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## David vs. Goliath

### Eastern Nevada's Range Lands vs. The Southern Nevada Water Authority

Throughout history, sources of water have caused disputes over ownership. In ancient Mesopotamia, the city-states of Umma and Lagash battled over water in 2500 BC (Hansen). Water is especially scarce in the desert ecosystem of the western states of the U.S. where rural water has been targeted to support the growth of urban areas. Exactly 100 years ago, monied Los Angeles interests secretly bought up thousands of acres of farm land in rural California's Owens Valley, then diverted the Owens River to Los Angeles. The Owens Lake was turned dry, farms were ruined, and communities were destroyed, igniting the bitter and sometimes deadly "California Water Wars" (Newton). Recently in Nevada, the fight over water rights has been escalating. The Southern Nevada Water Authority (SNWA), the local water authority for greater Las Vegas, has been attempting to claim water rights from Nevada's rural Lincoln and White Pine counties. They want to build a project, called the SNWA Groundwater Development Project and nicknamed the "SNWA Pipeline", in order to take water for Las Vegas's lawns, hotels and sprawling golf courses. However, this project has its opponents. Critics argue that the pipeline would damage the habitats of wildlife and livelihoods of farmers in Eastern Nevada ("Groundwater Project"). Also, the need for the pipeline is not urgent as the SNWA claims and there are various reasons for this (which will be discussed below). In short, the water resources belonging to Nevada's range lands should not be taken away for dubious claims on, and about, water.

The rural lands of Nevada are magnificently beautiful, self-sustaining ecosystems. Lincoln and White Pine Counties, located in Eastern Nevada, extend to the state border with Utah to the east.

Within these counties are the Southern Spring, Cave, Snake, and Dry Lake Valleys (“Project Map”). These valleys are unique compared to the rest of the United States: they lie in the Great Basin Desert, made up of “huge mountains, deep canyons, rolling foothills, flat playas, spectacular caves, and even marshes.” They receive on average less than 8 inches of rainfall per year; however, these lands are currently facing a drought, so there is significantly less rainfall than usual. Typical desert plants, such as sagebrush, grasslands, shrubs, and higher elevation woodlands, grow here. A wide range of animals, from bighorn sheep, to fish, to insects and to reptilians, such as the rare Great Basin Rattlesnake, all call these valleys their home (“Protect Snake Valley”).

For over a century, small agricultural communities have existed in these areas. Farmers and ranchers have managed to live off the limited supply of water from the region's own streams, springs, and aquifers. Additionally, some Native American peoples also live on these lands. All of these people work hard to support their themselves since natural resources are limited. They take great pride in their lifestyles. (“Great Basin Water Issues”).

However, these treasured range lands are threatened by the proposal of the SNWA pipeline. The project would consist of over 300 miles of pipelines that would be built from the Nevada-Utah border to Las Vegas. Water pumps, tanks, and other aquatic and electrical facilities would also need to be set up (“Groundwater Project”). The water obtained would be used to feed Las Vegas's non-native greenery. The plan is to pump up to 200,000 acre-feet (this is equal to about 65 billion gallons) of water annually. The price tag estimated by the Bureau of Land Management for this pipeline is \$3.5 billion dollars, but critics argue that the cost is closer to about \$16 billion dollars (Chereb). Patricia Mulroy, General Manager of the SNWA, has been leading the charge for the pipeline. Considered a “fierce and intelligent” leader of the SNWA for the past thirteen years, she has been seeking approval for the pipeline since 2004 (Fishman 56-57).

This controversial project has been met with tremendous outcry from various quarters. The limited water resources “are critical” to these rangelands' “plants and animals, including unique species

(such as the American Bittern or the Utah Chub Fish) found only in regional springs – springs which are directly threatened by pumping of groundwater” (“Great Basin Water Issues”). Proponents of the pipeline argue that the project would do no harm to the environment of Eastern Nevada. However, independent researchers insist that it is impossible to pump out that much water without causing catastrophe for the natural habitats and the livelihoods of those who live there. The Bureau of Land Management issued an Environmental Impact Statement (EIS) on August 3, 2012. This document thoroughly analyzes how the proposed project would affect the environment (“Groundwater Project”). Indeed, the negative results outweigh the benefits.

I interviewed Zach Frankel, Executive Director of the Utah Rivers Council. Mr. Frankel stated that the underground water reservoirs on the Nevada-Utah border have taken thousands of years to fill up. If this pipeline for Las Vegas would be constructed, water levels of the aquifers would drop 180 feet. The recharge rate of the aquifers is simply not fast enough to be able to withstand that loss of water. By using up the underground water sources of these lands, wildlife would be forced to find new habitats elsewhere or face death. The EIS concludes that about 12,288 acres of land would be cleared of vegetation that would be uprooted and soil erosion would be the result. The lack of vegetation would disrupt the lives of antelope, mule deer, bighorn sheep, elk, desert tortoises, pygmy rabbits, sage grouse, birds, and much more. Some land of two wild horse management areas would be cleared, too.

