

Description of Proposed Project and Alternatives

2.1 Introduction

This Supplemental Environmental Impact Report (SEIR) has been prepared to analyze potentially significant environmental effects associated with the Shell Guadalupe Dunes Gravel Remediation In-Lieu Proposal Project (Project). The Project would consist of leaving in place approximately 293,752 cubic yards (cy) of sand that has been found to contain remnant gravel from an exploratory drilling project in the Rancho Guadalupe Dunes County Park in northwestern Santa Barbara County (see Figure 2-1). Permit Condition #31 of 82-CP-75(cz) and 96-CDP-10 for the exploratory drilling project requires Shell Exploration and Production, Inc. (Applicant) to remove all drilling and associated materials to a maximum depth of 15 feet within the dunes. In exchange for leaving the remaining gravel in place, the Applicant proposes providing a monetary contribution (in-lieu fee) to the County for purchase of property in the County's north coastal region for public recreational or open space purposes at a ratio of not less than 3:1.

This SEIR analyzes resource area impacts for the Project and alternatives. For any potentially significant impacts from the Project, mitigation measures are identified that would reduce impacts. Mitigation measures for potentially significant impacts are identified in each resource area analyzed in Chapter 3. Alternatives to the Project and potential impacts are discussed in Chapter 5, including the No Project Alternative that would require the Applicant to comply with Permit Condition #31 of 82-CP-75(cz) and 96-CDP-10 and screen the approximately 293,752 cy of sand thought to contain remnant gravel, and subsequently remove the screened gravel from the Project Site.

2.2 Overview / Project Background

Permit Condition #31 of 82-CP-75(cz) requires removal of all materials brought into the dunes to support and as a result of the exploratory drilling project. Permit Condition #31 is stated as follows:

#31. All introduced materials on or near the surface (depth of 15 feet) shall be removed when the drilling islands are abandoned.

The original drilling and production project was approved by the County in 1983, conditionally granting Husky Oil Company permission to develop and operate 42 oil and gas wells from two drilling islands. That Project's environmental impacts were evaluated within 82-EIR-11, which identified significant impacts to land use/recreation, visual, and flora and fauna resources. Only Island D (referred to as Site D in this SEIR) was constructed and contained five wells, located approximately 240 feet northwest of the existing and actively used Gordon Sand Company access road. This drilling operation included the placement of gravel for road base to accommodate heavy equipment access and stabilize sand near the proposed islands.

Shell Exploration and Production, Inc., the successor in interest for the site and the current Applicant, ceased operation of Island D in 1989 and commenced abandonment and reclamation of the site under 96-CDP-010 as required by the County. With the exception of the remnant gravel

sites, all production wells and infrastructure were abandoned and site reclamation was completed in 1997 in compliance with regulations of the County and the California Division of Oil, Gas and Geothermal Resources (DOGGR). The Applicant performed site assessments which confirmed that no hazardous levels of any materials were present in local soils or groundwater (AECOM 2010). These assessments and a Remedial Action Plan (RAP) were approved by the County Petroleum Department in July 1992. A portion of the gravel and some asphaltic materials were removed under 96-CDP-010 in 1997; however, up to 293,752 cy of sand impacted by gravel remained due to technical screening limitations.

2.3 Physical Setting

2.3.1 Regional and Project Vicinity

The Project Site is located within Rancho Guadalupe Dunes County Park in the rural northwestern region of Santa Barbara County. Rancho Guadalupe Dunes County Park is a recreational area located in the coastal zone of the County in the southern portion of the coastal dune system known as the Guadalupe-Nipomo Dunes Complex. The dune complex extends approximately 18 miles from near the City of Pismo Beach in southern San Luis Obispo County to Mussel Rock in northern Santa Barbara County (refer to Figure 2-1). At approximately 15,000 acres, the Guadalupe-Nipomo Dunes is the largest dune complex south of San Francisco and one of the most intact dune complexes in the state of California. The dune complex is bordered to the north by the City of Pismo Beach, the west by the Pacific Ocean, the south by Vandenberg Air Force Base, and to the east by agricultural lands and several towns including the City of Guadalupe.

