

K. Bogdan: So now we're starting on the steps in preparing a cumulative effects analysis, and we're at step 1, which is to determine the geographic and temporal scope. The geographic scope establishes the boundary for each resource effects analysis. The geographic scope need not extend beyond the direct and indirect effects of the proposed action or the alternatives. It can be difficult to determine the appropriate boundary for some resources.

R. Hardt: For example, if a proposed action or alternative would affect habitat for a wide-ranging species then the geographic scope of analysis usually need not encompass the entire range of the species. Instead, the geographic scope might extend to some smaller boundary, such as a population unit, wintering range or a province, within which the proposed action or alternative would have some measurable effect.

C. Humphrey: I got a lot of questions from the field about geographic scope, and it all boils down to: can the scope be too broad or too small?

R. Hardt: It's a very difficult judgment call in setting the geographic scope. If we set the geographic scope too broad, it may completely lose the meaning of the increment of our action. For example, if you're analyzing the effect of sediment produced by our action entering into the stream. If you look at the entire river basin, that amount of sediment is always going to seem trivial, but if you look at that immediate stream reach, it might magnify the importance of it, yet you haven't really looked at the other things that are affecting sedimentation in that watershed.

So setting the geographic scope, if you go too broad you'll end up analyzing far too many actions to really provide a meaningful context and the increment of our action will be lost. If you set it too small, it might over-magnify the importance of our action, but fail to consider all of the other things that are affecting that resource in a meaningful way. So determining the geographic scope, you really need to consider the context and what's going to provide a meaningful analysis.

C. Humphrey: Some of those things sound fairly simple, but what if you had something like a long, linear feature, like a pipeline? How would you do that? How big would you go?

R. Hardt: Well for something like a long pipeline or a transmission corridor, the answer is usually you have to go very big. You have to look at the extent of where we're going to have a direct or indirect effect on the resource at issue, and that usually, for a long linear feature, is going to be a very large geographic scope, which means we're going to have to look at a lot of different actions having a cumulative effect together with our action.

K. Bogdan: Defining the temporal scope for the analysis should generally be based upon the duration of the effects of the proposed action or the alternatives. These timeframes, as with geographic scope, may vary by resource or by resource issue.

Also, it may be helpful in your analysis to differentiate between short-term and long-term timeframes for analysis, but if you're doing that, make sure you define the duration of the short term and the duration of the long term effects analysis.

Similar to the geographic scope, it can be impossible sometimes to determine the point and time at which there is absolutely no remaining effect of the proposed action or the alternatives. Now in these circumstances, you need to consider how long you would have a measurable effect, to set the temporal scope.

Now let's take a look at how the geographic and temporal scope were identified for each issue in the examples.