	0	0	-1	-2	-2	-2	-2	-2	-1	-1	-1	0	-12
Sac River @ Rio Vista	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ River @ Antioch	0	0	0	0	0	0	0	0	0	0	0	0	0
Predation	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-9
Food supply	1	1	1	1	1	2	2	2	1	1	1	1	15
Shallow/ nearshore habitat	0	0	0	0	0	0	0	0	0	0	0	0	0
Salinity/X2	0	0	0	0	0	0	0	0	0	-1	-1	-1	-3
Agricultural diversions	1	1	1	1	1	1	1	2	2	2	2	1	16
Total	2	2	3	9	10	10	11	15	10	12	8	1	99

Diversion Effects on Delta Smelt: Alternative 2 — DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-3	-3	-3	-3	-3	-3	-3	-3	-2	0	-26
Entrainment (export)	0	0	-1	-1	-1	-1	-2	-3	-3	-3	-2	0	-17
CCF predation	0	0	-1	-1	-2	-2	-2	-3	-3	-3	-2	0	-19
Handling	0	0	-1	-1	-1	-2	-2	-3	-3	-3	-2	0	-18
Hydrodynamics	0	0	-3	-3	-3	-3	-3	-3	-3	-3	-2	0	-26
Cross -Delta Flow	0	0	-2	-2	-2	-2	-2	-3	-3	-3	-2	0	-21
Qwest	0	0	0	0	0	0	0	0	-1	-1	-1	0	-3
Old River @Bacon Island	0	0	-1	-2	-2	-2	-2	-3	-3	-3	-2	0	-20
Sac River @ Rio Vista	0	0	-2	-2	-2	-2	-1	-1	-2	-2	-1	0	-15
SJ River @ Antioch	0	0	0	0	0	0	0	0	0	0	0	0	0
Predation	0	0	-1	-1	-1	-2	-2	-2	-2	-2	-2	0	-15
Food supply	1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-8
Shallow/ nearshore habitat	0	0	0	0	-1	-1	-1	-1	0	0	0	0	-4
Salinity/X2	-1	-1	0	0	1	1	1	-1	-1	-1	-1	-1	-4
Agricultural diversions	1	1	1	1	1	1	1	2	2	2	2	1	16
Total	1	0	5	6	11	9	9	25	20	26	13	0	180

Diversion Effects on Delta Smelt: Alternative 3 — WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	1	1	1	1	2	2	1	1	1	0	11
Entrainment (export)	0	0	1	1	1	1	2	2	1	1	1	0	11
CCF predation	0	0	1	1	1	1	2	2	1	1	1	0	11
Handling	0	0	0	0	0	0	-1	-2	-1	-1	0	0	-5
Hydrodynamics	0	0	1	2	2	2	2	2	1	1	1	0	14
Cross -Delta Flow	0	0	0	0	0	0	0	0	0	0	0	0	0
Qwest	0	0	0	0	0	0	0	0	0	0	0	0	0
Old River @Bacon Island	0	0	1	1	1	1	1	1	1	1	1	0	9
Sac River @ Rio Vista	0	0	0	0	0	0	0	0	0	0	0	0	0
SJ River @ Antioch	0	0	1	1	1	1	1	1	1	1	1	0	9
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	1	1	1	1	1	2	2	2	1	1	1	1	15
Shallow/ nearshore habitat	0	0	1	1	2	2	2	2	2	1	1	0	14
Salinity/X2	0	0	0	0	0	0	0	0	0	-1	-1	-1	-4
Agricultural diversions	1	1	1	1	1	1	1	2	2	2	2	1	16
Total	2	2	8	10	11	12	14	14	10	8	9	-1	102

