

Tri-Valley Community Profile Mono County, California



**Benton Valley
Benton Hot Springs
Benton Paiute Reservation
Hammil Valley
Chalfant Valley**

April 2008 Draft

Tri-Valley Community Profile Mono County, California

April 2008 Draft

**Mono County Board of Supervisors District 2
Duane "Hap" Hazard
hhazard@mono.ca.gov**

**Chalfant Regional Planning Advisory Committee
Benton/Hammil Regional Planning Advisory Committee**

Mono County Community Development Department

commdev@mono.ca.gov
P.O. Box 347
Mammoth Lakes, CA 93546
(760) 924-1800

Tri-Valley Community Profile Mono County, California

April 2008 Draft

To Suggest Revisions or Amendments

The Tri-Valley Community Profile is intended to be a dynamic document that changes as circumstances change and new information becomes available. To suggest revisions or amendments to the profile, or to request further information, contact the Mono County Community Development Department.

Tri-Valley Community Profile

Table of Contents

Community Profile

Mono County Community Profiles	5
What are the Boundaries of the Tri-Valley?	5
Land Use in the Tri-Valley	5
Land Use Planning	2
Who Lives in the Tri-Valley?	9
Economic Data for the Tri-Valley	13
Housing Conditions in the Tri-Valley.....	16
Community Services and Facilities.....	20
Community Infrastructure	22
Environmental Setting.....	24
Additional Resources	34

Facts and Figures

Projected Buildout Tables for the Tri-Valley.....	4
Tri-Valley Area Plan Policies	5
Accessing and Using Data from the 2000 US Census	9

Mono County Profiles

Mono County Community Profiles are a component of the **Mono County Master Environmental Assessment (MEA)**. They have been structured to work both as stand-alone documents and as chapters in the MEA. The County's **Master Environmental Assessment** is a comprehensive database that serves as the background for the development of General Plan policies and also as a database for the preparation of future environmental documents. For additional information on specific environmental topics, consult the applicable section of the MEA.

Mono County Community Profiles consolidate environmental, demographic, land use, housing, transportation, and other data about a community area into one document to facilitate ease of use. The text is followed by a map set that contains pertinent land use and environmental maps for that community area.

The Community Profiles may be used by planners or citizens as a comprehensive reference to Mono County's communities.

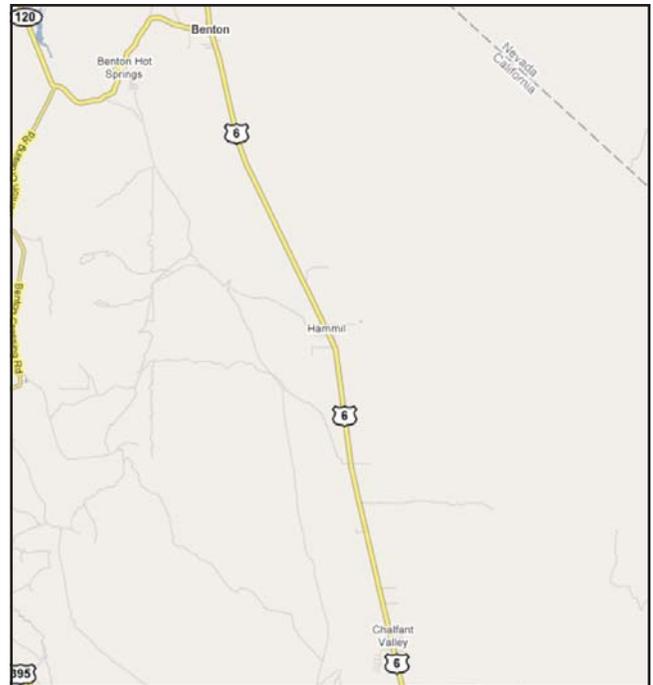
What are the Boundaries of the Tri-Valley?

The Tri-Valley is located in the southeast corner of Mono County. It is a northward continuation of the Owens Valley and is bordered to the south by Laws in Inyo County, to the west by the Casa Diablo area and the volcanic Tablelands, to the north by the Nevada state line, and to the east by the White Mountains.

The county planning area known as the Tri-Valley includes the communities of Chalfant Valley, Hammil Valley, Benton Valley, Benton Hot Springs, and the Benton Paiute Reservation.

The area is approximately 30 miles in length from the Inyo County line to the Nevada state line and approximately 5 miles in width. Topography within the region is characterized by the relatively flat floor of the valleys, gently sloping alluvial fans along the sides of the valley floors, and

steep slopes above the alluvial fans. There are no surface waters within the district other than at Fish Slough, a protected wetlands area in the southwest corner of Chalfant Valley. Vegetation in the area is primarily desert scrub communities, including sagebrush scrub and shadscale scrub



► *See the Tri-Valley Community Profile Map Set, Section 1, Area Maps.*

Land Use in the Tri-Valley

The Tri-Valley includes the communities of Chalfant, Hammil, and Benton. Chalfant is located in the southern portion of the region, approximately 13 miles north of Bishop in Inyo County; Hammil is approximately 10 miles north of Chalfant; Benton is approximately 10 miles north of Hammil.

Private lands in the Tri-Valley are concentrated in the center of the valleys, along the Highway 6 corridor, and in the Benton Hot Springs area, along State Route 120. The Chalfant Valley includes large parcels of land owned by the Los Angeles Department of Water and Power (LADWP). That land is designated Open Space (OS) in the Mono County General Plan and is maintained as open space by LADWP to protect its water resources. The remainder of the valley floor is public land managed by the Bureau of Land Management (BLM). Those lands are managed primarily for

habitat conservation and dispersed recreation. The mountains on either side of the valley are public land managed by the Inyo National Forest (INF) for habitat conservation and dispersed recreation.



Chalfant is a rural residential community with limited small businesses and community facilities including a community center, a park, a solid-waste transfer station, and a fire station. Residential property in Chalfant is a mix of half-acre lots, one-acre lots and larger lots designated Rural Mobile Home (RMH) or Estate Residential (ER). Most of the land immediately surrounding the community is large parcels owned by LADWP and designated Open Space (OS). There are some larger private parcels surrounding the community that are designated Agriculture (AG).

Land use in the Hammil Valley is primarily agricultural, mostly irrigated cropland. Rural residential development occurs on dispersed ranches and in small areas of large lot single-family residential development. Most of the large lot single-family residential development is designated Rural Residential (RR). Most of the larger private parcels are designated Agriculture (AG).

Benton is a rural residential community with limited small businesses, an elementary school, library, senior center, church, County roadway, Caltrans maintenance facility, and a solid-waste transfer station. Most of the land immediately surrounding the community is either publicly owned and managed by the Bureau of Land Management or is large private parcels designated Agriculture (AG).

Large parcels of land throughout the Tri-Valley region, particularly in Hammil Valley and Benton, are used for agriculture. In the past, alfalfa has been the primary crop. Other crops are now

being grown in addition to alfalfa, including seed potatoes, garlic, and carrots.

Include info on Williamson Act contract lands and land in ESLT land conservation contracts

Land Use Planning

Planning Policies

The Tri-Valley area is one of Mono County's Regional Planning Areas. The county is divided into several planning areas, based primarily on geographic separation between community areas. The Mono County General Plan is the overall planning document for privately owned land within the county. It contains overall land use policies for the incorporated area as well as Area Plan policies for communities. The Tri-Valley Area Plan policies contain specific land use direction for communities in the Tri-Valley. Site-specific land use policies for large development projects may be contained in Specific Plan documents prepared for those projects, e.g.:

Mountain Vistas Specific Plan and Environmental Impact Report. Adopted 2006.

White Mountain Estates Specific Plan and Environmental Impact Report. Draft 2007.

The Tri-Valley Area Plan policies from the Mono County General Plan Land Use Element are reproduced at the end of this section following the projected buildout tables for the Tri-Valley communities.

Planned Land Use

The Mono County General Plan Land Use Element provides for substantial additional development in the Tri-Valley area. In Chalfant, the additional development allowed by the plan would be predominantly rural residential development throughout the valley. Limited residential development could also occur throughout the valley on agricultural lands, although most of the agricultural lands have a 40-acre minimum lot size. Residential development on lands designated for agricultural uses would be spread out.

In Benton, the additional development allowed by the plan would be predominantly rural residential development throughout the valley,

along with limited commercial uses and mixed-use development in Benton that could incorporate residential development and commercial development. The commercial development would occur in the existing community along State Routes 6 and 120. Residential development could also occur throughout the valley on agricultural lands. A large amount of the land designated for rural residential has large minimum lot sizes (4 acres or more) which means that the development would be spread out. Residential development could also occur on lands designated for agricultural uses and could be similarly spread out.

Hammil Valley has a development credits program that allows a certain number of units to be developed per parcel, depending on the size of the parcel and the ownership. Despite this limitation, additional residential development could occur in the Hammil Valley

Projected Buildout

The Mono County General Plan Land Use Element contains projected buildout figures for each community area which were calculated based on the land use maps and the allowable densities established for each land use designation. The figures for maximum potential dwelling units and maximum potential population are based on the assumption that the maximum number of housing units allowed under general plan land use designations could be developed. This assumption is somewhat unrealistic, however, since large parcels of private land outside of community areas are in many cases unlikely to be developed in the next 20 years due to environmental constraints, lack of access, lack of infrastructure, and community desires to keep large parcels of agricultural lands as open space.

Assuming that the maximum potential number of dwelling units would be developed also assumes that commercially designated lots that are currently developed either with lower density residential uses or with commercial uses would be redeveloped with higher density residential uses. It is probably unrealistic to assume that this would occur on all commercially designated lots.

The anticipated 80 percent buildout figures for dwelling units and population actually assumes

an 80 percent buildout in community areas and a 50 percent buildout on private lands outside of community areas. This assumption is also probably high for the reasons stated above.

The buildout calculations for Chalfant, Hammil, and Benton from the Mono County Land Use Element are reproduced on the following pages.

► *See Tri-Valley Community Profile Map Set, Section 2, Land Use Maps.*



BUILDOUT BY PLANNING AREA AND LAND USE DESIGNATIONS

Community Planning Area: **CHALFANT VALLEY**

Land Use Designation	Density	Acres	Maximum Potential Dwelling Units
ER Estate Residential	1 du/acre	109	109
RR Rural Residential	1 du/acre		
RMH Rural Mobile Home	1 du/acre	443	365 ^a
SFR Single-Family Residential	5.8 du/acre		
MFR-L Multiple-Family Residential – Low	11.6 du/acre		
MFR-M Multiple-Family Residential – Moderate	15 du/acre		
MFR-H Multiple-Family Residential – High	15 du/acre		
MU Mixed Use	15 du/acre		
CL, M Commercial Lodging, Moderate	15 du/acre		
CL, H Commercial Lodging, High	15 du/acre		
RU Rural Resort	1 du/5 acres		
C Commercial	15 du/acre	1	15
SC Service Commercial	---	3	1
IP Industrial Park	---		
I Industrial	---		
RE Resource Extraction	---	40	---
PF Public/Quasi-Public Facilities	---	3	---
RM Resource Management	1 du/40 acres	162	5
OS Open Space	1 du/80 acres		
NHP Natural Habitat Protection	1 du/5 acres		
AG Agriculture	1 du/2.5 ac.	1,136	69 ^b
AP Area Plan	---		
SP Specific Plan	---	---	---
Total Private Lands		1,897	564
RM Resource Management – Federal/State	---	44,403	---
OS Open Space – WRID	1 du/80 acres	7,769	97
Other	---		
Total		54,069	661

Notes: du = dwelling unit

- a. 100 acres at 5-acre minimum lot size; 10 acres at 2-acre minimum lot size.
- b. 1,030 acres at 40-acre minimum lot size.

