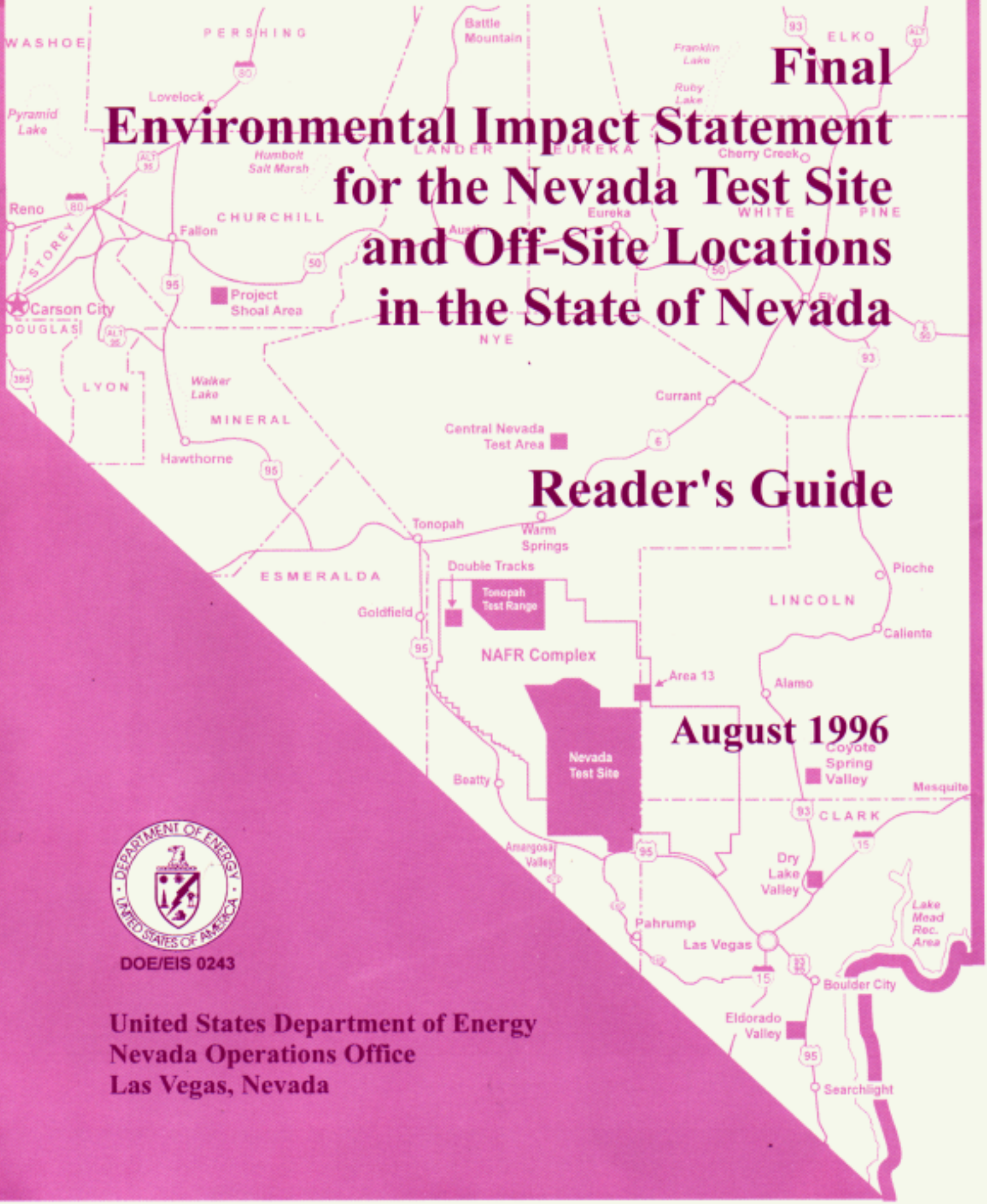
Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada

Reader's Guide

August 1996



DOE/EIS 0243

United States Department of Energy
Nevada Operations Office
Las Vegas, Nevada

Section 1

Introduction

This Reader's Guide is designed to help you find information in the U.S. Department of Energy's (DOE) Nevada Test Site Environmental Impact Statement (NTS EIS).

