Tuesday, October 11, 2011

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Dear Ms. Leuders and Ms. Woods,

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for the Clark, Lincoln and White Pine Counties Groundwater Development Project. These comments are submitted by Steve Erickson on behalf of the Utah Audubon Council and the Citizens Education Project.

C1 Utah Audubon chapters and their members have a deep interest and concern in preserving habitat for birds and wildlife in the region. Areas potentially affected negatively by the proposed groundwater development include premier habitat for threatened sage grouse populations and other important and protested specie such as raptors, and critical wetlands used as stopovers for migratory birds along the Pacific Flyway. Citizens Education Project is particularly concerned about the social and economic justice aspects of this proposal.

C2 In general, BLM has done a credible job of cataloging potential adverse impacts from the proposed action and the limited right of way alternatives described. These identified short and long-term, irreversible and irretrievable impacts are so widespread and severe that we believe that BLM, in order to fulfill its mission and uphold its public trust duties to preserve and protect the public resources under its jurisdiction, must choose the No Action Alternative and deny the Right of Way.

C3 Additionally, the DEIS identifies a plethora of incomplete and unavailable information, a great number of "known unknowns". The DEIS is replete with errors and omissions and vague and unsupported assertions, many of which we detail below. Taken together, we believe that the DEIS is too flawed and too inadequate for BLM to use as a basis for such a critically important, far-reaching decision, and that BLM must acknowledge this either by withdrawing, substantially revising and then reissuing this DEIS, or by preparing a Supplemental Environmental Impact Statement (SEIS).

General Observations and Critiques:

C4 The DEIS states that Federal law dictates that BLM grant a Right of Way (ROW) in Clark and Lincoln Counties. But this mandate conflicts with NEPA, which mandates that all reasonable alternatives, including no action, be considered. BLM does posit a No Action Alternative – meaning no ROW in NEPA parlance – but then claims it is doing so only to set a baseline against which to measure impacts from 6

C4 cont'd other alternatives, all of which allow a ROW. No Action in its real and legal meaning is turned on its head to be used as a means to justify taking action by granting at least some portion of the ROW sought by the proponent.

C5 Does the legislative mandate constitute the need for federal action rather than the avowed need of SNWA and its customers for a new water source and a conveyance system for that water?

C6 We would argue that one troubling aspect of this DEIS and this groundwater development project is that it is a constantly moving target on a number of levels, which, in fairness to BLM, greatly complicates impacts analysis.

C7 It is evident from the DEIS and from the public statements of Southern Nevada Water Authority (SNWA) officials that SNWA and BLM really don't know or can't say when construction or pumping may commence. SNWA General Manager Pat Mulroy is now stating that SNWA doesn't intend to build the pipeline anytime soon, while the DEIS projects that construction will peak in 2015 (ES). SNWA has long held that we won't know what impacts will be until pumping begins. Now SNWA testifies before the Nevada State Engineer (NSE) that it intends to pump intermittently if and when it commences pumping, further complicating impacts analysis.

How is granting a ROW now for water that may or may not be used or not used for 37 years an urgent necessity?

C8 SNWA and BLM don't know precisely where many of the facilities will be sited. Answering its own question, what future facilities would be required for groundwater pumping, the DEIS states it developed "a series of assumptions" because "locations of wells is presently unknown" (ES-29).

SNWA's stated intent to use distributed pumping - and the tiering of studies of where wells and associated infrastructure would possibly be located – further complicates impacts analysis. Water rights applications are site-specific, and no site-specific analysis is done in this DEIS, which argues that the EIS is premature. Moreover, this evolving and non-specific process, if sanctioned by BLM, will result in numerous change applications to the NSE – perhaps throughout the project lifetime – and require a near constant flow of environmental analyses and EA revisions by BLM. This will create a bureaucratic and legal nightmare for all concerned, and will be very expensive and time consuming.

C9 By postponing of gathering of essential information, the tiering of decisions endorsed by the DEIS for this project adds to the uncertainties surrounding impacts and impact analyses. Tiering sanctions and encourages speculation (the speculative nature of this project) – water may or may not be needed or used, well locations are undetermined and indefinite, well locations are subject to change, impacts may or may not be mitigated or able to be mitigated – by pushing those decisions in to the future and off the table for current and more precise analysis.

