

This Section provides an overview of the plan contents, a state profile, and a summary of land management.

0.1 OVERVIEW OF PLAN

This is the second revision of the original Standard State Hazard Mitigation Plan (SHMP) that was written and approved by FEMA in 2004 and first revised in 2007. It presents an assessment of the risks and potential losses posed by these hazards throughout the State. It also provides the methodology for prioritization of these risks. The Nevada Hazard Mitigation Planning Committee (NHMPC) that wrote and revised the plan was composed of representatives from federal, state, and local entities and the private sector. Greater participation of tribal representatives in the planning process is anticipated in the next iteration of the plan.

This plan is a living document and has been in a state of constant revision since the 2007 Plan according to the maintenance process presented in Section 6. The Planning Subcommittee met quarterly throughout 2008 and 2009 until the completion of the revised Nevada SHMP in September of 2010. The current revision of the SHMP is organized according to the elements presented in the FEMA Standard State Hazard Mitigation Plan Review Crosswalk (the Crosswalk). The plan meets the requirements of the Code of Federal Regulation (44 CFR 201) which precede each section.

This plan provides the basis and guidance for hazard mitigation in the State of Nevada with the goal of reducing loss of life and property by fostering disaster-resilient communities.

Section 1 describes the State's process for adoption of the Plan and presents the state's authority to implement the plan.

Section 2 provides an overview of the planning process; identifies the Nevada Mitigation Planning Committee (NHMPC) members, and documents the participation of interested groups in the planning process. It also documents how the planning team reviewed and analyzed each section of the plan and indicates whether or not each section was revised.

Section 3 presents the risk assessment for each of the following hazards:

Natural hazards

- Avalanche
- Canal Failure
- Dam Failure
- Drought
- Earthquakes
- Epidemic

- Expansive Soils
- Floods
- Ground Failure
- Infestations
- Landslide
- Severe Weather
 - Extreme Heat
 - Hail and Thunderstorms
 - Severe Winter Storm
 - Tornado
 - Windstorm
- Tsunami/Seiche
- Volcano
- Wildfire

Human-caused hazards

- Hazardous Material Events
- Subsidence
- Terrorism/WMD

Section 4 provides the State's blueprint for reducing the losses identified in the risk assessment. It describes the State mitigation goals that guide the selection of mitigation activities. It also describes how the previous goals were assessed and whether or not they were revised. It includes a discussion of the State's pre- and post-disaster hazard management policies, programs, and capabilities. It includes an evaluation of State laws, regulations, policies, and programs related to hazard mitigation. It evaluates the State's policies related to development in hazard-prone areas and discusses State funding capabilities for hazard mitigation projects. This section includes a general description and analysis of the effectiveness of local mitigation policies, programs, and capabilities.

Section 5 describes how the State supports local jurisdictions and tribal entities in developing plans that will accomplish their mitigation goals, objectives, and actions, through funding and technical assistance.

Section 6 describes the State of Nevada's plan for monitoring, evaluating, and updating the SHMP. It describes implementation measures, and reviews progress on mitigation goals, activities, and project closures.

Section 7 provides a list of sources used as references to gather data.

Section 8 provides the response to the enhanced plan requirements.

0.2 OVERVIEW OF PLAN CONTENTS

This subsection provides a profile of the State of Nevada including economy, physiographic, state facts, demographics, tribal information, geography, population, geography, climate, political divisions and jurisdictions.

