

**SECTION 4.0**  
**SIGNIFICANT IRREVERSIBLE**  
**ENVIRONMENTAL CHANGES**

## **4.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES**

### **4.1 PURPOSE**

CEQA Guidelines §15126 requires that an EIR identify any significant irreversible environmental changes associated with the proposed project. Such changes include, for example, the use of non-renewable resources during the initial and continued phases of the project, or irreversible damage from environmental accidents associated with the project. These changes are discussed below.

### **4.2 IRREVERSIBLE COMMITMENT OF RESOURCES**

#### **4.2.1 Intensification Of Land Use**

Under the proposed project, each project component would result in a change in land use. The Alvarado Campus, Alvarado Hotel, Student Union Expansion and Renovation, Campus Conference Center, and Student Housing project components each would result in a change from parking lots, existing developed open space or existing developed uses to a more intensive land use. Conversion of the parking lots to more intensive academic/housing or other campus facility uses would require a substantial investment and would represent a long term commitment to non-parking uses. Similarly, redevelopment of existing campus areas (*e.g.*, Olmeca and Maya Residence Halls) to more intensive land uses also represents a long term commitment to an increasingly dense urban form in the College Area. However, the conversion from parking lot use or existing dormitory space to a more intensive development use would not constitute the commitment of a "nonrenewable resource" within the meaning of CEQA Guidelines §15126.2(c).

The Adobe Falls Faculty/Staff Housing project component is proposed on vacant, undeveloped land, currently characterized by native upland and wetland habitat, that supports sensitive plant and wildlife species. Under the proposed project, development would occur on approximately 17 acres of the 33 acre site. Development of this parcel would eliminate a portion of this natural area and the habitat and species currently onsite. Due to the grading necessary for site development, it is unlikely that the developed areas could be returned to their existing natural functions. However, mitigation measures are proposed throughout Section 3.0 of this EIR to minimize the effects of the development impacts. Furthermore, because the proposed Adobe Falls Faculty/Staff Housing component of the proposed project would provide up to 348 housing units and related amenities in an area presently experiencing a severe housing shortage, the commitment of these nonrenewable resources is reasonable under the circumstances.

#### **4.2.2 Non-Renewable Energy Consumption**

Construction of each of the proposed project components would result in the use of non-renewable resources and energy sources, including fossil fuels, electricity and natural gas. Fossil fuels would be used to power construction equipment, as well as delivery and construction employee vehicles. Construction equipment would also use electricity and natural gas. Use of these energy sources would be considered a permanent commitment of resources. In addition, a variety of resource materials would be used during the construction process, including steel, wood, concrete and fabricated materials. Once these materials and fuels are used for purposes of construction, the commitment of such materials and fuels would be considered irreversible.

Once operational, the project components would consume more energy on a daily basis than presently is consumed on-site. (See EIR Section 3.13, *Public Utilities and Services Systems*, for analysis of the proposed project's use and effect on energy resources.) Assuming at least a portion of the energy used would be provided by nonrenewable sources, the proposed project would result in the commitment of nonrenewable energy resources during project operation. However, because implementation of the proposed project will enable SDSU to accommodate a portion of the projected increased demand for student enrollment over the next 15-20 years, the commitment of these resources is reasonable under the circumstances.

#### **4.2.3 Environmental Accident**

The CEQA Guidelines also require a discussion of the potential for irreversible damage caused by an environmental accident associated with the project. No unique hazards are found on the project site, nor does the site contain any uniquely hazardous uses. While the site is located within a seismically active region and would be exposed to ground shaking in the event of a seismic event, conformance with the regulatory provisions of the Uniform Building Code pertaining to construction standards would minimize damage and injuries in the event of such an occurrence. Geotechnical hazards can be mitigated by stabilization, removal, or redesign, and no significant impacts on the site are expected. (See EIR Section 3.5, *Geotechnical/Soils*, for analysis of the proposed project's impacts relative to geotechnical conditions.)

Uses proposed by the project (such as academic research uses) would be expected to use and store chemicals and/or substances, which are typically found in such settings. Given the multitude of federal, state, and local regulations governing the use of such substances, the proposed project is not expected to involve activities that would damage the environment or pose a risk to public health. (See EIR Section 3.6, *Hazards and Hazardous Materials*, for analysis of the proposed project's impacts relative to hazardous waste and materials.)