

7 CONTEXTUAL ISSUES

This chapter presents key issues within the context of Honua'ula.

7.1 RELATIONSHIP BETWEEN THE SHORT-TERM USES OF ENVIRONMENTAL RESOURCES AND LONG-TERM PRODUCTIVITY

Short-term uses and long-term productivity consist of Honua'ula's short-term construction phases and the long-term benefits after construction. Short-term construction impacts can be mitigated while they occur. In the long-term, the creation of Honua'ula will contribute substantial positive community and economic benefits, as discussed throughout this EIS. Therefore, Honua'ula will contribute to the maintenance and enhancement of long-term productivity for Maui in general.

In the short-term, construction activities will impact the area. Grading and construction will be visible from Pi'ilani Highway and adjacent areas, such as Maui Meadows and parts of Wailea Resort. Construction may impact noise levels, possibly ambient air quality, and possibly traffic conditions (although a TMP has been prepared for construction operations to mitigate the impacts of construction-related traffic and a post-construction TMP has also been prepared). As discussed previously in this EIS, all of the foregoing construction-related impacts will be mitigated. At the same time, construction will also generate significant employment and economic benefits, including:

- \$1.2 billion of direct capital investment in the Maui economy during the 13-year build-out period;
- 9,537 "worker years"²⁹ of direct on-site employment during the 13-year build-out period;
- \$480 million in employee wages paid out during the 13-year build-out period;
- \$513.9 million (nearly \$40 million annually) in discretionary expenditures into the Maui economy by Honua'ula residents and guests during the 13-year build-out period;
- \$41.8 million in net tax revenue benefit (taxes less costs) to the County of Maui during the 13 year build-out period; and
- \$97 million in net tax revenue benefit (taxes less costs) to the State of Hawaii during the 13 year build-out period.

The overall statewide economic impact over the projected 13-year build-out period is estimated to total approximately \$3.2 billion (Hallstrom 2009). This includes direct capital investment, contractors' and suppliers' profits, employee wages, resident income and expenditures, and operating economic activity.

²⁹ A "worker year" is defined as the amount of time one full-time worker can work in one year although one worker year (2,080 working hours) may be comprised of many employees involved in specialized tasks of shorter duration.

Over the long-term, as portions of Honua'ula become operational and construction activities decline, short-term impacts generated by construction activities will decrease and be replaced by the long-term impacts generated by increased human activity in the area, as discussed in Chapter 4 (Assessment of Human Environment).

The long-term productivity of Honua'ula will outweigh the short-term uses of the environment. Long-term community benefits include:

- Upgrading Pi'ilani Highway to four lanes from Kilohana Drive to Wailea Ike Drive;
- Modifying the Wailea Alanui/Wailea Ike Drive intersection to add a signalized double right-turn movement from northbound to eastbound turning traffic and provide two left-turn lanes for southbound traffic from Wailea Ike Drive;
- Providing a contribution of \$5,000 per unit (totaling \$5.75 million) to the County for traffic improvements;
- Providing workforce housing in accordance with Chapter 2.96, MCC (the "Residential Workforce Housing Policy") (Condition 5);
- Providing a contribution of \$5 million to the County for the development of the South Maui Community Park;
- Providing an in-lieu cash contribution to satisfy the park assessment requirements under Section 18.16.320, MCC (currently set at \$17,240 per residential unit);
- Developing formal provisions regarding cultural resources, such as access to specific sites to be preserved, the manner and method of preservation of sites, and appropriate protocol for visitation to cultural sites;
- Payment of at least \$3,000 per dwelling unit (totaling over \$3.45 million) to DOE for schools serving the Kīhei-Mākena Community Plan area;
- Providing two acres of land to the County of Maui for the development of a fire station and providing a contribution of \$550,000 to the County for the development of a police station in South Maui; and
- Formal protection, restoration, and propagation of native plants, including setting aside a Native Plant Preservation Area and Native Plant Conservation Areas.

Long-term economic benefits include:

- 518 jobs (382 directly related to on-site activities and 136 related to indirect off-site activities) after the build-out period;
- \$19 million in annual wages from the on and off-site jobs after the build-out period;
- \$77 million annually in discretionary expenditures into the Maui economy by Honua'ula residents and guests after the build-out period;
- \$1.6 million in annual net tax revenue benefit (taxes less costs) to the County of Maui after the build-out period; and
- \$1.5 million in annual net tax revenue benefit (taxes less costs) to the State of Hawaii after the build-out period.

After Honua'ula is built out, the long-term overall statewide economic impact is estimated to be approximately \$290.5 million annually (Hallstrom 2009). The expenditure of these funds into the island and state economies will have benefits that ripple through the economy with additional off-site, secondary, and indirect jobs on Maui and statewide. Income from property, personal, and excise taxes are expected to more than offset expenses associated with expanded public services to meet the requirements of Honua'ula and population growth.

Long-term risks to health and safety are not expected. Honua'ula will comply with all natural hazard building codes, drainage regulations, water quality standards, and waste disposal requirements. The infrastructure improvements implemented (as discussed in Section 4.8) will be in compliance with all health and safety standards.

The natural environment of the Property will be altered from its present vacant state, but the Property's long-term sustainability, viability, and productivity will be significantly enhanced. Native plants will be protected and propagated (see Section 3.6 Botanical Resources); native and endangered animal species will be protected and non-native feral ungulates, which pose a risk to native plant species, will be managed (see Section 3.7 Wildlife Resources); archaeological and cultural resources will be preserved for generations to come (see Section 4.1 Archaeological and Historic Resources and Section 4.2, Cultural Resources); and infrastructure improvements, such as drainage systems, water systems, and wastewater systems, will be designed to be self-sufficient and sustainable (see Section 4.8 Infrastructure and Utilities).

