

**BASIN 162 GROUNDWATER MANAGEMENT
ADVISORY COMMITTEE**

MEETING MINUTES

**July 28, 2015 – 2:00 PM
BOCC Chambers, Pahrump, NV**

Regular Members: Gregory Hafen II – Chair
Gregory Dann– Vice Chair
Lenny Badger
Wendy Barnett
Kristian Bentzen
Walt Kuver
Mike Floyd

Alternate Members: Kenny Bent
Judith Holmgren

Legal: Marla Zlotek

Finance: Amy Fanning

Staff: Darrell Lacy
Oz Wichman
Levi Kryder
Teddi Osburn

Acronyms: AG - Attorney General
AVSTP - Amargosa Valley Science & Technology Park
BOCC - Board of County Commissioners
BOR - Bureau of Reclamation
CSWP- Community Source Water Protection
CNRWA - Central Nevada Regional Water Authority
DOA - Department of Agriculture
DOI - Department of Interior
EPA - Environmental Protection Agency
GID - General Improvement District
GM - General Manager
GWE- Groundwater Evaluation Grant
GWMP – Groundwater Management Plan
HUD - Housing and Urban Development
IRWMP - Inter Regional Water Management Program
MOU - Memorandum of Understanding
NTS - Nevada Test Site
NCWDGB - Nye County Water District Governing Board
NRWA – Nevada Rural Water Association
NWRA - Nevada Water Resources Association
RFP - Request for Proposals
RNWA - Rural Nevada Water Authority
ROW - Right of Way
SNWA - Southern Nevada Water Authority
USDA - United States Department of Agriculture
UGTA - Underground Test Area
USGS - United States Geological Survey
WD - Water District

Mission Statement: "To create an equitable groundwater management plan for the Pahrump Basin and the Pahrump Community that balances water supply and demand today and for the future."

BASIN 162 GROUNDWATER MANAGEMENT PLAN ADVISORY COMMITTEE

1. **(00:00:15) Call to Order – Pledge of Allegiance**
2. **(00:00:40) Roll Call – Present:** Gregory Hafen II, Greg Dann, Kristian Bentzen, Wendy Barnett, Walt Kuver, Lenny Badger, Kenny Bent (Alternate filling in for absent member.)
Absent: Mike Floyd
3. **(00:01:13) General Public Comment (first): Three-minute time limit per person. Action will not be taken on the matters considered during this period until specifically included on an agenda as an action item.**
None
4. **(00:01:39) Approval or Modifications of the Agenda for the Groundwater Management Plan Advisory Committee Meeting of July 28, 2015.**
No modifications
5. **(00:01:56) For Possible Action – Approval of Minutes for June 23, 2015.**
Kenny Bent made a motion to approve the minutes for June 23, 2015. Wendy Barnett seconded the motion. The motion was approved with a vote of 7-0 in favor.
6. **(00:02:39) Correspondence and Announcements**
Greg Dann related that there are 2 water labs in Las Vegas that are certified by the State of Nevada to perform water analysis. He recently had his water analyzed and the Total Dissolved Solids (TDS) in his sample were drastically elevated from when the water was originally analyzed in 1970. He wanted to alert other well owners in the valley that their water may have the same issue.

Kristian Bentzen and Kenny Bent both noted that there were a lot more people attending the current meeting than there has been in the past. They both felt that it may have something to do with starting the meeting later in the day.
7. **(00:06:43) Ex-Parte Communications and Conflict of Interest Disclosure Statements**
None
8. **(00:06:50) For Possible Action – Presentation, deliberation and decision regarding the second draft of the Groundwater Management Plan for Basin 162.**
Oz Wichman noted that he would begin by going over the more obvious changes that were suggested at the previous meeting. Up for review was the second draft of the Groundwater Management Plan dated July 2015. He noted that changes and additions were printed in red for clarity. The items that were marked "to be determined" indicated that it will take some time to gather the information. There are other outstanding items which will be addressed in future versions of the draft. Some items were intentionally left out for the moment to allow further evaluation and to get feedback from the board.

