Metropolitan Water District of Southern California
WaterFix Workshop

March 27, 2018[1]

Video Recording of the meeting is on the MWD website at:

http://mwdh2o.granicus.com/MediaPlayer.php?view_id=12&clip_id=6670

[33:53 – 2:25:42]

Record: Thank you all. That's all the cards I have. Unless there's anyone else that wishes to speak, we will move on to our workshop item. What to cue this up, Jeff?

Kightlinger: Thank you, Mr. Chairman. We have three broad areas that we're going to be discussing today. The first, of course, will be Water Supply. Then we'll be looking at Financing. And, finally, we'll be looking at the legal structure of the agreements that have been proposed. The various experts on those would be Steve Arakawa, Gary Breaux and Adam Kear. They're all there ready for your questions. And so, naturally, since they're the experts, we decided to have someone else do the presenting.

And, that will be Roger Patterson. So, I've used up my time. So I'll turn it over to Roger now.

Patterson: His time was up.

Record: Roger, before you start, I want to thank you and your staff for all the hard work that you put in over the past weeks and days, and I would urge the Board to, unless you have a technical question or need clarification on the presentation, to wait until the end for what I expect to be a very robust discussion. So, Roger, go ahead.

Patterson: Thank you very much, Chair Record. Good morning to the Board members. And, to those who spoke and made public comment, thank you. It's much appreciated. I'm going to lead the presentation today. As Jeff pointed out, we've got the subject matter experts, who are available at the appropriate time, to add detail and answer questions.

It's a fairly lengthy presentation. I will acknowledge that right up front. But I'll do my best to work our way through it in an efficient manner. The outline for the presentation is, just quickly I'm going to review the decision that the Board approved last October. And then the two areas of focus, I think, for the workshop, the two primary areas of focus, are where are we now with allocation of project costs and benefits. And that's in the context of trying to find financing from the various public water agencies to move the project forward. And, secondly, what have we done to do due diligence on the direction the Board gave us to look at what

[1] http://mwdh2o.granicus.com/MediaPlayer.php?view_id=12&clip_id=6670.

it would look like if Metropolitan were to acquire and finance this unsubscribed portion of the project to move the whole project forward at one time.

So there'll be a couple of other things that I had a little bit more detail, too, on agreements. But those are really the two areas of focus, I believe, for the workshop. And we'll talk about what it would take to implement those and move forward.

So, as we all remember, marching into the fall in October, when we made the decision that Metropolitan to support Cal WaterFix, we were very explicit that the support was for our allocated portion of the project, which was 25.9%, as you will recall, for the 9,000 cfs project. And then we had some of the implementing agreement term sheets that were up and were approved by the Board for our participation in the Joint Powers' Authority to do the design and construction our participation in a finance Joint Powers Authority, and then an Adaptive Management Agreement that had been worked out by the fishery agencies, the operators and the various public water agencies. So that's essentially what the discussion was and what was approved last October.

There's been a lot going on since then, and that's what I want to try to describe today and give you sort of the lay of the land or the status of the issues, at least as we see them moving forward. Last summer, in July, is when the Department of Water Resources actually approved the Cal WaterFix Project, the full project, for moving ahead. The public water agencies, including Metropolitan, considered participation in the Project during the fall, mostly September and October, when we took our votes. Several other public agencies considered the Project. The bottom line coming out of that is, we had very broad support on the State Water Project side, and we had minimal support on the CVP side. Santa Clara was the only CVP contractor that expressed an interest in participating in the Project.

We've continued to work since then on what are the options for moving the Project forward, trying to understand why the CVP is not able to see their way clear to sign onto the Project. I think those deliberations and how much investment can the State Water Project make consistent with the benefits it received. Those discussions I think is what really led DWR to conclude early this year when we basically said, we need to know if any additional contractors are going to sign on in January. And there was essentially no change. And I think that's what led DWR to basically say, if we need to, it looks like we have financial support from the State Water Contractors side that could move the first stage of the Project forward towards construction. And that was two of the three intakes so two-thirds of a Project moving forward in the first stage. DWR said they would consider that. We looked at the cost and benefits of that, as you recall, and it's pretty straightforward math. It's essentially cost is reduced by about a third, because you go from three to two. And the benefits, water supply, but also the other benefits associated with the Project dropped by about a third as well. So it was pretty straightforward, reduce the cost a third, the benefits drop a third, and we presented that at committee at the Bay-Delta Committee, had some discussion on that, and, in February, that's when the direction was given to us to stop for just a minute and if staff go explore whether there are any opportunities that we could find that would allow the full Project to move forward at this time. And so, I have been working on that. The staff's been working on that. Jeff and others have been working on that since. And, what I'm going to do is sort of lay out the status of that today.

This is the big driver for me, and if we can find a way to move forward with the entire Project, all of the benefits we've talked about here for years we will be able to achieve. If we build a half a loaf, we're not going to get the benefits that we've hoped for all along. And some of these we looked at at Bay-Delta Committee. And, as you recall, reverse flow is one of the key drivers of this. When we build the entire Project, we can actually come out with a net annual positive reverse flow into the South Delta. If you, we're at about a minus 2,000 cfs now. If you build a partial project, you fall short of being able to do that.

And so, the full Project, as we've known for a long time, has a number of benefits associated with it. And, frankly, there is a benefit of getting broader participation, if we can find it, with all contractors, including on the Central Valley side. There are some joint benefits to be shared there and, frankly, some disputes and arguments that can probably be minimized to some degree, if we find a way to get folks on board. And clearly, if you build something all at once, you're going to be, it's a costly project, but it would be much more costly if you build it in pieces. I think that's pretty much common sense.

So coming out of that, we, as I said, we're really trying to understand what it is on the CVP side that it has been impossible to get past. And, I'm going to explain my take on what I believe is wrapped up in this. As many of you know, for eight years during the nineties, I ran the CVP. Those were rough years too. The 90's drought, and it's a very complicated project. It's a project that has different status of contractors within it. So, unlike the State Water Project, where we all share and share alike based on our Table A allocation, the Central Valley Project is stratified into senior, which are water right holders that were there before the project was built. They essentially gave over their water rights in exchange for a contract that gives them first shot at deliveries. Congress came in in 1992 and inserted a fishery priority, and a refuge priority. So that comes in after the senior water right holders, that the 800,000 acre-feet of the project is dedicated to fisheries. And there is a priority for delivering refuge water, which actually comes from across the Delta and is delivered through the same system as the water to all of the contractors. So the refuges have a priority on that. They have an M&I preference. And, unlike the State Water Project, Ag and M&I are the same. On the CVP, as a matter of policy that was adopted, the urbans, the municipal users, such as Santa Clara, City of Tracy, those have a preference. And, finally, the what-you-call water service agricultural contractors, which are essentially the west side of the San Joaquin Valley, are the final in line, not by water right, but by contract and administration of the contracts.

So we, for years, had tried to move the Project forward looking at cost, follow the water, and looking at the total water supply for both projects. And I've shown you many times, if you look at total water supply from South Delta, over time it's broken down roughly 45-55; 45 to the CVP, 55 to the State. That's without Cal WaterFix, that's just kind of how things have worked over the years. When we built San Luis Reservoir, basically we split it 45/55. That been the business model that we've had over the decades with the project.

So the assumption had been, up until the votes started to be taken, that that would be the allocation and breakdown to the Project, 45% of the costs and 45% of the benefits that come directly from Cal WaterFix. The Bureau of Reclamation, and everybody was in, so to speak. So everybody would be paying their share, including some contribution by exchange contractors and the refuge folks. We always knew that was a bit of a problem, but it was always the game plan, that they would contribute to the overall good of the CVP.

Last September, the Bureau of Reclamation put out what what they call their Participation Policy. Which was the first time that they said a couple of things that really, I think, turned the corner with CVP, and that was, one, we are not going to require any payment from the exchange contractors south of the Delta, and, two, we're not going to require any payment for direct delivery of refuge water supply. So that's a third of their contracts south of the Delta that now by policy of the Bureau of Reclamation are off the table. They're not going to pay.

The other thing Reclamation included in the policy is, they fuzzed up the notion of whether, if you invest, we'll give you assurance you'll get the water, that you get that water. So, up until this policy came out, it had been the assumption, with concurrence of Bureau of Reclamation, at least verbally, if you make and investment in a slice of Cal WaterFix, your proportionate share of the benefits for water supply will have your name on it. And when it gets to San Luis Reservoir, it will still have your name on it. And, unless it spills, like transfer water, unless it spills, it's available for you to use. When they put this policy out in September, they did away with that protection by adding language that essentially says, it's yours unless we need it for some other project purpose. And that combined with now, taking a third of the payers off the table, I think understandably made things difficult, because now you had 45% of the Project, $7.5 billion, for the CVP and a third of the payers are out. So if all of that goes to two-thirds. And Westlands is about half of that. So if you look south of the Delta, Westlands is about a third, exchange contractors and refuge is about a third, and everybody else is about a third. That's kind of the way it breaks down. So that's basically what you had. And, Westlands voted no, and other districts just didn't take it up because they saw it the same way as we can't. We can't cover more than our share, certainly, and that's really what they were faced with.