Regional access to the Guadalupe-Nipomo Dunes is provided via Highway 1 (Pacific Coast Highway). In the Project vicinity, the Pacific Coast Highway traverses the Santa Maria and Lompoc Valleys in a north-south direction from Gaviota State Park in Santa Barbara County to the City of Pismo Beach in San Luis Obispo, where the Pacific Coast Highway joins U.S. Highway 101 (US-101). Access within the dunes is provided at seven publicly owned areas, which are managed for the protection of the unique dune, beach, freshwater, and estuarine habitats, and for active and passive recreation including wildlife viewing, hiking, camping, and off-road vehicular recreation.

Rancho Guadalupe Dunes County Park is located in the southern portion of the dune complex, at the terminus of Main Street (6350 West Main Street), approximately 2.5 miles west of the City of Guadalupe. The Pacific Ocean is to the west of the Rancho Guadalupe Dunes County Park and the Santa Maria River, and the border of the County of San Luis Obispo is to the north of the park. Public beach parking is available in an approximately 60-space parking lot adjacent to the Santa Maria River estuary. Facilities at the Rancho Guadalupe Dunes County Park include beach access, picnic areas, interpretive kiosks, and access to hiking and fishing.

2.3.1.1 Project Site

The Project Site is located in the northeastern portion of the Rancho Guadalupe Dunes County Park, adjacent to the Gordon Sand Company, a commercial sand mining operation (see Figure 2-2). The Gordon Sand Company has been in operation since 1973 and consists of a sand screening and processing facility, access road, and sand collection pits. Access to areas of the Project Site is

provided via an unpaved road, which is a remnant of the drilling operation and is still used by Gordon Sand Company. The road runs along the south side of the sand processing facility, where it rises up an approximately 40-foot-high hill, then runs west into the dunes for approximately 4,900 feet ending at the sand pit. The Project Site is located approximately 3,000 feet east of the mean high tide line and can also be accessed by hiking from the beach and public parking area.

Remaining gravel from the exploratory drilling project is concentrated in four primary areas:

- **Site D.** Located approximately 240 feet north of the Gordon Sand Company access road, this site contained the former drilling island and contains five capped wells. The area is approximately 3.42 acres and contains approximately **63,639 cy** of remnant sand and gravel. Sampling in this area indicates that a layer of gravel occurs from 1 to 10 feet beneath an advancing dune in the northwestern portion of the area, as well as below approximately 4 to 5 feet of clean sand at the base of the old entrance road;
- **Site 2.** Located south of Site D, this area extends west along and within the Gordon Sand Company access road into the sand pit area. This area is approximately 4.59 acres and contains approximately **66,625 cy** of remnant sand and gravel. Sampling within this area indicates that gravel is predominantly within the top 1 foot and the percentage of gravel diminishes rapidly below that depth;
- **Road Site.** Located along the existing Gordon Sand Company access road, this site extends for approximately 1,730 feet between Site 2 and the Upper Area and varies in width from approximately 132 feet wide in the eastern portion to approximately 34 feet wide further to the west. Approximately **26,645 cy** of remnant sand and gravel occur within this approximately 2.4-acre area, mostly located within the top 4 feet;
- **Upper Area.** Located to the west of the Gordon Sand Company processing facility, this area has been used as an access road and by the Gordon Sand Company as a “rock spoil” area. Approximately **136,843 cy** of remnant sand and gravel occur, predominantly at the surface over most of this 8.49-acre area and up to 4 feet below the surface near the southern edge of the area.

Most of the Project Site falls within the Environmentally Sensitive Habitat (ESH) overlay designation on rural lands designated Open Lands and zoned Resource Management, 320-acre minimum parcel size (RES-320).

