

is not necessarily the case with the moth critical habitat. Delisting of the moth is not anticipated within the 10-year time horizon of this economic analysis, and it is beyond the scope of the economic analysis to forecast when delisting may occur beyond this period. The economic analysis does not conclude that the moth or critical habitat for the moth has no economic value; rather, it simply states that the value of the species cannot be quantified at this time. The economic analysis does not attempt to quantify the economic benefit derived from not fully developing lands proposed for critical habitat. Rather, the economic analysis acknowledges there may be benefits resulting from the preservation of open lands that might otherwise be developed, but concludes that because much of the critical habitat designation is already kept as open space and governed by existing State and local land use laws and county plans, these benefits may be insignificant. Finally, while the economic analysis concludes that many of the benefits of critical habitat designation are "difficult to estimate," it does not necessarily lead to a conclusion that the benefits are exceeded by the costs. We believe that the benefits of the species and of critical habitat designation are best expressed in biological terms that can be weighed against the expected costs of the rulemaking.

(47) *Comment:* One commenter pointed out that critical habitat does not benefit ecotourism by creating new special places for people to visit, as the DEA suggested. Rather, it helps to protect the special places that already exist from degradation, ensuring that they will be around in the future to attract future ecotourists.

Our Response: Chapter VI, section 6.b.(1) of the DEA indicated that the proposed critical habitat may enhance the appeal of ecotourism by providing a marketing dimension. However, the DEA also stated that this benefit may be slight since these places may already be regarded as special due to the existing natural and cultural resources in the area.

(48) *Comment:* A commenter stated that assigning an economic value to preservation of ecosystem functions that may result from the designation of critical habitat (such as groundwater recharge, protection of coastal marine waters and fisheries, and other ecosystem services) is now an acceptable method of economic analysis, and that the dollar value of these services is high. The commenter noted that this analysis was done in a qualitative, narrative manner in the DEA

and questioned why it was not done in a quantitative manner.

Our Response: The economic analysis recognized that the preservation of ecosystem functions may result from the designation of critical habitat for the Blackburn's sphinx moth. It was not feasible, however, to fully describe and accurately quantify these benefits in the specific context of the proposed critical habitat for the moth because of the scarcity of available studies and information relating to the size and value of beneficial changes that are likely to occur as a result of listing the moth or designating critical habitat. In particular, the following information is not currently available: (1) Quantified data on the value of the moth or the moth's critical habitat; and (2) quantified data on the change in the quality of the ecosystem and the species as a result of the designation.

(49) *Comment:* A commenter stated that there was no attempt in the DEA to quantify the value of open space (parks, preserves, even golf courses) surrounding real estate. The commenter noted that such increased property values are acknowledged but there was no attempt to estimate the corresponding increases in property values. Also, the commenter noted that some tourists prefer less developed areas.

Our Response: As discussed in the DEA and in the Addendum, there are only two areas where Blackburn's sphinx moth critical habitat could potentially increase the amount of open space. These areas include approximately 89 ha (220 ac) planned for single-family and multi-family homes in the Kaloko Properties development in proposed Unit 5a (island of Hawaii), and approximately 30 ha (75 ac) planned single-family and multi-family homes in the State VOLA project in proposed Unit 5b (island of Hawaii). (Note: this area was not included in this designation.) If these areas are redistricted to the Conservation District, the likelihood of which, as discussed in the Addendum, is considered small, they may remain open spaces but they will not necessarily be converted into golf courses and parks. Most golf courses and parks are not consistent with the regulations associated with the Conservation District. If the areas are left in the natural state or as preserves, the positive impact on surrounding real estate is likely to be minimal because much of the area is currently open and likely remain open over the next 10 years.

(50) *Comment:* Multiple commenters, including HDOA, opposed the

designation of Agricultural land and lands needed to support agriculture and ranching. Commenters were concerned that designation would reduce property values and the ability to develop lands that were previously planned for development and also stated the following: Thirty-three percent of the proposed designated land is within the State Conservation District, which includes irrigation water essential to agriculture. The rest of the lands proposed for designation are primarily in the State Agricultural District. Designation of Agricultural lands could prevent a farmer or rancher from using those lands since the very nature of those uses would in all likelihood entail cutting, uprooting, or injuring plants to a certain extent. The DEA failed to examine the economic impact of a landowner not being able to use his own land for fear of injuring a species he doesn't even recognize. No protection is afforded to farmers who unwittingly "harm" the designated critical habitat.

Our Response: Chapter VI, section 4.e. of the DEA discussed potential indirect impacts to Agricultural land, including the potential reduction in property values and the impact of redistricting Agricultural land to the Conservation. Section 4.b. of the Addendum revised these estimates based upon the intended modifications to the critical habitat designation to remove areas for biological reasons. The Addendum estimated the loss in property value associated with an extreme scenario—that of all unplanned Agricultural land on Maui, Molokai, and the island of Hawaii being redistricted to Conservation—at \$17 million to \$169 million. The loss of development potential on the Agricultural land in proposed Unit 5a (island of Hawaii) is estimated at \$13 million to \$25 million. We did not include this area in this designation (see Exclusions Under Section 4(b)(2)). Please refer to our responses to comment 29a for a detailed discussion of this issue. Additionally, it is important to note that the Land Use Commission considers the "maintenance of other resources relevant to Hawaii's economy, including, but not limited to, agricultural resources" as well as "the preservation or maintenance of important natural systems or habitats" when considering a petition for redistricting.

In addition, the economic analysis did not conclude that designation of critical habitat on Agricultural lands would prevent a rancher from using those lands. Rather, the economic analysis recognized that many areas within the critical habitat designation have been