So that put us into all of these deliberations, and we've been looking at ways to do this since. Considering the funding that could be available from the State Water Project when we were talking about the phased project, that sort of moved us to State Water Project contractors were expressing an interest, almost all of them, in picking up a larger portion of the Project if they got the additional benefit. This has always been a cost to follow water. So that really crystalized when we were taking about the staged project at the two-thirds level. So, as long as you're getting the benefits associated with the bigger investment in the Project, it's something that the State Contractors said they would consider, and also that we make sure we can do these long-term transfers, which we've never really done on the State Project side. We can do long-term transfers where contractors can work together to move costs and move benefits around. So, with those two things, we get the benefit of the investment and we have the flexibility to move costs and benefits around. Over time, we think we can probably make this work with two-thirds of the Project. Covered all my notes.

So on the allocation for the Project cost/benefits. So, what we've done is we said, let's go that way. Let's look at how this would play out if two-thirds of the Project is assigned to the State Water Project and two-thirds of the benefits assigned to the State Water Project, and we will, for now, we'll call the remaining amount CVP/unsubscribed, because we don't have anybody stepping up willing to pick it up. That's part of the due diligence that we've been doing now.

So, essentially, what that does is you've seen this graph many times on the left. That's kind of how it shakes down when you split it 45/55. And that's where you get Metropolitan we're 47% of the State Water Project. So, therefore, that is what got us in October to our approval of funding our share under that scenario of 25.9%. So that's Metropolitan. If the State Water Project picks up two thirds of the project, which is what we are considering now, so what that'll mean is the cost of the State Water Project will go up by $2 billion, so just, the math. $2 billion more would go on the state side, and the incremental water supply to the state side would increase about 150,000 acre-feet. So that's kind of the cost water piece, although the other benefits are obviously there if we can find a way to go forward. So, what that does, just doing the same kind of math that we had done before, is the State Water Contractors other than Metropolitan would be picking up 35.4% of the total project, and Metropolitan would be picking up 31.6% of the total project. No problem.

So we're going to get into this a little bit more, but that's what's on the table now. No one's approved this, but it is a discussion, and I'll kind of get to summarizing who and why we think this may work. I lost my juice. You've seen this chart many times. We've stuck to this all along because the fact of the matter is, there is a range of water supply benefits that could come out of the project, and what we've done is analyze changing regulations that would apply both with and without the project, so no one knows whether regulations will become tighter in the future, but if they do, these things kind of move together. With and without the project, you always have a Delta, a difference in water supply in particular between the two that kind of moves up and down depending on where the regulations go. So when we analyzed this, we looked at the range, kind of worst case, best case, and we simply picked the middle of those two for our analysis, and so that's the 1.3 million acre-feet of incremental water supply improvement that we've talked about for a long time here and we still think that's a pretty good estimate of the difference between with and without the project.

So, this, I want to go through this, because this is where kind of we'll tell you how this 150,000 acre-foot shift that I mentioned occurs. So in October, when we were looking at 45/55, that's how the 1.3 million acre-feet supply broke down. You've seen those numbers before, with our 25.9% being estimated at 337,000 acre-feet. That's a per-year annual average. Under an allocation where two-thirds of the cost and two-thirds of the benefit would go to the State Water Project, you'll see an increase there of about 150,000 acre-feet to the State Water Project, and a reduction to the CVP of a like amount. And that's important so they, it's basically, you move the money, but you also move the water supply benefits. Our 31.6% of the project then would be roughly 400,000 acre-feet incremental supply on average. Most of that comes, it's more in the wet years than it is in the dry years. It's mostly all in the wet years. But that's the average. So that's how that shifts.

So, I wanted to put this on something that also should be familiar with you. We've used these metrics many times as we were trying to get our arms around the various costs, and particularly, what it means to increase in water supply rates for Metropolitan, and what it would mean to rate increases that we would be faced with in the future to fund our share of Cal WaterFix. So the first column is October 2017. This was on the table when we made the approval the last time. Our share of 25.9%, that is a capital cost of $4.3 billion. The marginal cost at the Delta, $613 an acre-foot. You add the cost to bring it into Metropolitan and treat it, so now it's integrated into our delivery system, $840 incremental cost. The overall rate increase of funding the $4.3 billion plus O&M is an aggregate of 13% over a 15-year period, so you would step the rate increases Gary's talked about in over a 15-year period, so you'd be looking at just a little over 1% as the annual rate increase, and the total increase in costs to Metropolitan's water supply rate would be $122 an acre-foot under that scenario.

So what I've done on the other one for March of 2018 is at a two-thirds investment by the State Project, Metropolitan would be looking at 31.6%. I said this reallocation moves $2 billion from the federal side to the state side, so half of that's roughly ours, so that's why our share goes up by a billion dollars. The marginal cost is the same. It doesn't change, it's still $613 an acre-foot water. And it adds an additional 3% though to our rate increase over the 15 years, so we go from an annual increase of a little under 1% to a little over 1% to make that work, and it increases by $26, the water rate, blended rate. That's a blended rate for Metropolitan, so.

So that's how that would work. Alternative financing, so that's sort of the first part of it is what does it look like if there's a greater investment and greater benefits to the State Water Project and a lesser investment, or reducing the amount of the unsubscribed share and the benefits associated with that. So now I want to talk about what we've been doing to look at how it would work if Metropolitan were to contract for the unsubscribed share, and then what our options would be for using that, and there are many. So, I hope we got this right, but the direction was, see what it would take to move the entire project forward now. Let's avoid doing it in stages, and let's look at what it would look like if Metropolitan contracted for and financed this 33% now of unsubscribed capacity, and what would be the options for leasing or selling the benefits associated with that. So that's what we've been doing. In doing this, these are our overarching principals. One, we want to make sure that we stay consistent with all of the approvals of the project, our NEPA, CEQA. We have the fish permits from all three fishery agencies, so we want to make sure that we stay consistent with that as we move forward. And, to the degree we can, again, as I said earlier, getting broader participation in the project by all of the potential benefitting entities would be good, because it puts us in a better coordinated position moving forward, and it lessens the conflict that you have between the two projects, which I've seen several, and you've seen in the past as well.

Beneficiaries pay, so you don't pick up somebody else's share. If you pay a cost, you get the benefit associated with it. And in doing this, we want to make sure that any acquisition and subsequent agreements we enter into would minimize the financial risk to Metropolitan, which was raised at our last Bay-Delta Committee and that's obvious, but that's something that we really had our eye on. That's why it says it twice on this slide.

So you've seen this before. This is the flow chart, consider DWR, that box up at the top that has the 45/55 in it. But, as you know, we're planning on utilizing a new finance JPA that essentially would acquire private placement bonds from DWR and would issue the bonds for the project for the State Water Project investment. The debt service would be serviced through our statement of charges. So all State Water Project Contractors would pay, and they would pay their appropriate share based on Table A. So, that's what's shown over on the left. This is what we've talked about before. The bills would be paid to the design/construction JPA by DWR through revenues collected, back from the finance JPA.

We were always going to issue a separate series of bonds for the CVP investment. We wanted to keep ourselves separate on that, so that's the $7.5 billion here that was going to be the CVP bonds, and those would be serviced by the CVP investors, so that's what we talked about before. So, I'm going to update that. The lower right is the change here. So at first, I've changed the split to the 67/33. Everything related to the State Water Project investment would stay the same. DWR would issue private placement bonds, the finance JPA buys those, issues its own bonds and its debt service by State Water Project contractors through their statement of charges. What's different is the, and we're calling it the PWA Buyers Group. It's really Metropolitan, but I want to talk a little bit about some interest that we seem to be having from some of the other State Contractors and maybe joining us in the investment even though it would be pretty small amounts. There's really some interest in doing that. Basically, we, Metropolitan with any partners we have, would take over the responsibility for that 33%, and we would acquire it, we would service the debt associated with that, and we would be the ones that would enter into agreements with others to utilize those benefits. So that's the change. It's in the lower side of this, and please don't ask any questions on this slide, because I'll have to get Adam up here to answer them.

So what's this 33% amount to? As kind of with a real estate investment, there's a bundle of sticks that go with it, a bundle of benefits associated with the 33% investment. Foremost at the top is the ability of the buyers of that capacity interest to be able to lease and sell it to other participants, and particularly to any CVP participants. Absent that though, there are benefits associated with improved water supply reliability, wheeling revenue that could be recovered from folks that want to move water, including project water, through the investment, conveyance of transfer water. As you know, we're an investor in Sites Reservoir, at least exploring the planning effort there. So if that turned out to be an asset that Metropolitan invested in, you can move things like Sites water through this, so it has a whole bundle of potential benefits associated with it.

At the Bay-Delta Committee, I think it was Director Pressman, basically said, what if we do this and nobody comes? And so, what we did, we've spent some time looking at what would be the maximum exposure to Metropolitan in the event we acquired this unsubscribed share and didn't sell any of it and didn't derive any revenue from leasing it or moving other people's water for it, what would be the maximum exposure there. And so that's what this is. It would increase our investment in the project up to 64.6% and it adds $5.5 billion, that's the capital cost increase associated with the 33%. In the event that we're stuck with it, and we can use it for ourselves, but we don't generate any revenue, and we had to put it in our rates, then we would be looking at a 33% increase over 15 years, or a little over 2% a year increase that we would need to make for the entire investment. Not just that increment, but that's the entire investment of the 64.6%.