C10 Worse, the Tier 1 decision will lock-in all future decisions, despite new information and subsequent environmental analyses which might corroborate concerns that the issuance of the ROW allows for unacceptable negative impacts.

Purpose and Need:

C11 The BLM fails to analyze whether or not there is a need for the project (1-16), washing its hands of the issue in violation of the spirit if not the letter of NEPA. BLM claims it has no jurisdiction or responsibility to assess or question SNWA's stated need, purpose, timetables, finances, etc. "As a result, no water supply or management alternatives were determined to be reasonable alternatives to a ROW grant for this draft EIS." (ES-16) How does this respond to the BLM's statutory responsibility to "respond to the purpose and need for the action" (ES-15)?

C12 The DEIS notes that by 2035, conservation in Clark County is expected to save 276,000 afy of water (DEIS p. 1-13). These conservation savings exceed the total SNWA water applications for the project by 100,000 afy and raise the question as to whether the project is needed at all. (Additionally, these conservation savings, not only makes the project less necessary, it makes it less financially viable because less water use results in fewer revenues to the Authority to pay for the project.)

C13 The current state of the economy in Las Vegas is not taken into account in the needs analysis, making it dated and presumptive, increasing an already great range of uncertainty, and postponing the "need" for additional water sources further into the future. The demographic projections are out-of-date (p. 1-12 and as admitted by the State Demographer) and should be recalculated in light of current economic conditions and trends.

Alternatives:

C14 The DEIS wrongly narrows the range of alternatives considered to other modes of water conveyance and pipeline alignments (ES-15), stating that no other alternatives would "fulfill the purpose and need for the federal action or provide a comparable volume of water, within a similar time frame, and under financially feasible terms". Yet the DEIS fails to substantiate this declarative statement with any information whatsoever. How can the BLM make such a determination without studying those alternatives? If BLM did study other options, what were they, and on what specific bases were they rejected?

C15 It does not appear in the DEIS that the BLM studied the financial feasibility of the Proposed Action. No cost analysis or cost-benefit analysis appears in the document. On the other hand, the DEIS states that BLM did analyze the costs of other alternative groundwater conveyance methods such as trains, trucks or aqueducts and found that "none of these alternatives would result in a reduction of environmental impacts or be more economical than the proposed action" (ES-15). This would imply that BLM did analyze the costs of the Proposed Action and Alternatives and chose to do the same for these three additional alternatives, but chose not to do so for a wide range of alternative water sources not associated with this SNWA proposal. How does BLM justify this selectivity? Is it appropriate in a document that purports to be a programmatic analysis to eliminate alternatives without rigorous analysis?

C16 We will only mention here some of the alternatives that could have been subject to the same economic and environmental feasibility review that BLM conducted for trucks, trains, aqueducts and pipelines: additional water conservation, ocean desalination (with intergovernmental exchanges negating the need for water transport from the ocean to Las Vegas), installation of water reuse systems, and purchase or lease of Colorado River water from Upper Basin States or American Indian Tribes.

C17 The DEIS not only does not make any no cost estimates for construction and operation/maintenance of the pipeline, but the indirect costs of the pipeline – these costs to federal, state and local governments and to private interests are nowhere described, analyzed or quantified. It is certainly possible to do a range of estimated costs and to correlate that with each of the big picture alternatives and the ROW alternatives– a projected cost/benefit analysis – but the DEIS fails to do so. This is a critical flaw in the analysis.

Cumulative Impacts

C18 Cumulative Impacts analysis used throughout the DEIS misses some obvious and predictable potential developments or projects, such as enhanced agricultural development (e.g. from growing specialty crops for specific markets, improved branding/marketing), increased residential development (catering to a second home/retirement/lone eagle market, especially with new cell phone tower/access allowing more "telecommuting"), and tourism-oriented developments (dude ranches, recreational outfitters).

Most recent developments/projects in the area include military projects, some that became operational like JLENS and White Elk MOA. Others didn't (e.g. Dugway property expansion). The DEIS should have analyzed the cumulative impact of potential military initiatives.

C19 The potential for the ROWs to facilitate additional development – and therefore more and greater cumulative impacts – is glossed over.

Water Resources

C20 The DEIS inappropriately and arbitrarily limits the impact analysis to areas of 10 feet or more of drawdown. It is quite possible and not burdensome to model impacts in areas with less than 10 feet of drawdown, and this should have been done for this DEIS. The DEIS also arbitrarily limits the analysis of future impacts from drawdowns throughout the document to 75 and 200 years when some of the aquifers may not come to equilibrium for hundreds and even thousands of years.

