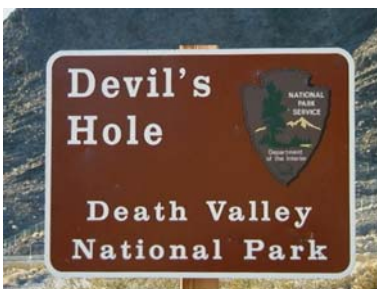
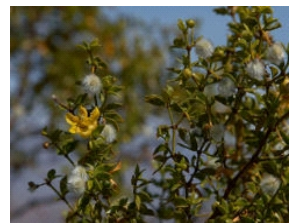
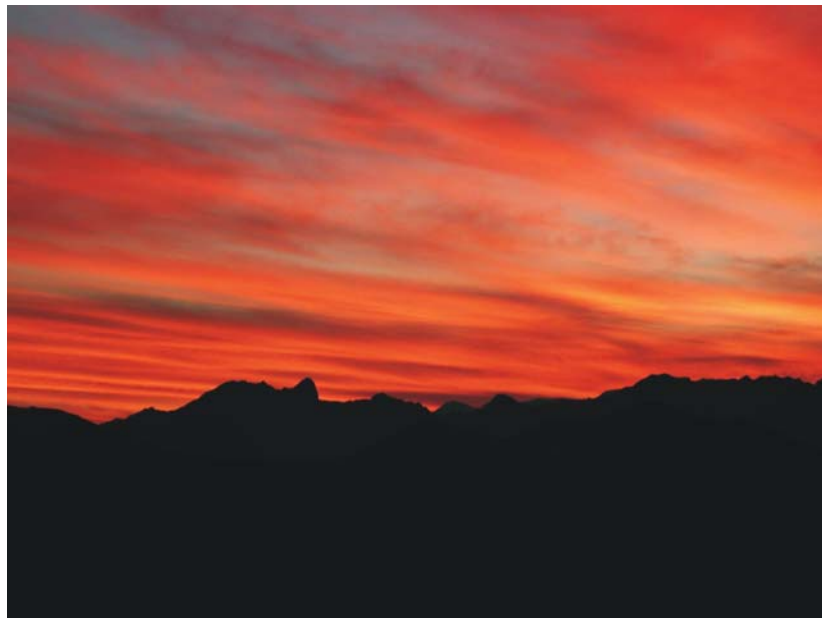

Amargosa Valley AREA PLAN



Adopted by the Nye County
Board of County Commissioners
on Month Day, 2009
An Amendment to the Nye County 1994 Comprehensive Plan

Prepared by:
Amargosa Valley Area Plan Committee
June 25, 2009 Draft

Photo Credits

Cover: clockwise from top left – Amargosa branch of the 1st International Bank, courtesy of Karen Clayton; Alfalfa crop and center irrigation, courtesy of Michelle DeLee; Cind-R-Lite operation at Lathrop Cone, courtesy of TerraSpectra Geomatics; Creosote bush, courtesy of A.J. Griffin; Town of Amargosa Emergency Services Building, courtesy of TerraSpectra Geomatics; Longstreet Hotel Pond, courtesy of Longstreet Hotel and Casino; Devil's Hole sign, courtesy of the National Park Service; Big Dune ACEC, courtesy of the Town of Amargosa; Dairy cows, courtesy of Nevada Agricultural Foundation; Flowering cactus, courtesy of A.J. Griffin. Center photo: Sunset, courtesy of A.J. Griffin.

BOARD OF COUNTY COMMISSION RESOLUTION NO. 2009- 39

A RESOLUTION ADOPTING AND CERTIFYING THE AMARGOSA VALLEY NEVADA, AREA PLAN AS A PART OF THE 1994 NYE COUNTY COMPREHENSIVE PLAN

WHEREAS, the Amargosa Planning Advisory Board, in accordance with Nevada Revised Statutes (NRS) 278.150 to 278.210, inclusive, and with the assistance of the residents of the Town of Amargosa Valley, the State Lands Department and the Nye County Nuclear Waste Repository Project Office (NWRPO) has worked towards creating an Area Plan for the Amargosa Valley as an amendment to the adopted Nye County Comprehensive Plan dated April 5, 1994; and

WHEREAS, the Town Advisory Chair presented the Amargosa Valley Area Plan to the Board in accordance with NRS 278.220 and the Board after holding a Public Hearing on the date of [REDACTED] and hearing public comment on the draft Amargosa Valley Area Plan, elected to adopt the Area Plan in accordance with the above stated Nevada Revised Statutes; and

WHEREAS, the vote upon the adoption of the Amargosa Valley Area Plan was carried by the affirmative votes of not less than two thirds of the total membership of the Board as follows:

Ayes:

Nays:

Abstains:

Absent:

NOW, THEREFORE, IT IS HEREBY RESOLVED, that the attached copy of the Amargosa Valley Area Plan, which includes the following sections and exhibits: 1. Introduction, 2. History, Demographics and Physical and Natural Setting, 3. Land Use Plan, 4. Streets and Highways Plan 5. Public Buildings, Public Services and Facilities, 6. Conservation and Natural Resource Plan, and Appendixes is hereby adopted and certified as the Amargosa Valley Area Plan of the 1994 Nye County Comprehensive Plan dated [REDACTED], and that

each of the attached materials contains the identifying signatures of the Chairperson and Secretary/Clerk of the Commission.

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NOW, THEREFORE, IT IS HEREBY RESOLVED that the document entitled “Amargosa Valley, Nevada Area Plan” is hereby adopted in its entirety along with the land use map. The Amargosa Valley Area Plan is hereby established to conserve and promote the public health, safety, and general welfare of the citizens of the Amargosa Valley.

DATED this _____ day of _____, 2009.

BOARD OF COUNTY COMMISSIONERS
OF THE COUNTY OF NYE, STATE OF
NEVADA

ATTEST:

Joni Eastley, Chairperson

Sam Merlino, County Clerk and Ex-Officio
Clerk of the Board.

ACKNOWLEDGEMENTS

No Plan like this could ever be put together in a vacuum. This Plan was no different. We would like to thank the following people and organizations for their interest, contributions and support:

The Nye County Board of County Commissioners: Joni Eastley, Chair; Butch Borasky, Vice-Chair; Gary Hollis; Lonrinda Wichman; and Fely Quitevis.

The Planning Board and Master Plan Committee of 1999 (David Boyd, Ed Booss, Andy Gudas, Shiela Rau, Lisle Lowe, Lyle Records and Lavonne Selbach) and the other members of the community who worked on a draft master plan and laid groundwork for this effort;

Skip Canfield, State Land Use Planning Agency, for the training, consultation, and support that he provided to the Area Plan Committee since October 23, 2006;

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Cheryl Beeman, NWRPO Community Planner, for her consultation, research, coordination, writing and general support in developing the Plan;

TerraSpectra Geomatics for gathering data and generating maps, working with the Committee and public to refine the maps, and for critiquing, editing and consulting on the Plan;

Walt Kuver, Nye County Consultant, for providing insight on environmental issues;

The members of the community and other interested parties that participated in the various meetings, providing their desires, concerns, and contributions, especially John Bosta, who participated from beginning to end and made significant contributions to the completeness and clarity of the Plan;

All of those who provided information for and comments on the Plan;

Osvaldo Granados and Andrea Lynn-Henry for collecting baseline data on every parcel in the Township and AJ Griffin for compiling and tabulating that data;

Jan Cameron who served as moderator, writer, editor and coach;

Shelly Kadrmas, who typed the various early drafts, set up and recorded all of the meetings, coordinated all of the drafts and comments, and generally, kept everyone on track;

And especially the members of the Area Plan Committee: Chairman, Dave Hall, and members, Aaron Lynn, Shiela Rau, Andy Gudas, Curt Stengel, Randy Kadrmas, AJ Griffin, who spent many, hours gathering information, listening to input from the community, writing, editing, and wrestling with the issues that had to be resolved over the last two and one-half years to generate this Plan.

We all owe each of you a great debt of gratitude. Thank you.

The Amargosa Town Advisory Board

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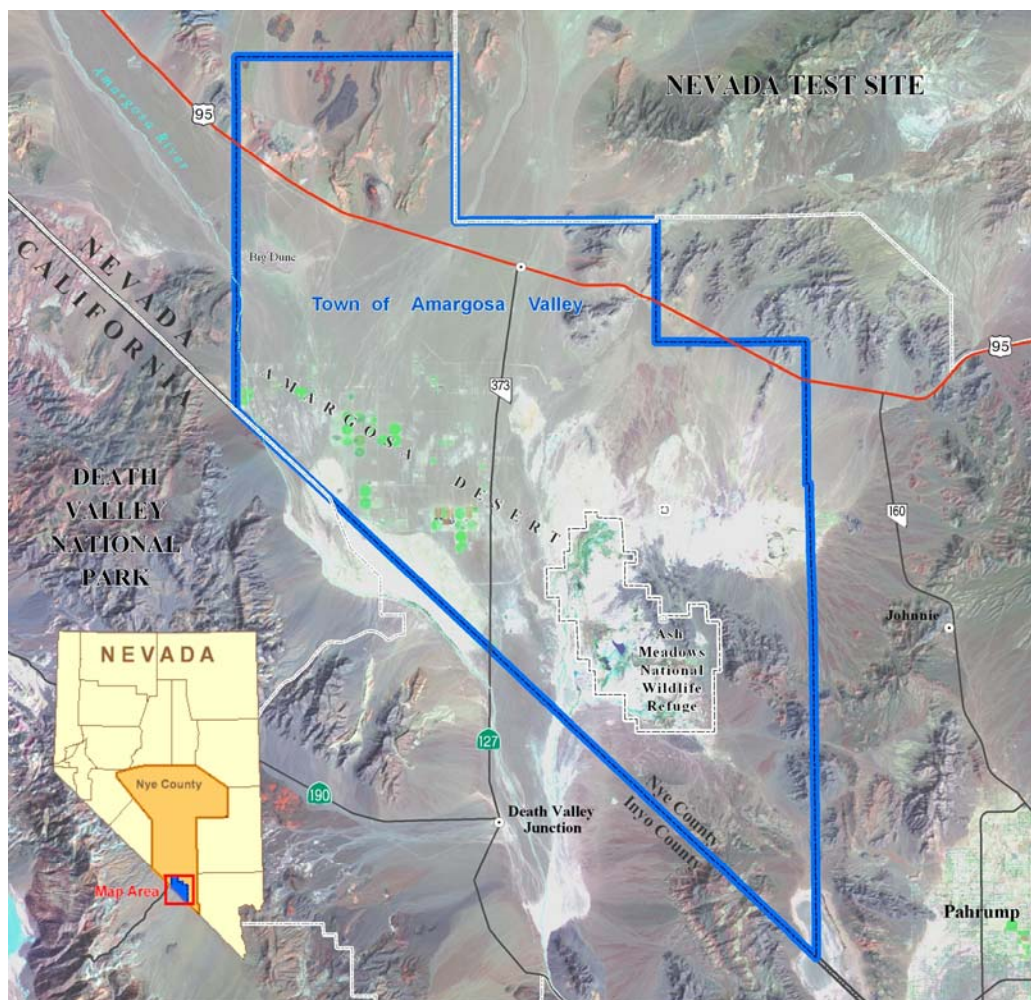
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EXECUTIVE SUMMARY

Amargosa Valley is an unincorporated township located in the southern portion of Nye County, Nevada. It has a small, rural population of about 1,500 people, spread over a large geographic area of approximately 505 square miles. Planning criteria for Amargosa Valley currently only exists under the provisions of the Nye County Comprehensive Plan, which was adopted in 1994. The Nye County Comprehensive Plan provides for development of community-specific Area Plans that are suited to the community's particular needs and stage of development.

A grass-roots planning process began in 2000, with area residents working to formulate an Area Plan for the community of Amargosa Valley. This process was led by the Amargosa Area Plan Steering Committee, working through the Planning Committee and the Town Advisory Board, and area citizens participated in a dozen meetings and workshops to provide input to the plan.

A draft version of this Area Plan document was released on May 6, 2009 for public review and input. This Area Plan identifies discrete, attainable goals and policies that provide guidance for improving the services and quality of life, and for building a framework to respond to resident's needs and to achieve their vision for the future of Amargosa Valley. The Area Plan will serve as the strategic planning tool for decision-makers related to growth and development within Amargosa Valley over the next 20 years. This plan meets the requirements as prescribed within the Nevada Revised Statutes (NRS Chapter 278 § 278.160).



Town Boundary of Amargosa Valley and the Surrounding Area.

CHAPTER ONE - INTRODUCTION

Presently, the only adopted planning criteria for Amargosa Valley exist under the broad, general provisions of the Nye County Comprehensive Plan (hereafter referred to as the Comprehensive Plan) and the division of land regulations that apply to properties located outside of the Pahrump Valley (Nye County Board of County Commissioners, 2008). The Comprehensive Plan, which was adopted in 1994, provides high-level policy guidance for ensuring the general public welfare and safety. But the Comprehensive Plan does not provide specific guidance for dealing with today's growth and development issues facing Amargosa Valley residents, nor does it address the specific desires of Amargosa Valley residents as identified in a public planning process. The Comprehensive Plan, Section 2.3.2 "Countywide versus Local Land Use Planning and Growth Management," recognizes the need for separate development plans for its communities:

"...Nye County's communities are distinct economically and demographically and, in some cases, culturally. These communities are separated by distance and have different prospects for growth and development. As a result, it is desirable to allow these communities to develop more specific Area Plans that suit each community's particular needs and stage of development."

Why is an Amargosa Valley Area Plan needed?

Successful communities must continually be shaped and guided. A community must actively manage its growth and respond to changing circumstances if it is to meet the needs of its residents and retain the quality of life that initially attracted those residents to the community. This type of long-range planning comes about only if a community has a vision of what it aspires to be. Although the Amargosa Town Advisory Board working with area citizens has undertaken various planning efforts since 1999, none of the plans have been adopted. As the valley experiences more growth and changing demands on everything from infrastructure to natural resources, it is very important to have a plan in place that will explain and foster a strong vision for Amargosa Valley's future.

Amargosa Valley's vision statement provides the framework for its plan for the town's future:

The community of Amargosa Valley will strive to maintain a rural atmosphere, open spaces, green belts, and agriculture, while encouraging controlled growth and safe industries in support of economic diversification.

Growth and development should not come at the expense of the qualities that make the valley special or diminish its natural resources.

PURPOSE AND DURATION OF THE AREA PLAN

The Amargosa Valley Area Plan (hereafter referred to as Area Plan) serves as an official public document adopted by the Nye County Board of County Commissioners, to guide the physical development of the Amargosa Valley over a twenty year period of time. This allows for the establishment of short, medium and long term goals and policies. Planning will also allow the community to manage its natural resources and provide public services and facilities while protecting the public health, safety and welfare. It is important to note that one of the primary purposes of the Area Plan is to provide the policy framework between the land use plan and any future ordinances by providing guidance rather than requiring strict conformity. If properly implemented, the Area Plan will assist appointed and elected officials in evaluating proposals for development, scheduling community improvements, and in financing capital improvements.

The Area Plan is a document designed to amend and update the Comprehensive Plan. After adoption by the Nye County Board of County Commissioners, the Area Plan will be attached to the Comprehensive Plan. The Area Plan is a living document which should be reviewed and updated every 5 years or so as the needs of the community change.

OBJECTIVES OF THE AREA PLAN

The objective of this area planning process is to develop minimal restrictions that would allow property owners, present and future, to develop their property in conformance with the Area Plan, while disallowing developments that may be deemed to be detrimental to the good public health, water, and air quality that the residents now enjoy. The intent is to:

- (1) Develop a plan that will establish minimum sustainable residential densities and limit future divisions of land to a minimum of two gross acres, except in specified higher density areas. This will help to ensure conservation of the underground water supply in Amargosa Valley and adequate space for good septic leach field drainage.
- (2) Encourage higher density development to be placed on the perimeter of town.
- (3) Discourage water intensive, hazardous waste-producing types of development that could have an adverse impact on the community.

The Area Plan is designed to serve the public good by:

- Stating Amargosa Valley's values, goals and objectives.
- Becoming a policy guide for physical development.
- Providing a strong legal basis for land use decision-making.
- Using public resources more efficiently and effectively.
- Avoiding arbitrary and capricious decisions that only serve special interests.
- Encouraging collaborative and rational decision-making.

The Area Plan is designed to serve economic development and the environment by:

- Projecting future land requirements.
- Ensuring that adequate public services and facilities are available for future growth.
- Protecting existing and future investments and property values.

PUBLIC PLANNING PROCESS

The process used to develop and to maintain the Area Plan consists of four primary steps:

- (1) Community visioning, formulation of goals and policies.
- (2) Development of a draft Area Plan.
- (3) Adoption of the Area Plan.
- (4) On-going evaluation and monitoring of the adopted Area Plan.

There has been a strong emphasis on public involvement throughout the planning process. During the formulation of the goals and policies, a series of meetings beginning on October 23, 2006, were held with the Amargosa Valley Area Plan Committee (hereafter referred to as Area Plan Committee). These meetings were open to all Amargosa Valley property owners, residents, developers, and other interested parties. The Area Plan Committee consists of area residents supported by State of Nevada and Nye County planning personnel and their consultants. These meetings gave area residents and property owners a chance to comment on the issues, opportunities, and goals related to the development of the Area Plan concept.

Based on the information generated at the meetings and using the information contained within the various draft documents, County staff prepared a concept plan (future land use map). This concept plan was reviewed at a series of meetings beginning in mid-2008 by the Area Plan Committee and other interested members of the public. These meetings provided early feedback in evaluating and refining the concept plan map, the planning issues, opportunities, and the goals and policies.

Once the concept plan was agreed upon by the Area Plan Committee, County staff prepared a draft Area Plan document. Throughout 2008 and early 2009, a series of meetings were held to review and revise the draft plans and maps. A meeting was held on April 9, 2009, with the Area Plan Committee that was open to any interested parties to review and provide additional input on the draft Area Plan. The results of the meeting were used to finalize the draft Area Plan. A meeting was held on May 6, 2009, with the Area Plan Committee and open to all Amargosa Valley property owners, residents, developers, and other interested parties to review and provide final comments on the draft Area Plan.

During the adoption process, the draft Area Plan was presented through the traditional public hearing process for final refinements. The public hearing process consists of a review and recommendation by the Area Plan Committee. The plan is then presented to the Amargosa Valley Planning Committee for review and the Amargosa Valley Town Advisory Board for approval and recommendation, and then to the Nye County Board of County Commissioners for adoption.

The final step is the on-going evaluation and monitoring of the Area Plan by County staff, with input from the Amargosa Valley Planning Committee, Amargosa Valley Town Advisory Board, and the Nye County Board of County Commissioners.

GUIDING PRINCIPLES OF THE AREA PLAN

The following principles guide the policies and strategies recommended in this plan. These core principles stem from the Community's vision for its future, the Nevada Revised Statutes, public input and informal community surveys.

A. Work together with the Amargosa Valley Planning Committee and citizens to develop an Area Plan that protects the public's health, safety and welfare.

- (1) Create a plan that will help to maintain the rural lifestyle now enjoyed by retaining large parcels and very low residential densities.
- (2) Promote good health and the general welfare.
- (3) Provide for economic development opportunities that will enhance and mesh with the rural lifestyle, encouraging businesses that are low water users, non-polluting, and with a focus on the "mom & pop" commercial/industrial enterprises.
- (4) Allow a rural way of life that provides room between neighbors and that lends itself to a relaxed and unthreatened way of life.
- (5) Protect life and property in areas subject to floods, landslides, and other natural disasters.

B. Ensure that the development on land is commensurate with the character and the physical limitations of the land.

- (1) Efficiently manage land use and development so that growth is coordinated with public services and promotes positive fiscal impacts.
- (2) Take into account the immediate and long-range financial impact of land to particular kinds of development, and the relative suitability of the land for development.
- (3) The rural-lifestyle may include a blend of agriculture, home sites and commercial/light industrial uses on the same parcel of land.

C. Promote the conservation of open space, preserve the quality of air and water, and protect other natural and scenic resources from unreasonable impairment.

- (1) The people who live in the Amargosa Valley value the natural environment, including the ability to view the stars against a dark sky. They desire to implement measures to protect against glaring, offensive and excessive light sources.
- (2) Recognize the importance of conserving and protecting water resources to ensure availability for future generations.
- (3) Establish scenic areas and scenic corridors to prohibit the construction of off-premise signs in order to protect views and vistas from sign clutter.
- (4) Establish billboard controls to protect the natural beauty, the environment, the views and vistas, and the character of our community.

D. Provide for recreational needs by enhancing local recreational opportunities.

Why is Amargosa Valley adopting this plan?

The residents of the Amargosa Valley have chosen to engage in long-range planning, in order to take control over their destiny rather than simply react to change. Community planning is the process of identifying issues and needs, strengths and weaknesses, and opportunities and constraints. It involves establishing goals, objectives, and implementation strategies in order to determine the most effective means by which the desired ends may be achieved. This plan focuses on actions and results versus complacency and inaction in coping with the unique challenges and opportunities facing the Amargosa Valley. The Area Plan helps residents:

- Prepare for the future.
- Accommodate the present.
- Anticipate change.
- Maximize community strengths.
- Secure a sense of community coordination.
- Deal with scarce resources.
- Build a sense of community.
- Provide for the health, safety and welfare of the community.

PLAN ORGANIZATION

Nevada Revised Statutes (NRS) Chapter 278, "Planning and Zoning," provides the structure upon which this Area Plan is based and defines the potential topics. NRS 278 specifically states that the plan must include charts, drawings, diagrams and schedules, as well as the written report. Based on population figures, the Amargosa Area is not required by the Nevada Revised Statutes to maintain long-range development plans; therefore, the community is free to choose which of the topics are of the utmost importance based on the challenges and opportunities that face Amargosa Valley. The Area Plan is comprised of the following land use elements as defined by NRS 278.160:

- Chapter Two addresses the history, natural setting, geography, and demographics of Amargosa Valley. The history of a community creates the environment that reflects the current quality of life. An understanding of the history is useful to understanding the vision, goals and ideals that guide that community's planning process.
- Chapter Three contains the Land Use Plan. The Land Use Plan addresses the current land usage within the community and the future desired uses, as defined by the community during its public planning process. The Land Use Plan provides an inventory and classification of types of land and of existing land cover and uses. The land use plan:

(1) Must address, if applicable:

- (i) Mixed-use development, transit-oriented development, master-planned communities and gaming enterprise districts; and
- (ii) The coordination and compatibility of land uses with any military installation in the city, county or region, taking into account the location, purpose and stated mission of the military installation.

