Section 4.15
Noise

Introduction

This section describes the existing environmental conditions and regulatory setting of the Project area, summarizes the affected environment, and describes environmental effects of the Project regarding noise. The effects of noise attributable to the Project were not discussed in the 2001 FEIR and 2001 FEIS. Potential noise impacts of the Project alternatives are summarized below.

The Project will not have any direct effects on noise in the places of use; the effects on noise, if any, associated with the provision of Project water to the places of use are addressed in Chapter 5, "Cumulative Impacts," and Chapter 6, "Growth-Inducing Impacts."

Summary of Impacts

Table 4.15-1 provides a summary of the impacts and mitigation measures on noise from this Place of Use EIR.

Table 4.15-1. Delta Wetlands Project 2010 Place of Use EIR Impacts and Mitigation Measures for Noise

2010 Place of Use EIR Impacts and Mitigation Measures
ALTERNATIVES 1, 2, AND 3
Impact NOI-1: Exposure of Sensitive Receptors to Noise from Recreational Activities (LTS) **Mitigation:** No mitigation is required.
Impact NOI-2: Exposure of Sensitive Receptors to Construction-Related Noise (LTS-M) **Mitigation Measure NOI-MM-1:** Limit Construction Hours and Comply with all Applicable Local Noise Standards
Impact NOI-3: Exposure of Sensitive Receptors to Operational Equipment Noise (LTS) **Mitigation:** No mitigation is required.
Impact NOI-4: Exposure of Sensitive Receptors to Noise from Ongoing Maintenance and Habitat Conservation Activities (LTS) **Mitigation:** No mitigation is required.
Note: SU = Significant and unavoidable; LTS = Less than significant; LTS-M = Less than significant with mitigation; B = Beneficial.

Existing Conditions

This section discusses the existing conditions and regulatory setting.

Sources of Information

Key sources of information used in the preparation of this section were:

- Contra Costa County General Plan (Contra Costa County 2005)
- San Joaquin County General Plan (San Joaquin County 1992)
- San Joaquin County noise ordinance (San Joaquin County 1995)
- Sacramento County noise ordinance (Sacramento County 1976)

Regulatory Setting

State

No state noise standards apply directly to the Project. California Government Code Section 65302(f) requires that cities and counties include a noise element in their general plans. The purpose of the noise element is to provide a guide for establishing a pattern of land uses that minimizes the exposure of community residents to excessive noise. The *General Plan Guideline* published by the Governor's Office of Planning and Research include recommendations for maximum noise exposure based on type of land use. These recommendations are available for counties and cities to adopt as part of their state-mandated requirement in establishing policies and standards in their general plans regarding incompatibility issues between land uses related to noise exposure.

Local

Bacon and Bouldin Islands are located in San Joaquin County and Webb and Holland Tracts are located in Contra Costa County. The local regulations established by San Joaquin and Contra Costa Counties that pertain to the islands that fall within their respective boundaries are described below.

County of Contra Costa Noise Element

The main goal of the Noise Element of the Contra Costa County General Plan is to improve the overall environment in the county by reducing annoying and physically harmful noise for existing and future residents and for all land uses. Of the policies of the Noise Element, the following pertain to the Project:

Policy 11-7: Public projects shall be designed and constructed to minimize long-term noise impacts on existing residents.

Policy 11-8: Construction activities shall be concentrated during the hours of the day that are not noise-sensitive for adjacent land uses and should be commissioned to occur during normal work hours of the day to provide relative quiet during the more sensitive evening and early morning periods.

Policy 11-11: Noise impacts upon the natural environment, including impacts on wildlife, shall be evaluated and considered in review of development projects.

