

JOINT HEARING

Committee on Federal, State and Local Governments
Committee on Government Affairs

Minutes of Meeting -- March 22, 1971

There was a Joint Hearing held on the 22nd day of March, 1971 at 7:00 P.M. by the Senate Committee on Federal, State and Local Governments and the Assembly Committee on Government Affairs in order to hear testimony regarding Lake Mead, Clark County Water Management Problems and the designation of a master water agency.

Those committee members in attendance were:

James I. Gibson)	
Carl F. Dodge)	
Warren L. Monroe)	Senate committee on Federal, State
Chic Hecht)	and Local Governments
Lee Walker)	
)	
Hal Smith)	
Dave Branch)	
Mary Frazzzini)	Assembly committee on Government
Frances Hawkins)	Affairs
Richard Bryan)	
Dick Ronzone)	

Also present were:

Mahlon Brown, Senator
 John Foley, Senator
 Frank Young, Assemblyman
 Art Olson, Assemblyman
 Paul May, Assemblyman
 Ty Hilbrecht, Assemblyman
 Woodrow Wilson, Assemblyman
 Jack Schofield, Assemblyman
 Keith Ashworth, Assemblyman
 Don Paff, Colorado River Commission
 Ted Lawson, Colorado River Commission
 Mary Kozlowski, Colorado River Commission

Jim Corey, Las Vegas City Commissioner
Morgan Sweeney, City Council, Boulder City
Bill Blackmer, Chief Engineer, Las Vegas Valley Water District
Boyd Bullock, Board member of Las Vegas Valley Water District
Thorn Butler, Board member of Las Vegas Valley Water District
Tom Donnelly, Manager, Las Vegas Valley Water District
Jim Guinan, Legislative Consultant
George Monahan, Clark County Engineer
Dr. Otto Ravenholt, Head of Clark County Health District
Dave Henry, Clark County Administrator
James Brennan, Vice Chairman, Clark County Commissioners
Bob Broadbent, Clark County Commissioner
Myron Leavitt, Clark County Commissioner
Tom Wiesner, Clark County Commissioner
Hank Thornley, Las Vegas City Commissioner
Dick Sauer, Director of Public Works, City of Las Vegas
Estes McDoniel, Mayor of City of Henderson
Clay Lynch, City Manager of North Las Vegas
Roland Westergard, State Engineer
Press representatives

There were several more people present from Clark County who did not submit names for the record.

Chairman Gibson: This is a joint committee meeting and in addition we have asked members of the Clark County Delegations from both the Senate and Assembly to meet with us because of the importance and the impact of the problem that we have under discussion. Now, the bills that are before the Senate committee -- this is the reason for our taking the initiative on the meeting tonight -- were introduced at the request of the Las Vegas Valley Water District. In a sense their introduction has allowed us to open up this matter which is important to all of us and is attested to by the presence here tonight of so many of you.

The procedure we will follow is to open up the discussion and comment on SB-279, introduced by the Clark County Delegation, which "Amends Las Vegas Valley Water District law authorizing district to construct, operate facilities required to collect, treat and redistribute all returns from various water uses."

Our intention is to then open the meeting to the entire subject of water problems in our Clark county area, particularly directed towards that testimony which might help us determine how the problem might be treated, whether or not a master water agency should be designated at this time, and in any event to authorize the legislation which would at least set in motion the procedures and the functions that would let us assure some progress in the next two years.

The concern of the committee, particularly those of us who served on the governor's committee on this problem last year, is that we not let this session of the legislature go by without some action which will make progress on the problem. We hope that we can come to some conclusion along with whatever legislation will uphold it and not wait another two years before we take any definitive action.

There are alternatives to the water district proposal and we would like to hear about them tonight and any comments that bear on this problem. As you can appreciate several members of the two committees are not from our county so we are hoping that we can have their objective thinking in working on the problem and any information they can gain which will be helpful to our ultimate resolution to the problem.

I would note for the record that specifically we have representatives here from the Las Vegas Valley Water District, Clark County, the Colorado River Commission, Mr. Westergard, our state engineer, and we also have represented here officials from the various cities in Clark County, who are very interested in the matter that is before us. We will start out by asking Mr. Donnelly of the water district to present his statement and upon Dave Henry of the county to present his comments and introduce those who would like to appear on the record tonight, and I will call upon the Colorado River Commission for any comments they might have and also on Mr. Westergard. At that point we will open it for comments from others who might be interested in making a statement for the record.

Tom Donnelly: (See statement attached hereto as Exhibit "A".)

Chairman Gibson: Are there any questions from the committee? I think what we would like to do, unless there is some question on Mr. Donnelly's statements, is have the other proposal presented and then we can go to general comments.

Senator Dodge: Mr. Chairman, one thing for those of us who are not from Clark County, it might be interesting to know actually what your functions are at the present time. What do you do down there as a water district?

Mr. Donnelly: The water district enabling act assigns to the water district responsibility for the collection and distribution of water.

Senator Dodge: Is this throughout the area?

Mr. Donnelly: Throughout the boundaries of the Las Vegas Valley Water District. It does exclude Boulder City.

Senator Dodge: Do you do anything now with regard to any reclamation of that water?

Mr. Donnelly: No, sir. The water district does not.

Senator Monroe: Would all the areas in Clark County be affected by this Las Vegas Wash situation included in the district at the present time?

Mr. Donnelly: All with the exception of Boulder City. Boulder City does not contribute to the effluent going through Las Vegas Wash. They are on the other side of the mountain.

Chairman Gibson: Any other questions at this point? Thank you. Dave Henry?

Dave Henry: Mr. Chairman, my name is David Henry and I am the Clark County Administrator. On behalf of Clark County I would like to indicate to your committee that there are several people here from the county that may answer some questions if you so desire. We have our Public Works Director, Mr. Sauer, Mr. George Monahan, Commissioner Tom Wiesner, Commissioner Myron Leavitt, Commissioner Bob Broadbent elected from the cities of North Las Vegas, Henderson, and Boulder City, and we have the man who will make the presentation to you, Vice-Chairman, James Brennan, elected from the City of Las Vegas.

James Brennan: Mr. Chairman, members of the joint committee, James Brennan, Vice-Chairman of the Clark County Commissioners. I think that the legislation that you have before you is rather indicative of one of the problems that the entities in Clark county face: The fact that there has been legislation introduced on behalf of Las Vegas Valley Water District which until recently the entities of Clark County in Las Vegas and possibly some of the other entities have no knowledge of. I feel that there has been a lack of communication with this type of a special district operating in Clark county and this is what our presentation will be about.

We have gotten together, unbelievably, with the City of Las Vegas and the County of Clark, for approximately 30 minutes this afternoon. We have drawn up a joint resolution, which I would like to have permission to call on Hank Thornley to read to this committee.

Mr. Thornley: Hank Thornley, Las Vegas City Commissioner. Mr. Chairman, committee members, members of the Clark County Delegation: The joint resolution of the Clark County Commissioners and the Las Vegas City Commissioners adopted this day reads as follows: (See copy of joint resolution attached hereto as Exhibit "B".) It should be noted that this was signed by all of the Clark County Commissioners and all of the Las Vegas City Commissioners including Mayor Oran Gragson.

In order to avoid repetition throughout this evening, we will try to keep this as organized as possible. While I am here I would like to point out the feeling of the city commission in this regard to voice our opposition to Senate Bill 279 and to advocate the naming of the county board of commissioners as an ex-officio agency, the master agency for water and eventually effluent problems in Las Vegas Valley. We feel that this is in keeping with all good philosophies of government. We think it is in keeping with most of the recommendations made by study committees, PAS and an extensive investigation study in California regarding this matter, where the recommendation was made in favor of general service governing bodies administering these affairs rather than special service districts. This will be the extent of my comments. There will be others available for questions as indicated by Mr. Henry and Mr. Brennan, and I am sure others would care to comment on the proposed legislation.

Mr. Brennan: Gentlemen, I think the hue and cry of recent elections has been one for more economy, more representation in government. I don't think there is any doubt that the citizens want to see consolidation in an orderly fashion and not only do I feel that if the joint resolution of the city of Las Vegas and the county of Clark is approved and given consideration, we will not only have consolidation, efficiency and a savings of taxpayers dollars, I think that we are also going to have some integration also. I think that's what you have to have -- not only consolidation, but when you are talking about water, you are talking about sanitation, you are talking about development in the county, you are talking about parks and recreation and land use and many, many other things that should be integrated.

I would like to set forth the position of the county. (A copy of the statement presented by Mr. Brennan is attached hereto as Exhibit "C".)

Gentlemen, we feel that we have as mandated by the legislature when the sanitation district was in much trouble, taken over that agency. We feel that we have done an admirable job, it is an efficient operation and it is responsible to the people. I think that the people have the right to know who their officials are. With all due respect to the directors of the Las Vegas Valley Water District, I would venture to say that there are not one hundred people in Clark county that can name every one of them, and I am not saying this facetiously, and I don't know whether you gentlemen can or I can. I know that many people can name one or two of them, but I don't think that this is democratic representation on behalf of the people. I would like to call on Commissioner Broadbent for concluding remarks.

Mr. Bob Broadbent: Mr. Chairman and members of the legislature, we would first of all like to thank you for this opportunity to appear before you and we are thankful that the legislature is taking the necessary steps to designate a master water agency and to set the steps in motion to solve the problem of Lake Mead. I think being from Boulder City and closer to the lake we've seen what's happened to that lake and the threat it is to this community and to all Clark county. For a long, long time we have recognized the necessity of the legislature in this session to take some positive steps to set some kind of a master water agency and give them the authority to go ahead and do it.

We in Clark county feel that we also have the right be legislation, to presently take the necessary steps to solve this problem. We feel that as a county we have the right under our broad general authority and as ex-officio members of the Las Vegas Sanitation District we also have that authority, being that Las Vegas Wash is in the service area of the sanitation district. But we also feel that to do this and be an effective master water agency is going to have to be spelled out by the legislature in order to give it the impetus it needs to make the studies and to make the decisions which are going to have to be made to solve the problem of pollution of Lake Mead, whether it is tertiary treatment or exportation of water out of the Wash.

I would like to refer a minute to the report made by the Public Administration Service in August of 1968, which is a report which was transmitted to the county commission on a study of local government in Clark county, and we have referred specifically to two or three sections that pertain to special districts in city and county government. On page 23 of this report under definition of special districts, it says this: (Mr. Broadbent read the language as marked off on pages 23 and 24, and from pages 65 and 66 of Exhibit "D" attached hereto.)

Mr. Chairman, besides quoting this I would like to say that I think that if we are looking at the philosophy of government which the legislature has looked at in the past session, then the need for consolidation and integration of services in Clark county, and if we are looking at the results of this PAS survey and qualifications of these people which the legislature recognized two years ago when it passed legislation adopted by both the Senate and Assembly, it set aside this same group of consultants to be the consultants to the board that would be formed to study this two years ago, had it not been vetoed by the governor. We would recognize the expertise of these people.

I would like to pledge to the legislature that if we are named as the master water agency, that we would consult with all the agencies of city and county government and with the legislature to make sure that we are going along the right lines, that we would immediately take all the necessary action to get the necessary mechanic scoring to reach a conclusion on the solving of the pollution in Lake Mead. We would propose in the next session of the legislature the amendments that we feel are necessary in the law to accomplish this purpose and that we would use the sanitation district and the assets of the county which we feel are broad and we have the expertise to solve this to give us the necessary mechanics to get this thing done.

Again, we would like to say that if we are looking at the broad consideration of what a county government is, where it serves the broad purpose of county needs, then certainly this is an area where the board of county commissioners should have a logical and a good part in serving the area and taking care of this problem. Thank you.

Chairman Gibson: I want to ask a question. You mentioned "ex-officio" directors, when in fact you are the directors of the sanitation district, isn't that so?

Mr. Broadbent: They call us "ex-officio" I don't know. Legally we are, yes. The law calls us "ex-officio".

Senator Dodge: Well, I was going to ask -- I don't know anything about the sanitation district. Who does it serve?

Mr. Broadbent: The sanitation district serves all of the unincorporated area generally -- all the unincorporated area of Clark county. It does serve parts of the city that have been annexed into it and parts of North Las Vegas. Primarily, the area that we serve is the "Strip."

Senator Dodge: Do you have your own treatment facility?

Mr. Broadbent: We have a treatment facility.

Senator Dodge: The city has other treatment facilities?

Mr. Broadbent: They have a treatment facility also. They are both within one mile and they are both tied together.

Senator Dodge: And they all dump in the Las Vegas Wash?

Mr. Broadbent: They all dump in the Las Vegas Wash.

Senator Dodge: Now, what was the background of that district? Is that a special district? Or is it actually a county operation?

Chairman Gibson: Well, there were two of them. They were 318 districts and because of the problem they were in, if you will recall on the tax rates and so on, it was resolved by putting the county commissioners as the directors.

Mr. Broadbent: Actually we administer it just like we do all the rest of the functions, but they have to leave it that way because of bond problems.

Senator Monroe: If you took over the Las Vegas Valley Water District, then you would also take over the responsibility of providing the cities with water, is that right?

Mr. Broadbent: The incorporated city of Las Vegas, and we would wholesale it to the other entities that wanted it, but at present most of Las Vegas is served by the Las Vegas Valley Water District. The City of Las Vegas has agreed to this. We wouldn't want to take anybody out of the water districts that are in there at the present time. We would wholesale to those -- like the city of -- oh, I don't know that we wholesale much water to North Las Vegas, I think they have a lot of wells and the Southern Nevada Water Project. I think the critical thing is that we are offering the sanitation system. We propose to set up a similar board like the Regional Streets and Highway Board that we have in Las Vegas to advise the board of county commissioners on the technical administration of this and on the political administration. The board has functioned down there rather successfully.

Senator Dodge: Do you anticipate that you are going to have to put in additional treatment facilities in the next two years down there?

Mr. Broadbent: We have to add to the sanitation district facilities. The City of Las Vegas is about out of room and we are out of room so we will have to have primary and secondary treatment. And also as part of the problem with Lake Mead -- and I don't know what the answer is -- there is

either going to have to be tertiary treatment to this water to take the nutrients out or there is going to have to be exportation of the effluent to keep it from going into the Wash or a combination of both.

Senator Dodge: Now, to try and understand this proposal -- I didn't ask Mr. Donnelly this because the discussion came up later -- when they ask for an authority to collect and treat and redistribute return flows from domestic use, among others, municipal, irrigation, industrial -- let's talk about domestic, which is sewage treatment. Would they gain with a competitive type system or treatment facilities which already exist?

Mr. Broadbent: I wouldn't think they would get into secondary and primary, what they are really looking at is the tertiary treatment and the reclamation of it, whether it would be to put it back on golf courses or reuse of the effluent. Now, we feel we have that authority, just like they do. They say they are asking for a clarification of their law, and the reason they are asking for clarification is because I believe all entities whether its the Colorado River Commiccion, the water district, the City of Las Vegas, the county, North Las Vegas, are looking for some sort of a mandate from the legislature on who ought to be the master water agency. Now, we have met together as an inter-agency for the past several years. We have had a conclusion, we have had a survey completed, and after we got through with it, it fell apart because there was no one entity to take the ball and to really lead with it, because there was a bickering between the agencies on the proper method to follow and which way to go and until there is one agency, I think designated by the legislature or by some other method, we are going to have trouble solving our problems.

Senator Dodge: Then if they have the problem, the tertiary, do I understand then that they take your effluent and treat it?

Mr. Broadbent: We have the authority.

Senator Dodge: No, but I mean if they had it and they went ahead with it, would they take your present treatment plants and treat it further?

Mr. Broadbent: Well, they would have to because the city of Las Vegas and the county are the ones that contribute the biggest part of the pollution problem to Lake Mead so they would have to take ours if they are going to solve it. If

they didn't take our effluent that is coming from the sanitation district of the city of Las Vegas, they couldn't solve the problem. The county is presently using the effluent on Paradise Valley and on Winterwood Golf Course and the city is selling some of theirs to some farms and some power companies, and we have an application from another golf course that wants to buy it and we are kind of holding up to see what's going to happen.

Mr. Lynch: Mr. Chairman, in North Las Vegas, I would have to correct this gentlemen, who is a county commissioner who represents our city, and in order to properly evaluate this proposal for my city council, I would like to know whether it is the intent of the county to allow this legislation -- that the City of North Las Vegas utility system, water wells and underground rights will not be interfered with.

Mr. Broadbent: It is our intention not to interfere with them.

Mr. Lynch: And any legislation along these lines could include language to that effect?

Mr. Broadbent: In this legislation here? As far as I am concerned it can, yes, sir. In fact I would push for that.

Mr. Ronzone: Does that mean then that that's the position of the county in this?

Mr. Broadbent: I think if we are going to solve the whole agency problem it is going to take a pretty complicated study over the next two years with all the agencies working at it. Now, I think the problem in this bill, if this session of the legislature is going to designate one agency to consult and to come back with a recommendation and to start the mechanics to solve the problem, we are going to have to bond, we are going to have to have a general district to give us the right to bond -- we are going to have to have some rather comprehensive legislation two years from now, I think. Now, maybe I'm dead wrong.

Mr. Ronzone: Mr. Broadbent, there is one thing that I, maybe it eludes me and I'm not very smart about it, but how can we have in the valley about four different water rates when it comes from the same basic sources? How can we justify this? How can you justify it?

Mr. Leavitt: We don't set the water rates.

Mr. Ronzone: Yes, but you would be, wouldn't you?

Mr. Leavitt: You would have to ask the water district how come the rates are different, we don't set them.

Mr. Broadbent: The sanitation district has the same rate for everybody.

Mr. Ronzone: In their district.