(2) May include a provision concerning the acquisition and use of land that is under federal management within the city, county or region, including, without limitation, a plan or statement of policy prepared pursuant to NRS. 321.7355.

- Chapter Four contains the Streets and Highways Plan. This chapter describes the general locations and widths of a comprehensive system of major traffic thoroughfares and other traffic ways and of streets and the recommended treatment thereof, building line setbacks, and a system of naming or numbering streets and numbering houses, with recommendations concerning proposed changes.
- Chapter Five is the Public Facilities and Services Plan. It provides general locations of current and future civic centers, and all other public buildings, drainage, utilities and rights-of-way, easements and facilities, along with school facilities based upon information furnished by the appropriate local school district.
- Chapter Six addresses the Conservation and Natural Resources Plan. For the conservation, development and utilization of natural resources, including, without limitation, water and its hydraulic force, underground water, water supply, solar or wind energy, forests, soils, rivers and other waters, fisheries, wildlife, minerals and other natural resources. The plan must also cover the reclamation of land and waters, flood control, prevention and control of the pollution of streams and other waters, regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan, prevention, control and correction of the erosion of soils through proper clearing, grading and landscaping, and protection of watersheds. The plan must also indicate the maximum tolerable level of air pollution.



Alfalfa field in Amargosa Valley where agriculture is an important land use. Photo courtesy of TerraSpectra Geomatics.

CHAPTER TWO - HISTORY, DEMOGRAPHICS, AND NATURAL SETTING



Amargosa Station in 1906. Photo courtesy Central Nevada Historical Society.

HISTORY

In its earliest history, the Amargosa Valley was home to two large Native American cultural entities: the Southern Paiute and the Western Shoshone. Archaeological studies suggest that the groups lived in the region from 12,000 years ago to the immediate past. Both the Shoshone and Paiutes were extremely adept at extracting a living from their marginal environment, subsisting on wild plant foods supplemented by wild game. They moved about in extended family groups from base camps established near water, fuel, and food (EPA, 2001).

Amargosa Valley's water, and particularly Ash Meadows Springs, has historically drawn travelers crossing the arid west. Horse traders opened a trail through the Amargosa Valley in 1830. The first documented entry into the valley by non-native settlers came in 1849 when forty-niners, who became lost trying to find a shortcut to southern California, crossed the valley before wandering into Death Valley. In the 1870's, the Homestead Act of 1862, the Desert Land Entry Act of 1877, and the mining boom in the Death Valley area attracted more non-native settlers to the Amargosa Valley. In 1873, Charles King established a ranch in the Ash Meadows area, where he had 1,300 cattle grazing on the grasslands watered by the surface springs in the area. In 1874, the Lee brothers staked a claim near King's ranch and also established a herd of cattle. By the end of the 1870's, homesteaders had claimed most of the land that was watered by springs and seeps. The mining camps in the area provided the market for the vegetables and beef raised on these farms and ranches. When mining declined in the early 1880's, most of the homesteaders were forced to abandon their lands (EPA, 2001).

The next period of growth in Amargosa Valley occurred in the early 1900's, with the first community in the Amargosa Valley and the building of the railroads. Fairbanks Springs was founded in 1904, by Ralph Jacobus "Dad" Fairbanks in Ash Meadows. He and his family established a general merchandise store, livery stable, and freight yard (Hayes, 2005). In 1906 the Las Vegas and Tonopah (LV&T) line linked Las Vegas to Goldfield. Amargosa became the main shipping point for the communities of Johnnie and Greenwater, to the south. The Tonopah and Tidewater (T&T) railroad began in 1904 to service the borax, gold, silver and lead and other important mineral mining and processing operations in the surrounding region. The T&T railroad line ran between Ludlow, California and Gold Center (just north of present-day Beatty). The route followed the gorge of the Amargosa River along the southwest boundary of the Valley, and during the 1920's and 1930's, the T&T provided the primary transportation corridor for products moving into and out of the Amargosa Valley.

While agriculture continued in the Ash Meadows area, the Amargosa Valley to the northwest remained uncultivated until 1915 when officials of the T&T railroad proved the land was arable with irrigation. The area now known as the T&T Ranch was planted in gardens and orchards which helped to feed the workers housed on the ranch property. A number of wells were dug at depths of 72 to 88 feet, and crops including alfalfa, vegetables, grapes, fruits, and nuts were raised, and a small dairy herd was established (EPA, 2001).

Reductions in mining yields and low homestead claim filings resulted in a decline of the railroads. The LV&T line was abandoned in 1918. The T&T experienced increasing decline in the 1930's, and was shut down on June 14, 1940. By mid-1942, all of the T&T's rails and scrap iron had been salvaged in support of World War II. Only the concrete foundation of the station remains.

The late 1940's and early 1950's marked the next stage of settlement in the Amargosa Valley with the creation of the Nevada Test Site (NTS) and increased agriculture and ranching. With the many activities at the NTS, a number of engineers, scientists, and technicians, who were employed there, decided to settle in Amargosa Valley. Some of these workers and their families retired and continue to reside in the valley. It was also during this era that farming was once again introduced to the Amargosa Valley as people began taking advantage of the Desert Land Entry Act and Homestead Act as a means of acquiring land. These acts were available to people who were willing to develop water sources (wells) and farm the required acreage.

Agricultural development expanded in Amargosa Valley through the 1970's, including the Ash Meadows area. In 1976, a Supreme Court decision (Cappaert vs US) ruled that a minimum water level for Devils Hole would be maintained to protect the endangered Devils Hole pupfish (U.S. National Park Service, 2008), resulting in water pumping restrictions. In 1984 the U.S. Fish and Wildlife Service purchased over 12,600 acres and the associated water rights in Ash Meadows and permanently withdrew the land from development.

Since the early mining days, the Amargosa Valley has been the site of booms and busts related to mineral resource and NTS activity cycles. A recent cycle occurred in the early and mid-1980's, when the Tenneco Oil Company and later American Borate Company operated a mill site located at Stateline on Highway 373, to mill the colemanite that was mined in the Death Valley Area. Residential and commercial developments, including a new mobile home park, an apartment complex, and a shopping center were developed as the company expanded operations and workforce. In mid-1986 the company furloughed over 200 workers in response to competition from low-cost international producers. As foreign competition increased, the mine was phased out and the mill ceased operation in the late 1990's (Amargosa Valley Development Task Force, 1993).

In May, 1983 Amargosa Valley (formerly Lathrop Wells) was formed as an unincorporated township located in the southern portion of Nye County along the California state border. The Town of Amargosa Valley covers an area approximately 505 square miles (1308 km²), and is named for the Amargosa River. Amargosa means "bitter water" in Spanish (Map 1).

The town of Amargosa Valley is located approximately 88 miles northwest of Las Vegas, 35 miles northwest of Pahrump, 30 miles southeast of Beatty, and 7 miles north of Death Valley Junction, California. Amargosa Valley shares its boundary to the north with the Nevada Test Site, Nevada Test and Training Range (formerly Nellis Air Force Range) and the proposed Yucca Mountain nuclear waste repository.

CURRENT SOCIOECONOMICS AND DEMOGRAPHICS

Population

The Nevada State Demographer's Office (NSDO) is responsible for conducting annual population estimates for Nevada's counties, cities, and towns. Figure 1 shows the population changes and the per year growth rate for Amargosa Valley from 1996 to 2008 (NSDO, 2008a).

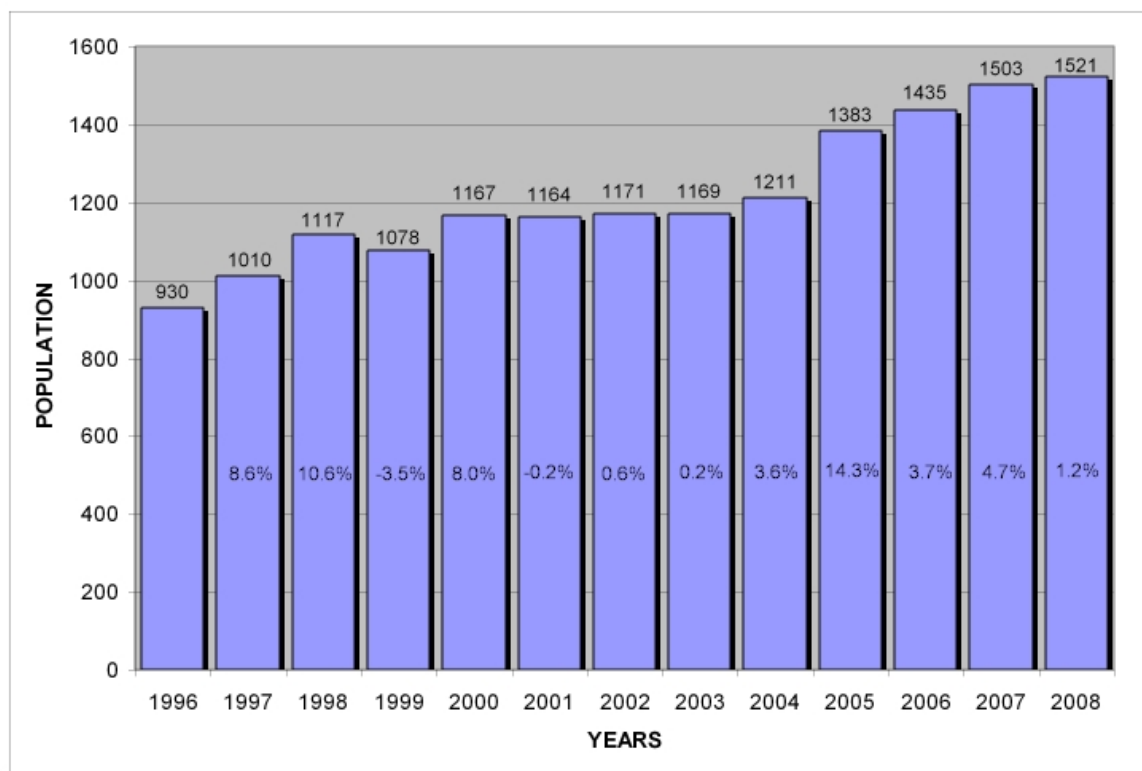


Figure 1. Amargosa Valley Population Estimates July 1996 - July 2008.

(Source: Nevada State Demographer's Office, 2008).

Since 1996, the population in Amargosa Valley has increased from 930 to 1,521 people, at an average annual rate of nearly 4% per year. With steady population growth, barely-regulated land divisions have become problematic. Land developers, through filing a series of parcel maps one

after the other, have begun to divide large tracts of land without providing needed infrastructure such as: improved roads, flood control, parks, open spaces or school sites. This growth and the possibility of the Department of Energy siting the Yucca Mountain Project, a geologic repository for high-level spent nuclear fuel, is placing pressure on Nye County and the Town of Amargosa to provide adequate services as the community grows while safeguarding the health, safety and welfare of the residents of the Amargosa Valley.

Factors such as availability of water resources, larger-lots and very-low density development, and lack of public water and sewer infrastructure are expected to play a significant role in limiting the development potential of the valley. Economic projections by the NSDO for Nye County suggest the recent economic challenges may also impact growth in the near term (NSDO, 2008b)

Demographics

The U.S. Census has no specific designation for Amargosa Valley as a town; census data for only those households that occur within the town boundary are not readily available. 2000 Census data for Amargosa Valley was extracted by zip code (89020). Figure 2 shows the zip code boundary overlain by the Amargosa Valley town boundary.



Results from the 2000 Census (Summary File 1 or SF1) demographic data are presented in the following tables and graphics. These data show the distribution of age, ethnicity, households, and occupancy in Amargosa Valley in 2000.

Table 1 lists the population of Amargosa Valley by age group, with a total population of 1,176. These data are also presented in Figure 3.

Figure 2. Amargosa Valley Zip Code Boundary.

Table 1. Amargosa Valley Population by Age. (Source: US Census 2000, SF-1)

| AGE | NUMBER | PERCENT |
|-------------------|--------|---------|
| Under 5 years | 110 | 9.4 |
| 5 to 9 years | 89 | 7.6 |
| 10 to 14 years | 84 | 7.1 |
| 15 to 19 years | 99 | 8.4 |
| 20 to 24 years | 77 | 6.5 |
| 25 to 34 years | 125 | 10.6 |
| 35 to 44 years | 167 | 14.2 |
| 45 to 54 years | 173 | 14.7 |
| 55 to 59 years | 59 | 5 |
| 60 to 64 years | 87 | 7.4 |
| 65 to 74 years | 74 | 6.3 |
| 75 to 84 years | 26 | 2.2 |
| 85 years and over | 6 | 0.5 |

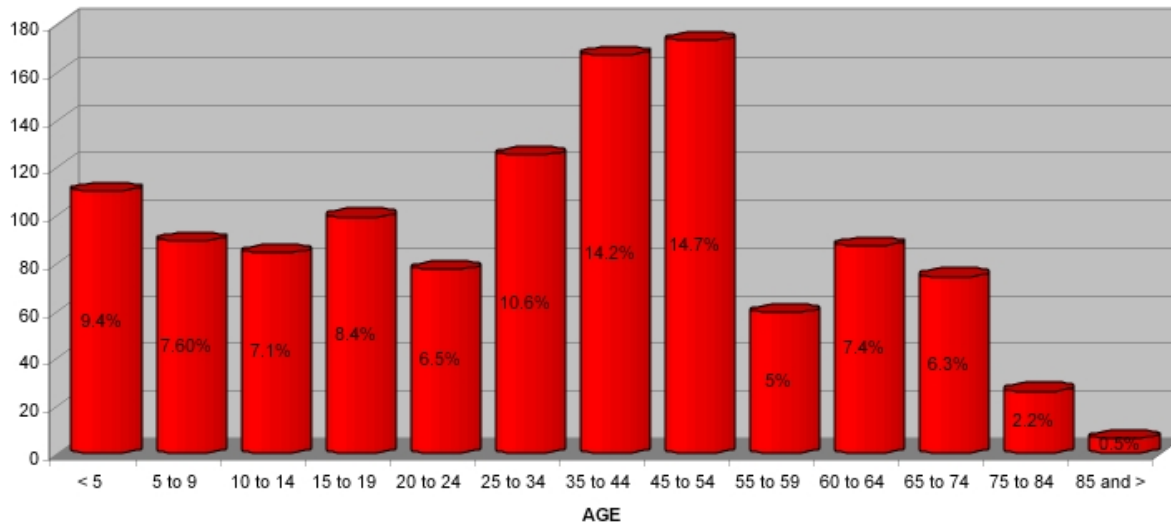


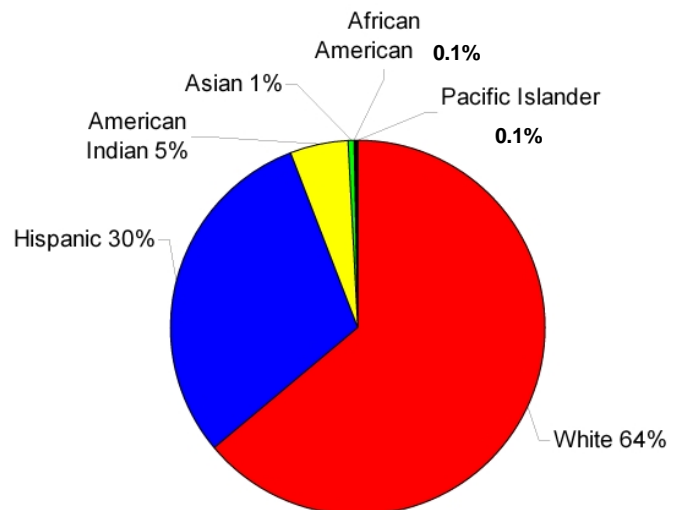
Figure 3. Population by Age Group.

(Source: US Census 2000, SF-1)

| ETHNICITY | NUMBER | PERCENT |
|------------------|--------|---------|
| White | 753 | 64% |
| Hispanic | 360 | 30% |
| American Indian | 58 | 5% |
| Asian | 8 | 1% |
| African American | 1 | 0.1% |
| Pacific Islander | 1 | 0.1% |

(Source: US Census 2000, SF-1).

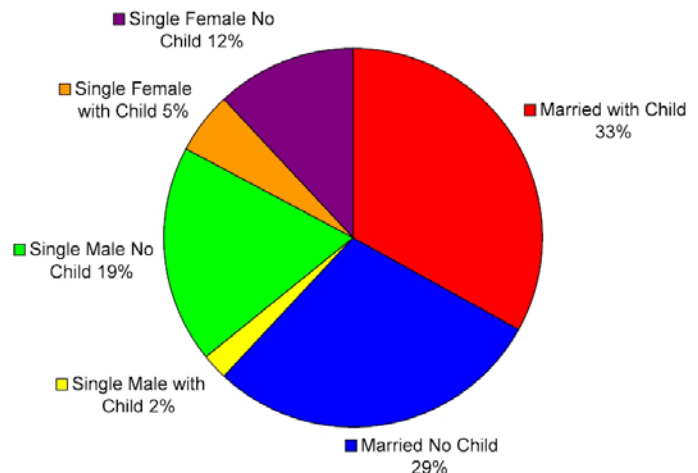
Figure 4. Population by Ethnicity.



| HOUSEHOLDS | NUMBER |
|--|--------|
| Married-couple family – with children under 18 | 127 |
| Married –couple family – no children | 112 |
| Single male – with children under 18 | 8 |
| Single Male – no children | 72 |
| Single Female – with children under 18 | 20 |
| Single Female – no children | 46 |

(Source: US Census 2000, SF-1)

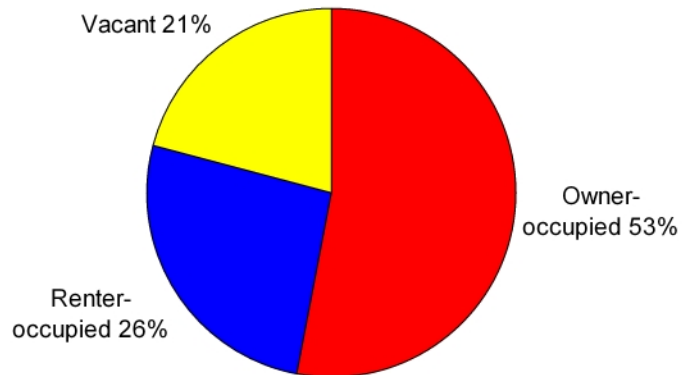
Figure 5. Households by Type.



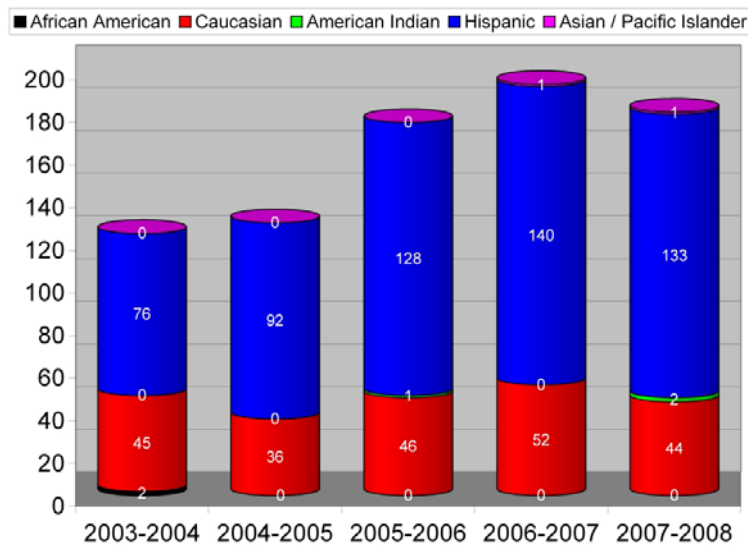
| OCCUPANCY | NUMBER |
|-----------------|--------|
| Owner-occupied | 287 |
| Renter-occupied | 142 |
| Vacant | 112 |

(Source: US Census 2000, SF-1)

Figure 6. Housing Occupancy and Tenure.



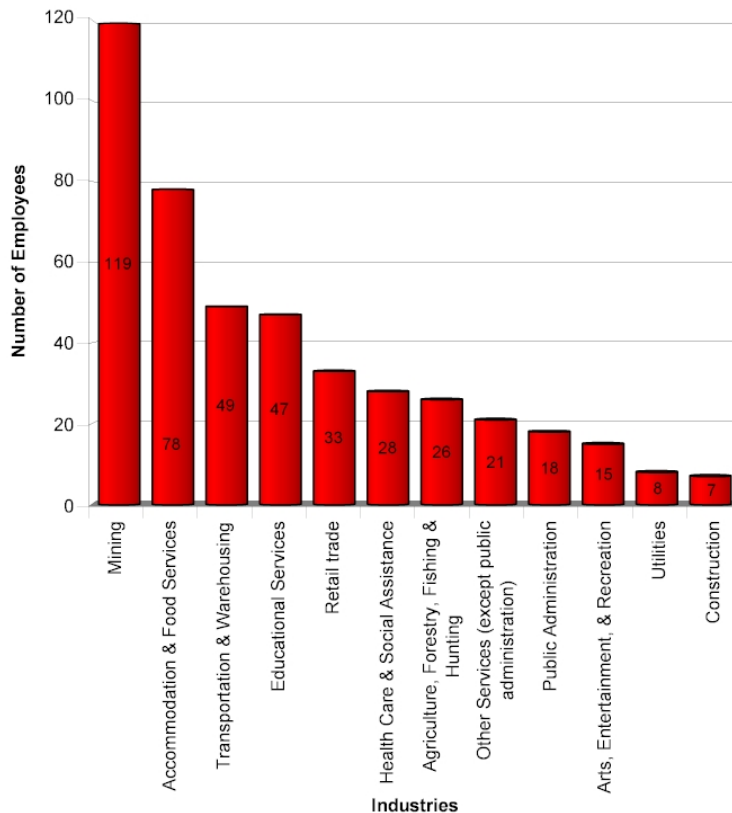
The State of Nevada's Department of Education publishes annual reports of accountability, which includes demographic profiles for each school. Figure 7 below presents the compiled results for Amargosa Valley School's Demographic Profile - Ethnicity for years 2003 – 2008 (Nevada Department of Education, 2009). The graph indicates there has been a gradual increase in enrollment, and that the number of Hispanic students has been increasing since the 2003, and the number of Caucasian students has remained fairly constant.



(Source: Nevada Department of Education, 2009).

Figure 7. Amargosa Valley School's Demographic Profile - Ethnicity for Years 2003 - 2008.

Amargosa Valley seeks to maintain a slow but steady growth rate which will accommodate residents of all ages, while preserving the community's character now and into the future. Although Amargosa Valley is comprised of a relatively small population, spread across a wide geographic area, the variety of recreational, social and community activities provides opportunities for all to participate in the community.