Diversion Effects on Delta Smelt: Alternative 3 — DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	1	1	2	2	2	3	2	2	1	1	17
Entrainment (export)	0	0	1	1	2	2	2	3	2	2	1	1	17
CCF predation	0	0	1	1	2	2	2	3	2	2	1	1	17
Handling	0	0	0	0	0	-1	-1	-2	-2	-2	-1	0	-10
Hydrodynamics	0	0	0	0	1	1	1	1	1	1	1	0	7
Cross -Delta Flow	0	0	0	0	0	0	0	0	0	1	1	0	2
Qwest	0	0	0	0	0	0	0	0	0	0	0	0	0
Old River @Bacon Island	0	0	0	0	1	1	1	1	1	0	0	0	5
Sac River @ Rio Vista	0	0	-1	-1	-1	-1	-1	-1	0	-1	0	0	-6
SJ River @ Antioch	0	0	1	1	1	1	1	1	1	1	1	0	9
Predation	0	0	0	0	0	1	1	1	1	1	0	0	5
Food supply	1	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	-8
Shallow/ nearshore habitat	0	0	1	1	2	2	2	2	1	1	1	0	13
Salinity/X2	-1	-1	0	0	1	1	1	-1	-1	-1	0	0	-2
Agricultural diversions	1	1	1	1	1	1	1	2	2	2	2	1	16
Total	1	0	4	4	11	8	11	5	8	10	7	3	83

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Net Effects Matrices with Common Programs Included

Net Effects Matrices with Common Programs Included
No Action Conditions - Existing

WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	0	0	-1	-1	0	0	0	-1	-1	0	-4
Hydrodynamics	0	0	0	0	-1	-1	0	-1	-1	-1	-1	0	-6
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	0	0	0	0	0	0	0	0	0	0	0	0	0
Shallow/ nearshore habitat	0	0	0	0	0	0	0	0	0	0	0	0	0
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	-2	-2	0	-1	-1	-2	-2	0	-10

Net Effects Matrices with Common Programs Included
No Action Conditions - Existing

DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-4
Hydrodynamics	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-6
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	0	0	-1	-1	0	0	0	0	0	0	0	0	-2
Shallow/ nearshore habitat	0	0	0	0	0	0	0	0	0	0	0	0	0
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	-3	-3	-2	-2	0	0	0	0	0	0	-10

Net Effects Matrices with Common Programs Included
Common Programs - Existing

WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrodynamics	0	0	0	0	0	0	0	0	0	0	0	0	0
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	1	1	1	1	1	2	2	2	1	1	1	1	15
Shallow/ nearshore habitat	0	0	1	1	2	2	2	2	1	0	0	0	11
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	1	1	1	1	1	1	1	3	4	4	4	1	23
Total	2	2	3	3	4	5	5	7	6	5	5	2	49

Net Effects Matrices with Common Programs Included
Common Programs - Existing

DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrodynamics	0	0	0	0	0	0	0	0	0	0	0	0	0
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	1	1	1	1	1	2	2	2	2	2	1	1	17
Shallow/ nearshore habitat	0	0	1	1	2	2	2	2	0	0	0	0	10
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	1	1	1	1	1	1	3	4	5	5	4	1	28
Total	2	2	3	3	4	5	7	8	7	7	5	2	55

D-062110

D-062110

Net Effects Matrices with Common Programs included
Alternative 1 - Existing
WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	0	0	-1	-1	0	0	0	-1	-1	0	-4
Hydrodynamics	0	0	0	0	-1	-1	0	-1	-1	-1	-1	0	-6
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	1	1	1	1	1	2	2	2	1	1	1	1	15
Shallow/ nearshore habitat	0	0	1	1	2	2	2	2	1	0	0	0	11
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	1	1	1	1	1	1	1	3	4	4	3	1	23
Total	2	2	3	3	2	3	5	6	5	3	3	2	39

Net Effects Matrices with Common Programs included
Alternative 1 - Existing
DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-3
Hydrodynamics	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-4
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	1	1	0	0	1	2	2	2	2	2	1	1	15
Shallow/ nearshore habitat	0	0	1	1	2	2	2	2	0	0	0	0	10
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	1	1	1	1	1	1	3	4	5	5	4	1	28
Total	2	2	0	0	2	3	7	8	7	7	5	2	45