In addition, the proposed range of uses, types of development, quantity of open space, and mitigation measures for various environmental impacts will not foreclose future options for enhancement, expansion, or preservation of various environmental, cultural, and community facilities.

7.2 CUMULATIVE AND SECONDARY IMPACTS

Cumulative and secondary impacts are impacts that may result from other reasonably foreseeable actions within the area, regardless of who initiates the action. Table 7 lists recently completed and proposed South Maui development projects, as compiled by the County of Maui Department of Planning, Long Range Planning Division. As defined by the Long Range Planning Division, projects are divided among the following categories:

- **Recently Completed Projects** include those where the subdivision process is complete, total build-out of the project has been reached or nearly reached, and real property is being actively marketed;
- **Planned/Committed Projects** have the appropriate conforming Community Plan and zoning entitlements, are approved agricultural subdivisions, are approved 201G/H, HRS projects (i.e. affordable housing projects which may be granted certain exemptions from State and County land use regulations), or are Department

of Hawaiian Home Lands (DHHL) projects (which are exempt from State and County land use regulations);

- **Planned/Designated Projects** have urban or rural Community Plan designations but not the conforming zoning entitlements to proceed; and
- **Proposed Projects** are currently lacking urban or rural Community Plan designations.

Table 87. South Maui Development Projects

Projects	Unit Types		
	Single Family	Multi-Family	Time Share and Hotel
Recently Completed			
Ho'olei Wailea MF-9	0	120	0
Honu Ala Hele	62	0	0
Kai Makani	0	112	0
Kamali'i Alayna Estates	92	0	0
Kihei Kauhale	23	0	0
Kilohana Hema	20	0	0
Kilohana Mauka	73	0	0
Landry Apartments	0	18	0
Moana Estates	90	0	0
Wailea Beach Villas	0	105	0
Sub-Total	360	355	0
Planned/Committed			
Alahele Homes	48	0	0
Bluffs at Wailea	12	0	0
Chambers Apartments	0	18	0
Cove Beach Villas	0	32	0
Garcia Mākena Residences	10	0	0
Grand Wailea Resort Expansion	0	0	310
Hale Mahaolu Ehiku	0	114	0
Ho'onani Homes	28	0	0
Hokulani Golf Villas	182	58	0
Honua'ula	560	840	0
Kai Ani Village	0	99	0
Kai Malu Wailea Master	0	150	0
Kalama Heights Ph. 2	0	36	0
Kalama Hills	12	0	0
Kanani Wailea	38	0	0
Ke Ali'i Ocean Villas	14	144	0
Kenolio Leilani Affordable Homes	7	0	0
Kihana Nursery	1	0	0
Kihei Hanalei Condominiums	0	4	0
Kilohana Waena	31	0	0
Liloa Village	65	0	0
Mākena Condos	0	436	0
Maluaka Mākena Residences	13	0	0
Maui Beach Place	0	3	0
Maui Lu Timeshare	0	388	400

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Planned/Committed (Continued)			
MF-21 Subdivision	5	0	0
Nani Loa Condos	0	64	0
Naupaka Courtyard	0	78	0
One Palauea Bay PD 8	15	0	0
Papa'anui Mākena Place	7	0	0
Paradise Ridge Estates	0	32	0
Sunset Estates	25	0	0
Wailea Baccarat (Renaissance)	0	0	193
Wailea MF-10	10	36	0
Wailea MF-11 Lots	12	0	0
Wailea MF-19 Lots	9	0	0
Wailea SF-11 Lots	16	0	0
Wailea SF-8	60	0	0
Wailea Villas (MF-4) (Papali)	25	0	0
Waiaka Village Apartments	0	18	0
Sub-Total	1,205	2,550	903
Planned/Designated			
Hale Pama Condos	0	6	0
'Iwa 'Ike Mākena Lots	4	0	0
Kaiwahine Lots	47	0	0
Kalani Mākena Condos	0	4	0
Ka'ono'ulu Condos	0	166	0
Ke Kani Kai Mākena Lots	2	0	0
Kenolio Makai Lots	18	0	0
Kihei Kaiwahine Res. A&B	600	0	0
Mākena Lots	669	0	0
Ohukai Village	768	160	0
One Wailea Dev.	20	0	0
Sub-Total	2,128	336	0
Proposed			
Ka'ono'ulu Village	1,522	895	0
Kama'ole Heights	0	98	24
Kama'ole Mauka Village	364	0	0
Kama'ole Village	1,216	400	0
Kulanihakoi Residences	0	231	0
Maui Palisades	300	0	0
Ohukai Village	70	56	0
Waiakoa Homes A&B	1,700	0	0
Waiohuli Village	616	512	0
Sub-Total	5,788	2,192	24
Total	9,121	5,078	927

Source: County of Maui Department of Planning, Long Range Planning Division (2009) (http://co.maui.hi.us/documents/Planning/Long%20Range%20Division/GIS%20Maps/DevProj200907_SouthMaui_WM.PD)

In addition, to proceed projects listed as Planned/Committed Projects, Planned/Designated Projects, or Proposed Projects may also need: 1) a State Land Use District Boundary Amendment, to designate the property to the appropriate State Land Use District (for example a property could have the necessary County Community Plan and/or zoning designation, but still be in the State Agricultural District, and thus require a reclassification to the State Urban District); 2) compliance with Chapter 343, HRS regarding preparing an EA or EIS; and 3) one or more County approvals, such as a SMA Use Permit, Project District Phase 1, 2 or 3 approval, subdivision approval or other approval.