BUILDOUT BY PLANNING AREA AND LAND USE DESIGNATIONS

Community Planning Area: **HAMMIL VALLEY**

Land Use Designation	Density	Acres	Maximum Potential Dwelling Units
ER Estate Residential	1 du/acre		
RR Rural Residential	1 du/acre	411	17 ^a
RMH Rural Mobile Home	1 du/acre		
SFR Single-Family Residential	5.8 du/acre		
MFR-L Multiple-Family Residential – Low	11.6 du/acre		
MFR-M Multiple-Family Residential – Moderate	15 du/acre		
MFR-H Multiple-Family Residential – High	15 du/acre		
MU Mixed Use	15 du/acre		
CL, M Commercial Lodging, Moderate	15 du/acre		
CL, H Commercial Lodging, High	15 du/acre		
RU Rural Resort	1 du/5 acres		
C Commercial	15 du/acre		15
SC Service Commercial	---		1
IP Industrial Park	---		
I Industrial	---		
RE Resource Extraction	---		
PF Public/Quasi-Public Facilities	---	3	---
RM Resource Management	1 du/40 acres	355	9
OS Open Space	1 du/80 acres		
NHP Natural Habitat Protection	1 du/5 acres		
AG Agriculture	1 du/2.5 ac.	6,134	278 ^a
AP Area Plan	---		
SP Specific Plan	---		
Total Private Lands		6,903	304
RM Resource Management – Federal/State	---	60,674	---
Other	---		
Total		67,577	304

Notes: du = dwelling unit

- a. Hammil Valley has a development credits program which allows a certain number of units to be developed per parcel, depending on the size of the parcel and the ownership. Dwelling units were calculated using the Development Credits Table included in the land use policies for the Tri-Valley.

BUILDOUT BY PLANNING AREA AND LAND USE DESIGNATIONS

Community Planning Area: **BENTON VALLEY**

Land Use Designation	Density	Acres	Maximum Potential Dwelling Units
ER Estate Residential	1 du/acre		
RR Rural Residential	1 du/acre	1,799	586 ^a
RMH Rural Mobile Home	1 du/acre		
SFR Single-Family Residential	5.8 du/acre		
MFR-L Multiple-Family Residential – Low	11.6 du/acre		
MFR-M Multiple-Family Residential – Moderate	15 du/acre		
MFR-H Multiple-Family Residential – High	15 du/acre		
MU Mixed Use	15 du/acre	110	1,650 ^b
CL, M Commercial Lodging, Moderate	15 du/acre		
CL, H Commercial Lodging, High	15 du/acre		
RU Rural Resort	1 du/5 acres	35	---
C Commercial	15 du/acre	15	225 ^b
SC Service Commercial	---		
IP Industrial Park	---		
I Industrial	---	40	---
RE Resource Extraction	---		
PF Public/Quasi-Public Facilities	---	45	---
RM Resource Management	1 du/40 acres	893	22
OS Open Space	1 du/80 acres		
NHP Natural Habitat Protection	1 du/5 acres		
AG Agriculture	1 du/2.5 ac.	3,578	1,391
AP Area Plan	---		
SP Specific Plan	---		
Total Private Lands		6,515	3,874
RM Resource Management – Federal/State	---	37,248	---
Other	---		
Total		43,763	3,874

Notes:

du = dwelling unit

- 492 acres RR; 288 acres RR 4 (4-acre minimum lot size); 16 acres RR 7 (7-acre minimum lot size); 775 acres RR 5 (5-acre minimum lot size); 134 acres RR 10 (10-acre minimum lot size); 234 acres RR 40 (40-acre minimum lot size).
- Assumes the development of a water and sewer system to obtain this density.
- 202 acres designated AG 5 (5 acre minimum lot size); 22 acres AG 7 (7-acre minimum lot size).

Mono County General Plan, Land Use Element Tri-Valley Area Plan Policies

TRI-VALLEY– GOAL

Preserve the rural and agricultural character of the Tri-Valley area.

OBJECTIVE A

Integrate compatible residential development into the existing community character in Benton.

Policy 1: Allow for the continuation of growth in Benton in a manner that promotes and protects its rural and agricultural character.

Action 1.1: Gross densities for residential development in Benton shall not exceed two (2) dwelling units per acre. For parcels forty (40) acres or greater, clustering shall be encouraged.

Action 1.2: Encourage agricultural landowners to utilize the property-tax incentives for agricultural land provided for in the county's Williamson Act program.

Action 1.3: Require new development to provide adequate buffering of incompatible uses (e.g., landscaping, physical barriers, large setbacks) to protect agricultural areas from residential and other incompatible land uses.

Action 1.4: Subdivisions of more than four parcels shall include paved streets.

Action 1.5: All tract maps shall include an in-depth hydrological study including flow tests and pressure/drawdown tests to ensure that there is an adequate water supply and that there will be no impact on neighboring wells.

Action 1.6: Discourage installation of streetlights unless necessary for safety reasons. Encourage shielded light sources whenever possible.

Action 1.7: Permit agricultural uses, including the keeping of animals, in all land use designations.

Action 1.8: Encourage access and equestrian trails through developments to public lands.

Policy 2: Prevent the intrusion of development into agricultural areas in order to protect agricultural resources.

Action 2.1: Monitor and discourage the conversion of viable agricultural land to non-agricultural uses.

Action 2.2: Agricultural activities shall have precedence over incompatible uses/activities in the Tri-Valley area.

Action 2.3: Carefully evaluate subdivisions outside existing community areas. Consideration should be given to assigning large minimum parcel sizes.

Action 2.4: Encourage private landowners with visual, environmental and agriculturally significant property to grant or sell a conservation easement to a land conservation organization to protect the land as open space and/or agricultural use.

Policy 3: Encourage residential development in areas that will minimize the impact on the environment.

Action 3.1: Encourage the completion of adequate studies of the flooding potential throughout the Tri-Valley area.

Action 3.2: Encourage the exchange of environmentally sensitive private lands for public lands.

Action 3.3: Continue to enforce the provisions of the county's Flood Plain combining district in the Tri-Valley area.



Policy 4: Encourage the timing of growth to allow for efficient use of existing public facilities and services and for adequate planning for additional public facilities and services.

Action 4.1: Allow additional residential subdivision only when adequate services (including fire protection, water, and school facilities) are available or planned for development. The proponent of a residential subdivision shall include this assessment as part of the environmental review process.

Action 4.2: To permit the efficient delivery of public services, encourage residential development in Benton to take place on parcels contiguous to existing development.

Action 4.3: All tract maps shall include an in-depth hydrological study including flow tests and pressure/drawdown tests to ensure that there is an adequate water supply and that there will be no impact on neighboring wells.

Action 4.4: New development projects, including subdivisions, shall comply with fire safe regulations and obtain "will serve" letters from the White Mountain Fire Protection District.

Action 4.5: Subdivisions and/or building permits shall not be approved in areas which are withdrawn and/or not within the White Mountain Fire Protection District until such areas are brought into the district.



OBJECTIVE B

Preserve the agricultural character of the Hammil Valley.

Policy 1: Protect agricultural uses from the encroachment of incompatible land uses.

Action 1.1: Limit residential development in Hammil Valley in order to minimize agricultural-residential conflicts.

Action 1.2: Prohibit scattered residential development in Hammil Valley that would increase agricultural-residential conflicts.

Action 1.3: Encourage agricultural landowners to utilize the property-tax incentives for agricultural land provided for in the county's Williamson Act program.

Action 1.4: All tract maps shall include an in-depth hydrological study including flow tests and pressure/drawdown tests to ensure that there is an adequate water supply and that there will be no impact on neighboring wells.

Policy 2: Prevent incompatible adjacent land uses.

Action 2.1: Require developers to provide adequate buffering (e.g., landscaping, physical barriers, large setbacks) of incompatible uses to protect agricultural areas from residential and other incompatible land uses.

Action 2.2: Discourage the extension of public and private facilities, especially roads, into open space or agricultural land.

Policy 3: Prevent the intrusion of development into agricultural areas in order to protect agricultural resources.

Action 3.1: Monitor and discourage the conversion of viable agricultural land to non-agricultural uses.

Action 3.2: Agricultural activities shall have precedence over incompatible uses/activities in the Tri-Valley area.

Action 3.3: Encourage private landowners with visual, environmental and agriculturally significant property to grant or sell a conservation easement to a land conservation organization to protect the land as open space and/or agricultural use.

- Policy 4: Encourage the continuation of agricultural production through implementation of the Development Credits Program.
- Action 4.1 Under the Development Credits Program, in the Hammil Valley:
1. No parcel may be created less than ten (10) acres in size.
 2. One development credit permits the construction of one single-family residence.
- Action 4.2: Consider amending the ten (10)-acre minimum parcel size.
- Action 4.3: Prior to project approval, development credits shall be assigned by the decision-making body having authority to approve or deny the project. Development credits shall be assigned in accordance with the total acreage under a single ownership. The total number of development credits shall be assigned in accordance with the following rules (see Table 1):
- a. For lands under a single ownership which total ten (10) acres or less, one (1) development credit shall be assigned.
 - b. For lands under a single ownership which total forty (40) acres or less, one (1) development credit shall be assigned for each ten (10) acres.
 - c. For lands under a single ownership which total more than forty (40) acres, four (4) development credits shall be assigned for the first forty (40) acres, and one additional development credit shall be assigned for each additional forty (40) acres, or portion thereof greater than ten (10) acres.
- Action 4.4: The assigned development credits shall be recorded in a Development Credits Ledger. The Development Credits Ledger shall be maintained by the Planning Division.
- Action 4.5: One development credit is considered to have been used for each existing dwelling unit on lands under a single ownership. Those lands shall be appropriately debited in the Development Credits Ledger. Secondary housing, pursuant to Chapter 16 of the Mono County Land Development Regulations, shall be permitted and shall not be considered as a development credit.
- Action 4.6: Property owners who own more than forty (40) acres must submit and obtain approval of a Master Plan for all the lands under their ownership prior to the use of any of the development credits assigned to lands under their ownership.
- Action 4.7: Property owners who own a 1/4, 1/4 section or forty (40) acres or less need not file a Master Plan and may use their development credits through the normal County land development procedures. Parcels of forty acres or less may apply for or be assigned Agricultural or Rural Residential designation. Development credits shall be debited to the Development Credits Ledger at the time of project approval.
- Action 4.8: The Master Plan shall designate the owner's assignment of development credits to each parcel under their ownership. Upon approval of the Master Plan by the decision-making body having authority to approve or deny the project the development credits shall be assigned to the parcels as stipulated by the Master Plan. The Development Credits Ledger shall be posted accordingly.
- Action 4.9: The development of parcels that are the subject of a Master Plan shall comply with all applicable Mono County land use designation and development requirements. In addition, the decision-making body having authority to approve or deny the project shall make a finding that the proposed project is in conformance with the approved Master Plan.



Action 4.10: Wherever feasible, development shall occur on clustered ten- (10) acre parcels. The location of the residential clusters shall be guided by the following policies:

- a. Residential development shall occur adjacent to existing residential development, or
- b. Residential development shall occur on soils rated Class II or poorer by the Soil Conservation Service land use capability classifications.

Action 4.11: When the size, location, or configuration of the lands under a single ownership permits no alternative location for the use of the assigned development credits other than adjacent to agricultural operations, the parcels shall be configured to allow the maximum setback for a building site from the agricultural operation.

Action 4.12: The Master Plan shall designate the phasing of development.

Action 4.13: The Master Plan may be amended utilizing county procedures for amendment of a General Plan.

Action 4.14: The Master Plan shall designate those lands with no remaining development credits as "Exclusive Agriculture."

Action 4.15: Prior to or upon the sale of an "Exclusive Agriculture" parcel which has no remaining development credits, the seller shall disclose to the buyer that the parcel has no remaining development credits.

Action 4.16: "Exclusive Agriculture" parcels of 160 or more acres are permitted one single-family dwelling and one secondary unit pursuant to Chapter 16 of the Mono County Land Development Regulations. When appurtenant to agricultural use, other farm outbuildings and quarters for farm labor may be permitted.

