IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF NEVADA

In the Matter of Application Number 53972 Filed By Las Vegas Valley Water District on October 17, 1989, to Appropriate the Waters of underground	PROTEST

Comes now the Nevada Wildlife Federation whose post office address is P.O. Box 71238, Reno, Nevada 89570 whose occupation is a nonprofit organization dedicated to the conservation of Nevada's natural resources, particularly wildlife and wildlife habitat, and protests the granting of Application Number 53972, filed on October 17, 1989 by the Las Vegas Valley Water District to appropriate the waters of underground situated in Nye County, State of Nevada, for the following reasons and on the following grounds, to wit:

Granting or approving Application Number 53972 would be detrimental to the public welfare in that it would: (i) likely jeopardize the continued existance of the Railroad Valley Springfish, listed threatened species of fish); (ii) prevent or interfere with the conservation of endangered and threatened species in violation of both federal and state law; (iii) take or harm those endangered or threatened species.

The granting or approval of the above-referenced Application would be detrimental to the public interest in that it, individually and together with the other applications of the water importation project, would:

1. interfere with the purpose for which the federal lands are managed under federal statutes including, but not limited to, the Federal Land Use Policy Act of 1976.

2. require the construction of facilities to transport the water across lands of the United States under the jurisdiction of the United States Department of Interior (including the Bureau of Land Management). This application should be denied because the Las Vegas Valley Water District has not obtained the necessary legal interest (e.g., right-of-way) in the federal land such that the applicant may extract, develop and transport water resources from the proposed point of diversion to the proposed place of use.

3. encourage the willful waste of water that has been allowed, if not encouraged, by the Las Vegas Valley Water District; consequently, the water will not be put to beneficial use.

4. be premature in that the Las Vegas Valley Water District lacks the financial capability for developing and transporting water under the

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subject permit which is a prerequisite to putting the water to beneficial use.

5. divert and export a sufficient quantity of water to lower the static water level in the area of the application and affect the quality of remaining ground water; further threaten springs, seeps and phraetophytes which provide water and habitat critical to the survival of wildlife.

6. impair wetlands and waters in the area of the application to support migratory birds, native fish, and other wildlife in conflict with Federal laws that seek to protect wetlands, migratory birds, and wildlife for the benefit of all.

7. in the absence of comprehensive planning, lead to a further degradation of the quality of life and the environment in the southern Nevada region with the most likely result being a further degradation of air quality in an area that presently exceeds Federal air quality standards established by the Clean Air Act for the protection of human health.

8. sanction water mining.

9. fail statutory requirements for a:
   (a) description of the place of use;
   (b) description of the proposed works;
   (c) estimated cost of such works; and
   (d) estimated time required to put the subject water to beneficial use.

10. discourage lower cost, more efficient alternatives to obtaining water and pass the development costs to the consumer.

11. be premature in that insufficient data has been provided to demonstrate that water of sufficient quantity and quality can be provided to the Las Vegas metropolitan area without adverse impacts on the environment.

Inasmuch as a water extraction and transbasin conveyance project of this magnitude has never been considered by the State Engineer, it is therefore impossible to anticipate all potential adverse affects without further information and study. Accordingly, the protestant reserves the right to amend the subject protest to include such issues as they may develop as a result of further information and study.

The undersigned additional incorporates by reference as though fully set forth herein and adopts as his [her/its] own, each and every other protest to the aforementioned application filed pursuant to NRS 533.365.

THEREFORE the protestant requests that the application be denied and that an order be entered for such relief as the State Engineer deems just and proper.

Signed Kenneth Struthers

Kenneth Struthers, President

Address 6062 Big Bend Ave.

Las Vegas, NV 89115

Subscribed and sworn to before me this 5th day of July 1990.

NOTARY PUBLIC
STATE OF NEVADA
County of Clark
Iris Deuel
My Appointment Expires Dec. 8, 1993

Iris Deuel
Notary Public
State of Nevada
County of Clark

$10 FILING FEE MUST ACCOMPANY PROTEST. PROTEST MUST BE FILED IN DUPLICATE. ALL COPIES MUST CONTAIN ORIGINAL SIGNATURE.

