



NEVADA LEGISLATURE LEGISLATIVE COMMISSION'S SUBCOMMITTEE TO STUDY WATER

(Nevada Revised Statutes [NRS] 218E.200)

SUMMARY MINUTES AND ACTION REPORT

The second meeting of the Nevada Legislature's Legislative Commission's Subcommittee to Study Water was held on Wednesday, March 9, 2016, at 9 a.m. in the West Hall Facility, Winnemucca Convention and Visitors Authority, 50 West Winnemucca Boulevard, Winnemucca, Nevada. A copy of this set of "Summary Minutes and Action Report," including the "Meeting Notice and Agenda" (Exhibit A) and other substantive exhibits, is available on the Nevada Legislature's website at <http://www.leg.state.nv.us/interim/78th2015/committee/>. In addition, copies of the audio or video record are available through the Legislative Counsel Bureau's Publications Office (e-mail: publications@lcb.state.nv.us; telephone: 775/684-6835) and may be available online at <http://www.leg.state.nv.us/Granicus/>.

COMMITTEE MEMBERS PRESENT IN WINNEMUCCA:

Senator Pete Goicoechea, Chair
Assemblyman James Oscarson, Vice Chair
Senator Aaron D. Ford
Senator Joseph P. (Joe) Hardy, M.D.

COMMITTEE MEMBERS NOT PRESENT:

Assemblywoman Maggie Carlton

OTHER LEGISLATOR PRESENT

Senator Donald G. Gustavson

LEGISLATIVE COUNSEL BUREAU STAFF PRESENT:

Alysa M. Keller, Senior Research Analyst, Research Division

Jered M. McDonald, Senior Research Analyst, Research Division

Heidi A. Chlarson, Principal Deputy Legislative Counsel, Legal Division

Erin Roohan, Deputy Legislative Counsel, Legal Division

Natalie J. Pieretti, Senior Research Secretary, Research Division

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Items taken out of sequence during the meeting have been placed in agenda order.

AGENDA ITEM I—CALL TO ORDER

Chair Goicoechea called to order the meeting of the Legislative Commission's Subcommittee to Study Water and welcomed the members and the public.

AGENDA ITEM II—PUBLIC COMMENT

Michael Cameron, Associate State Director, Nevada Chapter, The Nature Conservancy, discussed Nevada's national ranking in species diversity and encouraged the members to continue the dialogue regarding the environmental needs of the State's wildlife and ecosystem.

AGENDA ITEM III—APPROVAL OF MINUTES OF THE MEETING HELD ON FEBRUARY 8, 2016, IN LAS VEGAS, NEVADA

MOTION: Senator Hardy moved to approve the minutes of the meeting held on February 8, 2016, in Las Vegas, Nevada. The motion was seconded by Assemblyman Oscarson and approved unanimously.

AGENDA ITEM IV—OVERVIEW OF ACTIVITIES AND CHALLENGES OF THE HUMBOLDT RIVER BASIN WATER AUTHORITY

Mike L. Baughman, Ph.D., CECD, Executive Director, Humboldt River Basin Water Authority, detailed the characteristics and trends in the Humboldt River Basin with emphasis on the historical high water flows during the early 1900s that led to an increase in agricultural production and conflicts among users, which ultimately resulted in adjudication of water rights (Exhibit B).

There was discussion between various members and Dr. Baughman regarding pit lake evaporative loss. Dr. Baughman recommended a water right be required for the evaporative loss from mining pit lakes.

Discussion ensued between Senator Hardy and Dr. Baughman on the advantages of the requirement of water rights for evaporative loss from pit lakes.

Dr. Baughman provided an example of an enforcement action pursued by Nevada's Division of Water Resources (DWR), State Department of Conservation and Natural Resources (SDCNR) on a private pit lake (Exhibit B-1).

Discussion among several members and Dr. Baughman continued on the topics of: (1) drought recovery and resiliency; (2) aquifer storage and recovery; (3) reservoir enhancements; (4) new upstream reservoirs; (5) pit lakes and reinjection basins; and (6) cloud seeding.