The Project Site is located within Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Zone X¹, south of the Santa Maria River floodplain. The soil types found at the Project Site are dune land, with a typical profile of fine sand within top 6 inches, underlain by sand. According to the California Department of Conservation’s (DOC’s) Farmland Mapping and Monitoring Program (FMMP), soils within the site are designated as “Other Land” and are not considered Prime Farmland or Farmland of Statewide Importance.

¹ Areas of minimal flood hazard, which are areas outside special flood hazard areas and higher than the elevation of the 0.2-percent-annual-chance flood.

2.3.1.2 Surrounding Land Uses

The Guadalupe-Nipomo Dunes Complex is predominantly under public ownership, managed by federal, state, and local agencies for recreation and habitat protection; however, substantial areas under private ownership exist within the dunes. Public recreational access is concentrated within more developed areas located in the northern portion of the dune complex that include two campgrounds and access to the Oceano Dunes State Vehicular Recreation Area. The southern portions of the dune complex are more remote and are managed for protection of habitat and passive recreation (see Table 2-1).

Table 2-1. Guadalupe-Nipomo Dunes Complex Land Management

Name	Types of Uses	Location Relative to Project Site
U.S. Fish and Wildlife Service		
Guadalupe-Nipomo Dunes National Wildlife Refuge	Habitat protection; hiking; wildlife viewing	1.5 miles north
California Department of Parks and Recreation		
Pismo State Beach-North Beach and Oceano Campgrounds	Nature Museum; camping; surfing; fishing; hiking	Approximately 10.8 miles north
Oceano Dunes State Vehicular Recreation Area	Off-highway vehicle use; beach camping; hiking; horseback riding; wildlife viewing	Approximately 6.0 miles north
Oso Flaco Lake Natural Area	Boardwalk; interpretive signs; wildlife viewing	Approximately 5.5 miles north
Point Sal State Beach	Habitat protection; hiking; wildlife viewing	Approximately 3.25 miles south
County of Santa Barbara		
Rancho Guadalupe Dunes County Park	Habitat protection; hiking; interpretive kiosk; wildlife viewing; fishing	Contains Project Site, also extends to the west and south
Paradise Beach County Park/ Point Sal Reserve	Habitat protection; hiking; wildlife viewing	Approximately 3.75 miles south

Nearby recreational opportunities within the complex exist at the Guadalupe-Nipomo Dunes National Wildlife Refuge and Oceano Dunes State Vehicular Recreation Area north of the site and across the Santa Maria River in San Luis Obispo County. Point Sal State Beach is located approximately 3.25 miles south of the Project Site. The Guadalupe Dunes Visitor Center serves as an informational gateway to the Guadalupe-Nipomo Dunes Complex and is located approximately 2.5 miles east in the City of Guadalupe. The Rancho Guadalupe Dunes County Park provides beach access, picnic areas, an interpretive kiosk, and access to hiking, with a public parking area located at the terminus of Main Street. Public access is restricted between March 1 and October 1 during the snowy plover nesting season.

Much of the land for several miles east of the Project Site, located in the western portion of the Santa Maria Valley, is owned or leased by a variety of private owners including the Vecchioli Family Trust and the Maretti and Minetti Ranch Company, and is zoned for agriculture. Surrounding parcels to the south and east are predominantly within the AG-II-320 (agriculture, 320-acre minimum parcel size) coastal zone. A variety of other agricultural uses occur in the surrounding area including cattle grazing along the Santa Maria River and row crops. The nearest residential uses include scattered

rural residential uses associated with farming activities and the City of Guadalupe, approximately 2.6 miles to the east. The nearest residence is located approximately 1.2 miles from the Project site's eastern border.

2.4 Project Objectives

The Applicant's objectives are to finalize site closure and reclamation of the former exploratory drilling site within the Project Site in a manner consistent with goals and policies of the County's Local Coastal Program and State Coastal Act.

