



Job Aid: Assessing and Tracking “Good” Adaptation Outcomes Over Time

Key questions to ask about adaptation outcomes might be broadly put into the following categories:

- **Achievement of positive outcomes**
 - ◇ Do those involved or affected find the adaptation outcomes to be “good” or “acceptable” (judging by formalized criteria, comparison to a baseline or future vision, or qualitative perceptions of an achievement)?
 - ◇ Are the outcomes accomplished consistent with those intended (e.g., did a protective measure afford the level of safety anticipated, did a new technology perform as expected, or did the anticipated co-benefits of an action actually materialize)?
 - ◇ Did additional synergistic benefits emerge that were not foreseen but are appreciated?
- **Avoidance of negative outcomes**
 - ◇ Did the implemented adaptation actions fail to perform as expected?
 - ◇ Did any unintended negative side-effects emerge?
 - ◇ Did the implemented actions make things worse in some way (i.e., was the action maladaptive)?
- **Changes in outcomes over time**
 - ◇ At what point is a particular adaptation no longer “good enough”?
 - ◇ When has an outcome previously achieved lost its effectiveness, appropriateness or acceptability? Reasons might include:
 - The effectiveness of an adaptation option degrades – For example, a replenished beach has eroded away again; a coastal wetland is no longer sufficient to buffer against sea-level rise; a stormwater drain pipe has corroded over its normal lifespan; communication technologies have changed so much that former warning channels to alert the public to dangers are no longer used;
 - Climate risks are changing – For example, temperature extremes now exceed the material stability of road surfaces or railroad tracks for which they were designed; stormwater runoff is significantly higher than expected over the lifetime of a drainage system; plant hardiness zones have shifted so much further poleward that a particular crop is no longer viable in a region; or
 - Societal values and goals are shifting – For example, after several experiences with climate-related extremes, the public’s acceptability of risk is lower; due to an economic crisis, adaptation options that have lower costs or create greater economic co-benefits are preferred; or witnessing the loss of natural ecosystems due to the use of hard infrastructure, the public’s interest and preference are shifting from gray to green.



This job aid was created to serve as a reference for individuals interested in indicators and metrics to help communities define and track progress on their climate adaptation goals. Additional background and resources are available on the website: www.ResilienceMetrics.org. This website was developed in partnership with the National Estuarine Research Reserve System with funding from NOAA.

In making these evaluations, the question must always be asked:

- ***According to whom? Whose voices are heard? Whose opinions receive priority or more weight?***