



**BILL RICHARDSON**  
GOVERNOR

*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**

*Construction Programs Bureau*  
*Harold Runnels Building*  
*1190 St. Francis Drive, P.O. Box 26110*  
*Santa Fe, New Mexico 87502-6110*  
*Telephone (505) 827-2806*  
*Fax (505) 827-2837*



**RON CURRY**  
SECRETARY

**RICK MARTINEZ**  
ASD DIRECTOR

**August 23, 2004**

**FINDING OF NO SIGNIFICANT IMPACT**

**TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS:**

In accordance with the environmental review guidelines of the Council on Environmental Quality found at 40 Code of Federal Regulations (CFR) Part 1500 and the implementing environmental review procedures of the United States Environmental Protection Agency (EPA) found at 40 CFR Part 6 entitled "Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act", the State of New Mexico Environment Department Construction Programs Bureau has performed an environmental review of the following proposed action:

Village of Taos Ski Valley Wastewater Treatment Plant

Upgrade and Renovation Project  
Taos County, New Mexico

CWSRF #1438049

Estimated Proposed Funding:

NMED/EPA CWSRF loan:     \$2,000,000

The Village of Taos Ski Valley ("the Village") has been approved to receive a Clean Water State Revolving Fund (CWSRF) loan funded by the EPA and administered by the New Mexico Environment Department (NMED), for upgrade and renovation of the Village wastewater treatment plant.

The Village currently operates a wastewater treatment plant that serves Taos Ski Valley. The existing plant is located along the Rio Hondo River within the Village boundaries and was constructed in 1982. Due to the age of the facility, and current and future demands, many of the unit processes of the treatment plant need to be upgraded and renovated to meet future effluent quality criteria and standards, and provide for more efficient operations. The proposed project includes replacing the headworks, modifying the aeration basins and clarifiers, and relocating the chemical treatment process. The environmental review process, which is documented by the enclosed Environmental Assessment, indicates that no potential significant adverse environmental impacts will result from the proposed action. The project individually, cumulatively over time, or in conjunction with other actions will not have a significant adverse effect on the quality of the environment. On the basis of the environmental review determination that there are no predicted or cumulative significant adverse impacts associated with the project,

I have determined that the project is not a major Federal action significantly affecting the quality of the human environment, and that preparation of an Environmental Impact Statement is not necessary. My preliminary decision is based upon the enclosed Environmental Assessment, a careful review of the Environmental Information Document prepared for the project, the results of the public participation process, and other supporting data which are on file in the office listed below and available for public review upon request. Therefore, I am issuing this preliminary Finding of No Significant Impact pertaining to the project.

Comments supporting or disagreeing with my preliminary decision may be submitted for consideration to the attention of the NMED, Construction Programs Bureau, P.O. Box 26110, Santa Fe, NM 87502, attention Fred Kalish, Project Manager. After evaluating any comments received, the NMED will make a final decision. No administrative action will be taken on this preliminary decision for at least 30 calendar days after release of this Finding of No Significant Impact. The preliminary decision and finding will then become final after the 30-day comment period expires if no new significant information is provided to alter this finding.

Richard P. Rose, Ph.D., P.E., DEE  
Bureau Chief

cc: Neal King, Mayor  
Taos Ski Valley, 7 Firehouse Road, P.O. Box 100, Taos Ski Valley, NM 87525

Ron Curry, Secretary  
New Mexico Environment Department

Rob Straebel, Village Administrator  
Taos Ski Valley, 7 Firehouse Road, P.O. Box 100, Taos Ski Valley, NM 87525

Enclosure

**ENVIRONMENTAL ASSESSMENT  
VILLAGE OF TAOS SKI VALLEY  
WASTEWATER TREATMENT PLANT  
RENOVATION/UPGRADE PROJECT  
TAOS COUNTY, NEW MEXICO  
CWSRF #1438049**

**BACKGROUND**

The Village of Taos Ski Valley (“the Village”) currently operates a wastewater treatment plant servicing the Village. The treatment plant is located at the lower end of the parking lot of the Taos Ski Area on land leased from the U.S. Forest Service, in the SW & SE \_ Section 4, T28N, R14E, in Taos County, New Mexico (Figure 1).

The existing plant services 53 customers, consisting of mostly hotels and restaurants. The Village boundary (planning area) is within the Carson National Forest along the Rio Hondo River and includes approximately 325 acres located predominantly along Highway 150.

The treatment plant was constructed 20 years ago and is an “advanced” wastewater treatment plant, capable of removing both ammonia and phosphorus. The treatment plant infrastructure consists of a headworks, two equalization basins, four aeration basins, biological and chemical clarifiers, two pressure filters, a ultraviolet (UV) disinfection system, and solids handling facilities. The Village will receive a Clean Water State Revolving Fund (CWSRF) loan funded by the EPA, and administered by the New Mexico Environment Department (NMED), for renovations and upgrades to the treatment plant.

The proposed project is considered to be a Federal action requiring compliance with the National Environmental Policy Act (NEPA). In accordance with the environmental review requirements of the Council on Environmental Quality found at 40 Code of Federal Regulations (CFR) Part 1500 and the EPA's implementing regulations found at 40 CFR Part 6 entitled “Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act,” the NMED is preparing this Environmental Assessment (EA) to assist in determining the environmental impacts of the proposed action, and in evaluating whether an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FNSI) will be prepared for the proposed project.

