

LEGISLATIVE HEARING ON H.R. 3267—THE
“SONNY BONO MEMORIAL SALTON SEA REC-
LAMATION ACT”

HEARING
BEFORE THE
SUBCOMMITTEE ON WATER AND POWER
OF THE
COMMITTEE ON RESOURCES
HOUSE OF REPRESENTATIVES
ONE HUNDRED FIFTH CONGRESS
SECOND SESSION

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MARCH 12, 1998, WASHINGTON, DC
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LEGISLATIVE HEARING ON H.R. 3267—THE “SONNY BONO MEMORIAL SALTON SEA RECLAMATION ACT”

THURSDAY, MARCH 12, 1998

U.S. HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON
WATER AND POWER, COMMITTEE ON RESOURCES, *Wash-
ington, DC.*

The Subcommittee convened at 10:07 a.m. in room 1334 of the Longworth House Office Building, the Honorable John T. Doolittle, Chairman of the Subcommittee, presiding.

Mr. DOOLITTLE. The Subcommittee on Water and Power will come to order.

The Subcommittee is meeting today to hear testimony concerning H.R. 3267, The Sonny Bono Memorial Salton Sea Reclamation Act.

Our objective today is to consider legislation that has been introduced by the Salton Sea Task Force. Members of the Task Force, Congressmen Ken Calvert, Duncan Hunter, Jerry Lewis and George Brown have introduced a measure which is designed to restore effectively the health of the Salton Sea. As many of you are aware, restoration of the Salton Sea was a focus and primary concern of our late colleague Sonny Bono. This bill, H.R. 3267, the Sonny Bono Memorial Salton Sea Reclamation Act, is designed to promote Sonny's dream of restoring the Sea quickly and effectively.

Today we will hear some of the issues affecting the water quality and lake levels at the Salton Sea. A great deal of work has been done to evaluate the causes of poor water quality as well the periodic inundation and exposure of land around the Sea. More importantly, there have been scores of alternatives offered to solve these problems. If we are ever to find and implement the solutions, the time for action is upon us. Water quality is at an all-time low. The Sea can no longer serve as the recreation resource it once was and wildlife populations continue to be adversely affected.

The Salton Sea as it now exists is an artificial phenomenon created in 1905 as the result of high water and a break in a temporary levee along the Colorado River. For a period of about 16 months the Colorado River flowed into the Salton Sea. After the levee break was fixed with great difficulty and over an extended period of time, evaporation quickly reduced the size of the Sea. The water level declined until the 1920's when increased runoff from imported water used in the basin began to increase the Sea's surface.

The Salton Sea is now about 35 miles long and 15 miles wide. The inflow has a high salinity content from the Colorado River resulting in over four million tons of salt being deposited into the Sea

annually. Without a natural outlet, water leaves only by evaporation, leaving the salt behind. The Sea's salinity has increased to the point where it is now 25 percent higher than that of our oceans and currently jeopardizes local and migratory wildlife populations. The Salton Sea currently experiences frequent large fish and wildlife die-offs and will be incapable of accommodating any wildlife in just a few short years.

Land, recreational and ecological values associated with the Sea have declined over the last two decades due in large part to the rising salinity and surface elevation. Without efforts to reduce and stabilize the salinity levels they will continue to rise and will have severe impacts on surrounding landowners, individuals that wish to use the Sea for recreation and the existing wildlife species.

H.R. 3267 establishes the process for determining and implementing an engineering solution to save the Sea while also continuing the environmental analysis to evaluate and ensure the long-term health of the Sea's wildlife populations. Additionally, this measure will authorize the Water Reclamation and Purification Project along the New River, one of the major sources of water flowing into the Sea.

If we successfully reclaim this inland Sea it will provide for recreational and economic potential while also ensuring an environmentally safe refuge for fish and the one million migratory birds that use the Sea as part of the Pacific Flyway. If we fail to act, the wildlife will die and we will have lost a significant recreational, ecological and economic resource.

I commend the Members of the Congressional Task Force who have invested their time and energy to advance the cause of restoring the Sea. I look forward to hearing from the witnesses who have had an opportunity to evaluate the problems associated with the Salton Sea and the legislative proposal we are considering.

I do want to take a minute to comment on one issue which a number of Members have mentioned concerning this legislation, and that is access to Colorado River water. The legislation indicates that any water used to reduce salinity will be taken pursuant to existing law, including the Law of the River governing the Colorado River.

As all who deal with the Colorado River know, the Colorado River is very erratic in its supply of water. When the Colorado River water was allocated this variation was recognized. At the same time there was an assumption that the average annual supply available to the upper and lower basins combined would be about 15 million acre feet of water per year. Since that time the average has been around 14.2 million acre feet, somewhat less than the average expected. The water allocation scheme considered periods of high flow, and at those times existing secondary priorities or allocations will apply. If any water is to come from the Colorado River it must be in the context of those allocations.

I look forward to further discussion on this issue, and would like now to recognize Mr. Miller.

[H.R. 3267—The Sonny Bono Memorial Salton Sea Reclamation Act may be found at end of hearing.]

Mr. MILLER. Thank you very much, Mr. Chairman, and I want to join you in sharing your concerns and interests with our col-

leagues in devising a long-term solution for the restoration of the Salton Sea. We need to stabilize salinity and contaminant levels to protect the dwindling fisheries, resources and to reduce the threats of migratory birds, and we need to revive the economic potential of this area as well.

I do not, however, believe the Congress should act in haste to authorize and construct an expensive project at the Salton Sea before we know what we're doing. H.R. 3267 is well intentioned, but I believe it could force Congress to spend hundreds of millions of dollars of taxpayer money before the scientists and engineers have supplied us with the information we need to make good decisions.

This bill will require many changes in our Committee and I am certain that we will hear many suggestions from Members at today's hearing. I am particularly concerned that we correct the requirements for a compressed study and planning period. The time period for environmental studies and NEPA compliance is entirely too short, and the explicit language overriding further NEPA compliance and limiting judicial review is highly inappropriate.

I sincerely appreciate the efforts of those that have been made by the Congressional Salton Sea Task Force, the Salton Sea Authority, Senator Boxer and others of our colleagues.

I just want to say this. I guess I've been here long enough to see enough of these projects start and stop and start and stop. It's my belief that the road to success is paved by doing these things right at the outset, and a little more time taken at the outset has huge payoffs later on. I know I've struggled with George Brown over the last several years looking at a multiple of different ideas for the Salton Sea, I've read the proposals that are before us brought to us by Congressman Hunter, and I've read Senator Boxer's legislation.

I think the one thing that Sonny Bono gave us is Congressional agreement that we've got to do something and we've got to do it now. But what we ought to set in place is a process that is workable and that achieves a goal. It would be a tragic miscarriage of public duty if in Sonny's name we created something that didn't work or got bogged down because in mid-course we found out that the science of the studies was wrong, and another 6 months or a year at the beginning may have huge payoffs in terms of the success of this project going forward.

So I would hope, since we do have agreement here that we need to do something, and I'm not saying that it has got to be my way, but what I'm saying is I would hope that between now and the time this Committee marks it up we sit down and sort through some of these problems and realize that maybe the shortest point between "A" and "B" is through some existing law with good agreement and good science and positions by Members of Congress pushing the agencies to get this done.

So I look forward to the testimony by our colleagues and Senator Boxer, and I look forward to those who will testify on the later panels. I assume that I, like many of my colleagues, have heard from all of the signatories on the Law of the River about their views of this legislation, and I think that's simply indicative of whether or not you spend time on working these problems out up front or

whether you try to jam this and you end up with still having nothing been completed in the legislative process.

So I want to thank all of our colleagues in the House that have worked so terribly hard to try to get this up before the Committee, and I look forward to the testimony. Thank you.

Mr. DOOLITTLE. Thank you.

Under our Committee rules the opening statements are normally limited to the Chairman and Ranking Member. However, in view of the fact that Mr. Calvert is a primary sponsor of this bill I wondered if the Committee would entertain unanimous consent to allow him to make a statement. I would be happy to have everybody make a statement, but there are 16 witnesses at this hearing today and it's going to be a very long day if we can't expedite it.

Mr. Shadegg.

Mr. SHADEGG. Reserving my right to object, I would Mr. Chairman, like to make a brief opening statement, but I will make a commitment to you to keep it very brief, along with Mr. Calvert.

Mr. DOOLITTLE. All right. Well then with that reservation is there objection?

[No response.]

OK.

Mr. DOOLITTLE. Mr. Calvert is recognized.

Mr. CALVERT. Thank you, Mr. Chairman, and I promise to keep my statement brief also.

First, Congressman Lewis could not join us this morning, and I would ask unanimous consent that his statement be entered into the record.

I want to thank the Chairman and the Ranking Member of this Committee for holding the hearing so promptly on the Sonny Bono Memorial Salton Sea Reclamation Act, an issue that is not only important to me, but to California and I believe to the nation.

Mr. Chairman, my interest in saving the Salton Sea is personal as well as professional, and it has taken even more meaning since Sonny's death. Sonny and I became close friends representing the same county and working closely on issues important to our constituents, and certainly no issue came to the forefront more than the Salton Sea. We both shared fond memories of waterskiing on the Sea in our youth, and we looked forward to future generations enjoying the same type of memories.

When I was a boy I only appreciated the fun that the Sea had to offer, but now as a Member of Congress I see a large body of water with enormous potential. As the largest inland body of water in California it also offers an enhanced potential for environmental uses as it already serves as a component of the migratory bird Pacific Flyway. This is Southern California's largest environmental problem, in my opinion, and it needs to be addressed in a manner that provides for long-term solutions.

One point that I would like to make to my friend from California is we've been talking about this problem for 30 years, as I'm sure we'll hear from our other friends who are on this Task Force. When I was going down to North Beach 30 years ago they were putting up banners with Save the Salton Sea. They have been studying it for all of that time, and now it's time for action. I don't think anyone wants to see the death of the Salton Sea. We all agree that

something has to be done, but delay, no matter how well intentioned by the folks that are trying to do that, unfortunately may lead to some unfortunate results. We must act now and work out our differences. I have no problem meeting with the other side to accomplish this task and to get it done.

I appreciate your having this hearing, Mr. Chairman and, unfortunately, my friend from Arizona wasn't here to hear your excellent explanation of the Law of the River.

[The prepared statement of Congressman Calvert follows:]

STATEMENT OF HON. KEN CALVERT, A REPRESENTATIVE IN CONGRESS FROM THE
STATE OF CALIFORNIA

Mr. Chairman, thank you for holding this hearing so promptly on the Sonny Bono on this panel on an issue that is so near and dear to my heart. Mr. Chairman, my interest in saving the Salton Sea is personal as well as professional, and has taken on even more meaning with Sonny's death. Sonny and I became close friends representing neighboring districts and working closely on issues important to our constituents, especially saving the Salton Sea. We both shared fond memories of water-skiing on the Salton Sea in our youths, and wanted to ensure that future generations would be able to have similar memories.

When I was a boy, however, I only appreciated the fun the sea had to offer. As an adult, and as a Member of Congress, I see a large body of water with a staggering potential for the community. As the largest inland body of water in California, it also offers enormous potential for environmental uses, currently serving as a component of the migratory bird Pacific Flyway. This is Southern California's largest environmental problem, and it needs to be addressed in a manner that provides for long-term solutions.

You will hear from many people today with many laudable reasons for saving the Salton Sea. But the most compelling reason we are here today, and the reason this bill has such bipartisan support, is to honor the life and legacy of our dear friend and colleague, Sonny Bono. As we work toward getting this bill approved by the House and Senate, if understandable differences of opinion threaten to slow the forward movement of this legislation, we must keep foremost in our mind that it was Sonny's dream to restore the Salton Sea, and in his tragic absence, it is up to us to accomplish the task.

Thank you, Mr. Chairman.

Mr. DOOLITTLE. Well this is his first opportunity and he'll be able to hear it right now perhaps.

The Chair recognizes Mr. Shadegg.

Mr. SHADEGG. Thank you, Mr. Chairman.

I apologize for being a few minutes late and for not being able to hear your brilliant and eloquent explanation of the Law of the River. It is in fact the Law of the River which gives me concern in this particular hearing.

Let me say at the outset that I have no objection to the restoration of the Salton Sea and indeed view that as a worthy goal and one that I would be happy to work with in a reasonable fashion to ensure that those working toward that task are able to do so.

The caveat that I am compelled to insert is in fact the implications for the Law of the River. There are literally millions of people in the Western United States, over 13 million in the six Basin States, excluding California, and tens of millions others beyond that in California who are dependent upon the Colorado River, which is already completely allocated, and which allocation California is not only taking its entire current allocation, but as we all know it is taking more than its current allocation.

The point being that the Law of the River has been the subject of probably dozens of pieces of legislation in this Congress and of numerous U.S. Supreme Court decisions, and of at least one sem-

inal case, Arizona versus California. That law has been established over decades of compromise of litigation, and it important for us in considering this bill that we understand the delicate balance struck by the Law of the River.

Second, it is important to understand that restoration of the Salton Sea does not require that we alter the Law of the River, that is, California already gets its basic allocation of Colorado River water. In addition, California gets the largest piece of the surplus or excess waters of the Colorado River flow, when and if they occur, and the Secretary of Interior has now declared on two separate occasions that they have occurred, and from its basic allocation or from its surplus or excess allocation California can use that water for any purpose, including the Salton Sea, if that's what it sees fit.

However, I think it is important not just to my State of Arizona, but in fact important to the delegations from every other State, the six remaining States besides California that are in the Colorado River Basin, that we not alter the delicate balance struck by the Law of the River that compromises it in the litigation which have created it.

In that regard, as you all know, I circulated a letter which has been signed by every Member of each Delegation from each of the six remaining Basin States saying what I have just said, that is, that we do not oppose restoration of the Salton Sea. We simply implore you that this legislation should not alter the careful balance struck under the Law of the River, that California can take its current allocation, either its basic allocation or its surplus allocation, and achieve what those who want to restore the Salton Sea want to achieve, and that under no circumstances can we, the Representatives of those other States, and I would suggest quite frankly that many Members I think of the California Delegation representing other interests would be concerned about any reallocation of Colorado River water which would place them in jeopardy for this purpose.

Since it's not necessary to change the allocation or the Law of the River to accomplish the goal that the bill's sponsors want to do, I am hopeful they will agree to language which makes it clear that that is not intended in this Act, and quite frankly they have already represented to me, Mr. Calvert has and Mr. Hunter has to Senator Kyle in my State that they do not intend to do that.

And with that I look forward to the testimony.

[The letter referred to may be found at end of hearing.]

Mr. DOOLITTLE. Thank you. Let me just draw to the gentleman's attention Title I of the bill which does indeed state that the bill does not affect any treaty, law or agreement governing the use of water from the Colorado River. If the gentleman might review that and let us know in a timely manner whether you think that——

Mr. SHADEGG. Mr. Chairman, I have reviewed that, and actually it says this section does not alter that, and an amendment I will seek at some point would be that this Act not be that purpose, and then I think we would be comfortable. There also will be language offered by the Arizona Department of Water Resources and identical language offered by the Director of the Upper Basin States representing four Upper Basin States which is the clarifying lan-

guage which we will seek which does not alter the intent of what you just read and it technically corrects the language of the bill.

Mr. DOOLITTLE. OK, and maybe some of our principal authors would want to comment on that to indicate whether you're sympathetic or not.

We welcome our distinguished panel of Members here today to testify, and first on the panel is Senator Barbara Boxer of California.

Senator.

**STATEMENT OF HON. BARBARA BOXER, A SENATOR IN
CONGRESS FROM THE STATE OF CALIFORNIA**

Senator BOXER. Thank you so much, and I want to thank my colleagues for saying it was fine if I did open. We have a vote starting at 10:30, and I'm a little bit hobbled this morning. So I will have to leave. I would love to take questions. So if you could put them in writing, Mr. Chairman, I will immediately get the answers back.

I am very delighted to be here in the House, the House of the people, the place that I served for 10 years with many of you. I have many fond memories, and I think it is very appropriate that this legislation start here. It was brought to us by the late Sonny Bono who we all miss, and I am very proud to be playing a role in saving the Salton Sea.

I want to make a couple of points, Mr. Chairman, and I will be brief myself. I want to ask unanimous consent to place my entire statement in the record.

Mr. DOOLITTLE. Without objection, so ordered.

Senator BOXER. Mr. Chairman, I have had very pleasant conversations with Congressman Hunter on this, with Congressman Brown and Congressman Miller and several others and wanted to make the point that the legislation that I have introduced along with Senator Feinstein builds on the House bill. This is not a contest and there is no simple answer to this. This is going to be a moving, breathing piece of legislation. As Congressman Miller points out, I think we all have the same goal, and I was very taken with the comments of the Congressman from Arizona because I think he is working in a very friendly fashion to resolve his concerns.

What Senator Feinstein and I attempted to do in the legislation we have introduced is to listen to those concerns that have come in from the Department of Interior, from the local community, from environmental groups and from other States concerned about water allocation, and we did hear from Senator Kyle with a similar comment. So what we have tried to do in this legislation having had the benefit of Congressman Hunter and Congressman Brown and Congressman Calvert's work, if you will, and others is to respond to some of the discussions around the bill and try to put something together that responded to that.

In my presentation I go into some detail about the Salton Sea, which from the time I was a child learning about the Salton Sea has always fascinated me, and in the interest of time I won't go into that, except to say we now know that the Salton Sea is one of the most important habitats for migratory birds along the Pacific Flyway and that the extreme salinity along with agricultural and

waste water in the Sea are rapidly deteriorating the entire ecosystem. The existing Salton Sea ecosystem is near collapse or nearing collapse with millions of fish and thousands of birds dying off in recent year. Birds and fish that once thrived there are now threatened with death and disease as the tons of salt and toxic contaminants that are constantly dumped into the Sea become more and more concentrated and more and more deadly over time, and the local economy is being affected by the loss of recreational opportunities.

So we have an issue here that really I think does unite us. This is an environmental issue, this is also an economic issue, and it's also a tribute to our late colleague. So I think there is much going for us to come to a solution. But we do not have a solution at hand, and therefore while we must move forward swiftly I believe we must not move forward hastily. The legislation which I introduced allows the Department of Interior to adequately review all options for restoring the Sea while complying with all environmental laws. We put a timeframe in of 18 months, and I believe it is a tight timeframe, but it is realistic.

I am very pleased with the favorable comments on the Boxer-Feinstein bill. Secretary Babbitt said "I have had an opportunity to review the legislation. In my judgment the bill is a thoughtful and practical approach." He says he looks forward to refining and implementing this important initiative.

John Flicker, the President of the National Audubon Society said that the Audubon Society strongly endorses the legislation, and we have had other comments from local people. Tellis Codekas, President of the Salton Sea Authority and President of the Coachella Valley District said "Senator Boxer is on the right track. Her legislation builds on a bipartisan local and national effort."

Mr. Chairman, I am proud of this support, and you will certainly have an opportunity to hear from the real experts sitting behind me.

Again without going into the details of the legislation let me make this point. If we waive environmental laws, Mr. Chairman, I see this project getting delayed and delayed and delayed. The people of this country want us to stand by these environmental laws, and I think when Congressman Miller says we have to push the agencies I think that is absolutely true. When I started the legislation I had a conversation with Congressman Hunter, and he said, Barbara, 24 months, I mean we've got to push it down, and we talked to the Department of Interior and they signed off on the 18 months. So I think with all of us having good will this can come to a very good ending.

In closing let me quote Sonny Bono who told USA Today "If we don't move within a year or two, it will be too late," and I think he's right. The clock is ticking and we must act now to find a solution. Scientists have warned that the Salton Sea will be dead within 15 years. It is our responsibility.

I am very proud to be here, and I'm very grateful to you, Mr. Chairman, for including me. I want to be a member of the team with all of you in a bipartisan fashion to make restoring the Salton Sea one of the greatest accomplishments of this Congress. Thank you very much.

Mr. DOOLITTLE. Thank you, Senator.
 [The prepared statement of Senator Boxer follows:]

STATEMENT OF HON. BARBARA BOXER, A SENATOR IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Chairman, I want to thank you for this opportunity to discuss an issue which is so important to all of us here today—restoration of The Salton Sea.

I am very pleased to see the impressive panel of experts that will be testifying today, and I believe all opinions will lead us to a solid legislative effort.

Last week, I introduced a Senate version of the Salton Sea legislation. The Boxer–Feinstein legislation builds from the House bill, but there are important distinctions that alleviate some of the concerns I have heard from the Department of Interior, the local community, and environmental groups.

Over the years, scientists, communities and politicians alike, have been trying to draw national attention to the decline of the Salton Sea. Our late friend and colleague, Representative Sonny Bono, who died in a tragic accident in January, worked tirelessly to make this issue an environmental priority for this Congress. I am very pleased to join the bipartisan effort to carry on that legacy.

The Salton Sea is a unique natural resource in Southern California. Created in 1905 by a breach in a levee along the Colorado River, the Salton Sea is California's largest inland body of water. It is one of the most important habitats for migratory birds along the Pacific Flyway.

For 16 months after the breach, the Colorado River flowed into a dry lakebed, filling it to a depth of 80 feet. For a time following the closure of the levee, the water levels declined rapidly as evaporation greatly exceeded inflow. A minimum level was reached in the 1920s, after which the sea once again began to rise, due largely to the importation of water into the basin for agricultural purposes from the New and Alamo Rivers.

Since there is no natural outlet for the sea at its current level, evaporation is the only way water leaves the basin. Therefore, all of the salts carried with water that flows into the sea have remained there. Salinity is currently more than 25 percent higher than ocean water, and rising.

This extreme salinity, along with agricultural and wastewater in the sea, are rapidly deteriorating the entire ecosystem. The existing Salton Sea ecosystem is under severe stress and nearing collapse, with millions of fish and thousands of bird die-offs in recent years. Birds and fish that once thrived here are now threatened with death and disease as the tons of salts and toxic contaminants that are constantly dumped into the Salton Sea become more and more concentrated and deadly over time. The local economy is also being affected by the loss of recreational opportunities.

Despite the urgency of the situation, we do not have the solution at hand and, therefore, must move forward swiftly, but not hastily. The legislation which I introduced allows the Department of Interior to adequately review all options for restoring the sea while complying with all environmental laws. The time frame of 18 months, I believe, is tight but realistic.

I am pleased with the favorable comments on the Boxer–Feinstein legislation. Secretary Bruce Babbitt said, “I have had an opportunity to review the Salton Sea legislation that Senators Boxer and Feinstein are introducing this morning. In my judgement, the bill as drafted reflects a more thoughtful and practical approach for addressing the serious environmental challenges that face the Salton Sea. I look forward to working with the Senators in refining and, hopefully implementing this important initiative.”

John Flicker, President of the National Audubon Society said, “The National Audubon Society strongly endorses this legislation by Senator Boxer. This bill sets in motion a process to determine the source of the ecological crisis facing the Salton Sea and provide recommendations on how to reverse the Salton Sea's rapid deterioration.”

“Senator Boxer's bill represents an important step forward in the fight to save the Salton Sea,” said Congressman George Brown. “She has done an outstanding job building a consensus bill that can win local and Federal support.”

And Tellis Codekas, President of the Salton Sea Authority and President of the Coachella Valley Water District said, “Senator Boxer is on the right track with her bill. Her legislation builds on a bipartisan local and national effort to save the Salton Sea.”

I am proud of this support. And today you will have the opportunity to hear more from these individuals and their organizations.

Under my legislation, Interior will report to Congress within one year on the options for restoring the Salton Sea, and will include a recommendation for a preferred option. Interior will review ways to reduce and stabilize salinity and stabilize surface elevation. They will also explore opportunities to restore the health of fish and wildlife resources and their habitats, enhance recreational use and economic development, and continue the use of the Salton Sea for irrigation drainage.

Interior then has another 6 months within which it must complete all environmental compliance and permitting activities required to implement the proposal. By the end of this eighteen month period, Interior must submit a final report to Congress, at which time the authorization for construction is triggered, allowing Congress 30 days of session to make changes in the plan, or to stop it. This 30-day wait period gives the local authorities and Members of Congress an opportunity to review the plan before construction begins. If necessary Congress can then take action to stop or modify the proposal.

I totally understand the need to act swiftly, but I am concerned about the time frames established in the House bill. I firmly believe that if we rush this process and waive or modify the National Environmental Policy Act, we will end up in court, prolonging this process instead of shortening it.

As I said, I have worked with local and Federal interested parties, most of whom are represented here today—including the Salton Sea Authority, the Department of Interior, the Imperial and Riverside Counties Boards of Supervisors, the National Audubon Society, Members of Congress, and others—to develop, what I consider to be, a true consensus bill. I would again like to thank them for their assistance and dedication.

In a December 23, 1998, article in *USA Today*, Sonny Bono said, “This is our last chance. If we don’t move within a year or two, it will be too late.” He was right: the clock is ticking and we must act now to find a solution. Scientists have warned that the Salton Sea will be a dead sea within fifteen years.

I am hopeful that with the bipartisan effort shown here today, we can avert that unnecessary disaster, and save the Salton Sea for future generations of farmers, tourists and wildlife to enjoy.

Thank you, Mr. Chairman, for holding this important hearing today. I look forward to working with you and other Members of the Committee on this critical issue. This is necessary and important legislation that will not only benefit Californians and our Nation’s natural heritage, but will also carry on the legacy of Representative Sonny Bono.

Mr. DOOLITTLE. I believe Mr. Calvert has testimony to be entered into the record on behalf of Mr. Lewis; is that right?

Mr. CALVERT. Yes. Mr. Chairman, would you entertain Congressman Lewis’ statement for the record?

Mr. DOOLITTLE. Yes. Actually let me indicate to the Members and witnesses that the full text of the statements will be automatically included as part of the record. I know Representative Chenoweth has a statement as well to submit, and anyone else up here who has a statement it will be included.

[The prepared statement of Congressman Jerry Lewis follows:]

STATEMENT OF HON. JERRY LEWIS, A REPRESENTATIVE IN CONGRESS FROM THE
STATE OF CALIFORNIA

I would like to thank the Chairman and the Ranking Member for allowing me the opportunity to participate in this important hearing and lend my strong support for this measure which recognizes the hard work of our former colleague, Sonny Bono, and addresses an important environmental issue in Southern California.

The legislation before the Committee today is a result of regular meetings of a group known as the Salton Sea Task Force. The Task Force is comprised of Congressmen Duncan Hunter, George Brown, Ken Calvert and myself. We all owe Sonny Bono a debt of gratitude for raising the profile of this critically important Western Environmental project. Without his leadership, we would not be here today moving forward with this legislative initiative.

Through this legislation, we have the opportunity to get a handle on potential solutions relating to the environmental restoration of the Salton Sea. However, if we don’t act quickly and in unison, we may be too late to make a difference. Some environmental experts have predicted that at the current rate of increasing salinity, the Salton Sea may be dead in five or ten years.

It is important for everyone to understand that the members of the Salton Sea Task Force view this legislation as the starting point of a long and complicated process. For this reason, the legislation does not pick a solution to the problem. It lays out a framework that involves all the stakeholders—the Federal Government, the State of California, water agencies, farmers, local county governments, the Salton Sea Authority, local universities, environmental groups and others—and allows them to determine the most feasible solution to the pressing environmental issues associated with the Salton Sea. Members of the Salton Sea Task Force are extremely enthusiastic and supportive of the Salton Sea University Research Consortium's involvement on a variety of fronts, including the University of Redlands' establishment of a Salton Sea Bioregional GIS Database, San Diego State University's Center for Inland Waters, and the University of California, Riverside's expertise in farming and hydrological issues.

We believe that this hearing is an important first step towards recognizing and addressing issues and concerns we may not have accounted for in our original draft. In fact, many of my colleagues from Colorado River Compact States have raised questions regarding this bill's impact upon treaties, laws or agreements concerning allocations and uses of Colorado River water. I want to be clear—this legislation is not designed to upset these fragile water rights agreements. If necessary, the Task Force is certainly open to further clarifying this important point. It is our intent that this legislation should represent a consensus and not be a source of conflict.

Before I conclude my brief remarks, I want to reiterate that this legislation is a beginning point. We all expect the Sonny Bono Memorial Salton Sea Reclamation Act to evolve as it moves through the legislative process. It is our sincere hope that the final bill will represent Sonny's vision of the once vibrant Salton Sea—a Sea which can again play host to diverse ecosystems as well as recreation and unlimited economic opportunities.

Mr. DOOLITTLE. With that we will recognize Representative Duncan Hunter.

**STATEMENT OF HON. DUNCAN HUNTER, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. HUNTER. Thank you, Mr. Chairman. It's a real pleasure to be with you, and it was good to listen to Senator Boxer, our good friend who is working on this issue in the Senate and initiated legislation with Senator Feinstein. I was thinking about the common ground that we have as she was going through the litany of elements that they have in their bill.

You know, Mr. Chairman, this body of water, which was started in about 1905 with a flooding from the Colorado River, has become a recreational resource. We were figuring out today this thing is really within driving distance of about 6 percent of the population of the United States, and a few years ago it had more visitors than Yosemite National Park, for example. A lot of working people in this country are able to get in their cars, their pick-ups, or their campers and drive from Los Angeles or the Inland Empire, my good friend George Brown's area and Ken Calvert's great district there or Jerry Lewis' area or from the San Diego area. Literally 6 percent of the American population could get in their car and drive down the freeway, get away from the boss, have a good time, camp and enjoy what at one point was the most prolific fishery, the best fishing per angler day of any body of water in America, and that was the Salton Sea.

I would ask, Mr. Chairman, that my statement be admitted into the record, and I'll just generally summarize that statement.

Mr. DOOLITTLE. That will be fine, and we will certainly include the whole statement.

Mr. HUNTER. I thank you, Mr. Chairman, and I know you've undertaken a lot of time working on this problem. You attended the

hearings that Sonny convened for us in Palm Springs and you actually visited the Sea and visited the New River area also.

And, you know, Ken Calvert, who has done so much great work on this, and of course Sonny who grew up around the Sea and knew it so well, and Jerry Lewis who is just north of there and myself and George spent a lot of time working the issue, and one thing that we discovered was the issue has been worked for a long time.

This map that you have right here talks about the Salton Sea, the salinity level, the fact that it needs to get to around 34 parts per million, and that is roughly the salinity of ocean water, and the fact that it's above that and we need to bring it back down, and you can see the diking proposal that is manifest in that particular map. That map is 1974, and that was one of the initial proposals. So we have been looking at the Salton Sea and have been getting ready to do something about it for a long time.

Just to go to the point that my good friend, George Miller made, the reason we put an expedited timeframe in this bill very simply is because the Sea is dying, and when it gets to 60,000 parts per million the Sea is dead and the fish life can no longer exist. We're at 45,000 parts per million right now, ocean water being 35,000. So you've got this problem. You've got this big sump, this big bathtub, so to speak, with no outlet to it, and the waters that come in from the New River and the Alamo River which carry mainly tail water from the massive farming operations in America and in Mexico carries a little bit of salt into the Sea, but as the Sea evaporates off with no outlet over the years since that 1905 flooding the Sea becomes necessarily and by definition increasingly saline.

So how do you get rid of the salt and how do you arrest the increasing salinization of the Sea and hold it at an acceptable level? Well there are only a couple of ways you can do it at least under modern science and do it economically. One is to dilute that water to some degree, and that can be done by putting more water in the Sea. Of course, that causes a lot of problems if you don't pump some water out because you have right now a level of the Salton Sea that actually is higher than some of the surrounding farm land. So you can expel water, and you're probably going to have to expel some water. You can dike off part of the Sea and you can allow part of the Sea to die, and that's analogous to taking an arm off so that the patient can live, or you can do a combination of that, a combination of diking and perhaps some expulsion of water.

Ken Calvert during our brainstorming sessions with Sonny had this great idea that we have a 500,000 acre bombing range immediately to the east of the Salton Sea that we could use a basin there in the bombing range to host some of the expelled saline water and then continue to flush in with the fresher water that comes through the New and the Alamo Rivers.

So there are really three elements, and I'll wind up here very quickly because you've got a lot of witnesses. We've got to handle the salinity. That's the big question, and it's going to cost a lot of money. We know that. Even in the terms we speak of today it's going to be a fairly expensive proposition, but we have to do it.

The second leg of this still is we have to solve the toxic waste and pollutant problem that comes from Mexico where the New

River flows through the city of Mexicali picking up industrial waste and sewage presently and then flows some 50 miles past the Mexican border, north of the Mexican border into the south end of the Sea. We have a massive project with the International Boundary and Water Commission right now with Mexico, and we're going to break ground this August I'm told by the Commissioner on this project with Mexicali to wean the city of Mexicali and its wastes from New River. So that will solve part of our problem when that project is completed. That is fairly well funded at this point and moving forward.

We have a second problem, and that of course is the New River itself and the Alamo River, but mainly the New River which has been polluted for many years and is considered the most polluted river in North America.

Leon Lesika, who is going to testify today, is a great leader of Desert Wildlife Unlimited who has solved so many of our wildlife problems, and this group, this citizens group that you will listen to along with the Bureau of Reclamation, Mr. Chairman, are going to build, they are proposing to build, and we have money in our bill to do this, basically 50 miles of marshes along the New River, from where the New River enters Mexico and comes into the south end of the Salton Sea, and those marshes will have a natural filtering effect. It's scientifically proven and it's used by hundreds of communities throughout this country today to cleanse water. We need to address some technical problems in our national law to allow us to do that, but I think can do that.

But cleaning up New River along with weaning Mexicali and its industrial wastes from New River and, finally, coming up with this answer as to how we arrest the salinity of the Sea are the three problems we're facing.

The bill has quite a bit more detail than that, Mr. Chairman, but I know you have a lot of witnesses, and I'll close with that.

I just want to thank you and thank all my colleagues for picking up this ball. This is going to be tough and we're going to have to move it forward and it's going to take some sharp engineering and some sharp scientific work. I think we can do it.

To my friend, Mr. Miller, I know that these time lines are important, but we're only about 6 months apart. Senator Boxer's bill is 18 months, and ours is 12, the Task Force's bill is 12. That's not much difference, and today a computing dollar will buy about four million times as much computing power as it would in 1960 or 1962. We can do a lot of things today I think that we couldn't do in the past.

So, Mr. Chairman, thank you for taking on this challenge, and to all the Members of the Subcommittee we appreciate you, and I appreciate my colleagues. You know, Sonny used to say when he would wrap up these sessions that he would summon us to can't we just get this thing done. Let's start on it, Mr. Chairman.

Mr. DOOLITTLE. Thank you very much.

Our next witness is Representative George Brown.

Mr. Brown, you are recognized.

STATEMENT OF HON. GEORGE E. BROWN, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. BROWN. Thank you, Mr. Chairman, and I ask unanimous consent to insert my complete statement in the record and I will try and summarize also.

Mr. DOOLITTLE. Thank you, and it will be included in the record.

Mr. BROWN. Mr. Chairman, I want to express my appreciation to you for your strong support of taking some action on this matter, and I want to categorically state in response to your opening statement that none of the Members of our Task Force have any intention or desire to avoid respecting the Law of the River. That would open a can of worms which we just could not cope with, and we assure you of our respect for maintaining fully the existing Law of the River and all of its ramifications. As you know, this is a very complex body of law, but it has been built up over years.

I should indicate at this point that the original Congressman from this region, the first to be elected from what we call the Inland Empire was Phil Swing, who in effect began the Law of the River when he was able to get through the Congress the Bolder Canyon Act and the All American Canal Act back in the 1920's, and in honor of the first Congressman from the region I think all of the succeeding Congressmen from the region would want to respect that.

I would also like to assure Mr. Miller that we don't want to act in haste. However, reiterating what Mr. Hunter said, after 25 years of study of this problem and after predictions made by the Bureau of Reclamation that the system would collapse in the 1980's we don't think it's premature to speed up the action a little bit, and that's our only effort. We hope that this Committee will suggest reasonable and legitimate ways of speeding up this action so that we can save the Sea from collapse.

Now the prediction that it would collapse in the last 1980's would have come true except for the fact that the Sea is now about 10 feet higher than it was when that prediction was made, and that additional volume of water has maintained the salinity level at a considerably lower level than it normally would have been. It has raised the elevation, and in raising the elevation it has cost the Imperial Irrigation District about \$40 million in damages levied by the courts or settled by negotiation with the riparian landowners. That is a very large sum of money to pay for raising the level and maintaining the salinity a little bit lower to prevent that predicted collapse.

Now why didn't we do something when for 25 years we have been looking at studies of various solutions? Because there wasn't the political will to act on this, and that's the main difference in the situation over the years and today. We now have I think the political will, and it was Sonny Bono who was the inspiration for a great deal of this along with Mr. Hunter who has pursued this just as vigorously in order to create some momentum here. I think that we ought to move ahead with a prompt, but not overly hasty solution that respects the Law of the River, and I think we can do that.

I think that this whole operation can become a test bed for what is going to be the proper solution to our overall water problems in

the West, and that is using water more efficiently. We can do that through recycling, through desalinization, and through any number of methods of conservation.

Since this is the largest available Colorado River allocation that can be conserved I think we should use every possible scientific method to show that we can use this water efficiently, and then we must respect the right of the water right holders to use whatever conservation methods that are best for them to save water and to export that water at the prevailing price that exists to those areas which are willing to pay a higher price for it. I'm bringing in here the San Diego Imperial Irrigation District Water Transfer, which I think, while it's not in this bill and probably shouldn't be, it is a key element that needs to be considered here.

Conserving water in the Imperial Valley can release anywhere from 200- to 400-thousand acre feet per year according to their own calculations, and in my optimistic calculations it could be even more than that. That kind of a willing transaction between buyers and sellers is the way that we will get the most efficient use of water, and I urge that we make every effort to do that.

Thank you, Mr. Chairman.

Mr. DOOLITTLE. Thank you very much.

[The prepared statement of Congressman Brown follows:]

STATEMENT OF HON. GEORGE E. BROWN, JR., A REPRESENTATIVE IN CONGRESS FROM
THE STATE OF CALIFORNIA

I wish to thank Subcommittee Chairman Doolittle and Ranking Member DeFazio for providing me this opportunity to express my views on H.R. 3267, the "Sonny Bono Memorial Salton Sea Reclamation Act." It was a distinct pleasure for me to work with Congressman Sonny Bono in the early stages of formulating a legislative plan for saving the Salton Sea. I feel strongly that this bill is a fitting commemoration of his dream to restore the health of the Sea and the economic value of the Sea to the region.

I believe that this bill is a valuable step in addressing the problems at the Salton Sea. I am pleased that we were able to bring this bill forward now, though I am saddened that only with the passing of a fellow Member were we collectively able to muster the political will to tackle this daunting problem. But tackle it we must, because the Salton Sea is dying. Over two-hundred thousand birds and millions of fish have perished over the last five years. The die-offs, originally occurring only in the hot-weather months, now take place year-round. The death of the Salton Sea could imperil the health of the Pacific Flyway, which stretches from Alaska, through Canada, the Western United States, and on to Mexico.

Federal agencies have been studying solutions to the mounting problems of the Salton Sea for decades; today's high salinity and ecosystem stresses at the Sea are certainly no surprise. Until this year, policy-makers have preferred to take the easy wait-and-see option. I believe that this option is now closed, and it has fallen to the 105th Congress to finally decide the fate of the Salton Sea. Should we fail to act now, we may be addressing far more expensive and draconian measures to come.

The Salton Sea is more than just a problem to fix. It is a missed economic opportunity, capable of providing the region with a much needed engine for prosperity. Both visitor-day data from the State of California and a recent economic study conducted by faculty at the University of California Riverside suggest lost economic inputs to the region are in the hundreds of millions of dollars per year. Local unemployment runs over 30 percent in some areas. We must remember that Congressman Bono, more than any other Member of Congress, stressed the need to seek a solution which would provide for restoration of the economic life of the Sea and its surrounding communities. We must strive to honor his goal in this legislation.

I've been pursuing a solution to the problems at the Salton Sea for years. Obviously, if cleaning it up were easy, it would probably have been done a long time ago. But cleaning it up will not be easy. It is going to be a very difficult process for both the Congress and the many stakeholders involved. And I believe that the difficulties are reflected in H.R. 3267. We are still very early in the legislative proc-

ess. I look forward to discussing the issues raised in the bill with fellow Members. It raises the level of understanding and participation.

As Ranking Member of the House Committee on Science, I've developed a strong interest in understanding complex systems, and I'm very interested in the improvement of processes. The Congress has worked hard to create many approaches for dealing with difficult multi-faceted problems related to natural resources and the environment. The restoration of the Salton Sea presents the Congress with a valuable opportunity to build on these approaches, to improve upon them, to learn from the lessons of implementation. Certainly, the bill is not perfect; I am relying on the legislative process to perfect it.

I would be remiss if I did not express to the Subcommittee my positions on several of the important elements of the bill. I am looking forward to testimony on the provisions in the bill which waive certain environmental reviews of the restoration process. In attempting to expedite action, the current bill may well go too far in denying citizens and local governments their legitimate rights of review under environmental and reclamation statutes. I strongly support the importance of recognizing and valuing local stakeholder interests in the process to save the Sea. The Salton Sea Authority and its member agencies have worked hard to achieve a solution, and should be recognized for their critical role. I support the need to include the Torres Martinez Band of Cahuilla Indians in decision-making, and I believe that the inclusion of the Salton Sea University Research Consortium will expedite and bring greater trust to the overall solution-making process.

I feel most strongly that this bill reflects the authors need to act. H.R. 3267 represents a landmark shift in the nation's perception of the importance of the Salton Sea. I believe this Subcommittee can provide critical input needed to perfect this bill, to achieve broad-based bipartisan support for its passage.

Mr. DOOLITTLE. We will now have the opportunity to ask the Members of our panel questions.

Mr. Hunter, if I could ask somebody to put that chart back up, and I just wonder if you could tell us on that chart if it's displayed where that military range is.

Mr. HUNTER. Mr. Chairman, obviously the top of the chart is the north there, and it's to the east basically starting almost I would say about oh 20 miles from the top of the Sea coming down this way and then 500,000 acres is the bombing range. There is one to the west also, Mr. Chairman, but the biggest one is to the east. So we basically have ranges, government property flanking on each side of the Salton Sea.

Mr. DOOLITTLE. And the spot where you believe the water could be deposited from the Sea, how many miles from the Sea is that?

Mr. HUNTER. The one spot that they identified, and George help me on this, but the spot they identified I think is about 10 miles away.

Is that accurate, George?

Mr. BROWN. If I may comment. Yes, it's very close. Unfortunately, it's up about 1,700 feet, and that has been explored and investigated and a cost analysis made of pumping water up that high, and it comes out at \$40 million a year. Now if you pump it at sea level it's only \$10 million a year. So the elevation is critical unless you can find some way to generate electricity from letting the water run back down to the Sea or something like that.

Mr. HUNTER. And, Mr. Chairman, I would offer that this is all on the floor of the California desert. I mean the Sea itself is below sea level. I think we ought to explore in this study of course the possibility of finding a lower basin. In other words, the Sea literally is at sea level, and this basin that they identified in the bombing range is up some 1,700 feet, as George said. There are a lot of spots in the bombing range that are much lower and therefore require much less lift. The government property and the training area to

the west of the Salton Sea, none of that to my knowledge is more than 4- or 5 hundred feet above sea level. So I think we can further explore that and see if there aren't some lower ranges. That was one idea that Ken Calvert had.

The complication here, Mr. Chairman, and you've opened this question a little bit, is expelling water, and we still are looking at arranging some type of an agreement with Mexico that would allow us to expel some of that water to the south of the Sea into either the Laguna Salada, which is about 40 miles away, and that's a backup, if you will, of the tributaries that go into the Sea of Cortez, or taking it all the way down into the Sea of Cortez, or running a line over to the Colorado River desalinization plant that we built for Mexico right at the border at Yuma, and that is about, what, George, 60 miles away, and taking it down that canal into the Sea of Cortez. Now that obviously would require immense cooperation from Mexico.

So Ken's common sense idea was well if we can't get that and we can't bet on that perhaps we can build evaporation ponds there on one side of the Sea or the other, and I think that's going to be perhaps a really strong consideration.

Mr. DOOLITTLE. Thank you.

Let me ask the Members for unanimous consent. I had offered to Mr. Pallone, who has now been able to join us, to testify as part of the first panel, and I wonder if we could just suspend our questioning to allow him to make his statement and then resume. Is there any objection to that?

[No objections.]

Mr. DOOLITTLE. Seeing none, Mr. Pallone, a Member of our Full Resources Committee is recognized for his statement.

STATEMENT OF HON. FRANK PALLONE, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. PALLONE. Thank you, Mr. Chairman, and I apologize. I was in the Commerce Committee and we had the Speaker and Mr. Gephardt there on the American Disabilities Act. So I just came over.

Let me just say that although I'm not a Member of the Subcommittee I have become very interested in the topic of this hearing, the Salton Sea. I actually had the opportunity last weekend to be out there and have a tour of the Sea and also talked to some of the people that are concerned about its future. I witnessed, I have to say, both the great potential of the Sea as an environmental and recreational resource and also the unfortunate problems that the Salton Sea currently endures.

It was very interesting, Mr. Chairman, because in many ways the situation reminded me of what we faced in New Jersey back in 1988 when I was first elected. My district is along the shore in New Jersey and we had medical waste wash-ups and sewage sludge and a number of other things that negatively impacted our tourism industry so that we actually lost billions of dollars statewide as a result of the environmental degradation.

I truly empathize with my colleagues from California and also the Native American tribes and others who are working to restore the Salton Sea to a healthy ecosystem because I think that if they take certain preventative measures that are outlined in this bill or

other bills that have been introduced in the Senate that they can prevent the kind of problems that we in fact witnessed and that created huge economic problems for us at the Jersey shore.

Now I represent a very different area of the country, but my constituents and I, I think, have a lot in common because we have these similar environmental and economically linked hardships. I guess my point, and obviously I think everyone here agrees, is that the environment and a good economy, the environment and job creation, all that can co-exist, and I would very much like to see a solution for the Salton Sea that recognizes the environmental and recreational potential and what that means in terms of jobs. At the same time, you look at the impacts that might affect the agricultural sector and some of the other economic sectors in the area.

If you're willing, I would like to stay for the rest of the hearing today and work with my colleagues on this Committee in trying to address what I consider to be not only a California issue, but a truly national issue. Thank you.

Mr. DOOLITTLE. Thank you.

Well resuming the questioning, let me just ask the Members that are present on this panel either who have lived there or been there to see what it looks like, would any of you be inclined to take a swim in the Salton Sea as it presently exists?

Mr. HUNTER. Well, you know, when Secretary Babbitt came out, and I think it's indicative of the bipartisan support for this project because Speaker Gingrich has spent a lot of time working on this issue, as you know, Mr. Chairman, but when Secretary Babbitt came out and he took his tour George and I got to take a tour on an air boat with him. It was a very windy day with white caps coming over the tops of these air boats, and I asked the gentleman who was handling the boats, and he said you and George can go down and get in your boat, and there was one with very high seats that was about 20 feet above the waves, and we started to walk toward it, and he said, no, that's not your boat. We had the boat with the low seats where you sit down right at wave level and you catch them right in the face. I just will tell you that I asked Leon Lesika, who is sitting behind me, the great leader of Desert Wildlife Unlimited, if he wanted to do, and he said are you kidding, and he didn't go with us.

