

Summary Minutes of the Nevada Board for Financing Water Projects

Meeting of September 20, 2007

Held at the Legislative Building, 401 S. Carson St., Carson City, Nevada

Members Present:

Bruce Scott, Vice Chairman

Brad Goetsch

Bob Firth

Don Ahern

Jim Balderson (for Jennifer Carr, Ex-officio member)

A. INTRODUCTION AND ROLL CALL (Non Action)

The meeting was called to order at 9:30 am.

Bruce Scott chaired the meeting and is hereafter referred to as "Chairman Scott."

Chairman Scott noted the presence of new Board member, Don Ahern, and stated that he would give Mr. Ahern an opportunity to introduce himself and give some biographical background, but first he would like to read a letter from Kurt Kramer, Chairman of the Board. The letter, dated September 12, 2007, announced Mr. Kramer's resignation from the Board effective on that date.

Chairman Scott asked the Board to introduce themselves and asked the new member, Mr. Ahern, to give some background about himself. Mr. Ahern was born in Las Vegas and now resides in the Gardnerville area. He owns Ahern Rentals, with location in 11 states.

Others present associated with the Board at the hearing included Nhu Nguyen, Deputy Attorney General and Counsel to the Board, Adele Basham, Nevada Division of Environmental Conservation (NDEP), Michelle Stamates and Marcy McDermott (NDEP). Other NDEP personnel attending included Jim Larson, Bureau of Safe Drinking Water (BSDW) Las Vegas and Dana Pennington and Burt Bellows, BSDW Carson City.

(SEE SIGN IN SHEET FOR OTHERS ATTENDING)

Chairman Scott noted that he had a request to hear Agenda Item E.3, out of order and prior to E.2. When there was no objection, he said that the items would be heard in that order.

B. APPROVAL OF MINUTES - June 20, 2007 MEETING (Action)

When there were no comments or questions on the minutes of the previous Board meeting of June 20, 2007, Mr. Goetsch moved to approve the minutes as posted, Mr. Firth seconded, and the vote was unanimous in favor.

C. SET A DATE FOR THE NEXT BOARD MEETING IN DECEMBER (Action)

After discussion among the members and staff, the date of December 13, 2007, was agreed on by the Board, and will begin at 9:30 am.

D. DRINKING WATER STATE REVOLVING FUND (DWSRF) PROGRAM

(Ms. Basham gave a Powerpoint presentation with an overview of the DWSRF program. The presentation is contained in **Appendix 1**.) Chairman Scott asked if an Indian Tribe would qualify for the SRF loan. Ms. Basham stated that she was not sure but would get an answer to the question and notify the Board.

D.1. Discussion & possible approval of Revision 1 to the 2007 Project Priority List (Action)

Ms. Basham discussed the reason for Carson City's revised ranking and the 12 new projects that were added primarily to address arsenic issues (also included in Appendix 1).

Mr. Firth asked why the State is to grant exemptions to systems over 35 ppb and whether there were any funding implications for doing that? Ms. Basham answered that EPA guidance recommended, but did not require, that systems exceeding 35 ppb not be granted exemptions. NDEP concluded that EPA guidance was not necessarily reflective of the original intent of Congress. Mr. Balderson confirmed that this was correct, that these exemptions are allowed under the law. Mr. Firth commented that it seems when levels are that high, we should be concerned about granting exemptions. It doesn't seem appropriate from a water-quality standpoint. Mr. Balderson noted that those are the systems that NDEP is concentrating on to make the 2009 deadline. Chairman Scott added that a progressive movement toward compliance was more fiscally palatable, since so many of the systems with high levels are small systems, and there are limited resources. He complimented NDEP's approach.

Mr. Goetsch emphasized the need to gradually keep everyone moving toward compliance, as many small systems might still believe there was some way to avoid it. He was concerned that otherwise in 2009 there might be a sudden influx of requests without the capacity or funds to handle it. He asked about administrative action to compel forward movement.

Ms. Basham responded that a couple of years ago NDEP had added an "arsenic factor" on the priority list, which gave weight to higher arsenic levels when ranking applications. Also, BSDW has been giving notification and information to systems that have not submitted exemption applications, urging them to do so, or they would be referred for enforcement action.

In terms of the need for the Board to “meter out” the funds, Ms. Basham said it was something the Board might want to consider, and staff had information available on numbers of systems in various stages of the exemption and compliance processes.

Mr. Goetsch noted that the systems before the Board today were the proactive ones, but there were others that would do nothing unless under duress. The Board would not have the capacity or funds to handle a last-minute rush. He suggested letters detailing negative consequences.

Mr. Balderson outlined the steps being taken by NDEP to notify systems and inform them of the consequences of not taking action.

Ms. Basham noted the milestones that are established for action on arsenic to meet the 2009 deadline.

Mr. Goetsch summed up by wondering if some small systems believed they could wait until the last minute, get exemptions and extensions, and so avoid meters and rate increases for many years.

Ms. Basham summed up that there were eight new projects (included on table in presentation in Appendix 1) and gave some details on each.

Mr. Firth wondered about the almost \$9 million for Spring Creek Mobile Home Park. Ms. Basham noted that Spring Creek had not, yet, submitted the paperwork and that it is not a “mobile home park” but more a manufactured home community of 4,000 residents. The owners decided that they will not pursue SRF funding. In regard to arsenic remediation, some systems were in a preliminary stage and did not have a good cost estimate as yet, so she had provided one based on a spreadsheet taking various factors into account. In conclusion, a priority list workshop was held on September 12, 2007, and staff is recommending approval of Revision 1 to the Priority List.

Motion: Mr. Goetsch moved to approve Revision 1 to the 2007 Priority List and to approve the following resolution: A Resolution designated Revision 1 to Year 2007 Project Priority List Drinking Water State Revolving fund, Division of Environmental Protection, pertaining to the determination by the Board for Financing Water Projects of the State of Nevada to approve the priorities for determining which water systems will receive money from the account of the Revolving Fund as required in NRS 445A.265(3), making certain finding of fact and providing other details in connection therewith. Mr. Firth seconded. When the Chairman asked for further discussion or comment Mr. Firth asked for clarification of whether the changes discussed by Ms. Basham were included in the motion. Ms. Basham clarified that the resolution did not need to be updated. The vote in favor of the motion (including the resolution) was unanimous.

Chairman Scott noted that if the Board desired to support a letter to the State Environmental Commission expressing concern over arsenic exemptions it could be discussed at a later point in the meeting. He now moved down the agenda as agreed to Item E.3.

E. 3. Letter of Intent and Grant:
a. Lyon County Utilities for Crystal Clear (Action)

* Summary - Michelle Stamates

Ms. Stamates presented the following prepared remarks:

(BEGIN PREPARED REMARKS BY MICHELLE STAMATES [NUMBERS REFER TO SLIDE PRESENTATION])

(Slide presentation contained in Appendix 2)

APPLICANT: CRYSTAL CLEAR WATER SYSTEM

1, 2The Crystal Clear Water System is located off US Highway 95A in Lyon County, approximately 7 miles east of Yerington. Ownership of the system transferred to the Lyon County Utilities Department on June 1, 2006.

3Crystal Clear currently operates 2 production wells. There is no treatment process. Water is pumped and stored in a pressure tank before being sent into the distribution system.

4, 5, 6

7With average arsenic concentrations ranging from 42 – 47 micrograms/Liter, water from the wells exceeds the new drinking water standard. The water has a relatively high silica content which interferes with some arsenic treatment technologies. Also, the average concentration of fluoride in the production wells is 2.67 milligrams/Liter and is above the secondary maximum contaminant level of 2 milligrams/L.

Installing and operating treatment for arsenic and fluoride at the well head for the small number of active connections is not a preferred alternative based on both initial construction and continued operation and maintenance costs. The residents and the utilities operations staff also rejected the idea of point-of-use reverse osmosis units. Without 100% community buy-in, the POU system is not a viable option.

8Due to the proximity of Crystal Clear to the City of Yerington, consolidation of the systems appears to be a viable, non-treatment alternative. The City is currently pilot testing centralized arsenic treatment for its water system and plans to have treatment in place by approximately January 2009. A transmission main from the City to Crystal Clear would be approximately 6 miles long and would be located along the south side of Highway 95A. The majority of the property along this route is privately owned and has not, yet, been developed. In addition to an arsenic and fluoride compliant water supply, the Crystal Clear Water System is in need of appropriate water storage and system pipeline and appurtenances.

The City of Yerington and Lyon County Utilities have had discussions on the supply of water to and ownership and operation of Crystal Clear; however, a formal agreement is not in place at this time. The City will likely assume ownership of this system after the project is complete. The Board advocates cooperation and planning between water purveyors so that the per customer cost of constructing infrastructure and the water rates that the customers are paying remain affordable.

A customer using 15,000 gallons per month currently pays a total of \$55.56 per month. The water rate based on 1.5% of the median household income (\$32,216) is \$40.27 per month for residential users. The planned monthly water rate for Crystal Clear is \$65.00 for a usage rate of 15,000 gallons. The planned new base water rate is 2.4% of the MHI which is well above the Board's policy requirement for communities seeking grant assistance from this program.

Limited financial information is available for Crystal Clear, which just became an enterprise fund of Lyon County in 2006. The system is essentially broke at this time; however, based on the capital improvements recommended in the PER, rates will be established to assure the viability of the system. The Crystal Clear Water System has no outstanding loans or known debt.

9The total project cost is estimated to be approximately \$4.27M. In March 2007, the State Community Development Block Grant provided funding in the amount of \$170,000 to Lyon County Utilities for Crystal Clear Water System for the replacement of service lines, meter pits and meters within the Crystal Clear Water System. In July, Lyon County Utilities, on behalf of Crystal Clear, applied for and received loan and grant funding through the USDA for the maximum amount that the USDA would fund. This documentation of project financing was submitted with the letter of intent and includes a Letter of Conditions from the USDA and a Notice of Grant Award from the CDBG. The summary of secured and expected funding includes the following:

Funding Source	Amount
USDA RD Loan	\$500,000
USDA RD Grant	\$934,265
CDBG Grant	\$170,000
AB 198 Grant	\$2,663,635
Total	\$4,267,900

The current total for funding is less than the total estimated project cost due to an estimate error in the cost of the valves to be used on the up-sized (14-inch) pipe. This cost will need to be funded by the applicant as it is for future growth.

At the June 2007 Board meeting, the Board requested that an investigation be made into the potential interest from developers and individuals to connect to the proposed pipeline. The Lyon County Utilities spoke with the county's planning department and also with local real estate brokers and surveyors, and it appears that there has been no interest in development and the real estate market is very slow at present. The County cited several reasons they believe are affecting current interest in development: the County passed new requirements for subdivisions including paved roads, on-site storm water detention, and homes must be built above a certain elevation; with no sewer system in the area, larger lots are required to meet the septic density regulations; and the majority of the properties in this area do not have enough water rights to subdivide.

Staff supports the plan to connect the Crystal Clear Water System to the City of Yerington water system. Given the occurrence of arsenic and possibly fluoride throughout the valley region, this water transmission line from Yerington appears to be the most cost effective supply of water for Crystal Clear and other existing users in the area who may someday need to connect and for future development. According to the engineers, the minimum line size necessary to make the inter-tie is 12-inch. As growth is likely along the new length of pipeline, the engineering recommendation is to install a 14-inch transmission main; however, in keeping with similar inter-tie situations, the AB 198 grant program should assist in paying the cost to accommodate the existing connections in the system only. Lyon County Utilities will obtain loan and grant from the USDA to upsize the pipeline. With 141 ERUs in the Crystal Clear Water System today, the storage tank size necessary for those existing customers is approximately 250,000 gallons. It is proposed that the owner of the pipeline place a percentage of all future connection fees from new connections to the transmission main in a restricted capital replacement account thereby increasing the capital reserves available for future water system projects and reducing the need for future grant funding from this program.