Action 4.17: Contiguous parcels designated as "Exclusive Agriculture" that total 160 acres or more may be combined under a single ownership. The provisions of Actions 2.15 and 2.16 shall then be applied to the larger parcel.

Action 4.18: When sold, parcels that are the subject of an approved Master Plan shall retain the number of development credits assigned to them by the Master Plan and recorded in the Development Credits Ledger. When sold, parcels that are not the subject of an approved Master Plan shall be assigned development credits in accordance with Action 2.3 of the Development Credits Program. The lands that remain under the ownership of the selling party shall be reassigned development credits in accordance with Action 2.3 of the Development Credits Program.

Policy 5: Allow family farming mixed with large farms.

Policy 6: Allow exclusive farm worker housing on parcels that support ongoing agricultural operations.



Hamhill Valley Development Credits Assignments

Nominal Parcel Size (Acres) Actual Parcel Size (Acres) Development Credits

10	0.1--19.4	1
20	19.5--39.4	2
30	29.5--39.4	3
40	39.5--49.4	4
50	49.5--89.4	5
90	89.5--129.4	6
130	129.5--169.4	7
170	169.5--209.4	8
210	209.5--249.4	9
250	249.5--289.4	10
290	289.5--329.4	11
330	329.5--369.4	12
370	369.5--409.4	13
410	409.5--449.4	14
450	449.5--489.4	15
490	489.5--529.4	16
530	529.5--569.4	17
570	569.5--609.4	18
610	609.5--649.4	19
650	649.5--689.4	20
690	689.5--729.4	21
730	729.5--769.4	22
770	769.5--809.4	23
810	809.5--849.4	24
850	849.5--889.4	25
890	889.5--929.4	26
930	929.5--969.4	27
970	969.5--1009.4	28
1010	1009.5--1049.4	29
1050	1049.5--1089.4	30
1090	1089.5--1129.4	31
1130	1129.5--1169.4	32
1170	1169.5--1209.4	33
1210	1209.5--1249.4	34
1250	1249.5--1289.4	35
1290	1289.5	36

OBJECTIVE C

Integrate additional compatible development into the existing community of Chalfant.

Policy 1: Allow for the continuation of growth in Chalfant in a manner that promotes and protects its rural and agricultural character.

Action 1.1: Gross densities for residential development in Chalfant shall not exceed one (1) dwelling unit per acre. For parcels ten (10) acres or greater, clustering shall be encouraged.

Action 1.2: Small parcels (less than 10 acres) designated for agricultural uses contiguous to residential areas, not used primarily for agricultural purposes, may be considered for redesignation to a residential land use.

Action 1.3: Roads within subdivisions of more than four parcels shall at a minimum have a hard surface such as decomposed granite (DG).

Action 1.4: Discourage the installation of streetlights unless necessary for safety reasons. Encourage shielded light sources whenever possible.

Action 1.5: Permit small-scale agricultural uses, including the keeping of animals for personal use, in all land use designations, within the mandate of the county requirements for the Estate Residential (ER) designation.

- Policy 2: Encourage residential development in areas that will minimize the impact on the environment.
- Action 2.1: Encourage the completion of adequate studies of the flooding potential throughout the Tri-Valley area.
- Action 2.2: Encourage the exchange of environmentally sensitive private lands for public lands.
- Action 2.3: Continue to enforce the provisions of the county's Flood Plain Combining District in the Tri-Valley area.
- Action 2.4: All tract maps shall include an in-depth hydrological study including flow tests and pressure/drawdown tests to ensure that there is an adequate water supply and that there will be no impact on neighboring wells.

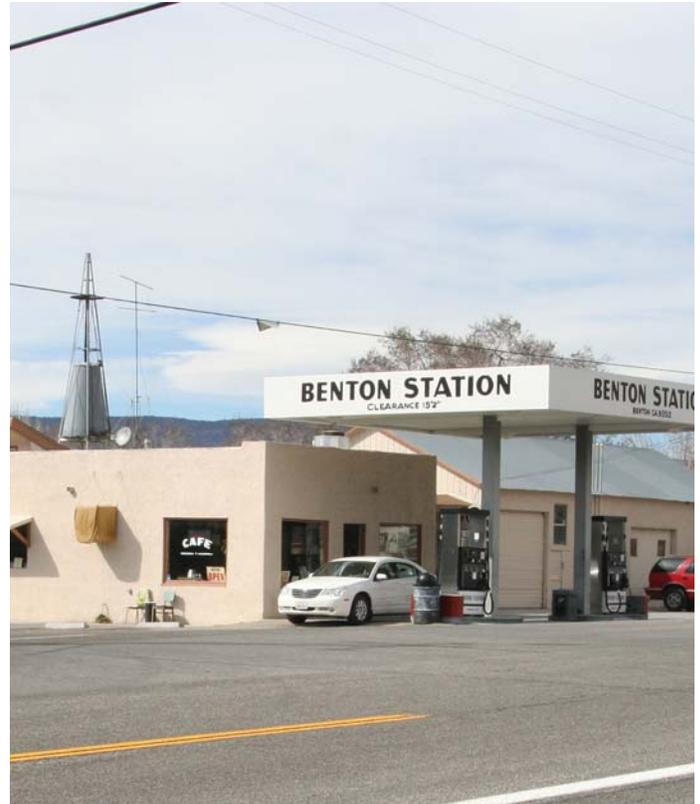
- Policy 3: Encourage residential land use patterns in Chalfant that permit the efficient delivery of public services.
- Action 3.1: Encourage residential development in Chalfant to take place on parcels contiguous to existing development.

- Policy 4: Encourage the timing of growth that will allow for efficient use of existing public facilities and for adequate planning for additional public facilities.
- Action 4.1: Allow additional residential subdivision only when adequate services (including fire protection, water, and school facilities) are available or planned for development. The proponent of a residential subdivision shall include this assessment as part of the environmental review process.
- Action 4.2: New development projects and subdivisions shall comply with fire safe regulations and obtain "will-serve" letters from the Chalfant Valley Fire Department.

OBJECTIVE D

Provide adequate commercial and public facilities and improved access to county services to serve visitors and residents in the Tri-Valley.

- Policy 1: Designate adequate lands compatible with the rural character of the Tri-Valley along Highways 6 and 120 in Benton and Chalfant for small-scale commercial uses that serve the communities.



- Policy 2: Allow only agriculture-related commercial uses in Hammil Valley.
- Policy 3: Prevent the establishment of regional commercial facilities.
- Policy 4: In Benton, encourage the establishment of commercial enterprises oriented toward providing services to highway travelers.
- Policy 5: Allow the continuation of home businesses in the area.
- Policy 6: Promote safer traveling on U.S. Highway 6.
- Action 6.1: Create passing lanes on U.S. Highway 6 on the Matthew grade.
- Action 6.2: Promote opening of Hwy. 120 year round.
- Action 6.3: Promote turnout lanes into housing and business areas.
- Action 6.4: Promote a rest stop north of Benton.
- Action 6.5: Encourage reduced speed in community areas and speed enforcement in communities.

- Action 6.6: Work with agencies to provide enhanced public transportation from the Tri-Valley area to county services.
- Action 6.7: Install information kiosks at key locations to provide information for visitors and locals.
- Action 6.8: Encourage Caltrans to install “open range” signs in the Tri-Valley area.

- Policy 7: Projects shall evaluate and consider communitywide planning to promote harmonious and balanced development that protects the rural character of the Tri-Valley.
- Action 7.1: Lands released into private ownership should be deed restricted prohibiting water exportation off site.
- Action 7.2: New projects should provide public access to public lands through trail easements or dedications. Historical use patterns should be accommodated.

- Policy 8: Encourage the Eastern Sierra Unified School District to provide K- through-12 education in the Tri-Valley area.
- Action 8.1: Encourage the BLM to provide property for school district use.
- Action 8.2: Encourage the Eastern Sierra Unified School District to provide K-through-12 education in the Tri-Valley area.

OBJECTIVE E

Provide for recreational and open-space uses in the Tri-Valley area.

- Policy 1: Utilize the open space provided by federal lands to ensure that the open-space needs of the community are met and to provide buffer space between communities.
- Action 1.1: Designate appropriate federal lands as public lands. Public land shall be used for open space or public purposes such as schools, parks, recreational landing strip, etc.
- Action 1.2: Designate a landing strip for agricultural and emergency uses in Hammil Valley.
- Action 1.3: Encourage cluster development in Specific Plans to provide for publicly accessible open space.

- Policy 2: Provide adequate land for the recreational needs of the area.
- Action 2.1: Work with government and private property owners to create an equestrian/recreational trail system in the Tri-Valley area that addresses the following:
 - a. Trail(s) from Inyo County line to the Nevada border.
 - b. Consider expanding trail system into Inyo County.
 - c. Trails should be designed to access public lands east and west of U.S. Highway 6 in as many areas as possible.
- Action 2.2: Require new development to allocate sufficient land and facilities to meet the recreational needs of residents of the development and to provide for its applicable share of Tri-Valley recreational needs.
- Action 2.3: Consider establishing a fee system for all new development and building permits dedicated to the construction and maintenance of recreational needs in the Tri-Valley area.



BENTON HOT SPRINGS VALLEY – GOAL

Preserve the historic, rural and agricultural character of the Benton Hot Springs Valley.

Policy 1: Preserve and restore historic features of Benton Hot Springs.

Action 1.1: Support public use and appreciation of Benton Hot Springs' historic properties, including the establishment of museums and exhibits.

Action 1.2: Encourage and support, as possible, restoration of historic structures and new construction within the historic town that reinforces and complements the town's historic design and character.

Action 1.3: Support the landowner's efforts to convert non-conforming structures (i.e., mobile homes and trailers) into structures that fit with the historic town character.

Action 1.4: Apply the Historic Building Code to Benton Hot Springs' historic properties rather than the Uniform Building Code. Support and/or approve variances to local, state and federal regulations when such variances are determined to be environmentally sound and safe and are consistent with furthering preservation of historic resources.

Policy 2: Maintain the open space and rural character of Benton Hot Springs meadow.

Action 2.1: Encourage grazing and agricultural uses of Benton Hot Springs meadow and irrigated pasturelands, as opposed to intensive development, in order to preserve open-space values.

Action 2.2: Support conservation practices and activities to enhance and maintain wildlife, livestock, visual and recreation benefits. If so desired by the landowner, support conservation and visual easements and tax-reduction incentives as affordable means for open-space protection. Determine that farming and ranching activities are appropriate uses and activities within these undeveloped areas.

Action 2.3: Encourage the clustering of intensive land use and development activities within and adjacent to the historic town to avoid significant encroachment on open-space areas.

Action 2.4: Support development of additional water sources and ponds to enhance habitat for wildlife and livestock.

Action 2.5: Support actions to mitigate flood damage potential within and adjacent to the historic town.

Policy 3: Encourage uses and businesses that support and complement, or do not seriously detract from, Benton Hot Springs' historic, hot springs, agricultural and rural attributes.

Action 3.1: Support using Benton Hot Springs' historic structures for residential housing and tourism services.

Action 3.2: Provide visitor services, including gas station, store/market, food, gift shops, museums and exhibits, lodging, and hot springs access, within and adjacent to the historic town.

Action 3.3: Encourage agricultural activities, such as aquaculture, greenhouse gardening, and field crops, in addition to livestock rearing.

Action 3.4: Allow for the development of short-term recreational-vehicle facilities and recreation special events in areas adjacent to the historic town and along Hwy. 120.

Action 3.5: Allow single-family residential development (estate residential, rural residential, and larger lots with 5-acre minimums) in locations adjacent to existing residential development (Benton Paiute Reservation and Benton historic town) and outside of open space (agricultural) areas.

Action 3.6: Encourage Benton Hot Springs to annex into the White Mountain Fire Protection District.



Who Lives in the Tri-Valley?

Population in 2000

Population data for the Tri-Valley are available from the 2000 US Census. A synopsis of the data is presented here. Additional detailed information is available at www.census.gov.