Economic Conditions

Amargosa Valley's economy has historically been tied to the industries of mining, ranching and farming, and the government sector.

The workforce in Amargosa Valley was estimated at 449 persons during the 2000 Census. The primary economic sectors, in terms of employment, were service industries with about 68% of the workforce, mining with about 27%, and agriculture at about 6%. Figure 8 presents 2008 Census data within the Amargosa Valley zip code 89020 for employment by industry using Census 2000 Summary File 3 (SF-3) sample data. Service industries are broken into 10 primary service types.

Figure 8. Amargosa Valley Employment by Industry. (Source: US Census 2000, SF-3).

Mining

An abundance of minerals has played an important role in Amargosa Valley's history and economy. Three of the town's mining company employers are: 1) IMV Nevada, owned by Mud Camp Mining Company, LLC, which mines and produces specialty clays (sepiolite, saponite, and bentonite) from deposits in lacustrine sediments in Amargosa Valley. The clays are processed at a plant in Amargosa Valley and are exported worldwide; 2) Ash Meadows Zeolite LLC, owned by

Zeox Mineral Materials Corp., ships clinoptilolite from a plant in Amargosa Valley. Clinoptilolite is used in water filtration, odor control, and nuclear clean-up; and 3) Cind-R-Lite Block Company, which produces lightweight aggregate from a cinder operation at Lathrop Cone (NBMG, 2007).



IMV Nevada. Photo courtesy Mike Visher, Nevada Division of Minerals.

Services

In 1996, Jim Marsh developed the Longstreet Inn and Casino, a 60 room hotel and casino with a 50 space RV park, restaurants and a bar, conference center, and a 9-hole golf course. The Horizon Academy, a boarding school for at-risk teenagers, opened in the early 2000's, providing additional employment for the area. In 2007, the First International Bank of Texas opened its first Nevada branch in Amargosa Valley, providing the first local banking service in about 50 years. Other various small businesses and industries are scattered around the Valley.



Longstreet Inn and Casino. Photo courtesy of Longstreet Inn and Casino.

Commercial development at the intersection of US95 and Hwy 373 includes: two truck stops, a brothel, an RV/trailer park, a fireworks plant, and a materials lay-down yard leased by the Nye County Nuclear Waste Repository Project Office.

Agriculture

Amargosa Valley has had a long history of agricultural development. Today, agricultural lands in Amargosa Valley are generally operated on a part-time basis with occupants relying on other employment as a primary source of income. Data from the 2000 Census indicates there were twenty-six employees involved in agriculture. The principal crop is alfalfa; the valley's growing season allows for up to seven cuttings of alfalfa per year. Other potential cash crops include: tomatoes, onions, garlic, melons, nuts (particularly pistachios), lettuce, grapes, sod, tree farms, potted plants, and ornamental flowers (Amargosa Valley Economic Development Task Force, 1993).



Irrigated alfalfa field. Photo courtesy Nevada Agricultural Foundation.

One of the principal markets for the alfalfa produced in the valley is the Rockview Dairies. In the mid-1990's, Rockview Dairies built their first concentrated animal dairy in Amargosa Valley, enlarging their facilities to the current three. Other livestock production the Amargosa Valley has included cattle, goats, and show animals. Small-scale agri-related businesses include beekeeping, vineyards, nut orchards, tree farms, catfish, and lobster farming.

Federal Facilities

Approximately 92% of the land in Amargosa Valley is public land; state and federal agencies are charged with its management. Only about 8% of the land in Amargosa Valley is private. The Nevada Test Site, Nevada Test and Training Range, and the proposed Yucca Mountain Nuclear Waste Repository are important federal facilities due to their close proximity to Amargosa Valley, with shared boundaries on the northern portion of the town.



Yucca Mountain North Portal Area. Photo courtesy DOE.

Yucca Mountain Project (YMP)

An unknown factor in Amargosa Valley's future growth will likely be its close proximity to the planned Yucca Mountain Project (YMP), a U.S. Department of Energy (DOE) facility on federal land, designed for the storage of high-level nuclear waste. The facility, if completed, is not expected to accept its first shipments of radioactive materials before 2020. The facility's main entrance would be located at Gate 510, approximately fourteen miles south of the repository storage tunnels.



Yucca Mountain Crest. Photo courtesy DOE.

The YMP is of special interest to residents of the Amargosa Valley. It is a Federal project on Federal land, being proposed for high-level radioactive waste storage and disposal. Residents of Amargosa Valley will not be able to make decisions on the YMP directly; however, Nye County has documented concerns regarding the proposed repository in formal written comments to the DOE. If the YMP opens, there will undoubtedly be increased traffic and more jobs for local residents. With limited housing, infrastructure and public services, it may be challenging for Nye County to absorb the impacts without a cooperative agreement with DOE for mutual aid and support. As noted in the Final Environmental Impact Statement, impacts on public services such as education and public safety could require mitigation.

In order to offset the anticipated impacts associated with any increase in YMP-related activities, Nye County has developed the Yucca Mountain Project Gateway Area Concept Plan (Giampaoli, 2007) to ensure that land development in the vicinity of YMP entrance off of US95 occurs in an orderly and consistent manner, while increasing economic development opportunities for industrial and commercial development in that area. The YMP Gateway Area Concept Plan encompasses approximately nine square miles, south of the gate 510 entrance to the Nevada Test Site (NTS) and is located entirely within the Town of Amargosa Valley. A primary objective of the Concept Plan is to demonstrate that Nye County and its communities are prepared to engage DOE, and other federal agencies doing business in Nye County, to establish a sustainable live-work community environment that will be attractive to federal agency and contractor workers in the short-term and for many years to come.

To this end, this Concept Plan addresses land use planning for the entrance area to the YMP that describes general reception and visitor areas, parking facilities, and service hubs for work related activities including contractor and material staging areas, emergency services, medical treatment, a transportation base to interior locations, and a general receiving area for vendors. Additionally, scientific research facilities, a museum and a renewable energy park are envisioned, as well as short-term residential facilities for YMP employees and visitors. The Area Plan has incorporated the YMP Gateway Area Concept Plan as a Special Development Area.

The Concept Plan's land use plan, goals, policies, objectives and Architectural and Landscape Design standards are proposed for adoption in its entirety into the Area Plan. The following page shows the Gateway Concept land use plan.

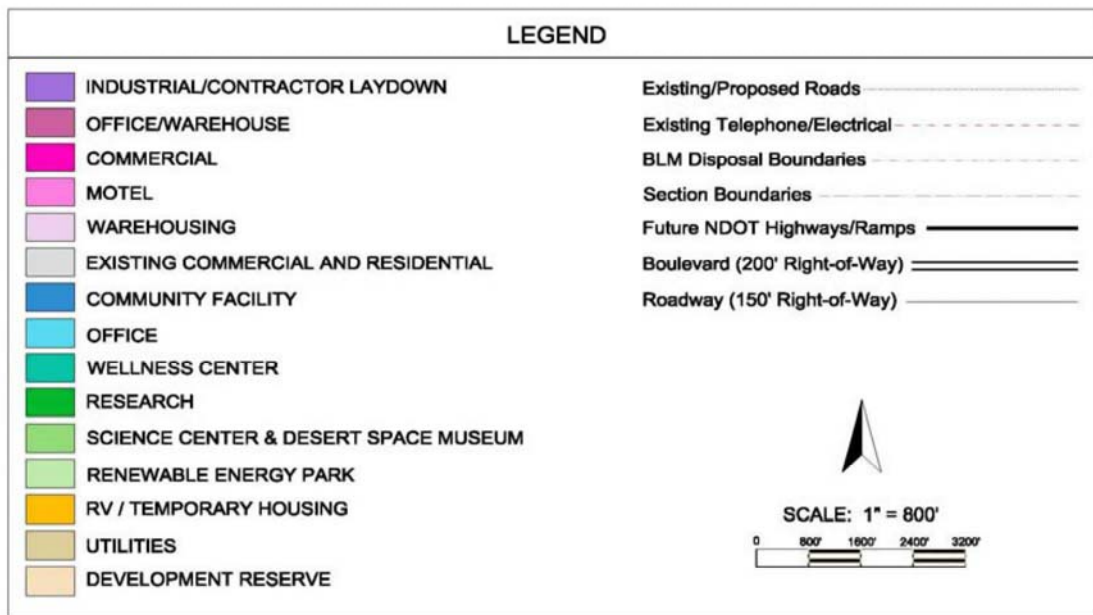
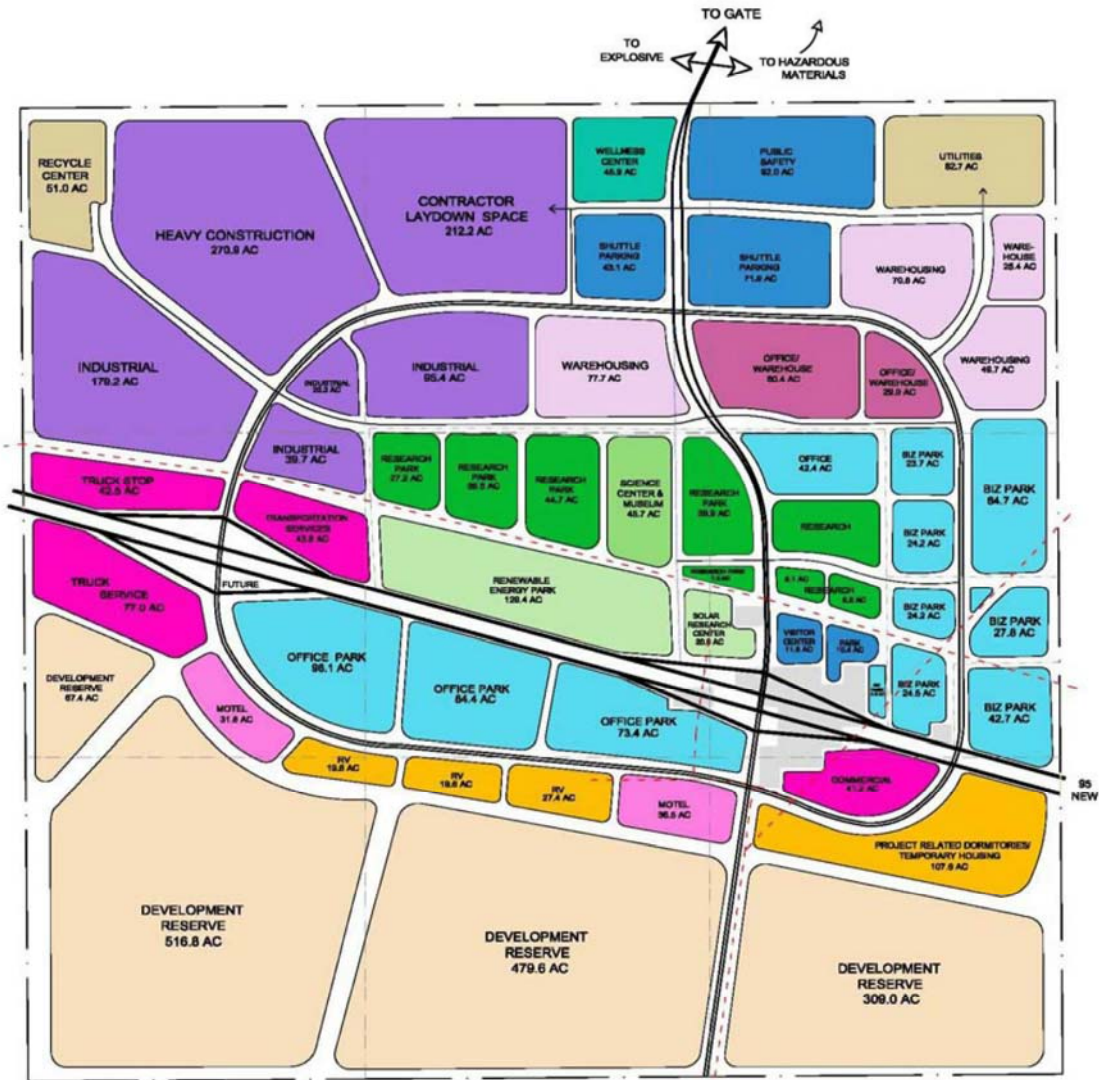


Figure 9. Yucca Mountain Project Gateway Area Concept Land Use Plan

Science and Technology Park in Amargosa Valley

In November 1999, Congress enacted Public Law 106-113. Section 132 afforded Nye County the exclusive right to purchase 354 acres within the YMP entrance area at fair market value for commercial purposes. In 2002, Nye County purchased and began development of the first 61-acres to establish the Amargosa Valley Science and Technology Park (AVSTP). Phase I includes installation of gravel roads, water tanks and a water main. The county is currently completing development of the first phase and may purchase the remaining approximately 293 acres.



*Amargosa Science and Technology Park.
Photo courtesy Pahrump Valley Times.*

YMP Repository Rail Spur

Two Nevada rail corridors are under study by the DOE for the YMP: The Caliente Corridor and the Mina Corridor. If a new rail is constructed, the planned AVSTP and existing industries in Amargosa Valley could benefit. Such businesses in Amargosa Valley include: Cind-R-Lite, Ponderosa Dairy, Ash Meadows, and IMV Nevada (NWRPO, 2007).

Tourism and Recreation

Amargosa Valley is favorably situated to take advantage of tourism and recreation development. Amargosa Valley hosts a portion of the Death Valley National Park and the Ash Meadows National Wildlife Refuge. There are 3 Areas of Critical Environmental Concern (ACEC) in Amargosa Valley. Big Dune ACEC – the sand dunes in this area provide unique biological habitat that support some rare insects. Ash Meadows ACEC and Amargosa Mesquite ACEC are 2 areas that contain several unique biological habitats that support rare fish, including the Ash Meadows pupfish, and rare bird and plant species. There is 1 Wilderness Study Area (WSA) listed by the Bureau of Land Management in Amargosa Valley: Resting Springs WSA.

Ash Meadows National Wildlife Refuge

Ash Meadows National Wildlife Refuge (NWR) is located in Amargosa Valley just 3 miles east of Nevada Highway 373, encompassing 23,000 acres of spring-fed wetlands and alkaline desert uplands that are managed by the U.S. Fish and Wildlife Service. The Refuge is a major discharge point for a vast underground aquifer system where the water-bearing strata comes to the surface in more than 30 seeps and springs, providing a rich and complex variety of habitats. Over 10,000 gallons per minute flow year round, primarily from 7 springs: Fairbanks, Rogers, Longstreet, Crystal, Point of Rocks, Jackrabbit, and Big Springs.

The refuge provides habitat for at least 24 plants and animals found nowhere else in the world. Four endangered fish species found on the refuge are: the Devils Hole Pupfish, Ash Meadows Amargosa Pupfish, Amargosa Pupfish and Ash Meadows Speckled Dace. One aquatic beetle (the Ash Meadows naucorid), and 1 plant (the Amargosa niterwort) are currently listed as endangered species.



Recently restored, Jack Longstreet's cabin sits adjacent to the spring that bears his name at Ash Meadows NWR. Photo courtesy US Fish and Wildlife Service.

Mesquite and ash groves flourish near wetlands and stream channels. Saltbush dominates large portions of the Ash Meadows NWR in dry areas adjacent to wetlands. Creosote (shrub) habitat occurs in the drier elevated areas along the east and southeastern portions of the refuge and 8 species of cacti occur scattered throughout. The concentration of indigenous life distinguishes Ash Meadows NWR as having a greater concentration of endemic life than any other local area in the United States and the second greatest in all of North America.

Ash Meadows was intensively farmed prior to its establishment as a National Wildlife Refuge. The Carson Slough, an area in the northwestern portion of the refuge which was historically the largest wetland in southern Nevada, was drained and mined for its peat in the 1960's. The refuge is currently in the habitat restoration stage. Numerous recreational opportunities are available at Ash Meadows NWR. Wildlife observation, hiking trails, picnicking, and bird watching are popular activities (USFWS, 2008).

Devils Hole

Once known as Miners Bathtub, Devils Hole is a detached unit of Death Valley National Park and is a habitat for the only naturally occurring population of the endangered Devils Hole pupfish (*Cyprinodon diabolis*). The 40 acre unit is a part of the Ash Meadows complex, an area of desert uplands and spring fed oases that was designated a national wildlife refuge in 1984.

Devils Hole is a surface fracture creating a limestone cave filled with water of approximately 30°C (86°F). The cavern is over 500 feet deep and the bottom has never been mapped. The surface area of the water is approximately 6 feet by 18 feet. According to geologists, the caves are assumed to have formed about 500,000 years ago (NPS, 2008).



Devils Hole. Photo courtesy National Park Service.

Big Dune

Big Dune is a formation of sand dunes, cresting approximately 300 feet above the surrounding terrain. The dune formation and surrounding land is administered by the Bureau of Land Management (BLM). Amargosa Dunes are home to the Big Dune Beetle (*Pseudocotalpa giulianii*) and three other sensitive beetle species: Large Aegialian Scarab Beetle (*Aegialia magnifica*); Rulien's miloderes weevil (*Miloderes rulieni*); and, Big Dune aphodius scarab beetle (*Aphodius* sp.). The entire dune is protected as a BLM designated Area of Critical Environmental Concern (ACEC). Within the ACEC, a five-acre area on the east side of the dunes has been set aside specifically for protection of these species (BLM, 2004).



Big Dune. Photo courtesy the Town of Amargosa Valley.

Big Dune has been a draw to off-road enthusiasts, both local and out of town, for many years. It is one of only a handful of "singing dunes" in the country.

Amargosa Valley, perhaps more than any other region in the West, remains close to the American frontier. In a real sense, a significant part of the frontier can still be found there. It exists in the attitudes, values, lifestyles and memories of the area residents. The frontier-like character of the area also is visible in the relatively undisturbed condition of the natural environment, most of it untouched by humans.

NATURAL SETTING

The name "Amargosa Valley" is used locally, although the broad valley in which the town resides is officially labeled on USGS topographic maps as the "Amargosa Desert." This valley lies within the basin and range physiographic province, which is characterized by a series of mountain ranges, generally trending north and northwest, separated by valleys and basins. The Amargosa Valley is at an elevation of about 2,640 feet (805 m) above sea level.

The landscape is typical of lower to moderate elevations in the North Mojave Desert, with large flat expanses of open desert range, including some large playas. Once a part of an ancient interior sea, the Mojave Desert was formed by volcanic action (lava surfaces with cinder cones are present) and by material deposited by the Colorado River. Minerals found in the desert include borax and other salines, gold, silver, and iron.



Extent of the Mojave Desert Ecosystem.

CLIMATE

Amargosa Valley is known for its "Champagne Air and Million Dollar Sunsets", reflecting the clear air and natural beauty of this desert community. Amargosa Valley experiences a climate typical of the "basin and range" topography found in the Great Basin. It is a dry desert valley with temperatures ranging from nearly freezing in the winter to the 100's in the summer. Annual precipitation typically has a bi-modal pattern, with most precipitation occurring during a winter rainy season or during the late summer months. Table 2 shows the high and low temperature, precipitation, and wind for reporting stations in Amargosa Valley and Crystal averaged over the period from 2004-2006.

Table 2. Temperature, Precipitation and Wind 3-Year Average (2004 - 2006).

| 3-Yr Average (2004-2006) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Avg. Hi Temp | 60.1 | 61.8 | 69.7 | 76.2 | 88.7 | 97.0 | 104.4 | 99.5 | 91.5 | 74.8 | 68.5 | 59.7 |
| Avg. Lo Temp | 34.2 | 36.9 | 42.3 | 47.4 | 58.2 | 65.7 | 74.9 | 70.2 | 60.0 | 50.5 | 40.3 | 32.5 |
| Max Temp | 78 | 80 | 92 | 93 | 100 | 110 | 114 | 110 | 105 | 93 | 84 | 75 |
| Min Temp | 21 | 20 | 26 | 33 | 46 | 49 | 61 | 60 | 47 | 36 | 21 | 19 |
| Avg. Rain | 0.63 | 1.46 | 0.58 | 0.12 | 0.00 | 0.04 | 0.14 | 0.51 | 0.40 | 0.57 | 0.40 | 0.39 |
| Wind Min/Max | 1.8 / 39.5 | 2.3 / 33.0 | 2.7 / 40.4 | 3.0 / 38.9 | 3.1 / 44.7 | 3.0 / 39.3 | 3.5 / 37.4 | 2.2 / 33.5 | 2.2 / 36.3 | 2.1 / 35.6 | 1.8 / 34.8 | 1.5 / 36.1 |

Information compiled by A.J. Griffin

With its mild winters, Amargosa Valley is a favorite for “snow birds” who like a rural lifestyle. The area also enjoys an average of about 300 sunny days annually, which contributes to a growing season that is almost 200 days, and is an important suitability factor for solar power applications. The minimum acceptable average wind speed for grid quality wind power is about 11 mph; winds in the Amargosa Valley average about 14 mph making it a potential wind resource area.

HYDROLOGY

Ground Water Resources

Amargosa Valley is part of the Death Valley flow system, and falls within the Amargosa Desert hydrographic basin. In Amargosa Valley, water is supplied by wells into the alluvial aquifer. Primary uses are domestic, agricultural, mining, recreation, and industrial. Most residences are supplied by individual wells, though some trailer parks, public facilities, and commercial establishments are served by small private water companies. Farming, including the Rockview Dairy's operations, uses the largest amount of water in the community.

Surface Water Resources

Although Amargosa Valley has no major lakes or rivers, there are important surface water resources. The Amargosa River, a desert river, crosses Amargosa Valley from northwest to southeast and flows aboveground only when rainfalls flood the desert washes. The Amargosa River originates in the mountains surrounding Beatty, flows through the Amargosa Desert region, and terminates at Bad Water in Death Valley National Park. Most of the river course from Beatty to Bad Water is underground, but about seventeen miles of surface flow exists in the areas of Beatty, Shoshone, Tecopa, and the Amargosa Canyon.

Flood zones are determined by soils, slope, drainage area, and amount and intensity of precipitation. Flood Rate Insurance Maps prepared for the Federal Emergency Management Agency (FEMA), identify floodprone areas for flood insurance purposes. Within the Amargosa Valley there are several areas mapped, including the Amargosa River.

The most significant springs in Nye County are located at Ash Meadows National Wildlife Refuge (NWR). More than thirty springs and seeps discharge to the land surface at the refuge (EDEN, 2007). Adjacent to Ash Meadows NWR is Devils Hole, a spring pool that is part of Death Valley National Park. Devils Hole is essentially the surface expression of a cavern system in the limestone rocks of the area, which is habitat for the Devils Hole pupfish. On June 7, 1976, the U.S. Supreme Court ruled that state-permitted water withdrawals in the vicinity of Devils Hole must be limited to maintain water levels at Devils Hole. Because of the Supreme Court ruling and subsequent National Park Service actions, it is no longer feasible to obtain and develop new water rights for lands in the vicinity of Devils Hole (Buqo, 2002).