The AB 198 grant sought by Lyon County Utilities for Crystal Clear is approximately 60.4% of the estimated total project cost and 68.1% of the suggested eligible project cost.

10Based on the requirements for safe drinking water, this Letter of Intent to submit a grant for the proposed construction project is recommended for approval. This recommendation is also based in part on the planned up-sizing of the transmission line in the overall capital improvement which is in the best interest of the state and brings the Crystal Clear Water System into compliance with the requirements for public water systems and will accommodate other existing users of valley water and future development in the area. The grant

amount should not exceed a total of \$2,663,635 (approximately 68.1% of eligible project costs). This grant would be for a 2-year period and would be subject to the conditions given.

11

	Eligible Project Cost	Grant Amount
Construction	\$3,245,000	\$2,209,765
Contingency	\$296,500	\$201,909
Engineering	<u>\$370,000</u>	<u>\$251,961</u>
Total	\$3,911,500	\$2,663,635

CONDITIONS

1. The Lyon County Utilities Department is subject to the provisions of NAC 349.554 through 349.574 regarding the administration of this grant.
2. All assets that are funded by the AB 198 grant program are subject to the Board's policy on funding a restricted capital replacement account. If any of the assets installed with grant funding are transferred to the City of Yerington, those assets are subject to the same requirements imposed on the Lyon County Utilities Department including, but not limited to, the funding of a restricted capital replacement account.
3. The owner of the pipeline (Lyon County Utilities Department or the City of Yerington) will place a minimum of 75 percent of all future connection fees from new connections to the transmission main in a restricted capital replacement account to assist with water system improvements.
4. Lyon County Utilities Department will assure that the Crystal Clear Water System complies with all of the requirements of the BSDW Water and will correct any violations or deficiencies identified in sanitary surveys conducted by the BSDW.
5. In order to assure that this project can proceed to design and construction, Lyon County Utilities Department must identify the source of funding for the current project cost shortfall estimated to be \$145,255 before the state will sign the funding agreement for this grant.

(END OF PREPARED REMARKS)

Mike Workman (Lyon Co. Utilities) & Kate Nelson (Farr West Engineering) & Brent Farr (Farr West Engineering) now testified in regard to the project. Mr. Firth said he had several question for them; he inquired about the actual size of the tank, and Ms. Nelson stated that they were proposing a 280,000 gal. tank. Mr. Firth also commented on timing, pricing and permitting issues for the tank, and Mr. Workman replied that his experience said it would take 6-8 months for BLM permitting for the tank. Mr. Firth asked Ms. Stamates if the grant would be conditioned on having all permits in place.

She stated that before they issue a Notice to Proceed all permits would have to be in place.

After perusal of further BLM permitting issues Mr. Firth noted that “everything seems to be driven by fire protections issues” and inquired whether existing wells might be kept in service in order to reduce the size of project facilities. Mr. Workman replied that the age and poor condition of existing wells made that not feasible. Mr. Firth asked for comparison of cost between a 12-inch and 14-inch pipeline. The answer from Ms. Nelson was \$100,000 or a little more. She added the USDA is funding the difference. After a discussion of future growth along the line, Mr. Workman said there was no immediate growth to help pay for the project but connection fees will help eventually. Mr. Firth also asked about new wells as an alternative, since the cost per customer is very high on this project. Mr. Farr replied that there seemed to be increasing arsenic between Yerington and Crystal Clear—Mr. Firth noted well depth and casing techniques to reduce arsenic; he ended by saying he felt that this was an alternative that hadn't been explored on a very expensive project.

Mr. Goetsch said he would like to follow up on that; he had a further discussion with Mr. Workman about costs and concluded a new well and backup plus treatment would probably cost in excess of \$2 million, perhaps \$3-4 million. He commended Lyon Co. Utilities for securing additional funding for this project since the last Board meeting. He expressed concern about the number of systems, especially smaller ones, that in the coming years would be coming the Board with this type of expensive project. Per customer costs on this project were still troubling—he also expressed concern about the projected costs on this project and whether the utility would be back in six months asking for additional monies. Mr. Workman replied that estimates given were actually made at a time of high costs, and he felt at bid they could realize a cost savings. He would do his best to work to reduce time for BLM permitting. Mr. Farr added that tank costs were in line with recent bid tabs (e.g., Golconda).

Mr. Ahern asked about eventual charges to developers along the proposed line. Mr. Farr replied that as time went on this project became more viable; part of developer connection fees will go to capital improvement. There is a condition on this grant that 75 percent of future connection fees will go to a restricted capital replacement account. Mr. Workman added that the design would be the most efficient taking into account both current costs and future growth. Mr. Ahern noted that the water line might actually spur growth.

Chairman Scott asked Mr. Workman to communicate to the Lyon County Commission the Board's appreciation for the efforts made to deal with water system problems in the county. He noted Churchill County also stepping up in similar fashion. He added that regionalization of water systems through projects like this, though with high capital costs, did reduce long term costs that are so much higher for small systems. He saw this as a good step in this direction. He suggested that connection fees could be offered at a certain price if bought now, with predictable price increase perhaps every two years, as a way to motivate developers to participate now.

Bert Bellows of the Bureau of Safe Drinking Water added approval of the idea of using existing wells and tanks to provide for fire suppression, and possibly for irrigation in

the future. Mike Workman added that some of the existing system was salvageable and would continue in use.

Motion--When there were no further Board comments and no public comment, it was clarified that there would be separate motions to approve the Letter of Intent and Grant, and Mr. Goetsch moved that the Board approve the Letter of Intent for funding Lyon Co. Utilities Crystal Clear capital improvement project, subject to staff recommendations and conditions. He added that given the amount involved, not to come back for more money. Mr. Firth seconded—he added that in the future he would like to see better analysis of alternatives like new wells, etc. The vote was unanimous in favor.

Motion--Mr. Goetsch moved to approve the Grant request, amount not to exceed \$2,663,635 or approximately 68.1 percent of the eligible project costs, estimated to be \$3,911,500, for a two-year period, subject to conditions previously referred to. He read the following resolution:

A RESOLUTION DESIGNATED THE "9-07-E3A CRYSTAL CLEAR WATER SYSTEM CAPITAL IMPROVEMENT PROJECT PERTAINING TO THE DETERMINATION BY THE BOARD FOR FINANCING WATER PROJECTS OF THE STATE OF NEVADA TO PROVIDE A GRANT FOR THE PURPOSE OF FINANCING CERTAIN PROJECTS; MAKING CERTAIN FINDINGS OF FACT AND PROVIDING OTHER DETAILS IN CONNECTION THEREWITH.

Mr. Firth seconded, and when there was no further discussion the vote was unanimous in favor.

After a brief break, the Chairman moved down the agenda to:

E.2. Letter of Intent:

a. Moapa Valley Water District (MVWD) (Action)

* Summary - Michelle Stamates

Ms. Stamates presented the following summary:

(BEGIN PREPARED REMARKS BY MICHELLE STAMATES [NUMBERS REFER TO SLIDE PRESENTATION])

(Slide presentation in Appendix 3)

APPLICANT: MOAPA VALLEY WATER DISTRICT – LETTER OF INTENT

This first summary is a Letter of Intent for arsenic treatment for the Moapa Valley Water District.

2The DISTRICT is located in Clark County approximately 52 miles northeast of Las Vegas and 36 miles south of Mesquite along Interstate 15.

3The service area of the DISTRICT covers some 79 square miles of unincorporated areas and several rural communities with less than 6,000 persons each and includes the Moapa, Glendale, Logandale, and Overton areas. The DISTRICT is currently served from four source water sites: the MX 6 Well located north along SR168, the Arrow Canyon Wells, Baldwin Springs, and Jones Spring.

4

5All source waters within the area originate from the same general carbonate aquifer system and have similar water quality characteristics.

6The total storage capacity is 8.3 million gallons with facilities distributed throughout the 79 square mile service area.

7A Preliminary Engineering Report was completed in July 2007 to evaluate alternatives for arsenic mitigation and propose the most cost effective solution. The average arsenic concentration for the four sources ranges from 15 – 17 µg/L. The Southern Nevada Water Authority and other regional utilities including the MOAPA VALLEY WATER DISTRICT conducted a pilot evaluation of adsorption technologies for arsenic removal in 2003 at the Baldwin Spring site.

8Based upon the results of this analysis and pilot testing, a granular iron-based media treatment process was selected as the preferred treatment by the DISTRICT and its engineers. In this process, raw water is filtered through the media and any arsenic present in the water adsorbs onto the media and treated water is discharged into the distribution system.

9The PER recommends the following process plan. The Arrow Canyon wells will be combined and treated at a new arsenic treatment plant located at the Arrow Canyon site. Water from the MX-6 Well is currently delivered to the Arrow Canyon & Baldwin Springs transmission line with no customers prior to blending; therefore, the current plan is to blend the water from MX-6 Well with treated water from the Arrow Canyon wells before either is introduced into the distribution system. The Baldwin Spring source will be treated at a new arsenic treatment plant located at the Baldwin Springs site. The most efficient mitigation for Jones Spring is to pipe it to the Baldwin Springs site for treatment.

A form of backwash called ‘fluffing’ of the media is required as the differential pressure across the media increases past a predetermined point due to residual silts, other waterborne particulates, and general compaction of the media. In order to prevent raw water channeling through the media and a premature arsenic breakthrough, fluffing is expected to occur approximately twice a month resulting in a minimum of water going to either lined evaporation ponds or to holding tanks that would later recycle the fluff water back through the adsorption process. A cost evaluation of recycling the fluff water vs sending it to evaporation

ponds will be made once a treatment vendor is selected. Media life at current production rates is anticipated to be 1 – 2 years. The exhausted GIM media is expected to be disposed of as non-hazardous waste.

Both of the treatment facilities will be constructed on land currently owned by the DISTRICT and pipeline construction to and from Jones Spring will occur within the public right of way and utility easements. **10, 11, 12, 13, 14, 15**

The metered water rate for the DISTRICT is currently \$49.87 for 15,000 gallons. The water rate based on 1.5% of the median household income (\$39,942) is \$49.93 per month for residential users. Increases in rates have occurred over the last two years, and another rate increase of 18% is planned for January 2008. The planned rate structure (including annual rate increases) is adequate to fund operations and maintenance, debt service, and the Board's required restricted capital reserve amounts.

16The total project cost is currently estimated to be \$10,323,000. Cost estimates and inflation predictions are based on recent bids received by the Virgin Valley Water District for its Arsenic Treatment Project. The DISTRICT submitted a pre-application to the Nevada Water and Wastewater Review Committee in June 2007. Subsequent to the pre-application process, the DISTRICT applied for loan and grant funding through the USDA and loan funding through the SRF as well as beginning the LOI process for a grant from the AB 198 program. The USDA provided a draft Letter of Conditions outlining the sources of funding that the DISTRICT is in the process of obtaining based on their financial need. The SRF also provided a letter on its tentative plan to fund a portion of this project through loan funding. Any SRF loan funding will be approved by this Board.

Funding Source	Amount
USDA RD Loan	\$2,918,000
USDA RD Grant	\$1,905,000
SRF Loan	\$1,500,000
AB 198 Grant	<u>\$4,000,000</u>
Total	~\$10,323,000

The AB 198 grant sought by the DISTRICT is approximately 38.75% of the estimated total project cost.

17Based on the requirements for safe drinking water, this Letter of Intent to submit a grant application for the proposed construction project is recommended for approval. The potential grant amount should not exceed a total of \$4,000,000

which is approximately 38.75% of eligible project costs. The grant would be for a 2-year period and would be subject to the conditions given.

18

	Eligible Project Cost	Grant Amount
Construction	\$7,905,042	\$3,063,000
Contingency	\$1,617,958	\$627,000
Engineering	<u>\$800,000</u>	<u>\$310,000</u>
Total	\$10,323,000	\$4,000,000

CONDITIONS

1. The Moapa Valley Water District is subject to the provisions of NAC 349.554 through 349.574 regarding the administration of this grant.
2. All assets that are funded by the AB 198 grant program are subject to the Board's policy on funding a restricted capital replacement account.
3. The Moapa Valley Water District must assure that water rates will be established that meet or exceed the Board's policy on reasonable water rates.