Nevada Wildlife Federation, Inc.

An Affiliate of the National Wildlife Federation

Post Office Box 71238
Reno, Nevada 89570

July 2, 1990

Michael Turnipseed, P.E.
State Engineer
Division of Water Resources
201 South Fall Street
Carson City, NV 89710

Dear Mr. Turnipseed:

The Nevada Wildlife Federation joins the Nevada Outdoor Recreation Association, Toiyabe Chapter of the Sierra Club, and Wilderness Society in submitting forms, fees, and supporting materials to protest applications by the Las Vegas Valley Water District for water outside the Las Vegas Valley. Our protest forms are attached.

The organizations who have joined in protesting these applications have long-standing interests in the management of Nevada's wildlife and natural resources. Cumulatively, thousands of Nevadans are represented by these organizations. Individual members hunt, fish, hike, conduct scientific studies, participate in off-highway-vehicle activities, take photographs, and rely on the natural resources for their living within the large area that will potentially be impacted by the individual water applications. The organizations represented in this protest wish to protest the large-scale cumulative effects of the proposed water withdrawals as well as the individual effects. Serious procedural questions must be addressed as well. The purpose of this letter is to identify individual applications that the organizations wish to protest and to provide the arguments which we feel should compel the State Engineer to reject the applications.

We recognize that we will be afforded an opportunity to provide more detailed objections at a later date; however, given the unprecedented scale of this project for Nevada, we wish to provide some general arguments to support our contention that the filings are premature and unwarranted.

Some of the major questions the State Engineer should consider are:

Is the water available for appropriation?

Will the water be put to best use?

Should the Las Vegas Valley Water District be granted the water rights at this time?

Have alternatives to the proposed action been adequately considered?

We believe the granting of water rights in southern and central Nevada is

premature for several reasons. First, adequate data does not exist for the State Engineer to adequately consider the first question. While studies of the groundwater in the areas have been conducted by federal, state, and local agencies and private contractors (most notably, for the possible location of the MX missile system in Nevada), inadequate data exists to demonstrate that sufficient water of high enough quality exists for the Las Vegas Valley Water District to economically import the water to the Las Vegas Valley. Present data suggests that the requested withdrawals will lead to a mining of water in many of the water basins. Second, alternatives to the proposed water applications have not been sufficiently explored from either a technical, legal, or legislative perspective. Thirdly, the impacts of the proposed action have not been sufficiently addressed, and numerous impacts involving Federal Actions have not been addressed at this time through the process established under the National Environmental Policy Act.

Two major questions, then, are what is the amount of "excess" water that may be transported from rural Nevada to the Las Vegas Valley, and what is the quality? Representatives of the Las Vegas Water District have stated that the "excess" water lies at relatively shallow depths, that the quality is good and that any impacts from the loss of the water in a basin will be monitored and mitigated by moving to other regions when effects are observed. This approach is flawed in several respects and must be rejected.

Currently, much of Nevada and the southwest is experiencing a drought. Whether this drought is normal or represents the start of a global warming trend cannot be answered at this time; nevertheless, the drought highlights the fact that a limited amount of water falls on our state in normal periods, and a reduction in our normal precipitation and recharge rates can be readily seen to have a major impact on our state through depleted lakes, reservoirs and reduced flows in our streams and springs. Water restrictions are currently in existence in several of the rural areas where the District seeks water. The present depletion of our surface water is from a drought. The proposed withdrawals by the Water District may have similar impacts on their targeted water basins even during relatively wet periods. In future dry periods, the withdrawals can only be expected to exacerbate problems.

Many people have compared the proposed water applications to Los Angeles' water withdrawals from the Owens Valley. Significant expenditures were made to acquire water rights and to develop the infrastructure to transport the water to Los Angeles. Despite observed impacts on the social infrastructure of the area and the environment, pumping of the groundwater has continued for many years at a rate high enough to impact the vegetation on the surface with relatively little effort to mitigate, until recently, the impacts. While Las Vegas Valley Water District officials claim: "it won't happen in Nevada", it seems reasonable to question whether it might in fact occur. Consider the size of the proposed project and the capital necessary to construct it. Consider the phased approach that is being suggested. Consider what would happen if the financing could not be obtained or additional water rights secured when deleterious effects were being observed from the pumping in an area, and it seems plausible to suggest that maybe the Water District would not be able to move to new areas to avoid significant environmental impacts in an area. In a sense, the history of Owens Valley may be a better lesson for us in Nevada than many people wish to acknowledge.

