

# Tear Down that Dam?

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Recorded on October 15, 2012

**Greg Dalton:** Welcome to Climate One, a conversation about America's energy, economy, and environment. I am Greg Dalton.

Today, we are discussing the future of the Hetch Hetchy Reservoir that serves two and a half million people in the Bay Area. Proposition F on the upcoming San Francisco Ballot asked voters to fund a study of different ways to capture water from the Tuolumne River and send it to San Francisco and Silicon Valley that could lead to a second vote in about four years seeking authorization to poke a hole in the O'Shaughnessy Dam and fundamentally change the regional water system.

Supporters say draining the dam would atone for San Francisco's original sin and restore an idyllic valley in Yosemite National Park. Opponents say the cost would be exorbitant and the risk -- put to the region's water security just as the Sierra's snow pack is declining to a disrupted climate.

Over the next hour, we'll address the future of Hetch Hetchy with our audience at the Commonwealth Club and a program that's underwritten by the San Francisco Foundation. We are joined by two people of each side of this passionate debate. Susan Leal is a water consultant and former general manager of the San Francisco Public Utilities Commission. She is also a co-author of the book, "Running Out of Water." Mike Marshall is executive director of Restore Hetch Hetchy, and Spreck Rosekrans is director of policy at Restore Hetch Hetchy, the main organization behind Proposition F. Jim Wunderman is CEO of the Bay Area Council, a business group and former chief of staff for Mayor Frank Jordan, and also served under Mayor Dianne Feinstein. Please welcome them to Climate One.

[Applause]

So, Mike Marshall, tells us why Proposition F is a good idea.

**Mike Marshall:** Well Greg, first of all, thanks for inviting us. This is a really important debate for San Francisco and for the region, and I would argue both for the state and for the nation. Ninety-nine years ago, San Francisco was given a special right. And that was the right to store part of our water supply in a national park. (0:01:57)

No other city in the country has that right, and no other city has the adverse impact that our water system has on Yosemite National Park, the Stanislaus National Forest, and more importantly, the wild and scenic Tuolumne River. It is important to remember that our water comes from the Tuolumne River and is stored in nine reservoirs, one of which is called Hetch Hetchy. So many of us think our water comes from Hetch Hetchy, but in fact it comes from the Tuolumne River. So we believe that given the special right to San Francisco that was given 99 years ago, that we have a special responsibility -- at least once every 99 years to revisit that decision and see if we can't do better. And multiple studies over the years -- and I know Jim will bring it up, he's got them under his arm here, have demonstrated that in fact, San Francisco can still get its water from the Tuolumne River and still generate power along that river, but store its water supply elsewhere without harm being done to it, and we think that's worth exploring further. The problem is San Francisco has not been a part of those conversations. They, for all intensive purposes, boycotted those studies.

So we put Proposition F on the ballot in an effort to ultimately accomplish the goal of restoring Hetch Hetchy, and I'll be very clear about that, we are with Restore Hetch Hetchy, but you can't consolidate from nine reservoirs into eight without first making reforms to the system. And we think there are important reforms that need to be made because San Francisco, rightly or wrongly, we don't recycle a drop of water, and we pretty much treat our rainwater sewage, whereas most other cities and counties in California have made significant investments over the last 25 to 30 years to capture the rainfall more successfully and more importantly, recharge their aquifer and look at recycling water.

And so we have linked reforming the water system and guaranteeing our future water security by building up our local water resources with some environmental benefits which would be the restoration of Hetch Hetchy Valley, improving flows on the wild and scenic Tuolumne River where the salmon population is all but disappeared, and reducing polluted storm water runoff into the bay.

It's just a plan. Prop F doesn't get me Restore Hetch Hetchy Valley and it doesn't get us more recycled water. It's just a plan. The plan would have to be brought back to the voters in 2016. So we think this is an incremental first step, a small one in fact, but admittedly an important one, and an important conversation for a city like San Francisco that rests or stands on its green values, on its environmental values, and yet we have a water system that's lasting the state in so many ways.

**Greg Dalton:** Jim Wunderman, why do you think Proposition F is a bad idea?

**Jim Wunderman:** Well, thanks for having me here, Greg, and I thank the audience for being here tonight and I want to pay respect to Mike and to Spreck, who I've known for a long time, for your genuine passion that you've expressed on this issue. And I don't mean to demean that in any way in any of the discussion that we have, but I have to say, you know, we've looked at this for a long time and we've looked at it with a foot forward, and I have to say what you suggested in Prop F is really a very dangerous thing for San Francisco and a large part of the Bay region. I think it's a misguided effort.

And what troubles me a lot about it is it's been an extremely misleading attempt on the voters of and people of San Francisco. I attended your opening of your event when you unfurled this banner that talks about water recycling. And you talked a lot about that and you talked about water conservation, when in fact -- you know, we're all for those kinds of things, and the Bay Area Council, which is a business association which has worked on those kinds of water issues for a long time, we could certainly stand with you on water recycling, which is something that PUC has been doing, maybe not as much as soon as we like but certainly doing in water conservation. But this is not about that. This is about restoring Hetch Hetchy. It's about draining Hetch Hetchy Reservoir which actually supplies somewhere between 85 to almost 100 percent of the water that we would -- would come out of our tap if we were to turn it on now, and the same would have been true 20 years ago and 40 years ago and 60 years ago, and hopefully, in the future as well.

And it's, you know -- it's a dangerous thing because the reason the Bay Area Council gets involved in something like this involuntarily is because water security, reliability, pristine quality -- these are things that make a region whole. And we know we have a lot of problems in our infrastructure. We have problems in our education system. We have all kinds of public problems today, why create another one?

We created the system 100 years ago. We'd stipulate we probably wouldn't build this today. But we built it at the time there's a lot of things we wouldn't do today that we did 100 years ago or 50 years ago, and there are things that we take for granted but, you know, it's tough to build big projects today. This was something that was, you know, that happened a long time ago that, you have to say,

it supplies all the water that we drink for a very, very large part, and we can argue about how much but we think it's a very large lion's share of that water. It produces 1.6 million kilowatts of energy that support entirely the newly overhead line system, the cable car system, the San Francisco General Hospital, San Francisco Airport -- we would lose all or large portion of that power if we were to give up on the system. We would be with the rest of Northern California and California looking for alternate places to find our water if we took this storage out of service. We have rights to Tuolumne but where are we going to restore the water? Let's be realistic about it. We are in a delta, where in other places to try to find our water in the future?

Do we really want to invest billions of dollars into this? I understand, you know, it's a wonderful intent, but it's not something that's rational given this environment. Now maybe you don't trust me because I'm, you know, I run the Bay Area Council and you don't know me. You know, why is it that at our senator and former mayor Dianne Feinstein feels so passionately about this, Minority leader Pelosi, and Jackie Speier? And the two leading environmental members of the State House, Senator Mark Leno and Supervisor Ammiano. What about -- excuse me, Assembly Member Tom Ammiano and former president of the board?

Eleven members of the Board of Supervisors who disagree about most things, unanimously agree no on F. What about Mayor Ed Lee, and every former living mayor? Mayor and now Lieutenant Governor Newsom, Mayor Willie Brown, Mayor Frank Jordan, Mayor Art Agnos all say no on F. San Francisco Tomorrow says no on F. There isn't a single major environmental group, major environmental group that's endorsed your measure.

That has to raise some questions about its validity. So again, I agree with your passion. I think, you know, it's well intended on your part. I honor you -- you know, part of the system of governance that we have, if we have issues and you can put this thing forward with less than 10,000 signatures and have us consider it, but I urge the public to read this very, very carefully before you place a yes on F vote because we start going down this path, it can be very tough to turn back.

**Greg Dalton:** Let's talk about the cost. I want to read a quote from the *San Francisco Examiner* editorial of October 11. "While we could get behind the restoration of Hetch Hetchy Valley and replacement of the city's water and power, if the replacement costs appear within reach, it is hard at this moment to imagine anyone ever managing to come up with the necessary funding." So Spreck Rosekrans, where is the money going to come from to do this?

**Spreck Rosekrans:** Well, first let me say that the cost is far less than what our opponents have claimed or should be far less, if competent people can manage the water system.

