

3.0 ERRATA AND CLARIFICATIONS

3.1 INTRODUCTION

This section contains errata and clarifications. Errata rectify minor errors found in the Draft EIS ranging from corrections of spellings to inserting words or phrases inadvertently omitted from the Draft EIS. Clarifications consist of explanatory information designed to enhance understanding of information in the Draft EIS. These clarifications do not represent substantive changes to the analysis or findings in the Draft EIS. Neither the errata nor the clarifications alter the conclusions presented in the Draft EIS regarding environmental impacts.

Combined with the Draft EIS, the errata and clarifications form the core of the Final EIS. Organization of the errata and clarifications follows the organization of the Draft EIS to assist the reader. The errata and clarifications start with the Executive Summary and progress through the remainder of the chapters and sections in the Draft EIS. Those sections of the Draft EIS not requiring any changes or clarifications are omitted from the list presented below.

Each erratum or clarification is listed according to its section, page, paragraph, and line number in the Draft EIS. The underlined words in the errata and clarifications are not part of the text changes to the Draft EIS; they are instructions. To ensure a clear understanding of the changes made to the Draft EIS, one section – 4.12 Environmental Justice – has been reprinted in its entirety. Also, when one or two numbers change within a table, the entire table is repeated. However, most of the errata and clarifications simply replace a word or phrase.

3.2 ERRATA AND CLARIFICATIONS TABLE

Draft EIS Section	Page	Paragraph	Line(s)	Errata or Clarification
Executive Summary	ES-1	5 th	7	<u>Add</u> “on or near the base” <u>after</u> “Base components”
Executive Summary	ES-3	1 st	2	<u>Before</u> “(Table ES-1)” <u>add</u> “for airspace management, air quality, safety, land use, hazardous materials and waste, earth and water resources, recreation and visual resources, and socioeconomics. The F-22 beddown would result in an increase in noise around Nellis AFB relative to baseline conditions. Increased noise would extend into areas with greater than average minority and low-income populations resulting in a disproportionate effect on these groups. This environmental justice impact would primarily occur in locations already zoned by Clark County to control development in areas subject to noise levels of 65 DNL or greater.”
Executive Summary	ES-4	3 rd full paragraph	1-6	<u>Replace</u> from “Under the Proposed Action... <u>through</u> northeast of the base.” <u>with</u> “The F-22 beddown would result in increased subsonic noise at and around Nellis AFB, but noise conditions would remain generally consistent with the patterns of the past 20 years. Ninety-five percent of the lands around Nellis AFB are zoned for and previously exposed to equivalent noise levels, or are undeveloped lands northeast of the base. Addition of F-22 flight activities would increase the area around the base currently affected by noise levels of 65 DNL or greater. DNL, or Day-Night Average Sound Level, is a noise metric that combines levels and durations of noise events and the number of events over a daily time period. The area around the base exposed to these noise levels would increase to approximately 23,000 acres, or 8,700 acres more than under baseline conditions and could affect an additional 6,250 people.”
Executive Summary	ES-5	6 th	2	<u>Change</u> “26 percent and 11 percent” <u>to</u> “24 percent and 10 percent”

F-22 Force Development Evaluation and Weapons School Beddown, Nellis AFB

Draft EIS Section	Page	Paragraph	Line(s)	Errata or Clarification
Executive Summary	ES-6	1 st	1-2	<u>Replace</u> "These figures exceed the 25 percent minority average and equal the 11 percent low-income average in Clark County" <u>with</u> "The 24 percent of minority populations and the 10 percent low-income populations currently affected by noise are lower than the Clark County average for these groups."
Executive Summary	ES-6	1 st	4	<u>Change</u> "27 percent minority and 19 percent low-income populations." <u>to</u> "30 percent minority and 16 percent low-income populations."
2.3	2-38	2 nd	2-4	<u>Replace</u> "The primary air-to-ground munition carried by the F-22 is expected to be the JDAM. JDAMs consist of 1,000 pound bombs guided to the target by an attached Global Positioning System (GPS) Receiver" <u>with</u> "the primary air-to-ground munition carried by the F-22 is expected to be the GBU 32 variant of the JDAM, which uses a 1,000 pound general purpose Mark-83 bomb. JDAMs are guided to the target by an attached Global Positioning System (GPS) Receiver."
2.3	2-38	3 rd	1	<u>Change</u> "Mark-82" <u>to</u> "Mark-83"
2.6	2-49	Table 2.6-1	NA	<u>Under Airspace for Proposed Action: F-22 Beddown</u> , add after "An increase of 544 F-22 annual night operations". . . "an 11% increase" <u>in the third bullet</u>
2.6	2-50	Table 2.6-1	NA	<u>Under Noise and Land Use for No-Action Alternative</u> , <u>change</u> "about 22,800 people" <u>to</u> "about 31,000 people" <u>in the second bullet</u>
2.6	2-50	Table 2.6-1	NA	<u>Under Noise and Land Use for Proposed Action: F-22 Beddown</u> , <u>change</u> "about 37,750 people" <u>to</u> "about 37,250 people" <u>in the second bullet</u>
2.6	2-55	Table 2.6-1	NA	<u>Under Environmental Justice for No-Action Alternative</u> , <u>replace the first bullet with</u> "Baseline noise levels of 65 DNL or greater do not disproportionately affect minority groups (24%) or low-income populations (10%)"