**PURPOSE AND NEED**

The “design life” for a wastewater treatment plant is typically 20 – 25 years, and the existing treatment plant is over 22 years old. Due to the age of the facility and anticipated near future demands, many of the unit processes of the treatment plant need to be upgraded and renovated to meet effluent quality criteria and standards.

The existing treatment plant has numerous mechanical deficiencies and operational inefficiencies in major treatment plant functions including the headworks, equalization/anoxic

basins, and biological and chemical treatment processes. For example, the headworks has a inefficient and poorly designed screening system, a poorly designed and inoperative flow metering system, and a poorly designed and inefficient grit removal system. In addition, four key unit processes in the treatment plant (biological clarification, chemical clarification, aeration basins and anoxic basin) have insufficient capacity for near term future demands.

Due to the age of the plant, the mechanical and operational inefficiencies, and lack of capacity for future demands, the treatment plant is in need of improvements. The proposed project will ensure adequate wastewater treatment for the Village residents and visitors, and to prevent non-compliance with the NPDES discharge permit and potential contamination of the environment.

## **PROJECT DESCRIPTION**

The Village's wastewater treatment plant is located at the lower end of the parking lot of the Taos Ski Area (Figure 2) on land leased from the U.S. Forest Service under a Special Use Permit. The Village has three goals for improving the Plant: to replace old equipment where needed; to optimize processes where possible; and to expand the design capacity to 200,000 gallons per day (gpd) from the current capacity of 95,000 gpd. The proposed project includes replacing the headworks, modifying the aeration basins and clarifiers, and relocating the chemical treatment process.

A new headworks building will provide room for an auger-style screen and compactor, a grit removal system and classifier, and a dumpster. The auger-style screen catches screenings as they enter the channel and pulls the screenings up to the compactor section. The compactor section produces clean screenings and deposits them into a drum that is placed beneath. Grit removal equipment will also be installed to reduce wear on pumps and to produce cleaner biosolids.

The existing aeration basins will be modified by the addition of attached growth media, allowing increased biomass and greater treatment capacity while maintaining sufficient nitrification. The media can be added as needed to allow capacity increases to be phased.

The existing chemical clarifier will be converted to a biological clarifier, allowing parallel operation between two clarifiers. Flow from both clarifiers will flow to a flocculation basin prior to diversion to a older abandoned wastewater treatment plant which will be renovated to include the entire chemical treatment process (increased flocculation time and new sludge removal system).

Other proposed improvements include modification to the equalization basin (replace and rebuilding hoists, removing baffle wall, installation of ultrasonic detectors and overflow lines), installing a check valve on the return activated sludge line, and installing variable frequency drives on the mixers. In addition, level detectors will be added to the sludge tanks and a new blower will be added for improved sludge processing. The existing filters, pumps, and disinfection system will remain in place.

The construction time of the entire project is estimated to be 12 months. The estimated cost of the project is approximately \$2,000,000.

## ALTERNATIVES TO THE PROPOSED PROJECT

The Village evaluated and considered various alternatives to address existing wastewater treatment deficiencies. Important factors influencing the evaluation of the processes and their recommended solutions included environmental acceptability, overall costs, system reliability/efficiency, accommodation of future demands, and public acceptance. The following is a discussion of the alternatives considered or evaluated during the development of the project.

### A. “No Action” Alternative

The existing plant is characterized as having a number of outdated unit processes leading to inefficiencies in the operation of the plant. In addition, some of the existing unit processes lack the capacity to accommodate future flows. The “no action” alternative could eventually result in non-compliance with the Village’s wastewater discharge permit due to plant hydraulic and organic overloading. Therefore, taking “no action” was deemed inconsistent with the Village’s current and future wastewater treatment needs and would not ensure protection of public health and environmental standards in the area.

### B. Headworks

The flow enters the existing treatment plant through the headworks, consisting of two manual bar screens, a grit chamber, and an influent flow meter. All aspects of the headworks are less than ideal, mainly because there are no automated features and space within the existing headworks building is extremely limited.

The screening and grit removal are very labor intensive and unpleasant tasks. The operators must manually rake the screenings into buckets on a daily basis. The buckets have to then be carried out to a dumpster. This is an unsavory task because there is no mechanism to wash organic material off the screenings, and the screenings are still very wet.

The grit chamber allows grit to settle, but there are no provisions for removal. The operators shovel the grit out annually, typically six to seven feet of deposited material. Failure to remove the grit in a timely manner results in grit passing through the chamber and potentially causing serious wear and tear on downstream equipment.

The influent meter measures flow but is not capable of recording data. Furthermore, the existing flow meter is more suitable for clean water and there are concerns about the accuracy of the readings.

Two options were considered for improving the headworks:

The first option evaluated renovation of the headworks within the existing building. The largest hurdle for this option is the limited size of the building. It is possible to make some improvements without expanding the building. For example, the existing building could house a grinder, an improved grit removal system, a new flow meter and recorder, and a composite sampler. However, there is insufficient space to install a new screen, and no available space to create a separate room for equipment electronics (required to prevent an explosion hazard).

The second option is to provide a larger building for the headworks, either through expansion of the existing building, or construction of a new building. To continue to use the existing building, walls would have to be moved and extensive concrete work would be needed.