So, got one more slide kind of on these costs here. So this is just rate impact, which is something that Board members in particular always keep their eye on, not just at Metropolitan, but everywhere. So, just to kind of summarize what I just went through in a little more detail there. So when we looked at what we needed to do for rate increases over the next 15 years based on the October decision, it was 0.9% annual rate increase. If we are picking up our share of the two-thirds of the State Water Project investment, it's 1.1%, and in the event that we had this maximum exposure, it would be the 2.2% per year for 15 years. That's sort of how that comes out. Okay, I'm going to move forward on what would it take to do this as far as agreements. Is that okay?

Record: Just a minute, Roger. Director Steiner, did you have a clarifying question?

Steiner: I do but I'm willing to wait until the end…

Record: Okay.

Steiner: …and I have questions on the portion that was just done, and I didn't know if you were breaking it up or going through the whole thing.

Record: No, just go through it all. You'll be first up.

Steiner: Okay.

Record: We all look forward to that.

Patterson: Thank you. So, what I want to do now is basically give a summary of what it would take to implement something like this. So we've been talking with the state through the Department of Water Resources, we've been talking with other State Water Project Contractors, and we've been talking with Central Valley Project contractors and the Bureau of Reclamation, so we've had lots of conversations going on. And we talked about some of these in Committee previously. First and foremost, we believe, and DWR is agreeable, that if we purchased and financed the unsubscribed 33% of the project, we would have a new separate agreement with the Department of Water Resources here. We're calling it the Master Agreement. But the objectives of this contract would be to cover that acquisition, lay out the terms on what we can do with it, be very clear that DWR has assigned to us, Metropolitan, and any other investors the interest in the capacity at the 33% level. So that's ours to manage and make decisions on. And DWR would also agree to utilize that part of the project to maximize the benefits, so they wouldn't arbitrarily go, "Oh, we're going to leave. We have water there we could legally divert under the rules, but we're just not going to do it." No, if you can follow the rules, you got to divert it, because that's what generates the revenue associated with it.

So this would be a new contract between the Department of Water Resources and Metropolitan and any others that we may have on the State Water Project side that would be interested in investing. The key terms of this would be very clear that we have the right to the capacity for the life of the project unless we choose to sell it. So it's ours as long as we want it as investors. It will be up to the buyers to determine fair compensation for the movement of water through the capacity interest. So it will not be Department of Water Resources, that sets a wheeling rate, it would be up to Metropolitan to decide what the wheeling rate is to use this part of the project. It would be very clear that the buyers have the right to sell or convey that capacity interest to others. So we can sell it. DWR would pre-agree we have the right to do that. And we would take on the obligation of the buyers to pay the capital until we sell it, and to pay the O&M as long as we have it until we assign it to someone else.

So that would essentially be the terms of the new Master Agreement with DWR. Now on the flip side, so that is a way to acquire the asset. We're calling this a Capacity Purchase Agreement, and this would be an agreement that the buyers, Metropolitan, would look to enter into with those that would be interested in buying all or a portion of our interest. So the objective of this would be, and this is something that we're exploring right now pretty intently because I would assume the Board will want to know where this is as soon as we are able to provide that. So, the objective would be to convey all of the 33% to any buyers out there, particularly on the CVP side. And I know somebody's going to say, "What's different with them now?" And I'm going to try to address that in a minute.

So, we talked about options, we talked about purchase agreements, and I think the discussions are leading more towards, we would much rather secure a purchase agreement up front so that the obligation is made and it's not an option that can be exercised years down the road, and you just decide you're not going to do it, and then we got to go find another buyer. So we're really focusing on purchase agreements that can be signed up front, and that will minimize the financial risk associated with any investment on behalf of Metropolitan or others.

So this agreement would be entered into by the seller, i.e., in this case, it would be Metropolitan and any CVP participants or others, but I would say mostly CVP participants, that we would prefer to do through one contract with the San Luis Delta Mendota Water Authority. They represent the 28 federal contractors south of the Delta. That includes Santa Clara and Westlands, but there are 26 others. So, to the degree that any of them would want to participate in buying a portion of this 33%, that JPA could form a project agreement of those participants, and our contract would be with the JPA and we wouldn't have to get down.

We have heard interest from Santa Clara in at least considering purchasing a portion of this separate from the Water Authority, that they would want to do it directly because they want to pay as they go. So there's some interest in that. It's probably 2%, in that range. We've also heard from what are called the Cross Valley Contractors, and these are a group of contractors that are down in the Fresno area, and their water supply comes from the Central Valley Project and their conveyance comes from the State Water Project. So, they are sort of at the mercy of both projects. And, last year for instance, they had 100% water allocation from the Bureau, said you get 100%, and we said, "Sorry, we can't deliver a drop of it because we're moving all of the water that we have through the capacity and it's maxed out." So they've actually come, and they're about a two percenter as well. They've actually said, "We would like to invest in Cal WaterFix in this 33% side so that that doesn't happen to us again, that if water's available to us, we've got enough capacity to be able to move it through the system and get it down to our service area." So, maybe Santa Clara and Cross Valley's 3% or 4% of this, but at least that conversation's going on. So, our view would be to convey the balance of that if there's interest to the Delta Mendota San Luis Water Authority.

Some of the key terms that we've talked about is, we would provide the financing and the debt service on the financing. That would be the obligation of the buyers, of Metropolitan. Upon completion of construction, we would be compensated for all of our costs, including the risk involved in getting into the propositions, we'd have to figure out what those costs are, by the buyers. So at the end of construction, the changes moves from us to the buyers. In consideration of this, we've talked about, we would want a non-refundable up-front payment of some amount, so that's ours no matter what has happened. We would want non-refundable progress payments that would be made during the term of construction. We get to keep those. And we would also want a sufficient security to minimize the fact that even though we have a contract, they go into default. That would make us whole as we go forward. We still have the asset. So we've talked about some kind of a bond that would be associated with this. So, up-front payment, probably annual payments that are progress payments, and some kind of a security bond would be associated with that, and that would minimize the default risk, we think.

Okay, so before I go into these transfers, there are two other agreements here, and we've talked about those before, and I'm going to go through those, but they're, to me, less important than what we just talked about. So, why would any CVP Contractor be interested in contracting with Metropolitan and any other buyers under this kind of an arrangement when they've had an opportunity all along to buy in and they didn't do it? I think that's a good question. I think, a couple of things, one, Reclamation has said they're going to revisit their policy on this, we can take your investment water if we have a need for any other project purpose. So that is a big discouragement. You're not going to invest in something if the federal government's saying, "If I need it for something else, I'll take it." So, they have said they will relook at that, and I think what that means is they will change that policy and make it clear that if you invest, it's your water for your use. So, that's one.

The exchange contractors and refuge folks are sort of out of the equation now. They are not going to get any benefits from Cal WaterFix. The reallocation moves $2 billion and 150,000 acre-feet over to the SWP side, so the total investment now by the CVP's like $5.5 billion instead of $7.5. But I think the number one issue other than the Bureau policies, if you get that cleared up, I think a big factor here that I've heard from folks, it isn't the cost of the acre-feet of water with Cal WaterFix that I've heard from the Westside farmers. It's really the cash flow, the carrying cost to get from here to the time that the benefit comes online and I have it and I can use it. And so, that is a major consideration, and we're trying to see how we could structure the financing in moving this forward to accommodate that, even though they'll be paying more for that unit of water later, but has some value.

The other thing that's in the background that I think is becoming more and more clear to farmers throughout the state is the Sustainable Groundwater Management Act is coming into existence. And if you look at the groundwater pumping on the west side of the San Joaquin Valley and how that's going to have to be reduced to comply with SGMA, it'll vary some by area, but they're going to have to reduce by at least half in most areas, and some of them are more like two-thirds, where you're going to have to groundwater pumping. So if you have to reduce groundwater pumping and you have no alternative water supply, the only thing the farmer can do then is retire enough acres to balance the equation, and it's a zero sum game at that point. So that's sort of in the background, I think, as far as thinking about this with folks, and they would have to answer that better, but that's what I've gleaned.

Okay, I have two other agreements that I want to walk through fairly quickly here, although this one is, that's wishful thinking on my part that this one will be quick. But, Steve has made a couple of presentations in the past on what these long-term water transfer agreements may look like between willing sellers and willing buyers on the State Water Project side, so that's what I want to talk about here. As a background, this framework is important. Every State Water Project Contractor south of the Delta is going to be billed for their share of Cal WaterFix. Okay? Everybody's going to get the bill. What this would do, it would allow certain contractors, if they want to, to have somebody else pick up at least a portion of their bill in exchange for transferring the benefits to that other contractor, that would be the buyer. So, call them the seller, is the one that first gets the bill, they're willing to give up some water to a buyer. So that's what we're talking about here.

We've had a team of people that have been working at this for several months between potential buyers and potential sellers, really looking at the bundle of benefits and costs associated with this, and what would be a fair compensation to the sellers for what you're going to buy, and what would you buy. You essentially would buy the improvement in Cal WaterFix to their Table A water supply, which is about 15%. So you would be buying the improvement in water supply to Table A based on, with and without Cal WaterFix. That's what you would be buying.

Our estimate, and also, to avoid the free rider concept, and I'll get into this in a little bit, we want to deal with what entitlement you have to use conveyance if we have a failure in the Delta. Because now you've said you didn't want to invest in the project, so when the Delta fails, where does that leave you? So those are two of the things we talked about. Basically, where we've landed here is, if you want to give up all of your Table A that you have gained from Cal WaterFix, the buyer would pick up 85% of your Cal WaterFix costs. And I'll get to why that's the case in a minute. So that's sort of the template that we've come to. You pick up 85% of the cost, you get all of the improvement in Table A supply.