One such item was encouraging well owners to hook-up to utility systems. Greg Dann suggested that utility companies pay for plugging of wells. Wendy Barnett noted that this would have to be approved by the PUC in order to justify an increase to her rate payers. Darrell Lacy felt that even

though this might benefit the entire community, the existing customers would be asked to foot the bill and it was not fair. Future growth must pay for itself.

Wendy Barnett discussed a planned extension of some of UICN's water mains for the purpose of improving fire protection in the community. Well owners along that route can choose to hook into the system if they wish. If a well fails the owner can have the option to re-drill, or plug their well and hook-up at their own expense. John Guillory from the DWR related that state policy does not allow an existing well to be deepened if the water main is within 180 ft. from any point on the property line. A brand new well cannot be drilled if the property line is within 360 ft. of an existing water main. Oz Wichman suggested that the 3 members of this committee that represent utility companies get together and work out a feasible plan to present at the next meeting which may encourage people to connect. Greg Dann felt that if costs were reasonable many people may consider this option.

Mr. Wichman noted that there needs to be an option available for people to connect to a utility in areas where the water table is in decline. Capping wells may help to stabilize water levels in a given area. It is up to this committee to recommend actions that will help to reverse this decline. Redistribution of pumping; incentives to connect to utility companies; continuing to fund the Groundwater Level Monitoring Program; use of groundwater modeling and aquifer storage and recovery are all tools that can directly address this issue.

Walt Kuver related that hooking up every lot to a utility is not a solution because, in the end, there is just not enough water available. Wendy Barnett stated that UICN is only bound to provide service in its approved service area. The most heavily pumped areas are not part of any utility service area at the moment. Ms. Barnett explained that the utility company receives a domestic well credit for each well that is connected.

Oz Wichman explained the total number of wells versus the actual number of domestic wells in the valley and how he derived those numbers from a well density map. There was discussion about production well locations not being pinpointed on the map. Mr. Wichman related that the pumping inventory on a production well varies from year to year as water rights tend to be transferred between different points of use. Kenny Bent had concerns about production wells drawing too much water that would negatively impact areas of the valley where the water table is falling. Gregory Hafen related that this is where a modeling program can help with formulating a redistribution plan for future pumping.

Mr. Wichman related that he has incorporated additional information into this draft plan that was not part of the original 13 ideas recommended for inclusion. With that, Gregory Hafen began to go through the draft, page by page, asking for comment from committee members as he went along. On page 4 Wendy Barnett questioned how the 50 gallons/day/capita was derived. Mr. Hafen related that all manners of water consumption are incorporated into that figure and not just household usage. Walt Kuver didn't think that the 20,000 AF perennial yield figure was accurate because about 8,000 AF flows off of the fan to the south and on to California. Mr. Hafen discussed how a redistribution plan could help capture that water. Rick Felling, representing the DWR, explained how the perennial yield number was derived.

In discussing page 5, Oz Wichman explained that RIB's and recharge basins both serve to put water back into the basin. He noted that Inyo County was removed from inclusion in this document due to the vast complexity of issues surrounding California water. Greg Dann wanted to have the actual pumpage of the basin included in this document so people may get a better grasp of the situation.

Wendy Barnett questioned references to the over-dedication of water rights on page 6. Mr. Wichman explained that those excess water rights can never be moved for use in a different project.

During discussion of items on page 7, Oz Wichman clarified for everyone that certificated water rights and water rights that are in a permit status are equally valid. When a certificated water right is moved to a new point of diversion, the only thing that changes is that beneficial use must be proven at the new location before it is re-certificated. Greg Dann was in disagreement. Christian Bentzen felt that there should be a distinction made between certificated and permitted water rights within the Groundwater Management Plan so we know where “cuts” can be made. Mr. Wichman responded that this was a fallacy and “cuts” are made based upon priority date. Rick Felling from the DWR confirmed that permitted and certificated water rights are treated the same when it comes to regulation by priority. Some certificated rights may have very early priority dates and retain their seniority through time. Greg Dann felt that the law was flawed.