In addition, the Contra Costa County Noise Element establishes acceptable levels of community noise exposure for its noise-sensitive land uses, including a "normally acceptable" standard of day-night noise level/community noise equivalent level (L_{dn}/CNEL) 60 A-weighted decibels (dBA) for residential uses. Contra Costa County has not established maximum allowable noise level standards for stationary noise sources (such as pumps). Noise from construction activities in Contra Costa County is considered exempt from applicable standards during daytime hours, although the County has not defined "daytime" or "normal work hours" for construction noise. Instead, the County uses project-specific conditions of approval to regulate construction noise levels for projects that require County approvals.

County of San Joaquin Noise Element

The primary objective of the Noise Element of the San Joaquin County General Plan is to ensure acceptable noise environments for each land use. Of the policies of the Noise Element, the following pertain to the Project, as the Project could affect nearby residential land uses:

Policy 1c: The hourly equivalent sound level from stationary sources shall be 50 decibels (dB) during the daytime and 45 dB during the nighttime for outdoor activity areas for residential development; transient lodging, hospitals, nursing homes, and similar health-related facilities; churches, meeting halls, and similar community assembly facilities; office buildings; schools; libraries; museums; and day-care centers.

Policy 1d: The maximum sound level from stationary noise sources shall be 70 dB during the daytime and 65 dB during the nighttime for outdoor activity areas for residential development; transient lodging, hospitals, nursing homes, and similar health-related facilities; churches, meeting halls, and similar community assembly facilities; office buildings; schools; libraries; museums; and day-care centers.

It should be noted that the County of San Joaquin is in the process of a General Plan update.

County of San Joaquin Noise Ordinance

The San Joaquin County noise ordinance is the primary enforcement tool for the operation of locally regulated noise sources, such as construction activity, and is set forth in Title 9, Section 9-1025.9 of the San Joaquin County Code. Table 4.15-2 summarizes maximum allowable noise level standards for sensitive land uses affected by stationary sources (i.e., non-transportation sources). Noise associated with construction, provided that such activities do not take place before 6:00 a.m. or after 9:00 p.m. on any day, is exempted from the provisions of the County noise ordinance.

Table 4.15-2. San Joaquin County Maximum Allowable Noise Exposure—Stationary Sources

	Outdoor Activity Areas	
	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly equivalent sound level (L_{eq}), dB	50	45
Maximum sound level (L_{max}), dB	70	65

Source: San Joaquin County 1995.

Note: Each of the noise level standards specified shall be reduced by 5 dB for impulsive noise, single tone noise, or noise consisting primarily of speech or music.

County of Sacramento Noise Element

The primary objective of the Sacramento County Noise Element is to protect the citizens of Sacramento County from the harmful and annoying effects of exposure to excessive noise. Although the Project is outside of Sacramento County, the noise from the proposed Project could affect land uses located within Sacramento County. Of the policies of the Noise Element, the following pertain to the Project:

Policy NO-2: Noise created by new non-transportation noise sources [such as pumps] shall be mitigated so as not to exceed any of the noise level standards of Table II-1 [Table 4.15-3], as measured immediately within the property line of any affected residentially designated lands or residential land use situated in the unincorporated areas.

Table 4.15-3 [Table II-1]. Sacramento County Noise Level Performance Standards—Non-Transportation Noise Sources

	Exterior Noise Level Standards (dBA)	
Statistical Noise Level	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
L_{50}	50	45
L_{max}	70	65

Source: County of Sacramento 1993.

Notes: These standards are for planning purposes and may vary from the standards of the County noise ordinance, which is for enforcement purposes.

These standards apply to new or existing residential areas affected by new or existing non-transportation sources.

The Noise Element further states that each of the noise standards in Table II-1 [Table 4.15-3] should be decreased by 5 dBA for simple tone (or pure tone) noises, which are from sources that emit noise that is dominated by a single frequency (Hz), or tone, and is often the case for operational equipment such as pumps.

County of Sacramento Noise Ordinance

The Sacramento County noise ordinance is set out in Title 6, Chapter 6.68 of the Sacramento County Code. Table 4.15-4 summarizes exterior noise standards for sensitive uses. Noise associated with construction activities, provided that such activities do not take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and 8:00 p.m. and 7:00 a.m. on weekends, is exempted from the provisions of the County noise ordinance.