Mr. Broadbent: The City of Las Vegas has the same rate, the City of North Las Vegas has the same rate. They are uniform in their district.

(end of tape)

.....treatment of that water under the existing expertise that we have. Now, that's a big increase in some rate, whether it goes on water rate, or sewer rate, general taxes or whatever it is, we are talking about that 5-10 dollars per month. Now that's the estimates that we've gotten on all the different plans, so I think in view of this that there has to be a long hard study, but we need one agency with the right or a mandate from the legislature to accomplish this.

Chairman Gibson: Mr. Bryan has a question.

Mr. Bryan: Thank you, Jim. Bob, if I understood your answer to Clay then you are not talking about a master water agency, as contemplated by the proposal for the entire water district. You are talking about the entire water district less the City of North Las Vegas.

Mr. Broadbent: And Henderson. Now, it is a master water agency because we are asking for the right to solve the tertiary treatment and solve the pollution of Lake Mead for that whole area -- that includes North Las Vegas and it includes Henderson. It includes the whole area.

Mr. Bryan: Where I am somewhat confused is what legal relationship do you contemplate existing between you and the City of North Las Vegas and the City of Henderson?

Mr. Broadbent: I don't think that it's really that firm yet, that it's really firm enough for us to say how that is, but I think in general, it would be that we would be the wholesaling

agency. We would wholesale whether it be reclaimed water or potable water. We have a lot of small water districts in the county too, and I think it might be safe to say that the general concept would be wholesaling.

Art Olson: Mr. Chairman, I would like to ask Mr. Broadbent a question. Bob, aren't you asking for a full-time job?

Mr. Broadbent: Well, I don't plan on doing it. I'll be honest with you. I don't plan on doing it -- I would plan on doing the same thing the water district would do or anybody if they were named the master water agency -- go out and hire the expertise to do it. I think it's up to us to set the policy and I think the board of county commissioners represent the whole county and represent it as well and would be responsive to the whole county in setting the policy that is necessary to solve this.

Chairman Gibson: Dick Sauer has a question.

Dick Sauer: I am the Director of Public Works for the city. What Bob is saying, and I think possibly you don't realize it, but the city and county now process some-odd 97% of all the sewage in Clark county. We process right now some 30 million gallons including North Las Vegas sewage which we do on contract at \$27.60 per million gallons. And we also process some of the county's. The county and the city are in full agreement with this proposal and if the county commission receives your approval, then the pollution problem will be handled by those agencies utilizing the entire expertise of both the city and the county. Henderson has agreed that they will also enter into the agreement to take care of -- I talked to Don Dawson and as far as utilizing the effluent -- maybe I am speaking out of turn, but anyway, the city and the county sewers will be handled as a single agency.

Assemblyman Hawkins: May I ask a couple of questions? I don't have the background on this as many of you do. I just got the bill. What is the composition of this board at the present time? Are they appointed? Are they elected?

Mr. Broadbent: Which?

Assemblyman Hawkins: Of your water district.

Mr. Broadbent: They are elected officials.

Assemblyman Hawkins: They are elected. Did the county commissioners oppose the establishing of this district originally, or did they support it in the past and now they have changed their position?

Mr. Broadbent: I can't tell you. It was formed many years ago.

Assemblyman Hawkins: Well, it says '47 here, but I thought you might know the background.

Mr. Broadbent: I couldn't tell you. Somebody else might be able to.

Mr. Donnelly: If I may, Mr. Chairman. The water district was initially created in 1947 by petition from the electorate in Clark county to the legislature. This was the response to this petition -- the Las Vegas Valley Water District was created.

Mr. Lynch: Mr. Donnelly, isn't it also true that there was a vote county-wide on the creation of that district?

Mr. Donnelly: There was not a vote, Mr. Lynch. It was by petition.

Chairman Gibson: I think the thing that precipitated it was the Union Pacific Railroad wanted to get out of the water business.

Mr. Donnelly: The situation, if I may, in 1947 and subsequent years the then water utility was a subsidiary of the Union Pacific Railroad. That subsidiary was called the Las Vegas Land and Water Company, but either because of their inability or their unwillingness to finance improvements to meet the growth, there was at that time I think, old-timers will recall, the water problem was very, very severe. It was so severe that the city council restricted water use to certain hours of the day and alternate days and that sort of thing. So this situation is what led to creation of the Las Vegas Valley Water District. I might say that since the district was created, it has as I stated before, responded to the public needs for additional water supplies, and we presently are in a position to meet their demands on the basis of estimated

population until somewhere along toward the year 2000.

Chairman Gibson: What is the bonding capacity of the water district?

Mr. Donnelly: The general bonding capacity of the water district would be related to the bond capacity of Clark county.

Chairman Gibson: You don't have a limitation on that?

Mr. Donnelly: No, sir. The water district, I might add, although it does have the right to participate in ad valorem taxes, the water district since its creation has never participated nor requested participation in ad valorem taxes. It has been totally self-sustaining from revenue.

Senator Dodge: What is your outstanding bonded indebtedness?

Mr. Donnelly: Our indebtedness now is a little in excess of 20.4 million dollars.

Senator Dodge: And about how long a period to pay off when you would be out of debt?

Mr. Donnelly: The latest maturity date these bonds were issued, the first issuance was in 1954. The latest maturity presently is 1995.

Senator Monroe: Just to clarify in my mind -- the status is the water district now has control of the water in the county, is that right? And you sell water to Las Vegas? Do you serve Las Vegas as a part of your district?

Mr. Donnelly: The water district serves within its designated boundary. Now these boundaries include the municipalities of Henderson, North Las Vegas, the city and the county. It does not include the total county. For instance Boulder City is included in Clark County. North Las Vegas has its primary source of supply from wells and gets a supplemental supply -- a standby supply -- from the Las Vegas Valley Water District.

Senator Monroe: Then really you don't control North Las Vegas.

Mr. Lynch: Senator, I might add we also have 14% of the outflow of the Southern Nevada Water supply project under contract to

our water company, and that's our third basic source of water. We do serve 20% of the people in the Vegas valley with water.

Senator Monroe: Then actually the areas that you serve are semi-independent of your authority, the same as North Las Vegas.

Mr. Donnelly: The only exceptions to water district service are the municipalities of North Las Vegas and the city of Henderson.

Senator Monroe: They are semi-independent of you. But if the county commissioners took this over that status would still remain the same, is that right? Well then the principle of demand and need, the principal problem down there is the service of water within various areas of the district. This would take care of the sewage, is that right?

Mr. Lynch: We don't understand in North Las Vegas why we are getting into a master water agency to solve water problems of four water companies that are supplying good water at proper rates with no problem. The problem starts with Lake Mead and the pollution of that lake and Mr. Sauer has already testified that the city of Las Vegas in Clark county contributes 97% of that pollution to that lake. We have a lake problem and a master sewage agency may be necessary, but we still haven't heard any evidence as to why the four water companies should be assimilated or anything should be done with it at all.

Senator Monroe: You say there is four?

Mr. Lynch: Henderson, Boulder City, North Las Vegas and the Las Vegas Valley Water District. They are all operating water systems under contract to the Southern Nevada water supply water projects and we have no problems with water supply.

Chairman Gibson: I want to call on the other people who want to make presentations. I would like Roland Westergard to respond to the problem as he views it from his standpoint. I know there are some overriding problems in the area that go to the point that Clay Lynch has raised, and whatever action the legislature takes there are certain things they should have in mind in that action. I think Roland has a couple of points he would like to make.

Mr. Westergard: Mr. Chairman, members of the committee, others present: I think the background on this goes back somewhat further from 1968. I believe in 1962 some of you same people were considering a proposal that was somewhat similar to what is under consideration here tonight.

Just to clarify a couple of points, I think it has been repeated several times that the thrust of what some people feel the legislative action should be this session should go to two major points:

- (1) The designation of not only the responsibility, but also the means of implementing a solution to the Las Vegas Wash and Lake Mead pollution problem; and the second thing
- (2) An initial step in the establishment of an overall water management agency.

Now, one of the reasons I think that the efforts in this respect have not been more constructive in the past is that there has not been a mandate, which has been referred to before, by the legislature, to meet a certain time schedule or a time limit. So if the legislature does assume some position in this, I would think too that they would want to establish some mandate on timing, either in the form of an official report from a designated agency back to the legislative commission or to the next session of the legislature.

To explain my position a little further on this, when this question was discussed several weeks ago in a conference that Mr. Donnelly mentioned, my office was asked to look at the existing Las Vegas Valley Water District law and proposed amendments, essentially with one purpose in mind. That was to see if there was existing legislation or an existing act on the books that most people could concur would meet these two objectives, would serve as the basis for meeting these two objectives.

We did review this act. I think there has been considerable testimony here tonight that recognizes the basic principles of this act does incorporate a foundation for accomplishing these two purposes, recognizing there may have to be some minor modifications. One of the modifications of the district act that is under consideration is the makeup or the election

procedures for members of the Las Vegas Valley Water District Board, depending on the legislative action. This, of course, would be one point that you would certainly want to consider.

Now, the other points that we thought should be included in legislation more or less to supplement the existing act would be the points that have been very well described here tonight -- assuming supervision, operation and maintenance not only of the existing water supply facilities in the Las Vegas Valley, but also those that are going to be necessary in the future. The same principle would apply to the existing and future sewage disposal treatment systems.

There has been a little reference to funding tonight. I don't know that it has been covered in sufficient detail, because if an existing agency or a new one is given the responsibility of immediately proceeding with a solution to the Las Vegas Wash-Lake Mead problem there is going to be the matter of funding any necessary investigation and certainly implementing the results of those investigations. I think that some sort of action by the legislature, either to make funds available that some agency has now, or some other means of funding this immediate problem would be necessary.

And there is the matter that Mr. Broadbent referred to briefly, and that's the long-range funding program problems, whether you would want to provide legislation that would enable this agency to enter into bonding commitments and this type of thing, or revenues from the agencies that are treating the sewage. These type of things I think should, if not covered by the legislation this time, certainly be anticipated.

There is one point, I don't think it has been overlooked -- I've been assured by everyone that's been discussing this issue that there is no intent to supercede or override the state authority on the resources in Las Vegas Valley or the Colorado River or any of the surrounding area. I personally feel that this is extremely important and significant. Regardless of what type of agency is set up I think that they must be held responsible to, for example, the State Board of Health on water quality standards, to the Colorado River Commission in regard to their authority on the Colorado River waters, and certainly to the State Engineer on ground water, his authority on the Colorado River, his authority over sewage effluent and this type of thing.

I would stress that it is important for several reasons to retain this state authority over resources. One being, of course, that whatever goes on in Las Vegas valley is certainly important to the entire state and in the future as various areas grow I don't think one local agency would have the authority to plan for and initiate action to implement necessary water resource projects that may be regional in scope. I think state responsibility must be maintained not only to protect Las Vegas valley, but other areas that might or could be affected.

The issue here then, it seems to me, is on the two major questions, how far should the legislature go in this session, and secondly, do we recognize essentially the authority is there, and the big question then is who should constitute, the Las Vegas Valley Water District Board.

Thank you Mr. Chairman, I would be glad to attempt to answer any questions you may have.

Senator Dodge: What is your attitude on whether water planning function needs to be consolidated with the problem of trying to solve the pollution problem? Do you think that needs to be consolidated in one agency?

Mr. Westergard: I think there would be some distinct advantages to having one agency responsible for the water supply as well as the sewage treatment because, not so much now as has been discussed, substantial quantities already of sewage effluent are already being used in Las Vegas valley. As the demand increases and the supply diminishes we are going to have to make more and better use of those supplies. So the return flows on one hand are in a sense tied directly into the prime sources anyway. So if you have one local agency responsible for both, it would certainly facilitate implementation of any necessary projects.

One other thing that the state is faced with in Las Vegas valley, Lake Mead, as the water supply becomes available everyone's aware that for the last 15 years we have been overpumping the ground water basin, and some of the well permits are going to have to be restricted and in fact terminated. Now, if one agency were responsible it would be much easier to work with one than five or numerous agencies in the valley to accomplish this purpose.

Senator Brown: What percentage does North Las Vegas contribute to the effluent in the Las Vegas Wash?

Mr. Westergard: I'm sorry Senator, I don't have that information.

Senator Brown: Roughly 20%.

Mr. Westergard: I just don't have that figure, Senator.

Mr. Lynch: We do contribute 20% and we contract with the city of Las Vegas to solve that problem, and if they go ahead and build a plant that will solve the problem of polluting Lake Mead. They will take the cost of operation of that plant and divide it into the number of million gallons that they process, send us a bill for it, and we will pay our responsibilities.

Senator Brown: To the extent that North Las Vegas was responsible, to the over-all cost.

Mr. Lynch: A quarter of a million gallons.

Chairman Gibson: Mr. Paff, would you respond. I know there is concern with the Colorado River Commission on maintaining the return credits and so on, and I am wondering if you could make any comments on that part of the problem?

Mr. Paff: My name is Don Paff, and I am Acting Administrator of the Colorado River Commission of Nevada. I have a few comments in addition, but to answer your question. First, Senator, the State of Nevada has allocated three hundred thousand acre-feet annually from the Colorado River system. That is net consumptive use. What that means is if we were to return waters to the Colorado River system, we would be able to divert in excess of the three hundred thousand acre-feet. For example, if we diverted four hundred thousand acre-feet, and returned one hundred thousand acre-feet, we would be only taking our allocation up three hundred thousand acre-feet.

First of all, I must admit that I have had inadequate time to discuss this subject in toto with the commission, so I speak without consulting Mr. Lawson and Mrs. Kozlowski, the commissioners who are here tonight.

First of all, in concert with Roland, we did also look at the district as a potential master utility in the Las Vegas valley area, and we generally concur with what Mr. Westergard has to say. We also concur that the problems of resource and purveyor

are two separate problems. We would feel that it is critical the state resource agencies not be incorporated into a regional consolidation of services if the legislature so considers necessary. We, however, feel that if you were to consider the Las Vegas Valley Water District, that it appeared that they have the necessary authority to perform this activity in the valley-wide area. Perhaps a modification of the governing body might be considered appropriate.

One thing I would like to put in perspective, perhaps, for those assembled here, the problem of Lake Mead is certainly a large problem. Permit us to identify the perspective of Nevada's contribution to pollution on the Colorado River by saying that today we are returning about 36,000 acre-feet annually through Las Vegas Wash into the Colorado River system. There is 8.25 million acre-feet that comes through the system. There are pollutants coming from the upper basin, there are salinity problems which are a broader picture of the problem in Lake Mead. The solution of the eutrophication problem in the Las Vegas Bay Arm is certainly critical and needs immediate attention, but it must be put in perspective of a total river system.

I think the consideration this evening has been in several areas: (1) the retail purveying of water; (2) the wholesale purveying of water, what I mean by that is the potable water; and (3) the collection, treatment and reclamation of waste water. If a master utility or master water agency were to be created, it would have retail or could have retail, wholesale and reclamation authorities, which is a rather vast responsibility.

We would concur with Mr. Westergard, that such a master utility certainly should have the opportunity of growing into this very substantial responsibility. Mr. Lawson, do you have any comments? Mrs. Kozlowski?

Senator Dodge: When you are talking about the return credit coming back into Lake Mead or into the Colorado River, I am not quite clear. On one hand I guess you indicate that in order to get the credit you have to have certain quality of water going back in there?

Mr. Paff: That is correct.

Senator Dodge: Then on the other hand, you were saying that the only return is 36,000 out of 8½ million acre-feet. To put it in perspective, what are you . . .

Mr. Paff: I'm sorry, Senator, I misled you, excuse me. Coming into Lake Mead presently, and flowing through Lake Mead, in the river is 8.25 million acre-feet. That flows annually through Lake Mead in effect -- in the top and out the bottom in effect to downstream users, including Mexico. Our contribution, our return flows are 36,000 acre-feet.

If we were to take the pollutants we add to the Colorado River system in 36,000 acre-feet, you couldn't even find it. But there is an immediate problem, obviously of eutrophication of the Las Vegas Bay Arm, which is caused by these nutrients, but in perspective of the system, it's but a drop in the bucket, and I would judge if that were to be discharged into a moving body, presently, if it were just a river rather than a lake, we might not have eutrophication as we see it today, because we would be able to assimilate it much more easily.

Chairman Gibson: Any questions? Thank you, Don. I want to give an opportunity to each of the entities to express your comments. Mr. Thornley, do you have any other comments for the city of Las Vegas? As we understand your position here you are in harmony with the county.

Mr. Thornley: That is true, with emphasis on the idea the ultimate administrative body, as an arm of the county, would be a regional water master agency controlled by a board made up of representatives of all of the entities, patterned after Regional Streets and Highways. I believe there are some additional technical comments that our Public Works Director, Mr. Sauer, would like to make.

Mr. Sauer: I haven't much extra to bring up except the point of necessity for combining the water district. I would like to comment on that just a little bit. We recently completed \$130,000 study which was participated in by all the entities in Las Vegas valley. The first recommendation of the six offered by these consultants, almost two years on this study, was that: "An agency be selected to be in responsible charge for the management of water resource and water quality and control in the Las Vegas valley. This selection should be made as soon as possible, in order to permit uninterrupted progress toward the eventual solution of the present water quality problems."

Now, the city and the county have the two largest sewage treatment, waste water treatment plants. As a matter of fact,

the county has now agreed to enlarge theirs and so have the city to meet the ever-growing need in the valley. We feel that by combining the efforts and the expertise in those two fields, that we would be far better able to work towards the pollution problem in accord with the recommendations of the consultants, than any other single agency. Particularly in view of the fact that the city and the county representing some 250,000 people are in full accord as to who should handle this problem.

