

1.0 INTRODUCTION

1.1 GENERAL OVERVIEW

The Ely District of the Bureau of Land Management (BLM) has prepared this Final Environmental Impact Statement (EIS) in response to a right-of-way (ROW) application submitted by the Lincoln County Water District (LCWD or Applicant) to construct and operate the Kane Springs Valley Groundwater Development Project (Proposed Action). The LCWD, in cooperation with the Lincoln County Power District No. 1 (LCPD) and Lincoln County Telephone (LCT), intends to construct groundwater facilities and ancillary utility infrastructure designed to pump and convey up to 5,000 acre-feet per year (AFY) of groundwater for delivery to the northern portion of the Coyote Spring Valley. **Map 1-1** shows the general location of the project within southern Lincoln County, Nevada. Primary components of the Proposed Action are described in more detail in Chapter 2.0. The Proposed Action would include:

Water Facilities

- Groundwater production/monitoring wells (well fields)
- Water collection pipelines
- Transmission pipeline
- Terminal storage tank
- Forebay storage tank

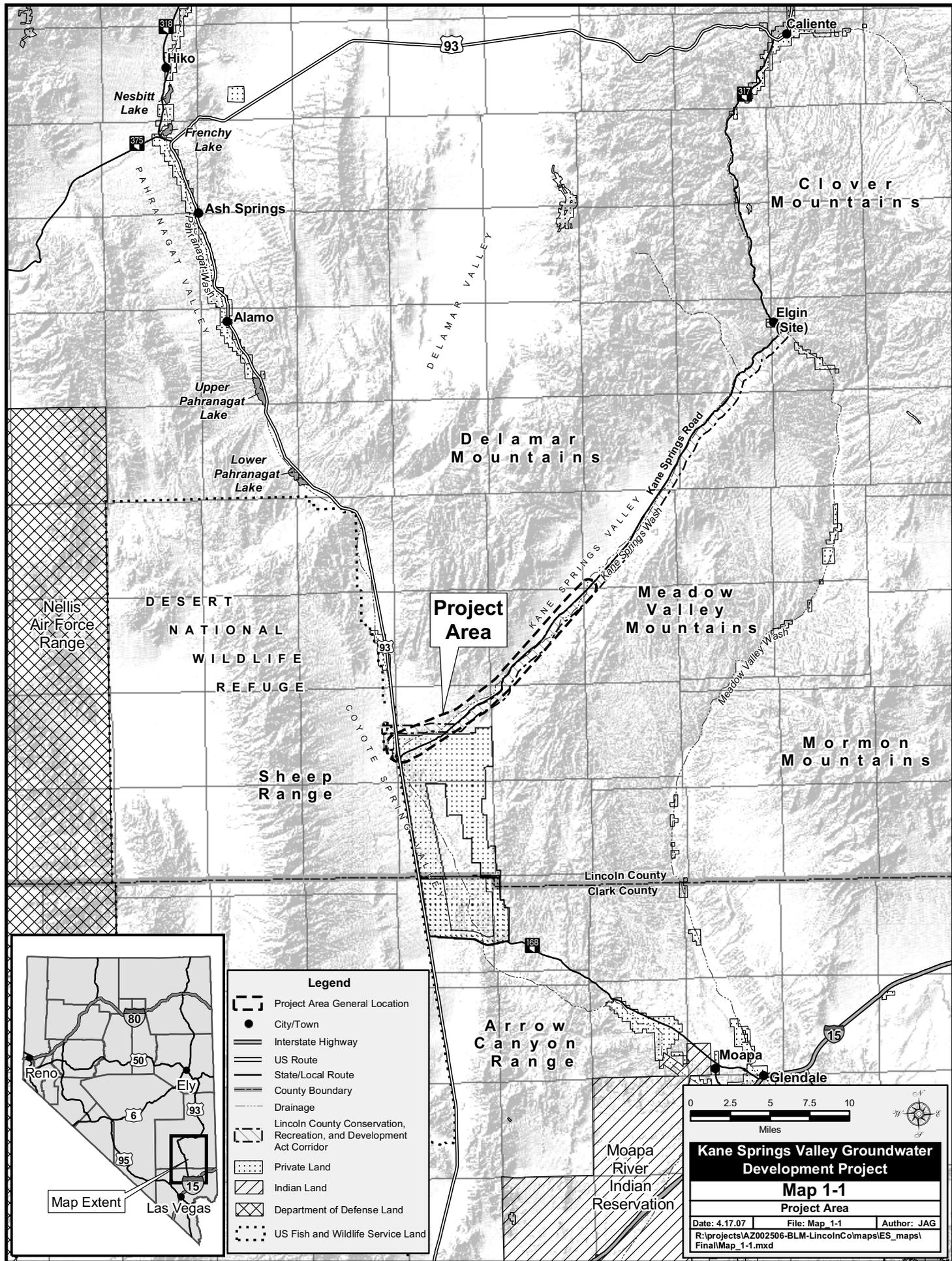
Electric Utility Facilities

- Electrical transmission/distribution lines
- Electrical substations

Communication Facilities

- Telemetry system/fiber optic lines

The LCWD currently holds groundwater rights and applications in the Kane Springs Valley Hydrographic Basin in Lincoln County, Nevada. As of February 2007, the Nevada State Engineer has granted an appropriation of 1,000 AFY to the LCWD for groundwater withdrawal from the carbonate aquifer within the Kane Springs Valley Hydrographic Basin. The LCWD has submitted four additional water rights applications to the Nevada State Engineer to pump additional groundwater from the Kane Springs Valley Hydrographic Basin. These water rights applications are still pending before the Nevada State Engineer.



Project Area

- Legend**
- Project Area General Location
 - City/Town
 - Interstate Highway
 - US Route
 - State/Local Route
 - County Boundary
 - Drainage
 - Lincoln County Conservation, Recreation, and Development Act Corridor
 - Private Land
 - Indian Land
 - Department of Defense Land
 - US Fish and Wildlife Service Land

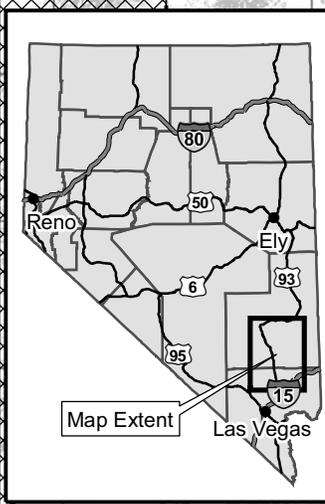
0 2.5 5 7.5 10
Miles

Kane Springs Valley Groundwater Development Project

Map 1-1

Project Area

Date: 4.17.07	File: Map 1-1	Author: JAG
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The project facilities would be located in southern Lincoln County, Nevada, within or immediately adjacent to the 2,640-foot wide utility corridor established by the Lincoln County Conservation, Recreation, and Development Act under Public Law 108-424 (LCCRDA). Enacted on November 30, 2004, Title III of the LCCRDA directed the Department of Interior to use the designated corridors for ROW for the roads, wells, pipelines, and other infrastructure needed for the construction and operation of a water conveyance system in Lincoln County, subject to the requirements of the National Environmental Policy Act (NEPA).