Table 4.15-4. Sacramento County Exterior Noise Standards

Cumulative Duration of the Intrusive Sound in Any One Hour	Daytime[1] (7:00 a.m. to 10:00 p.m.)	Nighttime[1] (10:00 p.m. to 7:00 a.m.)
30 Minutes	55	50
15 Minutes	60	55
5 Minutes	65	60
1 Minute	70	65
Level not to be exceeded for any time per hour	75	70

Source: County of Sacramento 1976.

Notes:

Each of the noise limits specified shall be reduced by 5 dBA for impulsive or simple tone noise, or for noises consisting of speech or music.

If the ambient noise level exceeds that permitted by any of the first four noise-limit categories, the allowable noise limit shall be increased in 5 dBA increments in each category to encompass the ambient noise level. If the ambient noise level exceeds the fifth noise level category, the maximum ambient noise level shall be the noise limit for that category.

[1] A-weighted decibels, dBA.

Affected Environment

Introduction to Noise

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise can be defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound level. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary enormously within the range of human hearing, the logarithmic dB scale used to measure and control sound intensity numbers at a convenient and manageable level.

The human ear is not equally sensitive to all frequencies in the entire spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called *A-weighting* (dBA). Because humans are less sensitive to low frequency sound than to high frequency sound, dBA sound levels de-emphasize low frequency sound energy to represent better how humans hear. Table 4.15-5 summarizes typical dBA sound levels.

Table 4.15-5. Typical A-Weighted Sound Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower, 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban, daytime	50	Dishwasher in next room
Quiet urban, nighttime	40	Theater, large conference room (background)
Quiet suburban, nighttime		
	30	Library
Quiet rural, nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio
	10	
	0	

Source: California Department of Transportation 1998.

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (L_{eq}), the minimum and maximum sound levels (L_{min} and L_{max}), percentile-exceeded sound levels (L_{xx}), the day-night sound level (L_{dn}), and the community noise equivalent level (CNEL). Below are brief definitions of these measurements and other terminology used in this section:

Sound. A vibratory disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

Noise. Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

Ambient Noise. The composite of noise from all sources near and far in a given environment exclusive of particular noise sources to be measured.

Decibel (dB). A unitless measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.

A-Weighted Decibel (dBA). An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

Equivalent Sound Level (L_{eq}). The average of sound energy occurring over a specified period, typically one hour, in terms of a single numerical value. In effect, L_{eq} is the steady-state sound level that, in a stated period, would contain the same acoustical energy as the time-varying sound that actually occurs during the same period. In essence, it is an averaged sound level over a specific time period that in which the sound level "peaks" and "valleys" have been removed.

Exceedance Sound Level (L_{XX}). The sound level exceeded XX% of the time during a sound-level measurement period or duration. For example L_{90} is the sound level exceeded 90% of the time and L_{10} is the sound level exceeded 10% of the time. L_{90} typically is considered to represent the ambient noise level.

Maximum and Minimum Sound Levels (L_{max} and L_{min}). The maximum or minimum sound level measured during a measurement period.

Day-Night Level (L_{dn}). The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dBA added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m. (nighttime) to take into account the greater annoyance of nighttime noises.

Community Noise Equivalent Level (CNEL). The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dBA added to the A-weighted sound levels occurring during the period from 7:00 p.m. to 10:00 p.m. (evening hours) and 10 dBA added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m. (nighttime hours).

L_{dn} and CNEL values rarely differ by more than 1 dBA. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment. In general, human sound perception is such that a change in sound level of 3 dBA is just noticeable, a change of at least 5 dBA is required before any noticeable change in human response would be expected, and a change of 10 dBA is perceived as doubling or halving sound level.