Mr. Lynch: Mr. Chairman, may I ask Mr. Sauer a question?

Chairman Gibson: Your turn is now, so if you want to ask a question or answer one.

Mr. Lynch: Instead of a question then, I will make a statement. The \$130,000 study that Mr. Sauer refers to and has been referring to and quoting repeatedly, did have as its first recommendation, a political decision, which I think was a disappointment to those of us who had expected those engineering consultants to give us an engineering answer.

It is a fact that after you get by that first recommendation, which was purely a political decision, the city of Las Vegas chooses not to accept any of the other engineering recommendations and has, as a matter of fact, its alternate proposal for shipping water out of the valley and up into the north end of the county, instead of the engineering recommendations that were made by that \$130,000 study.

Mr. Sauer: That's not a city of Las Vegas recommendation.

Mr. Lynch: That's why I wanted to ask a question of Mr. Sauer because I am sure that it is his recommendation and his plan to influence the commission to do so.

Chairman Gibson: Please address yourself to the chairman. What was your question, Jim?

Mr. Corey: Mr. Lynch alluded to the fact that the city of Las Vegas is proposing to ship some water out someplace and this is not an official act of the city of Las Vegas.

Mr. Lynch: Getting back to the Colorado River Commission's comment, such an act of pumping water out into the north end of the county would reduce our credit water return to the lake.

I would repeat my previous question and remark that 97% of the pollution problem of the lake is caused by the sewer plants of Las Vegas and Clark county and that if this legislature were to address itself only to creation of an agency to solve the sewage water problem of Vegas valley, we who are in the water business of water supply will continue to take care of our responsibility. The four water companies have contracted with the Colorado River Commission and with the federal government for an answer to water supply problems for some time. In North Las Vegas we do not understand why the problem of pollution in the lake and the problem of improper treatment of that sewage that pollutes the lake all of a sudden becomes a problem of the four water companies that are operating without a problem.

Senator Monroe: Mr. Lynch, do you think that if a master water district is formed that they will eventually take over North Las Vegas and the other three water service utilities now?

Mr. Lynch: My city council sent me here to find out what was proposed. We are having a problem in this regard with the Las Vegas Valley Water District. The District Act, as it is presently written, says that if the Las Vegas Valley Water District is going to take over the water company of the city of North Las Vegas, they will have to use eminent domain and pay for it at fair market value.

Now, some of these other proposals that have been made we're not sure. We were not invited to the meeting at which the county and the city of Las Vegas entered into this joint resolution.

Mr. Leavitt: You had a representative there, didn't you?

Mr. Lynch: I am not aware of any formal action by our city council, sir.

Senator Dodge: Mr. Lynch, looking down the road maybe 30 years, what comment would you have on Mr. Westergard's observation? He thinks that these things ultimately should be consolidated under one agency, particularly when you get involved in the reclamation of a substantial amount of water, and the fact that you need to have some proper planning in looking to the future water management and water availability.

Mr. Lynch: We believe first that there is an urgent need for a master water agency in the reclamation of water and the treatment of the sewage water. The Las Vegas Valley Water District has already pointed out to you that they have an extensive master plan, so has the city of Henderson, so has the city of North Las Vegas. We have our plans made for the next five years and I think that's as accurate as we can predict for awhile because we are growing at the rate of 20% a year. I think eventually an agency that would have over-all jurisdiction over this or a cooperative agreement between all of the entities involved will become desirable and necessary. Quite candidly, I know of nothing that the county or the city of Las Vegas has done to qualify them to be that agency at this point in time.

Senator Dodge: Well if they are, do you think that it is still an important thing to try to establish the agency before we get too many diverse interests going in different directions on this thing in the future? Do you think it would be harder 10 or 15 years from now, than it might be now to make this decision, and look to planning for the future?

Mr. Lynch: I think that if the city of Las Vegas and Clark county would get together and solve the sewage problem and the pollution of Lake Mead problem, that they would gain the confidence of all the other people that are involved in this business and they would have no problem convincing us that they should be in charge in the future.

(end of tape)

Chairman Gibson: The board of directors of the water district envisions the creation of a technical board advising the direction of the actual progress. That is the development of whatever facilities are necessary in the program patterned after the Regional Streets and Highways Commission, on which would be represented all the entities. Now, would you be afraid of this approach to the problem? You worked pretty well on the Regional Highway program.

Mr. Lynch: The Regional Streets and Highways Commission is not really an exact parallel, although some records have been set in progress in that regard. All of the entities involved in the Regional Street and Highway Commission do have streets and do have roads. In all of the regional group organizations that I have seen come out of Las Vegas or the county, the city of Las Vegas would have two representatives although they own no water company at all, and Clark county would have two representatives, although they only have one water company

and it covers 80 acres and isn't very successful either. The city of North Las Vegas would wind up being one-seventh of a group, when in fact we are presently holding more than one-fifth of the problem of supplying water to the people of Vegas valley. The composition of such a board could be studied and could be developed. In the meantime, if Las Vegas and Clark county want to solve the sewage problem, they can go ahead and do that by an inter-governmental cooperative act.

Mr. Thornley: Jim, could I ask Mr. Lynch a question?

Chairman Gibson: Yes.

Mr. Thornley: First of all, if I understand correctly, you do not disagree with the concept and the operation thus far of the history of the Regional Streets and Highways?

Mr. Lynch: We have had some differences of opinion, but generally it is successful, sir.

Mr. Thornley: Now, in the area of percentages you mentioned several times that between the city and the county we contribute 97% of the effluent to the Las Vegas Wash and Lake Mead. But already admittedly North Las Vegas makes their contribution and at the time contracts were signed, knowingly made this contribution. My question is, isn't it also true that the two entities, the county of Clark and the city of Las Vegas, who presented this resolution here today, also represent 70% of the water users in the area?

Mr. Lynch: Well, in the 97% contribution to the pollution problem I just used Mr. Sauer's figure.

Mr. Thornley: But admittedly, North Las Vegas, whether you are contracting or not, you are contributing.

Mr. Lynch: And we are paying in direct proportion to our contribution. That contract, as a matter of fact, when it was written over 15 years ago, I think showed a lot of foresight and it provides a flexible rate when people of North Las Vegas will pay proportionately their fair share of solving the problem of the effluent. I don't see any reason for making a change in that contract until such time as the city of Las Vegas proceeds to give the sewage treatment plant enough treatment which will raise its cost, admittedly, and will automatically reflect back to our costs.

Mr. Bryan: I don't think we had an answer to the question.

Mr. Lynch: Sir, I am well aware that when Las Vegas and Clark county get together on something they do represent a potential power, no question about that sir, and they do represent 70% of the people.

Mr. Bryan: The question was asked whether or not Clark county and the city of Las Vegas constitute approximately 70% of the water users in Clark county.

Mr. Lynch: That's correct.

Chairman Gibson: Well, on this board then they have four-sevenths of the voice on the board. Jim?

Mr. Corey: This came forth in a very large hurry. We have been up here several times worrying about apportionment of monies, but we haven't been worried too much about apportionment of water. This came up in a very panic session, but we did meet today and evidently everybody was not invited, or at least everyone wasn't there in full board as we were. My understanding about the proposition that we would like to put forth to you is a two-fold proposition. There would be somebody in charge of wholesaling of water and the reclamation of water when it is used and put back into the lake.

The problem evidently has been brought up of putting back into the lake of used water. Not being an engineer, I think it figures out one part in two hundred and fiftieth that we contribute to Lake Mead water. The Colorado River puts in 250 parts and we put in one part, and when they mix, if it does occur, reduces it to such a point that it's not worth talking about.

It can be handled in several ways. I think many of you that have lived in Clark county -- Jim, you can remember when the run-off came and the water got high and the water rushed into the Vegas Arm and it flowed in there and it was a nice high level and then during the winter season when there was no waters coming down the Colorado River the Vegas Arm would wash out, if you will, into the river and the bowl would dry up in that area and each year would be replaced by fresh water. There was no pollution in that area, merely by the act of flushing it out and so forth.

I think this can be accomplished by maybe a pipeline from Black Canyon on down, or possibly a pipeline from our Vegas Wash effluent into the lower stream which flows from the bottom of the lake in a channel of cold water that can be mixed -- and this is another theory that can be looked into by knowledgeable people and has nothing to do with me selling hamburgers.

The wholesaling and reclamation of water is what I am here to talk about. We are talking about one agency to furnish the different entities with water. North Las Vegas will continue with furnishing their people with water, and the city of Las Vegas will furnish their people with water, the county would furnish their people with water within their boundaries and each of the different entities would furnish the people with water, make the collections and put in the lines and so forth.

The reason I stress this is part of our problem -- not part of our problem, but a great deal of our problem -- is when you put the lines into the different areas, how do you make your city grow? And we have not had too good luck with the Las Vegas Valley Water District. We have had some problems. We are in court right now for 200 something thousand, or whatever the figure is -- Dick, what's the figure?

Mr. Sauer: I don't know what it is now, but the last I heard it's up to our costs around \$35,000 that we have expended on streets.

Mr. Corey: The breaks in the mains and so forth that occur that we have to go out and repair the streets and we feel that whoever owns the mains should do this and it's a question of law. It has not been resolved. We also want mains run into certain areas either when we have annexations or very seldom, but people coming into different areas and making subdivisions and so forth.

We have had other problems of when we have a street torn up for resurfacing possibly with Regional Streets and Highway money on Maryland Parkway where at that time we would like old mains that are 30 years old or so, or 20 years old, whatever the age is, that have a record of being bad, to be replaced at that time, and not later after the street has been paved to come in and cut the street again. And West Charleston is another example that we are cutting the street again. Not a great problem, but a problem, nevertheless, and it is expensive to the taxpayer. We think that this can be solved by the entity itself running their retail of water to the customer and buying from one wholesale entity that will have the over-all _____ combined with the state, and know where the waters come from and so forth.

When it comes to reclamation of waters, the Las Vegas city plant is the largest plant in the valley, I think in the State of Nevada. It's a very fine plant. They just increased it here not too long ago. It's doing an excellent job, contrary to some of the stories in some of the papers regarding

"boiling your water before you wash your dishes." This is not true. We have a very fine quality product that we put out. There is no chloroform, there's no bacteria. It has phosphates and nitrates. It does grow weeds. It is not, to anybody's knowledge that I have talked to -- and I've been to every tertiary water treatment on the West Coast, seminars and so forth -- it is not harmful to people if they drink it, could possibly cause some fungus growth.

Dr. White and possibly some of the other more knowledgeable people could give you a better background on this. But from what I can determine, it is not as bad as we have been led to believe. It does grow algae. The algae is a plant that flowers, blooms, dies and settles to the bottom, regenerates to phosphorus and nitrates, comes back up, feeds some more and regenerates. It is a process that will take a long time if you put no more pollutants in there. It will take a long time for it to wash up unless you flush it somehow. So that reclamation of the water by our plant, which is a 30 million gallon-a-day plant, is handling the excess that the county plant cannot handle. They are up to their maximum, and they can no longer handle their water, so we have put a pipeline in between the county plant and our plant and we are handling their excess waters.

We are also handling the effluent from North Las Vegas on a contract basis. And it has worked very well between North Las Vegas and Vegas and I think by this experience, we could arrive at a thing where the reclaimer of the waters could have contracts with everybody to reclaim the water in the most efficient time and in the latest stated plant, even if they have to go to tertiary treatment, at least everybody would be paying their fair share and there are federal funds available, if it is a joint endeavor rather than a single entity, and if it combines a whole area there are federal funds available.

So, I have a ton and a half of material outside, but I'm not going to bore you with it. I probably have spoken too long already, but I am knowledgeable in this if you would like to ask some questions, I would be glad to answer.

Chairman Gibson: Does anybody have some questions? Myron?

Mr. Leavitt: Senator Gibson, I don't actually have a question, I'd just like to make a statement.

Mayor McDoniel: I'm a little afraid of that seat, if you don't mind, that seat gets a little bit long and I will stand up and it won't take that much time.

My name is Estes McDoniel. I'm the Mayor of the city of Henderson, and I am here tonight to listen and to observe. Our city council has not discussed this problem, our city manager has not discussed it with members of the city council. So we are here to listen and to find out what is going on.

I would like to reiterate that we are a member of the Las Vegas Valley Water District, and we have been for some time. We have yet to use a drop of water from the Las Vegas Valley Water District. We purchase our water from a private company known as BMI.

We do have commitments to the Las Vegas Valley Water District in the form of our fair share of payment of the bonds that are coming up for the new pipelines leading to Lake Mead, and we do have certain obligations in the future that we will use a certain amount of the Las Vegas Valley Water District. We are a private company. Our city is in the water business -- our city is in the sewer business. This is part of our revenue to help perpetuate our city. Our city council has not gone on record as opposing one facet of this or the other. We would like to stay in the water business and seemingly, we would like to stay in the city sewer business. If there is something better, we would like to have the privilege of considering it.

So, I am here, again, tonight to just listen and to clarify some things. We are a part of the Las Vegas Valley Water District, but we have never bought water from the Las Vegas Valley Water District. We have thus far bought our water from BMI.

Chairman Gibson: Mr. Sweeney, did you have a gentlemen from Boulder City there?

Mr. Sweeney: Yes, Mr. Chairman, I would like to make a few observations, if I may. I'm Morgan Sweeney, councilman from Boulder City. We have various copies of Senate Bill 279, 282, 283 and 436.

As has been mentioned by the representative from the Las Vegas Valley Water District, Boulder City is not included within the district, and many people have mentioned that we are over on the other side of the mountain -- and in some ways we would

like to stay on the other side of the mountain. In looking at Senate Bill 279, it occurs to me that there is certain language in there that could possibly draw Boulder City within the Las Vegas Valley Water District because they state in various places that they are going to reclaim all the water, including collection, storage, treatment and distribution and return flow from domestic and municipal, irrigation and industrial uses, and it states that they want to have an exercise in the State of Nevada, the right of eminent domain, either within or without said district. Now, this "without said district" gives us a little cause to worry because we are without the district and it might be that some way or another we might be drawn within the district.

It seems that within the water district should be more or less punctuated in all of the bills -- within the water district. And it is stated that the Las Vegas Valley Water District serves Las Vegas valley.

Now, on Senate Bill 282, it seems to me that there isn't too much to be said there, that they are going to have a voting procedure, except that if you are going to have other entities outside of the Las Vegas Valley Water District, then the question arises, how many districts are there, and how many people are to be represented as voters in the district? (SB-282, Provides that directors of Las Vegas Valley water district be voted upon by electors of their divisions rather than running at large.)

On Senate Bill 283, it has been pointed out to me that some entities in Clark county do not provide a yearly budget which is presented to the tax commission. (SB-283, Authorizes increase in compensation of board of directors of Las Vegas Valley water district.)

(end of tape)

Now, the thing that we want to draw attention to most forcibly, is Senate Bill 436. (SB-436, Enlarges boundaries of Las Vegas Valley Water District to coincide with ground water basin in Las Vegas Valley as designated by state engineer.)

Now, 436 lays out the meets and bounds of a large area that the Las Vegas Valley Water District wishes to encompass. In 1967 we employed a firm to make a master water study for us, Curter, Chaplin & Associates, and in this June, 1967, projecture

they have included an area around Railroad Pass and into El Dorado Valley. Now, without making much point of that, I will allude to the bill I have just mentioned, Bill 436, and apparently someone made an error, if I am to rely upon our engineering people in Boulder City, because they have included areas that are not now in the Las Vegas Valley Water District.

Now, this was brought to our attention by a print that was shown in the Las Vegas Review Journal on Thursday, March the 18th, 1971. It shows the existing Las Vegas Valley Water District boundary, then it shows the proposed Las Vegas Valley Water District boundary, and they have spilled over the mountain. They have come through the Pass, so to speak. And unless some of our forces repel this invasion, it would occur that they are also coming into El Dorado Valley, so not only would it be Las Vegas Valley Water District, but it might also be the Las Vegas-El Dorado-Boulder City-Valley Water District.

Now, we would like to point out the fact that we believe that the boundary as set in the existing Las Vegas Valley Water District boundary on the south be maintained as it is, per se, in addition to which in the description of the area, they have included inclusive, "T23, south R63 east, sections 1, 6, 7 and 12." One and twelve are already within the incorporated limits of Boulder City, so I think someone has made an error, and I don't believe that the Las Vegas Valley Water District intends to ex-appropriate some of the land that we now have jurisdiction of.

In addition to this, they are talking about pollution. Boulder City put in a sewage treatment plant, we went to the state engineer, Mr. White at that time, and as a result of the studies made, Boulder City was compelled I might say -- maybe that's too strong a word -- but we were strongly advised that water would not be permitted, that water from our sewage treatment plants would not be permitted to go down El Dorado Valley and re-enter Lake Mead. As a result of this, Boulder City as a cost in excess of \$500,000, put in sewage pump plants that extend to the very edge, the limit of Boulder City and El Dorado Valley, and we pump this sewage effluent all the way up the mountain, over the pass, down into our sewage treatment plants where the water is treated.

Now, this water is being used for washing sand and gravel. Later on it will be used for other purposes, possibly for a golf course or two in Boulder City. Now, that is one point

of our problem. Another one is that in this \$130,000 study that has been alluded to by Mr. Sauer, somebody says the "first recommendation." Now, the "first recommendation" that I recall is that they would pump the effluent over Railroad Pass into El Dorado Valley. And that's where it was going to be. Another one that came later was that they were going to pump the effluent through a conduit and discharge it in the Colorado River below Hoover Dam. There was even an extensive study made to see whether or not this water could be used for the development of power by falling waters.