A presumption seems to exist that we have a good understanding of the hydrogeology in rural Nevada to permit the Las Vegas Water District to blanket a large portion of Nevada with water applications and that there will be no major environmental impacts. Limited hydrological data for the region suggests otherwise, and statements made by the representatives of the Water District indirectly support the conclusion that we simply do not have sufficient data to understand the impacts of long-term pumpage of the aquifers. Consider the statements by the Water District that they will monitor the situation after their wells, pipelines, powerlines and tanks are in place. If the water table is drawn down in the shallow aquifers that they seek to exploit, monitoring will likely show that lakes, ponds, springs, seeps, and springs dry up and vegetation becomes stressed, dies, or becomes significantly altered in terms of diversity. By the time these changes are linked to the pumpage of the aquifer, it would then be costly and impractical to restore these features, and long-term alteration and damage of the environment will have occurred.

Consider the situation at Ash Meadows years ago when a developer proposed to increase pumpage of water in the Pahrump valley. The water level in Ash Meadows was observed to be falling in relationship to increased water usage many miles away, and the endangered desert pup fish was in jeopardy. The pup fish was protected by a decision of the U.S. Supreme Court and a limitation on the amount of water that could be withdrawn from the aquifer.

Much of central Nevada overlies karst. Hydraulic conductivities can be high, and effects from the pumpage of groundwater may be seen over wide areas. Unfortunately, inadequate information exists to say exactly how much water may be withdrawn from a basin without significant impacts over a long-term period. Also, inadequate information exists on the water quality of the aquifers especially when long-term pumpage begins. Total dissolved solids may increase over a period of time, and heavy metals might increase to the point where the quality of the water may not be suited for human consumption. Where the water sources in central Nevada may be adequate for limited use, seasonal use, and for use in agriculture, the water sources may not be sufficient to augment the supply of a major metropolitan city that presently relies on two sources of water with the source of Lake Mead presently exceeding TDS guidelines for human consumption.

Assuming that adequate data exists to show that the quantity and quality of the water needed for future growth in Las Vegas can be found in rural Nevada, the next question is whether supplying that water to Las Vegas would be the best use of that water. We will argue that adequate water must be reserved for wildlife and the environment in rural Nevada. We will argue that transportation of water to Southern Nevada for future growth is not in the best interests of the public when all of the environmental and economic impacts have not been considered. Finally, there is the question of whether Las Vegas can continue wasting its present water and pursue water applications in rural Nevada at the same time.

Nevada has the highest per-capita rate of water consumption in the nation according to the National Water Well Association - 283 gallons per person for people on a public water supply. The national average is 134 gallons per person. This high figure and our visible and often cited wasting of water indicate that a major source of new water for southern Nevada could come from

conservation. The cost of obtaining this water is likely to be less than the cost of obtaining water from rural areas of Nevada.