The specific objectives for the Project are the following:

- Enhance coastal recreational opportunities in the Project vicinity.
 - Recreation – Maintain and enhance active and passive recreational opportunities for all segments of the community.
 - Long-term Viability – Ensure Rancho Guadalupe Dunes County Park management that is consistent with, or does not adversely affect ongoing natural processes.
 - Access – Provide and protect adequate vehicular, bicycle, and pedestrian access to the Rancho Guadalupe Dunes County Park and beach for all current and future users.
 - Natural Resources – Protect and enhance natural resources at the Rancho Guadalupe Dunes County Park and in adjacent areas.
 - Views – Protect public views of the Rancho Guadalupe Dunes County Park, beach, and adjacent areas.
- Avoid unnecessary impacts to biological resources and air quality related to removal and screening of gravel by allowing gravel to be left onsite.

2.5 Proposed Project and Alternatives: Detailed Project Description, Construction, Operation, and Maintenance

2.5.1 Description of Proposed Project

The Applicant proposes to leave in place approximately 293,752 cy of sand impacted by remnant gravel that remains from an exploratory drilling project. The original drilling and production project was approved by the County in 1983 and included the placement of gravel for road base to accommodate heavy equipment access and stabilize sand near the proposed drilling islands. Permit Condition #31 of 82-CP-75(cz) for the drilling project requires removal of all materials brought into the dunes to support the exploratory drilling project as follows:

#31. All introduced materials on or near the surface (depth of 15 feet) shall be removed when the drilling islands are abandoned.

In exchange for being allowed to leave gravel in place, the Applicant would provide a monetary in-lieu fee to the County for purchase of property in the north coastal region of Santa Barbara County for public recreational or open space purposes at a ratio of not less than 3:1. The County may also potentially partner with a non-governmental organization or other agency to purchase the property/leverage investment. The Applicant ceased operation in 1989 and commenced abandonment and reclamation of the site as required by the County. With the exception of the remnant gravel sites, all production wells and infrastructure were abandoned and site reclamation was completed under 96-CDP-010 in 1997 in compliance with County and DOGGR regulations. A portion of the gravel and some asphaltic materials were removed in 1997; however, up to 293,752 cy of sand impacted by gravel remain. The specific uses of Proposed Project in-lieu funds for recreational project uses or development activities would be defined if the Project is approved; therefore, potential uses of these funds are not included as part of the SEIR Project Description.

Construction, Operation, and Maintenance

Under the Proposed Project, all remnant gravel would remain in place and no construction, operation, or maintenance activities would occur within the Project Site.

2.5.2 Alternatives to the Proposed Project

As required by CEQA, this SEIR considers a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly achieve most of the basic objectives of the Project (refer to Section 2.4) but would avoid or substantially lessen significant effects of the Project. State CEQA Guidelines dictate that an EIR shall “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (Section 15126.6[a]).

An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider in detail alternatives that are infeasible or that would not attain most of the basic objectives of the project (Section 15126.6[f]). Furthermore, an EIR need not consider an alternative with an unlikely or speculative potential for implementation or an alternative that would result in effects that cannot be reasonably ascertained (Section 15126.6[f][3]).

The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. Section 15126.6(a) of the CEQA Guidelines also states that “there is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason” (*Citizens of Goleta Valley v. Board of Supervisors* [1990] 52 Cal.3d 553 and *Laurel Heights Improvement Association v. Regents of the University of California* [1988] 47 Cal.3d 376.).

The alternatives selected for analysis include:

- *Partial Gravel Removal Alternative* – this alternative would include removal of approximately 73,438 cy of sand impacted by gravel from the eastern portion of the Road Site and all gravel located within Site D. This alternative was selected as one that would remove the most visible areas of gravel while minimizing disturbance of areas supporting biological resources and reducing impacts associated with gravel removal and screening.

- *No Project Alternative* – required by CEQA to be addressed, this alternative would include removal of all gravel as required by existing permit conditions.

The presentation of each Alternative consists of a brief description of the Alternative itself followed by an analysis of potential impacts and a comparison to those impacts associated with the Proposed Project. This allows report reviewers to determine the general significance of impacts (if any) associated with the Alternative and their relative severity when compared to those associated with the Proposed Project. Any substantial new mitigation measures not included in the analysis of Project impacts in Chapter 3 are also briefly described.