Now, all of these studies, of course, result in the fact that the 300,000 acre-feet, and when we talk about acre-feet most people don't realize that an acre-foot is in excess of 325,000 gallons, so when we are talking about 300,000 acre-feet, that the State of Nevada is entitled to, that water is being used in other places besides the Las Vegas valley. In fact, Boulder City has spent, and are spending \$3,460,000 to use water from the Southern Nevada Water Project, to pump it from the lake side at the same point that North Las Vegas, Henderson, the Las Vegas valley and the Las Vegas Valley Water District will get their water from the same point. They have an independent line that comes into Boulder City.

Now, we have contracted with the Colorado River Commission for water over a long period of years for \$1,181,000. We are spending \$629,000 and \$750,000, which is \$1,379,000, to place this water in Boulder City in a ten million dollar water storage reservoir, which will be covered, and also in Boulder City, like no other city I ever heard of, has changed out every main water line in the city. We have taken out every water line and have replaced it with a transite-asbestos pipe -- every water line in Boulder City.

Now, when we talk about water, and I am talking about the past, and they talk about the Las Vegas Valley Water District, I want to maintain the integrity of Boulder City's water system. I want to maintain the integrity of our sewage disposal system, and I would like to have the boundaries of whomever takes over the Las Vegas Valley Water District or the distribution of water or the treatment of effluent from the plants -- we realize they have a primary, a secondary treatment, and when they talk about tertiary treatment, who knows what they are talking about? Tertiary means the third treatment, but what is the third treatment? We read in the papers of certain treatments that would cost millions of dollars, so however they treat it, I don't know. But however it is treated, it should be returned to the lake, so that, as it has been pointed out by the Colorado

River Commission representative, there should be a credit given for the water that is returned but it must be, in a sense, potable water. It must meet the standard.

That is about all I have to say, gentlemen, and I thank you very much. All we wish to do is maintain the area of jurisdiction and service that we now have -- we got 3650 gallons a minute from the United States government which, by law, the law 85900, the Boulder Bill, that comes to us 24 hours a day, day and night, and that water has been used up to this point for the existing population of Boulder City. But we have extended our water system, our sewage system, we have brought power into the area -- we are presently contracting for more power so that actually when Las Vegas valley gets so full that you don't know where to put it, we got a spot for it.

Mr. Blackmer: Senator Gibson, I'm Bil Blackmer, the chief engineer for the water district, and we did see the posse before we got to the Pass and we stopped at the Pass.

Mr. Sweeney, the proposed water district boundaries do not go into Boulder City. The township 23 south, range 63 east you mentioned in Senate Bill 436 includes sections 2 through 9, the sections 1, 6, 7 and 12 are in the township six miles to the west of that township 23 south, range 63 east. It's not the intention of the water district to go into the city of Boulder City.

Mr. Sweeney: We not only don't want you to go into Boulder City, Mr. Blackmer, but we would also like to have you remain out of El Dorado Valley.

Mr. Blackmer: No, we are not in El Dorado Valley.

Chairman Gibson: As I understood the presentation of this map, the district lines were drawn more or less at the dividing of the drainage into the Las Vegas Wash. That was the intention of it, at least.

Mr. Blackmer: This is correct. The large boundaries encompass either the Las Vegas artesian basin or the existing water district boundaries, whichever is the furthest out.

Chairman Gibson: Ted Lawson.

Mr. Lawson: Yes, sir, Mr. Chairman. I know that you people have the picture now, so all you have to do is to get together and solve it so that everybody will be happy.

Senator Dodge: I would like to ask Mr. Westergard -- in the Reno area, which has grown to some extent as fast as the Las Vegas area, a private utility, the Sierra Pacific Power Company distributes the water and the cities of Reno and Sparks have a treatment plant there. In that situation is there any inherent conflict or problem of cooperation or coordination between the distribution of water and the treatment of the waste water?

Mr. Westergard: No, there hasn't been, but I think the main reason that there hasn't is because of the return flows from the Reno-Sparks area, not only from municipal purposes, but for agricultural purposes are considered under an existing water decree, as you well know, Senator, on the Truckee River, and the percentages are set up by that decree so that metropolitan area and surrounding agricultural area can deplete the stream flow by only so much and the return from agricultural and municipal use has been fairly equal. So, in the water supply situation there has been no problem.

As far as water quality is concerned, there have been some problems. As most of you are aware, the cities of Reno and Sparks have periodically up-graded their treatment facilities there in the lower Truckee River. I don't think it's an analagous situation.

Senator Dodge: I gather that the water district in Southern Nevada is actually a utility. It operates as a utility in the distribution of water. Is there a consideration here in anyone's mind about the efficiency of operation of a utility as such which is directed to one function as against a governmental entity which is responsible for many functions? I don't know that it's a criticism or whether a potential criticism of a county operation..

(Note: At this point in the proceedings the tape recording was defective. The committee heard remarks from Mr. Jim Guinan. He has submitted a statement attached hereto as Exhibit "E", so that we will have some record of what was said during the hearing. Also during the period of time that the tape recording was defective, the committee heard from Mr. George Monahan, Mr. Boyd Bullock, and Mr. Thorn Butler.)

Testimony again resumes in the middle of Dr. Otto Ravenholt's presentation. As a part of his comments he submitted and read telegrams from James C. McCarty, a copy of which is attached hereto as Exhibit "F", and a report entitled "A Comprehensive Water Quality Control Program for the Las Vegas Drainage Basin," which is also attached hereto and marked as Exhibit "G".

Dr. Ravenholt: and the maximum is almost anything you want to name. That is up to 200 million dollars in the next thirty years. If you are going to de-salt and re-cycle the water. That's a lot of money.

The alternates include what Morgan, my neighbor in Boulder City referred to, that is include the analysis of what you might do by exporting the water to the dry lake valleys, both the one north of Las Vegas, north of Nellis Air Force Base, and the one in El Dorado Valley, to use it for irrigation purposes.

Include the study of ground water recharge -- another possibility for this water, but not a cheap possibility. Include the possibility of treating it and putting it down in the lake. The problem with putting it into the nearest side of the lake is partly that with the phosphorous already accumulated there, with the algae already present, there is a serious question of whether this will -- I think if you continue to put water into that arm, even though you take most of the phosphorous out of it, therefore, one of the alternates also discussed is the possibility of piping or channeling it on over and putting it into the main stream of the river. Because when it is cleaned up it is presumed that the same amount of phosphorous and nitrogen nutrients would have a far smaller impact on the river as such, than they will on the quiet bay of the lake. That's why those alternates are included in those already discussed here.

But the inter-agency task force which sought to analyze the alternate means by which this might be done and the relative costs of them, naturally came to the question of who might carry out the solution, and being a voluntary participating group of all the local entities this is where the inherent conflicts of interest in terms of who was to be in charge of the water came to light and this is why the engineers recommended as perhaps the major step to be taken, that only the legislature could designate the agency which was to have the jurisdiction and the responsibility and the financing authority to handle this difficult, expensive, long-term project, which in some ways, I suppose, will re-create in this day of environmental concern, the ancient system of the Middle East where the water master was in essence the government.

Certainly, if anyone does become the water master proposed, fresh water, sewage water, and rates on these things will exert an important influence on community development and cost of living in the Las Vegas valley. When I flew up this morning and saw all those empty spaces in between I wondered if another alternative might not be to move the people and start new valleys.

The study is available to give some perspective to cost and to the alternates. There is no way that this local inter-agency task force could, as we saw it, overcome the problem of resolving the competitive interests and designate this agency, and I would implore you, if that's the word, that no one other than the legislature can provide the secure and permanent foundation for any agency to take on this expensive, difficult and long-term task.

Mr. Thornley: Mr. Ravenholt, do you consider it important that the ultimate master agency for water and disposition of sewage effluent be an agency that can consider an action the over-all and related aspects such as recreation and other aspects that should go into the over-all picture. Do you feel this should entail or involve such a governing body?

Dr. Ravenholt: I think, Mayor Thornley, there is no doubt that the decisions made on the water management, the pricing of it and such will have a quite immediate effect on community development, on the recreational resources in some places and there must be coordination of these decisions with these others. Now, I think in various ways such coordination is presently more or less accomplished, and I presume it would be in the future. But the bigger question, I think, of how much authority the water agency should have comes when the water limits of the area are reached, and the question of whether the people draw out of the ground water basin or not, this kind of strategic decisions about water resources which Mr. Westergard has talked about that really become decisions that have to be closely related. They may not be that far off, but I don't think I have it clear yet as to what -- my answer is "yes," they must be very carefully coordinated.

Mr. Lynch: Mr. Chairman, that telegram from the federal government refers only to water quality control, not water supply. If we could solve the problem of water quality control, of the effluent of sewer plants going into Las Vegas Wash and if an agency can go in and solve that problem, it will demonstrate its ability to solve the other problems?

Dr. Ravenholt: I think the federal government is interested in termination of the pollution problem.

Chairman Gibson: Let me ask you, your worry would be alleviated if that were the part of the problem we met? You wouldn't object to the county being responsible for that?

Mr. Lynch: We think the county and city of Las Vegas should. They are the ones that are in the business of operating the quality water control plants.

Chairman Gibson: Mr. Brennan?

Mr. Brennan: Mr. Chairman, I don't think possibly that the city-county's plant might be as ambitious, you might say, as the report a couple of years ago by the Las Vegas Valley Water District, whereby they would take over all well permits in Clark county. I think we have an opportunity here for consolidation of services in government that would benefit the taxpayer for more efficient operation, which the electorates officials of 70% of the people have agreed to. And Senator, I think you said we want to get into this business, and possibly it's better with a public utility. I don't consider the Las Vegas Valley Water District a public utility. They are fighting politics. I think as you know that the commissioners of the county and the city commission of the city, do have some control over the public utility. But we're not faced with that situation here. We're faced with a situation now of not only having the Las Vegas Valley Water District tell where the water lines are going to go to the people, to the developers, to the taxpayers, to the county, but also sanitation. These two things should run hand-in-hand, line-in-line. And I think we've got a situation that is going to grow into a greater demand, and when you get into a situation of a special district handling water and sewage disposal in a county, you might as well give them the master plan. They might as well say where there is going to be residential, where there is going to be commercial, where there is going to be parks, you are going to have the tail wagging the dog. And I think we should get back to the dog wagging the tail with the people who are more responsible to the electorate and the taxpayer.

Mr. Leavitt: I just want to say one thing, Senator. People from Clark county of course realize this, but I would like to point out that we have two sanitation plants within a mile of each other that were built in excess of \$10,000,000. They are located in the lowest point of the valley so gravitation flow can go there. These are the ones we have talked about tonight that are owned by the city, and owned by the county.

The two entities that control these two sanitation plants want them to be consolidated, and as far as the representation that Mr. Lynch has talked about earlier, I don't care if North Las Vegas bases their representation on the amount of water used or the amount of sewage they let out, whichever is the greater, they can have it. I want to say this too -- in that meeting this morning the subject was brought up about representation and it was agreed by the people that were at that meeting, which is the entire board of county commissioners, and the entire board of the city commissioners, that representation wasn't the most important thing on this agency, but to get it on and solve the problem. Now, that's what we would like to do.

Assemblyman Branch: I would like to just make a short statement. Senate Bill 279 and Senate Bill 436 -- I see that one agency has been doing their homework, but we are in the 65th legislative day and there are people out in the audience that told us to go home five days ago, and now we are confronted on the 65th legislative day with solving the problems that exists in our county. I resent the fact that our city of Las Vegas and the county did not come up with an alternate plan of legislation that we could look at intelligently to vote on. And this is the problem that we are faced with. That we are to make a hasty decision something as important as this.

Chairman Gibson: While the plan isn't in bill form, Dick alluded to it with some changes. It's the same thing that we did to the sanitation districts when we did it. We just made the county commissioners, the board of directors of the sanitation district. What they are suggesting now is that we make the county commissioners the directors of the water district. So they do have a proposal for us that isn't in written form.

I might explain what's happened here. I have had so many comments on how this has developed. I do credit the water district for bringing it to a head, although there are some of us here who had arranged for meeting with the governor before the water district came up. They kind of solidified our determination to have such a meeting.

I was a member of the special legislative committee, Hal Smith was the chairman, Mahlon Brown was on it, Frank Young, and Jerry Tyson. And the designation that came out of that report was for the Colorado River Commission to come to this session of the legislature with a proposal which would in effect set up the next step of approaching this problem.

Now, in the changeover there was about a month taken in getting the attorney general's opinion that the million dollars they had requested on the bond issue for the treatment plant, could be used for this purpose. Once that was cleared, then they would retain experts and they initiated the steps to have, I think it was three or five of the outstanding water consultants in the country review all the reports that had been made up to this date, and give some guidance on proposals which they might enter into in this legislature. And in the changeover in administrations the direction of this was changed, and it was not gone ahead with. At the time when we met with the governor to try to salvage some action out of this session of the legislature it was late in the session, and it was brought about because we did not have anything before us at the time.

The governor has cooperated with us in attempting to come up with some designation that will help to go into the next step, and I am sure that before we are through with this session, this is only one of the problems that we have unresolved on the 65th day, and I am sure that by the time we are able to resolve the others, we will come up with something on this.

Now, this meeting tonight, I think is helpful to us and needed. Some of the people that we have talked to made the expression that Dr. Butler made, that not all of you have gotten together on this matter and certainly we will provide a form for that. Now, we are going to have to mull over what we have heard tonight. I am sure that some of us feel very strongly that there should be some positive action taken at this session of the legislature so we don't drift along for another two years before we start moving towards whatever the solution might be, whether it's what the reports recommended, or what any of the others have recommended, at least we would like to see developed out of this session, the impetus toward the eventual solution of the problem. That's certainly my determination, for whatever I can contribute. That's why we are here at this late date.

We were hoping we would have a report from the Colorado River Commission early in the session when it would give us some guidances to the next step to undertake. We don't have it, we're trying now to bring together the various interests and entities and see if we can't come up with something the legislature can get behind and give a mandate on that will at least, even though it might be interim in nature, that will get us further along the road by the next session than we would be without it.

Are there any comments from the committee?

Miss Hawkins: I would like to ask just one question. They said they want the sanitation district and the water district under the same governing body so they can work together. Why can't they work together anyway? Quite obviously you seem to think that there is a great barrier between them. I'd like to know, why can't you people down there work together?

Mr. Butler: There is nobody who has the legal or financial authority to proceed to solve the problem.

Miss Hawkins: You people can't sit down and say let's work together if you haven't got the authority?

Mr. Butler: I think we can work together, but you still need the authority to be able to proceed -- mainly the financial authority for this particular purpose.

Chairman Gibson: I think our time has been well spent here this evening and I appreciate the contribution that all of you have made. We will take this under further advisement.

(There is also attached hereto as Exhibit "H," a letter to Senator Gibson from Mr. Paul M. Zimmerman, President of the Board of Directors of the Las Vegas Valley Water District.)

Respectfully submitted,

Mary Jean Fondi,
Secretary to Committee on Federal,
State and Local Governments

APPROVED:

James I. Gibson, Chairman, Senate
Committee on Federal, State and
Local Governments

STATEMENT BEFORE THE SENATE COMMITTEE
ON
FEDERAL, STATE AND LOCAL GOVERNMENTS

RE: SENATE BILL NO. 279

March 22, 1971

Mr. Chairman and members of the Committee: I am Tom Donnelly, General Manager of the Las Vegas Valley Water District.

Senate Bill 279, which is before you today for consideration, was submitted by the Water District. The District Act presently authorizes the District - (quote) - "to conserve and reclaim water for present and future use within the District" - (end quote). The intent of Senate Bill 279 is to clarify this language and to remove any question as to the District's authority to manage and control return flows to Lake Mead through Las Vegas Wash. That is all this bill will do - nothing more - nothing less. It does not appropriate any water or effluent to the District and it does not override authority vested in the State Engineer and the State Department of Health.

It is my understanding that a bill is being drafted which will designate the Water District as the agency responsible for the cleaning of Las Vegas Wash. However, only Senate Bill 279 is now under consideration and, if the committee desires to confine discussion to that bill, I have no further comment. However, if the committee wishes to broaden the scope of discussion, I will continue briefly.

A review of past events is necessary to bring the present situation into focus. In 1968, an Inter-Agency Task Force, comprised of representatives from governmental agencies and private industry, was created for the purpose of resolving the Lake Mead pollution problem and to consider a master water control agency. This group authorized an engineering study at a cost of \$130,000. Upon completion of the study, the Task Force was unable to reach agreement on its recommendations.

Exhibit "A"

Because of the critical nature of the problems, former Governor Laxalt intervened and appointed a special legislative committee, comprised of members of the Clark County Senate and Assembly delegation, to study the situation and report back to him. Mr. Laxalt, following a recommendation subsequently made by the Committee, directed the Colorado River Commission to proceed immediately with a further study of the pollution problem and to have available at this session of the legislature an engineering cost estimate to permit authorization of a State bond issue for construction of a treatment plant or other facilities.

In mid-February of this year, Chief Engineer Bill Blackmer and I met with Clark County representatives in the Senate and Assembly. The purpose of this visit was to discuss what progress had been made in this regard. We expressed our concern about the situation and stated that it appeared nothing would be done for several years unless directed by this session of the legislature.

District representatives have not been directly involved in any events or proceedings subsequent to the meeting just mentioned. However, it is our understanding that a Governor's conference, attended by members of the Clark County delegation, Colorado River Commission, and the State Engineer's office, was held with the result that the Governor directed the State Engineer to prepare legislation which would designate an agency responsible for cleaning Las Vegas Wash and also to serve as the overall master water control agency in the Las Vegas Valley. Representatives of the Water District participated, by invitation, in the drafting of legislation. That brings us up to date.