FLORA AND FAUNA

Amargosa Valley is home to a large variety of plants and animals, some of which are on the endangered species list. Ash Meadows NWR and Devils Hole also include the primary wetlands of importance in Nye County (EDEN, 2007).

Amargosa Valley provides habitat for desert tortoise, desert bighorn sheep, wild horses and burros, and raptors, including golden eagles and prairie falcons.

Predominant indigenous vegetation is sage, creosote bush, with some Barrel, Teddy Bear and Yucca cacti at higher elevations. Numerous non-native plant species have also been introduced.



Creosote. Photo courtesy TerraSpectra Geomatics.

ENVIRONMENTAL CONSTRAINTS

Amargosa Valley residents are concerned with the environment, protecting fragile resource areas and avoiding development in known hazardous areas. There are a number of natural constraints that should be considered whenever new development is proposed. Some are hazardous while others can be characterized as resources, contributing to the desirable character or setting of the community.

Natural constraints include flooding, soil characteristics, unstable earth due to slopes, and high water tables, and availability of water resources. Significant resources that contribute to the physical and community character include unique geological formations, wetlands and wildlife habitat, and agricultural lands.



Alfalfa field in Amargosa Valley. Photo courtesy of TerraSpectra Geomatics.

CHAPTER THREE - LAND USE PLAN



Rural setting in Amargosa Valley. Photo courtesy of TerraSpectra Geomatics.

LAND USE PLAN

The pattern of development is important to any community and the land use element is a key component of the Area Plan. The Amargosa Valley has the opportunity to plan for development as it sees fit to ensure improved quality of life for current and future residents. Unregulated growth and development can destroy the peace, community cohesiveness, clear night skies, and the rural atmosphere that the community so highly values. Area residents understand that ordinances and resolutions would be required to be adopted in order to achieve the community vision. However, the community expresses a strong desire to implement minimal regulations in order to achieve the vision.

The land use element of a plan is typically the most recognized portion of any planning effort, and in many ways it is the foundation from which the other elements evolve. Transportation patterns, infrastructure, public services and facilities all adjust to address the needs of land uses such as residential, agriculture, commercial or industrial.

This section of the plan is intended to provide goals, objectives, and implementation strategies in order to guide growth in a manner that is fiscally responsible and consistent with the vision of the community.

KEY LAND USE ISSUES

- Create a sense of community identity.
- Protect the small town charm of the Amargosa Valley.
- Protect the night skies.
- Ensure quality development through standards, incentives, and ordinances that will allow the community to grow at a modest pace while enabling the residents to maintain their rural lifestyle.
- Develop appropriate opportunities to grow, expand the tax base and local job opportunities.
- Develop trail and open space opportunities through the use of floodplains, easements and rights-of-ways.
- Provide for local emergency health care facilities and satellite sheriff and fire protection throughout the community.
- Manage growth in a manner that allows services and facilities to keep pace with development and enables the community to maintain the characteristics that make it a desirable location to live, work and raise a family.
- Incorporate other planning efforts, such as the Science and Technology Park and the Yucca Mountain Gateway Development Plan.
- Improve the variety of commercial establishments in the community and ensure their appropriate location.
- Develop water resources and well-head protections.

EXISTING LAND USES

Existing land use information is essential to understanding current development patterns. The existing land use information for the Area Plan was supported by the baseline data gathered in early 2007 by a team of local individuals. Through a series of windshield surveys and interviews with the Amargosa Valley residents, they gathered parcel-by-parcel information on the community. Coupled with the Nye County Assessor's land use records as of March 2008, the information was entered into the Nye County geographic information system on a parcel basis, then used for statistical analysis and mapping. Existing Land Use in the Town of Amargosa Valley is shown on Map 3.

Present-day Amargosa Valley's development patterns are not typical of Spanish colonial settlements, a gridiron or railroad town, nor of a Mormon settlement. In this very rural area, the pattern of development throughout the Amargosa Valley has spread out across numerous sections of land creating a very-low density pattern with agricultural and commercial uses dotted between sparse developments of large-lot residential.

Residences, businesses, and public facilities are clustered in several separate locations throughout the townsite. These include the highway commercial center at Amargosa Valley (at the junction of US 95 and Hwy 373); the commercial and residential area at the state line (on Hwy 373 at the California border); and the Amargosa Valley Community Complex, which includes the community center and town offices, the emergency services center and sheriff's substation, a town library, the health clinic, and the Amargosa Valley School. The majority of land development evolved around

agricultural uses, and commercial activity evolved around the main roads through the valley. As a result, residential properties are surrounded by open expanses of green landscape scattered throughout the area (Amargosa Valley Development Task Force, 1993).

Although there are 7 private water systems throughout the valley and only 4 communal sewer systems established for localized uses, the town does not forecast expansion of these systems to serve the broader community.

AREA PLAN LAND USE CLASSIFICATIONS

In order to translate the goals, objectives, and policies of the Area Plan into map form, a set of land-use designations were developed by area residents to serve as a guide for mapping the general land use categories of the Amargosa Valley. Determining the land use designation for any area is generally based on multiple criteria, which may include:

- Existing patterns of development when compatible with goals, objectives, and policies of the Area Plan.
- Accessibility/circulation.
- Availability of public services and facilities and the potential for their expansion or extension.
- Geophysical characteristics of the area such as slope, wetland or flood prone designation, soils, geology, vegetative cover, and biological significance.
- Existing parcel size.
- To encourage buffering of certain uses from other, incompatible uses.

The following land use designations and descriptions are summarized below as used within the Area Plan, and are shown on Map 4 "Future Land Use."

RURAL ACTIVITY CENTER

RAC

Purpose: A broad category intended to encompass a wide variety of commercial, professional, office, civic, multiple and single-family residential activities, including home-based businesses in a variety of locations throughout the community, particularly where goods/personal services, civic and residential uses can be located at major intersections providing convenient community services for rural residents. The Rural Activity Center designation is the most intensive non-industrial land use classification within the Area Plan.

Objective: To minimize the vehicle travel for goods and services between communities while providing necessary business and services to meet the day-to-day needs of the community.

RURAL CROSSROADS

RCR

Purpose: To designate areas at major rural roadway intersections for the provision of limited commercial, office and single-family residential activities, including home-based businesses and services.

Objective: To minimize the vehicle travel for goods and services between the major activity centers in order to provide necessary business and services to meet the day-to-day needs of the community.

RURAL DENSITY RESIDENTIAL (5 acre gross minimum lot size)

RDR

Purpose: To designate areas for the lowest density residential-type of uses, creating very large rural-residential parcels in the valley where improved access is limited and/or areas that are mapped as a potential flood hazard area. This category includes smaller-scale farming/ranching operations at very low rural densities consistent with rural characteristics. The RDR designation should be applied to provide appropriate transitions/buffering between differing land use intensities with varying acreages being applied as appropriate.

Objective: Large to very large residential lots with wide open spaces and ample separation between neighboring uses designed to accommodate the “American West” lifestyle combining agricultural, farming and ranching, and residential uses. Business activities may function at levels significantly greater than a home-based business such that the residential use may be considered to be secondary or accessory to the commercial activity taking place on the same property.

LOW DENSITY RESIDENTIAL (2 acre gross minimum lot size)

LDR

Purpose: To designate residential lots intended for single-family residential development in areas where there is improved access. The LDR designation should be applied to provide appropriate transitions/buffers between differing residential land use intensities.

Objective: Two-acre minimum lot sizes established for residential uses allowing the care and keeping of livestock and business opportunities that do not change the residential character of the property.

HIGH DENSITY RESIDENTIAL

HDR

(¼ acre net minimum lot sizes for single-family residential development; Up to 6 dwelling units per acre for multiple-family dwelling units and manufactured home parks)

Purpose: To designate areas for high density residential-type of uses such as multi-family units, special housing needs (i.e., elderly, low income and manufactured home parks) where infrastructure and community services are or will be made available to support the increased residential density without impairment to available services or resources.

Objective: To establish areas providing housing opportunities to individuals and families in the community, regardless of income level. Special attention shall be given to site design in order to assure compatibility with any adjacent lower-intensity designated areas.

RURAL INDUSTRIAL

RUI

Purpose: To designate adequate areas in the community for business expansion and development serving manufacturing processing industries, including mining and mining-related activities. The RUI designation should be applied in areas where existing industrial activities and uses occur that are generally incompatible with low and high density residential uses.

Objective: To establish land for industrial development focusing on agricultural-related processing facilities or concentrated feed lots and dairies, mining related and green industries that will provide expanded economic opportunities for the community without impairment to the limited natural resources, particularly water.

OPEN SPACE, PARKS AND TRAILS

OST

Purpose: To identify areas for public open spaces in order to achieve the plan's objectives regarding environmental quality, open spaces, recreational opportunities, habitat conservation and preservation of cultural heritage.

Objective: To promote an interconnected regional open space network of parks, trails, desert belts and other open spaces.

COMMUNITY DEVELOPMENT RESERVE

CDR

Purpose: To guide development and use of the public lands that are managed by the BLM and may or may not be released for public ownership in the future. The lands covered by the CDR designation should be focused on flood control facilities, necessary public rights-of-way, resource production, and economic development opportunities. If released for private purposes, use of the land may require an amendment to the Area Plan.

Objective: Community Development Reserve lands can serve a variety of purposes and does not necessarily connote 1) non-use or severely restricted use, or 2) guaranteed public access. The lands can be used as the focal point of the community in the form of regional parks and trails or as a means of preserving the views and vistas of the area. CDR land may also be designated and set aside for natural resource production, flood control, easements, and rights-of-way.

SPECIAL DEVELOPMENT AREA

SDA

Purpose: To set aside public or private areas of special interest that would be subject to a specific plan of development or a Development Agreement in accordance with Nye County Code Title 16.32. SDA is a mixed-use designation and a variety of land uses might be proposed for approval, such as the Yucca Mountain Project Gateway Area Concept Plan, and projects under review by the Bureau of Land Management, such as the Solar Energy Facilities.

A property owner/developer must provide a specific plan of development for the subject property and obtain recommendations from the Planning Committee and the Town Advisory Board prior to Nye County Commission approval. Therefore, any zoning district may be considered appropriate and in conformance with the SDA designation based on a plan of development that ensures mitigation of incompatible uses, proper buffering, implements resource conservation, appropriate building form in context and design and provides integrated use of open spaces.

Objective: To allow for creative and balanced developments that will enhance the economic development opportunities within the community. Developments should focus on green development/industries that will provide expanded economic opportunities for the community without impairment to the limited natural resources, particularly water.

SPECIAL DEVELOPMENT AREA – FEDERAL LANDS

SDA

Purpose: Public lands that receive special recognition because of the quality, uniqueness, character and significance of their natural and cultural resources and ecosystems which are worthy of a high level of concern and protection, such as Wilderness Study Areas or as an Area of Critical Environmental Concern. Ash Meadows National Wildlife Refuge is an example of this designation.

Objective: To acknowledge lands which are set aside by the Federal government and are to be managed to preserve the natural conditions of the lands and to provide appropriate land use buffers and transitions adjacent to such lands that have been designated.

AGRICULTURAL PRODUCTION

AGP

Purpose: The purpose of the AGP designation is to safeguard agricultural lands from incompatible uses by establishing areas for agricultural production including livestock operations, field vegetables, flowers, forage and pasture operations, berry, tree and vine crops, greenhouse operations, aquiculture, viticulture, nursery and tree farms, cultivated or fallow land. The Agricultural designation denotes areas intended to remain in agricultural production over the long-term where demand for public services are not anticipated to be significant.

Objective: To designate cultivated production and ranching lands for their productive capabilities and to protect these areas from encroachment by incompatible uses.

COMMUNITY AND UTILITY FACILITIES

CUF

Purpose: The CUF designation identifies lands in private or public sector ownership/control, such as: electric distribution and transmission; water-storage; water treatment and distribution; natural gas transmission, storage and distribution; and civic and governmental properties. Ownership and control may be that of general purpose governmental units (i.e., town, county, State) or quasi-governmental entities (i.e., special districts, school districts, commissions, authorities). The CUF Identifies areas for public spaces in order to achieve the objectives regarding environmental quality and recreational opportunities.

Objective: To designate properties for the purpose of providing community-related facilities and services to meet the health and safety, social, quasi-governmental, governmental and educational needs of the community.

GOAL LUD-1 **Establish and maintain consistency between the Area Plan and land development proposals and any future ordinances.**

Policy LUD-1A *Ensure that development proposals and plan amendments are consistent with the land use designation and Area Plan goals and policies.*

Policy LUD-1B *Review and update the Area Plan for consistency and appropriateness every five (5) years or so as the needs of the community change.*

Policy LUD-1C *Use the goals policies of the Area Plan in other reports and studies, annual budgeting, capital improvement projects and other Town and County programs.*

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| GOAL LUD-2 | Adopt a policies and regulations that protect the rural lifestyle. |
| <i>Policy LUD-2A</i> | <i>Support development patterns that will complement the community's physical characteristics.</i> |
| <i>Policy LUD-2B</i> | <i>Respect the character of established residential areas and non-residential areas.</i> |
| <i>Policy LUD-2C</i> | <i>Retain and enhance the scenic views.</i> |
| <i>Policy LUD-2D</i> | <i>Regulate the division of land to promote efficient land uses and an interconnected system of roadways.</i> |
| <i>Policy LUD-2E</i> | <i>Take into account local needs, environmental factors, land use, neighborhood compatibility, transportation and public safety when reviewing specific proposals of development.</i> |
| <i>Policy LUD-2F</i> | <i>Prohibit the development of off-premise signs.</i> |
| <i>Policy LUD-2G</i> | <i>Establish height restrictions for signs and off-premise signs in order to protect the scenic views and vistas of the Amargosa Valley.</i> |
| <i>Policy LUD-2H</i> | <i>Ensure that outdoor lighting does not create undesirable light pollution.</i> |
| GOAL LUD-3 | Identify lands that are suitable for industrial, commercial and residential development. |
| <i>Policy LUD-3A</i> | <i>Establish policies to protect existing neighborhoods, commercial and industrial uses.</i> |
| <i>Policy LUD-3B</i> | <i>Assure that impacts from new residential, commercial and industrial developments are mitigated.</i> |
| <i>Policy LUD-3C</i> | <i>Work with private, state and federal economic development agencies to identify potential industrial and commercial land uses that are suitable for the township.</i> |
| <i>Policy LUD-3D</i> | <i>Facilitate the exchange of federally managed lands (BLM) into private ownership.</i> |
| <i>Policy LUD-3E</i> | <i>Implement; if possible, the Nye County Yucca Mountain project Gateway Area Concept Plan to mitigate the potential effects of the Yucca Mountain project and to provide jobs, housing and other resources for the benefit of the valley.</i> |
| <i>Policy LUD-3F</i> | <i>Limit sexually-oriented adult businesses and brothels to areas where the potential for secondary impacts are minimized and most controllable in accordance with Nye County code.</i> |
| <i>Policy LUD-3G</i> | <i>Prevent encroachment of the future development upon the floodplains throughout the Amargosa Valley unless there is strict compliance with floodplain management practices.</i> |

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| <i>Policy LUD-3H</i> | <i>Locate neighborhood retail and service businesses at intersections of arterial or collector streets, or other appropriately locations.</i> |
| <i>Policy LUD-3I</i> | <i>Allow for home occupations and live/work opportunities in keeping with the rural characteristics of the community.</i> |
| <i>Policy LUD-3J</i> | <i>Allow accessory residential uses in association with light industrial and commercial development when compatible.</i> |
| GOAL LUD-5 | Public services and facilities should be financed and constructed concurrently with new development. |
| <i>Policy LUD-5A</i> | <i>Ensure that new public infrastructure costs directly associated with the new development are paid for by the developer. Future residential growth should be coordinated with local service providers to ensure adequate capacity. The school district should be consulted when reviewing development involving new residential units.</i> |
| <i>Policy LUD-5B</i> | <i>Work with public land managers to secure appropriate access to public lands.</i> |
| GOAL LUD-6 | Preserve agricultural lands. |
| <i>Policy LUD-6A</i> | <i>Encourage the continuance of existing agricultural and related activities through appropriate land use designations and incentives.</i> |
| <i>Policy LUD-6B</i> | <i>Establish and maintain land use buffers around existing agricultural-related businesses.</i> |
| GOAL LUD-7 | Provide for suitable housing for all residents. |
| <i>Policy LUD-7A</i> | <i>Promote a mix of housing types in appropriate locations.</i> |
| <i>Policy LUD-7B</i> | <i>Seek state and federal funding for housing assistance programs for the purpose of repairing existing housing units and for the construction of new low income and senior housing.</i> |
| GOAL LUD-8 | Identify BLM managed lands suitable for disposal that could be used by the community to accommodate school, park and recreational development. |
| <i>Policy LUD-8A</i> | <i>Pursue ownership of the identified BLM disposal lands through the joint selection process.</i> |

CHAPTER FOUR - STREETS AND HIGHWAYS PLAN



Nye County Public Works Facility in Amargosa Valley. Photo courtesy of TerraSpectra Geomatics.

Nevada Revised Statutes (NRS) influence the content of this chapter of the Area Plan with regard to the general locations and widths of a comprehensive system of major traffic thoroughfares and other traffic ways and the recommended treatment thereof, building line setbacks, and a system of naming or numbering streets and houses.

The Streets and Highways element of the Area Plan sets forth goals and strategies to ensure the efficient movement of people, goods and services within the community. Good circulation within the community, good connectivity between neighborhoods, comprehensive multi-modal options, and effective management of traffic remain high priorities for Amargosa Valley.

Amargosa Valley seeks to effectively manage traffic and accommodate circulation needs, but to do so in a manner consistent with community character. The community plans to achieve this through incorporation of bikeways, park and ride, carpooling, pedestrian amenities, safe-neighborhoods and schools into an integrated transportation network moving people, goods and services conveniently and efficiently while minimizing land-use impacts from highways and higher speeds.

Land-use decisions which complement the circulation system are of significant importance in accomplishing these goals. Employment and service centers can be encouraged to locate conveniently close to residential areas, so that new roadway demands and traffic congestion may be decreased. Higher density developments (both residential and commercial) can support alternative transportation options including transit, bikeways and pedestrian amenities, thus extending the longevity of existing infrastructure, while expanding transportation choices. A well-planned regional road network can provide improved mobility opportunities for all area residents. Therefore, the community proposes to pursue a comprehensive, integrated approach to transportation planning. This includes coordination with federal, state and local jurisdictions; integrating land-use, transportation and capital improvement planning; and incorporating

neighborhood traffic solutions. Interconnectivity of streets and neighborhoods are vital to a well functioning community covering the vast land area that the Town of Amargosa Valley covers.

Key components of effective management of traffic include establishing road connectivity, providing alternate routes, access management, traffic calming and integrating other circulation features into roadway designs. Similarly, pedestrian amenities, bikeways, and park and ride areas provide incentives to reduce the number of vehicles on the roads and increase the number of passengers per vehicle which in turn reduces traffic demands. However, the automobile is likely to remain the primary transportation choice in the Amargosa Valley. Currently, the roads within Amargosa Valley are improved and maintained by the Nye County Road Department. The local office has 4 employees and oversees maintenance of approximately 130 miles of roadways. Map 5 shows the existing roads and airstrips within Amargosa Valley and proposed roadway alignments.

FUNCTIONAL CLASSIFICATION OF ROADWAY

Roads and streets are grouped into functional classes according to the type of service they are intended to provide in terms of traffic movement and access. The Town of Amargosa Valley's circulation system consists of U.S. highways, state highways, collector streets, local streets, and rural roads. The Nye County Regional Transportation Commission has developed a long-term capital improvement plan for road maintenance.

Major Highways – There are two highways running through the Amargosa Valley that are designed and constructed for the purpose of carrying vehicular traffic between communities and provide for the delivery of goods and services within the valley. U.S. Route 95 (US 95) is part of the National Highway System, but is maintained by the State of Nevada for the portion that runs through Nye County. US 95 is a north-south arterial that connects with U.S. Interstate 15 (I-15) in Clark County. It is a major transportation route between Las Vegas and Reno, passing through Beatty and Tonopah. US 95 is also known as Veterans Memorial Highway. The second highway in Amargosa Valley is State Route 373, which is a north-south arterial that connects with US 95 to the north, and becomes California Highway 127 to the south, eventually linking with I-15 at Baker, California.

Collector Streets - Collector streets form an interconnecting network for the movement of traffic of moderate to average traffic volumes and moderate operating speeds. The collector street functions to distribute traffic between local roads or major highways. Collector streets are designed to collect traffic and feed it onto highways and are typically located in a gridded system at 1 mile intervals. Ingress and egress should be limited to allow for continuous flow of traffic. Shared driveways should be encouraged whenever possible.

Collector street cross sections may vary from multi-lane roadways to two-lane roadways. The functional classification is not dependent on existing or number of lanes, since the functional road served by a roadway typically remains constant over time as the roadway's cross section may be improved over time to accommodate increasing traffic volumes.

Local Streets - Local streets provide access from individual properties to collector streets and highways, serving land access and mobility needs. They are designed to serve local neighborhoods only and are not meant for higher speeds. Through traffic and higher speeds should be discouraged along local streets through the use of design standards. Whenever feasible, residential lot development should be designed with lots having access onto local residential streets.

Rural Roads - Rural roads can be characterized by factors that make their operational characteristics, design requirements and associated impacts different from roads in urban areas. The term “Rural” refers to the predominant characteristics of adjacent land use along roads. Rural roads have fundamentally different characteristics than urban roads regarding density and type of land use intensities, density of street and roadway network, and in the nature of the travel patterns. More specifically, land use is the most important factor dictating rural road standards. The intensity of access needs change in rural settings, with associated roadway geometric requirements dictated by the agricultural, residential, industrial or commercial areas being served. For example, roads in rural residential areas, serving individual farmsteads up to rural estate subdivisions, are designed to achieve many objectives other than serving passenger car residential traffic, including accommodating agricultural and industrial (i.e. aggregate extraction) traffic. Unlike urban roads that serve specific arterial/collector/local functions, rural roads are more multi-purpose, and so geometric design standards for rural roads tend to be more “generous” than in the more strictly controlled urban areas. Rural roads also tend to serve vehicular traffic only, with little if any dedicated facilities for pedestrian and bicycling users (i.e., gravel shoulders and no sidewalks).

Public Transportation

Currently there are no public transportation services available within Amargosa Valley.