Draft EIS Section	Page	Paragraph	Line(s)	Errata or Clarification
2.6	2-55	Table 2.6-1	NA	<u>Under <i>Environmental Justice for Proposed Action</i></u> , replace the first bullet with “Projected noise levels of 65 DNL or greater would disproportionately affect about 11,200 (30%) people belonging to minority groups and about 5,900 low-income people (16%), but this effect would primarily occur in locations already zoned by Clark County to control development in areas subject to noise levels of 65 DNL or greater”
3.2	3.2-1/ 3.2-2	6 th	1-5	<u>Replace paragraph with</u> “ Human response to noise can vary greatly to a given sound level and frequency. Depending on the individual disposition to the noise source, the response can range from “calming” to “startling.” With the exception of evaluating sleep disturbance, metrics used to measure human response to noise consider the cumulative amount of noise over some time duration, typically 1, 8 and 24 hours. Many laymen consider this “averaging” over time as misleading since the resulting noise level can be less than the instantaneous or peak value of the noise signal. Realistically, from a “response” perspective, the true effect can only be understood when compared to a standard. This is analogous to temperature. Most Americans well understand the Fahrenheit temperature scale, some also understand the Centigrade scale; however, few would understand that 32 degrees Fahrenheit is comparable to 273 degrees Kelvin or 492 degrees Rankin. Thus, without a standard for comparison, the data become meaningless. The standard metric for human annoyance is based on the “cumulative dose” or time-weighted average noise level such as DNL.”
3.2	3.2-2	1 st Bullet	4	<u>Add “measured” after</u> “Sound levels are”
3.2	3.2-2	4 th Bullet	4-5	<u>Replace</u> “this effect can make noise seem louder than its actual level.” <u>with</u> “this effect can startle the receiver.”

Draft EIS Section	Page	Paragraph	Line(s)	Errata or Clarification
3.2.1	3.2-18	3 rd	4-8	<u>Replace</u> "In contrast, the area affected by actual baseline noise levels of 65 DNL or greater includes about half as many people (i.e., 23,000)." <u>with</u> "In contrast, the area in which 31,000 people live has been exposed to baseline noise levels of 65 DNL or greater."
3.2.1	3.2-19	Table 3.2-7	NA	<u>Replace</u> Table 3.2-7 <u>with</u> :

Table 3.2-7. Affected Population and Annoyance Estimates around Nellis AFB			
<i>Noise Level (DNL)</i>	<i>Population Affected¹</i>		<i>Number of People Potentially Highly Annoyed Under Baseline Noise Contours</i>
	<i>Within Clark County Zones</i>	<i>Under Baseline Noise Contours</i>	
65-70	24,402	22,669	2,720
70-75	14,119	8,208	1,806
75-80	5,379	91	34
80-85	1,200	32	17
>85	0	0	0
TOTAL	45,100	31,000	4,577
¹ Nellis AFB population excluded; estimated from 1998 count of housing units multiplied by 3.02 people per unit (regional average)			

3.2.1	3.2-19	2 nd	1	<u>Replace</u> "approximately 2,900 people" <u>with</u> "approximately 4,600 people"
3.2.2	3.2-29	3 rd full paragraph	2-3	<u>Change</u> "National Wildlife Range System" <u>to</u> "National Wildlife Refuge System"