**Greg Dalton:** So the state of California is --

**Spreck Rosekrans:** If we look --

**Greg Dalton:** -- between 2 to 10 billion dollars?

**Spreck Rosekrans:** Yes -- the state of California, they actually said, 3 to 10 billion dollars. And if you parse that report and see how they got to those numbers and especially at the higher end, they had water costing \$16,000 an acre foot. Now, I know I'm not supposed to get into jargon, but that's 16 times as much as you pay retail at your tap and 160 times as much as people pay on the open market.

Furthermore, when we've looked at restoration projects that have successfully taken place in the state on the Trinity River, in the Bay Delta, with Mono Lake, in the San Joaquin River. We've seen

communities that have been able to adapt. They've stored water in groundwater banks, they recycled water, they've done all kinds of things to ensure that water supply reliability that is fundamental for our farms and cities. They've been able to do that to much greater volumes that we're talking about here. But here --

**Greg Dalton:** At what cost though? Where is the money going to come from?

**Spreck Rosekrans:** And here, it's a question of don't even think about it. San Francisco will not -- is not on the stage with us today. They said these folks who we've debated before, but San Francisco wants us not to talk about it. As far as where the money comes from, it's important to get a plan, to get an estimate, and the usual sources. Mono Lake was largely restored -- in part restored by the federal and state government as well as the city of Los Angeles. We have ruled out philanthropy so the usual sources -- but the first thing to do is to get the people who run the system through the vote of the people in the same room with the people who wanted to restore the valley and come up with a plan that's cost-effective.

**Greg Dalton:** Let's get Susan -- Susan had a chance to -- Susan, you used to run this system. Let's get your opinion on the cost and where the money could come from, up to \$10 billion.

**Susan Leal:** Thank you. We have been in the room before Spreck, and in fact seven years ago, we debated this issue when I was general manager of the SFPUC. And I do respect your opinion, and we've stayed friends over the year, at least I hope I think we're friends.

But let's talk about where are we going to get the water. Because there has been discussion about, "Oh, we can go this reservoir or that reservoir." There's really only six reservoirs that provide drinking water to the City and County of San Francisco.

And as Jim mentioned, we get anywhere from 85 to 100 percent of our water from Hetch Hetchy Valley -- right now, right now, because of reduced snow pack last year, right now -- don't interrupt please, right now --

**Spreck Rosekrans:** Don't lie.

**Susan Leal:** -- right now, there are -- is close to 100 percent coming out in San Francisco -- coming out your tap, close to 100 percent of that water is coming from storage in the Hetch Hetchy Valley, impounded behind the O'Shaughnessy Dam. Now people talk about, "Well, maybe you could get water -- store water somewhere else." The one area that they've been talking about for years is Don Pedro Reservoir which is down the hill from the O'Shaughnessy Dam, from Hetch Hetchy Valley.

Don Pedro Reservoirs is owned and operated by Modesto Irrigation District. They said seven years ago in this room, "It's not -- it's not our reservoir," they continue to say. They own the reservoir, they operate the reservoir, there is not room to store our water. In fact, recently the SFPUC has been negotiating for a miniscule amount of water to buy from that reservoir. Those negotiations broke off two weeks ago. Modesto said, "We have no excess water." So where are we going to get the water from?

I do believe we should have more recycling and conservation. But that's not what this proposal is about. It's more than a study. It's more than a study. It sets up the bureaucracy, it starts to erode San Francisco's control over its water. That's very (crosstalk) --

**Mike Marshall:** Can I talk about the cost issue? So -- and Jim said something that I think is very important for everyone viewing and here tonight is go read the initiative.

I would urge you to do that because what Susan just described, my good friend Susan just described is not anything that you are going to be voting on. It is truly just a plan. It doesn't create a bureaucracy. It creates a five-member task force of volunteers made up of the general manager of the PUC, the general manager of the customers on the peninsula who buy water, two environmentalists, and an academic with an expertise in water recycling. They don't get paid a dime. And it puts aside \$8 million to bring some consultants in hopefully to work with the SFPUC staff. But the staff have been so antagonistic to this idea that we had to create a framework that wouldn't be manipulated by them to do this.

At the end of the day, the question of where will the money come from is a very important one. And Spreck touched on it, which is, you can't figure out where the money is going to come from until you figure out how you're going to have to spend it. And then once you figure out how you spend it, then what are the sources of revenue for that -- Prop F identifies all that, and then brings it back to the voters in 2016 hopefully, if we do our job, is restore Hetch Hetchy and put it back on the ballot, so that the voters can then make a judgment -- is the benefit worth the cost?

But Jim and Susan are suggesting and trying to scare you into not doing that research, not getting that information, so that -- and truly, a city that prides itself on its environmental values can have a robust values conversation in 2016 about the merits of reforming our water system so that we can undo the damage we've done to the national park and to the wild and scenic Tuolumne River for the last 99 years.

**Greg Dalton:** But hasn't this been studied already? I mean, a number of state agencies, Jim Wunderman is holding up a stack of -- a stack of reports, you know. Hasn't this already been studied?

**Mike Marshall:** It has been studied but not planned for. And San Francisco has boycotted these studies, and these numbers that Jim and Susan have been throwing out there about the cost, if you look on page four of the report, it says, "This number was included because the PUC gave it to us, but they didn't provide us any of the financial documentation to back it up. And therefore, we're including it for that reason only." So that--

**Susan Leal:** That's not what it says.

**Mike Marshall:** I got it over here. Can I read it?

**Greg Dalton:** The -- Spreck Rosekrans?

**Susan Leal:** Was this provided by the PUC?

**Mike Marshall:** Yes, let me, so -- let me --

**Greg Dalton:** Hang on one second. I want to read an editorial from the *Sacramento Bee* which gets us to this whole point of how much money -- excuse me, how much water is where. This is the *Sacramento Bee* editorializing on this Proposition F. "Contrary to rhetoric of reservoir defenders, Hetch Hetchy is not San Francisco's primary source of water, and draining it would not be disastrous. There are nine reservoirs that supply water to San Francisco and Hetch Hetchy stores 25 percent of the total." Susan Leal, is the *Sacramento Bee* wrong on that?

**Susan Leal:** Yes, yes. And I have a lot of respect for Jay Lund, but he is assuming that we can store water in Don Pedro. It's full. That reservoir is full. It would throw --

**Greg Dalton:** Could it be topped up? Could it be expanded?

**Susan Leal:** Look at the geography of that area. It's a flat area. It's not like you can build big walls, and -- when was the last time that somebody has approved building new storage?

**Mike Marshall:** But Susan, a third of the water in Don Pedro is San Francisco water--

**Susan Leal:** No, it's not

**Mike Marshall:** It's not a bank in the city.

**Susan Leal:** It's not used --

**Mike Marshall:** (crosstalk) water bank.

**Susan Leal:** It's a water bank and it means that it's not -- there's not a drop of water. There is not a drop of water, of San Francisco water that is stored on that reservoir.

**Mike Marshall:** Oh that's nonsense.

**Susan Leal:** And seven -- and seven -- excuse me, seven years ago, they had -- Allen Short, who is still the head of Modesto Irrigation District, sat probably a couple of seats over and he said, "It's our reservoir. There's no room in it for San Francisco." It's controlled by the Modesto Irrigation District and Turlock Irrigation District.

**Mike Marshall:** And he said he wouldn't run for mayor. People change their minds. (Laughter) And especially in the public arena. This is a political issue, not a plumbing issue. The fact is, it is a water bank. It means that we'd -- in wet years, release more water downstream so that in dry years, we can release less.

If they were to evict us, if we were not allowed to have a third of the storage areas -- there is water bank, would we not have to find another reservoir for it? Is it not an important part?

**Susan Leal:** No, let's -- if you want to talk about -- let's talk about water rights.

**Mike Marshall:** No why don't you answer that question --

**Susan Leal:** Not, let's talk about water rights because that would get back to that. Ladies and gentleman, we -- by the Raker Act, San Francisco doesn't have senior water rights.