2.5.2.1 Partial Gravel Removal Alternative

This Alternative would involve the removal of gravel from the most visually prominent areas, as observed by recreational users of Rancho Guadalupe Dunes County Park. The purpose of this alternative is to minimize visual impacts associated with imported gravel located on the surface of the dunes, while also minimizing the amount of construction-related disturbance to vegetated areas and impacts related to trucking of gravel to a remote site. This Alternative would involve the complete removal of gravel from Site D and from the eastern portion of the Road Site. This would result in the removal of approximately 73,438 cy of sand impacted by gravel. The remaining 220,314 cy of sand impacted by gravel located within the Upper Area, Site 2, and the western portion of the Road Site would be left in place. These areas have either been revegetated by dune species, or are within or adjacent to areas disturbed by the Gordon Sand Company roads or sand pit (see Figure 2-3).

Permit conditions associated with 82-CP-75(cz) and 96-CDP-010 would apply, as would standard County construction best management practices (BMPs), which would reduce many of the impacts of gravel removal. As required by Permit Condition #31, the Applicant would remove all introduced materials in Site D and the western portion of the Road Site to a maximum depth of 15 feet during abandonment.

Construction, Operation, and Maintenance

Removal of gravel under this alternative would involve sifting the sand to a depth that is clear of the imported gravel. Equipment used for the gravel removal would include a flatbed work truck with a small attached hydro-crane lifting unit and a service truck with a 4 to 6 person crew. Front-end loaders with 4.5-cy buckets would be used to pick-up sand and gravel material and put it into a screen/sifter unit. Work would progress from the Site D and back along the access road toward the Gordon Sand Company facility. The screen/sifter unit would initially be set up near Site D. As work is completed in Site D, the sifter unit would be moved back along the access road to accommodate the loaders and to minimize their required hauling distances. Two 20-cy rollaway containers would be used to store gravel after processing, and would be transported via truck to Greka's Santa Maria Asphalt Refining Facility, approximately 12 miles east of the Project Site.

Gravel removal would involve sifting the sand to a depth that is clear of the imported gravel. It is estimated that the majority of the gravel is within 2 to 3 feet below the surface. All the gravel from the Road Site and both shoulders would also be sifted out using a sand sifter. The sand sifter is moveable and would be located in the areas of excavation and sifting. Gravel within areas close to vegetation along the access road would be dug out using hand crews in a manner that minimizes impacts to dune vegetation. Based on previously completed screen tests, throughput of the system is estimated at 130 tons per hour and removal would require approximately 3 to 4 months to complete.



Permit Condition #21 of 82-CP-75(cz) limits noise levels from major activities during the Least Tern breeding season which starts approximately April 1 and continues until September 15. The Guadalupe Dunes also provide breeding habitat for the western snowy plover, for which the breeding season starts approximately March 1 and continues until September 30. Gravel removal activities within Site D and the western portion of the Road Site would occur between October 1 and February 28 in order to minimize potential impacts to sensitive bird species. If weather or schedule constraints prevent restoration activities from being completed within that timeframe, a biologist would conduct regular site visits to ensure limited impacts to sensitive bird species.

2.5.2.2 No Project Alternative

Section 15126 (e) (1) of the State CEQA Guidelines requires consideration of a no project alternative to allow decision-makers to compare the impacts of approving the Proposed Project with the impacts of not approving the Proposed Project.

Section 15126.6(e) of the CEQA Guidelines explains the No Project Alternative as:

"...the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved."

Section 15126.6(e) further states that:

“the ‘no project’ alternative shall discuss the existing conditions at the time the notice of preparation is published..., as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistence with available infrastructure and community services.”

Because the “existing conditions” of the site are interpreted to include the continuation of existing permitted conditions, full gravel removal as required by permit conditions is considered the No Project Alternative in this SEIR. Because there is no project approval associated with these two scenarios, there is no way to require mitigation for potential impacts. However, permit conditions associated with 82-CP-75(cz) and 96-CDP-010 would apply, as would standard County construction BMPs which would reduce many of the impacts of gravel removal.