For a point source such as a stationary compressor, sound attenuates based on geometry at rate of 6 dBA per doubling of distance. For a line source such as free-flowing traffic on a freeway, sound attenuates at a rate of 3 dBA per doubling of distance. Atmospheric conditions such as wind, temperature gradients, and humidity can change how sound propagates over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface such as grass attenuates at a greater rate than sound that travels over a hard surface such as pavement. The increased attenuation is typically in the range of 1 to 2 dBA per doubling of distance. Barriers such as buildings and topography that block the line of sight between a source and receiver also increase the attenuation of sound over distance.

Auditory and non-auditory effects can result from excessive or chronic exposure to elevated noise levels. Auditory effects of noise on people can include temporary or permanent hearing loss. Non-auditory effects of exposure to elevated noise levels include sleep disturbance, speech interference, and physiological effects, such as annoyance. Land use compatibility standards for noise typically are based on research related to these auditory effects.

Environmental Setting

The effects of noise attributable to the Project were not discussed in the 2001 FEIR and 2001 FEIS and, therefore, the environmental setting, with regard to noise, is discussed below.

Noise-sensitive land uses are those locations where noise can interfere with primary activities. These uses include places where people sleep, such as residences and hospitals. Other noise-sensitive uses are schools, libraries, places of worship, and areas of recreation during hours of normal human use.

Noise-sensitive land uses in the Project vicinity are primarily residential, with residences located to the west of Holland Tract on Hotchkiss Tract and to the northwest of Holland Tract on Bethel Island, both in Contra Costa County; to the southwest of Bacon Island in the Town of Discovery Bay (Contra Costa County); and to the east of Bouldin Island in the community of Terminous (San Joaquin County). Additionally, several lodging areas or mobile home parks exist north of Webb Tract and west of Bouldin Island in Sacramento County. As mentioned above, the nearest noise-sensitive land uses to the two proposed pump stations are residences located on Bethel Island (in Contra Costa County), approximately 2.5 miles from the proposed pump station on Webb Tract. Primary noise sources in the Project vicinity are agricultural operations, recreational land use such as hunting, vehicular travel on local roads and highways and occasional aircraft flyovers.

Population density and ambient noise levels tend to be closely correlated. Areas that are not urbanized are relatively quiet, while more urbanized areas are subjected to higher noise levels from roadway traffic, industrial activities, and other human activities. Table 4.15-6 summarizes typical ambient noise level based on population density.

Table 4.15-6. Population Density and Associated Ambient Noise Levels

	dBA, L_{dn}
Rural	40–50
Small town or quiet suburban residential	50
Normal suburban residential	55
Urban residential	60
Noisy urban residential	65
Very noisy urban residential	70
Downtown, major metropolis	75–80
Adjoining freeway or near a major airport	80–90

Sources: Hoover and Keith 2008.

As land use classifications and densities vary somewhat throughout the Project vicinity, so does the existing noise environment. Existing noise levels generally are relatively low in rural/suburban areas (40–55 L_{dn}), such as those areas surrounding the Project.

Environmental Commitments

The environmental commitments, as described in Chapter 2, would not alter the impact findings related to noise.

Environmental Effects

Methods

This analysis focuses on the potential construction-related and operational noise impacts associated with the Project and its alternatives. The applicable local planning documents and noise ordinances, CEQA Guidelines thresholds of significance discussed below, as well as noise prediction modeling methods as recommended by Federal Transit Administration 2006 (for stationary equipment), were used in the determination of the significance of Project impacts.

Significance Criteria

The noise impact analysis considered several criteria for determining the significance of impacts related to noise. The analysis took into account both relevant criteria contained in Appendix G of the State CEQA Guidelines (Association of Environmental Professionals 2009) and Project-specific criteria

developed by the lead agency to address potential impacts unique to the Project's location and elements.