Dr. Baughman encouraged State investment in the following recommendations: (1) increased storage for drought resiliency; (2) cloud seeding; (3) conservation to reduce demand for ground and surface water; (4) research/technology for improved water conservation by agriculture; (5) encouragement of the issuance of orders applicable to the Humboldt River Basin by the State Engineer's Office of the DWR, SDCNR; (6) legislation requiring certain compensation of downstream senior water rights holders by upstream junior water rights holders; and (7) require that pit lake owners secure water rights to cover evaporative losses.

AGENDA ITEM V—DISCUSSION OF WATER RESOURCE PRIORITIES OF NEVADA'S MINING INDUSTRY IN THE HUMBOLDT RIVER CORRIDOR

Dana R. Bennett, Ph.D., President, Nevada Mining Association, briefly discussed the impact mining has had on the State's economy (Exhibit C).

Allen Biaggi, Environmental Consultant, Nevada Mining Association, presented an overview of water use and management and detailed how the framework developed in concert with the State Engineer's Office in dealing with mine dewatering has impacted users. This framework includes: (1) the need for ground water rights; (2) the option to inject water back into the subsurface environment from where it was removed; (3) the possible substitution of existing water rights; and (4) the discharging of water to a surface water such as a reservoir, creek, or river provided it met all of the applicable water quality criteria and the securement of appropriate water permits (Exhibit C and Exhibit D).

Senator Ford and Mr. Biaggi discussed requirements for ponds and reservoirs compared to pit lakes and, based on 2010 data from the State Engineer's Office, the 1392 acre-feet of water that is evaporating annually on the 25 pit lakes present in the Humboldt River Basin.

Responding to Senator's Hardy question regarding irrigation rights, Mr. Biaggi informed the Subcommittee that mining companies have purchased large ranching operations and have subsequently substituted irrigation rights with dewatering rights.

There was continuing discussion between various members and Dr. Bennett and Mr. Biaggi.

Ron Leiken, Environmental Manager, Marigold Mining Company, Silver Standard, proffered a Microsoft PowerPoint presentation on the efficient use of water, including recycling of processed water and metering of wells (Exhibit E).

Bob Ingersoll, Deputy Executive Director, Barrick Gold Corporation, contributed information on the Turquoise Ridge Mine (Exhibit F). He discussed the management of underground water through a pumping system when mining for gold ore.

George Fennemore, Support Manager, Cortez Operations, Barrick Gold Corporation, shared dewatering operations at the Cortez Hills Complex (Exhibit F).

Discussion ensued between Senator Hardy and Mr. Fennemore regarding the dewatering wells and the water monitoring system.

Mr. Ingersoll delivered an update on the Goldstrike Mine operation (Exhibit F).

There was discussion between Senator Hardy and Mr. Ingersoll regarding ground water flows.

Paul M. Pettit, Regional Hydrogeologist, Newmont Mining Corporation, explained the administrative benefits of Newmont's super permit and the drought impacts on the Humboldt River (Exhibit G). He reported there are no connections between the deep carbonate aquifer along the Humboldt River and the water streaming toward Las Vegas.

Discussion ensued between various members and Mr. Pettit regarding: (1) evaporative losses between Imlay and Rye Patch Reservoir; (2) pit lake evaporation; (3) existing water rights; and (4) taking a voluntary approach in solving issues regarding mining pit lakes.

AGENDA ITEM VI—PRESENTATION OF ISSUES, PRIORITIES, AND RECOMMENDATIONS OF THE PERSHING COUNTY WATER CONSERVATION DISTRICT

Bennie Hodges, Manager, Pershing County Water Conservation District, illustrated the concerns within the Humboldt River Basin (Exhibit H), which included: (1) decreasing of river flow; (2) drought; (3) mine dewatering; (4) ground water pumping for agriculture; and (5) pit lake evaporative losses.

Senator Ford asked when the seven pit lakes listed by Mr. Hodge in the Humboldt River Basin might become full.