19

BRAD HUZA, MOAPA VALLEY WATER DISTRICT
TOM WARD, BOWEN COLLINS & ASSOCIATES

(END PREPARED REMARKS)

Mr. Firth asked if the Board had approved an SRF loan application. Ms. Stamates replied that a pre-application had been submitted to staff and the loan application might be before the Board by December 2007. Mr. Firth followed up with question for Brad Huza and Tom Ward about wells and well chemistry. Mr. Huza clarified that the springs in question were not under the influence of surface water.

Mr. Firth also asked about exchange of water rights with Coyote Springs and SNWA. Additional details of water sharing and pipelines with neighboring communities were provided. It was also clarified that the project before the Board did not include a growth component, but the equipment is capable of handling larger quantities in the future.

Mr. Goetsch followed up about future estimates and capacities. Mr. Goetsch also wanted to know more about the Coyote Springs connection, whether there was a cost savings by avoiding a second treatment facility, but treatment is still needed at Baldwin Springs. There was discussion of the various cost alternatives, like piping water from Baldwin Springs, but cost analysis and timelines still make the alternative

before the Board best according to Mr. Huza and Mr. Ward. Mr. Goetsch also discussed rates, and it was noted by Mr. Huza that an 18 percent increase is scheduled to be approved this year. And it was confirmed that all customers are metered.

Mr. Firth wondered about meeting the proposed construction schedule, given that this is just an LOI. Mr. Huza said that they expect to submit the Grant Application at the December Board meeting. Mr. Goetsch complimented the applicants on pursuing the various forms of financing outside of the grant program.

Chairman Scott asked about the 900 gallon per connection average consumption, and asked about conservation. Mr. Huza said rate increases did seem to be reducing consumption and the District was increasing conservation efforts.

When there was no further Board discussion, Chairman Scott asked for public comment and Cheryl Couch of USDA Rural Development said that the system had met all of their requirements.

Motion—Mr. Firth moved that the Board approve the Letter of Intent from Moapa Valley Water District to pursue funding under the AB198 program for arsenic treatment, total grant amount not to exceed approximately \$4 million or 38.75 percent of the eligible project costs of approximately \$10,323,000. The project would be eligible for a two-year grant, subject to conditions provided by staff. Mr. Goetsch seconded, and when there was no further discussion, the vote was unanimous in favor.

Chairman Scott now moved down the agenda to

E.4. Additional Funds:

a. Pershing County Water Conservation District (PCWCD) (Action)

* Summary - Michelle Stamates

(BEGIN PREPARED REMARKS BY MICHELLE STAMATES [NUMBERS REFER TO SLIDE PRESENTATION])

(Slide presentation in Appendix 4)

APPLICANT: **PERSHING COUNTY WATER CONSERVATION DISTRICT**

1, 2, 3The original grant was approved for the Pershing Co Water Conservation District by the Board on May 3, 2006, for \$3,956,282.50 (85% of the total eligible project cost of \$4,654,450) for a 5-year period.

4, 5, 6

Improvements to the Rogers Dam, located in the District near Lovelock, were included in the original project. The reservoir that backs up behind the Rogers Dam is diverted into the Union-Rogers Canal which provides irrigation water to approximately 56% of the total acres in the system.

7The Rogers Dam failed on July 18th, 2006, as a result of the very high flows in the Humboldt River that undermined the concrete control section of the dam. Severe economic hardship could have been experienced by the farmers of the “lower valley” if deliveries to Union-Rogers Canal could not be reestablished.

8On July 28, 2006, the Board approved a motion to reallocate already approved project funding for the construction and costs involved in the emergency temporary dam, for study and construction of an improved by-pass around the dam, and also for preliminary engineering and geotech work to begin moving forward on a new permanent structure.

9The cofferdam was constructed during a two-week time period between July 23 and July 31, 2006.

10, 11At the May 2007 Board meeting, the District requested the reallocation of \$569,500 in additional grant assistance with the elements directly related to the Rodgers Dam failure and the Board’s July 2006 motion. The Board approved the reallocation of approximately \$1.4 million from the original grant funds (85% of the total estimated eligible project cost of \$1.7 million to complete the improved by-pass around the dam and to complete the design for the new Rogers Dam.

12, 13

14As a result of the July 2006 Board meeting, the only original project element that would move forward was the Old Channel and Union Canal diversion structure as it had match funding from the BOR and was time sensitive. The rest of the project was frozen.

15, 16, 17, 18

The by-pass around the cofferdam, geotechnical studies, and engineering design for rebuilding the Rogers Dam are now complete. During its 2007 session, the Nevada State Legislature allocated \$100,000 from the general fund for replacement of the Rogers Dam (AB 302). The engineering estimate for the construction of the new Rogers Dam is \$3,384,175.

19During the construction of the cofferdam, the permanent bypass around the cofferdam/Rogers Dam, and the diversion structures for the Old Channel and Union Canals, the District has consistently demonstrated responsible financial management of the project and provided in-house fabrication and in-kind labor wherever possible to control project costs.

20This table shows a breakdown of the current project summary to-date:

	Total Eligible Project Costs To Date	Total Grant Payments Made To Date	Remaining on Current Grant
Construction	\$1,328,105.24	\$1,128,889.45	\$1,774,923.05
Engineering	\$301,450.84	\$256,233.21	\$360,696.79
Contingency	\$0.00	\$0.00	\$435,540.00
Total	\$1,629,556.08	\$1,385,122.66	\$2,571,159.83

21

Improvements to the Thacker Dam were included as a part of the original construction project; however, after the destruction of the Rogers Dam during the 2006 high flow event in the Humboldt River, engineers realized that the Thacker Dam could suffer similar undermining and would also require complete replacement. Staff recommends that the Board approve the use of the remaining grant funding and an increase in total grant funding to allow the construction of the new Rogers Dam and complete the design and DWR review of the new Thacker Dam.

22The District and their engineers have estimated all costs including contingency in the total estimate for the construction of the Rogers Dam. A cost breakdown was requested but not received. The costs for the requested project are shown in the table below:

	Eligible Project Cost	Grant Amount (85%)	Applicant's Match Amount (15%)
Construction - Rogers Dam	\$3,791,845	\$3,223,068	\$568,777
Construction Engineering - Rogers Dam	\$218,000	\$185,300	\$32,700
Construction Contingency - Rogers Dam (5%)	\$189,592	\$161,153	\$28,439
Engineering - Thacker Dam	\$110,000	\$93,500	\$16,500
TOTALS	\$4,309,437	\$3,663,021	\$646,416

23By reallocating the current grant amount remaining for construction, engineering, and contingency, the total additional grant requested is \$1,091,861.17 (\$3,663,021 - \$2,571,159.83). Staff recommends that the Board approve a new grant to the Pershing County Water Conservation District specifically for the construction of the Rogers Dam and design of the Thacker Dam. The total grant amount would be \$3,663,021.45 (85% of the total estimated eligible costs of \$4,309,437). The PCWCD is responsible for the 15% match of \$646,415.55 of which \$100,000 has been committed by the 2007

Legislature from the general fund (AB 302). This grant would be a 2-year grant subject to the conditions listed below. The PCWCD may make further grant applications in the future for project elements that were previously approved in the original letter of intent.

24

	Eligible Project Cost	Grant Amount
Construction	\$4,009,845.00	\$3,408,368.25
Contingency	\$189,592.00	\$161,153.20
Engineering	<u>\$110,000.00</u>	<u>\$93,500.00</u>
Total	\$4,309,437.00	\$3,663,021.45

CONDITIONS

1. The Pershing County Water Conservation District is subject to the provisions of NAC 349.554 through 349.574 regarding the administration of this grant.
2. Before a funding agreement will be signed, the District must have their “match funding” in place.
3. The District will work with DWR and staff to assure that all comments, questions, and recommendations from DWR are addressed.

25, 26, 27, 28

BENNIE HODGES, PERSHING COUNTY WATER CONSERVATION DISTRICT
 DANNY SOMMERS, FARR WEST ENGINEERING
 WALT SLACK, DYER ENGINEERING

Mr. Firth and Mr. Goetsch asked for some clarification of numbers. Ms. Stamates said that the old grant was to be reallocated and a new grant made. The approximately \$400,000 originally requested is now \$1,091,000 and the total spent to date is \$1,385,000. New money is for construction of the Rogers dam and engineering design only of Thacker Dam. Construction money for the Thacker Dam would be requested later.

Mr. Goetsch now had some questions for Pershing Co. and the engineers. He asked about attempts to find other funding, besides the \$100,000 Legislative appropriation. Mr. Hodges discussed their concerns about costs and said they had pursued all available avenues but none had come through.

He stated that the per-acre assessment for users had been increased, and they would supply the material (rock, etc.) but still need \$237,000 next year. They plan another

assessment increase of about \$3.50/acre next year. Mr. Goetsch summed up that the funds discussed today would go to engineer a significant project that the District will have to come back to the Board for 85 percent of funds? Mr. Slack said that Thacker Dam would be less in terms of construction than the Rogers Dam. Mr. Firth asked about the replacement of Thacker, and Mr. Hodges gave an overview of the whole system—the new dams will increase storage significantly. The construction schedule for Rogers will begin immediately and probably be complete next summer.

Mr. Firth followed up saying that the original grant had quite a list of projects, but some had to be deferred; he asked for a long-term overview. Mr. Hodges summed up saying that they would stretch out the maintenance and deal with it as best they could year-to-year. As far as farmer contribution to finance, at least hay prices are high. He gave some background on assessments and what those assessments are spent for.

Mr. Slack noted how much money Mr. Hodges has saved on the projects through his efficiency, finding materials, etc.

Chairman Scott noted that he appreciated what the District was doing, as well, he hoped for more Legislative support and noted the future of more of the Board's funding going to arsenic remediation. Mr. Ahern asked for more details on hay production and water deliveries per acre.

Motion--The Chairman stated that he would entertain a motion; Mr. Goetsch obtained clarification on numbers, and then moved that the Board approve a new grant to the Pershing County Water District, specifically for the construction of the Rogers Dam and design of the Thacker Dam, the total grant amount to be \$3,663,021.45 or 85 percent of the total project cost, estimated to be \$4,309,437 whichever is less. The PCWCD is responsible for 15 percent match of which \$100,000 was committed by the 2007 Legislature from the General fund. The grant is a two-year grant subject to conditions listed in the staff report. He read the following resolution:

A RESOLUTION DESIGNATED THE "9-07-E4A PERSHING COUNTY IRRIGATION SYSTEM CAPITAL IMPROVEMENT PROJECT PERTAINING TO THE DETERMINATION BY THE BOARD FOR FINANCING WATER PROJECTS OF THE STATE OF NEVADA TO PROVIDE A GRANT FOR THE PURPOSE OF FINANCING CERTAIN PROJECTS; MAKING CERTAIN FINDINGS OF FACT AND PROVIDING OTHER DETAILS IN CONNECTION THEREWITH.

Mr. Firth seconded, and without further comment, the vote was unanimous in favor.

It was clarified at Mr. Firth's request that the motion included reallocation of the old grant—the new money portion is \$1,091,000.

Mr. Hodges thanked the Board for saving half of last year's harvest through the funding they'd provided.

(Adjourned for lunch)

The meeting was called back to order at 1:45 p.m.

The Chairman moved up the agenda to Item E.1

E. CAPITAL IMPROVEMENT GRANT PROGRAM

1. AB198/237 Financial Report (Non Action) Marcy McDermott

(BEGIN PREPARED REMARKS BY MARCY MCDERMOTT)

The AB198 program has \$125M in bond authority. Of the \$125M, \$63M are outstanding in bonds sold, \$36M remain in grants funded by the Board, \$10M has been earmarked for outstanding Letters of Intent, and \$2M is set aside in administrative costs for a 5 year period. This leaves \$23.5M available for the Board to commit in grants or earmark for letters of intent. Approximately \$7M of which is being requested in grants and letters of intent at this meeting.