Mr. DOOLITTLE. Well that was certainly my impression, and I didn't go out on the Sea. I saw enough from the shore. Well thank you very much.

Let me recognize Mr. Miller for his questions.

Mr. MILLER. Thank you. Just a couple of comments because I think I outlined some of my concerns. I hope my opening remarks were interpreted as a desire that we do work together. It's not about delay. Duncan, was it you or George who said that this has been around for 25 years because you didn't have the political will to do it, and now to take the absence of that political will and lay that on the head of the agencies that have got to comply with laws and try to compress this so they can't do an adequate job I think lands this back into a controversy and into court because I don't think you're going to get a removal of judicial review, and I don't think the Administration can live with that, that's their indication.

What I was suggesting is that we ought to think, and I don't know if you're going to mark this up on the 26th or what day it is, but we ought to think about trying to get a preconference. You know, I've always thought of sending good legislation to the Senate is sort of like putting your child in foster care, you may never see it again.

[Laughter.]

Mr. MILLER. You know, as soon as people know that this is what California wants, all the sudden there are multiple holds on a bill, and if we don't have the agreement of all of the parties your chances, given the limited number of days, your chances of getting it out of the Senate are the same chances you have of escaping a black hole. I just think that people have got to set aside all their ideology, whether they like environmental laws or don't, but figure out how we make this work so we can walk over to the Senate and say everybody is in agreement and this is what we want done, because otherwise it just becomes bait and I think we ought to try to avoid that.

So what I'm saying is I think thinking about this over the next week or 10 days could buy us a real shortening of the legislative process here because none of this is going to happen before this bill becomes law. If we miss this cycle it would be a shame, and that's all I'm saying. This isn't about delaying, you know, what you and Barbara have tried to do because, as you point out, on this you're only 6 months apart. That's a tiny, tiny price if you thought you were going to get success. So we'll sort it out.

Mr. BROWN. May I comment, Mr. Chairman.

Mr. DOOLITTLE. Without objection.

[No objections.]

Mr. BROWN. Mr. Miller is expressing what I think is the desire of the sponsors of this bill. If we follow normal procedures here in the Congress it will be 6 months before this bill is signed. Six months is critical. The Sea could collapse by virtue of our failure to cut 6 months off of the normal time, and the normal time if we go through all the processes, including the Congressional processes, is about two and a half to 3 years. I don't think we have that much time. If we can cutoff 6 months here and if we can cutoff 6 months of extra time in the NEPA process we should do it and we should ask the Department how to do it right.

Mr. DOOLITTLE. Mr. Miller have you concluded?

Mr. MILLER. Yes. Thank you.

Mr. DOOLITTLE. Mr. Calvert is recognized and then following his questions we will recess for the votes, two votes.

Mr. CALVERT. Just a quick question since we have to go down for a couple of votes.

Duncan, you mentioned the problems we're having along the New River and the idea of putting those marshes in. As you mentioned, this is an idea that is being used throughout the United States to clean up various toxins from water, but you have an interesting problem with the Clean Water Act. Would you like to get into more detail on what that problem is.

Mr. HUNTER. Certainly, and we really need your help. I mentioned this to Secretary Babbitt, and at least he indicated initially that he would be happy to work on it also. When we first put to-

gether this idea, the idea of cleaning up a river or a body of water with a series of ponds, is that you flow some water out and you flow it through a series of ponds and the water hyacinths or other shrubbery pull the toxics out of the water so the water is a little cleaner as it goes to the next pond, and then finally you flow it back into the river, and after you've done that for 50 miles, basically 50 miles of marshes you've incrementally, by using these incremental processes at each pond, you've cleaned up the river considerably.

The problem that was laid on us by the Imperial Irrigation District who had their attorneys look at it was they came back to us and said the way we read the Clean Water Act is if we touch this water in the New River we own it. That means that once we pull it out we can only put it back in if it's basically pure quality, drinking quality. So that means that you've lost the chance to do incremental cleanup which has been shown to work very effectively around the country.

So we need to adapt the law, and we've got a change proposed in our bill that would do that, that would allow us to pull the water out as we travel this 50 miles of New River from Mexico to where it empties into the Salton Sea, filter it through the marshes and run it back into the river, and we'll have a much cleaner river for the water that finally gets to the south end of the Salton Sea. So we do need that change, Ken, and it's a very important part of this package, and we will need a lot of cooperation.

So, George, we are all going to have to make compromises. We can't have a situation where folks say this Act is inviolate and we can't change a comma or a single letter. We do have to make some common sense accommodations so we can have a good ecosystem and so we can clean up the New River.

Mr. CALVERT. And, last, George, you mentioned the Colorado River and the Law of the River and everyone's intention to meet that law and not violate it in any way. We couldn't take any water from the river today even if we wanted to, as you know, because the Sea is at flood stage now and we can't accept any. But if somewhere down the line we were able to remove water and we were able to take water in, how much capacity is there in the All American Canal to deliver water?

Mr. BROWN. Well the canal delivers the full allocation to the Imperial Irrigation District, which is three million acre feet, plus or minus a couple of hundred thousand. I think that it's actually more now, but of course the further down the canal you get the less water it's carrying because it's being used to irrigate as it goes down. I don't think capacity for the amount of water we're talking about is an important consideration here, but I could be wrong.

My own calculations are that under a steady state where you have the salinity at the level you want, then all you need to do is remove the incoming salt. Pumping out about a hundred thousand acre feet per year and making up a hundred thousand acre feet in fresh water would do the job and would maintain the Sea stable in perpetuity as far as salt level is concerned, and an additional hundred thousand acre feet I think could be accommodated in the All American Canal. If I'm wrong, why I'll suggest some other ways to get the water in.

Mr. CALVERT. Thank you, Mr. Chairman.

Mr. DOOLITTLE. Thank you.

We are going to recess now and we'll come back after the two votes. It is the Chair's intent to take a lunch break right around noon. We should finish up with this panel I think quickly after we come back, and then we will resume at approximately 1 o'clock once we take the lunch break. So we will reconvene in a few minutes.

[Recess taken for Members to vote.]

Mr. DOOLITTLE. The Subcommittee will reconvene. We are in the midst of querying our first panel, and the Chair recognizes Mr. Ensign from Nevada for his questions.

Mr. ENSIGN. Thank you, Mr. Chairman.

Obviously coming from Nevada and being a lower basin State ourselves we are very concerned about this project, and I want to ask a couple of fundamental questions dealing with the formation of the Sea in the first place. Can you maybe just discuss the history of how it was formed.

Mr. HUNTER. Sure. The Sea was formed in the several years succeeding 1905. It was a flood of the Colorado River in which the totality, as I understand it, and George is a better historian than I am on this, but the totality of the Colorado River flooded into the basin for about 2 years. Of course early on it was a fresh water lake. I mean the salinity built up over the years.

And I want to applaud you, Mr. Ensign and Mr. Shadegg. I know you are very concerned as participants in the River Division of Water, that this doesn't infringe on any of your rights, and I think George stated, and I want to state it again that we have no intention of upsetting the division of the Law of the River or taking any bigger share.

Mr. ENSIGN. The reason I brought up how it was formed is that, first of all, you've been to Israel and have been to the Dead Sea and you've seen the Great Salt Lake and all of that. If you have no outflow naturally bodies of water will die. You know, in less artificial man-made means of, you know, tremendous amounts of money and everything what you're talking here of having an unnatural outflow to this body of water it's going to die regardless of what kind of stuff from agriculture is brought in or any of that kind of stuff. It's going to die over time. I mean I thought that part of the environmental movement of today, you know, because this thing is called an environmental restoration, but it's part of environmentalism today about going along with what is natural?

Mr. HUNTER. Well let me give my answer, and then I know George has got an answer on this thing, too. That Sea serves, regardless of how it was made, and let's say it was a man-made lake, it serves 6 percent, or is within driving distance of 6 percent of the entire population of this nation, and a lot of folks who can't afford to book a trip to go fly fishing in New Zealand on the weekend can get in their camper and they can get away from the boss and they can drive down to Bombay Beach or one of those other places where Sonny Bono used to go and enjoy the sea, and in the old days they could ski, and they had the best fishing literally. It was the best fishing per angler day in the entire United States.

I don't think anybody here is saying that we want to return this desert to pristine days. I think what we say is we want to have multiple use of a great natural resource, and that includes our farming community that the Sea serves, the agriculture basin of about a million and a half acres in Mexico and in the United States. So we want our agriculture users and the great production that comes from that is a beneficiary of the Sea. And regardless of what has happened here and how it started, a great many fresh water birds, hundreds of thousands of them use the Sea. It's a great resource for average people. Middle-class Americans can go down and get in a duck blind at one of the refuges along the Sea and can have a nice morning watching the sun come up. So it's a great resource for us.

And, incidentally, I want to tell you, you have some folks that come over from Arizona also. There are not many that come down from Las Vegas to the Sea, but quite a few from Arizona.

George has an answer.

Mr. ENSIGN. Let me just point out a couple of other things about the bill that concern us in Nevada.

One is that you've tried to put in the bill, efforts to not change the Law of the River. One of the problems that we have in Nevada is we're working on a deal with Arizona right now about banking Arizona excess water, underground in Arizona. It will help future growth in Southern Nevada. Under your bill currently you're talking about surpluses and excesses and possibly being able to use that. California right now only has allocated to them 4.4 million acre feet, and they are currently using about 5.3 million acre feet of the Colorado River. I guess the fundamental question here is that we would have no problem supporting the bill if California was willing to only use its 4.4 million acre feet.

Mr. HUNTER. Well here was the way I envisioned it, John. My district goes all the way to Winterhaven. It goes to Arizona and includes that part of the river. We have years when our farmland along the river is washed away by floods and we have to get disaster relief. That water flows down and flows into the ocean. So it's not used by Arizona, it's not used by California and it's not used by anybody. It just flows into the ocean. So I think that you're eminently reasonable and, incidentally, our options may not even involve using excess storm water or years when you have excess rain water. I think it's reasonable that you don't want to have any infringement on water that you folks would use in Arizona or in Nevada, but I think it's unreasonable if we have a decision that we are going to let water flow into the Pacific Ocean rather than use it to restore this great resource.

Mr. ENSIGN. Just two quick points if I may make about this. First of all, Nevada right now is building a new pipeline from Lake Mead coming into Las Vegas. It's a \$1.7 billion project and we're funding it all ourselves. In other words, we didn't come to the Federal trough to feed from the Federal trough. We're doing it all ourselves.

The second point is that the surplus in the Colorado River when you have surplus years, is allocated and is not your excess, but it's the surplus above what normally flows down from the river. When a surplus occurs everybody along the Colorado River has their allo-

cation increased, and that would be one of the things that we would want to definitely have protected within this legislation.

Mr. HUNTER. Well I would say this. I think we can all work together and make this thing work and come to a solution, and I understand the nervousness. If you mention the word Colorado River, I was told if the word Colorado River was used all of Arizona's and Nevada's ears went up. I think we can do this thing without infringing on any of the water that you folks need.

Incidentally, it was good to see you at that meeting that we had on the Nevada testing site where your folks there from your district were concerned about getting some of that money from the Federal trough and we're going to work with them on that project, and you made a great speech. But seriously, I'm being facetious, I think we can work as partners on this, John.

You know, water has been historically, it has been the issue over which Westerners like us have big fights, but we also ultimately come to some pretty darn good agreements to serve our people well, and you and Mr. Shadegg are the best advocates for your folks, and we appreciate that. But I think we'll be able to work this thing out, and I want to work with you.

Mr. ENSIGN. OK.

Thank you, Mr. Chairman.

Mr. BROWN. Mr. Chairman, would you be kind enough to allow me to respond briefly to the gentleman's question?

Mr. DOOLITTLE. Sure. Go ahead. We'll use the balance of Mr. Calvert's and my time.

Mr. BROWN. There are two points you made and I would like to respond to each.

First, Salton Sea is a natural lake, and at periodic intervals it has been both a fresh water lake and a salt water lake. If you travel down there you will see the line established by the old lake level along the mountains there. Sometimes it's several hundred years between inundations, but it's formed naturally by the flow of the Colorado River across its delta, and on occasion it breaks out of the delta channel and the whole thing flows into the Salton Sea and creates a fresh water lake.

Mr. ENSIGN. So it's sort of an evaporation pond.

Mr. BROWN. Right. It has always been an evaporation pond, and there has been a hugh Indian culture around that lake during those times when it had water in it.

Mr. ENSIGN. Actually the whole State of Nevada used to be under water as a lake.

Mr. BROWN. Right, and parts of California, including Death Valley. So I'm not urging that we necessarily think in geologic terms. The last inundation of that lake was only 400 years ago. At the time that Columbus came that was the largest fresh water lake in the West.

Now the other point you made had to do with the utilization of surplus flows. California expects to live by its allocation. It is working diligently to live by its allocation. It's seeking to create new water through conservation and recycling. You have every right to insist that we continue, the Secretary is insisting that we continue, and we will continue.

You need to do one other thing. You need to establish clearly in either this legislation or other legislation your right, all of the Basin States, to bank water and to sell it either intrastate or interstate and get the benefits from the sale of that water that you're entitled to. At the present time if you neither bank it or sell it it either flows to the ocean, as Duncan mentioned, or we snap it up in California as surplus water, and that cannot continue. You deserve to get the same benefit from surplus water as California does.

Mr. ENSIGN. Thank you, Mr. Chairman.

Mr. DOOLITTLE. Thank you.

Is there any objection to the gentleman, Mr. Pallone, sitting with the Subcommittee? Mr. Pallone is a Member of the Full Resources Committee.

[No objections.]

All right. Seeing no objection, Mr. Pallone will be invited to join us up here.

Mr. DOOLITTLE. The Chair recognizes Mr. Shadegg.

Mr. SHADEGG. Thank you, Mr. Chairman.

I just want to followup on some points that have already been raised and discussed to some degree.

First of all, I'm not sure, Mr. Brown, that I don't disagree with at least one point you just made. I believe that the Law of the River already clearly allocates a hundred percent of the water, and that at least in Arizona as a result of a combination of the Law of the River and of some very forward-thinking laws we have enacted as a State that we have the absolute right now to bank water, and we are in fact banking water. We are banking water underground and there is the issue of whether or not that water may some day be sold outside of Arizona. That may be a legal question, but beyond that we have the right to take all of our current water and we have the right to bank it, and Arizona is already aggressively banking water. So I don't think we need to address that in this legislation at all.

Second, I think I have the understanding of everyone that is involved in the sponsorship of this bill and the indication from the Chairman that he is amenable to the same point, that language can be added to the bill which says directly and clearly that the bill doesn't change the current allocation and doesn't alter the Law of the River in any way. Are we in agreement on that?

Mr. HUNTER. Absolutely, we agree with that.

Mr. SHADEGG. Beyond that then California, as I think we are also in agreement, has the right to use either some portion of its basic allocation or in those years where if in fact it turns out there is a surplus, and as a result of El Niño there will be this year, because the current Law of the River clearly allocates a portion of the excess or surplus flow to California, and indeed allocates the largest portion of the surplus or excess to California, and California is free to use that water as well and to deliver it through the existing canal system. We're agreed on that.

Mr. BROWN. May I comment on that?

Mr. SHADEGG. Sure.

Mr. BROWN. The problem with the surplus water of the Colorado River, and as you indicate it is fully appropriated at the present

time based on average flow, and probably overly appropriated, but the trouble is that the Colorado flows anywhere from one half its average flow to twice its average flow. When you have half the average flow there is a shortage all over the basin, and when you have twice there is an inability to handle that. In Southern California of course we're building more surface reservoirs as well as probably some underground reservoirs to help capture some of that water, shall we say, and to normalize the flow of the river by storing it in reservoirs.

The proper way to do this is of course to utilize very possible technique and technology to maximize the usable water in the river, and we fully support doing that both through storage and through the right to transfer the water by any entitlement holder to a willing buyer who is willing to pay for it, and that may need some clarification, or any other similar device, and we would like to work with you in establishing that very clearly.

Mr. SHADEGG. I think we are in agreement with the exception that I believe in your remarks you create the implication that when the river is at its highest possible flow that water is not already allocated, and in point of fact it is already, every drop is already allocated. There is some question about whether it can be used, but the Law of the River allocates every single drop even in those highest flow years because the Secretary of Interior has the legal ability in high-flow years, and by the way he can also in low-flow years do the opposite, but in high-flow years he can declare that there is an excess and the law then allocates that excess amongst the Colorado River Basin States. So my only point is that since the law currently allocates the entire flow of the river in its highest conceivable flow we do not need to change that in this legislation.

Mr. HUNTER. I would hope, John, that you and John Ensign wouldn't argue, you know, understanding the fact that you have the allocation on paper under the Law of the River, but we still have surge times and flood times when you have a lot of water going into the ocean and that you wouldn't insist on water that is going into the ocean in practical fact not being used, if it could be used, to reduce the level of salinity in the Sea to use that.

Mr. SHADEGG. Absolutely not.

Mr. HUNTER. That's what we're talking about.

Mr. SHADEGG. What I would object to would be a change in the law which would supposedly deal with that water which is now as a practical matter in fact flowing into the ocean in a different way than the law currently deals with it. The law gives you, California, the right to take the vast majority of that water, and quite frankly right now you can't, we can't and nobody can. By the way, Mexico has a legal right as well to a portion of that water.

Mr. Chairman, with your indulgence I would like to ask one more question.

Mr. DOOLITTLE. Without objection.

[No objection.]

Mr. SHADEGG. Just to clarify one separate point from that issue having to do with the Colorado River and the flow of the river, two things are my understanding. No. 1, it is my understanding that the Imperial Valley Irrigation District, IIP or whatever it is, already was planning to spend, and the number I heard was some-

thing in the neighborhood of \$60 million to clean up the Salton Sea itself, and I would hope that whatever the Congress does does not displace any existing commitments for funding toward this task, and I would be interested in your assurance on that point because beyond my concerns about the Colorado River I have fiscal concerns.

The second point, and let me just wrap them into one question and then you can talk and they won't cut you off, whereas they might cut me off. The second point is it is also my understanding that the most advanced best management practices, particularly ditch lining and laser leveling of crop fields, are not fully being utilized in the Imperial Valley at this time and that there is currently under consideration the fact that they are going to begin to do that and that there then will be water savings, and it is my understanding that if those water savings occur there were plans in the works to take the saved water and actually by pulling it out of the further north canal deliver it to San Diego which is in a water shortage itself, and I would be interested in your comments on that point in terms of the long-term implications for the Salton Sea.

Mr. HUNTER. Sure. First, I think you've hit, John, on the overall problem with the conservation of water in general in the Southwest and the work or the cooperation between rural areas and the urban areas. If you're a farmer who is getting water for \$15 or \$20 an acre foot it's not in your economic interest nor can you afford, for example, to do tail water recycling, lining of all the ditches and other things, although we've done a lot of that in the Imperial Valley over the years, but it's very difficult when you're buying the water at that price. To the urban user, whether you're in Arizona or California, if you're paying \$500-plus per acre foot at the margin it's in your interest to do things that will free up that water.

So working together, the Imperial Irrigation District and the people of Imperial Valley who democratically elect that institution and the city of San Diego, which is at the tail end of the metropolitan water aqueduct, are coming to an understanding in which basically folks that live in the city are going to pay for water which otherwise would flow off of fields that could be reused, the tail water pump back systems, and likewise are paying to line canals and do other things that otherwise would allow the water to seep into the desert sand. So it's really a pretty good working partnership.

Now the effect on the Sea, and I think this is one reason why George has brought out very properly the emergency situation that we have, the Sea hasn't died in recent years as was predicted because we have more water in the Sea. We've had lots of farming operations there and lots of water delivered to the Sea and it's higher than it was predicted to have been.

When we pull down the amount of water that is going to the Sea through New River and Alamo River, which is largely the result of farming operations because of the new conservation practices, you're going to have a lower shoreline there. That means you're going to have a concentration of salt, and that means that the increased salinity could reach a crisis stage earlier than we think. So that's another one of the dynamics. So what we have here is we have all the partners on the river as one element and we have Mexico as a party which in several of options has to cooperate. We

need their cooperation or we can't exercise those options. You have the complication of the Mexicali pollution, the New River pollution, and then the fact that your Sea is shrinking in size.

Now with all those problems, as Sonny Bono said, why can't we just do it. I think we can put our heads together and come up with a practical solution that is not going to use up all the money in the treasury and that is going to maintain this enormously important resource and leave our Arizona and Nevada friends well satisfied. I think we can do it.

Mr. SHADEGG. The commitment of the Imperial Irrigation District that was existing to do cleanup work, are you aware of that?

Mr. HUNTER. Well here is what we have in the bill. I mean this is a 1974 proposal that showed what we could do, and there were several Congressmen over the years who were interested in trying to get something going, but obviously you're talking of something in terms of the funding sales, and this has to be Federal, State and local. What we have is a requirement in the legislation that the Secretary enter into a memorandum of understanding with the Governor and with the Salton Sea Authority that basically divides the cost, and there is going to be cost sharing. Obviously the local agriculture area or the area that is associated with the sporting uses of the resource can't support a project of this magnitude, but we have in place a mechanism for cost sharing that will be arrived at with the Secretary and with the Governor of California and with the Authority.

And, incidentally, the Torres Martinez Tribe is very much a part of this. Art Lopez is here with them and he is going to testify today. They're another important player. They have some of their lands submerged in the Sea, and Sonny was very, very concerned that they be treated equitably in this project.

Mr. SHADEGG. Thank you, Mr. Chairman.

Mr. DOOLITTLE. Thank you.

Mrs. Chenoweth is recognized.

Mrs. CHENOWETH. Thank you, Mr. Chairman.

Mr. Hunter and Mr. Brown, I do want to go on record as saying that I enthusiastically endorse the concept of this project. I very much endorse it. It may sound strange to some of my conservative friends, but I believe the Federal Government has an obligation to repair the damage that they did in 1905 when they destroyed the dike upon the construction of the American Canal. That is what caused the formation of the Salton Sea and the Federal Government has turned a blind eye to their responsibility there.

But I have some technical questions that I would like for you to think about. Even though the Sea was accidentally formed it is surface water and therefore it does belong to the State of California. So the way the bill is constructed I worry about the authority that we're giving to the Federal Government.

Now I believe that we the Congress should fund the project. We should repair the damage. But what we're doing in this bill, on page 7 with regards to relationship to other laws, we are allowing the Department of Interior to get out from under their obligations under the reclamation laws, and it was under the reclamation laws that the problem was formed in the first place.

Now what are we creating here? It appears that we're giving over the Salton Sea and the operation of the Salton Sea, taking that property that belongs to California and giving it to the Federal Government. The Federal Government never does as good a job as the State does. I would much rather see us just block grant to California the money that we owe them and they could get this thing done far quicker than the Federal Government could.

Another concern that I have is that there is a training range down there, and once that property belongs to the Federal Government, and under what authority I don't know. It's not under reclamation. I mean this bill takes them out from under reclamation. So how are they going to manage water when it's outside of reclamation and we haven't identified what it is.

The second problem is, and Mr. Hunter you have worked with me on the training range in Idaho, and I think that I mentioned to you that one of the problems, big problems that we've had in Idaho is that the Department of Interior wants to control air traffic above their properties, and I worry about that here, and I worry about the future of the training range.

I think that if the Congress bellied up to the bar and did what they were supposed to do in terms of funding the project, and I think that we would like to be able to name it, but I think it should be placed in the hands of the State, and I think that is consistent with State water law and the Law of the River and the California Compact.

And, furthermore, in the proposed bill we also have the Congress stating that the Secretary shall employ agencies of the State government. It doesn't state that the Secretary can help coordinate studies and so forth. It states here that the Secretary shall require certain agencies of the State government to do certain things, and it doesn't say the Secretary shall provide them with money.

So I think we're handing something over to the Federal Government that may get us in deeper soup than if we just lived up to our obligations and funded the project and let the State take care of their resources that we damaged.

Mr. HUNTER. Excellent questions, Helen. Let me tell you why I think the Federal Government is uniquely the lead player in this project. Because of some elements that you don't generally have in a project like this, no matter which option we take with respect to the salinity problem, Mexico is a key player, and one reason is the New River that flows north through Mexicali and into the United States, when it enters the United States is the most polluted river in North America. We right now have this project with Mexico in Mexicali trying to wean Mexicali from the New River and stop that sewage and those raw pollutants from going in there.

Also we have in these options that are potential options here, and we've addressed the Colorado River a lot, but really another source of excess water is Laguna Salada, which is kind of a back water of the tributaries of the Sea of Cortez. It backs right up to the border, and if you look at our map there it's about 40 miles south of the south end of the Sea, and it comes almost up to the Mexican border.

So we're going to have to work with Mexico to make this thing work in any event, and if we use one of the options that involves

expulsion of the salt water into Mexico, or it was even suggested at one time you have a line pump in and pump out through the Sea of Cortez. We need their cooperation.

You also potentially have the desalinization plant and the canal that serves that plant at Yuma. This is an international project, and when you have an international project we have a system that is set up that works pretty well, the International Boundary and Water Commission, but also the Federal Government has with respect to these water projects along the border, has a pretty good rapport and a pretty good working relationship with Mexico. It's a lot easier for them to handle the ball there than it is for the States. So we do have a requirement that they enter into an agreement with the State. I mean the Governor of the State of California has a lot to say about this program, and that's necessarily so, and also the Governor of the State and the State of California and the Salton Sea Authority are obviously partners in the cost sharing aspect of this also. Because it sits rights on the border and we involve Mexico I think this is one of those cases.

Now with respect to the bombing range and whether or not the bombing range is going to be infringed on, let me just say as a guy who represents that area that that is an enormous resource just like your training range is in Idaho. My contemplation here is that if we use part of the bombing range as a deposit for a salt evaporation area that that will be done with an understanding that it is simply an easement into the range and that there is absolutely no inhibition of the practices of training or fighting of both our Navy aviators and our Air Force aviators at that range.

We have people from all over the country, units now that rotate into that range and use it. It's very valuable and you can fly 365 days a year there, and we will not inhibit that use at all. I mean that would be a very important thing I think to all of us and to the National Security Committee. So if we used it, as long as we're bombing it we're using it as a bombing range. It seems like that would be compatible to have a salt evaporation place there, but I know Ken Calvert has strong feelings on that, too, and he would join with me in seeing to it that we would not inhibit that national security utilization.

Mrs. CHENOWETH. Thank you, Mr. Hunter, and I just want to let you know that those of you in California have given a lot of thought to this project. The precedent that this may set of course is of concern to all of us in the West who deal with the western water law and the national security issues and the international treaty issues that you will have to deal with are of concern. I just hope that we're dealing with the right agency. Other than that so long as the State's sovereign rights to control and govern their surface water remains intact, then I'll be very sanguine and supportive of it.

Mr. HUNTER. Thank you, and thank you for your work as a real champion for States' rights and for private property rights.

Mr. DOOLITTLE. Mr. Pallone, you are recognized for any questions you may address.

Mr. PALLONE. Thank you, Mr. Chairman.

I as an outsider who just went to look at the Salton Sea for the first time this past weekend, I just wanted to ask sort of a general question of my two colleagues.

When I was there, it was somewhat surprising to me to see this large body of water surrounded by major recreational activities, for example, in Palm Springs, which isn't very far. Then when I took the helicopter tour I noticed that I guess historically there had been homes built for recreational use. In other words, people that built homes around the Sea who were obviously, you know, using it as a marina for recreational purposes, but that that had seriously declined from what I could see because of the pollution problems. There were homes that were actually under water and there were many that seemed to be abandoned. Of course I was told that the agricultural interests essentially use the Salton Sea as a place where the runoff, I guess from their agricultural pursuits and the water that they use to irrigate the area, it's sort of the basin for that.

What I guess I wanted to ask you just very generally is—isn't there a real possibility because of the proximity to L.A. and because of the fact that you have Palm Springs nearby, isn't there a real possibility for this area to develop as a major recreational site, I mean to bring new homes in and people who would use the area for fishing, sports activities and whatever? And is it necessarily so that by doing that that you impinge on the agricultural interests? I mean it seems to me that you could still have, you know, major agriculture going on, but still have this area develop as even more of a recreational site. I guess I'm kind of getting the impression, or I got the impression from some, that maybe the agricultural interests would just as soon have it used as a basin for their waste water, but to me it seemed that in the long run that the recreational activity was extremely valuable and could co-exist with agricultural interests.

Mr. HUNTER. Let me give just a real short answer, but I want George Brown to comment on this because he was born in my district, and I was born in his district, and we've been real partners on this thing as Sonny has.

First, agricultural interests have saved the Sea because the New River basically consists of agricultural runoff. As George so eloquently stated, the death of the Sea was projected to be in the mid-1980's when we would reach 60,000 parts per million and we would totally lose the fishing resource and the wildlife that attends that. It didn't happen because of the agriculture water that flows into the Sea. If you cutoff New River and Alamo River, which is the runoff not only from American farming but also farming in Mexico, the Sea would be dead now.

And, second, the folks that I know, and I've spent a lot of time there, I mean you could find me out there on, you know, a dike on the Salton Sea at 5:30 in the morning with Leon Lesika crawling through the mud hunting, and if we get this thing cleaned up we're going to be out there catching some of those corbina which still exist in the Sea. We have a bird festival there that the Valley and the farmers really love that attracts thousands of people each year. So I think the community, the agriculture community and the Sea

really appreciates it, and they're common sense guys and ladies and certainly we can co-exist.

With respect to development of the Sea, and the Chairman of Torres Martinez is going to testify, he is right here with us today, but of course that is in the cards and could be done. Sonny Bono had great dreams for this. I mean he would summon us to his office and he had drawings and plans and lots of things that could be done, particularly in conjunction with the Torres Martinez Tribe which has thousands of acres submerged under the Sea. So I think all those things can be accomplished in a multiple use.

George.

Mr. BROWN. It was Sonny Bono's genius that he perceived the value of the kind of recreational, commercial and other developments that you've talked about. Much of what already existed of this sort has been inundated as the Sea rose. The Irrigation District has had to pay out close to \$50 million, and I will submit the detailed figures on that, to compensate for the inundation of the areas surrounding the Salton Sea, and they are as much interested in stabilizing the level as anybody else because only then can you get the full commercial, recreational and other development potential that exists there.

Mr. PALLONE. Thank you.

Mr. DOOLITTLE. The Subcommittee is going to recess until approximately 1 o'clock. In the event there is a vote in progress at that time it will reconvene following that vote.

[The Subcommittee recessed for lunch at 12:10 p.m.]

[The Subcommittee reconvened at 1:28 p.m, the Hon. John T. Doolittle, Chairman of the Subcommittee, presiding.]

Mr. DOOLITTLE. We will reconvene the Subcommittee and begin with Panel 2.

Let me ask the panelists if they will please stand and raise their right hands.

[Whereupon, David Hayes, Douglas Wheeler, Tellis Codekas and Richard Bunker stood, raised their right hands and were duly sworn by the Chairman as follows:]

Do you solemnly swear or affirm under penalty of perjury that the responses given and statements made will be the whole truth and nothing but the truth.

Mr. HAYES. I do.

Mr. WHEELER. I do.

Mr. CODEKAS. I do.

Mr. BUNKER. I do.

Mr. DOOLITTLE. Let the record reflect that each answered in the affirmative.

Gentlemen, we appreciate your being here and indulging the Committee in the votes and so forth. We will try and move as expeditiously as possible.

We have as our first witness on this panel Mr. David Hayes who is Counselor to the Secretary of the Interior.

Mr. Hayes, you are recognized for your testimony.

Let me just jump in and say that the lights are a guide. When the red light goes on the 5 minutes is up. That doesn't mean you have to cutoff in mid-sentence, but we do have a lot of witnesses

this afternoon. So we ought to try and be as expeditious as possible. And with that please begin.

STATEMENT OF DAVID HAYES, COUNSELOR TO THE SECRETARY, DEPARTMENT OF INTERIOR, ACCOMPANIED BY ROBERT JOHNSON, LOWER COLORADO REGIONAL DIRECTOR, BOR, AND MICHAEL SPEAR, PACIFIC REGIONAL DIRECTOR, F&WS

Mr. HAYES. Thank you, Mr. Chairman.

As you mentioned, I am David Hayes, Counselor to Secretary Babbitt. I appreciate the chance to appear here today on behalf of the Administration on this important piece of legislation.

I am accompanied today by Bob Johnson, Regional Director of the Lower Colorado Region of the Bureau of Reclamation, who is behind me, and also Mike Spear, who is the Regional Director for the Pacific Region of the Fish and Wildlife Service, and they're available for questions if you so desire.

I'm going to be brief this afternoon, Mr. Chairman, and I ask that my written statement be submitted for the record.

As you know, Secretary Babbitt visited the Salton Sea last December for technical briefings and for consultations with governmental officials. In connection with that visit and those discussions, the Secretary publicly announced his concern for the environmental condition of the Salton Sea and his interest in moving forward with a plan to address the problems facing the Sea.

The Secretary also acknowledged the need to pull together the many local, State and Federal players so that their efforts could be coordinated to move out on this issue quickly and in lock step and in a goal oriented fashion. Based on these principles, the Secretary announced two key initiatives.

First, he suggested that the United States and the Salton Sea Authority, in close cooperation with the State of California and the Torres Martinez Tribe, initiate a NEPA/CEQA review of the Salton Sea in order to evaluate the potential alternatives for addressing the Sea and doing so in a disciplined timely manner in accordance with the standards set forth under the National Environmental Policy Act. The Secretary's goal then, as he stated then and has repeated, is to take full advantage of the work that already has been done in connection with a study of the Sea, but to do it right with a thorough NEPA analysis on a fast track.

Secondly, the Secretary, because he recognized the need for more coordination in terms of the research and science activities going on at the Sea, suggested that the four key governmental authorities involved in the Sea, the Federal Government, the State of California, the local Salton Sea Authority and the Torres Martinez Tribe, form a Research Management Committee to obtain input from scientists and to coordinate policy choices on implementing needed research on a real-time basis and folding that science into the NEPA/CEQA process that needs to get underway in full flower over the short term. It is his idea that the science should be front loaded so that it will be of utmost utilization in the NEPA/CEQA process.

These initiatives are moving forward. The NEPA process has begun. Meetings with cooperating agencies have been held, ar-

rangements with consultants have been made, a work plan is underway, the Bureau of Reclamation is hiring a new manager for the project, and there is a close working relationship that has been continued between the Bureau of Reclamation and the Salton Sea Authority and particularly on this subject with outreach to the State of California and others. Also, the Research Management Committee has been formed. The Committee has appointed a Chair of the Science Subcommittee, Dr. Milt Friend, and the Science Subcommittee is beginning its work.

It is within this framework that the Secretary and the Administration considers H.R. 3267. Much of this legislation and its goals match the goals that the Secretary and the Administration have laid out for the Sea, but it does depart in certain important respects that I would like to highlight here briefly, more in terms of highlighting issues that we need to work together on than to suggest that there are impediments to coming together on a bill that can have bipartisan support.

First with regard to the environmental analysis of remedial actions at the Sea. As mentioned in my written testimony, the Administration feels strongly that we need to be open minded about the potential alternatives and the appropriate alternatives for remediating the Sea. We should not be at this point limiting ourselves to two or three potential types of solutions. We need to get more input on a short-term basis to make sure that what we analyze are the potentially available options and we do it in a disciplined way.

We are concerned about the timeframe that is in this bill. We do not think that it's practically feasible within a 12-month timeframe to do a NEPA evaluation on as large and complex a project as this, plus do the environmental permitting that is contemplated within that 12-month period, and plus do the construction specification work that the bill anticipates all to be done within 12 months. The Secretary is committed to working this EIS on a very fast track basis, but this kind of timeframe in our judgment is not feasible.

On the science side we think that it's important that the science effort be funded fully and appreciate the interest of the Congress in increasing funding. We think it's important that the charge of the Science Committee not be too narrow, and we think that it's important that the actual priority decisionmaking on the science side be done by governmental officials who are accountable for their actions, although we encourage the support of the University Committee and their availability in actually implementing much of the science work that is going to need to be done once those decisions are made.

Two quick final points. I see the red light is on. As mentioned in my—

Mr. DOOLITTLE. Let's hear your points.

Mr. HAYES. Thank you, Mr. Chairman. As mentioned in my statement, the Emergency Action Title, Title II, is of great concern to us. We think that moving forward with beginning to pump out saline water before the end of the year without knowing the end location for the water and without knowing the availability of water coming in and replacing it presents some serious practical problems as well as serious potential environmental problems, and

we would want to do a full review before taking any kind of action like that.

In terms of funding, a couple of points. The Secretary has indicated an interest in and a willingness to accelerate the level of attention that the Department will give to this matter. More money certainly would be helpful in that regard. We do not have the kind of money in our current budget or our fiscal year 1999 budget request to undertake the type of effort that seems to be contemplated here. So we assume that supplemental funding authority would be needed in order to effectuate this.

And, finally, as mentioned in my written testimony, we are concerned about the potential preauthorization of \$300 million for the potential project that would spin out of the environmental analysis. We think it would be more prudent to identify the project and to seek authorization and appropriation for whatever amount is appropriate to the selected project.

That concludes my statement, Mr. Chairman. Thank you for the opportunity to be before you today.

Mr. DOOLITTLE. Thank you very much.

[The prepared statement of David Hayes may be found at end of hearing.]

Mr. DOOLITTLE. Our next witness is the Honorable Douglas P. Wheeler, Secretary for Resources with the State of California.

Secretary Wheeler.

STATEMENT OF HON. DOUGLAS P. WHEELER, SECRETARY FOR RESOURCES, STATE OF CALIFORNIA

Mr. WHEELER. Good afternoon, Mr. Chairman. My name is Doug Wheeler and I am the California Resources Secretary, and am pleased to represent Governor Wilson and the State of California in commenting on this bill. I will ask that my full written testimony be submitted for the record, and I will attempt very briefly to summarize that testimony in the interest of time.

Let me say, first of all, that Governor Wilson thanks you, Mr. Chairman, and the Subcommittee for this hearing and for the expeditious consideration that you are giving to H.R. 3267. The State of California supports strongly the objectives of this legislation and believes that the Salton Sea resource is one of national and State significance quite obviously whose issues and problems have been long standing and which deserve our very close and immediate attention.

There is a history, as you've already said, of efforts to deal with these questions. The State has been involved in virtually all of those up to and including the effort that Mr. Hayes has just described which was initiated by Secretary Babbitt last fall in consultation with the State. We were in part responsible for the establishment of the Salton Sea Authority in the belief that the Authority ought to provide and can provide local leadership in addressing the issues of the Authority, and you will hear from its very capable President in a moment. At least four of our State agencies have continuing roles to play, including our Department of Water Resources, our Department of Fish and Game, our State Water Resources Control Board and our Department of Parks and Recreation.

Despite these early efforts, and there have been studies, as you know, by the Bureau of Reclamation in cooperation with the State, and there has been a Congressional Task Force even prior to the untimely death of Congressman Bono, there are still more questions than answers about what needs to be done first to restore the Sea and then to protect it on a sustainable basis over time.

You've heard described the many issues which need to be addressed using sound science as the basis for a recovery strategy. Those include the problems of evaporation and the resulting salinity, they include the water quality impacts of urban and agricultural runoff, and those include fluctuations in sea level which threaten the economic viability of adjoining properties.

So I think it's fair to say and to summarize the State's position as urging that we move expeditiously now to capitalize on the momentum which seems to exist in a bipartisan spirit, but that we do it methodically making use of the science and making use of the processes which are already in place. We have some studies, as I've said, that recommended a number of options. Those were to have been the focus of the process which Secretary Babbitt announced last fall. Similarly we have a Research Management Committee which is underway, as you have already heard. It, too, has the capability of reaching out to those who can provide it and obtaining from them science that will inform an appropriate solution.

I want to underscore something that was said this morning. It is our belief that if we pursue here a flawed procedure either because we avoid judicial review or the possibility of judicial review or environmental review or the possibility of environmental review we run the risk of contaminating the entire result, which is something that none of us would want to have. It is important I think to have both an effective and expeditious procedure as we also have a perfect, not an imperfect solution.

In conclusion let me just say that I echo the sentiments of millions of Californians, and particularly those who live in the Basin of the Salton Sea, that it is a tarnished treasure. We believe its luster can and should be restored, and working together we believe that this legislation will make that possible.

Mr. CALVERT. [presiding.] Thank you for your testimony.

[The prepared statement of Secretary Wheeler may be found at end of hearing.]

Mr. CALVERT. Next is Tellis Codekas.

STATEMENT OF TELLIS CODEKAS, PRESIDENT, SALTON SEA AUTHORITY, ACCOMPANIED BY TOM KIRK, EXECUTIVE DIRECTOR, SALTON SEA AUTHORITY AND PAUL CUNNINGHAM, DIRECTOR OF EXTERNAL AFFAIRS, IID

Mr. CODEKAS. Thank you, Mr. Chairman.

On behalf of the Salton Sea Authority, thank you for the opportunity to address the Subcommittee and to comment on the Sonny Bono Memorial Salton Sea Reclamation Act, H.R. 3267. I am Tellis Codekas, President of the Salton Sea Authority.

The Salton Sea Authority is comprised of the Counties of Riverside and Imperial, and the Imperial Irrigation and the Coachella Valley Water Districts. The Torres Martinez Desert Cahuilla Indians and a host of Federal and State agencies are ex-officio mem-

bers of the Authority. The Authority is at the hub of a wheel which includes dozens of national, state, regional, tribal and local stakeholders. The Authority recognizes the vital importance of the Sea as an agricultural drain, an environmental resource, a recreational destination, and an economic development engine.

Introduction of this legislation and the companion legislation in the Senate represent important steps forward in reclaiming and restoring the Salton Sea. Enacting legislation to save the Sea is a fitting tribute to the man who was very much responsible for the current drive to save and restore the Sea. The Salton Sea Authority and its member agencies strongly support the central elements of H.R. 3267 and look forward to working with the Committee and the Congressional Salton Sea Task Force on this proposed legislation.

The Authority was established in 1993 and has been working closely with Federal partners, particularly the Bureau of Reclamation and our State partners, particularly the Resources Agency and Cal-EPA on developing a consensus to restore this important resource. Until a year or so ago much of our effort went unnoticed. The Sea was not viewed as a high national priority, but times have changed and we are thankful for the change in relation to the Sea. We need the help of our Federal Government.

The Secretary of Interior became personally involved in our efforts in December. The Secretary acknowledged the interagency and multi-interest effort that we had already developed. He confirmed the Department's commitment to this effort and established a structure to address biological and other studies.

We are committed to the process that the Secretary and the Authority agreed upon. The proposed legislation largely builds on the existing process and we support the areas where it does so specifically, particularly findings acknowledging the Federal interest, project requirements consistent with those developed by the Authority, commitment to exploring multiple options in the feasibility study, and authorization of appropriations which will allow completion of the feasibility, environmental analysis and permitting work.

Unfortunately, there are also provisions in the bill which do not reflect our process or local needs.

First of all, the memorandum of understanding referred to on page 6 seems to suggest a new process and a new feasibility study. We think it ought to confirm the roles of the Federal lead agency, the Department of Interior through the Bureau of Reclamation, and the local lead agency, the Salton Sea Authority, in completing our current work program.

Secondly, limitations of administrative and judicial review under the National Environmental Policy Act may be counterproductive. As the co-lead agency we still must meet the requirements of the California Environmental Quality Act. Waiving NEPA provisions sends up a red flag to the very interest groups that we are working very hard to include in our restoration efforts, such as the Audubon Society.

Thirdly, the Secretary of Interior, the Authority, the Torres Martinez and the State currently sit on a Research Management Committee. The Committee was so composed to ensure limited conflict of interest, management oversight of research conducted, and to

move expeditiously on research needs. The inclusion of a fifth member from the university community is disconcerting. The universities may well receive some share of research funds and having them make recommendations on fund distribution is an apparent conflict of interest. Additionally, research imperatives and their pace should not jeopardize plans to quickly restore the Sea. We do not support including any representative on the Management Committee that may create a perception of a conflict of interest.

There are other provisions in the bill which raise questions.

My red light is on. May I have two more minutes.

Mr. CALVERT. Go ahead.

Mr. CODEKAS. The Authority applauds the Members of Congress and specifically the Congressional Salton Sea Task Force for recognizing that stabilizing and reduce the Sea's salinity is the highest priority. However, the Emergency Action specified under Title II of the bill may be counterproductive.

Title II directs the Secretary to expulse water out of the Salton Sea by December 1 of 1998 to accommodate diversion of, presumably, Colorado River water into the Sea. However, given that the mechanics of how the water will be pumped out, where the seawater will be pumped to, how the project will be funded, designed and constructed have not been worked out, this Title and its deadline are unworkable. Such an emergency action is an overwhelming technical, financial and political challenge by the deadline imposed. Preferably, the bill should direct the Secretary to work with the Authority through our current effort to identify and design an emergency plan to stabilize the Sea.

Perhaps the greatest tribute to the late Congressman found in this bill is its intent to fix the Sea's problems quickly. The Authority thanks Congressmen Hunter, Brown, Calvert and Lewis for their commitment to expediting the recovery efforts.

I am thankful that the Speaker has shown a commitment to this effort and that our two California Senators have introduced similar legislation to this bill. We hope that the President signs restoration legislation within a few months. Still, the clock is ticking for the Salton Sea.

In the interim, the Authority and the Bureau of Reclamation can accomplish a great deal under our current \$5 million work program. Federal funds authorized under Public Law 102-575 are being matched with State and local funds to carry out this work plan. Commitment by the Administration to proceeding on our work plan will help all of us to get a jump-start on whatever legislative deadline Congress establishes.

We are thankful for the opportunity to speak before you today. The Authority represents the local interest in reclaiming this important resource.

At this point, while not part of my written testimony, but because of all that has gone on today I would like to briefly address the issue of using surplus Colorado River water. In discussions with Colorado River Basin representatives they have expressed concerns about using excess Colorado River water to restore the Salton Sea. The Authority, the Coachella Valley Water District and the Imperial Irrigation District have never assumed the use of so-called excess Colorado River water to reclaim and restore the Sea,

and we have continuously expressed our concern that any such language in the Salton Sea bill could jeopardize passage.

To terminate I would like to say we stand ready to work with our partners and to do so quickly. The Authority's Executive Director, Tom Kirk is here to address any questions that you may have. Additionally, Tom Veysey, one of our board members and a Supervisor of Imperial County, and Paul Cunningham, Chair of the Authority's Technical Advisory Committee and Director of External Affairs for the Imperial Irrigation District are here to serve as resources to you. Thank you.

Mr. CALVERT. Thank you, Mr. Codekas.

[The prepared statement of Tellis Codekas may be found at end of hearing.]

Mr. CALVERT. Next is Mr. Richard Bunker, Chairman of the Colorado River Commission of Nevada.

You may begin your testimony.

**STATEMENT OF RICHARD BUNKER, CHAIRMAN, COLORADO
RIVER COMMISSION OF NEVADA**

Mr. BUNKER. Thank you very much, Mr. Chairman.

I would like to express our gratitude on behalf of the State of Nevada and Governor Bob Miller for the opportunity to appear on behalf of H.R. 3267, the reclamation of Salton Sea. My name is Richard Bunker, and I'm Chairman of the Colorado River Commission of Nevada.