0.2.1 Economy

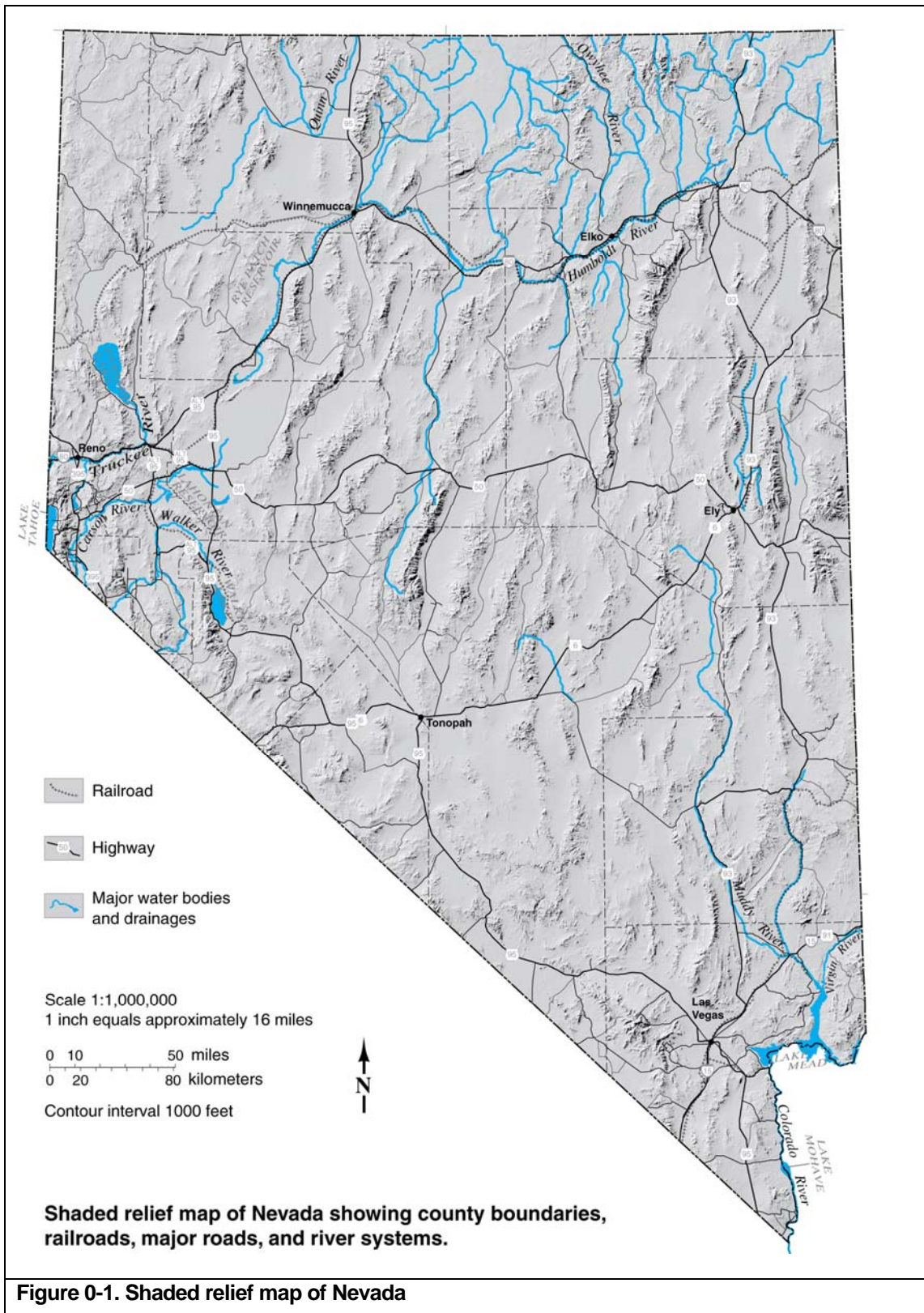
The major industry in Nevada is tourism. Tourism includes the large resort and casinos found in large numbers in southern Nevada around Las Vegas and, to a lesser extent, in Reno and Lake Tahoe and the smaller communities. Please see the Table 0-1 below showing earnings by major industry in Nevada for 2006. The information source is the U.S. Department of Commerce, Bureau of Economic Analysis and the Nevada Regional Economic Analysis Project. This data was retrieved April 17, 2009. The table below provides a snapshot of overall employment of the population of the state.

Table 0-1. Nevada Earnings by Major Industry, 2006

Major Industry	Earnings \$(1000s)	Percent of Total	Rank
Accommodation and Food Service	11,565,669	15.93	1
Construction	9,223,804	12.71	2
Local Government	5,983,049	8.24	3
Professional and Technical Services	5,280,163	7.27	4
Retail Trade	5,182,247	7.14	5
Health Care and Social Assistance	4,935,748	6.80	6
Finance and insurance	4,007,084	5.52	7
Manufacturing	3,258,098	4.49	8
Administrative and Waste Services	2,898,679	4.12	9
Wholesale Trade	2,802,695	3.86	10
Transportation and Warehousing	2,323,141	3.20	11
Real Estate, Rental and Leasing	2,242,007	3.09	12
Management of Companies and Enterprises	2,082,890	2.87	13
State Government	1,961,475	2.70	14
Other Services, except Public Administration	1,646,698	2.27	15
Federal Civilian	1,542,811	2.13	16
Arts, Entertainment and Recreation	1,326,838	1.83	17
Information	1,161,656	1.60	18
Mining	1,097,331	1.51	19
Federal Military	971,041	1.34	20
Utilities	620,878	0.86	21
Educational Services	268,990	0.37	22

Table 0-1. Nevada Earnings by Major Industry, 2006

Major Industry	Earnings \$(1000s)	Percent of Total	Rank
Farm Earning	82,825	0.11	23
Forestry, Fishing and Related Activities	31,937	1.04	24
Total	72,588,754	100.00	



0.2.2 Physical Geography

Nevada is bordered by California on the west, Oregon and Idaho on the north, Utah on the east, and Arizona on the southeast. Nevada is located primarily in the Basin and Range physiographic province with more than 30 north–south-trending mountain ranges and intervening valleys. Average elevation in the northern part of Nevada ranges from about 4000 to 6000 feet and averages from 2,000 to 3,000 feet in the southern part of the state. The highest elevations are Boundary Peak in the Sierra Nevada, at 13,143 feet (4,009 meters), and Wheeler Peak, at 13,063 feet in the eastern part of the state. The southern part of the state lies within the Mojave Desert. The northernmost part of the state lies within the Columbia Plateau Physiographic region.

Most of Nevada lies within the Great Basin whose waters do not reach the ocean but terminate in sinks or flow into lakes with no outlets. There are some small drainage areas in the north margins of the state that empty into the Columbia River Basin and another limited region in the southeast that drains into the Colorado River.

The state's three main river systems that originate in the Sierra Nevada and flow generally eastward into Nevada are the Truckee, the Carson and the Walker Rivers. The termini of these rivers are respectively Pyramid Lake, Carson Sink, and Walker Lake. The Humboldt River system in northern Nevada is the only major river system that is entirely contained within the state, ending in Humboldt Sink. In the southern part of the state the Virgin and Muddy Rivers flow south into the Colorado River system, which includes Lake Mead.

In addition to these natural waterways there are several major man-made reservoirs in the state, briefly described in Table 0-2 below.