Additionally, dust storms – both from the pipeline construction, but also from the lasting erosion of the soil – could well cause severe and long-term air pollution in Nevada and Utah. Revisiting the California Water Wars, it is instructive to note that the dust storms and air pollution caused by the dry Owens Lake bed finally led to a court decision in the 1990's ordering the Los Angeles Department of Water and Power to “pump about 95,000 acre-feet of water *every year* to flood the lake bed; that's enough to supply all of San Francisco” (Newton). So now we have Los Angeles using precious water to flood the desert every year in an attempt to keep dust down – in other words, in order to make up for past and continuing wrongs.

Another concern is that air born dust could land on the snow pack of nearby mountains. This could change the amount of spring run-off melting into creeks. Then, the water quality of the habitats of aquatic animals could deteriorate (“EIS Executive Summary 32-35”). Rob Mrowka of the Center for Biological Diversity believes that "Some of Nevada's rarest, most unique species rely on wetlands and springs....The Las Vegas water grab could undo all that and drive them extinct in the blink of any eye" (qtd. in Chereb).

It is not only wildlife that would be affected. The livelihoods of farmers, ranchers, and Native Americans would be lost, too. Their farms and livestock would suffer from losing their sources of water. Their century-old homes, as well as thirty-five hydrographic basins, five National Wildlife Refuges, four state wildlife areas, seven state parks, and two national parks, would be impacted (“Snake Valley Aquifer”).

This fight has been long and complicated. It all began in 1989, when the SNWA applied for over a hundred water rights across rural Nevada. Nothing significant happened until 2004, when the BLM began to review the applications (Brean). Through 2007 to 2008, the Nevada State Engineer gave the SNWA permission to pump enough water to drop aquifer water levels in one valley by 200 feet over seventy-five years. Angry objections led to a court case called *Great Basin Network vs. State Engineer*. On January 28, 2010, the Nevada State Supreme Court ruled that the pipeline could not be built. This decision was made after the revelation that the state engineer had acted capriciously and had violated the due process rights of protestors by not holding timely hearings. There was also no credible evidence provided that three particular valleys would be left with a plentiful supply of water (Greene).

But just last December 28 (2012), the tables turned yet again. The BLM granted the SNWA Pipeline right of way to be built over federal lands. Now, the pipeline's future is in the hands of the court system. In response to the BLM decision, Patricia Mulroy said, “This is a huge milestone for southern Nevada.” However, many lawsuits are expected to be filed by opponents in the near future (Chereb).

What Mulroy and the SNWA argue is that Las Vegas needs rural Nevada's water to support itself in the event that the Colorado River cannot provide enough (Fishman 82). This argument relies on fear, as well as a misconception that the population of Greater Las Vegas (i.e., Clark County) is still booming. In reality, this is not the case. Through the years 2000 to 2007, the population of Clark County had, indeed, been increasing. However, since 2007 the county growth rate has actually been decreasing by an average of  $-1.42\%$ . In the last year for which we have statistics, 2011, Clark County experienced a population loss of  $3.42\%$  ("Growth Rate"). The trend suggested that a net population outflow might be underway. Certainly, the population of Las Vegas is no longer growing and the claims that Las Vegas will need ever greater volumes of water is not true.

When it comes to water conservation, there is more that Clark County could do. Up to 90,000 acre-feet of water every year could be saved without pumping in any water ("Great Basin Water Issues"). Las Vegas Valley residents currently use 248 gallons per capita of water daily (BLM EIS 11). Other cities in the American Southwest do better: Albuquerque has dropped their daily usage to less than 150 gallons per capita (Fleck), while Tucson uses only 95 gallons per capita ("Tucson Water"). Incidentally, our neighbors in Canada use only 79 gallons per capita, and residents of Great Britain and the Netherlands use only 35 gallons and 27 gallons, respectively (Patriquin & Squire). At 248 gallons per capita, Las Vegas residents by comparison are still wasteful in their water use.

This past December, U.S. Interior Secretary Ken Salazar suggested that significant amounts of water could also be saved simply by covering up aqueducts from the Colorado River to prevent evaporation. Secretary Salazar also mentioned desalinized ocean water for Las Vegas ("Colorado River Report"). On this last point, one additional possibility might be for Nevada to send Southern California electrical power produced cheaply from the Silver State's great alternative energy resources, in return for Nevada keeping part of the water now being sent from the Colorado River to Los Angeles.

Yet another immediate way Las Vegas could be saving water also exists. The waters of the Colorado River are pooled into two large, man-made reservoirs: Lake Mead and Lake Powell.

According to Dr. Wade Graham, professor of public policy at Pepperdine University, this system causes the loss of “huge volume of water to evaporation in the desert sun and to seepage into the dry ground. By consolidating the water in Lake Mead, the bureau (of Reclamation) could save as much as 300,000 acre-feet a year – equal to the state of Nevada's entire entitlement” (Graham).

The ideas for saving water for Las Vegas already exist. The claims that Las Vegas will need ever greater volumes of water are dubious. Yet Las Vegas's water authority wants to grab the limited water that there is in Nevada's rural White Pine and Lincoln Counties. Is this really justified? The answer is no—it is not necessary and it is not acceptable to ruin these range lands and to hurt so much of the wildlife and human community of rural Nevada.

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