Alan Biaggi, previously identified, replied the seven pit lakes will not be filled within the next ten years.

There was continuing discussion among various members and Mr. Hodges, Mr. Biaggi, and Paul M. Pettit, previously identified, regarding temporary permits granted by the State Engineer for mining operations.

Jason King, P.E., State Engineer, Office of the State Engineer, DWR, SDCNR, articulated that Nevada law allows the State Engineer's Office authority to issue temporary water rights in a water basin that is fully appropriated. He stressed the importance of knowing the difference between consumptive use and nonconsumptive use when discussing mine pumping.

Mr. King pointed out that in 2013, 370,000 total acre-feet of ground water was pumped within the Humboldt River Basin drainage, and the Perennial Yield is approximately 470,000 acre-feet. He stated the State Engineer's Office is undertaking a four-year endeavor to create a capture model to look at the connectivity between surface water and ground water.

Senator Ford requested written information clarifying the mining industry's potential solutions to the issues surrounding pit lake evaporation and temporary mining permits.

Mr. Hodges informed the members while pit lakes may not directly affect the main stem of the Humboldt River, the tributaries that feed into the Humboldt River may be affected by the pit lakes.

Addressing the issue of pit lake evaporation, Mr. King stated the State Engineer's Office is working with stakeholders in an effort to reach a voluntary agreement.

AGENDA ITEM VII—OVERVIEW OF WATER RESOURCE ISSUES AND PRIORITIES OF WINNEMUCCA FARMS

Samuel J. Routson, Vice President for Corporate and Legal Affairs, Winnemucca Farms, explained how the drought has affected farm production and the subsequent implementation of a new business model (Exhibit I). He reported on the use of well metering and stressed the importance of addressing agriculture when discussing water resources. Mr. Routson offered the following recommendations: (1) require "best practices" in physical transport and use of water; (2) encourage conservation; (3) deny supplemental pumping if surface water is available; (4) increase Nevada's storage capacity; and (5) change State management of the water resource.

Concluding, Mr. Routson addressed a report by the Nicholas Institute for Environmental Policy Solutions titled *Unbundling Water Rights: A Blueprint for Development of Robust Water Allocation Systems in the Western United States* detailing a pilot project for transitioning to market-based water rights, allocation, and management systems in the Diamond Valley and the Humboldt River Basin.

AGENDA ITEM VIII—OVERVIEW OF DOMESTIC WELL ISSUES IN GRASS VALLEY

Joe Ratliff, Domestic Well Owner, expressed his concerns over the significant drawdowns of ground water aquifers occurring in Grass Valley (Exhibit J). He noted the drawdowns are due to a number of complex hydrological, climatic, and water usage factors. Mr. Ratliff proposed the following recommendations: (1) enforce of water conservation; (2) monitor flow meters; (3) provide legislative authority to the DWR for enforcement of strict water management plans and conservation measures; (4) placement of a moratorium on new construction; (5) prepare a current, comprehensive statewide water conservation and management plan; (6) direct that

water rights applications be brought before a board or committee; and (7) vet the State Engineer position through a standard hiring process rather than an appointment process.

Chair Goicoechea and Mr. Ratliff discussed the decline of the water table.

AGENDA ITEM IX—OVERVIEW OF WATER ISSUES IN THE HUMBOLDT RIVER BASIN

Jason King, previously identified, and Senator Hardy discussed the needs of the State Engineer's Office (Exhibit K), which include: (1) regulatory support for a conjunctive management approach; and (2) a framework to allow options, other than curtailment, for the balancing of surface water and ground water basins.

There was discussion between Chair Goicoechea and Mr. King regarding the State Engineer Office's ability to implement adaptive management in the way water resources are regulated within the State.

Revisiting the legislative needs, Mr. King addressed the proposal for new language that allows mitigation for conflicts of existing water rights (Exhibit K).

Several members along with Mr. King, and Rick Felling, Deputy Administrator, DWR, SDCNR, continued discussion on the following topics: (1) mitigation of conflicts of water rights; (2) curtailment of domestic well owners only to the extent of their outdoor water use; (3) conjunctive management of ground and surface water; (4) drought; (5) domestic well metering; and (6) beneficial use.

