Acknowledgements
The Kohala Center gratefully recognizes the advisors and community members who provided invaluable information for this Health Impact Assessment through interviews, participation in our Scoping and Assessment workshops and meetings, and by responding to data requests.

This project was supported by a grant from the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts. The views expressed are those of the authors and do not necessarily reflect the views of the Health Impact Project, the Robert Wood Johnson Foundation, The Pew Charitable Trusts, or any of the individual stakeholders or advisors listed below.

Project Partners
The Health Impact Project — pewtrusts.org/en/projects/health-impact-project
The Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts, is a national initiative designed to promote the use of health impact assessments (HIAs) as a decision-making tool for policymakers.

The Kohala Center — kohalacenter.org
The Kohala Center is an independent, community-based center for research, conservation, and education, turning research and ancestral knowledge into action, so that communities in Hawai‘i and around the world can thrive—ecologically, economically, culturally, and socially.

Sust’āinable Molokai — sustainablemolokai.org
Sust’āinable Molokai is a local, grassroots group formed to inspire youth and all Moloka‘i residents to work toward a more sustainable future for the island, and conduct education and advocacy work that honors traditional and cultural pathways alongside modern strategies for sustainability. Sust’āinable Molokai builds partnerships and calls upon community networks to restore ‘āina momona (abundance) to the land and people.
EXECUTIVE SUMMARY
Health Impact Assessment (HIA) of the proposed
Mo‘omomi Community-Based Subsistence Fishing Area (CBSFA)

For a glossary of Hawaiian words used in this Executive Summary, see page 6.

Introduction
Hawai‘i State law provides pathways for island communities to apply for the designation of Community-Based Subsistence Fishing Areas (CBSFAs), allowing for co-management of culturally significant and/or ecologically vulnerable nearshore fisheries by the state and local communities. In the early 1990s residents of the Island of Moloka‘i expressed concern about Native Hawaiians’ rights to exercise traditional cultural fishing practices in nearshore environments. A task force report, commissioned in 1994 by then-Governor John Waihe‘e, recommended that the Mo‘omomi fishery area along the northwest coast of Moloka‘i serve as a demonstration area, in which fishing activities would be managed by the Ho‘olehua Homestead community primarily for subsistence rather than commercial use. The Hawai‘i State Legislature passed Hawai‘i Revised Statute §188-22.6 that same year, authorizing the Department of Land and Natural Resources (DLNR) to designate CBSFAs and implement management strategies “for the purpose of reaffirming and protecting fishing practices customarily and traditionally exercised for the purposes of [N]ative Hawaiian subsistence, culture, and religion.”

Fish and other marine life are prominent staples of traditional Hawaiian diets, and overfishing, commercial harvesting methods, and a gradual movement away from the Hawaiian mahele system of sharing and other ancestral practices were identified as threats to community and cultural food security. Despite the passage of legislation more than 20 years ago, the proposed Mo‘omomi CBSFA remained a pilot project. Currently Hui Mālama O Mo‘omomi, a community organization based on Moloka‘i, is in the process of advancing a formal proposal to make traditional subsistence harvesting practices legally enforceable in the designated area of Moloka‘i’s north shore.

This Health Impact Assessment seeks to provide information that will help evaluate the CBSFA proposal by taking into consideration potential effects of CBSFA status on community well-being. The authors also hope that the findings and recommendations of an HIA particular to the Mo‘omomi area may also prove relevant to CBSFA proposals from other regions of the state where such co-management strategies are being considered.
About This Study
Health Impact Assessment (HIA) is a recognized and structured method bringing together scientific data, subject matter expertise, and community input to identify the potential health effects of proposed new laws, regulations, projects, and programs to offer practical recommendations to minimize risks and capitalize on opportunities to improve community well-being. For the purposes of this HIA, we use the World Health Organization’s definition of health as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. Because this assessment was conducted in and about a largely native Hawaiian community, traditional Hawaiian concepts of health were taken into careful consideration.

