

***NCCC Domain Application of The Nature Conservancy Conservation Action Planning
Coho Salmon Viability Tables (Key Habitats and Indicators by Life Stage)
Example 1 of 3***

Key to Codes

What follows is the list of key attributes in the order they appear in the CAP workbook with their corresponding codes. SP = Spawners, EG = Egg, EF = Emergent Fry, SR = Summer Rearing, WR = Winter Rearing, SM = Smolt, ML = Multiple Lifestage.

Code	Key Attribute	Indicator
SP1	Access/ passage to watershed/stream mouth	Number of days stream mouth physically open with adequate flow during entry period (Nov 1- Mar 31)
SP2	Access/ physical passage to spawning habitat	Barriers that reduce access to potential spawning areas based on TRT criteria
SP3	Flow during spawning period (sufficient for passage and spawning habitat)	Percentage of estimated volume of unimpaired discharge in normal water years during period Nov 1 - Mar 31
SP4	Water quality	Turbidity (days that turbidity is > 25 NTUs)
SP5	Habitat area/ frequency/ availability	Quantity of spawning habitat (i.e., gravels) calculated from TRT high and low risk criteria by watershed
SP6	Habitat distribution	Distribution of accessible suitable spawning areas (spatial statistic)
SP7	Number of spawners	Mean annual adult spawner abundance
EG1	Flow during incubation period	Percentage of estimated volume of unimpaired median discharge in NORMAL water years during Nov 15 - May 1
EG2	Redd stability	Increased frequency of scour events above background conditions
EG3	Habitat quality (gravel quality)	Percent fines (<0.85mm) in potential spawning habitat areas

EF1	Water quality	Turbidity (days that turbidity is > 25 NTUs)
EF2	Habitat area/ frequency/ availability	Functioning high velocity refuge habitat with flows less than 9 cm/s (includes complex edgewater habitat, LWD, substrates, backwaters, alcoves) (% of potential rearing habitat)
SR1	Flow during summer	Instantaneous flow reduction leading to reduced survival
SR2	Flow during summer	Percent of unimpaired median summer baseflow (based on long-term mean monthly discharge) specific to individual watersheds accounting natural variability
SR3	Riparian cover	Percent canopy closure over stream channel
SR4	Riparian tree species composition and structure	Mean percent natural composition and structure (site potential) within 100 meters of streams
SR5	Water quality and food availability	Mean EPT richness index of potential rearing areas across IP kms
SR6	Habitat area/ frequency/ availability	Pool habitat percent by length across all IP-km
SR7	Habitat complexity/ quality	Average shelter rating of 100 or greater for pools in the watershed.
SR8	Habitat quality (pool quality)	Percent of pools (see pool habitat) that are > 3 ft (at deepest point) across all IP-km (e.g., all primary pools in potential rearing areas).
SR9	Water temperature	Maximum Weekly Average Temperature (MWAT) of potential summer rearing habitat in degrees C across all IP-km
SR10	Number of juveniles	Density of juveniles
WR1	Habitat availability and amount of large woody debris	LWD (# key pieces / 100 m) in potential rearing areas (IP-km)

WR2	Habitat complexity - high velocity refuge	Functioning high velocity refuge habitat with flows less than 15 cm/s (includes LWD, backwaters, alcoves, SMUs, but not floodplains) (% of potential rearing habitat)
WR3	Habitat complexity - high velocity refuge	Percent of historical floodplain disconnected from stream
WR4	Turbidity	Turbidity (days that turbidity is > 25 NTUs)
SM1	Access/passage downstream to ocean	Presence of diversions/dams/barriers that increase smolt mortality
SM2	Access/passage from estuary to ocean	Number of days stream mouth physically open with adequate flow during entry period (March through June)
SM3	Flow for downstream passage (March - June)	Maximum potential rate of diversion from pumping during April and May expressed as a percent of estimated unimpaired median flow in April.
SM4	Flow for downstream passage (March - June)	Number of days when depths are less than 4/10s of a foot anywhere in migration corridor during peak outmigration period
SM5	Estuarine: Maintenance of fresh/brackish habitat conditions (<15 ppt in the estuary)	Percent of unimpaired freshwater inflow to estuary
SM6	Habitat availability - low velocity areas in stream environment	Proportion of complex pools along migration corridor with qualifying shelter rating of > 100
SM7	Habitat quality (cover) in estuarine environment	Depth, LWD and other habitat elements (e.g. eelgrass)
SM8	Habitat quality (Large woody material) in the stream environment	Large woody debris (m ³ / 50 m reach) mean - throughout migration corridor (downstream of IP reaches)
SM9	Habitat quality/cover (estuarine)	Percent of historical estuarine habitats available
SM10	Abundance/density	Smolt abundance, assuming a 1% ocean survival, backcalculated from the number of adults needed to meet TRT objectives for low risk of extinction

ML1	Flow and channel morphology	Percent of watershed in impervious surface
ML2	Hydrologic regime (timing, duration, frequency, extent)	Average stand age in watershed
ML3	Recreational and subsistence harvest	Numbers of fish taken in freshwater
ML4	Riparian cover	Average diameter at breast height (DBH) of trees within 100 meters of watercourse
ML5	Riparian cover	Percent agricultural area within 100 meters of watercourse
ML6	Soil/sediment stability & movement	Miles of road per square mile
ML7	Soil/sediment stability & movement	Miles per square mile within 100 meters of watercourse
ML8	Water chemistry	Index of toxicity (based on severity of adverse effects on fish)
ML9	Watershed process	Percent of watershed area in agriculture
ML10	Watershed process	Rate of timber harvest in watershed