This is a list of buyers and sellers. So, there are 24 State Water Contractors south of the Delta. Eighteen of the 24 are 100% in. So 18 of the 24, 100% in. Four would like to sell all of their benefit. So, it's the bottom four, Tulare, County of Kings, Oak Flat, and Empire West. They've said that they would like to give up all of the benefit to their water supply associated with Cal WaterFix. The total Table A of all of those is right at 100,000 acre-feet. So the total amount of water to be sold and transferred by those four that want to give all of it up is about 15,000, a little over 15,000 acre-feet a year on average, so it's not a huge amount. They represent about 2.5% of the State Contractors south of the Delta, those small ones.

Kern is the big one, as we all know, and they've got almost a million acre-foot contract. And at least as of now, Kern is about 50% invested in the project. So, if you ask them right now, they would say that they would be able to transfer this Cal WaterFix water supply benefit half, half of what they get with their contract. So, it's 500,000 acre-feet, take that times 15 and you get something. What is it, Deven?

So, those are the sellers. Dudley Ridge has been 100% out up until last week. And last week they said they had surveyed their farmers again, and they've got a third of their farmers are interested in buying in, and they've got a few more they're talking to, so I think that may move up a little bit higher. So, that is the potential list of sellers there, and that's all of them. Out of the 24, that's all of them that have said they're interested in working something out. The buyers, this is only a partial list. There are other buyers out there that choose to be talking to potential sellers and not be known. So we're going to try to flesh this out a little bit further, because the goal is to match up buyers and sellers here and put these agreements together.

So this is kind of how it would work. We've looked at the total water supply improvement that you get from Cal WaterFix, and a little over 80% of that comes from Table A, and about 21% of that is to Article 21. The important thing to keep in mind here, and you go, well, we're talking about the buyer paying 85% of the cost. The fact of the matter is, Table A has a whole lot more value than Article 21, because Table A you can schedule. An Article 21, it occurs when it occurs, and it's usually when it's really wet, because it only occurs when San Luis is full. And so, you're ability to access Article 21 is during those times. And unless you're an entity with storage, which is primarily Metropolitan and Kern, it's pretty hard to get much of the Article 21 water. It's surplus water. We call it Article 21, it really means surplus, and it occurs when everything else is full and there's additional water to divert. They make a declaration and say, if you can take Article 21, take it.

The unit cost is the same on these. So, the breakdown is, as I say, it's about 80/20. But Table A has additional value because you can schedule it. The other thing we have talked about, and this is a bit complicated. But to deal with what happens if you have chosen to sell most of your rights and we lose the Delta for some reason, because of size make and you lose the South Delta, you could still divert through Cal WaterFix, but you can't divert out of the South Delta. So in exchange for the seller putting up 15% of the cost of Cal WaterFix, they get their shot at Article 21 water while it's available, and they can, in an emergency, they can use their portion of Cal WaterFix for a year. If it lasts longer than a year, those benefits go to the buyer. So it's time that, if it's a real emergency, you don't want to just cut somebody's water supply off. But if it's a longer term deal and it's going to go more than a year, the deal on the table is those benefits then go to the buyer.

So, that's essentially how that would look. So what that means is, basically the seller, so in summary, the seller pays all the costs again associated with Cal WaterFix. The 85% reimbursement goes directly to that district. It doesn't go through the state, doesn't go through DWR. It goes directly district to district from buyer to seller. So that effectively means that the selling entity is paying 15% of Cal WaterFix costs in exchange for the benefits that they retain, which is access to Article 21. They do keep the capacity. They can move transfer water through, but that's part of what they get for 15%. The buyer doesn't need it. Frankly, anybody that's a buyer already has plenty of capacity to move transfer water. And they do retain this 12 month emergency. Although, if they want to give that up, there may be a buyer out there that would pay more than 85% to say, hey, if you give that up, that has some value to me, and particularly if you are a buyer without storage, because that would be very valuable in a failed situation. And there may be some, Metropolitan's not necessarily one, because we have storage, but, maybe.

So, on the other side, the buyer gets all of the improvement in Table A associated with Cal WaterFix. We're going to establish, there's a table in here as an example.

But you will know ahead of time how much water is associated with this purchase in any allocation here. So you find the percent allocation in a given year, you'll know how much water comes from this particular purchase. And you also get the use of the seller's water in an outage that lasts longer than a year. And that will be by month. So if it goes 13 months, you get their water for a month. If it goes 14, you get the water for 2 until the system is restored, if it is.

Again, 85% of the cost is paid to the seller by the buyer. So that's the metric. This is the table, and it's an example. This will probably change a little bit. In general, if you have a base Table A supply, your benefit from Cal WaterFix to Table A is about 15,000 acre-feet a year. And as we all know, this is mostly in wetter years, the wetter end of the spectrum. So, once you hit 60%, you're basically right at that 15,000 and anything wetter than that.

So this is just an example of how it would work. And, the metric behind this is with and without Cal WaterFix. So every five years, when we look at these tables to make sure that we fine tune it, if there's been some regulatory changes, they would say it ought to, you know, flip 500 acre-feet or 1,000 or whatever it would be. So, again, that's an example. Those are the agreements that are being talked about now. We want to land those as part of the package. So, in the next two weeks, these should be hammered out between buyers and sellers. And I don't think we're going to be the biggest buyer. We've had other State Water Contractors come to Jeff and to me and say, would you guys kind of hold off and let us go first and make sure we've satisfied any needs we have to buy. And then, big old Met, you know, we'll see what's left for you. So, we'll see how that goes.

We talked about this agreement in the past. It was covered in white paper No. 3. It's a Gap Funding Agreement. It's very much like what we had for our planning costs. Essentially, what this would be is funding to cover cash flow from day one up until you sell the first series of bonds. So we call, when we sell the first series of bonds, we're going to reimburse ourselves for all of our planning costs of the 63 million that Metropolitans invested in our planning costs. That will be reimbursed to us, Gap Funding, as well. So those that put up funding would get reimbursement out of the first series of bonds. Everybody will pay their fair share. Some of them can pay now, and some of them are going to have to pay later. It used to be a commercial like that. But that's sort of the way that this would work.

The work that's going to be going on in this first year. I had it on there. This is basically to get going, to finish up the permitting. Even though we have the major permits, there's still other permits for the Project needed. The big time-sensitive thing is geotechnical work to get additional drilling and geotechnical information. So that needs to start from day one and then continue working on the design. So that's the kind of activities that would be going on during this time. The estimate for twelve months, we believe the finance JPA will have bonds issued before twelve months. But this Project hasn't moved the fastest. So we said, let's give ourselves twelve months. The budget estimate for that is $133 million. And that would be funded by the public water agencies putting up their proportionate share, except those that can't, for some legal reason, and there are some, because of the way they collect revenues. And they will come in later. They will pay their share. In the case, a portion of this would be funded by the state as they have been funding the tail end of the planning costs here. So we've worked out the agreement on that.

We've listed several of the entities here. There are more coming that we'll be looking at upfronting theirs as opposed to paying later and getting billed for it. But that's what we call the Gap Funding Agreement. So that will be part of the package. And that's my spiel for now.

Kightlinger: I have the hard part. I have one slide. So, thank you, Roger. A long, detailed presentation, lots of complex moving parts, but at the end of the day, what we will be asking for is relatively straightforward.

There's two pieces here: Goals to bring us to the April Board meeting, whether Metropolitan is going to fund our two-thirds share of the Project, 67% going from 25.9 to 31.6% of the total. This would be the case whether you build the one tunnel or not, we are going to that same share, that proportion, of the budget.

And is the Board interested in financing the unsubscribed CVP share, that we would finance it and we would have those arrangements in contracts to back that up and to safeguard Metropolitan's risk and financial standing.

That will be the action. With that, I'm happy to take questions from the Board. That was my one slide.

Chair: Director Steiner.

Steiner: I had a number of questions _______[1:28:21] as it comes back from the queue if that's okay. I first wanted to just confirm some of the assumptions. So, when we use the word unsubscribed in the various slides, that's referring only to the CVP. Is that correct?

Kightlinger: That's correct.

Steiner: And that's not referring to any of the State Water Contractors, such as Kern or others that may be offloading. That will be on top of the costs that are listed for example in slide 17.

Kightlinger: That is correct.

Steiner: And then, on slide 15, as part of this entire pickup, we would be picking up both the JPA buyers for the 67% at 11.2, and a 33% at the 5.5? Our share of that would be whatever our share is as the Met. Right? So that would be for the $16 billion, all of the bonds.

Kightlinger: I'm not sure I followed that question.

Steiner: Well, I want to confirm that if we're picking up the 33%, we're going to also be picking up their share of the bonds. So, we wouldn't be just funding the 11.2 of the JPA. We'd be funding the 16.

Kightlinger: I don't think that's right.

Patterson: Can Gary take a shot?

Kightlinger: You want to take a shot at that Gary?

Steiner: Sure, just to clarify. I want to be sure that we know what we're funding.

Breaux: Can I get the slide up there, maybe that would help to.

Steiner: 11.2…Would we be half of the 11.2 and a half of the 5.5? Or we wouldn't affect the 5.5 at all? Who's paying for the 5.5 is what I'm trying to get to.

Breaux: Okay, so, yes, the 11.2, we're about half of that. And of the 5.5, we're going to be almost all of that probably to pay for what other people in the buyers group.