Net Effects Matrices with Common Programs included
Alternative 2 - Existing
WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-1	-1	0	0	0	-1	-1	0	-6
Hydrodynamics	0	0	-1	-1	-1	-1	-1	-2	-1	-2	-1	0	-11
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	1	1	1	1	1	2	2	2	1	1	1	1	15
Shallow/ nearshore habitat	0	0	1	1	1	1	1	1	0	0	0	0	6
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	1	1	1	1	1	1	1	3	4	4	3	1	23
Total	2	2	-1	-1	1	2	3	2	4	2	3	2	27

Net Effects Matrices with Common Programs included
Alternative 2 - Existing
DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-2	-2	-2	-1	-1	0	0	0	0	0	-8
Hydrodynamics	0	0	-2	-2	-2	-1	-1	0	0	0	0	0	-9
Predation	0	0	0	0	0	-1	0	0	0	0	0	0	-1
Food supply	1	1	0	0	1	2	2	2	2	2	1	1	15
Shallow/ nearshore habitat	0	0	1	1	0	0	0	0	0	0	0	0	2
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	1	1	1	1	1	1	3	4	5	5	4	1	28
Total	2	2	-2	-2	-2	0	3	6	7	7	5	2	28

Net Effects Matrices with Common Programs included
Alternative 3 - Existing
WET YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	2	2	2	2	4	5	3	3	2	0	25
Hydrodynamics	0	0	2	3	3	3	3	3	2	2	2	0	23
Predation	0	0	1	1	1	1	1	1	1	1	1	0	8
Food supply	1	1	1	1	1	2	2	2	1	1	1	1	15
Shallow/ nearshore habitat	0	0	2	2	3	3	3	3	2	1	1	0	20
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	1	1	1	1	1	1	1	3	4	4	3	1	23
Total	2	2	9	10	11	12	14	17	13	12	11	2	115

Net Effects Matrices with Common Programs included
Alternative 3 - Existing
DRY YEARS

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	
Entrainment	0	0	2	2	3	4	4	6	5	5	3	1	35
Hydrodynamics	0	0	1	1	2	3	3	4	4	4	3	0	25
Predation	0	0	1	1	1	2	3	3	3	3	2	0	19
Food supply	1	1	0	0	1	2	2	2	2	2	1	1	15
Shallow/ nearshore habitat	0	0	2	2	3	3	3	3	1	1	1	0	19
Salinity/X2	0	0	0	0	0	0	0	0	0	1	1	0	2
Agricultural diversions	1	1	1	1	1	1	3	4	5	5	4	1	28
Total	2	2	7	7	11	15	18	22	20	21	15	3	143

D-062111
D—062111

Alternative Matrices WITHOUT Common Programs

D-062112

D—062112

Alternative Matrices WITHOUT Common Programs
Alternative 1 - Common Programs — **WET YEARS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	0	0	-1	-1	0	0	0	-1	-1	0	-4
Hydrodynamics	0	0	0	0	-1	-1	0	-1	-1	-1	-1	0	-5
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	0	0	0	0	0	0	0	0	0	0	0	0	0
Shallow/ nearshore habitat	0	0	0	0	0	0	0	0	0	0	0	0	0
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	-2	-2	0	-1	-1	-2	-2	0	-10

Alternative Matrices WITHOUT Common Programs
Alternative 1 - Common Programs — **DRY YEARS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-4
Hydrodynamics	0	0	-1	-1	-1	-1	0	0	0	0	0	0	-5
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	0	0	-1	-1	0	0	0	0	0	0	0	0	-2
Shallow/ nearshore habitat	0	0	0	0	0	0	0	0	0	0	0	0	0
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	-3	-3	-2	-2	0	0	0	0	0	0	-10