Airports

The Jackass Aeropark was a publically-owned airport, managed by the Nye County Board of County Commissioners. Opened approximately in 1949 as the Lathrop Wells Airport, the airport was closed at some point between 1957 and 1959. In the early 1960's, it was leased by Desert Farms and a new longer runway was constructed and the airfield was reopened under the name of Jackass Aeropark. The renovation extended the unpaved runway from 5,000 to 6,800 feet. Around 2004-2006 BLM denied the lease to Desert Farms and the Aeropark was abandoned. Improvements at the Aeropark have been a 6,800-foot runway approximately 130 feet wide, and a hanger with eight tie-downs.

There are several private air strips which serve light aircraft in Amargosa Valley with prior permission or for emergency landing.

Rail

No rail access to Amargosa Valley currently exists. In the early 1900's two rail routes serviced the Amargosa Valley: the Tonopah and Tidewater (T&T) from 1905 to 1938 and the Las Vegas and Tonopah (LV&T) from 1906-1918. These rail routes have been abandoned and the tracks removed (T&T in 1942 and the LV&T in 1919). However, a portion of the old T&T railroad grade remains. Potentially, the proposed Yucca Mountain Nuclear Waste Repository will be served by rail access through Nye County and possibly a portion of Amargosa Valley (Amargosa Valley Economic Task Force, 1993).

GOAL TRN-1

Develop a safe and efficient multi-modal transportation system.

Policy TRN-1A

Promote improved pedestrian, bicycle and automobile connections where appropriate between existing neighborhoods and community facilities.

Policy TRN-1B

Ensure that the transportation system adequately accommodates and encourages through traffic on the street network system and appropriately controls traffic, access and speeds.

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| <i>Policy TRN-1C</i> | <i>Acquire additional public street rights-of-way on existing thoroughfares as needed to facilitate turn lanes and acceleration/deceleration lanes and to provide additional traffic turning capacity at appropriate intersections.</i> |
| <i>Policy TRN-1D</i> | <i>Establish criteria for the placement of traffic control devices in conformance with state and county Manual of Uniform Traffic Control Devices (MUTCD).</i> |
| GOAL TRN-2 | Improve and preserve access to and within Amargosa Valley. |
| <i>Policy TRN-2A</i> | <i>Develop and maintain a roadway capital improvement program, coordinated with the Nye County Regional Transportation Commission and the Nevada Department of Transportation, to insure roads are maintained and improved when necessary.</i> |
| <i>Policy TRN-2B</i> | <i>Discourage direct ingress and egress from and to the highway onto neighboring land uses to prevent congestion and minimize accidents. Frontage roads should be encouraged to provide safe egress and ingress. Future driveway cuts fronting on highways should be allowed only after approval by the county engineer, and/or the Nevada Department of Transportation.</i> |
| <i>Policy TRN-2C</i> | <i>Road and access improvements should preserve and maintain features that contribute to the rural character of the community, including small local roadways with minimum paving and preservation of the natural landscape.</i> |
| GOAL TRN-3 | Improve community access to US Highway 95 and State Route 373. |
| <i>Policy TRN-3A</i> | <i>Coordinate with NDOT, Nye County and other regional transportation planning groups to improve transportation throughout the Amargosa Valley, including enhancements to thoroughfares, trails, bicycle lanes and public transportation opportunities.</i> |
| GOAL TRN-4 | Working with the Nye County Public Works Department, develop access management strategies to coordinate land access and traffic flow to preserve the performance and safety of the street system in the Amargosa Valley. |
| <i>Policy TRN-4A</i> | <i>Adopt appropriate access management regulations.</i> |
| <i>Policy TRN-4B</i> | <i>Establish an appropriate building line setback to prevent encroachment of structures into the planned right-of-ways.</i> |
| GOAL TRN-5 | Maximize the continuity of the street network to provide a direct system of access throughout the community to minimize response time for emergency vehicles. |
| <i>Policy TRN-5A</i> | <i>Use the Division of Land Regulations to acquire right-of-ways, through dedication or other means, for the extension of collector, local and rural roadways.</i> |

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| <i>Policy TRN-5B</i> | <i>Identify all dead-ended streets, their impact on the flow of traffic through the Amargosa Valley and determine feasible and appropriate courses of action such as right-of-way or easement acquisition.</i> |
| <i>Policy TRN-5C</i> | <i>Minimize the construction of dead-ended streets other than those that are temporarily terminated and planned for extension at a later date.</i> |
| <i>Policy TRN-5D</i> | <i>Continue to require dedication of public right-of-way and construction of street improvements as development occurs.</i> |
| <i>Policy TRN-5E</i> | <i>Align all new roads and streets, whenever practicable, with existing roads and streets by continuation of the centerlines thereof.</i> |
| <i>Policy TRN-5F</i> | <i>Support alternative access from the Amargosa Valley to Pahrump through Crystal.</i> |
| GOAL TRN-6 | Address pedestrian safety issues |
| <i>Policy TRN-6A</i> | <i>Continue aggressive enforcement of speed limits and other traffic laws near schools and parks.</i> |
| <i>Policy TRN-6B</i> | <i>Design and implement enhanced pedestrian crosswalks at appropriate locations such as the elementary school, community center and community park to increase pedestrian visibility.</i> |
| GOAL TRN-7 | Establish a coordinated system of street naming and addressing to facilitate emergency response, and postal services as well as the provision of utilities, by establishing a uniform system for street naming and assigning address numbers. |
| <i>Policy TRN-7A</i> | <i>Work with Nye County to develop an addressing and street naming/numbering system that is simple to understand, easy to implement and maintain while ensuring that every parcel or lot can be properly identified.</i> |
| GOAL TRN-8 | Work with the Nye County and the Federal Aviation Administration to reestablish the Jackass Aeropark and to develop it as a regional transportation hub. |

CHAPTER 5 - PUBLIC BUILDINGS, PUBLIC SERVICES AND FACILITIES



Amargosa Valley Emergency Services Personnel and Community Volunteers. Photo courtesy the Town of Amargosa Valley

The purpose of this chapter is to show the locations and arrangement of civic centers and all other public buildings. Community facilities provide the necessary services to meet the physical, social, cultural and protective needs of the community. The school, community center, library, and clinic were built by the people of Amargosa Valley in the early 1980's. The park was also built, located on land leased from the Bureau of Land Management and situated across the street from the community's facilities that continue to serve the community. The success and quality of the services help to define the community as a desirable place to live and work. Community services for the Amargosa Valley are provided by a variety of general and special purpose governmental organizations and private entities. The county is the largest service provider, administering many services such as recreation facilities and law enforcement in close cooperation with the Town Advisory Board. Fire protection and emergency services are provided by community volunteers in coordination with, and supported by, the county. The Nye County School District administers the school and the Amargosa Valley Library District administers the library. The senior services are provided through the cooperation of community volunteers, the non-profit, Nye County Senior Services, Inc. and the county.

This chapter of the Area Plan establishes goals, policies and implementation strategies for community centers, schools, libraries, public safety services, parks and trails. The objective is to reinforce Amargosa Valley's sense of community – the social cohesion developed from a feeling of belonging to a local area and having an interest and a stake in what happens in the community. Public services and facilities play a prominent and necessary role in the daily lives of the residents of the Amargosa Valley. Some community facilities support the ability to manage daily life with minimum disruption and ensure the public safety, while others are needed for management of the community. These facilities also provide a focal point of community pride.

SCHOOLS

Public schools are an essential component of community life and an integral part of the Amargosa Valley community. Planning for educational services supports and reinforces the community, so that a full range of educational opportunities may be provided to all citizens. The Nye County School District (NCSD) provides the educational needs for the children of the Amargosa Valley. At the present time, there is one elementary-middle school in Amargosa Valley, serving pre-kindergarten through the 8th grade. High school-aged children are bused to the high school in Beatty.

The present-day Amargosa Valley elementary-middle school building was built in 1974 and sits on approximately 9.9 acres. At this time, the NCSD has no plans to construct additional class rooms for the Amargosa Valley School; building and classroom capacities have been augmented through the use of portable classrooms.

The following tables show student enrollment by grade at the Amargosa Valley Schools.

Table 3. Amargosa Elementary School Enrollment

| Grade: | Number of Students |
|------------------|--------------------|
| Pre-Kindergarten | 10 |
| Kindergarten | 21 |
| 1 | 27 |
| 2 | 19 |
| 3 | 19 |
| 4 | 18 |
| 5 | 14 |
| Total: | 128 |

Table 4. Amargosa Middle School Enrollment

| Grade: | Number of Students |
|---------------|--------------------|
| 6 | 10 |
| 7 | 21 |
| 8 | 21 |
| Total: | 52 |

Source: Nye County School District



Amargosa Elementary School. Photo courtesy of TerraSpectra Geomatics.

The NCSD is currently negotiating with the Bureau of Land Management to acquire 20-30 acres for a new school site. Continued growth in the Amargosa Valley region will require the addition of another elementary/middle school within the next 10 years. To the extent that the area plan of a community affects the density of population, the range of housing types, and the pace of development activity, it also influences the need for schools. Acquisition of school sites and other public facilities are typically administered through the subdivision regulations.

GOAL SCH-1 **Maintain existing schools and provide for new schools as the need is identified.**

Policy SCH-1A The town should coordinate with Nye County School District to determine both short and long-term needs concerning classroom space and construction of new facilities.

Policy SCH-1B Future school sites should be identified for reservation from the BLM land disposal list.

Policy SCH-1C School facilities should emphasize increased and shared utilization of school facilities.

Policy SCH-1D Encourage institutions of higher education to open campuses in Amargosa Valley or to provide programs using community facilities.

LAW ENFORCEMENT AND EMERGENCY SERVICES

The Nye County Sheriff's Department and the Nevada Highway Patrol provide law enforcement in Amargosa Valley.

Nye County Sheriff's Office

Nye County Sheriff's Office (NCSO) provides law enforcement for the Amargosa Valley, maintaining a Substation (without a dispatcher) on Farm Road in Amargosa Valley. It is used for deputies to write reports. Until approximately 2001, the substation served as a dispatch station for Amargosa Valley, something that the local population would like to have returned to better facilitate communications within and about the Valley.

The Amargosa Valley Substation is included in the Central Area Command, which encompasses Beatty, Amargosa Valley and is responsible for Crystal, Nevada. The area extends from State Route 160 north to the Nye / Esmeralda county line. There are three full time deputies that provide 24-7 law enforcement coverage within the Amargosa Valley. Amargosa Valley is also supported by the Beatty Substation, which has one Lieutenant and three Deputies. The Beatty Substation has a temporary holding facility that can hold up to 12 inmates.



Sheriff's Deputies. Photo courtesy of A.J. Griffin.

Over the past decade, the NCSO has been facing an increased demand for its services. The number of calls for services within the community has increased steadily from 517 in 2004 to 762 in 2008. This is in addition to responses to accidents and other incidents on US 95 from the southern Nye County line to Beatty, and response to calls in Crystal. The NSCO also plays a role in various supplemental programs such as DARE, National Night Out, and Neighborhood Watch and other community events. As the Valley's population continues to increase, demand for police services will also increase, potentially resulting in a need for additional officers, department personnel and office space.

The problems identified by the Amargosa Valley Substation are related to the vast size of the area to cover and having limited personnel to cover the area. There are no deputies to fill a graveyard

shift, making it necessary for employees to be on call during these hours. The 911 system needs enhancement and the microwave system needs to be continued north from Pahrump through the rest of the county.

The projected needs of the Nye County Sheriff's Office in order to provide improved services to the Amargosa Valley over the next 5-10 years are:

Staffing:

- Two additional deputy positions
- A sergeant position
- A level of 2.5 deputies per thousand population should be maintained.

Equipment:

- Replace patrol vehicles upon reaching 100,000 miles.
- All required safety equipment and vehicles for new positions.
- Upgraded dispatch console and 911 center
- Additional four wheel drive patrol vehicles.

Nevada Highway Patrol

Nevada Highway Patrol (NHP) is primarily responsible for maintaining the public safety and law enforcement on Amargosa Valley highways. Currently three officers patrol the county and assist the county and town when requested. A State Highway Patrol substation is located in Pahrump. Funding and personnel levels are determined by the central office located in Carson City.

Future needs depend on whether or not Yucca Mountain is licensed for high level nuclear waste storage. If licensed, a substantial increase in officers and equipment will be needed to patrol the township due to an increase in traffic. At the current rate of growth, an additional 2 patrol officers are needed along with two additional vehicles over the next 5-10 years. Like the Amargosa Valley Sheriff's Department, there are not enough troopers to provide a graveyard shift. Response to emergency calls at this hour is on an on-call basis, making it difficult to respond in a timely manner.

Emergency Services / Management

Emergency services in Amargosa Valley are provided primarily by volunteers. The Amargosa Valley Volunteer Fire Department is managed by the Town of Amargosa Valley and provides fire protection and emergency response. They coordinate with the county Emergency Services Department and other fire departments/agencies when necessary, for additional support. The Nye County Emergency Services Department provides assistance to the local community ambulance and fire service volunteers such as training, disaster planning, etc.

The Amargosa Valley Emergency Operations Plan was adopted in 1996 and includes chapters on "Planning Situations and Assumptions", "Pre-Disaster Planning" and "Disaster Response and Recovery Activities". The goal of the plan is to protect life and property in Amargosa Valley during and after an emergency. The plan creates an operational system that the county can use to adequately prepare for, respond to, and recover from major emergencies and disasters. The plan identifies the responsibilities of local, state, federal and private agencies required to deal with the four phases of emergencies: preparation, mitigation, response and recovery.

The public safety, public works and emergency services agencies located in Amargosa Valley are trained to handle the great majority of emergencies that arise. These situations are handled under standard day-to-day operating procedures. When emergencies strain the response or management abilities of the normal response agencies, a smooth transition to a system of major emergency or disaster management is outlined in the Emergency Operations Plan.

The Local Emergency Planning Commission (LEPC) provides emergency management services through a local county coordinator. Hazardous materials training is a major focus of LEPC's efforts. A need for improved communications and equipment is a major concern, given the miles of county highways and remoteness of the area. A climate-controlled facility is also required for storage of emergency food and other supplies.

Fire Protection

Fire protection is provided through a Volunteer Fire Department located at 853 E. Amargosa Farm Road and a second fire hall located at 1756 S. Clark Street near the Nevada/California border. The equipment is mostly state-of-the-art, but on-going training is a primary concern. The Bureau of Land Management also provides fire protection capabilities for wildland fires. The Bureau of Land Management maintains cooperative agreements with the local jurisdictions of Amargosa Valley. Even though the Nye County Emergency Services have assumed responsibility for fire protection in Crystal, the Amargosa Valley Volunteer Department is usually paged to respond in Crystal and is usually the first responders at any fire. There is a need to build additional fire halls and those locations have been identified.



Amargosa Volunteer Fire Department. Photo courtesy the Town of Amargosa Valley

Ambulance and Medical Services

Medical services are provided by three different groups. The volunteer Emergency Medical Technicians (EMTs) provide ambulance service within and from Amargosa Valley, as well as on US 95 and in Crystal. The ambulance service is provided 24-7 through volunteer efforts and would benefit greatly from an enhanced 911 system. Two sites have been designated for future fire stations (Map 6).



Amargosa helipad with a Mercy Air Flight for Life Helicopter. Photo courtesy the Town of Amargosa Valley.

The Amargosa Clinic is run by Nevada Health Services, Inc., Monday through Friday. The clinic was built by Amargosa Valley and is owned by the County. County and federal grants subsidize the medical services.

Mercy Air provides advanced life support and emergency medical airlift services from Amargosa Valley to hospitals in Las Vegas. A heliport is located across from the Clinic and Fire Station 1 on Farm Road. The Flight for Life helicopters also land throughout the Valley and on US 95.

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| GOAL EML-1 | Work with NCSO and NHP to determine acceptable standards for adequate levels of service and equipment. |
| <i>Policy EML-1A</i> | <i>Establish standards upon which to measure the adequacy of police-protective services and facilities within Amargosa Valley.</i> |
| <i>Policy EML-1B</i> | <i>Acquire equipment necessary for police services to maintain and enhance public health, welfare and safety.</i> |
| GOAL EML-2 | Ensure that emergency response times for emergency services are adequate and in accordance with accepted standards and averages. |
| <i>Policy EML-2A</i> | <i>Establish policies so that new growth participates in the provision for emergency services.</i> |
| <i>Policy EML-2B</i> | <i>Coordinate with other jurisdictions on issues related to emergencies, hazards and disasters.</i> |

COMMUNITY FACILITIES AND SERVICES

Community Center

The Community Center in Amargosa Valley was built in the early 1980's. It serves as the primary meeting place for the community, whether it is for formal or informal meetings, weddings, funerals, anniversaries, parties, dances, haunted houses, fund raisers, art shows or children's open gym. It also serves as the school gym, sports arena, parent's day meeting place, and special program and graduation site. The Community Center also serves as the Town Office, which is manned by the Town Secretary. As an additional service to the community, the Town Secretary is also a notary.



Amargosa Community Center. Photo courtesy the Town of Amargosa Valley

Senior Center

The Desert Senior Center is located on Desert Seniors Drive, approximately 1.3 miles from the Community Center, Library and School. It was built in the early 1970s on 10 acres donated to the community to provide for senior services. The Senior Center offers meals-on-wheels for seniors who cannot leave their homes or prepare their own meals. It also serves meals for seniors and others on Monday through Friday from 4:00 – 5:30.

Seniors and other community members also utilize the Center for meetings and activities, such as pool (smoke free), arts and crafts, diet club meetings, Cribbage, etc. The Center and its activities are supported through community donations, federal grants and Nye County funds that provide the staff to coordinate the senior nutrition programs.



Amargosa Senior Center. Photo courtesy of Jo Ann Sly.

Library

The Amargosa Library is a full-service library built in the early 1980's. It serves the residents of Amargosa Valley and Crystal. It also serves as the school library. The library, at the end of 2008, had 78,000 items in its collection, including both fiction and nonfiction in Spanish and English. It served between 1,413 - 2,153 patrons per month and had a circulation of 1,434 - 2,439 volumes per month in 2008. Other services include providing copies, fax services, and English - Spanish translations. The Library Director provides monitoring for online college courses and is also a notary.



Amargosa Valley Library. Photo courtesy of the Town of Amargosa Valley

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| GOAL CFS-1 | Upgrade and maintain quality public facilities and services in order to meet the challenges of growth in accordance with accepted community standards. |
| <i>Policy CFS-1A</i> | <i>Build a new Senior Center to meet the needs of seniors in the community. An RV park and senior housing should be co-located with the Senior Center on the land available on Desert Senior Drive.</i> |
| <i>Policy CFS-1B</i> | <i>Expand the current library or build a new library facility to meet the continually growing needs of the community.</i> |
| <i>Policy CFS-1C</i> | <i>The community should look at building a multi-generational building to house a new community center, library, senior center, boys and girls club, and other needed community facilities.</i> |
| GOAL CFS-2 | Seek available funds to support development of public facilities and services. |
| <i>Policy CFS-2A</i> | <i>The community should identify grants funds that would be available to build individual community facilities or a multigenerational, multiuse facility.</i> |
| <i>Policy CFS-2B</i> | <i>The community should identify individual or corporate entities that could provide endowments for community facilities and services.</i> |
| <i>Policy CFS-2C</i> | <i>Grants should be identified for fire stations and equipment, as well as emergency services equipment.</i> |
| GOAL CFS-3 | Ensure that medical and health services are accessible to all residents. |
| <i>Policy CFS-3A</i> | <i>Adequate health facilities should be provided to serve the needs of the residents of Amargosa Valley.</i> |
| <i>Policy CFS-3B</i> | <i>Additional providers should be encouraged to open medical facilities in the community.</i> |

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| GOAL CFS-4 | Expand the collections, holdings and programs of the Library. |
| <i>Policy CFS-4A</i> | <i>Continue to ensure that the library's collection reflects community needs by periodically surveying the community and cooperate with the local schools to coordinate library purchases.</i> |
| <i>Policy CFS-4B</i> | <i>Expand the current facility or build a new one to house the materials and equipment that are necessary to meet the community's needs.</i> |
| <i>Policy CFS-4C</i> | <i>Establish the library as the town's cultural, technological, and community center.</i> |
| <i>Policy CFS-4D</i> | <i>Sponsor continuing education and internet and computer literacy programs, by holding diverse courses to meet the interests of the community, such as, book discussion groups, movie theme series, speakers on seasonal topics and interests, etc.</i> |
| GOAL CFS-5 | Develop and continue to enhance existing cultural and heritage facilities, events, and programs that strengthen the community character and image. |
| <i>Policy CFS-5A</i> | <i>Support cultural activities oriented to families such as theater, concerts in the park, and school activities.</i> |
| GOAL CFS-6 | Increase the multi-purpose facility space available in Amargosa Valley. |
| <i>Policy CFS-6A</i> | <i>Co-locate schools, parks and other civic facilities to leverage facility use and decrease transportation costs.</i> |

Parks and Recreational Facilities

Amargosa Valley has a wealth of natural resources to be enjoyed by its residents and visitors. Wide-open space, in which to recreate, is an important resource for the valley. Parks and recreational opportunities are intended to provide for the passive and active recreation needs of the community. Where possible they should be located and designed to take advantage of natural amenities. Amargosa Valley is blessed with vast open spaces and a variety of natural resources with special environmental features.

Amargosa Valley currently has one park, immediately across the street from the Community Building and school, on land under a long-term lease from the Bureau of Land Management. It has playground facilities, ball fields, a soccer park and a horse arena. Land has been designated for a swimming pool and walking/running paths.

However, if steps are not developed and implemented for the protection or acquisition of open spaces for all to enjoy, the residents of the Amargosa Valley risk losing opportunities for development of trails (pedestrian, ATV, and equestrian) as well as parks to serve both active and passive recreational



Amargosa Valley Park. Photo courtesy the Town of Amargosa Valley

needs. A typical recreational needs analysis would be determined based on the number and types of facilities available, how many people use them, and an estimated future demand for such facilities. However, with such limited facilities within the community, demand for recreational services is impossible to calculate.

As with a majority of small towns, there is a shortage of money and programs to provide activities for youth and adults of all ages. Financial resources are limited and the critical numbers of people to support recreational facilities is limited. The lack of critical population numbers also inhibits the construction of a community swimming pool. A role for the Town of Amargosa Valley is to prioritize the types of recreational facilities desired by area residents and encourage private investors to develop some of the facilities.

The Ash Meadows National Wildlife Refuge, located within Amargosa Valley, provides many opportunities for lovers of nature. It also provides habitat for many varieties of birds, a pleasure for the bird watcher. The Big Dune ACEC is open to motorized and non-motorized recreational uses.

GOAL PRF-1 Provide a system of parks, trails and recreational programs to serve the year-round leisure needs of area residents.