A simpler approach is the construction of a new building of sufficient size to accommodate a complete headworks facility.

Construction of a new and expanded headworks building is the **preferred** alternative. Modifications within the existing building will result in continuing operational problems which would likely require upgrading in the near future.

### **C. Improvements to the Biological and Chemical Treatment Processes**

The existing treatment plant unit processes were evaluated for anticipated future flow capacity. The following unit processes were found to be significantly undersized: chemical clarification, biological clarification, aeration basins, and the anoxic zone. Proposed improvements to the biological and chemical treatment processes address each of the identified deficiencies.

The assessment of the alternatives for the existing treatment plant to accommodate future flows included: (1) construction of a new plant, and (2) modification of existing treatment plant processes. Options for modifications to the existing treatment plant included operating with and without an anoxic zone.

#### *New Treatment Plant*

Preliminary specifications for a new treatment plant assumes the same flow schematic as the existing plant. The new plant would be designed to provide twice the existing aeration basin volume, two biological and two chemical clarifiers with greater operational flexibility, a new rapid mix and larger flocculation basin, new blowers, and a dry chemical feeder for addition of soda ash.

#### *Modification of Existing Treatment Plant*

Two alternatives were considered for increasing the existing treatment plant capacity.

The first alternative involves increasing the aeration basin capacity of the existing treatment plant by converting one of the existing equalization basins to an aeration basin. The additional aeration capacity would increase the overall treatment plant capacity, but eliminates the anoxic zone currently configured into the existing equalization basin. The anoxic zone acts as an anoxic selector, improving the biological treatment process and enhancing effluent quality by selecting beneficial microorganisms and assisting in denitrification and alkalinity recovery.

The second alternative involved increasing the aeration capacity of the existing plant by the addition of attached growth media the existing aeration basins to increase biomass and treatment plant capacity. This alternative allows the existing anoxic zone to be enlarged by reconfiguring one of the existing equalization basins and at the same time maintaining the full equalization capacity.

Both alternatives include conversion of the chemical clarifier to a second biological clarifier and relocation of the entire chemical unit process to an older, abandoned package treatment plant which will be reconstructed to include the chemical treatment process and sludge removal.

The **preferred** alternative is modification of the existing plant to increase plant capacity by adding attached growth media to the existing aeration basins (i.e., second alternative). Construction of a new plant is very costly and not needed at this time since much of the existing

plant infrastructure has useful life remaining. Modification of the existing treatment plant using the second alternative allows continued use of both Equalization basins for equalization, maintains and improves the anoxic zone, allows the continued use of the aeration basins, and allows expansion of the plant to be phased as needed.

## **ENVIRONMENTAL SETTING**

### *Land Use*

The existing treatment plant is situated on a site comprising about 3.4 acres of Carson National Forest land along the Rio Hondo River. The elevation of the site is approximately 9300 feet. The Village is permitted to use this site through a U.S. Department of Agriculture Forest Service Special Use Permit with an expiration date of December 31, 2032. All project construction will occur within the existing boundaries of the Special Use Permit. However, the permit needs to be amended to include construction of the new headworks building and to allow increased treatment capacity. The Village has met with representatives of the Forest Service and an amendment to the existing permit has been prepared in draft form. It is anticipated that the amendment will be finalized and approved by the Forest Service by the end of September.

On March 24, 2004, the Carson National Forest Questa District Archaeologist conducted an inspection of the proposed location for the new headworks building at the existing wastewater treatment plant. The area was previously 100% surveyed by the Forest Service in 1981 and 1986. The 2004 survey report states that the ground surface of the treatment plant facility has been cleared and leveled by heavy equipment, and is covered by structures and construction gravel.

Soil conditions were obtained from a 1998 Geotechnical Engineering Report prepared as part of the construction of the Village Office and Fire Station located proximal to the treatment plant site. Soils are described as consisting of interbedded layers of clayey sand and silt, containing considerable amounts of gravel and cobbles.

The site does not contain any formally classified lands, and is located outside the 100-year flood plain.

### *Growth and Population Trends*

Growth in the service area has historically been slow and sporadic. However, there are near-term plans for several hotel expansions and additional residential and commercial developments. Longer term growth projections include connection of a variety of existing residential and commercial developments, currently utilizing on-site septic systems, to the Village's wastewater collection and treatment system. Near and long-term development is expected to add an additional 55,700 and 68,450 gpd to the wastewater treatment plant, respectively. As a result, peak daily wastewater flows are projected to increase from the existing peak of 100,000 gpd to exceed 200,000 gpd by the year 2020.

## **IMPACTS OF THE PROPOSED PROJECT**

The proposed project was analyzed to identify potential short-term, long-term, and cumulative impacts on the environment. Factors that were considered include the probability of impact occurrence, magnitude of any occurrence, if any predicted occurrence is determined to be

reversible/irreversible, direct/indirect or one-time/cumulative, the proposed action's conformity to legal mandates, and the social distribution of risks and benefits.

The majority of the impacts associated with the proposed project will be short-term and temporary due to actual construction activities, and will cease immediately upon completion of construction work. There are no significant adverse environmental impacts associated with the proposed action that cannot be reduced to acceptable levels. The only irretrievable resources committed to this project are labor, machinery wear, materials, funds spent, and energy consumed during construction and operation. The potential short and long-term, direct, indirect, and cumulative impacts resulting from the proposed action are identified and discussed below.