The HIA project staff interviewed health and DLNR representatives, Native Hawaiian scholars, and organizational leaders, and held a community meeting to determine the key issues to examine with regard to the potential health effects of this particular CBSFA policy and rule-making process. Four major underlying determinants of health emerged from these consultations and are examined in the study:

• Self-determination and control of resources
• Traditional marine resource management and transmission of ancestral knowledge
• Access to marine resources for family and community subsistence
• Commercial fish sales and commercial fisher income

Key Findings
The assessment process combined data gathered from existing research and community surveys and reports, as well as from transcripts of two community meetings and 18 structured interviews of Molokai residents, Ho'olehua Homesteaders, public health officials, landowners, commercial and subsistence fishers, and community organizers on Molokai, in addition to commercial fishing representatives on O'ahu. Key findings included the following:

1. Self determination and control over resources
In traditional Hawaiian conceptions of health, personal harmony and well-being are deemed to stem from one's relationship with the land, sea, and spiritual world. Detachment from the natural world imposed by historical events and contemporary state and federal laws can create a sense of marginality, helplessness, and alienation, with negative effects on physical and mental health. Both research findings and community interviews confirmed that the ability of community members to co-manage fisheries and take responsibility for local marine resources would contribute to their health and well-being by restoring a sense of autonomy and balanced connection to the natural world.

2. Traditional marine resource management and transmission of ancestral knowledge
Proponents of CBSFA designation emphasize that cultural food security—obtaining food that both satisfies nutritional needs and maintains connection with cultural and
social practices and traditions—is critical not only for the physical health of Native Hawaiians but also for their overall well-being. Community members consulted during the study expressed concern that near-shore fisheries were being depleted, with a consequent threat to cultural food security. In addition, isolation from aspects of one’s cultural practices is understood to have a negative effect on indigenous health, contributing to stress, trauma, and mental and physical health disparities when compared to other ethnic groups.

The proposed Mo‘omomi CBSFA would enable Moloka‘i’s Native Hawaiian communities to engage in and carry forward traditional fishery management practices to assure the availability of marine resources over time; strengthen connections to place, cultural identity and values; and to share abundance with ʻohana and kūpuna, thereby creating and sustaining community resilience. The transmission of ancestral knowledge of fishing and fishery management has also been identified as a way to affirm the value and maintain the vitality of older community members while providing an ʻāina-based, culturally competent learning environment that improves the sense of well-being and academic achievement of Native Hawaiian children and youth.

3. **Access to marine resources for family and community subsistence**

Given the relative abundance of marine life in the Mo‘omomi area at this time, a subsistence-focused management strategy would likely stabilize or increase the area’s marine resources, providing on-going availability and access to high-quality nutrition in the neighboring communities and contributing to family and island food security. An educational program coupled with the CBSFA designation could encourage a return to a more traditional Pacific Island diet in place of processed and less nutritionally rich foods that currently contribute to chronic disease among Native Hawaiians.

4. **Commercial fish sales and fishers’ income**

Community consultations indicate that the people of Moloka‘i generally don’t fish at Mo‘omomi in order to sell their catch. Division of Aquatic Resources data indicate that relatively few fishers report commercial catch from Mo‘omomi, commercial and near-shore subsistence fishers in large part target different species, and commercial fishers focus on the deeper sea areas beyond the nearshore CBSFA proposed boundary. Thus research concludes that CBSFA policy and rules for Mo‘omomi would not significantly impact commercial fishing income at this time.
Recommendations

The assessment findings detailed above suggest the following recommendations:

1. **Support BLNR approval of CBSFA rules for Mo'omomi, with a clear co-management strategy and resources for its implementation.**

   Involvement in the development and implementation of CBSFA rules is likely to increase a sense of control, connection, and sovereignty over local resources that could have a positive effect on Native Hawaiian well-being for the population that accesses the Mo'omomi fishery. Community consultations regarding Mo'omomi indicate that the majority of people interviewed believe that allowing communities to devise management regulations would be good for the protection of marine resources and the perpetuation of a subsistence choice independent of global economic forces. Some community members opposed or were skeptical of the proposed Mo'omomi rule-making process, for reasons which included:

   - Personal conflicts among community members who had different opinions as to how the rules should be formulated;
   - Potential misunderstanding of CBSFA intent with the belief that rules will eliminate fishing altogether and prevent people from feeding their families.

   Because the DLNR CBSFA process requires community outreach and at least one required public hearing, a corollary recommendation of this report is to continue community dialogue between the leaders and members of Hui Mālama O Mo'omomi, the DAR administration, and other residents of Moloka‘i to promote maximum understanding of and support for proposed regulations.