In the past month or so several of my colleagues from Southern Nevada and I had an opportunity to go into the Salton Sea area as well as the Imperial Irrigation area and parts of Arizona, and at the time were given a very in-depth briefing by the people of both Arizona and California regarding the reclamation efforts of the Salton Sea. We went on this tour to convey basically to our Nevada policymakers one simple reality, that when it comes to the Colorado River water Nevada is very inextricably connected to the actions and the activities of our sister States, both Arizona and California.

As a member of the Colorado River Commission for the past several years I have learned that issues involving the Colorado River are really like a never ending soap opera with intricate, slow-moving plots and subplots, and unless you follow the program faithfully it's very difficult at any given moment to know who is romancing who and why. We in Nevada have been romanced by almost everyone at one time or another, including the interests behind the Salton Sea Authority.

Let me say we appreciate and are supportive of the objectives of the Salton Sea interests and we support that over all plan. However, we feel that H.R. 3267 has a lot of work to be done on it before it meets that criteria. I would just underscore it's primarily because the arithmetic on the Colorado River just doesn't work, and I will get into that in a minute.

I also would like to for your record issue a disclaimer, that the comments that I am making about this bill should in no way be taken by any of the California interests that we are siding with one

side or the other in the California water war between the agricultural and the urban areas.

Our problem is that today California is using approximately 5.2 million acre feet of Colorado River water when its entitlement is only 4.4 million. The additional water that has been coming from Arizona and Nevada as its unused entitlement is part of the overall entitlement of the Lower Basin. Arizona and Nevada along with the four Upper Basin States have for years been urging California to implement a plan to reduce its usage to the 4.4 million acre feet that it has been allocated. I am pleased to tell you that in the past couple of years this plan has been talked about. As of right now they have not reached a resolution, but they have been working on it.

I wouldn't want you to misunderstand. California has a very absolute contract right to the water that they are using. However, we think it is very dangerous for them to base any type of long-term activity, and particularly Federal legislation on temporary water. Within the next several years Nevada will be using up its own meager supply of 300,000 acre feet, and we also will be attempting to use some of the unused apportionment and surplus water.

Unlike California, however, we have a plan that is in place and it is being worked on at the present time for the day when all of the Lower Basin water will be put to use. As the Department of the Interior moves forward to approve regulations which will allow Colorado River water to be banked in Arizona we intend in Nevada to avail ourselves of that opportunity to the point of hopefully being able to bank somewhere in the area of 100,000 acre feet annually for the next several years. I would underscore the fact that we are waiting for the Department of the Interior to move forward with those banking regulations.

The other thing we would indicate to you is that Nevada, unlike California, has no agricultural buffer. We know that there is a lot of conversation going on between agricultural and urban interests in California and would suggest to you that some of the water that is going currently into the Salton Sea, if the arrangements are made between the San Diego Water Authority and Imperial Irrigation, a lot of the water that is going to be transferred because of that negotiation is going to be water that ultimately would not be going into the Sea because it will be conserved water from that Irrigation District.

I will bring my remarks to a conclusion, but we would suggest to you that before any further Federal demands for water are created California should first implement a plan as to how they are going to live within the 4.4. We believe that, Imperial, Palo Verde and the Coachella Irrigation Districts are going to have to enter some substantive plans to conserve water, and we are opposed to the legislation as it is currently written because we believe that it brings about a huge dependency over and above what they currently have for the State of California on Colorado River water.

I thank you, Mr. Chairman, for your time.

Mr. CALVERT. I thank the gentleman.

[The prepared statement of Richard Bunker may be found at end of hearing.]

Mr. CALVERT. We have a vote in process right now. There are approximately 7 minutes left, and then there is another vote following on passage. So we will stand in recess, and I'm sure there will be some questions as soon as we return, which will be approximately in 15 minutes.

We stand in recess.

[Recess taken for Members to vote.]

Mr. CALVERT. [presiding] The Committee will come to order.

Mr. Lewis has asked to join us at the roster if there is no objection.

[No objections.]

Mr. CALVERT. It's approved.

I'm going to ask a quick question. I know Mr. Lewis has some time constraints.

I'm going to first ask Mr. Hayes, in your testimony you referred to the restricted time constraints in the bill. Mr. Hayes, I understand that in past positions you've been involved in CERCLA litigation. As you know, that law was established to remediate our nation's worst abandoned hazardous waste sites. When that program was established Congress did not want cleanups to be hindered by judicial challenges—I'm going to move over here and let the Chairman take over.

Mr. DOOLITTLE. Go ahead.

Mr. CALVERT. [continuing] and wrote Section 113[h] of CERCLA so that parties may not challenge Superfund cleanup remedies before they are completed. The Supreme Court has recently upheld a lower court ruling that in fact Congress did not want Superfund cleanups hindered by judicial challenges. The members of the Salton Sea Task Force that have introduced this measure before us today have those same concerns, that because of the deteriorating and dangerous environmental conditions at the Salton Sea Congress should provide that the cleanup is not hindered by judicial challenges. Also, this Administration, as have past Administrations, has enacted legislation that limits administrative and judicial review in a number of areas and for a variety of reasons. In light of this information your statement that "In the Administration's view, it is inappropriate to shortcut the remedies afforded by the environmental laws in the name of environmental protection" appears schizophrenic at best. Do you agree with the Congressional Task Force Members that reclaiming the Salton Sea should proceed without being hampered by dilatory litigation?

Mr. HAYES. Congressman, it is a very rare circumstance I think that the Administration is comfortable with overriding the environmental laws. In the context of NEPA I think we've got a very good track record on both sides of the aisle of doing NEPA reviews and with the courts not interfering with actions that are selected as the result of an EIS process.

As you know, the standard for enjoining a project based on NEPA violations is quite high, and only in the case of an egregious violation of NEPA would judicial review potentially interfere with the administration of a project. And if those circumstances in fact took place, it may be appropriate to have the courts review the NEPA process. The Administration does believe that any departure from the normal course of NEPA review, and NEPA in particular,

one of the central environmental laws, the first and the one with which we have had the most history, that departures are not warranted and in fact have been quite rare.

Mr. CALVERT. One point, and then I'm going to ask the Chairman to take over again and recognize Mr. Lewis, but you mentioned that you were not in favor of preauthorization on this bill. Well Secretary Babbitt, as I understand it, has endorsed the Senate version of the bill which also asks for preauthorization. So are you opposite of Mr. Babbitt's position?

Mr. HAYES. No. Mr. Babbitt's statement was that he is encouraged by the Senate bill. He finds it to be, and I believe the quote was, a more practicable and feasible approach, but it needs to be refined, and once refined, implemented. He did not endorse all aspects of the bill. The Administration has a concern, a budgetary concern about preauthorizing \$300 million for a project that is not yet identified. But, as the Secretary has said, and I hope these comments will be understood in this light, the Secretary is extremely interested in working closely with the Congressional Task Force, as exhibited by his visit, in getting legislation that will work, but the Administration is concerned about the preauthorization, and that concern extends to the Senate bill.

Mr. CALVERT. Thank you, Mr. Chairman.

Mr. DOOLITTLE. Thank you, Ken.

The Chair asks unanimous consent to have our colleagues, Duncan Hunter and Jerry Lewis join us up here on the panel.

Is there any objection?

[No objections.]

Mr. DOOLITTLE. Seeing none, you're official.

Mr. Lewis, we welcome you.

Mr. LEWIS. Thank you very much, Mr. Chairman. It's unusual to have these circumstances, but as you know I was scheduled to testify earlier and Mr. Calvert was kind enough to submit my written testimony. The Appropriations subcommittee hearing is still going on that I'm responsible for. So I'm going to have to run back shortly.

The reason I wanted to come back was because it is my understanding that there may be some disagreement, a serious disagreement between some of the members of the panel who have a similar interest in the Salton Sea to my own, but apparently the lines of communication that contain a serious gap and I'm quite concerned about it. I wanted to come and formalize those concerns before the Committee.

Mr. Codekas, you know that during my last 4 years in the State Legislature and my first 4 years in the Congress I had the privilege of serving the Coachella Valley. We've had long-term contact here as well as long-term interest in the Salton Sea, but over these years there has been virtually nothing done about solving this problem.

Following the tragic death of Congressman Jerry Pettis he was replaced by my predecessor, Shirley Pettis and, as you may remember, she raised the question of the Salton Sea as her No. 1 legislative issue. In those days because of a lack of intensive involvement of legislators on both sides of the aisle from Southern California, Shirley was the only point person really carrying the cudgel. Com-

petition for environmental spending in Northern California made this idea difficult. Eventually, the whole project, idea and thought pattern were set aside. The Salton Sea has continued to deteriorate, and we are at the point where it is all but gone in terms of a usable and valuable asset.

In the last couple of years we have been successful at raising the issue in a way that would suggest that maybe, just maybe the National Government will do more than just pay lip service to this problem. As you know, because we have studied and restudied and analyzed and reevaluated this problem for over 30 years, 2 years ago I had the opportunity to put a million dollars in a bill that involves a subcommittee that I happen to Chair that suggested that maybe people a little bit away from the valley where, we all have special interests in this environmental problem should take an independent look at the issue.

I had the audacity to suggest that maybe the University of Redlands might be able to look at all the studies that had been produced and give us some evaluation. That was in the fiscal year 1977 VA HUD bill. Last year we put another million dollars in the fiscal year 1998 bill to have that work continue to formalize itself. But beyond that we were able to put \$5 million in a pool that could be used by the Authority to assist in looking at those alternatives and taking some constructive steps toward a solution that would be a comprehensive solution.

I know that over all these years in frustration the local people who have an interest have essentially said, my God, we had better do something and let's opt on the cheapest solution, which is diking. I don't know if that is the right one or not, but I do know that there are many, many alternatives that involve recognizing the impact of pollution coming from the New River, that recognize that there are problems from the Mexican border that are multiple and that a very complex solution that be involved if we deal with Mexico. There are suggestions about the value of the possibility of pumping out and using evaporative ponds. There are a whole array of ideas.

It seemed to me that there is a need one more time for those people who are just outside the region, to help us evaluate those alternatives. A coalition of universities has come together. Redlands isn't just going to do it by itself, but rather some of the finest minds in the country dealing with the environment are going to help us take a look at this.

I'm concerned about two things. It's my understanding that at least among members of the Salton Sea Authority there are those who think that we should not have the universities involved, and that baffles me. If that's the case we'll take the \$5 million back and my committee can use it some other way.

The other line that I heard that came from this morning's meeting was a suggestion that we shouldn't fund or have money in to deal with the New River, and, my goodness, if there is a problem that needs to be addressed, the New River is in that category. I remember Clare Burgener talking about that when I first arrived in Congress. It is the source of one of our major difficulties.

Would you please clear the air for me and tell me if I'm wrong. If I'm not wrong, then just let me know and I would be glad to see

if we can use that funding for public housing or some other purpose.

Mr. CODEKAS. Well with your permission, Congressman Lewis, can I have our Executive Officer answer this for you?

Mr. LEWIS. If he is the guy who is the source of those ideas I would love to hear from him.

Mr. CODEKAS. Tom Kirk.

Mr. DOOLITTLE. Before you answer raise your right hand, please.

[Whereupon, Tom Kirk comes forward, raises his right hand and is first duly sworn by Chairman Doolittle as follows:]

Do you solemnly swear or affirm under the penalty of perjury that the responses given and the statements made will be the whole truth and nothing but the truth?

Mr. KIRK. I do.

Mr. DOOLITTLE. Thank you. Why don't you introduce yourself and tell us your official position. You can sit down there and grab a microphone.

Mr. KIRK. Tom Kirk, Executive Director of the Salton Sea Authority.

Mr. Lewis, first, thank you for all of the work you have done in helping to appropriate significant amounts of funding for the effort.

In terms of Authority's position on the university involvement, I can say without any hesitation that the Salton Sea Authority absolutely supports the university's involvement in the effort, and the question is how should that involvement be structured.

The Salton Sea Authority in fact has a current contract with the University of California at Davis and with the Department of Water Resources through the Resources Agency. We support the efforts of San Diego State University. Dr. Stuart Hurlbut has been very active at the Sea and he has been one of the few researchers that has been out there for many years. And with the University of Redlands we have had continuing discussions with them. We see their role as being absolutely instrumental with their geographic information system in assembling the existing and the new information that we develop.

So, yes, I think the impression that you have that the Authority is against university involvement isn't correct. We see the university involvement as being absolutely critical. In fact, one of our concerns is one provision in the bill that would have the universities sit on a panel, the Scientific Management Committee, and that in fact that may preclude them of further involvement.

The way the panel was set up by the Department of the Interior it was made very clear that that Science Management Committee could have no ties or very limited ties to actual research. It was to guide the research. We are concerned that the universities on that panel may limit their ability to accept funds for research. Hopefully that clarifies that issue.

May I also say on the issue of the \$5 million, we again thank you for providing that funding. There are a couple of points on that. One, we would like to continue to use it. Public housing may be a very good use for that funding.

Mr. LEWIS. Maybe the Coachella public housing.

Mr. KIRK. I know some people who would be very interested in that, but we are much more interested in using that funding for

the Salton Sea recovery effort. When I came on board back in November I was told money wouldn't be a problem. We've got \$5 million through your good efforts and the Congressional Task Force efforts. We have \$2.5 million through State funding. As our President knows, we haven't seen dime one, not just dollar one, but dime one of either of those. We are very close on the State funding. We are working through the Cal EPA, and I think in the next 30 days we will have access to that \$2.5 million.

On the \$5 million in funding the Authority assumed incorrectly back when I was hired that that money would simply come to the Authority and then we could use it for our current work program doing the engineering analysis, the environmental permitting and the like. We found out a couple of months ago that in fact that funding travels the same route that the Redlands funding did, and that was through an EPA office that the process took on the order of 12 to 14 months to complete.

I have worked with your contacts at the University of Redlands to help us with our proposal, and we have had many discussions with them and we are hopeful with the help of the Research Management Committee and Milt Friend to put a proposal in to EPA in short order.

Mr. LEWIS. Mr. Kirk, let me respond in this way. It is my understanding that you, Mr. Kirk, argued internally relative to the University Consortium staying in place, but the board has taken a different position than that. It's the position of the board that concerns me a lot for I do think that there is great value to be had here by the kind of evaluation and re-evaluation that they can provide.

Your comments about EPA, I'm very sensitive about and appreciate. My subcommittee is responsible for funding their budget. I can tell you this, that they have a new grant administrator in place as of this moment, and it's my understanding that the grant administrator is quite anxious to work with us to expedite this process. That certainly should be a relief to everybody who is so concerned.

Mr. KIRK. What I can pledge to you, sir, is that the Salton Sea Authority will take your concerns and I know concerns shared by the rest of the Congressional Task Force and we will take a look at our position related to university involvement. I can assure you again that we want to see the universities very much involved and we want to find a way to structure that involvement that makes sense locally and for you.

Mr. LEWIS. I appreciate that.

Mr. HUNTER. Mr. Chairman, could Mr. Lewis yield to me briefly on that point just to followup.

Mr. LEWIS. I yield.

Mr. DOOLITTLE. He is kind of out of time, but I'll try and be as generous as I can.

Mr. LEWIS. You are more than generous, Mr. Chairman.

Mr. HUNTER. I'm looking at the provision that we have where the University Consortium is a part of the Salton Sea Research Management Committee. The membership is made up of the Secretary, the Governor of California or appointees of the Secretary and the Governor of California, and, No. 3, the Salton Sea Authority, No.

4, the Torres Martinez Desert Cahuilla Tribal Government and, No. 5, one person appointed jointly by the California Water Resources Center, the Los Alamos National Laboratory and the Salton Sea Research Consortium. Now that means that the universities in terms of power or what you call potential conflict of interest have one third of one fifth of the influence on this particular structure, and if you divide that up further by the universities, each university basically simply has a seat at the table, but in no way can I see the leverage that would amount to a conflict of interest here. The reason for having this is that the Committee shall select the topics of study under this section and manage these studies.

I think it's important to have our academic experts and the people who have done the research involved in a discussion as to what the topics are going to be and how this study is going to proceed, and I don't see a problem there. So that was one area where I hope that you folks will take another look at this thing.

Mr. KIRK. We will, and thanks for putting it into perspective, Mr. Hunter. I would like to add that on the existing \$5 million in funding we do plan on working with the universities even on that. We have already bounced some ideas off the University of Redlands and we hope to involve the others.

Mr. Lewis, you did address the issue of the New River funding as well.

Mr. LEWIS. Yes.

Mr. KIRK. I was surprised by your comments because the Salton Sea Authority and, as far as I know, all of our member agencies have not taken any position opposing the funding for the New River.

Mr. LEWIS. I'm pleased to hear that, and I could be in error. I do know that that funding, or at least I have heard that that funding has been eliminated or is not a part of the Senate bill, and that is of some concern to me, but it may be just a lack of communication on our part.

Mr. KIRK. We had nothing to do with that elimination as far as I know.

Mr. LEWIS. I appreciate that. Let me speak to the university representation in a different way. I have always strived in my lifetime to have people think I was an academic. Having failed that, I've got a couple of kids who are. They don't work for any of these universities, but in the meantime it's just the association with them that helps my image. So I'm anxious to have them at least be my representative on them one way or another. Anyway, we appreciate your response and appreciate working with you.

Mr. KIRK. Thank you.

Mr. LEWIS. Thank you, Mr. Chairman, very much.

Mr. DOOLITTLE. Thank you.

Mr. Hunter, did you finish your questions?

Mr. HUNTER. Just one or two here, Mr. Chairman, and thank you for letting myself and Mr. Lewis sit on the panel, too.

First, one reason why we had in our bill this to some degree elimination of the judicial review and challenge is because, and, Mr. Hayes, I would address this to you, because your boss, Mr. Babbitt who really has his heart in the right place on this project

has seen with his own eyes that this Sea is dying. The last thing we want to have, and especially if we start seeing less water going into the Sea and salinization accelerate, the last thing we want to have is to be part way down the line on a project which is basically a function of decisionmaking by your boss. I mean the product that we have when we pick the option is going to be presumably led by your organization, and the last thing we need is to have is some off-the-wall organization, not a responsible conservation organization, but some third party go forum shopping.

We know one thing Sonny Bono hated was what he called judicial activism and to find a judge who stops the project, and as a result of that the 200,000 birds that have died so far in the Salton Sea are joined by literally hundreds of thousands of other waterfowl, and we get to the point where the Sea will not allow fish to survive because of increased salinization. So I would hope that you understand the importance for that.

I think what we tried to track when we put that together was the same acceleration and the same limitation on judicial review that we've had with things like the Alaskan pipeline, and certainly you've seen it, too. I mean it was mentioned by Mr. Calvert that that has occurred in other places. But this is going to be largely your decision on how we move ahead with this in consultation with some other agencies. If we make a responsible decision we need to move quickly. I think that's a key here.

Let me just ask since Jerry touched on it briefly, and we're going to have a panel on New River. New River is something we can do right now. We can start working it and do that concurrently with the big project in cleaning up that river through a series of 50 miles of filtering marshes. I think it's a great concept, and I haven't met an academic or a person coming from the conservation community who doesn't like it. It's relatively inexpensive compared to other things that you can do and the prospect of having to have a plant to pull some of the pollutants out of that river.

So let me just ask, Tellis, since you're before us now, you folks do endorse the idea of moving ahead at the same time in this project of cleaning up New River with a series of marshes and it's a partnership between the Bureau of Reclamation and IID and of course Desert Wildlife Unlimited?

Mr. CODEKAS. How would you want us to work this?

Mr. HUNTER. Well we have in our bill, and the Senate bill doesn't have the \$2 million, but we start out with \$2 million for the initiation of the cleanup of New River, and what that would be is a couple of these initial ponds because the idea is you build a series of marshes along New River. We've got about 50 miles of river there, and as you flow the water, you flow the water out of the river through the marshes, the aquatic plants pull the pollutants, some of the heavy metals out and some of the sewage pollutants out of the water, and then flow it back in.

So we've got to basically put our first couple of ponds in place, and we can do that right now and do some experimentation with them and see what types of water plants work the best, do some work in terms of engineering and basically work that project of cleaning up New River in concert with the major Salton Sea project. So we have \$2 million in the House bill to do that for New

River. The Senate bill doesn't have that, although they do mention that we do need to work on all the rivers, New River, Whitewater and Alamo. Do you folks favor this second track project to clean up New River?

Mr. CODEKAS. I can't answer that. I will have to ask Tom Kirk. This has to go through our Technical Advisory Committee before it comes to the board.

Mr. KIRK. Mr. Hunter, I will be very brief on this issue. We haven't addressed this as the Salton Sea Authority. The Authority does applaud your efforts to address all of the sources of the Salton Sea's problems, including the New River, and obviously that's a big issue. What I can say is that I know Supervisor Veysey is in the audience, and Imperial County and the Imperial Irrigation District are very interested in the cleanup of the New River, and I believe that the County of Imperial would like to continue to work with you on how that is accomplished.

Mr. HUNTER. All right.

Mr. Hayes, do you have an answer on that? I know we gave Secretary Babbitt a very short briefing on that program.

Mr. HAYES. Yes, Congressman, and I think the Bureau has done some preliminary work with the other partners and we are open to it. We have not officially taken a position on the level of funding and that kind of thing, but we are open to that project and think it may be an innovative way to help deal with the New River issues.

Mr. HUNTER. Thank you.

Thank you, Mr. Chairman.

Mr. DOOLITTLE. Thank you.

Secretary Wheeler, what is the status of the California 4.4 plan?

Mr. WHEELER. The plan, as Mr. Bunker has already indicated, is under development by the Colorado River Board of California. The Governor has indicated that it is a very high priority because we take seriously the warnings we've had from Secretary Babbitt and from our neighboring States on the Colorado Basin that we cannot subsist on the margin between our allotment and that surplus which has been declared in recent times. We have shared with the other States a draft of the plan and we have invited their comment. I should use this opportunity to say we intend, no matter what outcome of this investigation relative to the Salton Sea, to live within California's 4.4 million acre feet allotment.

Mr. DOOLITTLE. Do you mean to begin immediately to live within that or will it be phased in over a period of time?

Mr. WHEELER. Ultimately to live within it as circumstances dictate. We have a surplus this year and, as has already been said, we may have one next year.

Mr. DOOLITTLE. As long as we have a surplus we're legitimately entitled to have that as well, right?

Mr. WHEELER. Exactly, a share of it, our share of it.

Mr. DOOLITTLE. Right.

Mr. WHEELER. And the point is we have to be ready for that time when we don't have a surplus to live within our 4.4, and we will be prepared to do that.

Mr. DOOLITTLE. Thank you.

Mr. Bunker, I'm sorry I was out of the room when you gave your testimony and maybe you will be repeating yourself, but could you explain the concept of surplus water as it applies to the Colorado River. Could you use maybe the scenario from last year as an example and with what frequency would you expect that scenario to occur?

Mr. BUNKER. Well, Mr. Chairman, I am not a technician, but to the limits of my ability I will try to assist that. My understanding is that it is a declaration that is possible by the Secretary of the Interior each year, and that there is a process and there are criteria that have to be met before that is done.

I think one of the problems that comes back to the surplus issue is the fact that there are priorities on the river and, unfortunately, in a shortage there are some States that have a lower priority than do some of the California agencies, and I think that is what their concern is, and I think it's a legitimate concern. I think it is very difficult for any type of, whether it be Federal legislation or Irrigation District programs to be based on temporary water, and that's all you could say that surplus water is. You know, it might be great for several years, but if a drought comes, then of course it's going to be a very difficult situation.

Mr. DOOLITTLE. It is possible that someone with an existing Colorado River allocation could contribute that to the cleanup effort?

Mr. BUNKER. I think the answer to that is yes. I think it's the position of the six other Basin States that as long as California is operating within its 4.4 we really don't care where it goes or how they use it. That's an internal discussion that you folks must have. So my answer to that would probably be yes, as long as it's within the 4.4.

Mr. DOOLITTLE. Let me ask Mr. Wheeler. How many years have we been over the 4.4?

Mr. WHEELER. I don't have an exact answer for you, but continuously, and that's in part, Mr. Chairman, for the obvious reason that in addition to surplus determinations, which are made as a consequence of the hydrology of the river annually, there have been excesses beyond the allotments made to the other States and not utilized by the other States, and that, too, has been available to California. But as you have heard this morning from Mr. Bunker and from the other States, as their needs being to grow that excess over their allotments will no longer be available as well. So it's not as if California has relied unreasonably or inappropriately on that water. It's just that that water is not any longer as readily available as it once was.

Mr. DOOLITTLE. How many years into the future is it before these other States can actually take their full allotment and do something with it?

Mr. WHEELER. You would have to ask them. Arizona has taken the very strategic decision to store its water even in advance of its need and has offered to sell some of it to Mr. Bunker we're told.

Mr. BUNKER. Mr. Chairman, if I might respond to that.

Mr. DOOLITTLE. Yes.

Mr. BUNKER. The Arizona Banking Authority has set up a program, if the Federal regulations are approved by the Department of the Interior, that would allow Nevada to start banking 100,000

acre feet, approximately 100,000 acre feet each year. Now Arizona is already using that additional allotment that they have entitlement to to recharge their groundwater system. They are currently doing that from their allotment.

And in response to your question of how soon are we going to be using those allotments or those entitlements in the two States, Arizona is very close, and certainly with banking Nevada will become very close because we're going to try to bank the rest of our unused entitlement.

Mr. DOOLITTLE. Would one of you gentlemen care to volunteer an opinion as to whether it's possible under this Law of the River for one State to sell it to another State?

Mr. WHEELER. That is a determination about which we await the decision of the Secretary of the Interior, and those are the regulations that Mr. Bunker has made reference to. We might address that question perhaps unfairly to Mr. Hayes.

Mr. DOOLITTLE. OK. Mr. Hayes.

[Laughter.]

Mr. HAYES. Fair or unfair, here it goes. Mr. Chairman, the Secretary has issued proposed regulations under which he believes he has the authority under certain circumstances where there is an authorized State banking program for interstate transfers of banked water that it would be subject to Secretarial approval. Those proposed regulations were published in the Federal Register I believe just on December 31st, and the public comment period is continuing until April 3rd, and we hope to go forward with final regulations that will facilitate these transfers.

Mr. DOOLITTLE. Mr. Wheeler, is the State of California inclined to accede to the proposed regulations?

Mr. WHEELER. California has been an advocate both of banking and of interstate transfers, yes.

Mr. DOOLITTLE. So there would be no opposition to this moving forward?

Mr. WHEELER. Not to the concept generally. I have not seen the regulations themselves.

Mr. DOOLITTLE. All right. Well in the interest of time, I have more questions, but I think since we've got so many witnesses perhaps we will try and move along here.

Let me just ask a question of you, Mr. Hayes. This afternoon the idea was raised to block grant to the State of California the funds to perform the entire project as the lead agency. Would the Administration prefer this option or the current proposal outlined in the bill, and tell us why or why not.

Mr. HAYES. Mr. Chairman, I don't think this project is a good candidate for a block grant. I think rather the kind of joint approach the Secretary talked about is more appropriate. The reason I think why a block grant approach may be particularly inappropriate here is the fact that there are several Federal interests here that would be difficult to delegate through a block grant.

There is obviously a very strong interest in tribal communities in the Sea, and we as trustee of the tribes have a special responsibility toward the tribes, and that's one of the reasons why the Torres Martinez Tribe in particular with their major land holdings

is playing a major role, and appropriately so in the activities we're talking about.

Also, we have one of the major fish and wildlife resources in the entire Pacific region with the Salton Sea. The national wildlife refuge in the southern part of the Sea is a very important aspect of the whole national Federal western flyway, as Congressman Hunter and others have discussed.

And, finally, the Secretary is Water Master of the Colorado River and has special responsibilities in that role as Water Master and, as exhibited in this hearing, the Colorado River issues are quite sensitive and need to be handled with great care. Having a block grant concept of pushing those issues off to the State, certainly Mr. Wheeler and his colleagues are very well qualified to work in this arena, but we think the Federal presence is necessary.

Mr. DOOLITTLE. Mr. Wheeler, could I pose the same question to you?

Mr. WHEELER. You may, and I haven't had a chance to discuss it with the Governor of course, but I could imagine what his response might be, and therefore I will venture to guess that California would welcome this challenge, Mr. Chairman. I would say that the Chenoweth formula will soon gain credence in Sacramento. But I do want to say more seriously that we have a good record of collaboration with the Federal Government in California, and increasingly so, in which there is a recognition both of our interests and our ability to work cooperatively.

Mr. Lewis has been a major sponsor of our habitat conservation work in Southern California, and you have been supportive of our efforts in the CalFed Bay Delta solution. I think there is a role for each, and I think we can find a way appropriately to reflect those responsibilities and to share in the costs, to say nothing of the important role of local government in this new Regional Authority.

Mr. DOOLITTLE. Here is a tough one, Mr. Wheeler. As between this and CalFed which has the higher priority?

Mr. WHEELER. Which of my children do you want me to dispose of?

[Laughter.]

Mr. WHEELER. We have an answer for that, Mr. Chairman. We believe that the sequencing of timing and funding will allow you to do both. Happily, the Federal commitment to CalFed will expire with the fiscal year budget 2000 according to present plan, and according to the timetable envisioned by the bill before you today the authority will and the appropriation for this project will begin in the year 2001. So we see a continuous stream not having to choose between one or the other of these very important projects.

Mr. DOOLITTLE. Well thank you. Now are you telling us you won't be asking for CalFed money then after that time?

Mr. WHEELER. I won't be asking, Mr. Chairman.

[Laughter.]

Mr. DOOLITTLE. Let me just briefly ask you to answer this question, Mr. Hayes and then Mr. Wheeler. What percentage of the cost of all of this for the Salton Sea do you believe should be borne by the State of California and other non-Federal entities?

Mr. HAYES. Mr. Chairman, as you know, currently there is authorization for the Bureau of Reclamation to spend up to \$10 mil-

lion on Salton Sea activities. That is the vehicle under which we currently are funding the ongoing efforts, and that legislation anticipates a 50 percent cost share by the State and local interests. Our position I guess going in is that seems about right, and that it's appropriate to have a cost share and the 50/50 makes sense. We have not had significant discussions on that point, but my testimony does suggest that we could continue on that basis.

Mr. DOOLITTLE. Thank you.

Mr. Wheeler, does that figure make sense to you?

Mr. WHEELER. It sure doesn't. I'm more inclined to the 75/25 formula, Mr. Chairman, but I would note that your legislation, or this bill provides that nothing can occur until we reach agreement among the various parties about cost share, and that's probably the place in which to leave this decision at the moment. We don't know yet how much the project is going to cost, how much of the benefit could be ascribed to local interests or to State interests or to national interests, and as we get additional research and we get the feasibility study which is authorized by this bill I guess we will be able to make a better judgment about a fair apportionment of costs. But it is clear from your bill that there will be no cost sharing unless all parties agree to it, and that would be satisfactory to California.

Mr. DOOLITTLE. Thank you.

Mr. Codekas, could you discuss how the Colorado River water could play a role in solving the inflow needs of the Salton Sea while protecting existing rights and obligations.

Mr. CODEKAS. How the existing Colorado River could aid the flow into the Salton Sea?

Mr. DOOLITTLE. Yes, without violating any of the existing rights that people have.

Mr. CODEKAS. Well what is difficult about this is we are already looking at a transfer from IID to San Diego. If that goes ahead that is going to reduce the inflow to the Salton Sea more instead of expanding it. If someone could feasibly treat the water well enough to reuse it in irrigation, I could see that happening, reuse of the water if that's possible, but it really looks tough with the diversions that we're looking at today. So I can't see that you can take any of the Colorado River water and put it directly into the Salton Sea. It's all appropriated and I just don't think that can happen.

Mr. DOOLITTLE. So you and Mr. Bunker on that point would tend to be in agreement then?

Mr. CODEKAS. I am.

Mr. DOOLITTLE. Do you know of any water right holders that have expressed interest in making Colorado River water available through means of banking or permit or interim sale exchanges or other creative measures?

Mr. CODEKAS. I think U.S. Filter, Mr. Hickman has made overtures in the Coachella Valley about trading agriculture runoff to reuse or trade, but any additional water, I don't know if there is any available at this time.

Mr. DOOLITTLE. Of those that presently have water rights you know of no one then that is interested in doing it?

Mr. CODEKAS. For the Salton Sea?

Mr. DOOLITTLE. Right.

Mr. CODEKAS. At the prices water goes for now I couldn't imagine that.

Mr. DOOLITTLE. Tell us what the prices are that it goes for.

Mr. CODEKAS. Well it's going for about \$240 an acre foot to San Diego.

Mr. DOOLITTLE. Mr. Hunter, you represent San Diego, don't you? [Laughter.]

Mr. HUNTER. Mr. Chairman, could I followup on that?

Mr. DOOLITTLE. Yes, please.

Mr. HUNTER. I think we went over this idea initially when we were discussing this thing, the idea of using a flood stage river where you have water literally, as we did a couple of years ago in my district, flooding out the banks and the farms across the river from Yuma, and doing it on the Yuma side, too, that using that water in maybe a one-time effort to knock the salinity down from 45,000 parts per million to say 40—or to say 38,000 parts per million, that would dramatically buy us time, No. 1, and put the Sea back into a healthy state at least in terms of salinity for a period of years.

So I guess my question is you stated that you don't mind us doing that as long as we would use it within our 4.4 million acre foot allotment. So a question to Mr. Bunker.

If we're using more than 4.4, which we are, as Mr. Wheeler said, and have for a while, but we have a big rain year and even with your banking and your storage and other things you have flood stage Colorado River flowing past Yuma and ultimately to the Sea of Cortez, is your position that you would rather see it go into the ocean than to see us use it to flush to some degree the Salton Sea?

Mr. BUNKER. No. There are flood control criteria that are set up by the Department of the Interior and by the Corps of Engineers, and when the reservoirs reach a certain level, then by dictum from the Secretary and, if not, then by the Corps of Engineers they can release water. Now again I am not an expert in that area, and there are experts coming after us——

Mr. HUNTER. No, I'm talking about in terms of policy. You said that your policy feeling was that it was OK with you if California used Colorado River water as long as it was within their 4.4 million acre foot allotment. I'm saying assuming we obviously are using 4.4 and more already for our irrigation and our other uses, but in reality we have a flood year in which you have water physically washing away the banks of the Colorado River bed at Yuma and water flushing out into the Sea of Cortez, would it be OK if California used it at that point?

Mr. BUNKER. Of course the obvious answer is yes. I do not know if there are criteria that are set up whereby California would have the majority of that water anyway. That well could be the case.

Mr. HUNTER. Thank you.

Mr. DOOLITTLE. Mr. Calvert is recognized for an additional question.

Mr. CALVERT. I have one additional question, and I thank my friend from San Diego for asking that question because I was going to ask the same thing.

Mr. Wheeler, we have been talking about the time problem we have here at the Sea. Time allocated for the Federal agencies to

complete NEPA work, as you know, is specified in H.R. 3267. But since their work needs to be done in cooperation with the State of California, could you assure you us that the State would comply with the allotted timeframes that we have outlined in the bill?

Mr. WHEELER. Yes, we believe we could. And it's an important point because although there is talk of relieving the Federal agencies of responsibility under NEPA, of course the Congress cannot affect the applicability of CEQA, the State law, to the Salton Sea Authority, which is a State agency. So in any event we would have to comply with CEQA.

Let me make one further suggestion though, that we might expedite this process, as the Governor would want to do, by integrating NEPA and CEQA and by allowing CEQA to become a functional equivalent to NEPA so that we don't have to run two separate and redundant parallel processes. It may be a way to save some time.

Mr. CALVERT. That's a very good suggestion and we'll take that under advisement.

One other question. The State is talking about some additional bond measures on the November ballot. Are you going to include dollars within the pending statewide bond issue for the Salton Sea in November?

Mr. WHEELER. The Governor has asked for \$2.1 billion in water and parks bonds for which this project would be eligible. We have the problem as yet of getting approval from the Legislature, as you know. We failed to make the deadline for the June ballot, and we're hopeful of making it for the November ballot, but that's a matter to be determined by the Legislature.

Mr. KIRK. Mr. Chairman, could I be recognized on that question?

Mr. DOOLITTLE. Certainly.

Mr. KIRK. We have, the Salton Sea Authority has put in a request for \$50 million through our State Senator and State Assemblyman to that proposed bond measure. So it is something that we are actively working on.

Mr. CALVERT. Thank you, Mr. Chairman.

Mr. DOOLITTLE. Did I hear the figure was \$50 million?

Mr. KIRK. Correct.

Mr. DOOLITTLE. If this is a \$300 million project that's about, what is it, one sixth. That's 17 or 18 percent. So we'll have another bond issue to make up whatever the difference is.

Mr. WHEELER. That would be the State's share of course, Mr. Chairman.

Mr. KIRK. We assume that \$50 million is way beyond what our local share would be.

Mr. DOOLITTLE. Well this has been very illuminating, and I'm glad that we've taken some additional time with this panel. I hope we're not going to keep all of you too late. We may have some additional questions to address via written form and we would ask you to please respond expeditiously to those so we can close out the record.

With that we will excuse the panel. Thank you very much.

[Additional questions to be submitted and responded to for the record may be found at end of hearing.]

Mr. DOOLITTLE. We will invite the members of Panel No. 3 to come up and take their seats, or remain standing if you like because we are going to do the oath here first.

Let me ask you gentlemen please if you would raise your right hands.

[Whereupon, Christopher Harris, Art Lopez, R. Wayne Hardie and Henry J. Vaux, Jr. having raised their right hands were first duly sworn by Chairman Doolittle as follows:]

Do you solemnly swear or affirm under the penalty of perjury that the responses given and the statements made will be the whole truth and nothing but the truth.

Mr. HARRIS. I do.

Mr. LOPEZ. I do.

Mr. HARDIE. I do.

Mr. VAUX. I do.

Mr. DOOLITTLE. Let the record reflect that each answered in the affirmative.

We welcome you here gentlemen, and we will begin the testimony with Mr. Christopher Harris, Water Resources Program Manager for the Arizona Department of Water Resources.

Mr. Harris.

STATEMENT OF CHRISTOPHER HARRIS, WATER RESOURCES PROGRAM MANAGER, ARIZONA DEPARTMENT OF WATER RESOURCES

Mr. HARRIS. Thank you, Mr. Chairman and Members.

My name is Chris Harris. I am here today representing Rita Pearson, the Director of the Arizona Department of Water Resources to provide the State of Arizona's perspective on H.R. 3267, the Sonny Bono Memorial Salton Sea Reclamation Act.

I would also like to request that a copy of my oral testimony be placed in the record, Mr. Chairman.

Arizona is not objecting to the State of California's desire to develop a plan to address the long-term needs of the Salton Sea ecosystem, but it is Arizona's position that a well-thought-out and scientifically valid plan which will not harm the water supplies or water quality of the other Colorado River Basin States or Mexico has the greatest opportunity for providing a lasting legacy of the late Congressman Bono's efforts to stabilize and restore the Salton Sea.

I would like to discuss two major points regarding H.R. 3267 for the Committee's consideration. These include the identification of potential sources of water for Salton Sea reclamation, and the difficulty of using Colorado River water for Salton Sea reclamation within California's Colorado River allocation.

The passage of the Boulder Canyon Project Act in 1928 and the completion of Hoover Dam in 1935, led to the construction of numerous large dams and reservoirs on the Colorado River and its tributaries. These storage reservoirs allowed the Basin States and the Bureau of Reclamation to control flood flows, regulate the river, generate hydroelectric power and deliver water for downstream uses in agricultural, municipal and industrial sectors.

Creation of this infrastructure has resulted in a permanent dependency on the water supplies of the Colorado River. Because of

this dependency, a complex use and accounting system had evolved that has permitted the complete allocation of the Lower Basin's Colorado River Compact apportionment of 7.5 million acre feet. Based upon this accounting system, Arizona made the commitment necessary to ensure its long-term economic development through full utilization of its Colorado River allocation.

Current demand on the Colorado River by the Lower Basin States is at an all-time high. Arizona is approaching full use of its 2.8 million acre foot apportionment, along with Nevada which is close to fully using their annual 300,000 acre foot entitlement. California's present consumptive use of Colorado River water is approximately 5.2 million acre feet per year, exceeding its basic apportionment of 4.4 annually by 800,000 acre feet. Finally, the United States is also obligated, through international treaty, to annually provide Mexico with 1.5 million acre feet.

Consequently, there is currently 9.8 million acre feet of demand in the Lower Basin. Under the Law of the River, the Secretary is not authorized to deliver more than 9 million acre feet of water to the Lower Basin States and Mexico unless surplus conditions are declared. In 1998, the Secretary did declare surplus conditions, but this was an extraordinary event and is not sustainable over the long-term.

Arizona's concern is that any additional demand in the Lower Colorado River Basin will increase the likelihood of shortage to Arizona's Colorado River water supply. This concern reflects the high-risk position assumed by a significant portion of Arizona's Colorado River allocation. In order to gain California's support for the construction of the Central Arizona Project in the 1968 Colorado River Basin Project Act, Arizona was required to accept the low-priority position for about 1.5 million acre feet of our Colorado River allocation.

In that legislation, Arizona was required to subordinate CAP uses to California's basic apportionment of 4.4 million acre feet. During a shortage in the Lower Basin, cities and towns, Native American tribes and thousands of acres of croplands in central- and southern Arizona all supplied by the CAP, face a very real threat of having their water supplies seriously curtailed or halted.

Title I and Title II of H.R. 3267 propose to reduce and stabilize the salinity and the surface elevation of the Salton Sea. We interpret this as pumping a substantial quantity out of the Sea and then attempting to dilute the remaining solution through the introduction of new water supplies. Arizona is concerned that the source of this water is not identified in the draft legislation.

Currently, the Secretary of the Interior is not planning to make flood control releases during the referenced timeframes in Water Year 1998, nor are they anticipated in early 1999. It is Arizona's position that Congress should carefully consider the source of the water that is expected to be used and the timeframe to accomplish these goals.

Perhaps Arizona's greatest concern is the preservation of the historic rights and obligations with respect to the Colorado River. The State of Arizona has suggested language that could strengthen H.R. 3267 in our written testimony on page 3.

With the increased demand—Mr. Chairman, if you could give me about two more minutes I can wrap this up.

Mr. DOOLITTLE. That's fine.

Mr. HARRIS. Thank you very much. With the increased demand upon the Colorado River system and the potential risks of shortage to the Colorado River Basin States the Secretary of the Interior requested that California initiate the development of a negotiated plan among its Colorado River water using agencies to reduce their annual use from 5.2 million acre feet to the basic apportionment of 4.4.

The California "4.4 plan" proposes to reduce California's annual use of Colorado River water in two phases through the implementation of the following components: transfers of water from agricultural districts to municipal water providers in the South Coast region; transfer of seepage recovered from the All American and Coachella Canals; intensive management of surface and ground-water supplies; and Colorado River reservoir operating criteria which continue to make surplus water available.

In order to effectuate these transfers, intensive water conservation programs will be required in the agricultural districts which will ultimately lead to reduced drainage flows into the Salton Sea and thereby increasing the Sea's salinity.

Successful development and implementation of the 4.4 plan will require California Colorado River water users to make difficult decisions regarding reallocation or acquisition of supplies in order to meet the long-term demand in the State. Arizona supports this goal, but is concerned that the addition of Salton Sea reclamation through the programs proposed in H.R. 3267, could result in an inability to reach consensus on the more immediate goal of completing the 4.4 plan. Not achieving this goal risks the long-term reliable supplies of Colorado River water for the other Basin States, particularly Arizona.

To conclude, Arizona urges the Congress to amend H.R. 3267 to accomplish the following:

1. Identify all potential sources of water for the Salton Sea Reclamation Project and consider the impacts of using that water;
2. Require explicit adherence to the current Law of the River; and
3. Require that any Colorado River water utilized for the Salton Sea Reclamation Project must come from within California's mainstream allocation of Colorado River water.

Thank you very much for the opportunity to address the Committee.

Mr. DOOLITTLE. Thank you.

[The prepared statement of Christopher Harris may be found at end of hearing.]

Mr. DOOLITTLE. Our next witness will be Mr. Art Lopez, Chair of the Torres Martinez Desert Cahuilla Indians.

**STATEMENT OF ART LOPEZ, CHAIR, TORRES MARTINEZ
DESERT CAHUILLA INDIANS**

Mr. LOPEZ. Thank you, Mr. Chairman.

It's a privilege to be a representative here of the Torres Martinez and to have the opportunity to testify before you here today.

We are honored to address an issue that is of utmost importance to the Torres Martinez Cahuilla Tribe. H.R. 3267, the Sonny Bono Memorial Salton Sea Reclamation Act is a critically important acknowledgement of the dedicated efforts of the late Sonny Bono.

The Cahuilla Indians support in principal the Sonny Bono Memorial Salton Sea Reclamation Act. My people believe this Act will focus the necessary public attention and direct the necessary financial resources to restore, preserve and ultimately protect the Salton Sea.

In the process of focusing attention on the Salton Sea it is important that Congress include in any legislation its clear intent that all the key stakeholders be involved and have the opportunity to fulfill a meaningful role in the future of the Salton Sea. The Torres Martinez are a major stakeholder. Twelve thousand acres of our tribal land lies underneath the Salton Sea, and similar amounts lie adjacent to the Salton Sea. It is important that any Commission, Authority or decisionmaking bodies established under H.R. 3267 recognize the need for equal and active participation by the Torres Martinez.

In restoring and reclaiming the Salton Sea the unique government-to-government relationship that exists serves to enhance our cooperative efforts. The Memorandum of Understanding referred to under Section 101, paragraph 5, item [A] should include the Torres Martinez Cahuilla Indians. Any solution implemented as a result to this bill will affect the Torres Martinez and our tribal lands for many years. The Torres Martinez have paid their dues.

Finding a solution to the problem of the Salton Sea will require monumental scientific and engineering efforts. The Torres Martinez have waited for this kind of Congressional attention for many years, and we have always known that the Salton Sea is important. All we ask of you is to fully include the Torres Martinez in a leadership and a decisionmaking role, to fund our need for professional and scientific representation, to fund necessary scientific and engineering studies and activities so that the solutions are comprehensive and long-term and that you continue to show the leadership that you have thus far.

Mr. Chairman, at this point I would like to comment that the 12,000 acres that we have underneath the Salton Sea, we would request that consideration be given in the future toward our 12,000 acres that have been inundated for 93 years.

I thank you, Mr. Chairman, for the privilege and honor to testify today.

Mr. DOOLITTLE. Thank you very much.

[The prepared statement of Art Lopez may be found at end of hearing.]

Mr. DOOLITTLE. Our next witness will be Mr. R. Wayne Hardie, Group Leader of Energy and Environmental Analysis at the Los Alamos National Laboratory.

Mr. Hardie.

STATEMENT OF R. WAYNE HARDIE, GROUP LEADER, ENERGY AND ENVIRONMENTAL ANALYSIS, LOS ALAMOS NATIONAL LABORATORY

Mr. HARDIE. Thank you, Mr. Chairman.

As you said, my name is Wayne Hardie, and I'm the Leader of the Energy and Environmental Analysis Group at Los Alamos National Laboratory which is operated by the University of California for the Department of Energy. Although Los Alamos is best known for its work in nuclear weapons, we have significant expertise and experience in environmental issues.