1. Biological Resources Including Threatened and Endangered Species: The proposed project must be conducted in accordance with the requirements of the Endangered Species Act (ESA), as amended, and the Fish and Wildlife Coordination Act (FWCA). The ESA requires Federal agencies to determine whether projects they undertake or support may affect endangered and threatened species and their critical habitats. The FWCA requires Federal agencies to determine whether projects they undertake or support affect fish and wildlife resources. The project has been coordinated with state and Federal wildlife protection agencies for potential impacts to protected species and their designated habitat.

The proposed project was coordinated with the United States Fish and Wildlife Service (USFWS) concerning the protection of listed animal and plant species. In correspondence dated May 18, 2004, the USFWS found a "no effect finding" stating that the proposed project will have no effect on listed species, wetlands, or other important wildlife resources.

The proposed project was also coordinated with the New Mexico Department of Game and Fish (NMDGF) concerning protection of animal and plant species of state concern. In correspondence dated December 16, 2003, the NMDGF stated that the department "does not anticipate significant impacts to wildlife or sensitive habitats [as a result of the proposed project]." NMDGF provided a list of sensitive, threatened, and endangered species in Taos County, New Mexico.

Based upon the results of the biological survey and the results of coordination with the USFWS and the NMDGF, there will be no effect on Federal or state listed protected animal or plant species or their designated critical habitat since none occur within the project area. However, should protected animal or plant species or their designated habitat be discovered during construction, work will stop immediately in that general vicinity, and the funding recipient will immediately notify the USFWS and the NMDGF of the discovery. Appropriate mitigation measures will be developed and implemented, as needed, in consultation with the USFWS and the NMDGF before construction will be allowed to continue.

2. Cultural/Historic Resources: The proposed project must be conducted in accordance with the requirements of the National Historic Preservation Act (NHPA), as amended, the Archaeological and Resources Protection Act (ARPA), the Historic Sites Act of 1935, and Executive Order (EO) 11593 entitled "[ ] Protection and Enhancement of the Cultural Environment". The NHPA requires that any Federal undertaking (including expenditure of funds) must determine the effects of the proposed action on any property listed on, or eligible for inclusion on, the National Register of Historic Places. The term undertaking includes Federal

government assistance or support of any non-Federal action. Section 106 of the NHPA requires Federal agencies to consider the effects of their actions on historic properties, which are defined as property included on or eligible for inclusion on the National Register. The ARPA requires the preservation of cultural resources that may be damaged by Federal or Federally authorized construction activities.

The proposed project was coordinated with the New Mexico Department of Cultural Affairs (NMDCA) concerning the protection of sensitive resources with archaeological, historical, architectural, or cultural significance. In correspondence dated July 13, 2004, the NMDCA, Historic Preservation Division indicated concurrence with a report prepared by the Forest Service and its determination that “no historic properties affected” for the proposed project.

The proposed project was coordinated with the Pueblos of Acoma, Cochiti, Isleta, Jemez, Laguna, Nambe, Picuris, Pojoaque, San Felipe, San Ildefonso, San Juan, Sandia, Santa Ana, Santa Clara, Santo Domingo, Taos, Tesuque, Zia, Zuni, and the Jicarilla Apache Tribe, Mescalero Apache Tribe, Southern Ute Tribe, the Ramah Navajo Chapter, the Navajo Nation, and the Hopi Tribal Council concerning protection of cultural resources considered significant by the Pueblos and Tribes. They were requested to provide tribal assistance and advice in identifying any historic properties, including those of traditional religious and cultural importance, within the proposed project planning area. Additionally, views on the project’s effects on such properties were solicited. Should they identify historic properties or properties with cultural or religious significance within the project area, consultation efforts were encouraged to identify and discuss relevant preservation issues and concerns about the confidentiality of information regarding the property. In correspondence dated June 8, 2004 (Pueblo of Laguna), June 3, 2004 (Pueblo of Isleta), and July 6, 2004 (Mescalero Apache Tribe), the responding Pueblos indicated that the proposed project would not effect any known traditional, religious or cultural sites. Should additional materials, artifacts, or properties of a potentially historic or archaeological nature be unearthed during construction, work will stop immediately in that general vicinity, and the funding recipient will immediately notify the State Historic Preservation Office (SHPO) and the Pueblos of the discovery.

Any resources discovered will be evaluated in accordance with the regulations of the Advisory Council on Historic Preservation in accordance with 36 CFR Part 800. Appropriate mitigation measures will be developed and implemented, as needed, in consultation with the SHPO and the Pueblos before construction is allowed to continue.

3. Floodplains and Wetlands: The proposed project must be conducted in accordance with the requirements of Executive Order (EO) 11988 entitled “Floodplain Management,” and EO 11990 entitled “Protection of Wetlands.” The purpose of EO 11988 is to ensure that Federal agencies avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of floodplains, and to avoid direct or indirect support of floodplain development wherever there is a practical alternative. The purpose of EO 11990 is to ensure that Federal agencies avoid, to the extent possible, adversely impacting wetlands, to minimize wetlands destruction, and to preserve the value of wetlands.