**Greg Dalton:** The Raker Act is a --

**Susan Leal:** It's federal law which allowed us to take water off the Tuolumne, to impound the water in Hetch Hetchy Reservoir. We have junior water rights. We have junior water rights to Turlock and Modesto. They hold the cards. And if you think we're going to tell them, "Oh, let's put water in your reservoir." I don't think so. They have senior water rights. They get the first draw of the river. And when people say things like, "Oh, you don't get your water from the reservoir. You get it from the river." Well if you only got it from the river, this past year, we would have water for about a month because the water goes straight down that river. You have to store it. And our major, number one source of storage is the Hetch Hetchy Reservoir. And let's talk a little bit about the clean energy that we would lose also if we took down that dam.

And again, sure, maybe you'd say, if it was a hundred -- if probably won't be putting up a dam now, but right now, we're providing water for 2.6 million people. And that clean energy -- let's go back to that clean energy, that clean energy. The revenues from that clean energy has allowed San

Francisco to install more solar. We have the largest solar installations of any city in California, and you know what that solar is paid for? How it's paid for? It's paid for by our clean energy revenues from our clean hydropower energy. If we took down, we drain Hetch Hetchy, we would lose anywhere from 40 to 60 percent of that clean power.

**Mike Marshall:** That is not --

**Susan Leal:** If you want a lesson in power, I can do that to you, I ran the system. And the reason why someone from San Francisco is not here is because they went through a transition. They just got a new general manager. And the outgoing general manager, he would be here because I've heard him speak about the system. They just got a new one with the invite.

**Greg Dalton:** Spreck Rosekrans:

**Spreck Rosekrans:** Well, I think we've maybe answered the question of -- she has in this thing a bit studied to death because we can't agree on the most basic facts, and that is how much Tuolumne River water can you still bring to San Francisco without storing water in Hetch Hetchy Valley in Yosemite National Park. Studies that I have done, that UC-Davis has done, the federal government has done, say it's 95 percent and upward. So you've got to make that five percent. That's difficult, that's important, but it's 95 percent. It's not we're losing the Tuolumne River. It's not we're losing 85 percent, and to say otherwise is plainly false. And that's why we need to have a real discussion, not this which is a discussion about having the discussions that these folks don't wanna have -- with city officials and environmentalists and academics and engineers to talk about how to make the system work without storing water in the national park. And I think you'll find, you'll be able to move 95 or more percent of the water. You'll be able to generate probably still 80 percent of the hydropower. And then, we can talk about how you replace what's lost without affecting the environment.

**Jim Wunderman:** See--see the problem.

**Spreck Rosekrans:** And whether it's something that people want to pay for, but we haven't had that discussion yet.

**Jim Wunderman:** (crosstalk) always forget.

**Spreck Rosekrans:** You haven't discussed the substance with us. You sit up--you sit up here on stage with us and tell us that we're spreading lies, but we haven't had a public discussion. It has been over 10 years. You're afraid of the camel's nose under the tent. That's what it is.

**Jim Wunderman:** You know, the problem you guys have is you have the -- the laws of physics don't apply in your particular campaign.

This -- this is a system that has been studied and operated for 80 years since the water first came in the early 1930s. Since that time, never has somebody turned on the spigot and water not come out. It is a absolutely reliable system. Think about how important that is. This is Climate One. We're talking about the world in which we're going to have less snow pack, the experts predict. Water is going be harder to come by. And what you're suggesting is we take storage that we have, that we paid for, that we built -- was very difficult to get that project done, and we actually take it out of service. And by your case that somehow or other it can just meander its way down the river and we'll get it somewhere else and don't worry about it.

And even in the environmental defense report that you guys were behind seven years ago, it stipulated that every five years we -- but only every five years -- we would find ourselves in drought

condition. And that's okay because we're (crosstalk) --

**Spreck Rosekrans:** No.

**Jim Wunderman:** That's what it said.

**Spreck Rosekrans:** It doesn't say that, Jim.

**Jim Wunderman:** Okay, that -- yes, it said it. Okay. Yes, it said it. So this thing you say it hasn't been studied, it's been studied time and time again. You may not like what the Department of Water Resources of the state of California said about it, but the fact is it laid serious doubts about the efficacy of the program. It said it would cost \$3-10 billion. Probably a lot of people in the audience here today have been up to Hetch Hetchy, probably most of the folks have been here--up there. I've been there many times. It would only take one -- a bit of imagination to understand the enormity of the cost of removing this facility, the environmental impacts of so doing that would -- cost of replacement in today's environment.

We're talking about reliable, pristine water and hydropower for a popular -- for a major iconic city and its neighbors, 2.5, 2.6 million people. And, you know, our education system doesn't work, so we're struggling with that. Our infrastructure generally speaking doesn't work. We can't seem to protect ourselves so let's take our water system out, too.

That seems to be the theory, and start again with that. I don't buy it. I think we -- you know, I understand we probably wouldn't build this today. but this is something that actually works. It's a gravity-fed system, 200 miles of canals and pipelines built 80 -- you know, put in service 80 years ago. It actually -- it actually functions. It doesn't use any pumps. One-fifth of the energy in the state of California is spent pumping water. One-fifth of our energy. This spends zero energy pumping water, and in fact -- in fact, as 1.6 million kilowatts back to the system for good public purposes. This is not a perfect project. There isn't such a thing. It creates some environmental challenges and maybe some people don't sleep so well at night over it. I understand. But you have to look at the entire scope of the needs of the society. These aren't times when we're floating around in a lot of money.

We are facing tremendous societal issues. And in all the -- I -- I understand you wanna see this done and I respect your desire to see it happen, but please voters who are listening -- listening to this program, think twice before you vote for this because what Mike says, "Oh, it's just a plan. You're just going to look at it." It's not how it works. You're sending a powerful message to the United States Congress. A lot of people in that body don't happen to like San Francisco, and you're sending them a message that is okay with the (crosstalk) in San Francisco to go take a look at this thing. Do you think some people here may think that's good? I don't think it's good and we'll do it what it takes to send a message that it's not.

**Greg Dalton:** All right. Jim Wunderman is CEO of the Bay Area Council. Other guests today at Climate One are Spreck Rosekrans and Mike Marshall from Restore Hetch Hetchy, and Susan Leal, former general manager of The San Francisco PUC.

Let's get back to the energy. Where is the displaced energy going to come from? We take out the dam that generates clean hydro. Where is that -- is that the base load --. Mike.

**Mike Marshall:** Technically correct, but clearly Halloween is upon us because Jim wants you to be afraid, very, very afraid of the future.

And, you know, it's often said that the system was an engineering marvel. And -- and I think that's



very true of the time in the early 20th century. The late 19th century it was designed and then built in the early 20th century. It was also an environmental disaster. And we know that now in the -- in the 21st century, and we look forward to the 21st century and we realize we have got to change the way we do business. We could change the way we walk in the face of the earth and we have to change the way our -- our cities and counties operate. And -- and so we have to rethink it and so a planning process is key to that. The threshold, if we get this, if Prop F passes and a plan is done, we then have to go out and get 60,000 signatures to get it on the ballot, and then the voters have to approve it again.

So this message to -- this concern about sending a wrong message to Congress is again, you know, he just -- Jim wants you to be afraid very, very afraid. The power issue is simple. We -- you know, we -- it's about 20 percent loss of power according to the best studies that have been out there. That it's a miniscule amount compared to -- I mean, the same amount of power we deliver to San Francisco. All our hospitals, our schools will get the same amount of power. We -- we sell most of the access power to Turlock and Modesto Irrigation Districts.

So obviously with a 20 percent loss of power, we would sell less power, but Prop F takes that into consideration, and requires that before any change be made and before the voters get to approve it, we identify wind and solar alternatives. And then the alternative that the city has never even considered.

**Greg Dalton:** But wind and solar don't develop the same kind of consistent base load that that a hydro has, right? So it -- Susan there?

**Susan Leal:** Yeah. Let's talk a little bit about that 20 percent. It's really 40 to 60 percent. And let me describe it to you very quickly. There is one reservoir which does not provide drinking water. It does provide power that comes down the hills, through tunnels, through pipelines, hits a turbine, produces power. That's about 40 percent of the power. That would remain if the Hetchy was drained.

But at the O'Shaughnessy Dam, the water is captured there. It goes into a tunnel. It goes to Kirkwood powerhouse (0:28:00).