The Laboratory was asked last May by the Congressional Salton Sea Task Force to provide technical support for the remediation of the ecological problems in the Salton Sea. Today I am going to report on how the results of our work in evaluation various concepts for addressing high salinity and variable water levels of the Sea relate to H.R. 3267.

Los Alamos has examined the costs, salinity and sea level changes resulting from three remediation concepts, desalinization, pump in, pump out and diked impoundment and compared these results with no action. We have concentrated on performance and economic issues and have not evaluated ecological or institutional factors in this analysis.

Due to anticipated water conservation for our analysis we assumed the inflow into the Salton Sea will literally decrease from the present flow of about 1.3 million acre feet per year to 1.0 million acre feet per year over a 20-year period. It is very important to note that the results are strongly influenced by this assumed inflow reduction. Similarly, using supposed excess Colorado River water could also have a major impact on the results.

If no action is taken the Salton Sea will of course continue to increase in salinity from today's level of 44 parts per thousand. The Sea would reach a salinity level of about 60 parts per thousand in about 15 years. Remember this is assuming water conservation. This is important because some believe that most fish can no longer live in water at this salinity level.

If there were an expensive filtering or distillation method to remove salt from high salinity water desalinization would be an obvious solution to the problems of the Salton Sea. The process could be used to reduce the salinity of the water already in the Salton Sea or to desalinate ocean water being pumped from the Gulf of California as part of a pump in, pump out scheme. While desalinization can be used to produce fresh water for urban household use, in our opinion desalinization approaches to reduce the salinity of the Salton Sea would be prohibitively expensive.

Another concept that has received attention consists of pumping water from an external source to the Salton Sea and pumping water from the Sea to an external location. The advantage of such a concept is that it has the potential to allow simultaneous control of salinity, elevation and surface area. The obvious source for pumping water is the Gulf of California which of course is at ocean water salinity. However, for this concept to be practical for salinity control without a reduction in the level of the Sea the salinity of the pump-in water needs to be considerably less than that of ocean

water. If the pump-in water is at ocean water salinity very large quantities of water must be pumped, both in and out.

Pump out achieves nearly the same result as pump in, pump out and at a much lower cost. Providing that a smaller Salton Sea by approximately 35 percent is acceptable, pump out should be considered as a viable option for the Salton Sea.

One important issue that needs to be resolved with this is the destination of the pumped water. One frequently mentioned area is the Laguna Salada in Mexico. Technically this is feasible, but would entail reaching an agreement with Mexico. Another important issue with pump out is that the salinity level would increase for about 25 years, hitting a peak of almost 65 parts per thousand before decreasing.

Another concept that has a potential for controlling salinity and elevation is the creation of in-Sea impoundment areas by diking. The primary disadvantage of diked impoundment is that part of the surface area in the Sea would be in an impoundment area which would contain very saline water. Fish would not be able to survive in the impoundment and in time this brine would precipitate salt.

Using our assumptions on inflow volumes, an impoundment area of about 10 percent of the area of the Salton Sea would allow the Salton Sea to reach ocean salinity. An estimate of the cost of an earthen dike is about \$300 million. However, such a dike would only provide salinity control and the Sea could ultimately be reduced in area by about 20 percent. A larger reinforced dike, which would really be a dam, with an impoundment area of almost 30 percent of the present Sea would be required to maintain the existing shoreline. A reinforced dike providing both salinity and elevation control would probably raise the capital cost by more than a factor of two.

Based on our analysis we conclude that:

First, desalinization is not a viable concept for salinity and elevation control;

Two, pump out is a feasible method for salinity control, but the size of the Salton Sea could decrease by approximately 35 percent, and further more the Sea would continue to increase in salinity for about 25 years; and

Three, diked impoundment could control salinity and elevation if the dike is reinforced to serve as a dam. If the dike is earthen the size of the Sea could decrease by about 20 percent. In either case the impoundment area would have high salinity water.

The ecological and institutional consequences of various concepts need to be better analyzed before a final selection is made. Furthermore, the impact of anticipated water diversion from the Salton Sea and the possible use of supposed excess Colorado River water need to be factored into the decision.

In summary, the options identified for consideration in H.R. 3267 appear to be the most feasible for reclaiming the Salton Sea. However, the elevation requirements in the proposed legislation could restrict the options. This is because the existing shoreline is the result of an equilibrium condition between historical inflows of about 1.3 million acre feet per year and evaporation, and meeting the ele-

vation requirements with a substantially reduced inflow could be a considerable challenge to say the least.

Thank you.

Mr. DOOLITTLE. Thank you.

[The prepared statement of R. Wayne Hardie may be found at end of hearing.]

Mr. DOOLITTLE. Our next witness is Dr. Henry J. Vaux, Jr., Associate Vice President of the Division of Agriculture and Natural Resources at the University of California.

Dr. Vaux.

STATEMENT OF HENRY J. VAUX, JR., Ph.D., ASSOCIATE VICE PRESIDENT, DIVISION OF AGRICULTURAL AND NATURAL RESOURCES, UNIVERSITY OF CALIFORNIA

Mr. VAUX. Thank you, Mr. Chairman.

As you say, my name is Henry Vaux, and I serve as Associate Vice President of the University of California System for Agriculture and Natural Resource Programs. I appear here today on behalf of California's Federal Water Resources Research Institute of which I formerly served as Director.

At the outset I want to thank you, Mr. Chairman, for the opportunity to appear here this afternoon and ask that my written testimony be included in the record.

The Federal Water Resources Research Institutes were first authorized by the Water Resources Research Act of 1964 and, as you are aware, that program has been reauthorized approximately every 5 years since. The program maintains Federal Water Resources Research Institutes at the Land-Grant Universities in each of the 50 States, in the District of Columbia and in the several Trust Territories. The broad purpose of the Institutes is to focus the collective research expertise of scholars in the nation's institutions of higher education on water problems at the local, regional and national levels. And to this end the authorizing legislation requires that the Institutes make their funds available to scholars at all institutions of higher education in their respective States and not just to those domiciled in the Land-Grant Universities.

In my written testimony I make three points, and I want to briefly identify those points and elaborate on them here this afternoon.

First, faculty researchers with interests in water resources at all of California's colleges and universities are eligible to compete for the Federal funds which the California Water Resources Research Institute awards.

The Institute's role is to facilitate, coordinate and support research on water resources undertaken by all faculty in California irrespective of institutional affiliation. Over the last 10 years nearly all of the Federal dollars available to the California Institute have been awarded to faculty researchers on campuses other than the University of California campuses. Thus, for example, over the last 10 years funds have been awarded to faculty researchers at San Diego State University, at Humboldt State University, at California State University at Fresno, at the California Institute of Technology, and at Stanford University.

The Institute is unique in that it maintains relationships with virtually all faculty with interests in water resources at all of Cali-

fornia's colleges and universities, and the most recent edition of our directory of water resources expertise, which provides the number of those relationships, lists some 986 faculty at 33 colleges and institutions all within California.

My second point is that the role of the California Water Resources Research Institute is to identify the high-priority research topics; to ensure through peer review that the research is directed at those high-priority topics and is of the highest quality; and to engage in programs of research dissemination to inform other researchers, water managers and members of the public of the results of that research.

The California Water Resources Research Institute does not itself conduct research. Rather, its role is to facilitate the conduct of research by faculty experts located at the State's colleges and universities. By performing its facilitation role the Institute helps to ensure that research on water resources in California is well coordinated, focuses on the most pressing topics and is of the highest quality. In addition, the Institute's activities help to avoid duplication of research efforts both within California and nationally.

My third point is that the California Water Resources Research Institute is prepared to facilitate the development and conduct of any research or programs of research that the Salton Sea Research Management Committee may identify as necessary pursuant to the provisions of H.R. 3267.

I want to emphasize as clearly as I can that our presence here today and our interest in the Sonny Bono Memorial Salton Sea Reclamation Act lies with ensuring that whatever research may emerge as a consequence of this Act is accomplished by the most qualified investigators and is of the highest possible quality.

We believe that many important questions will emerge, and we stand prepared to assist local, State and Federal officials in identifying and framing those questions, should that be appropriate. We also prepared to make our offices available to ensure that only the highest quality research projects are funded and that all of our college and university researchers with interests related to the reclamation of the Salton Sea are afforded an opportunity to compete for whatever funds may be available.

In closing let me thank you again, Mr. Chairman, for the opportunity to appear here today. Thank you.

Mr. DOOLITTLE. Thank you.

[The prepared statement of Henry J. Vaux, Jr., Ph.D. may be found at end of hearing.]

Mr. DOOLITTLE. Let me ask one of you to comment on when we anticipate this, and I know it's just an estimate, when do we think this 200,000 acre feet per year water is going to be transferred over to San Diego? When is that expected to happen?

Mr. HARRIS. Mr. Chairman, as I think I'm the only water buffalo up here let me take a shot at that. There is a 1988 agreement between the Imperial Irrigation District and the Metropolitan Water District which I believe accounts for 106,000 acre feet. The San Diego Imperial County Irrigation District proposed transfer is simply that. It is a proposed component of the California 4.4 plan. I believe that they have signed, if you will, a memorandum of agreement that they would like to advance the process. They are not yet

actually moving water. I believe the State of California as part of the 4.4 plan is attempting to put together a wheeling agreement with the Metropolitan Water District in order to facilitate moving that water through the Colorado River aqueduct to the South Coast region.

Mr. DOOLITTLE. Well in your testimony this would clearly negatively impact the Salton Sea, would it not?

Mr. HARRIS. I believe it would, Mr. Chairman. I think it's clearly in the best management practices within the district to be more efficient in their use of Colorado River water, and we believe that this is a critically important component of the 4.4 plan to make this transfer from a agricultural sector to the municipal sector, but I believe that the end result will be that there will be some diminishment of the current inflows into the Salton Sea.

Mr. DOOLITTLE. Which are already inadequate, and then we're going to add to that I gather the diminishment of the New River water flowing in as a result of Mexico's getting the reclamation plant we're building for them and then keeping and using the water.

Mr. HARRIS. I think that's another concern that is obviously worth bearing in mind. My colleague just informed me that the proposed date I believe to start moving some of that water would be about 2008. They would start stepping it up, and I think the full transfer could be complete by then.

Mr. DOOLITTLE. When they go through that are they going to have to do their NEPA compliance and all of that?

Mr. HARRIS. Yes, sir, they will.

Mr. DOOLITTLE. And is there no doubt that this negative impact on the Salton Sea will be brought out as they do those environmental studies?

Mr. HARRIS. I would assume that in the scoping of issues that NEPA and CEQA both would be evaluating that.

Mr. DOOLITTLE. Isn't there a requirement for mitigation when there is an action to be taken that negatively impacts some other resource?

Mr. HARRIS. I believe so, Mr. Chairman.

Mr. DOOLITTLE. Do you want to comment on that, Mr. Hardie.

Mr. HARDIE. Mr. Chairman, I testified that our calculations show that the Salton Sea would reach a salinity of 60 parts per thousand in 15 years under the assumptions of diversion. It would be more like 30 years without diversion.

Mr. DOOLITTLE. The first figure was, what, 15 years?

Mr. HARDIE. Fifteen years to hit 60 parts per thousand, and 30 years to hit 60 parts per thousand without diversion.

Mr. DOOLITTLE. So I would gather this would be the basis for the local entities participating in some solution for the Salton Sea given the impact they're having on this.

Mr. Vaux, you were telling us a little bit about the California Water Center. That Center receives no funding under this legislation, right?

Mr. VAUX. That is correct.

Mr. DOOLITTLE. Could you tell us what function the Center has played regarding the use and coordination of the education institutions in California.

Mr. VAUX. Well, as I have indicated, the Center has served as a coordinating body for all water resources research undertaken at the universities and colleges within California. It has done that primarily through the Federal program for which it has received appropriations since 1965, and in that connection it involves scholars on not only the UC campuses but other campuses in helping to establish with state and national officials a research agenda. Then we coordinate the research through a unified call for proposals, and the awards are the made on the basis of a fairly elaborate, but very concise peer review process which provides us with assurances of quality control, but on a very timely basis.

Mr. DOOLITTLE. What role has the Center had concerning Salton Sea research in recent years?

Mr. VAUX. The Center has had various roles related to the Salton Sea research. I can't give you the exact number of projects, but out of a research portfolio of about 30 projects annually I would judge that between one and two of those projects in each of the last 10 years have been focused on problems, either generic problems or very specific problems, related to the Salton Sea.

Mr. Tom Kirk mentioned earlier the work of Professor Stuart Hurlbut at San Diego State University on the Salton Sea, and if my recollection serves me correctly that was work on microorganisms in the Sea. That work was funded through the California Federal Water Resources Research Institute program.

Mr. DOOLITTLE. Thank you.

Mr. CALVERT is recognized.

Mr. CALVERT. Mr. Hardie, during your investigations of potential solutions to the problems of the Sea did you look into the concept of evaporation ponds?

Mr. HARDIE. Yes. As part of the diked impoundment?

Mr. CALVERT. To take evaporation ponds outside of the Sea and move them into either the eastern or western side of the Salton Sea.

Mr. HARDIE. That would basically be the same as a pump out.

Mr. CALVERT. If we were able to find a location to put evaporation ponds within several miles of the Sea, and we were able to pump out water, because right now how many thousand acre feet determines the flood stage now in the Sea? How much water should be pumped out to bring it to a stable elevation?

Mr. HARDIE. I can give you a few statistics here. There are 7.5 million acre feet of water in the Salton Sea currently. In a normal year or an average year about 1.3 million acre feet of water enters the Sea. Now if you are asking how much has entered say in the past year—nobody is really measuring the water going into the Sea.

Mr. CALVERT. I guess the question is this. At the present time there is too much water in the Salton Sea and we're flooding out several farms in the area and some riparian habitat. How many hundreds of thousands of acre feet would have to be removed to bring it back to a reasonable level?

Mr. HARDIE. I don't have that number. I mean I could easily get it.

Mr. CALVERT. Just take a guess here today would you say it was over 250,000 acre feet?

Mr. HARDIE. He said a foot per 250,000 acre feet.

Mr. CALVERT. I'm just asking the question that if we were able to pump out water right now somewhere, say to evaporation ponds at the rate of 100,000 acre feet, and the inflow of water from the various locales, either from the New River, the Alamo, the White-water or whatever, remains the about a million three for the next several years, what happens to the salinity in the Salton Sea?

Mr. HARDIE. The salinity will go up. That would be basically my pump-out option, and the salinity will continue to increase for about 25 years.

Mr. CALVERT. So we would be pumping out water at 47,000 parts per million into evaporation ponds as the water comes in at a million three hundred thousand acre per year.

Mr. HARDIE. Well I was assuming that it would decrease, that the amount of water coming in would decrease.

Mr. CALVERT. Even if the water remains the same for the next several years, and let's say the Imperial Irrigation District did not come to an agreement within the next 3 years, what would happen at that point? Would the salt remain the same or would it increase or decrease?

Mr. HARDIE. We did that calculation and I actually have it in my pile here. But if I remember right it would remain roughly the same, it would not increase very much, and then it would decrease.

Mr. CALVERT. Over time it would decrease?

Mr. HARDIE. Over time it would decrease and it would not go up nearly as fast or nearly as far as it would under diversion.

Mr. CALVERT. This is in the short run. And if during this period, and I want to get back because I think Mr. Hunter may want to ask this question, if we were able to get to flood stage water, flood stage meaning there is water going into the Sea of Cortez and you were able to bring in water from other sources into the Sea the salinity would go down, wouldn't it?

Mr. HARDIE. Right. In fact, there is a little rule of thumb here I can give you which is that for every hundred thousand acre feet that you replace with Colorado River water the salinity will decrease by about .6 parts per thousand. So if you had say 500,000 acre feet that you could magically take out of the Salton Sea and replace it with 500,000 feet of this excess Colorado River water that we've been hearing a lot of about, then that would be three parts per thousand. So it would go from 44 or 45 down to 42 or 43.

Mr. CALVERT. Thank you, Mr. Chairman.

Mr. DOOLITTLE. Thank you.

Mr. Hunter, do you wish to ask questions?

Mr. HUNTER. Thank you, Mr. Chairman.

Just a short one I wanted to ask Mr. Harris. I presume you heard the representative from Nevada say that even if California was using its 4.4 million acre foot allotment, that if we had such a flood year that you had water physically overflowing the banks of the Colorado and going into the Sea of Cortez that nobody was using that it would OK if California used that to flush out the Salton Sea. Do you folks agree with that also?

Mr. HARRIS. Congressman Hunter, we would be delighted if you used that water. It might help us in the Yuma region.

Mr. HUNTER. That's the only question I've got, Mr. Chairman. I know we've got another panel, and you've been really great at giving us plenty of time here today. So thank you.

Oh, I wanted to thank Art Lopez, too, especially for being here as well. Sonny Bono really wanted you folks to play an integral part of what we do with the Sea, Art, and thank you for coming back and being with us.

Mr. LOPEZ. Thank you.

Mr. HUNTER. And, Mr. Hardie, thanks for everything you guys are giving us. I think you're going to be with us for a while because we're going to have more technical questions for you.

Mr. HARDIE. I'm happy to help.

Mr. DOOLITTLE. Mr. Shadegg is recognized for his questions.

Mr. SHADEGG. Thank you, Mr. Chairman.

Gentlemen, I appreciate the information. I am a little bit confused about how damming off a portion of the Sea to make more saline that area in order to reduce the salinity of the other is a tremendous benefit, and perhaps somebody can explain that to me.

However, while the technical members of the panel are thinking about that aspect of the question let me simply ask Mr. Harris, you said you have language in your prepared testimony. I would like you to draw the Committee's direct attention to that language and perhaps read it and explain why you think that needs to be added, in addition to which I think you were here this morning when the Chairman pointed out that at least he read it to say the Act does not alter the Law of the River, but in point of fact the way it's drafted it says the Section does not alter the Law of the River, and that change of wording from Section to Act would be a significant improvement, is that correct?

Mr. HARRIS. That is correct, Congressman Shadegg. In effect the State of Arizona would be much more comfortable if this could be more explicit in the Act that the Act does comply with the historic rights and obligations of the Colorado River, and in fact we do offer language on page 3 of our written testimony which enumerates much, if not all, of that body of law that we call the Law of the River.

Mr. SHADEGG. And on that point I understand the four Upper Basin States have joined in the same language that we are requesting, is that correct?

Mr. HARRIS. To my knowledge, that is correct, Congressman Shadegg. In fact, the Upper Colorado River Commission Executive Director, Mr. Wayne Cook will follow in the next panel and I believe he will make a similar suggestion.

Mr. SHADEGG. A similar or——

Mr. HARRIS. In my understanding it is an identical request.

Mr. SHADEGG. Not the other point on Section versus Act.

Mr. HARRIS. That would be appropriate in our mind that this Act should comply with the Law of the River.

Mr. SHADEGG. And the current language refers to just the Section rather than the Act.

Mr. HARRIS. That is correct, Congressman.

Mr. SHADEGG. Thank you very much.

Gentlemen, does anybody want to try to further elucidate me as to how that will work and why we aren't creating two eye sores instead of one or one eye sore to fix another one?

Mr. HARDIE. It seems a little weird, doesn't it.

Mr. SHADEGG. It does, yes.

Mr. HARDIE. But it works, and the reason it works is that first off I think we all agree that if you have water going into a body and only leaving by evaporation what is left is salt and it gets saltier and saltier. So if you had some way of removing the salt, then the salinity would decrease.

Mr. SHADEGG. Well the clearest thought there is a desalinization plant which, as I understand from your testimony, is impractical.

Mr. HARDIE. In my opinion it's very expensive. For example, nuclear reactors could provide electricity, but I think it's pretty impractical.

Think of this impounded area as the ultimate repository for the water and the salt. Now it could be inside, it could be an internal impoundment area, or it could be some place else. What you have is water flowing from the outside into this impoundment area. So now you have salt leaving the area that you would like to be fresh. So it's really no difference. It could be internal impoundment or it could be external, but it's a way of getting water and therefore salt out of the area that you want to have at a lower salinity level, and it's being replenished by low salt water.

Mr. CALVERT. Would the gentleman from Arizona yield?

Mr. SHADEGG. Sure, but let me just summarize what I think you said, and then I would be happy to yield.

What I think I understand you're saying is by creating a flow of water out of the one body you are reducing its salinity and you will thus raise the salinity in the other body of water, but you're not worried about that.

Mr. HARDIE. Well I'm not saying I'm not worried about it, but I'm just saying that is what will happen, and I think it's for other people to study whether that is a problem or not. Ultimately it will become so saline that the water will have to be pumped out. Now that could be 50 years or it could be 200 years, depending on the configuration, but ultimately it will reach saturation.

Mr. SHADEGG. In the main body of the Salton Sea that you're removing water from and creating the flowing you will be able to reduce the salinity, but not make it fresh water.

Mr. HARDIE. Right. You could make it reasonably low, but not fresh water.

Mr. SHADEGG. If it were reasonably low would it be significantly more attractive either from an environmental standpoint or, more importantly, or as importantly for me a recreational standpoint?

Mr. HARDIE. Oh, I definitely think so because you could certainly get it at least to seawater salinity fairly easily.

Mr. SHADEGG. Mr. Calvert.

Mr. CALVERT. Thank you.

What the gentleman was pointing out, Mr. Hardie, and something the Task Force has been talking about is not particularly having the impoundment within the Sea itself, but potentially have evaporation ponds several miles away from the Sea which would evaporate water at a faster rate and then would serve as the same

basic concept as having an interior impoundment area hopefully for less money and would not have some of the negative connotations potentially as an interior impoundment.

Mr. SHADEGG. My time has run out, but with the Chairman's indulgence let me ask on quick followup question on that. If the second body of water which had flow into it but not flow out of it, in that body is it contemplated that you might make that a large land area with a very shallow body of water and thereby increasing the rate of evaporation?

Mr. HARDIE. I'm sorry, in the second body of water?

Mr. SHADEGG. Yes, so you wouldn't have to ultimately pump that water out.

Mr. HARDIE. Well from point of view of the Salton Sea it's just gone. Now there is a negative impact of that, however, in that the level of the Salton Sea will be reduced significantly under pump out. So it's not a simple solution. I mean all of these options have advantages and disadvantages.

Mr. SHADEGG. And it will be a tough problem and therefore costly.

I thank the members of the panel, and I thank the Chair for his indulgence.

Mr. DOOLITTLE. Could I just ask, if you do pump this water out some place somewhere else, either Laguna Salada or in the gunnery range or in an internal impoundment, what's going to keep them out of those areas so will we not continue to have waterfowl problems?

Mr. VAUX. Yes. I'm not an expert in this area, but I know enough about it to know that short of putting a net over the water body it's simply impossible to keep migratory birds off the water.

Mr. DOOLITTLE. Yes, Mr. Hardie.

Mr. HARDIE. I'm not a waterfowl expert, but I think the problems you have with the waterfowl is the waterfowl eating the sick fish because I mean I don't hear any problems with waterfowl in the Great Salt Lake, for example.

Mr. DOOLITTLE. OK. So we presume there wouldn't be fish in this place the water flows into.

Mr. HARDIE. There won't be fish there very long. So that doesn't strike me as a big problem.

Mr. DOOLITTLE. Mr. Lopez, I understand there are other tribes interested in this legislation. Could you shed any light on that as to what their views might be or who the tribes are?

Mr. LOPEZ. Well the only interest the other tribes might be considering is help fund some of our activities. We are going to present this to some other tribes. The only tribe down in that area that has ancestral rights are the Torres Martinez Indians.

Mr. DOOLITTLE. Is there a Kavizon Tribe down there and do they believe they have interests in this?

Mr. LOPEZ. I haven't heard from them personally, but that sphere of tribal occupancy is Torres Martinez. The Kavizon Tribe is north of us, and as far as I know I've never heard of their having any right down in that area.

Mr. DOOLITTLE. And you don't know of any interest they have expressed in the legislation?

Mr. LOPEZ. No, not at this time.

Mr. DOOLITTLE. Is your tribe looking to connect this legislation to your water rights settlement?

Mr. LOPEZ. I would like to see consideration toward our settlement, and I don't want to have any hindrances to this bill with our settlement.

Mr. DOOLITTLE. How much money are you seeking in the settlement?

Mr. LOPEZ. Well we are asking for 93 years of unused land, the money that could have been generated off of that. A study on that was I think \$1.3 billion of loss of revenue. You know, we used agriculture numbers in that area. Well, we're not asking that amount of money. We are asking for \$100 million for a recovery fund that would be put into the government's banks and we would draw interest off of that, by putting so much a year away for us that we could draw interest and that would be sufficient for us to do some kind of economic development that would help us participate in that area of development.

Mr. DOOLITTLE. But you are then seeking \$100 million in the water rights settlement?

Mr. LOPEZ. Right, plus I believe there is \$14 million already on the table that has been there for a number of years. The Chairman prior to me had a bill go through and that \$14 million—the bill didn't go through, but the \$14 million was delegated I believe.

Mr. DOOLITTLE. Mr. Harris, it was mentioned in your testimony that programs costing millions of dollars will compete with other programs, and I just wondered how you believe that this program along with all the others, is going to compete for a limited amount of money?

Mr. HARRIS. Well I think that's the point I tried to make in my written testimony. I believe that this is an issue within the State of California alone, and I'm not totally one hundred percent up on all of the programs you have, but clearly you've got some big ones. You've got the big CalFed process underway, I believe there are more salmon stocks that are in the process of being evaluated for listing right now, which undoubtedly will lead to additional programs, you have the NCCP process in the South Coast region, several large HCPs and now Salton Sea Reclamation all kind of competing, not only within the State of California, for both water and fiscal resources and staffing resources, but now you're also competing with similar programs in the Colorado River Basin and the rest of the Western United States. There is a very large recovery program for native fish in the Upper Colorado River Basin, and I believe there is legislation that is being put forth or developed right now to fund that program for another 10 years. In the lower Colorado region, there is a tri-State effort between California, Arizona and Nevada on the Lower Colorado River Multi-Species Conservation Program, and I believe that's going to be significantly costly over the long haul as well.

So my sort of note of caution was that I think we've got a big picture here that we've really got to look at. We've got limited resources and fiscal austerity within our States as well as at the National Government, and I think that we've got to be very careful that we get the most bang for our buck.

Mr. DOOLITTLE. Thank you.

Does any other Member up here want to ask further questions?

[No response.]

Mr. DOOLITTLE. Gentlemen, thank you very much for your time and contribution. We perhaps will have other questions which will be submitted in writing, but for now we will excuse this panel and call up the fourth and final panel.

[Questions to be submitted to be responded to for the record may be found at end of hearing.]

Mr. DOOLITTLE. If you gentlemen will raise your right hands.

[Whereupon, Wayne E. Cook, Leon Lesika, Stephen Weber and Evan M. Hirsche raised their right hands and were first duly sworn by Chairman Doolittle as follows:]

Do you solemnly swear or affirm under a penalty of perjury that the statements made or testimony given will be the whole truth and nothing but the truth.

Mr. COOK. I do.

Mr. LESIKA. I do.

Mr. WEBER. I do.

Mr. HIRSCH. I do.

Mr. DOOLITTLE. Let the record reflect that each answered in the affirmative.

Thank you very much. We appreciate your patience and waiting until this time.

We will have testify first Mr. Wayne E. Cook, Professional Engineer and Executive Director of the Upper Colorado River Commission.

Mr. Cook.

**STATEMENT OF WAYNE E. COOK, P.E., EXECUTIVE DIRECTOR,
UPPER COLORADO RIVER COMMISSION**

Mr. COOK. Thank you, Mr. Chairman, and Members of the Committee. My name is Wayne Cook and I am the Executive Director of the Upper Colorado River Commission.

On behalf of the Upper Basin States of the Colorado River Basin we thank you for the opportunity to provide written testimony for your March 12, 1998 hearing on H.R. 3267, the Sonny Bono Memorial Salton Sea Restoration Act.

The Upper Colorado River Commission is an interstate administrative agency created by the Upper Colorado River Compact in 1948. The member States of the Commission are Colorado, New Mexico, Utah and Wyoming. Among other things, this Commission represents the Upper Basin States in consultations with the Secretary of the Interior on matters pertaining to the operations of the Colorado River.

The Upper Basin States do not object to the goal of stabilizing the Salton Sea, either its salinity level or the content. We are concerned, however, that H.R. 3267 as it is presently introduced is unclear on what role the Colorado River may play in such stabilizing activities.

For instance, Section 101[b] paragraphs 1 and 2 suggest stabilizing the salinity level between 35 and 40 parts per thousand and the surface elevation at 240 to 230 feet below sea level. Such goals could perhaps jeopardize implementation of the California 4.4 plan currently being negotiated by the Southern California water agen-

cies. California must restrict its current Colorado River uses to stay within its normal water limitation of 4.4 million acre feet of Colorado River water.

The proposed 4.4 plan envisions conservation of water in the Imperial Irrigation District and other agricultural areas for transfer to the Metropolitan Water District for use in keeping aqueduct full. Such conservation measures may significantly reduce inflow to the Salton Sea perhaps by several hundred thousand acre feet. Any successful Salton Sea legislation must not jeopardize that goal.

Section 101[c] paragraph 2[A] suggests augmented flows into the Salton Sea. Such flows could be imported sea water or Mexicali Valley return flows, but the direct use of Colorado River water for this purpose would be generally precluded by the Law of the River.

Section 101[f] paragraph 1 regarding reclamation laws to the Upper Basin States is somewhat disquieting. We are not sure that we know what this section is intended to accomplish. We only ask the question why do we preclude this project from planning criteria, benefit-cost analysis, discharge permitting, ESA and other things. Doing so seems to set a dangerous precedent.

Section 101[f] paragraph 2, as Chris Harris pointed out in his testimony on the last panel, needs to be strengthened and we have some suggested language, which in the interest of time I will not read, but it's in our written testimony. We believe that this language better describes and fully lays out the compilation of Acts that make up the Law of the River, and we would ask for that language to be inserted in any further drafts.

We are also concerned about the language in Title II under the Emergency Actions to Stabilize the Salton Sea. Section 201[b] paragraph 2 suggests water will be available in late 1998 and/or early 1999. Again as Mr. Harris testified previously, the source of this water is not identified, but under the present plans approved for operations of the Colorado River for water year 1998 and projected 1999 there is no water available from the Colorado River for such purposes in the Salton Sea. If this section contemplated use of the Colorado River for emergency purposes in 1998 or 1999 it must be rewritten to exclude use of Colorado River water.

We thank you for the opportunity to appear this day and would be ready to answer any questions that you might have. Thank you.

Mr. DOOLITTLE. Thank you very much.

[The prepared statement of Wayne E. Cook may be found at end of hearing.]

Mr. DOOLITTLE. Our next witness will be Mr. Leon Lesika, Executive Director of Desert Wildlife Unlimited.

Mr. Lesika, it's nice to see you here in Washington. We enjoyed having the field hearing and having the opportunity to examine some of your important work out there at the Salton Sea.

**STATEMENT OF LEON LESIKA, EXECUTIVE DIRECTOR,
DESERT WILDLIFE UNLIMITED**

Mr. LESIKA. Thank you, Mr. Chairman.

It is a pleasure to be here today and testify regarding the water cleanup for the Alamo and New Rivers. We propose using existing technologies and proven designs to improve the quality of water flowing into the Salton Sea. Imperial County is located adjacent to

Mexico in the extreme southeast corner of California. The New River starts in Mexico and runs through the city of Mexicali whose population is in excess of one million people.

Based on polluted water samples collected from the New River at the border the river has earned the title of the most polluted river in the United States. The New River travels about 50 miles north from the international border and empties into the Salton Sea. From Mexico the river carries untreated and undertreated human and industrial waste. The New River also receives agricultural drain water containing pesticides and chemical fertilizers from farms in the United States and Mexico.

The Alamo River does not have the same level of human and industrial wastes as the New River, but does receive agricultural waste on both sides of the border. Mexico with the assistance of the United States is in the process of building a waste water treatment plant.

In June 1997 Congressman Duncan Hunter formed the Citizens Congressional Task Force on the New River to begin a grassroots effort to address the problems of drain water on the New and Alamo Rivers. He asked me to head this Task Force and in a weak moment I agreed. We formed a group which includes representatives from the U.S. Fish and Wildlife Service, the U.S. Geological Survey, the U.S. Bureau of Reclamation, the California Department of Fish and Game, the California Regional Water Quality Control Board, the University of California at Riverside, the University of California Polytechnic at Pomona and the University of Baha, California. Local representation includes the County Board of Supervisors, the Administration Office, the Agricultural Commission, the Fish and Game Commission, Imperial Irrigation and Imperial Valley College. We have also received support from many volunteer groups, such as Desert Wildlife Unlimited, Boy Scouts of America, local school districts and others too numerous to mention.

Since June the Task Force members have developed a pilot plan to address these serious water quality issues on the American side of the border. We are using proven technologies known as bioremediation to improve water quality. This plan includes a series of ponds for sedimentation and wetland vegetation that will remove contaminants before the river empties into the Salton Sea some 50 miles away.

To my left over here is a prototype on a 68-acre parcel that the Bureau of Reclamation is doing the engineering on at the present time. This is actually four-pond system. The water comes out of a drain ditch and goes into a sediment pond, comes back into a ditch and then goes into another vegetative pond, back into a ditch, then into another vegetative pond and so forth, through all four. This particular system if we have a problem in any one given pond we can bypass it by cutting off the pond and circumventing it with the ditch. So that is one of the prototypes for our first two series.

The Task Force has formed a subcommittee that is working on a design that will monitor their project to evaluate the efficiency and success of the cleanup process. We are all very confident that this proposed project will be effective in improving the water quality of the Salton Sea ecosystem. Other benefits include improved habitat for endangered species such as the Yuma clapper rail, the

Southwestern willow flycatcher as well as recreational opportunities, such as hiking, bird watching, camping, fishing and hunting.

Efforts to save the Salton Sea cannot be effective if we do not clean up the water that contaminates it first.

Thank you for the opportunity to speak to you today.

Mr. DOOLITTLE. Thank you very much.

[The prepared statement of Leon Lesika may be found at end of hearing.]

Mr. DOOLITTLE. Our next witness will be Mr. Stephen Weber, President of San Diego State University, Salton Sea University Research Consortia.

Mr. Weber.

STATEMENT OF STEPHEN WEBER, PRESIDENT OF SAN DIEGO STATE UNIVERSITY, SALTON SEA UNIVERSITY RESEARCH CONSORTIA

Mr. WEBER. Mr. Chairman and Members of the Subcommittee, thank you for the invitation to appear today on behalf of the Salton Sea University Research Consortium.

I am proud to represent my fellow colleagues, California University, Riverside Chancellor Raymond Orbach and President James Appleton of the University of Redlands. Our Consortium strongly supports the Sonny Bono Memorial Salton Sea Restoration Act.

The University of Redlands, the University of California, Riverside and San Diego State University have joined forces to form the Salton Sea University Research Consortium in order to address the environmental problems at the Salton Sea in an integrated, timely and efficacious manner.

The complexity of issues surrounding the Salton Sea requires research approaches that consider the biological and ecological systems of the Sea, the regional hydrology, the chemistry of soil and toxic substances as well as potential bio-remediation and engineering solutions. We must also take into account the economic issues, the agricultural interests and the human cultural and social concerns of the Salton Sea region and the Lower Colorado River Basin. The role of the Salton Sea University Research Consortium will be to help provide policymakers with informed research grounded in years of onsite scientific investigation of the Salton Sea and its ecosystems.

Our Consortium offers the full spectrum of expertise necessary to grapple with the difficult questions and the difficult decisions which must be made in real time.

Approximately 25 faculty members at the University of California, Riverside have expertise addressing issues facing the Salton Sea. San Diego State University's Center for Inland Waters includes more than 20 faculty and researchers who have conducted, as you heard earlier today, long-term studies at the Salton Sea and its surrounding basin. The University of Redlands has just received the first half of a \$2 million appropriation to establish a Salton Sea Bioregional GIS data base which will consolidate existing data. Our combined universities have extensive expertise in this area. We believe that timely access to this knowledge is vital to the Salton Sea restoration efforts.

The University Research Consortium is made up of three universities in close proximity to the Salton Sea. Our faculty have been working in teaching courses at the Sea and in the surrounding basin for more than 20 years. Recent research results include an analysis of the dynamics of several kinds of toxic algae we have discovered there. We also have gathered the first comprehensive data on nutrient levels in the Salton Sea since the 1960's and have discovered several new fish parasites which are implicated in the massive fish die-offs. We are collaborating with the Bureau of Reclamation on a bioremediation project on the New River.

Members of the Consortium have considerable experience managing large-scale research projects and coordinating with other State and Federal agencies as well as with other universities. The salinity/drainage program of the University of California manages extensive research activities at the Kesterson Reservoir, a situation very comparable to the Salton Sea. San Diego State University's extensive work on arid-lands agriculture and salinity problems in the Middle East has direct applications to the problems faced at Salton Sea.

Through the Southwest Center for Environmental Research and Policy a federally funded consortium of five U.S. universities and four Mexican universities we have conducted applied peer-reviewed research to find solutions to many of the environmental problems that affect the border region. We propose to bring a California solution to a California problem.

We are pleased to learn that Section 102 of the proposed bill calls for the establishment of the Salton Sea Research Management Committee. The Consortium strongly endorses this initiative because it will bring together the diverse areas of expertise that are needed to address, and to solve in real time, the complex issues facing the Salton Sea.

Given the previous discussion about peer review, we strongly support the statement on page 10, line 17 of the bill which requires, and I quote "studies under this section are subjected to peer review." Give our research expertise coupled with our geographical proximity to the Salton Sea the University Research Consortium is in a unique position to in the language of the bill, and I quote again, "help select the topics of study and manage those studies."

The University Research Consortium has identified a number of ways that it can be assistance.

- Coordinating research efforts;
- Collecting, maintaining and updating information;
- Developing and conducting peer-reviewed research;
- Advising and reporting to Congress on the progress of the cleanup;
- Constructing and managing research stations on and near the Salton Sea; and
- Providing long-term monitoring.

In short, our universities have substantial expertise in scientific endeavors related to the Salton Sea, in managing large regional, national and international programs, in forming and implementing consortia, and in providing an objective peer-reviewed, science-based perspective on complex issues.

I have additional information about our faculty research capabilities and publications which I will submit for the record.

We look forward to working with the Federal Government, the Salton Sea Authority, the State of California and all stakeholders in addressing the critical environmental problems of the Salton Sea.

Our Consortium is dedicated to bringing the best expertise available to preserve this unique resource.

Thank you.

Mr. DOOLITTLE. Thank you.

[The prepared statement of Stephen Weber may be found at end of hearing.]

[The additional information to be supplied may be found at end of hearing.]

Mr. DOOLITTLE. Our next witness is Mr. Evan Hirsche, Director of the National Wildlife Refuge Campaign, National Audubon Society of California.

Mr. Hirsche.

STATEMENT OF EVAN M. HIRSCH, DIRECTOR, NATIONAL WILDLIFE REFUGE CAMPAIGN, NATIONAL AUDUBON SOCIETY

Mr. HIRSCH. Mr. Chairman and Members of the Subcommittee, my name is Evan Hirsche, Director of the National Audubon Society's Wildlife Refuge Campaign.

I want to thank you for the opportunity to provide you with our views on H.R. 3267, the Sonny Bono Memorial Salton Sea Reclamation Act. We appreciate the Committee's interest in honoring the late Representative Bono by promoting a solution to the ecological crisis occurring at the Salton Sea.

The mission of the National Audubon Society representing more than 67,000 Californians and more than 550,000 Americans nationwide is to conserve and restore natural ecosystems focusing on birds, other wildlife and their habitats for the benefit of humanity and the earth's biological diversity.

Mr. Chairman, what is happening at the Salton Sea is nothing short of an environmental Chernobyl. Indeed, what is widely considered one of the most important areas for birds in the Pacific Flyway is fast becoming an avian graveyard. How we respond to this crisis will have broad ramifications for people and ecosystems far beyond the scope of our immediate interests.

The Salton Sea Refuge was established in 1930 for the purpose of providing wintering and spring migration habitat for birds. The refuge today provides vital wintering habitat for some of the largest concentrations of migratory waterfowl, shorebirds and passerines in the Nation and provides important habitat for the endangered Yuma clapper rail. More than 380 species call this unlikely alcove in the Southern California desert their home as they travel between points as far south as Antarctica and as far north as the Arctic.

In spite of the area's tremendous ecological value, massive die-offs of birds and fish have occurred in recent years. In the past 5 years alone more than 250,000 birds have died from outbreaks of botulism, Newcastle disease and other undiagnosed causes. As we speak, an outbreak of fowl cholera is 10 weeks running and has al-

ready killed an estimated 8,000 to 23,000 birds representing 54 species. What is happening at the Salton Sea is nothing short of an ecological disaster.

The importance of enacting legislation to address the problems of the Salton Sea cannot be overstated. H.R. 3267 is a bold, innovative initiative that makes a good-faith effort to reach a solution to the crisis. We are concerned, however, that this legislation seeks to accomplish a great deal without a full and accurate accounting of all expected outcomes.

We have four main concerns with H.R. 3267:

First, we believe the timetable for identification and review of alternatives is too short;

Second, we believe that the scope of options under consideration should be expanded;

Third, we object to any exemption of administrative and judicial review; and

Finally, we are concerned about pumping water from the Sea without a full accounting of disposal impacts.

Concerning the timetable for review, H.R. 3267 proposes a 12-month timeline to complete feasibility studies for a series of complex options described as cost effective by the Bureau of Reclamation. Even under the most optimistic circumstances this timeline is unrealistic and may result in costly mistakes or missed opportunities. While we certainly agree that it's possible to study an issue almost without conclusion, we have equal concerns about hastily adopting an alternative or series of alternatives without having a better sense of the likely outcomes.

Concerning the scope of options, we must all recognize there is no silver bullet solution to the problems facing the Salton Sea. H.R. 3267, however, limits the feasibility study to just four options, excluding a variety of others. The four options identified in this legislation were adopted from the 1997 Bureau of Reclamation's volume entitled *Alternative Evaluation* which reviewed 54 alternatives. Rather than selecting alternatives with the best likelihood for success, the BOR selected their alternatives based on four criteria, one of which was \$10 million or less in annual operating costs. The obvious inadequacy here is that, and I quote from the report, "The alternatives did not address what would be done with the salts or how much the disposal cost would be if disposal were necessary." Without knowing the cost for salt or brine disposal the \$10 million ceiling may be unrealistic even for the five retained alternatives.

Concerning exemption from administrative and judicial review, the National Audubon Society is strongly opposed to provisions in the H.R. 3267 that seek to limit environmental oversight and public participation. Specifically Section 101[f][3][A] would exempt activities associated with implementation of a selected alternative from meeting the full requirements under NEPA. While we appreciate the authors' interest in expediting actions to rectify the crisis in the Salton Sea, we firmly believe that the full NEPA compliance should be applied to the selection and implementation of alternatives.

Likewise, we have concerns about Section 104[c] which exempts river reclamation activities from having to meet Section 402 requirements under the Federal Water Pollution Control Act. I would

just add here that based on what I've heard today much of what was explained earlier in testimony is reaching us for the first time and we are withholding our judgment on how we feel about that particular program pending further edification.

We also have concerns about Section 101[f][e][B] which limits judicial review of the chosen alternative. Despite the urgency of implementing a remedy, we should not sacrifice the legal rights of U.S. citizens to accomplish our goals.

Finally, we have concerns about pumping brine from the Salton Sea. Title II of H.R. 3267 requires that the Secretary of the Interior begin pumping water from Salton Sea prior to December 1, 1998 to accommodate water diversions from unidentified sources. We object to this provision for several reasons.

First, Title II appears to bypass necessary environmental oversight mandated under NEPA. The ecological impacts of brine disposal, particularly on the scale addressed by the bill, are expected to be enormous. A full review of the disposal plan and an opportunity for the public to comment will be critical.

Second, if it is desired to import surplus water from the Colorado River to the Sea, the legal mechanism by which this can be accomplished needs to be identified. Again, we appreciate the need to expedite remediation, but we strongly believe that any such efforts must comply with Federal and State environmental regulations.

In concluding, the National Audubon Society appreciates the efforts of the Committee and the sponsors of H.R. 3267 to quickly address the crisis at the Salton Sea. Although there are a number of provisions in the bill that we object to, we are supportive of the overall intent to find and implement a solution in the least amount of time possible. We hope the bill can be amended to address our concerns, and we look forward to working with the Committee as we move forward with this important legislation.

That concludes our testimony.

Mr. DOOLITTLE. Thank you.

[The prepared statement of Evan Hirsche may be found at end of hearing.]

Mr. DOOLITTLE. Mr. Weber, does your Consortium have a financial interest in this project?

Mr. WEBER. The universities we represent may very well submit proposals, but they would be through independent peer review.

Mr. DOOLITTLE. But does it concern you that, under at least the wording of the bill, while they have an interest in getting the research they are also part of the selection process for determining the board that will determine these studies and manage these studies? Does that seem to you as a conflict of interest?

Mr. WEBER. If I understand the language of the bill it says that the Salton Sea Research Management Committee shall select the topics of study. We believe that an informed presence by universities that have been researching in this area for many years will be helpful in determining the most relevant topics of studies under the section and then managing them, but they will not directly award those contracts. That is, Mr. Chairman, on page 9, line 20 I believe.

Mr. DOOLITTLE. Right. The committee shall select the topics of studies under this section and manage those studies. I mean that

Consortium is likely to get some of that research in any event, and doesn't it put you in a situation where you could be accused of self-dealing if you're on the committee that manages these studies and selects the topics of the studies?

Mr. WEBER. I think there are two possibilities here. Either contrary to the language of the law you would imagine the Management Committee actually letting the contracts and not using peer review, in which case there would clearly be a conflict of interest and, frankly, I think you would all rightly be suspect of the quality of science that might be a consequence of that. But under this bill there are clear provisions for peer review so there is no conflict there. We are constantly working with Federal agencies in this relationship.

Mr. DOOLITTLE. Can you describe how that peer review would work. Take the language of the bill and tell me how it is that peer review works and how this would all operate.

Mr. WEBER. It could work in several different ways. It could work through the Department of the Interior, or it could work through Water Resources that testified on the panel before us. There are many ways in which panels of independent experts and academics from other universities around the country are impaneled together, provide a call for proposals, and various universities that believe they have expertise to contribute then bring forward proposals, and that independent jury selects the ones that they think will be most efficacious.

Mr. DOOLITTLE. As opposed to the Management Committee itself you mean.

Mr. WEBER. I read that as the clear intent of the bill.

Mr. DOOLITTLE. Mr. Lesika, I have a question for you, and if people here don't know, I'm going to ask this to some of the other people who testified before. When the sewage treatment plant is built in Mexicali, and they're going to take a large portion of the water to reuse, and then San Diego takes its 200,000 acre feet of water out of Imperial, of the total annual inflow into the Salton Sea, do you know how much of that water will be reduced by those two events?

Mr. LESIKA. Well there are apparently two positions on this, whether Mexico will pump back this water south and use it or they will not. But apparently about a third of the water that comes across the border is what goes into the Salton Sea. So if they did pump back the water to the south and used it for agriculture you would lose a third of the water immediately. The amount pumped to San Diego, I don't know exactly what percentage that would be. But, yes, that would reduce the inflow considerably right there, and particularly if conservation by the agricultural community was also tightened up considerably you could possibly lose another percentage there.