Accessing and Using Data from the 2000 US Census

The American Factfinder feature on the Census website provides access to data from the 2000 US Census. Census data is reported by a variety of geographic units, including census tracts, block groups, blocks, and zip codes. Mono County includes two census tracts—Tract 1 is the unincorporated portion of the county, Tract 2 is Mammoth Lakes. Within Tract 1, Block Group 7 is the Tri-Valley area. Blocks are smaller units within each block group. American Factfinder includes a mapping feature that shows where blocks and block groups are located.

2000 US Census Data for the Tri-Valley--Population

Population

Mono County total population	12,853
Mono County unincorporated area population	5,759
Tri-Valley population	954
Chalfant Valley population	465
Hammil Valley	158
Benton Valley population	331

- In 2000, the total population of the Tri-Valley was 954 persons, approximately 17% of the county's total unincorporated population of 5,759 persons. Between 1980 and 2000, the percentage of the unincorporated area population living in the Tri-Valley remained fairly constant at 16-17 percent.
- In 2000, 49% of the population in the Tri-Valley lived in Chalfant, 16% lived in Hammil, and 35% lived in Benton.



Ethnicity

Tri-Valley Overall

Hispanic/Latino	107 (11.2 % of total Tri-Valley population)
Native American	61 (6.4 % of total Tri-Valley population)

Benton

Hispanic/Latino	60 (56 % of Tri-Valley Hispanic population)
Native American	56 (92 % of Tri-Valley Native American population)

- Between 1990 and 2000, the percentage of the population identifying themselves as Hispanic, of whatever race, remained relatively unchanged in the unincorporated area, rising from 11.3% of the population in 1990 to 12.4% of the population in 2000. This population is fairly evenly distributed throughout the county's communities; 11.22% of the Tri-Valley population identified itself as Hispanic in 2000. Anecdotal data indicates that the Hispanic population has continued to increase since the 2000 census.
- In 2000, 56% of the Hispanic population in the Tri-Valley and 92% of the Native American population lived in Benton.

Age of Population

Tri-Valley Overall

Under 5 years old	48 (5 % of Tri-Valley population)
5-17 years old	193 (20.2 % of Tri-Valley population)
18-64 years old	586 (61.4 % of Tri-Valley population)
65+ years old	127 (13.3 % of Tri-Valley population)

Benton

Under 5 years old	25 (52 % of Tri-Valley population under 5 years old)
5-17 years old	70 (36 % of Tri-Valley population 5-17 years old)
18-64 years old	191 (32 % of Tri-Valley population 18-64 years old)
65+ years old	45 (35 % of Tri-Valley population 65+ years old)

- In 2000, the Tri-Valley had a slightly smaller percentage of children under age 5 than the overall percentage in the unincorporated area (5% in the Tri-Valley, 6% in the unincorporated area). The overall population of children under age 5 in the unincorporated area decreased from 8% to 6% of the total population between 1990 and 2000. The population of children under age 5 is fairly evenly distributed throughout the unincorporated area.
- In 2000, the population of children aged 5-17 in the Tri-Valley was 20% of its total population compared to 18% of the total population in the unincorporated area. The overall population of school-age children in the unincorporated area increased numerically between 1990 and 2000 but decreased from 19% to 18% of the total population. Compared to other community areas, the Tri-Valley had the highest percentage of its population in this age group; although other community areas had a greater number of people this age, it was not such a high percentage of their overall population since their overall population was also higher.
- In 2000, adults aged 18-64 comprised 61% of the Tri-Valley's population compared to 65% of the unincorporated area's population. That segment of the unincorporated population remained fairly constant between 1990 and 2000, increasing from 63% of the total population in 1990 to 65% of the total population in 2000. The population of adults 18-64 was fairly evenly distributed throughout the unincorporated area.
- In 2000, senior citizens aged 65 or older made up 13% of the Tri-Valley's population compared to 12% of the



unincorporated area’s population. That segment of the unincorporated area population increased from 10% to 12% of the total population between 1990 and 2000. Compared to other community areas, the Tri-Valley had one of the higher percentages of its population in this age group and the third largest number of people in this age group.

- In 2000, approximately one third of the total population in the Tri-Valley lived in Benton. Approximately one third of all age groups also lived in Benton except for children under 5 years old; approximately one half of all children under 5 in the Tri-Valley lived in Benton.

Median Age

- The median age in the unincorporated area increased from 33 in 1990 to 40.1 in 2000. In the Tri-Valley, the overall median age was 42.9 in 2000. The median age in Benton was 39.5.

Households

Total Number of Households	375
Average Household Size	2.54 persons per household
Average Household Size in Benton	2.69 persons per household
Average Size, Owner Occupied Housing	2.44 persons per household
Average Size, Renter Occupied Housing	2.94 persons per household

- The average household size in the unincorporated area decreased from 2.51 persons per household in 1990 to 2.40 persons per household in 2000. The average household size in the Tri-Valley was the third highest in the unincorporated area after the Mono Basin and the western portion of the Antelope Valley.

Families

Total Number of Families	272
Average Family Size	2.96 persons per family
Average Family Size in Benton	3.15 persons per family

Population Projections for the Tri-Valley

The California State Department of Finance (DOF) provides population projections for counties for 10-year intervals. DOF also provides population estimates annually. Current population estimates and projections for Mono County from DOF seem low and do not seem to take into account current population growth in the area.

Given that caveat, DOF population projections can be utilized to project the future population in the Tri-Valley, based on the following assumptions:

- The percentage of the total county population that is in the unincorporated area (vs. in Mammoth Lakes) will remain at 45 % (the percentage it was in the 2000 census).
- The percentage of the total unincorporated area population that is in the Tri-Valley will remain at 16.5 % (the percentage it was in the 2000 census).

DOF population projection for Mono County for 2020	16,248
45 % of total population = unincorporated area population	7312
16.5 % of unincorporated population = Tri-Valley population	1206

b permits—26% in 2006 for TV, 31% in 2005

ECONOMIC DATA FOR THE TRI-VALLEY

Economic data for the Tri-Valley are available from the 2000 US Census. A synopsis of the data is presented here. Additional detailed information is available at www.census.gov.



2000 US Census Data for the Tri-Valley--Economics

Labor Force

Tri-Valley total working population
387
Benton working population
93

Place of Work

Tri-Valley total working population
387
Worked in county of residence
111 (29 % of working population)
Worked outside county of residence
276 (71 % of working population)

Travel Time to Work

Total Workers	387
Worked at Home	29
Did Not Work at Home	358

Travel Time to Work	
Less than 5 minutes	0
5-9 minutes	18
10-14	20
15-19	109
20-24	63
25-29	0
30-34	45
35-39	4
40-44	21
45-59	17
60-89	33
90 or more	28

Mean Travel Time to work for Tri-Valley overall
30.9 minutes

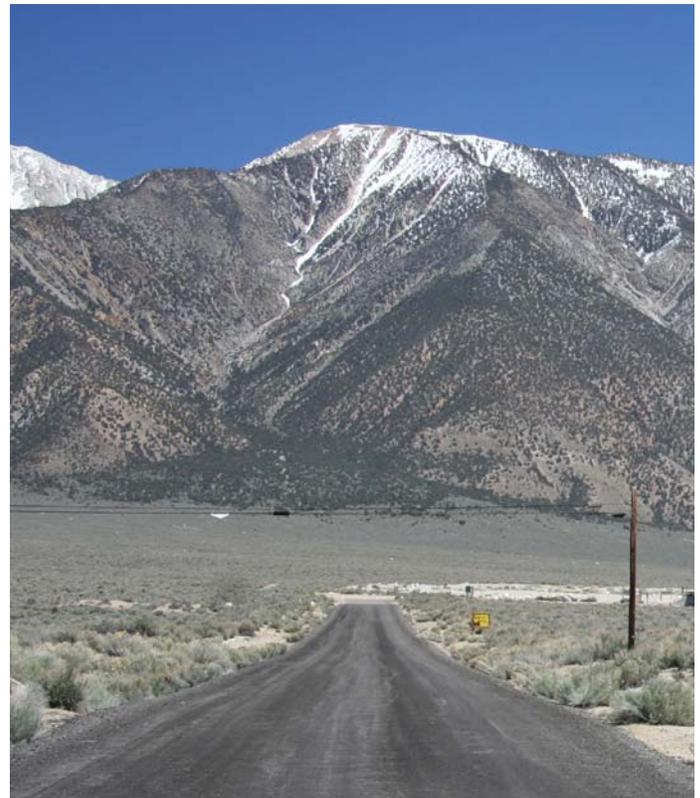
Mean Travel Time to work for Benton
53.5 minutes

- The mean travel times shown above, along with the fact that over 70 % of workers in the Tri-Valley work outside of Mono County, indicate that many residents of the Tri-Valley probably work in Bishop in Inyo County.

Means of Transportation to Work

Total Workers	387
Drove alone	254
Carpooled	88
2-person carpool	64
3-person carpool	22
4-person carpool	2
Bus	7
Other means	9
Worked at home	29

- In 2000, 66% of workers in the Tri-Valley drove to work alone, 23% carpoled, 2% took a bus, 2% used some other means of transportation and 7% worked at home.



Income

Mono County (includes Mammoth Lakes)

Median Household Income in 1999	\$44,992
Median Family Income in 1999	\$50,487
Per Capita Income in 1999	\$23,422

Tri-Valley Overall

Median Household Income in 1999	\$40,278
Median Family Income in 1999	\$50,150
Per Capita Income in 1999	\$16,381

Benton

Median Household Income in 1999	\$26,250
Median Family Income in 1999	\$30,469
Per Capita Income in 1999	\$13,611

- The median household income varied significantly throughout the county depending on the area and the age of the householder, with the southern half of the county having generally higher overall income levels.
- Mono County residents in the unincorporated area had income from a variety of sources in 1999. The Tri-Valley area had some of the higher levels of income in the county from Social Security, Supplemental Security, and retirement funds.

Tri-Valley Overall

Families Below Poverty Level	15
Individuals Below Poverty Level	88

Benton

Families Below Poverty Level	15
Individuals Below Poverty Level	65

- In 2000, 22% of the families and 20% of the individuals in the incorporated area with incomes below poverty level lived in the Tri-Valley.
- Of the residents in the Tri-Valley with incomes below poverty level, 100% of the families and 74% of the individuals lived in Benton.

Poverty

Mono County (unincorporated area only)

Families Below Poverty Level	67
Individuals Below Poverty Level	438



HOUSING CONDITIONS IN THE ANTELOPE VALLEY

Housing data for the Tri-Valley are available from the 2000 US Census. A synopsis of the census data is presented here. Additional information is available in the **Mono County Housing Element** and at www.census.gov. The **Eastern Sierra Housing Needs Assessment**, prepared by The Housing Collaborative in 2004, analyzed housing needs in the area based on a combination of 2000 Census data and results from a household survey. A synopsis of those findings is presented here following the census data.



2000 US Census Data for the Tri-Valley--Housing

Housing Units

Tri-Valley overall	514
Benton	200

- The Tri-Valley had 514 housing units in 2000, 283 detached single-family residences and 231 mobile homes, a somewhat higher percentage of mobile homes than in other county communities.

Occupied Housing Units

Tri-Valley overall	375
Owner-occupied	297 (79% of occupied units)
Rented	78 (21% of occupied units)

Benton	123
Owner-occupied	76 (62% of occupied units)
Rented	47 (38% of occupied units)

- The Tri-Valley has a higher percentage of homeowners (77 %) versus renters (23 %) than elsewhere in the county. Homeowners tend to be older, with many seniors. In 2000, the overall rental rate in the unincorporated area was 31%.