We believe all will agree that immediate action must be taken now by the Legislature to discontinue the ever-increasing discharge of effluent to Lake Mead and also to designate a single agency to serve as the master water agency.

Exhibit "A"

I would like to state why we believe the Water District is the logical agency to assume the additional responsibilities. The Water District Act provides the enabling legislation. All that is required is a directive from the legislature to proceed. It is our belief we are the only agency that can promptly and effectively resolve the many complex problems.

The Water District has, since 1954, been responsive to the public and has met every challenge to provide an adequate water supply for the explosive growth in population. In the last five years, the District has constructed reservoirs, pumping plants, and automated telemetering facilities at a cost in excess of 20-million dollars to enable the District to accept and deliver water from the Southern Nevada Water Project. . . . During the past year, a Master Water Plan was prepared, at a cost of \$100,000, for the complete future development of the Valley, which is of immeasurable value not only to the District but to other governmental agencies. This is further evidence of responsibility in foresight and progressive planning.

The Water District has an enviable reputation in financial circles for fiscal responsibility. Financial statements and audit reports are immediately available to this committee or any other interested parties.

The Water District has personnel with the necessary expertise to perform in the fields of finance, engineering and water treatment. Also, a new office annex recently completed is adequate to handle future requirements in personnel for many years to come.

The Water District Act presently and with proposed amendments provides for election of the directors in a manner which guarantees effective representation of the electorate.

Finally, and most importantly, the Water District wishes to emphasize the immediate need for action.

Thank you.

Exhibit "A"

WHEREAS, the Board of Commissioners of the City of Las Vegas and the Board of County Commissioners have considered the matter of water in the County of Clark

NOW, THEREFORE, BE IT RESOLVED, jointly, by the two above Boards that the Legislature of the State of Nevada be petitioned to consider the designation of the Board of County Commissioners of Clark County as the ex-officio directors of the Las Vegas Valley Water District.

Dated this 22nd day of March, 1971.

BOARD OF CITY COMMISSIONERS
CITY OF LAS VEGAS

BOARD OF COUNTY COMMISSIONERS
COUNTY OF CLARK

Chas. K. Grossman
Alexander Colantuono
Mrs. Hobery
Frank Kaulitz
James Carey

James E. Ryan
Walter J. ...
Walter J. ...
B. D. Broadbent
...

ATTEST:

LORETTA BOWMAN, COUNTY CLERK

By: *Reba Snyder*
Deputy

A PROPOSAL REGARDING WATER MANAGEMENT

IN

CLARK COUNTY

This proposal is being set forth by the Board of County Commissioners and the City Commissioners of Las Vegas in response to recent discussions with the Senate Governmental Affairs Committee of the State of Nevada. It directs itself to the question of what agency should manage the water function in Clark County. It also relates to the eventual inclusion of the sewage operation of the various entities in the distant future. The proposal is based upon concepts of local government structure as set forth by the United States Commission on Intergovernmental Relations, the research of the Public Administration Service in developing the Local Government Study in Clark County in 1968, and a work of the Governor's Commission on Metropolitan Area Problems of California.

THE PROBLEM

The immediate problem of protecting the water resources of Clark County requires swift and unilateral action. Bold measures are needed today if we are to preserve and to protect this water resource so vital to human life and to the economy of Clark County. The unabated and increasing pollution of Lake Mead by effluent waters of the Las Vegas Valley dramatizes the need for even further action. Then, of course, there are the competing interests of the various local governmental entities as well as certain State agencies.

Exhibit "C"

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SPECIAL DISTRICT VERSUS GENERAL PURPOSE GOVERNMENT

Work-a-day officials, political practitioners, and scholars in the field of local government, all agree that special purpose districts by definition and structure should not be assigned the vital governmental functions naturally belonging to general purpose governments, to wit: cities or counties. The Governor's Commission on Metropolitan Area Problems of California as well as the United States Commission on Intergovernmental Relations concluded as follows:

- "(1) Special districts are special interest entities that are inefficient, uncoordinated with general local governmental entities and undemocratic.
- (2) Special districts prevent the citizen from knowing what is going on, how it is going on, and who is going on in the realm of special entity activity."

As a result of the above mentioned report, the California Legislature created the Local Agency Formations Commission specifically to:

"stop special districts except where there are no other alternatives with general purpose government of a city or a county."

The Institute of Governmental Studies at Berkeley reported to the Association of Bay Area Governments in 1963 the problems of special districts:

"(1) Low political visibility causing low voter turnout and little voter awareness.

(2) Low fiscal visibility that brought about taxation without awareness and taxpayer frustration, not to mention inefficiencies and lack of interest in coordinating affairs with other general purpose governments."

The Institute of Local Self Government reported on California special districts in a study called "Special Districts or Special Dynastys - - Democracy Denied." This report chided special interest entities as:

"now undergoing a critical confrontation as to their validity which has been hetherto unproven."

The study concludes that:

"special districts because of their many faulted manifestations have been the object of more restrictive and corrective legislation alone in the past ten years than has been directed against all other governmental institutions."

LOCAL GOVERNMENT FOR MASTER WATER AGENCY

It is obviously essential that immediate steps be taken to designate a local government with broad voter representation and with a broad

Exhibit "C"

revenue base to assume responsibility for the management of the water functions in Clark County. This local government should then proceed under legislative mandate to develop specific legislative proposals on or before the next session of the Legislature to implement the following:

- (1) The consolidation of Clark County Sanitation District with the Las Vegas Valley Water District into a single utility department of the County.

- (2) To develop a master plan for the total administration of the Southern Nevada Water Supply Project and all related matters that will ultimately lead to the single agency administration of the water resource in Clark County.

CONCLUSION

Based on the above data and the obvious need for immediate action it is apparent that the Board of County Commissioners should be designated as the governing board ex-officio of the total water agency in Clark County.

Exhibit "C"

**LOCAL GOVERNMENT
IN
CLARK COUNTY, NEVADA
1968**

**Public
Administration
Service**



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Exhibit "D"

activity areas these functions are required by state law.

Special Services to Unincorporated Areas. Services provided to all or selected portions of the unincorporated area of the County, other than through special district arrangements, include:

- | | |
|----------------------|-----------------------|
| Police Protection | Crossing Guards |
| Fire Protection | Parks |
| Building Inspection | Recreation |
| Zoning | Cemeteries |
| Street Maintenance | Flood Control |
| Street Lighting | Utilities |
| Building Maintenance | Agricultural Services |
| Animal Control | |

These activities, with a few exceptions, are provided within the unincorporated towns and are financed from the receipts of property tax levies and such other revenues as the privilege tax and gaming tax collected therein. (See Tables 8 and 13). They do not for the most part represent charges against county taxes levied on a county-wide basis. They are urban or municipal-type services necessitated by the fact that these are in fact urban areas; were they within the incorporated cities, the County would not concern itself with providing such services. Other services are provided by the County through the mechanism of formalized special districts some of which are essentially creatures of the County; for example, the sanitation district through which are provided sanitary sewers and disposal facilities for much of the urbanized unincorporated area to the south and east of the City of Las Vegas. These are discussed below.

Special Districts

There are within Clark County fewer local government entities classed as special or single-purpose districts than are found in many similar urban areas, however, those that exist are so varied as to

Exhibit "D"

constitute a confused pattern. These units, which provide a single service within their jurisdictional areas, tend to overlap each other and the incorporated cities as to service areas, compete with cities for revenues, constitute barriers to orderly municipal growth through annexation, and are at times responsive to special interest group desires rather than the general public need. Some are completely autonomous entities with their own elected governing boards and independent sources of financial support, others are subordinate sub-divisions of the County, and others fall in between enjoying varying degrees of independence.

The Clark County School District is an independent entity providing a uniform and comprehensive program of public educational services on a countywide basis. As will be seen later, it competes with other local governments for revenue sources -- particularly the property tax. It does not, however, duplicate or overlap services provided by the cities and the County and cooperates with them in several functional areas such as health, parks, and recreation.

The Las Vegas Valley Water District is also an autonomous entity with its own elected governing board. Because its operations are financed entirely by user service charges, it does not compete for the tax base; nevertheless, it does pose problems of an inter-governmental nature. The District serves much of the urban area, including the City of Las Vegas, but the Cities of North Las Vegas, Henderson, and Boulder City and the Desert Water District operate water supply and distribution systems. Problems arise, for example, in the provision of adequate water supply for fire protection -- not

Exhibit "D"

administered on a regional basis. The option then exists as to whether to lodge responsibility for each such function in a special regional agency or to group several functions under one or more multiple-purpose regional agencies. Where the logical service area extends into two or more counties, the more common approach is the creation of new regional entities -- metropolitan utility districts, transportation authorities, air pollution control districts, and the like. Where, on the other hand, the total service area lies within one county the function is normally assigned to a county government agency or a subordinate special entity therein.

Local illustrations of this alternative are found in the areas of public education and property assessment. The many formerly independent school districts have been consolidated into the unified Clark County School District, an independent public jurisdiction administering a uniform countywide educational program. In the case of property assessment, the function was placed in the county government rather than in a separate single-purpose entity.

In areas where special autonomous entities have been created for a single purpose or service the result has usually been an undesirable fragmentation of local government. These become almost "invisible governments" often controlled by one or several special interest groups, operating outside the spotlight of public attention, and unresponsive to general public needs, wishes, and interests. Although their activity is almost always closely related to other local public services it is not viewed as such. For example, utility systems have an enormous impact on total area development and citizen well-being. If they are not closely integrated with other public

Exhibit "D"

service programs, waste and illogical growth patterns are certain to result. A local illustration can be found of this in Clark County in the area of water services. Water services, for example, not only help set the pattern of residential, commercial, and industrial growth, but bear directly on such on-going service programs as fire protection, recreational activities, and sanitary sewers. A good case can be made for a fully consolidated water service utility, or sanitation system, serving the entire Las Vegas Valley. These would produce distinct benefits to the public in terms of the particular services given, but if they are administered by agencies autonomous from the general city and county governments the broader public and area interests are apt to be ill-served.

Assignment of such consolidation functions to county government would overcome much of the difficulty; however, this alternative, as that of the joint powers approach, can be criticized as offering a piecemeal solution. It is a poor substitute for the broader approach of considering the total range of public services and their inter-relationships, and developing an overall service pattern.

Annexation of Urbanized Areas to Existing Cities

Traditionally in the United States industrial, commercial, and residential areas have been included within incorporated cities and towns. As an existing city grew the adjacent area needed for this growth was annexed; growth was reasonably contiguous and the cities remained compact with limited unused space within their boundaries. Changes in transportation patterns have completely altered the patterns of urban growth. Today nearly every family

Exhibit "D"

3-53
282

LAW OFFICES
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March 26, 1971

Honorable James I. Gibson
State Senator
Legislative Building
Carson City, Nevada

Dear Jim:

Mrs. Fondi has informed me that the tape on which my testimony should have been recorded at the hearing on Monday night, March 22, 1971, was blank and that you have requested that I repeat my testimony. The following is to the best of my recollection what I said on Monday night.

"Mr. Chairman, Members of the Committee, my name is James Guinan. I am an attorney from Reno, Nevada, and I represent the Las Vegas Valley Water District in connection with proposed legislation.

The Water District has requested the preparation of specific legislation in additon to Senate Bill 279 which is already before you. We had hoped that the legislation would be available tonight for consideration, but we have not received it from the bill drafter.

Regardless of which agency is given the responsibility to solve the Lake Mead-Las Vegas Wash pollution problem, there are certain steps which must be taken in our opinion, to accomplish the desired result. The agency should be designated as the master water agency for the Las Vegas Valley. The agency should be designated as the State agency to receive federal assistance in the form of grants-in-aids or other participation by the federal government.

The designated agency should assume supervision, operation and maintenance of existing and future Southern Nevada water project facilities for water treatment and distribution and also of all sewage treatment plants.

Exhibit "E"

Honorable James I. Gibson

-2-

March 26, 1971

It would not be necessary for the agency to assume control of sewage collection lines. The reason why the agency which has control of water distribution should also have control of sewage treatment plants is that sewage effluent will eventually be recycled through the distribution system when it becomes technologically and economically feasible to provide effluent of sufficient quality. It is essential that the distributor of the water have control of the quality of the effluent.

In regard to the Las Vegas Wash problem, the agency should be designated specifically to solve that problem, including necessary investigations and authority for implementation of the solution, including construction, operation and maintenance of necessary facilities. There is presently an amount of money in excess of one million dollars in funds of the Colorado River Commission which were to have been used for this purpose. These funds should be made available to the designated agency by requiring that the Colorado River Commission contract with such agency to provide the necessary studies and implementation.

Nothing has been said so far this evening about financing. We are talking about a project which will cost, on the basis of the best estimates we have been able to obtain, between fifty to eighty million dollars. There should therefore be specific legislation authorizing issuance of bonds in an amount not to exceed eighty million dollars. In our opinion, these will have to be State bonds because we doubt that any agency in Clark County has the bonding capacity to make bonds in that amount saleable, unless it is designated a state agency for that purpose.

The purpose of having the state back the bonds is not so that the state will ultimately pay them. The bonds should be retired from revenue, but without the state backing they will probably not be saleable.

It is doubtful that revenues would be sufficient to support the issuance of bonds in the full amount. The issuance of the bonds should be staged so that they are sold when revenues are sufficient to support them. A tertiary sewage

Exhibit "E"

Honorable James I. Gibson

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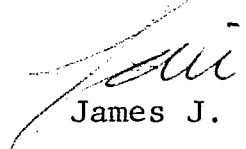
March 26, 1971

treatment plant can be built in stages as the bonds are issued.

The Las Vegas Valley Water District believes it is the logical agency to be designated as master water agency and that it has the ability and capacity to complete the project successfully.

The water district believes that the necessary legislation should be enacted at this session of the legislature and that the solution of the problem should not await two more years of study"

Sincerely,



James J. Guinan

JJG/lam

Exhibit "E"



Telegram

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=DR OTTO RAVENHOLT DISTRICT HEALTH OFFICER CLARK COUNTY
HEALTH DISTRICT CARE ERNEST GREGORY CHIEF BUREAU OF EH=
NYE BLDG 201 SOUTH FALL STREET CARSON CITY NEVADA 89701 =

AS YOU ARE AWARE THE DATE FOR COMPLETION OF THE LAS VEGAS VALLEY WATER QUALITY PLANNING STUDY, SUPPORTED BY THE WATER QUALITY COM OF THE ENVIRONMENTAL PROTECTION AGENCY IS JULY 1 1971. THIS STUDY IS AN IMPORTANT FIRST STEP IN A REGIONAL ATTACK ON WATER POLLUTION PROBLEMS IN THE LAS VEGAS-LAKE MEAD AREA.

=I WOULD LIKE TO TAKE THIS OPPORTUNITY TO REMIND YOU THAT ASSURANCE NO 4 OF THE CLARK COUNTY PLANNING GRANT

WU 1201 (R 5-69)

WESTERN UNION

APPLICATION OF APRIL 20 1970 STATES THAT: "THE PLAN WILL RECOMMEND MEANS FOR ITS IMPLEMENTATION INCLUDING INTERMUNICIPAL AND JOINT MUNICIPAL AND INDUSTRIAL USE OF FACILITIES AND FOR FINANCING NECESSARY FACILITIES."

I UNDERSTAND THAT THE NEVADA STATE LEGISLATURE IS CONSIDERING THE LAS VEGAS WASH SITUATION THIS SESSION. I URGE YOU TO CONTINUE IN YOUR EFFORTS TO ENCOURAGE FORMATION OF AN AGENCY WITH FULL AUTHORITY TO PROCEED WITH IMPLEMENTATION OF WATER QUALITY PLANS FOR THE LAS VEGAS VALLEY. THIS VITAL STEP IS ESSENTIAL TO RESOLVING THE POLLUTION PROBLEMS ASSOCIATED WITH LAS VEGAS WASH AND IS ESPECIALLY CRITICAL AT THIS TIME =

JAMES C MCCARTY JR DEPUTY DIRECTOR WATER QUALITY OFFICE EPA REGION IX.

Exhibit 'E'

INTRODUCTION

During recent years the effects of water pollution in Las Vegas Wash and the Las Vegas Bay of Lake Mead have become increasingly evident. The waste waters generated within the Las Vegas Drainage Basin are adequately treated from a biological standpoint by the sewage treatment plants within the Valley. These treatment plants, principally those operated by the City of Las Vegas and the Clark County Sanitation District, treat the organic components of the waste flows in a manner and to a degree presently considered satisfactory in most parts of the Nation. The problem, however, arises not from the organic loadings in the waste waters, but from nutrients, phosphorus and nitrogen, which are present in community effluents and which are not removed by conventional sewage treatment processes.

These nutrients have accumulated in the quiet waters of Las Vegas Bay and have fostered the growth of algae there. The algae grows profusely, dies, and decays, thus presenting the pollution problem currently to be seen in the waters of Las Vegas Bay. This problem was partially defined in 1967, by an investigation conducted by the Federal Water Pollution Control Administration which correlated the deterioration of Las Vegas Bay (as measured by the density of algae) with the phosphorus content of treated sewage effluent discharged into Las Vegas Wash.

Recognizing the need for action to abate pollution of Lake Mead, concerned officials formed the Inter-Agency Water Pollution Control Task Force in 1968. The Task Force is funded by and has representation from the following public and private bodies: Clark County, Colorado River Commission of Nevada, Clark County Sanitation District, City of Las Vegas, City of Henderson, City of Boulder City, City of North Las Vegas, Las Vegas Valley Water District, Basic Management, Inc., Nevada Power Company and the Clark County Health District. In addition to funding provided by Task Force members, additional funding was received through the Federal Water Pollution Control Administration to finance the required study and planning effort.