In order to determine compliance with EO 11988 concerning the protection of the floodplain in the area, floodplain delineation maps of the area were obtained from the Federal Emergency Management Agency (FEMA). According to the FEMA Flood Insurance Rate Maps (FIRM), there are no 100-year flood plains within the service area for the Village of Taos Ski Valley service area.

The proposed project was coordinated with the local Floodplain Administrator (FA) concerning any necessary siting or permitting requirements for the project. Under the National Flood Insurance Program (NFIP), the local FA is responsible for implementation and enforcement of the requirements of the NFIP in Taos County in order for the County to be eligible for participation in the Federal flood protection program. In correspondence dated April 5, 2004 from the Village of Taos Ski Valley Engineering/Planning Director, the proposed project location elevation is characterized as significantly higher than the existing high water level of the Rio Hondo, and approximately 18 feet higher than the existing floor of the wastewater treatment plant and approximately 150 feet from river.

In order to determine compliance with EO 11990 concerning the protection of wetlands in the area, the proposed project was coordinated with the United States Army Corps of Engineers (COE) concerning jurisdictional wetlands within the proposed project area. The proposed project was coordinated with the COE concerning jurisdictional wetlands within the proposed project area. In correspondence dated August 12, 2004, the COE confirms that the proposed project will not involve the placement of dredged or fill materials below the ordinary high water (OHW) mark of the Rio Hondo or any adjacent wetlands. Furthermore, the COE determined that the proposed project is not regulated under the provisions of Section 404 of the Clean Water Act and a Department of the Army permit will not be required. Should jurisdictional wetlands be identified at any time during the planning or construction phases of the project, the funding recipient is required to coordinate further with the COE upon discovery, and to obtain any necessary permits that may be required from the COE prior to actual construction in such areas. Further, any and all recommendations made by the COE must be complied with during construction of the project. Based upon comments received from the COE, construction of the proposed project is not expected to have a significant adverse impact upon wetlands since they are not located within the area.

As an additional means of insuring that proper consideration is afforded the need to protect the natural beneficial functions of floodplains and wetlands, as well as the need to minimize potential flood hazards to life and property, the construction funding is conditioned to read:

a. The recipient agrees that no development to be served by the project will be located in floodplains or wetlands, for a period of 50 years. This restriction does not apply to development that existed prior to the issuance date of the Finding of No Significant Impact related to this project;

b. The recipient agrees to adopt and enforce suitable ordinances and implementing procedures for effective local administration of this floodplain and wetlands service area restriction. On application of the recipient's governing body and after considering all relevant information on a proposed development's effects on the natural functions and values of the

affected floodplain, the EPA Regional Administrator may waive the service area restriction in individual cases; and

c. EPA and the recipient intend that this floodplain service area restriction shall benefit any person, organization, or entity possessing an interest in preservation of the natural environment in the 100-year floodplain subject to this restriction. Any such beneficiary may seek enforcement of the restriction against the recipient or its successor in a court of competent jurisdiction if notice of the intent to seek enforcement is first given the recipient and EPA Region 6 and neither entity initiates corrective action within 90 days of receiving such notice.

4. Surface Water Resources: The principal surface water features near the project area are a result of rainfall and snowmelt runoff. There are no stream relocations anticipated relative to the proposed construction project. EPA requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge from construction projects disturbing one or more acres (effective March 10, 2003). The permit requires that a Storm Water Prevention Plan (SWPPP) be prepared for the site and that appropriate Best Management Practices (BMP) be installed and maintained both during and after construction to prevent, to the extent practical, pollutants in storm water runoff and to protect against surface water siltation.

The proposed project has been coordinated with the Surface Water Quality Bureau (SWQB) of the NMED concerning the protection of surface water resources in the area. The Village currently has a National Pollution Discharge Elimination System (NPDES) permit to discharge plant effluent to the Rio Hondo River. A new permit will be required for the projected increased discharge volume. Compliance with current and future NPDES permit requirements will prevent adverse impacts to surface water quality.

The proposed project must also be conducted in accordance with the requirements of the Wild and Scenic Rivers Act (WSRA), which preserves the free flowing state of rivers listed in the National Wild and Scenic Rivers System (WSRS) due to outstanding scenic, recreational, geological, fish and wildlife, historic, cultural or other similar values. The WSRA protects both the scenic listed river and the land surrounding it. This project area contains no rivers listed in the WSRS or under study for listing, and there are no other designated wild and scenic rivers in the project area subject to the requirements of the WSRA. The proposed project is not expected to have a significant adverse impact upon any of these special water resources or the land immediately surrounding them since they are not located in the area.

5. Groundwater Resources: The groundwater in the project area consists of a shallow aquifer of gravelly alluvium with a matrix of silt, clay and sand. The proposed project has been coordinated through a telephone consultation with the Ground Water Quality Bureau (GWQB) of the NMED concerning the protection of groundwater resources in the area. GWQB staff stated that a state ground water discharge permit is not currently required for the treatment plant. However, staff indicated that wastewater treatment plants located in areas of shallow ground water may at some point in the future be required to obtain a ground water discharge permit due to NMED concerns about the potential for seepage of wastewater from the treatment plant infrastructure.