That's about 20 percent of the power. Then it goes down from Kirkwood. It goes down another tunnel, the Moccasin powerhouse. That's another 20 percent. At least another 20 percent in there, so you're --

**Mike Marshall:** You're missing a reservoir. There's a third reservoir that supplies water to that systems as well.

**Susan Leal:** No. There's only -- there's -- there's the three powerhouses.

**Mike Marshall:** And there's three reservoir.

**Susan Leal:** There is one powerhouse -- that there's only one powerhouse that is not initially set by capturing water at the O'Shaughnessy Dam. And that's the point. So you're losing anywhere from 40 to 60 percent of your power, and that is the home powerhouse which is not fed by O'Shaughnessy Dam. So it's you can't just -- the water just doesn't go into a powerhouse. It has to go through waters and tunnels, and it's captured -- where it's captured at the dam, that's where it goes to the dam.

**Greg Dalton:** I think the controller statement on the San Francisco ballot it says, what it is about -- \$41 million in lost revenue because of this electricity? Spreck Rosekrans?

**Susan Leal:** Yeah, that's how you pay for solar.

**Mike Marshall:** But that's based on her assumption that it's 40 to 60 percent of the power. That's not true.

**Spreck Rosekrans:** What we -- what we need to understand that this is an order that this is an oral presentation without diagrams and so forth. But one key element of the solution is probably -- we don't know the final solution, but it's probably to implement a proposal that San Francisco themselves presented a couple of decades ago, and that's to put a pipeline from home powerhouse that Susan mentioned at the bottom of the -- below the Cherry Reservoir and pipe that power over through the Moccasin powerhouse.

**Susan Leal:** And how much would that cost?

**Mike Marshall:** Let's find out. Let's pass Prop F and find out. (Laughter)

**Spreck Rosekrans:** Well, if you -- if you -- if read our report, you'd see that we escalated the cost for a time that the San Francisco proposed and believe it was the late 80s or early 80s. Anyway, so again we can't agree here on the basic facts.

Let's pass Prop F. Let's sit down in a room with some engineers and talk about it. These people I'm sure some of them -- half of them would probably like to come back and do a more technical discussion, but it can be done at far lower cost than what our opponents are claiming.

**Greg Dalton:** I spoke with an environmentalist recently with a national environmental organization who -- I said, "Why aren't more environmental organizations, the national ones coming out in support of Prop F." And he said, "Well, if we had \$10 billion to spend on the environment, this would not be our top priority in California. We want something that would be systemic, that would have a ripple effect." So, Mike, either you might like to respond.

**Mike Marshall:** Sure.

**Greg Dalton:** That why the environment -- other environmental organizations are not rallying behind this or setting this for now?

**Mike Marshall:** Well, first of all change doesn't happen in a continuum and we don't -- we're not in an isolated nation state. But as the old bumper sticker used to say, I think globally act locally. San Francisco can't control the environmental improvements and much via the rest of the state. But the voters of San Francisco have a unique opportunity here. They have unique responsibility because we caused such damage to Yosemite and the Tuolumne River, but it also presents us with an extraordinary opportunity. And ultimately, that's what Prop F is. Is it provides us the opportunity to impact environmental restoration projects around the world because at the end of the day, Yosemite is one of the most iconic places.

Four million people visit each year. I think that 25 percent of them are from across the world. And to create this extraordinary environmental restoration project within the boundaries of a national park that not only will people go visit, and restoration scientists from around the world will come to learn about the science of ecological restoration and restoring lost habitat. But in the Internet age, kids from kindergarten to 12th grade are going to be able to, in their environmental science classes, actually have curriculum that watch the growth of a valley come back to life. San Francisco voters have the unique power to start that process. And so is this a -- and so I would argue that it's really up to the San Francisco voters to decide whether it's worth pursuing. (0:32:03) And all Prop F does is pursue it. But I would argue then that once we accomplish it, it will have an impact on

environmental restoration projects, on water sustainability projects, and far beyond the boundaries -  
- a huge impact far beyond the boundaries of San Francisco, or the boundaries of Yosemite.

**Greg Dalton:** You think other dams may come down?

**Mike Marshall:** Other dams are coming down right and left. Look what's going on up in Washington state. It's very exciting. But yes, I think that -- that if San Francisco can revisit a decision they made a hundred years ago and say, "Hey, we now get the impacts. Let's see if we can do better." That's going to infuse environmental restoration programs, dam removal projects around the country with a true sense of what is possible. And once again, take San Francisco from the last in the state in terms of water management to first in the state, in the nation, in deciding that they can do better.

(Crosstalk)

**Spreck Rosekrans:** We do get broad support from organizations -- for this.

**Susan Leal:** Environmental defense is not neutral. Sierra Club is not neutral. Neither one of them is supporting it. But let's talk about this thing about last in the nation. San Francisco conserves water. We are one -- about one-third of the state average in the amount of water we use. And in terms of recycling, yes we do recycle.

In 2004, in our system, we put recycled water so that the golf courses in between the San Francisco and Daly City border, they use recycled water for those golf courses. And speaking of eight million, that eight million you could use for that study, you could be expanding recycled water plants, as San Francisco PUC is doing next week. Next week, they are expanding that recycling plant that I mentioned, the one that was opened in 2000.

**Mike Marshall:** In Daly City and owned by Daly City.

**Susan Leal:** It was paid for by San Francisco and we paid for it --

**Mike Marshall:** And San Francisco paid for Don Pedro, too.

**Susan Leal:** It's part of our -- it's part of the Hetch Hetchy water system. No, we didn't pay for Don Pedro, but -- but --

**Mike Marshall:** Fifty percent --

**Susan Leal:** But -- but let me just say if you could stop interrupting me because I haven't interrupted you. If you could -- let me just go ahead and say that in 2004, we put together and paid for recycling plant and Daly City would provide to these golf courses. San Francisco spent another nine million, and next week that recycling plant which has a capacity of 2.4 million gallons a day will be expanded to irrigate Hardy and Fleming golf courses and parks. Now, that's where \$9 million could go, but they want us to spend \$8 million doing the study. And -- and he said we boycotted this. So the city has boycotted this.

When I was general manager, we had dozens of our engineers having to go up to Sacramento for months for the DWR study, and I think Jim has got a copy of the direct -- (crosstalk) --

**Greg Dalton:** Department of Water Resources.

**Susan Leal:** Department -- I'm sorry, Department of Water Resources. Months, we were spending -

- our people were distracted going up to Sacramento to discuss our system with them.

**Greg Dalton:** Susan Leal was the former general manager of the San Francisco PUC. Other guests today at Climate One are Mike Marshall and Spreck Rosekrans from the Restore Hetch Hetchy, and Jim Wunderman, CEO of the Bay Area Council. I'm Greg Dalton. If you're just joining us, there's a podcast of this and other Climate One programs available in the iTunes store. We're discussing Proposition F on the San Francisco ballot.

The people who don't really have a voice here are -- there's 2.5 million people served by the Hetch Hetchy water system and it's only San Francisco that gets to vote on this. Let's talk about the people at Silicon Valley, the Peninsula who are served by the system that are impacted it and yet they don't seem to have a voice, and they can't vote on this, and they're going to be impacted.

**Mike Marshall:** Prop F gives them a voice. That's right. The city owns and operates the systems, so legally they can have all the input they want, but they can't make any changes. They don't have the legal authority to do that. Only San Francisco has that. So that's where we're starting. But Prop F gives them an equal voice with the general manager of the San Francisco Public Utilities Commission, so I don't disagree.

The customers at this point, there should be a regional water system, not a San Francisco-owned and operated system, but that's the legal situation. And until the legislature -- the California Legislature or the Board of Supervisors are -- somebody with the authority to give them part ownership, we -- we can't go to them and ask them for -- to be -- to have an input on this.

**Jim Wunderman:** So we're [crosstalk] business association.

**Greg Dalton:** Jim Wunderman?

**Jim Wunderman:** We've worked on this before. And in fact, back and I believe it was 2008, I think it was -- we passed -- or no, it's about 2004. So we passed a major bond measure in San Francisco. I think it was \$1.6 billion, and in order to seismically retrofit the Hetch Hetchy system and make it safe for the next generations and at the same time, the water users on the peninsula Alameda County put up a bond measure under their own authority of over \$2 billion to match San Francisco's investment.

