

**BASIN 162 GROUNDWATER MANAGEMENT
ADVISORY COMMITTEE**

MEETING MINUTES

**September 29, 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
John Klenke
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

BASIN 162 GROUNDWATER MANAGEMENT PLAN ADVISORY COMMITTEE

1. **(00:00:16) Call to Order – Pledge of Allegiance**
2. **(00:00:55) Roll Call – Present:** Gregory Hafen II, Greg Dann, Wendy Barnett, Walt Kuver, Lenny Badger, Mike Floyd **Absent:** Kristian Bentzen
3. **(00:01:16) 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.**

Amy Nelson explained that she has gathered names of many people that would like to have a water education program presented to the Pahrump Community. She will be working with Oz Wichman to get that organized.
4. **(00:03:09) For Possible Action – Deliberation and decision regarding the placement of alternates to fill temporary vacancies for the current meeting.**

Wendy Barnett moved that temporary vacancies not be filled with an alternate for the current meeting. Lenny Badger seconded that motion. Greg Dann commented that it would be advantageous to have seven members on board at this time rather than run the risk of a stalemate with only six members voting. He emphasized that the alternate, Kenny Bent is qualified to partake in the discussion. Mrs. Barnett related she was aware that Mr. Bent would like to continue rehashing items that had already been discussed and resolved. She hoped to keep moving the plan along at this point. He should not be a voting member at this meeting in order to keep moving toward the final draft.

During public comment, Kenny Bent stated that this was an attempt to stifle conversation and he would like to be a part of the dialogue. Other members of the public expressed support for Mr. Bent's inclusion.

Gregory Hafen, II reminded everyone that the procedure for seating of alternates had been approved by this committee at a previous meeting. Wendy Barnett clarified that it was too late in the process to allow Mr. Bent to come in and start adding and changing things. Her motion was for him to simply not have a vote. She did not want to see the path that the other seven members have been working on be changed at this point.

The motion passed with a vote of 4-2 in favor of passage. Greg Dann and Mike Floyd cast the dissenting votes.
5. **(00:11:44) Approval or Modifications of the Agenda for the Groundwater Management Plan Advisory Committee Meeting of September 29, 2015.**

Gregory Dann proposed that Item 9 to be heard following Item 11 in order to allow adequate time to review Item 10, the Groundwater Management Plan.

Lenny Badger made a motion to move Item 9. Wendy Barnett seconded the motion. The motion passed with a vote of 6-0 in favor.

6. (00:12:46) For Possible Action – Approval of Minutes for August 25, 2015.

Wendy Barnett made a motion to approve the minutes for August 25, 2015. Lenny Badger seconded the motion. The motion was approved with a vote of 6-0 in favor.

7. (00:13:23) Correspondence and Announcements

Gregory Hafen, II emphasized that the current meeting must be finished by 4:30 PM in order to allow another meeting that is scheduled for this room. He discussed the joint meeting to be held in conjunction with the Nye County Water District Governing Board on October 12, 2015 at 9 AM. He stressed that there will only be one copy of the back-up material available for public viewing at this meeting. The public can view all material on line at the Nye County website.

Wendy Barnett announced that she had attended the Governor's Drought Symposium in Las Vegas. There was a lot of discussion concerning how to use water more wisely. As a participant she gave perspective on issues regarding rural water. She was excited about the mood for change which prevailed among the participants, and about their concerns for the entire State and not just their own local interests.

Oz Wichman noted that he will be participating as a speaker at the upcoming NWRA Fall Symposium where he will present the topic "Drafting a Groundwater Management Plan: A Long and Rocky Road." He will hand out copies the draft GWMP to participants.

8. (00:17:56) Ex-Parte Communications and Conflict of Interest Disclosure Statements

None

10. (00:18:03) For Possible Action – Presentation, deliberation and decision regarding the Final Draft for Stage One of the Groundwater Management Plan for Basin 162.

Oz Wichman related that the appendices are currently being compiled and will be included along with the final draft of Stage One when it is presented during the joint meeting on October 12th. Mr. Wichman briefly discussed changes suggested during the last meeting that have been incorporated into the final document. Of note, the Tables on pages 8 and 9 will be revised to make them more user friendly, but the information contained in them will not change. New versions will be included in the final document.

Mr. Wichman emphasized that during today's meeting he must have a decision from this committee regarding a recommended and/or prohibited plant list for new landscaping (pg. 21). He discussed changes in language that he made on page 30 in Section M. Gregory Hafen, II noted new language that had been provided by Wendy Barnett that was added to Section H as it relates to allowing utilities to put in backbone infrastructure.

There was discussion about organized weed control districts that operate in Nevada. Tri-County Weed Control provides services to both public and private entities. They can provide staff, equipment and chemicals for eradication of weeds that are not generally available at your local hardware store. A reference to this district will be added to page 21 as it relates to prohibited plants.

During discussion, it was decided that under the section "Prohibited Plants for New Landscaping," Salt Cedar would be the only species that is specifically mentioned. References to UNCE's invasive species list would be retained so the public can do further investigation into that topic. Upon Greg Dann's recommendation, it was decided that the SNWA "Water Smart Landscapes Program Plant List should be included as Appendix G in the final document.

On page 20 it was decided that the statement "this item has budgetary impacts" should be removed since the entire document itself has budgetary impacts. There was discussion about the potential for people to plant turf, then remove it so they could receive payment in doing so. Gregory Hafen, II felt

that deed restrictions could deal with that problem. Oz Wichman stressed that at the moment this is just a plan. That is why we are calling this Stage One. Wendy Barnett related that this type of program has been very successful in other communities. There was other discussion about at what point in time it may be necessary to begin considering importation of water as an option.