For the purposes of this analysis, a noise impact is considered to be significant if:

- Construction activity occurs outside of the hours of 7:00 a.m. to 8:00 p.m.
- Operation of the proposed pump stations results in exterior noise levels in excess of L_{eq} 40 dBA during nighttime hours or 45 dBA during daytime hours (as measured on the receiving noise-sensitive property line), per the San Joaquin and Sacramento County noise standards for stationary noise sources (with a 5 dBA penalty applied for simple tone noise sources). Adherence to this criterion also would ensure compliance with the Contra Costa County guideline of L_{dn}/CENL 60 dBA for residential uses.
- Ongoing maintenance and conservation activities would unreasonably disturb noise-sensitive uses.

Impacts and Mitigation Measures

The following section evaluates the potential impacts of the Project on noise.

Proposed Project (Alternative 2)

Implementation of the Project would involve the improvement and strengthening of levees on all four islands, which will involve the use of heavy construction equipment. The Project also would involve the installation and operation of one discharge pump station on the southeast corner of Bacon Island and one discharge pump station on the southern end of Webb Tract.

Impact NOI-1: Exposure of Sensitive Receptors to Noise from Recreational Activities

It is anticipated that implementation of the Project would result in effects on recreational boating, hunting, and traffic.

Traffic

Table 4.10-7 from the Section 4.10, Traffic and Navigation, summarizes peak hour traffic volumes on roadways in the Project area that are generated by the Project. In addition, Tables 4.10-8 and 4-10-9 from Section 4.10, Traffic and Navigation, summarize future no project peak hour traffic volumes on roadways in the Project area, while Tables 4.10-10 and 4-10-11 summarize future with project peak hour traffic volumes on roadways in the Project area. Based on the data found in Tables 4.10-7 through 4.10-11, it is anticipated that traffic volumes would increase by 62% on Bacon Island Road at the Bacon Island Road Bridge and 79% on Jersey Island Road north of Cypress Road. This would equate to a noise increase of approximately 2 dB on Bacon Island Road and 3 dB on Jersey Island Road. As previously indicated, a change in sound level of 3 dBA is just noticeable, while a change of at least 5 dBA is required before any noticeable

change in human response would be expected. Because the increase in traffic noise levels along these roadway segments is barely perceptible, this impact is considered less than significant.

Recreational Boating
Implementation of the Project is anticipated to result in increases in recreational boating use-days in and around the Project islands because of the addition of recreation facilities, including boat slips. However, these increases are not anticipated to result in any increases in the exposure of noise-sensitive land uses to noise from boating activities, as the Project would not locate these activities closer to any noise sensitive land uses. Consequently, this impact is considered less than significant. Implementation of Mitigation Measure REC-MM-1 would reduce boat slips by 86.8%, and further reduce any impact.

Hunting
Implementation of the proposed Project is anticipated to result in increases in recreation use-days for hunting in the Delta. However, these increases are not anticipated to result in any increases in the exposure of noise-sensitive land uses to noise from hunting activities, as the Project would not locate these activities any closer to any noise-sensitive land uses. Consequently, this impact is considered less than significant.

Mitigation
No mitigation is required.

Impact NOI-2: Exposure of Sensitive Receptors to Construction-Related Noise
Construction of the Project would result in a temporary increase in noise levels in the Project vicinity, which could affect nearby noise-sensitive uses. Construction noise occurring between the hours of 7:00 a.m. and 8:00 p.m. would be considered less than significant. Noise from construction activities that occur outside of these hours would be considered significant. It is anticipated that noise levels would attenuate to imperceptible levels at the nearest noise-sensitive land use due to distance from construction activities. However, in the event that construction activities occur near a noise sensitive land use outside of these hours, a significant noise impact could occur. Implementation of Mitigation Measure NOI-MM-1 would reduce this impact to a less-than-significant level.

It is anticipated that groundborne vibration and noise from construction activities would not be perceptible at the nearest noise-sensitive land used due to distance from construction activities, as groundborne vibration and noise attenuate more dramatically when compared to airborne noise.

Mitigation Measure NOI-MM-1: Limit Construction Hours and Comply with all Applicable Local Noise Standards
In addition to complying with all applicable local noise standards, the Project applicant will limit construction activities that create noise near sensitive use areas to the hours between 7:00 a.m. and 8:00 p.m.

