Independent Economic Analysis Board Meeting Notes

January 15, 2015

Members Present	Members Absent	Guests
Terry Morlan	Noelwah Netusil	Tony Grover
Bill Jaeger		Jim Ruff
Roger Mann		Mike Smart
JunJie Wu		Mark Fritsch

1. Greetings and Introductions.

Chair Terry Morlan welcomed everyone to today's meeting of the Independent Economic Analysis Board, held January 15, 2015. This was a phone meeting. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at this meeting. Anyone with questions or comments about these notes should contact Tony Grover at 503-222-5161.

The minutes from the IEAB's November 7, 2014 meeting were amended and approved. Grover congratulated Jaeger on his recent appointment to the Independent Science Advisory Board.

2. Report on Presentation of Task to Council.

Morlan said that, during the Task 211 presentation at the most recent Fish Committee meeting, it was strongly reinforced how important the O&M bow wave topic is to the Council. This IEAB task is just part of the work going on around this issue, he said, but it definitely has the Council's attention. Grover noted that long-term O&M will be discussed at an upcoming meeting in the near future; he suggested that it may be a good idea for Morlan to participate.

Morlan said that one thing he noted during the recent Council discussion is an expectation that this process will result in a reduction in long-term O&M costs for the region – certainly effective analysis and long-term planning are key to controlling those costs. Morlan added that BPA has not budgeted any funds for significant Pisces or Taurus improvements in FY2015. We hear all the time that BPA doesn't have funds to put more money into Pisces, Grover said; we're not insensitive to it, but we're also aware that BPA has a lot of budgetary flexibility, and that they reallocate funds all the time. He noted that, in his experience, if there needs to be a little bit of development to incorporate the IEAB's templates, BPA likely has the budgetary flexibility to make it happen. We'll know more about the extent of any changes required once we have a pilot developed, he added.

Morlan added that the Oregon Willamette Wildlife Agreement contains some useful information regarding long-term planning. He suggested that the IEAB may want to take a look at the Oregon plan as a starting-point. There are also the recent Southern Idaho wildlife settlements, which build long-term O&M in as a set-aside, Grover said.

We would like to use this IEAB task to guide us into the future, said Fritsch. The rub we're dealing with is the agreements that have been around for decades – how do we provide guidance to the sponsors so they can plan with some continuity? There are a lot of things going on in this area right now, and my advice to the IEAB is, full speed ahead, Fritsch said. We will be careful to be sure that our recommendations add value, and are as implementable as possible for wildlife managers, Morlan said.

Overall, the Fish Committee was very supportive of this task, and the Council approved it without comment, Morlan said. Even the people who are normally critical of this type of effort are very supportive of this task, Grover added – if we are hearing anything vaguely critical, it's that we're not diving into it as quickly as we could. Morlan added that the initial discussions focused on a six-month time period for the IEAB to conclude this project, but it may be possible to deliver subcomponents of the project more quickly if that would be helpful to the Council.

3. Discussion of Task 211 Approach and Timing.

Morlan noted that Subtask 1 under this task is to enumerate what types of long-term costs and benefits should be considered. I believe Bill and Junjie have sent us some information on that topic, said Morlan. You're referring to something I mentioned in the context of my work on a water group here in Oregon, a framework for evaluating water storage projects, Jaeger said. There was a cost-benefit analysis framework, and a look at how the Bureau of Reclamation evaluates projects, which included some qualitative metrics. It's not a template for what we want to do, but it might give us a sense of some of the issues involved in evaluating projects, Jaeger said.

I'm wondering what cost data has been required for past projects, Wu said – perhaps someone could compile a list of those costs so we can talk about what costs should and should not be included in our analysis. Also, how do we take uncertainty into account? It would be helpful to examine that list so that we can discuss the most appropriate way to tackle those costs. Perhaps a good starting-point would be to prepare this list of short-and long-term costs, and separate them into categories, Wu suggested. We can then discuss them as a group.

The key is to come to some conclusions about the cost categories that will be included in our analysis, Mann said. We have a fair amount of project cost data, but we need to decide which costs are important for the purposes of this study. Frisch suggested that the IEAB ask Bill Maslen's staff to do a preliminary pass to narrow down the Pisces and Taurus datasets somewhat.