In considering cumulative impacts, the above designations are important distinctions regarding when and if a proposed project may proceed. It is unknown whether all proposed projects will proceed or be built as currently proposed, as desired product types change over time and project developers are constantly assessing project feasibility. For several of the listed projects there has been no movement toward development, in some cases for many years. The feasibility of a project proceeding is based on many factors, including the State Land Use District classification, the Community Plan and zoning designations, other necessary approvals, overall economic conditions, the demand for the proposed product, and the willingness of a landowner or developer to risk the capital required for development.

In addition to the category distinctions utilized for the list of projects above, however, there are other important considerations that must also be taken into account when evaluating cumulative impacts. Some listed projects may be proceeding only with their preliminary or first phases or only have some of their required approvals. Other listed projects are currently within the State Agricultural or Conservation districts, do not have the appropriate community plan designation, or proper zoning, and thus to proceed may require: 1) a State Land Use District Boundary Amendment at the State level; 2) a community plan amendment at the County level; and/or 3) a change in zoning approval at the County level. These approvals could take many years to obtain and are subject to review and approval of State and County decision-making bodies, which will need to weigh the merits of each project at the time the approvals are requested. Therefore, proposed projects in the State Agricultural or Conservation Districts, without the appropriate community plan designation, and without property zoning, are much more speculative than projects with the appropriate underlying entitlements.

Furthermore, a multi-stage land use approval and permitting process exists in Hawai'i, such that there are many approvals of a project at various levels of government and at different points in time. At each step, decision-makers involved in the process evaluate a project in the context of the existing regional conditions, including infrastructure capacity and other factors. Because it is not possible to know which proposed projects may proceed, at what time, and in what form, it is appropriate to evaluate the impact of an individual project at each step in the decision-making process in context with all other projects that have preceded it. This comprises the existing cumulative conditions at the time. This is a rational, logical approach that allows each project to be evaluated in sequence with others that have preceded it (i.e. in context of the existing cumulative

conditions at the time). Because of the multi-stage land use approval process, along with additional environmental permit regulations, there are sufficient safeguards in place to address and mitigate for cumulative impacts when proposed projects apply for approvals.

Finally, the capacity of infrastructure systems (such as roadways and wastewater treatment facilities) are constraints to unlimited development, and large-scale projects increasingly are required to provide regional solutions to add capacity proportionate with their impacts or to build private systems (as Honua'ula will) that do not or do burden State and County facilities. The availability of water is also a critical factor in determining whether a project can proceed and may be a limiting factor with respect to a specific project moving forward, especially in the Kīhei region with its restricted water resources. Thus, for all of the foregoing reasons, an overly broad approach of simply adding up the total units of all proposed projects and then concluding that the total amount of proposed development will have significant cumulative impacts, is too simplistic, unrealistic, and unreasonably alarmist.

Honua'ula will be part of the overall change and growth of the region. Cumulative and secondary impacts resulting from proposed projects are likely to include increased population and greater demands on public infrastructure systems and services. However, the population of the Kīhei-Mākena region is projected to grow and the needs of a growing population relating to traffic, infrastructure, public services, and other issues will need to be addressed regardless if some or all of these projects are built. The challenge is to manage growth in a predictable and acceptable manner.

In the case of Honua'ula, the "Project District 9" designation of Property on the *Kīhei-Mākena Community Plan* has been in place since 1992. In the mid-1990s the *Kīhei-Mākena Community Plan* was subject to an extensive community-based revision and update. The County Council and the Mayor adopted the plan (Ordinance No. 2641), which became effective on March 6, 1998. The updated *Kīhei-Mākena Community Plan* maintained the Project District 9 designation for the Property. It also reaffirmed the vision—through a community-based process—that Project District 9 should be a residential community complemented with commercial uses and integrated with golf courses and other recreational amenities. Thus, the primary uses envisioned for Honua'ula have been well thought out, considered, and anticipated for nearly 20 years.

In addition, during the County Council hearings for the Honua'ula Change in Zoning and Project District Phase I approval in 2008, the County Council heard extensive testimony from both the public and experts in various fields of study. In response to concerns raised at the hearings, the Council included comprehensive conditions as part of the Change in Zoning Ordinance (County of Maui Ordinance No. 3554) approval. These conditions reflect a range of concerns and ensure that any impacts of Honua'ula are mitigated and addressed in context with regional impacts and demands, including impacts related to traffic and demands related to infrastructure systems such as water and wastewater. Prior to the County Council hearings in 2008, the Council's Land Use Committee had held extensive public meetings over the course of 2006 and 2007 to consider Honua'ula,

including an estimated ten public hearings where public testimony was heard. These meetings/hearings provided significant opportunity for the consideration of public questions and concerns prior to the Council's consideration and approval of the Project District Phase I application.

One of the conditions imposed by the Council as part of Honua'ula's Change in Zoning Ordinance (County of Maui Ordinance No. 3554, Condition 5) requires Honua'ula Partners, LLC to provide workforce affordable homes in compliance with Chapter 2.96, MCC, with 250 of these required workforce affordable homes to be provided off-site at the Ka'ono'ulu Light Industrial Subdivision (TMK (2) 3-9-01: 16). The Ka'ono'ulu Light Industrial Subdivision is within the State Urban District and is within the County of Maui Light Industrial zoning district. Multifamily homes are a permitted use within the State Urban District and County Light Industrial zone.

