

Viewpoints: Why I'm still confused about the proposed tunnels in the Delta

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I and my colleagues at the [Pacific Institute](http://PacificInstitute.org) have worked on California water issues for more than a quarter of a century. It is therefore no surprise that we get asked on a regular basis by friends, journalists and colleagues what we think about the efforts underway to resolve the problems of the Sacramento-San Joaquin Delta and in particular, about the proposed massive tunnel project to divert water from the Sacramento River to the conveyance aqueducts south of the Delta.

The purpose of the Bay Delta Conservation Plan proposals, ostensibly, is to resolve the joint problems of 1. ensuring reliable water supplies south of the Delta, and 2. restoring the damaged ecosystems and fisheries damaged by the current design and operation of water infrastructure. These are supposed to be “co-equal” goals. Will the new proposals achieve this? I don't know what to think, because I cannot get the critical information necessary to make an informed judgment. Here are some questions that should have been answered long ago:

“How much water will this new system take out of the Delta?”

Uh, we don't know.

Why? Because: “Future scientific studies will identify project yield.” This fact alone should set off alarm bells. The project documents, to the extent you can get detailed information out of them, suggest anywhere from 4.8 million to 5.8 million acre-feet a year would be exported for the State Water Project and the federal Central Valley Project, not including the additional 1.7 million acre-feet or so that comes out of the Delta for Northern California users, and not including water taken out even before it reaches the Delta.

The upper end of this range is what Southern California water contractors think they'll get and is one of the reasons they're so anxious for the full-size version of the project to proceed. But that upper range is even more water than recent exports from the Delta, which averaged

5.4 million acre-feet a year from 1995 to 2011. Yet most scientists agree that a key to fixing the ecological problems of the Delta is to take less water out, not more.

“What will this infrastructure, or the water it provides, cost?”

We don't know.

Why? Because there is no agreed-upon design, no final information about land costs or contracting or interest rates or much more, including especially hard-to-measure ecological costs and benefits. Current numbers being bandied about are \$25 billion with interest costs. I think we can safely say that this is the bare minimum, given the routine and severe cost escalations common to such projects. And if you hear someone quote a cheaper number, they're leaving something out.

“Who's going to pay for it?”

We don't know, since it depends on what “it” is.

There is a clear agreement that most of the infrastructure cost should be paid for by the direct beneficiaries who receive water. But who will pay for the ecosystem improvements and efforts to fix damages already caused by existing water infrastructure? How will the costs be split among irrigation beneficiaries vs. urban water beneficiaries? Current vs. future ratepayers? We don't know.

“Well, can I look at a cost-benefit study or an evaluation of alternative options?”

No, at least not an official one.

And the unofficial ones, which have reached completely opposite conclusions about whether there are any net benefits at all or whether non-structural options can play a role, are controversial, incomplete in what they count and riddled with questionable and untested assumptions. For example, most of them leave out full evaluations of ecosystem benefits, or the potential for cutting water demands south of the Delta by improving water-use efficiency.

“Will the ecosystem repairs and restoration happen along with the infrastructure construction?”

We don't know.

Why? Because the funding mechanisms are completely different, regulators and policymakers don't agree about what changes are necessary to fix the ecosystems and ecosystem restoration isn't a simple engineering problem amenable to technical fixes.

“What rules will govern its operation and who will strictly monitor and enforce those rules?”

We don't know.

Presumably a combination of state water agencies, independent oversight boards and water users, but the details are not final. History shows that clear operating rules and oversight are vital to successful water projects. Should the project of this magnitude be built before such rules are in place?

“What provisions will be put in place to change the operating rules as climate change increasingly alters water conditions and in the event that new science shows new problems or advantages?”

We don't know.

A key to effective water management in the future will be the ability to modify and adapt to changing conditions. We know the climate is changing, and that California's water systems are vulnerable. But the current system is designed for a stable climate. The future one cannot be.

Provide the answer to these questions and then the public – and perhaps the voters – can have a real debate about the pros and cons before shovels go in the ground and more dollars get thrown around. We're supposed to get some of the final project documents in just a few weeks after many years and dollars spent planning. Honest and complete answers to the questions posed above must be provided if California voters and decision-makers are to make informed choices about the path forward for California water. Good water policy in California will only come about if it is guided by sound science, eyes-open analysis and public transparency.

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