Construction would occur in three phases, with 1 to 3 years between phases. Phases would correspond to demand for water and issuance of permits for additional water rights. Construction would begin at the southwest end of the project area (near the intersection of U.S. Highway 93 [Highway 93] and Kane Springs Road) and continue to the northeast (generally following Kane Springs Road). Construction of Phase 1 would begin upon acquisition of necessary permits, approval and grants and would occur over a 90- to 180-day period. Phase 2 and Phase 3 construction would be completed in 30 to 60 days at 1- to 3-year intervals after completion of Phase 1, and would correspond to the demand for water and the issuance of future water rights.

Multiple ROW grants may be issued based on the analysis in this EIS. The LCWD would be responsible for construction and operation of the proposed groundwater facilities subject to the terms and conditions of BLM Serial Number N79742. The LCPD and the LCT activities would be authorized under separate ROW grants. The ROWs for the water production/delivery system, electrical distribution system, and the fiber optic lines within the congressionally designated LCCRDA corridor would be issued in perpetuity pursuant to Title III of the LCCRDA.

The LCWD submitted the application for the Proposed Action to the BLM on February 9, 2005. The application was submitted to the BLM Ely District, which is the office responsible for managing the BLM-administered public lands where the Proposed Action would be developed. In late 2005, the BLM Nevada State Director established the Nevada Groundwater Projects Office to facilitate the preparation of the EIS for this Proposed Action and two similar ROW applications for groundwater development in eastern Nevada. Although the Nevada State Office is responsible for preparing the EIS, the Nevada Groundwater Projects Office staff coordinates all efforts with the Ely District staff.

The BLM, as the federal agency with responsibility to issue the ROWs, is leading the preparation of this EIS. The Council on Environmental Quality (CEQ) guidelines direct federal agencies to actively engage state, local and other federal agencies in preparation of NEPA analyses and documentation (42 United States Code [U.S.C.] §§ 4331[a], 4332[2]). The Moapa Valley Water District, National Park Service (NPS) – Lake Mead National Recreational Area, Nevada Department of Wildlife (NDOW), Nevada Department of Conservation and Natural Resources, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service (USFWS), and the U.S. Geological Survey (USGS) were all invited to participate as cooperating agencies in preparation of the EIS for the Proposed Action. The Moapa Valley Water District, NDOW, and USFWS accepted BLM's invitation and have signed Memorandums of Understanding outlining their responsibilities as a cooperating agency. By accepting cooperating agency status, the agencies accept obligations to contribute staff to the EIS Interdisciplinary team and develop analyses for which they have particular expertise. Although the EIS is ultimately a BLM document, the BLM agrees to use the analyses, proposals and comments of the cooperating agencies to the maximum

extent possible.

1.2 PURPOSE AND NEED

The purpose of the action is to provide public land for the transport of groundwater resources by allowing for the construction of a groundwater development and conveyance system on public lands managed by the BLM. The multiple-use mission of the BLM includes managing activities such as mineral development, energy production, recreation, and grazing, while conserving natural, historical, cultural, and other resources on the public lands. The BLM's objective is to meet public needs for use authorizations such as rights-of-way, permits, leases, and easements while avoiding or minimizing adverse impacts to other resource values. The proposal to construct, operate and maintain a groundwater conveyance pipeline on public lands would be in accordance with this objective.

In order to convey the groundwater from the point of origin to the Coyote Spring Valley, the LCWD has submitted a ROW application to the BLM for the Proposed Action. The Proposed Action includes construction and operation of groundwater production wells, pipelines, pumping stations, storage facilities, telemetry facilities, telephone service and power facilities (as outlined above) that cross or occupy BLM-administered public lands.

Pursuant to Title III of the LCCRDA, Congress directed the BLM to conduct a NEPA analysis of any ROW application submitted for the construction and operation of utility infrastructure within the designated 2,640-foot LCCRDA utility corridor. This Final EIS is intended to fulfill the requirements of the NEPA by disclosing the potential environmental impacts of granting the requested ROWs for the Proposed Action and those of a reasonable range of alternatives to the Proposed Action.

The BLM will: (1) respond to the request for a ROW for the construction of a pipeline conveyance system, wells, collector pipelines, and ancillary facilities to transport groundwater resources, and (2) analyze potential impacts to affected resources.

1.3 RATIONALE FOR RIGHT-OF-WAY APPLICATION

The Applicant is seeking a ROW from the BLM for the purpose of developing and conveying groundwater that has been permitted or may be permitted to the LCWD in Kane Springs Valley for use by Lincoln County customers.

There is a need for developing sustainable water supplies as outlined in the 1999 Lincoln County Water Plan:

- To assist and support the needs of local communities in Lincoln County including Coyote Spring Valley;
- To meet the needs of future economic development within Lincoln County; and
- To produce, purchase, wholesale and transport water from sources inside and outside of Lincoln County to meet customer water needs across the region.

The purpose of the Proposed Action is to provide ROWs for the production and transportation of

water resources across areas of federal land. The Proposed Action would assist in meeting a portion of the water demands of Lincoln County and is a component of Lincoln County's Water Plan. Development is underway in the adjacent Coyote Spring Valley. Currently, 16,304 AFY of groundwater has been permitted within the Coyote Spring Basin for a variety of uses. Groundwater from Kane Springs Valley would supplement these uses which include municipal, agricultural and industrial applications.

1.4 PROJECT BACKGROUND

Approximately 98 percent of Lincoln County is public land. Remaining limited private lands are available for industrial and commercial development. The county ranks near the bottom among Nevada's counties in population, total personal and per capita income, and property tax revenues. Historically, the economy of Lincoln County has depended on agriculture, mining, mainline railroad operations and federal defense initiatives.

In response to the economic downturn caused by slowing mining activities, reduction of county-based railroad operations and maintenance activities, and termination of major Department of Energy weapons development programs at the Nevada Test Site, Lincoln County has sought to diversify and expand its economy.

Historically, other jurisdictions located adjacent to Lincoln County considered importing groundwater from Lincoln County to augment their water supplies. The Board of Lincoln County Commissioners recognized that groundwater resources within the county would play a major role in economic development in their county. In 1999, Lincoln County prepared and distributed the Draft Lincoln County Water Plan for public review. Goals of the Water Plan included development of water resources both inside and outside of Lincoln County.

