Point, Haloku, Oloupena, Puukaoku, and Wailele Falls. This unit provides habitat for 2 populations of 100 mature, reproducing individuals of the long-lived perennial *Brighamia rockii* and is currently occupied by 60 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, rock crevices on steep basalt sea cliffs, within the spray zone, in coastal dry or mesic forest, *Eragrostis variabilis* mixed coastal cliff communities or shrubland, or *Pritchardia* sp. coastal mesic forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Brighamia rockii*—e

This unit is critical habitat for *Brighamia rockii* and is 83 ha (206 ac) on State land. The unit contains a portion of Kahiwa Falls and Lepau Point. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Brighamia rockii* and is currently occupied by 5 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, rock crevices on steep basalt sea cliffs, within the spray zone, in coastal dry or mesic forest, *Eragrostis variabilis* mixed coastal cliff communities or shrubland, or *Pritchardia* sp. coastal mesic forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Canavalia molokaiensis*—a

This unit is critical habitat for *Canavalia molokaiensis* and is 80 ha (197 ac) on State land (Molokai Forest Reserve). The unit contains a portion of Kapuna Spring and Mokomoko Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Canavalia molokaiensis* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, exposed sites on steep slopes in dry or mesic *Metrosideros polymorpha-Dodonea viscosa* lowland shrubland. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Canavalia molokaiensis*—b

This unit is critical habitat for *Canavalia molokaiensis* and is 76 ha (187 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kahuaawi Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Canavalia molokaiensis* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, exposed sites on steep slopes in dry or mesic *Metrosideros polymorpha-Dodonea viscosa* lowland shrubland. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Canavalia molokaiensis*—c

This unit is critical habitat for *Canavalia molokaiensis* and is 150 ha (371 ac) on State land (Molokai Forest Reserve), containing a portion of Kaunakakai Gulch. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Canavalia molokaiensis* and is currently occupied by an unknown number of plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, exposed sites on steep slopes in dry or mesic *Metrosideros polymorpha-Dodonea viscosa* lowland shrubland. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 3—*Centaurium sebaeoides*—a

This unit is critical habitat for *Centaurium sebaeoides* and is 96 ha (238 ac) on State and Federal lands (Kalaupapa National Historical Park). The unit contains a portion of Kalapapa Peninsula, and Lae Hoolehua and Kaupikiawa Capes. This unit provides habitat for one population of 500 mature, reproducing individuals of the annual *Centaurium sebaeoides* and is currently occupied by several thousand plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, volcanic or clay soils or cliffs in arid coastal areas. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—a

This unit is critical habitat for *Clermontia oblongifolia* ssp. *brevipes* and is 131 ha (325 ac) on State (Puu Alii NAR) and private lands, containing a portion of the eastern ridge of Waikolu Valley. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Clermontia oblongifolia* ssp. *brevipes* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, shallow soil on gulch slopes in wet *Metrosideros polymorpha*-dominated forests. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—b

This unit is critical habitat for *Clermontia oblongifolia* ssp. *brevipes* and is 358 ha (884 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kaholoapele, Kamakou, Pakui, Puu o Wahaula, and Uapa Summits, and Kalapa Konomanu and Kuana Ridges. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Clermontia oblongifolia* ssp. *brevipes* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, shallow soil on gulch slopes in wet *Metrosideros polymorpha*-dominated forests. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*–c

This unit is critical habitat for *Clermontia oblongifolia* ssp. *brevipes* and is 427 ha (1,054 ac) on State and private lands. The unit contains a portion of Honukakau, Kapuki, and Olokui. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Clermontia oblongifolia* ssp. *brevipes* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, shallow soil on gulch slopes in wet *Metrosideros polymorpha*-dominated forests. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Ctenitis squamigera*—a

