UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

October 2, 2009

Mrs. Caryn Huntt DeCarlo
Bureau of Reclamation
Lahontan Basin Area Office
705 N Plaza, Room 320
Carson City, NV 89701

Subject: Draft Environmental Impact Statement for Walker River Basin Acquisition Program (CEQ# 20090250)

Dear Mrs. DeCarlo:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed.

We have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*") due to our concerns regarding the long-term feasibility of the project given increasingly constrained water supplies, climate change, and the lack of full funding; compliance with Total Maximum Daily Load requirements; and full disclosure of potential mitigation measures, program implementation and governance, and public participation and transparency measures.

EPA supports efforts to address the threats to the Walker Lake ecosystem. We urge action be taken now to prevent further decline of this ecosystem. Shrinking lake volumes, increasing total dissolved solids concentrations, and declining water quality in terminal lakes is becoming a significant issue throughout the west (e.g., Pyramid Lake, Salton Sea). As water demand increases, it is becoming ever more challenging to equitably balance available supplies, water supply commitments, and environmental needs. EPA believes that long-term water supply planning should focus, in part, on determination of available supplies and bringing water supply commitments and needs into alignment with these supplies.

We strongly recommend the Walker River Basin Acquisition Program (Acquisition Program) utilize all available tools for enhancing water management flexibility and reliability. These tools could include water transfers between irrigation districts or other water sources, conservation, pricing, irrigation efficiencies, operational modifications, market-based incentives, water acquisition, conjunctive use, voluntary temporary or permanent land fallowing, and wastewater reclamation and recycling.

We note that none of the action alternatives, as currently funded and designed, would provide sufficient water for long-term restoration of the Walker River Basin nor stabilize the surface elevation and total dissolved solids concentrations of Walker Lake. We recommend evaluation of a multifaceted alternative that combines the approaches of the three action alternatives – land and associated water right purchases, leasing of water rights, and implementation of water efficiency measures. The FEIS should include a mitigation plan, program implementation and governance framework, mechanisms to provide additional and future funding, and procedures to ensure public participation and transparency of program actions.

The Walker River Basin and Walker Lake are resources highly valued by the regional Native American tribes, especially the Walker River Paiute Tribe. We urge Reclamation and the managers of the Acquisition Program to pursue government-to-government consultations with all potentially affected tribes.

We understand the Bureau of Reclamation's (Reclamation) legislatively directed role is to provide funding to the University of Nevada for their Acquisition Program and research. Given Reclamation's water management expertise, we urge you to take a leadership role in guiding development of the program, and ensuring acquisition and implementation decisions are based on full understanding of environmental, social, and economic consequences.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one hard copy and one CD ROM to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Laura Fujii, the lead reviewer for this project. Laura can be reached at (415) 972-3852 or fujii.laura@epa.gov.

Sincerely,

/s/

Kathleen M. Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosures: Summary of Rating Definitions
Detailed Comments

cc: Bureau of Indian Affairs, Phoenix Area Office
US Fish & Wildlife Service, Nevada Office
US Geological Survey, Carson City
Roxanne Ellingson, Walker River Paiute Tribe
University of Nevada, Reno

EPA DETAILED DEIS COMMENTS ON WALKER RIVER BASIN ACQUISITION PROGRAM, LYON & MINERAL COUNTIES, NV. , OCTOBER 2, 2009

Acquisition Program Design

Evaluate a multifaceted alternative that combines the approaches of the three action alternatives. Walker Lake is a natural desert terminal lake dependent on the quantity and quality of inflows to maintain its water quality. Although the lake is listed as impaired for total dissolved solids (TDS), selenium, and phosphorus (p. 3-31), it serves as an important stop for migratory birds and once supported an abundant population of the threatened Lahontan Cutthroat Trout (LCT). A reduction in lake elevation, loss of access to spawning habitat, and increasing TDS concentrations led to a loss of this fishery in the lake, which is now maintained with stocking from the Lahontan National Fish Hatchery Complex (p. 5-4).

Data provided in the Draft EIS (DEIS) demonstrate that long-term water quality improvements in Walker Lake are only achieved with approximately 50,000 acre feet per year (af/yr) of increased inflows. While lower inflow rates provide temporary benefits, they do not prevent a gradual reduction in lake surface elevation and an increase in TDS over fish tolerance levels. We note that all the action alternatives, as currently funded and designed, do not provide sufficient water to restore the Walker River Basin nor stabilize the surface elevation and TDS concentrations of Walker Lake.

> ***Recommendations:***
> We recommend evaluation of a multifaceted alternative that combines the approaches of the three action alternatives – land and associated water right purchases, leasing of water rights, and implementation of water efficiency measures. The full range of available options to obtain sufficient water for Walker Lake inflows should be considered in the Final EIS (FEIS). Additional options to evaluate in more detail are irrigation system telemetry, wastewater reclamation and recycling, conjunctive use programs, and modifications in system operations.

Provide an evaluation of potential crop changes and the water savings that may be obtained. As noted in the DEIS, there may be considerable potential to make water available by converting from existing conventional crops such as alfalfa to alternative crops that use less water. The DEIS did not evaluate the water savings associated with a change in crops because of concerns with the economic viability of alternative crops for Walker Basin growers (p. 2-13). Ongoing drought, an increasingly constrained water supply, and climate change may require a crop shift to ensure long-term viability of agriculture. An evaluation of alternative crops and potential water savings would be of benefit to Walker Basin growers and water supply managers.