On June 11, 2003, Nevada's Governor signed the Lincoln County Water District Act, which established the LCWD as a political subdivision of the state (Chapter 474, Statutes of Nevada 2003). The special legislative act created a single governmental entity with the authority to serve water to all real property located within the boundaries of Lincoln County. Further, the act authorized the LCWD to sell water and water rights and to enter into agreements with private entities or corporations for the transfer or delivery of any water right or water appropriated (id at Sections 11[7], 11[11], and 11[12]).

1.5 POLICIES, PLANS, AND PROGRAMS

The following subsections provide an overview of agency authorities and responsibilities that may apply to the Proposed Action. The approval or denial of ROW authorizations for the Proposed Action by the BLM is not contingent on any of the agency actions described below. However, construction and operation of the Proposed Action, if the ROW application is approved, may not proceed until all applicable reviews, consultations and authorizations are completed.

1.5.1 Relationship to BLM Policies, Plans and Programs

The BLM Ely District is responsible for the management of approximately 11.4 million acres of land located in Lincoln, Nye and White Pine Counties in eastern Nevada (BLM 2005). The Ely

District includes three Management Areas: Egan, Schell and Caliente. The Proposed Action is located in the Caliente Management Area. The Schell and Caliente Management Framework Plans (MFPs) were approved in 1983 and 1981, respectively; and the Egan Resource Management Plan (RMP) was approved in 1987. In 1999, the BLM amended the Caliente MFP to address the management of threatened desert tortoise habitat in southern Lincoln County (Federal Register June 16, 1999, Vol. 64, No. 115).

On July 25, 2005, the BLM issued a Notice of Availability of the Draft RMP/EIS for the Ely District Office (Federal Register 05-14939, Vol. 70, No. 145, 43902-43903). Upon approval, the RMP/EIS would replace the Egan RMP, the Schell MFP (which covers the northern portion of the Ely Field District), and the amended Caliente MFP. Until that document is approved, the management of the Caliente Management Area and federal actions pertaining to the Proposed Action follow the directives in the 1999 Amended Caliente MFP.

The issuance of ROWs across BLM-administered public lands is outlined under Title V of the FLPMA. Title V states that in “designating rights-of-way corridors and in determining whether to require that ROW be confined to them, [BLM] shall take into consideration national and state land use policies, environmental quality, economic efficiency, national security, safety, and good engineering and technological practices” (43 U.S.C. § 1763). The FLPMA further directs that “each rights-of-way permit contain terms and conditions to protect federal property and economic interests, protect lives and property, and otherwise protect the public interest in the lands traversed by the ROW or adjacent to them” (43 U.S.C. § 1765).

1.5.2 Relationship to Non-BLM Policies, Plans, and Programs

1.5.2.1 Water Rights

On February 14, 2005, the LCWD filed four applications (72218, 72219, 72220, and 72221) for a combined maximum duty of approximately 17,375 AFY with the Nevada Division of Water Resources, Office of the Nevada State Engineer (Nevada State Engineer). Applications 72218 and 72219 were timely protested by White Pine County and Wayne, Ruby and Bevan Lister; however, White Pine County withdrew its protest prior to the administrative hearing. Applications 72220 and 72221 were timely protested by the USFWS. The NPS filed timely protest on all four applications. During the public administrative hearing on the applications, the LCWD and USFWS presented a stipulation to resolve the USFWS protest.

Pursuant to the stipulation, the USFWS withdrew its protests and the parties requested that a Monitoring, Management and Mitigation Plan to the stipulation be included as part of the terms and conditions of any water right applications that are granted. The goal of the plan is to collectively manage the development of the LCWD water rights in the Kane Springs Valley Hydrographic Basin and to avoid losses to senior water rights held by the USFWS in the Moapa Valley National Wildlife Refuge (NWR). Although the BLM was not a party to this agreement, the USFWS concerns and requirements outlined in the stipulation are being considered in the preparation of this EIS. The Monitoring, Management and Mitigation Plan consists of four principal components:

- **Monitoring Requirements:** Related to production and monitoring wells, elevation control, spring flow, water quality, quality of data, and reporting.

- **Management Requirements:** Related to the creation and role of a Technical Review Team, the establishment of action criteria, and the details of the decision making process.
- **Mitigation Requirements:** Related to potential mitigation measures that could be implemented if “unreasonable adverse impacts” occur as a result of groundwater extraction associated with the Kane Springs Valley Groundwater Development Project.
- **Modification of Plan:** Related to procedures that would be followed to modify the Monitoring, Management, and Mitigation Plan if future changing conditions or mitigations warrant modification.

A copy of the Stipulation for Withdrawal of Protests and the Monitoring, Management and Mitigation Plan (Exhibit A) are included in **Appendix A**.

On February 2, 2007, the Nevada State Engineer issued Ruling 5712, granting a duty of 500 AFY under Application 72220, and a combined duty of 500 AFY under Applications 72218, 72219, and 72221; for a total of 1,000 AFY. A copy of Nevada State Engineer Ruling 5712 is provided in **Appendix B** and summarized in sections 3.3.3.3.1 and 4.3.1.2. The applications were granted subject to the payment of statutory permits fees and the preparation of a monitoring and mitigation plan approved by the Nevada State Engineer.

1.5.2.2 Regional Planning

While the Caliente MFP guides land use decisions and management actions on BLM-administered public lands within the Caliente Management Area (see Section 1.5.1), established policies or programs of other federal, state and local regulations or guidelines apply to the Proposed Action. Other federal plans applicable to land use in the regional area include the USFWS Desert Tortoise (Mojave Population) Recovery Plan (USFWS 1994), the Recovery Plan for the Southwestern Willow Flycatcher (USFWS 2002), and the Recovery Plan for the Rare Aquatic Species of the Muddy River Ecosystem (USFWS 1995b). There is no habitat for the southwestern willow flycatcher within the project area. However, suitable habitat for this species does occur in the Meadow Valley Wash, located approximately 20 miles east of the northernmost extent of the project area; the south end of the Upper Pahranaagat Lake area, approximately 24 miles northwest of the project area; and the Muddy River area, approximately 28 miles south of the project area (NDOW 2006). These species are described in greater detail in Section 3.5 - Wildlife Resources.

The BLM, in cooperation with the USFWS and the U.S. Department of Defense, is preparing a Programmatic EIS to evaluate issues associated with the designation of energy corridors on federal lands in 11 western states including Nevada. Based on the information and analyses developed in the Programmatic EIS, each agency would amend its respective land use plans by designating a series of energy corridors. Designated utility corridors within the project area include the 2,640-foot wide LCCRDA corridor and the approved Southwest Inter-tie corridor west of Highway 93.