Gregory Hafen stressed that this committee was originally formed to define solutions before the State Engineer might feel the need to regulate by priority. Darrell Lacy noted that the number of allocated water rights in Basin 162 is diminishing because the State Engineer is beginning to deny extensions for some permits. Oz Wichman discussed how the “Conservation Credit” would be a useful tool for utility companies to relinquish some of those permitted water rights back to the basin.

Referring to page 9, Gregory Hafen stressed that staff needs to expand the table to figure out what the true adjusted over-allocation number should be. Oz Wichman stressed that this project will take many hours of additional staff time to be completed. Kenny Bent was concerned that the minimum lot size required for a septic system was too small. Gregory Hafen related that county code issues will be discussed at a later time.

Moving on, Mr. Hafen reviewed changes in language that were requested by the committee for various pages of the plan. Regarding water importation, Rick Felling related that the process was not overly complicated but it seemed to generate a lot of opposition from outside organizations which can make it difficult to move forward. Mr. Felling clarified that Clark County cannot draw water from Basin 162 because it is already over-appropriated. There was discussion about a water importation project proposed by Oz Wichman that is included in this draft plan. Mr. Wichman reminded everyone that one of the priority items suggested by this committee was importation of water into the Pahump Basin. Noting that this would be a project for the future, Greg Hafen emphasized that it was important to begin a feasibility study now in order to find out if there is any water available to import. Dan Schinhofen felt that it was important to think long term so that there will be water available for future generations to come.

Gregory Hafen commented that with regards to the conservation section of the plan, both Darrell Lacy and Greg Dann have been working together to come up with both a preferred and a prohibited plant list for new landscaping. Revisions to the Nye County Code are recommended as a first step in implementing the conservation plan. Regarding the water education section, there was discussion about avenues available to disseminate information to the public. Greg Dann suggested including information about ways one could detect water leaks in their system.

There was some discussion about the recommendation to require meters on new domestic wells. Kenny Bent felt this was something that the county could require during the building process. Darrell Lacy thought that the DA’s office may need to be consulted regarding the legality of this proposal.

Rick Felling stated that the DWR has never regulated groundwater in the state, but if there became a need, domestic wells can be regulated by priority date. Greg Dann questioned whether people should be directed to water right brokers to purchase additional water rights. Oz Wichman stressed the importance of keeping people informed about their options. He said that the term water “broker” will be changed to “agent” to avoid any potential legal issues. John Guillory explained that a domestic well owner is allowed to add additional water to an existing well, but they will be required to prove beneficial use for the additional water.

During discussion of RIB's it was noted that this water did not to be treated since the ground acted as a natural filter of contaminants. Oz Wichman discussed the benefits of aquifer storage and recovery in stabilization of water levels in the valley. A feasibility study with cost estimates will have to be conducted. Rick Felling noted that water can be recharged through a RIB. It does not have to be injected into the aquifer.

There was discussion about the installation of backbone infrastructure in areas where water levels are dropping. Oz Wichman felt that he needed to reword this section so that the benefits and logistics of water redistribution are better understood. During a discussion of costs, it was noted that grants and special taxing districts could provide funding to implement such a project.

The committee reviewed changes to the development agreement section. Wendy Barnett questioned whether developers would be given credit for implementing water conservation measures. Darrell Lacy stated that a development agreement is an ordinance within itself and can come forward with alternative dedication requirements that must be approved by the RPC and the BOCC. He also related how the Master Plan can control growth through regulation of allowable lot sizes. There was discussion about regulating water use through enforcement of CC&R's.