Draft EIS Section	Page	Paragraph	Line(s)	Errata or Clarification
3.5.1.1	3.5-2	1 st	5-7	<u>Change</u> “the base has a <i>Spill Prevention and Response Plan</i> , <i>Nellis AFB Plan 19-1</i> , and a <i>Facilities Response Plan</i> included as appendices in the <i>Nellis AFB Hazardous Waste Management Plan</i> ” <u>to read</u> “the base has a <i>Facilities Response Plan</i> and the <i>Nellis AFB Hazardous Waste Management Plan</i> ”
3.5.1.1	3.5-2	2 nd	1	<u>Add</u> “(NAFB Plan 12)” <u>after</u> “ <i>Nellis AFB Hazardous Waste Management Plan</i> ”
3.5.1.1	3.5-2	2 nd	2	<u>Delete</u> “RCRA and non-RCRA”
3.5.1.1	3.5-2	3 rd	1	<u>Replace</u> “more than 110,000 pounds” <u>with</u> “approximately 149,000 pounds”
3.5.1.1	3.5-2	3 rd	2	<u>Add</u> “presently” <u>after</u> “Nellis AFB is”, <u>replace</u> “areas” <u>with</u> “sites” <u>and</u> “or” <u>with</u> “and”
3.5.1.1	3.5-2	3 rd	8-16	<u>Replace from</u> “Wastes generated on base.....” <u>through</u> “waste streams generated on base.” <u>with</u> “Wastes generated on base are turned into 83 satellite accumulation points and then into the Central Accumulation Site on base. These accumulation points manage 46 established waste streams generated on base. The Defense Reutilization and Marketing Office is responsible for managing disposal operations.”
3.5.1.1	3.5-2	4 th	1	<u>Add</u> “and vehicle” <u>after</u> “aircraft”
3.12.1	3.12-3	4 th	5-7	<u>Replace</u> “These areas have also traditionally been occupied by a higher proportion of members of a minority group (from 26 to 31 percent of the population affected by noise levels grater than 65 DNL).” <u>with</u> “These areas have also historically been occupied by a higher proportion of members of a minority group; 33 percent of the population in the area zoned by Clark County for noise levels of 65 DNL or greater are minorities (Table 3.12-1).”

Draft EIS Section	Page	Paragraph	Line(s)	Errata or Clarification
3.12.1	3.12-3	5 th	1-7	<u>Replace entire paragraph with</u> "Approximately 31,000 total people are estimated to be affected by current (baseline) noise levels of 65 DNL or greater. Out of those 31,000 people about 7,480 (24 percent) are considered to be minorities, and 3,218 (10 percent) to have low incomes. The 24 percent minority and 10 percent low-income populations currently affected by noise around Nellis AFB are lower than the county average. Within the area around Nellis AFB zoned for noise of 65 DNL or greater, 33 percent of the people belong to minority populations and 13 percent to low-income populations (Table 3.12-1)."
3.12.1	3.12-5	1 st	1-3	<u>Delete paragraph starting with</u> "Minority and low-income" <u>through</u> "above 70 DNL."
3.12.1	3.12-5	Table 3.12-1	NA	<u>Replace Table 3.12-1 with:</u>

Table 3.12-1. Minority and Low-Income Populations Around Nellis AFB in Areas with Baseline Noise of 65 DNL or Greater

	<i>Minority</i>	<i>%</i>	<i>Low-Income</i>	<i>%</i>
Clark County Total Population ¹	281,120	25	123,200	11
Clark County Zoning Noise Levels ² ≥65 DNL	14,897	33	5,792	13
Baseline Noise Levels ≥65 DNL	7,480	24	3,218	10

¹Total population based on 1996 estimate from Clark County Department of Comprehensive Planning.

² Zoning based on Clark County Department of Comprehensive Planning.