A cursory analysis of the economics and alternatives to the proposed transfer of water from rural Nevada to Las Vegas valley would show substantial costs in acquiring water from rural Nevada. Geophysical and hydrogeological tests would have to be conducted. Wells would have to be drilled, pipelines laid, and reservoirs and standpipes built. Powerlines would have to be constructed with many of the lines going to, and through remote areas. Many of those areas possess scenic, natural, and recreational qualities that merit consideration by the Congress for wilderness designation. Additional electrical power would be required to pump the water to Las Vegas, and these power sources might prove to be quite costly to the environment as well as to future consumers. Adequate sources of financing would have to be obtained to construct such a large project. Local taxes would rise along with water rates necessary to finance the project. Increased water rates would likely lead to increased conservation. Fixed capital costs for operating the water system would increase with increased water conservation for the water delivered. Increased population and increased demands for the water might be justified as a means for paying the project costs at the lowest possible cost to the consumers. Increased population in the Las Vegas valley would likely bring about the deterioration in our present quality of life which many people in larger cities, such as Los Angeles, find at present to be attractive. In the future, it would not be unusual to find our present high rate of growth to slow as conditions in our city approach those of larger, older cities. At a time when the credit markets are being taxed by the financing of the Federal deficit, the savings and loan bailout, and the requirements from a rapidly growing state and city, future financing of the water project may be difficult even when proponents of the project advocate a phased approach. Once begun, the cost of the project may be expected to increase even when phases of the project are slowed or canceled. Experiences within the Department of Defense with large military procurements help illustrate the point that costing of major procurements stretching over many years can be difficult at best. Modifications to the procurements could lead to higher costs when many people would expect just the opposite. A complete analysis of the economics and alternatives is likely to show significant impacts to the environment and substantial risks in pursuing the massive water importation project.

A complete analysis of the project is needed through the development of an environmental impact statement. Federal lands are presently involved, and Federal agencies may be involved at a later stage in evaluation and possible construction of the project. The National Environmental Policy Act applies to this project.

Although the state of Nevada does not have an "Environmental Policy Act" the State Engineer should consider: the alternatives to the proposed action, the environmental impacts, the costs and the alternatives to ensure that our limited water supplies are put to best use. While granting of the water applications may be made individually, the Las Vegas Valley Water District cannot develop such a large project if there isn't a minimum level of water of high enough quality and sufficient quantity to justify the large capital costs. It may be argued that the District needs to tally the individual water applications and evaluate their newly implemented conservation program and future growth projections before a final decision is made to implement the

project. It may be that conservation efforts are successful, future growth slows, financing is unavailable, other alternatives prove to be viable, and the need for the project diminishes. In this situation, Clark County and the Las Vegas Valley Water District have held in trust the water rights in rural Nevada which some would argue should be held in trust not by Clark County but by the rural areas or the State Engineer. Indeed, a contention in these protests is that the State Engineer should not act on the water applications until it can be shown that there is a reasonable expectation that Clark County will be able to use the water and that the water in rural Nevada is best used in southern Nevada for future residential and industrial development.

Perhaps one of the most serious impediments to future growth in southern Nevada is air quality. Traffic congestion, over-crowding of schools, and a stated "shortage of water" may serve to limit future growth, but the quality of the air in the Las Vegas valley may prove to be the most serious problem. Already, the area exceeds Federal air quality standards for carbon monoxide and exceedance of the ozone standard is near. Particulate levels are high, and increased allergy problems are being reported. A revision of the Federal Clean Air Act will likely continue the threat of Federal sanctions for the area, including the loss of Federal funds for major construction projects, if air quality does not improve and eventually attain Federal health standards. As the population of the area grows, so do allergens and so do vehicle miles travelled increase. These increases will lead to deteriorating air quality and increase the chances that future population growth will slow and Federal funding for future population growth will be limited. The State Engineer should consider this when consideration is given to a granting of water rights to Las Vegas for possible, not certain, development at a later date.

Should efforts by the Las Vegas Valley Water District to promote water conservation fail to meet demands for water stemming from further growth in the Las Vegas Valley, Dr. Larry Paulsen of the University of Nevada - Las Vegas has suggested obtaining water rights from the Upper Colorado basin and transferring that water through the Colorado River to Las Vegas. This may be cheaper and have less impact to the arid regions of Nevada than the proposed water importation project. This, as well as other alternatives, need to be examined further before formal water rights are granted to the Water District.

Additional water for Las Vegas could be readily obtained through a restructuring of existing water rates and incentives for new businesses, developers and residents to work within a water market to acquire existing water rights within the Las Vegas valley and to retrofit existing businesses, residences, and recreational facilities with water efficient plumbing and landscaping. Again, this alternative may prove to be more economical and less damaging to the environment than the proposed project. The Las Vegas Valley Water District has, to date, failed to explore this alternative in preference for the proposed applications of water in a major portion of Nevada.

Sincerely,

Kenneth J. Struthers

Kenneth J. Struthers, President