Early in their deliberations, the members of the Task Force recognized that Las Vegas Bay pollution was only one part of the overall problem facing the residents of Las Vegas Valley. The larger need was for development of a long-range water resource management program to optimize the beneficial uses of the total water resources in the Valley and to protect the quality of these resources for future generations.

In September, 1968, upon recommendation of the Inter-Agency Water Pollution Control Task Force, Clark County executed a contract with the engineering joint venture of Boyle Engineering and Cornell, Howland, Hayes & Merryfield (Boyle-CH₂M) to perform the necessary studies and to submit reports relative to a comprehensive water

quality control program for the Las Vegas Drainage Basin. This study has been accomplished and the report has been submitted in two volumes: Phase I (dated February, 1969) deals with the formulation and definition of the problems, and Phase II (dated December, 1969) presents analyses of alternative plans of action and makes recommendations for implementation of the program.

PROBLEM DEFINITION

In broad terms, the aim of a comprehensive water quality control program for the Las Vegas Drainage Basin in terms of both long-range and short-range objectives is threefold and can be summarized as follows:

1. To reduce as soon as possible and to the maximum extent possible, pollution due to nutrient concentrations in Las Vegas Bay of Lake Mead.
2. To reduce to acceptable limits, pollution hazards to the waters of the Colorado River System insofar as the residents of the Las Vegas Valley have control over these pollution hazards.
3. To make maximum beneficial use of the water resources available to the Valley and assure, during the planning period adopted, adequate quantities of water and acceptable quality of water.

The above objectives should be met as economically as possible with due consideration given to the protection of the physical environment and the ecology of the Colorado River System as it may be affected by the activities of the people of this area.

Within the framework of the above broad objectives, it is necessary to define certain limits with regard to the objectives of the planned program. The planning period to be encompassed was taken as thirty years, terminating in the year 2000. The population to be accommodated at that time is based upon the land use plan adopted by Clark County for the Las Vegas Valley, and projects a population of approximately one million persons in the year 2000. Although the plans presented are for the population stated, the difficulty of population predictions some thirty years hence is such that flexibility in planning is considered a necessity. Therefore, although many of the economic analyses presented in Phase II of the report are based upon certain populations occurring in certain years, the key to incremental expansion of any program adopted is the occurrence of given population figures, not the occurrence of specific years. The programs proposed are planned in such a manner that staging or incremental construction of any given plan can be made to accommodate either an increase or a lag in the assumed rate of population growth. Furthermore, these programs can be adjusted should the rate of water usage, or the rate of waste water production, by the future population vary from those assumed in this study.

1 "Exhibit G"

WATER RESOURCE DEVELOPMENT

The currently contemplated sources of water available for use by present and future populations of the Las Vegas Valley include: (a) the groundwater basin, (b) Colorado River Water, and (c) reclaimed waste water.

The groundwater basin under the Las Vegas Valley constitutes the principal source of water used in the Valley today. It was the total source until 1942, when water was first imported from Lake Mead to supply Henderson and the Basic Management, Inc., complex near Henderson. The Las Vegas Valley groundwater basin will continue to be an important source of water. Although the natural recharge to the basin is not firmly established, based upon existing data and recent practice, an annual yield of 50,000 acre-feet from the groundwater basin has been utilized in assessing the water resources available for the period of this water plan. Should a program of artificial groundwater recharge with reclaimed water be adopted, this groundwater basin yield could, of course, be increased by an amount corresponding to the volume of water recharged to the basin.

Colorado River Water will, in the future, be a much larger component of the total supply for the Valley than it has been in the past. The BMI pipeline will continue in use to the Henderson area. It is anticipated that in the future, most of this water will be used in the Henderson-BMI general industrial complex. The Southern Nevada Water Project from Lake Mead to Las Vegas Valley will begin operation in 1971, with an initial capacity of 135,000 acre-feet.

The allotment of Colorado River Water for the entire State of Nevada is 300,000 acre-feet per year. Commitments to Boulder City, Fort Mojave area, and others of approximately 35,000 acre-feet per year leave 265,000 acre-feet per year available for use within the Las Vegas Valley in the year 2000. To the amount of water from the Colorado River currently allotted to the State of Nevada, additional water allotment can be obtained if suitably treated waste water flows are returned to the river system. The increase in allotment on an annual basis would be equal to the amount of acceptable waters returned to the system. Although the initial capacity of the Southern Nevada Water Project is not designed to deliver the full entitlement of Colorado River Water to the Valley, it has been assumed for the purposes of this report that the Project system will be expanded as required to meet the need for water pumped from Lake Mead, which water supply is limited only by the State's allotment (265,000 acre-feet per year for the Las Vegas Valley), plus any credits for suitably treated waste waters returned to the Colorado River System. The magnitude and timing of the increase of capacity in the Southern Nevada Water Project will depend upon the particular plan of action finally chosen. Such a variation in timing and capacity has been analyzed in each of the alternative plans presented in detail in Phase II of this report.

Reclaimed waste waters must, of necessity, form a substantial portion of the future water resources of the Las Vegas Valley. The use of these reclaimed waste waters could include irrigation for agriculture and ornamental plantings, cooling water and other industrial uses, readmittance or return to the Colorado River System for credits on increased allotment, demineralization and sterilization for immediate return to the potable water system or any other possible beneficial use. It is estimated that by the year 2000, approximately 182,000 acre-feet per year of waste water will be generated within the Valley. After making allowance for waste waters not

connected to sewer systems, potential on-site reuse at industrial plants and potential sales for irrigation usages near the sewage treatment plants, it appears that a net waste water volume available for reuse will approximate 135,000 acre-feet per year.

Based upon the figures shown above, the supply available to meet the net water demand of the Las Vegas Valley by the year 2000, includes groundwater (50,000 acre-feet per year), Colorado River Water (265,000 acre-feet per year), and reclaimed water (135,000 acre-feet per year), for a total of approximately 450,000 acre-feet per year. The estimate of the water need for the area at the same time is 441,000 acre-feet per year. Each of these figures will vary by that time, depending upon the method of water reclamation utilized, the per capita rates of water usage and sewage production as well as other estimated factors. The impact of this analysis, however, indicates that the Las Vegas Valley will have to look to additional sources of water other than those listed herein by the year 2000, or when its population reaches approximately one million persons. This analysis emphasizes the importance of local, State and Federal water agencies continuing to plan for water resource development to meet needs of the more distant future.

WATER QUALITY STANDARDS

Water quality standards describe requirements relating to the acceptability of a given water supply for a given purpose. To be meaningful, standards should relate to the uses planned for the water. To be useful, they should be technologically and economically feasible. Water quality standards are often based on what seems desirable rather than what is actually allowable in terms of safety to health or pollution control. Since man's knowledge of the total effects of various pollutants is far from complete, opinion and judgment enter into the setting of limits, and conflicts occur in the attempts to implement the resulting requirements.

For the purposes of this summary, water quality standards for various uses of reclaimed water will be stated in somewhat general terms rather than more specific technical terms. A more detailed technical discussion of this subject can be found in Chapter 12 of the Phase II Report. Since the quality standard for the water to be produced from a reclamation system governs the process to be utilized and the cost of such waste treatment, qualities of effluent and methods of attaining these qualities have been outlined for the various water usages.

For irrigation water to be used, either for agriculture, golf courses, or other beneficial irrigation use within the area, it has been assumed that the quality currently being produced by the City of Las Vegas and the Clark County Sanitation District's sewage treatment plants will be acceptable. This water, produced by the secondary treatment of domestic sewage in a conventional system using biologic processes, has proven its suitability for irrigation of golf courses, agricultural crops, green belts, etc., within the Valley. Furthermore, this use has been approved by appropriate health authorities. It is, therefore, anticipated that the current standards for this use will continue.

The suitability of a given water for use in recharging a groundwater supply (one of the alternative plans later outlined) is dependent upon a number of factors, including method of recharge, volume of underground water available for blending with recharged water, chemical characteristics of the groundwater aquifer, and many other factors. It has been assumed that water of the type

currently produced by existing sewage treatment plants, would have to be filtered to remove solids suspended in these waters in order to prevent possible plugging of aquifers. Other than filtration, additional treatment of secondary effluent for recharge has not been postulated, but it is felt that data presently available are insufficient to permit confident prediction of recharge results.

The proposed treatment system to produce an effluent suitable for discharge into Lake Mead is more complex than that required for either of the foregoing usages or discharges. The Nevada State Board of Health has set discharge requirements for effluents to be discharged into the Las Vegas Wash (such discharge requirements are assumed to be comparable to those which will be required for discharge into Lake Mead). These effluent standards, which are quite stringent in regard to the removal of nutrients (phosphorus and nitrogen), are graded to provide one standard until the year 1980, and a more exacting standard after the year 1980.

The pre-1980 standard which is to take effect as of July 1, 1973, requires the reduction of total phosphorus to less than 1.0 parts per million and the reduction of total nitrogen to less than 7.0 parts per million. It is these stipulated reductions in the nutrients that require the addition of tertiary treatment processes to further treat the secondary effluent now being produced. This is a stringent but necessary requirement if progress is to be made in the revitalization of Las Vegas Bay. The necessary processes to produce this effluent will be listed later.

The 1980 standards for discharge as set by the Nevada State Board of Health, require further reductions in phosphorus and nitrogen to 0.05 parts per million for each of these nutrient constituents. The effect of this standard, utilizing present knowledge and technology, is to require the desalting or demineralization of the effluent water. It is anticipated that demineralization by whatever process utilized will be an additional stage of treatment to be added to the plant initially needed to meet the 1973 standard.

It should be noted that present State of Nevada requirements for water quality in the Colorado River do not apply directly to effluents discharged, but rather to the Colorado River itself. Therefore, for the purposes of this study and report, a set of standards for effluent discharge to the Colorado River immediately below Hoover Dam has been formulated. These proposed standards are the recommendations of the consulting engineers performing this study. They have not received official sanction of the Nevada State Board of Health which is studying the problem, and is scheduled to hold hearings and make determinations relating to these effluent discharge requirements in the relatively near future. The effluent standards recommended are, from the standpoint of nutrient levels, substantially the same as the proposed 1973 standards for discharge into Las Vegas Wash and Lake Mead. The calculated impact on nutrient levels in the Colorado River below Hoover Dam would be below the present level of detectability, utilizing standard testing procedures. It is believed that standards for effluent water discharged below the dam can be somewhat less stringent than those standards for discharge into Las Vegas Bay. Most authorities agree that flowing streams subject to good mixing action, have a far greater capability to assimilate nutrients than do still lakes. It must be emphasized, however, that the alternative based upon discharge into the Colorado River below Lake Mead is contingent upon the proposed standards and that adoption of substantially different standards may affect the feasibility of the plan presented.

POSSIBILITIES CONSIDERED

3-59

In considering alternative programs for management of the Valley's water resource and maintenance of the quality of the water, many possibilities presented themselves. Following is a discussion of the principal possibilities for incorporation into the plan. The final alternative programs which are evaluated include one or more of the possible approaches discussed below:

1. **IRRIGATION** - In considering the disposal of treated waste waters by means other than discharge into Las Vegas Wash, the first alternative which comes to mind is the use of these waters for irrigation. This irrigation could be within the Valley entirely, utilizing treated waters for agricultural production as is currently being done to some extent on farmland near the City of Las Vegas and Clark County Treatment Plants. Presumably, if this operation could be expanded, either in its present location or in some other location on a grand scale, the waste waters treated to minimal standards could be utilized productively to raise agricultural products for marketing.

This possibility was investigated for potential farming in the Las Vegas Valley itself, in El Dorado Valley and in Dry Lake Valley. Agricultural experts were retained to evaluate the suitability of this type of water for agricultural use, the types of crops which could be raised in the area with the water and soil available, and the annual requirement for application of water to land, including not only that water necessary to service the crops being raised, but also the water necessary to leach the salts which accumulate in the plant root zone. The quantities of water which would drain from the agricultural fields to waste by evaporation or return to the Colorado River System were also assessed.

The use of these waters for agricultural purposes poses a number of serious problems which tend to limit this approach as an adequate solution. These problems are:

a. The flows of waste waters from the Las Vegas Valley are year-round flows which are discharged every hour of every day throughout the year. Agricultural and plant demand for water is maximal in summer months and minimal in winter months. Thus, for this to be a real alternate for disposal of reclaimed waste waters, it becomes necessary to construct seasonal storage reservoirs to store wintertime flows for summertime use. The problem involved in finding physical sites available for such water quantities - which may amount to as much as 50,000 acre-feet - is in itself a major undertaking. Furthermore, water treated only to the extent needed for use in irrigation, may not rest in reservoirs of some depth without presenting problems of deterioration of the effluent. Septic action or vigorous algal blooms would render the reservoirs more objectionable than the present conditions in Las Vegas Bay.

b. Investigations were made utilizing planned distribution systems to deliver this treated water to all possible areas of golf courses, parks, freeway rights of way, school grounds, green belts, etc., for beneficial use within the Valley. Excess flows could be wasted to irrigation in certain other areas in the Valley, simply as a means of disposal. An analysis of the cost of this type of reclaimed water distribution system and this type of a waste water disposal system indicated that the costs were out of line with other possible alternatives investigated in more detail. The in-Valley reclaimed water distribution system was

5-60 255

therefore abandoned as a possible total solution to the problem. The idea of utilizing water on an "as needed" basis was not abandoned.

In the water budgeting procedure used, approximately 30,000 acre-feet (four times present usage) was allotted for in-Valley irrigation uses. Additional quantities can be made available. Any of the alternative plans proposed is flexible enough to permit this usage to the optimum amounts required.

2. EXPORTATION — In terms of immediately alleviating the pollution problem in the Las Vegas Bay, one of the methods which comes to mind is the export of effluent from the Las Vegas Valley to adjoining valleys for either agricultural use or simply for the purpose of removing the flows from Las Vegas Wash. Unfortunately, by approximately the year 1985, it will become necessary to reclaim waste waters to meet needs within the Valley. Because of this need, capital facilities built for the purposes of exporting waste waters from the Las Vegas Valley would in general have a short useful life. Nevertheless, the export plan for disposing of treated waste waters into adjoining valleys was investigated. Transportation and disposal of these waters in Dry Lake Valley, El Dorado Valley, Pahrump Valley, Hidden Valley, and the Jean Lake area were evaluated. Consideration was given to maximizing possible agricultural benefits from the use of exported water. On the basis of the preliminary evaluations of these plans, it became evident that exportation to the Pahrump, Hidden Valley and Jean Lake areas was prohibitively expensive as compared to the Dry Lake and El Dorado Valley areas. Therefore, the first three possibilities were not given detailed analysis, but one of the alternative plans presented in the report explores the export of treated effluents to the Dry Lake and El Dorado Valley areas for a time lapse between now and the time when it becomes necessary to reclaim the effluent for use within Las Vegas Valley or for the acquisition of additional credits on Nevada's water allotment.

3. PONDING AND RECREATIONAL LAKES — The possible utilization of treated waste waters for ponding to evaporation or for use as recreational lakes was considered on a preliminary basis. If these lakes were to serve as a disposal means, the surface area of the lakes must be sufficient to provide for the disposal of the effluent by evaporation to the atmosphere. This would require a surface area in excess of 20,000 acres based upon local evaporation rates. It is, in effect, a wastage of the water which would be needed as water supply in the Valley after the year 1985. The lakes themselves would have to be well sealed so the water could not find its way by underground seepage into the Colorado River picking up large amounts of salts, such as chlorides, to contribute additionally to the Colorado River Water System. Assuming that waters placed in these recreational lakes were not treated for the removal of nutrients, significant algae problems would result. If the reclaimed water lakes were to be used for anything other than ornament, such as body contact sports, some tertiary treatment of the effluent water would be needed. It was felt that from the standpoint of recreational waters the main body of Lake Mead offers superior facilities to anything that could be provided by recreational lakes utilizing reclaimed water.

4. GROUNDWATER RECHARGE — The utilization of suitably treated effluents for recharging the groundwater basin has many advantages. Unfortunately, at the present time, not enough is known about the characteristics of the groundwater basin underlying the Las Vegas Valley

to state positively that this alternative is acceptable. However, on the assumption that it is physically possible to recharge to the groundwater basin with a suitably prepared waste water effluent, an economic analysis was made regarding this possibility. It is apparent that it presents definite advantages. These are in the form of capacity for storing large quantities of water and favorable economic features. The report recommends that a detailed groundwater investigation be launched by the agency achieving management authority for the groundwater resource and that this program be expedited with the idea of attaining definitive results before the year 1980. A decision can be made by that time relating to the feasibility of a groundwater recharge as opposed to other alternative plans outlined.

All possibilities outlined above use effluent either in the condition currently produced by treatment plants operated by the City of Las Vegas and the Clark County Sanitation District or use this effluent with minimal additional treatment. Other alternatives which visualize the discharge of a highly treated water into Lake Mead at Las Vegas Bay, into the Colorado River below Hoover Dam or into the potable water system were investigated. These alternatives require considerable additional treatment over that outlined for previous alternatives.

For discharge to the Colorado River below Hoover Dam or to Lake Mead, under the State of Nevada Health Department's 1973 Standards, additional treatment is necessary to remove phosphorus and nitrogen from waste water flows. Utilizing this approach to treatment of the effluent has disadvantages in terms of capital and operating costs needed to maintain the tertiary treatment facilities required for the removal of nutrients. On the other hand, once these flows are treated, they are relatively inexpensive to dispose of. The return flows to the Colorado River System should establish credit to increase Nevada's allotment of water from the River System, thus solving the problem of water supply after the mid 1980's. Tertiary treatment of the waste waters in order to reduce the nutrients discharged should alleviate substantially, although not cure, the pollution problem in Las Vegas Bay. If discharges are permitted to the Colorado River below Hoover Dam this offers maximum possible relief to the Las Vegas Bay problem while providing a satisfactory and realistic means of treated waste water disposal.