So I would call that a vote. Nobody seems to be turning on their tap in San Mateo County or in Santa Clara county or Alameda County and complaining of the two-thirds of the users of the system. The governance may not be exactly what somebody might want to do if it was designed today, but the system is working and like many other water districts throughout the state, some districts are dependent upon supplies from some others. In the San Francisco's case, it has been a pretty steward because in all the history of the system, it has supplied that water on a continuous basis.

Now if you turn the clock back to before the Hetch Hetchy and before the earthquake and the fire in 1906, this wasn't the case. The city and the surrounding area was dependent on water that wasn't showing up, that the lack of water and water pressure were the major reasons behind the destruction in San Francisco back in 1906. We provided a system that took care of that problem.

San Francisco voters actually invested in the bond measures that provided that system. And today, it's working for 2.5 million people. So the idea that somehow there's underrepresentation in this issue, I think is a really -- it misses the point. The fact of the matter is that we have a system that works. It's working for those 2.5 million people.

You know, the Sacramento Bee which you mentioned is, you know, it represents a newspaper -- that

editorial which takes their story hook, line and sinker, represents the most wasteful region in the state when it comes to water use. You didn't quote the San Francisco Chronicle and the San Francisco Bay Guardian and the Sing Tao Daily and other papers which firmly say no on F and strongly comment that what -- voters should take a very hard look and vote no on this measure.

So, you know, we're -- we are in a situation in which the vast proportion of folks, and I would include those on the Peninsula and in Alameda County say unequivocally we -- you know, we should stop this before it gets too far down the path because this is very, very dangerous. And I would ask, you know, my friends Mike and Spreck, if this is so good, why are so many respected leaders in the newspaper business, in elected officials, in organizations -- the San Francisco Democratic Essential Committee, others, why are they all opposed to this? What is so good about it that nobody could find a reason to support it?

**Greg Dalton:** Mike Marshall, it's not often that the Bay Guardian and the Bay Area Council are on the same side of things. [Laughter]

**Mike Marshall:** So, you see, we're unifiers. Yeah, but the Bay Area Guardian, their -- their issue is with PG&E who Jim works for, or it was one of his members. And they support Restoring Hetch Hetchy just not so we give it to PG&E, which is just a little too tall of an order for Restoring Hetch Hetchy to accomplish.

**Jim Wunderman:** You didn't read the editorial.

**Greg Dalton:** But there's -- well -- but there's, you know, another unifying force, all of the San Francisco Board of Supervisors who don't agree on anything, they're also, you know, lined up against this. So--

**Mike Marshall:** Well -- so Prop F, rightly or wrongly, I think is perceived by folks as an indictment of the management of our water system over the last 20 to 25 years. And I think that's unfortunate, but we -- we are far behind with the rest of the state and the rest of the country when it comes to sustainable water practices. And, you know, Susan talks and -- and the opponents talk about how great we are at conserving water.

But, you know, folks, we don't have front yard swimming pools or air-conditioning. So, we can't use water. And I've been a renter in my apartment in Hayes Valley for 14 years and I've never seen a water bill. More importantly, the SFPUC has never sent me something encouraging to conserve water. Sixty-five, sixty-eight percent of San Franciscans rent their homes. And so the vast majority of us don't pay our water bills, which is the single best impetus for conserving water.

So, I think the reason -- there are two reasons. One is that this is a bit of indictment of the existing leadership, and I don't think that's the case. We're constantly trying to change and improve the way we're doing business. And you know, Senator Feinstein has longstanding opposition to this and honestly, she cast a very dark shadow over people get late night phone calls from the good senator threatening them. So, I think that -- I know. It's unfortunate but it's true.

**Greg Dalton:** Susan Leal.

**Susan Leal:** Let's talk about outreach to the customers. At least when I was general manager, I know the -- my successor as general manager of SFPUC did aggressive outreach to those people who paid the bill. And what happens is, it was a lot of -- we do have tenant kits that we give out to property owners, but we do reach out and the -- and the utility does reach out to property owners so that they provide incentives for low flow fixtures, low-flow toilets and that has been a real hallmark.

And yes, we don't have swimming pools and we don't have lawns. But you know what? During the day, our place balloons to twice its size. And that's a lot of water being used by people. And yet, we're able to conserve by reaching out. The utility has reached out to the -- to the restaurants, the hotels, and aggressively, in a nice way, to the residents basically saying, "Use less water. We'll provide you incentives to use less."

"And if you use more, you'll pay a higher tier rate." If you've seen any kind of water bills -- if you're seeing any of your water bills and I'm sorry to renters, you haven't, but that's probably a good thing if you -- you probably don't want to see a water bill. But if you've seen any water bills, their tiered rates -- and as you start using more, you get a higher bill. That's why we reached out to the property owners. That's what the PUC did when I was general manager, and I know that the current GM is doing that as well.

**Mike Marshall:** Can I agree --

**Greg Dalton:** Mike Marshall.

**Mike Marshall:** -- for a second, is that --

**Greg Dalton:** Do you have to?

**Mike Marshall:** Yeah. And she's right in projecting that in fact, the SFPUC is projecting that we as residents will reduce our water consumption by 10 million gallons a day. We currently use about 80 and it's going to go down to about 70 -- which is extraordinary and terrific. But the SFPUC, what do they want to do with that water? Did they want to leave it in the natural environment? Do they want to leave them on the Tuolumne River? No. They want to sell it at a cost to Silicon Valley because they are projecting more water needs into the future.

So, the incentive for us to conserve is to completely eliminate it relative to our environmental sensibilities. This -- the Prop F is not just designed by coming up with a plan, but it's in fact ultimately designed to change the way we as a city think about water. We can't -- we have to have a 21st century notion of water, which is to leave as much of it in the natural environment compared to the 20th century when the philosophy was, "Let's take as much of it out of the environment and hoard it as much as we can." We need to leave as much in the natural environment and reuse and reuse the water we have far more effectively than we are in the trajectory to do.

**Greg Dalton:** Mike Marshall is executive director of Restore Hetch Hetchy. Other guest today at Climate One are Spreck Rosekrans, director of policy at Restore Hetch Hetchy, and Susan Leal, a water consultant, former general manager of the San Francisco PUC, and Jim Wunderman, CEO of the Bay Area Council. We're discussing Proposition F on the San Francisco ballot, I'm Greg Dalton.

We're going to put a microphone here and invite your participation.

As we said earlier, from this side, please go out that door. The line starts with our producer, Jane Ann, right there. We encourage you -- we'll have a significant line here so we want to have -- you don't need to describe a -- you don't need to hide a comment as a question but we do ask you to keep it brief and concise, one one-part question and I will be assertive about keeping it on point and keeping it brisk so we can include as many people as possible. Let's have our audience questions. Yes? Welcome.

**Holly Bundock:** Hi. Thank you for including me. My name is Holly Bundock. I represent more than -- almost a thousand members of the Coalition of National Park Service Retirees, and I wonder what the city would suggest -- or even the Bay Area Council, would suggest to, you know, that the

Elwha Dams and the Glines Dams in Olympic cost only \$355 million to take down by land acquisition, build waste water treatment plants, restore the valleys and indeed, after --

**Greg Dalton:** These are dams in Washington State in the Olympic National --

**Holly Bundock:** In Washington State. So the Coalition supports Prop F.

**Greg Dalton:** Okay.

**Holly Bundock:** Please vote.

**Jim Wunderman:** It is a very -- yeah, I'll just say it.

**Greg Dalton:** Jim Wunderman.

**Jim Wunderman:** I'm just going to comment. It was a very -- it's a great project. We're all for it. There's tons of dams in -- tons -- many, many dams in the Western United States and across the country that are out of service, they're not providing potable water for the people who once depended on them, they're not providing flood control. Let's take them out of service. I think that one as you correctly stated was a couple hundred million dollar-type project. You know, let's go for those. Let's do more projects where you're not removing system that people are depending on and let's protect the systems that people depend on today. And, you know, I think those are the balances and the kinds of issues that we have and the questions that really should be asked here, because it's really worth it.

**Greg Dalton:** Susan Leal.

**Susan Leal:** I -- I think it's important to note that we the -- we, the city, has taken dams out of service in the Niles Canyon, the Niles River.

