

**Glossary of terms:
Draft 4/28/06**

Italicized definitions are excerpts from the “Program Assessment Rating Tool” by the federal Office of Management and Budget.

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. Quantitative models can be developed from conceptual models and used to predict potential outcomes. 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 levels, described below.

- 1.) 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.

Administrative indicators may also be called “input” indicators.

2.) Driver Indicators- These indicators describe the factors that may be influencing outcomes. There are two types of driver indicators: a. **Outputs** which are on-the-ground implementation of management actions such as acres of habitat restored and b. **Uncontrollable factors** which are often natural phenomena not controlled by the management actions of the program such as weather and hydrologic fluctuations

- *Output Indicators – Output indicators describe the level of activity that will be provided over a period of time, including a description of the characteristics (e.g. timeliness) established as standards for the activity. Outputs refer to the internal activities of a program – the products and services delivered.¹ (Example: acres of best management practices implemented for agricultural water conservation per year).*

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

- *Baseline Outcome Indicators – Outcome indicators where no program implementation has occurred. Baseline monitoring is needed for future evaluation of effectiveness of implementation actions.*
- *Predicted Outcome Indicators – Indicators of outcomes that are predicted from modeling evaluations of potential implementation options. These can assist decision makers that are evaluating different options to achieve program goals and can become the performance goals if the project is implemented.*
- *Efficiency measures – Sound efficiency measures capture skillfulness in executing programs, implementing activities, and achieving results, while avoiding wasted resources, effort, time and/or money. Simply put, the efficiency is the ratio of the outcome or output to the input of any program. Because they relate to costs, efficiency measures are likely to be annual measures. Meaningful efficiency measures consider the benefit to the customer and serve as indicators of how well the program performs ...(e.g. balancing costs and quality)¹.*
 - *Outcome efficiency measures – The best efficiency measures capture skillfulness improvements in program outcomes for a given level of resource use. Outcome efficiency measures are generally considered the best type of efficiency measure for assessing the program overall.¹*
 - *Output efficiency measures – It may be difficult to express efficiency measures in terms of outcomes. In such cases, acceptable efficiency measures could focus on how to produce a given output level with fewer resources. However, this approach should not shift incentives toward quick, low-quality methods that could hurt program effectiveness.¹*

¹ Excerpt from “Guide to the Program Assessment Rating Tool (PART)” Office of Management and Budget, March 2006, www.omb.gov

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. In some cases, several metrics may be combined into a performance measure “index” to help synthesize and communicate detailed 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.

PART: Program Assessment Rating Tool – PART is a diagnostic tool used to assess the performance of Federal programs and to drive improvements in program performance. It helps inform budget decisions and identify actions to improve results. PART is designed to provide a consistent approach to assessing and rating programs across the Federal government. PART assessments review overall program effectiveness, from how well a program is designed to how well it is implemented and what result it achieves.²

Information on PART guidance: www.omb.gov

Examples of Program Assessments using the PART process: ExpectMore.gov

Strategic Goal or Strategic Objective: A statement of aim or purpose that is included in a strategic plan.

Long-term Performance Objective: A more specific description of outcome indicators that relate to strategic goal or strategic objective. The Performance objective should be as specific as possible to describe what should be measured to describe long-term success for the program. Multiple long-term performance objectives can be described to support one strategic goal or strategic objective.

Performance Goal: Sets a target level of performance over time expressed as a tangible, measurable objective, against which actual progress can be compared, including a goal expressed as a quantitative standard, value or rate. A performance goal is comprised of performance measures with targets and timeframes.² The PART process recommends establishing long term performance goals and annual performance goals for each performance measure.

Target :

PART definition: *Quantifiable or otherwise measurable characteristic that tells how well a program must accomplish a performance measure.²*

ERP definition: A target is a qualitative or quantitative statement of a Strategic Objective. Targets are something to strive for but, unlike Strategic Objectives, may change over the life of the program with new information and progress, or may vary

² Excerpt from “Guide to the Program Assessment Rating Tool (PART)” Office of Management and Budget, March 2006, www.omb.gov

according to the configuration of storage and conveyance in all alternatives. Target adjustments will be science driven and based on the results of adaptive management. Targets may include a range of values or a narrative description of the proposed future value of an ecosystem element. ... Targets are flexible tools to guide the effort.³

³ Ecosystem Restoration Program Plan, Volume 1, Page 13