This Guide is divided into four sections:

- an introduction to the NTS EIS
- specific topics
- number conversions and scientific notations
- public reading room locations.

DOE will be making important management decisions regarding the future mission of the NTS and related operational areas within the state of Nevada. These decisions will focus on the types of programs and project activities to be located at the NTS and the other sites within Nevada and how the economic, infrastructural, and natural resources will be used.

DOE has prepared this NTS EIS to:

- assess the impacts of past, current, and proposed activities
- establish a baseline from which to tier future National Environmental Policy Act reviews
- evaluate four future-use alternatives
- comply with National Environmental Policy Act and the Council on Environmental Quality and DOE regulations implementing the Act.

The NTS EIS is a three-volume document

Volume 1 analyzes the four alternatives, including the No Action Alternative, as they relate to the Defense, Waste Management, Environmental Restoration, Nondefense Research and Development, and Work for Others Programs. In addition, Volume 1 contains a Summary that gives a general description of the purpose of the NTS EIS, explains what will be accomplished, and identifies the environmental laws with which activities at the NTS must comply. An index has been compiled to assist you in locating topics within the NTS EIS.

Volume 2 identifies the framework for the Resource Management Plan.

Volume 3, summarizes public comments on the Draft NTS EIS and includes DOE responses to comments.

The NTS EIS incorporates other broader program-oriented EISs by reference. This EIS addresses the proposed activities at the NTS and the other sites within Nevada. Side bar notation indicates a change to the text.

Specific Topics

In this EIS, each alternative discusses the following topics for each site:

- Land use
- Transportation
- Socioeconomics
- Geology and soils
- Hydrology
- Biological resources
- Air quality
- Noise
- Visual resources
- Cultural resources
- Occupational and public health and safety
- Environmental Justice

The NTS EIS contains an American Indian perspective contributed by the Consolidated Group of Tribes and Organizations (CGTO). These sections are italicized in their entirety in the body of this EIS.

Alternative 1 - Continue Current Operations (No Action)

The current DOE mission and activities would continue. These would include activities and projects that support the Defense, Waste Management, Environmental Restoration, Nondefense Research and Development, and Work for Others Programs.

Alternative 2 - Discontinue Operations

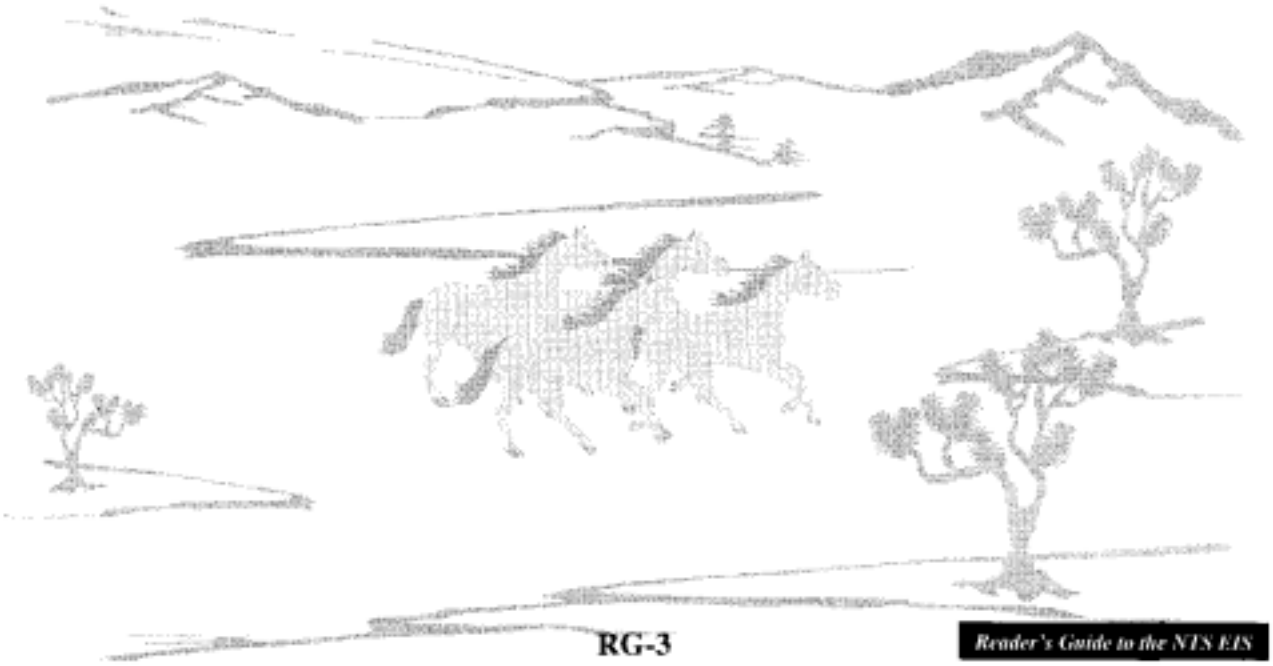
All current and planned programs and activities would be discontinued. Only those monitoring and site security functions necessary for human health, safety, and security would be maintained.