In order to meet the 1980 requirements as set by the Nevada State Board of Health, it is necessary to embark upon a demineralization program for the water in addition to tertiary treatment to remove phosphorus from the secondary effluents before it can be discharged into Lake Mead. Analysis of this possibility has been included in the proposed alternatives.

The desalinization system to meet the total 1980 requirements could be any one of a number of methods. It should be realized that distillation plants now in operation in many parts of the world are relatively small as compared to the capacity of the plant which will be required to care for the effluent waste waters generated within the Las Vegas Valley. For example, alternative plans presented indicate that the first unit of a desalinization plant, when built, should be on the order of one hundred million gallons per day, a substantial increase in size over any plant currently in existence. There are four different desalting processes which presently show promise: multiple effect distillation, membrane filtration, mixed bed ion exchange, and reverse osmosis. Cost estimates presented in the economic analysis concerned with the desalinization process are assumed to be

adequate to care for any one of these processes finally selected. At the present time, the distillation process has had most operational experience. Any of the above with plants having been installed in San Diego, Guantanamo Bay, in the near East, and around the Persian Gulf, to mention a few locations.

All of the desalting processes will require massive amounts of power either from a direct heat source such as a fossil or nuclear fuel or from an electrical power source. The pros and cons of installing fossil fueled direct heat plants, fossil fueled electrical plants, nuclear fueled direct heat plants or nuclear fueled electrical plants has not been investigated in detail. However, it is obvious that the installation of any of these plants to provide large quantities of power offers additional problems from the standpoint of new requirements for cooling water, new possibilities of air pollution, and/or new possibilities for thermal pollution in the area.

It would appear that if the monies were spent toward a desalinization process of whichever type, in order to produce a water capable of meeting the 1980 State Health Board Standards, that it would be unwise to return this water back into Lake Mead to become degraded by the Lake Mead water. It would appear more feasible and economical to mix this demineralized water with the Lake Mead supply to produce better quality water for domestic consumption within the Valley. Alternatives investigated evaluate the cost of conveying the demineralized water to Lake Mead or to a point just before the water filtration plant on the Southern Nevada Water Project. From this point, such waters could be mixed and readmitted to the potable water system within the Valley.

ALTERNATIVE PLANS EVALUATED

After considering all possibilities advanced relating to the total management of the water resource for the Las Vegas Valley and relating to the treatment and disposal of waste waters generated within the Valley, four alternative plans of action were formulized and evaluated on a comparative basis. Unit costs for waste water disposal and water resource development for each of the programs were developed. The attempt was made to present each of these programs in sufficient detail so the documentation presented in Chapter 16 of the Phase II Report could be utilized to analyze the plans as presented; could be up-dated on a continuing basis through the years to take account of changing conditions or changing technology; or could be used as a set of building blocks by agency management and staff to evaluate modified programs. It is hoped that the serious students of this problem will take the time to thoroughly study and evaluate the data documenting the proposed alternatives as presented in Chapter 16. With this information in mind, almost any rearrangement or departure from the plans outlined can be analyzed and evaluated. The four alternative plans each contain elements of two or more of the possibilities previously considered. Each plan is flexible enough to accommodate changing conditions during the planning period and to provide for demands in water usages during these periods.

Each of the plans proposes the collection of effluent from the treatment plants in the City of Las Vegas, the City of Henderson, the Clark County Sanitation District, and the BMI industrial complex at a central point. It is further assumed that the difficult industrial wastes produced in the Henderson complex or by other industries in the Valley will be isolated either for separate treat-

ment and disposal, or will be pre-treated so that these wastes will not produce an undue burden on the total treatment plant process when blended with other discharges. After collection at a central point, the waste waters will be treated to the degree necessary as visualized in each of the following alternative plans, and after treatment, will be discharged in the manner outlined.

1. GROUND WATER BASIN RECHARGE ALTERNATE (INJECTION WELLS)

The possibility of treating waste waters to the degree necessary to inject these waters in the underground basin as a means of both waste water disposal and water resource management was investigated on the basis of the assumption that this operation could be accomplished. At the present time, it is not certain that this can be done since not enough is known about the geologic and hydrologic characteristics of the groundwater basin. Because of the favorable economics indicated for this system, a more detailed investigation and evaluation of the groundwater basin has been outlined in Chapter 18 of the Phase II Report. If before 1980, the practicality of recharging the groundwater basin can be established, this alternative may well be a major part of the program from that point forward.

The groundwater recharge alternate as evaluated visualizes the construction of a filtration system to follow the secondary biological treatment of wastes. From the filtration element of this system, waste waters would be conducted through a pump station and pipeline to a series of injection wells located at the higher elevations in the westerly portion of the City of Las Vegas. Through these wells, water would be injected into the underground basin for later withdrawal by pumps for use in the potable water system. In planning the program, injection wells and filtration plant increments were staged to meet the growing demand during the planning period. The estimated unit cost for treating and disposing of waste waters in this fashion, such cost being over and above the cost of secondary biological treatment, is estimated to range from \$225 per million gallons to \$338 per million gallons during the period discussed.

2. EXPORTATION TO EL DORADO AND DRY LAKE VALLEYS, PLUS DESALTING ALTERNATE

Exportation of secondary effluent to the El Dorado and Dry Lake Valleys for irrigated agriculture in the El Dorado Valley and for disposal to evaporation in the Dry Lake Valley offers advantages relating to low initial cost and to an immediate cessation of adding nutrients to the Las Vegas Bay. This plan, however, takes volumes of water from the Las Vegas Valley for disposal elsewhere and must be modified in the mid-1980's to meet the anticipated need for reclaimed waste waters as a source of water supply at that time. The plan, therefore, visualizes the installation in 1985 of both a desalting plant and a tertiary waste treatment plant to remove phosphorus and to pre-condition the water prior to it being demineralized. This plan proposes the immediate construction of a pipeline export system to Dry Lake Valley which would be later used as a pipeline to dispose of the waste brines, that is, streams with high salt concentrations generated through the operation of the desalting plant. This element of the system then, would be used continuously. Furthermore, the plan proposes immediate construction of an export system to El Dorado Valley together with agricultural storage reservoirs and percolating ponds to utilize this water for agriculture. This facility to the El Dorado Valley would be expanded to its maximum capability through addition of pumps and modifications to the agricultural system by the year

1983. From 1985 on, this system would be utilized to a steadily lesser extent because of the need for water in the Las Vegas Valley. By the year 2000, it is anticipated that the export system to El Dorado Valley and any agricultural economy which it may have generated would be phased out completely. This element of the plan, that is, developing and then collapsing an agricultural economy in the El Dorado Valley, is not a desirable feature. The tertiary treatment plant and desalting plant which would be started with incremental construction in 1985, could be expanded by steps to care for increased water needs of the Las Vegas Valley to the year 2000. This combined plan, which incorporates features of export, agricultural use of secondary effluent, and later desalting of the waste water for use in the potable water system or conveyance to Lake Mead, would cost from a low of \$103 per million gallons when the export system is operating at maximum efficiency to a high of some \$650 per million gallons at the end of the planning period.

3. LAS VEGAS VALLEY WASTE WATER COLLECTION AND TREATMENT SYSTEM ALTERNATE

The Las Vegas Valley Waste Water Collection and Treatment System Alternate calls for the collection of waste flows at a common point and installation of a tertiary treatment plant for removal of phosphorus and nitrogen to be consistent with the recommended standards for disposal at a point in the Colorado River below Hoover Dam. After the treatment (phosphorus and nitrogen removal) the flow would be conveyed through canals and pipelines by gravity to a point below Hoover Dam where it would be discharged into the main stream of the river. The economics of this plan are predicated on the assumption that the standards recommended for discharge at this point would be judged satisfactory. Should standards of a sharply different nature be set, a different type of treatment would have to be used. Based on these assumptions, however, this plan has many advantages. It offers the most positive relief for the pollution problem in Las Vegas Bay. It operates primarily by gravity, eliminating the need for extensive pumping as in the case of the export plan and the recharge plan. It avoids the need for an expensive and possibly objectionable power source for the desalting process. By transmitting this water, adequately treated, to the Colorado River System, the entitlement of the State of Nevada would be increased and the future water supply problem of the Valley cared for. Because this water will be conducted around Hoover Dam rather than through it there are some possibilities that a reduction in total generation of power at Hoover Dam may result although Nevada's percentage of the total generation should not be affected. This alternate has the additional possibility of the installation of a small hydro-electric generating plant at the point where the waste stream would drop into the River. Such hydro-electric generating feature is not an integral part of this alternative but should be judged strictly on its

own merits as an added feature.

This alternate would require immediate construction of the channel from the common waste water treatment plant to the point of discharge below the Dam. A tertiary treatment plant for removal of phosphorus and nitrogen would be installed at the common collection point. Expansion of the tertiary plant would be phased to keep pace with growing population. Costs of disposal and treatment of waste water under the Las Vegas Waste Water Collection and Treatment System are estimated to vary from a low of \$163 per million gallons to a high of \$217 per million gallons in the year 2000. The economy of this plan is due first to relatively low initial cost, but probably more importantly to the fact that it is a gravity operated system. If the hydro-electric plant were installed, resulting revenues would reduce the total cost of the program, although in minor amount.

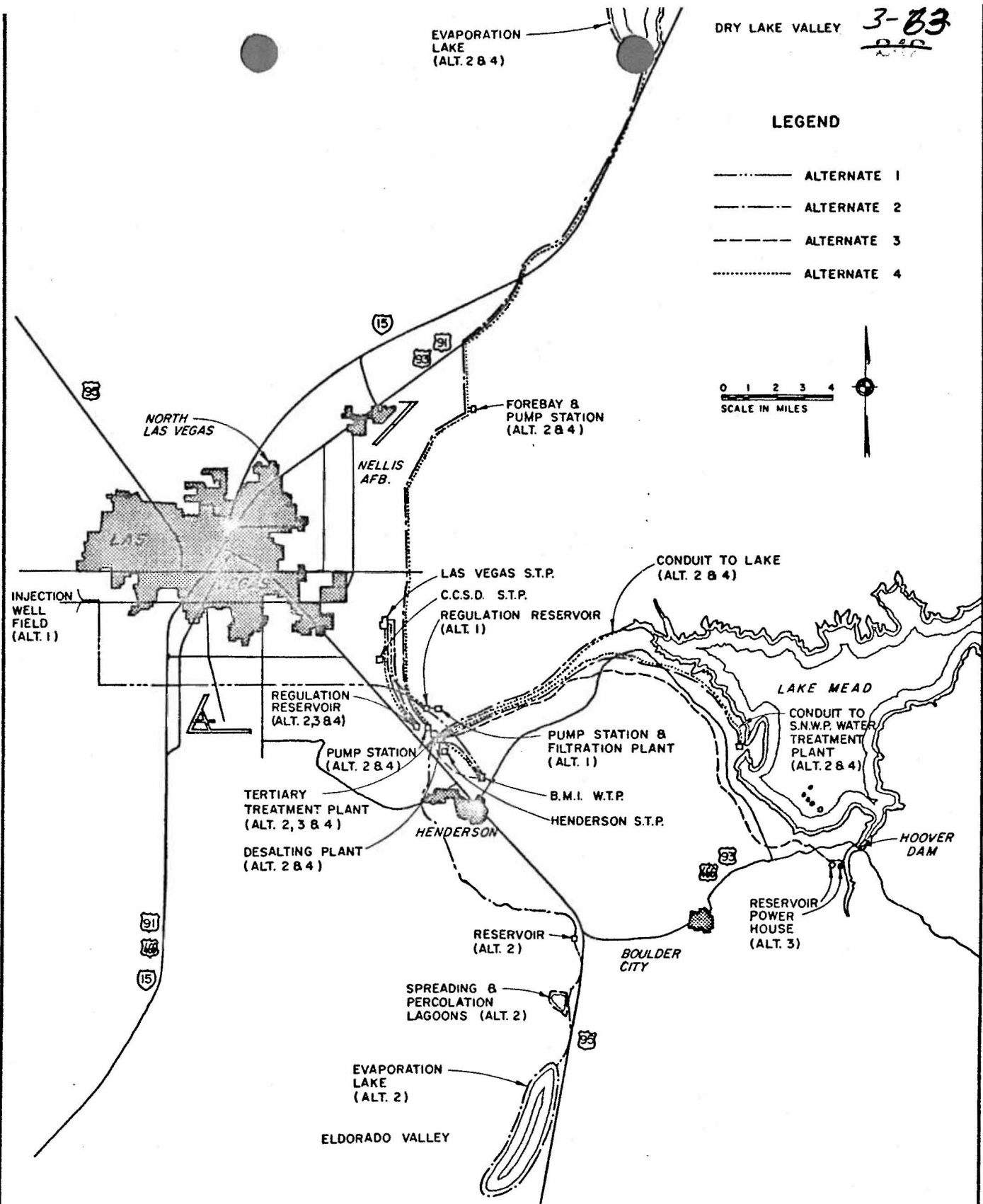
4. COMPLETE TREATMENT ALTERNATE

If the waste waters are to be discharged to Lake Mead in accordance with the recently promulgated standards for discharge into Las Vegas Wash, it will be necessary to provide for complete treatment of the waste stream including desalting by the year 1980. The Complete Treatment Alternate Plan visualizes again the collection of waste streams at a common point and the construction of a tertiary plant designed to remove the nutrients in accordance with the 1973 standards. At the same time, the export line to Dry Lake would be built and utilized for the purpose of wasting effluent rather than giving it tertiary treatment, until a desalting plant is constructed to meet 1980 requirements. At that time, the export line to Dry Lake would be used as a waste line to dispose of the brine generated in the desalting process. In addition, this line could be used to export industrial waste waters which might be harmful to the normal tertiary and desalting treatment processes. In the period of 1973 to 1980, it is anticipated that effluent produced with nutrient reduction would be discharged into Las Vegas Bay. After 1980, when the desalting plant is installed, the effluent could be discharged either into Las Vegas Bay or conducted to a point on the Southern Nevada Water Project System for incorporation into the potable water system. This alternate has the advantage of providing the most complete treatment possible with present technology, and providing after 1980, a product of high quality water which would be utilized to improve the quality of the potable water being served within the Valley. Costs of this process for treating and disposing of the water are estimated in the range of \$200 per million gallons before the desalting plant is installed in 1980. From that time, costs range from a minimum of \$514 per million gallons to \$657 per million gallons in the year 2000. Summarized below are salient features of the economics of the four plans discussed.

SUMMARY OF COMPARATIVE COSTS FOR ALTERNATIVE PLANS
(PERIOD 1971 - 2000) (THOUSANDS OF DOLLARS)

BASIS	GROUNDWATER BASIN RECHARGE	EXPORTATION TO EL DORADO & DRY LAKE DESALT EFFLUENT TO:		LAS VEGAS VALLEY WASTE WATER COLLECTION & TREATMENT SYSTEM		COMPLETE TREATMENT DESALT EFFLUENT TO:	
		LAKE MEAD	SNWP T.P.	BASIC SYSTEM	WITH POWER PLANT	LAKE MEAD	SNWP T.P.
INITIAL CONSTRUCTION COSTS	\$31,382	\$20,874	\$20,874	\$18,616	\$21,309	\$25,826	\$25,826
PHASED CONSTRUCTION COSTS	19,992	148,057	151,829	7,460	9,981	101,018	104,091
TOTAL CONSTRUCTION COSTS	51,379	168,931	172,703	26,076	31,290	126,844	129,917
SUMMATION OF ANNUAL COSTS FOR WASTE WATER DISPOSAL	267,921	369,879	372,254	184,696	182,629	506,242	511,807
PRESENT WORTH (1970) - SUMMATION OF ANNUAL COSTS FOR WASTE WATER DISPOSAL	115,570	131,421	133,260	81,179	80,132	204,331	206,576
SUMMATION OF NET COMPARATIVE ANNUAL COSTS OF WASTE WATER DISPOSAL & WATER DEVELOPMENT	625,435	813,540	802,853	635,440	632,373	955,685	937,368
PRESENT WORTH (1970) - SUMMATION OF ANNUAL COSTS FOR WASTE WATER DISPOSAL & WATER DEVELOPMENT	\$264,380	\$317,152	\$313,617	\$269,590	\$268,219	\$392,281	\$385,218

3-83
219



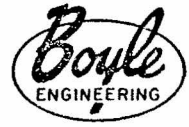
LEGEND

- ALTERNATE 1
- - - - - ALTERNATE 2
- · - · - ALTERNATE 3
- · · · · ALTERNATE 4

0 1 2 3 4
SCALE IN MILES

- ALTERNATE 1 GROUND WATER BASIN RECHARGE
- ALTERNATE 2 EXPORTATION TO ELDORADO AND DRY LAKE VALLEYS PLUS DESALTING
- ALTERNATE 3 LAS VEGAS VALLEY WASTE WATER COLLECTION AND TREATMENT SYSTEM
- ALTERNATE 4 COMPLETE TREATMENT

SUMMARY OF ALTERNATES



CORNELL,
HOWLAND,
HAYES &
MERRYFIELD

CONSULTING ENGINEERS
1209 SOUTH COMMERCE STREET
LAS VEGAS, NEVADA 89102

7 Exhibit "G"

Based on the figures shown in the table, it appears the most advantageous system from the standpoint of economics is the Valley Waste Water Collection and Treatment System. However, it must be remembered that the cost of this system is predicated on the assumption that nutrient removals for discharge below Hoover Dam comparable to the State Board of Health 1973 Lake Mead Standards, will be satisfactory. If the impact of the alternative plans outlined herein is incorporated with the cost of water supply to the Valley, the Waste Water Collection and Treatment System still appears to be the most desirable alternative. The groundwater basin recharge program (if proven to be physically feasible) could be on a par with the Waste Water Collection and Treatment System.