4.2.1	4.2-9	2 nd	2	<u>Change</u> "about 38,000 people" <u>to</u> "about 37,000 people" <u>and</u> "Almost 15,000 people" <u>to</u> "Approximately 6,000 people"
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Draft EIS Section	Page	Paragraph	Line(s)	Errata or Clarification
4.2.1	4.2-9	Table 4.2-4	NA	<u>Replace Table 4.2-4 with:</u>

Table 4.2-4. Baseline and Projected Affected Population and Annoyance					
<i>Noise Level (DNL)</i>	<i>Baseline Population Affected¹</i>	<i>Baseline Number of People Potentially Highly Annoyed¹</i>	<i>Projected Population Affected¹</i>	<i>Projected Number of People Highly Annoyed¹</i>	<i>Population within Clark County Zones¹</i>
65-70	22,669	2,720	27,056	3,247	24,402
70-75	8,208	1,006	10,074	2,216	14,119
75-80	91	34	30	11	5,379
80-85	32	17	90	48	1,200
>85	0	0	0	0	0
TOTAL	31,000	4,577	37,250 ¹	5,522	45,100
¹ Nellis AFB excluded.					

4.2.1	4.2-9	3 rd	1	<u>Change</u> “approximately 5,600 people” <u>to</u> “approximately 5,500 people”
4.2.1	4.2-9	3 rd	2	<u>Change</u> “an increase of 2,700 people” <u>to</u> “an increase of 945 people”
4.5.2	4.5-3	1 st full paragraph	2-3	<u>Change</u> “about 4,000 pounds” <u>to</u> “about 14,500 pounds”
4.5.2	4.5-3	1 st full paragraph	4	<u>Change</u> “less than a 3 percent increase” <u>to</u> “less than a 10 percent increase” <u>and add</u> “This increase would not exceed hazardous waste amounts disposed of in the past which were as high as 461,000 pounds in 1992. Hazardous waste has been reduced by roughly 68 percent and is expected to continue to decrease.” <u>after</u> “to current conditions.”

Draft EIS Section	Page	Paragraph	Line(s)	Errata or Clarification
4.8.2	4.8-2	2 nd full paragraph	3	<u>Add</u> "potentially eligible" <u>after</u> "effects to"
4.8.2	4.8-2	2 nd full paragraph	10	<u>Replace</u> "The Munitions Area has never been surveyed." <u>with</u> " The munitions area will be surveyed and any cultural resources found would be evaluated by January 2000, prior to construction."
4.8.2	4.8-2	2 nd full paragraph	12	<u>Delete</u> "and survey to identify archaeological remains"
4.8.2	4.8-2	2 nd full paragraph	13	<u>Delete</u> "significant" <u>and replace</u> "of possible." <u>with</u> "and mitigate effects to insignificant levels through data recovery."
4.12	4.12-1 through 4.12-5	NA	NA	<u>Replace Section 4.12, Environmental Justice, with a revised Section 4.12 (below)</u>

4.12 ENVIRONMENTAL JUSTICE

As directed by Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, this analysis addresses potential disproportionately high and adverse human health or environmental effects on these populations.

The existence of disproportionately high and adverse impacts first depends on identifying impacts for each of the individual resources (e.g., noise, air quality, water resources, and hazardous materials and wastes). If implementation of the Proposed Action were to have potentially significant effects on people for any particular resource, then it would be necessary to examine those impacts in terms of their potential to adversely and disproportionately affect minority or low-income communities. Section 3.12 determined that noise was the only resource with such potential.

Determining disproportionate impacts involves comparing the composition of the affected population to the composition of the Region of Comparison (ROC). The ROC is the smallest political unit encompassing the impact area. For the area around Nellis AFB, the ROC is Clark County. The ROC for the NRC includes Clark, Lincoln, and Nye counties.

4.12.1 No-Action Alternative

Because there would be no change from existing conditions under the No-Action Alternative, there would be no environmental justice issues.

4.12.2 Proposed Action

NELLIS AFB

During the winter of 1998 a windshield survey was conducted, including personal contact with managers of multiple dwelling units. These data were combined with census tract data to ensure consideration of potential impacts at or below the census tract level. This information provided up-to-date estimates of population in the area surrounding the base. The information resulting from this evaluation has been incorporated into this analysis.

Low-income and minority populations in the residential areas associated with Sunrise Manor and other unincorporated communities near Nellis AFB would bear a disproportionately greater share of noise impacts than the population as a whole in the surrounding community. Portions of Sunrise Manor west and south of Nellis AFB (refer to Figure 3.2-5) would be subject to increased noise of 2 dB or less above levels currently experienced. This would occur almost entirely in areas already zoned by Clark County to control development in areas subject to noise levels of 65 DNL or greater.