Providing workforce affordable homes at the Ka'ono'ulu Light Industrial Subdivision does not trigger the need for an environmental assessment or environmental impact statement under Chapter 343, HRS. However, impacts related to the use of the property for urban uses and uses permitted under the property's Light Industrial zoning have previously been examined as part of the property's State Land Use District Boundary Amendment, County Change in Zoning, and County Subdivision approvals. No rare, threatened, or endangered plant species are expected to be impacted, as none were found during a botanical inventory survey of the property. An archaeological inventory survey and a related preservation plan have been prepared to address impacts to archaeological resources and, based on their approval of these documents, the State Historic Preservation Division has determined that no historic properties will be affected. As part of the subdivision process for the Ka'ono'ulu Light Industrial Subdivision, the County of Maui Department of Public Works reviewed and approved improvements necessary for the subdivision, including provisions for water, sewage disposal, electrical and communications lines, drainage and flood control, and connection with Pi'ilani Highway, including widening and traffic signal improvements. The State DOT has also reviewed and approved the connection with Pi'ilani Highway, including widening and traffic signal improvements. Further, the construction of the improvements required for the subdivision has been guaranteed with a bond of over \$22 million.

Regional traffic growth, including from the Ka'ono'ulu Light Industrial Subdivision, is being taken into account as part of DOT's Long Range Land Transportation Plan (LRLTP), which is currently being updated in consideration of known proposed developments in the region and will serve as a guide for the development of major surface transportation facilities and programs to be implemented in the future.

Because Chapter 2.96, MCC requires the workforce affordable homes to be offered to Maui residents, the affordable homes will result in a redistribution of the existing Maui population as opposed to an incremental increase. As a result, there will be no impacts related to increased population, such as an overall increase in the need for State and County services. In addition to the workforce affordable homes, Honua'ula Partners, LLC

will also provide a minimum two-acre park within Ka'ono'ulu Light Industrial Subdivision to meet the recreational needs of the workforce affordable home residents.

Impacts to schools will be addressed by Honua'ula Partners, LLC's compliance with County of Maui Ordinance No. 3554, Condition 22, which requires Honua'ula Partners, LLC to pay DOE at least \$3,000 per dwelling unit upon issuance of each building permit to be used, to the extent possible, for schools serving the Kīhei-Mākena Community Plan area; provided that, should the State pass legislation imposing school impact fees that apply to Kīhei-Mākena Project District 9, Honua'ula Partners, LLC will from that point forward comply with the State requirements, or contribute \$3,000 per dwelling unit, whichever is greater.

Of all the projects currently proposed within South Maui, Honua'ula stands out as contributing its fair share and more to address cumulative and secondary impacts. For example, Honua'ula will address the regional need for:

- **Traffic Improvements**, by:
 - Upgrading Pi'ilani Highway to four lanes from Kilohana Drive to Wailea Ike Drive;
 - Modifying the Wailea Alanui/Wailea Ike Drive intersection to add a signalized double right-turn movement from northbound to eastbound turning traffic and provide two left-turn lanes for southbound traffic from Wailea Ike Drive;
 - Signalizing the Pi'ilani Highway/Okolani Drive/Mikioi Place intersection and providing an exclusive left-turn lane on Okolani Drive;
 - Modifying the Pi'ilani Highway/Kilohana Drive/Mapu Place intersection to provide an exclusive left-turn lane, and the southbound Pi'ilani Highway approach to provide an exclusive right-turn lane into Mapu Place; and
 - Providing a contribution of \$5,000 per unit (totaling \$5.75 million) to the County for traffic improvements.
- **Workforce Housing**, by providing a significant amount of workforce housing in accordance with Chapter 2.96, MCC (the "Residential Workforce Housing Policy");
- **Parks**, by providing a contribution of \$5 million to the County for the development of the South Maui Community Park and an in-lieu cash contribution to satisfy the park assessment requirements under Section 18.16.320, MCC (currently set at \$17,240 per residential unit) in addition to providing parks within Honua'ula that are open to the public but privately maintained;
- **Schools**, by paying at least \$3,000 per dwelling unit (totaling over \$3.45 million) to DOE for schools serving the Kīhei-Mākena Community Plan area;
- **A Fire Station**, by providing two acres of land to the County of Maui for the development of a fire station; and
- **A Police Station**, by providing a contribution of \$550,000 to the County for the development of a police station in South Maui.

In addition, Honua'ula will not rely upon or burden any public infrastructure facilities and will instead develop, maintain, and operate its own private water and wastewater systems (or partner with other private providers, in the case of wastewater treatment facilities). All infrastructure will be constructed concurrently with development and will be completed before the issuance of any certificate of occupancy, thus ensuring that necessary facilities and services are in place before residents move in.

Further, the substantial tax revenues from Honua'ula are expected to be well in excess of the costs incurred by the State and County, thereby contributing to the overall State and County tax base (see Section 4.9.5, Economy) and, in turn, the provision of public infrastructure and facilities concurrent with growth.

Regarding cumulative impacts of traffic, the TIAR prepared for Honua'ula (see Section 4.4 and Appendix L) accounted for increased traffic due to additional projects in the Wailea and Mākena region. Traffic on Pi'ilani Highway and other roads is expected to increase even if Honua'ula is not built. As stated above Honua'ula will be part of the regional traffic solution by: 1) upgrading Pi'ilani Highway to four lanes from Kilohana Drive to Wailea Ike Drive; 2) modifying the Wailea Alanui/Wailea Ike Drive intersection to add a signalized double right-turn movement from northbound to eastbound turning traffic and provide two left-turn lanes for southbound traffic from Wailea Ike Drive; 3) signalizing the Pi'ilani Highway/Okolani Drive/Mikioi Place intersection and providing an exclusive left-turn lane on Okolani Drive; 4) modifying the Pi'ilani Highway/Kilohana Drive/Mapu Place intersection to provide an exclusive left-turn lane, and the southbound Pi'ilani Highway approach to provide an exclusive right-turn lane into Mapu Place; and 5) providing a contribution of \$5,000 per unit (totaling \$575 million) to the County for traffic improvements.