Alternative 3 - Expanded Use

The NTS and its resources would support national programs of both a defense and nondefense nature. The alternative includes support for ongoing U.S. Department of Energy, Nevada Operations Office, mission activities and provides for increased use of the NTS and its resources and capabilities by other federal and non-federal agencies and organizations.

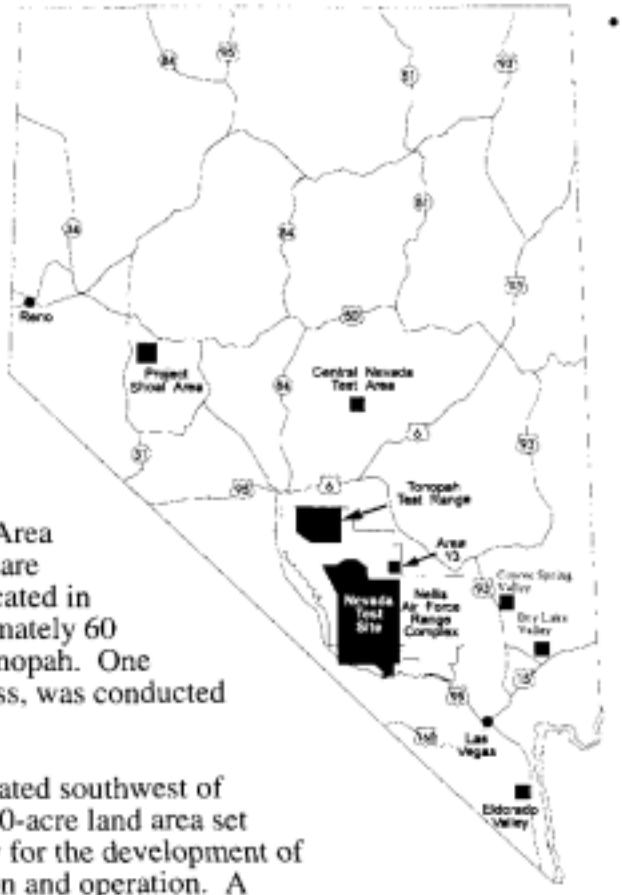
Alternative 4 - Alternate Use of Withdrawn Lands

Programs and activities not currently included in the NTS mission responsibilities would be located at the NTS. The DOE would discontinue all defense-related and most Work for Others Program activities at the NTS. Waste Management Program operations would continue in support of ongoing NTS Environmental Restoration Program activities and waste-generating operations associated with projects sited at the NTS. Non-defense research programs would be expanded.



Where Are the Sites in Nevada?