In July 2007, \$14.8M in bonds were sold for this program. Of the \$14.8M, we paid \$3.9M to the Treasurer's Office for funds advanced to the AB198 program for the last 6 months of fiscal year 2007. We currently have \$8.8M in cash available for grant payments. We expect to deplete these funds by January and will be requesting another bond sale after the first of the year.

(END PREPARED REMARKS BY MARCY MCDERMOTT)

Chairman Scott asked if the Treasurer's office would be notifying the Board about whether some additional monies would be available because some bonds are now paid off. Ms. McDermott said the Treasurer will brief the Board on this and other matters by the next bond meeting. Ms. McDermott asked if members would submit any question and she would have them answered. The Chairman was especially interested in funds becoming available—Ms. McDermott said a projection sheet was recently obtained but staff would like some clarification from the Treasurer's Office before reporting it to the Board.

Mr. Firth asked about the project list where some projects went back to 2005—did they have the two-year grant requirement, and if so why were some funds unspent? Ms. Stamates noted the Washoe County projects he mentioned did not have the two-year limit.

Chairman Scott now moved down the agenda to:

E.5. Progress Report for Funded AB198/AB237 Projects (Non Action)

Michelle Stamates

(The progress report is contained in **Appendix 5**)

Ms. Stamates gave additional information on the Jarbidge project after the recent fire there, the Manhattan water quality (good) from the test borehole, and Gabbs.

The Chairman now moved down the agenda to:

E.6. Progress and Financial Report for Funded SB62 Projects (Non Action) Michelle Stamates

(Project Reports contained in **Appendix 6**)

Chairman Scott commented on the slowness of reports from certain counties. The reporting requirement is only yearly. The Chairman asked for a report on response at the next meeting.

Mr. Goetsch brought up the Central Nevada Regional Water Authority (CNRWA) and that all counties are required to make a land and a master plan, but land planning and master planning are not linked to resources. In the future, relating to SB62, water resources should be linked to land planning.

Mr. Ahern asked for clarification of the SB62 funding and its purpose. Chairman Scott clarified that the rural counties did not have a good idea of their resources, and the Legislature gave \$1,000,000 to the Board for counties-with few strings attached. The money has been allocated to counties and entities for what they felt was "most critical." It was used primarily to generate data.

It was also clarified that AB198/237 is all one part of one pot of money now.

The Chairman now moved down the agenda to:

G. ADMINISTRATIVE RESOLUTION (Action)

Ms. McDermott explained that, briefly, this resolution, with Board approval and Chairman Scott's signature, gives staff the money to run the program for the next two years.

Mr. Firth clarified that they were requesting \$585,000, which was correct. It funds all or part of the various Office of Financial Assistance personnel, plus allocated rent, utilities etc.

Mr. Firth moved that Resolution 9-07 be approved (The text of the Resolution is **Appendix 7**). Mr. Goetsch seconded, and the vote was unanimous in favor.

Chairman Scott now moved down the agenda to Item H.1:

H. REVIEW / ADOPT NEW BOARD POLICIES

1. Scale to Determine Grant Amount (Action) *Summary - Dave Emme (NDEP)

(Mr. Emme's presentation is available in **Appendix 8** and includes H.1, 2 and 3)

Mr. Goetsch asked about the point system used to award grants; should there be deductions from points if the system is extremely small, and their needs be addressed by other means? Mr. Emme said that the current policy, and changes proposed, do not address that. Chairman Scott emphasized that not regionalizing should lose points.

However, if engineering analysis shows that not regionalizing is less expensive that is okay.

Mr. Goetsch emphasized he'd like more minus points to weight for how many people get helped. Mr. Emme said that they could add something about fewer than 50 people and it could be a deduction. Mr. Goetsch emphasized that regional cooperation must be rewarded.

The Chairman emphasized the "second home deduction" that would identify communities with over 30 percent second homes for deductions. He also spoke of the need to emphasize and use and read meters—Mr. Firth spoke in support. Chairman Scott asked about a disincentive if systems will not agree to effective metering.

Chairman Scott suggested "for discussion" that deduction for not regionally cooperating might be increased.

Mr. Goetsch suggested that extremely small systems (under 50 to 100 people) "go back down to 15 points." Under Category III he suggested that responsible rates "meter community charged" be bumped up slightly to the 10 range; and under Category IV item e recommended 30 points for regional cooperation (definition to be refined by staff).

Mr. Emme said a 1-mile limit was suggested by Ms. Basham for regionalization as a project alternative; she clarified that it was subject to engineering studies.

More detailed discussion took place of the 30 points for regionalization. Chairman Scott noted everyone seemed reasonably comfortable with it.

More detailed discussion took place on the Category II item d "small systems" point award. Mr. Goetsch said that perhaps at some point they simply cannot fund very small systems with large grants. Mr. Emme said perhaps a separate policy that said if the cost per household was above a threshold that other options must be considered. Mr. Firth agreed this might be better than trying to establish a point value. Mr. Goetsch wondered if the Board has authority for this approach. Chairman Scott said Mr. Emme's suggestion was good. Mr. Ahern asked about legislative intent, and was told that legislation mentioned "6,000 persons" as threshold to be assisted through this program.

There was more detailed discussion of Category III item d (points for existing metering). A figure of 10 was agreeable to the Board. Mr. Goetsch also brought up Category III item j and alternate funding sources—it should be weighted higher—and he proposed 15.

Chairman Scott summarized the consensus: Category III item d goes from 5 to 10; Category III item j from 5 to 15; and Category IV item e from minus 10 to minus 30.

Motion--Mr. Goetsch moved to make the changes as summarized above, it was seconded by Mr. Firth and the vote was unanimous in favor.

2. Reasonable Water Rates (Action) *Summary - Dave Emme (NDEP)

Mr. Emme proposed the following (from his presentation):

- Eliminate reference to “reasonable rate” being in place in order to be eligible for a grant since this conflicts with later sections of the policy; and
- Specify that reasonable rates must be in effect prior to soliciting construction project bids rather than prior to the first construction pay request.

After a brief discussion;

Motion—Mr. Goetsch moved, and Mr. Firth seconded, that the changes be made as summarized above, and when there was no further comment, the vote was unanimous in favor.

3. Funding Level for Irrigation Projects (Non Action) *Summary - Dave Emme (NDEP)

After Mr. Emme’s presentation, Mr. Goetsch asked to what the “20 percent” ceiling was related? Mr. Emme said that this was actual funds available at the time of the request. Mr. Firth noted that then as of this meeting that was 20 percent of \$23.5 million? That was correct.

Mr. Goetsch and Mr. Firth wondered what would happen to irrigation projects if the Board only funded 65 percent, when for example Pershing County had so much trouble finding alternative funding. Chairman Scott noted that water conservation projects might have other public benefits and leaned more toward a limitation in dollars on a “first come, first serve” basis with more time to implement, as opposed to the 65 percent.

Mr. Firth noted the need for irrigation districts to present a long-term plan but that the facilities are so old they may go before the plan can be implemented.

Mr. Slack commented from the audience with some facts on the problems with Pershing County irrigation. He said that Nevada was unique as far as he knew in providing this help for irrigation, but he would like to see it at 85 percent. He also emphasized other public benefits of the projects.

Chairman Scott summed up that more information is needed on alternate funding sources.

Ms. Basham asked about the second part of the policy, the 65 percent ceiling on funding? Chairman Scott said that given the possible additional public benefits from these projects he was inclined to say no, he wasn’t comfortable with that. Irrigation districts could create a more attractive project with public recreation benefits. Mr. Emme asked, then, if a scale was preferable that took account of these factors, and Chairman said yes, he would not like to see for example, a reservoir abandoned because of set limitations. Mr. Goetsch said added value factors could include, number served, acres, economic impact, recreation, environmental, wildlife, shared

access and cooperation with other entities, tourism, past performance and fiscal/capitalization planning. Chairman Scott added water conservation.

Ms. Stamates noted she had sent the policies to the irrigation districts but had not received any comments.

Chairman Scott moved to Item I:

I. BOARD COMMENTS (Non Action)

The Chairman noted that there were Sexual Harassment Policy forms for each member that they needed to sign.

He said that the Board would find a briefing useful on the arsenic issue, what the State Environmental Commission (SEC) does, enforcement steps and policies, so that if the Board desired to address or write to the SEC regarding the issue it would have full information. Mr. Balderson said that the Bureau could and would give complete information on policies and enforcement. Mr. Firth and Mr. Goetsch noted that the main thing they needed to know was what steps non-compliant systems would need to take in order to plan for the costs. Mr. Balderson noted that yes there would be a certain number of systems after the December SEC meeting that didn't have an exemption; the enforcement policy has not been finalized. Ms. Basham said the Board would need numbers and a list of systems when it was finalized.

Mr. Ahern noted that he thought this Board functioned well and he looked forward to learning more, and asked staff to send material that might be of interest.

Mr. Goetsch welcomed Mr. Ahern, noted they would miss former Chairman Kramer and former member Stephanie Zimmerman and wished to thank Dana Pennington for his long and excellent service.

Ms. Basham asked members to comment on the new and improved financial reporting, designed by Ms. Zimmerman and Dana Tuttle. Chairman Scott thanked Ms. Tuttle and Ms. Zimmerman.

Chairman Scott spoke of the need for some recognition of Mr. Kramer, Mr. Pennington and Ms. Zimmerman. It was decided to discuss after the meeting.

J. PUBLIC COMMENTS (Non Action)

There was no public comment.

K. ADJOURN BOARD FOR FINANCING WATER PROJECTS PUBLIC MEETING

Mr. Ahern moved to adjourn the meeting, seconded by Mr. Firth, and the meeting adjourned at 4:09 p.m.

Appendix 1 - DWSRF Overview

What is the Drinking Water State Revolving Fund (DWSRF)?



- Low interest loan program
 - Typically ~ 3.0 to 3.5% interest
 - 20 year term
 - Authority: Nevada Revised Statutes (NRS) 445A.200 to 445A.295
-

Brief History of DWSRF

- 1996 Amendments to Safe Drinking Water Act created DWSRF on federal level
 - 1997 Nevada Legislature created program in Nevada
 - 1998 Program initiated: NACs developed, staff hired, etc.
 - 1999 First loan to SNWA
-

Source of Funds

- Annual capitalization grant from USEPA
 - 20% state match provided by state bonds that are repaid from loan interest
 - Repayments from existing loans (approximately \$90 million in loans has been committed)
-

USEPA Grant Requirements

- Federal regulations
 - Fund utilization rate (turn around of money)
 - Environmental review
 - Intended Use Plan, Priority List
-

Board for Financing Water Projects

- Approval of Priority List
 - Approval of Loan Commitments
-

Eligible Applicants

- Publicly owned water systems
 - Privately owned water systems
 - Federal facilities not eligible
-

Eligible Projects

- Facilitate compliance with health protection
- Meet drinking water standards
- Replace aging infrastructure
- Consolidate water supplies
- Reasonable amount of growth

Priority List

- Project must be on priority list to be considered for a DWSRF loan.
- Pre-application is all that is required
- List is ranked
- Board approves the List
- Grant projects must be on List



Project Ranking

Ranked within class

- **Class I – Acute Health Risks**
demonstrated illness, bacteria, surface water treatment, nitrate
 - **Class II – Chronic Health Risks**
drinking water standard violation
 - **Class III – Rehabilitation**
deteriorated, substandard, inadequate conditions
 - **Class IV - Refinance**
-

How Projects are ranked

- Determine Class designation
- Assign points per NAC 445A.67569
- Develop Raw Rank number
- Adjust for local MHI – Multiply raw rank number by ratio of state MHI to local MHI