Honua'ula is also part of the new "smart growth" planning paradigm that provides an alternative to conventional suburban sprawl, with stores and services as an integral part of the community. This design will help to minimize car trips onto Pi'ilani Highway, since many establishments providing for residents' day-to-day needs will be within walking and biking distance. Therefore, unlike in a conventional subdivision, Honua'ula is designed to be a community with services and facilities to enable residents to meet many of their daily needs without using their cars; thus minimizing trips to outside areas and reducing congestion.

In mitigating cumulative impacts to human and environmental health, Honua'ula is committed to limiting energy consumption and reducing solid waste. Honua'ula Partners, LLC will design and construct energy systems for all residential units to meet all applicable ENERGY STAR requirements established by the EPA in effect at the time of construction. All homes (single-family and multifamily) will be equipped with a primary hot water system at least as energy efficient as a conventional solar panel hot water system and other energy-saving concepts and devices will be encouraged in the design of Honua'ula. Design standards will specify low-impact lighting and encourage energy-efficient building design and site development practices. Honua'ula will also implement strategies from the

County of Maui Integrated Solid Waste Management Plan (2009) for diverting solid waste from landfills by providing options for recycling, such as collection systems and bin spaces and promoting sound recycling practices among residents, guests, and construction and maintenance personnel. Green waste, particularly from the golf course, may be processed on-site and reused.

Honua'ula will make an important and valuable contribution to the long-term viability, preservation, and conservation of native plants in southeastern Maui. Honua'ula's on-site Native Plant Preservation Area, combined with other on-site Native Plant Conservation Areas within Honua'ula (see Figure 12 and Section 3.6 (Botanical Resources)), will provide a total of approximately ~~443~~ 76 acres for the protection, enhancement, and propagation of native plants of the mixed *kiawe-wiliwili* shrubland associations in southeastern Maui. These areas will: 1) provide protection for native plants; 2) ensure the long-term genetic viability and survival of the native dry shrubland species; and 3) enhance long-term native plant population growth. In addition, Honua'ula Partners, LLC will implement significant off-site measures to protect native plants and Blackburn's sphinx moth habitat and provide a net conservation benefit. Combined, Honua'ula's on-site 40-acre Native Plant Preservation Area and off-site mitigation measures discussed in Section 3.6 (Botanical Resources) provide 394 acres of native dry shrublands for the perpetual protection and propagation of native dryland plants.

Existing scientific research suggests even small restoration efforts consisting of a few hectares can help provide habitat for native species and can subsequently serve as urgently-needed sources of propagules (Cabin et al. 2000b, Cabin, et al. 2002a). This is reinforced by numerous sources of information on successful propagation of native plants specifically for landscaping (e.g., TNC 1997, Tamimi 1999, Friday 2000, Wong 2003, Bornhorst and Rauch 2003, Lilleeng-Rosenberger and Chapin 2005, CTAHR 2006). The research shows that even small preserves consisting of individual trees are being deemed as appropriate and feasible by USFWS and DLNR when managed in combination with regional preserve areas, such as at La'i'opua on Hawai'i Island (Leonard Bisel Associates, LLC and Geometrician Associates 2008). Protected and managed natural areas in south Maui in proximity to Honua'ula include the 'Auwahi 1 restoration area (10 acres) and Pu'u o Kali (236 acres) Forest Reserves and the Kanaio (876 acres) and 'Ahihi-Kīna'u (1,238 acres) Natural Area Reserves – ~~substantial~~ habitats that are more intact host higher diversity of known native host plants for the Blackburn's sphinx moth than those found in Honua'ula, and contain a greater diversity of native plant species than Honua'ula.

Honua'ula will make lasting contributions to preserving the archaeological and cultural resources of the region by preserving archaeological sites *in situ* and through the preparation and implementation of the CRPP (see Section 4.1 (Archaeological and Historic Resources) and Section 4.1 (Cultural Resources)). The CRPP sets forth selection criteria for archaeological sites to be preserved and short- and long-term preservation measures, including buffer zones and interpretative signs, as appropriate for each site and types of native flora to be used for landscaping for buffer zones. The CRPP: 1) was prepared in consultation with interested and concerned parties, cultural advisors, Nā Kūpuna O Maui,

the Maui County Cultural Resources Commission, the Maui/Lāna'i Island Burial Council, the DLNR, Nā Ala Hele, SHPD, OHA, and various knowledgeable individuals; 2) will be has been submitted to SHPD and OHA for review and recommendations; and 3) will be provided Maui County Cultural Resources Commission for review and adoption after receipt of comments and recommendations from SHPD and OHA. Through this collaborative process the CRPP will be refined to provide additional information including: 1) the nature of access to religious, ceremonial, and confirmed burial sites; 2) determination of appropriate traditional protocols and practices; and 3) establishment of educational and community stewardship programs.

An assessment of the potential impacts on groundwater resources of Honua'ula concludes that the creation of Honua'ula will not impair Wailea Resort's golf course irrigation wells, with the possible exception of a salinity increase in Wailea Resort's Well 2, which is directly downgradient of Honua'ula's on-site wells. Decreased pumping of Honua'ula's on-site wells would alleviate this potential impact. With respect to Honua'ula's off-site wells, an estimated six active downgradient irrigation wells may be impacted by a potential increase in salinity due to reduced flowrate, which current calculations indicate may be on the order of five percent. It is not known if the increase in salinity would materially impair the utility of the wells; however if the utility of the wells is materially impaired, additional wells (pumping the same combined amount of water) in the area north of Maui Meadows would distribute the draft over a greater area and would alleviate the impact downgradient. Honua'ula Partners, LLC commits to providing these additional wells if the utility of active downgradient wells is materially impaired. All existing on- and off-site wells are fully permitted by the State CWRM. All new wells will be developed in compliance with all requirements of Chapter 174C, HRS (State Water Code) and HAR, Chapters 13-167 to 13-171, as applicable, pertaining to CWRM and administration of the State Water Code. In addition, since the Honua'ula water system will be a private, closed system (i.e., it will not be connected to any other public or private system, there will be no impact to present or future irrigation well owners in the Wailea/South Maui area related to transmission and storage of Honua'ula's water.