Vacant Housing Units

Tri-Valley Vacant Housing Units	139 (27% of all Tri-Valley units)
For rent	8
For sale	14
Rented or sold, not occupied	5
Seasonal, recreational use	75
For migrant workers	12
Other vacant	25

- In Mono County, the unincorporated area had a vacancy rate of 39 percent in 2000, down from 44 percent in 1990. This unusually high rate reflects the large number of vacation homes and seasonal use units in the area, many of which remain vacant for the majority of the year
- When the census was taken in 2000, only Antelope Valley, Long Valley/Wheeler Crest, and Tri-Valley had units available for rent. Tri-Valley, along with the Antelope Valley, had the lowest percentage of vacant units reserved for seasonal use.

Housing Conditions

- In 2003, the Mono County Community Development Department Housing Conditions Survey identified 167 housing units in the Tri-Valley as being in good condition, 116 units as being in fair condition, 51 units as being in poor condition, and 8 units as being vacant.
- 157 units (31%) in the Tri-Valley were built 10 or fewer years ago, 89 units (17%) were built 11-20 years ago, 107 units (21%) were built 21-30 years ago, 103 units (20%) were built 31-40 years ago, 28 units (5%) were built 41-50 years ago, and 26 units (5%) were built 51 or more years ago (Mono County Housing Element, Table 37);

Household Size (# households in each category)

1 person household	82
2 person household	149
3 person household	63
4 person household	48
5 person household	16
6 person household	11
7 or more persons	6

- The Tri-Valley had 50 overcrowded households in 2000 (more than one person per room), more than any other planning area in the county and 40% of the total 125 overcrowded households in the county.
- The Tri-Valley had 56 large households in 2000 (five or more persons), 30 owner-occupied units and 26 renter-occupied units. Only Antelope Valley had a higher number of large households and the majority of those were renters at the Marine Corps Housing in Coleville.

Cost of Housing

Monthly Mortgage Costs as a Percentage of Household Income in 1999

Less than 15 percent	30 households
15 to 19 percent	22 households
20 to 24 percent	16 households
25 to 29 percent	16 households
30 to 34 percent	25 households
35 percent or more	0 households

Monthly Rent as a Percentage of Household Income in 1999

Less than 15 percent	23 households
15 to 19 percent	6 households
20 to 24 percent	5 households
25 to 29 percent	0 households
30 to 34 percent	0 households
35 percent or more	13 households
Not computed	31 households

- The Tri-Valley had 38 households overpaying for housing in 2000 (paying 30% or more of household income for housing), 25 owner-occupied households and 13 renter-occupied households. This is one of the lowest percentages of households overpaying in the county's communities (according to data from the 2000 Census).

Farmworker Housing

- Large farm owners and ranchers in the Antelope, Bridgeport and Hammil Valleys hire a limited number of farmworkers and ranch hands. Housing for most of these employees is provided on site. If this type of housing were to be eliminated, it would be difficult for farm laborers to find adequate affordable housing. The 2000 Census indicates that when the census was taken, in April 2000, there were 17 vacant units reserved for farmworkers. This does not indicate how many total units were available for farmworkers.

Eastern Sierra Housing Needs Assessment Findings

- This area has a relatively small percentage of units devoted to seasonal/recreational use (15%), but the number more than doubled since the 1990 Census which indicates more seasonal use will continue into the future.
- There was a modest increase in the number of units since 1990 (17.9%), however the total number of vacant units increased by over half and occupied units only increased by 8%. There was a substantial increase in owner-occupied units (from 67% to 79%), but there were fewer new households moving into this area in the 15 months prior to the 2000 Census than other areas.
- Of its housing stock, 231 units are mobile homes and 283 are single-family units. There are no multi-family units and almost all the homes are heated by LP gas or wood. This is consistent with a rural area.
- Home values increased 39%, and rents more than doubled from 1990 to 2000. Household income increased 71% during this period, indicating that for owners, income was increasing faster than housing values. The increase in home values reflects the large number of mobile homes in the area, and the median household income of \$40,278 is well below the state (\$47,493) and the county (\$44,992).
- There are a lot of seniors in the area (23% of households), and they make up 26% of the owners. Families with children under 18 make up one-third of the households, which is higher than Mono County. Households predominantly consist of one and two persons (84%), and there are a fair number of single parents (10% of households).
- Paying too much for housing was a problem for 20% of households in the area. It appears that those earning less than 60% of the Area Mean Income (AMI) have the greatest difficulty with housing costs, yet there was only modest interest in rent assistance and little support for purchasing a deed restricted unit.
- Among owners, 44% want to buy a different home and 83% of renters would like to be owners. They are looking for midsize single-family homes or manufactured/mobile homes, although there was a fair amount of interest in smaller single-family units. Overall, they are looking for slightly larger homes than most of Mono County.

- When looking for a place, cost and size of the lot are very important, as is storage for equipment/vehicles. Proximity to employment is not as important to residents here than other places.
- Employees in the Tri-Valley area were more inclined to see housing as a serious problem (55%) than a critical problem (29%).



Community Services and Facilities

Community services and facilities in the Tri-Valley are owned and operated primarily by Mono County and the Eastern Sierra Unified School District. Information on County facilities and services is available at www.monocounty.ca.gov. Information on school and library facilities and services is available at www.monocoe.k12.ca.us (libraries) and www.esusd.org (schools).

Community services and facilities are located in the communities of Benton and Chalfant.

Benton

The following community services and facilities are located in Benton:

- Mono County Road Shop
- Caltrans Maintenance Facility
- Benton Senior Center (County facility)
- Ida Lynn Parkinson Park (County facility)
- Benton Transfer Station (County facility)
- Edna Beaman Elementary School (Eastern Sierra Unified School District)
- Mono County Library facility at Edna Beaman Elementary School
- Bookmobile visits Benton, Hammil, Chalfant, Paradise, and Swall Meadows twice a

month
White Mountain Fire Protection District
Station
U.S. Post Office at ????

Chalfant

The following community services and facilities are located in Chalfant:

Chalfant Community Center (County facility)
Chalfant Park (County facility)
Chalfant Transfer Station (County facility)
Bookmobile visits Benton, Hammil, Chalfant,
Paradise, and Swall Meadows twice a
month
Chalfant Valley Fire Department Station
U.S. Post Office at ????

▶▶ *See Tri-Valley Community Profile Map
Set, Section 3,
Community Services and Facilities maps.*



Chalfant Valley Fire Department, Community Service District

Service Area: Chalfant Valley. Provides mutual response to Hammil Valley along with the White Mountain FPD.

Sphere of Influence: Same as district boundaries

LAFCO Recommendations for Reorganization:

Potential for future reorganization of Chalfant Valley Fire Department and White Mountain FPD into a Tri-Valley FPD to achieve greater efficiency. A consolidation would occur only if both districts agreed to reorganize.

Services Provided: Fire protection (fire prevention and suppression, wildland firefighting), emergency medical services, permit approvals, development reviews

ISO Rating: 9

Hydrants: 10

Volunteers: 14 (2-4 available to respond mid-day)

Average Response Time: 10 minutes

Mutual Aid Agreements: BLM, USFS, CDF, Bishop Fire Department, White Mountain FPD

Facilities: Fire Station in Chalfant

Equipment: Four engines/pumpers, two water tenders, wildland vehicle, command and support vehicles, ambulance, 8 PASS, 8 SCBA, 14 PPE

Service Calls in 2005: 38 total—3 structural, 11 vehicle accident, 22 emergency medical, 2 false alarm

Funding/Budget: Funding is primarily property tax revenues with mitigation fees from new development and augmentation funds from the county.

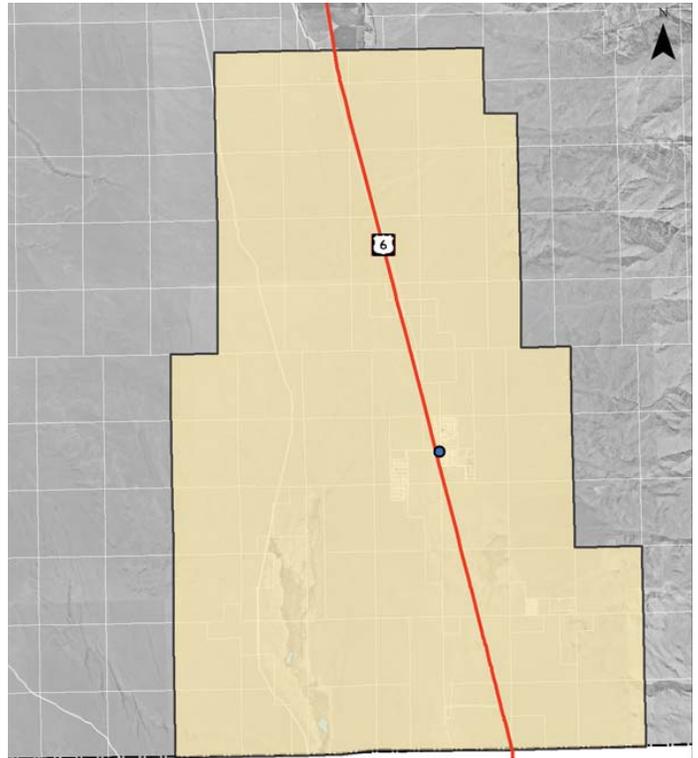
Expenses are equipment (50%), services (10%), supplies (20%), liability insurance 15%, salaries 2.5%, and training 2.5%.

Fire Mitigation Fee: \$0.75 per square foot of new development

Surrounding Fire Agencies: White Mountain Fire Protection District, 20 miles north via State Route 6 and the Bishop Fire Department, 13 miles south via State Route 6.

Fire Safe Council: Currently no fire safe council in the Chalfant Valley

District Issues of Concern: Need for ALS in Tri-Valley, availability of water, pace of growth, need for additional facilities and equipment, poor communications between Chalfant Valley and Mono 1 dispatch



White Mountain Fire Protection District

Service Area: Benton and Hammil Valleys. Some large ranch lands withdrawn from the district although they are located within the district boundaries.

Sphere of Influence: Same as district boundaries

LAFCO Recommendations for Reorganization:

Potential for future reorganization of White Mountain FPD and Chalfant Valley Fire Department into a Tri-Valley FPD to achieve greater efficiency. A consolidation would occur only if both districts agreed to reorganize.

Services Provided: Fire protection (fire prevention and suppression, wildland firefighting), emergency medical services, HazMat response, permit approvals, development reviews

ISO Rating: 8

Hydrants: none

Volunteers: 15 (2 available to respond mid-day)

Average Response Time: 5 minutes

Mutual Aid Agreements: BLM, USFS, CDF, Chalfant Valley Fire Department

Facilities: Fire Station in Benton

Equipment: Two engines/pumpers, a water tenders, wildland vehicle, rescue vehicle, command and support vehicles, 18 PASS, 18 SCBA, 18 PPE

Service Calls in 2005: 53 total—16 vehicle accident, 30 emergency medical, 1 wildland fire, 6 false alarm

Funding/Budget: Funding is primarily property tax revenues with mitigation fees from new development and augmentation funds from the county.

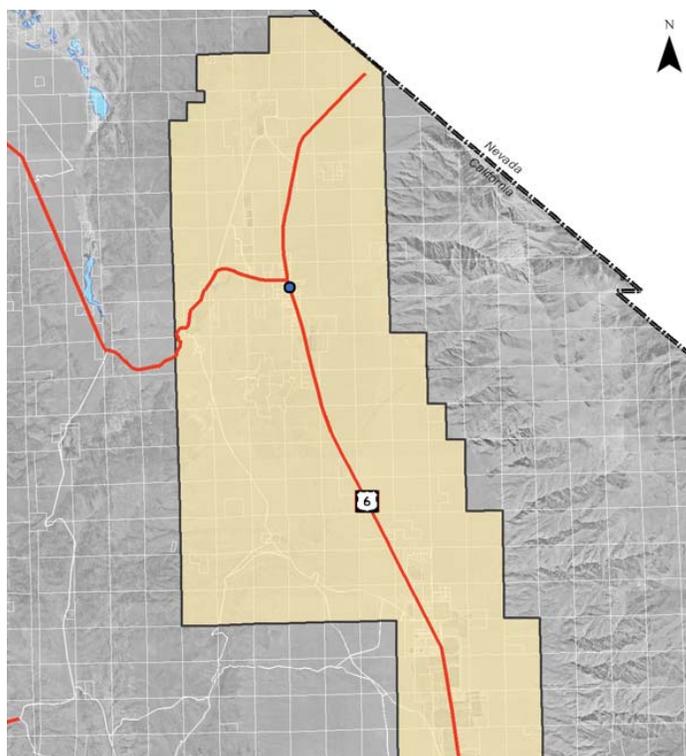
Expenses are equipment (30%), services (10%), supplies (20%), liability insurance 25%, salaries 2%, and training 5%.