This unit is critical habitat for *Ctenitis squamigera* and is 58 ha (144 ac) on private land. The unit contains a portion of Kalapamoa Ridge and Kua and Wawaia Gulches. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Ctenitis squamigera* and is currently occupied by 20 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, mesic forests or gulch slopes. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea dunbarii*—a

This unit is critical habitat for *Cyanea dunbarii* and is 328 ha (810 ac) on State (Kalaupapa National Historical Park and Molokai Forest Reserve) and private lands. The unit contains a portion of Waihanau Stream and Waianui Gulch. This unit provides habitat for 7 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea dunbarii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, streambanks in mesic to wet *Dicranopteris linearis-Metrosideros polymorpha* lowland forest on moderate to steep slopes. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea dunbarii*—b

This unit is critical habitat for *Cyanea dunbarii* and is 88 ha (218 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Mokomoko Gulch and Kapuna Spring. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea dunbarii* and is currently occupied by 30 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, streambanks in mesic to wet *Dicranopteris linearis-Metrosideros polymorpha* lowland forest on moderate to steep slopes. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea dunbarii*—c

This unit is critical habitat for *Cyanea dunbarii* and is 23 ha (56 ac) on State (Molokai Forest Reserve) land. The unit contains a portion of Kaulolo Ridge and the Molokai Tunnel near Puu Makaliilii. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea dunbarii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, streambanks in mesic to wet *Dicranopteris linearis-Metrosideros polymorpha* lowland forest on moderate to steep slopes. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea grimesiana* ssp. *grimesiana*—a

This unit is critical habitat for *Cyanea grimesiana* ssp. *grimesiana* and is 2,133 ha (5,272 ac) on State (Molokai Forest Reserve and Olokui NAR) and private lands. The unit contains a portion of Kahiwa Falls, Kolo, Kukuinui, and Pohakaunoho Ridges, Puu Lua and Pakui Summit, Malahini Cave, and Kuapuuiki Spring. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea grimesiana* ssp. *grimesiana* and is currently occupied by 7 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, mesic forest dominated by *Metrosideros polymorpha* or *M. polymorpha* and *Acacia koa,* or cliffs. In

addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea mannii*—a

This unit is critical habitat for *Cyanea mannii* and is 110 ha (272 ac) on State land (Kalaupapa National Historical Park and Molokai Forest Reserve). The unit contains a portion of Waihii Spring and Waianui Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea mannii* and is currently occupied by 20 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, the sides of deep gulches in *Metrosideros polymorpha*-dominated montane mesic forests. This unit is geographically separated from the other four units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea mannii*—b

This unit is critical habitat for *Cyanea mannii* and is 81 ha (199 ac) on State land (Molokai Forest Reserve). The unit contains a portion of Kapuna Spring and Mokomoko Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea mannii* and is currently occupied by 50 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, the sides of deep gulches in *Metrosideros polymorpha*-dominated montane mesic forests. This unit is geographically separated from the other four units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea mannii*—c

This unit is critical habitat for *Cyanea mannii* and is 78 ha (192 ac) on State (Molokai Forest Reserve) and private lands, containing a portion of Kahuaawi Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea mannii* and is currently occupied by 50 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, the sides of deep gulches in *Metrosideros polymorpha*-dominated montane mesic forests. This unit is geographically separated from the other four units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea mannii*—d

This unit is critical habitat for *Cyanea mannii* and is 160 ha (396 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kikiakala Summit and Kaunakakai Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea mannii* and is currently occupied by 50 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, the sides of deep gulches in *Metrosideros polymorpha*-dominated montane mesic forests. This unit is geographically separated from the other four units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea mannii*—e

This unit is critical habitat for *Cyanea mannii* and is 168 ha (416 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kalaoamoa Ridge, and Kua, Malao, and Wawaia Gulches. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Cyanea mannii* and is currently occupied by 40 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, the sides of deep gulches in *Metrosideros polymorpha*-dominated montane mesic forests. This unit is geographically separated from the other four units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea procera*—a