   This consensus-seeking process is time-consuming and is not necessarily a traditional Hawaiian method of rulemaking. It could be argued that not giving credence to the authority of a to make and enforce resource management regulations is a violation of Native Hawaiian legal rights (for a legal background, see Appendix B at koha.la/moomomi-legal). Given HIA findings about the positive value of preserving and transmitting ancestral knowledge, time is of the essence for CBSFA approval, so that community elders have the opportunity to implement traditional management strategies and train others to carry this knowledge into the future.

   Delaying the CBSFA approval process is not recommended; however, the interviews conducted for this assessment suggest that the most positive outcome for community cohesion, and by implication community well-being, will be reached through on-going education about the potential benefits and the regulatory details of the CBSFA.

2. **Continue and support the Mo'omomi CBSFA as a place for the study and teaching of traditional Native Hawaiian fishery management practices.**

   CBSFA designation and management has the ability to further engage Ho'olehua and Moloka‘i residents in traditional Native Hawaiian cultural practices and to provide a focal
point for the intergenerational transmission of ancestral cultural knowledge, thereby supporting Native Hawaiian well-being through strengthened connections to cultural identity, place, and community. A recommendation that stems from HIA project interviews and educational research literature is to continue Hui Mālama O Mo‘omomi’s efforts to maintain the Mo‘omomi CBSFA as a place for the study and teaching of traditional Native Hawaiian fishery management practices, with recognition and assistance from Hawai‘i’s educational institutions and with the human and financial resources to encourage the perpetuation of cultural knowledge and traditional practices, along with the teaching and use of contemporary scientific methods that can assist in documenting the long-term results of those practices.

3. **Emphasize the value of traditional Hawaiian foods in a subsistence-based diet.**
Dietary research in the Hawaiian community has confirmed that returning to a diet based on fish protein and traditional Polynesian starches such as *kalo* and *ʻuala* reduces metabolic disease indicators and likely leads to greater physical health. Those on Moloka‘i who are advocating for a Mo‘omomi CBSFA, along with research in Ha‘ena on the Island of Kaua‘i, suggest that assuring access to the fishery for subsistence purposes will result in the relatively wide distribution of gathered marine resources to local families. Community interviews on Moloka‘i, however, indicate that many people are eating less fish than they did in the past. One of the primary reasons cited is that there are other choices available, considering the abundance of low-cost, high-fat sources of protein in local grocery stores and fast-food establishments. Given the stated pride that Moloka‘i residents have in the extent of their subsistence economy and their desire to be more food self-sufficient, as emphasized in numerous community reports and visioning sessions, there may be an opportunity to use the cultural relationship and control of a resource like Mo‘omomi to publicize and encourage a return to a more traditional Hawaiian diet.

**Conclusion**
The findings from this Health Impact Assessment support BLNR approval of CBSFA regulations for Mo‘omomi, with a clear co-management strategy and resources for its implementation. Both secondary sources and community interviews suggest that the CBSFA has the potential to enhance individual, family and community well-being by (1) supporting self-determination and self-governance of marine resources guided by Native Hawaiian tradition with a history of sustaining the health of those resources; (2) strengthening social connections enabled by traditional subsistence practices and the transmission of those practices and their associated values to younger generations; and (3) improving community food security and assuring the availability of a high quality source of food over time. Findings also suggest that the CBSFA limitations will not substantially affect income generated from commercial fishing and may have a positive effect on fish stocks in areas outside of the CBSFA.
## Glossary of Hawaiian Words

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ahupua‘a</td>
<td>land division usually extending from the uplands to the sea, often managed by a konohiki. This Health Impact Assessment uses a published definition from Dr. Kamanamaikalani Beamer: an ahupua‘a is a “culturally appropriate, ecologically aligned, and place-specific unit(s) [of land] with access to diverse resources.”</td>
</tr>
<tr>
<td>‘āina</td>
<td><em>lit.</em> that which feeds; often used to refer to land or earth</td>
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<tr>
<td>kalo</td>
<td>taro</td>
</tr>
<tr>
<td>konohiki</td>
<td>resource manager of an ahupua‘a under the chief; land or fishing rights under control of the konohiki</td>
</tr>
<tr>
<td>kupuna</td>
<td>respected elder; grandparent; ancestor (pl. kūpuna)</td>
</tr>
<tr>
<td>mahele</td>
<td>sharing; portion, division</td>
</tr>
<tr>
<td>‘ohana</td>
<td>(extended) family</td>
</tr>
<tr>
<td>‘uala</td>
<td>sweet potato <em>(Ipomoea batatas)</em></td>
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