A Draft Multiple Species Habitat Conservation Plan (MSHCP) has been prepared for Coyote Spring Investment (CSI) development activities in southern Lincoln County. The USFWS has

prepared a Draft EIS regarding the Draft MSHCP and the issuance of an incidental take permit to take endangered and threatened species in accordance with Section 10(a) of the ESA of 1973, as amended (Federal Register November 2, 2007, Vol. 72, No. 212). The Draft EIS and Draft MSHCP are available for public review and comment until January 2, 2008. The earliest the Final CSI MSHCP and USFWS EIS are anticipated to be completed is March 2008. A separate Habitat Conservation Plan and EIS addressing the southeastern portion of Lincoln County are currently under development and expected to be final by spring 2008. The Clark County MSHCP covers development activities on private lands in Clark County (Federal Register September 22, 2000, Vol. 65, No. 185).

Local regulations and guidelines that guide development activities on private lands within the project area include:

- *Lincoln County Water Plan* (Resource Concept, Inc. 2001)
- *2005 Annual Report Lincoln County Comprehensive Economic Development Strategy*, (Board of Lincoln County Commissioners 2006)
- *Lincoln County Master Plan*, adopted December 2006 (Lincoln County Planning Commission 2006)
- *Coyote Springs – Lincoln County General Improvement District Service Plan* (CSI 2005)
- *Clark County - Coyote Springs Water Resources General Improvement District Service Plan* (CSI 2006)

Prior to construction, the Applicant would need to obtain other permits and approvals from federal, state and local agencies with respect to their jurisdictions. Other potential permits and approvals are discussed in Section 1.8.

1.5.3 Public Controversy

Groundwater pumping in Nevada is a highly controversial subject. There are differing viewpoints in the scientific literature and among various federal, state, and local land management and regulatory agencies. The BLM acknowledges that areas of controversy exist regarding the Proposed Action and the analyses in this Final EIS. Many of these are not resolvable because they reflect either differing points of view or irreducible uncertainties in predicting the future. However, the BLM has considered these areas in the development of this Final EIS.

Jurisdiction of Groundwater Allocation

There is a common misconception concerning the jurisdiction of the Nevada State Engineer and the BLM with respect to the appropriation of water rights in Nevada. Although the BLM has the authority and responsibility to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generation (in this case by coordinating with agencies and water rights applicants to protect the federal land resources), it is the responsibility of the Office of the Nevada State Engineer to award or deny water rights applications and thus ensure efficient long-term sustainable use of groundwater resources.

The BLM does not have the authority to require the Applicant to have a backup water source in the event that the amount of groundwater allocated by the Nevada State Engineer is not sustainable or additional water is necessary but unavailable. It is the BLM's responsibility to issue or deny the ROW grant for the Proposed Action.

Existing Groundwater Data

Disagreement exists regarding the ability to predict the perennial yield in the hydrographic basins and potential impacts to springs and surface water. Perennial yield is defined as the amount of usable water from a groundwater aquifer that can be economically withdrawn and consumed each year for an indefinite period of time. It cannot exceed the natural recharge to that aquifer and ultimately is limited to the maximum amount of discharge that can be utilized for beneficial use. Uncertainties associated with the existing data in the Region of Influence have resulted in different opinions among hydrogeologists in predicting the amount of water available for beneficial use, and raise questions about the capability to reliably predict potential impacts of groundwater pumping on surface water resources.

The data analyzed in this EIS are the best available representation of current and predicted conditions at this time. There is, however, a level of uncertainty associated with any set of data in terms of predicting impacts, especially where natural systems are involved.

Alternatives Development

Pursuant to CEQ regulation section 1502.14, the EIS should present reasonable alternatives within and outside the BLM's jurisdiction. Actions connected to the Proposed Action but outside the BLM jurisdiction include the location of groundwater diversions and amount of groundwater permitted by the Nevada State Engineer; groundwater monitoring and management agreements between the Applicant and the Nevada State Engineer; and wildlife and groundwater monitoring, management, and mitigation agreements between the Applicant and the USFWS.

The Applicant's Proposed Action is to obtain a ROW from the BLM for the purpose of developing and conveying up to 5,000 AFY of groundwater from the Kane Springs Valley Hydrographic Basin for use by Lincoln County customers. The Applicant applied to the BLM for a ROW to construct and operate the proposed project facilities on BLM lands; therefore, the alternatives were developed based on alternative routes for the infrastructure, and not on pumping scenarios that are under the jurisdiction of the Nevada State Engineer.

1.6 SCOPING

The NEPA is designed to ensure that the environmental consequences of major federal decisions are known and available to public officials and the public before decisions are made and actions are undertaken. Public scoping assists in the environmental review process by providing a means to inform the public about activities that involve a federal action and solicit their comments regarding issues and alternatives which the BLM should consider addressing in the EIS. The BLM considered comments received through public scoping when developing the scope of issues and alternatives to be analyzed in this EIS.

A Notice of Intent (NOI) to prepare the EIS was published in the Federal Register (Volume 71, No. 62) on March 31, 2006. The notice encouraged the public and other federal, state, local and Tribal governments to assist the BLM in identifying issues and alternatives to be considered by the BLM for evaluation in the EIS. A 30-day public scoping period (March 31, 2006 through May 1, 2006) was provided for submission of comments.

The BLM distributed press releases announcing the dates, locations and times of scoping meetings to local and regional print and broadcast media. Paid legal notices indicating the dates, locations and times of scoping meetings were published in the local newspapers circulated in Reno, Las Vegas, Baker, Caliente, Alamo and Mesquite, Nevada. The BLM held six open house meetings between April 11, 2006 and April 18, 2006. A summary report of scoping comments received during the scoping period is provided in the Kane Springs Valley Groundwater Development Project EIS Scoping Report (BLM 2006d). A copy of this report is available for review/download at the BLM Nevada State Office website located at www.nv.blm.gov.

Based on comments received during the scoping process, the following general categories of issues were identified as summarized below.

- **NEPA Process** – Eighty-six comments were received specific to the NEPA process; particularly, how closely the EIS would follow the NEPA process.
- **Social Resources** – Fifty-one comments were received specific to concerns about impacts on the human or built environment. Scoping comments were provided on the following resources: 1) Visual Resources; 2) Noise; 3) Land Use (including Transportation, Mineral Resources and Range Resources); 4) Areas of Critical Environmental Concern, Wilderness and Other Special Use Areas; 5) Recreation; 6) Socioeconomic Resources; 7) Solid Waste and Hazardous Materials; 8) Environmental Justice; 9) Paleontology; and 10) Archeological Resources and Historic Properties.
- **Physical and Biological Resources** – Ninety comments were received specific to concerns about impacts on components of the physical environment. Scoping comments were provided on the following resources: 1) Air Quality; 2) Biological Resources (including Endangered, Threatened, Proposed and Candidate Species, Fisheries, Migratory Birds, Vegetation, Noxious Weeds and Wetlands/Riparian Habitat); 3) Geologic Resources; 4) Soil Resources; and 5) Water Resources.