Table 0-2. Major Nevada Reservoirs

Name	River System	Total Storage Capacity (acres)
Lake Mead	Colorado	29.7M
Lake Mojave	Colorado	1.82M
Lake Lahontan Reservoir	Carson	317,000
Pitt-Taylor Reservoir Upper	Humboldt	24,200
Pitt-Taylor Reservoir Lower	Humboldt	22,200
Rye Patch Reservoir	Humboldt	171,000
South Fork Reservoir	Elko	41,000
Wild Horse Reservoir	Owyhee	73,500
Weber Reservoir	Walker River	13,000

0.2.3 Climate

Nevada is the driest state in the US, with overall average annual precipitation of approximately nine inches. The low precipitation and high average elevation characterize most of the state as high desert.

0.2.4 Temperature

Nevada is characterized by exceptionally large daily ranges of temperature caused by strong surface heating during the day and rapid nighttime cooling. The mean annual temperatures vary from the middle 40s (Fahrenheit) in the northeast to the 50s in the west and central areas, and to the middle 60s in the south. The average range between the highest and the lowest daily temperatures is 30 to 35 degrees with larger variations in summer than the winter. Temperature extremes range from 120° F to 50° F below zero. Summer temperatures above 100° F are common in the south and occasional over the rest of the state. Over the northern and central portions of the State, freezes begin early in the autumn and continue until late in the spring.

0.2.5 Precipitation

Nevada's geographic location on the lee side of the massive mountain barrier of the Sierra Nevada markedly influences the precipitation that falls on the state. Prevailing west winds bring warm moist Pacific air that ascends, cools, condenses and falls as precipitation before it reaches the eastern slope of the Sierra Nevada. The effects of this mountain barrier are felt throughout the State, resulting in desert conditions over the rest of the state. Nevada averages only about nine inches of precipitation overall. Highest amounts are in the Sierra Nevada averaging over 40 inches. The Ruby Mountains area in central Nevada average about 18 inches, and the least amount of precipitation, as little as five inches, falls in the lower valleys of Nevada from Death Valley California to the Idaho border. In the western and south-central mountains of the state most of the precipitation falls as winter snow, while in the central and northeastern area most precipitation occurs as spring rain. In the southeastern part of the state most of its precipitation comes from summer thunderstorms.

Although Nevada is characterized by generally low mean annual precipitation, occasional extreme precipitation events do present a risk to Nevada's people, homes, and infrastructure. Precipitation information is obtained from the Nevada State Climate Office website: <http://water.nv.gov/WaterPlanning/wat-fact/precip.cfm>

0.2.6 Population

Nevada has 17 counties as shown in Figures 0-2. Nevada's population is concentrated in centers separated by large sparsely populated spaces as shown in Figures 0-2. More than 85% of the state's inhabitants reside in the two most

populous counties, Clark and Washoe. 2008 population statistics by county are presented in Table 0-3. The sparsity of population and vast distances between population centers seriously impact preparation, response and recovery efforts in an emergency event.