Alternative Matrices WITHOUT Common Programs
Alternative 2 - Common Programs — **WET YEARS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-1	-1	-1	-1	0	0	0	-1	-1	0	-6
Hydrodynamics	0	0	-1	-1	-1	-1	-1	-2	-1	-2	-1	0	-11
Predation	0	0	0	0	0	0	0	0	0	0	0	0	0
Food supply	0	0	0	0	0	0	0	0	0	0	0	0	0
Shallow/ nearshore habitat	0	0	0	0	-1	-1	-1	-1	-1	0	0	0	-6
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	-2	-2	-3	-3	-2	-3	-2	-3	-2	0	-22

Alternative Matrices WITHOUT Common Programs
Alternative 2 - Common Programs — **DRY YEARS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	-2	-2	-2	-1	-1	0	0	0	0	0	-8
Hydrodynamics	0	0	-2	-2	-2	-1	-1	0	0	0	0	0	-8
Predation	0	0	0	0	0	-1	0	0	0	0	0	0	-1
Food supply	0	0	-1	-1	0	0	0	0	0	0	0	0	-2
Shallow/ nearshore habitat	0	0	0	0	-2	-2	-2	-2	0	0	0	0	-8
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	-5	-5	-4	-4	-3	-2	0	0	0	0	-17

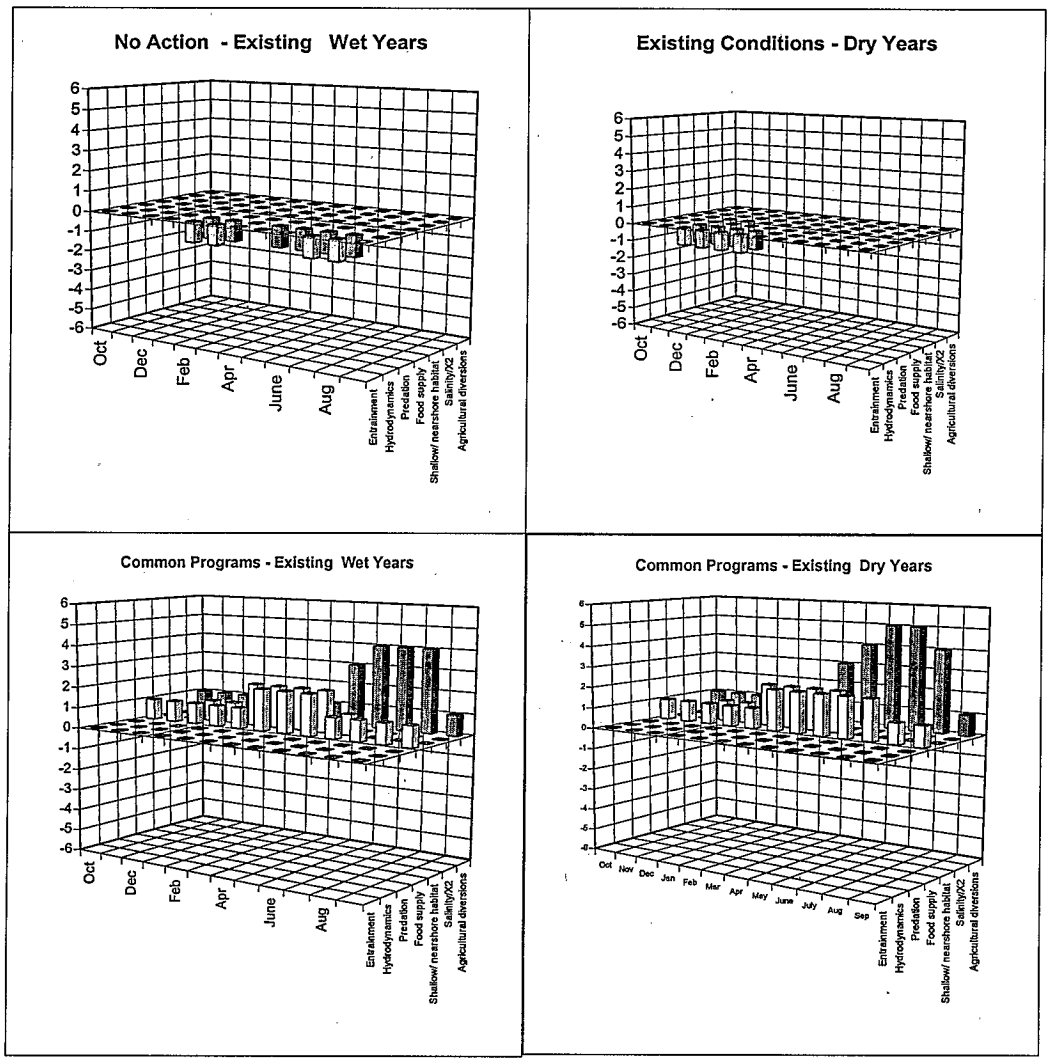
Alternative Matrices WITHOUT Common Programs
Alternative 3 - Common Programs — **WET YEARS**

