

Estuary condition cards – 12 different conditions

EC 1	<b>High tide flooding in the spring</b> – all organisms move two spaces upstream; all habitat is available and prey is abundant, all organisms except 5mm and smaller crab larvae +2. Check zone and habitat point values.
EC 2	<b>Low tide ebbing in the spring</b> – all fish and crabs above low tide line must take one extra predator/prey card immediately. Check zone and habitat point values.
EC 3	<b>High tide flooding in the summer</b> – all fish and crab feed well and gain +2 points. Check zone and habitat point values.
EC 4	<b>Low tide ebbing in the summer</b> – all fish and crab above low tide line may move one square to achieve tidal channel, if not in tidal channel -2. If in tidal channel, take one additional predator/prey card immediately. Check zone and habitat point values.
EC 5	<b>High tide upwelling mid-summer</b> – all fish and crabs feed well and gain points. Check zone and habitat point values.
EC 6	<b>High tide no upwelling mid-summer</b> – all fish and crabs lose points. Check zone and habitat point values.
EC 7	<b>High tide rainfall event in the spring</b> – all crabs in mid and upper estuary lose points. Check zone and habitat point values.
EC 8	<b>Flooding tide oil spill in near shore ocean</b> – all crabs and salmon lose points. Check zone and habitat point values.
EC 9	<b>Flooding tide oil spill in lower estuary</b> – all crabs and salmon in lower estuary lose more points, all crabs in mid-estuary lose points. Check zone and habitat point values.
EC 10	<b>Ebbing tide sewage spill in lower estuary</b> – all fish and crab in odd numbered coordinates lose -2 points. Check zone and habitat point values.
EC 11	<b>Boat basin dredging project in lower estuary</b> – all fish and crab below low tide line lose points. Check zone and habitat point values.
EC 12	<b>Emergency water withdrawal from major freshwater tributary</b> – lower estuary becomes too salty for all salmon less than 55mm. Check zone and habitat point values.

Predator/prey interaction cards – 8 different conditions

PP1	Young surf smelt enter lower estuary to feed on any prey less than 15mm, may be eaten by predators larger than 55mm.
PP2	Young ling cod enter lower estuary to feed on any prey greater than 15mm but less than 60mm.
PP3	Caspian tern chicks and adults plunge dive and feed from above un-vegetated tidal flats at high tide on fish 40mm or greater in length.
PP4	Pigeon guillemot chicks learn to dive with adults and feed in open water on fish 20mm or greater in length.
PP5	Double-crested and Pelagic cormorants feed in flocks on fish and crabs between 15mm and 55mm in length unless protected by eelgrass beds.
PP6	Crab larvae larger than 15mm feed on smaller crab larvae unless protected by eelgrass beds; young staghorn sculpin feed on fish less than 40mm in length.
PP7	All crab larvae and juvenile salmon feed on isopods. Those in eelgrass beds gain +2 points.
PP8	Striped bass, an introduced species, enter lower estuary to feed on any prey greater than 15mm but less than 60mm