Figure 0-2. County Map of Nevada

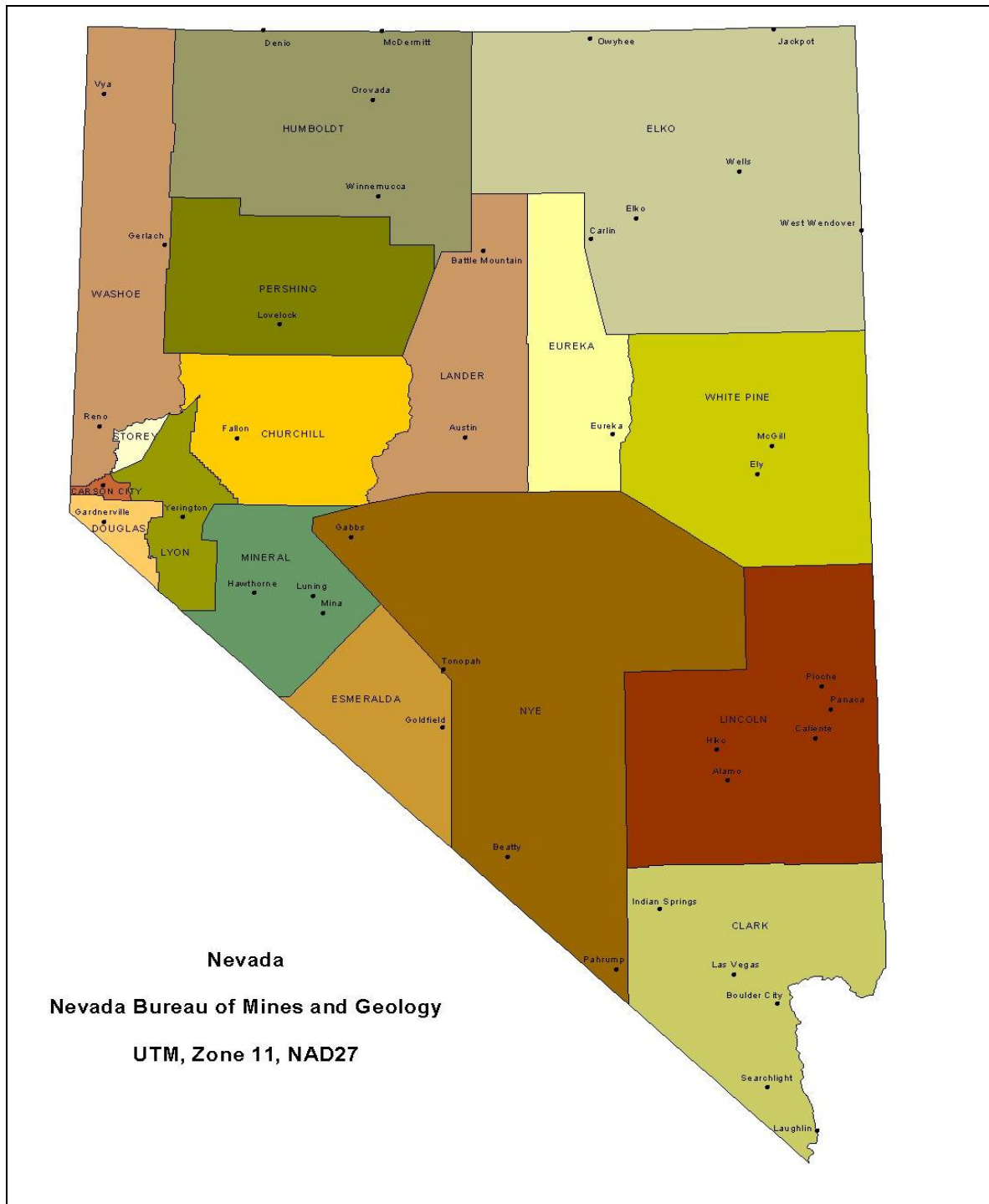


Figure 0-3. Nevada's Population Density

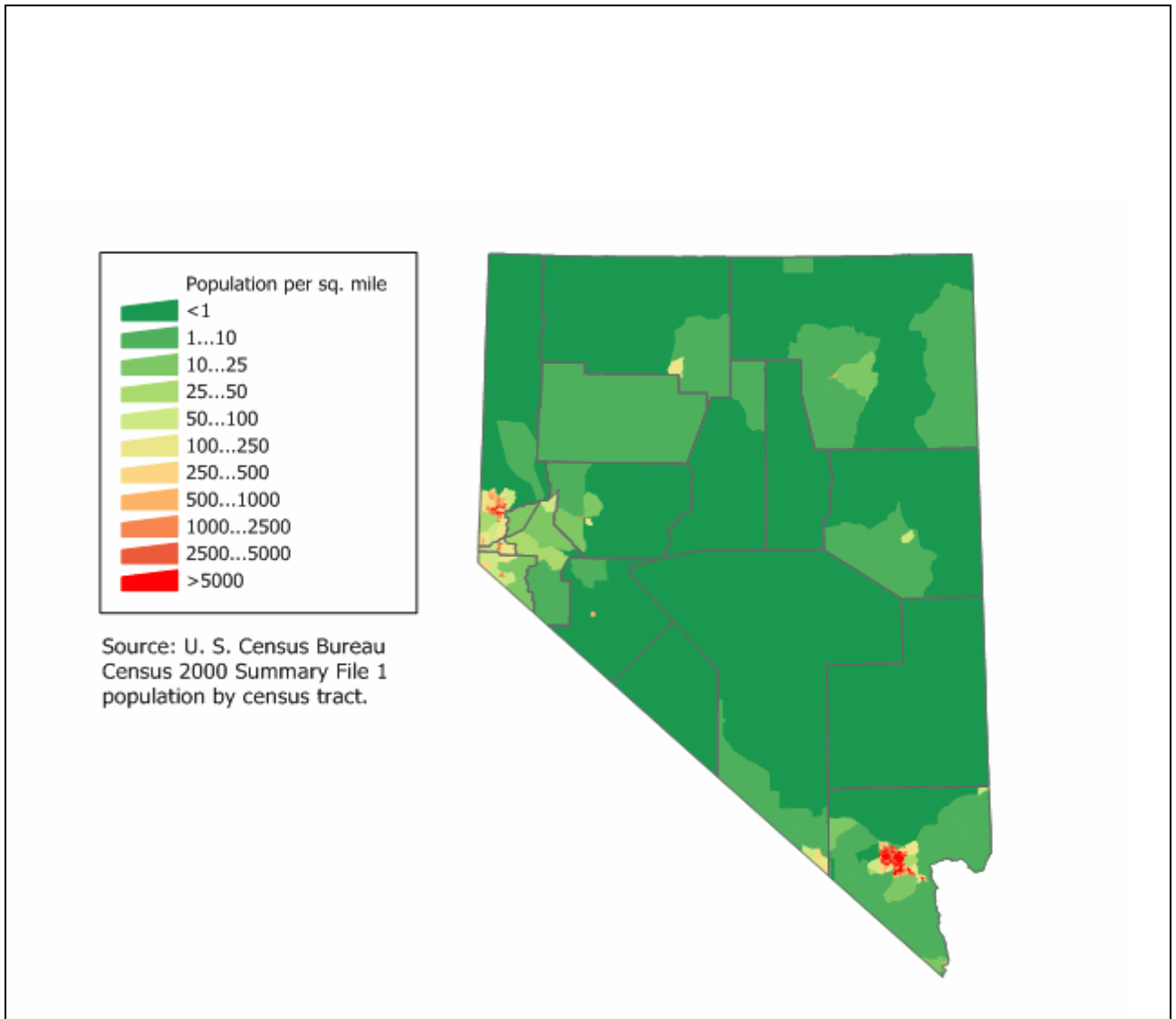


Table 0-3. Nevada County & City Population Estimates 2008

Carson City	57,600	Lander County	5,891
		<i>No cities</i>	
Churchill County	26,981	<i>Unincorporated towns</i>	
<i>Cities</i>		Austin	309
Fallon	9,258	Battle Mountain	2,922
		Kingston	320
Clark County	1,967,716	Lincoln County	4,352
<i>Cities</i>		<i>Cities</i>	
Boulder City	16,684	Caliente	1,077
Henderson	269,538	<i>Unincorporated towns</i>	
Las Vegas	593,528	Alamo	464
Mesquite	19,754	Panaca	645
North Las Vegas	214,661	Pioche	785
<i>Unincorporated towns</i>			
Bunkerville	1,160	Lyon County	55,820
Enterprise	149,713	<i>Cities</i>	
Indian Springs	1,488	Fernley	19,609
Laughlin	8,761	Yerington	3,324
Moapa	998		
Moapa Valley	7,134	Mineral County	4,401
Mt. Charleston	1,118	<i>No cities</i>	
Paradise	182,264	<i>Unincorporated towns</i>	
Searchlight	750	Hawthorne	2,970
Spring Valley	176,910	Luning	80
Summerlin	27,992	Mina	207
Sunrise Manor	185,745	Walker Lake	305
Whitney	36,164		
Winchester	37,141	Nye County	47,370
Douglas County	52,131	<i>Cities</i>	
<i>No cities</i>		<i>Unincorporated towns</i>	
<i>Unincorporated towns</i>		Amargosa	1,521
Gardnerville	5,412	Beatty	1,024
Genoa	255	Gabbs	332
Minden	3,261	Manhattan	138
		Pahrump	38,882
Elko County	50,561	Round Mountain	850
<i>Cities</i>		Tonopah	2,628
Carlin	2,322		