This unit is critical habitat for *Cyanea procera* and is 348 ha (860 ac) on State (Kalaupapa National Historical Park, Molokai Forest Reserve, and Puu Alii NAR) and private lands. The unit contains a portion of Kalahuapueo, Kaulahuki, Kikiakala, and Puu Kaeo Summits. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea procera* and is currently occupied by 2 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, walls of steep gulches in wet *Metrosideros polymorpha*-dominated lowland mixed forests. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Cyanea procera*—b

This unit is critical habitat for *Cyanea procera* and is 373 ha (921 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kalapamoa Ridge and Makalihua Summit. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea procera* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, walls of steep gulches in wet *Metrosideros*

polymorpha-dominated lowland mixed forests. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Diellia erecta*—a

This unit is critical habitat for *Diellia erecta* and is 99 ha (244 ac) on private land (Molokai Forest Reserve), containing a portion of Makolelau Ridge, just below Puu Kolekole. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Diellia erecta* and is currently occupied by an unknown number of plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, mixed mesic forest or mesic *Diospyros sandwicensis* forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Diplazium molokaiense*—a

This unit is critical habitat for *Diplazium molokaiense* and is 368 ha (909 ac) on State (Molokai Forest Reserve and Olokui NAR) and private lands, containing a portion of the western ridge of Wailau Valley. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Diplazium molokaiense* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, steep, rocky, wooded gulch walls in wet forests. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Eugenia koolauensis*—a

This unit is critical habitat for *Eugenia koolauensis* and is 471 ha (1,164 ac) on private land (Molokai Forest Reserve). The unit contains a portion of Naa Puu Kulua and Pohakuloa Summits, and Waiakuilani Gulch. This unit provides habitat for 2 populations of 100 mature, reproducing individuals of the long-lived perennial *Eugenia koolauensis* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, rocky gulches or gentle slopes with deep soil. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Flueggea neowawraea*—a

This unit is critical habitat for *Flueggea neowawraea* and is 61 ha (151 ac) on State land (Molokai Forest Reserve). The unit contains a portion of Waihii Spring and Waianui and Mokomoko Gulches. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Flueggea neowawraea* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, gulches in mesic forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Hesperomannia arborescens*—a

This unit is critical habitat for *Hesperomannia arborescens* and is 160 ha (397 ac) on State (Molokai Forest Reserve and Olokui NAR) and private lands. The unit contains a portion of Puukaoku and Wailele Falls. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hesperomannia arborescens* and is currently occupied by 3 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, slopes or ridges in wet *Metrosideros polymorpha-Dicranopteris linearis* lowland forest or mesic *Diospyros sandwicensis-Metrosideros polymorpha* lowland forest transition zones. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Hesperomannia arborescens*—b

This unit is critical habitat for *Hesperomannia arborescens* and is 175 ha (432 ac) on State (Molokai Forest Reserve) and private lands, containing a portion of Kukuinui Ridge. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hesperomannia arborescens* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, slopes or ridges in wet *Metrosideros polymorpha-Dicranopteris linearis* lowland forest or mesic *Diospyros sandwicensis-Metrosideros polymorpha* lowland forest transition zones. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 4—*Hibiscus arnottianus* ssp. *immaculatus*—a

This unit is critical habitat for *Hibiscus arnottianus* ssp. *immaculatus* and is 56 ha (139 ac) on State land (Kalaupapa National Historical Park), containing a portion of Puu Kauwa Summit. This unit, in combination with unit 6—*Hibiscus arnottianus* ssp. *immaculatus*—b, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus arnottianus* ssp. *immaculatus* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, steep sea cliffs in mesic forests. This unit, together with unit 6—*Hibiscus arnottianus* ssp. *immaculatus*—b, is

geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—b

This unit is critical habitat for *Hibiscus arnottianus* ssp. *immaculatus* and is 108 ha (268 ac) on State land (Kalaupapa National Historical Park and Puu Alii NAR). The unit contains a portion of the eastern ridge at the mouth of Waikolu Valley and the coast from Alapai to Wainene. This unit, in combination with unit 4—*Hibiscus arnottianus* ssp. *immaculatus*—a, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus arnottianus* ssp. *immaculatus* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, steep sea cliffs in mesic forests. This unit, together with unit 4—*Hibiscus arnottianus* ssp. *immaculatus*—a, is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—c