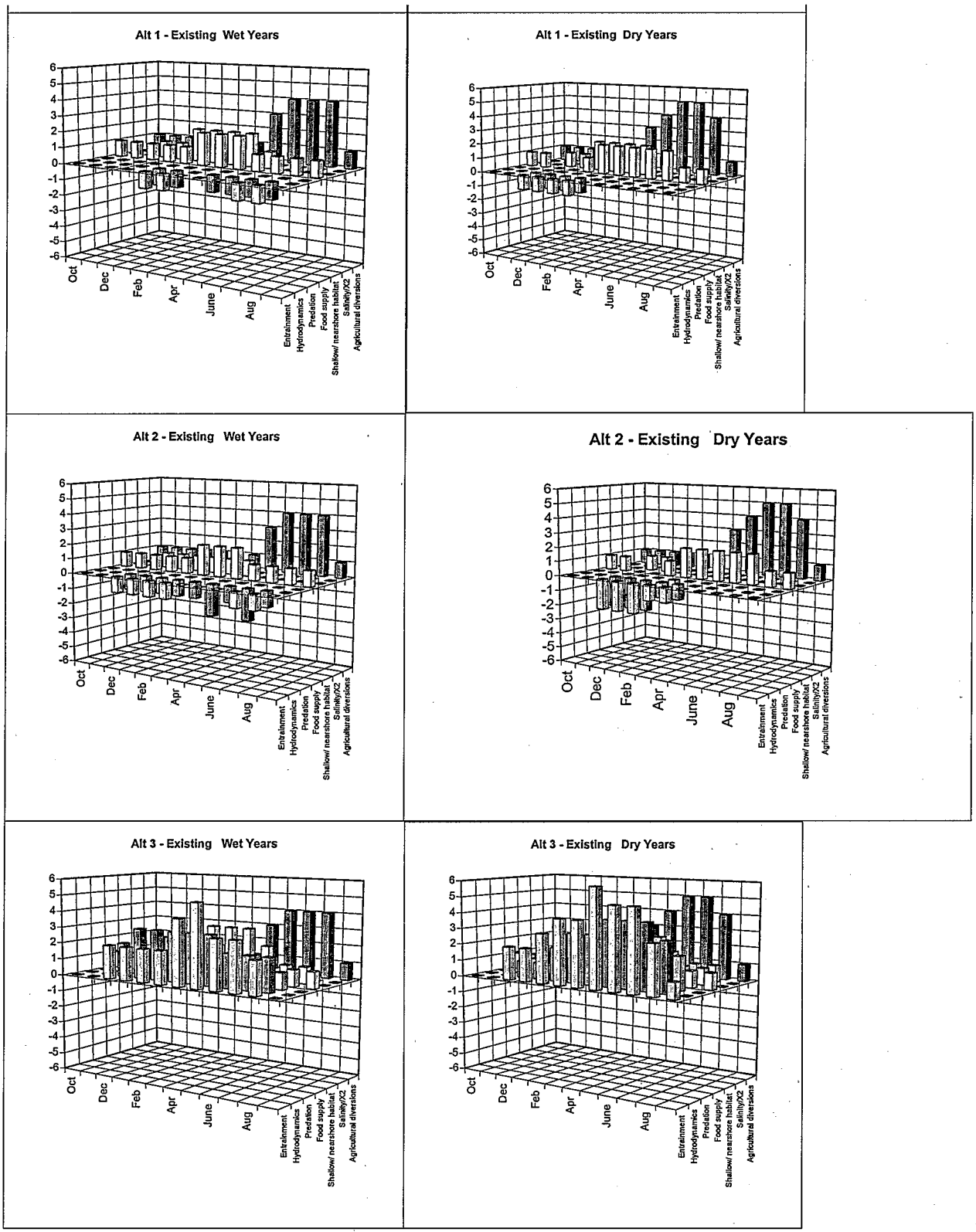
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	2	2	2	2	3	3	3	3	2	0	25
Hydrodynamics	0	0	2	3	3	3	3	3	2	2	2	0	23
Predation	0	0	1	1	1	1	1	1	1	1	1	0	9
Food supply	0	0	0	0	0	0	0	0	0	0	0	0	0
Shallow/ nearshore habitat	0	0	1	1	1	1	1	1	1	1	1	0	9
Salinity/X2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural diversions	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	6	7	7	7	9	10	7	7	6	0	66

