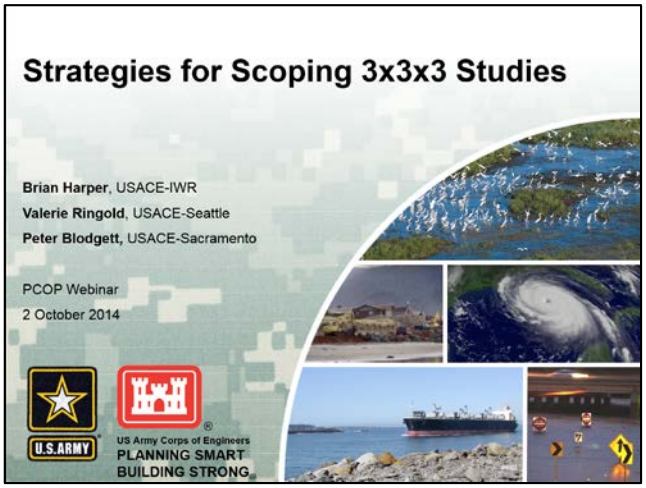
Q & A: Strategies for Scoping 3x3x3 Studies
Planning Community of Practice Webinar Series
October 2, 2014



The October 2nd webinar, part of a series of information-sharing webinars hosted by the Planning Community of Practice, provided a series of lessons and tips from studies that have successfully scoped to be 3x3x3 compliant – to be (or have been) completed within 3 years and $3 million.

Brian Harper (IWR) was joined by Valerie Ringold (Seattle District) and Peter Blodgett (Sacramento District) for the presentations and questions from the field.

The questions and responses below are not a direct transcript; they have been reordered and edited for clarity. Additional questions and feedback are always welcome via the Planning Community Toolbox's SMART Guide comment form online at: http://planning.usace.army.mil/toolbox/smart.cfm?Section=10&Step=1 or by email to hqplanning@usace.army.mil

Scoping to 3x3x3 Without Reconnaissance Studies

Any thoughts from the panel on how you would scope your respective studies if you hadn't had the benefit of a reconnaissance study?

For the Sutter Study, I'm not sure the approach to technical analysis would have been much different without a reconnaissance study. Much of the data used in the Sutter Feasibility Study was initially developed by the 2002 Sacramento-San Joaquin Comprehensive Study (Comp Study), a FEMA National Flood Insurance Program mapping study, the American River Common Features study, and extensive geotechnical analysis by the State of California. From all this existing information the PDT had a reasonable understanding of the problems and opportunities within the study area. A planning charette held at the beginning of the study was useful in determining the approach and technical analysis needed to formulate and screen alternatives.

From Seattle Harbor: I would just say that without a recon, I think it would be difficult to take the approach we took on Seattle Harbor, such as being able to narrow down our problem definition and then focus our scope accordingly. I would also say that it would be difficult to write a PMP or even be able to identify costs to sign an FCSA without some kind of "recon-like" scoping activities. It is a hard concept for me to wrap my mind around to not have some kind of initial recon level analysis done on a project in order to develop the PMP, scope of work, review plan, etc. Seems like a charette would need to be the first activity in a no recon study situation, and that we couldn't really develop a scope, schedule, or study budget until after that meeting.

Pilot Studies and 3x3

Was Sutter Basin fully 3x3x3 compliant? For example, was the FCSA signed and money expended prior to entering the pilot program?

Sutter Basin was a SMART Planning Pilot. The initial feasibility study, started in early 2000's, had been going on/off for over 10 years before it became a pilot (one of the reasons it was selected and local sponsors eager to sign up). There was a previous FCSA signed before becoming a pilot in 2011, and funds (millions) expended before becoming a pilot.

Since it was a pilot, Sutter Basin was exempt from the $3 million since the study was developing and proving SMART planning concepts and procedures. The study did come in under a 3 inch report binder and took just over 3 years to complete (3 years and one month to a Chief's Report).

Guidance and Level of Detail

When is specific guidance going to be issued pertaining to uncertainty and level of detail?

There aren't specific targets or thresholds for what the "level of detail" should be. Our guidance directs us to the level of detail sufficient to distinguish between plans based on benefits, costs, and impacts and a level of risk that isn't untenable for the organization. Our guidance is the Planning Guidance Notebook and the Planning Community Toolbox, describing how you work through the process itself to distinguish between plans, plus the tools such as a Decision Management Plan to lay out your analytical tasks as you go to the next milestone, who on the team is going to do what analysis to inform the costs, benefits, and impacts, using what kind of tools, and what kind of uncertainties/risk are present in that work. The reason that the Decision Management Plan is required before milestone meetings is so that the Vertical Team can buy into that plan, agree that it is a reasonable set of analyses to develop the information that is needed for the next decision. The Risk Register lays out your assumptions and decisions about that risk.