This unit is critical habitat for *Hibiscus arnottianus* ssp. *immaculatus* and is 218 ha (538 ac) on State (Molokai Forest Reserve and Olokui NAR) and private lands. The unit contains a portion of Haloku, Oloupena, and Puukaoku, and Wailele Falls, and Olokui and Pohakuulaula Summits. This unit provides habitat for 2 populations of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus arnottianus* ssp. *immaculatus* and is currently occupied by 15 to 20 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, steep sea cliffs in mesic forests. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Hibiscus arnottianus* ssp. *immaculatus*—d

This unit is critical habitat for *Hibiscus arnottianus* ssp. *immaculatus* and is 276 ha (681 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kahiwa Falls and Kukuinui Ridge. This unit provides habitat for 3 populations of 100 mature, reproducing individuals of the long-lived perennial *Hibiscus arnottianus* ssp. *immaculatus* and is currently occupied by 6 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, steep sea cliffs in mesic forests. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 9—*Hibiscus brackenridgei*—a

This unit is critical habitat for *Hibiscus brackenridgei* and is 101 ha (249 ac) on State land, containing a portion of Kamiloloa, just above Makakiloia. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Hibiscus brackenridgei* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, slopes in lowland dry forest and shrubland. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Ischaemum byrone*—a

This unit is critical habitat for *Ischaemum byrone* and is 30 ha (75 ac) on State (Olokui NAR) and private lands. The unit contains a portion of Puukaoku Point and Wailele Falls. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Ischaemum byrone* and is currently occupied by 100 to 1,000 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, coastal dry shrubland or *Artemisia* cliff communities near the ocean, among rocks or on basalt cliffs or talus slopes. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Ischaemum byrone*—b

This unit is critical habitat for *Ischaemum byrone* and is 29 ha (72 ac) on private land. The unit contains a portion of Kahiwa and Waiahookalo Gulches, Kikipua, Lepau, and Milo Points, and Waiokala Cape. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Ischaemum byrone* and is currently occupied by an unknown number of plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, coastal dry shrubland or *Artemisia* cliff communities near the ocean, among rocks or on basalt cliffs or talus slopes. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 9—*Isodendrion pyrifolium*—a

This unit is critical habitat for *Isodendrion pyrifolium* and is 107 ha (264 ac) on State land, containing a portion of Kamiloloa, just above Makakiloia. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Isodendrion pyrifolium* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, dry shrublands. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Labordia triflora*—a

This unit is critical habitat for *Labordia triflora* and is 2 ha (5 ac) on State land (Molokai Forest Reserve), containing a portion of Kupaia Gulch. This unit, in combination with unit 6—*Labordia triflora*—b, unit 6—*Labordia triflora*—c, and lands within TNCH's Pelekunu Preserve, provides habitat for 4 populations of 100 mature, reproducing individuals of the long-lived perennial *Labordia triflora* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, gulch slopes in mixed mesic *Metrosideros polymorpha* forest. This unit, together with units 6—*Labordia triflora*—b and 6—*Labordia triflora*—c, is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Labordia triflora*—b

This unit is critical habitat for *Labordia triflora* and is 2 ha (6 ac) on private land (Molokai Forest Reserve), containing a portion of the west side of the west fork of Kaweia Gulch. This unit, in combination with unit 6—*Labordia triflora*—a, unit 6—*Labordia triflora*—c, and lands within TNCH's Pelekunu Preserve, provides habitat for 4 populations of 100 mature, reproducing individuals of the long-lived perennial *Labordia triflora* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, gulch slopes in mixed mesic *Metrosideros polymorpha* forest. This unit, together with units 6—*Labordia triflora*—a and 6—*Labordia triflora*—c, is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Labordia triflora*—c

