

## Glossary of terms:

Adaptive Management: “Learning by doing.” “An approach to designing and implementing resource management policy that takes account of uncertainty and maximizes the opportunity to learn from management actions” (Michael Healy)

Conceptual Model – a visual and/or narrative explanation of how a system works or expected to respond. A conceptual model should include a discussion of controlling factors (management actions and other uncontrollable factors), expected response or outcome, and a discussion of areas of uncertainty and unpredictability. Two common frameworks for conceptual models include:

- **Driver-Linkage-Outcome (DLO) framework** for conceptual models: a conceptual model that describes the relationship between several or many controlling factors and their expected influence on the outcome of interest. For example, a conceptual model related to salmon life cycle, may include drivers such as: spawning habitat, flow conditions, rearing conditions, lotic food web, ocean conditions, predation, pumps, diversions, impediments to passage and effects of contaminants. Outcomes may include: number of adults returning to spawn, number of redds, etc. DLO conceptual models should discuss the relative magnitude of the linkages (i.e. influence on the outcome) as well as uncertainty and unpredictability.
- **Pressure-State-Response (PSR) framework** for conceptual models: a conceptual model that describes the relationship between one controlling factor (pressure) and the expected influence on the outcome of interest. The PSR model could be considered a simplification or focusing of the DLO model, which may be appropriate in some situations. For example, discharges of a specific constituent causing toxicity in an organism of interest has a simple and linear relationship – it may not be necessary to examine it in the context of a broader conceptual model.

Metric – something that is actually measured. Example: concentration of organic carbon at Banks.

Indicator – a quantitative evaluation of a metric or set of metrics that are representative of an environmental attribute or system attribute of interest. Indicators may be directly tied to a metric (example: daily concentration of organic carbon at Banks) or may be a derivation of one or more metrics (example: average monthly organic carbon concentration at the 5 Delta export points). Indicators are classified into three types, described below.

- **Administrative Indicators** – indicators that summarize administrative actions and describe resources (i.e. funds, personnel, projects) focused on a particular subject. Example: amount of funds spent on projects to improve water use efficiency.
- **Driver Indicators**- indicators that are representative of controlling factors (example: hydrologic year type) or implementation actions (example: acres of freshwater tidal marsh habitat restored)

- **Outcome Indicators** – Indicators that are representative of system or environmental response to controlling factors. (example: adult salmon returning to spawn)

Performance measure – using a specific indicator or set of indicators to assess program performance and/or progress towards program goals. Example: A performance measure for water supply reliability might be “unmet demand” = demand – supply Performance measures may be quantitative or qualitative interpretations of quantitative information. There may be some value in identifying quantitative targets or goals associated with specific performance measures.

Program assessment – an evaluation of program progress and performance that includes performance measures and evaluation of the effectiveness of processes, including adaptive management.

Target – The level of indicator performance sought within a given timeframe. Targets may be quantitative (specific numbers or rates of change) or stated in qualitative terms. Quantitative targets can be useful when interpreting data and assessing progress towards goals.