Mr. DOOLITTLE. So the very bad situation we have now relative to the salinity and so forth could be made substantially worse by those two events, is that your understanding?

Mr. LESIKA. Yes. Of course I grew up in Imperial County and I actually lived where the Salton Sea is about eight foot deep now. So I kind of could see what would happen if this inflow was reduced say by 40, 50 or 60 percent. It would probably go back to the

1930 or the 1940 level. It would probably kill most everything there because of the salinity, but then there would be a possibility at that time that it could be reborn by reducing the salt by evaporative ponds.

Mr. DOOLITTLE. So, even if it should become a total dead sea, it doesn't preclude a solution from reviving it then is what you're saying.

Mr. LESIKA. Well that's my own personal opinion, and I probably shouldn't comment on it.

Mr. DOOLITTLE. I know you're seeking to prevent that from happening in the first place and let's hope it doesn't happen.

This is a question for Mr. Hirsche. You seem to acknowledge that there is a grave crisis here, and I just wonder, you're in support of the general objective of the bill, but are opposed to the specifics. I'm just interested, is there ever in your mind or in the mind of the organization you represent an emergency sufficiently acute to justify acting in a short amount of time and circumventing protocol based on the emergency the lengthy requirements of the environmental laws?

Mr. HIRSCH. Off the top of my head I can't think of one. I would say with respect to this particular situation the proposals that have been thrown out and the timelines that have been thrown out as feasible to conduct the full engineering and environmental studies, I think we're talking about a 6-month difference between this bill and what Interior is willing to accept and what the National Audubon Society is willing to accept. If we are talking about a timeline of 15 years before the Sea is dead, I think 6 months is adequate time to allot to a proper NEPA process and the conducting of engineering studies.

Mr. DOOLITTLE. You know, if it's only 6 months that's one thing, but having been involved extensively in oversight over the implementation of the CVPIA, you know, they've taken two and three times as long as what the representation was, and in some cases we still don't have the answer even to this day.

So I'm a little concerned, and if I had more time I would have addressed that question to the witness for the Department of the Interior, but it's entirely foreseeable, and indeed I would venture to guess it's almost likely that they won't get it done in the 18 months. So we're really talking about 2 years or 3 years. I don't know how long we're talking about. I think that's the concern of the authors of the bill and why they want a shorter time period. I think if we all felt comfortable that it really was going to happen in 18 months I suspect that would be an easy compromise to make.

Mr. HIRSCH. Mr. Chairman, my understanding from discussions with some of the folks over in Interior is that they are already moving on some of these things in advance of the enactment of legislation which adds to obviously the amount of time to conduct the appropriate studies. The National Audubon Society wants to represent its position in good faith. If it can be done in 18 months, we hope it can be done in 18 months. This really comes down to the agencies though to give us a fair and reasonable accounting of the timeline.

Mr. DOOLITTLE. Thank you.

Mr. Calvert.

Mr. CALVERT. Thank you, Mr. Chairman.

First, Mr. Cook, I appreciate your testimony. Obviously it's somewhat redundant to what we've been talking about here today and on the other panels because obviously the Law of the River has been probably the biggest part of our conversation here today. You've probably heard these comments before, and it is not the intent of the three of us here from California to alter the Law of the River.

In fact what our intent is, and Mr. Hunter asked a question earlier to the gentleman from Arizona and the gentleman from Nevada, that if the situation occurred where we had flooding down the Colorado River and what happened, I guess it was last year or a couple of years ago down in Yuma where water was just surging, doing damage and going into the Pacific Ocean. Would you rather see the water go into the Pacific Ocean or would you say that we could use that water at that kind of level to help the Salton Sea?

Mr. COOK. Those waters are released because of flood control criteria that mandate them to be released, and the Upper Basin States would not object to those being used.

Mr. CALVERT. So if that kind of a situation occurred, you wouldn't object to those flood waters being used?

Mr. COOK. They occur periodically, and they're occurring today, and we would not object.

Mr. CALVERT. Thank you, Mr. Cook.

Mr. Weber, I appreciate your being here. I'm an alumni of San Diego State, as you know, and I always enjoy seeing you folks from San Diego. There was a question about a conflict, and I just wanted to point out, if you agree, that on the Management Committee itself there would be potentially five folks, and the Consortium would elect one of the three universities to serve on that management team. So you would have to be very convincing to get a majority to go along, plus get peer review and everything else, and wouldn't you believe that a conflict of interest would be a very hard case to make on the part of the Consortium?

Mr. WEBER. The voice of reason is always very suasive.

Mr. CALVERT. Thank you.

And, finally, Mr. Hirsche, I listened to your testimony and I liked the first part of it. You were wanting to find a solution and wanting to fix the problems with the Salton Sea, and then I was trying to find the part of the bill that you agreed with. I thought I heard that you had a problem taking salt out of the Sea, and if Sonny Bono were here today, and I knew Sonny quite well, and he had a way of putting things very simply, you know. It doesn't take a rocket scientist, although we do have a rocket scientist that is helping us on this problem, to figure out what the problem is. The problem is we have too much salt and too much toxicity in the Sea and that's what is killing the fish and killing the birds. So we need to get the salt out and get rid of the toxics in the Sea, and part of that is getting rid of that salt brine. I thought I heard you say you had a problem with getting rid of the salt.

Mr. HIRSCH. Congressman, actually in the testimony we are concerned about the lack of accountability for where the salt is going to go at this point, and there is nothing in the legislation that provides for where it is going to go.

Mr. CALVERT. It's going to go somewhere. It's going to either go to an impoundment area or evaporation ponds or to potentially across the border back into the Sea of Cortez. It's going to go somewhere, and you don't object to that salt going some place?

Mr. HIRSCH. No, as long as we follow the appropriate NEPA guidelines.

Mr. CALVERT. You mentioned the NEPA guidelines, and I have to share with my friend and Chairman, Mr. Doolittle, that if in fact we were able to rely on the Department of the Interior to say that it's going to 18 months, no problem, we're going to make that timeline, and we'll just all happily go along with that deal I'm sure, but I have yet to find a timeline the folks over there have met.

Now this instance, as you readily admit, is a potential catastrophe, and would you pick between that type of catastrophe or meeting the NEPA and other environmental requirements?

Mr. HIRSCH. Well I think at this point our inclination would be to follow the process and see where we are.

Mr. CALVERT. So if you had to choose between a catastrophe and the environmental laws you're going to pick the environmental laws.

Mr. HIRSCH. Well the catastrophe is already well underway. As I mentioned, it's 250,000 birds so far in 5 years.

Mr. CALVERT. Thank you, Mr. Chairman.

Mr. DOOLITTLE. I thank the members of the panel for appearing. We will have perhaps further questions, and I will ask you to respond expeditiously.

[Questions to be submitted and responded to for the record may be found at end of hearing.]

Mr. DOOLITTLE. With that we will excuse this panel, and this hearing is adjourned.

[The Subcommittee adjourned at 4:50 p.m., subject to the call of the Chair.]

[Additional material submitted for the record follows.]

STATEMENT OF DOUGLAS WHEELER, SECRETARY FOR RESOURCES, STATE OF CALIFORNIA

Mr. Chairman and members of the Subcommittee, my name is Douglas P. Wheeler, Secretary for Resources in the Administration of California Governor Pete Wilson. Thank you for the opportunity to address the Subcommittee on the Sonny Bono Memorial Salton Sea Reclamation Act. The Governor of California applauds the introduction of this bill and appreciates the efforts of the members of the Salton Sea Congressional Task Force who have taken this important step, as well as their past actions to bring to national attention the existence of this remarkable resource. In particular, the Governor supports the goal of this legislation as a fitting tribute to the exemplary efforts of the late Congressman Sonny Bono, who did so much to foster efforts to restore the Salton Sea.

Background

Since its accidental creation in 1905 following the flooding of the Colorado River, the Salton Sea has served as a tremendous resource for the citizens of California. As California grew during the early decades of this century, the Sea became a popular recreational haven for anglers, boaters, and wildlife viewers, reaching its zenith from the late 1950's through the mid-1970's. The Sea provided a unique sportfishery, found nowhere else in California, where anglers caught marine fish in a lake setting at catch rates that were considered to be phenomenal. In addition, as other wetland areas of southern California were lost to development, the Sea assumed increasing importance as a refuge for migratory waterfowl.

Unfortunately, however, the health of the Sea has deteriorated over the past several decades, primarily due to high salinity levels and the inflow of contaminants. The salinity of the Sea has increased gradually to the current level of approximately 44 parts per thousand. By comparison, ocean salinity levels are in the range of 35 parts per thousand. The gradual increase in salinity is not difficult to understand; the only "outlet" for the Sea is through evaporation, which removes water while leaving the salts carried into the Sea from the New, Alamo, and Whitewater Rivers, as well as from agricultural runoff. In addition to salt, the inflow to the Sea carries contaminants such as selenium.

The problems of the Salton Sea have long been recognized and efforts have previously been initiated to address these problems. Without the threat of crisis, none of these proposals came to fruition. In 1987, however, the results of inaction began to impact the ecological health of the Sea. In that year, the combination of high salinity levels and contaminants led to the initial avian "die-offs." In 1992, the avian mortality escalated, as over 150,000 eared grebes and ruddy ducks died from an undetermined cause. Additional avian mortality episodes occurred in 1994, 1996, and 1997, and continue to the present. The increasing salinity has also greatly impacted the 4 fish species comprising the entire fishery of the Salton Sea. Lower reproductive success and an increased susceptibility to disease are two known stresses on Salton Sea sportfish that are caused by elevated salinity levels. Today, largely as a result of the avian mortality and the decline in fisheries, the need to restore the health of the Salton Sea is recognized as a priority in California and nationwide.

The restoration of the Salton Sea has long been a priority of the State of California. In 1988, the Salton Sea Task Force was formed with the encouragement and sponsorship of the California Department of Fish and Game. The Task Force included local stakeholder representatives and was successful in focusing attention on the problems of the Sea. By the early 1990's, it was clear that strong regional leadership was needed to identify and implement a plan with local support. To this end, the Salton Sea Authority ("Authority") was established with State support in 1993 by Riverside and Imperial Counties, the Coachella Valley Water District, and the Imperial Irrigation District.

The Authority has made substantial progress toward developing a workable plan for the restoration of the Sea. Beginning in 1994, the Authority, in cooperation with the Bureau of Reclamation and the State of California, began to study the environmental and economic impacts of salinity on the Salton Sea. The Authority also addressed the question of flooding, which resulted from fluctuations in Sea level and threatened adjacent properties. The efforts of the Authority resulted in a report on alternatives to fixing the Sea, released in final draft form in September 1997. The report analyzed 54 alternative approaches to restoring the health of the Salton Sea and recommended four "diking" alternatives which met specified criteria. The Authority also co-sponsored with the U.S. Fish and Wildlife Service a workshop on Saving the Salton Sea. The findings of the workshop were published in October 1997 and outlined 31 study proposals.

With these efforts as a foundation and following consultation with the State, Interior Secretary Bruce Babbitt visited the Salton Sea in December 1997. Secretary Babbitt met with local stakeholders, State of California representatives, and Federal agencies and recommended a two-fold approach to restoring the Salton Sea. First, the Secretary proposed that an environmental review process pursuant to the Federal National Environmental Policy Act and the California Environmental Quality Act be initiated immediately under the direction of the Salton Sea Authority and the Bureau of Reclamation. Secretary Babbitt recommended that the environmental review process analyze the four diking proposals, which emerged from the alternatives study released in September 1997, as well as “pump-in” and “pump-out” options. Second, the Secretary proposed additional scientific research, drawing upon the findings of the Saving the Salton Sea workshop. To guide research efforts, the Secretary proposed a Research Management Committee to consist of representatives from the Federal Government, the State of California, the Salton Sea Authority, and the Torres Martinez Tribe. The State of California supported Secretary Babbitt’s proposal and agreed to participate in the preparation of environmental documentation and as a representative on the Research Management Committee. The Research Management Committee has since been established and promises to be a workable, effective means by which to develop a scientifically sound solution.

Sonny Bono Memorial Salton Sea Reclamation Act

The State of California strongly supports the goals and objectives of H.R. 3267. Congressional action on the Sonny Bono Memorial Salton Sea Reclamation Act is a critical next step toward restoring the Salton Sea. We agree that there is need for appropriate levels of funding support for further scientific and engineering studies, and ultimately, the implementation of an agreed solution. The funding for feasibility studies will allow a thorough evaluation of the alternative approaches to fixing the Sea, which has already been initiated using State and Federal funds. The bill also authorizes construction funding for the preferred alternative solution. Finally, funding is provided to support scientific research on many of the as yet unresolved resource management issues of the Sea.

California also supports the reliance of the Act on the existing analytical process and management structure. The Salton Sea Authority and the Bureau of Reclamation have made significant progress over the past several years and it is appropriate that H.R. 3267 build upon this progress toward the goal of restoring the Sea. The Memorandum of Understanding required by the Act will appropriately provide a framework for the Federal, State, and local partners to select an alternative which meets our shared objectives and to establish the financial responsibilities of each. California also endorses the recognition of the Research Management Committee as an effective structure for managing the critical process of scientific study and research.

With respect to the scope of the environmental assessment process, California favors a comprehensive approach. The problems of the Salton Sea are complex and, in order to achieve our objectives, we must gain a better understanding of the relationships between contaminants and avian mortality and disease, fisheries and salinity, and the health of fisheries and migratory birds. A successful solution must address all of these issues and offer a means to effectively restore a healthy, sustainable equilibrium to the Sea.

Sustainability in this context includes disposal of the brine or highly saline waters which will most likely be a byproduct of any engineering solution. It would be unacceptable to solve the salinity problems of the Sea only to exchange them for a brine disposal problem. We support, therefore, the inclusion in the legislation of subsection 101(e) calling for “determination of a method for disposing of pumped-out water.” Sustainability also necessitates that the ultimate solution address the root causes of ecological degradation to the Sea, not simply the apparent causes of increasing salinity. The avian mortality and declining fisheries stem from a complex set of factors, including contaminants from agriculture and urban runoff. The solution must identify and correct those factors throughout the watershed which contribute to the deteriorating water quality and fluctuating sea levels. In addition, as we develop a solution, we must be sure to comply with the Law of the River and take into account ongoing activities which might affect the quantity and quality of water flowing into the Sea, such as proposed water transfers.

The environmental review required by the bill will be significant in helping to determine the best possible solution to the Sea’s problems. For this reason, we should be sure to take advantage of the information generated through this process. We share the sense of urgency for a credible solution that motivates the sponsors of the bill. We suggest that there are ways to accelerate the environmental review process without hindering its value as a decisionmaking tool. For instance, the state and

Federal environmental processes can be run concurrently, or, if the Federal Government agrees, the intricate and thorough state environmental review process could be certified as satisfying the needs of Federal law. This option is built into the Federal transportation bill pending in the House. However, we would observe that the imposition of a statutory deadline for completing environmental studies may prove self-defeating.

Additionally, we believe that aggrieved parties should not be denied their right to judicial remedies as is currently precluded by subparagraph 101(f)(3)(B). California and many other states have fought hard over many years to ensure that Federal agencies abide by state environmental laws, and we believe it would be a bad precedent to excuse them from that responsibility, even in this narrow case.

Clearly, we must not delay progress toward a prompt solution. The Salton Sea is deteriorating rapidly and time is of the essence. The ambitious timelines set out in the legislation present a challenge to those of us charged with developing and implementing a solution, but, I am confident that with the commitment of all levels of government to save the Sea, we will meet this challenge.

In closing, I would like to reiterate the support of the State of California for the objectives of this legislation. The Salton Sea is a nationally significant resource and deserves our full attention. We appreciate the efforts of the Congressional Task Force and look forward to working with the Task Force and this Subcommittee to help perfect the bill so that it may be promptly enacted. It will provide the framework and the resources necessary to restore the Salton Sea.

STATEMENT OF TELLIS CODEKAS, PRESIDENT, SALTON SEA AUTHORITY

On behalf of the Salton Sea Authority, thank you for the opportunity to address the Subcommittee and to comment on the Sonny Bono Memorial Salton Sea Reclamation Act, H.R. 3267. I am Tellis Codekas, President of the Salton Sea Authority.

The Salton Sea Authority is comprised of the Counties of Riverside and Imperial, and the Imperial Irrigation and the Coachella Valley Water Districts. The Torres Martinez Desert Cahuilla Indians and a host of Federal and state agencies are ex-officio members of the Authority. The Authority is at the hub of a wheel which includes dozens of national, state, regional, tribal, and local stakeholders. The Authority recognizes the vital importance of the Sea as an agricultural drain, an environmental resource, a recreational destination, and an economic development engine.

Introduction of this legislation and the companion legislation in the Senate represent important steps forward in reclaiming and restoring the Salton Sea. Enacting legislation to save the Sea is a fitting tribute to the man who was very much responsible for the current drive to save and restore the Sea. The Salton Sea Authority and its member agencies strongly support the central elements of H.R. 3267 and look forward to working with the Committee and the Congressional Salton Sea Task Force on this proposed legislation.

The Authority was established in 1993 and has been working closely with Federal partners, particularly the Bureau of Reclamation and our state partners, particularly the Resources Agency and Cal-EPA on developing a consensus to restore this important resource. Until a year or so ago, much of our effort went unnoticed. The Sea was not viewed as a high national priority. Times have changed and we are thankful for the change. We need the help of the Federal Government.

The Secretary of Interior became personally involved in our efforts in December. The Secretary acknowledged the interagency and multi-interest effort that we had already developed. He confirmed the Department's commitment to this effort and established a structure to address biological and other studies.

We are committed to the process that the Secretary and the Authority agreed upon. The proposed legislation largely builds on the existing process and we support areas where it does so specifically, particularly:

- Findings acknowledging the Federal interest, Project requirements consistent with those developed by the Authority,
- Commitment to exploring multiple options in the feasibility study, and
- Authorization of appropriations which will allow completion of the feasibility, environmental analysis and permitting work.

Unfortunately, there are also provisions in the bill which do not reflect our process or local needs.

First of all, the memorandum of understanding referred to on page 6 seems to suggest a new process and a new feasibility study. We think it ought to confirm the roles of the Federal lead agency, the Department of Interior through the Bureau of Reclamation, and the local lead agency, the Salton Sea Authority, in completing our current work program.

Secondly, limitations of administrative and judicial review under the National Environmental Policy Act may be counterproductive. As the co-lead agency, we still must meet the requirements of the California Environmental Quality Act. Waiving NEPA provisions sends up a red flag to the very interest groups that we are working very hard to include in our restoration efforts, such as the Audubon Society.

Thirdly, the Secretary of Interior, the Authority, the Torres Martinez and the State currently sit on a Research Management Committee. The Committee was so composed to ensure limited conflict of interest, management oversight of research conducted, and to move expeditiously on research needs. The inclusion of a fifth member from the university community is disconcerting. The universities may well receive some share of research funds and having them make recommendations on fund distribution is an apparent conflict of interest. Additionally, research imperatives and their pace should not jeopardize plans to quickly restore the Sea. We do not support including any representative on the management committee that may create a perception of a conflict of interest.

There are other provisions in the bill which raise questions. The Authority applauds the Members of Congress and specifically the Congressional Salton Sea Task Force for recognizing that stabilizing and reducing the Sea's salinity is the highest priority. However, the Emergency Action specified under Title II of the bill may be counterproductive.

Title II directs the Secretary to expulse water out of the Salton Sea by December 1, 1998 to accommodate diversion of, presumably, Colorado River water to the Sea. However, given that the mechanics of how the water will be pumped out, where the Seawater will be pumped to, how the project will be funded, designed and constructed have not been worked out, this Title and its deadline are unworkable. Such an emergency action is an overwhelming technical, financial and political challenge by the deadline imposed. Preferably, the bill should direct the Secretary to work with the Authority through our current effort to identify and design an emergency plan to stabilize the sea.

Perhaps the greatest tribute to the late Congressman found in this bill is its intent to fix the Sea's problems quickly. The Authority thanks Congressmen Hunter, Brown, Calvert and Lewis for their commitment to expediting the recovery efforts.

I am thankful that the Speaker has shown a commitment to this effort and that our two California Senators have introduced similar legislation to this bill. We hope that the President signs restoration legislation within a few months. Still, the clock is ticking for the Salton Sea.

In the interim, the Authority and the Bureau of Reclamation can accomplish a great deal under our current five million-dollar work program. Federal funds authorized under Public Law 02-575 are being matched with state and local funds to carry out this work plan. Commitment by the Administration to proceeding on our work plan will help all of us to get a jump-start on whatever legislative deadline Congress establishes.

We are thankful for the opportunity to speak before you today. The Authority represents the local interest in reclaiming this important resource. We stand ready to work with our partners to do so and to do so quickly. The Authority's Executive Director, Tom Kirk is here to address any questions that you may have. Additionally, Tom Veysey, one of our board members and a Supervisor of Imperial County and Paul Cunningham, chair of the Authority's Technical Advisory Committee and Director of External Affairs for Imperial Irrigation District are here to serve as resources to you.

STATEMENT OF RICHARD BUNKER, CHAIRMAN, COLORADO RIVER COMMISSION OF NEVADA

Chairman Doolittle, Members of the Subcommittee, thank you for the invitation to testify on behalf of the State of Nevada and its Governor Bob Miller, concerning H. R. 3267 to reclaim the Salton Sea. My name is Richard Bunker and I am Chairman of the Colorado River Commission of Nevada. It was just one month ago that I, along with my colleagues from the Colorado River Commission and the Board of the Southern Nevada Water Authority, visited the Salton Sea and participated in a briefing from members of the Salton Sea Authority concerning their environmental restoration efforts.

Southern Nevada and the Colorado River

This Salton Sea briefing came at the end of a three day tour of the Colorado River which started at Lake Mead and followed the river visiting its dams, powerplants

and aqueducts which serve millions of people in the three lower basin states. Every elected and appointed official involved in water resources decision making was invited to participate on the tour. We met with water officials from Arizona and California and were hosted for dinners, dam tours, crop inspections and briefings. We went on this tour to convey to our Nevada policymakers one simple reality, when it comes to Colorado River water, Nevada is inextricably connected to the actions and activities, problems and solutions of our sister states of California and Arizona. During the past five years as a member of the Nevada Colorado River Commission, I have learned that issues involving the Colorado are like a never ending soap opera with intricate, slow moving plots and sub plots. Unless you follow the program faithfully, it is very difficult to really tell at any given moment, who is romancing whom and for what reason. We in Nevada have been romanced by just about everybody at one time or another, including the interests behind the Salton Sea Authority. Let me say at the outset that we in Nevada appreciate the objectives of California Salton Sea interests and support their overall plan to prevent the Salton Sea from becoming a Dead Sea. We are, however, opposed to H. R. 3267 in its present form for reasons which I will explain.

Concerns with H. R. 3267

I want to first issue a disclaimer that these comments on H.R. 3267 should not be viewed by anyone as Nevada having allied itself with any particular interest in California's water wars. That said, we believe that the bill will exacerbate California's continued over reliance upon Colorado River water to the detriment of Nevada and the rest of the basin states. Although California uses about 5.2 million acre feet of Colorado River water, its Compact entitlement is for only 4.4 million acre feet. In the past, the additional water has come from Arizona and Nevada's unused entitlement of lower basin water. Arizona and Nevada, along with the four upper basin states have for years been urging California to implement a plan to reduce its uses of the Colorado to the 4.4 million acre feet to which it has a permanent legal right. I am pleased that California is now working on its 4.4 plan.

I do not want to suggest that California is breaking the law by using the excess entitlement water. They have a contract right with the Department of the Interior to use such water *temporarily* until it is fully utilized by Arizona and Nevada. Nevada has a similar contract right to temporary use of unused entitlement. Within ten years when we exceed our own measly Colorado River entitlement of 300,000 acre feet, Nevada plans to also divert a smaller amount of the unused entitlement system water now being used by California.

Unlike California, however, we have a plan to develop alternate supplies for that day when all the water in the lower basin has been put to use. That day is not far off. Just last year, Arizona used nearly all of its water for the first time, leaving California to depend upon surplus water to meet its needs. As the Department of the Interior moves to approve regulations which allow for Colorado River water to be diverted and stored in groundwater aquifers located principally in Arizona, the full lower basin supply of 7.5 million acre feet will be gone. Nevada hopes to take advantage of the opportunity to participate in Arizona's groundwater banking program to provide us with supplies when we need them. Also unlike California, Nevada has no significant agricultural water uses from which water can be conserved or retired and transferred for municipal use.

California Must Move to Conserve Its Agricultural Water

As far as we can tell, California has a long way to go on its plan to live within its 4.4 million acre foot entitlement. Several competing plans have been advanced by the various Ag and urban interests in California with no consensus developing around anything. Now comes H.R. 3267, the Salton Sea bill trying to stabilize a Federal National Wildlife Refuge where historically no lake ever existed and was created mostly from the wasted tailwater from the California Ag districts. The bill calls for a study of how to bring *more* water to the Salton Sea and specifically redirects this year's surplus flows to the Sea.

It seems to us that before any further Federal demands for water are created, California should first implement a plan to live within the permanent supplies to which it is entitled.

Conclusion

California is now using nearly 1 million acre feet of Colorado River water above its entitlement. California's right to use this water is *temporary*. With the prospect of off stream groundwater banking, the excess lower basin water will soon be gone. California cannot rely year to year upon surplus flows to satisfy its needs. California must implement a plan to wean itself from this dependency upon other state's water by implementing water saving programs at the Imperial, Palo Verde and Coachella

irrigation districts and diverting that saved water to satisfy California's growing urban water demands. We are opposed to the creation of a Federal wildlife refuge at the Salton Sea. Such a refuge would become dependent upon the very wasted Ag water California must save to meet its 4.4 million acre foot limitation.

STATEMENT OF RITA P. PEARSON, DIRECTOR, ARIZONA DEPARTMENT OF WATER
RESOURCES

I would like to thank the House Subcommittee on Water and Power for the opportunity to provide the State of Arizona's perspective on H.R. 3267, the "Sonny Bono Memorial Salton Sea Reclamation Act."

While Arizona does not object to the State of California's desire to develop a plan to address the long-term needs of the Salton Sea ecosystem, it is Arizona's position that a well thought out and scientifically valid plan, which will not negatively impact the other Colorado River Basin States or Mexico, has the greatest opportunity of providing a lasting legacy of the efforts of the late Congressman Sonny Bono to stabilize and restore the Salton Sea.

With this testimony, it is the State of Arizona's intent to provide the Subcommittee with information on several issues to consider during the deliberations associated with this legislation. These issues are: (1) the identification of potential sources of water for Salton Sea reclamation in H.R. 3267; (2) the difficulty of using Colorado River water for Salton Sea reclamation within California's Colorado River allocation; and (3) the balance to be achieved between the ecological needs of Salton Sea and the larger context of the ecological needs in the southwestern United States. Each of these issues are described in more detail in the following pages.

Introduction and Background

The Colorado River is one of the most erratic rivers in the United States. Over the 90-year period of record there have been annual flows at Lees Ferry, Arizona of more than 23 million acre-feet (maf) and flows as low as 5 maf. Approximately 70 percent of the annual natural flow of the Colorado River occurs in the months of May, June and July. The only way these flood flows can be managed for beneficial use is through utilization of a reservoir storage system.

Because of the erratic and meandering nature of the Colorado River, the Salton Sink has been repeatedly filled and evaporated over the past few thousand years. Prior to the filling of the present Salton Sea, the most recent was prehistoric Lake Canhuilla which dried up approximately 300 years ago. The average annual precipitation in the region is about 3 inches, but the annual rate of evaporation is approximately 5 feet.

Settlement of the Imperial Valley in the late-1800s led to the first tentative attempts at diverting the Colorado River water at the turn of the century for agricultural purposes. Shortly after, in 1905, flood flows from the Gila and Colorado Rivers breached a dike near the International Boundary and poured into the Imperial Valley for 16 months and created the Salton Sea.

Attempts by the agricultural interests along the Lower Colorado River and in the Imperial Valley to limit the potential for devastating floods, as well as provide a long-term reliable supply of Colorado River water led to the passage of the Boulder Canyon Project Act (BCPA) in 1928 (43 U.S.C. 617, December 21, 1928). The BCPA authorized the construction of Hoover Dam and the All-American Canal to supply water for the Imperial and Coachella Valleys. The BCPA listed the primary purposes for the construction of Hoover Dam as controlling floods, improving navigation, regulating the flow of the Colorado River and providing for the storage and delivery of water for reclamation of public lands and other beneficial public uses within the United States.

Since the construction of Hoover Dam, numerous large dams and reservoirs have been constructed on the Colorado River and its tributaries accounting for approximately 60 maf of storage. This is approximately four times the average annual yield of the Colorado River. This allowed the Basin States and the Bureau of Reclamation (Reclamation) to control flood flows and regulate the River to provide for the generation of hydroelectric power and delivery of water for downstream uses in agricultural, municipal and industrial sectors. Creation of this infrastructure has resulted in a long-term dependency on the water supplies of the Colorado River. Because of this dependency, a complex use and accounting system has evolved that has permitted the complete allocation of the Lower Basin's Colorado River Compact apportionment of 7.5 maf.

Current demand on the Colorado River by the Lower Basin States is at an all-time high. Arizona and Nevada are approaching full utilization of their basic appor-

tionments of 2.8 maf and 300,000 acre-feet, respectively. California's present consumptive use of Colorado River water is approximately 5.2 maf per year, while its mainstream basic apportionment is only 4.4 maf, plus one-half of any available surpluses. Additionally, the United States is annually obligated, through an international treaty, to provide Mexico with 1.5 maf. Consequently, there is currently 9.8 maf of annual demand in the Lower Basin. Under the Law of the River, the Secretary is not authorized to deliver this amount of water unless surplus conditions are declared. In 1998, the Secretary did declare surplus conditions, but this condition is not sustainable over the long-term, particularly during periods of drought. Arizona is concerned that additional demand in the Lower Basin will increase the likelihood of shortages to municipal and agricultural users.

H.R. 3267 Does Not Identify the Source of Water for Salton Sea Reclamation

Title I, Section 101(b)(1) of H.R. 3267 proposes to reduce and stabilize the "overall salinity of the Salton Sea to a level between 35 and 40 parts per thousand." In addition, Section 101(b)(2) would "stabilize the surface elevation of the Salton Sea to a level between 240 feet ... and 230 feet below sea level." Title II of H.R. 3267 is intended to provide "emergency action to stabilize Salton Sea salinity." Section 202(1) requires the expulsion of saline waters from the Sea "... by pumping sufficient water out ... prior to December 1, 1998 ..." in order to accommodate, through Section 202(2), "diversion into the Salton Sea of water available as a result of high-flow periods in late 1998 and early 1999."

Arizona interprets this as pumping a substantial quantity of water out of the Sea and then attempting to dilute the remaining solution through the introduction of new water supplies. Arizona is concerned that the source of this water is not identified in the draft legislation. The Secretary of the Interior is not planning to make flood control releases during the referenced time frames in Water Year 1998, nor are they anticipated in early 1999. It is Arizona's position that Congress should reconsider the water that is expected to be used and the time-frame to accomplish these goals.

Similarly, Section 101(c)(2)(A)(iii) describes an option to be considered which would provide "augmented flows of water into the Salton Sea." Again, it is not clear what the source of these augmented flows would be. If these flows are the result of importation of water from the Pacific Ocean, Gulf of California or return flows from the Mexicali Valley, this should be specifically referenced.

Perhaps Arizona's greatest concern is the preservation of rights and obligations with respect to the Colorado River. Section 101(f)(2) must be strengthened with the incorporation of the following language:

This Act shall not supersede or otherwise affect any treaty, decree, law or agreement governing the use of water from the Colorado River. The Secretary shall implement this Act in a manner fully consistent with and subject to the Colorado River Compact, the Upper Colorado River Basin Compact, the Water Treaty of 1944 with Mexico, the decree of the United States Supreme Court in *Arizona v. California*, and the provisions of the Boulder Canyon Project Act of 1928, Colorado River Storage Project Act of 1956 and the Colorado River Basin Project Act of 1968 which govern the allocation, appropriation, development and exportation of the waters of the Colorado River Basin.

Finally, the water supply and water quality issues associated with reclamation of the Salton Sea as proposed in H.R. 3267 must be carefully examined in relation to the overall management of the Lower Colorado River. The Colorado River is an interstate river which is fully appropriated and managed by nearly a century of intense scrutiny, dialogue, negotiation, legislation and litigation. Currently, the seven Colorado River Basin States, Native American Tribes, the United States and other interested stakeholders are involved in several important basin-wide governance processes which are addressing issues such as water supply, quantity and allocation, water quality, as well as endangered species and habitat management.

Additional Colorado River Water for Salton Sea Reclamation Must Come From Within California's Allocation

With the increased demand upon the Colorado River system and the potential risks of shortage to the Colorado River Basin States, the Secretary of the Interior requested that California initiate the development of a negotiated plan among its Colorado River water-using agencies to reduce their annual use from 5.2 maf to the basic apportionment of 4.4 maf. The California "4.4 Plan" proposes to reduce the annual use of Colorado River water in two phases. Phase I would step the use down from 5.2 maf to approximately 4.6-4.7 maf over a ten to 15 year period (2010-2015). Phase II would further reduce California's use of Colorado River water down to the basic apportionment of 4.4 maf. The primary 4.4 Plan components include: (1) firm

“core transfers” from agricultural districts to municipal and industrial water providers in the South Coast region; (2) recovery of seepage from the All-American and Coachella Canals; (3) implementation of conjunctive use management of surface and groundwater supplies; and (4) Colorado River reservoir operating criteria which continue to make surplus water available.

A critical component of the 4.4 Plan is the firm transfer of approximately 400,000 acre-feet per year out of the Imperial Valley to the South Coast region during Phase I. Phase II calls for an additional 50,000 to 100,000 acre-feet per year to be transferred from Imperial Irrigation District, if determined feasible. In order to effectuate these transfers, intensive water conservation programs will be required in the agricultural districts which will ultimately lead to reduced drainage flows into the Salton Sea. Even if only the Phase I 400,000 acre-feet per year of firm transfer water is removed from the Imperial and Coachella Valleys, this is roughly equivalent to 40 percent of the nearly one million acre-feet per year of current agricultural drainage flowing into the Sea.

The ultimate goal of the California 4.4 Plan is to develop programs which return the State to its basic apportionment and continue to allow the Colorado River Aqueduct, operated by the Metropolitan Water District of Southern California, to run at essentially full capacity (approximately 1.2 maf annually) without causing detrimental impacts to the agricultural service areas and to the other Basin States. This raises a concern in Arizona regarding the relationship between the proposed California 4.4 Plan and the role of H.R. 3267 and reclamation of the Salton Sea. Arizona believes that the legislation, in its present state, is unclear on the role of the Colorado River in the restoration and reclamation of the Salton Sea. Programs proposed in H.R. 3267 must come within California’s lawful apportionment, but not jeopardize the overall goal of California’s implementation of the 4.4. Plan.

Ecological Needs of Salton Sea Reclamation Must Be Viewed in the Larger Context of the Ecological Needs of the Southwestern United States

Arizona generally supports the concept described in Section 101(c)(1) which requires that the Secretary prepare a “feasibility study” of various options for reclaiming the Sea. Preparation of the study is compatible with the recommendations stemming from the Salton Sea Needs Assessment Workshop which was held in August 1997 in Palm Springs, California. In fact, the Workshop proceedings developed a package of 31 research proposals which would require approximately \$32 million and three years to implement.¹ There are two specific recommendations which came out of the Workshop which may be of interest to the Committee.

First, according to page 15 of the proceedings, “foremost in team discussions was the overriding need to understand the Salton Sea ecosystem, preferably before, but at a minimum, while we attempt to fix it through human intervention. Otherwise the technical solution for the Salton Sea’s problems are liable to be too narrowly focused and a unique opportunity to benefit people and wildlife may not be achieved ...”

Second, an additional recommendation on page 71 suggested that “... agencies should make clear to Congress and stakeholders that three years of focused science can only reduce some of the major uncertainties about the problems of the Salton Sea, and that final solutions to the problems are unlikely to emerge from such an effort. An adaptive approach to managing the Salton Sea and conducting science is more likely to be successful.” The Needs Assessment teams recommended that the concept of adaptive management should involve implementing small actions, monitoring the response of the Sea to that action, assessing the response mechanisms and using the knowledge gained to design and implement subsequent actions and monitoring and assessment processes. It should be recognized that a similar adaptive management process has been successfully implemented by the Secretary of the Interior, the Colorado River Basin States and other stakeholders for the management and operation of Glen Canyon Dam.

Currently, the Lower Basin States, several Native American Tribes, the United States, environmental organizations and other stakeholders are developing a fifty-year program which will meet the needs of over 100 species occupying habitats along the Lower Colorado River. This Lower Colorado River Multi-Species Conservation Program (MSCP) is a significant effort directed at ensuring long-term Federal and non-Federal compliance with environmental laws and regulations, while ensuring the continued utilization and development of the water and hydroelectric power resources of the Colorado River.

¹Saving the Salton Sea: A Needs Assessment Workshop, August 4-8, 1997, Workshop Proceedings, A Report of the U.S. Fish and Wildlife Service, Region 1, Portland, Oregon, 73 pp.

The MSCP, much like the CalFed Bay-Delta Program, Upper Colorado River and San Juan River Basin Recovery Programs are major undertakings requiring significant commitment of Federal and state resources. Programs costing several hundred millions of dollars must be carefully evaluated from the standpoint of the overall goals and objectives and the likelihood of long-term measurable success. These programs, and similar ones in the southwestern United States, are all in the position of competing for limited resources from the Federal and state taxpayers, while attempting to address certain specific and unique needs. There is an obligation on the part of Congress and individual state legislatures to ensure that the programs with the greatest likelihood of success are supported through commitment of these limited resources.

While Arizona recognizes that the needs of the Salton Sea ecosystem are significant, the proposed solutions must be evaluated in the perspective of the overall management of the water and ecological resources of the Lower Colorado River Basin. A Salton Sea solution must be considered and integrated with the ongoing California 4.4 Plan, the recent proposed rule authorizing the offstream storage of Colorado River water and the development of the 50-year Lower Colorado River MSCP. Each of these processes are a single component of the evolving blueprint which guides the wise use, management and conservation of all of the natural resources in the Lower Basin. One process cannot be rapidly advanced without carefully evaluating the potential impacts upon the others. Management of these valuable resources can only be accomplished with broad-based public participation in a thoughtful, iterative and scientifically credible environment.

Conclusion

In summary, Arizona urges the Congress to amend H.R. 3267 to accomplish the following:

1. Identify all potential sources of water for the Salton Sea Reclamation Project and consider the impacts of using that water;
2. Require explicit adherence to the current law of the Colorado River; and
3. Require that any Colorado River water utilized for the Salton Sea Reclamation Project come from within California's mainstream allocation of Colorado River water.

In view of the complexity of the current issues facing the Secretary of the Interior, individual Colorado River Basin States and stakeholders, there are still questions which remain to be answered. For example, there may not be sufficient resources in Reclamation's Lower Colorado Region to accomplish the goals and objectives required in H.R. 3267 and still meet the needs of the California 4.4 Plan process, offstream storage of Colorado River water, development of surplus criteria for reservoir operations, implementation of the final biological opinion for Lower Colorado River operations and the continued development of the Lower Colorado River MSCP. Consequently, Arizona believes that the time-lines proposed in H.R. 3267 should be re-evaluated in the context of these other equally important elements of Colorado River management.

The burdens placed on California, the United States and potentially the other Colorado River Basin States for development and implementation of the Salton Sea Reclamation Project will require a cooperative and effective partnership of the Congress, the States and stakeholders within the Basin. Arizona looks forward to working with the United States, California and the other Basin States during the development of the Salton Sea Reclamation Project.

Thank you for the opportunity to address the Subcommittee regarding H.R. 3267. I would be happy to answer any questions you may have.

STATEMENT OF HENRY J. VAUX, JR., ASSOCIATE VICE PRESIDENT, UNIVERSITY OF CALIFORNIA

Mr. Chairman, my name is Henry J. Vaux, Jr. and I am Associate Vice President of the University of California System for agricultural and natural resource programs. I appear here this morning on behalf of California's Federal Water Resources Research Institute, where I formerly served as Director. At the outset, I want to thank you for the opportunity to appear before your Committee in support of efforts to reclaim and improve the Salton Sea. I also want to reiterate our profound thanks for your long-term support of the Water Resources Research Institute Program.

In my testimony this morning, I wish to make three basic points. First, I want to describe and clarify the purposes of the Federal Water Resources Research Institutes and briefly identify several of the ways in which the Institute in California has addressed these purposes. Second, I want to elaborate upon the current mission

and role of the Institute. Third, and finally, I want to describe the capability of interests of the California Water Resources Research Institute in supporting the activities that would be authorized under the provisions of H.R. 3267.

The Federal Water Resources Research Institutes were first authorized by the Water Resources Research Act of 1964 (Public Law 88-379). The Institute program has been reauthorized approximately every five years since. The most recent reauthorization is contained in Public Law 104-147. The program maintains Federal Water Resources Research Institutes at the Land Grant University in each of the 50 states, in the District of Columbia and in the several Trust Territories. The broad purpose of the Institutes is to focus the collective research expertise of scholars in the nation's institutions of higher education on water problems at the local, regional and national level. To this end, the authorizing legislation requires that the Institutes make their funds available to scholars at all institution of higher education in their respective states. Thus, one of the hallmarks of the Institute program is that competition for the Federal funds that it administers are open to faculty in all institutions of higher education and NOT just to researchers at the Land-Grant Universities.

Faculty researchers with interests in water resources at ALL of California's Colleges and Universities are eligible to compete for the Federal funds which the California Water Resources Research Institute awards.

The California Water Resources Research Institute, which is also known as the University of California Water Resources Center, was initially established by the State at the University of California in 1958. With the passage of Public Law 88-379, the Center was also designated as the Federal Water Resources Research Institute for California. The Institute's role is to facilitate, coordinate and support research on water resources undertaken by faculty at California's public and private Universities. Over the last ten years, nearly all of the Federal dollars appropriated to the California Institute have been awarded to faculty researchers on campuses other than University of California campuses. Thus, for example, since 1987, these funds have been awarded to faculty researchers at San Diego State University, Humboldt State University, California State University at Fresno, the California Institute of Technology and Stanford University. The Institute is unique in that it maintains relationships with virtually all faculty with interests in water resources at all of California's Colleges and Universities. The most recent addition of our California Directory of Water Expertise lists some 986 faculty at 33 Colleges and Universities.

The role of the California Water Resources Research Institute is to identify the high priority research topics; to ensure, through peer review, that research is directed at the highest priority topics and is of the highest quality; and to engage in programs of research dissemination to inform other researchers, water managers and members of the public of the results of the research.

The California Water Resources Research Institute does not conduct research. Rather, its role is to facilitate the conduct of research by faculty experts located at the state's colleges and universities. This facilitation is accomplished in a variety of ways. Annually, high priority research topics are identified in consultation with water managers, local, state and Federal officials with responsibilities for water resources and members of the public. Research proposals are evaluated and rated by peer groups and only those of the highest quality receive research support. The results of water research accomplished in California and throughout the world are disseminated in a variety of publications, at annual conferences and at workshops convened for the purpose. By performing its facilitation role the Water Resources Research Institute helps to ensure that research on water resources in California is well coordinated, focuses on the most pressing topics and is of the highest quality. In addition, the Institute's activities help to avoid duplication of research effort both within California and nationally.

The California Water Resources Research Institute is prepared to facilitate the development and conduct of any research or programs of research that the "Salton Sea Research Management Committee" may identify as necessary pursuant to the provisions of H.R. 3276.

I wish to emphasize as clearly as I can that our presence here today and our interest in the "Sonny Bono Memorial Salton Sea Reclamation Act" lies with ensuring that whatever research may emerge as a consequence of this Act is accomplished by the most qualified investigators and is of the highest possible quality. We believe that many important research questions will emerge as reclamation and restoration efforts go forward. We stand prepared to assist local, state and Federal officials in

identifying and framing those questions, should that be appropriate. We are also prepared to make available our good offices to ensure that only the highest quality research projects are funded and that all of our college and University researchers with an interest in questions related to the restoration of the Salton Sea are afforded an opportunity to compete for whatever funds may be available.

In closing, Mr. Chairman, I want to reiterate that the California Water Resources Research Institute stands ready to help in any way as you move forward with H.R. 3267. Let me thank you again for the opportunity to appear before your Subcommittee, and for your continuing support of the Water Resources Research Institute program.

STATEMENT OF STEPHEN L. WEBER, MEMBER, SALTON SEA UNIVERSITY RESEARCH CONSORTIUM, AND PRESIDENT, SAN DIEGO STATE UNIVERSITY

Mr. Chairman and Members of the Subcommittee, thank you for the invitation to appear today on behalf of the Salton Sea University Research Consortium. I am proud to represent my fellow colleagues, Chancellor Raymond Orbach, University of California, Riverside, and President James Appleton, University of Redlands. Our Consortium strongly supports the Sonny Bono Memorial Salton Sea Restoration Act. We are proud to have worked with the members of the Congressional Salton Sea Task Force, Congressmen Hunter, Lewis, Calvert and Brown and the late Sonny Bono, on this issue of paramount importance to California.

To address the grievous and disastrous environmental problems at the Salton Sea in an integrated, timely and efficacious manner, the University of Redlands, the University of California, Riverside and San Diego State University have joined forces to form the Salton Sea University Research Consortium.

The complexity of issues surrounding the Salton Sea requires research approaches that consider the biological and ecological systems of the sea, the regional hydrology, the chemistry of soil and toxic substances, as well as potential bioremediation and engineering solutions. We must also take into account the economic issues, the agricultural interests and the human, cultural and social concerns of the Salton Sea region and the Lower Colorado River basin. The role of the Salton Sea University Research Consortium will be to help provide policy-makers with the best possible research data on which to base their management decisions.

Our consortium offers the full spectrum of expertise necessary to grapple with these difficult decisions.

Experts from each of our universities have long been active, not just on water resource issues in California, but specifically on issues pertaining to the Salton Sea. Approximately 25 faculty members at the University of California, Riverside have expertise addressing issues facing the Salton Sea. San Diego State University's Center for Inland Waters includes more than 20 faculty and researchers who have conducted long-term studies at the Salton Sea and its surrounding basin. The University of Redlands has just received the first half of a \$2 million appropriation to establish a Salton Sea Bioregional GIS Database, which will consolidate the existing research data that is of greatest interest to the various stakeholders in the Salton Sea.

Our combined universities have extensive interests and expertise in this area. We believe that timely access to this knowledge is vital to the Salton Sea restoration efforts. Scientists from California's leading public and private universities, including the University of California and the California State University systems, are represented in our Consortium. Faculty and researchers knowledgeable about the Salton Sea and its ecosystem from nearly 40 campuses in California are available to address the complex problems endangering the Salton Sea. These are university scientists who have conducted research on the endangered brown pelican, who have developed flow models for water movement within the sea, which has important implications for the proposed solutions; and who have linkages to such valuable programs as UC Mexus, which has important ties to Mexico and is currently conducting a comprehensive study of the Lower Colorado River basin.