Policy PRF-1A Evaluate and acquire parcels or easements for open space, trails and recreation.

Policy PRF-1B Integrate the town's recreational trail system with the US Forest Service and BLM planned recreational developments.

Policy PRF-1C Ensure that development includes or otherwise participates in the provision of community services and facilities (i.e., schools, fire protection, parks) based on increased demand for services created by such development.

Policy PRF-1D Work with public land managers to secure appropriate access to public lands.

GOAL PRF-2 Increase recreational opportunities and tourism in Amargosa Valley.

Policy PRF-2A Continue to work with appropriate agencies to promote recreational opportunities.

Policy PRF-2B Diversify outdoor recreation opportunities.

Policy PRF-2C Develop a "recreational opportunities inventory" that highlights the wealth of natural assets found in the valley.

Policy PRF-2D Promote the Big Dune for recreational use by tourists, while working with the BLM to provide facilities to better manage the results of that use.

Policy PRF-2E Promote the use of the Ash Meadows National Wildlife Refuge by birders and other naturalists.

Policy PRF-2F Develop an in-town visitor center jointly with Death Valley and Ash Meadows.

CHAPTER SIX – CONSERVATION AND NATURAL RESOURCES PLAN



Crystal Reservoir in Ash Meadows, Amargosa Valley. Photo courtesy the Town of Amargosa Valley

The Nevada Revised statutes Chapter 278, suggest that a Conservation plan should address the development and utilization of natural resources, including but not limited to water, soils, minerals, air quality, and solar and wind energy.

ENVIRONMENTAL HAZARDS

Map 7 shows the location of some potential Amargosa Valley environmental hazards due to agricultural, commercial, industrial, or mining activities.

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| GOAL EHZ-1 | Protect the health, safety, and welfare of the community by avoiding or adequately mitigating environmental hazards. |
| <i>Policy EHZ-1A</i> | <i>Maintain the Wellhead Protection Plan for Amargosa Valley municipal and quasi-municipal wells.</i> |
| <i>Policy EHZ-1B</i> | <i>Further protect water quality by implementing the Community Protection Plan if the Yucca Mountain project proceeds into development.</i> |
| <i>Policy EHZ-1C</i> | <i>County Public Works/Planning should require new development near a fault line to provide a mapping of the fault line and determine the potential impacts on the proposed development.</i> |
| <i>Policy EHZ-1D</i> | <i>Support regional and local efforts for household waste recycling.</i> |

AIR QUALITY

Fresh air is one of the most important resources of Amargosa Valley. The air quality affects the health and well-being of the populous, as well as the visibility of the wonderful night-time sky. Hence, it is critical to the desired life-style of residents that the air quality be protected.

GOAL AIR-1

Mitigate detrimental impacts related to growth.

Policy AIR-1A

Protect air quality through the acceptance and surfacing of existing and future roads.

Policy AIR-1B

Require developers to surface roads leading to and within developments.

Policy AIR-1C

Encourage appropriate control of fugitive dust from disturbed sites and rights-of-ways.

Policy AIR-1D

Monitor air quality regularly and proactively apply control measures within the community to avoid intervention by EPA and imposition of their formal Air Quality Attainment Programs.

WATER RESOURCES

The water resources of the Amargosa Valley are its most precious natural resource and are basic to all efforts to preserve the environment and resident lifestyles, and to meet the needs of area citizens by providing for their economic well-being and improving their quality of life. Water resources planning in Amargosa Valley should be consistent with County policies and with existing state and federal laws and regulations and any court decrees (Buqo, 2002)

The key issues related to groundwater resources are:

- Damage to groundwater resources on the Nevada Test Site.
- Potential migration of contamination off of the Nevada Test Site.
- Potential future contamination associated with Yucca Mountain.
- Naturally occurring arsenic in the groundwater in Amargosa Desert.
- Proposed water exportation by the Southern Nevada Water Authority.
- Unpredictable growth in the Amargosa Desert.
- Federal land use policies.
- Water resource speculation in Nye County and adjacent areas.
- Over-commitment of water in some basins and the poor understanding of the physical and legal water availability in terms of perennial yield, effects of groundwater withdrawals.

The State of Nevada, Department of Conservation and Natural Resources, Division of Water Resources (NDWR) is charged with management of and quantification of available ground water resources within the various hydrographic regions within the state. Committed water resources in each basin are monitored. These include the total permitted, certificated, and vested ground-water rights recognized by the State Engineer that can be withdrawn from the basin in any given year.

Current demand for water in Amargosa Valley is not precisely known and can only be estimated. The majority of water use falls into five categories: public water supply systems, domestic wells, commercial, mining, agriculture, and federal use (Buqo, 2002). There are approximately 400 domestic wells in the Amargosa Desert basin in the communities of Amargosa Valley and Crystal. The Nevada State Water Plan estimated a total self-supplied domestic water use of 542 gallons per day in 1995.

According to the Nye County Water Resources Plan (Buqo, 2002), the current economy of the Amargosa Valley is agrarian based. However, the nature of the community may change dramatically over the coming decades as arable lands give way to residential, commercial or industrial development. Over the short term, agricultural production and water use are expected to remain stable or expand slightly. Current population projections and forecasts for agricultural development suggest that there will be adequate water to meet the demands for the next 20 years. While the permitted groundwater rights were reported as 28,600 acre feet, which exceed the published perennial yield of 24,000 acre feet, water use in the basin is far less and has not exceeded 16,000 acre feet. In 2000 the water use inventory identified less than 13,000 acre feet of total groundwater pumpage (Buqo, 2002).

Water Rights

The water resources needs of future generations of Amargosa Valley must be protected with a balanced approach that provides for economic growth without detriment to the social, aesthetic, cultural, and ecological values of the valley.

Unlike some other states, Nevada has a statewide system for the administration of both ground water and surface water. Nevada Water Rights and Water Law is based on statutes enacted over 100 years ago and are founded on two fundamental concepts: prior appropriation and beneficial use. Prior appropriation grants priority to water permits chronologically, ensuring that new water rights are granted only after protections to existing water rights holders are assured. Beneficial use requires that water be put to a use that benefits the people of Nevada, preventing water from being reserved for speculative purposes (SNWA, 2009). Appropriative water rights can be lost through nonuse and they may be sold or transferred apart from the land.

The NDWR, headed by the State Engineer, is responsible for the administration and enforcement of Nevada water law. This includes overseeing the appropriation, distribution, and management of the state's surface and groundwater. For Nevada, the State Engineer is authorized to "designate" a groundwater basin, where permitted ground water rights approach or exceed the estimated average annual recharge, and the water resources are being depleted or require additional administration. The State Engineer has additional authority in the administration of the water resources within a designated groundwater basin, and to declare preferred uses (e.g., municipal and industrial, domestic, agriculture, etc.). The Amargosa Desert Hydrographic Basin has been declared as a "designated" basin by the State Engineer, and is shown on Map 8.

Point of Diversions

A point of diversion is the location where surface or underground water is diverted from its source for the purpose of beneficial use (e.g., commercial, domestic, irrigation, mining, etc.). Map 8 shows the location of points of diversion within Amargosa Valley. As development occurs in Amargosa Valley, water rights tied to some of the point of diversions may need to be transferred to the new development sites. It is possible to change the water's point of diversion, manner of use and place of use, by filing the appropriate application with the state engineer.

However, transfers of points of diversion have recently been restricted by the State Engineer, which could result in constraining development in Amargosa Valley. The Office of the State Engineer found that conditions within the Amargosa Desert Hydrographic Basin warranted the curtailment of future appropriations of ground water and additional regulation of change applications.

Nevada Office of the State Engineer Order 1197

On November 4, 2008 the Nevada State Engineer issued Order #1197. This order states that “any applications to appropriate additional underground water and any application to change the point of diversion of an existing ground-water right to a point of diversion closer to Devils Hole, described as being within a 25 mile radius from Devils Hole within the Amargosa Desert Hydrographic Basin, will be denied.” Additionally, the Order states that “In no such case shall new points of diversion be allowed within 10 miles of Devils Hole.” There are a few limited exceptions to this rule. Map 8 “Water Resources” depicts the extent of the State Engineer’s ruling upon Amargosa Valley.

Early Warning Drilling Program

The Early Warning Drilling Program (EWDP) was initiated under the Nye County Nuclear Waste Repository Project Office (NWRPO). The program is intended to provide geologic and hydrologic information about one of the least understood hydrogeologic systems in the vicinity of Yucca Mountain. The questions that are being investigated are: 1) the origin of the spring deposits; 2) the geology and hydraulic properties of the valley-floor sediments; 3) the recharge; and, 4) ground-water flow patterns. By understanding this critical information, a monitoring system can be better designed to protect the water resources of Amargosa Valley. Locations of the EWDP drilling program are shown on Map 8.

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| Goal H2O-1 | Manage the quantity and quality of Amargosa Valley's Groundwater resources by adhering to the adopted Nye County Water Resources Plan dated August 2004. |
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| <i>Policy H2O-1A</i> | <i>Established water rights should be protected.</i> |
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| <i>Policy H2O-1B</i> | <i>Support the newly-formed Nye County Water District as they implement plans to refine estimates of the Amargosa basin water quantity and its sustainable basin yield.</i> |
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| <i>Policy H2O-1C</i> | <i>Work with potential power plant developers to map and summarize their expected water usage quantities at each potential power plant location in the valley.</i> |
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| <i>Policy H2O-1D</i> | <i>Identify, develop, and maintain adequate water supplies within the Amargosa Valley to maintain the existing environment and accommodate future recreational and economic development needs.</i> |
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| Goal H2O-2 | Clarify the intent and final resolution of the Nevada State Engineer's Order #1197 that severely restricts changes to the point of diversion of Amargosa Valley groundwater in an attempt to protect the water level in Devil's Hole |
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| <i>Policy H2O-2A</i> | <i>Pursue the County's formal protest of Order #1197 with the State Engineer's Office to a resolution.</i> |
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CULTURAL RESOURCES

Within the Township of Amargosa Valley, most of the historic and cultural resources are located within Ash Meadows or on the T&T Ranch. The former is managed by the Department of Fish and Wildlife. The latter is private property. The owners/managers of those sites should be encouraged to preserve the historical and cultural resources for future generations. The scenic resources in and around Amargosa Valley abound. Development should be managed in such a way as to protect those scenic vistas.

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| Goal CUL-1 | Protect cultural, historic and scenic resources as new development occurs. |
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| <i>Policy CUL-1A</i> | <i>If a cultural, historic or scenic resource is identified, determine if there is an overriding public benefit from the project and that mitigation measures to offset the cultural loss are made part of the project.</i> |
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| <i>Policy CUL-1B</i> | <i>Consider the impact of industrial development projects on the Valley's viewshed during the project permitting and approval process.</i> |
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FLOOD PLAIN PROTECTION

Map 9 shows areas in the valley identified by the Federal Emergency Management Agency (FEMA) as floodprone, and which could pose possible flooding threats to proposed development. It should be noted that at least 2 significant drainage areas were not completely mapped by FEMA on the 1990 Flood Insurance Rate Maps. These include the Topopah Wash and Fortymile Wash, whose drainages are depicted on Map 9.

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| GOAL FPP-1 | Manage and mitigate potential threats from flooding in the Amargosa Valley. |
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| <i>Policy FPP-1A</i> | <i>Use FEMA Flood Insurance Rate Maps (FIRM) as the basis for delineation of floodplains and floodways, unless more recent research and surveys are presented which establish a more accurate delineation. Reevaluate land use designations when a new FEMA FIRM map becomes available.</i> |
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| <i>Policy FPP-1B</i> | <i>Require that all new plans for development within or adjacent to a floodplain show the project's relationship to the floodplain.</i> |
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| <i>Policy FPP-1C</i> | <i>Ensure that development that lies within all identified floodways is suitable for that location and takes the necessary precautions to protect surrounding property.</i> |
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| <i>Policy FPP-1D</i> | <i>Require review of proposed drainage improvements by the Nye County Floodplain Administrator as a condition of project approval.</i> |
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| <i>Policy FPP-1E</i> | <i>Design development to be compatible with riparian areas and playas to protect wildlife habitat, floodways and water quality.</i> |
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| <i>Policy FPP-1F</i> | <i>Require that all new plans for development within or adjacent to a floodplain show the project's relationship to the floodplain and that the development will not endanger that project or the surrounding areas.</i> |
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LAND AND UNDERGROUND RESOURCES PROTECTION

Goal LUR-1

Retain existing mining areas and promote the exploration and development of potential mineral deposits in appropriate locations within the Amargosa Valley.



Nellis Air Force Base is the home of this 140 acre solar PV system, the largest in North America is similar to those power plants proposed for location within the Amargosa Valley.

ENERGY USE AND DEVELOPMENT

The Nevada State Office of Energy (NSOE) adopted the State Energy Protection Plan, announced in February 2001, as a comprehensive energy plan for Nevada that seeks to “ensure a reliable, affordable and diverse energy supply for Nevada” (NSOE, 2002).

The energy protection plan includes components that encourage energy conservation, facilitate electric generation and transmission permitting, facilitate natural gas transmission permitting, and encourage renewable energy development. The plan also addresses electric utility reliability issues and provides for annual energy resource assessments. The State of Nevada’s Energy Protection Plan provides for specific legislative mandates regarding renewable energy and energy conservation.

Decisions affecting land use directly impact energy use, primarily because of the strong relationship between where we live and work and our housing and transportation needs. Land uses should be developed in a manner that would maximize the conservation of all forms of energy, and based on sound economic principles.

EnergyAtlas.org notes that Nevada, and particularly the Amargosa Desert, is one of the most versatile areas for renewable energy development with “excellent sites for developing all four renewable resources”. Through adoption of the State Energy Protection Plan, Nevada has made a significant commitment to the development of renewable energy resources. The Energy Atlas further indicates that the Amargosa Desert ranks highest in the state for the annual average solar insolation – exposure to the sun’s rays, with a potential electricity generation of 93 million mega watt hours/year (MWh/yr). This has led to over 30 applications from developers requesting the use of multiple sections of BLM land for solar power plants in the Valley.

Map 10 shows the extent of these applications in Amargosa and adjacent areas to be well over 125 square miles as of the end of March 2009. Concentration of this many applications in one valley caused the BLM to initiate a Solar Programmatic Environmental Impact Statement effort to determine how to adjust the permitting process to reflect the cumulative impact of that many power generating sites.

If even a portion of these proposals become reality, Amargosa Valley will become a significant player in the renewable energy industry with potentially hundreds of new energy-related jobs. It is important, however, that this role be taken on in a manner that is environmentally responsible, so that the quality of life for Amargosa residents is not diminished. Towards this end, Nye County must gain a recognized role in the ongoing agency review and permitting process.

It is Amargosa Valley’s objective to establish long-term and beneficial partnerships with the renewable energy sector. At this time, all of the approvals needed to construct any renewable energy facility are limited to those issued by the State of Nevada and the Federal Government. Outside of the Pahrump Regional Planning District, the County provides no official guidance with respect to the potential offsite impacts – good or bad – of new developments on our roads, water supply, other infrastructure, hazardous materials, or on the environment.

GOAL ENR-1 Support and encourage the efficient use of energy; and improved reliability and diversity in the transportation fuel supply

Policy ENR-1A: Promote the siting of renewable energy research or pilot technology demonstration projects in Amargosa Valley

Goal ENR-2 Become proactively involved in the federal and state efforts to route and approve renewable energy transmission corridors for distributing power from the Amargosa Valley to the national grid.

Policy ENR-2A Strive to designate transmission corridors in appropriate locations that are capable of supporting multi-modal corridor configurations of electrical transmission lines, fiber optics communication links, natural gas pipelines, roads, and rail.

Policy ENR-2B Work with Valley Electric Association (VEA) to maintain joint compatibility of local and regional planning efforts, initiatives, and construction projects.

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| <i>Policy ENR-2C</i> | <i>Seek informal review of new corridor proposals with the Nevada Public Utilities Commission (PUC) as they are developed.</i> |
| <i>Policy ENR-2D</i> | <i>Work with Nye County officials to establish an MOU (Memo of Understanding) with the Federal Energy Regulatory Commission (FERC) so as to participate in the corridor decisions in the Amargosa Valley area.</i> |
| Goal ENR-3 | Establish mutually beneficial working relationships with power plant developers in order to review and discuss individual projects and to manage the cumulative impacts of multiple projects on the community. |
| <i>Policy ENR-3A</i> | <i>Facilitate future siting of renewable energy facilities by working with stakeholders and private industry to select areas for preferred energy project development.</i> |
| <i>Policy ENR-3B</i> | <i>Support the development of base load plants nearby that compliment and encourage the use of power from the solar and/or wind facilities.</i> |
| <i>Policy ENR-3C</i> | <i>Make the Developers aware of the limited water resources in the Valley and the federal agency constraints likely to be placed on its usage.</i> |
| <i>Policy ENR-3D</i> | <i>Encourage the use of dry cooling and/or hybrid system technologies, when possible, that reduce overall water consumption</i> |
| <i>Policy ENR-3E</i> | <i>Facilitate partnering agreements between renewable energy developers, the State, and Nye County to plan and develop shared infrastructure such as roads, construction lay down areas, maintenance yards, switching substations, etc.</i> |
| <i>Policy ENR-3F</i> | <i>Promote training and education of local residents to optimize renewable energy-related employment opportunities for local residents.</i> |
| <i>Policy ENR-3G</i> | <i>Work with local housing resources to provide housing solutions for transient construction workers as projects are built.</i> |
| Goal ENR-4 | Promote the use of sustainable resources and energy efficiency within the Amargosa Valley community. |
| <i>Policy ENR-4A</i> | <i>Encourage Amargosa Valley residents and businesses to adopt the energy efficiency programs offered through Valley Electric Association seminars and energy audits.</i> |
| <i>Policy ENR-4B</i> | <i>Encourage the use of sustainable building designs developed to LEED standards.</i> |
| <i>Policy ENR-4C</i> | <i>Encourage planning for new or remodeled public facility buildings to include a design study that evaluates the option of using photovoltaic solar power panels on each building.</i> |

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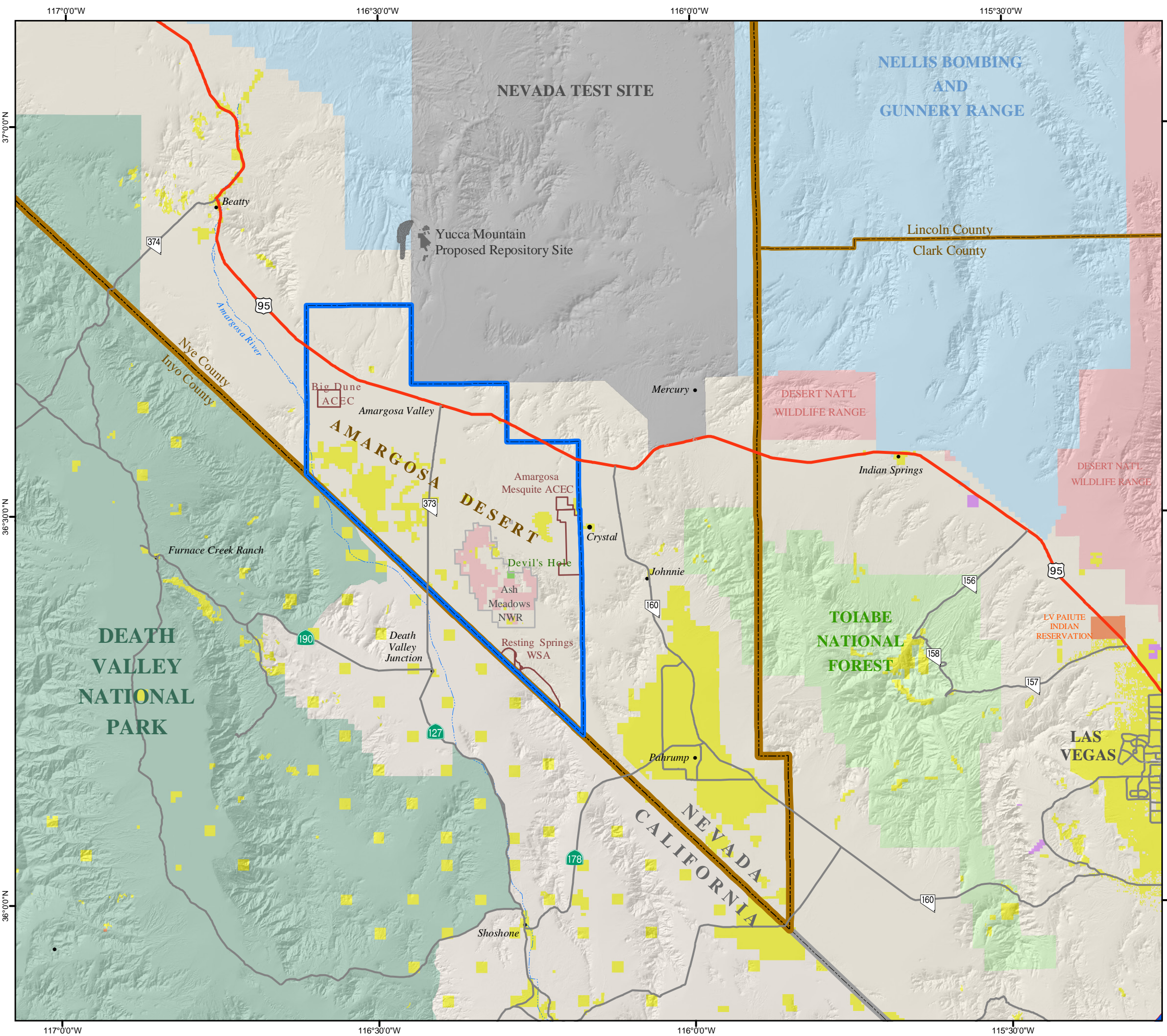
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MAP FIGURES



AMARGOSA VALLEY, NEVADA AREA PLAN

Map 1
Amargosa Valley Vicinity

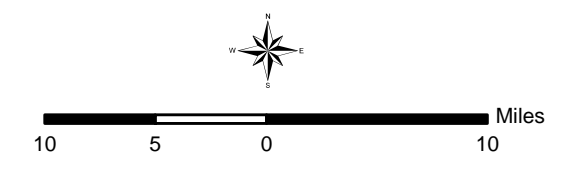
LANDOWNER

- BIA/Native American Reservation
- Bureau of Land Management
- Department of Defense
- Department of Energy
- National Park Service
- State Lands
- Private
- U.S. Fish and Wildlife Service
- U.S. Forest Service

Amargosa Valley Town Boundary



SOURCES:
Land Ownership from BLM Land Ownership dataset (2007).
Ash Meadows National Wildlife Refuge ownership and boundary from Don Harper, USFWS (5/2009). Road centerlines and Amargosa Valley Town boundary from the Nye County GIS Repository (2008).



