

US EPA ARCHIVE DOCUMENT

FINDING OF NO SIGNIFICANT IMPACT

County of Washoe Department of Water Resources Spanish Springs Valley Nitrate Remediation Pilot Project Phase III

Spanish Springs Valley, Washoe County, Nevada

The U.S. Environmental Protection Agency (EPA) Region 9 intends to authorize the award of a FY 2005 special appropriation grant to the County of Washoe for implementation of Phase III of the Spanish Springs Nitrate Remediation Pilot Project, intended to improve water quality in the Spanish Springs Valley. EPA Region 9's authorization of funds is a federal action requiring compliance with the National Environmental Policy Act (NEPA), 42 USC §§43321-4370(f). In accordance with NEPA; Council of Environmental Quality Regulations, 40 CFR §§1500.1-1508.28; and EPA NEPA regulations 40 CFR Part 6, EPA Region 9 has prepared an Environmental Assessment (EA) describing the environmental impacts associated with the proposed project. Based upon the analysis in the EA, EPA has prepared this Finding of No Significant Impact (FONSI) which documents EPA Region 9's decision that the proposed project will not have a significant effect on the environment.

Project Location and Description

The proposed action (project) is located in the 80.1 square mile Spanish Springs Hydrographic Basin, about 8 miles northeast of the Reno-Sparks metropolitan area. The 8 square mile project area is located near the center of the basin and encompasses the population center with homes built between 1979 to present.

Groundwater quality in the project area has been degraded over the past two decades due to the high number and high density of septic systems in the Project Area. Washoe County Department of Water Resources (WCDWR) has suspended use of Desert Springs Wells #3 and #4 (DS#3 and DS#4, respectively) due to nitrate-N and arsenic concentrations in excess of the maximum contaminant level. To mitigate this loss of supply, WCDWR contracted with the Truckee Meadows Water Authority (TMWA) to purchase replacement water on a wholesale basis. While the purchase of wholesale water allows WCDWR to suspend the use of DS#3 and DS#4 in the near-term, these wells, and the local groundwater aquifer, will be needed to meet peak summer demands as the region continues to grow and water demands increase.

The long-term solution to the nitrate problem is to convert septic systems to the municipal sewer, thereby removing the largest source of nitrate in the Valley. Ten percent of the septic systems in the project area in the center of the Valley have already been connected to the sewer. WCDWR is continually searching for funding to convert septic systems to the sewer, and will continue until the majority of septic systems in the center of the Valley have been converted. In addition, there has been a moratorium on high-density septic systems in the Valley since the late 1990's. A smaller loading of naturally-occurring nitrate from the soil is being reduced through domestic and municipal irrigation management.

The project proposes several management and engineering control measures to remediate the groundwater quality with respect to nitrate. Specifically, approximately 75 million gallons per year of groundwater will be extracted from DS#3, the well with the highest nitrate-N concentrations (removing nitrate from the aquifer) and blended with potable drinking water for use by the local community. Clean potable water from TMWA will be injected into the groundwater at DS#4 (replacing groundwater with low concentrations of nitrate), and monitoring to verify effectiveness of the activities. Phase I and II of this project were funded with congressional appropriations through EPA primarily to provide information about the extent of nitrate contamination in the aquifer. Phase III of this project, coupled with the continued conversion of septic systems to the municipal sewer system, will result in improved groundwater quality and reuses existing groundwater well infrastructure.

Environmental Consequences and Conditions

After carefully considering the regulatory, environmental (both natural and human) and socio-economic factors as described in the EA, EPA Region 9 has not identified any significant impacts to the environment that would result from the implementation of the proposed project.

Public Review

The EA is on file and available for public review at the EPA Region 9 office. To make an appointment to review the EA, contact Cheryl McGovern at the address given below.

Interested parties may submit comments on the EA and this unsigned FONSI to EPA Region 9 by 5:00 p.m. on January 16, 2011. Comments via letter, fax, or email should be sent to Cheryl McGovern at the following address:

EPA Region 9, WTR-4
75 Hawthorne Street
San Francisco, CA 94015-3901
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fax: 415-947-3537
email: mcgovern.cheryl@epa.gov

EPA Region 9 will not take administrative action on the proposed project prior to the close of the comment period. If, after considering public comments, EPA Region 9 concludes the proposed project will not have significant environmental impacts, EPA Region 9 will revise this FONSI by adding a summary of the comments received and EPA Region 9's responses. The revised FONSI will be forwarded to the Water Division Director for review and signature. The FONSI will be final upon signature. EPA Region 9 will not recirculate the signed FONSI for public review, but will make it available to any individual upon request.