C21 The DEIS states that there will be 345 water rights impacted in 75 years and 500 water rights in 200 years. Where does this estimate come from? How was it arrived at? Which specific water rights are included in those figures? How much will it cost to mitigate the harm to these water rights? Where will the money come from?

C22 We wish to point out that there is no groundwater specifically reserved for BLM lands in the draft Utah-Nevada Agreement from the pool of "unappropriated" water. (The only water protected for federal uses in Utah under the draft agreement supplement and/or protect water rights for Fish Springs). How will BLM assure that it will be able to meet its public trust obligations to protect the public lands in

C22 cont'd Snake Valley if drawdowns result in significant adverse impacts requiring replacement or supplemental water as mitigation when BLM has no additional reserved water rights in Snake Valley under the draft bi-state agreement?

C23 The DEIS fails to adequately address federally reserved water rights in the affected basins. In fact, the DEIS fails to do due diligence to even identify existing federal reserved rights.

C24 DEIS doesn't address potential impacts to the Great Salt Lake Desert and to Utah valleys on the edge of Snake Valley, though it acknowledges the potential for impacts to Fish Springs - and some reduction of discharge in interbasin flows to Pine, Wah Wah and Tule Valleys - and does estimate interruption of groundwater flow to the GSL basin and other Utah basins at 24,000 afy. The potential for drawdowns resulting in reversing the flow in the north Snake Valley – possibly leading to saltwater/brackish water intrusion- is not addressed.

Air Values:

C25 The DEIS inappropriately dismisses the potential for disturbance of erionite in area soils (3.2-9), stating that there are no known deposits of erionite in the GWD. Yet at the same time, the DEIS acknowledges in the Soils Section that there are large areas within the affected basins where soil samples were not taken and soils composition is not characterized. Given the extreme toxicity of erionite and its widespread distribution naturally and its spread by human activity, it behooves the BLM to use the precautionary principle and survey the GWD area extensively to assure that construction personnel and others will not be exposed to this deadly fiber.

C26 Likewise the DEIS dismisses concerns about re-suspension of radioactive fallout particles in the soil and potential exposure of workers. Again, this conclusion is not supported by soil sampling. The same can also be said for other contaminants and toxic substances in the soil, including mercury from gold mining operations in Nevada.

C27 The DEIS wrongly limits the affects of increased dust created by drawdowns and vegetation die-off to the immediate area, despite overwhelming information (research literature, records) that dust transport is region-wide. Impacts – and cumulative impacts - upon downwind communities, including the highly populated and air-quality-challenged Wasatch Front, are called "highly uncertain" and then ignored. This must be rectified. To predict that there will be some 24,000 additional tons of dust created annually by the drawdowns in 75 years and 34,000 tons in 200 years, and then to fail to postulate the level and extent of those impacts fails the "hard look" test.

Climate Change

C28 The DEIS gives short shrift to climate change concerns, devoting just 6 pages to the subject (3.1-49 to 55). Yet even this general and superficial review predicts that climate change will likely result in:

- Widespread warming leading to reduced snowpack, earlier melting of snowpack, earlier spring run-off, and associated declines in river flows.

C28 cont'd

- Decreasing and more variable precipitation, rapid landscape transformation, increased flood risk and reduced flood-buffering capacity, and more widespread drought.
- Vegetation die-off will result in increased frequency and severity of wildfires. Impacts will be "substantial for some resources, impacting biodiversity, protected areas and agricultural lands." "Impacts on species distributions, community structure and ecosystem function may be significant."
- "Lower soil moistures, increases in erosion, more severe droughts, altered distribution of vegetation, and types, increased water temperatures affect aquatic biological resources, modifying, shifting or eliminating habitats, altering or restricting the physical ranges of species present, more invasive species, decrease quality of rangeland, reduced livestock feed, increased ET (greater discharge).

All of this adds up to less water available for export and greatly increases the negative consequences of all the alternatives (but, of course, effects the No Action Alternative least). Unfortunately, the DEIS makes no attempt to quantify any of these critically important climate change-related impacts. This is a major flaw that greatly increases the range of uncertainties of all the impacts identified or predicted – and quantified - throughout the DEIS. Almost certainly, and almost 100% across the board, climate change will worsen those effects.