Honua'ula, the widened Pi'ilani Highway, the Wailea Ike Drive/Wailea Alanui Drive intersection improvements, and the off-site water and wastewater infrastructure ~~is~~ are not expected to cause secondary impacts to marine water resources. As discussed in Section 3.5.2 (Nearshore Marine Environment), the results of the nearshore water quality assessment and further evaluation of the potential changes to groundwater composition indicate that there is little or no potential for alteration of the marine environment or negative impacts to marine waters due to Honua'ula. The assessment concludes that: "the estimates of changes to groundwater and surface water would result in a decrease in nutrient and sediment loading to the ocean relative to the existing condition. With such a scenario, it is evident that there would be no expected impacts to the nearshore marine ecosystem owing to development of Honua'ula."

In addition, as discussed in Section 4.5 (Noise) and Section 4.6 (Air Quality), Honua'ula, the widened Pi'ilani Highway, the Wailea Ike Drive/Wailea Alanui Drive intersection

improvements, and the off-site water and wastewater infrastructure ~~is~~ are not anticipated to significantly impact the acoustical environment or air quality and thus will not significantly contribute to cumulative and secondary impacts associated with these issues. Finally, adherence with Chapter 20.35, MCC regarding outdoor lighting ensures cumulative and secondary impacts related to light pollution will not impact sensitive surrounding land uses.

7.3 IRRIVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Creation of Honua'ula will involve the irreversible and irretrievable commitment of certain land and fiscal resources. Major resource commitments include the land and capital, construction materials, non-renewable resources, labor, and energy required for the community's completion.

Honua'ula will require that approximately half of the Property be used for urban-like uses; however approximately half of the Property also will be set aside for open space, including the Native Plant Preservation Area, Native Plant Conservation Areas, natural gulches, open space buffers along Pi'ilani Highway and the border of Maui Meadows, and the golf course. The urban-like uses of Honua'ula are well-suited for the Property because the Property is: 1) located contiguous to existing urban land uses (Wailea Resort); 2) designated as "Project District 9" on the Kihei-Makena Community Plan; 3) adjacent to Pi'ilani Highway; 4) in close proximity to employment areas; and 5) in accordance with the purpose and intent of the Project District 9 ordinance, Chapter 19.90A, MCC, which provides for a residential community consisting of single-family and multi-family dwellings complemented with village mixed uses, all integrated with an eighteen-hole golf course and other recreational amenities.

The impacts represented by the commitment of resources should be weighed against the significant positive and recurring benefits that will be derived from Honua'ula versus the consequences of either taking no action or pursuing another less beneficial use of the Property.

7.4 PROBABLE ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED

Potential environmental impacts resulting from the creation of Honua'ula have been discussed throughout this EIS, and mitigation measures have been provided for adverse impacts. Probable adverse environmental effects that cannot be avoided are discussed below.

Goundwater – As discussed above and in more detail in Section 3.5.1 (Groundwater), an assessment of the potential impacts on groundwater resources of Honua'ula concludes that the creation of Honua'ula will not impair Wailea Resort's golf course irrigation wells, with the possible exception of a salinity increase in Wailea Resort's Well 2, which is directly downgradient of Honua'ula's on-site wells. Decreased pumping of Honua'ula's on-site wells would alleviate this potential impact. With respect to Honua'ula's off-site

wells, an estimated six active downgradient irrigation wells may be impacted by a potential increase in salinity due to reduced flowrate, which current calculations indicate may be on the order of five percent. It is not known if the increase in salinity would materially impair the utility of the wells; however if the utility of the wells is materially impaired, additional wells (pumping the same combined amount of water) in the area north of Maui Meadows would distribute the draft over a greater area and would alleviate the impact downgradient. Honua'ula Partners, LLC commits to providing these additional wells if the utility of active downgradient wells is materially impaired. All existing on- and off-site wells are fully permitted by the State CWRM. All new wells will be developed in compliance with all requirements of Chapter 174C, HRS (State Water Code) and HAR, Chapters 13-167 to 13-171, as applicable, pertaining to CWRM and administration of the State Water Code.

Land Use Character – Over the last several decades, land uses in the Kīhei-Mākena region have undergone a gradual change as more in-fill urban uses were built on previously vacant properties, and growth has started moving mauka of Pi'ilani Highway.

Creation of Honua'ula will change the visual appearance of the Property from vacant land to a built environment. This change will be visible from Pi'ilani Highway looking mauka across the Property. However Honua'ula will not impinge upon any significant public scenic view corridors and Honua'ula will have no significant impacts on views toward the ocean or Haleakalā. Honua'ula will encourage building forms that respect and maintain the unique topographic and landscape character of the land

Honua'ula will be in character with surrounding uses and will complement the pattern of development as envisioned in the *Kīhei-Mākena Community Plan* and by the County zoning of the Property. Honua'ula will incorporate appropriate architecture, materials, colors, site design standards, and landscaping to create a community in context with the Kīhei-Mākena region. To ensure an overall architectural theme as well as other design standards are established for Honua'ula, design guidelines have been prepared. The design guidelines cover various aspects of Honua'ula design with the overall goal of providing a framework so that a consistent character is achieved (see Section 2.3.6 (Design Guidelines)).