> ***Recommendations:***
> The FEIS should provide an evaluation of potential crop changes and the water savings that may be obtained. Include a description of required investments, availability of dependable markets, transition period, and potential benefits and risks to the grower. Where feasible, we urge consideration of a transition to higher value, more water efficient crops, which would improve long-term sustainability

of irrigated agriculture and generate increased water for Walker River and Walker Lake flows.

Describe key components of the Acquisition Program. The DEIS states that the authorizing legislation limits Reclamation's decision-making discretion for development of alternatives and mitigation requirements, design of the Acquisition Program, and selection of an alternative (p. 1-5). Therefore, the DEIS does not describe a mitigation plan, program implementation and governance, mechanisms to provide additional and future funding, and procedures to ensure public participation or transparency of program actions. The National Environmental Policy Act process is intended to support good decision-making based upon understanding of environmental consequences and full disclosure of potential impacts. We believe key components of the Acquisition Program should be described in the FEIS in the spirit of full disclosure and sound decision-making.

Recommendations:
The FEIS should describe Acquisition Program implementation and governance, mechanisms to provide additional and future funding, procedures to ensure public participation and transparency of program actions, and proposed mitigation of program effects.

Water Resources

Demonstrate that the Acquisition Program is consistent with, and would contribute to, achieving TMDL criteria. Walker Lake is listed under Section 303(d) of the Clean Water Act as impaired for TDS, selenium, and phosphorus; and portions of Walker River are impaired for total suspended solids (TSS). In response, Total Maximum Daily Loads (TMDL) for TSS have been established for East Walker River and Walker River upstream of the Walker River Indian Reservation, and for TDS for Walker Lake (pps. 3-29, 3-31).

Recommendation:
The FEIS should demonstrate that the Acquisition Program is consistent with, and would contribute to, achieving load allocations of the TSS and TDS TMDLs for Walker River and Walker Lake.

Full Disclosure

Provide additional information on the use and ownership of Homestretch Geothermal water. The Acquisition Program has an option for a 5-year lease of spent geothermal water from the Homestretch Geothermal Power Plant upstream of Wabuska gage (personal communication, Caryn Huntt DeCarlo). If the option is exercised, the water would be discharged to Walker River in compliance with a Nevada Division of Environmental Protection (NDEP) water quality discharge permit. Spent geothermal water contains arsenic, boron, copper, fluoride, sulfate and TDS in excess of water quality criteria, and would require adequate dilution flows to meet water quality standards (p. 3-35). A pilot project, which is being evaluated under a separate NEPA environmental assessment, is being conducted to determine the feasibility of using this

spent geothermal water for Walker Lake inflows (p. 3-66). EPA is concerned about the potential utilization of spent geothermal water for beneficial uses in this situation, given that constituents of concern all exceed state water quality standards in a significant percent of samples, which would require significant dilution flows to ensure the discharge to the Walker River meets water quality standards (p. 3-66).

Recommendations:
The FEIS should provide additional information regarding the potential use of Homestretch Geothermal spent water. Include specific information on the water rights associated with the spent geothermal water, a summary of the geothermal water reuse pilot project environmental assessment, and a summary of the draft NDEP discharge permit.

Conduct government-to-government consultations with all potentially affected tribes. The Walker River is a resource highly valued by the regional Native American tribes, especially the Walker River Paiute Tribe. Federally recognized tribes have broad regulatory and land management authority, including, in some cases, Water Quality Standards authorities, for resources within and traversing their reservations. Furthermore, many may have priority water rights which need to be considered. We note that the Homestretch Geothermal Power Plant is adjacent to the northwestern boundaries of the Walker River Paiute Tribe who have concerns regarding the use and ownership of surface water and groundwater rights.

Recommendation:
We urge Reclamation and the Acquisition Program managers to pursue government-to-government consultations with all potentially affected tribes. If not already done, we recommend inviting the Walker River Paiute Tribe to be a cooperating agency.

Describe the magnitude of the effect on the resources of Alkali Lake WMA. The DEIS states that the purchase of irrigated agricultural land adjacent to Alkali Lake Wildlife Management Area (WMA) would result in the reduction of water delivery to the area and subsequent reduction of tail water that reaches Alkali Lake (p. 4-13). The WMA supports a mosaic of riparian and semi-desert grassland outside of agricultural areas and is maintained by tail water from surrounding fields, meadows, and mountain runoff. Due to limited precipitation, reduced snowmelt, and reduced agricultural tail water caused by water conservation measures, the lake level has decreased significantly (p. 4-5). While the purchase of the adjacent Valley Vista Ranch LLC may further reduce agricultural tail water to the WMA, it is not clear what the magnitude of this effect would be on the Alkali Lake WMA.

Recommendation:
The FEIS should describe, in general terms, the magnitude of the effect on the resources of Alkali Lake WMA caused by the purchase of Valley Vista Ranch. For example, provide data on the amount of reduced agricultural runoff

anticipated, in comparison to the overall water received and required by the WMA.