Steiner: And then, on slide, slide 11 and 7 when we talk about the 6.2 million people, that, I think we've established previously includes non-water users. It's one of those tiny little footnotes up there.

Breaux: Yeah, so…

Steiner: The household cost is spread over 6.2 million people. I think when we did the white papers, we established that included non-water users.

Breaux: Yeah, those are households, 6.2 million households.

Steiner: I'll pass now. I have additional questions, so I'll go back in the queue.

Record: Okay. Director Atwater.

Atwater: Yes, excellent job. This is a lot of work, obviously, in the last month or so. A couple of things, I just wanted to ask questions about. One is, when you look at the multiple benefits in the first slide or so about reverse flow, flexible operations, enhanced coordination. Like Roger, I worked on the CVP and just to remind people that in the mid-1980s, it was a big deal to have a full agreement in the US Congress to authorize the coordinated operation of the CVP and the State Water Project. And as he alluded to in 1992 and the Miller-Bradley bill, it added many layers of complexity and now we're dealing with some of those issues. I think the way you've approached it really address those issues.

Related to that, one of these I'd like to highlight. Four or five years ago, with Brian Thomas, I prepared a paper on comparing the various projects and such and the value of the Delta Fix. And just looking at the numbers that Roger just presented, it clearly shows that for $2 billion, this increased reliability in Metropolitan 150,000 acre-feet. And you add in the value of earthquake, flooding and all of the other issues, that is really cost competitive. And, just as an example, from a reliability standpoint for earthquake, it's certainly more cost effective than Contra Costa's, Los Vaqueros, the Diamond Valley, when you look at the comparison of costs from a reliability standpoint. And, of course, the San Diego Canyon Water Authority's _______[1:37:57]. It is a very cost effective storage.

So, lastly, what I would say is that, when we analyze this, some of the other things that we didn't get a chance to talk about the benefits of lower salinity in the Delta and the reliability, the market transfers. We might want to try to expand upon that, because just to remind the Board, the Metropolitan Salinity Management Plan that was adopted by this Board in 1999 put the salinity benefits at roughly half a billion dollars or more. And so, when you think about water recycling and everything else, we like all of the above strategy, but none of them can be on a unit cost with these incremental investments in the Delta. I just highlight that as an example, the City of L.A. _______[1:33:44] advocate, the report they published. The incremental costs are significantly higher in order of magnitude for water recycling and groundwater improvements in L.A. Not that we all don't want to do it, but this kind of foundational having high quality low TGS water and given the challenges on the Colorado River, really dramatically affects our investments on brackish groundwater desal, water recycling, all of the other things we're trying to do in southern California. So, it really does fit together nicely from my perspective with the IRP. Thank you.

Record: Director Barbre.

Barbre: Thank you very much, Mr. Chairman. Two questions. We hear a lot of talk about storm water capture being preferable to this. What would be the per acre-foot cost for if we did the full 11.1 billion financing. What would that be in comparison to a similar amount of storm water capture?

Kightlinger: Brandon Goshi, can you come up?

Goshi: Sure. If you can go to the slide that has the costs, household costs. And you're talking about the financing of the full project?

Barbre: Right.

Goshi: I think there's a 480 figure at the bottom 517. Thank you. So, I would focus here on, nothing useful on this slide. Maybe the main point here is that the marginal costs that we've shown on the other slides haven't changed because the shifting of the benefits along with the costs, so that the $600 and $800 treated to the surface area are valid comparators. Storm water capture, I believe in the October timeframe we showed a comparison of storm water projects ranging up to an over $5,000 per acre-foot. And so I would draw that comparison between the two costs 800 versus something in the thousands.

Barbre: So it would be fair to say that storm water capture would be a little higher than the $2.40 a month.

Goshi: Fair to say, much higher.

Barbre: Higher. Okay. Thank you, Brandon. Second question is, if I may, are there guarantees that this will, contractors will not _______[1:36:47] access to the State Water Project pumps?

Kightlinger: One of the benefits of moving from the two-thirds, from the 55/45 to the two-thirds, one-third approach, is that it does take off the table the need for CVP access to the State Water Project pumps. And so, I think that actually is an improvement in the governance of the Project and, also, an increase in our benefits to the State Water Project that comes with the cost and add on as well.

Barbre: So there wouldn't be the concerns that Clifton Forebay that _______[1:37:24] state wouldn't have to pump on behalf of the federal contract?

Kightlinger: No. That's exactly right.

Barbre: Thanks.

Record: Director Lewinger.

Lewinger: Thank you, Mr. Chairman. First a question for Roger. You talked about on the CVP, we have the senior rights and the fish and refuge getting about a third of the deliveries. If we go ahead and finance the whole project without CVP participation, where is that water going to come from?

Patterson: That water going to come…

Lewinger: _______[1:38:09]

Patterson: So the valuation that Reclamation made is they will, I would say, almost always have enough water they can divert through their pumping facility at Tracy in the South Delta to meet those two requirements. And they're willing to take the risk of that not happening in really, really dry years. And in that case, as happened two or three years ago, the exchange contractors would have to go to the San Joaquin River, which is the original source of the water, and put on a call. So their making that evaluation, they know, sure, if we invested, we'd have more reliability, and we avoid the possibility of that probably ever happening. But that's where it comes from.

Lewinger: So let's look at the flip side of that coin, though. So if CVP does not participate in the Project, there's virtually no water left for the junior M&I and the junior Ag partners to get any water.

Patterson: It..

Lewinger: Unless they…

Patterson: It depends…

Lewinger: …sign an agreement.

Patterson: Yeah. I mean, it's where they are now. And it's getting worse. And our view, and I think they share, is that we're probably going to see another 20% reduction in water supplies through deliveries in the South Delta. And so, right now, those juniors, if you want to call them that, but that class of water service contract, now, they saw several zeros. They will in a good year move their 20% this year. Let's just say that. And I hope it will go up a little bit, but in a really good year they're at 30%.

Lewinger: Now, in the past when you've made this presentation, Roger, and you talked about the phase 1 of 6,000 cfs, my recollection is you always said we're assuming that 1,000 of that is going to go to CVP. Is that no longer the assumption?

Kightlinger: That is correct. The CVP has indicated that they are not interested in funding 1,000 of a 6,000 cfs facility.

Lewinger: Okay.

Kightlinger: So that is why I stated that a two-thirds investment by the State Water Project holds for either project.

Lewinger: Okay. And my last question. Jeff you said, I heard you say that you're going to, on the last slide, you're gonna bring that item forward for the April Board meeting, because I didn't see it on the advanced agenda.

Kightlinger: That's certainly my intent unless directed otherwise.

Lewinger: Okay, so my question regarding that timing is, are we going to be asked to vote on those, especially the second alternative, the all-in without having the implementation agreements in front of us?

Kightlinger: You won't have final drafts of it, you'll have the key terms of all of the various agreements.

Lewinger: But we won't know who's going to yes or no.

Kightlinger: So what we will know is, obviously we don't know for sure what everybody does until their boards act. What we will know by that time is what the recommendations of their general managers and chairs of their various boards are to their boards for action. And so we will know those recommendations and, obviously, some board may choose to reject that recommendation. But we will know the recommendations and the intent of the various contracting agencies.

Lewinger: Thank you Mr. Chairman.

Record: Director Kurtz.

Kurtz: Thank you Mr. Chairman. I really appreciated, Roger, the history of the CVP agreements because I've struggled to try to understand their position on all of this and that really helped to get that perspective. And it would seem that what you're talking about now minimizes the Bureau of Reclamation's, doesn't take away totally, but minimizes the Bureau of Reclamation's decisions that, at least in part, shifted their thinking about the Cal Fix project. And following up, maybe doctor, but Director Lewinger's question, is there any expressed interest from CVP that the lesser water rights groups to engage in agreements or maybe not sign anything, but express interest now? It is always good to know you're…

Kightlinger: Right.

Kurtz: When you're filling up your inventory, it's always good to know if there are buyers.

Kightlinger: No, the answer is strong interest on this. As Roger has pointed out, this approach takes care of two of their main concerns, which is the cash flow issue over the period of time, and how to put this on their various books. So, they have expressed strong interest in participating, should Metropolitan do this. And what I've suggested, what they need to do is to write that up in whatever format, memo, board letter they do and with recommendations to their boards so I can then demonstrate to our board what they intend to do or what they are trying to do with us.

Kurtz: If I could ask a follow up question, Mr. Chairman.

Record: Sure.

Kurtz: Looking at the way that water would be costed with the _______[1:43:35]. There's a difference in just buying water when there is water and then covering the cost in years when there's not water. That didn't make sense, huh?

Kightlinger: I think I'm following.

Kurtz: Okay. So I'd presume that what they would pay when they purchase water would also reimburse for when, we're going to have to pay the capital cost whether we get water or not. That's the State Water Project. And they would have to buy water with all of those costs included.

Kightlinger: So, let me try and put it this way, during the construction period there will not be water moving through the project because it won't be completed. They will be paying progress payments. They'll have an upfront payment, etcetera. Those are the types of payments they would be making during the construction while we're carrying the debt. Once the project comes online, they then are obligated to pick up all of the costs forwards and backwards. So, to completely making us whole with interest for a whole that we've carried, and then they pick up all of the operating costs going forward, paying their freight.