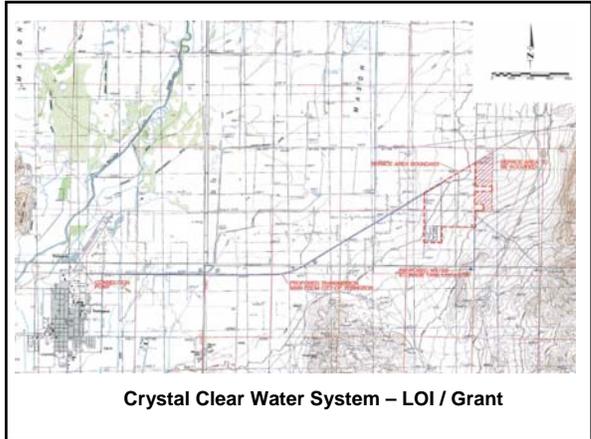
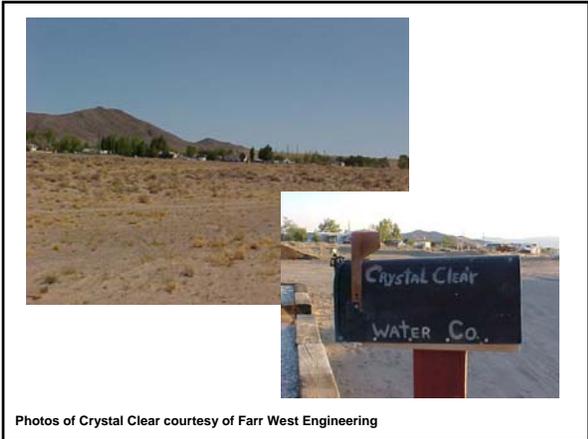
Proposed Revision 1 to 2007 List

- Carson City ranking revised:
uranium & arsenic
 - 12 new projects
 - Focused outreach:
 - > 35 ppb arsenic
 - Incomplete exemption request
 - Resulted in 8 new arsenic listings
-

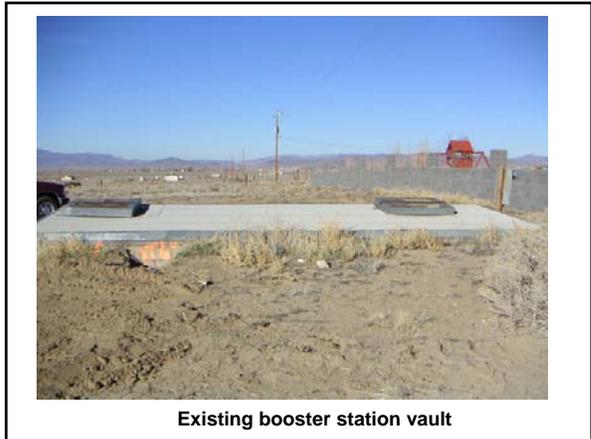
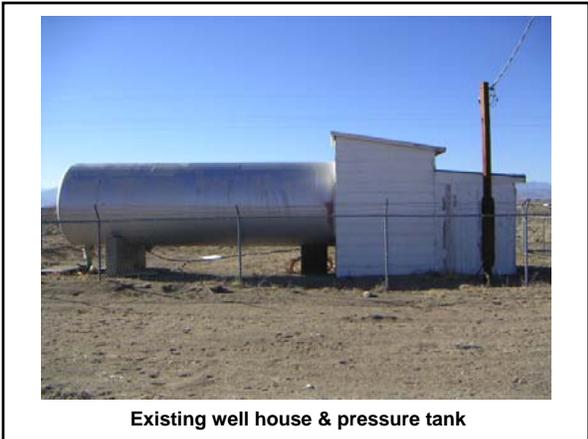
System Name	Project Description	Proposed Rank
South Maine MHP	Arsenic and uranium compliance	2
Topaz Lodge Water Co.	Arsenic compliance	8
Frontier Village MHP	Arsenic compliance	12
Shoshone Estates	Arsenic compliance	14
Elk Point	Uranium compliance	15
Wildes Manor	Arsenic compliance	16
Carson River Estates	Arsenic compliance	18
McDermitt	Arsenic compliance	19
Schurz Elementary School	Arsenic compliance	39
Sun Valley GID	2 nd wholesale delivery point, transmission, distribution	44
Lamiolle Water Users Assoc	New well, storage, transmission, distribution	48
Gold Country Water Co.	Water meters	54

-
- Workshop held 9/12/07
 - Staff recommends Board approval
 - Resolution in Board binder
-

Appendix 2 - Lyon County Utilities for Crystal Clear



- CCWS currently operates 2 production wells.
- There is no treatment process.
- Water is pumped and stored in a pressure tank before being sent into the distribution system.



- Average arsenic concentrations range from 42 – 47 µg/L
- The water has relatively high silica content which interferes with some arsenic treatment technologies
- The average concentration of fluoride in the production wells is 2.67 mg/L (above the secondary maximum contaminant level of 2 mg/L)

- Consolidation with the City of Yerington system appears to be a viable, non-treatment alternative for the CCWS.
- Yerington is currently pilot testing centralized arsenic treatment for its water system & plans to have treatment in place by January 2009.
- A transmission main from Yerington to CCWS would be approximately 6 miles long & would be located along the south side of Highway 95A.

Funding Source	Amount
USDA RD Loan	\$500,000
USDA RD Grant	\$934,265
CDBG Grant	\$170,000
AB 198 Grant	\$2,663,635
Total	\$4,267,900

This recommendation is based in part on the planned up-sizing of the transmission line in the overall capital improvement

- is in the best interest of the state
- brings the CCWS into compliance with the requirements for public water systems
- will accommodate other existing users of valley water
- will accommodate future development in the area

The grant amount should not exceed a total of **\$2,663,635** (approximately 68.1% of eligible project costs estimated to be \$3,911,500) for a 2-year period and would be subject to the conditions given.

	Eligible Project Cost	Grant Amount
Construction	\$3,245,000	\$2,209,765
Contingency	\$296,500	\$201,909
Engineering	<u>\$370,000</u>	<u>\$251,961</u>
Total	\$3,911,500	\$2,663,635

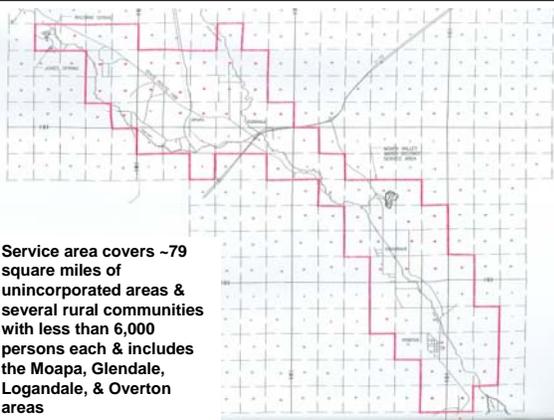
Appendix 3 - Moapa Valley Water District (MVWD)



Moapa Valley Water District - LOI



Service area located in Clark County -52 miles northeast of Las Vegas & 36 miles south of Mesquite along Interstate 15



Service area covers ~79 square miles of unincorporated areas & several rural communities with less than 6,000 persons each & includes the Moapa, Glendale, Logandale, & Overton areas



Moapa Valley Water District - Along SR 168



Moapa Valley Water District - Logandale / Overton Areas



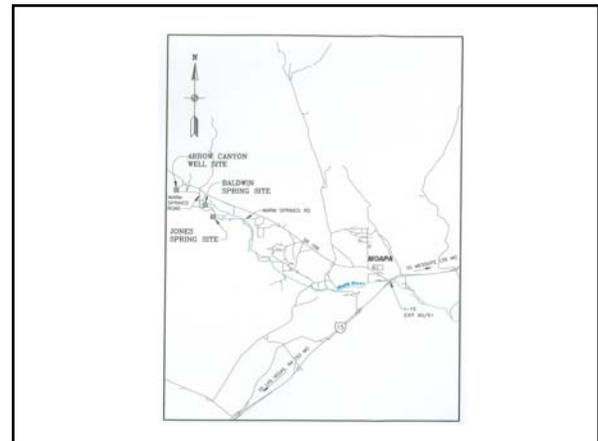
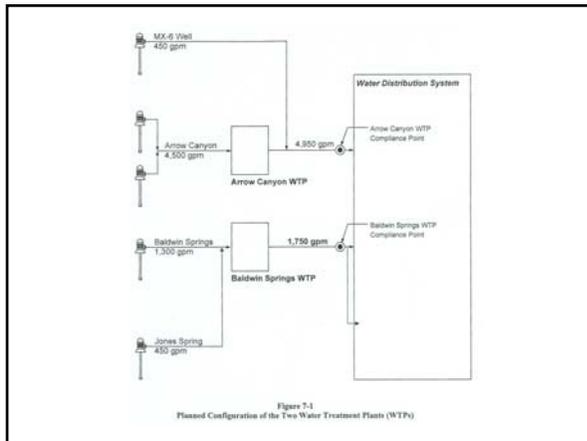
Moapa Valley Water District - 3M-Gallon Storage Tank

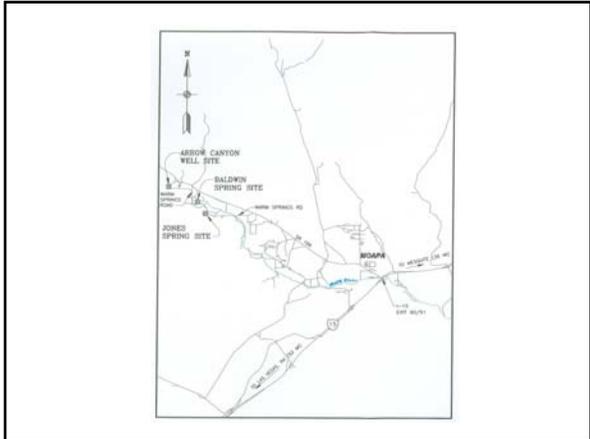
Average arsenic concentration for all sources
15 – 17 µg/L

Arsenic mitigation alternatives PER - completed
July 2007

Results of analysis & pilot testing

- Granular iron-based media (GIM) treatment process selected as the preferred treatment
- Raw water is filtered through the media and any arsenic present in the water adsorbs onto the media and treated water is discharged into the distribution system





Arrow Canyon Wells



Arrow Canyon Wells

Funding Source	Amount
USDA RD Loan	\$2,918,000
USDA RD Grant	\$1,905,000
SRF Loan	\$1,500,000
AB 198 Grant	<u>\$4,000,000</u>
Total	~\$10,323,000

The grant amount should not exceed a total of **\$4,000,000**

- ~38.75% of eligible project costs estimated to be **\$10,323,000**
- 2-year period
- Subject to the conditions given

	Eligible Project Cost	Grant Amount
Construction	\$7,905,042	\$3,063,000
Contingency	\$1,617,958	\$627,000
Engineering	<u>\$800,000</u>	<u>\$310,000</u>
Total	\$10,323,000	\$4,000,000



Appendix 4 - Pershing County Water Conservation District
(PCWCD)

**Pershing County Water Conservation District
(P.C.W.C.D.)**

Located at Lovelock in Pershing County, Nevada

Total acres - 40,000

Main commodities produced

Alfalfa
Wheat
Cattle

Water Source

Humboldt River
Rye Patch Reservoir

2006 PCWCD Receives Original Grant from the Board

- Replacement of the Pitt-Taylor Diversion Dam & Diversion Structure
- Replacement of the Control Structure - Upper Pitt-Taylor Dam
- Replacement of the Control Structure - Lower Pitt-Taylor Dam
- Installation of a Back Up Structure on the Humboldt River Plug
- Replacement of the Diversion Structures for the Old Channel / Union Canals
- Replacement of Anker Pond
- Installation of 5 Slide Gates in Pitt Dam
- Installation of Slide 5 Gates in Rogers Dam

Total grant \$3,956,282.50 (85% of the eligible project cost of \$4,654,450.00)