6. Socioeconomics and Environmental Justice: Socioeconomic impacts comprise a wide spectrum of potential impacts to the human environment. Since the proposed project will supply

the public with improved drainage infrastructure, improved wastewater collection infrastructure, and will improve wastewater treatment in the project area, improvements to public health and enhanced environmental protection will result from the project. No significant negative impacts to the community character will result, and no displacements of business or residents will be necessary as a result of the project.

In accordance with EO 12898 entitled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” potential environmental impacts to minority and low-income communities have been evaluated in this Environmental Assessment. The EPA defines Environmental Justice (EJ) as the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. The goal of fair treatment is not to shift risks among populations, but to identify potential disproportionately high adverse impacts and to identify alternatives to mitigate those impacts. The EPA Region 6 EJ Index Methodology defines demographic criteria, applies basic principles of science, and requires environmental managers to use program-specific data to identify communities of most concern. To evaluate the potential impacts on minority and low-income communities, the EJ Index uses Geographical Information System maps, census demographic data and a mathematical formula to rank the project for EJ purposes and potential.

The EJ Index Methodology analyzes 1 square mile and 50 square mile geographic areas around a particular point-specific project site. Since the project will serve all populations equally, an environmental justice analysis was performed to develop an EJ index and accompanying maps, which delineates the area. The EJ index indicators range from 1 where the factors affecting minorities are considered to be in balance when compared to the state average, to 100 where the factors affecting minorities are considered to be grossly unbalanced when compared to the state average. The analysis is based on the percentage of minority people, the percentage of economically distressed households earning less than \$15,000 per year, and the population of the area in comparison with the remainder of the state.

The proposed project will be conducted in a manner to ensure that there will be no exclusion of persons or populations from participating in, denying persons or populations the benefits of, or subjecting persons or populations to discrimination because of their race, color, income level, or national origin in accordance with EO 12898. All areas will be serviced equally by the proposed improvements, which will lessen the health risks to the residents. There will be no adverse impacts that are considered disproportionate to any particular population(s) based on ethnicity or income. Since the project is expected to have a significant beneficial impact upon the area environment and is considered to be extremely beneficial in nature, the project is considered to be an appropriate use of Federal grant funds. The results of the EJ analysis are shown in the enclosed Figures 3, 4 and 5.

7. Land Use and Land Values: The proposed project must be conducted in accordance with the requirements of the Farmland Protection Policy Act (FPPA) and the Wilderness Act (WA). The FPPA requires Federal agencies to minimize the unnecessary and irreversible conversion of farmlands to non-agricultural uses, and to avoid adverse impacts to prime and unique farmlands through protection of these resources. The FPPA is administered by the Natural Resources Conservation Service (NRCS). The WA establishes a system of national

wilderness areas and a policy for protecting and managing the system through the prohibition of motorized equipment, structures, installations, roads, commercial enterprises, aircraft landings, and mechanical support on or into such protected areas. The WA is administered by the NPS.

In correspondence dated December 11, 2003, the NRCS stated that “there are no prime or unique farmlands located in the project planning area.”

The project area does not contain any land subject to protection under the WA. Construction of the project is not expected to have a significant adverse impact to prime and unique farmlands or lands subject to protection under the WA, since they are not located in the project area.

The proposed project should not have a substantial negative impact upon current land uses or land values, nor should it have a substantial impact upon the values of surrounding land holdings. The proposed improvements will be confined to areas that are currently used for similar purposes and should have no impact to surrounding land use or values. Public lands and recreation areas do occur in the project planning area, and will continue to be used for such purposes. Construction work in or adjacent to the existing facilities or rights-of-way is not expected to have negative effects on these facilities.

8. Soils: Construction of the proposed project will include a minimal amount of impact to area soils, but no permanent significant adverse impacts are expected. The area where the treatment plant is located is heavily disturbed due to previous construction activities. Erosion from site excavation and grading, and other construction activities will be kept to a minimum by limiting the clearing of vegetation to only those areas necessary, and by prompt mulching and re-vegetation. Prompt re-vegetation minimizes the amount of time that disturbed surfaces and soils are exposed to the energy of wind, rainfall and water runoff. Prompt mulching protects the ground surface until the new re-vegetation becomes established. Impacts upon soils can be mitigated through the implementation of a sedimentation and erosion control plan. This rapid re-vegetation and the implementation of engineering Best Management Practices (BMP) will be used to control the impacts of erosion.

All excess spoil, soil and vegetation will be hauled away to an engineer approved and designated area consistent for this use. The use of engineering BMP is expected to minimize temporary impacts to project area soils. With the incorporation of engineering BMP, the excavation activities will have minor adverse impacts on soils and can be reduced to negligible levels to prevent soil movement by winds or waters. Dust will be controlled during actual construction by watering active sites and roads to control fugitive dust emissions.

9. Noise: Construction equipment is expected to minimally increase normal noise levels around active project work sites. Noise impacts will be limited primarily to active construction sites, and will involve heavy-duty earth moving equipment or other construction related machinery and supplies. Requiring construction contractors to reduce noise levels of motorized equipment with noise mufflers will reduce such disturbances. All noise generated by the proposed action will be maintained at an intensity below that which is damaging to hearing. Project activities will be conducted in accordance with the requirements of local and state noise ordinances.

There will be no construction work after dark so that all noise will be limited to normal daylight hours. In the event of project emergencies that require night work, only the immediate work area will be affected, and will cease upon completion of such activities. Overall, project related noise will be temporary, will cease upon completion of each phase of the program, and is not expected to have long-term adverse impacts to the citizens in the area since most of the construction activities are located in isolated or sparsely populated areas. No blasting or explosive charges will be necessary during the proposed construction.