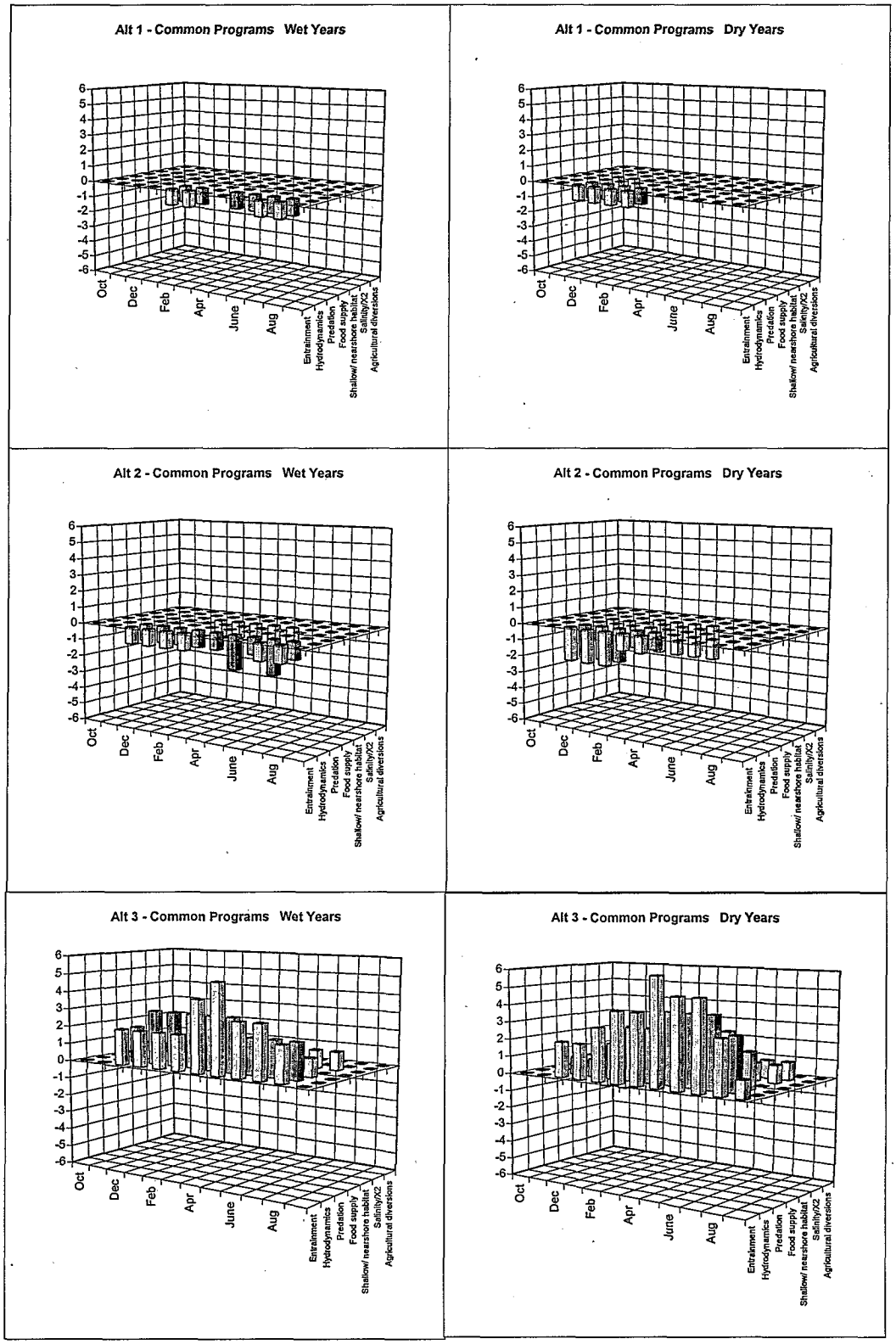
Alternative Matrices WITHOUT Common Programs
Alternative 3 - Common Programs — **DRY YEARS**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Total
Entrainment	0	0	2	2	3	3	4	5	5	5	3	-1	35
Hydrodynamics	0	0	1	1	2	3	3	4	4	4	3	0	25
Predation	0	0	1	1	1	2	3	3	3	3	2	0	19
Food supply	0	0	-1	-1	0	0	0	0	0	0	0	0	-2
Shallow/ nearshore habitat	0	0	1	1	1	1	1	1	1	1	1	0	9
Salinity/X2	0	0	0	0	0	0	0	0	0	-1	-1	0	-2
Agricultural diversions	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	4	4	7	10	11	14	13	11	9	-1	88