PCWCD responsibility - 15%



Pitt Taylor (Thacker) Diversion Dam (Photo courtesy of Farr West Engr)



Pitt Taylor Diversion Canal (Photo courtesy of Farr West Engr)



Pitt Dam

Rogers Dam Failure

July 18, 2006, Rogers Dam failed - PCWCD unable to irrigate ~21,000 acres of land

PCWCD Board of Directors arranged for an emergency meeting with the Board

July 28, 2006, Board allowed PCWCD to use some of the original grant funds to:

- construct a temporary "coffer dam"
- for study / construction of improved by-pass around the dam
- for preliminary engineering / geotech work to move forward on a new permanent structure

Temporary Cofferd Dam Constructed to Resume Irrigation

- Two weeks to build
- Constructed by District employees, local farmers, local towns people, & independent contractor
- Cost approximately \$706,000



Failed Rogers Dam with coffer dam in the background

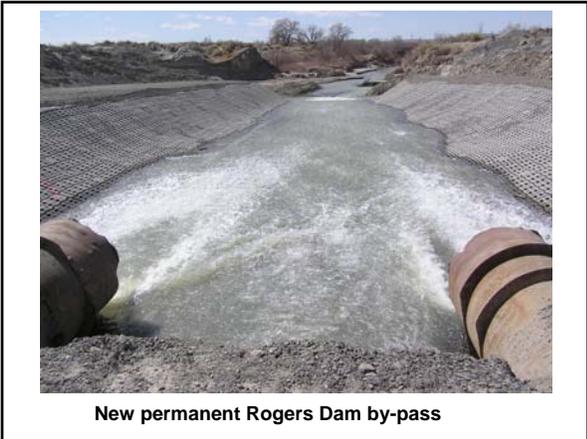
New Rogers Dam Bypass Construction

- Original bypass constructed after flood years of 1983 and 1984
- Original bypass fails during irrigation season of 2006
- Failure occurred first time it was used since its construction
- New bypass constructed winter of 2007 - constructed by PCWCD employees, local farmers, and local towns people
- Cost approximately \$709,000

Total cost for Cofferd Dam and Bypass approximately \$1.4 million



Rogers Dam by-pass after 2006 event (Photo courtesy of the PCWCD)



New permanent Rogers Dam by-pass

Only original project element that would move forward was the Old Channel / Union Canal diversion structure as it had match \$85,000 grant funding from the BOR & was time sensitive



Original Old Channel / Union Canal Diversion Structure
(Photo courtesy of Farr West Engr)



Old Channel / Union Canal Diversion Structure



New Old Channel / Union Canal Diversion Structure



Old Channel / Union Canal Diversion Structure

During the construction of the cofferdam, the permanent bypass around the cofferdam/Rogers Dam, & the diversion structures for the Old Channel / Union Canals, the PCWCD has consistently demonstrated responsible financial management of the project & provided in-house fabrication & in-kind labor wherever possible to control project costs

	Total Eligible Project Costs To Date	Total Grant Payments Made To Date	Remaining on Current Grant
Construction	\$1,328,105.24	\$1,128,889.45	\$1,774,923.05
Engineering	\$301,450.84	\$256,233.21	\$360,696.79
Contingency	\$0.00	\$0.00	\$435,540.00
Total	\$1,629,556.08	\$1,385,122.66	\$2,571,159.83



	Eligible Project Cost	Grant Amount (85%)	Applicant's Match Amount (15%)
Construction - Rogers Dam	\$3,791,845	\$3,223,068	\$568,777
Construction Engineering - Rogers Dam	\$218,000	\$185,300	\$32,700
Construction Contingency - Rogers Dam (5%)	\$189,592	\$161,153	\$28,439
Engineering - Thacker Dam	\$110,000	\$93,500	\$16,500
TOTALS	\$4,309,437	\$3,663,021	\$646,416

By reallocating the current grant amount remaining for construction, engineering, and contingency, the total additional grant requested is **\$1,091,861.17** (\$3,663,021 - \$2,571,159.83)

Staff recommends that the Board approve a new grant to the PCWCD specifically for the construction of the Rogers Dam and design of the Thacker Dam

The total grant amount would be \$3,663,021.45 (85% of the total estimated eligible costs of \$4,309,437.00)

The PCWCD is responsible for the 15% match of \$646,415.55 of which \$100,000 has been committed by the 2007 Legislature from the general fund (AB 302)

This grant would be a 2-year grant subject to the conditions listed below.

The PCWCD may make further grant applications in the future for project elements that were previously approved in the original letter of intent

	Eligible Project Cost	Grant Amount
Construction	\$4,009,845.00	\$3,408,368.25
Contingency	\$189,592.00	\$161,153.20
Engineering	<u>\$110,000.00</u>	<u>\$93,500.00</u>
Total	\$4,309,437.00	\$3,663,021.45



Removal of the old Rogers Dam



Lovelock area farms & ranches



Lovelock area farms & ranches



Lovelock area farms & ranches

Appendix 5 - Progress Report for Funded AB198/AB237 Projects

PROGRESS REPORT ON OPEN PROJECTS

SEPTEMBER 2007

GRANTEE	DATE APPROVED	GRANT AMOUNT	ENGINEER	OWNER'S REPRESENTATIVE	LAST STAFF SITE VISIT	PROGRESS
Walker Lake	12/10/97	\$1,143,447.00	Farr West	Mark Nixon	Apr-07	Land was not secured from the military as expected. The engineers and hydrogeologists are planning a new well on GID property but away from the influence of Walker Lake. No further progress has been made to date.
Storey Co for Virginia City	8/29/01	\$1,503,096.00	CSA	Marilou Waling	Sep-06	The cultural survey revealed artifacts that have limited the potential area that the BLM approved for construction. The project plan changed to installing only one raw water tank instead of the two tanks that were previously planned. Excavation for the new tank revealed additional artifacts that were appropriately addressed by the archeologist on site. The bolted tank is now complete; however, leaks and issues with the roof must be corrected by the contractor.
City of Caliente	3/14/02	\$2,021,314.72	Amec	April Nelson	May-07	<p>The additional grant funds approved by the Board in May 2005 were deobligated in the August 2006 Board meeting. Caliente provided a project update at the November 2006 Board meeting.</p> <p>Staff made a site visit to Caliente with a representative from Master Meter. A summary of the findings was forwarded to the Board. Caliente has retained the services of Sunrise Engineering to assist in getting the meters on-line. The current schedule shows July 2007 as the target for having the meters on-line.</p>
Walker River Irrigation District	3/13/02 1/22/07	\$6,685,163.19	Farr West Lumos RO Anderson Black Eagle	Ken Spooner	Sep-07	<p>The project was initially bid; however, the low bidder could not get bonded. WRID is acting as the general contractor for this job. The District will do some of the work themselves and bid the earthwork and concrete as separate jobs. The Board held a special meeting in January to address a request for increase in grant amount.</p> <p>The WRID Board awarded the construction contract to V&C Construction in February 2007. The low bidder, MKD sued the District in the Supreme Court. The WRID Board has withdrawn the contract award from V&C and awarded the work to MKD. Construction began in July 2007 with work on both the diversion structure and levee structure running concurrently. Completion is expected in 4 to 5 months.</p>

PROGRESS REPORT ON OPEN PROJECTS

SEPTEMBER 2007

GRANTEE	DATE APPROVED	GRANT AMOUNT	ENGINEER	OWNER'S REPRESENTATIVE	LAST STAFF SITE VISIT	PROGRESS
Kingsbury GID	6/26/02 8/23/06	\$9,505,311.39	Amec	Jack Jacobs	Sep-07	<p>KGID was awarded additional grant funding at the August 2006 Board meeting to complete Phase 1 of the project.</p> <p>Rapid Construction was awarded the contract for the final pipeline phase of construction and is expected to complete this work in Sept 2007.</p> <p>KGID is focusing its energy on obtaining a new tank site for Tank 10B. A likely site has been identified and approval will be sought from the USFS and Heavenly Ski Resort, which share control of the property. If approval does not appear promising, the district will pursue replacement of existing Tank 10A. The district's preferred alternative is to construct a new Tank 10B while Tank 10A is still on line.</p>
Wells	12/5/02	\$1,102,310.09	TRW Engineering	Jolene Supp	Jul-06	<p>The installation of the well, well house, chlorination system, and SCADA are now complete. Design and bid documents are complete for the new tank and water line; however, the City is concerned that they can no longer afford the new tank. They are looking into the possibility of connecting the industrial park well and tank (owned by the City) to the main system and provide looping. Early cost estimates indicate that this alternative may cost approximately \$500,000. It is not clear why this alternative was not reviewed at the PER stage. The City was advised to do appropriate hydraulic modeling and have this alternative plan reviewed and approved by BSDW before approaching the Board with a change of scope request.</p>
Hawthorne PER	12/16/04	\$42,500.00	Farr West	Steve Gustafson		<p>The water audit is complete. The master plan has been completed, including the background, existing conditions, proposed improvements, mapping, water rate analysis, and environmental information. A water model is also apparently complete. The County is asking for additional information to be addressed regarding the old Babbitt area, as a large development may be relocating to the area and may put a strain on existing infrastructure. The post-PER work has yet to be accomplished, such as the environmental report and applications for funding.</p>
Elko Co for Jarbidge	12/16/03	\$1,287,700.70	Stantec	Lynn Forsberg		<p>The treatment plant is complete and in operation. Certification of the plant is currently in progress. Particle counts are on-going with some fine tuning of the system as necessary. BSDW will conduct a sanitary survey of this system in Sept 2007.</p>

PROGRESS REPORT ON OPEN PROJECTS

SEPTEMBER 2007

GRANTEE	DATE APPROVED	GRANT AMOUNT	ENGINEER	OWNER'S REPRESENTATIVE	LAST STAFF SITE VISIT	PROGRESS
Washoe Co for Heppner Subdivision	3/31/04	\$1,280,300.00	Washoe County	John Nelson	May-07	<p>Heppner Waterline Extensions Phase 1-3 and 5a are complete. The County acquired the Grant of Right-of-Way for the new storage tank site from the BLM. The improvements to Lemmon Valley Well #8 are on hold until the tank is on line.</p> <p>Washoe Co has the facility plan that accounts for future water from Fish Springs Ranch. Contri construction is currently installing the 38-mile pipeline with booster pump system and wells. The new storage tank at the Heppner subdivision may increase from 0.6 to 1.5 Mgal. New development must fund the increase in the tank size. Negotiations are still in progress.</p>
Churchill County	7/20/04 4/05 8/23/06 11/9/06	\$3,667,667.54	Brown & Caldwell/ V-Point	Brad Goetsch	Aug-07	The Sand Creek Well, new storage tank, distribution system, operations center/treatment plant, and well house are complete. Punchlist items for the Sand Creek system are complete and the tie-in of Jetway Chevrolet and the mobile home parks are in-progress.
Lovelock Meadows	10/19/04 11/9/06	\$2,806,284.99	Farr West	Ryan Collins	Jul-07	Phase 1 of this project was completed in July 2007. Awaiting as-built drawings to close this project.
Nye Co for Manhattan PER	10/19/04 11/3/05	\$85,000.00	Day Engineering	Samson Yao	Aug-07	The existing borehole in the town of Manhattan is currently under aquifer test to determine drawdown over time. Early test results indicate that this location may produce water that meets the arsenic concentration requirements. The County and Day Engineering are preparing a pre-application to the NWWRC for funding consideration of a new project to bring Manhattan into compliance with the requirements for safe drinking water.
Golconda GID	1/27/05	\$956,478.75	Farr West	Becky Trigg	Jul-06	Bidding was completed in August 2007 with construction bids coming in lower than engineering estimates. Work is expected to begin in Sept 2007.
Washoe Co for Spanish Springs	1/27/05	\$4,000,000.00	Washoe County	John Nelson	May-07	The Phase 1A sewer project is complete and 171 homes have abandoned their septic systems and connected to the new sewer line to date.
Virgin Valley Water District	1/27/05	\$2,000,137.00	Brown, Collins & Associates	Mike Winters	Mar-06	The Scenic reservoir construction is complete, connected to distribution system, disinfected and connected to VVWD Well No. 30. The new coagulation-filtration arsenic treatment facilities for the 2 Bunkerville were redesigned to include lined infiltration ponds to handle the backwash water. VVWD plans to bid all 5 of the treatment plants in March 2007 to assure uniformity of equipment and hopefully reduce overall costs. Construction should begin in May/June.
Douglas Co for Sheridan Acres	4/27/05 3/14/07	\$1,632,119.63	Douglas County	Ron Roman	Sep-07	The well, well house, and CO2 stripper, and new storage tank are complete and on-line. Douglas Co received additional grant funding for the meters in March 2007 and this work is nearing completion.
Goldfield Arsenic PER	8/04/05	\$29,750.00	Lumos	Lori Dunn	Jul-07	Treatment and non-treatment options were investigated. Three pilot tests, one bench test, and one computer simulation were completed. Staff has commented on the draft PER.