Kenny Bent explained that the valley was already at the breaking point when it came to having enough water for developments that have already been approved. There should not be any new developments approved going forward. Walt Kuver suggested the concept of "staged" growth control which would provide some flexibility in enforcement. Wendy Barnett cautioned about changing the minimal lot size to one acre as it will enable these lots to be eligible for a domestic well.

During public comment John Bosta suggested that the Water District had no authority to limit the amount of water drawn from new domestic wells as that would require a change in water law. He also expressed concerns about water being drawn from the valley floor and pumped to the fan in order to fill water tanks owned by utility companies. He felt utility companies were partially responsible for declines in the valley floor aquifer. (See attached.)

Joe Leising briefly commented that a water model that is overly complicated will be assumption driven due to its complexity. ASR is possible in this valley but it requires suitable conditions in order to work properly, and water that is recharged must be monitored as it could potentially contaminate the aquifer.

9. **(03:20:08) For Possible Action – Presentation, discussion and possible decision regarding ongoing and short-term projects of the Nye County Water District.**
None

10. **(03:20:20) Staff Reports/Comments:**

A. Darrell Lacy

Mr. Lacy related that he attended the governor's drought forum last week and briefly discussed some of the material presented there.

B. Oz Wichman

Mr. Wichman noted that he and Darrell Lacy had attended a meeting in Diamond Valley where the state designated the basin a Critical Management Area. Eureka County is now working on a groundwater management plan. There are concerns about the published pumpage inventory which they feel is overstated and citizens requested adjudication of the entire basin. They are using the latest techniques to minimize water usage and are generally supportive of the State Engineer, give him the utmost respect and are in support of the CMA designation.

C. Levi Kryder

None

D. John Klenke

In response to Mr. Bosta's observations, he related that the Water District is working with UICN to collect data on their production wells in the vicinity of Hwy 162. He has data going back to 2004 and noted that those wells are not dropping any faster than surrounding domestic wells. In general they are drilled deeper than domestic wells. He has not observed any impact from these wells at this point.

11. (03:26:53) For Possible Action – Discussion, Direction and Possible Decision Concerning Future Meetings/Workshops.

The next scheduled meeting of the Basin 162 Groundwater Management Plan Committee is August 25, 2015, commencing at 9 AM.

It was decided to schedule a September meeting for the 29th beginning at 2:00 PM. Darrell Lacy suggested that the BOCC be given a chance to review the draft plan within the next month or so.

Greg Dann felt domestic wells have been demonized during these meetings over the last year and a half and it is getting old. He would like to see more items dealing with curtailment of subdivisions in the plan. Kenny Bent would like to add additional items to the plan during the next meeting.

12. (03:32:28) General Public Comment (second) - (Three-minute time limit per person) Action will not be taken on the matters considered during this period until specifically included on an agenda as an action item.

John Bosta felt that it was inconsiderate to ask the public to hold comment till the end of discussion of an item. Another member of the public was in agreement

13. (03:34:01) Adjourn

Gregory Hafen adjourned the meeting.

Groundwater Management Plan-Second Draft-Comments

My name is John F. Bosta. Three minutes is not enough time for a person make all of the comments on the 49 pages of this agenda item. A person should have 3 minutes for each Chapter subsection in the Table of Contents.

The State Engineer increased the 12,000 acre-feet of Perennial Yield to 20,000 acre-feet of Perennial yield without providing any background information for the change. Has the State Engineer considered the Evaluation of the Maxey-Eakin Method for Calculating Recharge to Ground-Water Basins in Nevada-1992? This evaluation provides the following information for Basin 162; Masey-Eakin Recharge (ac-ft/yr) is 26,000 ac-ft/yr; and Model-Estimated Recharge (ac-ft/yr) is 37,000 ac-ft/yr. The Type of Estimate is a gw flow model and the Source is Herrill, WSP-2279 which is a U.S. Geological Survey Water-Supply Paper.

At yesterday NCGWGB meeting the term "Consumptive Use" was deleted from their Resolution. All use of the word "consumption" should be removed from this Second Draft.