Traffic Impacts – Although the creation of Honua'ula will have an impact on traffic in the region, traffic on Pi'ilani Highway and other roads is expected to increase even if Honua'ula is not built. Furthermore, Honua'ula will be part of the regional traffic solution by: 1) upgrading Pi'ilani Highway to four lanes from Kilohana Drive to Wailea Ike Drive; 2) modifying the Wailea Alanui/Wailea Ike Drive intersection to add a signalized double right-turn movement from northbound to eastbound turning traffic and provide two left-turn lanes for southbound traffic from Wailea Ike Drive; 3) signalizing the Pi'ilani Highway/Okolani Drive/Mikioi Place intersection and providing an exclusive left-turn lane on Okolani Drive; 4) modifying the Pi'ilani Highway/Kilohana Drive/Mapu Place intersection to provide an exclusive left-turn lane, and the southbound Pi'ilani Highway approach to provide an exclusive right-turn lane into Mapu Place; and 5) providing a

contribution of \$5,000 per unit (totaling \$5.75 million) to the County for traffic improvements.

Honua'ula is also part of the new "smart growth" planning paradigm that provides an alternative to conventional suburban sprawl, with stores and services as an integral part of the community. This design will help to minimize car trips onto Pi'ilani Highway, since many establishments providing for residents' day-to-day needs will be within walking and biking distance. Therefore, unlike in a conventional subdivision, Honua'ula is designed to be a community with services and facilities to enable residents to meet many of their daily needs without using their cars; thus minimizing trips to outside areas and reducing congestion.

Solid Waste – As detailed in Section 4.8.5, there will be solid waste generated during and after construction of Honua'ula, but Honua'ula Partners, LLC is committed to limiting the environmental impact of Honua'ula by reducing solid waste. A solid waste management plan will be coordinated with the County's Department of Environmental Management Solid Waste Division for the disposal of on-site and construction-related waste material, and Honua'ula Partners, LLC will work with contractors to minimize the amount of solid waste generated during the construction. After construction, Honua'ula Partners, LLC will implement strategies from the County of Maui Integrated Solid Waste Management Plan (2009) for diverting solid waste from landfills by providing options for recycling, such as collection systems and bin spaces and actively promoting sound recycling practices among residents, guests, and construction and maintenance personnel. Green waste, particularly from the golf course, may be processed on-site and reused.

Electrical Power – When fully built-out, the peak forecasted electrical demand for Honua'ula is estimated to be 9,467 kilowatts (kW) per month. Honua'ula Partners, LLC is committed to limiting the environmental impact of Honua'ula by reducing energy consumption. To reduce energy consumption, Honua'ula Partners, LLC will design and construct energy systems for all residential units to meet all applicable ENERGY STAR requirements established by the EPA in effect at the time of construction. All homes (single-family and multi-family) will be equipped with a primary hot water system at least as energy efficient as a conventional solar panel hot water system and other energy-saving concepts and devices will be encouraged in the design of Honua'ula. Design standards will also specify low-impact lighting and encourage energy-efficient building design and site development practices. The Honua'ula project plan includes area set aside for the expansion of the MECO substation (Figure 1).

Air Quality – In the short term, construction of: 1) Honua'ula; 2) the widening of Pi'ilani Highway; 3) the Wailea Ike Drive and Wailea Alanui Drive intersection improvements; and 4) the off-site water and wastewater infrastructure will unavoidably contribute to air pollutant concentrations due to fugitive dust releases at construction areas. However, mitigation measures, including frequent watering of exposed surfaces, will help to reduce and control such releases, and all construction activities will comply with the provisions of HAR, Chapter 11-60.1, Air Pollution Control, Section 11-60.1-33, "Fugitive Dust."

Over the long-term, the air quality modeling analyses prepared for Honua'ula and the widening of Piilani Highway (see Section 4.6 Air Quality, ~~and~~ Appendix O, and Appendix R) concludes that: 1) even during worst-case conditions, predicted concentrations of traffic-related pollutants will remain well below State and Federal standards; 2) mitigation measures for traffic-related air quality impacts are unnecessary and unwarranted; ~~and 3).~~ In addition the air quality modeling analysis prepared for Honua'ula concludes that significant long-term impacts on air quality are unlikely due to indirect emissions associated with the community's electrical power and solid waste disposal requirements. Long-term impacts due to Wailea Ike Drive and Wailea Alanui Drive intersection improvements are not expected to be significant as the the improvements will accommodate anticipated future traffic while while providing similar vehical flow and queing times at the intersection as compared to exiting conditions. Long-term air quality impacts are not expected to be significant from the off-site water and wastewater infrastructure, as after these facilities are created there will be very little to no vehicle emmissions associated with on-going operations.

Noise – In the short term, construction of: 1) Honua'ula; 2) the widened Pi'ilani Highway; 3) the Wailea Ike Drive/Wailea Alanui Drive intersection improvements; and 4) the off-site water and wastewater infrastructure will generate temporary noise impacts. The dominant noise sources during construction will likely be associated with operation of heavy construction machinery, paving equipment, ~~and~~ material transport vehicles, and possible blasting to break or dislodge rock. As an alternative to blasting, the use of chemical expansion to break or dislodge rock will be considered. However, noise from construction activities will be short-term and will comply with all federal and state noise control regulations.