PROGRESS REPORT ON OPEN PROJECTS

SEPTEMBER 2007

GRANTEE	DATE APPROVED	GRANT AMOUNT	ENGINEER	OWNER'S REPRESENTATIVE	LAST STAFF SITE VISIT	PROGRESS
Metropolis Irrigation District	1/25/06	\$489,467.40	Dyer Engineering	Vernon Dalton	Jun-07	Engineering design and environmental and cultural assessment for BLM permitting is currently in progress.
Douglas Co for Cave Rock	1/25/06	\$476,089.25	Douglas Co	Ed Mason	Sep-07	Construction is in-progress with completion expected in September 2007.
Moundhouse PER	5/3/06	\$12,750.00	Farr West	Mike Workman		A draft of the PER is complete and in review.
Beatty Arsenic PER	5/3/06	\$51,850.00	Farr West	Jim Weeks		<p>Water samples have been taken to get additional data on water quality. Arsenic treatment system vendors have been contacted in order to determine the feasibility of pilot testing. A bench test was run on the water and results are pending.</p> <p>Well EW4 was down for pump replacement and pilot testing had to wait until the well is back on line. Pilot testing was due to commence when the Yerington arsenic pilot testing completed in August or September 2007.</p>
Yerington Arsenic PER	5/3/06	\$47,600.00	Farr West	Dan Newell		Sampling of 4 city wells was completed. Pilot testing began in April 2007 and is anticipated to be complete in August or September 2007. The pilot testing included pH adjustments and a media switch to determine effects on arsenic removal.
Pershing Co Water Conservation District	5/3/06	\$3,956,282.50	Farr West & Dyer Engineering	Bennie Hodges	Jul-07	<p>The failure of the Rogers Dam in late July 2006 created an emergency need to reallocate grant funds to a cofferdam and design of a replacement for the Rogers Dam. The cofferdam was completed in August 2006 and the by-pass around the Rogers Dam/cofferdam was completed prior to the start of the irrigation season in March 2007.</p> <p>The only other construction element of this project that was released for grant funding at this time was the replacement of the diversion structures for the Old Channel/Union Canals as they had match funding from the BOR for only the next year. The diversion structure was also completed in March 2007.</p> <p>Design is currently underway for the new Rogers Dam and for the Pitt Taylor diversion. The District will present a request for additional funding of the Rogers Dam construction at the September 2007 Board meeting.</p>
Kingston GID	5/3/06	\$2,726,309.70	Day Engineering	Dean Day	Aug-07	Project bids came in more than \$900,000 under the engineering estimate. Pacific Rim out of Renton, WA, was the low bidder. Work began in June 2007 is progressing on schedule.
Pershing Co for the Town of Imlay	8/23/06	\$563,993.96	Farr West		Jul-06	Pershing Co has submitted a planned rate structure for Imlay. The project is awaiting a Notice to Proceed from CDBG (match funding agency) prior to starting surveying and design.

PROGRESS REPORT ON OPEN PROJECTS

SEPTEMBER 2007

GRANTEE	DATE APPROVED	GRANT AMOUNT	ENGINEER	OWNER'S REPRESENTATIVE	LAST STAFF SITE VISIT	PROGRESS
Stagecoach GID	8/23/06	\$2,210,089.19	Nichols Consulting	Lynn Arndell	Sep-07	Project bids came in under the engineering estimate with A&K being the low bidder. Work began at the end of May 2007. The 12" intertie transmission line is installed and tested from the Churchill Rancho Estates to Boyer Ave. The water main from Iroquois to the new storage tank is installed and the new tank is currently in progress. The booster pumps were the longest lead time item and will be delivered and installed in Oct 2007.
LVVWD for Searchlight	8/23/06	\$2,536,522.34	LVVWD	Shweta Bhatnagar	Aug-07	<p>LVVWD completed a Biological Assessment (BA) in June 2006 and an EA in August 2006. The FWS responded by issuing a Biological Opinion (BO) in September 2006 which outlined measures required to minimize those potential effects. In December 2006 the BLM issued the Finding of No Significant Impact (FONSI) for the completed EA and issued a Right-of-Way Grant/Temporary Use Permit to conduct the groundwater exploration study. This project is also being funded by a grant from the U.S. Environmental Protection Agency (EPA).</p> <p>The LVVWD completed design and contract preparation for the Piute Valley Test Wells and bids opened in January 2007. Bids came in under the engineering estimate. The LVVWD awarded the construction contract on March 20, 2007, to Layne Christensen, Inc. in the amount of \$420,000. Two of the four exploratory wells are now complete to 1000-ft. The results of the air-lift testing after all four wells are drilled will determine which two may become production wells to replace S1 and S2. The remaining two holes will become monitoring wells.</p> <p>On April 3, 2007, Searchlight's primary production well, S2, failed. The LVVWD immediately dispatched crews and started Searchlight's backup well, S1. The LVVWD contacted Searchlight customers, asking them to curtail their water use, as S1 produces significantly less water than S2. Construction water was also discontinued until the well was repaired. LVVWD crews replaced the pump, motor, cable, and other required equipment and were able to get S2 back online by April 10, 2007. The Searchlight Water System accrued unanticipated costs as a result of this well failure. The LVVWD loaned the water system funds to make necessary emergency repairs and hopes to recuperate costs through water rates and connection fees. The well failure also demonstrated the need for new infrastructure for the Searchlight Water System.</p>
Lyon Co Utilities for Crystal Clear	8/23/06	\$43,350.00	Farr West	Mike Workman	Sep 2007	Lyon County Utilities Department submitted a letter of intent to the Board at the June 1007 Board meeting. The Board requested further investigation and tabled a decision on the planned project. Lyon County will present an updated letter of intent and grant application at the September 1007 Board meeting.

PROGRESS REPORT ON OPEN PROJECTS

SEPTEMBER 2007

GRANTEE	DATE APPROVED	GRANT AMOUNT	ENGINEER	OWNER'S REPRESENTATIVE	LAST STAFF SITE VISIT	PROGRESS
Gabbs PER	3/14/07	\$25,925.00	Day Engineering	Samson Yao		
Topaz Ranch Estates	3/14/07	\$1,471,452.01	TEC	Bill Maher		The conditions required in the grant resolution have now been met; however, signing of the funding agreement is pending a discussion of the GID's current financial situation and project management plans.

Appendix 6 - Progress and Financial Report for Funded SB62 Projects

SB 62 PROJECT REPORT SEPTEMBER 2007

Project	Grant Amount	Project Summary
Humboldt River Basin Water Authority	\$120,000.00	Assemble existing information into a water resources data base in support of threats to water rights. Develop recommendations for collection of additional necessary data. Develop a public information program. Deliver a summary report for each county describing available forecast of economic/demographic conditions and related water.
Esmeralda County	\$16,245.85	<p>The project was planned to conduct a physical reconnaissance of the County's present water uses and existing water rights and develop a strategy to enhance and protect the County's water rights to ensure present and future water demands can be met as well as preparing a Water Rights Management Plan. All water rights identified in four hydrographic basins were reviewed. A field reconnaissance trip was conducted with the State Engineers office to physically site in the locations for the point of diversion for water rights and ascertain the manner by which the appropriated water is being exercised.</p> <p>Progress Report, June 2007: The Esmeralda County Water Rights Plan is complete and available electronically on NDEP's website at http://ndep.nv.gov/bffwp/esmeralda%20county_sb62.htm (contact: Michelle Stamates at 775.687.9331 or mstamate@ndep.nv.gov).</p>
Town of Tonopah	\$11,250.00	<p>Assemble all active surface and groundwater rights for Ralston Valley Hydrographic Basin No. 141, Big Smokey – Tonopah Flat Hydrographic Basin No. 137, and Alkali Spring Valley Hydrographic Basin No. 142.</p> <p>Progress Report, April 2007: In an effort to reduce costs, town employees gathered information from the Nye County Courthouse records for this project. The project is estimated to be approximately 50% complete at this time. A progress meeting will be held 4/17/2007 with the Tonopah Public Utilities and Town Officials to review the information gathered to date.</p>
Churchill County	\$36,500.00	<p>Update of the County's Water Resources Plan for surface and groundwater resources. Review of all county records relating to water resource requirements, both existing and projected. Update of the water resource ownership in the County.</p> <p>Progress Report, June 2007: The Churchill County Water Resources Plan update is complete and available on the County's website at http://www.churchillcounty.org/planning/waterplan.php and is linked to NDEP's website at http://ndep.nv.gov/bffwp/sb62.htm (contact: Michelle Stamates at 775.687.9331 or mstamate@ndep.nv.gov).</p>
Eureka County	\$120,000.00	<p>Compile and develop a database of existing water-level data and supporting hydrologic information as the basis for developing a baseline of water-level measurements for Nevada's Central Hydrographic Region. Create maps showing a spatial distribution of existing water level data.</p> <p>Progress Report, May 2007: In progress: 1) mapping discharge areas and verifying ET rates; and 2) drilling, strat. sections, and water level measurements.</p>

SB 62 PROJECT REPORT
SEPTEMBER 2007

Project	Grant Amount	Project Summary
Gerlach	\$92,833.42	<p>A database of spring flow and quality and a groundwater model will be developed to determine any changes that might result from the proposed development in the basin that might adversely affects the two springs (Garden and Railroad Springs) that provide water to Gerlach.</p> <p>Progress Report, January 2007: Data loggers & flow meters have been installed at springs; Monitoring of water level and discharge rate from the springs is currently in progress and will be used in calibration of the groundwater model.</p>
LVVWD – Kyle Canyon	\$27,184.72	<p>Install 100 Permalog units for the detection of subsurface leaks and acquisition of a Patroller unit for data collection. This system will allow operators to find and repair leaks, protecting millions of gallons of water previously lost to the system.</p> <p>Progress Report, December 2006: 30 leak detection units have been installed in the Rainbow subdivision. The balance of the work will be completed after the product has been proven suitable to the area’s winter conditions. The remaining work should be completed by summer 2007.</p>
City of Fernley	\$38,680.59	<p>Reconcile all past and future mapping difficulties by attempting to develop a new GIS map of all Truckee Diversion surface water rights within the City of Fernley.</p> <p>Progress Report, June 2007: Data on all deeds relating to water rights transfers to the City of Fernley have been obtained and included in a database. Initial mapping of both sections 10 and 13 are in progress.</p>
Virgin Valley Water District	\$116,041.77	<p>Analyze water quality information from throughout the watershed region to develop a conceptual model of groundwater flow, mixing and hydrologic connection through naturally occurring chemical tracers, and develop a steady-state representation of the predevelopment conditions of the regional groundwater flow systems utilizing modifications of previous models to develop a comprehensive numerical model.</p>
White Pine County	\$116,041.77	<p>Update information (including: hydrogeologic framework, groundwater hydrology, and regional groundwater flow system) on County’s water resources and update the Water Resources Plan to assist in identifying potential water use and needs based on scenarios for growth and development.</p> <p>Progress Report, June 2007: A draft of the County’s Water Resources Plan has been produced and is now in review.</p>
LVVWD – Searchlight	\$150,000.00	<p>Drill and develop 4 new monitoring wells to better understand the groundwater resource and groundwater quality in Paiute Valley and the Eldorado Valley Basins. One of the 4 wells will be funded by this grant.</p> <p>Progress Report, Dec 2006: LVVWD is evaluating site locations in Piute Valley for potential monitoring wells. The project schedule includes an Environmental Assessment and rights-of-way by February 2008; Bidding completed by June 2008; and Monitoring wells completed by December 2008.</p>