Elko	18,424	Pershing County	7,192
Wells	1,524	<i>Cities</i>	
West Wendover	4,990	Lovelock	2,458
<i>Unincorporated towns</i>		<i>Unincorporated towns</i>	
Jackpot	1,222	Imlay	243
Montello	165		
Mountain City	130	Storey County	4,384
		<i>No cities</i>	
Esmeralda County	1,240	<i>Unincorporated towns</i>	
<i>No cities</i>		Gold Hill	212
<i>Unincorporated towns</i>		Virginia City	1,027
Goldfield	415		
Silver Peak	182	Washoe County	423,833

Eureka County	1,553	<i>Cities</i>	
<i>No cities</i>		Reno	223,012
<i>Unincorporated towns</i>		Sparks	91,684
Crescent Valley	283	<i>No towns</i>	
Eureka (town)	473	White Pine County	9,694
Humboldt County	18,014	<i>Cities</i>	
<i>Cities</i>		Ely	4,352
Winnemucca	7,659	<i>Cities</i>	
<i>No towns</i>		Lund	157
		McGill	1,128
		Ruth	407
STATE	2,783,733		

Source: Nevada State Demographer's office http://www.nsbdc.org/what/data_statistics/demographer/pubs/pop_increase/

0.3 LAND MANAGEMENT & JURISDICTION

An effective hazard mitigation plan must involve cooperation among all land management participants. Figure 0-3 is a map showing the overall distribution of federal and tribal lands in Nevada. Federal agencies control more than 86% of the land. These groups include the U. S. Bureau of Land Management (BLM); U.S. Department of Defense (DOD), U. S. Forest Service (FS), U. S. Bureau of Indian Affairs (BIA), U. S. Bureau of Reclamation (BOR), U. S. Fish and Wildlife Service (FWS), National Parks Service (NPS), and others.

