

in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Oahu 1—*Cyperus trachysanthos*—a

This unit is critical habitat for *Cyperus trachysanthos* and is 78 ha (194 ac) on State land, containing a portion of Kaena Point. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyperus trachysanthos* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonally wet sites (mud flats, wet clay soil, seasonal ponds, or wet cliff seeps) on seepy flats, coastal cliffs, or talus slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Niihau for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 28—*Cyperus trachysanthos*—b

This unit is critical habitat for *Cyperus trachysanthos* and is 8 ha (20 ac) on State land, containing a portion of Nonoula Crater. This unit, in combination with unit Oahu 29—*Cyperus trachysanthos*—c, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyperus trachysanthos* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonally wet sites (mud flats, wet clay soil, seasonal ponds, or wet cliff seeps) on seepy flats, coastal cliffs, or talus slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Niihau for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 29—*Cyperus trachysanthos*—c

This unit is critical habitat for *Cyperus trachysanthos* and is 4 ha (10 ac) on State land, containing a portion of Ihelhelauakea Crater. This unit, in combination with unit Oahu 28—

*Cyperus trachysanthos*—b, provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyperus trachysanthos* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonally wet sites (mud flats, wet clay soil, seasonal ponds, or wet cliff seeps) on seepy flats, coastal cliffs, or talus slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Niihau for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 36—*Cyperus trachysanthos*—d

This unit is critical habitat for *Cyperus trachysanthos* and is 5 ha (13 ac) on State land (Diamond Head State Park), containing a portion of Diamond Head. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyperus trachysanthos* and is currently occupied by 40 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, seasonally wet sites (mud flats, wet clay soil, seasonal ponds, or wet cliff seeps) on seepy flats, coastal cliffs, or talus slopes. This unit is geographically separated from critical habitat designated elsewhere on Oahu and on Kauai and Niihau for this species in order to avoid all recovery populations being destroyed by one naturally-occurring catastrophic event.

Oahu 4—*Cyrtandra dentata*—a

This unit is critical habitat for *Cyrtandra dentata* and is 307 ha (758 ac) on State land (Mokuleia Forest Reserve and Pahole NAR). This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra dentata* and is currently occupied by 20 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered

nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, gulches, slopes, stream banks, or ravines in mesic or wet forest. This unit is geographically separated from Army lands at Kawaihoa Training Area that provide habitat for five populations of this species, in order to avoid all populations from being destroyed by one naturally occurring catastrophic event (see “Analysis of Impacts Under Section 4(b)(2): Other Impacts”).

Oahu 35—*Cyrtandra polyantha*—a

This unit is critical habitat for *Cyrtandra polyantha* and is 190 ha (469 ac) on private and State land (Honolulu Watershed Forest Reserve and Kuliouou Forest Reserve), containing a portion of Puu o Kona. This unit provides habitat for 5 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra polyantha* and is currently occupied by 3 individuals. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is necessary for the expansion of the present population, which is currently considered nonviable. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridges in *Metrosideros polymorpha* mesic or wet forests. We do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species.

Oahu 20—*Cyrtandra subumbellata*—a

This unit is critical habitat for *Cyrtandra subumbellata* and is 829 ha (1,457 ac) on private and State land (Hauula Forest Reserve, Sacred Falls State Park, Kaipapau Forest Reserve, Kahana Valley State Park, and Ewa Forest Reserve), containing a portion of Castle Trail, Puu Kaaumakua, and Puu Pauao. This unit provides habitat for 6 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyrtandra subumbellata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary for the establishment of additional populations on Oahu in order to reach recovery goals. The habitat features contained in this unit that are essential for this species include, but are not limited to, moist slopes or gulch bottoms in wet forest dominated by *Metrosideros polymorpha* or a mixture of *Metrosideros polymorpha*-*Dicranopteris linearis*-*Acacia koa*. Although we do not believe that enough