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Map updated on 6/7/09 - TSG-09024.2

AMARGOSA VALLEY, NEVADA AREA PLAN

Map 2 Land Ownership

LANDOWNER

- Bureau of Land Management
- Fish and Wildlife Service
- Nevada Department of Transportation
- National Park Service
- Nye County
- Private

BOUNDARIES



- Bureau of Land Management Disposable Lands
- Amargosa Valley Town Boundary
- Sections
- Township, Range

ROADS

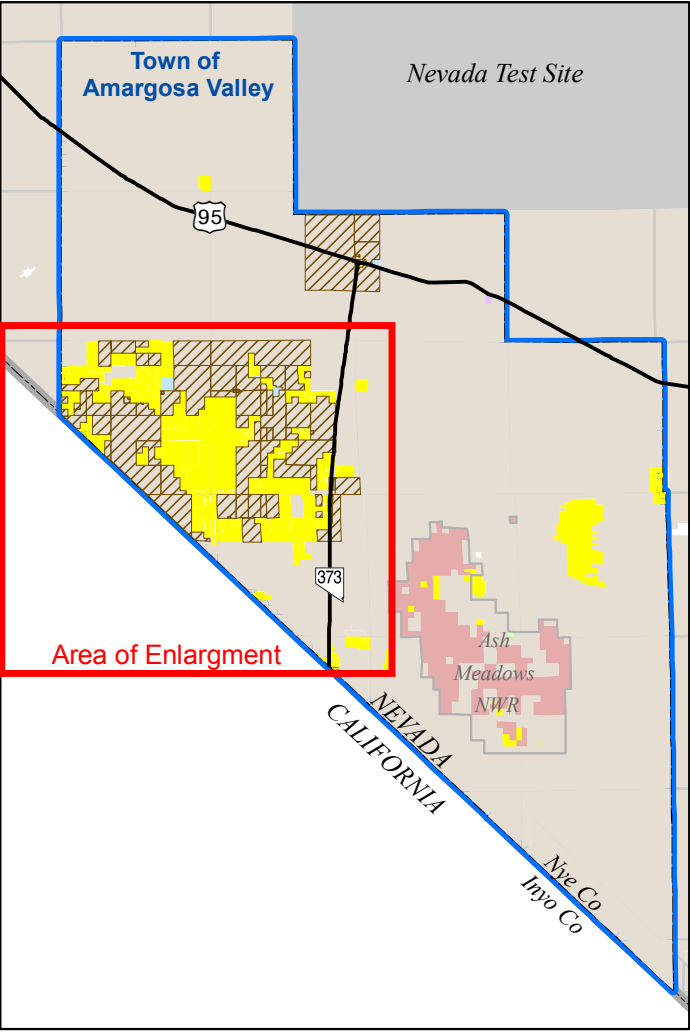
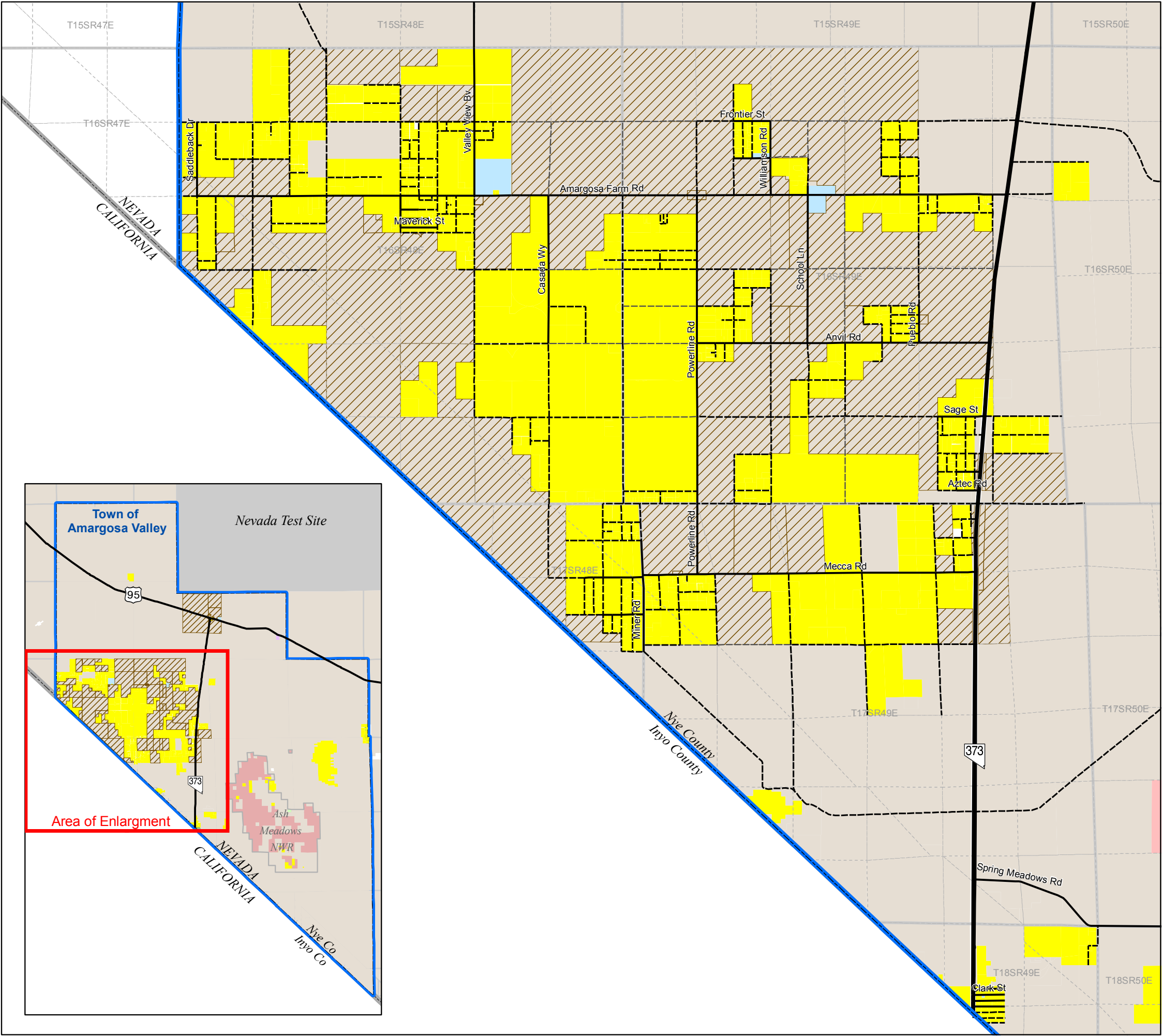
- Paved Highway
- Paved Road
- Unpaved Road

SOURCES:

Land Ownership from BLM Land Ownership dataset (2007). Road centerlines, Township, Range, and Section, and Amargosa Valley Town boundaries from the Nye County GIS Repository (2008).

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

AMARGOSA VALLEY, NEVADA AREA PLAN

Map 3 Existing Land Use

EXISTING LAND USE DESIGNATION

- | | |
|--|--------------------------|
| | Agricultural Commercial |
| | Agricultural Crop |
| | Agricultural Residential |
| | Airstrip |
| | Commercial |
| | Industrial |
| | Mining |
| | Public Services |
| | Residential |
| | Special Development Area |
| | Special Management Area |
| | Undeveloped |

BOUNDARIES

-  Amargosa Valley Town Boundary
 Parcels
 Sections
 Township, Range

ROADS

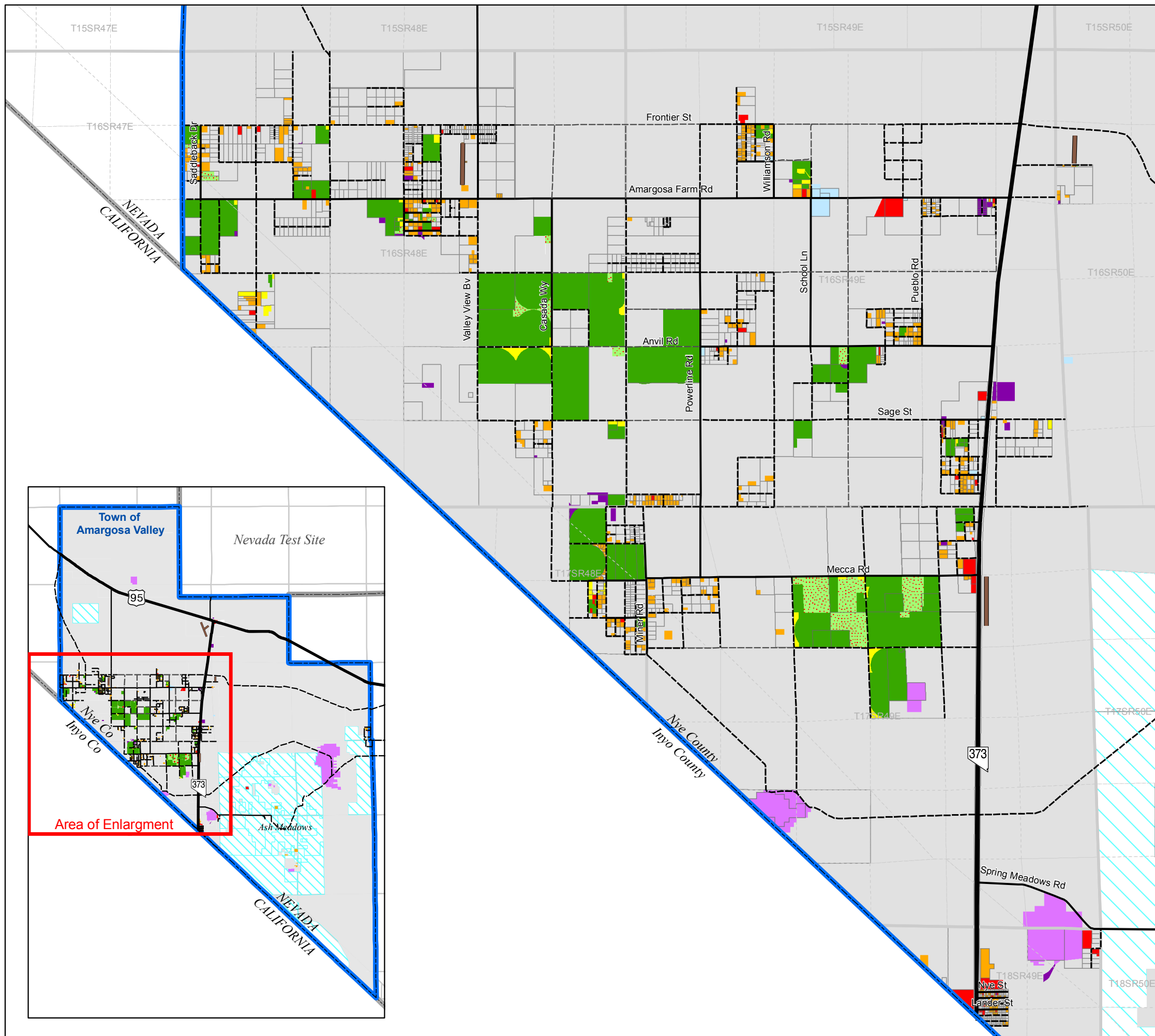
- Paved
 — Paved US Hwy
 --- Unpaved

SOURCES:
Existing Land Use compiled from inputs provided by the Amargosa Valley Area Plan Committee field verifications, Nye County Assessor's database, and photo-interpretation of Nye County 2007 digital orthophotography. Parcels, road centerlines, Amargosa Valley Town boundary, and Township, Range, and Section boundaries from the Nye County GIS Repository (2008).



A horizontal number line with tick marks at -2, -1, 0, and 1. The segment between -1 and 0 is highlighted in white, while the rest of the line is black. The word "Miles" is written at the right end of the line.

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Map updated on 6/7/09 - TSG-09028.2



AMARGOSA VALLEY, NEVADA AREA PLAN

Map 4 Future Land Use

FUTURE LAND USE DESIGNATION

- AGP - Agricultural Production
- CDR - Community Development Reserve
- CUF - Community & Utility Facilities
- HDR - High Density Residential
- LDR - Low Density Residential
- OST - Open Space, Parks and Trails
- RAC - Rural Activity Center
- RCR - Rural Cross Roads
- RDR - Rural Density Residential
- RUI - Rural Industrial
- SDA - Special Development Area (Solar, Wind, and Other)
- SDA - Special Development Area (Federal)
- Proposed Trails

BOUNDARIES

- Amargosa Valley Town Boundary
- Parcels
- Sections
- Township, Range

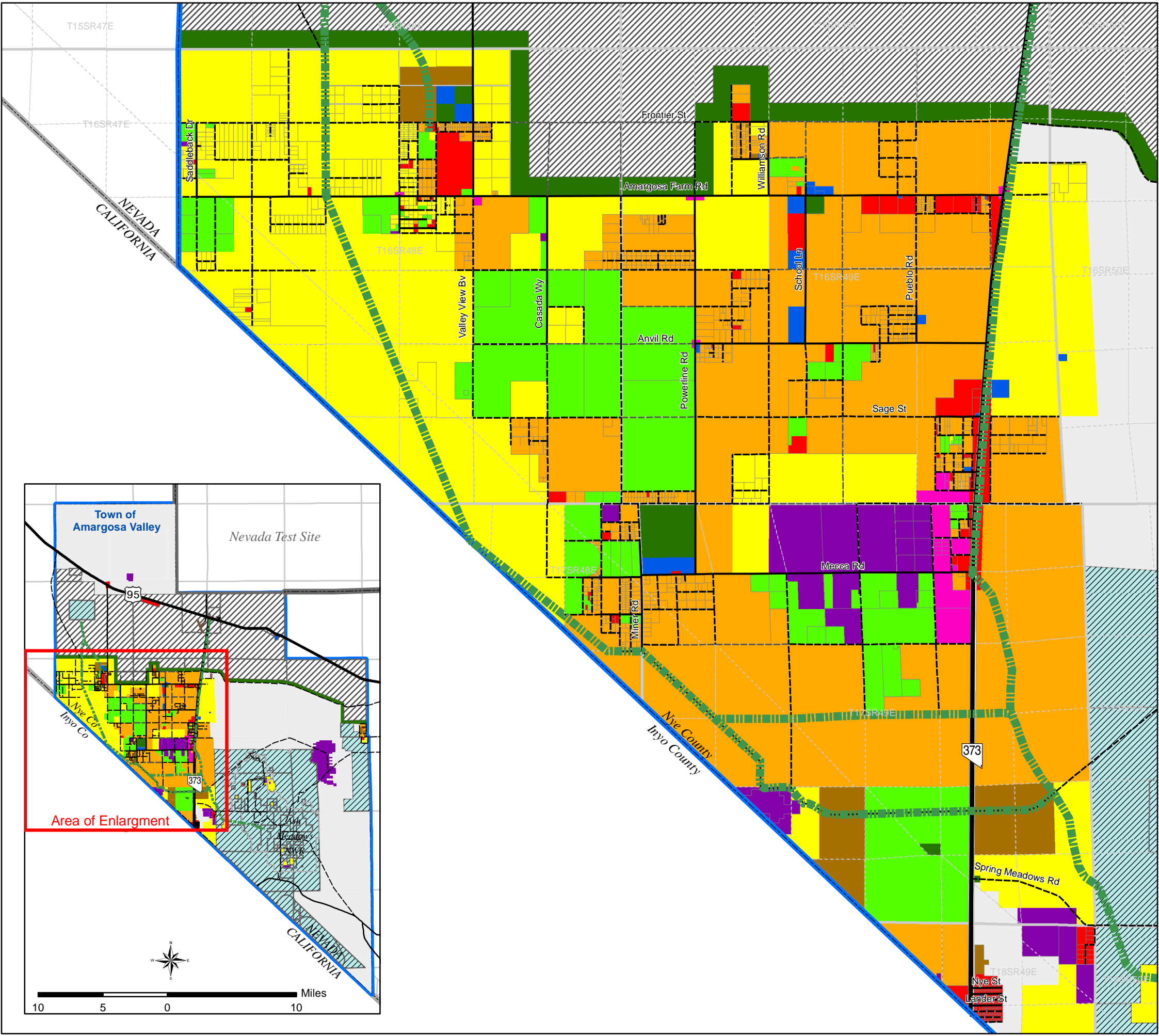
ROADS

- Paved Hwy
- Paved
- Unpaved

SOURCES:
Future Land Use designations automated for each parcel from inputs provided by the Amargosa Valley Area Plan Committee. The SDA YMP Gateway Area Concept Plan (June 2007) is available from the Nye County Nuclear Waste Repository Project Office. Parcels, road center-lines, Amargosa Valley Town boundary, and Township, Range, and Section boundaries from the Nye County GIS Repository (2008).



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Map updated on 7/15/09 - TSG-09027.4



AMARGOSA VALLEY, NEVADA AREA PLAN

Map 5 Transportation

ROADS

- Paved Highway
- Paved Road
- Unpaved Road
- 4 Wheel Drive Trails
- Planned Road

AIRSTRIPS



Airstrips

RAIL

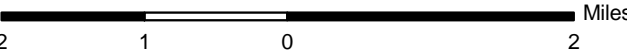


Proposed Yucca Mountain
Caliente Rail Route

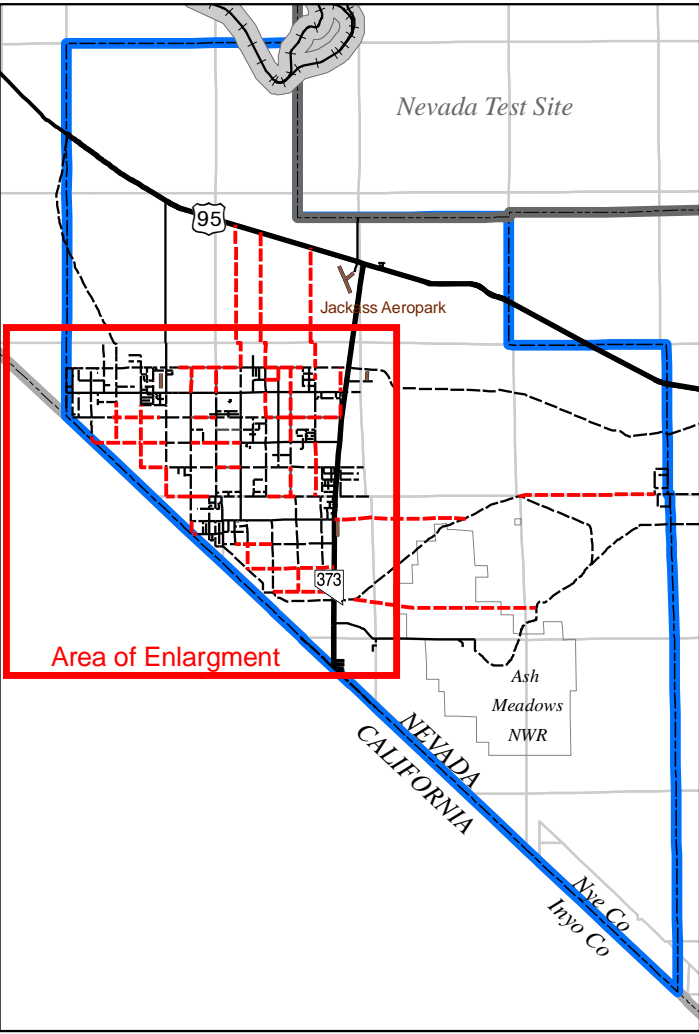
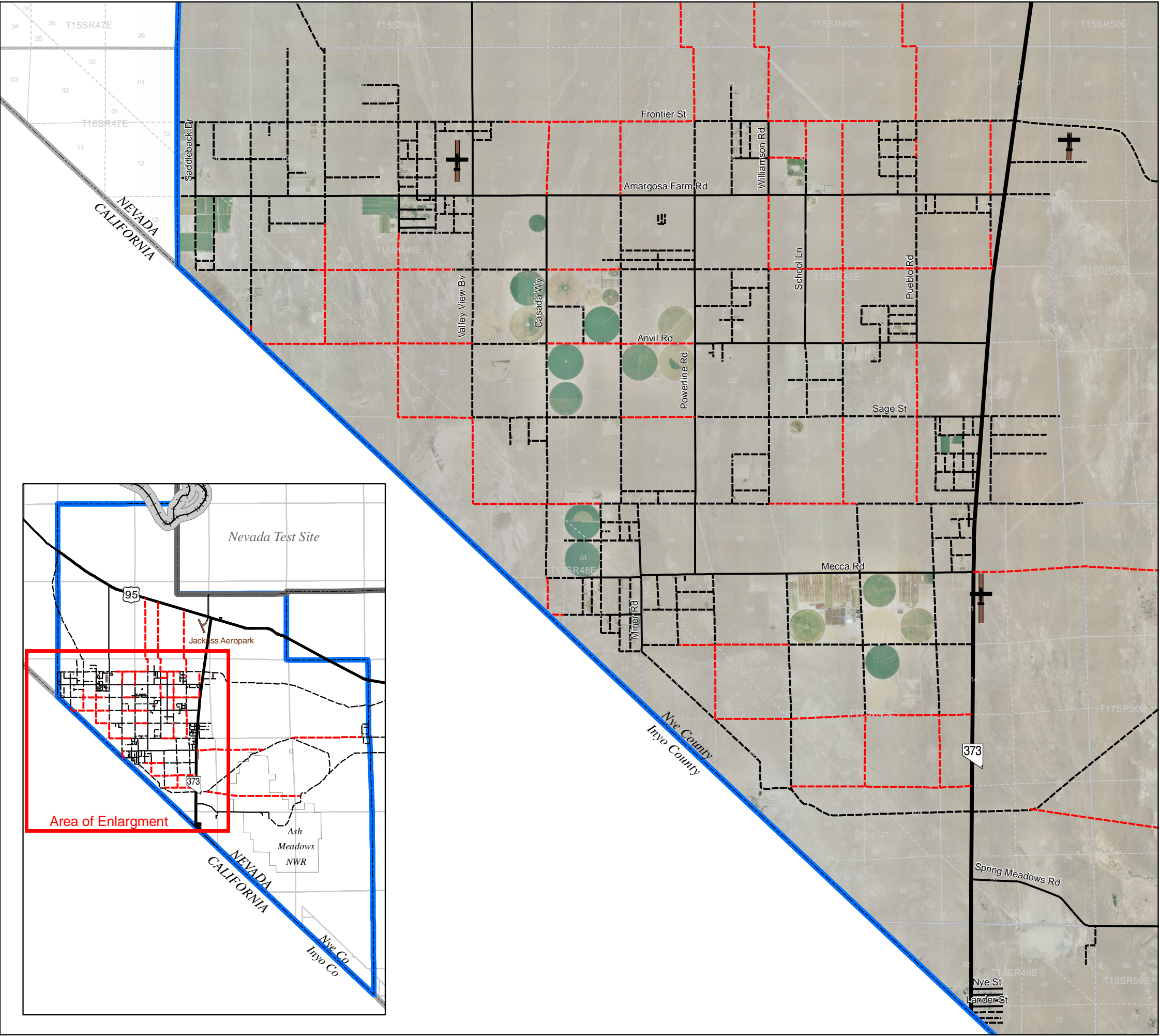
BOUNDARIES

- Amargosa Valley Town Boundary
- Sections
- Township, Range

SOURCES:
Existing road centerlines from the Nye County GIS Repository (2008). Planned roads inputs provided by the Amargosa Valley Area Plan Committee. Amargosa Valley Town and Township, Range, and Section boundaries from the Nye County GIS Repository (2008). Airstrips photo-interpreted from 2007 orthophotos. Proposed YMP Caliente Rail Route from Supplemental DOE Transportation EIS.