1.7 ORGANIZATION OF THE FINAL EIS

In response to public comment on the Draft EIS, as well as new information obtained since the release of the Draft EIS, the BLM has made a number of changes to the Final EIS. The most important substantive changes are listed below. Editorial and grammatical changes to improve accuracy, clarity, consistency, and improved readability have been made to the Final EIS based on public comment and internal review.

- Modification of the LCPDs electrical system between the proposed Emrys Jones Substation to each of the proposed wells sites changed from a 69 kilovolt (kV) transmission line with

22.8 kV underbuild to a 138 kV transmission line with 22.8 kV underbuild. This line would initially be energized at 25 kV class distribution providing service to each of the proposed well sites through individual step-down substations. Changes from the Draft EIS to Final EIS are reflected in the Executive Summary; Chapter 1; and Chapter 2 - Description of the Electrical Utility Facilities; and Map ES 1-1, Map 2-1; and Figure 2-7. The direct, indirect, and cumulative effects of this change were considered in Chapter 4 – Environmental Consequences.

- To improve clarity regarding the role of the BLM and the Office of the Nevada State Engineers in developing groundwater resources on BLM-administered public lands in Nevada, a “Public Controversy” section has been added to the Executive Summary (ES-1.2.2) and Chapter 1 (1.4.3).
- The Nevada State Engineer Ruling 5712 has been summarized in Chapter 3 (3.3.3.3) and Chapter 4 (4.3.1.2).
- An “Assumptions for Analysis” section has been added to the beginning of Chapter 4. This section describes assumptions made by the BLM for analyzing effects of the Proposed Action on the human and natural environment.
- An “Incomplete and Unavailable Information” section has been added to the beginning of Chapter 4.
- Through consultation with the USFWS, the BLM has revised language regarding potential effects of the Proposed Action on the Moapa dace, desert tortoise, and southwestern willow flycatcher. These edits are in response to the agencies uncertainty regarding indirect effects of the Proposed Action on spring flows in the Muddy River system. The Stipulation Agreement between the USFWS and the LCWD/Vidler includes measures to mitigate unreasonable adverse impacts from the Proposed Action on the Muddy River system.
- A discussion on global climate changes and its effect on the regional area have been added to Chapter 4 – Cumulative Impacts (4.20.3.1).
- Table 4-8 has been added to Chapter 4 (4.20.4.4). The table includes acreage of desert tortoise habitat likely to be disturbed from cumulative actions within the Mormon Mesa Critical Habitat Unit (Cumulative Resources Analysis Area for Desert Tortoise).
- The Weed Risk Assessment for the project area has been added to Appendix E-5.
- Comments on the Draft EIS and BLM’s responses to the comments appear in Appendix F.

The following sections describe the organization of the remaining components of the Final EIS. Changes to specific chapters in the Draft EIS to the Final EIS are described above.

1.7.1 Chapter 2.0 – Proposed Action and Alternatives

Chapter 2.0 describes the Proposed Action and Alternatives including the No Action Alternative.

Alternatives that were considered but eliminated from further analysis are described in Chapter 2.0, Section 2.4 - Alternatives Considered during Scoping but Eliminated from Further Consideration with a discussion of why they were not considered further.

1.7.2 Chapter 3.0 - Affected Environment

The existing environment that could be affected by granting the ROWs for the Proposed Action is described in Chapter 3.0 of the EIS. The existing environment includes the social and natural environment. The baseline environmental information provides the basis for analyzing impacts of the Proposed Action and alternatives.

1.7.3 Chapter 4.0 – Environmental Consequences

Chapter 4.0 describes the possible environmental consequences of the Proposed Action and alternatives. Direct, indirect and cumulative effects of the Proposed Action and alternatives are assessed and described in order to allow for comparative impact evaluation. Impacts are compared to the social and natural environment that would be expected to exist if no action were taken (the No Action Alternative).

1.7.4 Chapter 5.0 – Consultation and Coordination

Chapter 5.0 describes public participation undertaken to date, and additional opportunities that would occur, throughout the EIS process. It also lists agencies and organizations that received copies of the EIS for review, and lists the preparers of the document.

1.7.5 Chapter 6.0 – References, Abbreviations and Acronyms, Glossary, and Index

Chapter 6.0 includes a list of references used in the preparation of the EIS. Other sections that follow include a list of abbreviations and acronyms and a glossary of technical terms used.

1.8 APPLICABLE LAWS, REGULATIONS, AUTHORIZING ACTIONS AND PERMITS

The EIS was prepared in compliance with the CEQ regulations for implementing NEPA (40 CFR § 1500-1508); the BLM NEPA Handbook, H-1790-1; the Ely District Office Environmental Analysis Guidebook; FLPMA Sections 201, 202 and 206 (43 CFR § 1600); and the BLM Land Use Planning Handbook (BLM Handbook H-1601-1). The BLM also has Instruction Memorandums (IM 2004-105, 149, 231, and 2005-105) which guide and set policy for the BLM compliance with the NEPA.

Table 1-1 lists federal and state laws and regulations that may apply to the Proposed Action. The Applicant and its contractors would comply with requirements set forth in these directives as applicable.

