

protect primary constituent elements for species that do not physically reside in the area but might somehow be transported. If the critical habitat proposal would require reducing water diversions from any stream, the Service should investigate whether that would take anyone's vested water rights. The Service has an obligation to thoroughly investigate this issue and refrain from designating critical habitat until it has determined whether its actions will affect water use. At minimum, portions of specific parcels that include water sources or water systems should be removed.

Our Response: Existing irrigation ditch systems and potable water systems are manmade features that do not contain the primary constituent elements for the plants. Because the Service does not include these manmade features in critical habitat designations, the intended designation will not affect the operation and maintenance of irrigation and potable water systems (DEA, Chapter II, Section 4).

Regarding new stream diversions, Chapter VI, Section 3.j. of the DEA stated that it is highly unlikely that new or expanded ditch systems would be proposed or approved within the proposed designation because it would directly or indirectly reduce stream flow, which is a major environmental concern. But if a stream diversion were to be proposed, critical habitat designation might result in an expanded biological assessment, project delays, project modifications, and an increased probability of denial (DEA, Chapter VI, Section 4.f.). Activities that alter watershed characteristics in ways that would appreciably reduce groundwater recharge or alter natural, dynamic wetland or other vegetative communities may directly or indirectly destroy or adversely modify critical habitat. Such activities may include water diversion or impoundment, excess groundwater pumping, manipulation of vegetation such as timber harvesting, residential and commercial development, and grazing of livestock that degrades watershed values. However, without more specific information on the scope and location of a future (and currently unplanned) stream diversion project, it is not possible to estimate the potential indirect costs.

(62) **Comment:** Any water diversion in, or upstream of, critical habitat will be challenged by people who oppose all diversions on principle. They will contend that diverting water from endangered plants risk driving them to extinction. Opponents of diversions

could use the critical habitat designations to invent a colorable argument sufficient to delay and confuse water use decisions.

Our Response: See the response to the previous comment (61).

(63) **Comment:** The DEA fails to recognize that the indirect costs to private landowners to investigate the implications of critical habitat on their lands are sunk costs associated with the designation process.

Our Response: Chapter VI, Section 4.k. of the DEA indicated that landowners might want to learn how the designation may affect (1) the use of their land (either through restrictions or new obligations), and (2) the value of their land. The cost-estimate to investigate the implications of critical habitat was \$80,000 to \$400,000.

Section 5.g of the addendum revised the estimate to reflect the reduction in the number of potentially affected landowners as a result of the intended modifications to the critical habitat. The revised estimate ranges between \$26,500 and \$227,500. For completeness, the estimate includes expenditures made during the designation process (i.e., sunk costs) and expenditures that will be made after the final designation.

Summary of Changes From the Proposed Rule

Based on a review of public comments received on the proposed determinations of critical habitat, we have reevaluated our proposed designations and included several changes to the final designations of critical habitat. These changes include the following:

(1) We published 303 single species critical habitat units for 99 plant species on the island of Oahu. As proposed, units were identified for multiple species. Delineation of critical habitat for each individual species will assist landowners, Federal agencies, and the Service in focusing and streamlining section 7 consultations.

(2) We changed the scientific names for the following species associated with the listed species found in the "SUPPLEMENTARY INFORMATION: Discussion of the Plant Taxa" section: *Athyrium sandwichianum* changed to *Diplazium sandwichianum* for *Alsinidendron trinerve*, *Cyanea acuminata*, and *Diellia falcata*; *Athyrium arnottii* changed to *Diplazium arnottii* for *Schiedea kaalae*; *Blechnum occidentale* changed to *Blechnum appendiculatum* in the discussions of *Alectryon macrococcus*, *Alsinidendron obovatum*, *Cenchrus agrimonoides*, *Ctenitis squamigera*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea pinnatifida*,

Cyrtandra dentata, *Delissea subcordata*, *Diellia erecta*, *Diellia falcata*, *Diellia unisora*, *Flueggea neowawraea*, *Hedyotis degeneri*, *Lipochaeta tenuifolia*, *Lysimachia filifolia*, *Neraudia angulata*, *Nototrichium humile*, *Phyllostegia hirsuta*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Schiedea kaalae*, and *Schiedea hookeri*; *Bryophyllum* sp. changed to *Kalanchoe* sp. for *Lipochaeta tenuifolia*; *Glycine wightii* changed to *Neonotonia wightii* for *Hibiscus brackenridgei*; *Lipochaeta* sp. changed to *Melanthera* sp. for *Sesbania tomentosa*; *Lipochaeta integrifolia* changed to *Melanthera integrifolia* for *Peucedanum sandwicense*; *Lipochaeta remyi* changed to *Melanthera remyi* in the discussions of *Hibiscus brackenridgei* and *Schiedea kealiae*; *Lipochaeta tenuis* changed to *Melanthera tenuis* in the discussions of *Lipochaeta lobata* var. *leptophylla*, *Nototrichium humile*, and *Schiedea hookeri*; *Lycopodium* sp. changed to *Lycopodium cernua* for *Lobelia oahuensis*; *Lycopodium cernuum* changed to *Lycopodium cernua* for *Platanthera holochila*; *Morinda sandwicensis* changed to *Morinda trimera* for *Flueggea neowawraea*; *Myrica faya* changed to *Morella faya* in the discussions of *Cyanea grimesiana* ssp. *obatae*, *Hedyotis parvula*, *Melicope saint-johnii*, *Schiedea kaalae*, *Silene perlmannii*, *Urera kaalae*, and *Viola chamissoniana* ssp. *chamissoniana*; *Phymatosorus scolopendria* changed to *Phymatosorus grossus* for *Diellia erecta*; *Pluchea symphytifolia* changed to *Pluchea carolinensis* for *Chamaesyce celastroides* var. *kaenana*; *Setaria gracilis* changed to *Setaria parviflora* for *Labordia cyrtandrae*; *Styphelia tameiameia* changed to *Leptecophylla tameiameia* in the discussions of *Bonamia menziesii*, *Cenchrus agrimonioides*, *Eugenia koolauensis*, *Hedyotis coriacea*, *Hedyotis degeneri*, *Lepidium arbuscula*, *Lobelia niihauensis*, *Platanthera holochila*, *Sanicula purpurea*, *Schiedea hookeri*, and *Viola chamissoniana* ssp. *chamissoniana*; *Thelypteris cyatheoides* changed to *Christella cyatheoides* in the discussion of *Cyanea crispa*; *Thelypteris parasitica* changed to *Christella parasitica* in the discussions of *Alectryon macrococcus*, *Cyanea grimesiana* ssp. *obatae*, *Cyanea truncata*, *Cyrtandra dentata*, *Phyllostegia kaalaensis*, *Phyllostegia mollis*, *Phyllostegia parviflora*, *Pteris lidgatei*, *Schiedea kaalae*, *Schiedea hookeri*, and *Urera kaalae*; *Thelypteris sandwicensis* changed to *Dryopteris sandwicensis* in the discussions of *Cyanea acuminata*, *Cyrtandra*