"According to the State Engineer, water rights appropriations in Pahrump Valley reached the 12,000 acre-feet perennial yield in 1943. That means, if he were to administer the basin on a strict priority basis, then any water rights with a priority date after 1943 could be curtailed. There are about 50 senior water rights holders (out of a total of approximately 850 water rights holders) which exhausted the 12,000 acre-feet perennial yield by 1943.

Adding to the over-appropriation problem are the more than 11,000 existing domestic wells in the Pahrump Valley (which are statutorily entitled to pump 2 acre-feet each), and the potential for another 8,500 future domestic wells to be drilled (based on the State Engineer's estimate of the number of existing lots meeting the 1-acre minimum lot size that makes them entitled by statute to drill a domestic well)." [Direct Testimony of Wendolyn S. W. Barnett on Behalf of Utilities, Inc. of Central Nevada Application for approval of the 2014 Integrated Resource Plan]

"The Calvada Valley water system occupies the central portion of the existing *UICN* service area with surface elevations varying from approximately 2,580 feet to 2,870 feet. *UICN* currently provides water service to 4,570 metered customers in Pahrump, the majority of who are served by the Calvada Valley water system. The developer originally identified some 28,300 single family residential lots, multi-family lots, commercial lots, mobile home, industrial lots, and recreational vehicle lots proximate to the Calvada Valley water system.

The Calvada Valley water system is divided into two zones. The Calvada Valley High Zone serves lots in the Vineyards, Subdivision, Pahrump Valley Winery, Shamrock Unit 1, Commercial Loop, Rancho Vista Unit 6, and Calvada Valley Unit 6 and 11 (east of Highway 160), and Unit 10. Water is pumped from the Low Zone to the 1,000,000 gallon High Zone tank by a pair of 600 gpm booster pumps located at a pump station on CV1, Block1, Lot 8. It is located approximately 3,000 feet north of the northeasterly most corner of Calvada Valley Unit 10, Block 20, Lot 1, on Bureau of Land Management (BLM) property. This tank provides adequate pressure for lots as high as 2,876 feet.

An existing water main on the east side of Highway 160 is the backbone of the High Zone water system. Valves at all existing Low Zone water connections with the main are shut off to separate the two zones. A Pressure reducing station is located at the northeasterly corner of Calvada Boulevard and Highway 160. In the event that the Low Zone water tank is out of service, the Low Zone water system can be served from the High Zone by manually opening a valve above the pressure reducing station. Chlorinating facilities are provided at existing well heads and at the Low Zone water tank and are therefore not needed or provided at the High Zone tank.

"Calvada Valley Low Zone serves existing lots in Diamond Bar Estates, Autumnwood, Charleston Park, and Calvada Valley Units 1-5, Units 6 and 11 (west of Highway 160), Units 7-9B (west of Highway 160). The Low Zone is supplied by five domestic wells, Wells 1, 2, 8, 9, and 11, which pump water to the 750,000 gallon water tank located at Calvada Valley Unit 10, Block 2, Lot 44. It provides a minimum pressure of 40 psi to all lots below an elevation of 2,710.5 feet." [Utilities, Inc. of Central Nevada Dead End Looping Analysis of the Existing Water System, 7/24/2007 Page 9]

"Although the Perennial yield (PY) for the overall basin is 20,000 AFA and 2013 pumping was published at 14,348 AFA, groundwater levels within much of the area comprising the valley floor-where most of the domestic well are located-continue to decline." The above 2007 statement by UINC includes five domestic wells located valley floor (Calvada Valley Low Zone). All of the Utilities production wells should be located in Figure 1 map on page 10. All of the utility companies are pumping water from the valley floor to their tanks in the High Zone which adds to the "continued decline" on the valley floor.

The Basin 162 Groundwater Management Plan should stop all work until the State Engineer declares Basin 162 a Critical Manage Area.

Respectfully Submitted,
John F. Bosta