I think a good analogy is really the public/private partnership model where in those instances you have a private investor step in. Their job is to carry the risk of the project. They've got a premium for that. Once the project comes online, then the agency that they delivered it for is obligated to pick up all of the costs plus the premium. That's kind of the model that we have here. They would be contractually obligated to pick up all of those costs at the end of the project coming online and we would have picked up those various payments ongoing and they would be ours and not refundable and not going against necessarily the project costs, they would be ours for taking on that added risk.

Kurtz: I wanted to ask about state permitting but I'm glad to go back into the queue since it's changing topics.

Record: Okay, Director Murray.

Murray: Thank you Mr. Chair. Let me ask it this way. Roger, because I just love seeing you at the microphone, if you would. Give you some exercise today. Good morning. This project, the WaterFix…

Patterson: Yes.

Murray: …has always been built on the principle, been proposed on a principle of beneficiary pays. So under these scenarios, is that still the case?

Patterson: Yes.

Murray: Okay. I'm sure that everyone in this room is aware, through a variety of articles, papers, opinion pieces, city council actions that the city of Los Angeles, and by the way, I think we all know that the water purchased by several of the agencies represented on this Board comprise the largest portion, the bulk of the revenue derived by Met towards anything and everything that we do. In this particular case, only on behalf of the city of Los Angeles, not speaking or proposing to speak for anyone else. The direction by the mayor and city council to reduce the reliance on imported water by 50% by 2025 and to generate LA's own water by 2035, it's not a plea. It's not a would-you-please-if-you-can. That's a directive, and we've got some very talented, smart people at the Department of Water and Power and others moving in that direction. So, in the calculations that are being done on this, has it been considered that when the city of Los Angeles is buying less water, not to mention which when there's ample water coming down through the LA Aqueduct and the purchases of water by LA can go anywhere from maybe 20-25% up to, sometimes, 80%. Has that been calculated in these numbers? Because I think I've heard you say in the past that while we all know there can be variability in construction costs, you meet conditions out there, but then once the project is up and operational, the expenses are going to be pretty fixed. So, that being said, then whatever those, not to mention the capital costs of the construction, but once it's up and operational many years out, that that nut is going to have to be met regardless of which one of the agencies around this Board are contributing more or less. And if any of the agencies that buy a lot of water here are contributing less, because we're getting our water from other sources, am I wrong in thinking then that that's going to mean that the other agencies here are going to have to pay in more? That the cost to them will go up? Because remember, the operational expenses are going to be pretty much fixed. Am I wrong in that?

Patterson: Well, I'll take a shot at that one Jeff, or Deven can add to it. But, the O&M costs are about $60 million a year. So they're actually fairly small given this. The design of it is we can get about half of the water by gravity, which is pretty slick, but you have O&M costs. But the capital costs and the O&M costs are all wrapped into our water rate. So if you buy Met water you're paying. If you don't buy Met water, you're not.

Murray: You're not, okay. And that means somebody else is.

Patterson: Well whoever's buying the water.

Murray: Right, correct. But I'm thinking about, they've got to cover whatever that nut is, correct?

Kightlinger: Let me just add, this fits within our IRP modeling…

Murray: Yup, okay.

Kightlinger: Which takes into account member agency efforts to be with less purchases with Metropolitan and we've been looking at the DWP Plan, we've been looking at all of our member agencies plans. This fits within it, and we've actually taken a conservative assumption in here which assumes 1.7 million acre-feet in cells. The actual IRP moves out to 1.8 and beyond as the future goes on, because of added growth in the region. But we've just taken, since we used 2017 dollars and pulled that out, we used 2017 projected sales and pulled that out, which is actually more conservative and that puts a higher cost per unit in the project than we would project through the IRP.

Murray: And Jeff, since you mentioned the IRP, and this will be the last part of what I'll ask today, as I understand it now, we're looking at roughly a million acre-feet short on our IRP. And, of course, we are, as Met, much less our member agencies, attempting, wherever possible, to diversify our water portfolios. So, as I understand it again, even with WaterFix, that's not going to, and is not designed to, in terms of how we look at the, our integrated resources plan, make up that million acre-feet. That's going to have in it conservation, recycling, and a host of other kinds of things, all of which are expensive. All of which take many years to construct. And so again on this proposal that Met would be the Daddy Warbucks, if you will, and pay for the entire project, the 9,000 cfs project. I just hope, and I believe, I have to believe that we're also, as member agencies, keeping a very close eye on what Met's capabilities will be in supporting through the local resources programs and other means, the development of those sources of water that move us towards that IRP goal and diversify our portfolio. Because there is still no guarantee, based on hydrologic conditions and other things, that even once this project is built, that you're guaranteed that amount of water every year. So, you know, the more that we can do in our territory here in southern California, the more independent, the more reliable we will be and finally I would say to our friends in Labor & Business, you know, the project and various projects that we have proposed here in southern California are where the jobs are and are going to be. So it's not a matter of jobs versus no jobs, it's a matter of are the jobs going to be up in the Delta in construction and the tunneling etc or are the jobs going to be here in southern California. In terms of the infrastructure, design, and other aspects of what will need to be developed in order to meet our goals. Thank you very much Mr. Chair.

Record: Director Lefevre?

Lefevre: Thank you Mr. Chair. So, on the DAP funding agreement, we have that, it's going to provide funding for permitting geotechnical and design, there's a 133 million that is going to be picked up apparently by State Water Contractors, but DWR already has RFPs and RFQs to do the same thing. How are these things, how are they going to be coordinated?

Kightlinger: Yes. So contracts will have to be let to do the work. This is the funding, this is accumulating the funds to pay for that work. So the RFPs are going to be, lead to contracts with various consultants to perform the work needed to build the project. This is the funding for that first year of effort, until roughly a year of effort, until bonds are issued and then you start having the capital funds going forward through the bond process.

Lefevre: So DWR will actually be doing the contracting and we'll be given…

Kightlinger: The design construction JPA that we would be a part of, will be letting all those contracts.

Lefevre: Alright, our issue is funding and contracts will be awarded separately.

Kightlinger: A short period of interim funding…

Lefevre: I got that.

Kightlinger: …is all this is, until such time that the bonds are let, it's a relatively minor piece of this.

Lefevre: Okay thanks.

Record: Director Peterson.

Peterson: Uh Roger, you might want to bring a chair up here. I'm curious about the Delta, cross-Delta charge. What is that currently? For transfers?

Patterson: You mean the percent assessed for transfers?

Peterson: Yeah.

Patterson: It's an average of about 20%.

Peterson: Okay that would virtually be eliminated with this project?

Patterson: Yeah, it virtually, I'm sure there'd be a bit of a tax but for the most part the 20% you'll be picking the water up, you'll take it through the tunnels so you won't have to pay that 20%. So if you buy a 100, now you get 80.

Kightlinger: So just to clarify for the rest of the Board, these are what we'd normally call the through Delta carriage losses that every acre-foot you push through the Delta you lose about 20% of it that you would not have with the project. I just wanted to make sure people got that.

Peterson: I'm a little bit concerned about the refuges, and the exchange contractors, and their ability to call on the water. You say the tunnels will not be used for delivery to these agencies, however, can eight agencies within the CAP who are junior to these rights, can they be pushing water through these tunnels at the same time there's a demand made on the San Joaquin River in private?

Patterson: Yep, that's the clarification in reclamation that needs to be very clear, but yes. So if there is not adequate water in the, from the tracing ponds to move the exchange contractors than they have the right to go to the San Joaquin River and put a call on the river from _______[1:55:32]. And they would do that even though you had water coming from Cal WaterFix because you would in those situations and that would belong to the investors in the project and they would get that water.

Peterson: I'm just a little concerned that if really needs to be clarified by the Bureau because it, to me it's kind of loosey goosey right now in that the exchange contractors have that right and they might try to exercise that right on the tunnels and that's my concern.

Patterson: And that's why I say that sort of got messed up in this policy and it needs to be very clear and I think it's pretty easy to do that but it needs to be clear and it needs to be in writing.

Peterson: Yep, but what about the refuges?

Patterson: The refuges will have, they will have their entitlement, they don't go to the San Joaquin River and get their share. So that's the Bureau's responsibility to get it. They're probably going to be buying water in some cases frankly.

Peterson: So would you see the Bureau as a potential buyer?

Patterson: We've been down that path, I thought from day one that they should invest just like we are for all users of the CVP, it's not on the table right now. Do I think it will happen someday, yeah, I do, long term.

Peterson: Thank you.

Record: Director McKenney.

McKenney: Thank you Chairman _______[1:56:58]. I don't know if this question is for you or Jeff. The idea that _______[1:57:05] that Director Murray brought up. I'd like for us maybe to step back for a second and think about a kind of benefit that we got to keep in mind when we go for a vote in April on this. And that is, comparing the old two tunnels project and being able to move forward with that in some way versus the staged, or one tunnel approached, what is the outlook for ongoing future conflict with the CVP contractors under those two scenarios and is there a benefit there that we're identifying for ourselves in avoiding that conflict.

Kightlinger: If you look at one of the earlier slides it had enhance coordination between the State Water Project and the CVP as one of the benefits of moving forward with the full project. We foresee a world of trouble trying to make a coordinated operations agreement. If one set of contractors are entirely pumping from the South Delta and one set of contractors are having duel conveyance both south and north, and making the COA, the Consolidated Operating Agreement, effective and working, we think, we think we'd just be, it become a real nightmare. And so that is one of the real benefits of moving forward with the full project and having CVP participation in dual conveyance. I don't know if you have anything to add that Roger.