Table 1-1
Laws, Regulations and Executive Orders that May Apply to the Proposed Action
FEDERAL
Administrative Procedures Act, Title 5 U.S.C. Chapter 5, Sections 511-599
Federal Land Policy and Management Act of 1976 43 U.S.C.1701 et seq.
National Historic Preservation Act and regulations implementing the National Historic Preservation Act 16 U.S.C.470 et seq.
Archeological Resources Protection Act of 1978, as amended, 42 U.S.C.1996 and 1996a
Clean Water Act of 1987, as amended, 33 U.S.C.1251 et seq.
Clean Air Act of 1990, as amended, 42 U.S.C.7401 et seq.
Protection and Enhancement of the Cultural Environment Executive Order 11593
Endangered Species Act of 1973, as amended, 16 U.S.C.1531 et seq.
Native American Graves Protection and Repatriation Act of 1990, as amended, 25 U.S.C.3001 et seq.
Noise Control Act of 1972, as amended 42 U.S.C.4901 et seq.
Occupational Safety and Health Act 29 U.S.C.651 et seq. (1970)
Pollution Prevention Act of 1990 42 U.S.C.13101 et seq.
Safe Drinking Water Act, as amended, 42 U.S.C. § 300f et seq. (1974)
Safe Drinking Water Act, as amended, 42 U.S.C.201 et seq.
Migratory Bird Treaty Act (Migratory Bird Guidance) 16 U.S.C.703–711 Executive Order January 1, 2001
National Environmental Policy Act, Protection and Enhancement of Environmental Quality - Executive Order 11512
Section 110 of the National Historic Preservation Act (1980, amended 1992)
Floodplain Management Executive Order 11988
Protection of Wetlands Executive Order 11990
Federal Compliance with Pollution Control Standards Executive Order 12088
Environmental Justice Executive Order 12898
Indian Sacred Sites Executive Order 13007
American Indian Religious Freedom Act of 1978 (42 U.S.C.1996)
Consultation and Coordination with Indian Tribal Governments Executive Order 13084
Invasive Species Executive Order 13112
Exotic Organisms – Executive Order 11987
Responsibilities and the ESA, Secretarial Order 3206 (June 5, 1997)
Federal Water Pollution Control Act, as amended, 33 U.S.C.1323 et seq.
Wild and Scenic Rivers Act, as amended, 16 U.S.C.1271 et seq.
Wilderness Act, as amended, 16 U.S.C.1131 et seq.
Recreation and Public Purposes Act of 1926, as amended, 43 U.S.C.869 et seq.
Mineral Leasing Act of 1920, as amended, 30 U.S.C.181 et seq.
Mining and Mineral Policy Act of 1970, as amended, 30 U.S.C.21 (a)
Taylor Grazing Act of 1934, as amended, 43 U.S.C 315 et seq.
Public Rangelands Improvements Act of 1978, 43 U.S.C.1901
Wild and Free-Roaming Horse and Burro Act, as amended, 16 U.S.C.1331-1340
Migratory Bird Conservation Act of 1979, as amended, 16 U.S.C.715 et seq.
Energy Policy and Conservation Act Reauthorization of 2000, as amended, Public Law 106-469.
Energy Policy and Conservation Act Report.
Executive Orders 11644 and 11989 (Off-Road Vehicles)
Executive Orders 13045 (Protection of Children from Environmental Health Risks and Safety Risks)
Executive Orders 12144 (Environmental Effects Abroad of Major Federal Actions)
Executive Orders 13212 (Actions to Expedite Energy Related Projects)
Secretarial Order 3175 (incorporated into the Departmental Manual at 512 DM 2)
STATE
State Protocol Agreement VII C.2 (State Protocol Agreement between the BLM, Nevada and the Nevada SHPO)
Chapter 474, State of Nevada 2003 (County Fire Protection Districts)
Nevada State Engineer Ruling 5712 (2007) (Kane Springs Valley Project)

Table 1-1 Laws, Regulations and Executive Orders that May Apply to the Proposed Action
NRS Chapters 501 through 506 (Wildlife – Administration and Enforcement; Licenses, Tags, and Permits; Hunting, Fishing, and Trapping; Management and Propagation; Fur Dealers; and Wildlife Violator Compact)
NRS Chapters 527 and 528 (Forestry; Forest Products and Flora – Protection and Preservation of Timbered Lands, Trees, and Flora; Forest Practice and Reforestation)
NRS 527.060-120 (Protection and Preservation of Timbered Lands, Trees, and Flora – Definitions of Cactus and Yucca)
NRS 527.270 (List of species declared to be threatened with extinction; special permit required for removal or destruction)
NRS 533.030 (Adjudication of Vested Water Rights; Appropriation of Public Waters - Appropriation for beneficial use; use for recreational purpose declared beneficial; limitations and exceptions)
NRS 533.035 (Adjudication of Vested Water Rights; Appropriation of Public Waters - Beneficial use: Basis, measure and limit of right to use)
NRS 534.020 (Underground waters belong to public and are subject to appropriation for beneficial use; declaration of legislative intent).
NRS 555.005 (Agriculture – Control of Insects, Pests, and Noxious Weeds, Definitions)
NAC Chapters 527 and 528 (Administrative Code for NRS 527 through 528)
NAC Chapters 501 through 505 (Administrative Code for NRS 501 through 505)
NAC 445A – 445A.225 (Water control definitions and standards)
NAC 444.571 (Class II disposal site definition)
NAC 445A.226 (Actions for contaminated sites)
U.S.C – United States Code NRS – Nevada Revised Statutes NAC – Nevada Administrative Code et seq. – “and the following”

1.8.1 Air and Water Resources

The Nevada Division of Environmental Protection (NDEP) regulates air and water quality in the State of Nevada in cooperation with the U.S. Environmental Protection Agency (EPA). Prior to project construction, the LCWD or its contractor would be responsible for obtaining an approved Surface Area Disturbance – Air Quality Permit from the NDEP – Bureau of Air Pollution Control. The contractor would be required to implement a Dust Control Plan during project construction. The LCWD has prepared a Dust Control Plan that describes measures the LCWD and its construction and reclamation contractors would implement during project construction in accordance with local regulations (LCWD 2007).

The NDEP also controls the discharge of storm waters associated with temporary construction activities through a National Pollutant Discharge Elimination System (NPDES) Notice of Intent Permit and the requirement that all activities be conducted in accordance with a Storm Water Pollution Prevention Plan (SWPPP). The NDEP also issues NPDES permits for pipeline construction activities that involve discharge to the Waters of the United States, as classified by the Clean Water Act and its amendments, during hydrostatic testing.

The LCWD has prepared a SWPPP that addresses activities related to construction and reclamation of the Proposed Action (LCWD 2007).

The Nevada Division of Water Resources is responsible for administering and enforcing Nevada water law, which includes the permitting, adjudication, and appropriation of groundwater and

surface water in the state. All water within the boundaries of the state, whether above or beneath the surface of the ground, is subject to appropriation for beneficial use under the laws of the state (Nevada Revised Statutes [NRS] 533.030 and NRS 534.020). Beneficial use is the basis, the measure, and the limit of the right to use water. In Nevada, beneficial uses are determined on a case-by-case basis. The general groundwater policy of the Nevada State Engineer is to limit water withdrawals from a basin to the average annual recharge for that basin. However, in basins where an outside source of supply is assured, the State Engineer may allow withdrawals in excess of the annual recharge. Each right to appropriate groundwater in the State of Nevada carries with it the right to make a reasonable lowering of the static groundwater level at the appropriator's point of diversion (NRS 534.110(4)). The Nevada State Engineer may allow, at his discretion, the groundwater level to be lowered at the point of diversion of a prior appropriator with the provisions that rights of holders of existing appropriations can be satisfied under such express conditions (NRS 534.110(5)).