AGENDA ITEM X—DISCUSSION OF SCHEDULE AND SCHEDULING OF FUTURE MEETINGS

(This agenda item was taken out of order.)

The following dates were scheduled for future meetings:

- Tuesday, June 7, 2016, 9 a.m., in Dyer, Nevada
- Tuesday, July 19, 2016, 9 a.m., in Pahrump, Nevada

AGENDA ITEM XI—PUBLIC COMMENT

Joe Sicking, Chair, State Conservation Commission, SDCNR, reiterated the "use it or lose it" concept and agreed that storage is needed in the Humboldt River Basin. He opined that the meadows should act as reservoirs in their natural state and store water in wet years while releasing water in dryer years.

Robert McDougal, Nevada Nile Ranch, and member, Humboldt River Basin Water Authority, addressed how crop insurance has sustained his ranch and raised concerns over losing the ability to carry insurance. He supported the State Engineer Office's suggested legislative needs and stated there must be a means of water measuring with an ability to put that measured water into a basin's budget.

Kenneth F. Benson, President, Haystax West, Diamond Valley, discussed a court action in which he is a party, and encouraged members to review a September 2015 decision by the Nevada Supreme Court and a 2016 decision by the Eureka County District Court.

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AGENDA ITEM XII—ADJOURNMENT

There being no further business to come before the Subcommittee, the meeting was adjourned at 2:41 p.m.

Respectfully submitted,

Natalie J. Pieretti
Senior Research Secretary

Alysa M. Keller
Senior Research Analyst

APPROVED BY:

Senator Pete Goicoechea, Chair

Date: _____

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EXHIBITS

EXHIBIT	WITNESS/ENTITY	DESCRIPTION
Exhibit A	Alysa M. Keller, Senior Research Analyst, Research Division, Legislative Counsel Bureau	Agenda
Exhibit B	Mike L. Baughman, Ph.D., CEcD, Executive Director, Humboldt River Basin Water Authority	Microsoft PowerPoint Presentation
Exhibit B-1	Mike L. Baughman, Ph.D., CEcD, Executive Director, Humboldt River Basin Water Authority	Division of Water Resources, State Department of Conservation and Natural Resources, Enforcement Letter
Exhibit C	Dana R. Bennett, Ph.D., President, Nevada Mining Association (NMA), and Allen Biaggi, Environmental Consultant, NMA	Microsoft PowerPoint Presentation
Exhibit D	Allen Biaggi, Environmental Consultant, NMA	Handwritten Comments
Exhibit E	Ron Leiken, Environmental Manager, Marigold Mining Company, Silver Standard	Microsoft PowerPoint Presentation
Exhibit F	Bob Ingersoll, Deputy Executive Director, Barrick Gold Corporation and George Fennemore, Support Manager, Cortez Operations, Barrick Gold Corporation	Microsoft PowerPoint Presentation
Exhibit G	Paul M. Pettit, Regional Hydrogeologist, Newmont Mining Corporation	Microsoft PowerPoint Presentation
Exhibit H	Bennie Hodges, Manager, Pershing County Water Conservation District	Microsoft PowerPoint Presentation
Exhibit I	Samuel J. Routson, Vice President for Corporate and Legal Affairs, Winnemucca Farms	Microsoft PowerPoint Presentation
Exhibit J	Joe Ratliff, Domestic Well Owner	Handwritten Comments
Exhibit K	Jason King, P.E., State Engineer, Division of Water Resources, State Department of Conservation and Natural Resources	Microsoft PowerPoint Presentation

This set of "Summary Minutes and Action Report" is supplied as an informational service. Exhibits in electronic format may not be complete. Copies of the complete exhibits and other materials distributed at the meeting are on file in the Research Library of the Legislative Counsel Bureau, Carson City, Nevada. You may contact the Library online at www.leg.state.nv.us/lcb/research/library/feedbackmail.cfm or telephone: (775) 684-6827.