The minority population residing within Clark County Planning zones of 65 DNL or greater represents 33 percent of the total population in that area, as compared to the minority population in the ROC which is 25 percent. This means that the area historically affected by Nellis AFB operations already has a higher proportion of minorities than the ROC. Currently, 24 percent of the population affected by baseline noise levels are minorities (Figure 4.12-1). This would increase to 30 percent of the total population under the Proposed Action. Minority members potentially affected by noise would increase from 7,480 to 11,199 (Table 4.12-1). Approximately 76 percent of the affected minority members live in areas with noise levels between 65 and 70 DNL (Table 4.12-2).

The low-income populations residing within Clark County Planning Zones of 65 DNL or greater represents 13 percent of the total population in that area, as compared to the low-income population in the ROC which is 11 percent. This means that the area historically affected by Nellis AFB operation already has a higher proportion of low-income people than the ROC. Currently, 10 percent of the population affected by baseline noise levels is low-income (see Figure 4.12-1). This would increase to 16 percent of the total population under the Proposed Action. The low-income population potentially affected by noise would increase from 3,218 to 5,883 (see Table 4.12-1). Approximately 70 percent of the affected members of the low-income population live in areas with noise levels between 65 and 70 DNL (Table 4.12-3).

Table 4.12-1. Minority and Low-Income Populations Affected by Noise Levels Greater than or Equal to 65 DNL				
	<i>Minority</i>	<i>%</i>	<i>Low-income</i>	<i>%</i>
Clark County Total Population ¹	281,120	25	123,200	11
Clark County Zoning Noise Levels² ≥65 DNL	14,897	33	5,792	13
Baseline Noise Levels ≥65 DNL	7,480	24	3,218	10
Projected Noise Levels ≥65 DNL	11,199	30	5,883	16
¹ Total population based on 1996 estimate from Clark County Department of Comprehensive Planning.				
² Zoning based on Clark County Department of Comprehensive Planning.				