I know, in about 2006, we took a dam out of commission. And when a dam is not being used, it's unused as it was in Elwha, it should be removed. The other thing I want to mention about the national parks is that every year, the ratepayers of San Francisco or the ratepayers of the SFPUC provides \$5 million every year to the national parks up in Yosemite to maintain the backpacking base camp and the trails all around Yosemite. Go there sometime, it's absolutely stunning to hike in the camp.

**Mike Marshall:** So, the bulk of the five million is for security. Ever since 9/11, the security cost for water companies around the country have gone way through the roof. We get a special deal because we contract with the park service, the National Park Service, to provide that security and to provide that trail maintenance. But those are -- those are costs for any water company. Very few water companies have the opportunity to subcontract with the federal agency.

**Greg Dalton:** Let's get our next audience question. Yes, welcome.

**Karen Keifer:** Hi. I'm Karen Keifer from Redwood City where we have a salt pond done by Cargill, that DMB Associates from Scottsdale, Arizona want to pave over, I think it's 1,486 acres to build 12,000 homes for 30,000-32,000 people. One of the things there was the water question because Redwood City has great water. We recycle but we don't have enough allotment. What do we -- where are we going to get it? DMB has said from the Kern County, Nickel Family, they got the water rights. But Santa Clara County and Alameda won't go along with those water rights. So Department of Defense said that the next World War is going to be over water. Where are we going to get water? I agree that Tuolumne just doesn't have enough. Where are we going to get it?

**Susan Leal:** It's, it's very -- it's --

**Greg Dalton:** Spreck Rosekrans? Susan.

**Susan Leal:** It's a very -- it's a very tough issue and since California became a state, water has been a tough issue to be --.

**Greg Dalton:** Spreck Rosekrans.

**Spreck Rosekrans:** If I can say it, I'm fairly familiar with that example and it's a complicated interchange of Fremont and the Nickel Family and the Kern County Water Agency and the water agencies in the Bay Area have declined to participate and cooperate. And we hear so much about water. People fighting over water. What we don't hear about is the enormous amount of cooperation. San Jose -- the Santa Clara Valley Water District is banking ground water in the same volume as we stored in Hetch Hetchy Valley under the ground in Kern County, as is urban Southern California. Urban Southern California is buying water from the Sacramento Valley. Again, people that never said they would sell that water.

Whether you like it or not, there are a lot of deals that are being done. A lot of exchanges and many of them are very, very successful. And in this case, when we talk about wanting to restore Hetch Hetchy Valley, we know our work's cut out for us. But to get the folks in Eastside Irrigation District in Turlock to work with San Francisco to make sure we lose zero Tuolumne River water is a very doable thing from a physical perspective, and we need to make it work from an institutional perspective. And Restore Hetch Hetchy has put in writing that we are pledged to work with Redwood City and other folks on the Peninsula as this thing goes -- as Prop F goes forward if it passes. We'll go to the state legislation with you if possible.

You may remember that 10 years ago, you folks brought the degeneration of the pipeline system to the state legislature. You threatened to take the water system away and that's why we now have a very important \$5 billion water system improvement plant that San Francisco was forced into doing. So the customers are very important. They need reliable water. They need reliable infrastructure.

**Greg Dalton:** Let's go to our next audience question. Yes, welcome.

**Martha Salas-Portas:** Yes, hello. My name is Martha Salas-Portas and I'm a concerned citizen who came to the meeting today to get more informed.

I'd like to say that I and five generations of my family have enjoyed Yosemite National Park. The incredible beauty there and just how the enriching experience of being able to camp there and go there. I'd like to say that I would urge all environmentalists and people who are thinking of voting yes on this to actually get educated and find out more information. I think that my answer is vote no on F. We need to place more of our education on learning more about how we can support the school system, how we can change what is really the problem based on our society right now and the San Francisco area and look at our schools. So I would say vote no on F.

**Greg Dalton:** Thank you. Any response quickly? Whichever next' up?

**Jim Wunderman:** I agree.

**Mike Marshall:** It -- it -- it should -

[Laughter]



You know, I get it. We live in tough times and --

**Greg Dalton:** Money's tight.

**Mike Marshall:** Money's tight, but that should not be an obstacle to us having big ideas and thinking grandly about the future. America, I was -- grew up in America of ingenuity. It was -- it was that sense of American ingenuity that built the system and we can bring that same sense and economics to reforming the system so that it begins to undo the damage it does to Yosemite National Park.

**Greg Dalton:** We're talking about San Francisco Proposition F at Climate One. Let's have our next audience question.

**George Miller:** My name is George Miller. I'm not the Congressman. I'm a civilian. Sixteen years ago, I began volunteering at the Bancroft Library. And I catalogued the corporate archives, the Spring Valley Water Company going back to 1861. I catalogue all of O'Shaughnessy's personal papers. I'm the only person on Earth that's read them. (Laughter) It took me four years and 364 boxes but I learned a lot about this including a letter from Mr. O'Shaughnessy to then Mayor Rolph before he took the job as to why this was a bad idea.

I too read the Water Resources Report and I got as far as page 40, under Benefits of Restoration. We've talked about the cost as \$12 billion maybe whatever. The annual benefits of restoring Hetch Hetchy Valley range from \$26 million to \$6 billion. That's annual. Now, I grew up in the investment business. Now, if you presented me an idea that cost ten and return six, I'm in. [Laughter]

[Applause]

**Susan Leal:** I'd like to respond to that.

**Greg Dalton:** Susan Leal, this is getting to the idea of valuing services provided by ecosystems and assigning a value to them.

**Susan Leal:** Right. And that's if you want Yosemite, Hetch Hetchy -- that part of Yosemite to look like Yosemite Valley Floor.

**Mike Marshall:** Oh, come on, Susan. Stop it.

**Susan Leal:** You want to be -- how do you make money? You have to bring people. In fact, San Francisco, in case you don't know, they own in principle, the land under the water.

**Mike Marshall:** That's true.

**Susan Leal:** So it could be O'Shaughnessy lodge and links and -- or you know, lodges. That's -- the only way you make money is if you put a lot of people on cars in there like Yosemite Valley. Right now, you can go to Hetch Hetchy Valley and it is beautiful --

**Mike Marshall:** Yeah. It's, it's --

**Susan Leal:** It is beautiful walking, beautiful walking, hiking, backpacking. I've done it. I would encourage you all to do it. In the springtime, the wildflowers are absolutely stunning.

**Greg Dalton:** Mike Marshall, quickly?

**Susan Leal:** I've seen bears, too.

**Greg Dalton:** Mike Marshall?

**Mike Marshall:** I mean, Susan sort of missed the whole concept here which is the economic value of a restored Hetch Hetchy Valley. In a modern world, we have to -- in order to make cost-benefit analysis, we have to begin to assign values to the natural world, and that's what George is talking about, and that's what the state of California on their own came up and said, "Look, it might cost you this much to do but this is what we get back on an annual basis upwards of \$6 billion."

**Susan Leal:** If you develop it.

**Mike Marshall:** But they used the same economic modeling -- no, not if you develop it. If you -- if it's undeveloped, the same economic modeling used in the litigation for Mono Lake where LA gave up 25% of their water supply -- not their storage but their supply, it was an exact same litigate -- economic modeling that was used here. And it's something that we -- that San Francisco's going to have to deal with one way or the other. Because we -- as long as we continue to use Hetch Hetchy as a reservoir, we are denying the state that economic benefit.

**Greg Dalton:** We've got a long line of questioners. We'll try to get through as many people as we can. We're talking about Proposition F in San Francisco at Climate One. Yes, sir.

**Male Audience:** Well, unlike George, I haven't read any of that stuff. It seems like I need to start hanging out at Bancroft more. But my question is, if we're wasting all that water and I agree we are, with water scope flaws, if we really need to go down the conservation path, why are we spending -- why don't we see a proposal to do that residents spending \$3 billion that we don't have to take away an existing water resource and existing hydro as a way to strangle hold people into conserving? That seems like that would be the right answer.

**Mike Marshall:** No, but --

**Susan Leal:** I -- I agree with you.

**Greg Dalton:** Mike -- Mike Marshall?

**Susan Leal:** I agree with you. I think that if we spent that \$8 million we're talking about in the study or if this proposition said, "Let's require more recycling, more conservation, make the system which is sustainable more sustainable," I think a lot of people that are opposed to it will be for to it.

