

## Attachment C: Environmental Results and the Logic Model

Recently, the U.S. Congress, Office of Inspector General (OIG), and the Office of Management and Budget (OMB) raised concerns about the lack of clarity or documentation showing how EPA grant funds produce environmental outcomes and results. The EPA Environmental Results Order was established to address these issues.

The Order was designed to ensure that grants are results-oriented and aligned with EPA's Strategic Plan. Thus, IGAP work plans must both identify short-term outcomes and deliverables of the grant and also connect them with long-term accomplishment of the Tribe's environmental objectives.

### Measuring Environmental Results: Outputs and Outcomes

Under the Order, EPA requires that all grant recipients include documentation of outputs and, "to the extent practicable," of outcomes as well. In order to evaluate the effectiveness of a project, applicants are expected to describe how they intend to measure their **outputs** or deliverables (conferences held, farmers trained, research completed and published, demonstration projects implemented) and how they intend to measure the **outcomes** or impacts of their activities. Outputs and outcomes differ both in their nature, and in how they are measured. Both Outputs and Outcomes should be measurable, quantifiable and relevant.

1. **OUTPUTS:** Outputs are the activities or deliverables that are to be accomplished as a result of a grant. Outputs are generally described as deliverables or milestones in a workplan or timeline. Outputs include things like number of workshops held, number of volunteers trained, field work completed, study completed, watershed management plan completed, etc.
2. **OUTCOMES:** Outcomes are the measurable results of the work of the grant. In contrast to outputs which are accomplished during the life of the grant, outcomes often will occur after the completion of the grant. It may be useful to consider outcomes in different time frames: short-term, medium-term and long-term.
  - **Short-term outcomes** may include things like: increased knowledge, active stewardship program.
  - **Medium-term outcomes** might include: documented changes in behavior, documented reduction of pesticide use (3 of pounds of pesticides per acre no longer being used on 2000 acres).
  - **Long-term outcomes** might include: documented reduction of nutrients in lake, documented reduction in # of children with asthma, documented improvement of indoor air quality, meeting water quality standards.

**Medium- and Long-term Outcomes** can be costly, especially if monitoring, sampling and analysis are involved. In addition, it can take many years for the long-term impact of a grant to have a measurable effect on the environment. For small

grants, we tend to focus on short- and medium-term outcomes, but we want to see the grant in the context of long term goals and objectives.

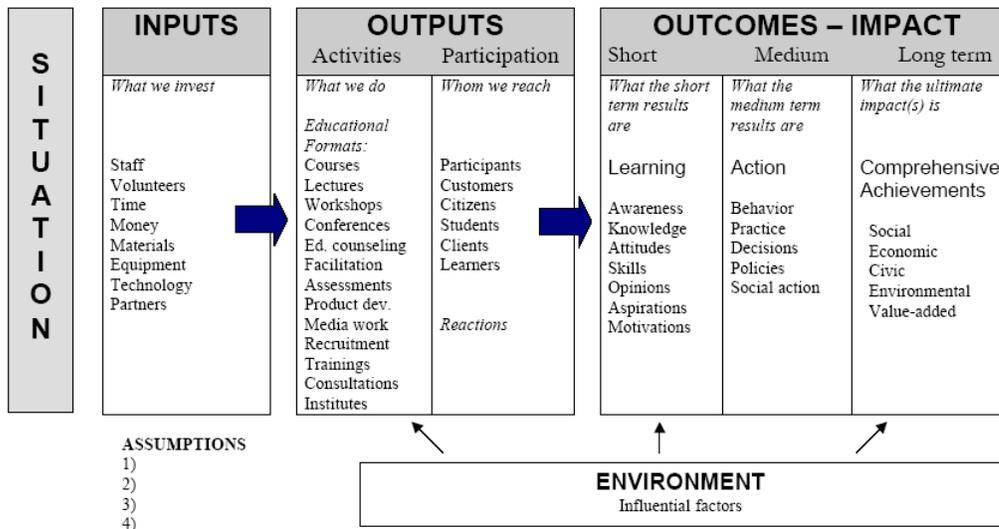
**The Logic Model: a framework for developing outputs and outcomes**

Logic Models reflect the connections between planned actions and expected results. They explain the rationale and steps in getting towards your goal:

We need to conduct this research  
*so that*  
 Scientists and the public understand why the fish are dying  
*so that*  
 Decision makers can institute protective land use policies  
*so that*  
 People can modify behaviors that damage fish habitat  
*so that*  
 Conditions in the stream improve  
*so that*  
 Salmon are healthy and abundant.

**A Logic Models provides detail in a graphic format:**

**LOGIC MODEL: Program Performance Framework**



University of Wisconsin-Extension, February 2001

**Some other types of results to consider:**

Increased knowledge, Modified behavior, Increased capacity/expertise, Preservation of environmental resources, Improved conditions, Improved human health.