Patterson: No I agree. Director Gold raised that at the last Committee meeting. You're just setting yourself up for conflict. Because if you are not in, you're going to be pushing harder and harder to do, to move more water out of the South Delta and you're going to pit one group of contractors against another and we've got enough of those issues now.

McKenney: As is usually the case, I agree with Director Gold.

Record: Anyone else who hasn't asked a question yet that wants to ask one. I'm going to clear my screen and start with Director Steiner on the second time around. So go ahead and weigh in if you want to speak.

Steiner: Thank you Mr. Chairman. Director Peterson asked one of my questions. And to close off another issue, all of the calculations we've done are assuming no further reduction for fish, for our other environmental reasons on the construction of the tunnels. I mean we're assuming that's not going to happen.

Patterson: Well that's not quite accurate. I mean, that's why as I said earlier, we've done a range, we've done a range of looks at it and the reality is there could be more restrictive operations in the future and we've looked at what would that mean and basically, the Cal WaterFix benefit stays kind of the same as the regulations get tighter or less tight. It just sort of floats on top and so that benefit is there and obviously more valuable if regulations get tighter in the south Delta. So we haven't assumed that they're going to stay. And they probably won't.

Steiner: But that it won't affect the tunnel, the northern exports.

Patterson: No. Those regulations, like a bypass flows, etc., they are, I would say, incredibly restrictive right now. This is the coming out of the blocks, we want to be really restricted from national fisheries standpoint. The design of the intakes is designed for Delta smelt, even though it's not in a Delta smelt area. But it's designed for if the event you get smelt, so you have a .2 feet per second velocity, so it's a really, really conservative design and a really, really conservative operation. Could it get worse? It could, but more than likely it would stay the same or perhaps get a little better on that.

Kightlinger: I think it's worth reminding the Board here that the Project has biological opinions associated with it with operating criteria. And so, that is part of the model and it's in there. And some of them call for further restrictions, and that has been built into the analysis.

Steiner: Thank you. On the CVP contracts, the subject of purchase agreements for CVP, are we looking at doing take or pay contracts with them?

Patterson: Yes. That's what we talked about, take or pay.

Steiner: And on the timing for the new contract with DWR, I thought I heard you say what it was. But I can't remember.

Patterson: Well, it's, we would like to get it as soon as we can. As Jeff says, we'll have a detailed term sheet on that. I gave you an overview of the general flavor of the terms today. But we'll have a detailed term sheet on that specific contract language to follow.

Steiner: Are the financing JPA presently is that still just met in Seven Mile?

Patterson: We've got several other entities that, as Jeff said. What we've got to do is get everybody to lay out. Here is what we're going to go back with and recommend to our Board, and that includes participation in finance JPA. And so, the only ones that approved it are Met and Zone 7.

Kightlinger: Alameda County Zone 7.

Patterson: Alameda County Zone 7.

Steiner: And, last question I'll ask now is on the Gap Funding. We had that tiny little footnote again saying that they may authorize participation. When do we expect to know what they are going to do.

Patterson: Those in the footnote are the ones where at least their general manager has said they will go back to the board and ask for it. There are some that aren't on the list, like Kern isn't on there. They are still considering it and others. So those are the ones that said, we would be willing to ask for our share from our board.

Steiner: I'll pass now.

Record: Director Kurtz.

Kurtz: Can we get an update on the state permitting? And it was suggested that that might have possible impacts. I'm sure that's an unknown, but I'd be interested in Metropolitan's perspective. I know you're following that process.

Patterson: Yeah, Becky Sheehan, she usually reports to you. She's really our brains on that. She said last week, and Steve can add to this, the proceeding which is now considering the impacts of the Project on fisheries. So the first one was on potential impacts on other water users. So it's going a little faster than they expected. Remember, they got a little bit of a slow start because they had some challenges to some ex parte communications. But now that they've started the proceeding, it seems to be moving along fairly quickly. It's scheduled for the permit this fall. So we could get Becky to report in more detail at the Committee. I don't think there's anything new there. It's kind of the same old.

Record: Director Lewinger.

Lewinger: Thank you, Mr. Chairman. First question, I'd like to go back to something that Director Murray was talking about. If we can go to slide 10, please. So it's my understanding that our current IRP assumes the 337,000 acre-feet from the Delta Fix. That's the current program at 26% roughly. And so, what I'd like to know is, if we go to the full program, MWD will be getting a minimum of 410,000 acre-feet plus any of the CVP's 429,000 that's left over that people don't sign up for. How does that impact our IRP? And how will that impact financing for future local projects and conservation? Because we're talking about potentially several hundred thousand acre-feet.

Upadhyay: So the IRP assumes approximately 1.2 million acre-feet on average from the State Water Project. So that's consistent with this range, 330 to 400 thousand, in that range. The additional supply that you're talking about coming from the CVP, that would be potentially additional supply that's in the mix. But the rate impacts that you see also assume continuing the Local Resources Program and the Conservation Program. So we're not assuming that those are reduced or that funding is affected by it. The rates would allow both of those to continue.

Lewinger: Well, we would not need as much, if we develop that water, then the need for developing local supplies would drop off.

Kightlinger: I think that's a decision that the Board could make at that point. So we've built that along to the rate, so you have the worst case scenario, or however you want to look at it, maximum exposure. So that's built into what we've projected for rates for this Project as well as full funding of our LRP, conservation, etc. The Board could make that decision down the road. Either we want more water in storage and we want to build up a bigger drought contingency, or we can choose not to. But that would be later decisions.

Lewinger: Thank you. And, Jeff, going back to a comment you made that you hoped in April we would have a staff recommendation from the CVP agencies. Could you please explain or talk about why not, if their staffs are making recommendations and have those in time for our April Board meeting, what would be the negative impact of us waiting a month until their boards take action on those recommendations so we know whether they've accepted their staffs' recommendation or not?

Kightlinger: From my perspective, it's a chicken-egg issue. They don't really know that we're willing to finance the rest of it, and so they don't know that they can take action until we express the willingness to finance that unsubscribed portion. We could say, well, you go first and then we'll express our interest in financing that. And if this Board chooses not to, then all that has to be restarted. So someone has to go first. And so, that's my goal of bringing this Board's

Lewinger: So them taking action on principles, their board taking action accepting a set of principles, doesn't commit them to anything unless we agree to finance.

Kightlinger: That's another approach. We could all take multiple board actions, vote yes on principles, then vote yes on the actual contracts. But, what I'm proposing to bring forward is Board action in April, as I laid out.

Record: Director Pressman.

Pressman: So I may be confused, but I want to be sure. If the two tunnels are built, and we have the additional 33% from CVP, then would it be the case that we would be taking more of our necessary water from the north, except when it wasn't available, and then that would free up more water for the south for the CVP, so that they would have less interest in buying from us. Or am I just totally lost?

Patterson: Well, it's a complicated system. I'll say that. I don't think that is the case. The rules that govern diversions in the South Delta would prevent them from being able to do that. They wouldn't be able to pick up any additional water. And so our, what we're, what I think we were hearing from the Board as we looked at this investment is, this isn't to acquire for use by Metropolitan, but can we advance the Project by providing this involvement of picking up this and getting agreements to provide those benefits to someone else. I mean, that's really where we're putting our energy. And as Jeff said, we've had some kind of surprising in a way interest in doing that. And so, that's really Plan A that we're working on now, to see if we can put that together. The fall back, obviously, is there are benefits. If it falls through, we certainly would keep the title to this thing until we were paid in full, so to speak. But that is the plan, is to enter into purchase agreements for the whole amount, unless the Board would tell us to keep an option to call some of it back or, you know, there's all sorts of way you can do this.

Record: Director Blois.

Blois: Thank you, Chair Record. There is a parallel project called I think Eco-Restore floating around about, we all know that the system as it exists now needs help. My question is, if we do one tunnel, how does that affect Eco-Restore. And if we do two tunnels, how would that affect Eco-Restore, or would there be any difference?

Patterson: Well, I think there would be a little bit of difference, but it would be pretty marginal. Eco-Restore is a combination of the mitigation for Project operation, the mitigation for building Cal WaterFix, which is not huge when it comes to the number of acres restored. So you could say it would be a little bit less if the Project was smaller. If you reduced the Project a third, would it be a third less? Yeah, maybe.

Kightlinger: I think there are two elements to the question. There would be less money in Eco-Restore as paid for by the Project because there would be less mitigation. That's what Roger was speaking to. The second element of your question or the answer to your question is that because you no longer have completely erased the impacts of reverse flow, the efficacy of those investments in ecosystem restoration is less effective. It takes more mitigation, in effect, because you haven't solved all of the problems. So you're going to have to do, whatever you do in terms of investing and ecosystem restoration will be less effective because you haven't built out the full project.

Blois: Thank you.

Record: Director Dake.

Dake: I just want to ask a little bit about how, in the future Appendix A from the bond buyers, how that would be written. In the view, we've heard that the Met is going to obtain $2 billion worth of additional low-cost benefits from the notion of buying the unsubscribed portion, which means that other users of the two systems are not going to have access to those benefits. Maybe they're going to be ours. They're not going to be available to the others. Even though we might wish everybody enjoyed those benefits. And then we've also heard that our interest in the WaterFix are going to be protected from invasion by the CVP contractors. They're not going to be able to enjoy all these benefits, and the Department of Water Resources is going to agree to operate the Project in order to protect our revenues. Right? So, let's see. How are we going to describe this in a way that is satisfied to a bond buyer?