Figure 0-4. Nevada Land Use and Jurisdictions with Map & Boundaries

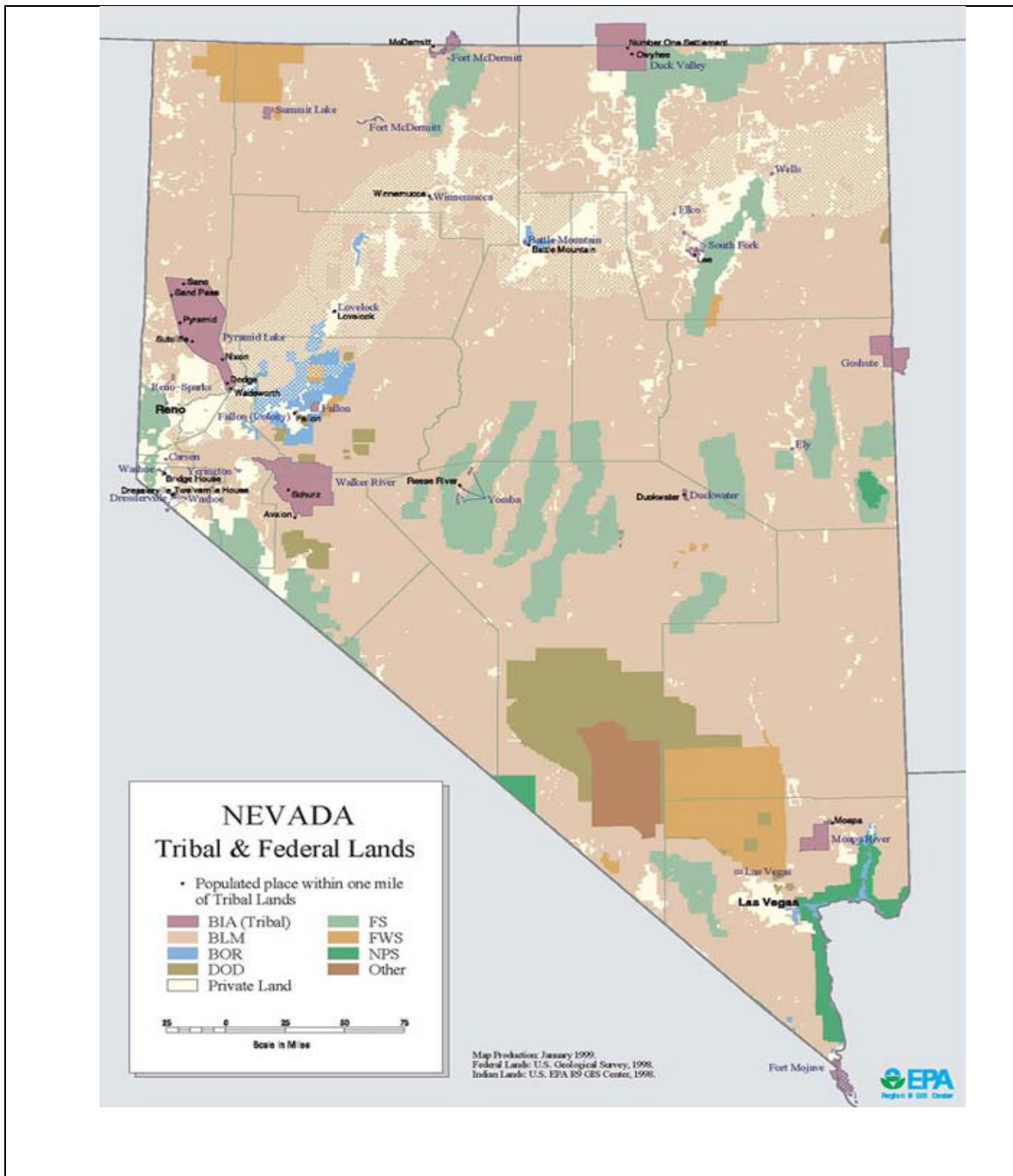


Figure 0-5 below shows the location of Indian reservations and colonies in Nevada in 2010 and contact information for each tribal entity.

Figure 0-5. Nevada Indian Reservation Map with Contact List

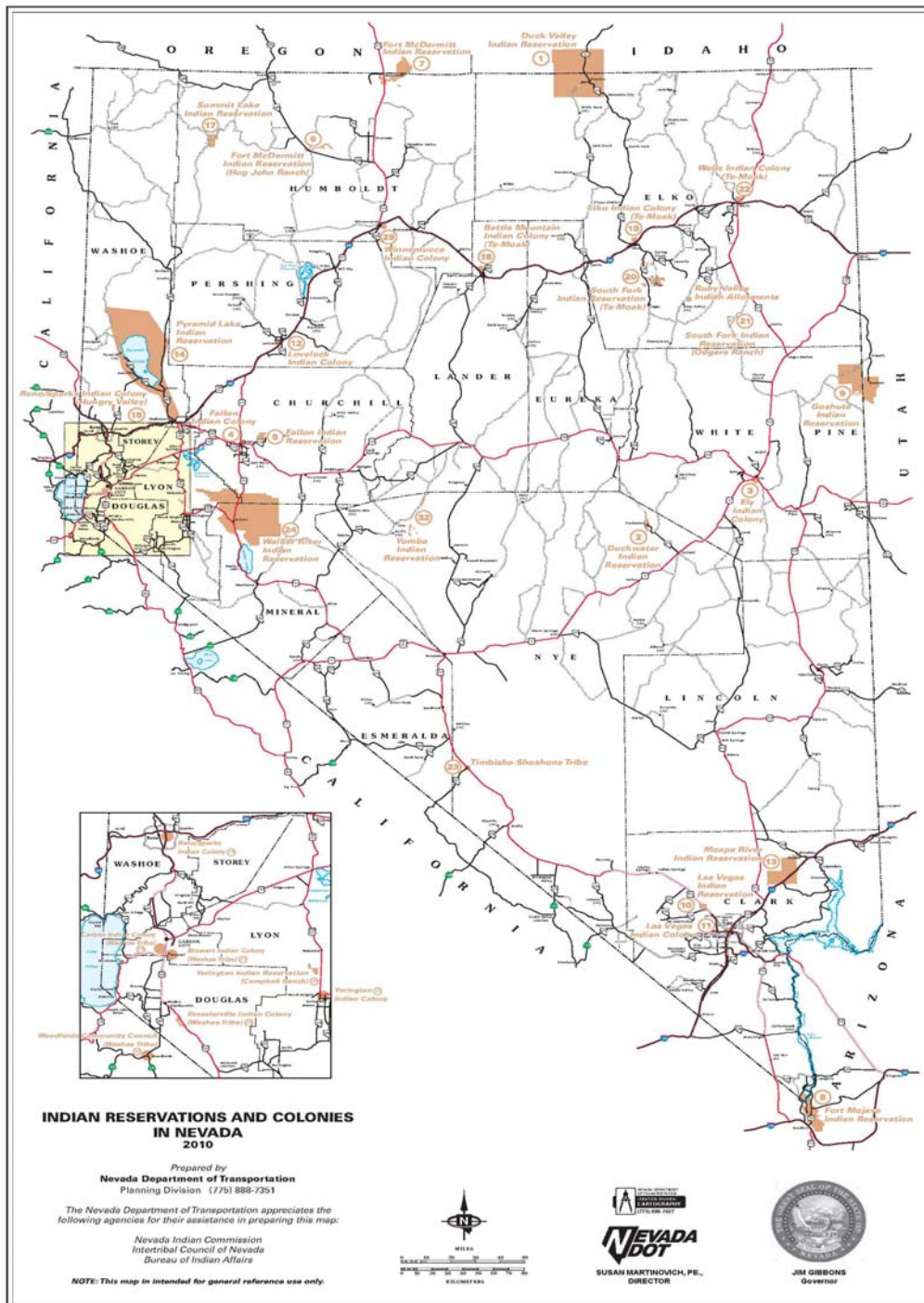


Figure 0-5. Nevada Indian Reservation Map with Contact List

INDIAN RESERVATIONS AND COLONIES IN NEVADA

Duck Valley Sho-Pai Tribe (1)
P.O. Box 219
Owyhee, Nevada 89632
Phone: (208) 759-3100
Fax: (208) 759-3940
www.shopaiatribes.org