C29 While it is true that "it is impossible to link a specific greenhouse gas emission and a specific climate change" (3.1-49), it is also obvious, as the DEIS notes, that the "impact on water resources will depend in part by changes in system characteristics, changing pressures on the system, how the management of the system evolves, and what adaptations to climate change are implemented". (3.1.50) There is nothing that more dramatically fits that description than the proposed groundwater development project.

C30 The BLM ducks the question of how much worse will climate change make the impacts of the Proposed Action, and evades the express policy outlined in Secretarial Order 3226, and kicks the can down the road by stating that "future NEPA documents will follow DOI and BLM policies related to climate change."

C31 BLM argues that "since the current state of climate change science prevents the association of specific actions with specific climate-related effects, the BLM can neither: a) analyze the climate related effects of BLM actions nor (b) ascribe any significance to these potential effects. For these reasons, climate change impacts could not be evaluated for the proposed action"… (3-5). But the assertion that the impacts are uncertain and non-specific should not give license to pass over the subject for another day. This "Incomplete and Unavailable Information" is just too critical to ignore for purposes of decision-making now, within the context of the granting or denying of the ROW.

Geologic Resources

C32 The predicted land subsidence over an area of some 575 square miles is unacceptable, and should be considered evidence of illegal groundwater mining.

C33 The DEIS fails to identify specific locations where subsidence is expected to occur, making it impossible to fully analyze the impacts of subsidence. At the least, the DEIS should be able to provide a range of probability of locations where subsidence could be expected. This would then allow the DEIS to project the severity of those impacts.

C34 The DEIS should, but doesn't, attempt to project the costs of subsidence to governments and to private interests. These costs can be presumed to be substantial. Since there is no physical "mitigation" that can be done feasibly, then mitigation must be financial, and therefore BLM should make a best faith estimate of the price tag for such mitigation. Additionally, the costs of subsidence must also be included in the analysis of the cumulative impacts of subsidence.

Soils

C35 DEIS states that there are additional soils studies underway. How will this information be incorporated into the decision-making process when available if this data were to show greater concerns or negative impacts regarding soils than anticipated (e.g. presence of erionite)?

Vegetation

C36 The DEIS makes clear that there are significant challenges to protecting vegetion resources in the groundwater development basins, noting that there are 35 BLM sensitive species, 17 US Forest Service sensitive species, 6 Nevada protected critically endangered species, 24 Nevada protected cacti or yucca species, and one federally threatened species within the ROW areas.

C37 DEIS acknowledges that the effectiveness of early warning monitoring will not avoid all impacts, especially under the plans for Snake Valley 3M (UT-NV Agreement) (3.5-47). It is important to note that "a process for mitigating impacts" (3.5-46) is not "mitigating impacts". Nor is "a commitment to a process" (Pat Mulroy testimony to NSE, 9/26/11) a contractual obligation. That SNWA will develop a detailed monitoring plan is not justification for BLM to delegate the authority for and responsibility to protect biological resources.

C38 Short-term, long-term and permanent loss of vegetation, introduction and expansion of noxious weeds and invasive species, loss of vegetation communities, loss of individuals or populations of sensitive or endangered species, increased dust and wildfires, and impacts of these events to the ecology, wildlife and humans due to construction and pumping are unacceptable impacts that cannot adequately be dealt with by any 3M program.

C39 The DEIS does not address complications that climate change present to re-vegetation efforts or how it may exacerbate problems with invasive species, noxious weeds or other successor vegetation.

Terrestrial Wildlife

C40 The DEIS notes that BLM Sensitive Species List is under review and up-dates are not available (3.6-1), the Nevada Wildlife Plan is also under review and not available for this DEIS, and that the USFWS has no current Avian Protection Plan. This is typical of the incomplete and unavailable information problem

C40 cont'd plaguing this DEIS, and further evidence that the DEIS for this project is not timely. The DEIS does find 34 special status species within the GWD (p.20) including the Endangered Southwest Willow Flycatcher (in Parangat Valley and NWR and Muddy River).