D-062113
D—062113


No Action - Existing Wet Years
Existing Conditions - Dry Years
Common Programs - Existing Wet Years
Common Programs - Existing Dry Years
6
5
4
3
2
1
0
-1
-2
-3
-4
-5
-6
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
June
July
Aug
Sep
Entrainment
Hydrodynamics
Predation
Food supply
Shallow/ nearshore habitat
Salinity/X2
Agricultural diversions


Alt 1 - Existing Wet Years
Alt 1 - Existing Dry Years
Alt 2 - Existing Wet Years
Alt 2 - Existing Dry Years
Alt 3 - Existing Wet Years
Alt 3 - Existing Dry Years
6 5 4 3 2 1 0 -1 -2 -3 -4 -5 -6
Oct
Dec
Feb
Apr
June
Aug
Entrainment
Hydrodynamics
Predation
Food supply
Shallow/ nearshore habitat
Salinity/X2
Agricultural diversions


Alt 1 - Common Programs Wet Years
Alt 1 - Common Programs Dry Years
Alt 2 - Common Programs Wet Years
Alt 2 - Common Programs Dry Years
Alt 3 - Common Programs Wet Years
Alt 3 - Common Programs Dry Years
6
5
4
3
2
1
0
-1
-2
-3
-4
-5
-6
Oct
Dec
Feb
Apr
June
Aug
Entrainment
Hydrodynamics
Predation
Food supply
Shallow/ nearshore habitat
Salinity/X2
Agricultural diversions