Fire Mitigation Fee: \$0.50 per square foot of new development

Surrounding Fire Agencies: Chalfant Valley Fire Department, 20 miles south via State Route 6.

Fire Safe Council: Currently no fire safe council in the Benton or Hammil Valleys

District Issues of Concern: Need for ALS in Tri-Valley, availability of water, pace of growth, need for additional facilities and equipment, poor communications between Benton Valley and Mono 1 dispatch, getting the withdrawn lands it serves back into the district and generating some revenue from those lands



Community Infrastructure

Community infrastructure includes roads and highways, transit facilities and services, trail systems, communications facilities (telephone, cable TV, internet), power providers (electricity, propane, natural gas), sewer providers, and water providers. Community infrastructure in the Tri-Valley includes the following facilities and services.

▶▶ *See Tri-Valley Community Profile Map Set, Section 4, Community Infrastructure Maps.*

Roads and Highways

Highways

Highway 6 is the primary regional roadway in the Tri-Valley. Highway 6 is a two-lane conventional highway with a functional description of Minor Arterial (Caltrans, District 9, Route Concept Report--Highway 6). The travel way is 24 feet wide for the entire length of Highway 6 with approximately 4-foot wide shoulders. Caltrans has identified Highway 6 as a component of the Interregional Road System (IRRS) and as a Major Connector in the Strategic Highway Network (STRAHNET), indicating that the route is important for the transportation of people and goods.



The **Eastern Sierra Bicycle Guide** (www.dot.ca.gov) describes Highway 6 from Bishop to the Nevada State Line as a 2-lane narrow shoulder highway with gentle gradients, light traffic during the day, and mostly trucks at night. In 2005, the most recent year for which traffic counts are available, Annual Average Daily Traffic (AADT) volumes for Highway 6 at its junction with State Route 120 west were 1,100 vehicles southbound and 960 vehicles northbound. The Peak Hourly traffic count was 140 vehicles southbound and 100 vehicles northbound. Twenty-three percent of all vehicles were trucks; of the truck traffic, 71 percent was large trucks with 5 or more axles.

AADT Traffic Counts are available at www.dot.ca.gov/hq/traffops

Roads

The Tri-Valley contains County maintained roads and non-county maintained roads. County maintained roads are generally paved 2-lane roads located in community areas. See the County Road Maps for an inventory of roads in the Tri-Valley.

Transit Facilities and Services

Transit services in the Tri-Valley are provided by Inyo-Mono Transit. IMT provides local Dial-A-Ride service in Benton and twice-weekly roundtrip service from Benton to Bishop. Additional transit service, north to Reno and south to Ridgecrest, is available in Bishop from CREST.

Trail Systems

There are currently no formal trail systems in the Tri-Valley. Bicyclists utilize U.S. 6 for touring. Undeveloped public lands are utilized by equestrians, off-road vehicle users, bicyclists, and pedestrians.

The **Eastern Sierra Bicycle Guide**, available from Caltrans District 9 and locally, contains maps of bike routes in the Eastern Sierra, including U.S. 6 in the Tri-Valley.

Communications Facilities

Telephone service is currently provided by Verizon.

There are no cell phone towers in the Tri-Valley.

There is no cable TV service in the Tri-Valley.

Power

Electricity is provided by Southern California Edison.

Propane is provided by local purveyors.

There are no natural gas lines in the area.

Sewer

There are currently no sewer systems in the Tri-Valley. All development uses individual septic systems.

Water

Water for domestic and fireflow uses is predominantly supplied by individual wells. New subdivisions in the area are installing community water systems and are generally organized as mutual water companies, i.e.:

White Mountain Estates, Phase I
Mutual Water Company
Osage Ranch
Mountain Vistas
White Mountain Estates, Phase II

Others???



Environmental Setting

This section provides an overview of the environmental setting in the Tri-Valley. Detailed information is available in the applicable sections of the Mono County Master Environmental Assessment (MEA) and in site-specific documents prepared for projects in the Tri-Valley. The most up-to-date data for some environmental topics may be available online on the websites of various state agencies such as the California Department of Fish and Game (www.dfg.ca.gov), Caltrans (www.dot.ca.gov), or the California Air Resources Board (www.arb.ca.gov). Additional website addresses are provided in the Additional Resources section of this profile.

► *See Tri-Valley Community Profile Map Set, Section 5, Environmental Setting Maps.*

Hazards

Avalanche Hazards

Not applicable in the Tri-Valley.

Dam Failure Hazards

Not applicable in the Tri-Valley.

Flood Hazards

Much of the development in the Tri-Valley is subject to alluvial fan flooding and flash flooding from the surrounding mountains. Although the FEMA Flood Insurance Rate Maps do not show much of the area as being within the 100-year floodplain determined to be significant for planning purposes, floods of that magnitude have occurred in the Tri-Valley, largely as the result of intense summer rain storms that result in flash flooding and mudflows. Flows from extreme events will flow as very wide shallow flows once they reach the valley floor due to the wide shallow topography of the valley floor and floodplain.

Additional information on past flooding in the Tri-Valley, current flood hazard mitigation, and proposed flood hazard mitigation is contained in the **Mono County Multi-Jurisdictional Local Hazard Mitigation Plan**. Project specific

information concerning flooding may require consultation with the Mono County Floodplain Administrator, Mono County Department of Public Works.

▶ *Flood Hazard Maps for the Tri-Valley are included in the Environmental Setting Maps.*

Landslide/Rockfall Hazards

Landslide hazards in Mono County are primarily associated with seismic activity and heavy rainfall. Rockfalls and mudflows occur after those events. Landslide hazards are not considered to be one of the most common natural hazards in Mono County due to the low incidence of landslides in the county, the small number of identified landslide risk areas, and the fact most Mono County communities are located away from canyon slopes where landslides primarily occur.

Mountainous and hilly areas are generally at high risk for landslides. Land or mudslides can occur in areas with a slope of 15 percent or more. Neighborhoods and businesses located on or below bluffs and hills are especially vulnerable to landslides. Landslide Risk Zone Map 7-3B in the California State Multi-Hazard Mitigation Plan shows only the southeast corner of the county (White Mountains and Oasis) as having any landslide incidence and/or susceptibility. The southern half of the White Mountains in Mono County is shown as having a Moderate Landslide Incidence (1.5 % to 15 % of area involved). The extreme southeast corner of the county (Oasis) is shown as having Moderate Susceptibility/Low Incidence. Alluvial fan areas in the Tri-Valley may also be affected by large mud and debris flows associated with flash floods.

Additional information on landslides and rockfalls in Mono County, and current and proposed landslide hazard mitigation, is contained in the **Mono County Multi-Jurisdictional Local Hazard Mitigation Plan.**

▶ *Landslide/Rockfall Maps for the Tri-Valley are included in the Environmental Setting Maps.*

Seismic Hazards

Earthquakes occur frequently in the Eastern Sierra and in Mono County. Review of the USGS website shows that earthquakes occur in the general vicinity weekly and almost daily. The majority of those earthquakes are under magnitude 3 and are not felt by people. Associated seismic and geologic hazards such as landslides, rockfalls, and ground failure have occurred in conjunction with earthquakes.



The California Geological Survey has mapped data on historical earthquakes throughout California that show the epicenters of and areas damaged by magnitude 5 or greater earthquakes from 1800 to 1999 (CGS Map Sheet 49). During that timeframe, Mono County experienced earthquakes with a magnitude between 6.0 and 6.9, with the epicenters located at the eastern and western edges of the Long Valley Caldera. The damage map from Map Sheet 49 shows the minimum number of times that damaging shaking (MMI of VII or greater¹) has occurred throughout California. Damaging shaking has occurred two times in the vicinity of the Long Valley Caldera and one time in the southern half of the county (from Mammoth east to the Tri-Valley). Damaging shaking also occurred once in the Mono Basin area.

Dave Hill, from the USGS Long Valley Observatory, noted the following concerning the Chalfant Valley earthquake in 1986:

¹The Chalfant Valley earthquake (M=6.4)

1 Modified Mercalli Intensity (MMI) is a scale that measures the effects of earthquake ground motion on people and structures. MMI VII effects are characterized by significant damage to weak structures.

occurred on July 21, 1986. It was preceded by a month-long foreshock sequence that began M=2.6 earthquake on July 3 and built up to a M~5.8 (as I recall) earthquake just 24 hours before the mainshock. The area had shown virtually no previous earthquake activity (since the mid-1970s anyway). The aftershock sequence was also rather energetic including three M>5.5 earthquake (the largest was close to M~6). I think the associated damage was minimal aside from rock falls in the mountains and a number of mobile homes in the Chalfant area that were toppled from their (unstable) foundations." (Dave Hill, pers. comm..)

Mono County is located in an area of California with a major fault system known as the Eastern California Shear Zone. About 10mm/year of slip occurs on faults east of the Sierra Nevada (CGS Note 31). Probabilistic Seismic Hazard Assessment (PSHA) maps prepared by the California Geological Survey (CGS) and the USGS show that the areas with the greatest earthquake shaking hazard in Mono County include the Long Valley Caldera, the western portion of the Mono Basin extending north along the Eastern Sierra escarpment, the western edge of the White Mountains, the southeast corner of the county around Oasis, and the northern tip of the county around Topaz Lake. These regions are near major, active faults and will on average experience stronger earthquake shaking more frequently. This intense shaking can damage even strong modern buildings. The hazard pattern shown on the PSHA maps produced by CGS and USGS is very similar to the damage pattern shown on the map indicating Areas Damaged by Historic Earthquakes (1800-1998). Both maps show high hazard and damage from earthquakes of MMI VII or greater along the Eastern California Shear Zone in the southern half of Mono County.

Maps prepared by the California Geological Survey (CGS) and the USGS show the magnitude of the earthquake that causes the dominant hazard for peak ground acceleration at 10% probability of exceedance in 50 years with alluvial site conditions. In most of Mono County, the earthquake that would cause the dominant hazard would be magnitude 6.5-7; in Bridgeport Valley it would be magnitude 6.0-6.5; in the Tri-Valley it would be magnitude 7.0-7.5.

Maps prepared by the DMG and the USGS also show the distance of the earthquake that causes the dominant hazard for peak ground acceleration at 10% probability of exceedance in 50 years with alluvial site conditions. That map indicates the distance to the earthquake that contributes most to the hazard at each site. For most areas, the fault that is nearest the site causes the highest hazard. In much of Mono County, the distance to the nearest fault is very small.

The primary seismic hazard in the County is strong to severe groundshaking generated by movement along active faults. The entire county, except for a small portion of the Sierra crest, is in an area where intense groundshaking is possible. This area has been designated as a Seismic Zone 4, the zone of greatest hazard defined in the Uniform Building Code. Consequently new construction in the County must comply with stringent engineering and construction requirements. In addition, existing buildings that may be subject to seismic hazards must comply with new requirements of the unreinforced masonry building law (Government Code Section 8875).

The USGS maintains recent earthquake information on its website, including a continuously updated map showing the location and magnitude of earthquakes in the Long Valley area over the previous seven days (see quake.wr.usgs.gov/recenteqs/Map/Long_Valley.html). If that web site address has changed, try accessing it through the USGS home page (www.usgs.gov).