The Coyote Spring – Lincoln County General Improvement District (GID), and the Clark County – Coyote Spring Water Resources GID, both political subdivisions of the State of Nevada, are mandated under law to provide water treatment (NRS 318.144) and sanitary sewer facilities (NRS 318.140) to those portions of the Coyote Spring development area within their respective territories. If either Coyote Spring – Lincoln County GID or Clark County – Coyote Spring Water Resources GID determines that water provided from the well field requires treatment, a water treatment facility may be constructed on private lands near the proposed terminal storage tank. The Coyote Spring – Lincoln County GID and the Clark County – Coyote Spring Water Resources GID would be responsible for wastewater treatment, storage and disposal facilities in the Coyote Spring Valley area. Coyote Spring developers would be responsible for the treated effluent reuse system. Construction of these facilities would correspond to the phased construction envisioned for the development of the Coyote Spring community. The NDEP and the Nevada State Health Department would regulate these facilities subject to Nevada Administrative Code (NAC) Chapter 445A. Also, the NDEP would regulate the use of treated effluent. Other actions associated with the Coyote Spring development are discussed in Section 4.20 – Cumulative Impacts.

1.8.2 Fish and Wildlife Resources Including Threatened, Endangered, Candidate and Special Status Species

Special status species include those declared as Threatened or Endangered under the federal ESA of 1973, as amended; candidate species proposed for listing under the ESA; or species of concern or otherwise identified by the USFWS, BLM, or State of Nevada as unique or rare. Threatened, Endangered and species proposed for listing under the ESA are protected by the ESA. Candidate species have no protection under the ESA. However, the BLM policy requires that actions authorized, funded or carried out by the agency would not jeopardize the continued existence of any Threatened or Endangered species, contribute to the listing of any candidate species as Threatened or Endangered, or result in the destruction or adverse modification of habitat which is determined by the Secretary of the Interior as critical to such species.

Under Section 7 of the ESA, the BLM is required to consult with the USFWS on actions that it permits, licenses, funds or otherwise authorizes, in whole or in part, to ensure that these actions would not jeopardize the continued existence of any listed species. The BLM also must confer with the USFWS on any agency action when an action may affect a Threatened or Endangered

species or result in adverse modification of critical habitat as designated by the USFWS.

As part of the Section 7 process, the BLM prepares a Biological Assessment to comply with the ESA, and USFWS issues a Biological Opinion deciding whether the Proposed Action would jeopardize the continued existence of any species listed or proposed for listing as Threatened or Endangered under the ESA, and whether the Proposed Action would result in adverse modification of designated or proposed critical habitat. The BLM has prepared a Biological Assessment for the Proposed Action and will continue to coordinate with the USFWS throughout the EIS process. The Biological Opinion is expected to be published by February 10, 2008.

In Nevada, “sensitive” species are defined as those plant and animal species identified by the BLM as species for which population viability is a concern, as evidenced by (1) a significant current or predicted downward trend in population numbers or density or (2) a significant current or predicted downward trend in habitat capability that would reduce the species’ existing distribution.

Conservation management and special protections for flora and fauna are provided mainly by state and federal laws, regulations and policies, with management carried out by authorized agencies. The State of Nevada provides for and authorizes conservation management and protection for a great number of species under NRS Chapters 501 through 506, NAC Chapters 501 through 505, NRS Chapters 525 and 528, and NAC Chapters 527 and 528.

The state’s wildlife and wild land plants are administered by the NDOW and the Nevada Division of Forestry, respectively. Mule deer, bighorn sheep, mountain lion, cottontail rabbit, chukar, Gambel’s quail and mourning dove are among wildlife classified as game species; whereas bobcat, kit fox and gray fox are among those classified as fur-bearing species. In general, management methods and intensities are based on a sustainable population principal with protection enforced against illegal harvest. Wild land plants, notably coniferous species, are similarly managed by the Nevada Department of Forestry. However, because of the vulnerability of certain wildlife and flora to decline, special management status and protections may be asserted. Under NRS chapter 501, wildlife may be classified as protected with further classifications of sensitive, Threatened or Endangered as warranted.

Similarly, under NRS 527.270, native plants may be declared as threatened with extinction and protected. By nature, authorities to manage plant and animals overlap between the state and federal natural resource management agencies.

The NDOW establishes population objectives for various species. The BLM confers with the NDOW on proposed projects that would have an effect on wildlife or fisheries. The USFWS and the NDOW are cooperating agencies with the BLM in the preparation of this EIS.

1.8.3 Waters of the United States, Wetlands and Floodplains

The requested ROW crosses 11 ephemeral drainages including four crossings of the Kane Springs Wash. All drainages are tributaries to the Kane Springs Wash. These drainages are normally dry and only flow during periods of heavy rainfall, most often associated with summer thunderstorms. Construction activities in these washes would require consultation with the Army Corps of Engineers. The St. George, Utah Regulatory Office is the delegated office

responsible for implementing and enforcing Section 404 of the federal Clean Water Act (33 CFR parts 320 to 330). Formal jurisdictional wetland delineation has not been conducted.

1.8.4 Heritage Resources

The BLM consults with the Nevada State Historic Preservation Office (SHPO) and other interested parties, as necessary, regarding potential impacts of the proposed undertaking on archeological resources and historic properties.

Collection of vertebrate fossils on public lands requires a permit issued by the BLM (43 CFR 8365). Invertebrates and fossil plants (including petrified wood and pollen) may be collected without a permit except in specially designated areas. Invertebrates may be collected from public lands without a permit in reasonable quantities for personal enjoyment, not for barter, sale or exchange.

Section 106 of the National Historic Preservation Act (NHPA; 16 U.S.C 470f) requires the BLM to take into account the effects of “undertakings” on sites, districts, buildings, structures and objects eligible for or included in the National Register of Historic Places (NRHP). The regulations require the BLM official to avoid effects where prudent and feasible. When the federal official determines that an undertaking would have an effect on an NRHP property, it is required to provide an opportunity for the SHPO to comment before the undertaking is allowed to proceed. The Nevada BLM/SHPO Protocol Agreement guides the process for assuring consultation between the BLM and the SHPO. The BLM has conducted a Class III (intensive) survey to identify archaeological resources and properties that would be affected by the Proposed Action. The Class III Survey Report has been submitted to the SHPO.

Section 110 of NHPA (16 U.S.C 470 h-2) requires federal agencies to establish a program for the identification, evaluation and nomination of significant sites, districts, buildings, structures and objects under the jurisdiction and control of such agency to the NRHP. NRHP properties must be managed and maintained in a way that considers the preservation of their historic, archaeological, architectural and cultural values. This section of NHPA incorporates the provisions of Executive Order 11593 into law.