- Nevada Test Site - approximately 1,350 square miles of land area located in Nye County in southern Nevada, with its southernmost point about 65 miles northwest of Las Vegas, Nevada.
- Area 13 of the Nellis Air Force Range - approximately 4 square miles of land area, located off the northeast corner of the NTS. Area 13 is the site of Project 57, a nuclear safety test.
- Tonopah Test Range - approximately 602 square miles of land area, located in the northwestern portion of the Nellis Air Force Range. The Tonopah Test Range is used primarily as a research, design, and testing grounds for defense-related activities by the DOE.
- Project Shoal Area - approximately 4 square miles of land area located in Churchill County and approximately 30 miles southeast of Fallon, Nevada. Project Shoal was conducted in 1963 as part of the Plowshare Program to develop peaceful applications of nuclear testing.
- Central Nevada Test Area - approximately 4 square miles of land area, located in Nye County, approximately 60 miles northeast of Tonopah. One event, Project Faultless, was conducted at this site in 1968.
- Eldorado Valley - located southwest of Boulder City. A 6,000-acre land area set aside by Boulder City for the development of solar power generation and operation. A consortium, including the DOE, the non-federal Corporation for Solar Technology and Renewable Resources, the solar industry, Nevada stakeholders, and the university systems, would develop the solar-generating facilities.



- Dry Lake Valley - located near the Apex Industrial Area, several miles northeast of the U.S. Highway 93 and Interstate 15 intersection. A 3,600-acre area has been set aside for the development of solar power generation and operation by the Nevada Power Company. A consortium, including the DOE, the non-federal Corporation for Solar Technology and Renewable Resources, the solar industry, Nevada stakeholders, and the university systems, would develop the solar-generating facilities.
- Coyote Spring Valley - a 2,400-acre land area, located in Lincoln County. It is a possible site for the development of solar power generation and operation.

Explanation of Number Conversions

The following rules were used in the conversion and rounding of numbers for this EIS.

1. Original numbers were converted from metric to English equivalents (or vice versa) according to standard conversion factors.

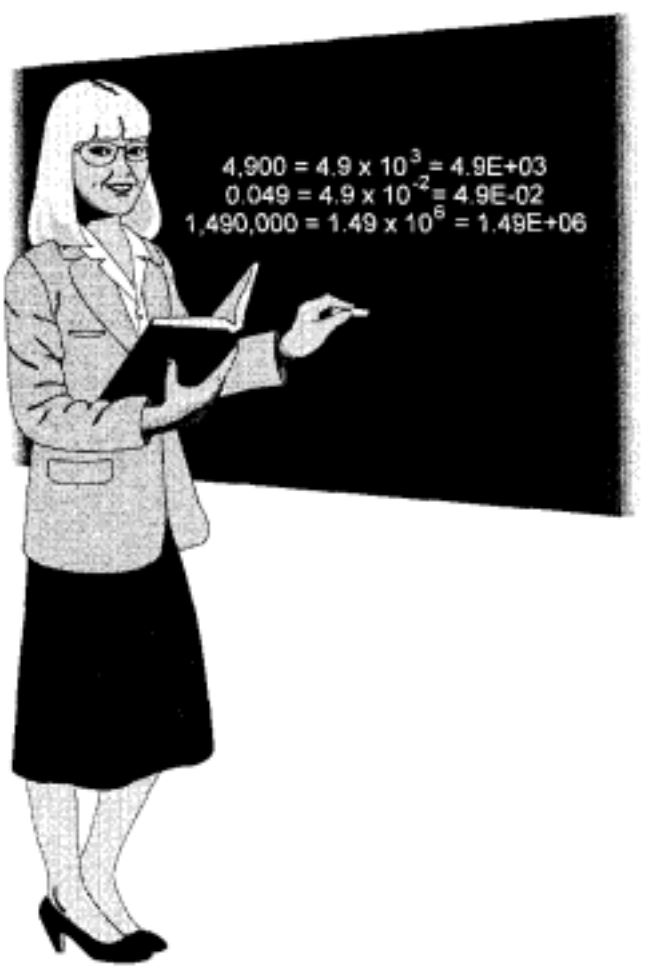
2. Original numbers were not rounded before they were converted.