**Mike Marshall:** Susan, why would we require something until we know the capacity is? Prop F is designed to figure out our capacity in terms of water recycling, groundwater recharge, groundwater use and restoration of Tuolumne. Before we make any decisions about doing it, we need to have a plan in place that gives us all the facts and figures. So to the gentleman's question, vote yes on Prop F because it answers your question. It is specifically designed to give us that information before we make any decisions about reforming the system.

**Susan Leal:** The agency has spent the last several years looking at how much more to recycle.

They already have budgeted, and moving forward, more recycling beyond the one that they have --

**Mike Marshall:** More than they're doing. They don't do any, so yeah. That's not very hard.

**Susan Leal:** Yes, they do. Yes, they do. They paid for the one and they do in Harding Park,

Fleming. Those are opening next week. Olympic Club, all those are run on recyclable water. San Francisco, all those golf courses on recyclable water. And, and --

**Mike Marshall:** Right. But when you walk out --

**Greg Dalton:** Hold on, Mike. Hold on, Mike. Hold on.

**Susan Leal:** Hold on, hold on.

**Mike Marshall:** -- (crosstalk) with Tuolumne River water.

**Susan Leal:** And that's -- you know, I was always opposed as a general manager and they use a lot more gray water and they're going to be using more gray water. And the point is, let's -- if you want a proposition that requires more recycling, more conservation, you get people to support it. That's not what this is about. It sets up a task force. It sets up a budget for a task force. It sets up something -- that, to me, is another bureaucracy.

**Mike Marshall:** But if the voters approve it, then it has public support, doesn't it?

**Jim Wunderman:** Yeah, that's what we need to see.

**Susan Neal:** If they do approve it but I would hope they vote no.

**Greg Dalton:** Let's have our audience question. Yes, sir.

**Male Audience:** I haven't heard from any of the panelists about the political consideration, the big picture considerations that are behind Proposition F. I see two possibilities. One, that it would release more water for large farms in the Central Valley and the other that it would simply embarrass San Francisco --

**Mike Marshall:** Yeah.

**Audience:** -- and possibly degrade their representatives.

**Jim Wunderman:** If I may, Greg, on just --

**Greg Dalton:** Jim Wundermann.

**Mike Marshall:** Let me, let me, let me -- can I answer that?

**Jim Wunderman:** I don't think so.

[Laughter]

**Mike Marshall:** 'Cause I don't think --

[Laughter]

**Greg Dalton:** Hold on. I'm playing --

**Jim Wunderman:** The number one supporter of the project, the member of Congress that these gentleman has secured is Dan Lungren.

**Mike Marshall:** Jim, that's false.

**Jim Wunderman:** -- Representative --

**Greg Dalton:** Hold on. Let him -- hold on.

**Jim Wunderman:** No, that is true. Okay? Because I have debated him --

**Mike Marshall:** Dan Lungren --

**Jim Wunderman:** -- and that's the only other debate I participated in.

**Mike Marshall:** -- has nothing to do with Restore Hetch Hetchy.

**Jim Wunderman:** Dan Lungren is your supporter.

**Mike Marshall:** He is not a supporter.

**Jim Wunderman:** And there's a good reason for it.

**Greg Dalton:** Hold on.

**Jim Wunderman:** And last time it was --

**Spreck Rosekrans:** Thirteen years ago --

**Jim Wunderman:** It was Dan Hodel --

**Susan Leal:** And last --

**Jim Wunderman:** -- and it's always someone from outside of San Francisco and generally, it's correct.

**Greg Dalton:** Hold on, you guys. Do I have to call in (crosstalk) here?

**Mike Marshall:** Yes.

**Spreck Rosekrans:** Thirteen years ago, I sat in a living room in Merced, California.

And along with another dozen people, decided to form a group called Restore Hetch Hetchy. We've been working since that time toward restoration of Hetch Hetchy Valley in Yosemite National Park as a single goal. We've worked with other environmental organizations that have broader goals and so forth --

**Jim Wunderman:** And the best you can get is Dan Lungren.

**Spreck Rosekrans:** Excuse me.

**Greg Dalton:** Hold on, Jim. Hold on.

**Spreck Rosekrans:** And we have -- and what we have -- and these people are dedicated to this goal as well as create a fair and cost-effective plan for water supply, replacement water supply and power that would be lost. And we've got people on the left, we've got some Democrats, we've got some Republicans. This is an American issue. And you're rolling your eyes, there's no -- there's no hidden agenda. There's no profiteering. [Laughter] This is the one time that any insult like this has been done to one of our national parks. No dam has been built in an existing national park before Hetch

Hetchy was built and none has been built since. Congress has seen to that. They've essentially admitted they made a mistake in 1913. We choose to try to undo that mistake and to provide a better vision for America's national parks going forward.

**Greg Dalton:** Let's get to a couple of questions before we have to wrap this up on Proposition F in San Francisco. Yes, sir. Let's have your question. Welcome.

**Male Audience:** Hello. I'm Bill Klinghoffer. I live in San Francisco. I've hiked around Hetch Hetchy Reservoir on the north side in the spring. It's a beautiful hike -- pristine condition maintained by the City of San Francisco. What I'd like to know is the Don Pedro Reservoir, which has been talked about as a possible other source, a place to hold the water, has mainly irrigation water and it's had boating and it has NTBE, and other chemicals that are related to boating, and I'd like to know what about the pollution in that reservoir, and has that been studied?

**Susan Leal:** Well, we really haven't --

**Greg Dalton:** Susan Leal.

**Susan Leal:** -- at least the SFPUC has not studied it to my knowledge because we don't own or operate it or -- and Modesto has made abundantly clear, including two weeks ago in a letter -- letters to the editor from the head of the utility and to the Modesto Bee saying that there is no storage for San Francisco in their reservoir. So that's why we haven't looked at it. But you do raise a good point about Don Pedro.

**Spreck Rosekrans:** And what we --

**Greg Dalton:** Spreck.

**Spreck Rosekrans:** -- what we proposed is to divert the river when it's flowing, divert from Cherry Reservoir which San Francisco owns and operates when the river is not flowing during the dry times of the year like right now, and that gets you 95% of the water. Don Pedro would still be operated as a water bank as it is now, very valuable asset for San Francisco. Nothing would change down there.

**Greg Dalton:** Yes, sir. Let's have our next audience question.

**Ron Sundergill:** Thank you. My name is Ron Sundergill, I'm the regional director of the National Parks Conservation Association in San Francisco. And I have a comment and a question. The comment is -- well, there's been a number of I think erroneous statements made here tonight. I think the most egregious one was, Mr. Wunderman's statement about national environmental groups not supporting this initiative. I represent an organization which is one of the largest (Applause) -- which is one of the largest national conservation groups in the United States. We have 600,000 members, 100,000 in the state of California. And there's other groups like ours that support this initiative. But my question is then to either Spreck or Mike. What are the other national environmental groups that are supporting and or regional groups?

**Greg Dalton:** Real quickly then. We'll get to another audience question. We have to wrap this up.

**Spreck Rosekrans:** Well, let's --

**Greg Dalton:** Spreck Rosekrans.

**Spreck Rosekrans:** Let's be clear. There are -- the National Wildlife Federation is probably the biggest that are on there.

They're going to be by a factor of several -- locally, the Planet Conservation League, Friends of the River and a variety of others.

**Mike Marshall:** San Francisco Legal Conservation Voters.

**Spreck Rosekrans:** And -- and -- but bear in mind, there are other groups that support restoration but have not wanted to get involved in the tawdry local political angle, so they're not involved with Prop F, but the Environmental Defense Fund, Sierra Club and individually 20 different chapters of the Sierra Club have all endorsed restoration of Hetch Hetchy Valley, so let's not lose sight of that.