Kightlinger: Very clearly. Gary can add more detail.

Breaux: Yes, we'll do, completely and fully, yeah, you know how long the Appendix A is, but these agreements would be very important just like the existing State Water Project agreement. How it works takes many pages. So we would describe those agreements in full, and obviously our rate projections and our coverages on our debt and all that we all include the costs and any benefits if we have that as well. So, it's very doable, but, yes, it does add additional disclosures.

Dake: Let me ask this

Kightlinger: Let me add another little layer to it. I look upon it that it would be very similar to our obligations to the State Water Project. We have our obligations for debt we've issued for Metropolitan projects, but we also have a long-term contract, there's a 75 year contract, for half the cost of the State Water Project. That has been, and that's what this would be. It's a similar type of debt load, certainly less than the amount we committed to the State Water Project. It's not our debt. It's on our books, but it's an obligation that Metropolitan that is described very fully and carefully in Table A, the obligations with it. The rating agencies have looked at that. They understand our obligation to service that debt to the State Water Project, and they've found us AAA, etc. I think this would be described in a very similar fashion.

Dake: As a little follow-up, Roger described purchase and finance of the unsubscribed portion. I suspect it's more, it's not legal for the state to sell us that. Right? So it's not really a purchase. It's a contracting for, is that

Kightlinger: It would be an ownership interest conveyed to a contract, not actually having fee title to the tunnel, the 33% of the tunnel.

Dake: But what's your characterization of the risk if a governor came to office who was not interested in us having those contractual rights? How would that be managed?

Kightlinger: There's a constitutional provision about interference with contracts that, but perhaps our counsel might opine on that. Our actual practicing counsel.

Dake: We'd be vulnerable

Steiner: You say I'm just practicing.

Speaker 1: [2:14:51] I was referring to me.

Speaker 2: [2:14:55] Anne

Scully: Yeah. It depends of course on when the contracts were entered into, if the contracts were entered into before the administration changes. If the administration changes before there is a contract and the governor is directing resources to do something else, that's something we'd have to contend with.

Speaker 2: Thank you.

Record: Director Peterson.

Peterson: It's been suggested that we should lead from behind. That's a troubling thing. This agency is a leader. We're not a follower. And I challenge anybody to tell me if they have heard of one water project that has been overbuilt in the history of water in California. I don't think you can find one. It is in this whole concept of Dr. Sunding told us, you're going to need both the tunnels and you're going to need investment in southern California. So jobs aren't going to be in one place or the other. They're going to be in both places. So I think we should take a very strong leadership role on the 10th. Thank you.

Record: Director Murray.

Murray: _______[2:16:01]. Briefly, I think back in October when we took our vote, there was an opportunity that day, I believe, that there could possibly have been a unanimous vote on the one tunnel solution. But we didn't go in that direction. And it was decided that the proposal would be exclusively the two tunnel solution. And the vote that day was not a unanimous vote, although it certainly exceeded 50%. But it was not unanimous. Of course, on this kind of an absolutely, almost historic major project, whenever possible, it's always beneficial to have a unanimous vote. I think it shows a concurrence of the vast implications of the project. Dr. Sunding has mentioned, as I recall in one of his more recent reports, he said, one tunnel would do the job. The term that I've heard among the various water agency managers that I've spoken to that's continually used is the word reliability. And, of course, there are a lot of other things that can be kicked into this Project, but ultimately, what seems to interest the water agency managers the most is reliability. And that the one tunnel 6,000 cubic feet per second capacity tunnel would provide that reliability. There are other issues, but that's really the principal driver on this. So, I know we're, at this point, and by the way, last thing, too. I remember hearing expressed, I think, back in October, that there had been a hope and a desire that maybe Met would have taken its vote before agencies like Westlands and others. I'm certainly appreciative that we didn't, because I think the Westlands vote was informative. I think that what now has occurred in terms of those agencies who have voted to be in, versus those agencies who have voted to wait, versus those agencies who voted not to come in, has been helpful to us in terms of doing our assessment or analysis and calculations on this Project.

So given the in excess of $100 million that Metropolitan has already invested in islands up in the Delta, I don't see Met as leading from behind. But I think that moving with caution and deliberation is absolutely the word of the day on a project of this magnitude. And I think all of us at the end of the day are answerable not to just the small group of us in this room, but we're answerable to the large numbers of people who are the ratepayers of our agencies. And I'm sure if many of us move around and speak to diversified groups of people, we get questions about why is this necessary at all, why does it cost so much, what do we get out of it, and, of course, rates. Any time you go someplace, the question is that. So I hope that as we are, I believe, we're moving forward. If we need a little more time, so be it, because those of us who serve on this Board representing our agencies have got to be able to go back to those ratepayers, those citizens, those other policy bodies, city councils, mayors, others. And we've got to be able to answer the question of, why did you vote the way you voted on this Project. Thank you, Mr. Chair.

Record: Director Barbre.

Barbre: Thank you, Mr. Chairman. When we built the Colorado River Aqueduct, what percentage of autonomy of the _______[2:19:27] represent and _______[2:19:32].

Patterson: I think we have a slide on this, Deven.

Kightlinger: Ellen, do you have some of those backup slides on the one under basically the cost of the, this and the Colorado River Aqueduct State Water Project and this Project. I believe we have a slide to that fact.

Barbre: And were those votes all unanimous State Water Project, CRA?

Kightlinger: State Water Project was not. CRA was unanimous.

Barbre: State Water Project was not. Do you have the vote tally of that handy maybe?

Kightlinger: No. It was a split vote. It was a strong vote. It was well over 70%. But I don't remember the exact number.

Barbre: Maybe for April we can have that as a backup slide?

Kightlinger: Absolutely, certainly.

Barbre: Okay.

Kightlinger: Ellen, can you put up the slide? That just gives you, is this the one? Yes. But there's a different bar chart I also saw. But, I don't know. This basically just shows that when you have the Colorado River Aqueduct and putting all these in 2017 dollars and the amount of people it serves, so $4.7 billion really serving two million people is a significant cost undertaking. State Water Project, again, large. And this relatively smaller, per capita, certainly.

Record: Okay, I'm going back to Director Steiner, and I'm clearing my screen, so continue to punch in if you want to talk. Director Steiner.

Steiner: Thank you, Mr. Chairman. Several of the speakers referenced a restore the Bay blog and a public records request and sent emails. Can we have some response at least to what they raised by those issues in April meeting at either Water Planning, at least as to some of the concerns that they've raised about our participation so that can be cleared up?

Kightlinger: We'll go back to the minutes and listen to what those comments were, and we can respond to them.

Steiner: They referenced as I recall, the comments in an email by you and an email by Tom Phillip, and I don't remember what else. So I appreciate your going back through the minutes and…

Kightlinger: Yes. And I don't recall what emails they referred to, so we'll see whatever that we can find.

Steiner: Well, the general nature seems to be that you were telling Dr. Sunding what to say and what to do. So, I think that probably better require some response.

Kightlinger: Luckily, everyone listens to me so well.

Steiner: Thank you.

Record: Director Cordero.

Cordero: Thank you, Chairman. Slide no. 11 references rates, as well as slide no. 17. I just have a quick question. We've gone from, a lot of those speakers today spoke about rates and the importance of and the concern that they have about raising rates. While we may not feel that $1.90, 2.40 or 4.80 is a lot of money, to some people it is. So, considering that, my understanding that we went from, or we could possibly go from 2.40 a month to full implementation or maximum exposure to 4.80 a month? Or is there a variable of the 4.80, based on buyers?

Patterson: That would be I think a different slide than 11.

Kightlinger: But that is correct. We'll pull up the slide. The maximum exposure was this 4.80 a month, as you see now on this slide. But we expect it to be closer to the 2.40 a month because we would expect to have contracts that would be fully subscribed for other participants, the CVP participants, to pay for it. And, there would be Wheeling income and other revenues as we showed with those benefits. So, this would be if the tunnels were not used by anybody but us, ever.

Cordero: Okay, so 4.80 is the worst case scenario?

Patterson: Yes, correct.

Kightlinger: That's one way to put it.

Record: Anyone else? Director McKenney.

McKenney: Chairman. I just wanted to make one note. We had the discussion about Dr. Sunding's emails, and I would like to hear an explanation in the future meeting about that. And we also heard Director Murray talking about the Sunding Report and its findings that maybe one tunnel would do the job. I would just like to say, from my perspective, I didn't read his report as saying it would do the job. I read his report as saying, from a economist's perspective for a one tunnel project, and if it's exceeding costs, which means one tunnel is better than none. But I don't think

Dr. Sunding would presume to opine. I wouldn't consider it very valuable for him to opine about our final decision about whether it's the best thing to do. We're a _______[2:24:35] I think we have to make that decision based on all of the benefits that we see and they may not be the same kind of benefits that an economist would see. So, I find his report to be very valuable, but I don't think it's a litmus test for our decision.

Record: I don't have any other speakers. I think this is a very good discussion. More to come, I'm sure. I would encourage the Board to not wait for April to ask questions of staff or even other Directors. It's really important, obviously, and it's a big deal. So, I appreciate staff's work on a relatively short time period. And I also appreciate the good discussion and the thoughtful questions. So, with that, I think I need to go eat lunch. So, the Workshop is adjourned. Thank you.