10. Energy: When considering energy consumption, the proposed action is expected to have energy requirements typical of other construction projects of its scope, size and duration. No additional, special or specific energy demands or impacts are anticipated as a result of implementation of this project.

11. Air Quality: The proposed project must be conducted in accordance with the requirements of the Clean Air Act (CAA), as amended. The CAA requires each state to develop, implement, maintain and enforce an Air State Implementation Plan (SIP), with appropriate air pollution control regulations and strategies, to ensure that state air quality meets the National Ambient Air Quality Standards (NAAQS) established by the EPA for six specific criteria air pollutants. The NAAQS under each SIP include standards or safety levels for ozone, carbon monoxide, lead, particulate matter less than or equal to 10 microns, sulfur dioxide, and nitrogen oxides. These are widespread common pollutants known to be harmful to human health and welfare. Areas within each state that are designated as non-attainment for any of these criteria pollutants are subject to additional planning and control requirements. Currently, each state has a Federally approved SIP, which protects air quality and has emission control plans for any non-attainment areas that may occur.

The proposed project was coordinated with the Air Quality Bureau (AQB) of the NMED concerning the protection of air quality in the area. In correspondence dated May 5, 2004, the AQB stated that “neither an Air Quality Permit nor a Notice of Intent is required [for the proposed construction activity].”

Negligible increases in engine exhaust emissions from construction vehicles and equipment are anticipated, since active construction sites will involve the use of heavy-duty and earth moving vehicles, equipment and supplies. However, all vehicles and equipment used in the performance of the proposed project must comply with 40 CFR Part 85 entitled “[ ] Control of Air Pollution from Mobile Sources”. No excessive vehicle odors are anticipated beyond the immediate vicinity of a particular active construction site. Such exhaust emissions will cease in the immediate vicinity of any particular active construction site upon completion of activities requiring motorized vehicles. No hazardous air pollutants are anticipated to be released into the environment as a result of any construction activities associated with the proposed project.

Occasional odors emitted by wastewater treatment facilities should not be of concern because the site is about one mile away from the town site. Some increased odors may occur when the plant is not operating properly, efficiently and dependably. Impacts to air quality may occur if the project causes an increase in noticeable odor near the facility. However, the upgraded wastewater treatment facilities should provide reliable and consistent service, and thus will mitigate any odor issues that might arise.

12. Visual Impacts: Visual impacts will be limited primarily to active construction sites, and will involve viewing heavy-duty earth moving equipment or other construction related machinery and supplies. Long term visual impacts are expected to be minimal. The project will be designed with input from the Forest Service. It is their requirement that the colors and materials used will blend in with the surrounding landscape.

13. Public Health and Safety: The proposed improvements will have a significant and positive benefit to public health and safety. Potential construction related adverse impacts to the surrounding community are amenable to standard mitigative and precautionary measures. Appropriate measures will be taken to minimize vehicular and pedestrian traffic disruption, and to protect the public from construction hazards by restricting access to the construction area.

Night work will not be permitted except during emergency situations or conditions. Most of the construction will be conducted at existing sites that currently have controlled access. Safety measures include, but are not limited to, the use of barricades, traffic lights, police officers directing traffic, notification to the public, and any other techniques necessary to insure the safe and orderly flow of vehicles and pedestrians in the immediate vicinity of construction sites. Any excavation and pipe placement will be conducted as rapidly as possible to minimize safety hazards and to limit the potential for erosion. Such practices will be conducted in accordance with engineering BMP. The project construction will comply with the Occupational Safety and Health Administration (OSHA) requirements for safety during trenching.

14. Coastal Resources: The proposed project is not subject to the requirements of the Coastal Zone Management Act (CZMA) and the Coastal Barrier Resources Act (CBRA). The CZMA protects the coastal zone which includes coastal waters extending to the outer limit of state submerged land title and ownership, adjacent shorelines, and land extending inward to the extent necessary to control shorelines. The coastal zone includes islands, beaches, transitional areas, inter-tidal areas, and salt marshes. The CBRA protects ecologically sensitive coastal barriers along the coasts of the United States. Both of these Acts require Federal agencies to consider these protected resources when providing financial assistance.

The proposed project area does not include any coastal resources since the entire state of New Mexico is inland and not adjacent to any coastal location. Therefore, the requirements of these coastal resource protection acts are not applicable to the proposed project.

15. Cumulative Impacts: Potential cumulative impacts would be those impacts to the environment that would result from the proposed project in combination with other ongoing actions, and those reasonably foreseeable future actions. The proposed project will not individually nor cumulatively over time have a negative impact on the quality of the human or natural environment. To the contrary improved wastewater treatment will have a positive environmental effect by enhancing public health and protecting the groundwater from contamination.

The project components are located within the existing facility boundary. Since no other ongoing activities or developments have been identified at this time, cumulative impacts have been considered and are determined to be commensurate with the project. The project is not expected to have a significant adverse impact upon the environment when considered individually or in conjunction with other projects.