**Greg Dalton:** Let's have another question. We'll get to the end here. Yes, sir. Welcome to Climate One.

**Mac Shaver:** Thanks for taking my question. My name is Mac Shaver. I'm a retired National Park superintendent and I represent Association of National Park Retirees and the Association of National Park Rangers, all of who vote although most don't live in San Francisco. I do -- I'd like just to point out that two of the strongest congressional supporters of removal of the dams in Olympic, Elwha and the others, were Nancy Pelosi and Dianne Feinstein. And they're not supporting this. And the reason is, a classic nimbly issue, "Not in my backyard." They do not want in their --

[Applause]

**Mac Shaver:** They do not want on their watch, to lose something that was gained a hundred years ago. They know it's the right thing to do and they knew it wasn't Olympic. They knew it is now, it's a big mistake if we don't pass Prop F.

[Applause]

**Greg Dalton:** Jim Wunderman?

**Jim Wunderman:** You know, you know I don't think it's fair, you know, that -- I appreciate that if you spend your career with the national parks, you may find this a particularly attractive moment. I don't think it's fair to put thoughts into Dianne Feinstein and Nancy Pelosi's head because I personally have a lot of respect with those two individuals. I worked for Dianne Feinstein when she was mayor, despite the fact, you know, I and probably no one here agrees with everybody all the time but these are two very well-studied individuals.

These are two people who are great leaders of our state, our city and our region, and it's not easy. If you think it's easy to get an elected official of that quality and character to just come along to your side because, you know, they want to just protect something, it's not the way it works. These are extremely thoughtful individuals, they look at the issues, they're well-staffed, they're very, very well versed. Once again, if this is such a good thing, if you had such a great idea, Mike and Spreck, why is that every -- the mayor and every single former mayor, every member of the board of supervisors, the San Francisco Chronicle, the Bay Guardian -- we can just put them all in the box and say they're all doing this for some nefarious reason and then in their heart of hearts, they actually know better.

I just don't think so. I think you really need to look in the mirror and say, "What exactly is it about our proposal that falls short? And let's have that conversation.

**Greg Dalton:** We've been -- okay. Quickly Mike --

[Applause]

**Mike Marshall:** Yeah.

**Greg Dalton:** And then we'll go to a question.

**Mike Marshall:** I would just point out that 16,000 San Franciscans, rank and file people with strong environmental values signed petitions to put this -- to create this debate and put this before us as voters. And I would hope that they wouldn't be disdained for that process or for those 16,000 people compared to the 50 that we see.

**Susan Leal:** But we know that when it was put on the ballot, people thought they were voting for sustainability and more conservation and more recycling.

**Mike Marshall:** They are.

**Susan Leal:** Who won't vote for that? But that's not what this proposition is about. This is about draining one of our most treasured --

**Mike Marshall:** Susan, the [crosstalk] wrote the petition. The signatory --

**Greg Dalton:** Hold on, all right.

**Mike Marshall:** -- for the petition.

**Susan Leal:** People don't really -- come on. We've all been there when someone asks us to sign one of those things. This is about its sustainability --

**Jim Wunderman:** Use your own campaign literature. Recycle our water. This is what you put out. Okay? Does it say drain Hetch Hetchy? No. It took a judge to say that it needed to say that on the ballot because you didn't want to say it.

**Mike Marshall:** No, it didn't. (crosstalk)

**Jim Wunderman:** So let's just be honest about what we're discussing.

[Applause]

**Greg Dalton:** Let's have our audience question. We're at the end here. Yes? Yes, welcome to Climate One.

**Mark Cloutier:** Hi. My name is Mark Cloutier and I'm a policy director at the San Francisco Foundation and we did some careful analysis of this and I want to make one brief comment and then ask a question which was, local environmental organizations do believe in restoring Hetch Hetchy. I think most of the people in this audience, in an ideal sense, agree with restoring Hetch Hetchy.

They don't agree with this proposition, and they don't agree unless we find alternative clean energy sources. We're not going to find the water. There's not -- this is not the time. We don't have the technology and it's part of the reason why we oppose Proposition F. But really, I want to get to you for a second, I want to ask -- let's say Proposition F passes and the study is done and it recommends taking down the dam. Let's say it's -- let's say it's \$3 billion. Who's going to pay? What will they forego? Who pays taxes? Who are rate payers? How much of that is of their disposable income and what's going to happen to low-income folks, low-income kids, their access to education? This is not the right time to be doing that.

**Mike Marshall:** Let me respond to that very quickly. And Mark, thank you for the question.

(Applause) But I would say, you can't find something unless you look for it. You said, "How can we find more alternative energy? How can we find more water?" Well, we need to look for it. And Prop F is that. It creates a planning process to identify the very issues you have concerns about. And I agree that we have all kinds of societal needs but I'll be damned if I accept that. It's an either/or proposition that we can't invest in the environment because we have to invest in our kids. And to pit children, poor children, against the environmental improvements and change, as the San Francisco Foundation has done, Mark, you know, you're my buddy but I just think that's reprehensible. I think we have got to recognize that every child that walks this earth needs to inherit first. And in order to do that, we have to make environmental changes.

**Susan Leal:** Let's --

**Mike Marshall:** The Prop F puts San Francisco on the trajectory to do.

[Applause]

**Susan Leal:** Let's talk, let's talk about that \$3 billion.

**Greg Dalton:** Susan Leal?

**Susan Leal:** Because that's just about equals -- that just about equals the U.S. budget for national parks.

So, that's \$3 billion. And if it's \$3 billion to \$10 billion? I think the estimates could be much, much higher. So, that's a lot of --

**Mike Marshall:** So the point --

**Susan Leal:** -- that's a lot of money. And whereas, you know what, we're doing a big seismic upgrade and we only pay a third of it. That's \$4.5 billion. There are wastewater treatment plants that we have to upgrade. Those cost at least a couple of billion. If you want to talk about pollution and environment, there are wastewater treatment plants up and down the state that are polluting bays and rivers. Where is the money for that? Where -- where -- when you've got billions of dollars, where do we really need it? For other environmental improvements? For education? That's a lot of money.

**Greg Dalton:** Last question. This really is the last question. Yes, sir. Welcome to Climate One.

**John Carpenter:** Yes, yes. John Carpenter of Mountain View. There's one thing tonight that has not been mentioned. It's silting. That's a property of larger reservoirs. They silt up. Hoover Dam has a terrible amount of silt behind it. The cost of dredging is equally horrible. So -- so the question -- so the question is, O'Shaughnessy Reservoir, what percentage of it is silted up and how much is it going to cost to dredge it?

**Susan Leal:** It is a -- because it is a granite bowl, that was one of the reasons that O'Shaughnessy chose that side and because it is in a granite bowl, it has not silted up. They have done -- in the mid 80s when the Lake really went down, they could also investigate that it has not. So it's good. It's not silted up.

**Mike Marshall:** I would agree with that but I would add that there -- when the city clear-cut the valley ford, they didn't take into consideration the 8,000 years or Native American life. And so within the minimal sediment that is behind the dam, there's significant Native American cultural artifacts and remains. And so although there won't necessarily be a huge expenses assigned, there



needs to be a lot of time and energy put into respecting those cultural sites and --

**Susan Leal:** I have a comment.

**Mike Marshall:** And there would be a time frame involved in doing that.

**Susan Leal:** I have a comment on that. Actually, when we took testimony on different things about the water system in 2006, 2005, we went up the country which needs -- near the O'Shaughnessy Dam, and they took comment from a number of different people. And they've got -- found people who were -- had some Native American heritage. And their point about Hetch Hetchy was they wanted it undisturbed, they want it -- they didn't want it drained and then it may like Yosemite Valley, that is the comments that our staff got. So that is, that's important to keep in mind.

**Mike Marshall:** And they testified in the California legislation, Susan's right. Some of the tribes in Native American bands are opposed to the idea and others support the idea. So there needs to -- and Prop F mentions the concerns of Native Americans and says that they are key stakeholders in this process and need -- no matter whether the Prop F passes or not, need to brought into the fact that our water systems severely impacts their culture sites.

**Greg Dalton:** We have to end it there. Our thanks to Mike Marshall, executive director of Restore Hetch Hetchy, Spreck Rosekrans, director of policy of Restore Hetch Hetchy, Jim Wunderman, CEO of the Bay Area Council, and Susan Leal, water consultant, former general manager of the San Francisco PUC. I'm Greg Dalton, I'd like to thank our audience on the radio and here tonight at Climate One. Thank you all for coming.

[Applause]

[END]