Duckwater Sho-Pai Tribes (2)
P.O. Box 140068
Duckwater, Nevada 89314
Phone: (775) 863-0227
Fax: (775) 863-0301

Ely Shoshone Tribe (3)
16 Shoshone Circle
Ely, Nevada 89301
Phone: (775) 269-3013
Fax: (775) 269-3156

Fallon Paiute-Shoshone Tribe (4,5)
565 Rio Vista Drive
Fallon, Nevada 89406
Phone: (775) 423-6075
Fax: (775) 423-5202
www.fpst.org

Fort McDermitt Paiute Shoshone Tribes (6,7)
P.O. Box 457
McDermitt, Nevada 89421
Phone: (775) 532-8259
Fax: (775) 532-8487

Fort Mojave Indian Tribe (8)
500 Morrillan Street
Needles, California 92363
Phone: (760) 629-4591
Fax: (760) 629-5767
www.fortmojave.com

Goshute Business Council (9)
P.O. Box 6104
Ibapah, Utah 84034
Phone: (435) 234-1138
Fax: (435) 234-1162
www.goshutetribes.com

Las Vegas Paiute Tribe (10,11)
1 Paiute Drive
Las Vegas, Nevada 89030
Phone: (702) 386-3926
Fax: (702) 383-4019
www.lvpautiltribe.com

Lovelock Paiute Tribe (12)
P.O. Box 878
Lovelock, Nevada 89419
Phone: (775) 273-7861
Fax: (775) 273-5151

Moapa Band of Paiutes (13)
P.O. Box 340
Moapa, Nevada 89025
Phone: (702) 865-2787
Fax: (702) 865-2875
www.moapapaiutes.com

Pyramid Lake Paiute Tribe (14)
P.O. Box 256
Nixon, Nevada 89424
Phone: (775) 574-1000
Fax: (775) 574-1008
www.plpt.nsn.us

Reno-Sparks Indian Colony (15,16)
98 Colony Road
Reno, Nevada 89502
Phone: (775) 329-2936
Fax: (775) 329-8710
www.rsic.org

Summit Lake Paiute Tribe (17)
1708 H Street
Sparks, Nevada 89431
Phone: (775) 827-9670
Fax: (775) 827-9678
www.summitlaketribe.org

To-Modak Tribe of Western Shoshone
525 Sunset Street
Elko, Nevada 89801
Phone: (775) 738-8251
Fax: (775) 738-2345
www.tomodaktribe.com

Battle Mountain Band Council (18)
37 Mountain View Drive #C
Battle Mountain, Nevada 89620
Phone: (775) 635-2004
Fax: (775) 635-8016

Elko Band Council (19)
511 Sunset Street
Elko, Nevada 89803
Phone: (775) 738-8889
Fax: (775) 753-5439

South Fork Band Council (20,21)
H.C. 30 Box B-13
Spring Creek, Nevada 89815
Phone: (775) 744-4273
Fax: (775) 744-4523

Wells Band Council (22)
P.O. Box 809
Wells, Nevada 89635
Phone: (775) 752-3045
Fax: (775) 752-2179

Timbisha Shoshone Tribe (23)
P.O. Box 206
Death Valley, California 92328
Phone: (760) 786-2374
Fax: (760) 786-2376
www.timbisha.org

Walker River Paiute Tribe (24)
P.O. Box 220
Schurz, Nevada 89427
Phone: (775) 773-2306
Fax: (775) 773-2585
www.wrpt.us

Washoe Tribe of Nevada & California
919 Highway 395 South
Gardnerville, Nevada 89410
Phone: (775) 265-4191
Fax: (775) 265-6240
www.washoetribe.us

Carson Colony Community Council (25)
2900 South Curry Street
Carson City, Nevada 89703
Phone: (775) 883-6459
Fax: (775) 883-6467

Dresserville Community Council (26)
919 Highway 395 South
Gardnerville, Nevada 89410
Phone: (775) 265-4191
Fax: (775) 265-6240

Stewart Community Council (27)
919 Highway 395 South
Gardnerville, Nevada 89410
Phone: (775) 265-4191
Fax: (775) 265-6240

Woodfords Community Council (28)
96 Washoe Boulevard
Markleeville, California 96120
Phone: (530) 694-2170
Fax: (530) 694-1880

Winnemucca Colony Council (29)
P.O. Box 1370
Winnemucca, Nevada 89446
Phone: (775) 623-0888
Fax: (775) 623-6918

Yerington Paiute Tribe (30,31)
171 Campbell Lane
Yerington, Nevada 89447
Phone: (775) 463-3301
Fax: (775) 463-2416

Yomba Shoshone Tribe (32)
H.C. 61 Box 6275
Austin, Nevada 89310
Phone: (775) 964-2463
Fax: (775) 964-2443

RELATED ORGANIZATIONS

**Bureau of Indian Affairs
Western Regional Office**
400 North 5th Street
Phoenix, Arizona 85004
Phone: (602) 379-6782

Nevada Indian Commission
5366 Snyder Avenue
Carson City, Nevada 89701
Phone: (775) 687-8333
Fax: (775) 687-8330
www.nic.nv.gov

Nevada Urban Indians, Inc.
1475 Terminal Way
Suite B
Reno, Nevada 89502
Phone: (775) 768-7600
Fax: (775) 768-7611
www.nevadaurbanindians.org