Further, we have initiated discussions and plan to coordinate closely with the Water Resources Center and Los Alamos National Laboratory both in naming a representative for the fifth seat to the research management committee and in carrying out research. Already our relationship with each of these entities is tightly linked. The Water Resources Center has funded scientists at both California State University and the University of California. The Associate Director of the center is a faculty member at UC, Riverside. Likewise, the Director of the Los Alamos National Laboratory is being appointed as an adjunct professor at UC, Riverside.

The immediate benefits of our participation are twofold.

First, the Consortium comprises three universities in close proximity to the Salton Sea. Our faculty has been working and teaching courses at the Sea and surrounding basin for more than 20 years. Recent research results include an analysis of the dynamics of several kinds of toxic algae we have discovered there. We also have gathered the first comprehensive data on nutrient levels in the Salton Sea since the 1960s and have discovered several new fish parasites, which are implicated in the massive fish die-offs. We are collaborating with the Bureau of Reclamation on a bio-remediation project on the New River. We are up to speed and ready to "get it done."

Second, members of the Consortium have considerable experience managing large-scale research projects and coordinating with state and Federal agencies as well as other universities. The salinity/drainage program of the University of California, for example, manages extensive research activities at the Kesterson Reservoir, a situation very comparable to the Salton Sea. San Diego State University's extensive work on arid-lands agriculture and salinity problems in the Middle East has direct applications to the problems faced at the Salton Sea.

We propose to bring a California Solution to a California Problem. We know the Sea, and it is we who will live with the success or failure of this effort.

We are pleased to learn that Section 102 of the proposed bill calls for the establishment of the "Salton Sea Research Management Committee." The Consortium strongly endorses this initiative because it will bring together the diverse areas of expertise that are needed to address and solve in real time the complex issues facing the Salton Sea. Given our research expertise, coupled with our geographical proximity to the Salton Sea, the University Research Consortium is in a unique position to play a critical role in the research and monitoring effort. The success of this restoration effort requires the long-term alliance of our Federal, State, and Local institutions, the indigenous peoples of the region, and the university community.

The University Research Consortium has identified a number of ways that we can be of assistance:

- Coordinating research efforts, including the evaluation of existing research to determine what is known and where the gaps are. The purpose is to integrate priorities across disciplines.
- Collecting, maintaining, and updating information through a Salton Sea data clearinghouse.
- Developing and conducting research in a coordinated manner, including economic impact reports.
- Advising and reporting to the Congressional Task Force and the Congress on the progress of the Salton Sea clean up.
- Constructing and managing a Salton Sea Research Laboratory and Visitor Center jointly with the California State Parks and providing research facilities at the Coachella Valley Agricultural Station, only four miles from the Salton Sea.
- Providing long-term management and monitoring to ensure that biological, hydrological, and economic impacts are positive over the long-term.

In short, our universities have substantial expertise in scientific endeavors related to the Salton Sea; in managing large regional, national, and international programs; in forming and implementing consortia; and in providing an objective, science-based perspective on complex issues. I have additional information about our faculty research capabilities and publications that I will submit for the record.

We look forward to working with the Federal Government, the Salton Sea Authority, the State of California, and all the stakeholders in developing and implementing successful solutions to address the critical environmental problems at the Salton Sea.

Our Consortium is dedicated to bringing the best expertise available to preserve this unique resource. Thank you.

STATEMENT OF TED STEWART, EXECUTIVE DIRECTOR, UTAH DEPARTMENT OF
NATURAL RESOURCES

Thank you for this opportunity to present written testimony for the March 12, 1998 hearing on H.R. 3267 titled "Sonny Bono Memorial Salton Sea Restoration Act." I am charged with protecting Utah's Upper Basin water allocation from the Colorado River. I would like to convey to you a concern Utah has with the legislation as circulated in draft form.

California Use of Colorado River Water

With the advent of the full use of the Lower Basin's allotment of 7.5 million acre-feet of water per year under the Colorado River Compact of 1922, pressures to improve irrigation efficiencies increased. In fact, the state of California passed legislation imposing fines on the wasteful use of water. This resulted in a lawsuit in the 1980's where the Imperial Irrigation District was accused of wasteful use of water and ultimately directed by the state of California to improve its irrigation efficiency. However, from our point of view the side effects of improving agricultural water use efficiency has been or will be a decrease in the volume of water flowing into the Salton Sea. The result could be a decline in the level of the Salton Sea as evaporation may exceed inflow. Also as a terminal lake with no outlet besides evaporation this will result in an increase in salinity concentration in the Salton Sea. The increasing salinity level is threatening the existing fishery, wildlife habitat and other associated uses of the sea.

Problem with the Proposed Legislation

The proposed legislation calls for the stabilizing of both salinity and water elevation levels. Unless an outlet is provided to flush the salt from the sea, or a desalination plant is built to remove salts, the only other way we see to accomplish this is by providing relatively large quantities of fresh water to the Sea. The problem is, the draft legislation does not specify the source of water that might be used to accomplish this purpose. The Colorado River appears to be the only significant source of water available. But, the Lower Colorado River Basin states, particularly California, are currently using in excess of their full allocation from the river. If the legislation is not carefully crafted it could result in Upper Basin water being used to freshen the sea. This would not only be unfair but it would disturb the delicate balance that currently exists between the Upper and Lower Colorado River Basin states.

Utah has no problem with stabilizing the Salton Sea, whether in terms of volume or salinity. We believe, however, the water used for this purpose, if it comes from the Colorado River, must come from the state of California's compact allocation. We think this is consistent with the current interpretations of the "Law of the River." Indeed, Utah would emphasize that if Colorado River water is needed for Salton Sea augmentation, the water should come only from California's compact allocation.

Suggested Amendments

The state of Utah supports the suggested amendments recommended by the Upper Colorado River Commission. With those amendments, Utah and the other Colorado River Basin states will not be put at risk by this legislation. We believe any other result would be inequitable, violate the "Law of the River," and place at odds with each other the Colorado River Basin states.

STATEMENT OF EVAN M. HIRSCH, DIRECTOR, WILDLIFE REFUGE CAMPAIGN,
NATIONAL AUDUBON SOCIETY

Thank you for the opportunity to provide you with our views on H.R. 3267, the "Sonny Bono Memorial Salton Sea Reclamation Act." We appreciate the Committee's interest in honoring the late Representative Bono by promoting a solution to the ecological crisis occurring at the Salton Sea. The mission of the National Audubon Society, representing more than 67,000 Californians and more than 550,000 Americans nationwide, is to conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity.

The Salton Sea has become a virtual Mecca for migratory birds travelling along the Pacific Flyway. More than 380 species call this unlikely alcove in the southern California desert their home as they travel between points as far south as Antarctica and as far north as the Arctic. Indeed, the importance of the Sea transcends national interests and must be considered in the broader international context.

Mr. Chairman, how we respond to this crisis will have broad ramifications for people and ecosystems far beyond the scope of our immediate interests.

The Salton Sea National Wildlife Refuge was established in 1930 for the purpose of providing wintering and spring migration habitat for birds. At the time it was established the refuge contained 46,800 acres above the Salton Sea's waters; inundation over the years has left the refuge with just 2,400 acreage above water level. In spite of the lost acreage, the refuge today provides vital wintering habitat for some of the large concentrations of migratory waterfowl, shorebirds and passerines in the nation, and provides important habitat for the endangered Yuma clapper rail.

Local communities also benefit substantially from the refuge's existence and wellbeing. A 1994 study conducted by economist Paul Kerlinger concluded that \$3.1 million was spent by 54,000 bird watchers in local communities surrounding the Salton Sea.

In spite of the area's tremendous ecological value, massive die-offs of birds and fish have occurred in recent years. In the past five years alone, more than 250,000 birds have died from outbreaks of botulism, Newcastle disease and other undiagnosed causes. As we speak, an outbreak of fowl cholera is ten weeks running, and has already killed an estimated 7,800-23,000 birds representing 54 species.

What is happening at Salton Sea is nothing short of an ecological disaster.

The importance of enacting legislation to address the problems of the Salton Sea cannot be overstated. H.R. 3267 is a bold initiative that makes a good faith effort to reach a solution to the crisis. We are concerned, however, that this legislation seeks to accomplish a great deal without a full and accurate accounting of all expected outcomes. We have four main concerns with H.R. 3267:

- Timetable for identification and review of alternatives;
- The scope of options under consideration;
- Exemption of administrative and judicial review;
- Pumping water from the Sea without a full accounting of disposal impacts.

Timetable for Review

H.R. 3267 proposes a 12-month timeline to complete feasibility studies for a series of complex options identified as "cost effective" by the Bureau of Reclamation. Even under the most optimistic of circumstances, this timeline is unrealistic. Our major concern is that in a rush to comply with this unrealistic timeline, costly mistakes will be made or viable options ignored.

Solving the crisis at the Salton Sea will not be easy. In October of last year, *Saving the Salton Sea*, a research needs assessment, prepared by the U.S. Fish and Wildlife Service in cooperation with the State of California and other Federal agencies, concluded that at least three years and \$30 million would be necessary to conduct studies alone. While we certainly agree that it's possible to study an issue almost without conclusion, we have equal concerns about hastily adopting an alternative or series of alternatives without having a better sense of the likely outcomes.

Accordingly, the twelve-month timetable provided in H.R. 3267 seems a woefully short time period in which to accumulate the necessary environmental and engineering data necessary to adopt a realistic alternative. In particular, it is mandatory that the Environmental Impact Statement (EIS) process under the National Environmental Policy Act (NEPA) follow the engineering/technical studies and the selection of a preferred alternative. To accommodate the sequential ordering of these studies, Audubon believes that this legislation ought to be modified to allow at least an 18-month timeline.

Scope of Options

We must all recognize that there is no "silver bullet" solution to the problems facing the Salton Sea. H.R. 3267, however, limits the feasibility study to just four options, excluding a variety of others. The options identified in this legislation: Pumping water from the Sea; building desalinization impoundments within the Sea; providing infusions of fresh water; and a combination of the three, were adopted from the 1997 Bureau of Reclamation's option assessment, which reviewed 54 alternatives. Rather than selecting alternatives with the best likelihood for success, the BOR selected their alternatives based on fiscal criteria. For the purposes of their selection, the BOR chose those options that would require \$10 million or less in annual operating costs.

We don't believe that any realistic option should be excluded because of a narrow set of criteria. Therefore, we strongly encourage the Committee to expand the range of alternatives for consideration to include those that may yield longer-term ecological benefits.

Exemption from Administrative and Judicial Review

National Audubon is strongly opposed to provisions in H.R. 3267 that seek to limit environmental oversight and public participation. Specifically, Section 101(f)(3)(A) would exempt activities associated with implementation of a selected alternative from meeting the full requirements under NEPA. While we appreciate the authors' interest in expediting actions to rectify the crisis in the Salton Sea, we firmly believe that full NEPA compliance should be applied to the selection and implementation of alternatives. Likewise, we object to Section 104(c) which exempts river reclamation activities from having to meet Section 402 requirements under the Federal Water Pollution Control Act. It seems contradictory to exempt inflows from

meeting pollution standards when our central objective is to clean up the Salton Sea.

We also have concerns about Section 101(f)(3)(B) which limits judicial review of the chosen alternative. Despite the urgency of implementing a remedy, we should not sacrifice the legal rights of U.S. citizens to accomplish our goals.

Pumping Brine from the Salton Sea

Title II of H.R. 3267 requires that the Secretary of the Interior begin pumping water from the Salton Sea prior to December 1, 1998 to accommodate water diversions from unidentified sources. We object to this provision for several reasons. First, Title II appears to bypass necessary environmental oversight mandated under NEPA. The ecological impacts of brine disposal, particularly on the scale addressed by the bill, are expected to be enormous. A full review of the disposal plan, and an opportunity for the public to comment will be critical. Second, it is unclear where diversion water will be drawn from and what the expected ecological and economic impacts on the source are likely to be. Again, we appreciate the need to expedite remediation, but we strongly believe that any such efforts must comply with Federal and state environmental regulations.

Conclusion

National Audubon Society appreciates the efforts of this Committee and the sponsors of H.R. 3267 to quickly address the crisis at the Salton Sea. Although there are a number of provisions in the bill that we object to, we are supportive of the overall intent to find and implement a solution in the least amount of time possible. We look forward to working with the Committee as we move forward with this important legislation.

105TH CONGRESS
2D SESSION

H. R. 3267

To direct the Secretary of the Interior, acting through the Bureau of Reclamation, to conduct a feasibility study and construct a project to reclaim the Salton Sea.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 25, 1998

Mr. HUNTER (for himself, Mr. LEWIS of California, Mr. CALVERT, and Mr. BROWN of California) introduced the following bill; which was referred to the Committee on Resources

A BILL

To direct the Secretary of the Interior, acting through the Bureau of Reclamation, to conduct a feasibility study and construct a project to reclaim the Salton Sea.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) **SHORT TITLE.**—This Act may be cited as the
5 “Sonny Bono Memorial Salton Sea Reclamation Act”.

6 (b) **TABLE OF CONTENTS.**—The table of contents of
7 this Act is as follows:

Sec. 1. Short title; table of contents.
Sec. 2. Findings.

TITLE I—SALTON SEA RECLAMATION PROJECT

- Sec. 101. Salton Sea reclamation project authorization.
- Sec. 102. Concurrent wildlife resources studies.
- Sec. 103. Salton Sea National Wildlife Refuge renamed as Sonny Bono Salton Sea National Wildlife Refuge.
- Sec. 104. Alamo River and New River irrigation drain water.

TITLE II—EMERGENCY ACTION TO STABILIZE SALTON SEA SALINITY

- Sec. 201. Findings and purposes.
- Sec. 202. Emergency action required.

1 **SEC. 2. FINDINGS.**

2 The Congress finds the following:

3 (1) The Salton Sea, located in Imperial and
4 Riverside Counties, California, is an economic and
5 environmental resource of national importance.

6 (2) The Salton Sea is critical as—

7 (A) a reservoir for irrigation, municipal,
8 and stormwater drainage; and

9 (B) a component of the Pacific flyway.

10 (3) Reclaiming the Salton Sea will provide na-
11 tional and international benefits.

12 (4) The Federal, State, and local governments
13 have a shared responsibility to assist in the reclama-
14 tion of the Salton Sea.

15 **SEC. 3. DEFINITIONS.**

16 In this Act:

17 (1) The term “Project” means the Salton Sea
18 reclamation project authorized by section 101.

1 (2) The term “Salton Sea Authority” means
2 the Joint Powers Authority by that name established
3 under the laws of the State of California by a Joint
4 Power Agreement signed on June 2, 1993.

5 (3) The term “Secretary” means the Secretary
6 of the Interior, acting through the Bureau of Rec-
7 lamation.

8 **TITLE I—SALTON SEA**
9 **RECLAMATION PROJECT**

10 **SEC. 101. SALTON SEA RECLAMATION PROJECT AUTHOR-**
11 **IZATION.**

12 (a) **IN GENERAL.**—The Secretary, in accordance with
13 this section, shall undertake a project to reclaim the
14 Salton Sea, California.

15 (b) **PROJECT REQUIREMENTS.**—The Project shall—

16 (1) reduce and stabilize the overall salinity of
17 the Salton Sea to a level between 35 and 40 parts
18 per thousand;

19 (2) stabilize the surface elevation of the Salton
20 Sea to a level between 240 feet below sea level and
21 230 feet below sea level;

22 (3) reclaim, in the long term, healthy fish and
23 wildlife resources and their habitats;

24 (4) enhance the potential for recreational uses
25 and economic development of the Salton Sea; and

1 (5) ensure the continued use of the Salton Sea
2 as a reservoir for irrigation drainage.

3 (c) FEASIBILITY STUDY.—

4 (1) IN GENERAL.—The Secretary shall promptly
5 initiate a study of the feasibility of various options
6 for meeting the requirements set forth in subsection
7 (b). The purpose of the study shall be to select 1 or
8 more practicable and cost-effective options and to
9 develop a reclamation plan for the Salton Sea that
10 implements the selected options. The study shall be
11 conducted in accordance with the memorandum of
12 understanding under paragraph (5).

13 (2) OPTIONS TO BE CONSIDERED.—Options
14 considered in the feasibility study—

15 (A) shall consist of—

16 (i) use of impoundments to segregate
17 a portion of the waters of the Salton Sea
18 in 1 or more evaporation ponds located in
19 the Salton Sea basin;

20 (ii) pumping water out of the Salton
21 Sea;

22 (iii) augmented flows of water into the
23 Salton Sea; and

24 (iv) a combination of the options re-
25 ferred to in clauses (i), (ii), and (iii); and

1 (B) shall be limited to proven technologies.

2 (3) CONSIDERATION OF COSTS.—In evaluating
3 the feasibility of options, the Secretary shall consider
4 the ability of Federal, tribal, State and local govern-
5 ment sources and private sources to fund capital
6 construction costs and annual operation, mainte-
7 nance, energy, and replacement costs. In that con-
8 sideration, the Secretary may apply a different cost-
9 sharing formula to capital construction costs than is
10 applied to annual operation, maintenance, energy,
11 and replacement costs.

12 (4) SELECTION OF OPTIONS AND REPORT.—
13 Not later than 12 months after commencement of
14 the feasibility study under this subsection, the Sec-
15 retary shall—

16 (A) submit to the Congress a report on the
17 findings and recommendations of the feasibility
18 study, including—

19 (i) a reclamation plan for the Salton
20 Sea that implements the option or options
21 selected under paragraph (1); and

22 (ii) specification of the construction
23 activities to be carried out under sub-
24 section (d); and

1 (B) complete all environmental compliance
2 and permitting activities required for those con-
3 struction activities.

4 (5) MEMORANDUM OF UNDERSTANDING.—(A)
5 The Secretary shall carry out the feasibility study in
6 accordance with a memorandum of understanding
7 entered into by the Secretary, the Salton Sea Au-
8 thority, and the Governor of California.

9 (B) The memorandum of understanding shall,
10 at a minimum, establish criteria for evaluation and
11 selection of options under paragraph (1), including
12 criteria for determining the magnitude and prac-
13 ticability of costs of construction, operation, and
14 maintenance of each option evaluated.

15 (d) CONSTRUCTION.—

16 (1) INITIATION.—Upon expiration of the 60-day
17 period beginning on the date of submission of the
18 feasibility study report under subsection (c)(4), and
19 subject to paragraph (2) of this subsection, the Sec-
20 retary shall initiate construction of the Project.

21 (2) COST-SHARING AGREEMENT.—The Sec-
22 retary may not initiate construction of the Project
23 unless, within the 60-day period referred to in para-
24 graph (1), the Secretary, the Governor of California,
25 and the Salton Sea Authority enter into an agree-

1 ment establishing a cost-sharing formula that ap-
2 plies to that construction.

3 (e) DETERMINATION OF METHOD FOR DISPOSING OF
4 PUMPED-OUT WATER.—The Secretary shall, concurrently
5 with conducting the feasibility study under subsection (c),
6 initiate a process to determine how and where to dispose
7 permanently of water pumped out of the Salton Sea in
8 the course of the Project.

9 (f) RELATIONSHIP TO OTHER LAW.—

10 (1) RECLAMATION LAWS.—Activities authorized
11 by this section or any other law to implement the
12 Project shall not be subject to the Act of June 17,
13 1902 (32 Stat. 388; 43 U.S.C. 391 et seq.), and
14 Acts amendatory thereof and supplemental thereto.
15 Amounts expended for those activities shall be con-
16 sidered nonreimbursable and nonreturnable for pur-
17 poses of those laws. Activities carried out to imple-
18 ment the Project and the results of those activities
19 shall not be considered to be a supplemental or addi-
20 tional benefit for purposes of the Reclamation Re-
21 form Act of 1982 (96 Stat. 1263; 43 U.S.C. 390aa
22 et seq.).

23 (2) PRESERVATION OF RIGHTS AND OBLIGA-
24 TIONS WITH RESPECT TO THE COLORADO RIVER.—

25 This section shall not be considered to supersede or

1 otherwise affect any treaty, law, or agreement gov-
2 erning use of water from the Colorado River. All ac-
3 tivities to implement the Project under this section
4 must be carried out in a manner consistent with
5 rights and obligations of persons under those trea-
6 ties, laws, and agreements.

7 (3) LIMITATION ON ADMINISTRATIVE AND JUDI-
8 CIAL REVIEW.—(A) The actions taken pursuant to
9 this title which relate to the construction and com-
10 pletion of the Project, and that are covered by the
11 final environmental impact statement for the Project
12 issued under subsection (c)(4)(B), shall be taken
13 without further action under the National Environ-
14 mental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

15 (B) Subject to paragraph (2), actions of Fed-
16 eral agencies concerning the issuance of necessary
17 rights-of-way, permits, leases, and other authoriza-
18 tions for construction and initial operation of the
19 Project shall not be subject to judicial review under
20 any law, except in a manner and to an extent sub-
21 stantially similar to the manner and extent to which
22 actions taken pursuant to the Trans-Alaska Pipeline
23 Authorization Act are subject to review under sec-
24 tion 203(d) of that Act (43 U.S.C. 1651(d)).

1 (g) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to the Secretary to carry
3 out the Project the following:

4 (1) For the feasibility study under subsection
5 (c) and completion of environmental compliance and
6 permitting required for construction of the Project,
7 \$22,500,000.

8 (2) For construction of the Project,
9 \$300,000,000.

10 **SEC. 102. CONCURRENT WILDLIFE RESOURCES STUDIES.**

11 (a) IN GENERAL.—The Secretary shall provide for
12 the conduct, concurrently with the feasibility study under
13 section 101(c), of studies of hydrology, wildlife pathology,
14 and toxicology relating to wildlife resources of the Salton
15 Sea by Federal and non-Federal entities.

16 (b) SELECTION OF TOPICS AND MANAGEMENT OF
17 STUDIES.—

18 (1) IN GENERAL.—The Secretary shall establish
19 a committee to be known as the “Salton Sea Re-
20 search Management Committee”. The Committee
21 shall select the topics of studies under this section
22 and manage those studies.

23 (2) MEMBERSHIP.—The committee shall consist
24 of 5 members appointed as follows:

25 (A) 1 by the Secretary.

1 (B) 1 by the Governor of California.

2 (C) 1 by the Salton Sea Authority.

3 (D) 1 by the Torres Martinez Desert
4 Cahuilla Tribal Government.

5 (E) 1 appointed jointly by the California
6 Water Resources Center, the Los Alamos Na-
7 tional Laboratory, and the Salton Sea Univer-
8 sity Research Consortium.

9 (c) COORDINATION.—The Secretary shall require
10 that studies under this section are conducted in coordina-
11 tion with appropriate Federal agencies and California
12 State agencies, including the California Department of
13 Water Resources, California Department of Fish and
14 Game, California Resources Agency, California Environ-
15 mental Protection Agency, California Regional Water
16 Quality Board, and California State Parks.

17 (d) PEER REVIEW.—The Secretary shall require that
18 studies under this section are subjected to peer review.

19 (e) AUTHORIZATION OF APPROPRIATIONS.—For
20 wildlife resources studies under this section there are au-
21 thorized to be appropriated to the Secretary \$5,000,000.

1 **SEC. 103. SALTON SEA NATIONAL WILDLIFE REFUGE RE-**
2 **NAMED AS SONNY BONO SALTON SEA NA-**
3 **TIONAL WILDLIFE REFUGE.**

4 (a) **REFUGE RENAMED.**—The Salton Sea National
5 Wildlife Refuge, located in Imperial County, California, is
6 hereby renamed and shall be known as the “Sonny Bono
7 Salton Sea National Wildlife Refuge”.

8 (b) **REFERENCES.**—Any reference in any statute,
9 rule, regulation, executive order, publication, map, or
10 paper or other document of the United States to the
11 Salton Sea National Wildlife Refuge is deemed to refer
12 to the Sonny Bono Salton Sea National Wildlife Refuge.

13 **SEC. 104. ALAMO RIVER AND NEW RIVER IRRIGATION**
14 **DRAIN WATER.**

15 (a) **RIVER ENHANCEMENT.**—The Secretary shall
16 conduct research and implement actions, which may in-
17 clude river reclamation, to treat irrigation drainage water
18 that flows into the Alamo River and New River, Imperial
19 County, California.

20 (b) **COOPERATION.**—The Secretary shall implement
21 subsection (a) in cooperation with the Desert Wildlife Un-
22 limited, the Imperial Irrigation District, California, and
23 other interested persons.

24 (c) **PERMIT EXEMPTION.**—No permit shall be re-
25 quired under section 402 of the Federal Water Pollution

1 Control Act (33 U.S.C. 1342) for actions taken under sub-
2 section (a).

3 (d) AUTHORIZATION OF APPROPRIATIONS.—For
4 river reclamation and other irrigation drainage water
5 treatment actions under this section, there are authorized
6 to be appropriated to the Secretary \$2,000,000.

7 **TITLE II—EMERGENCY ACTION**
8 **TO STABILIZE SALTON SEA**
9 **SALINITY**

10 **SEC. 201. FINDINGS AND PURPOSES.**

11 (a) FINDINGS.—The Congress finds the following:

12 (1) High and increasing salinity levels in Salton
13 Sea are causing a collapse of the Salton Sea eco-
14 system.

15 (2) Ecological disasters have occurred in the
16 Salton Sea in recent years, including the die-off of
17 150,000 eared grebes and ruddy ducks in 1992, over
18 20,000 water birds in 1994, 14,000 birds in 1996,
19 including more than 1,400 endangered brown peli-
20 cans, and other major wildlife die-offs in 1998.

21 (b) PURPOSES.—The purpose of this title is to pro-
22 vide an expedited means by which the Federal Govern-
23 ment, in conjunction with State and local governments,
24 will begin arresting the ecological disaster that is over-
25 coming the Salton Sea.

1 **SEC. 202. EMERGENCY ACTION REQUIRED.**

2 The Secretary shall promptly initiate actions to re-
3 duce the salinity levels of the Salton Sea, including—

4 (1) salt expulsion by pumping sufficient water
5 out of the Salton Sea prior to December 1, 1998, to
6 accommodate diversions under paragraph (2); and

7 (2) diversion into the Salton Sea of water avail-
8 able as a result of high-flow periods in late 1998 and
9 early 1999.

JOHN SHADEGG
4TH DISTRICT, ARIZONA
REPUBLICAN POLICY COMMITTEE
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Congress of the United States
House of Representatives
Washington, DC 20515-0504

COMMITTEES:
BUDGET
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NATIONAL PARKS, PUBLIC LANDS
GOVERNMENT REFORM AND
OVERSIGHT
SUBCOMMITTEES:
NATIONAL ECONOMIC GROWTH, FEDERAL
REGULATORY AFFAIRS
NATIONAL SECURITY, INTERNATIONAL AFFAIRS
AND CONSTITUTIONAL JUSTICE

March 11, 1998

The Honorable Newt Gingrich
Speaker of the U.S. House of Representatives
H-233, The Capitol
Washington, D.C. 20515

Chairman John Doolittle
Subcommittee on Water and Power
1522 Longworth House Office Building
Washington, D.C. 20515

Dear Speaker Gingrich and Chairman Doolittle:

We are writing to express our concern with some aspects of H.R. 3267, the Sonny Bono Memorial Salton Sea Reclamation Act. Specifically, it is critical that any restoration plan respect the needs of the people in the Colorado River Basin who depend on Colorado River water for their lives and livelihoods and that it not alter the allocation of that water as already established by the Law of the River.

Current law allocates all Colorado River water. Under that law, any "excess water" is already allocated with California receiving the largest portion of the excess. No federal legislation is needed for California to use its portion of any excess Colorado River water for Salton Sea restoration or any other purpose.

We are concerned that, as written, H.R. 3267 alters the current allocation of Colorado River water among the Basin states which allocation is the result of years of careful legislative compromises and several United States Supreme Court decisions.

As you know, the population of the southwestern United States is growing rapidly and demand for water to meet basic human needs is growing with the population. Currently there are over 13.5 million people in the six Colorado River Basin states other than California and millions more in California whose water rights could be harmed if Colorado River water is reallocated for diversion into the Salton Sea.

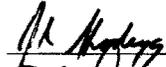
We oppose any attempt within H.R. 3267 to alter the current allocation of Colorado River water for the Salton Sea or any other purpose. California has a right to excess flows currently and it can use that water however it sees fit. Under no circumstances, however, can we agree to

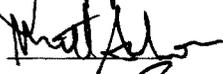
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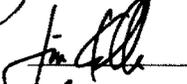
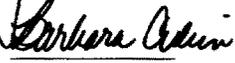
changing the current allocation as suggested in the provisions of H.R. 3267 to allow California to take a greater proportion of Colorado River Water than currently authorized

Improving the environmental quality of the Salton Sea is a worthy goal and we are confident that it can be accomplished without the reallocation of Colorado River water. We are willing to work with the sponsors of H.R. 3267 to develop an approach which honors our departed colleague while protecting the water rights of the citizens of the states we represent.

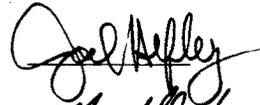
Sincerely,



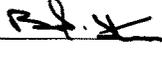










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Bill Schuff

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**TESTIMONY OF
DAVID J. HAYES, COUNSELOR TO THE SECRETARY OF THE INTERIOR
ON H.R. 3267
BEFORE THE
HOUSE COMMITTEE ON RESOURCES
SUBCOMMITTEE ON WATER AND POWER
MARCH 12, 1998**

I am David J. Hayes, Counselor to the Secretary of the Interior, Bruce Babbitt, and I am speaking here today behalf of the Administration regarding H.R. 3267, the "Sonny Bono Memorial Salton Sea Reclamation Act."

Introduction

The Administration applauds this Committee's interest in addressing the serious problems facing the Salton Sea. The Salton Sea ecosystem is under severe stress. As this Committee knows, the Salton Sea provides an important stop for hundreds of thousands of migratory birds who travel on the Pacific Flyway. It also is the permanent home of a number of wildlife and fish species. Virtually all of these wildlife resources are being stressed by exposure to ever-rising salinity concentrations in the Sea, as well as exposure to a variety of other contaminants in the ecosystem. As other witnesses will discuss in detail, there have been a number of serious bird and fish kills at the Sea over the past several years, and the frequency of these tragic occurrences is on the rise. The Sea's value as a recreational resource also has declined. Many anglers, boaters and other potential recreational users of the Sea find the resource to be uninviting.

The Administration also endorses the dedication of Salton Sea legislation to the memory of Congressman Sonny Bono and the renaming of the Salton Sea National Wildlife Refuge for him. Secretary Babbitt discussed the Sea several times with Sonny Bono before his death. The Secretary has a personal appreciation for Congressman Bono's commitment to save the Salton Sea.

It is one of the reasons why the Administration has been focusing special attention on this important resource.

Background

As you know, Secretary Babbitt visited the Salton Sea last December. Over a two day period, he toured the Sea, received technical briefings on issues affecting the Sea, and hosted a meeting of governmental officials from all levels to discuss potential strategies for addressing the problems of the Sea. Congressmen Hunter and Brown also attended the meeting.

Following these discussions, Secretary Babbitt issued a Statement which I have attached to this testimony. In the Statement, the Secretary identified five "Consensus Principles" which achieved broad-based support:

1. Rising salinity levels and fluctuating lake levels are threatening some of the Salton Sea's fish, wildlife, and recreational resources.
2. Other environmental factors, in addition to salinity and lake levels, may be adversely impacting the Sea's resources.
3. Governmental authorities should work together to identify prudent mitigation efforts that can be implemented as soon as practicable, so that the trend toward further deterioration of the Salton Sea resource can be slowed, stopped, and/or reversed. It is likely that additional scientific research will be needed to facilitate the identification and implementation of appropriate mitigation steps.
4. Limited funds will be available to conduct the type of scientific research that is needed to inform the decision making process. Accordingly, research efforts need to be coordinated and prioritized to maximize the usefulness of scientific data to the decision making process.
5. All efforts to address the health of the Salton Sea must be undertaken through a public process which obtains input from all interested stakeholders, including interested environmental organizations and private citizens.

Based on these principles, the Secretary identified two key steps that governmental authorities with a stake in the Salton Sea should undertake: (1) initiation of an open environmental

review process under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) to identify and evaluate specific options for addressing the Salton Sea; and (2) establishment of a joint governmental coordinating mechanism to help coordinate and focus the efforts of the many governmental agencies who are involved in funding important research activities related to the Salton Sea.

The Secretary provided additional leadership on both of these issues by calling on the Bureau of Reclamation to work with the Salton Sea Authority to begin the NEPA/CEQA process on an accelerated timetable and produce an EIS that will analyze a range of alternatives to address the Salton Sea. On the science front, the Secretary encouraged the formation of a coordinating committee comprised of governmental authorities that have jurisdictional responsibilities for the Sea. The four governmental entities with direct interests in the Salton Sea—the United States, the State of California, the Salton Sea Authority, and the Torres Martinez Tribe—would each have a member on the “Salton Sea Research and Funding Coordination Committee.” This Committee would consist of high-level governmental officials who would, with the assistance of a Science Subcommittee, identify and prioritize research and other types of scientific evaluation needed to complete the NEPA/CEQA process in a timely fashion. The Committee would seek input from all interested nongovernmental parties, including universities, environmental groups, citizens groups, and other interested parties and individuals.

The two part strategy that Secretary Babbitt outlined last year is now underway. The Bureau of Reclamation has been working with the Salton Sea Authority to begin an EIS process that will build on work that already has been done at the Sea, and which will identify and evaluate the potential environmental, social, and economic impacts of various options for remediating the Salton

Sea. The parties are preparing a work plan that will explain how the process will move forward, including opportunities for public input.

With respect to the science effort, the four governmental authorities have appointed representatives to the "Research Management Committee" (renamed from the "Research and Funding Coordination Committee"), and the representatives have finalized mission statements for the Research Management Committee and the Science Subcommittee. (The mission statements are attached to this testimony.) The Research Management Committee has, in turn, appointed Dr. Milt Friend, a senior science advisor to the Chief Biologist of the United States Geological Service, as Chair of the Science Subcommittee. Dr. Friend is seeking input from all interested federal, state and local governmental agencies, and has initiated outreach to the university community, which has substantial expertise to lend to this project.

Comments on H.R. 3267

Overview

By way of overview, the Administration believes that Salton Sea legislation should build on the foundation of intergovernmental coordination that has been established over the past few months. More specifically, the Administration believes that NEPA's environmental review process must be implemented, under the active leadership of the co-lead agencies: the Bureau of Reclamation and the Salton Sea Authority, with full cooperation and input from other interested federal and state agencies including, for example, the U.S. Fish and Wildlife Service, the U.S. Geological Survey, the U.S. Bureau of Land Management, the U.S. Environmental Protection Agency, the U.S. Army Corps of Engineers, the California Department of Fish and Game, the California Environmental Protection Agency, and the California Department of Water Resources.

The Administration also believes that science input should flow through the intergovernmental Research Management Committee that has been jointly established by the United States, the State of California, the Salton Sea Authority and the Torres Martinez Tribe. This Committee of governmental authorities is uniquely situated to take input from scientific experts and manage a scientific program that dovetails with the environmental review process, thereby maximizing the usefulness and relevance of scientific research.

H.R. 3267 would adopt some features of this framework, but it also would depart in important respects from principles that the Administration believes should underlie the Salton Sea restoration effort. We have discussed below the issues that are of most concern to the Administration.

The NEPA Process

The Administration believes strongly that remediation efforts at the Salton Sea must be based on an analysis that is completed in accordance with the National Environmental Policy Act. NEPA is designed specifically to identify a range of reasonable alternatives, and then to provide a thorough analysis of the potential environmental, social, and economic implications of each alternative. This type of disciplined analysis ensures that decision makers know the implications of their choices. It also ensures that all interested parties, including the Congress, stand on a "level playing field" of information regarding the potential environmental, social, and economic consequences of remedial options.

H.R. 3267 apparently would allow the Department to undertake a NEPA review of the Salton Sea, but it would compromise and limit that review in at least three important respects. First, Section 101(c)(2) would allow the EIS to focus on only three types of remedial actions: the use of impoundments; pumping out water; and the augmentation of inflows. The Administration agrees

that these options would be appropriate for consideration in an EIS, but we do believe strongly that the NEPA scoping process must include consideration of all reasonable options. Until we have completed the scoping process, which provides interested members of the public with an opportunity to offer their views, we will not know whether other potential remedial options might also warrant consideration. In light of the work that already has been undertaken to analyze a variety of potential alternatives, we believe that a streamlined scoping process can be undertaken, but we strongly object to overriding this important ingredient of the NEPA process.

Second, H.R. 3267 would compress the NEPA process beyond any reasonable or realistic time frame. An EIS process for a large, complex project normally takes at least eighteen months to complete. A number of options typically must be analyzed against a number of environmental criteria, leading to the preparation of a draft EIS and the potential identification of a preferred alternative. The draft EIS is then provided to the public for comment. Following public input, the EIS is finalized, and decision makers are in a position to select the remedial action that will be undertaken. Implementation of the remedy then begins, with the preparation of construction specifications, environmental permitting, and other steps necessary to implement the remedy.

Section 101(c)(4) of H.R. 3267 would require the Department to complete the entire NEPA process *plus* select a remedial option *and* complete all construction specifications and environmental permitting for the selection remedial option within 12 months. As a practical matter, this approach would require completion of a major EIS within 6 to 7 months, an impossibility for a project as large and complex as one that is designed to restore the massive Salton Sea ecosystem. The proposed schedule also would truncate or eliminate the opportunity for the public to engage in meaningful input on potential remedial alternatives. Indeed, the schedule would require that both

environmental compliance and permitting be completed within 12 months. However, since environmental compliance must be completed before any permitting decisions can be made, the schedule would be even more unrealistic. These types of shortcuts seem particularly inappropriate when the options under consideration in the Salton Sea EIS may call for the expenditure of hundreds of millions of dollars.

Third, the Administration objects to the legislation's attempt in Section 101(f)(3) to cut off the rights of interested members of the public to pursue judicial review of the NEPA process in the courts. Overriding the protections of the NEPA process undercuts the fundamental integrity of the NEPA framework. Access to the courts ensures that the NEPA process will be completed in a fair and open manner. The Salton Sea deserves these legal protections.

Likewise, the Administration strongly objects to the proposed limitations on judicial review on a range of additional environmental permitting actions. In the Administration's view, it is inappropriate to shortcut the remedies afforded by the environmental laws in the name of environmental protection.

The Administration has begun to work with the Salton Sea Authority to develop a parallel EIS / feasibility study for the Salton Sea. Although the Administration has very serious objections to impacts of H.R. 3267 on the NEPA process, as explained earlier, it should be noted that we expect the EIS / feasibility process to include engineering evaluations of various alternatives that are typical at this stage.

Scientific Analysis

The Administration appreciates the efforts of H.R. 3267 to codify the Secretary's formation of a joint governmental body to help prioritize and manage scientific research on the Salton Sea, and to integrate these activities into the NEPA process. The legislation would depart from the Secretary's approach, however, in at least two important respects.

First, Section 102(b) would change the membership from the Salton Sea Research Management Committee to include a representative of the university community. With this change, the Committee would no longer be made up of governmental officials who have legal responsibilities associated with the Salton Sea. Instead, key decisions regarding the timing and funding of specific projects would be made jointly with nongovernmental parties who may have a special interest in such decisions.

The Administration recognizes the important contribution that universities can and will make to the Salton Sea, but we believe that the contribution is best made by hearing from the university community regarding its views of research that should be undertaken, and then by calling on universities to assist in undertaking specific research activities. Dr. Milt Friend, Chairman of the Science Subcommittee, already has begun his outreach to the university community, and the Department hopes and expects that the universities will submit proposals to conduct a variety of research activities. Decisions about what research should be undertaken, and on what timetable, are best made by governmental authorities who have legal responsibilities to carry out and can be held accountable by the public for their decisions.

The Administration also is concerned that Section 102 may inadvertently narrow the scientific issues about which the Research Management Committee can receive input. While we agree

that scientific questions related to wildlife resources are a very important scientific undertaking for the Committee (~~see~~ Section 102(a)), it also is important to receive input on other issues that affect the ecosystem and may be relevant to the selection of potential remedial activities. For example, a greater knowledge of the geologic hazards for the area are needed to better understand the impact of potential earthquakes on proposed engineering solutions.

Emergency Action

Title II of H.R. 3267 would require the Secretary to immediately take action to reduce the salinity levels of the Salton Sea by diverting water into the Salton Sea which is "available as a result of high-flow periods in late 1998 and early 1999," and then "pumping sufficient water out of the Salton Sea prior to December 1, 1998," to accommodate these "diversions."

The Administration is troubled by a number of aspects of this proposed title. As an initial matter, the bill apparently would call on the Secretary to undertake these major actions without the benefit of any environmental analysis. The pumping out of large quantities of water to as yet unidentified locations obviously could have significant environmental implications on the Salton Sea, and on receiving lands or waters. Likewise, diversions of water from destinations to which such water would otherwise be delivered may have significant environmental ramifications on the Salton Sea, and on other locations that would be affected by the diversions. These major actions should not be undertaken without the benefit of an environmental and feasibility analysis of their implications.

Title II's assumption that water is available this year for delivery to the Salton Sea also raises difficult and important questions that deserve more review and analysis. More specifically, the Administration is very troubled by assumptions that excess quantities of Colorado River water can be delivered to the Salton Sea. Rights to access Colorado River water supplies are governed by the

"law of the river," a complex set of legal principles in which many Colorado River Basin states, tribes, and water users have a very strong interest. The savings provision relating to the preservation of rights and obligations with respect to Colorado River water contained in Section 101(f)(2) should be strengthened and made applicable to all sections of the bill to ensure that the law of the river and rights and obligations arising therefrom are not impacted by the legislation.

Funding

H.R. 3267 would authorize significant funding for the EIS and related engineering effort and for scientific research. In addition, the bill would preauthorize up to \$300 million dollars to construct an as yet unidentified remedy that would be selected following the completion of the NEPA process.

With regard to the authorization of \$300 million to undertake remedial action, the Administration believes that it would be more prudent to identify the remedial action that is selected following the NEPA process, and then seek authorization and appropriations to implement that specific action. Until the NEPA process produces a disciplined analysis of alternatives, we are not in a position to identify what alternative is best suited to addressing the problems facing the Salton Sea and what the cost of that alternative might be.

Finally, we believe that cost of NEPA compliance, feasibility studies, and research should be cost shared equally between federal and non-federal interests as is currently authorized for the Bureau of Reclamation's Salton Sea activities.

We are also concerned by section 101(f) of the bill, which would make the costs of remedial action non-reimbursable to irrigators. Until we know more fully the source of the problems

facing the Salton Sea, we believe it would be premature to exempt any party from contributing to the cost of a solution.

Conclusion

The Administration fully endorses the goals of restoring the Salton Sea as reflected in H.R.3267. However we strongly oppose H.R. 3267 as drafted due to the serious concerns we have outlined in this testimony and which will be further addressed in additional comments that we will submit for the record in the very near future. The Administration looks forward to continuing the dialogue with Congress on this important issue and, hopefully, by working together, we will be able to develop a consensus on how to address the serious problems faced by the Salton Sea.



Contact: Tim Ahern (202) 208-5089

FOR IMMEDIATE RELEASE
Dec. 19, 1997

**STATEMENT BY
INTERIOR SECRETARY BRUCE BABBITT
AFTER MEETING WITH GOVERNMENTAL AGENCIES
INVOLVED IN SALTON SEA ISSUES**

THE CHALLENGE

Environmental conditions at the Salton Sea have been deteriorating steadily over the past several years. Salinity levels in the Sea have been increasing, and water in the Sea is now 25 percent more salty than ocean water. A variety of other contaminants also are flowing into the Sea, including contaminants from agricultural run-off and from industrial and domestic sources. Because the Sea has no natural outlet, the concentration of all contaminants in the Sea is on the rise. The absence of an outlet also has led to fluctuating sea levels as the flows through inlet streams rise and fall from season to season and year to year.

Taken together, these environmental factors are putting significant stress on the Salton Sea eco-system. Signs of the stress abound. The Sea is an important resource for a wide variety of fish and wildlife, including waterfowl which rely on the Sea as an important stop-over in the Pacific flyway system. In recent years, there have been several fish and wildlife kills, with many scientists suspecting that environmental conditions at the Sea may be contributing factors. Environmental stresses on the Salton Sea also are taking a toll on recreational uses of the Sea. The Sea is becoming less attractive to swimmers, boaters, and anglers.

PAST EFFORTS TO ADDRESS THESE ISSUES

Concern about the future of the Salton Sea is not new. Over the years, there have been numerous initiatives to identify and address the causes of the Sea's decline.

In recent years, there has been a renewed sense of urgency to confront the environmental issues and to move forward with a plan that might mitigate the adverse environmental forces at work in the eco-system. The Salton Sea Authority, which was formed in 1993, has been the focal point of much of the recent effort. The Authority has developed cooperative relationships with a number of federal and state agencies to help address issues relating to the Sea. By way of example, the Authority and the Bureau of Reclamation have undertaken a preliminary, screening analysis of wide variety of potential alternatives for addressing the Sea's environmental problems.

Despite the formation of some good working relationships among interested local, state and federal authorities, the number of interested parties and agendas has been proliferating. In response to the many unanswered questions about the causes and potential remedies for adverse fish and wildlife impacts, for example, research proposals have emerged from a variety of sources, leading to conflicting funding demands, goals, and priorities. Likewise, in response to the need for practical solutions to the environmental problems facing the Salton Sea, a large number of engineering proposals have emerged from a variety of sources, leading to significant questions about the relative feasibility and effectiveness of many of the proposed alternatives.

CONSENSUS PRINCIPLES

Leaders from the federal government, the State of California, the Torres Martinez Tribe and the Salton Sea Authority have met and discussed the need to take coordinated measures to address the challenges presented by the Salton Sea. There is an emerging consensus that governmental responses to the Salton Sea should be guided by a number of shared understandings, including the following:

1. Rising salinity levels and fluctuating lake levels are threatening some of the Salton Sea's fish, wildlife, and recreational resources.
2. Other environmental factors, in addition to salinity and lake levels, may be adversely impacting the Sea's resources.
3. Governmental authorities should work together to identify prudent mitigation efforts that can be implemented as soon as practicable, so that the trend toward further deterioration of the Salton Sea resource can be slowed, stopped, and/or reversed. It is likely that additional scientific research will be needed to facilitate the identification and implementation of appropriate mitigation steps.
4. Limited funds will be available to conduct the type of scientific research that is needed to inform the decision-making process. Accordingly, research efforts need to be coordinated and prioritized to maximize the usefulness of scientific data to the decision-making process.

5. All efforts to address the health of the Salton Sea must be undertaken through a public process which obtains input from all interested stakeholders, including interested environmental organizations and private citizens.

NEXT STEPS

In order to begin working together toward the common goal of improving the health of the Salton Sea, the governmental authorities with a stake in the Salton Sea have discussed taking two important steps: (1) initiate an open environmental review process under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) to identify and evaluate specific options for addressing Salton Sea; and (2) establish a joint governmental coordinating mechanism to help coordinate and focus the efforts of the many governmental agencies who are involved in funding important research activities related to the Salton Sea.

I am pleased to report there is a general consensus that these steps should be taken. The details of how to implement the steps will require further consultation among the governmental parties and interested members of the public. Some of the ideas that I have for taking these steps are set forth below.