Construction, Operation, and Maintenance

Condition #32 of 82-CP-75(cz) requires that the site be returned to its original condition. As required by Permit Condition #31, the Applicant shall remove all introduced materials to a maximum depth of 15 feet during abandonment. Gravel was applied to the surface of the access routes and island exploratory site. Removal of gravel would involve sifting the sand to a depth that is clear of the imported gravel. It is estimated that the majority of the gravel is within 2 to 3 feet below the surface. At the access roads, gravel has fanned out onto a wider area along the sides of the access road. All the gravel from the roadway and the areas along its shoulders would also be sifted out using a sand sifter. The sand sifter is moveable and would be located in the areas of excavation and sifting. Gravel within areas close to vegetation along the access road would be dug out using hand crews in a manner that minimizes impacts to dune vegetation.

Equipment for the gravel removal would include a flatbed work truck with a small attached hydro-crane lifting unit and a service truck with a 4 to 6 person crew. Front-end loaders with 4.5-cy buckets would be used to pick up sand and gravel material and put it into a screen/sifter unit. The screen/sifter unit would initially be set up near the island site. As work is completed in the island area, the sifter unit would be moved back along the access road to accommodate the loaders in minimizing hauling distances. Two 20-cy rollaway containers would be used to store gravel after processing, and would be transported via truck to Greka’s Santa Maria Asphalt Refining Facility, approximately 12 miles away from the Project Site.

Gravel removal can be best described as a “mining” type of operation similar to a small-scale strip-mine facility; the sand and gravel material would be removed in strips and transported to a process plant and run through a screening system, at which point the clean sand would be backfilled into the excavated strip. This process would proceed in a continuous cycle as the gravel is removed from the sand, area by area. The process plant would consist of a double deck, high frequency vibrating screen conveyor belt machine, with the material brought by rubber tire bucket loaders. Water would be used to help push the material through the screening system, the water reclaimed and recycled with the use of a temporary holding pond. Based on previously completed screen tests, throughput of the system is estimated at 130 tons per hour and project schedule of approximately 5 to 7 months to complete for this alternative.

In 1983, the original applicant (Husky Oil Company) submitted a dune restoration program and revegetation plan to the County. To properly abandon the site and remove all the gravel, the vegetation would also be removed. Therefore, to minimize vegetation impacts, the native dune plants that can be salvaged would be transplanted prior to sand sifting to another dune area, as determined by a revegetation specialist, in order to maximize its potential for survival. The plants

would be maintained and monitored for 3 years. Also, seed collection and redistribution in areas of plant relocation would be required to maximize habitat restoration.

Condition #21 of 82-CP-75(cz) limits noise levels from major activities during the Least Tern breeding season which starts approximately April 1 and continues until September 15. The Guadalupe Dunes also provide breeding habitat for the western snowy plover, for which the breeding season starts approximately March 1 and continues until September 30. Gravel removal activities would occur between October 1 and February 28 in order to minimally impact sensitive bird species. If weather or schedule constraints would not allow restoration activities to be completed within that timeframe, a biologist would conduct regular site visits to ensure limited impacts to sensitive bird species.

2.6 Discretionary Actions and Approvals

Under CEQA, the County of Santa Barbara is lead agency and has primary discretionary authority over approval of the Proposed Project or alternatives. Project implementation would require approval of a revision to the Conditional Use Permit 82-CP-75(cz) and a new Coastal Development Permit by the County Planning Commission which could potentially be appealed to the County Board of Supervisors. Final County discretionary permit action could also be potentially appealed to the California Coastal Commission. Consideration and certification of a final EIR with appropriate findings (CEQA Guidelines Section 15091), statement of overriding considerations (CEQA Guidelines Section 15093) if applicable, and a mitigation measures monitoring program by the County Board of Supervisors upon recommendation by the County Planning Commission, would also be required.