C41 Because the DEIS does not quantify the impacts upon the various species and populations of small mammals of vegetation changes or die-off due to groundwater development, analysis of the impacts of loss of prey to raptors is wholly inadequate. Changes to the habitat may result in raptors leaving the area, as may changes in prey species composition, which may also disruption of their migratory routes. This out-migration of raptors will have further impacts upon small mammal species populations in an ecological feedback loop. None of this is characterized or quantified in the DEIS.

C42 This same flaw holds true for the cursory, nearly non-existent analysis of the impacts of groundwater pumping on predator mammals. Habitat fragmentation, loss of habitat, change of species composition, and reduction of prey base are noted as having impacts upon predators, but are not quantified. How predators will respond to these critical changes to their environment is not addressed.

C43 Crucial winter habitat for pronghorn in N. spring, N. Snake, Tippett Valleys, for elk in Deep Creek V., for mule deer project area-wide, potential for Rocky Mt. Bighorn and Desert Big Horn sheep will be affected, possibly resulting in reduced numbers (and reduced prey for cougar).

C44 Impacts of groundwater pumping to the Greater Sage-Grouse may prove to be unavoidable, unacceptable and difficult if not impossible to mitigate. Loss of sagebrush habitat critical to sage grouse will likely result in population losses, disruption of mating, nesting, and ability to survive winters. There are 15 leks identified within 2 miles of ROW (nine active). We believe the distance for this proximity analysis should be expanded to 5 miles. The DEIS states that pumping and surface impacts "could result in the reduction or even loss of some local sage grouse populations in Cave, Snake and Spring Valleys (3.6-74).

C45 The DEIS notes that 12,208 acres of native shrublands and woodland habitat would be removed or disturbed by groundwater development, requiring 20 to 200 years to recover. These impacts cannot be mitigated in any way that will preserve habitat for terrestrial wildlife. Greater Sage Grouse, with active leks in Cave, Spring, Lake, Snake, Hamlin, Steptoe, Tippett, and Deep Creek Valleys, will be especially challenged by these changes. The DEIS states that "in Nevada, sage grouse rely on wet areas for their survival". Disappearance of springs, seeps and sub-irrigated meadows will further threaten sage grouse populations.

C46 Northern Harrier, Flammulated Owl are species of special management concern. The DEIS does not mention how impacts to these species might be mitigated.

C47 Direct impacts to raptor species include reduction of foraging and nesting habitat up to 8,265 acres as a result of facilities construction, operation and maintenance. The DEIS doesn't recommend any mitigation measures (3.6-67). Acreages of habitat lost due to groundwater pumping were not listed. Habitat impairment and loss of surface waters in Important Bird Areas, including GBNP and the Lake Creek/Big Springs and Pruess Lake complex, is a particular concern for raptors, especially eagles, who

C47 cont'd use open waters for forage. There is no mitigation for loss of Big Springs and Pruess Lake for these species – they will be reduced in numbers in these areas.

C48 The DEIS states that the population status and trends of the Western Burrowing Owl are not well understood. Since this species has been identified in or near ROWs in 7valleys, including Snake, Spring, Dry Lake and Delamar, special care should be taken to avoid adverse impacts to individual birds from ROW construction.

C49 The DEIS concedes that groundwater sources and impacts to caves is not well understood, so it is hard to know how seriously cave species will be impacted.

C50 The DEIS doesn't mention that bat colonies throughout much of the eastern U.S. are suffering from the devastating, population decimating white nose disease. The cumulative impacts upon the species of groundwater depletion coupled with this disease (should it migrate to the reason), should be considered.

C51 Cumulative impacts analysis in this section is overly broad and general. The organization of this chapter made it difficult for the reader to follow and make sense of to be able to offer useful critiques.

Wilderness

C52 The DEIS notes that, within the groundwater development region, there are 29 federally designated Wilderness Areas, 12 Wilderness Study Areas, 27 Areas of Critical Environmental Concern, 8 National Wildlife Refuges or State Wildlife Management Areas, and two National Parks. The DEIS does not state whether or not reserved water rights for these areas were considered.

Land Use and Grazing

C53 The EIS fails to analyze impacts of drawdown upon state lands (SITLA administered lands) in Utah's portion of Snake Valley and potentially other Utah basins. Any loss of value to these lands due to drawdowns, subsidence, vegetation change, or other degradation should be quantified.

C54 The number and value of AUMs affected should be quantified. How much value will be lost should be quantified.

Recreation

C55 Costs to states from lost hunting and fishing, tourism, non-game wildlife viewing (as bird watching) due to facility construction and long-term groundwater pumping should be estimated (quantified).