Additional information on seismic hazards, including current and proposed seismic hazard mitigation, is contained in the **Mono County Multi-Jurisdictional Local Hazard Mitigation Plan**.

▶ *Seismic Hazard Maps for the Tri-Valley are included in the Environmental Setting Maps.*

Severe Winter Storm

Not applicable in the Tri-Valley.

Volcanic

All of Mono County is subject to some impact

from volcanic hazards. The Tri-Valley would be subject to 6-8 inches of ash accumulation from volcanic events in the Long Valley area and the Inyo-Mono volcanic chain. Ongoing monitoring of those volcanic hazards by the USGS is intended to assess volcanic hazards and identify the early signs of possible eruptions. The USGS, the California Office of Emergency Service, and local jurisdictions in the Eastern Sierra have established procedures to alert the public to a possible eruption.

Additional information on volcanic hazards, current volcanic hazard mitigation, and proposed volcanic hazard mitigation is contained in the **Mono County Multi-Jurisdictional Local Hazard Mitigation Plan.**

▶▶ *Volcanic Hazard Maps for the Tri-Valley are included in the Environmental Setting Maps.*



Wildfire

Most of Mono County is identified as having a very high fire hazard. The Bureau of Land Management’s Wildland Fire Management Plan for the Bishop Resource Area contains the following information on wildland fires in the Benton Fire Management Unit:

This 218,957-acre FMU surrounds the Benton, Hammil, and Chalfant Valleys of Mono and Inyo Counties.In the period from 1980 thru 2002, 82 wildland fires occurred wholly or partially within this FMU, burning a total of 271 acres (includes acres burned outside the FMU boundary). Fire

cause was 39% natural (lightning), 49% human-caused and 12% unknown. Fire size distribution for the Bento FMU is displayed in Table 6, below.

Table 6.

Fire Size Class	# of Fires	Acres Burned
A (0.25 ac. or less)	68	4.5
B (0.26 – 9.9 ac.)	11	16.5
C (10.0 – 99.9 ac.)	2	35
D (100 – 299 ac.)	1	215
E (300 – 999 ac.)	0	0
F (1,000 – 4,999 ac.)	0	0
G (5,000 + ac.)	0	0
Total	68	271

Normal fire season is April 1st thru November 31st. ...Orographic influences of the Sierra Nevada and White Mountains significantly affect this FMU. Warm, dry summers are typical. Relative humidity is usually low, and live fuel moisture typically drops to 50 – 70% by late summer and early fall. Thunderstorms are common and frequently these storms produce little or no rain. Multiple ignitions caused by dry lightning are common during these periods. Additionally, these thunderstorms are usually accompanied by strong, erratic winds. Fire behavior is generally moderate, but in the vicinity of thunderstorms or other periods of high wind, fire behavior readily becomes extreme. Daytime winds are normally upslope and up canyon, with late afternoon shifts to down slope, down canyon. Very strong winds associated with cold fronts moving through the area are not uncommon on the east side of the Sierra Nevada, particularly in the spring and fall.

Additional development in areas with a high fire hazard could subject more people and property to that fire hazard. Future development is required to comply with the requirements of the applicable fire protection district as well as with the current requirements of the Uniform Fire Code to ensure that structures are fire safe. Mono County also has Fire Safe Regulations (Chapter 22 of the Mono County Land Development Regulations) that address emergency access, signing and building numbering, water supply reserves for emergency fire use, and vegetation modification around structures.

Additional information on wildfire hazards,

including current and proposed wildfire mitigation, is contained in the **Mono County Multi-Jurisdictional Local Hazard Mitigation Plan**.

▶ *Wildfire Hazard Maps for the Tri-Valley are included in the Environmental Setting Maps.*

Wildlife

Wildlife in the Tri-Valley includes a variety of migratory birds, rodents, rabbits, coyotes, small reptiles, bats, raptors, mule deer, and various invertebrates.

Casa Diablo Deer Herd

The Casa Diablo Deer Herd's winter range is in the area surrounding Benton. In the summer the herd migrates into summer range on Glass Mountain and in the June Lake Loop area. Part of the herd also migrates along the southern flank of the Adobe Hills into summer range near Lee Vining and Lundy Lake. The remainder of the Tri-Valley has been identified as a light deer use area by the California Department of Fish and Game.

Bighorn Sheep

Nelson's bighorn sheep occur in the White Mountains in Mono County. They prefer open, rocky, steep habitat with available water and herbaceous forage. DFG personnel have indicated that bighorn sheep have been seen at the base of the White Mountains in winter.



Special Status Species

A variety of Special Status wildlife species may occur in the Tri-Valley, including the Swainson's hawk, Owens Valley Vole, various bat species, various springsnails, Owens Speckled Dace, pygmy rabbits, and sage grouse. The best source of current information on sensitive wildlife species in the area is the California Natural Diversity Database maintained by the California Department of Fish and Game (www.dfg.ca.gov/bdb/html/cnddb.html).

▶ *Wildlife Maps for the Tri-Valley are included in the Environmental Setting Maps.*

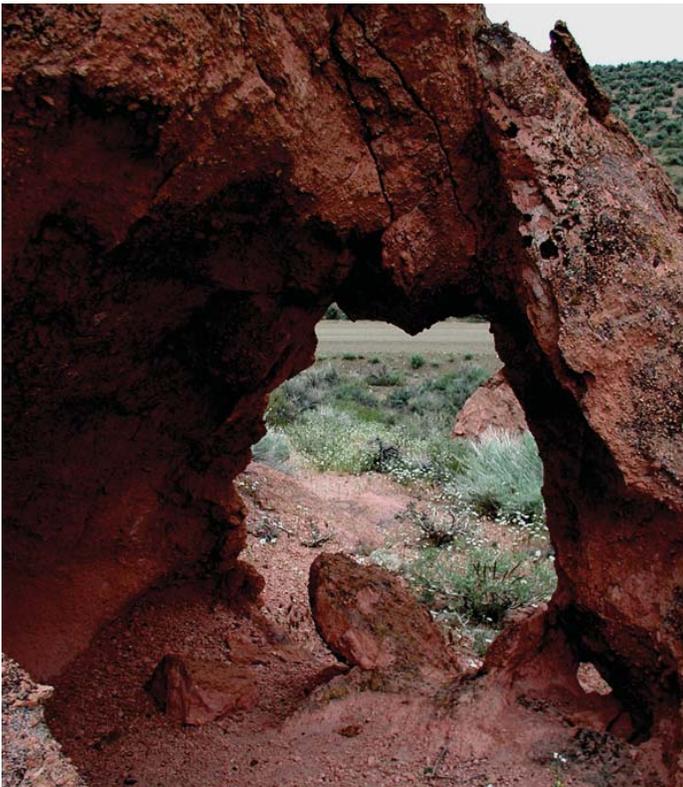
Vegetation



Vegetation in the Tri-Valley is predominantly desert plant communities, including Big Sagebrush Scrub and Shadscale Scrub. Limited areas of riparian communities occur at Fish Slough and scattered throughout the valleys, primarily at springs and ephemeral streams in the alluvial fans at the sides of the valleys. Pinyon and juniper woodlands occur at higher elevations on the alluvial fans and on the mountain sides at the edge of the valleys.

On much of the valley floor, the native vegetation has been altered by agricultural uses. A variety of Special Status plant species may occur in the Tri-Valley. The best source of current information on sensitive plant species in the area is the California Natural Diversity Database maintained by the California Department of Fish and Game (www.dfg.ca.gov/bdb/html/cnddb.html).

▶ *Vegetation Maps for the Tri-Valley are included in the Environmental Setting Maps.*



been determined. Refer to the Mineral Resource maps in the Map Set for a specific location.

► *Geology and Soils Maps for the Tri-Valley are included in the Environmental Setting Maps.*

Water Resources

Tri-Valley Watershed

The Benton, Hammil and Chalfant Valleys form a northern extension of the Owens Valley. The three valleys form a single watershed that is tributary to the Owens River. The valleys are bounded on the east by the White Mountains and on the west by the southeast sloping lava flows of the Volcanic Tablelands and the Benton Range.

Runoff from the White Mountains, the Volcanic Tablelands, and the Benton Range flows into these valleys and ultimately drains into the Owens Valley, in Inyo County. Streams originating in the White Mountains contribute most of the runoff in this watershed. The streams draining the slopes on the western side of this watershed generally do not contribute much water to the area. All of these drainages are ephemeral, except for the reach immediately downstream of Benton Hot Springs that contains a small, year-round, seepage flow. An ephemeral wash drains the length of the watershed from Benton to Laws in Inyo County. This wash is the main stem of the drainage system and, during periods of heavy precipitation, it conveys floodwaters downstream. Most of the runoff in this basin is either captured as surface water and used for irrigation on local farms or it drains into the valley's deep alluvium and is captured as groundwater.

Most agricultural and domestic water supplies in these valleys are derived from underground aquifers. Some surface water supplies are obtained from small streams that drain the White Mountains and from natural springs.

Fish Slough

Fish Slough, located in southern Chalfant Valley, is a unique wetland that straddles the border of Mono and Inyo Counties. Fish Slough provides critical protected habitat for several species of fish unique to the Owens Valley. Fish Slough was identified as an Area of Critical Environmental Concern by the Bureau of Land Management (BLM) and a

Geology and Soils

Geology

Looking for info from NRCS

Soils

Looking for info from NRCS

Soil Erosion

All of the central portion of the Tri-Valley, from the Nevada state line to the Inyo county line, is subject to wind erosion. The base of the White Mountains throughout the Tri-Valley is also subject to stream sheet rill erosion, as is a large area south of Benton Hot Springs and west of Hammil Valley.

Mineral Resources

A preliminary mineral resource assessment for Mono County, utilizing data from the U.S. Geological Survey and the California Division of Mines and Geology, identified broad areas in Mono County that may have value for mineral resource deposits. The White Mountains southeast of Chalfant Valley are considered a major source for limestone. The remainder of the Tri-Valley, including the base of the White Mountains and the alluvial fans to the west of the valley floor, contains a mix of areas with significant mineral deposits, areas without significant mineral deposits, and areas where the significance of potential mineral deposits has not



special management plan has been developed for the area (BLM, 1986).

Tri-Valley Groundwater Basin

Groundwater basins in Mono County mostly contain alluvial materials and Pleistocene lake deposits. Recharge of these basins occurs by four different processes, the most important of which is recharge along stream channels where long-term flow is sustained by the gradually melting snowpack in the upper reaches of the Sierra Nevada and White Mountains. Recharge also occurs along ephemeral stream channels. The other three processes include recharge from infiltration of direct precipitation; from lakes and ponds; and, artificially, from flood irrigation of fields.

The Tri-Valley Groundwater Basin is a 250-square-mile basin that eventually drains into the upper reaches of the Owens Valley. Surface water flow is southward from the Benton Valley to Hammil and then into Chalfant Valley.

- ▶▶ ***Water Resource Maps for the Tri-Valley are included in the Environmental Setting Maps.***

Noise Environment

The main noise source in the Tri-Valley is traffic, primarily on Highway 6 but also on local roads. Sensitive receptors that could be affected by changes in the noise environment include residential uses and the school in Benton.

A project will normally have a significant effect on the noise environment if it will substantially

increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals for the community in which it is located. The Mono County Noise Element and the Noise Regulations (Chapter 10.16 of the Mono County Code) regulate the noise environment in Mono County.

Development in the Tri-Valley may result in short-term construction related noise impacts and long-term traffic noise impacts. Short-term construction related noise impacts would be associated with excavation, grading, and construction activities on site during construction. Construction related short-term noise levels would be higher than the existing ambient noise levels in the project area but would no longer occur once construction is completed. Compliance with the construction hours specified in the county's Noise Regulations will reduce the construction related noise impacts to a less-than-significant level.

