

Table 11. Assessment Methods for the Marine Community

Assessment Variable	Assessment Criteria	Species/Life Stage	Assessment Method	Meets Constraint		
				1	2	3
Delta flow	Abundance index	*Longfin smelt	Relationship between outflow or X2 and abundance (California Department of Fish and Game 1992, IEP 1996)	Yes	Maybe	Yes
	Distribution	*Asian clam	Relationship between high spring Delta outflow and location of recruitment and extent of population (IEP 1996, Peterson 1996)	Maybe	Maybe	Yes
	Population abundance	*Bay shrimp/post-larval	Correlation between log of outflow and log-abundance (San Francisco Estuary Project 1992, Herbold 1994)	Yes	Maybe	Yes
	Habitat area	*Longfin smelt/larvae, *Bay shrimp	Relationship between salinity and area of habitat meeting the optimal salinity needs for the species (CDFG 1992, Unger 1994)	Yes	Maybe	Yes
Habitat	Annual abundance index	*Longfin smelt *Starry flounder *Bay shrimp	Relationship between abundance and location of X2 (San Francisco Estuary Project 1993 and Jassby et al. 1995)	Yes	Maybe	Yes
	Habitat area (EET)	*All, including productivity	Area of habitat restoration meeting specific criteria (e.g., based on species needs) relative to area of existing habitat that meets the same criteria	Maybe	Maybe	Maybe

C-000563

Table 11. Continued

Assessment Variable	Assessment Criteria	Species/Life Stage	Assessment Method	Meets Constraint		
				1	2	3
Water quality	Mortality	Striped bass	Relationship between the annual summer die-off in Carquinez Strait and high liver concentrations of organic toxicants (Cashman et al. 1992)	No	No	Yes
Fishing	Harvest	*Chinook salmon/adult *Striped bass/adult *White sturgeon/adult	Percentage of total estimated adult population harvested each year	Maybe	Maybe	Maybe
		*Chinook salmon/adult	Ocean harvest models	Yes	Maybe	Maybe
Species interaction	Growth rate	Asian clam	Positive correlation between growth rates and phytoplankton concentrations (IEP 1996)	No	No	Maybe

Notes:

An asterisk (*) indicates that the assessment method, as applied to the species and life stage identified, may be included among the tools used for the impact assessment in the Programmatic EIR/EIS.

EET - The Estuarine Ecology Project Work Team of the Interagency Ecological Program identified these assessment criteria as potentially serving as primary controls of resource abundance.

Under "Meets Constraint", constraints 1, 2, and 3 are discussed in the text and briefly defined as:

1 - The assessment criteria must be measurable.

2 - The measurement error of the assessment criteria must be lower than the range of differences among alternatives.

3 - The assessment criteria must make it possible to identify important differences and similarities between alternatives.