SB 62 PROJECT REPORT
SEPTEMBER 2007

Project	Grant Amount	Project Summary
Topaz Ranch Estates	\$5221.88	<p>Identification and mapping of proposed point of use/place of diversion for the existing 9 water rights permits.</p> <p>Progress Report, Sep 2007: The GID was awaiting final easement on the new well to begin this project. The easement was finalized in August 2007.</p>
Central Nevada Regional Water Authority	\$150,000.00	<p>Compile and document the baseline information required to determine long-term changes in groundwater levels in the Central Hydrographic Region (including: Churchill, Elko, Esmeralda, Eureka, Lander, Nye, & White Pine counties) in order to evaluate the sustainability of present groundwater supplies secured under existing water rights, analyze the impacts of future development, and support future actions by local governments.</p> <p>Progress Report, April 2007: Completed to date: 1) a spreadsheet containing water-level data, supporting database attributes and data-quality information; 2) maps showing spatial distribution of water-level data; and 3) analysis of data gaps. In progress: 1) summary report that documents methods and findings and identifies areas needing additional new water-level measurements; and 2) modifications and expansions of NSWR Facilities Map application. A last step includes the development of a website.</p>

Appendix 7 - Administration Funding Resolution

RESOLUTION

A RESOLUTION DESIGNATED THE "9-07 GRANT PROGRAM ADMINISTRATION SET-ASIDE FUNDING RESOLUTION"; PERTAINING TO THE DETERMINATION BY THE BOARD FOR FINANCING WATER PROJECTS OF THE STATE OF NEVADA TO SET ASIDE FUNDS FOR THE PURPOSE OF ADMINISTERING THE PROGRAM; MAKING CERTAIN FINDINGS OF FACT AND PROVIDING OTHER DETAILS IN CONNECTION THEREWITH.

WHEREAS, the Board for Financing Water Projects (the "Board") of the State of Nevada (the "State") is authorized by Chapter 349.980 to 349.987, Nevada Revised Statutes (the "Act"), to administer a program to provide grants of money to purveyors of water to pay for costs of capital improvements to publicly owned community water systems and publicly owned non-transient water systems required and made necessary by the State Board of Health pursuant to NRS 445.361 to 445.399, inclusive, or made necessary by the Safe Drinking Water Act (42 U.S.C. §§ 300f *et seq.*) and the regulations adopted pursuant thereto; and

WHEREAS, NRS 349.984 creates a fund (the "Fund") for grants for water conservation and capital improvements to certain water systems to which is deposited bond sale proceeds, bond interest and any other applicable revenue; and

WHEREAS, the State Board of Finance is authorized by NRS 349.986 to issue general obligation bonds in the face amount of not more than \$125,000,000.00 to support the purposes of the program, with the net proceeds from the sale of bonds deposited in the "Fund"; and

WHEREAS, NRS 349.982 allows money in the "Fund" be used to defray, in whole or in part, the costs of administering the "Fund" and the expenses of the board in administering the program.

NOW, THEREFORE, BE IT RESOLVED, BY THE BOARD FOR FINANCING WATER PROJECTS OF THE STATE OF NEVADA:

Section 1. This Resolution shall be known as and may be cited by the short title of the “9-07 Grant Program Administration Set-Aside Funding Resolution.”

Section 2. In connection with its findings of fact set forth in Section 3 of this Resolution, the Board has determined, and does hereby declare, that \$585,465.00 of the “Fund” shall be set-aside to fund administration of the grant program.

Section 3. The Board hereby makes the following findings of fact in support of its determination to set-aside money from the “Fund” to fund administration of the grant program:

(a) It is the Board’s policy to maintain sufficient monies in the administration fund to fund program and Board administration costs for 2 years out, depending on the availability of cash in the “Fund”; and

(b) The “Fund” contains approximately \$9,000,000.00 in cash on hand which is uncommitted to projects and available for program administration; and

(c) The current cost of administering the grant program, including Board expenses, is approximately \$292,732.50 per year; and

(d) Sufficient funding to finance administration of the program for a 2-year period is available for administration.

Section 4. The Board hereby authorizes and directs the Director of the Department of Conservation and Natural Resources to send a copy of this Resolution to the Division of Environmental Protection and to take all other necessary and appropriate actions to effectuate the provisions of this Resolution in accordance with the Act and the Regulations.

Section 5. This resolution shall be effective on passage and approval of this resolution.

PASSED, ADOPTED AND SIGNED:

Bruce Scott, Vice - Chairman Date
Board for Financing Water Projects

Attest:

Adele Basham, P.E. Date
Technical Assistant to the Board for Financing Water Projects

Appendix 8 - REVIEW / ADOPT NEW BOARD POLICIES

Board for Financing Water Projects Proposed Policy Changes September 20, 2007

David Emme, Chief
Bureau of Administrative Services
Nevada Division of Environmental Protection

Policy #1. Scale to Determine Grant Amount

Existing scale (57 to 87% of project costs) is based on:

- Need for the project (acute or chronic health concern or system rehab.)
- Community need of State assistance based on:
 - Median income relative to State average
 - Population served
 - Water rates relative to Board policy
 - Property tax rates
- Other factors, such as:
 - Water conservation measures
 - Addresses system leakage
 - Regional cooperation
 - Applicant has alternative funding
- Deduction for relative rank on SRF Priority list

Policy #1. Scale to Determine Grant Amount

Proposed changes intended to favor small, low income communities and provide incentives toward well managed systems and projects:

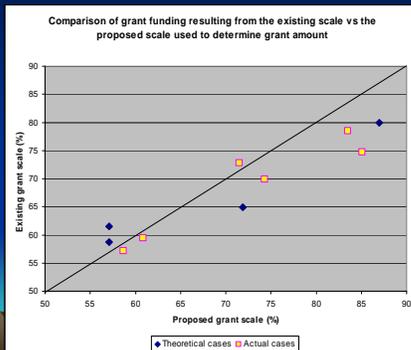
- Community need of State assistance:
 - + Increase weighting for low income communities
 - + Increase weighting for low population served
 - + Increase weighting for water rates that meet Board policy
- Other factors, specified as:
 - + Addresses system leakage
 - + Water conservation measures
 - + Metered water rates
 - + Asset management plan
 - + O&M, X-connection and emergency response plans
 - + Wellhead protection plan
 - + Project management
 - + Daily inspections
 - + Applicant has alternative funding

Policy #1. Scale to Determine Grant Amount

Proposed changes, continued:

- Deduction factors:
 - o Eliminate deduction for the relative rank of the applicant on the SRF Priority list; and
- Specify deductions for:
 - Communities that include a high proportion of second homes;
 - Applicants that fail to adequately fund capital replacement funds;
 - Applicants that have performed poorly on a previous grant project; and
 - Applicants that do not take advantage of opportunities for regional cooperation.

Policy #1. Scale to Determine Grant Amount



Policy #2. Reasonable Water Rates

Proposed wording changes to existing policy to:

- Eliminate reference to "reasonable rate" being in place in order to be eligible for a grant since this conflicts with later sections; and
- Specify that reasonable rates must be in effect prior to soliciting construction project bids rather than prior to the first construction pay request.

Policy #3. Funding Level for Irrigation Projects—For discussion only

Background

- Grant eligibility for water conservation projects related to irrigated agriculture was included in AB237 and passed by the 1999 Legislature.
- Lacking specific guidance in Statute or a Board policy, irrigation-related grant projects have been funded at 85%.
- Staff tasked with developing a funding scale policy for irrigation projects.

Policy #3. Funding Level for Irrigation Projects—For discussion only

Proposed policy considerations

- Defining scale factors is problematic, e.g. amount of water conserved? Available storage? Water rates? Irrigated acreage? Population? Income?
- Proposed policy takes a simpler approach:
 1. Sets a ceiling on allocation of available grant funds for irrigation projects at 20%;
 2. Sets a flat grant scale (65%) and local match.

Policy #3. Funding Level for Irrigation Projects—For discussion only

Basis for allocation ceiling:

- The grant program was created to assist small water systems.
- When eligibility for grants was expanded to include irrigation (AB237—1999) and sewer system connections (SB200—2003) additional bonding authority was added for those purposes.
- With regard to sewer connections, the Board awarded the allocated funding (\$4 mil) and adopted a policy that no additional grants would be awarded unless more funding was allocated for that purpose.

Policy #3. Funding Level for Irrigation Projects—For discussion only

Basis for allocation ceiling, continued:

- With regard to irrigation projects, \$10 mil in additional bond authority was allocated by AB237 raising the bond authority to \$50 million or 20% of the total authority.
- Legislative intent is fairly clear from the AB237 hearing record. *“Assemblyman Dini said the reason they added the \$10 million was because they did not want to compete with the small water companies, and domestic water companies that had a balance left in their end of the original \$40 million. Water planning wanted to add the \$10 million for new projects for conservation of water. That was the purpose of raising the bonds.”*

Policy #3. Funding Level for Irrigation Projects—For discussion only

Basis for allocation ceiling, continued:

- Since the Board has elected to continue awarding irrigation project grants beyond the \$10 million allocation, staff would propose a 20% ceiling on future grant awards to preserve funding for drinking water projects.

Policy #3. Funding Level for Irrigation Projects—For discussion only

Basis for allocation ceiling, continued:

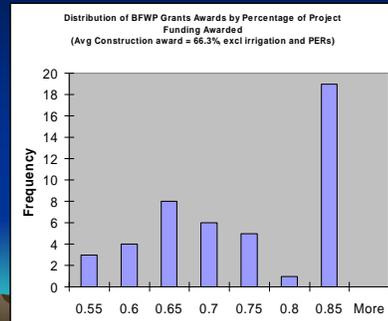
- Since the Board has elected to continue awarding irrigation project grants beyond the \$10 million allocation, staff would propose a 20% ceiling on future grant awards to preserve funding for drinking water projects.

Policy #3. Funding Level for Irrigation Projects—For discussion only

Basis for grant funding scale of 65%:

- A funding level of 65% would bring equity with drinking water grants since the average funding level of drinking water grants is approximately that level.
- This level of funding and local match is also in line with US Army Corps of Engineers funding levels for similar water resource projects.

Policy #3. Funding Level for Irrigation Projects—For discussion only



Policy #3. Funding Level for Irrigation Projects—For discussion only

Cost Share for Corps Projects		
Project Purpose	Maximum Federal Share of Construction	Maximum Federal Share of O&M
Commercial Navigation		
Coastal Ports —		
<20 ft. harbor	80%*	100%
20-45 ft. harbor	65%*	100%
>45 ft. harbor	40%*	50%
Inland Waterways	100%**	100%
Flood Control	65%	0%
Hydroelectric Power	0%	0%
Municipal and Industrial Water Supply	0%	0%
Agricultural Water Supply	65%***	0%
Recreation	50%	0%
Hurricane and Storm Damage Reduction (except Periodic Beach Nourishment)	65% (50%)	0% (0%)
Aquatic Plant Control	not applicable	50%
Environmental Restoration		
Congressionally Authorized Projects	65%	0%
Beneficial Uses of Dredged Material and Modification for Improvement of Environment	75%	0%

source: "The Civil Works Program of the Army Corps of Engineers—A Primer" CRS Report to Congress 2006

Thank you