It is important to review guidance in the context of what is required to develop and compare plans during the feasibility study versus what is required for the final feasibility level alternative.

For example, for level of detail / uncertainty related to costs, ER 1110-2-1302 Tables 1 and 2 lay out the classifications of cost estimates and the appropriate level of cost detail by study phase. We're typically talking about a Level 4 to get through the Tentatively Selected Plan and a Level 3 to support the final recommendation and the Chief's Report.

Factors Impacting 3x3x3 Compliance (Dollars and Time)

Sometimes clarity doesn't come until after the screening of alternatives or even during TSP discussions with the vertical team. The addition of a new measure or alternative can then impact the tight 3x3 schedule that we are on. This can be good thing, but it can also be viewed negatively by those that are narrowly focused on schedule and budget. So what relief can we expect when we choose project quality over schedule?

Quality is vitally important, even within the constraints of 3x3x3. The decision management plan and risk register are a means to explicitly evaluate the risks to quality, while considering the schedule and cost trade-offs. If we, corporately, agree on the decision and a change of path or need for additional work, and that has an impact on schedule and budget, that is something that should be expected and accepted by all the levels involved in the decision.

This also gets to the idea of acknowledging that we most likely will have more than one acceptable solution to a problem and that we, corporately, need to determine the best way to make risk-informed decisions on whether the new information or measures that may be introduced as the study develops, is worth changing the agreed-upon course. In some cases, the change may not have that much overall benefit, in other cases it may be that the outcome is this is too important and we may need to seek a waiver (from time and/or $$) in order to incorporate it in to the study moving forward.

I have a concern that the requirements of the NEPA and environmental compliance related processes will overwhelm the 3x3x3 framework. Recent CWRB experience shows a lack of command support for any proposal where there were outstanding elements to resolve with resource agencies despite agency agreements with the PDT to address these issues later in the process.

The requirement for coordination and for certain letters and documents are not "risk" issues; they are "compliance with policies and laws" issues. Perhaps the timing is a risk issue, and there can be a difference of opinion between the District and HQ of the level of risk to the agency regarding timing. We are going through quite a bit of corporate learning, and how we work out those agreements can still be a challenge. We are not always going to get the answer we want just because we take a risk-informed approach, but it's still the right approach to take: laying out the pros and cons of a certain strategy and then dealing with the answer. And if the answer impacts the ability of the study to remain within the constraints of 3x3, our job is to communicate that to leadership as a consequence of the decision.

For Ecosystem Restoration projects, development of new habitat models can be a real sink for money and time. Is this an area where we should consider early exemptions on the time (3 year) and money ($3M) requirements?

PDTs should scope new ecosystem modeling efforts to fit within the established time and funding constraints (3 year / $3M). The PDT should coordinate model selection/model development needs with the ECO-PCX and the Vertical Team. The ECO-PCX is available to assist the PDT in selection of environmental benefit assessment models. The PDT/PCX/Vertical Team should critically evaluate whether existing quality model are available to capture difference and tradeoffs in outputs of alternative plans. When appropriate, existing models should be used. The ECO-PCX will help determine if a new model is required. If so, the ECO-PCX will assist the PDT in scoping the model development tasks to an appropriate level of detail.

Vertical Team Coordination and Impacts on Funding / Time

Is all horizontal and vertical coordination self-funded? Limited funds often prevent getting too much input from others outside of the PDT.

Generally coordination is funded by the project, but it depends on the topic. MSC resources are available to you to help with vertical coordination. If it is a call to the MSC or PCXes for initial advisory support, PCXes may provide that without a bill. When reaching out to PCXes and technical resources for a more intensive effort, generally those are costs that would be borne by the project. Personally, I believe some of the resources set aside for technical review at the end of the study could be reallocated to fund additional technical engagement / advisory input at the front end to build technical quality into the process in a potentially less expensive and more effective manner.

From Seattle: We also engaged technical expertise at the MSC early in the study with reconnaissance funding, talking about the project, the scope, what we thought were the biggest issues, and got their input and feedback based on their expertise. We also used the Deep Draft PCX; they are a mandatory center, so we had to send them money, but we used them to help us scope the economics and it didn't add significantly to our costs. The RIT also helped us confirm we were policy compliant early.

Much of the risk/uncertainty acceptability (or not) is based on judgment calls of the PDT and each of the subsequent reviewers. How can we better align with the Vertical team given worker turnover and limited resources?

Part of the reason we create a Decision Management Plan that lays out what we are going to do, and use a Risk Register that evaluates and communicates the uncertainties and risk, and the Decision Log that captures agreements with the vertical team is to document that commitment – regardless of whether that person walks away and another person steps into the team. That's not to say that decisions cannot be revisited, but it should be risk informed. Re-do or re-work should be the rarity, not our normal practice.