Inter-Tribal Council of Nevada
600 Greenbrae Drive, Suite 280
Sparks, Nevada 89431
Phone: (775) 355-0600
Fax: (775) 355-0648
www.itcn.org

Las Vegas Indian Center, Inc.
2300 West Bonanza Road
Las Vegas, Nevada 89107
Phone: (702) 647-5842
Fax: (702) 647-4497
www.lasvegasindiancenter.org

**California / Nevada Tribal
Technical Assistance Program (TTAP)**
Nevada Indian Justice Center
5250 Aero Drive
Santa Rosa, California 95403
Phone: (707) 579-5507 or (707) 579-9019

Table 0-4. Tribal Demographics in Nevada

Reservation Names and Map ID Numbers shown on Figure 0-4	Date Established	Resident Tribe(s)	Population of the Reservation (2000 census)	Enrolled Tribal Members
Duck Valley Shoshone-Paiute (1)	1877	Western Shoshone, Paiute	1700+	2000+
Duckwater Shoshone (2)	June 14, 1942	Western Shoshone	125	373
Ely Shoshone Council (3)	1931	Western Shoshone	274 (1990)	
Fallon Paiute-Shoshone (4, 5)	1887	Paiute, Western Shoshone	1297 (2009 website)	1297
Fort McDermitt Paiute- Shoshone (6, 7)	1892	Shoshone, Paiute	387 (1990)	
Fort Mojave (8)				
Confederated Tribe of the Goshute Reservation (9)	1863; 1940 constitution	Goshute, Western Shoshone, Navajo, Ute, Paiute, Northern Cheyenne, Southern Arapahoe, Bannock	350 (approx.)	565 (as of 3/2009)
Las Vegas Paiute Colony (10, 11)	1911	Paiute		
Lovelock Paiute (12)				
Moapa Business Council (13)				
Pyramid Lake Paiute (14)	1936	Paiute	1603+	
Reno-Sparks Indian Colony (15, 16)	Early 1900s; more formal Tribal Government in 1935	Paiute, Shoshone, and Washoe		900+
Summit Lake Paiute (17)				120
Te-Moak Tribal Council (see individual bands below)		Te-Moak Western Shoshone		
Battle Mountain Band Council (18)	1917	Te-Moak Western Shoshone	553 (1995)	
Elko Band Council (19)	1918	Te-Moak Western Shoshone	1326 (1995)	
South Fork Band Council (20, 21)	1941	Te-Moak Western Shoshone	257 (1995)	
Wells Band Council (22)	1863	Te-Moak Tribes of Western Shoshone	34	177
Timbisha Shoshone (23)	1983	Timbisha Shoshone Tribe, Western Shsone	199 (1992)	
Walker River Paiute (24)	1874	Paiute	1200+	

Table 0-4. Tribal Demographics in Nevada

Reservation Names and Map ID Numbers shown on Figure 0-4	Date Established	Resident Tribe(s)	Population of the Reservation (2000 census)	Enrolled Tribal Members
Washoe Tribe of Nevada and California (<i>see individual bands below</i>)				
Carson Colony Community Council (25)	1934	Washoe		
Dresslerville Community Council (26)	1934	Washoe		
Stewart Community Council (27)	1934	Washoe		
Woodfords Community Council (28)	1934	Washoe		
Winnemucca Colony Council (29)				
Yerington Paiute (30, 31)				
Yomba Tribal Council (32)	Dec 22 1939	Western Shoshone	192 (1992)	

Source: Intertribal Council of Nevada website and links to individual Nevada tribal websites where available, 2009 <http://itcn.org/Tribes.html> or *A Native American encyclopedia: history, culture, and peoples*, 2000, Barry Pritzker

Table 0-5. Nevada Facts

State Facts	
Admitted to United States	October 31, 1864
State name	Nevada, meaning snow-capped
Capital City	Carson City
Largest City	Las Vegas
Number of Counties	17
Number of Tribal Reservations	26
Percentage of federally controlled lands	86%
Physiography	
Total land area	110,567 sq. mi., rank: 7 th largest
Latitude and Longitude	Longitude: 114°W to 120°W Latitude: 35°N to 42°N
Highest point	13,140 ft. at Boundary Peak in the Sierra Nevada
Lowest point	470 ft on the Colorado River in Clark County
Mean elevation	5,500 feet above sea level
Demographics	
Total population	2,783,733
Population per square mile (2000)	18.2

Population, percent change, April 1, 2000 to July 1, 2007	28.4%
Homeownership rate, 2000	61%
Median household income, 2007	\$54,996
High school graduates, percent of persons age 25+, 2000	81%
State Trivia	
State Nickname	Silver State; Sagebrush State, Battle-Born State
State slogan	Battle Born
State Motto	"All for our country"
State animal	Desert Bighorn Sheep (<i>Ovis canadensis nelsoni</i>)
State Bird	Mountain bluebird (<i>Sialia currucoides</i>)
State Fish	Lahontan cutthroat trout (<i>Salmo clarki henshawi</i>)
State Flower	Sagebrush (<i>Artemisia tridentata</i>)
State Fossil	Ichthyosaur (<i>Shonisaurus</i>)
State grass	Indian rice grass (<i>Oryzopsis hymenoides</i>)
State reptile	Desert tortoise (<i>Gopherus agassizii</i>)
State Trees	The Single-Leaf Pinion (<i>Pinus monophylla</i>) and the Bristlecone Pine (<i>Pinus aristata</i>)
State rock	Sandstone
State precious gemstone	Virgin Valley black fire opal
State colors	Silver and blue
State metal	Silver