1. Initiation of NEPA/CEQA Process

We are agreed that a NEPA/CEQA process should be initiated to evaluate the potential environmental impacts associated with various alternative actions that might be taken at the Salton Sea. I anticipate that the NEPA/CEQA process will take the following approach:

- * Scoping of the NEPA/CEQA review will take full advantage of the analysis that the U.S. Bureau of Reclamation (BOR) and the Salton Sea Authority already has undertaken. The scoping process also will consider environmental factors that were not studied in the BOR/Salton Sea Authority alternatives analysis.

- * The NEPA/CEQA process will produce an environmental impact statement that will facilitate the implementation of mitigation actions that can be implemented without extended delays.

- * The Salton Sea Authority, working with the Bureau of Reclamation, will take the lead in the NEPA/CEQA process. Cooperating agencies will include the U.S. Fish & Wildlife Service, the U.S. Environmental Protection Agency, the Army Corps of Engineers, the California Department of Fish & Game, the California Environmental Protection Agency, and the California Department of Water Resources.

* A schedule will be developed to move forward with the NEPA/CEQA process at a deliberate pace, recognizing the tension between the need to have adequate environmental analysis to make appropriate decisions, and the need to take concrete steps to respond to the Sea's environmental challenges.

* Scientific analysis needed to complete the NEPA/CEQA process will be coordinated with the assistance of the newly-formed Salton Sea Research and Funding Coordination Committee, discussed below.

2. Coordination and Prioritization of Research and Funding

Several governmental agencies are financing and implementing a variety of research activities that should assist decision-makers in addressing the health of the Salton Sea. Due to the urgency of moving forward, the large number of agencies that involved, and the substantial scientific issues that face decision-makers, I believe that a coordinating committee, which I would call the "Salton Sea Research and Funding Coordination Committee," should be established. The Committee would have the following membership and charter:

* The Committee would consist of high-level representatives of the four governments involved in the Salton Sea recovery effort: (1) the federal government; (2) the State of California; (3) the Salton Sea Authority; and (4) the Torres Martinez Indian Tribe.

* The Research and Funding Coordination Committee would facilitate the identification of research and/or other types of scientific evaluation needed to complete the NEPA/CEQA process in a timely fashion. The Committee also would identify and coordinate funding sources to complete such research or evaluation.

* The Research and Funding Coordination Committee would appoint a Science Subcommittee, which would be responsible for assisting the Committee in identifying and prioritizing research and evaluation needs. The Science Subcommittee would include scientists or other technical experts from the following agencies:

U.S. Geological Survey
 U.S. Fish & Wildlife Service
 U.S. Bureau of Reclamation
 U.S. Environmental Protection Agency
 U.S. Army Corps of Engineers
 California Department of Fish & Game
 California Environmental Protection Agency
 California Department of Water Resources
 Salton Sea Authority

Torres Martinez Indian Tribe

Dr. Milton Friend, Director of the National Wildlife Health Center, Biological Resources Division, USGS, would Chair the Science Subcommittee.

* The Research and Funding Coordination Committee would seek input from all interested parties, including environmental groups, citizens groups, and other interested parties and individuals. The Committee would seek to leverage federal and state-funded research on the Salton Sea with research opportunities provided by universities and other organizations.

CONCLUSION

I am hopeful that my visit to the Salton Sea, and my consultations with other governmental authorities, has helped to facilitate coordination among the many governmental agencies that have a common interest in addressing the environmental challenges that face the Sea. The steps that I am announcing today, based in consultations with the Salton Sea Authority, the State of California, the Torres Martinez Tribe, other federal agencies, and the Congressional delegation, are concrete, positive steps that put us on the right road toward finding solutions to the problems confronting the Salton Sea.

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Testimony of Art Lopez

<p>WITNESS: ARTHUR LOPEZ, TRIBAL CHAIRMAN TORRES-MARTINEZ DESERT CAHUILLA INDIAN TRIBE PO BOX 1150 THERMAL CA 92274 (760) 397-8144</p>	<p>LEGAL COUNSEL: Thomas W. Fredericks Fredericks, Pelcyger, Hester & White, LLC 1075 S. Boulder Rd., Ste. 305 Louisville, CO 80027 (303) 673-9600</p>
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SUMMARY OF ARTHUR LOPEZ TESTIMONY

Mr. Arthur Lopez, Chairman of Torres Martinez Desert Band of Cahuilla Indians will testify in support of H.R. 3267 entitled "Sonny Bono Memorial Salton Sea Reclamation Act." Congressman Bono was the Torres-Martinez Band's congressman and assisted them on many legislative proposals including a legislative effort in the 104th Congress 2nd Session to compensate the Torres-Martinez Band for lands inundated and spoiled by the creation of the Salton Sea. For those reasons the Tribe became very close to Congressman Bono and worked with him well. The Torres-Martinez Band feels very strongly that such a legislative effort is justified in honor of Congressman Bono.

Chairman Lopez requests two amendments to the proposed legislation. Both regard including the Torres-Martinez Band in the list of entities and/or governments to be included to direct and guide the implementation of the legislation. The first amendment is with regard to Section 101(c)(5)(A) of Title I, which lists the various entities that should be included in the Memorandum of Understanding to be negotiated and signed pursuant to the Bill. The second amendment is with regard to the "cost-sharing" agreement to be negotiated pursuant to Section 101(d)(2) of the Bill. The Torres-Martinez Band wants to be a full party and listed as a governmental entity to be included in the cost-sharing agreement.

The Torres-Martinez Band, through its Chairman Lopez, justifies being a full party to the clean-up of the Salton Sea because of their location to the Sea and the fact that they own land adjacent and under the Salton Sea. Furthermore, they set forth the possibility of conflicts with the Secretary and the irrigation districts as well as the counties and the state government in the implementation of the reclamation of the Sea as further justification for being a full party to the clean-up.

In addition to the above-referenced amendments, the Chairman of the Torres Martinez Desert Band of Cahuilla Indians recommends amending the Act to include the compensation of the Torres-Martinez Band for lands inundated and/or adjacent to the Salton Sea that have been otherwise unusable as a result of the Salton Sea being maintained at a certain level. The amendment would also cause the litigation referenced in the Findings to be dismissed with prejudice and a flowage easement to be granted to the Imperial Irrigation District and the Coachella Valley Water District. The amendment being proposed by the Tribe would compensate the Tribe at \$114.2 million. Fourteen point two million would be paid out to the Tribe and allottees as soon as possible after appropriation of funds to implement the Act. The remaining \$100,000,000 would be left in the Treasury of the United States with the interest being paid out annually to the Tribe for governmental services.

As justification for the payment of the \$114.2 million, Chairman Lopez has referenced the farm reports that have been filed with the Department of Agriculture and the value of the farm products for each year that have been grown on irrigated agriculture within the Coachella Valley from 1935 to the present. Twenty percent of the farm value has been utilized and 90% of the inundated or spoiled land acreage has been multiplied times 20% of the value to create a value of over \$300 million. That \$300 million value has been present valued by a factor of 6%. With the 6% factor being included in the present value number, the present value number is raised to \$1.3 billion. Consequently, the Tribe feels justified in requesting \$114.2 million as compensation for lands that they have lost the use of for over 90 years. They feel justified in requesting that amount in that they feel their lands would have produced sufficient value to justify compensation at the \$114.2 million level.

In closing, Chairman Lopez again thanks the Committee for the honor of testifying in support of legislation that honors Congressman Bono and thanks the Committee for the time allotted to him.

TESTIMONY OF ARTHUR LOPEZ, CHAIRMAN OF THE
TORRES-MARTINEZ DESERT BAND OF CAHUILLA INDIANS
BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON RESOURCES, SUBCOMMITTEE ON WATER AND POWER
WASHINGTON D.C. 20515

BEFORE THE HONORABLE JOHN T. DOOLITTLE, CHAIRMAN
SUBCOMMITTEE ON WATER AND POWER

H.R. 3267 "SONNY BONO MEMORIAL SALTON SEA RECLAMATION ACT"
THURSDAY, MARCH 12, 1998, 10:00 A.M.
ROOM 1334, LONGWORTH H.O.B.

Mr. Chairman, Members of the Committee, my name is Art Lopez. I'm the Chairman of the Torres-Martinez Desert Band of Cahuilla Indians, whose address is P.O. Box 1160 in Thermal, California, zip code 92274. It is both an honor and a privilege for me to testify here on H.R. 3267, a Bill entitled "Sonny Bono Memorial Salton Sea Reclamation Act." The Torres-Martinez Band considered Sonny Bono a dear friend who supported the Band in many important issues before Congress. I, too, worked with Congressman Bono in the 104th Congress on a Bill that would have compensated the Torres-Martinez Band of Desert Cahuilla Indians for the Tribe's lands that have been inundated by the Salton Sea, which have been lost to us since 1909. Congressman Bono worked hard with the Torres-Martinez Band to get that legislation passed. Consequently, I, too, am pleased to testify on behalf of the Torres-Martinez in support of this important legislation. As many of the Bill sponsors know, the Torres-Martinez Band is located near the Salton Sea. Many of our lands are inundated by or adjacent to the Salton Sea. Our ancestors have been located in the Salton Sea area since time immemorial. We have enjoyed the Salton Sea when it was first created as many of the citizens of Southern California enjoyed in the early days.

Because of the Torres-Martinez location in relationship to the Salton Sea, the clean-up of the Salton Sea will have a very positive impact on the Torres-Martinez Band. The economic and environmental benefits on our lands adjacent to the Salton Sea will be substantial. The Torres-Martinez Band looks forward to the day when they can benefit from their relationship to the Salton Sea, a day when fish and wildlife will be bountiful and tourists will come to enjoy not only the fish and wildlife, but also the Sea as the recreation area that it once was known to be. The Torres-Martinez Band welcomes this time and looks forward to participating with the other governmental agencies in bringing about this great event of reclaiming the sea.

In order to assure our participation, the Torres-Martinez Band

would recommend that it not only be a member of the Salton Sea Research Management Committee, but that it be a full member of the governments that are delegated responsibility under the Bill and recognized by Congress as having a historic relationship to the Salton Sea. It is the position of the Torres-Martinez Band that it be included, along with the Secretary, the Salton Sea Authority and the Governor of California as a party to the Memorandum of Understanding set forth in Section 101(c)(5)(A) of Title I of the Bill. Our location and the fact that we have remained a part of the Salton Sea for decades justifies our participation in this important undertaking. Without our full participation, we cannot be assured of the full benefits which this Bill would give to our Tribe because of other conflicts that may arise between the Secretary, the counties, the irrigation districts, and the state of California. Consequently, Mr. Chairman, I would recommend that the Torres-Martinez Desert Band of Cahuilla Indians be included as one of the parties to the Memorandum of Understanding under Section 101(c)(5)(A) of Title I.

Again, Mr. Chairman, we would like to be included in Section 101(d)(2) entitled "Cost Sharing Agreement." That section states that the Secretary may not initiate construction of the project unless within a 60 day period referred to in paragraph 1, the Secretary, the Governor of California, the Salton Sea Authority enter into an agreement establishing a cost sharing formula that applies to that construction. It is the position of the Torres-Martinez Desert Band of Cahuilla Indians that it too should be part of that agreement with regard to cost sharing so that it can be a full participant in the clean-up of the Salton Sea. Again, we feel justified in requesting this participation in that only then will we be recognized as a full participant in the clean-up and be assured that benefits that accrue will also accrue to the Torres-Martinez Band. Mr. Chairman, I strongly recommend that the Bill be amended to add the Torres Martinez Desert Band of Cahuilla Indians to Section 101(d)(2).

Although the Torres Martinez Desert Band of Cahuilla Indians fully supports the intent and purpose of H.R. 3267 entitled the "Sonny Bono Memorial Salton Sea Reclamation Act," I would be remiss if I didn't raise the issue of compensating the Torres Martinez Desert Band of Cahuilla Indians prior to cleaning up the Salton Sea and granting an approved flowage easement for the Sea. I am certain that Congressman Bono would have wanted these issues to be resolved prior to or in conjunction with the clean-up of the Sea. As I indicated in my opening statement, Congressman Bono and other members of the California delegation supported the Torres-Martinez Band in the 104th Congress in their efforts to be compensated by the United States for tribal lands that have been inundated and spoiled by the Salton Sea. The Torres-Martinez Band=s compensation

bill was defeated primarily because of a gaming provision in the legislation.

The parties to litigation styled United States of America, in its own right and on behalf of the Torres-Martinez Band of Mission Indians and the allottees therein v. the Imperial Irrigation District and Coachella Valley Irrigation District, Case No. 82-1790-K(M) and a case styled The Torres Martinez Desert Cahuilla Indians, et al. v. Imperial Irrigation District, et al., Case No. 91-1670-J(LSP), have agreed to stay the legal proceedings in these cases with the understanding that the legal issues and the compensation to be given to the Torres-Martinez Band and their allottees should be settled by a negotiated settlement. However, the United States and the Torres-Martinez Band have been unable to reach a settlement.

Consequently, I'm requesting that this Bill be amended to include either as Title I or as Title III the equitable compensation of the Torres Martinez Desert Band of Cahuilla Indians and for the granting of a flowage easement to the Imperial Irrigation District and the Coachella Valley Water District and the other entities that cause water to be deposited into the Salton Sea. Only upon the compensation of our Tribe and the granting of the flowage easements will it be proper for creating a memorial to the late Congressman Bono's honor. I would therefore request that H.R. 3267 be amended to include a Title which equitably compensates the Torres-Martinez Band of Mission Indians for the lands that are currently inundated and spoiled as a result of the Salton Sea. I would also further request that this Bill be amended to add a flowage easement to the named parties for their benefit. With these issues being resolved, the litigation discussed above can be dismissed with prejudice, future conflicts over the Salton Sea can be avoided, and the integrity and success of the "Sonny Bono Memorial Salton Sea Reclamation Act" can be assured.

Mr. Chairman, I propose the following amendment:

Title III-Equitable Compensation to the Torres Martinez Desert Band of Cahuilla Indians and granting of a flowage easement.

SECTION 301. CONGRESSIONAL FINDINGS AND PURPOSES.

(a) FINDINGS.-The Congress finds and declares that:

(1) In 1876, the Torres-Martinez Indian Reservation was created, reserving a single, 640-acre section of land in the Coachella Valley, California, at the northern end of the Salton Sink. The Reservation was expanded in 1891 by Executive Order, pursuant to the Mission Indian Relief Act of 1891, adding about

12,000 acres to the original 640-acre reservation.

(2) Between 1905 and 1907, flood waters of the Colorado River filled the Salton Sink, creating the Salton Sea, inundating approximately 2,000 acres of the 1891 reservation lands.

(3) In 1909 an additional 12,000 acres of land, 9,000 of which were then submerged under the Salton Sea, were added to the reservation under a Secretarial Order issued pursuant to a 1907 amendment of the Mission Indian Relief Act. Due to receding water levels in the Salton Sea through the process of evaporation, at the time of the 1909 enlargement of the reservation, there were some expectations that the Salton Sea would recede within a period of approximately 15 years.

(4) Through the present day, the majority of the lands added to the reservation in 1909 remain inundated due in part to the flowage of natural run-off and drainage water from the irrigation systems of the Imperial, Coachella, and Mexicali Valleys into the Salton Sea.

(5) In addition to those lands that are inundated, there are also tribal and individual Indian lands located on the perimeter of the Salton Sea that are not currently irrigable due to seepage of salt water into these lands by osmosis.

(6) In 1982, the United States brought an action in trespass entitled *United States of America*, in its own right and on behalf of *Torres-Martinez Band of Mission Indians* and the *Allottees therein v. The Imperial Irrigation District and Coachella Valley Water District*, Case No. 82-1790 K (M) (hereafter in this section referred to as the "U.S. Suit") on behalf of the *Torres-Martinez Indian Tribe* and affected Indian allottees against the two water districts seeking damages related to the inundation of tribal and allottee-owned lands and injunctive relief to prevent future discharge of water on such lands.

(7) On August 20, 1992, the Federal District Court for the Southern District of California entered a judgment in the U.S. Suit requiring the Coachella Valley Water District to pay \$212,908.41 in past and future damages and the Imperial Irrigation District to pay \$2,795,694.33 in past and future damages in lieu of the United States' request for a permanent injunction against continued flooding of the submerged lands.

(8) The United States, the Coachella Valley Water District and the Imperial Irrigation District have filed notices of appeal with the United States Court of Appeals for the Ninth

Circuit from the district court's judgment in the U.S. Suit (Numbers 93-55389, 93-55398, 93-55402), and the Tribe has filed a notice of appeal from the district court's denial of its motion to intervene as a matter of right (No. 92-55129).

(9) The Court of Appeals for the Ninth Circuit has stayed further action on the appeals pending the outcome of settlement negotiations.

(10) In 1991, the Tribe brought its own lawsuit, Torres-Martinez Desert Cahuilla Indians, et al., v. Imperial Irrigation District, et al., Case No. 91-1670 J (LSP) (hereafter in this section referred to as the "Indian Suit") in the United States District Court, Southern District of California, against the two water districts, and amended the complaint to include as a plaintiff, Mary Resvaloso, in her own right, and as class representative of all other affected Indian allotment owners.

(11) The Indian Suit has been stayed by the District Court to facilitate settlement negotiations.

(12) It is the collective judgment of all concerned that Congress should enact legislation to resolve this dispute and to compensate the Indians for their losses and once legislation is passed and signed into law, to allow the court suits to be dismissed with prejudice.

(b) PURPOSE. The purpose of this Act is to equitably compensate the Torres-Martinez Band of Desert Cahuilla Indians for the loss of the use of their lands resulting from inundation and spoiling of said lands by the Salton Sea, to allow for the dismissal with prejudice of the law suits that have been filed and to grant to IID and CVWD a flowage easement by the Torres-Martinez Band, the affected allottees and the United States.

SECTION 302. COMPENSATION.

(a) ESTABLISHMENT OF TRIBAL AND ALLOTTEES COMPENSATION TRUST FUNDS ACCOUNTS.

(1) IN GENERAL. There are established in the Treasury of the United States three compensation trust fund accounts to be known as the "Torres-Martinez Compensation Trust Funds Account", the "Torres-Martinez Compensation Economic Recovery Trust Funds Account", and the "Torres-Martinez Compensation Economic Recovery Interest Trust Funds Account", respectively.

(A) The Secretary shall have responsibility for the administration, investment and distribution of all sums

deposited into, accruing to, and remaining in, the "Torres-Martinez Compensation Trust Funds Account," and shall invest all non-distributed sums in these accounts in accordance with 25 U.S.C. Sec. 162(a).

(B) Any and all sums held in the "Torres-Martinez Compensation Trust Funds Account" shall be available for distribution to the Tribe as may be requested by the Tribe subject to the following conditions:

(i) The Tribe shall use such sums only for the purposes of education, land acquisition, economic development, youth and elderly programs, or other tribal purposes, including, but not limited to, the payment of attorney fees for legal services rendered to the Tribe in connection with the U.S. Suit, the Indian Suit, any related litigation and the settlement of the same, in accordance with plans and budgets developed by the Tribe and approved by the Secretary.

(ii) Nothing in this subsection or any other section of this Title may be construed as prohibiting the Tribe from using a portion of the sums held in the "Torres-Martinez Compensation Trust Funds Account" for the purpose of making per-capita payments to members of the Tribe; provided, that such portion shall not exceed twenty five percent (25%) of the Tribal amount of the sum held in the ATorres-Martinez Compensation Trust Funds Account.®

(C) All funds deposited into the "Torres-Martinez Compensation Economic Recovery Trust Funds Account" are to remain in the United States Treasury and to be invested in government securities issued by the United States.

(D) The Secretary of the Treasury shall have responsibility for the administration, investment and distribution of all sums deposited into, accruing to, and remaining in, the "Torres-Martinez Compensation Economic Recovery Interest Trust Funds Account" and shall invest all sums in this account in government securities issued by the United States.

(E) All interest deposited into the "Torres-Martinez Compensation Economic Recovery Interest Trust Funds Account" shall be available, without fiscal year limitation, for use by the Secretary of the Interior, commencing with fiscal year 1999, and each fiscal year thereafter, in making payments to the Torres-Martinez Desert Cahuilla Indians for use for educational, social welfare, economic development and other programs, subject to the approval of the Secretary. No part of the principal of the Torres-Martinez Desert Cahuilla Indian Economic Recovery Fund shall be available for making such payments.

(F) The Secretary agrees to make payments to the Tribe from the "Torres-Martinez Compensation Economic Recovery Interest Trust Funds Account" promptly, provided the Tribe has submitted plans for said money promptly and the Secretary has approved of said tribal plans.

(2) AVAILABILITY.-

(A) Amounts held in the "Torres-Martinez Compensation Trust Funds Account" shall be available to the Secretary of the Interior for distribution to the Tribe and the affected allottees in accordance with a negotiated agreement between the Secretary, the Justice Department, the Imperial Irrigation District, the Coachella Valley Water District, the Tribe and the affected allottees. In the negotiated agreement, the Secretary is directed to seek a contribution from IID and CVWD for distribution to the Tribe and the affected allottees in the amount of \$4,000,000 as partial consideration for the dismissal with prejudice of the lawsuit.

(B) Amounts held in the "Torres-Martinez Compensation Economic Recovery Interest Trust Funds Account" for the Tribe shall be available to the Secretary for distribution to the Tribe pursuant to a tribal plan submitted to the Secretary by the Tribe for the purpose of utilizing said interest monies annually beginning on October 1, 1999 and each and every year thereafter.

SECTION 303. TRUST LAND ACQUISITION AND STATUS

(a) Notwithstanding any other provision of law, the tribal council may, on behalf of the Tribe:

(1) acquire land located within the reservation area after the date of the enactment of this Act into law and take title to such lands in fee simple, and

(2) lease, sell, or otherwise dispose of such lands in the same manner in which a private person may do so under the laws of the state.

(b) Notwithstanding any other provision of law or regulation, at the written request of the tribal council, the Secretary may:

(1) accept conveyance to the Secretary by the tribal council (on behalf of the Tribe) of Title to any land located

within the reservation area that is acquired by the tribal council in fee simple after the date of enactment of this Act into law; and

(2) hold such title upon such conveyance by the tribal council, in trust for the benefit of the Tribe, provided that lands may not be taken into trust if they are located both North of Township 6 South and West of Range 8 East within Riverside County.

(c) Notwithstanding any other provision of law or regulation, the Attorney General of the United States shall approve any deed or other instrument which conveys title to land within the reservation area, to the United States to be held in trust by the Secretary for the benefit of the Tribe.

(d) All lands taken into trust shall become part of the Torres-Martinez Indian Reservation.

SECTION 304. PERMANENT FLOWAGE EASEMENTS.

(a) CONVEYANCE OF EASEMENT TO COACHELLA VALLEY WATER DISTRICT.-

(1) TRIBAL INTEREST.-The United States, in its capacity as trustee for the Tribe, as well as for any affected Indian allotment owners, and their successors and assigns, and the Tribe in its own right and that of its successors and assigns, shall convey to the Coachella Valley Water District a permanent flowage easement as to all Indian trust lands (approximately 11,800 acres) located within and below the minus 220-foot contour of the Salton Sink, in accordance with the terms and conditions of this Act.

(2) UNITED STATES INTEREST.-The United States, in its own right shall, notwithstanding any prior or present reservation or withdrawal of land of any kind, convey to Coachella Valley Water District a permanent flowage easement as to all Federal lands (approximately 110,000 acres) located within and below the minus 220-foot contour of the Salton Sink, in accordance with the terms and conditions of this Act.

(b) CONVEYANCE OF EASEMENT TO IMPERIAL IRRIGATION DISTRICT.-

(1) TRIBAL INTEREST.-The United States, in its capacity as trustee for the Tribe, as well as for any affected Indian allotment owners, and their successors and assigns, and the Tribe in its own right and that of its successors and assigns, shall grant and convey to the Imperial Irrigation District a permanent flowage easement as to all Indian trust lands (approximately 11,800 acres) located within and below the minus 220-foot contour of the Salton Sink, in accordance with the terms and conditions of this Act.

(2) UNITED STATES.-The United States, in its own right shall, notwithstanding any prior or present reservation or withdrawal of land of any kind, grant and convey to the Imperial Irrigation District a permanent flowage easement as to all Federal lands (approximately 110,000 acres) located within and below the minus 220-foot contour of the Salton Sink, in accordance with the terms and conditions of this Act.

(c) The exact language of the flowage easements shall be negotiated in the agreement negotiated between the parties referred to in Section 302(a)(2)(A) of Title III.

SECTION 305. SATISFACTION OF CLAIMS, WAIVERS, AND RELEASES.

(a) SATISFACTION OF CLAIMS.-The benefits available to the Tribe and the allottees under the terms and conditions of the provisions of this Act shall constitute full and complete satisfaction of the claims by the Tribe and the allottees arising from or related to the inundation and spoilage of tribal and allottee lands currently inundated and saturated with salt.

(b) The disputes giving rise to and being resolved by this Act concern the inundation of specified Indian lands, and have not concerned either water rights or the enforcement of federal or state environmental laws, statutes, and regulations. Further, nothing in this Act may be construed as barring the initiation of suits or actions to enforce applicable water rights, environmental laws, statutes, or regulations.

(c) APPROVAL OF WAIVERS AND RELEASES.-The United States hereby approves and confirms the releases and waivers required by this Act.

SECTION 306. MISCELLANEOUS PROVISIONS.

(a) ELIGIBILITY FOR BENEFITS.-Nothing in this Act shall affect the eligibility of the Tribe or its members for any Federal program or diminish the trust responsibility of the United States to the Tribe and its members.

(b) ELIGIBILITY FOR OTHER SERVICES NOT AFFECTED.-No payment pursuant to this Act shall result in the reduction or denial of any Federal services or programs to the Tribe or to members of the Tribe, to which they are entitled or eligible because of their status as a federally recognized Indian tribe or member of the Tribe.

(c) PRESERVATION OF EXISTING RIGHTS.-Except as provided in this Act, any right to which the Tribe is entitled under existing law shall not be affected or diminished.

SECTION 307. AUTHORIZATION OF APPROPRIATIONS.

(a) There are authorized to be appropriated to the Secretary to carry out the equitable compensation of the Torres-Martinez Band the following:

(1) To be deposited into the "Torres-Martinez Compensation Trust Funds Account" to pay the Tribe and the affected allottees, \$10,200,000.

(2) To be deposited into the "Torres-Martinez Economic Recovery Trust Funds Account" to be held in the Treasury of the United States for the benefit of the Torres-Martinez Band, \$100,000,000.

SECTION 308. EFFECTIVE DATE.

(a) This Act shall take effect on the date of enactment of this Act.

Mr. Chairman, it is my firm belief that the Torres-Martinez Band should be compensated and flowage easements granted to the parties responsible for maintaining the Salton Sea at its current level prior to the clean-up of the Salton Sea. Without these issues being resolved, the very existence of the Salton Sea is subject to challenge because Torres-Martinez tribal and allotted lands and the lands of the United States are being trespassed on by the waters that are flowing into the Sea causing the Sea to rise to its current levels. I would therefore strongly urge this Committee to recommend the amendment that I have proposed here today.

In support of the \$114.2 million requested as compensation, I have included as Appendix A a spreadsheet that sets forth the total amount of crops that were produced in terms of value in the Coachella Valley from 1935 to the present and took 20% of that value and multiplied it by 90% of the acreage that has been inundated or spoiled by the Salton Sea to determine a value for the lost use of the land from 1935 to the present. The total value of the loss, Mr. Chairman, is over \$300 million and if we present value it at 6% interest per year, the value of the loss becomes almost \$1.4 billion. The value of the crops grown in the Coachella Valley is provided each year by the Department of Agriculture from reports filed by the farmers.

As you can see, Mr. Chairman, we are not requesting the full value of what we feel we have lost. We are requesting a very small percentage of that value. The Torres-Martinez Band is requesting these dollars at the level requested in order to be justly compensated and at the same time do the Tribe's part in assisting in the clean-up of the Salton Sea. We are not unmindful of the fact that the Torres-Martinez Band will greatly benefit from such a clean-up and we will have ample opportunity to seek out these economic benefits in the future. We do believe, however, that our request for \$114.2 million is justified given the numbers generated by the CVWD farmers and loss of the use of our lands as a result of the Sea being created and maintained. We would therefore strongly request that this Committee support our proposed amendment at the level of funding that we have requested to settle our claims for the loss of the use of our land for the past 90 years.

In closing, Mr. Chairman, I'd like to reiterate the Torres-Martinez Band's total support for this H.R. 3267 Bill entitled "Sonny Bono Memorial Salton Sea Reclamation Act" for the reasons set forth in my testimony here today. Sonny Bono was a great man and a great friend to our Tribe and we will miss him dearly as we pursue the causes of the Torres-Martinez Band. I am honored to have the privilege to testify in support of this important legislation. I trust that you will give my recommendations your utmost consideration. I thank you and the other members of the Committee for the time you have allotted me to testify here today. Thank you very much.

Appendix A

11-Mar-98

Year	1935	1936	1937	1938	1939	1940	1941	1942
Valuation Total	1,622,733.17	1,920,819.62	1,748,854.00	1,828,566.00	1,745,693.35	2,510,793.34	3,609,587.76	5,369,920.00
Total Acreage	14,357.00	14,599.00	15,273.00	14,221.00	15,655.50	16,353.00	18,279.00	19,232.00
Revenue per Acre	113.03	131.57	114.51	128.58	111.51	153.54	197.47	279.22
less Cost per Acre	(90.42)	(105.26)	(97.61)	(102.87)	(89.21)	(122.83)	(157.98)	(223.37)
Profit per Acre	22.61	26.31	22.90	25.72	22.30	30.71	39.49	55.84
UN Used Acres *	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00
Profit per Acre	22.61	26.31	22.90	25.72	22.30	30.71	39.49	55.84
Total Gross Value	345,863.59	402,610.32	350,389.13	393,461.22	341,210.54	469,823.74	604,263.63	854,406.99
rate of loss	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
years	63	62	61	60	59	58	57	56
Present Value of UN Used Acreage	15,012,310.13	16,460,190.15	13,492,978.71	14,271,393.96	11,657,197.78	15,118,692.27	18,315,249.55	24,392,611.13

TOTALS	
Total Value of UN Used Acreage	313,475,545.84
Total Present Value of Loss	1,360,645,169.33
ASSUMPTIONS	
Cost Per Acre	80.00%
Rate of Loss	6.00%

* minus 10% of 17,000 for roads, channels & laterals

Appendix A

11-Mar-88

Year	1943	1944	1945	1946	1947	1948	1949	1950
Valuation Total	11,627,109.30	13,801,735.40	11,747,865.31	13,109,506.40	13,442,213.40	15,906,159.08	15,962,150.99	18,867,328.00
Total Acreage	15,870.00	18,658.25	18,933.70	21,359.00	23,568.00	27,075.00	34,727.00	29,961.00
Revenue per Acre	732.65	739.71	620.47	613.77	570.60	587.49	459.65	629.73
less Cost per Acre	(586.12)	(591.77)	(496.38)	(491.02)	(456.48)	(469.99)	(367.72)	(503.78)
Profit per Acre	146.53	147.94	124.09	122.75	114.12	117.50	91.93	125.95
UN Used Acres *	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00
Profit per Acre	146.53	147.94	124.09	122.75	114.12	117.50	91.93	125.95
Total Gross Value	2,241,900.09	2,263,519.37	1,898,649.91	1,878,135.19	1,746,038.42	1,797,704.41	1,406,518.91	1,926,972.52
rate of loss	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
years	55	54	53	52	51	50	49	48
Present Value of UN Used Acreage	60,286,075.63	57,331,358.85	45,296,033.24	42,203,589.17	36,955,883.53	35,836,954.80	26,411,306.60	34,082,158.61

TOTALS	
Total Value of UN-Used Portion	313,475,648.84
Total Present Value of Loss	1,380,645,188.33
ASSUMPTIONS	
Cost Per Acre	80.00%
Rate of Loss	8.00%

* minus 10% of 17,000 for roads, channels & laterals

Appendix A

11-Mai-98

Year	1951	1952	1953	1954	1955	1956	1957	1958
Valuation Total	23,558,581.23	21,730,574.51	23,580,190.00	24,301,913.91	26,152,181.39	26,625,164.17	35,026,661.96	32,861,177.62
Total Acreage	39,515.50	43,628.00	46,110.00	47,346.00	52,555.00	47,465.00	49,905.00	56,782.00
Revenue per Acre	596.19	495.81	511.39	513.28	497.62	560.94	701.87	578.73
less Cost per Acre	(476.95)	(396.65)	(409.11)	(410.63)	(398.09)	(448.75)	(561.49)	(462.98)
Profit per Acre	119.24	99.16	102.28	102.66	99.52	112.19	140.37	115.75
UN Used Acres *	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00
Profit per Acre	119.24	99.16	102.28	102.66	99.52	112.19	140.37	115.75
Total Gross Value	1,824,328.64	1,517,193.53	1,564,853.21	1,570,647.08	1,522,703.36	1,716,485.88	2,147,712.37	1,770,899.29
rate of loss	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
years	47	46	45	44	43	42	41	40
Present Value of UN Used Acreage	30,392,183.87	23,807,131.53	23,128,472.60	21,865,490.20	19,966,556.54	21,199,975.59	24,984,950.99	19,404,546.93

TOTALS	
Total Value of UN-Used Portion	313,475,648.84
Total Present Value of Loss	1,360,643,199.53
ASSUMPTIONS	
Cost Per Acre	80.00%
Rate of Loss	6.00%

* minus 10% of 17,000 for roads, channels & laterals

Appendix A

11-Mar-98

Year	1959	1960	1961	1962	1963	1964	1965	1966
Valuation Total	29,977,791.11	35,510,988.25	35,575,355.57	39,147,022.80	43,957,480.75	42,611,429.82	47,481,503.79	45,765,150.92
Total Acreage	54,084.00	57,833.00	59,841.00	50,442.00	60,629.00	60,563.00	59,865.00	56,995.00
Revenue per Acre	554.18	614.03	594.50	647.68	725.03	703.89	793.14	802.97
less Cost per Acre	(443.34)	(481.22)	(475.60)	(576.14)	(560.02)	(562.87)	(634.51)	(642.37)
Profit per Acre	110.84	122.81	118.90	129.54	145.01	140.72	158.63	160.59
UN Used Acres *	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00
Profit per Acre	110.84	122.81	118.90	129.54	145.01	140.72	158.63	160.59
Total Gross Value	1,695,789.57	1,878,920.76	1,819,163.92	1,981,898.18	2,218,593.66	2,152,980.78	2,427,017.48	2,457,081.53
rate of loss	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
years	39	38	37	36	35	34	33	32
Present Value of UN Used Acreage	17,502,047.51	18,265,544.57	16,657,248.07	17,093,067.89	18,022,859.85	16,473,783.36	17,491,753.98	16,679,663.38

TOTALS	
Total Value of UN-Used Portion	314,675,548.84
Total Present Value of Loss	1,386,843,198.53
ASSUMPTIONS	
Cost Per Acre	80.00%
Rate of Loss	6.00%

* minus 10% of 17,000 for roads, channels & laterals

Appendix A

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Year	1967	1968	1969	1970	1971	1972	1973	1974
Valuation Total	47,175,420.06	53,446,928.39	48,829,348.00	49,555,071.00	58,553,596.00	66,420,000.00	65,556.00	74,657,000.00
Total Acreage	62,679.00	56,075.00	54,480.00	55,013.00	53,339.00	55,646.00	58,054.00	59,782.00
Revenue per Acre	752.65	953.13	896.28	900.79	1,087.76	1,193.62	1.13	1,248.82
less: Cost per Acre	(602.12)	(782.51)	(717.02)	(720.63)	(678.21)	(954.89)	(0.90)	(999.06)
Profit per Acre	150.53	190.63	179.26	180.16	219.55	238.72	0.23	249.76
UN Used Acres *	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00
Profit per Acre	150.53	190.63	179.26	180.16	219.55	238.72	0.23	249.76
Total Gross Value	2,303,112.45	2,916,586.73	2,742,517.56	2,756,412.43	3,359,155.66	3,652,467.38	3,455.43	3,821,391.39
rate of loss	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
years	31	30	29	28	27	26	25	24
Present Value of UN Used Acreage	14,726,180.41	17,565,362.94	15,559,035.00	14,727,904.20	16,905,736.16	17,314,008.02	15,428.38	16,071,163.02

TOTALS	
Total Value of UN-Used Farmland	313,475,546.24
Total Present Value of Loss	1,380,645,186.33
ASSUMPTIONS	
Cost Per Acre	80.00%
Rate of Loss	6.00%

* minus 10% of 17,000 for roads, channels & laterals

Appendix A

11-Mar-98

Year	1975	1976	1977	1978	1979	1980	1981
Valuation Total	93,263,200.00	103,884,545.00	107,030,600.00	126,311,700.00	146,190,900.00	159,772,000.00	167,102,900.00
Total Acreage	59,168.00	62,172.00	58,907.00	60,798.00	59,609.00	68,287.00	71,009.00
Revenue per Acre	1,576.24	1,670.92	1,816.94	2,077.56	2,452.50	2,339.71	2,353.26
less Cost per Acre	(1,261.00)	(1,336.74)	(1,453.55)	(1,662.05)	(1,962.00)	(1,871.77)	(1,882.61)
Profit per Acre	315.25	334.18	363.39	415.51	490.50	467.94	470.65
UN Used Acres *	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00
Profit per Acre	315.25	334.16	363.39	415.51	490.50	467.94	470.65
Total Gross Value	4,823,306.38	5,113,020.45	5,559,842.40	6,357,344.02	7,504,641.14	7,159,522.60	7,200,986.83
rate of loss	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
years	23	22	21	20	19	18	17
Present Value of UN Used Acreage	19,106,357.27	19,077,340.61	19,539,348.90	21,044,108.64	23,398,715.16	21,025,842.36	19,919,049.70

TOTALS	
Total Value of UN Used Paymen	313,475,448.24
Total Present Value of Loss	1,340,845,894.83
ASSUMPTIONS	
Cost Per Acre	80.00%
Rate of Loss	6.00%

* minus 10% of 17,000 for roads, channels & laterals

Appendix A

11-Mar-98

Year	1982	1983	1984	1985	1986	1987	1988	1989
Valuation Total	219,768,800.00	240,040,400.00	252,801,200.00	238,821,600.00	264,491,300.00	252,571,500.00	330,664.00	253,084,800.00
Total Acreage	61,014.00	64,853.00	63,672.00	67,223.00	67,762.00	71,081.00	72,547.00	59,069.00
Revenue per Acre	3,601.94	3,701.30	3,970.37	3,552.68	3,903.24	3,563.29	4.56	4,282.39
less Cost per Acre	(2,881.55)	(2,961.04)	(3,176.29)	(2,842.14)	(3,122.59)	(2,842.63)	(3.65)	(3,425.91)
Profit per Acre	720.39	740.26	794.07	710.54	780.65	710.66	0.91	856.48
UN Used Acres *	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00
Profit per Acre	720.39	740.26	794.07	710.54	780.65	710.66	0.91	856.48
Total Gross Value	11,021,938.05	11,325,977.58	12,149,322.65	10,871,191.35	11,943,912.19	10,873,071.43	13,947.26	13,104,104.77
rate of loss	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
years	16	15	14	13	12	11	10	9
Present Value of UN Used Acreage	28,717,182.15	27,795,008.67	28,083,448.84	23,669,156.11	24,493,987.67	21,002,567.66	25,375.60	22,456,487.76

TOTALS	
Total Value of UN Used Portion	313,472,548.84
Total Present Value of Loss	1,330,944,168.53
ASSUMPTIONS	
Cost Per Acre	80.00%
Rate of Loss	6.00%

* minus 10% of 17,000 for roads, channels & laterals

Appendix A

11-Mar-98

Year	1990	1991	1992	1993	1994	1995	1996
Valuation Total	289,156,800.00	316,815,200.00	282,515,400.00	341,087,700.00	324,374,200.00	406,149,700.00	319,613,700.00
Total Acreage	64,824.00	56,495.00	58,195.00	59,570.00	58,192.00	61,066.00	57,142.00
Revenue per Acre	4,460.64	5,607.84	4,854.63	5,725.83	5,574.21	6,651.00	5,593.32
less Cost per Acre	(3,568.52)	(4,486.28)	(3,883.71)	(4,580.66)	(4,459.36)	(5,320.80)	(4,474.66)
Profit per Acre	892.13	1,121.57	970.93	1,145.17	1,114.84	1,330.20	1,118.66
UN Used Acres *	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00	15,300.00
Profit per Acre	892.13	1,121.57	970.93	1,145.17	1,114.84	1,330.20	1,118.66
Total Gross Value	13,649,571.27	17,180,005.52	14,855,178.69	17,521,040.15	17,057,070.59	20,352,046.67	17,115,570.37
rate of loss	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
years	8	7	6	5	4	3	2
Present Value of UN Used Acreage	22,032,355.84	26,089,551.35	21,273,273.85	23,633,257.89	21,670,823.31	24,354,897.89	19,291,982.47

TOTALS	
Total Value of UN Used Acreage	311,475,566.64
Total Present Value of Loss	1,380,645,198.83
ASSUMPTIONS	
Cost Per Acre	80.00%
Rate of Loss	6.00%

* minus 10% of 17,000 for roads, channels & laterals

R. Wayne Hardie

**EVALUATION OF OPTIONS FOR RECLAMATION
OF THE SALTON SEA**

INTRODUCTION

Los Alamos National Laboratory, which is operated by the University of California for the Department of Energy, was asked last May by the Congressional Salton Sea Task Force to provide technical support for the remediation of the ecological problems in the Salton Sea. Today I am going to report on how the results of our work in evaluating various concepts for addressing high salinity and variable water levels of the Sea relate to H.R. 3267. Our results are preliminary and in some cases qualitative, but they can be used to help guide decision-makers in their deliberations. Ultimately, selecting the "best" solution for reclaiming the Salton Sea will have to integrate performance, economic, ecological, and institutional factors into the decision.

SALINITY AND WATER LEVEL CONTROL

Los Alamos has examined the cost, salinity, and Sea level changes resulting from three remediation concepts:

- desalination;
- pump-in; pump-out; and
- diked impoundment

and compared these results with "no action." We have concentrated on performance and economic issues and have not evaluated ecological or institutional factors in this analysis.

The purpose of this work is to determine the primary advantages and disadvantages of each concept. For each concept, there are numerous variations, so detailed engineering designs must be completed once a concept is selected.

Due to anticipated water conservation, for our analysis we assumed the inflow into the Salton Sea will linearly decrease from the present flow of 1.3 million acre-feet per year (MAF/year) to 1.0 MAF/year over a twenty year period. It is important to note that the results are strongly influenced by this assumed inflow reduction. Similarly, using excess Colorado River water could also have a major impact on the results.

The "water and salt balance" model that we used is a fairly simple computer simulation that calculates elevation, surface area, volume, and salinity. The model also takes into account changes in evaporation rate due to changes in salinity and surface area.

No Action

If no action is taken the Salton Sea will, of course, continue to increase in salinity from today's level of 44 ppt. Figure 1. The Sea would reach a salinity level of about 60 ppt in about 15 years. This is important because some believe that most fish can no longer live in water at this salinity level. The salinity level would reach almost 100 ppt in 30 years, and after 50 years would approach 120 ppt.

Regarding water level, the elevation of the Sea would be lowered from today's -227 feet to -242 feet after 30 years. This 15 foot drop in elevation would result in a reduction in the Sea's surface area by approximately 20%--from about 380 sq. miles to 304 sq. miles.

Desalination

If there were an inexpensive filtering or distillation method to remove salt from high-salinity water, desalination would be an obvious solution to the problems of the Salton Sea. The process could be used to reduce the salinity of the water already in the Salton Sea, or to desalinate ocean water being pumped from the Gulf of California as part of a "pump-in, pump-out" scheme.

If desalination is used to freshen the water in the New, Alamo, and Whitewater Rivers and the water allowed to flow into the Salton Sea, this reduces the quantity of salt going into the Sea but does not solve the problem because salt is not being removed from the Sea. Furthermore, if the desalinated water is diverted instead of flowing into the Salton Sea, this will lower the Sea's elevation and increase its salinity thereby making the problem worse.

One desalination proposal was developed last year by U.S. Filter. They proposed treating New and Alamo River water prior to entering the Salton Sea and diverting about 160 TAF/year for recycle. The saline water, 45 TAF/year, would be disposed of, in addition to 22 TAF/year of water which would be pumped out of the Salton Sea for a total water loss to the Sea of 227 TAF/year (160 + 45 + 22). U.S. Filter estimates that the total project capital cost would be between \$750 million and \$1.0 billion.

The impact of the above proposal on the salinity of the Salton Sea is an increase to about 120 ppt at 30 years, which is 20 ppt higher than doing nothing. Furthermore, the elevation of the Sea under this scenario would decrease to -250 feet with a corresponding reduction in surface area of over 30%, to about 260 square miles.

Another proposal, by the Metropolitan Water District (MWD), would divert approximately 450 TAF/year of Alamo (390) and Whitewater (60) River water. After desalination, the water would be delivered to the Colorado River Aqueduct. MWD estimates the capital cost would be \$1.1 billion with operation costs of \$58 million/year. Once again, from the point of view of remediating the Salton Sea, this makes the Sea smaller and saltier.

In summary, while desalination can be used to produce fresh water for urban household use, in our opinion desalination approaches to reduce the salinity of the Salton Sea would be prohibitively expensive.

Pump-In, Pump-Out

Another concept that has received attention consists of pumping water from an external source to the Salton Sea and pumping water from the Sea to an external location. The advantage of such a concept is that it has the potential to allow simultaneous control of salinity, elevation, and surface area.

The obvious source for pump-in water is the Gulf of California which, of course, is at ocean water salinity. However, for this concept to be practical for salinity control without a reduction in the level of the sea, the salinity of the pump-in water needs to be considerably less than that of ocean water. If the pump-in water is at ocean water salinity, very large quantities of water must be pumped, both in and out. For example, pumping in 400 TAF/year of ocean water and pumping out 500 TAF/year of Salton Sea water is required for the Salton Sea to approach ocean water salinity. Figure 2. Even with this large amount of water exchange, the elevation would decrease by about 23 feet. Figure 3. Our estimate is that the capital cost for such a system would be about \$1.7 billion, with another \$30 million per year in operating costs (assuming electricity costs of 3.5 ¢/kWh).

Since it is unlikely there will be a source of low-salinity pump-in water, a variation of this concept is "pump-out" only. Pumping out a relatively small 150 TAF/year of Salton Sea water will allow the Salton Sea to reach ocean salinity. Figure 4. This would create a smaller Salton Sea by about 35% (to 245 square miles) with an elevation only about 3 feet lower than pumping in 400 TAF/year and pumping out 500 TAF/year. Our estimate of the capital cost for this system is about \$300 million, with operating costs being approximately \$5 million per year.

Therefore, "pump-out" achieves nearly the same result as "pump-in, pump-out," and at a much lower cost. Providing that a smaller Salton Sea by approximately 35% is acceptable, "pump-out" should be considered as a viable option for the Salton Sea.

One important issue that needs to be resolved with this concept is the destination of the pumped water. One frequently mentioned area is the Laguna Salada in Mexico. Technically this is feasible, but would entail reaching an agreement with Mexico. Another important issue with "pump-out" is that the salinity level would increase for about 25 years, hitting a peak of about 65 ppt before decreasing. Figure 5.