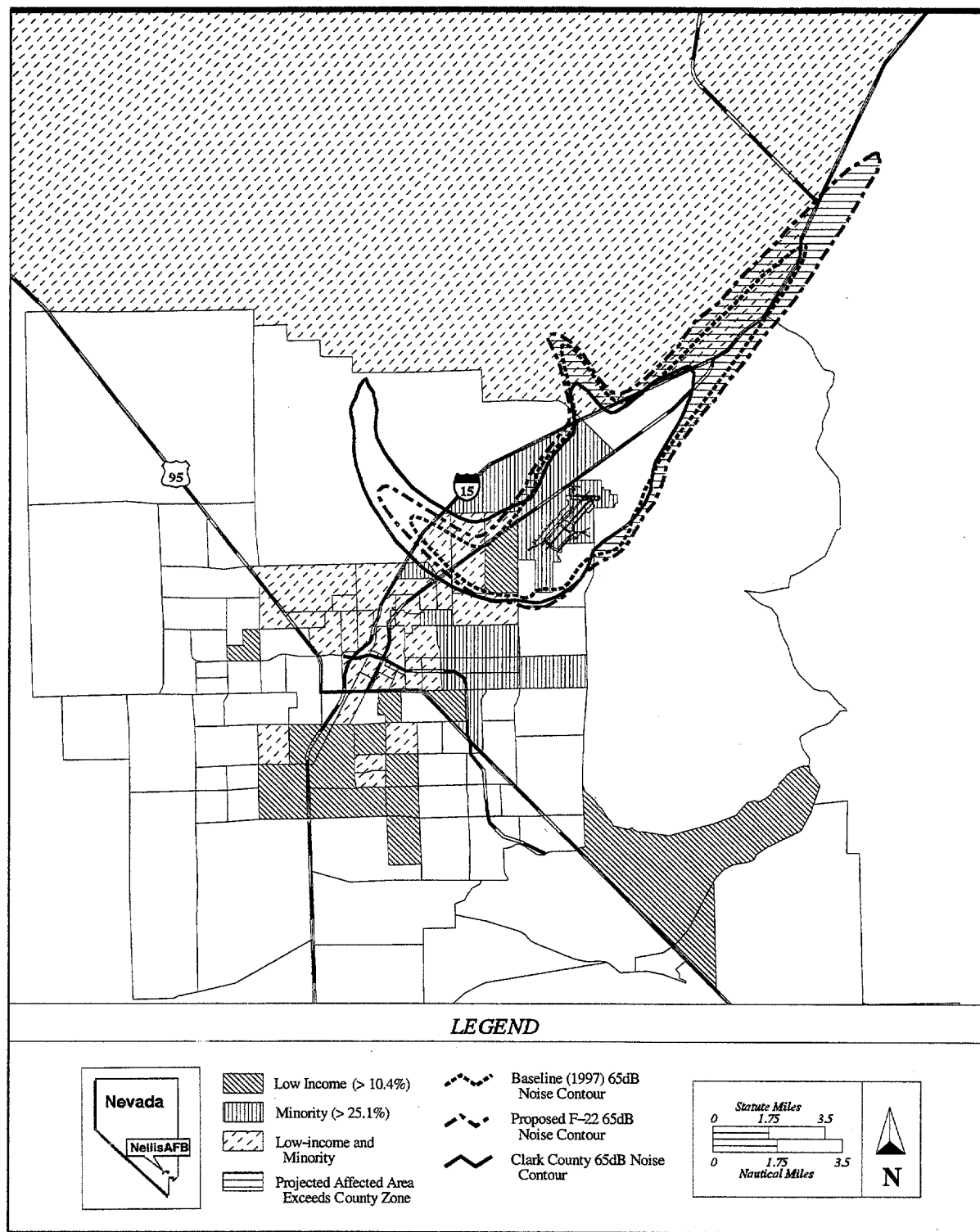


Figure 4.12-1. Proposed Noise Contours and Low-Income and Minority Census Tracts

/net/palau/cehu/22/plots/figures/noisefigs9.xml

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**Table 4.12-2. Minority Populations in Areas
with Noise of 65 DNL or Greater**

<i>DNL</i>	<i>Clark County Zoning Minority Population</i>	<i>Baseline Minority Population</i>	<i>Projected Minority Population</i>	<i>Projected vs. Baseline Change in Minority</i>
65-70	8,083	4,609	8,552	3,936
70-75	4,745	2,842	2,626	-216
75-80	1,780	22	7	-15
80-85	289	7	21	14
>85	0	0	0	0
TOTAL	14,897	7,480	11,199	3,719

**Table 4.12-3. Low-Income Populations in Areas
with Noise of 65 DNL or Greater**

<i>DNL</i>	<i>Clark County Zoning Low-Income Population</i>	<i>Baseline Low-Income Population</i>	<i>Projected Low- Income Population</i>	<i>Projected vs. Baseline Change in Low-Income</i>
65-70	3,171	2,195	4,125	1,930
70-75	1,774	1,011	1,746	735
75-80	720	9	3	-6
80-85	127	3	9	6
>85	0	0	0	0
TOTAL	5,792	3,218	5,883	2,665

MANAGEMENT ACTIONS TO REDUCE POTENTIAL EFFECTS: Zoning regulations currently require all residential construction within areas affected by noise levels of 65 DNL or greater to include noise attenuation features. Noise attenuation from current standard construction practices can reduce indoor noise by 20 dB or more. The Air Force will continue to work with Clark County and other local officials to support enforcement of existing zoning ordinances and to assess the

adequacy of noise abatement measures. If changes are found to be needed to address noise conditions, the Air Force will assist local officials who seek to establish or modify noise attenuation measures. The Air Force will also continue to employ aircraft noise abatement procedures that will apply to the F-22 aircraft around the base, including expedited climb-outs for all aircraft and restrictions on the time and direction of flight activities. In addition, Nellis AFB proposes to expand their community interaction program to provide more emphasis on minority and low-income populations around the base. This effort would aid these segments of the community in understanding the function and importance of Nellis AFB, as well as provide a focused opportunity for minority and low-income populations to work with the base on issues concerning them.

NELLIS RANGE COMPLEX

The Proposed Action's only effect that could have an adverse impact on minority and low-income populations is noise levels of 65 DNL or greater. No change would occur to subsonic noise levels under the Proposed Action. A 1 to 3 CDNL increase would occur due to supersonic operations in the Elgin and Coyote Military Operations Areas, but the combined subsonic and supersonic noise level would still be less than 65 DNL (see Table 4.2-9). Although Elgin has been identified as a low-income area, Coyote overlies neither low-income nor minority tracts. No disproportionate increase in noise over low-income or minority tracts would occur under the Proposed Action.

AMERICAN INDIAN RESERVATIONS

No American Indian reservations directly underlie airspace affected by the Proposed Action. There would be no disproportionate impacts to American Indian populations.