The exterior noise standard for residential uses is 65 dBA CNEL; the interior noise standard is 45 dBA CNEL. The State guidelines indicate that residential uses are normally acceptable in exterior noise environments up to 60 dBA CNEL and conditionally acceptable in exterior noise environments up to 70 dBA CNEL (when adequate building insulation would provide sufficient noise attenuation to meet the 45 dBA CNEL interior noise standard). For planning purposes, the 65 dBA CNEL is considered by many local jurisdictions as the exterior noise standard for transportation related noise impacts.

- ▶▶ ***Noise Contour Maps for the Tri-Valley are included in the Environmental Setting Maps.***

Visual Resources

Visually, the Tri-Valley is very open, with sweeping vistas of the surrounding mountains. Development and agricultural uses are highly visible since the floor of the valley is relatively flat and there is no screening vegetation. Community areas appear as relatively discrete areas of development within a surrounding larger area of undeveloped sagebrush scrub and agricultural lands. Community areas are predominantly one-story detached single-family residential development, with limited landscaping.

Colors and materials of the structures tend to blend into the surrounding environment.

The Bureau of Land Management (BLM) establishes Visual Resource Management (VRM) classes for the public lands it manages in the area. BLM lands to the west of U.S. 6 are identified as VRM III, Moderate, which means that “Visual contrast caused by a management activity can be evident, but must remain subordinate to the characteristic landscape”. BLM lands to the east of U.S. 6, along the base of the White Mountains, are identified as VRM II, High, which means that “Visual contrast is permitted; management activity is seen, but it must not attract attention. Changes in any of the basic elements (form, line, color, texture) caused by the activity must not be visible in the characteristic landscape” (MEA, p. 114).

U.S. Highway 6 does not have a scenic highway designation. There are 60-110 kV transmission lines that run roughly parallel to U.S. 6 on the west side of the highway, from Bishop to Chalfant. Large transmission lines (>110 kV lines) run along the west edge of the valley from Bishop to south of Hammil where they shift to the northwest. Overhead electrical distribution lines are evident in community areas; outdoor lighting and streetlights are minimal in community areas.

Climate and Air Quality

Average annual precipitation in the area is approximately 5 inches per year, based on data collected at the nearest climatological station at the Bishop airport (see www.ncdc.noaa.gov). Temperatures can range from lows in the 20s in the winter months to highs in the 90s in the summer months (www.ncdc.noaa.gov). Annual Heating Degree Days at the Bishop airport average 4314; annual Cooling Degree Days at the Bishop airport average 1003 (www.ncdc.noaa.gov)

As of 2006, Mono County was designated a non-attainment area for the state PM_{10} standard as well as for the ozone standard (see www.arb.ca.gov, State Area Designations Maps). The PM_{10} classification is for Mono Basin and Mammoth Lakes; both locations are also non-attainment areas for the national PM_{10} standard (www.epa.gov/air). Particulate matter (PM_{10}) in the Mono Basin results from dust from the exposed lakebed of Mono Lake. PM_{10} in Mammoth Lakes is primarily a problem in winter, resulting from wood burning and resuspended road cinders. Overall in Mono County, the sources of most PM_{10} emissions are unpaved road dust/cinders, fugitive windblown dust, and woodstove emissions.

The ozone designation is also for Mammoth Lakes. In the past, the State Air Resources Board concluded that ozone levels in the Great Basin Air Basin (Alpine, Inyo and Mono Counties) that exceeded the state standard were caused by transport from the San Joaquin Valley Air Basin;



the Great Basin Unified Air Pollution Control District adopted an Ozone Attainment Plan for Mono County which identified the County as an ozone transport area.

Although there are no air quality data specifically for the Tri-Valley area, the Mono County MEA notes that fugitive windblown dust is a problem in the area, primarily when it creates a safety hazard by blowing across Highway 6. Dust from construction activities is a concern for residents of the area. Soils in the Tri-Valley are primarily alluvial soils, sand and silt, overlying a layer of volcanic rock (Bishop Tuff). These soils tend to be highly erodible and subject to wind erosion.

The MEA identifies the Tri-Valley as subject to wind erosion. The prevailing wind direction in the area is from the north ten months of the year and from the south in November and December, based on data collected at the nearest climatological station at the Bishop airport (see www.ncdc.noaa.gov). That station has been in operation since 1930. Wind data for the Bishop Airport show average annual wind speeds of 9 miles per hour (mph) with annual peak gusts of 70 mph.

Archaeological evidence shows that over the past 2000 years the area was occupied by increasing numbers of humans and that by 1000 years ago the area was inhabited by ancestors of the current Paiute groups. By the end of the nineteenth century, the southern part of Mono County was occupied by groups of the Owens Valley Paiute. Archaeological evidence of this occupation often includes stone flakes, petroglyphs, food grinding tools, and projectile points. During the later part of the 19th century, Europeans were drawn to the area by mining opportunities that typically occurred in the hills and mountains. Cattle ranching and agriculture replaced mining in the early part of the twentieth century.

Policies in the Mono County General Plan (Conservation/Open Space Element, Cultural Resource Policies) require future development projects to avoid significant impacts to cultural resources or to mitigate impacts to a level of non-significance. Projects with the potential to significantly impact cultural resources are required to fund an analysis of those potential impacts and to provide project alternatives or measures to avoid or mitigate impacts to cultural resources.

Cultural Resources

Many historic and prehistoric cultural resource sites are known to exist in the Eastern Sierra.



Additional Resources

Site Specific Planning Documents

The following documents contain site-specific planning and environmental information for the Tri-Valley region of Mono County. All documents are available from the Mono County Community Development Department.

- **Mountain Vistas Specific Plan and Environmental Impact Report.** Mono County Community Development Department. 2006.
Chalfant: Special studies on hydrogeology, noise, and circulation.
- **White Mountain Estates Specific Plan and Environmental Impact Report.** Mono County Community Development Department. Draft 2007.
Chalfant: Special studies on hydrogeology, drainage, wildlife, vegetation, faults and seismic, circulation, and cultural resources.
- **Silver Peak Ranch Environmental Impact Report.** Mono County Community Development Department. Draft 2007.
Benton: Special studies on biological resources, cultural resources, ???
Other EIRs, special studies for Tri Valley???

Areawide Planning Documents

The following documents contain additional planning and environmental information for the Tri-Valley region of Mono County. Mono County documents are available from the Mono County Community Development Department.

Bureau of Land Management.

Fire Management Plan for the Bishop Resource Area. 2002.

Resource Management Plan for the Bishop Resource Area. 1991.

California Regional Water Quality Control Board.

Water Quality Control Plan for the Lahontan Region (Basin Plan). 1995.

MHA Environmental Consulting Inc. et.al.

TASK 1: REPORT Preliminary Data Collection and Hydrologic Models for the U.S. Filter Tri-Valley Surplus Groundwater Program Mono County. 2001.

Mono County Community Development Department

Building/Planning Guide: Buying and Developing Property in Mono County. 2003.

Mono County Code

Mono County Land Development Regulations (Revised Land Use Element). 2001.

Mono County Local Agency Formation Commission (LAFCO)

Chalfant Valley Fire Department Municipal Service Review and Sphere of Influence Recommendation. Draft, 2007.

Mono County Local Transportation Commission (LTC)
Mono County Regional Transportation Plan (RTP). 2002.

Mono County Office of Emergency Services
Mono County Emergency Operations Plan (EOP). 2004.

Mono County Planning Division
Mono County Environmental Handbook. 2003.
Mono County General Plan. 1993.
Mono County General Plan, Revised Land Use Element and Land Development Regulations. 2001.
Mono County Housing Element. 2004.
Mono County Master Environmental Assessment. 2001.
Mono County Trails Plan. 1994.
Multi-Jurisdictional Local Hazard Mitigation Plan for Mono County and Mammoth Lakes. 2006.

The Housing Collaborative LLC et al.
Eastern Sierra Housing Needs Assessment. Draft 2004.

U.S. Forest Service, Inyo National Forest
Inyo National Forest Land and Resource Management Plan. 1990.

Internet Reference Sites

The following sites contain planning and environmental information for the Tri-Valley region of Mono County. The current internet address at the time of printing is listed for these sources; the address may have changed since printing.

California Air Resources Board (ARB)

Emissions and air quality data. Nonattainment status.

www.arb.ca.gov

California Department of Fish and Game (DFG)

California Natural Diversity Database, information on plants, wildlife, and habitat.

www.dfg.ca.gov

California Department of Transportation (Caltrans)

Annual Average Daily Traffic (AADT) counts, Annual Average Daily Truck Traffic on the California Highway System, Eastern Sierra Bicycle Guide, other Caltrans transportation planning documents

www.dot.ca.gov

California Geological Survey (CGS)

Information on seismic hazards, landslide hazards, loss estimates for seismic events.

www.consrv.ca.gov/CGS

Inyo-Mono Transit

Information on local transit services in Mono County.

www.countyofinyo.org/transit

National Climatic Data Center (NCDC)/National Oceanic and Atmospheric Administration (NOAA)

Climate data.

www.ncdc.noaa.gov

U.S. Census Bureau

Population, housing, economic and social data from the 2000 Census.

www.census.gov

U.S. Environmental Protection Agency (EPA)

Emissions and air quality data. Nonattainment status.

www.epa.gov/air

U.S. Geological Survey (USGS)

Information on seismic hazards, volcanic hazards, landslide hazards, and water hazards.

www.usgs.gov

Tri-Valley Community Profile Map Set

Section 1 Area Maps

Location Map

Topographic maps of area

Orthographic maps of area

Section 2 Land Use Maps

Land Ownership, Chalfant Valley (federal, state etc)
Land Ownership, Hammil Valley
Land Ownership, Benton Valley
Agricultural lands—Williamson Act Contracts
Chalfant Valley Planning Area
Hammil Valley Planning Area
Benton Valley Planning Area
Land Use Map 96, Chalfant Valley Area
Land Use Map 97, Chalfant Community North
Land Use Map 98, Chalfant Community South
Land Use Map 99, Milner Fan Area
Land Use Map 100, Hammil Valley South
Land Use Map 101, Hammil Valley Central
Land Use Map 102, Hammil Valley
Land Use Map 103, Hammil Valley North
Land Use Map 104, Benton Valley Area
Land Use Map 105, Benton Community
Land Use Map 106, Benton Townsite
Land Use Map 107, Benton Hot Springs

Section 3 Community Services and Facilities

Maps showing schools, libraries, parks, senior center, community center, transfer stations, fire stations, post offices, road shop, caltrans maintenance facility

However you think it would best work to show all this

Could we make a map for each community showing fire station and location of fire hydrants in that community?

Section 4 Community Infrastructure

County Road Maps for Tri-Valley (only ones I have are really poor—do you or Public Works have better ones?)
Existing Highway System in Mono County
Caltrans map of U.S. 6
Eastern Sierra Bike Guide Map for U.S. 6
IMT route map for Benton to Bishop

Section 5 Environmental Setting

For all of these, only include pages that are pertinent for Tri-Valley

Hazards—maps from LHMP, include ones that are pertinent to Tri-Valley

- Avalanche
- Dam Failure
- Flood
- Landslide/Rockfall
- Seismic
- Severe Winter Storm
- Volcanic
- Wildfire

Wildlife—existing maps from MEA, some are not too good, can we improve them?

- Deer herd use areas
- Bighorn sheep use areas
- Deer kill locations
- Special status species and habitats
- Wildlife use areas—big game
- Wildlife use areas—other

Vegetation—existing maps from MEA

- Vegetation and Landforms—CA GAP Analysis
- Vegetation and Landforms—USGS Analysis

Geology and Soils—existing maps from MEA, some are not too good, can we improve them?

- Geologic maps
- Soils maps—something I was reading led me to believe there are new NRCS soils maps for the Tri-Valley—
is this so?
- Mineral resources
- Soil erosion

Water Resources—existing maps from MEA

- Shallow groundwater
- Wetlands
- Surface water resources
- Groundwater basins and recharge zones

Noise Environment—existing maps from MEA

- Noise Contours

Visual Resources—existing maps from MEA

- Visual resource maps
- State and county designated scenic highways