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Map updated on 6/7/09 - TSG-09029.2



AMARGOSA VALLEY, NEVADA AREA PLAN

Map 6 Public Buildings, Services and Facilities

LAND USE DESIGNATIONS

- Existing Public Services
- Future Community and Utility Facilities

- Cemetery
- Community Center
- County Facility
- Fire Department
- Helipad
- Library
- Medical Clinic
- Park
- School
- Senior Center
- US Post Office
- Utility

- Proposed Trails

BOUNDARIES

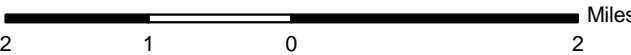
- Amargosa Valley Town Boundary
- Sections
- Township, Range

ROADS

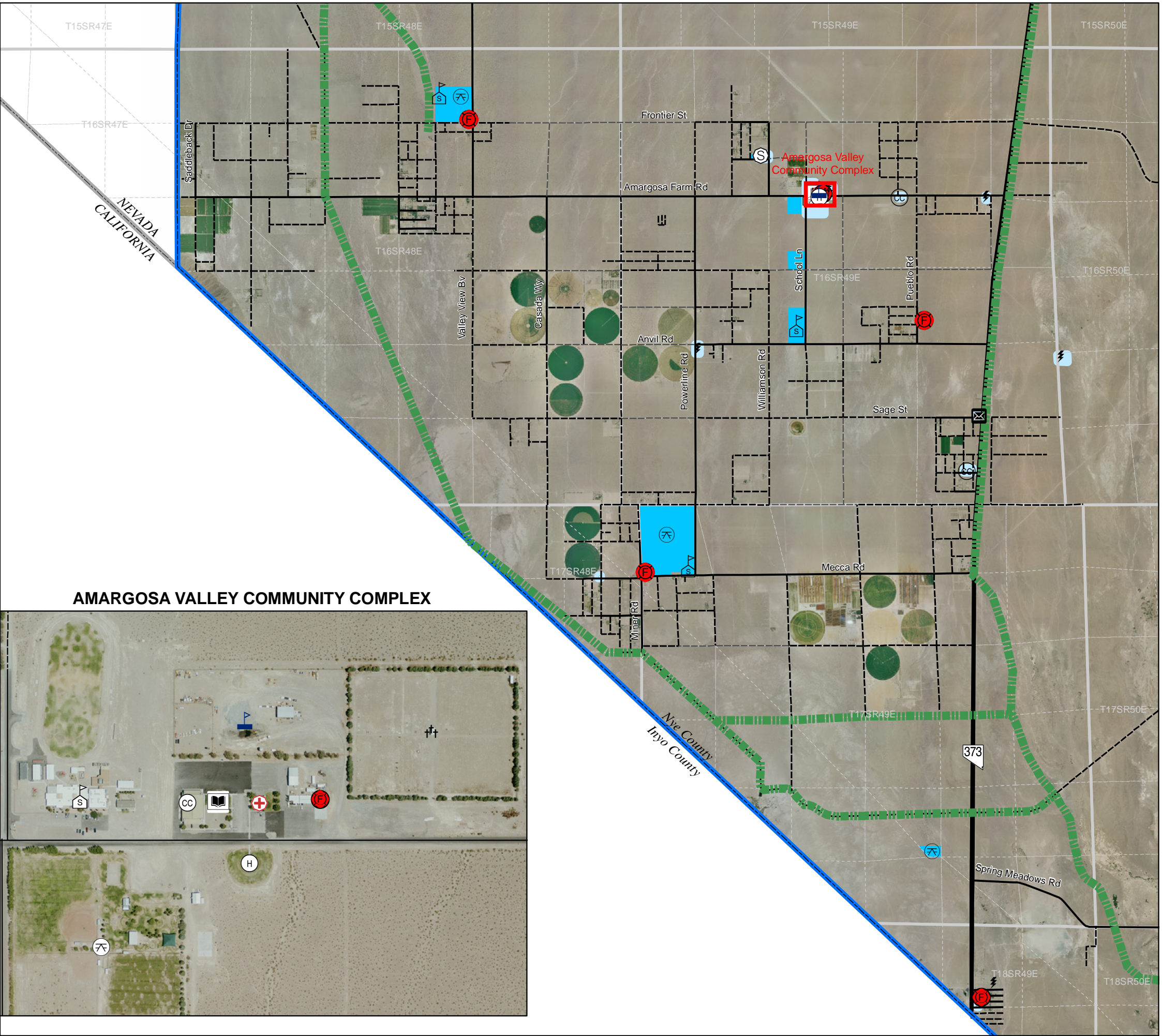
- Paved Hwy
- Paved
- Unpaved

SOURCES:

Existing Public Services interpreted from 2007 orthophotos. Future Community and Utility Facilities provided by the Amargosa Valley Area Plan Committee. Parcels, road centerlines, Amargosa Valley Town boundary, and Township, Range, and Section boundaries from the Nye County GIS Repository (2008).



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Map updated on 6/8/09 - TSG-09030.2



AMARGOSA VALLEY COMMUNITY COMPLEX



AMARGOSA VALLEY, NEVADA AREA PLAN

Map 7 Environmental Hazards

- Public Water Supply Systems
Operated by Nye County
- Wellhead Protection Potential Contaminant Sources
- Dairy

Existing Landuse

- Agricultural Commerical
- Agricultural Crop
- Agricultural Residential
- Airstrip
- Commercial
- Industrial
- Mining
- Public Services
- Residential
- Special Development Area
- Special Management Area
- Undeveloped

Amargosa Valley Town Boundary

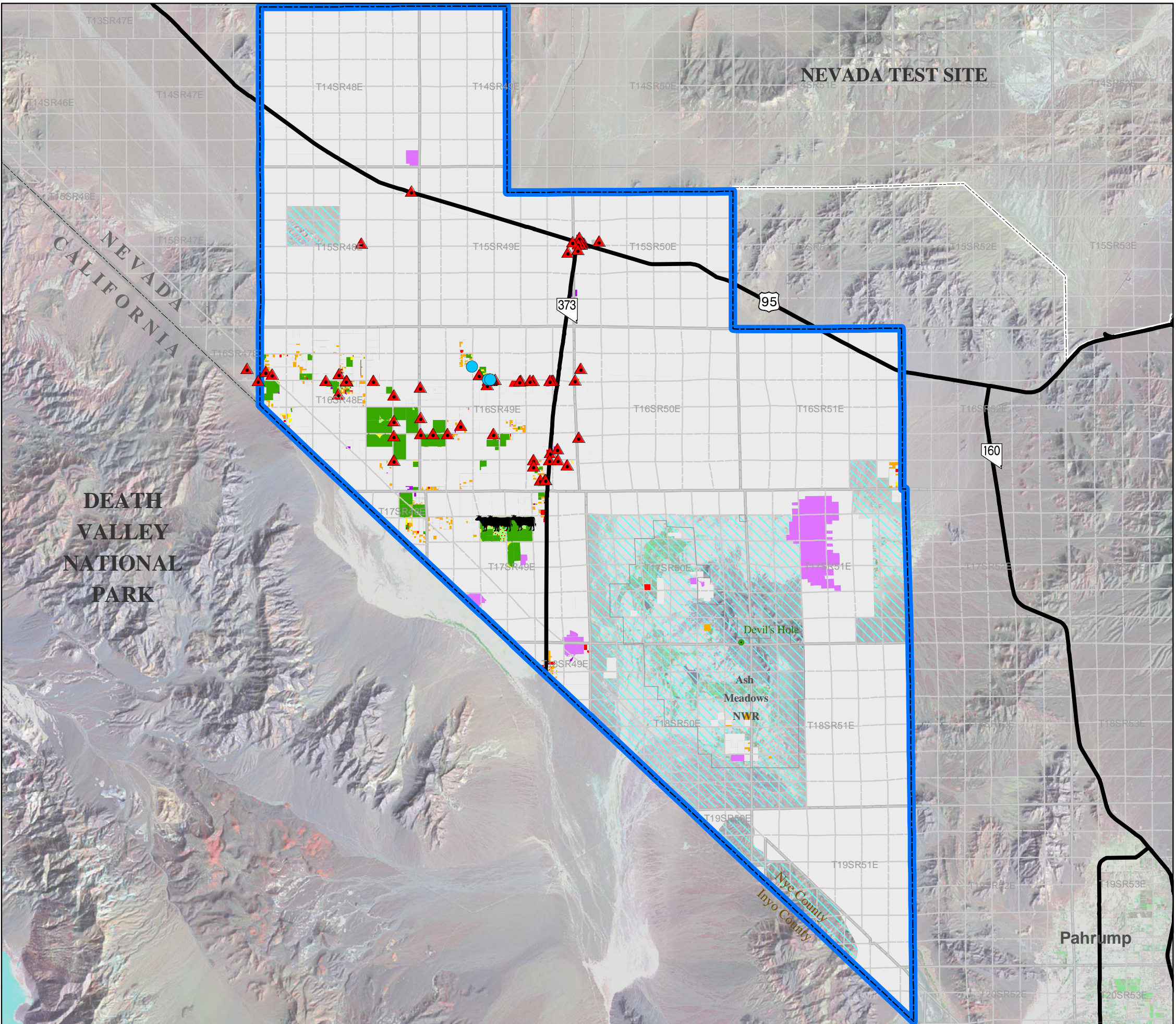
SOURCES:
Potential Contaminant Sources are from Wellhead Protection Plan for Nye County Operated Systems in Amargosa Valley (March, 2006). To identify the potential sources of ground-water contamination in the Town of Amargosa Valley, a comprehensive contaminant source inventory was conducted in 1995. The inventory included all contaminant sources within and near the town. The three public water supply systems operated by Nye County are located at the Senior Center, Elementary School and Amargosa Valley Town Complex.

Amargosa Valley Town boundary and Township, Range, Sections are from the Nye County GIS Repository (2008).



5 2.5 0 5 Miles

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Map updated on 6/8/09 - TSG-09031.2



AMARGOSA VALLEY, NEVADA AREA PLAN

Map 8 Water Resources

- Early Warning Drilling Program Wells
- Amargosa Desert Hydrographic Basin
- Drainages

WATER RIGHTS APPLICATION STATUS

- Certificated
- Permitted
- Ready for Action
- Ready for Protest
- Vested
- All Other Status (cancelled, abandoned, etc.)

- 10 Mile and 25 Mile Buffers Around Devil's Hole
(Office of the State Engineer Order 1197)

LANDOWNER

- Bureau of Land Management
- County
- Department of Energy
- National Park Service
- State Lands
- Private
- U.S. Fish and Wildlife Service

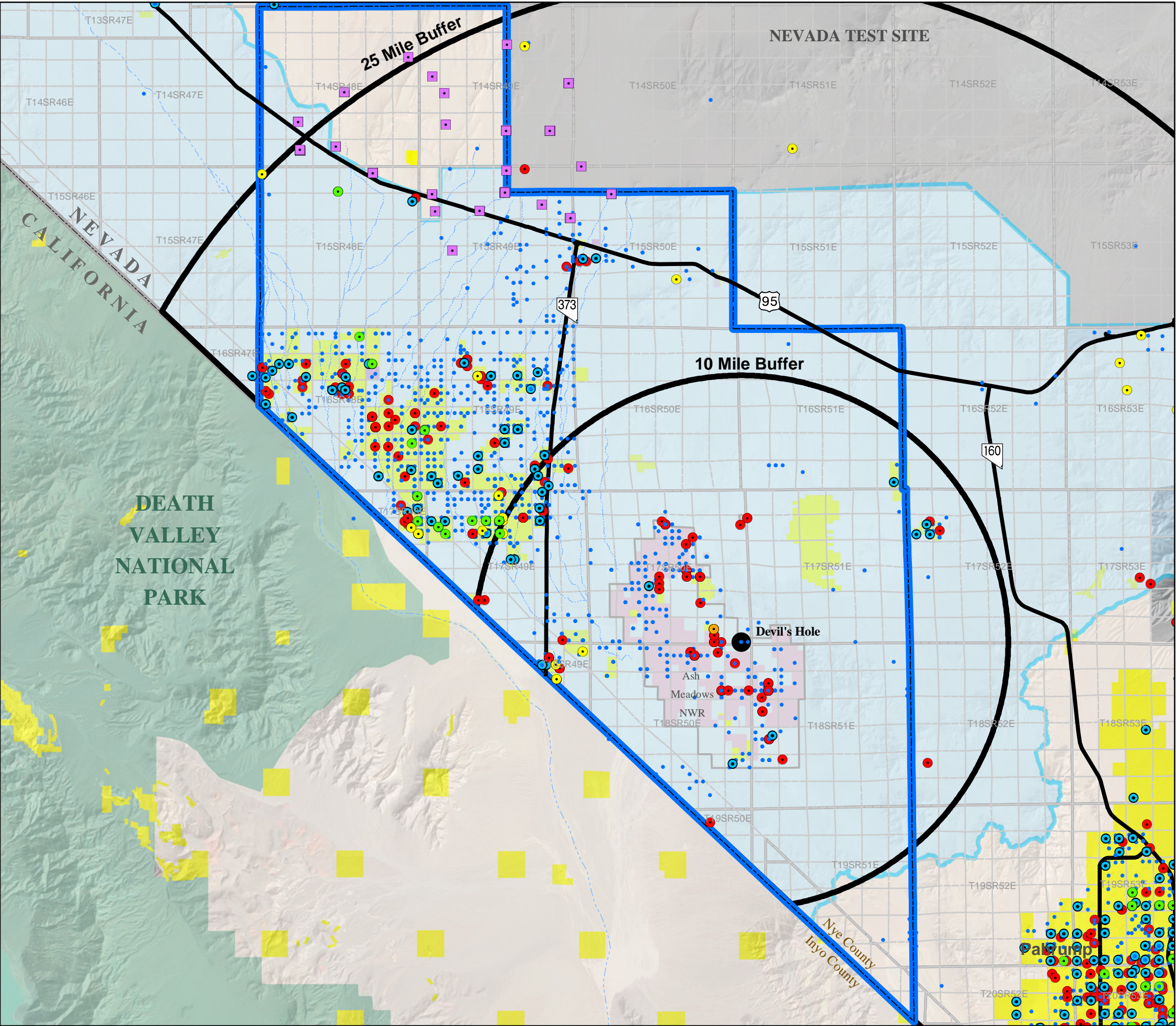
- Amargosa Valley Town Boundary

SOURCES:
Point of Diversions (POD) are locations where surface or underground water is diverted from its source for the purpose of beneficial use (e.g., commercial, domestic, irrigation, mining, etc.). The PODs shown on this map represent the locations of all PODs in the Nevada Division of Water Resources (NDWR) database, as of July, 2008. Codes for the application status, manner of use, and source (e.g., lake, spring, underground, etc.,) are included in the database for each POD.
Point of Diversions, Amargosa Desert Hydrographic Basin boundary, and Order 1197 buffers from the Nevada Division of Water Resources, Office of the State Engineer. Land Ownership from BLM Land Ownership dataset (2007). Road centerlines and Amargosa Valley Town boundary from the Nye County GIS Repository (2008).



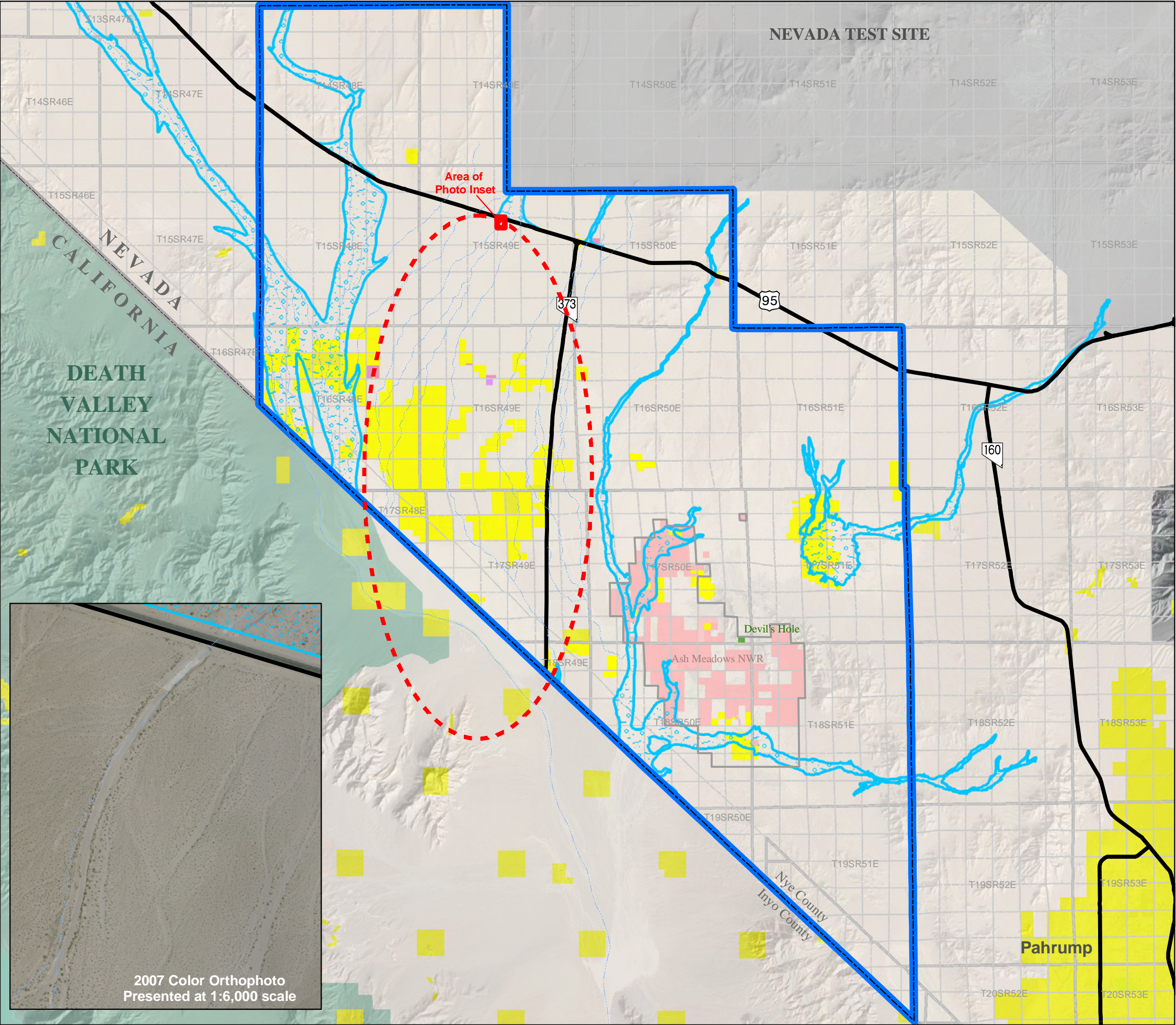
5 2.5 0 5 Miles

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Map updated on 6/25/09 - TSG-09034.3



AMARGOSA VALLEY, NEVADA AREA PLAN

Map 9 Floodplain Protection



- FEMA FIRM Floodprone Areas
- Drainages
- Possible Area of Incomplete Floodprone Mapping

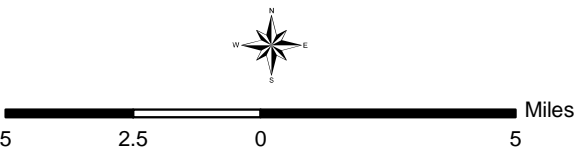
LANDOWNER

- Bureau of Land Management
- County
- Department of Energy
- National Park Service
- State Lands
- Private
- U.S. Fish and Wildlife Service

Amargosa Valley Town Boundary

SOURCES:
Floodprone areas were automated from georeferenced scans of Federal Emergency Management Administration (FEMA) Flood Insurance Rate Map (FIRM) Panels of S. Nye County (September 28, 1990). It appears the central portion of Amargosa Valley was not completely mapped, with drainages from Fortymile Wash and Topopah Wash ending on the north side of US 95.

Land Ownership from BLM Land Ownership dataset (2007). Road centerlines and Amargosa Valley Town boundary from the Nye County GIS Repository (2008).



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Map updated on 6/8/09 - TSG-09032.2

NEVADA TEST SITE

AMARGOSA VALLEY, NEVADA
AREA PLAN

Map 10
Energy Development

BLM RIGHT-OF-WAYS

- Telephone and Telegraph
- ×—× Transmission Line
- Power ROW
- Pending Solar ROW Applications
- Proposed Energy Corridor on Federal Lands

LANDOWNER

- Bureau of Land Management
- County
- Department of Energy
- National Park Service
- State Lands
- Private
- U.S. Fish and Wildlife Service

Amargosa Valley Town Boundary

SOURCES:
Telephone, Telegraph and Transmission Line Right-of-Ways from BLM. Pending BLM solar ROW Applications from BEC, Inc. Power ROWs from BLM GeoCommunicator on 5/27/09. Note: In some areas, Power ROWs do not show the actual extent of the ROW, but rather the PLSS Section in which the ROW is present. Areas proposed (per the requirements of Section 368 of the Energy Policy Act of 2005) as West-wide energy corridors for the final "Programmatic Environmental Impact Statement, Designation of Energy Corridors on Federal Land in the 11 Western States", November 2008 downloaded from the West-Wide Energy Corridor Programmatic EIS Information Center on 12/09/08.

Land Ownership from BLM Land Ownership dataset (2007). Road centerlines and Amargosa Valley Town boundary from the Nye County GIS Repository (2008).



5 2.5 0 5 Miles

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Map prepared on 6/8/09 - TSG-09033.2