## **DOCUMENTATION, COORDINATION, AND PUBLIC PARTICIPATION**

Three public meetings for the proposed project were held on September 8, 2003, January 15, 2004, and March 24, 2004 to discuss the treatment plant project and progress of the planning efforts. In addition, a formal public hearing was held on May 27, 2004. A notice for the hearing was published 45 days prior to the hearing, notices were posted at six locations around the Village, and a copy of the notice was mailed directly via certified mail to 56 interested persons or entities from a project mailing list. The purpose of the public meetings and hearing were to inform the public of the proposed Village of Taos Valley Wastewater Treatment Plant Renovation/Upgrade Project, and to review the draft Facility Plan and Environmental Information Documents, seek public comment, identify issues of concern, present the alternatives considered, and to enlist public participation in the development of the project. A summary of the proposed action was presented, a description of the recommended facilities, regulatory requirements for the project, anticipated construction and operation and maintenance costs, financing, potential environmental impacts from the proposed action, and a discussion of the Environmental Information Document. Interested parties were invited to comment during the meetings and hearing, and to provide any written information pertinent to the project within a reasonable time frame prior to the closing of the formal public comment period. Concerns raised during the Hearing focused primarily on water quality and growth. Responses to these concerns were provided by the chairman of the Village's Planning and Zoning Commission, representatives of the Village, and representatives of the New Mexico Environment Department. Respondents explained that sewer capacity is not the limiting factor with respect to growth in the Valley, and that it a high priority of the Planning and Zoning Commission to get the remaining septic tank leachfield systems connected to the Village's sewage collection and treatment system to protect ground water quality. Surface water quality concerns focused on historic compliance of the Village's wastewater treatment plant with the effluent limits in their current NPDES permit. As previously stated, the Village will need to obtain a new permit to match the increase in treatment plant capacity and discharge volumes resulting from this project.

During the process of conducting the environmental review and preparing this EA for the project, coordination has been conducted with all required resource protection agencies to solicit and incorporate their initial review and comments. Copies of this EA have been provided to the following agencies and offices for their final review and comments, if any. Other interested parties may request a copy of the EA in writing from the NMED, Construction Programs Bureau, P.O. Box 26110, Santa Fe, NM, 87502, or by telephone at (505) 827-2809. Coordination included the following agencies:

- U.S. Army Corps of Engineers, Operations Division, Regulatory Branch
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Department of Interior, Fish and Wildlife Service
- U.S. Department of Interior, National Park Service
- U.S. Environmental Protection Agency
- U.S.D.A. Forest Service, Questa Ranger District
- New Mexico Department of Game and Fish, Conservation Services Division
- New Mexico Environment Department, Air Quality Bureau

- New Mexico Environment Department, Ground Water Quality Bureau
- New Mexico Environment Department, Drinking Water Bureau
- New Mexico Environment Department, Surface Water Quality Bureau
- New Mexico Office of Cultural Affairs, Historic Preservation Division
- New Mexico Office of the State Engineer
- New Mexico State Highway & Transportation Department, Environmental Section
- Village of Taos Ski Valley, Flood Plain Administrator
- Pueblo of Acoma
- Pueblo of Cochiti
- Pueblo of Isleta
- Pueblo of Jemez
- Pueblo of Laguna
- Pueblo of Nambe
- Pueblo of Picuris
- Pueblo of Pojoaque
- Pueblo of San Felipe
- Pueblo of San Ildefonso
- Pueblo of San Juan
- Pueblo of Sandia
- Pueblo of Santa Ana
- Pueblo of Santa Clara
- Pueblo of Santo Domingo
- Pueblo of Taos
- Pueblo of Tesuque
- Pueblo of Zia
- Pueblo of Zuni
- Jicarilla Apache Nation
- Mescalero Apache Tribe
- Southern Ute Tribe
- Navajo Nation
- Ramah Navajo Chapter
- Hopi Tribal Council
- Taos County

### **RECOMMENDATION**

Based upon completion of this Environmental Assessment, and a detailed review of the supporting information contained in the Environmental Information Document, the Public Hearing Responsiveness Summary and the Facility Plan which were prepared for the project, and other pertinent technical, engineering and administrative documentation, the proposed project is considered to be cost-effective and environmentally sound. Therefore, it is recommended that a **Finding of No Significant Impact** be issued for this project.

### **REFERENCES**

1. Wastewater Treatment Plant Preliminary Engineering Report for Village of Taos Ski Valley, The Engineering Co., May 11, 2004.
2. Wastewater Treatment Plant Environmental Information Document for the Village of Taos Ski Valley, The Engineering Co., July 2004.
3. <http://www.census.gov/>, (U.S. Census Bureau homepage).
4. <http://www.nps.gov/rivers/wildriverslist.html> (Wild and Scenic Rivers -- List by State).
5. [http://www.wilderness.net/nwps/maps/NM\\_map.cfm](http://www.wilderness.net/nwps/maps/NM_map.cfm) (Wilderness Areas in New Mexico).
6. <http://www.nrcs.usda.gov/technical/land/lgif/m49831.gif> (Acres of Prime Farmland, 1997).

**Figure 1: Project Location Map**

**Figure 2: Site Plan**

**Figure 3: EJ Minority Status - Degree of Vulnerability (DVMAV)**

**Figure 4: EJ Economic Status - Degree of Vulnerability (DVECO)**

**Figure 5: EJ Index - Potential Environmental Justice Index (EJ)**