3. Converted numbers were rounded to their appropriate level of precision; normally they were rounded to 2 significant figures, including decimals or numbers below 10,000. Numbers greater than 10,000 were normally rounded to 3 significant figures.

4. Figures were expressed in scientific notation to 3 significant figures (e.g., 1,450,000 would be expressed as 1.45×10^6).

5. Metric units are referred to first, with English units in parentheses, regardless of which was the original number.

Note: Slight variations in the same number used in different sections may occur because different computer spreadsheet software rounds or truncates numbers differently or because the analysts rounded the numbers before or after calculations.



Use of Scientific Notation

Very small and very large numbers are sometimes written using "scientific notation" or "E notation" rather than as decimals or fractions. Both types of notation use exponents to indicate the power of 10 as a multiplier (i.e., 10^n, or the number 10 multiplied by itself "n" times; 10^{-n} or the reciprocal of the number 10 multiplied by itself "n" times).
For example: $\mathbf{10^3 = 10 \times 10 \times 10 = 1{,}000}$

$$\mathbf{10^{-2} = \frac{1}{10 \times 10} = 0.01}$$

In scientific notation, large numbers are written as a decimal between 1 and 10 multiplied by the appropriate power of 10:

4,900 is written $4.9 \times 10^3 = 4.9 \times 10 \times 10 \times 10 = 4.9 \times 1{,}000 = 4{,}900$
0.049 is written 4.9×10^{-2}
1,490,000 or 1.49 million is written 1.49×10^6

A positive exponent indicates a number larger than or equal to one; a negative exponent indicates a number less than one.

In some cases, a slightly different notation ("E-notation") is used, where "× 10" is replaced by "E" and the exponent is not superscripted. Using the above examples:

$4{,}900 = 4.9 \times 10^3 = 4.9\text{E+}03$
$0.049 = 4.9 \times 10^{-2} = 4.9\text{E-}02$
$1{,}490{,}000 = 1.49 \times 10^6 = 1.49\text{E+}06$

Copies of the NTS EIS have been placed in the following public reading rooms:

DOE Public Reading Room
2621 Losee Road, Bldg. 1
North Las Vegas, NV 89030

Las Vegas Public Library
533 N. Las Vegas Blvd.
Las Vegas, NV 89101

Carson City Public Library
900 N. Roop St.
Carson City, NV 89701

Tonopah Public Library
171 Central Street
Tonopah, NV 89019

Doris Shirkey Library
2101 E. Calvada Blvd.
Pahrump, NV 89041

Caliente Branch Library
100 Depot Ave.
Caliente, NV 89008

University of Nevada, Reno
Noble H. Getchell Library
Reno, NV 89557

University of Nevada, Las Vegas
James Dickenson Library
4505 S. Maryland Parkway
Las Vegas, NV 89154

Freedom of Information Reading Room
Forrestal Bldg.
1000 Independence Ave., S.W.
Washington, DC 20585

Fallon Public Library
Churchill County Library
553 S. Main
Fallon, NV 80406-8887

Washington County
Library
50 S. Main
St. George, UT 84770

White Pine Library
950 Campton
Ely, NV 89301

Goldfield Library
P.O. Box 430
Goldfield, NV 89013

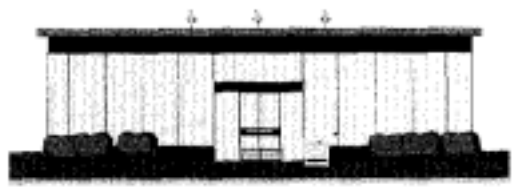
Dyer Public Library
P.O. Box 105
Dyer, NV 89010

Silver Peak Library
P.O. Box 128
Silver Peak, NV 89047

Community College of Southern Nevada
Cheyenne Campus
3200 E. Cheyenne
Las Vegas, NV 89117

Henderson Campus
700 College Dr.
Henderson, NV 89015

West Charleston Campus
6375 W. Charleston Blvd.
Las Vegas, NV 89102



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