In the long-term, the acoustic study prepared for Honua'ula (see Section 4.5 Noise and Appendix N) concludes that substantial change in traffic-generated noise levels (as defined by DOT) will not occur due to the creation of Honua'ula and the widening of Pi'ilani Highway, however, the number of residences along Pi'ilani Highway subject to noise levels that exceed DOT residential noise standards is projected to increase from two residences to up to up to 16 residences by the year 2022—with most of this increase due to regional increases in traffic even if Honua'ula is not built. To mitigate impacts to residences along Pi'ilani Highway subject to noise levels that exceed DOT residential noise standards, sound attenuating walls are recommended in accordance with DOT's traffic noise abatement policy. Noise levels from the completed Wailea Ike Drive and Wailea Alanui Drive intersection improvements and the off-site water and wastewater infrastructure are not expected to be significant in the long term.

7.4.1 Rationale for Proceeding with Honua'ula Notwithstanding Unavoidable Effects

In light of the above mentioned unavoidable effects, Honua'ula should proceed because the adverse impacts can be mitigated and are more than offset by substantial positive factors, including:

- Compliance with the *Kihei-Mākena Community Plan*, which designates the Property as “Project District 9,” and the Project District 9 ordinance (Chapter 19.90A, MCC) which provides for a residential community consisting of single-family and multifamily dwellings complemented with village mixed uses, all integrated with an eighteen-hole golf course and other recreational amenities;
- Significant long-term community benefits provided by Honua'ula in compliance with the conditions of zoning under County of Maui Ordinance No. 3554, including:
 - Upgrading Pi'ilani Highway to four lanes from Kilohana Drive to Wailea Ike Drive (Condition 2a);
 - Modifying the Wailea Alanui/Wailea Ike Drive intersection to add a signalized double right-turn movement from northbound to eastbound turning traffic and provide two left-turn lanes for southbound traffic from Wailea Ike Drive (Condition 2e);
 - Signalizing the Pi'ilani Highway/Okolani Drive/Mikioi Place intersection and providing an exclusive left-turn lane on Okolani Drive;
 - Modifying the Pi'ilani Highway/Kilohana Drive/Mapu Place intersection to provide an exclusive left-turn lane, and the southbound Pi'ilani Highway approach to provide an exclusive right-turn lane into Mapu Place;
 - Providing a contribution of \$5,000 per unit (totaling \$5.75 million) to the County for traffic improvements (Condition 3);
 - Providing workforce housing in accordance with Chapter 2.96, MCC (the “Residential Workforce Housing Policy”) (Condition 5);
 - Providing a contribution of \$5 million to the County for the development of the South Maui Community Park (Condition 10);
 - Providing an in-lieu cash contribution to satisfy the park assessment requirements under Section 18.16.320, MCC (currently set at \$17,240 per residential unit) (Condition 11);
 - Developing formal provisions regarding cultural resources, such as access to specific sites to be preserved, the manner and method of preservation of sites, and appropriate protocol for visitation to cultural sites (Condition 13);
 - Payment of at least \$3,000 per dwelling unit (totaling over \$3.45 million) to the DOE for schools serving the Kihei-Mākena Community Plan area (Condition 22);
 - Providing two acres of land to the County of Maui for the development of a fire station and providing a contribution of \$550,000 to the County for the development of a police station in South Maui (Condition 24); and
 - Formal protection, restoration, and propagation of native plants, including setting aside a Native Plant Preservation Area and Native Plant Conservation Areas (Condition 27).
- Significant economic benefits, including an estimated:
 - \$1.2 billion of direct capital investment in the Maui economy during the 13-year build-out period;

- 9,537 “worker years³⁰” of direct on-site employment during the 13-year build-out period;
- \$480 million in employee wages paid out during the 13-year build-out period;
- 518 jobs (382 directly related to on-site activities and 136 related to indirect off-site activities) after the build-out period;
- \$19 million in annual wages from the on and off-site jobs after the build-out period;
- \$513.9 million (nearly \$40 million annually) in discretionary expenditures into the Maui economy by Honua'ula residents and guests during the 13-year build-out period;
- \$77 million annually in discretionary expenditures into the Maui economy by Honua'ula residents and guests after the build-out period;
- \$41.8 million in net tax revenue benefit (taxes less costs) to the County of Maui during the 13 year build-out period;
- \$1.6 million in annual net tax revenue benefit (taxes less costs) to the County of Maui after the build-out period;
- \$97 million in net tax revenue benefit (taxes less costs) to the State of Hawaii during the 13 year build-out period; and
- \$1.5 million in annual net tax revenue benefit (taxes less costs) to the State of Hawaii after the build-out period.

7.5 UNRESOLVED ISSUE

Wastewater – As discussed in Section 4.8.2 (Wastewater System), Honua'ula Partners, LLC, will either transport wastewater to the Mākena WWRF for treatment or provide a WWRF on-site. The preferred alternative is to transport wastewater to the Mākena WWRF. Transporting wastewater to the Mākena WWRF for treatment provides the benefit of consolidating wastewater services for both Honua'ula and Mākena, allowing economies of scale in the treatment process and consolidated regulatory compliance. Additionally, sufficient golf course land is available within both developments to reuse 100 percent of the recycled water for irrigation. Honua'ula Partners, LLC has had substantive discussions about this alternative with the Mākena WWRF owner, Mākena Wastewater Corporation, and they support the connection; however, formal agreements with Mākena Wastewater Corporation have not yet been finalized. If formal agreements with Mākena Wastewater Corporation are not finalized, Honua'ula Partners, LLC will proceed with the other alternative for wastewater treatment discussed in Section 4.8.2 (Wastewater System), which is to construct an on-site WWRF that is capable of treating all of the Honua'ula wastewater to R-1 standards.

³⁰ A “worker year” is defined as the amount of time one full-time worker can work in one year although one worker year (2,080 working hours) may be comprised of many employees involved in specialized tasks of shorter duration.