The group discussed some of the specific types of information available in Pisces and Taurus. Fritsch noted that there is a major upcoming re-evaluation of wildlife projects, with reviews

scheduled for 2015 and decisions scheduled for 2016, with an eye toward transition to a desired future state by 2017. This project could play a major role in that re-evaluation, Fritsch said.

Mann asked whether there are types of long-run costs that should be included in the IEAB's analysis, which may not be included in Pisces or Taurus. They will certainly not include future projects, such as the reintroduction of fish above Grand Coulee, he said. The Corps will be releasing its study of proposed fish reintroduction programs at Willamette high-head dams this spring, Grover said – that will contain some tremendously useful information.

Grover was asked whether there has been any talk of the Fish & Wildlife Program taking on someone else's long-term costs, at a particular hatchery, for example. He replied that there have been some discussions along those lines, such as cases where BPA has paid to install screens on an irrigation system, and the users of that system are enjoying the ESA relief from those screens, but not contributing to the costs. Asking those users to share future O&M costs may create a political firestorm, however, and there was general agreement that the IEAB probably doesn't want to include such projects in this analysis.

Mann said his goal is simply to avoid excluding any costs that should be included in this analysis. Many of these projects are the basic building-blocks of the F&W program, and the managers of those programs and facilities need certainty that they will be able to paint gantries and replace aging equipment and other components in order to protect the benefits of the F&W Program into the future, Fritsch observed. What we're trying to get our hands around is, what level of detail is appropriate? Do we want to go down to the level of replacing light bulbs and tires? Or do we want to focus on things like retrofitting screens?

We should probably start with definitions, so we have a common understanding of the vocabulary with respect to project types and cost categories, as well as the list of costs Junjie was discussing, Morlan said. To me, the key point is protecting the ratepayers' investment in the major building-blocks of the program, screens, hatcheries, and land – things like protecting habitat from invasive species, Fritsch said. We have made these investments, and we're responsible for maintaining them, he said.

One area we will need to look at is technological obsolescence, Mann said. The Council is also talking about regulatory obsolescence – can you give us some more information about that? A good example is current screen design, and the fact that it is not adequate to accommodate juvenile lamprey, Fritsch replied – it is possible that in the future some of those facilities will have to be redesigned to accommodate the needs of that species. Materials are also constantly evolving – rather than screen, for example, most modern bypass facilities use stainless and plate steel. That might be a good example for our discussion of the trade-off between higher up-front investment vs. lower long-term maintenance costs, Morlan observed. There is also the issue of the transition away from the older, Mitchell Act, meat hatcheries to a more fish-friendly design, Fritsch added.

Do we need to be concerned at all with mainstem passage facilities? Mann asked. Things wear out, Grover replied; the Lower Granite trap is a good example, and maybe that would be a good case study, because that's turning into such a hugely expensive project as they redesign it to meet

the current needs of the region. To clarify, then, all upstream and downstream passage facilities would be within our scope? Mann asked. Yes, but there's a very long lead-time for most of those projects, Grover replied.

The group devoted an extensive discussion to the scope of Task 211. Among the topics discussed:

- Are downstream passage projects within the "decision-tree?" Grover suggested that the IEAB discuss that question with Bill Booth and Bill Maslen.
- The impact of reimbursable projects on long-term O&M costs.
- The correct approach for planning for O&M for existing projects. Fritsch said that, to him, this is the key element of this analysis, from the Council's perspective.
- The "frothy part" of the bow wave vs. the solid part of the bow wave.
- The distinction between construction costs and O&M costs, and which repair/upgrade projects fall into which categories.
- There is a need to clarify the framework for the Task 211 analysis. Is our goal to minimize costs in order to achieve a certain objective? Wu asked. If so, reimbursable information is important. On the other hand, if the objective is to maximize the net benefits of these projects, including as many relevant costs as possible is the most important factor, he said.
- The crucial need is to understand what are legitimate costs to include in long-term O&M estimates. We're still in kindergarten here, Grover observed; we're back in the formative years in terms of our education on this task.
- What information does the IEAB need to collect to ensure optimal decision-making by the Council? Wu asked. That depends on what decisions the Council needs to make, he said, so we will probably need some additional discussions with Council staff on this point.
- Is it appropriate to establish a general O&M trust fund? A trust fund for each major project type? Some other approach?
- How, specifically, can projects be designed more intelligently, with an eye toward minimizing future O&M costs?
- Grover said the IEAB needs to look closely at the list of 400+ existing projects and determine what hidden future costs are lurking there. We also need to evaluate which of those costs are legitimate, and which are not legitimate, he said. That's what's going to allow us to design projects more intelligently going forward, in order to optimize O&M costs in the future. Is there a least-cost way to build these projects, perhaps by spending more up-front in order to reduce the amount of upkeep that will be necessary over the life of the project? That's a key question for the Council.
- The need for incentives that will encourage proposing entities to think long-term in terms of cost. How do we incentivize people to do it right, and to budget honestly and transparently for long-term O&M? Jaeger asked. That's how it'd done in the private sector, and maybe that's where we need to look for some of our case studies. What tools