Transportation

C56 The DEIS states that there are no anticipated impacts to transportation from groundwater pumping (3.10-20). How is it possible that, if there are 575 square miles of ground subsidence, no roads will be affected? BLM should have done an analysis of impacts of subsidence on transportation. Also, the DEIS should analyze how increased dust due to drawdowns will affect aircraft use for local travel, crop-

C56 cont'd

dusting, and other uses due to decreased visibility. Likewise, the DEIS should assess whether increased dust storms may have an effect upon low-level military aircraft training maneuvers.

Visual Resources

C57 The DEIS did not consider burying powerlines where they do not currently exist as a mitigation measure. Why not? The proposed action (and alternatives A-E) would have impacts on visual quality outside of GBNP that would not meet visual quality objectives and cannot be effectively mitigated.

Socio-Economics

C58 The DEIS provides an inadequate analysis of socio-economic impacts but still shows that impacts will put ranchers and farmers out of business and de-populate rural communities.

C59 Loss of employment in the region due to groundwater pumping should be quantified, as should the costs of safety-net services to those employed and their families.

C60 The DEIS fails to take a hard look at indirect and cumulative socio-economic impacts, including future development in the region.

Management, Monitoring and Mitigation and the Stipulated Agreements

C61 An argument can be made that the stipulated agreements and associated monitoring and mitigation plans inappropriately and perhaps illegally delegate to other parties the duties and responsibilities that BLM was charged with under the Organic Act. These agreements are replete with problems and will not effectively prevent environmental damage, including the severe negative impacts BLM has identified throughout the DEIS.

A short list of the problems with these agreements includes that they are vague, unenforceable (even arbitration is not binding), and unfunded, lack guidelines, lack time limits for resolving disputes, provide no penalties, and are dependent upon the State Engineer for placing conditions on well permits to remediate their failings.

Wild Horses

C62 The DEIS identifies 6 Herd Management Areas (HMAs) in the groundwater development area, with the Eagle and Silver King herds being the most directly affected. The DEIS states that there are some 3000 acres of facility footprints, 24 miles of perennial streams and 292 springs within HMAs, and approximately 3.4 million HMA acres within the study region.

C63 Negative effects upon horses from project construction include disruption on foaling, injuries, noise, and impacts to water sources. Groundwater pumping effects identified include loss of water sources, reduced forage, disruption of herd movement, and increased human conflicts (such as horse-vehicle collisions). Cumulatively, these effects will result in reduced carrying capacity of the habitat for wild horses in the region.

C64 A problem with the DEIS analysis of project impacts on wild horses is that no data is given on springs potentially affected by pumping in HMAs in Utah – Choke Cherry, Confusion, Conger, Kingtop, and Sulphur HMAs. There is no information provided on the number of springs in those areas, nor is there any data or analysis of the impacts upon horses if those springs are compromised by pumping. The Sulphur herd exhibits some traits and bloodlines thought to be descendent from the Spanish Barb horses brought to America by Spanish explorers in the 1600s (BLM 2009). The DEIS should consider additional measures to assure protection and continued viability of this special herd.

C65 The DEIS notes serious impacts upon wetland/meadows areas that are typically sub-irrigated or spring-fed (8000 acres in Siver King HMA). The forage available in these areas is important for herds. Mitigations proposed appear inadequate to address reduction or loss of this food source.

C66 The DEIS minimizes the effects of pumping on springs that wild horses depend upon (just one verified spring in the Eagle HMA, none in Antelope or Silver King HMAs, 3.12-21) This simply does not square with other estimates in the DEIS of the number of springs being dried up or having flow greatly reduced due to pumping.

C67 There is ample evidence from past experience in the Great Basin that when springs frequented by wild horses dry up, that the horses are at significant risk of death by dehydration (e.g. Needle Springs). The proposed mitigation of using "artificial" water sources such as stock ponds and bubblers may not be adequate in these circumstances, as horses may not move to those new sources quickly enough. This mitigation may also prove difficult to achieve if groundwater drawdowns prove to be greater than anticipated and deeper wells must be drilled to provide artificial water. Intensive (daily) monitoring of herds should be contemplated should critical springs dry up.

Thank you for taking these comments into consideration.

Sincerely,

Steve Erickson, Policy Advocate

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