Diked Impoundment

Another concept that has the potential for controlling salinity and elevation is the creation of in-Sea impoundment areas by diking. This could result in a Salton Sea with the same elevation as now and a salinity level comparable to that in the ocean. The primary disadvantage of "diked impoundment" is that part of the surface area in the Sea would be in an impoundment area which would contain very saline water. Fish would not be able to survive in the impoundment, and in time this brine would precipitate salt.

Eventually, this salt would have to be removed from the impoundment area--the cheapest way probably being to pump out the brine. When this has to be done is uncertain and will depend on the criteria for pumping out the brine. A lower bound would be when the brine first reaches saturation while the upper bound would be when the impoundment area fills up with salt.

Using our assumptions on inflow volumes, an impoundment area of about 10% of the area of the Salton Sea (approximately 35 square miles) would allow the Salton Sea to reach ocean salinity. Figure 6. An estimate of the cost of an earthen dike is about \$300 million--however, such a dike would only provide salinity control and the Sea could ultimately be reduced in area by about 20%. A larger, reinforced dike with an impoundment area of almost 30% of the present Sea would be required to maintain the existing shoreline. Figure 7. A reinforced dike providing both salinity and elevation control would probably raise the capital cost by more than a factor of two. Operation costs would be approximately \$2 million/year.

If having part of the Salton Sea at a high salinity level is acceptable, we feel that "diked impoundment" is also a viable option for the Salton Sea.

CONCLUSIONS

Based on our analysis, we conclude that:

- Desalination is not a viable concept for salinity and elevation control of the Salton Sea.
- "Pump-out" is a feasible method for salinity control, but the size of the Salton Sea could decrease by approximately 35%. Furthermore, the Sea would continue to increase in salinity for about 25 years.

- “Diked impoundment” could control salinity and elevation if the dike is reinforced to serve as a dam. If the dike is earthen, the size of the Sea could decrease by about 20%. In either case, the impoundment area would have high salinity water.

The ecological and institutional consequences of the various concepts need to be better analyzed before a final selection is made. Furthermore, the impact of anticipated water diversion from the Salton Sea and the possible use of excess Colorado River water need to be factored into the decision.

In summary, the options identified for consideration in H.R. 3267 appear to be the most feasible for reclaiming the Salton Sea. However, the elevation requirements in the proposed legislation could restrict the options. This is because the existing shoreline is the result of an equilibrium condition between historical inflows of about 1.3 MAF/year and evaporation, and meeting the elevation requirements with a substantially reduced inflow could be a considerable challenge.

Finally, while Los Alamos appreciates the proposal to jointly appoint a member of the Research Management Committee, a better role for the Laboratory might be to assist in the feasibility study.

Thank you.

Elevation and Salinity for No Action

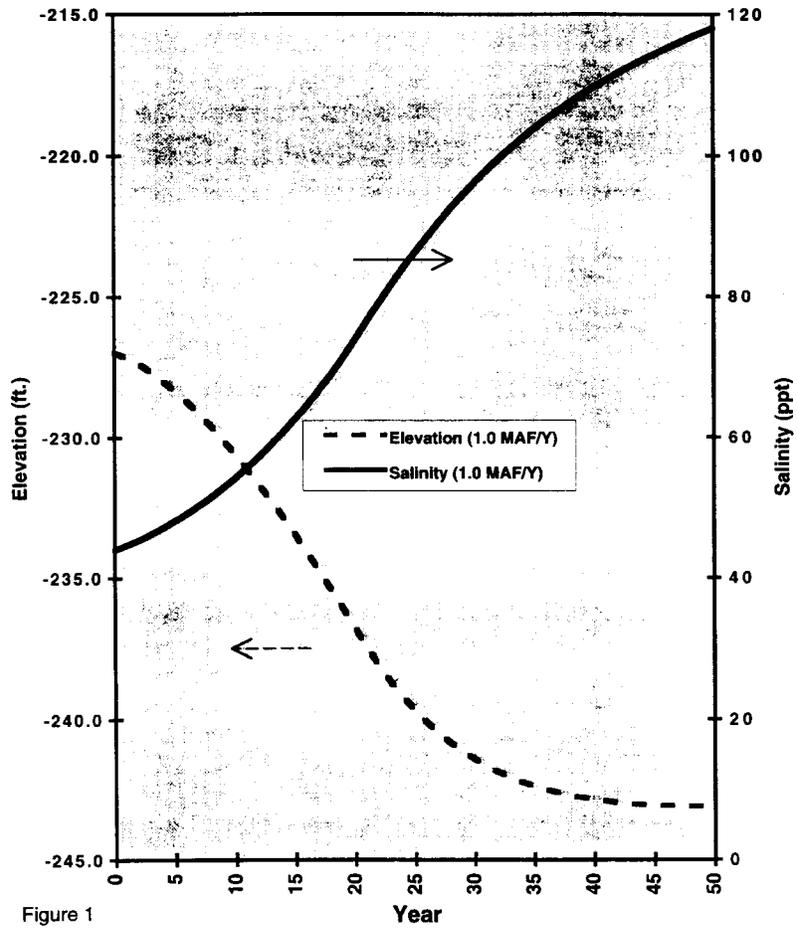


Figure 1

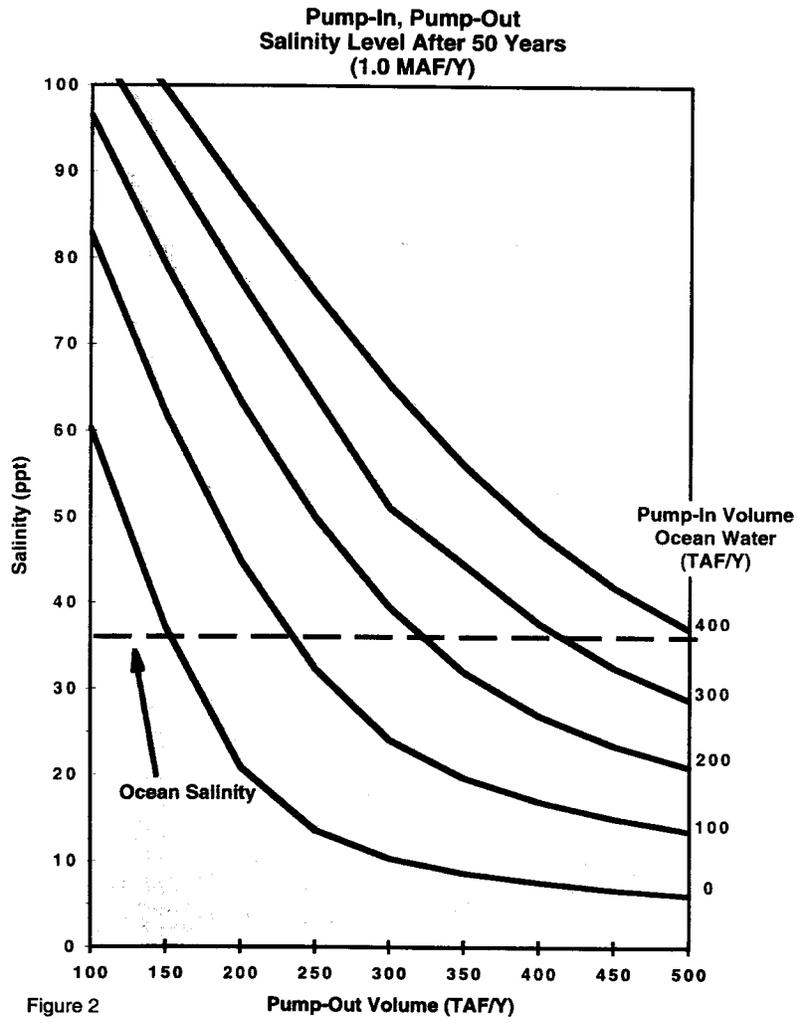


Figure 2

**Pump-In, Pump-Out
Elevations After 50 Years
(1.0 MAF/Y)**

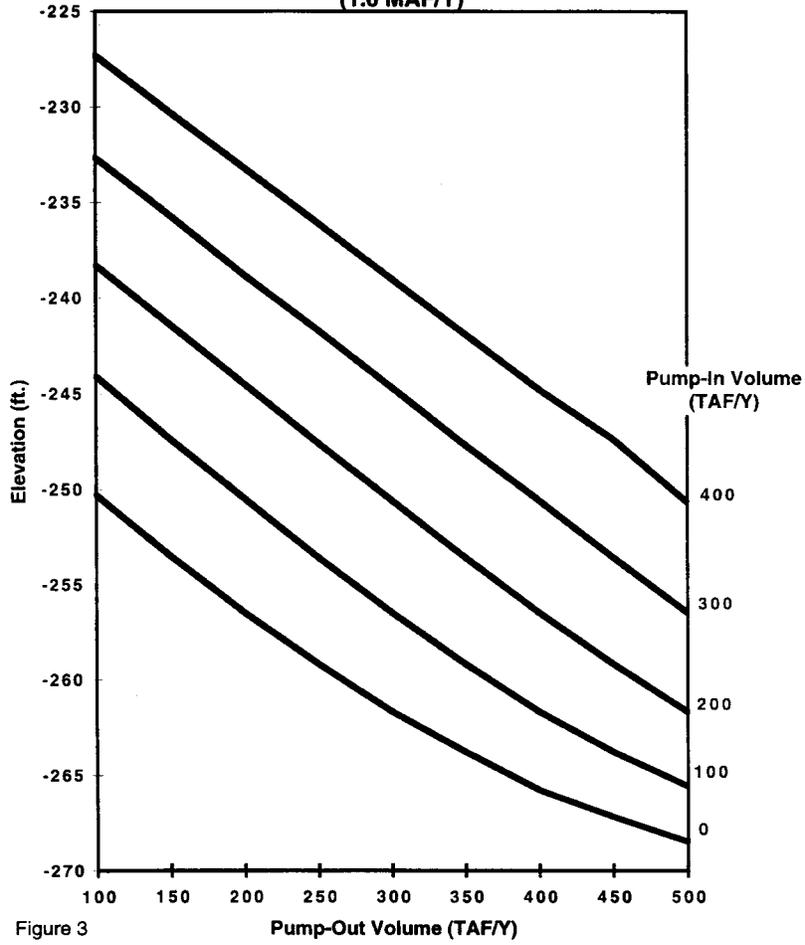


Figure 3

**Pump-Out Only
Elevation and Salinity**

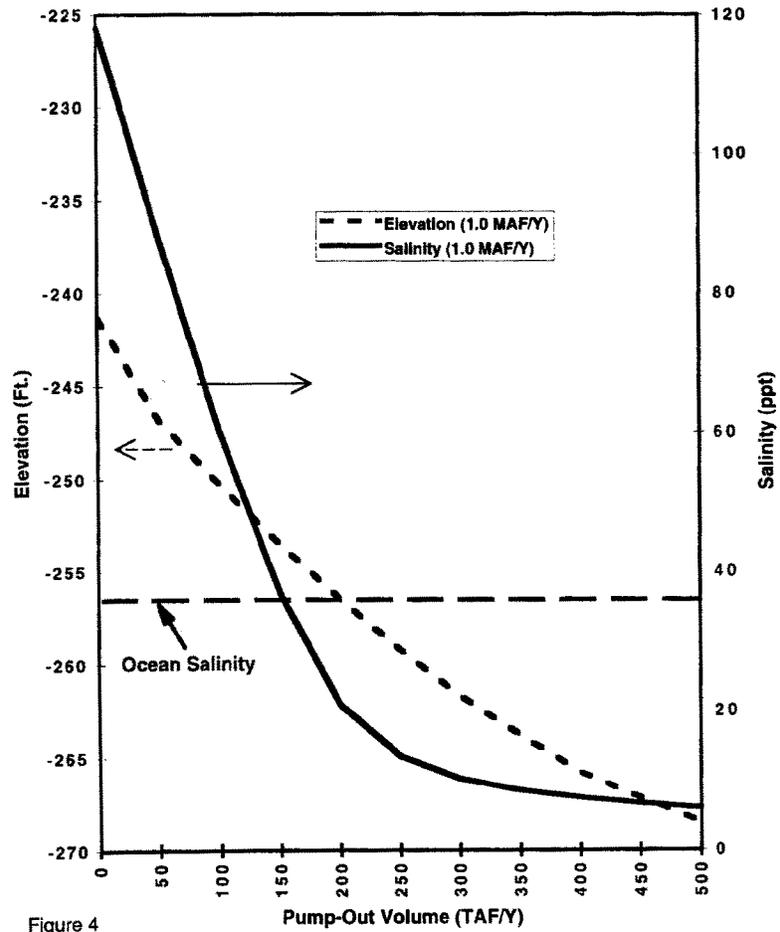


Figure 4

Salinity Vs Time
(With Diversion & 150 TAF/Y Pump-out)

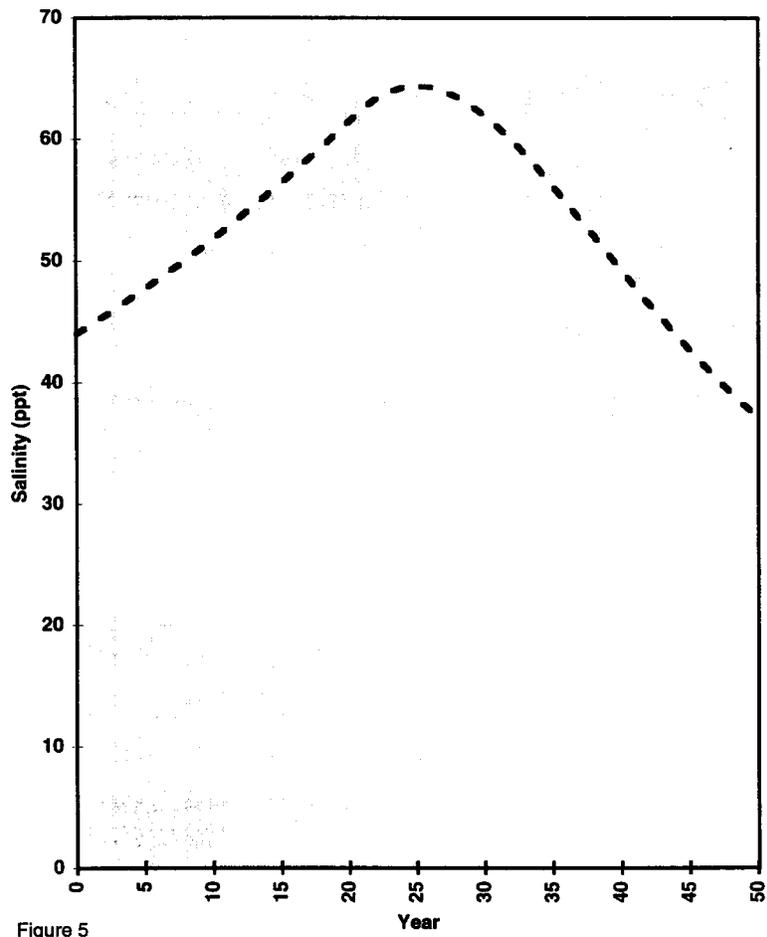


Figure 5

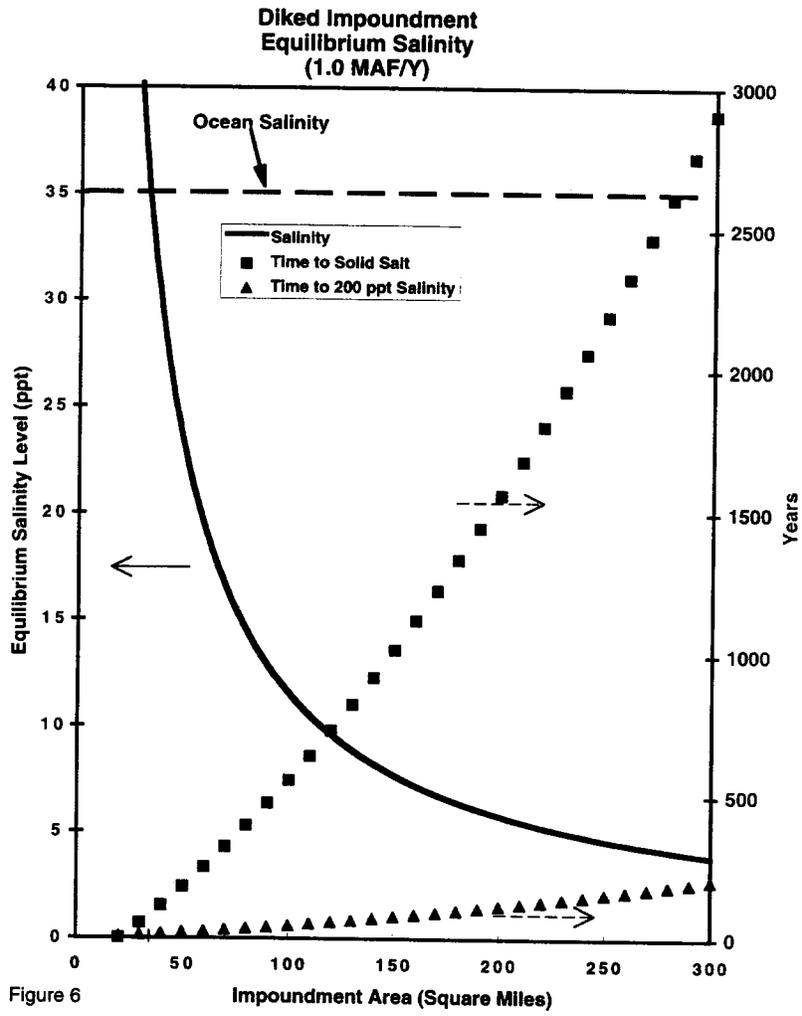


Figure 6

**Minimum Impoundment Area to Meet Salton
Sea Authority Criteria
(35 ppt Salinity & Existing Shore Line)**

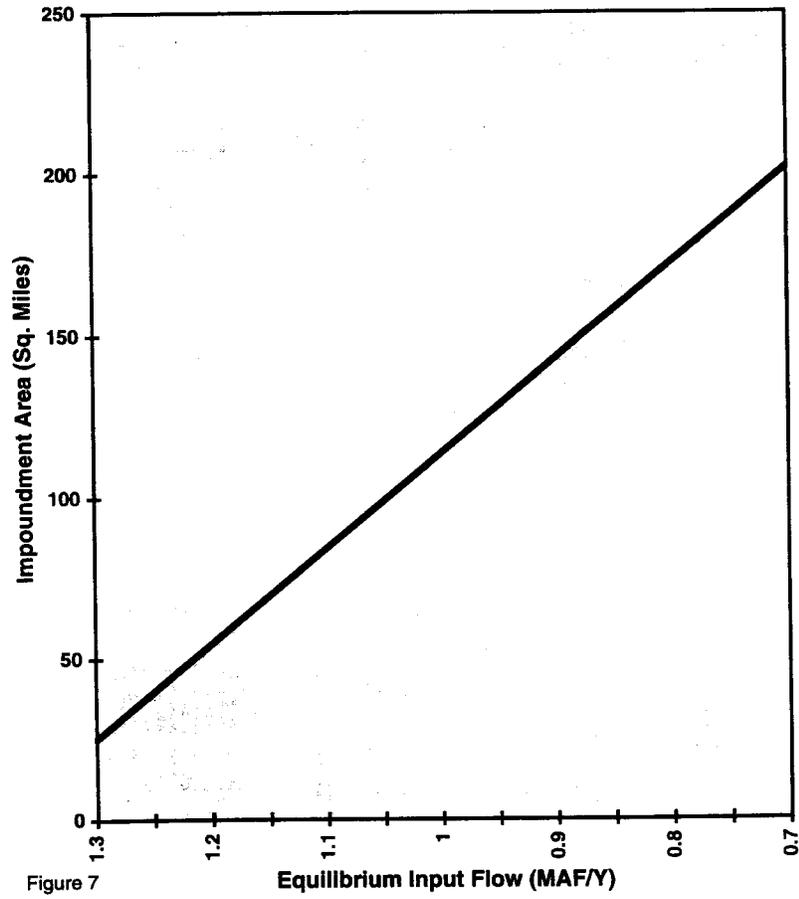


Figure 7

**EVALUATION OF OPTIONS FOR RECLAMATION
OF THE SALTON SEA**

**Testimony before the
Subcommittee on Water and Power
U.S. House of Representatives Committee on Resources**

March 12, 1998

SUPPLEMENTAL SHEET**SUMMARY AND CONCLUSIONS**

Los Alamos National Laboratory has been providing technical support for the remediation of the ecological problems in the Salton Sea. This testimony will report on how the results of our work in evaluating various concepts for addressing high salinity and variable water levels of the Sea relate to H.R. 3267.

Based on our analysis, we conclude that:

- Desalination is not a viable concept for salinity and elevation control of the Salton Sea.
- "Pump-out" is a feasible method for salinity control, but the size of the Salton Sea could decrease by approximately 35%. Furthermore, the Sea would continue to increase in salinity for about 25 years.
- "Diked impoundment" could control salinity and elevation if the dike is reinforced to serve as a dam. If the dike is earthen, the size of the Sea could decrease by about 20%. In either case, the impoundment area would have high salinity water.

The ecological and institutional consequences of the various concepts need to be better analyzed before a final selection is made. Furthermore, the impact of anticipated water diversion from the Salton Sea and the possible use of excess Colorado River water need to be factored into the decision.

In summary, the options identified for consideration in H.R. 3267 appear to be the most feasible for reclaiming the Salton Sea. However, the elevation requirements in the proposed legislation could restrict the options. This is because the existing shoreline is the result of an equilibrium condition between historical inflows of about 1.3 MAF/year and evaporation, and meeting the elevation requirements with a substantially reduced inflow could be a considerable challenge.

Finally, while Los Alamos appreciates the proposal to jointly appoint a member of the Research Management Committee, a better role for the Laboratory might be to assist in the feasibility study.

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UPPER COLORADO RIVER COMMISSION
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TELEPHONE: 801-531-1150

- No objection to stabilization.
- Stabilization plan must not:
 1. Jeopardize the California 4.4 Plan.
 2. Generally depend on Colorado River water.
- Section 101(f)2 - Preservation of Rights and obligations. Needs to be strengthened (language is provided).
- Title II - Emergency Action.
No Colorado River water available in 1998 or 1999.

TESTIMONY
of

WAYNE E. COOK, Executive Director
UPPER COLORADO RIVER COMMISSION

before the

U. S. HOUSE OF REPRESENTATIVES COMMITTEE ON RESOURCES
HEARING ON THE
SONNY BONO MEMORIAL SALTON SEA RESTORATION ACT
H. R. 3267

March 12, 1998

On behalf of the Upper Basin States of the Colorado River Basin, we thank you for the opportunity to provide written testimony for your March 12, 1998 hearing on H. R. 3267, "Sonny Bono Memorial Salton Sea Restoration Act."

The Upper Colorado River Commission is an interstate administrative agency created by the Upper Colorado River Compact in 1948. The member states of the Commission are Colorado, New Mexico, Utah and Wyoming. Among other things this Commission represents the Upper Basin States in consultations with the Secretary of the Interior on matters pertaining to the operations of the Colorado River.

The Upper Basin States do not object to the goal of stabilizing the Salton Sea, either its salinity level or content. We are concerned, however, that H. R. 3267, as presently introduced, is unclear on what role the Colorado River may play in such stabilizing activities.

SECTION 101(b)(1)and(2) PROJECT REQUIREMENTS page 3, line 16-21, suggests stabilizing the salinity level between 35 and 40 parts per thousand and the surface elevation at 240 to 230 feet below sea level. Such goals could perhaps jeopardize the implementation of the California 4.4 Plan currently being negotiated by the Southern California water agencies. California must restrict its current Colorado River uses to stay within its normal-year water limitation of 4.4 million acre feet of Colorado River water. The Plan envisions conservation of water in the Imperial Irrigation District, and other agricultural areas, for transfer to Metropolitan Water District for use in keeping its Colorado River Aqueduct full. Such conservation measures may significantly reduce inflow to the Salton Sea. Any successful Salton Sea legislation must not jeopardize that goal.

U. S. HOUSE OF REPRESENTATIVES COMMITTEE ON RESOURCES
Hearing on H. R. 3267
March 12, 1998
Page 2

SECTION 101(c)(2)(A)iii, OPTIONS TO BE CONSIDERED page 4, line 8, suggests augmented flows into the Salton Sea. Such flows could be imported sea water or Mexicali Valley return flows, but the direct use of Colorado River waters for this purpose would be generally precluded by the "Law of the River."

SECTION 101(f)1 - RECLAMATION LAWS page 7, line 10-14, is disquieting. What does this section intend to accomplish? Why exclude this project from planning criteria, benefit/cost analysis, discharge permitting, ESA, etc? Doing so seems to set a dangerous precedent.

SECTION 101(f)2 - PRESERVATION OF RIGHTS AND OBLIGATIONS WITH RESPECT TO THE COLORADO RIVER page 7, line 23, this section needs to be strengthened, and we would suggest the following language:

This section shall not supersede or otherwise affect any treaty, law or agreement governing use of water from the Colorado River. The Secretary shall implement this Act in a manner fully consistent with and subject to the Colorado River Compact, the Upper Colorado River Basin Compact, the Water Treaty of 1944 with Mexico, the decree of the Supreme Court in *Arizona v. California*, and the provisions of the Colorado River Storage Project Act of 1956 and the Colorado River Basin Project Act of 1968 that govern allocation, appropriation, development and exportation of the waters of the Colorado River Basin.

We are also concerned about language contained in Title II - Emergency Action to Stabilize Salton Sea Salinity. SECTION 201(b)(2) suggests water will be available in late 1998 and/or early 1999. However, the source of such water is not identified. Under the present approved plan for operations of the Colorado River for water year 1998 and projected 1999, there is no water available from the Colorado River for such uses in the Salton Sea. If this section contemplated Colorado River water for emergency purposes in 1998, or 1999, it must be rewritten to exclude use of Colorado River water or limit such use to remain within California's 4.4 million acre feet allotment.

If you have questions concerning these comments, please contact Wayne E. Cook, Executive Director, Upper Colorado River Commission at 801-531-1150.

**TESTIMONY SUBMITTED IN RESPONSE TO REQUEST FROM SUBCOMMITTEE
HOUSE COMMITTEE ON RESOURCES, SUBCOMMITTEE ON WATER AND POWER
CONCERNING H.R. 3267, THE SONNY BONO MEMORIAL SALTON SEA RECLAMATION ACT**

Submitted by
Michael J. Bazdarich, Ph. D.
Director, Inland Empire Economic Databank and Forecasting Center
University of California at Riverside

March 10, 1998

PROPERTIES OF MY SALTON SEA STUDY

Between October 1997 and January 1998, my Center conducted and completed a study of the economic potential of the Salton Sea. I estimated the private-sector economic benefits that could accrue to the immediate area of the Sea from its development as a water-sports recreational area, were environmental conditions on the Sea improved sufficiently to induce such development. I also briefly discussed the revenue sources that should be available to help pay the expenses of such a clean-up effort.

One initial point made in my study was that the benefits accruing from a clean-up involve both the gains accruing from an *improvement* of Salton Sea conditions from their current state and also the gains from the *prevention of further deterioration* in those conditions. That is, even the present state of the Sea cannot be maintained without remedial action, as salinity and pollution levels will otherwise continue to rise, water levels will continue to fluctuate, and so environmental conditions will continue to deteriorate. Therefore, a project which effects and maintains an improvement in Sea conditions will reap both the gains of improving conditions and also of preventing further deterioration.

In my study, the methods involved in estimating the economic benefits of an improvement in Sea conditions to a level conducive to widespread economic development of the region are fairly straightforward. Economic utilization and valuations presently can be compared to those accruing in regions with a water-sports and leisure use comparable to the potential usage of the Salton Sea. However, the study points out that a tabulation of such benefits only, again, understates the total benefit of a clean-up effort, as these do not include the benefits accruing from the prevention of further deterioration of the Sea and thus from the prevention of further diminution in the economic utility of the Sea.

The latter benefits are somewhat more difficult to quantify, since they involve a comparison of present circumstances to those that would accrue from some unknown, disaster state at some distant time in the future. Nevertheless, my study offered two indirect methods of estimating these benefits of preventing further deterioration (alternatively, the costs of that further deterioration).

This point is also applicable to any evaluation of the public-sector or environmental benefits of the Sea. Again, my study focused on private-sector, economic benefits of a clean-up. It specifically did *not* attempt to quantify the environmental value/benefits of the Sea as a wildlife refuge, fishery, or otherwise. It similarly did not quantify the value of the Sea as a repository for agricultural run-off. With respect to these items, it might be argued that these benefits are already accruing. However, it is still the case that all these values/benefits are at risk should Salton Sea conditions continue to deteriorate. Thus the preservation of all these benefits can be credited as benefits accruing to a successful clean-up via the prevention of further deterioration of the Sea.

STUDY LIMITED TO DEVELOPABLE PROPERTY WITHIN ONE-HALF MILE OF SHORE

While my study focuses on private-sector economic benefits accruing from increased utilization of the Sea as recreational and leisure center. I attempt to ensure that those benefits would accrue in a manner compatible with the sustenance and enhancement of other, non-economic qualities of the Sea as well. Thus, my study assumes that economic development will be restricted to an area totaling only about 57% of Sea shore property. Specifically, I do not allow for any private-sector utilization of property in or adjacent to 1) the National Wildlife Refuge on the southern and eastern shores of the Sea, 2) the California State Recreational Area on the eastern shore, or 3) the Armed Forces Test Base, on the western shore. I also restrict benefit calculations to exclude Torrez-Martinez Indian Reservation lands on the northwestern shore of the Sea, as these lands may be exempt from tax levies which could be raised to finance a clean-up. (The regions considered possible for private-sector human recreational development are listed in Figure 1 of my study, reproduced and attached to this testimony.)

Besides these areas, there is currently a small duck pond area on the North shore of the sea. That region of the Sea lies closest to the Coachella Valley area and would also seem to be a prime location for human utilization of the Sea. My assumption was that the ducks there could be relocated to the southern end of the Sea and that the area in question would be available for human utilization.

In order to focus on the direct benefits accruing from a clean-up and also in order to keep the scope of the project manageable, my calculations of economic benefits were restricted to an area within one-half mile of the Salton Sea shore (within the restricted regions described above). Successful clean-up and consequent development of the region immediately surrounding the Sea would also facilitate faster-than-otherwise commercial growth in the neighboring Imperial and Coachella Valleys, not to mention properties adjacent to—but more than one-half mile from—the Sea shore. However, the methods for estimating such benefits are less straightforward than those involving Sea shore proper, and, also, limitations were set to keep the project manageable.

ASSUMPTIONS ON QUALITY OF SALTON SEA CLEAN-UP

Finally, but perhaps most importantly, my study assumed that the eventual clean-up project would be thorough and successful enough to allow the Salton Sea are to emerge as a region of comparable quality to and competitive with such water-sports-recreational areas as Lake Havasu, Bullhead City, Lake Arrowhead, and Big Bear Lake. At a minimum, such comparable quality would require a) reduction in and subsequent stabilization of Salton Sea water salinity at a level equal to or lower than that of ocean water, b) reduction in Sea water pollution and nutrient content to levels consistent and compatible with widespread use by human swimmers, water-skiers, and boaters, and c) stabilization of Sea water levels at a state or within a range that does not provide an unreasonable threat to property constructed or improved along the shore line.

It would of course be prohibitively expensive to try to improve Sea water to the pristine state of, say, Lake Tahoe. It could be argued that any conditions short of that might be distasteful to some potential vacationers/tourists, and some have questioned whether widespread water-sports utilization will occur around the Sea under any feasible clean-up effort. These are technical questions which I cannot answer unequivocally.

However, I would point out that all the successful water-sports regions mentioned in the second paragraph preceding are man-made and so initially suffered some stigma among water-sports enthusiasts. Furthermore, Lake Havasu and Bullhead City exist in less than pristine desert surroundings, and their development and promotion involved intensive marketing efforts some years back before they gained acceptance as viable locations for swimming, boating, and water-skiing. Each of these locations was able

P. J. Bazdarich Testimony to Sub-Committee on Water and Power RE HR 3267, March 12, 1998

to provide visitors with enjoyable water-sports experience, and with the growth of the Southern California, Arizona, and Nevada economies, there was sufficient demand to spur intensive development of all these regions.

The Salton Sea, meanwhile, offers a body of water much larger than any of those areas. It is much closer and more highway-accessible to Southern California residents than are Lake Havasu or Bullhead City, and the topography of the Salton shoreline is ideal for widespread development (given, of course, the restrictions and the extent of environmental improvements outline above). Furthermore, state of California population and demographic projections forecast more than enough potential demand growth emerging through the next thirty years to allow development of and widespread use of the Salton Sea shore region, without visible, adverse impact on the economies of Colorado River or Pacific Coastal Range freshwater resorts. There is widespread agreement, then, that the potential for extensive private-sector utilization of the Salton Sea exists should a clean-up project be conducive to that.

SOURCES OF ECONOMIC BENEFITS

In estimating the economic benefits of *improving* Salton Sea conditions, I identify three potential sources: 1) increased real estate values accruing from more favorable Sea Water conditions, 2) increased property tax flows as a result of increased real estate values, and 3) increased sales tax revenues.

It might be argued that Sea shore workers' wages and proprietors'/operators' profits will also rise as a result of increased economic utilization of the Sea. My response is that those benefits are subsumed within the property value enhancements which I estimate. Once successful clean-up of the Sea is secured, economic theory has it that the remaining scarce resource is the land surrounding the Sea. While workers, merchants, and other resources will flock to the Sea as it is developed, in a competitive market, those individuals will receive merely market rates of return on their labors, the same as they would receive in other locales. Any extraordinary returns (economic rents) would accrue to landowners as holders of the "scarce" resource in this instance, and such returns will thus be reflected in land values around the sea shore.

This statement should not be construed as value judgment. I am not saying that land is all that matters. Furthermore, I am not saying that all levies used to finance the clean-up effort should be imposed on Sea shore landowners (although a delineation of the benefits and costs involved does provide some *guidance* towards workable financing sources). All I am saying is that under competitive market conditions, a comprehensive study of the likely increment to land values can be said to capture ancillary economic benefits from commercial and retail activity. So under competitive conditions, my calculations will be inclusive. Under less than perfectly competitive tourist market conditions, my calculations can be said to (slightly) *understate* the total economic benefits accruing from clean-up.

Keep in mind that this reasoning requires use of property values that capture all commercial/residential benefits. Therefore, I look at *retail* final market real estate values for small-size lots, rather than wholesale or bulk-lot prices. Per-acre prices for land are much less when the land is sold in multi-acre parcels than when it is sold as improved lots. The higher, retail prices accrue from the extra value-added from infrastructure provisions and other improvements necessary to make the lot commercially or residentially useful. That value-added, in turn, will rise as the commercial and residential viability of Salton Sea land increases with a successful clean-up program, and so it should be incorporated in my calculations. In other words, estimating economic benefits via calculation of prospective property value increments dictates the use of retail land values.

Now, there are two circumstances under which prospective land values will not quite capture all increased economic values. To the extent that landowners have to pay property taxes, property values will rise less

P. 4. Bazzarich Testimony to Sub-Committee on Water and Power RE HR 3267, March 12, 1998

than otherwise by the present value of all future increases in property taxes accruing from the Sea clean-up and consequent economic development. Also, to the extent that merchants and shoreline business operators have to pay sales taxes and other levies on their business operations, the rents they are willing to pay landlords for their business property will be less than otherwise, and so the market value of the property will also be less than otherwise by the present value of those future sales taxes. So market prices of property will not capture economic benefits which accrue directly to the government, but they will capture those remaining in the private-sector. My calculations thus estimate increments both to property values and direct tax revenues.

Finally, the benefit estimates are cast in terms of "current" or inflation-adjusted 1997 dollars. Discount rates used to capitalize streams of benefits or costs are chosen in inflation-adjusted terms. It can be generally stated that the estimates in my study are not sensitive to various projections of future inflation.

ESTIMATION OF BENEFITS

In calculating prospective increase in property values, I compare current estimated Salton Sea property values to those currently existing in the competitive areas of Lake Havasu and Bullhead City. My reasoning is that the ambient environmental conditions in those resorts (relatively flat, desert terrain) are more comparable to those of the Salton Sea than would be the mountainous lake areas of Lake Arrowhead or Big Bear Lake in Southern California. Also, economic theory teaches that property values should vary inversely with proximity to major population centers. That is, considering two otherwise comparable plots, the land closer to major population centers should be of higher value. Arrowhead and Big Bear are both closer to and slightly more accessible to the Los Angeles and Riverside-San Bernardino areas than the Salton Sea.

In contrast, however, the Salton Sea is much closer to and much more accessible to Los Angeles-Anaheim, Riverside-San Bernardino, and San Diego than either Colorado River resorts (Lake Havasu and Bullhead City). Given a suitable clean-up, then, the Salton Sea shore area would have the potential to achieve higher property values than are occurring in those regions. I thus use the current property values in those areas as potential benchmarks for Salton Sea property. Again, while economic theory would predict a higher value for Salton Sea property in the event of clean-up, to keep my results conservative, I allow only for Salton Sea property values to rise to levels in some cases comparable to those in Lake Havasu and Bullhead City. For prime real estate, I generally estimate potential values on the Salton Sea at only about half of current values on the Colorado River. These "conservative" estimates still find a potential increment to property values of \$2.165 billion (for the limited area around the Sea shore covered in my study). (Details of these calculations and others are presented in my full report.)

Under existing California law (Proposition 13), such enhanced property values would eventually be taxed at a rate of 1% per year, once the lands were re-assessed following sale or other transfer. Assuming a 10% per year "turnover" in property once development intensifies and using a 3.5% inflation-adjusted discount rate to capitalize inflation-adjusted tax flows results in a conclusion that a "present value" of \$618 million of additional property tax flows can be expected to accrue in the event of clean-up.

Finally, intensive economic development of the sea would generate substantial retail activity around the shore. Also, elsewhere, the state of California has projected the potential *future* population of the Salton Sea community at 45,000, which estimate looks conservative given the potential of the region in the event of a successful clean-up. Assuming both such population growth and per-capita retail activity levels consistent with those in surrounding Southern California resort areas implies potential incremental taxable sales activity of \$915.8 million per year, resulting in an increment of \$68.5 million per year to sales tax revenues. The present value of such flows in perpetuity amounts to \$1.958 billion.

These three elements sum to a total economic benefit of \$4.581 billion from improvement of Salton Sea conditions from their current state to a state conducive to widespread economic development. In addition, ***my calculations also estimate the benefits/costs of preventing further pollution to be between \$3.391 billion and \$5.691 billion.*** (These benefits/costs of preventing further deterioration are estimated in the text of my report alternatively via an "annualization" of the benefits already estimated and also via a brief consideration of the costs of filtering run-off water to remove salinity and contaminants.)

BENEFITS TO FULLY ACCRUE AT SOME FUTURE DATE

These benefits are calculated in terms of a present, capitalized value. It should be understood, of course, though, that that "present value" will not begin to accrue until clean-up of the Sea has progressed to the point where economic development of the Sea becomes economically practical, and the full benefits will not accrue until some time after that. So those "present values" are calculated as of the date that full economic utilization of the Sea has occurred, and some discounting of that amount to a truly present value should be made in order to compare it to the costs that will need to be incurred presently in order to effect clean-up. The benefits of preventing further deterioration, though, would accrue immediately once a clean-up project is under way.

My calculations did attempt to cast benefits into truly present value terms. Under assumptions that the benefits of improving Sea conditions do not accrue for fifteen years, the present value of the total benefits of a successful clean-up would still total some \$6.076 billion.

THE EFFICACY OF VARIOUS CLEAN-UP PROJECTS

My study did not advocate any specific method of clean-up of the Salton Sea. Also, while I have estimated the economic developmental benefits of a successful clean-up, there is no presumption that such development *should* occur or that clean-up should be effected in order to expedite that development. It could well be that Congress envisions and directs a clean-up effort that provides only for the preservation of wildlife refuges and habitats or agricultural uses and not for human recreational use at all.

With respect to the various clean-up methods, I would caution only that care be used in attributing the economic benefits I have estimated to specific proposals, as the scope of results of particular projects may not be consistent with the assumptions summarized above. Again, my estimates assume that a clean-up is successful in restoring the environmental quality of the Sea to a level where it is fully competitive with other water-sports recreational areas. Any project which does not achieve those conditions cannot logically be expected to deliver the benefits I have estimated.

Thus, there should be some question concerning the applicability of my estimates to clean-up methods involving only impoundment of large surface areas of the Sea. My understanding of the technical properties of such plans is that while they would allow achievement of reduced salinity and pollution levels in Sea waters outside the impoundment area, the concentration of salt, nutrients, and pollutants within the impoundment area might still be a source of odor and bird kills which could inhibit commercial development of the rest of the Sea. The restricted use of such a large portion of the Sea (up to 50 square miles, as well as possible surrounding causeways) could also detract from the scenic and boating utility of the Sea and thus also detract from possible private-sector utilization. It should also be considered whether location of the impoundment area would detract from development of specific parcels designated in my study as developable.

Similar comments could be made about other specific clean-up proposals. It may be indeed that no feasible clean-up proposal could achieve the environmental quality necessary for the intensive utilization of the Sea

P. 6, Bazzdarich Testimony to Sub-Committee on Water and Power RE HR 3267, March 12, 1998
 contemplated in my estimates. That is a technical question beyond my expertise. Whether impoundment, pump-in/pump-out, or other alternatives can deliver the environmental prerequisites underlying my calculations is an answer that physical scientists will have to answer. My point is only that the full benefits I have estimated should not be imputed to or associated with a clean-up proposal that does not have a realistic prospect of facilitating such benefits. There is, then, an issue for further research as how extensive are the economic benefits that could be expected to accrue from each specific proposal.

EFFECTS ON FARMERS, RESIDENTS, AND TOURISTS

My study has been seen by some as anti-farmer, because it suggests that a levy be considered on agricultural- and waste-water contributors to the Sea to offset the clean-up costs necessitated by deposits of salt, contaminants, etc. borne by those waters. However, in the very passage in the study where I mention such levies, I also state that they should be offset by the economic value of the water content which carries those deposits. That is, besides clean-up, the survival of the Sea also depends on the securing/maintenance of a water source in the magnitude of 1.3 million acre-feet per year. It may well be that the economic costs of removing pollutants from current agricultural- and waste-water run-off is less than the economic value of the water itself, in which case my analysis would actually suggest compensating farmers (for water value less incremental clean-up costs) to continue their run-off.

This is an empirical question, and I don't claim to now know the answer one way or the other. I bring up the issue not because I am pro-farmer or anti-farmer, but because the economics of the issue indicates that wherever possible, the costs of the Salton Sea clean-up should be borne by the beneficiaries of the clean-up and/or by those who cause the "problem" in the first place. As I state elsewhere in my report, the Salton Sea is an odd situation in which the "cause" of its problem—water drainage—is also the reason for the Sea's existence in the first place.

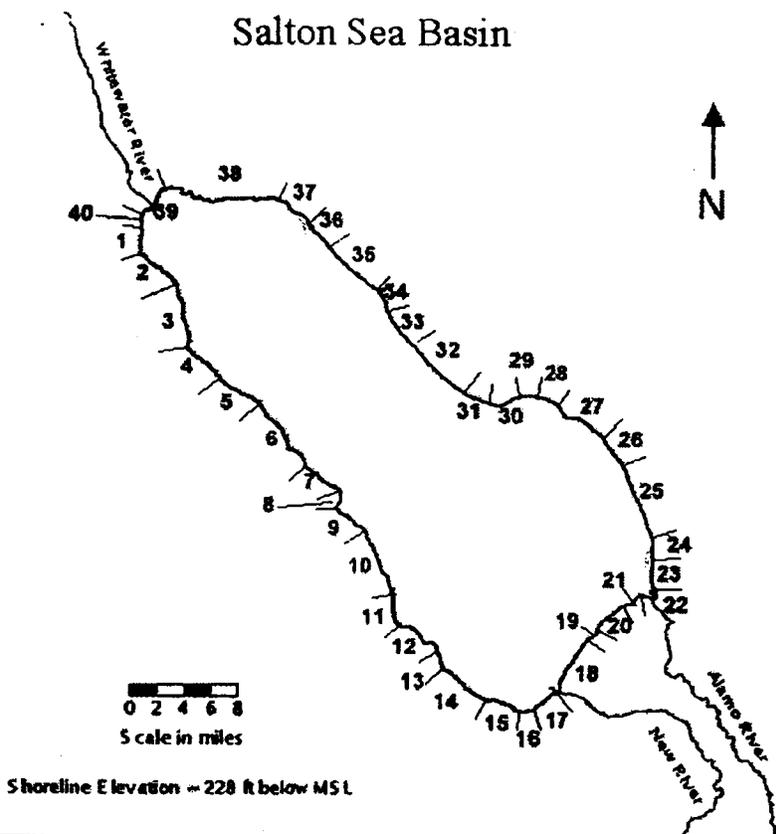
All parties involved appear to agree that the Sea as it now stands is an asset which must be preserved. That can only mean that *the agricultural- and waste-water run-off of the last seventy years has provided a net benefit to the region*: that the accumulated benefits arising from the provision of that water exceed the accumulated costs of the accompanying pollution. How the consideration of such a fact can be judged to be anti-farmer is a mystery to me.

At the same time, three listed, possible funding sources in my report would inevitably be borne by residential and commercial residents of the Sea, and these would almost surely comprise the bulk of private-sector funding of the clean-up. I would not expect Salton Sea residents to be any happier about the prospects of their paying for the clean-up than the farmers are by the prospects of a potential water run-off levy (which levy may turn out to be a subsidy).

In conclusion, my study finds that substantial benefits would accrue from successful clean-up of the Sea. It is fatuous to believe that such benefits can be achieved without substantial costs. Such costs, in turn, must be borne by someone, and no private party is going to gladly shoulder a sizable share of the clean-up costs.

The government and most likely the Federal government is absolutely required to exercise leadership in pushing the Salton Sea clean-up to fruition. It is also likely that government financing of up-front costs will be necessary. However, economic logic dictates that the involved local parties eventually bear the costs of maintaining the Salton Sea project, as well as the costs of servicing and retiring debt incurred during the initial stages of the project. My study indicates that sufficient funds can be mobilized to pay these costs. The actual mobilization, though, is a task of no small magnitude.

Salton Sea Basin



Shoreline Elevation ≈ 228 ft below MSL

Figure 1. DEMARCATION OF SALTON SEA SHORE

The regions denoted on this map by numbers from 1 to 40 correspond to the one-half mile deep strips (from shore to one-half mile inland) listed in Figures 3 and 4 below.

Full residential/commercial development is projected to occur in strips 6, 7, 8, 13, 24, 27, 28, 29, 30, 36, 38 and 39. Partial development is projected to occur in strips 1, 2, 3, 4, 5, 9, 11, 14, 15, 16, 24, 25, 26, 31, 33, 34, 35, 37, and 40. No development is projected to occur in strips 10, 12, 17, 18, 19, 20, 21, 22, 23 and 32. Out of a total of 29,415 acres of Sea-front property, 16,886 acres are projected to be developed. (Land "excluded from development" includes Indian lands, due to taxability issues.