The Archaeological Resources Protection Act (16 U.S.C 470aa et seq.) prohibits excavation, removal, damage, alteration or defacement of archeological resources without a permit. The Archaeological Resources Protection Act (16 U.S.C 470ii) also requires agencies to inventory the nature and extent of archaeological resources on public and Indian lands. Further, the Act (as amended Public Law 100-588) also requires federal agencies to establish a program to increase public awareness of the significance of archaeological resources located on public and Indian lands and the need to protect such resources.

1.8.5 Tribal Consultations

Executive Order 13084 directs federal agencies to consult with modern American Indian Tribal representatives who may have concerns about issues that affect Tribal self-government, trust resources, and Indian Tribal treaty and other rights. The BLM is conducting government-to-government consultation with interested Tribes to provide information on the Proposed Action and alternatives and to obtain information on cultural resources and Native American

practices/beliefs which may be affected by the Proposed Action and alternatives.

Executive Order 13084 requires federal officials to recognize the domestic dependent sovereign status of federally recognized Indian Tribes and coordinate with Tribes on any activities which may have an impact on Tribal interests. The American Indian Religious Freedom Act ([AIRFA] 42 U.S.C 1996) reinforces the constitutional right of free practice of religion. The AIRFA reminds federal officials to consider impacts of federal actions on the free practice of Indian religions.

Executive Order 12898 reinforces AIRFA by directing federal land managers to specifically take into account and document that federal actions do not damage sacred sites.

The Native American Graves Protection and Repatriation Act ([NAGPRA]43 CFR Part 10) requires federal officials to consult with American Indian individuals, Tribal organizations and recognized Tribal governments with demonstrated affinity to human remains, funerary objects, sacred objects and objects of cultural patrimony when federal actions may disturb these features.

1.8.6 Highways

The U.S. Department of Transportation, Federal Highway Administration, and Nevada Department of Transportation (NDOT) recognize it is in the public interest for utility facilities to use the ROWs of public roads and streets when such use does not interfere with the primary purpose of the ROW for transportation (23 CFR part 645).

The state highway department is responsible for preserving such ROWs free of all public and private installations, facilities or encroachments except under other approved use or occupancy. Any traffic disruptions along Highway 93 during project construction would require notification of the NDOT.

1.8.7 Authorizing Actions and Permits

Table 1-2 lists federal, state, county and other permits and approvals that may be needed to implement the Proposed Action or other action alternatives.

1.9 INTERRELATED PROJECTS

CEQ guidelines for the EIS preparation require that cumulative impacts be addressed in addition to direct and indirect impacts. Cumulative impacts are those incremental impacts that would result from the effects of the Proposed Action or action alternatives when added to the effects of other past, present and reasonably foreseeable projects.

The BLM has identified 14 interrelated projects whose effects on individual resources potentially impacted by the Proposed Action or action alternatives may be cumulative in nature. Cumulative impacts may potentially extend across a broad range of the resource categories being assessed in this document. Each project has been evaluated to determine if it is sufficiently defined (reasonably foreseeable) to be: 1) relevant to potential impacts, 2) within the project area of influence, and 3) of a magnitude that could potentially result in a cumulative impact. Cumulative effects and descriptions of each of these projects are presented in Section 4.20 - Cumulative Impacts.

- Lincoln County Conservation, Recreation, and Development Act (LCCRDA)
- CSI Development – Lincoln County
- CSI Development – Clark County
- LS Power Electric Transmission Project (LS Power)
- Coyote Spring 138 kV Transmission Line Project
- Ely Energy Center Project (500 kV transmission line in the LCCRDA corridor)
- Coyote Spring Well and Moapa Transmission System Project
- Lincoln County Land Act Groundwater Development and Utility Right-of-Way Project
- Toquop Energy Project
- Additional Moapa Valley Water District Groundwater Pumping in Upper Moapa Valley
- Clark, Lincoln, and White Pine Counties Groundwater Development Project
- Pumping of Other Existing Undeveloped Coyote Spring Valley Groundwater Rights
- Alamo Industrial Park and Community Expansion Land Sale
- Build-Out of the Lincoln County Land Act Area (Toquop Township Planning Area)

Table 1-2 Authorizations, Permits, Reviews and Approvals		
Actions Requiring Permit, Approval or Review	Permit/Approval	Accepting Authority/ Approving Agency
Federal		
ROW over BLM-administered Public Lands	FLPMA and Title III of the LCCRDA	BLM
NEPA Compliance to Grant ROW	Environmental Impact Statement	BLM
Grant of ROW by the BLM	National Historic Preservation Act, Compliance with Section 106	BLM and SHPO
Grant of ROW by the BLM	Endangered Species Act Compliance (Section 7 Consultation on public lands and Section 10 Consultation on private land); the BLM and USFWS, Biological Assessment, Biological Opinion	USFWS
Dry Wash Crossings	Clean Water Act, Section 401/404	Army Corps of Engineers
State of Nevada		
Water Appropriation, Importation, Monitoring and Mitigation	Water Appropriation Permits	Nevada State Engineer
Notice of Intent to Drill or Abandon a Well	Well Drilling Permits	Nevada Department of Water Resources
Critically Endangered Plant Species; Native Cacti and Yucca Commercial Salvaging and Transportation Permit	Collection Permit for State-Listed Plants	Nevada Division of Forestry
Wildlife and Habitat Consultation for Disturbance on the BLM Land	Authorization for take or removal of state-protected reptiles	NDOW
Desert Tortoise Handling Permit/Authorization	Handling Authorization	NDOW
Notification for Stormwater Management during Construction and Operation; Temporary Groundwater Discharge	SWPPP, Section 401 Water Quality Certification; Section 402 NPDES Notification; Temporary Discharge Permit	NDEP
Construction / Fugitive Dust – PM ₁₀	Surface Area Disturbance – Air Quality Permit	NDEP
Certificate for New Water Utility	Utilities Environmental Protection Act Construction Permit	Public Utilities Commission of Nevada
Encroachment of U.S. Highway 93	Encroachment Permit	Nevada Department of Transportation
Local		
Construction and Operation of the Proposed Action	Special Use and Construction Permits; Grading Permits for Project Components on the BLM lands	Lincoln County

BLM – Bureau of Land Management

NDOW – Nevada Division of Wildlife

NPDES – National Pollution Discharge Elimination System

ROW – right-of-way

SWPPP – Storm Water Pollution Prevention Plan

LCCRDA – Lincoln County Conservation, Recreation, and Development Act

NDEP – Nevada Department of Environmental Protection

NEPA – National Environmental Policy Act

PM₁₀ – particulate matter less than 10 microns

SHPO – State Historic Preservation Office

USFWS – U.S. Fish and Wildlife Service