Mr. Wichman related that, at the request of Jason King, he will be adding language to Section M that discusses the amount of water savings that might be achieved by implementing items proposed in the plan. Also, balancing of water use trends with that of population trends needs to be addressed.

During public comment Amy Nelson related her experiences with eliminating Salt Cedar on her property. She agreed that this plant should be outlawed throughout the valley and emphasized that vacant lots with Salt Cedar growing presented a major area of concern. Dave Caudle noted that the basin is currently in balance as it relates to population vs. usage, but ½ acre foot per lot may not be sufficient for some of the larger lots. Wade Hinden felt that Nye County should pay to remove Salt Cedar from lands that had been forfeited back to the county in lieu of taxes. Katreen Romanoff felt that growth control should be implemented. Diane Holguin thought that population growth figures included in this document were not accurate.

Oz Wichman related that Salt Cedar eradication is an important issue which will require a major commitment and source of funding from the community itself.

11. (01:09:35) For Possible Action – Presentation, deliberation and decision regarding ongoing and short-term projects of the Nye County Water District.

None

9. (01:09:50) For Possible Action – Presentation and discussion regarding the Leising Geoscience hydrostratigraphic assessment and climate response/recharge evaluation studies being conducted in the Pahrump Valley.

Joe Leising presented a PowerPoint slide show which summarized findings of the study he has been conducting in the Pahrump Valley. He began by presenting basic terms, concepts and goals to help with public understanding of the study. Mr. Leising noted that this was an observational study which increasingly requires more and more data of which there can never be enough. Assumptions are made to fill in the data gaps.

Mr. Leising related that precipitation more efficiently penetrates into the aquifer at higher elevations where the soil is more permeable. Due to the tightly packed soils in the valley floor, precipitation does not readily permeate. For the most part, the valley aquifer is replenished by waters flowing downhill from the mountain. The water level in the valley aquifer will decrease if pumping exceeds the rate at which water flows into the basin from the mountain source. This is referred to as the Water Balance. If the rate of water flowing from the mountain exceeds that which can be taken into a lower basin, water may seep out through faults along the route in the form of artesian springs.

Data compilation is now complete and results will be incorporated into the final report. Mr. Leising was unsuccessful in determining whether or not there existed a “sweet spot” on the valley floor. He felt that the fan was more likely to have a sweet spot due to the composition of the soils.

One of Mr. Leising’s challenges was to assess whether or not some fluctuations in valley water levels were climate derived. He noted that there was some evidence of climatic trends, most notably in undeveloped portions on the southern end of the valley. He determined that there needs to be a sustained long term change before evidence is reflected in the aquifer. Primary impact on the basin appears to be from pumpage. Distribution of domestic wells has a major impact upon declining water levels in certain areas. In general, if every type of well in the basin were to pump between .5 - .7 AF per year, between 11,000 to 13,000 AF would be pumped annually.

In doing analogies with the Las Vegas Valley, Mr. Leising has determined that there may be as many as 30,000 AF in perennial yield for Basin 162, but he cautioned that these numbers were only speculative. The 20,000 AF established by the DWR is the standard on which to base future decisions. He estimated that the basin is losing around 5,000 AF per year as it flows out of the valley (a reduction in storage). If you count the average of 12,000 AF used by wells annually plus the 5,000 AF in storage loss, that leaves around 3,000 AF per year for other purposes.

Mr. Leising recommends continuing the various Groundwater Evaluation programs and adding additional wells in order to better assess changes occurring in the basin. There needs to be more information gathered regarding just how much water is actually being used by domestic wells. Averaging .5 AF per domestic well will help keep water levels in balance. More lithologic information needs to be gathered on the wells that are being monitored. This can be captured through driller's well logs for individual wells. This information can be fed into water models in making more accurate estimations of water flow. He felt that geophysical studies are needed and exploratory wells must be drilled on the fan in order to get a better idea about the characteristics of the alluvium. This was done in the Las Vegas Valley with much success. It cannot be done without funding.

Upon questioning, Mr. Leising explained that the 12,000 AF annual usage figure was derived from reports submitted to the DWR over the last 10 years. Greg Dann noted that on page 6 of the Groundwater Management Plan annual pumpage for 2013 is reported at 14,384 AF annually. Mr. Leising noted that his number was based upon net figures which did not include potential recharge from septic systems and irrigation.

There was discussion about moving water from the Trout Canyon or Carpenter Canyon fans to help augment declining levels in the central valley. It was agreed that this undertaking would be very expensive but it does have potential. Mr. Leising felt that building water retention/rapid infiltration basins on the fan in order to capture run-off would help to recharge the valley aquifer. It may also be possible to pump treated effluent to a recharge basin so it can infiltrate into the water supply.

There is much more information that needs to be gathered which will require a source for funding. The drilling of wells to evaluate lithography in determining water flows into and around the valley should be considered. He encouraged incorporating volunteer data into the scientific studies. The significance of using sub-basin information to determine the direction of water flow was discussed. Mr. Leising presented graphs showing the relationship between years with increased precipitation and the impact upon water levels at various wells.

12. (02:17:17) Staff Reports/Comments: None

- A. Darrell Lacy**
- B. Oz Wichman**
- C. John Klenke**

13. (02:17:22) For Possible Action – Discussion, Direction and Possible Decision

Concerning Future Meetings/Workshops. The next meeting of the Basin 162 Groundwater Management Plan Committee is scheduled for October 12, 2015, beginning at 9 AM. This will be a joint meeting with the Nye County Water District Governing Board to discuss Stage One of the Groundwater Management Plan for Basin 162.

Darrell Lacy noted that with regards to the DWR, there needs to be a discussion of a timeframe for implementation of the plan before it is submitted to them.

14. **(02:19:01) 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.
None
15. **(02:19:21) Adjourn**
Gregory Hafen adjourned the meeting.