can the IEAB provide to encourage that behavior? The current level of uncertainty with respect to long-term O&M funding should provide some incentive, Morlan observed.

- Is it possible to change the proposal forms to capture detailed future O&M cost information?
- The need for a common set of rules to assess the future O&M costs for the 400+ projects on the list.
- The need to assess "The problem of estimating the size of the problem." The task for the IEAB is to give the Council "smart questions to ask" of BPA and project sponsors.
- How willing is BPA to come to grips with this? Grover asked. It's the number one priority in the new F&W Program, but little is known, at this point, about what BPA is willing to do to address it. It was agreed that it would be very interesting if BPA would be willing to engage with the IEAB on this issue, and discuss the IEAB's current focus.
- This task is the beginning of the conversation, not the end, said Grover. There will likely be additional tasks associated with this subject area.

Ultimately, it was agreed that the IEAB will begin by developing the list of the types of costs that should be included in this analysis, as well as a description of what types of data are available in Pisces and Taurus. It's important to remember that everyone's intention was good here – they wanted to do the right thing, but they didn't really have the tools to address long-term O&M effectively, Grover observed. Morlan suggested that the group write up the results of today's discussion to capture the essential points of agreement.

4. Work Assignments for Task 211.

Morlan said he had done some thinking about which IEAB members might be best-suited to the individual pieces of this project. For example, writing the introduction, objectives and executive summary of the report. There's also a review of Pisces and Taurus, their current state and how they might be improved, he said. There is also a subtask associated with looking at some example projects showing how O&M costs have changed over time – Roger thought he might be able to take that on because he has worked with Pisces and Taurus before. Mann agreed to do so.

Fritsch said he will put together some fish screen and wildlife examples, covering the history of these projects. Morlan suggested that Fritsch focus on projects where unexpected costs have come to light, rather than especially bad or controversial examples. The point is to give some examples that show the dynamic nature of this issue, Morlan said.

What's the time-frame for this initial work? Jaeger asked. About six months, Morlan replied. Wu said he will take a look at risk and uncertainty in the context of costs and benefits. Jaeger said that, although his time is limited over the next couple of months, he is willing to look at how long-term O&M is addressed by other entities, such as the Bureau of Reclamation. Wu noted that his time is also limited over the next two months. That shouldn't be a problem, Morlan said – I believe the risk and uncertainty part of this task will come later.

Mann said he will work on the Pisces questions; Morlan said he will work on the introduction, scope and rationale subtask, and will interface with Council staff. Mann added that it will probably be about a month before he can provide substantive work on this task.

5. General Discussion of IEAB Role in 2015.

Morlan asked whether any of the other members had any thoughts on this topic. Grover said that, following the adoption of the new Program, everyone is so busy getting all of the new policies up and running that they haven't had much time for introspection or analysis. There are some science reviews, such as the ISAB' density dependence work; there has also been some discussion of a rationalized system for making decisions. One other thing, said Morlan – there has been some long-term discussion of getting the IEAB involved on the power side. Grover noted that when he had re-drafted the IEAB charter, he had included power within the scope. Morlan said he had spoken with Tom Eckman about potential power-related issues, and offered the IEAB's services on an as-needed basis.

6. Next IEAB Meeting Date.

The next meeting of the Independent Economic Analysis Board was set for April 16 (a face-to-face meeting). Meeting summary prepared by Jeff Kuechle, NWPPC contractor.

Certified by: Signed – T. Morlan – 4/16/2015

Terry Morlan, Chair