<u>Cost of Addition Treatment And Disposal</u>	<u>Use Per Year Per Household</u>	<u>Cost Per Year Per Household</u>	<u>Cost Per Month Per Household</u>
<u>\$/mg</u>	<u>(mg)</u>		
150	0.16	\$24.00	\$2.00
300	0.16	48.00	4.00
450	0.16	72.00	6.00
600	0.16	96.00	8.00

MANAGEMENT AND FINANCING

The complexity of the water quality control problem and the close inter-relation of the various elements of the problem make it highly desirable that a single agency be given the responsibility and authority for basin-wide management of the total water resource. This resource includes the groundwater, imported Colorado River supply, and reclaimed waste waters. The agency responsible should be in a position to manage these supplies to benefit the total area and to assess costs of operation equitably among those benefited according to the benefits received. This concept will obviously require the shifting and redefinition of authority among the currently constituted state and local agencies within the Valley. Failure to centralize this authority will pose a substantial task of continuing coordination.

It is imperative that a management agency be designated in the near future and supplied with a competent staff to pursue the execution of the program outlined in this report, either in accordance with the recommended plan, one of the other alternatives presented, or a variation. The management agency must also have the authority and responsibility to evolve a financing program. Financing of the program is assumed to be through issuance of bonds for the construction of capital facilities and through levying of use charges for repayment of these bonds and operating expenses. The exact structure of the capital improvement funding and the rate charging to carry operating expenses cannot be defined until the management agency has been selected.

Until the organizational structure of the program management has been set, rate structures and mechanics of collection are a matter of speculation. However, to give some idea of the financial impact on the community, the following tabulation has been made to reflect the costs to an "average household." The average household is defined as a home having 3.5 occupants, each contributing about 125 gallons of waste water per day. This results in an annual waste water contribution of 160,000 gallons. The 125 gallon per capita figure provides allowance for infiltration, unused system capacity, and other factors.

The above cost to the householder can be compared against existing average rates of about \$2.25 per month for sewage collection and secondary treatment. The figures shown above would have to be added to current charges, thus raising monthly charges to the householder from the current \$2.25 per month to the range of \$4.50 to \$10.00, depending upon the alternate selected, the rate schedule adopted, and the federal assistance available. If the Las Vegas Valley Waste Water Collection and Treatment System plan is adopted, as outlined in the Phase II Report, the cost per month for an "average household" would be on the order of \$2.50 per month during the period discussed. This lower cost is one reason for this plan being recommended by the authors.

RECOMMENDATIONS

The following recommendations are offered:

1. That an agency be selected to be responsible for management of water resources and water quality control in the Las Vegas Valley. This selection should be made as soon as possible to permit rapid progress toward solution of present water quality problems of Lake Mead.
2. That the alternate plan "Las Vegas Valley Waste Water Collection and Treatment System" be adopted as the preferred course of action.
3. That a financing program be adopted and implemented.
4. That a groundwater basin investigation and testing program, as outlined, be undertaken as soon as possible.
5. That application be made for Federal funds to help finance the necessary capital improvements required to meet the July 1, 1973 deadline imposed by the Nevada State Board of Health.
6. That consultants be retained to begin preparation of contract documents for construction of required facilities as soon as practicable.

LAS VEGAS VALLEY WATER DISTRICT

3700 WEST CHARLESTON BOULEVARD
BOX 4427 P. O. ANNEX
LAS VEGAS, NEVADA 89102
TELEPHONE 870-2011

177

March 25, 1971

The Honorable James I. Gibson
Legislative Counsel Bureau
Legislative Building
401 South Carson Street
Carson City, Nevada 89701

Dear Mr. Gibson:

Directors of the Las Vegas Valley Water District are vitally concerned about suggested legislation which would remove them from administrative control of the District and place this responsibility with the Board of County Commissioners.

It is our understanding that, on the morning of March 22, 1971, prior to a hearing before a joint committee of the Senate and Assembly, a closed meeting of the City and County Commissioners was held for the purpose of developing methods and means for obtaining control over the Water District and, thereby, control of water production, distribution and sales in the Las Vegas Valley. The result of this meeting was a joint resolution to petition the legislature to designate the Board of County Commissioners as ex-officio directors of the Water District.

Statements made by City and County officials before the Senate and Assembly joint committee, as well as newspaper quotes attributed to those officials, imply that it is the intent of the City and County to share in wholesaling and retailing of water and in revenues generated from water sales. The details of any agreement between the City and County have not been released to the public nor, to our knowledge, to the legislature.

It appears evident that City and County interest in the Water District is primarily for revenue and not the public welfare. A recent newspaper article quoted a City official as stating that an increase in water rates of three cents per thousand gallons would provide the City with an additional \$500,000 in revenue.

Water District bond covenants require that all money received from water sales or other sources be deposited in specified bank accounts. Use of this money is restricted. In support of these statements, we submit the following authority:

RESOLUTION OF THE BOARD OF DIRECTORS OF THE LAS VEGAS VALLEY WATER DISTRICT PROVIDING FOR THE ISSUANCE OF BONDS OF THE LAS VEGAS VALLEY WATER DISTRICT, FIXING TERMS AND CONDITIONS THEREOF AND COVENANTS RELATING TO PAYMENT OF SAID BONDS AND THE HANDLING OF FUNDS.

Exhibit "H"

The Honorable
James I. Gibson

March 25, 1971

Page 2

Section 12. Equality of Bonds, Pledge of Revenues

"All of the revenues of the District, after payment of costs of operating and maintaining the works and properties and the general expense of the District, are hereby pledged for the security of the bonds and such revenues and any interest earned on such revenues shall constitute a trust fund for the security and payment of the bonds and the interest thereon. Said revenues and the funds derived therefrom shall be used only as permitted under the terms of this resolution and Chapter 167, Statutes of Nevada, 1947, as amended and supplemented."

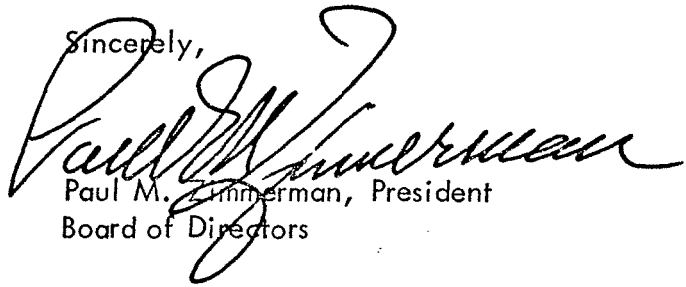
Covenant 6

"That no water or other service from the works or properties of the District may be furnished or rendered by the District to any city, town, county, public corporation or political subdivision of the State of Nevada free, nor shall any such service be rendered at lower rates than those charged other persons for similar services."

The resolution of issuance and bond covenants further designates specific accounts in which funds shall be deposited and disbursed. Any and all surplus funds remaining after authorized expenditures must be used to redeem bonds.

Should the suggested legislation be enacted and if the City or the County diverted any funds whatsoever of District revenues for unauthorized purposes, a bond-holders' suit would be invited. We need not comment on the impact such a suit would have on the credit of the entire state.

Sincerely,



Paul M. Zimmerman, President
Board of Directors

cc: The Honorable Hal Smith

Exhibit "H"

MEMO TO THE MEMBERS OF THE GOVERNMENT AFFAIRS COMMITTEE
FROM HAL SMITH, CHAIRMAN

RE: SB 386 - Modifies procedure for payment of state group
insurance premiums.

This bill was passed out of committee on 3-17-71 with a
DO PASS recommendation.

Lillian Bergevin, Chairman of the State Employees'
Insurance Committee and tells me that the state employees want
a limit of \$8.54 per employee as the state contribution and
feel that all other political subdivisions should also be limited
to this amount. She feels that if other local governments pay
more of the share the state employees will be unhappy.
She presented me with a copy of an Attorney General's opinion
that says that no political subdivision can pay more than
this amount.
See attached copy.

We will try to have the bill re-referred back to committee
to discuss this bill in more detail.



2-217

STATE OF NEVADA
OFFICE OF THE ATTORNEY GENERAL
SUPREME COURT BUILDING
CARSON CITY 89701

ROBERT LIST
ATTORNEY GENERAL

February 4, 1971

Miss Lillian Bergevin
Chairman
Group Insurance Committee
Department of Health,
Welfare and Rehabilitation
Division of Health
Carson City, Nevada 89701

re: State Group Insurance Plan

Dear Miss Bergevin:

This is in reply to your request for an opinion dated February 1, 1971, concerning local governments participating in the State group insurance plan established under NRS Chapter 287.

The question you have asked is whether it is mandatory for any county, city, school district or other political subdivision to pay an employer's share which is identical to the amount paid by the State under NRS Chapter 287.

The Committee on Group Insurance as established by NRS 287.041 is directed to purchase insurance policies in NRS 287.043, subsection 3; which reads as follows:

"3. Purchase policies of life, accident or health insurance, or any combination thereof, from any insurance company qualified to do business in this state for the benefit of all eligible state officers and employees who elect to participate in the state's group insurance program."

The Committee is further authorized to negotiate and contract with local governing bodies for participation in the State

See
Health Div.

Miss Lillian Bergevin
February 4, 1971
Page Two

Plan under subsection 2 of NRS 287.043. The local governments are authorized to negotiate and contract with the State Committee under NRS 287.025, which reads as follows:

"The governing body of any county, school district, municipal corporation, political subdivision, public corporation or other public agency of the State of Nevada shall have, in addition to the other powers granted in NRS 287.010 and 287.020, the power to negotiate and contract with any other such agency or with the committee on group insurance for the state group insurance plan to secure group insurance for its officers and employees and their dependents by participation in any group insurance plan established or to be established or in the state group insurance plan."

Chapter 287 of NRS leaves two options to local governments; that is, establish their own plan under NRS 287.010 and NRS 287.020, or enter the State's plan. If a public agency elects to enter the State plan it is required to pay the State's share at the cost of premiums as set out in NRS 287.046, which reads:

"Any state or other participating officer or employee who elects to participate in the state's group insurance program shall be entitled so to participate, and the department, agency, commission or public agency which employs such officer or employee shall pay the state's share of the cost of the premiums of such group insurance from funds appropriated or authorized as provided in NRS 287.044. Employees who elect to participate in the state's group insurance program shall authorize deductions from their compensation for the payment of premiums on such insurance." (Emphasis supplied)

All participating public agencies in the State's group insurance plan are required to pay the same amount of the pre-

Miss Lillian Bergevin
February 4, 1971
Page Three

mium that is paid by the State.

Yours very truly,

ROBERT LIST
Attorney General

By: Julian C. Smith, Jr.
Deputy Attorney General

JCS/cw



2-220

STATE OF NEVADA
DEPARTMENT OF HEALTH, WELFARE, AND REHABILITATION
DIVISION OF HEALTH
CARSON CITY, NEVADA 89701

March 12, 1971

Honorable Hal R. Smith
Chairman, Committee on Government Affairs
Nevada State Assembly
Carson City, Nevada

Dear Mr. Smith:

I have been advised that Senate Bill 386 has been referred to your Committee for consideration. As Chairman of the Committee on State Group Insurance, I would appreciate an opportunity to discuss this bill with you and your Committee.

I will make time available any time it is convenient for you. Please call me at 882-7458.

Sincerely,

A handwritten signature in cursive script that reads "Lillian Bergevin".

Lillian Bergevin, Chairman
Committee on State Group Insurance

LB:dc

As a result of our presentation to the Assembly Committee on the Dodge Act, an alternative to arbitration was requested. The attached is suggested, a summary of which follows:

- A. Factfinding will be delayed until after the tentative budget date.
- B. Negotiations would be required after factfinding, with a mediator available as needed.
- C. If no agreement is reached, both sides present their case to the City Commission.
- D. If the employee organization does not agree with the Commission's decision, a vote of the people is authorized at the next scheduled election. The ballot question must specifically indicate the source of such funding necessary to implement the proposal with the source determined by the governing body (City Commission for Las Vegas). There will also be a means for both sides to present their position to the public before the vote.

SECTION 16 NRS 288.190 is hereby amended to read as follows:

- 288.190 1. The parties shall promptly commence negotiation. If an impasse should arise or it appears that one might arise, the parties or either of them, may so notify the board and request the services of a mediator. The board shall, within five (5) days, appoint a competent, impartial and disinterested person to act as mediator for the entire negotiation process as his services are requested. It is the function of such mediator to promote agreement between the parties, but his recommendations, if any, are not binding upon an employee organization or the local government employer.
2. If a mediator is appointed, the board shall fix his compensation. The services of the mediator including, if any, actual and necessary travel and subsistence expenses, shall be provided by the board.

Section 17 NRS 288.200 is hereby amended to read as follows:

- 288.200 1. If any impasses remain after the tentative budget date it is the duty of the mediator, or any party, to so notify the board and explain the nature of the impasse. It is then the duty of the board to determine if factfinding should be called for and to so notify the parties involved by February 22nd. The parties involved shall then appoint one member each to the factfinding panel who shall then select a third member to act as a chairman by February 26th. If they fail to do so the board will appoint the third member by February 28th. The factfinding panel so empowered shall find its facts in relation to all employee organizations negotiations in process at that time.
2. The local government employer shall pay one-half of the costs of factfinding and the employee organization or organizations shall pay one-half.
3. The factfinding panel shall report its findings and recommendations to the parties involved, the mediator and

the board by March 10th. These findings are not binding upon the parties, but if within five (5) days after the panel has so reported the parties have not reached an agreement, the panel shall make its findings public.

4. Upon receipt of the factfinding report the parties shall promptly commence daily negotiations for the resolution of differences based on the factfinding report. The mediator shall remain available to both parties during these negotiations.
5. On the 4th Tuesday of March at the public hearing on the budget, the Chief Administrative Officer of the public employer involved shall submit a copy of the findings of fact, the agreed upon issues and his solution for any remaining disputed issues to his governing body. The employee organization (s) shall submit their recommendations for the solution of any remaining issues at the same meeting. The governing body shall then make the final decision on the disputed issues by April 1st.
6. If the employee organization is not in agreement with the governing body's decision they may call for a vote of the people at the next scheduled election for a yes or no vote on their proposed solution. In any proposed solution that calls for additional funding in any form, the ballot question will specifically indicate the source of such funding determined by the governing body. Such a call will be done by notifying the governing body in writing, within five (5) days of its announced decision. In the event that the next scheduled election is after the beginning of the fiscal year, the governing body's decision shall be final and binding until after the election and no retroactive benefits will be awarded. Any cost involved in placing the question on the ballot shall be split equally amongst the parties involved. Nothing in this section shall be construed so as to eliminate the possibility of the parties involved from reaching a negotiated settlement prior to said election. All parties involved in any election under this act shall inform the public of the reasons for their respective positions.

STATE OF NEVADA



2-224

Employees Association, Inc. / Post Office Box 1016 - Carson City, Nevada 89701
Phone 882-3910

March 22, 1971

Honorable Hal Smith, Chairman
Committee on Government Affairs
Legislative Building
Carson City, Nevada 89701

RE: AB 567

Dear Mr. Smith:

The purpose of AB 567 in promoting additional training and study by public employees appears valid. There does not appear to be any substantial addition to retirement system liabilities.

I believe the purpose could be strengthened and administration simplified if the following amendments were adopted:

1. After the word "system" in Line 10 add the following phrase: "within 3 months after completion of the course of study or training".
2. Add the following sentence after "period of leave" in Line 12: "The employer shall notify the retirement board at the start of the leave of absence concerning the nature of the leave, it's relevance to the duties of the employee, and the period of time to be covered by the leave".

Sincerely,

(Signed)

KENNETH BUCK, Consultant
2210 Ward Place
Reno, Nevada 89503

cc: All Committee Members
Mr. Schofield

KB/kr



STATE OF NEVADA

Employees Association, Inc. / Post Office Box 1016 - Carson City, Nevada 89701
Phone 882-3910

March 22, 1971

Honorable Hal Smith, Chairman
Committee on Government Affairs
Legislative Building
Carson City, Nevada 89701

RE: AB 552

Dear Mr. Smith:

AB 552 permits any veteran of wartime service to purchase up to 4 years of retirement credit after 10 years of public service in Nevada by paying the contributions for such years at the "contribution rate of the 10th year". (This should undoubtedly be "salary rate" as the contribution rate is set at a percentage by statute.)

At the present time, retirement credit is given without charge for veterans who entered the armed forces from employment with participating members of the system and returned to covered employment within 12 months (18 months under certain circumstances) after discharge. This assures that persons whose career in the public service in Nevada was interrupted by service in the armed forces will not be penalized by virtue of such service.

AB 552 will permit any veteran, from any state, to buy 4 years of time. At the present time the average person entering into retirement can expect to receive close to \$11 for each \$1 of personal contributions. If he had paid both employer and employee contributions he would receive about \$5.50 for each \$1. This bill proposes a bonus in this proportion for military service from any state at the expense of the Nevada retirement system.

To the best of my knowledge other states will not accord such privileges to a Nevada veteran. It is reminiscent of the \$1,000 property tax exemption which the legislature, some years back, was finally forced to limit to Nevada veterans.

We believe the bill should not be adopted. I will request that I be invited to appear before the committee if a hearing is held thereon.

Sincerely,

(Signed)

Kenneth Buck, Consultant
2210 Ward Place
Reno, Nevada 89503

KB/kr