Impact NOI-3: Exposure of Sensitive Receptors to Operational Equipment Noise

The only permanent noise-generating components of the Project are four discharge pump stations, two on Bacon Island and two on Webb Tract. Pump noise will vary depending on several factors, including pump type (electric or diesel), drive motor horsepower, speed (revolutions per minute), and the distance to the nearest noise-sensitive receptor. According to reference source levels in Hoover & Keith (2008), pumps can generate noise levels of up to 80 dBA at a distance of 50 feet.

To provide a worst-case scenario for noise impacts attributable to the proposed pump stations, it is assumed that a given pump potentially could operate continuously for a full hour during nighttime hours (10 p.m. to 7 a.m.). With the nearest sensitive land uses (residential) to either of the two proposed pump stations located on Bethel Island (in Contra Costa County), approximately 2.5 miles from the proposed pump station on Webb Tract, and based on the reference source level provided above, noise from the operation of the closest pump station is projected to attenuate to a noise level of 17 dBA and is not be anticipated to be audible over the existing ambient noise at any noise-sensitive land uses in the Project vicinity. This impact is considered less than significant.

Mitigation

No mitigation is required.

Impact NOI-4: Exposure of Sensitive Receptors to Noise from Ongoing Maintenance and Habitat Conservation Activities

Ongoing maintenance of the proposed pumps, diversion structures and fish screens, and levees will be conducted as necessary. In addition, conservation activities will be performed intermittently on the Project Habitat Islands and may involve an exposure of sensitive uses to intermittent noise from vehicles and light maintenance equipment. However, these activities are anticipated to be relatively infrequent. Because of the intermittent nature of these activities and the relatively far distance of 2.5 miles between the nearest receptor and a proposed pump station, this impact is considered less than significant.

Mitigation

No mitigation is required.

Alternative 1

Alternative 1 would have the same effects as Alternative 2.

Alternative 3

Under Alternative 3, all four Project islands would be used as reservoirs (as opposed to two). Under this alternative, there would be reduced hunting activities

but more construction and pump noise. The potential short- and long-term effects of Project noise would be essentially the same as under Alternative 2.

No-Project Alternative

Because the No-Project Alternative would not involve any construction, only operational impacts are discussed in this section. Operation of the No-Project Alternative includes increases in agricultural activity and recreational uses compared to existing conditions. Operation of the No-Project Alternative could result in noise effects from increased traffic and hunting.

Increase in Traffic Noise Levels

Table 4.10-9 from the Section 4.10, Traffic and Navigation, summarizes peak hour traffic volumes on roadways in the Project area that are generated by the No-Project Alternative. In addition, Tables 4.10-8 and 4-10-9 from Section 4.10, Traffic and Navigation, summarize future no project peak hour traffic volumes on roadways in the Project area, while Tables 4.10-10 and 4-10-11 summarize future with project peak hour traffic volumes on roadways in the Project area. Based on the data found in Tables 4.10-7 through 4.10-11, it is anticipated that traffic volumes under the No-Project Alternative would increase by 19% on Bacon Island Road at the Bacon Island Road Bridge and 27% on Jersey Island Road north of Cypress Road. This would equate to a noise increase of less than 1 dB on Bacon Island Road and on Jersey Island Road. As previously indicated, a change in sound level of 3 dBA is just noticeable, while a change of at least 5 dBA is required before any noticeable change in human response would be expected. Therefore, the increase in traffic noise levels attributable to the No-Project Alternative along these roadway segments would be barely perceptible.

Exposure of Sensitive Receptors to Noise from Recreational Activities

Operation of the No-Project Alternative is anticipated to result in increases in hunter use-days on the Project islands attributable to the proposed intensive for-fee hunting program. However, these increases are not anticipated to result in any increases in the exposure of noise-sensitive receptors to noise from hunting activities, as the Project would not locate these activities closer to any noise-sensitive land uses.