This unit is critical habitat for *Labordia triflora* and is 13 ha (32 ac) on private land (Molokai Forest Reserve), containing a portion of the east side of the east fork of Kaweia Gulch, near Puu Kolekole. This unit, in combination with unit 6—*Labordia triflora*—a, unit 6—*Labordia triflora*—b, and lands within TNCH's Pelekunu Preserve, provide habitat for 4 populations of 100 mature, reproducing individuals of the long-lived perennial *Labordia triflora* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, gulch slopes in mixed mesic *Metrosideros polymorpha* forest. This unit, together with units 6—*Labordia triflora*—a and 6—*Labordia triflora*—b, is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Labordia triflora*—d

This unit is critical habitat for *Labordia triflora* and is 523 ha (1,292 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kaluaaha, Makalihua, and Maunaoluolu Summits, Lae o Kapuna Ridge, and Pelekunu Gulch. This unit provides habitat for 4 populations of 100 mature, reproducing individuals of the long-lived perennial *Labordia triflora* and is currently occupied by 10 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, gulch slopes in mixed mesic *Metrosideros polymorpha* forest. This unit is geographically separated from the other three units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Lysimachia maxima*—a

This unit is critical habitat for *Lysimachia maxima* and is 408 ha (1,009 ac) on State land (Kalaupapa National Historical Park, Molokai Forest Reserve, and Puu Alii NAR). The unit contains a portion of Kalahuapueo, Ohialele, and Puu Kaeo Summits. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Lysimachia maxima* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Lysimachia maxima*—b

This unit is critical habitat for *Lysimachia maxima* and is 441 ha (1,090 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kalapa, Konomanu, and Kalapamoa Ridges, and Lehuulua and Puu Haha Summits. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Lysimachia maxima* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Lysimachia maxima*—c

This unit is critical habitat for *Lysimachia maxima* and is 414 ha (1,023 ac) on State (Molokai Forest Reserve and Olokui NAR) and private lands, containing a portion of Kolo Ridge. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Lysimachia maxima* and is currently

unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, *Metrosideros polymorpha-Dicranopteris linearis* montane wet forest. This unit is geographically separated from the other two units designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Mariscus fauriei*—a

This unit is critical habitat for *Mariscus fauriei* and is 9 ha (22 ac) on State land (Molokai Forest Reserve), containing a portion of Kaunakakai Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Mariscus fauriei* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, *Diospyros sandwicensis*-dominated lowland dry forest, which is unique to Molokai for this species. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Mariscus fauriei*—b

This unit is critical habitat for *Mariscus fauriei* and is 307 ha (758 ac) on State (Molokai Forest Reserve) and private lands, containing a portion of Ooa Summit. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Mariscus fauriei* and is currently occupied by 20 to 30 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, *Diospyros sandwicensis*-dominated lowland dry forest, which is unique to Molokai for this species. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Melicope mucronulata*—a

This unit is critical habitat for *Melicope mucronulata* and is 84 ha (206 ac) on State land (Molokai Forest Reserve). The unit contains a portion of Waihii Spring and Waianui Gulch. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Melicope mucronulata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, steep, west- or north-facing slopes in mesic *Diospyros sandwicensis-Metrosideros polymorpha* forest, *M. polymorpha-Dodonaea viscosa* shrubland, or *M. polymorpha-Styphelia tameiameiae* shrubland. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Melicope mucronulata*—b

This unit is critical habitat for *Melicope mucronulata* and is 84 ha (208 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kapuna Spring and Mokomoko Gulch. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Melicope mucronulata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, steep, west- or north-facing slopes in mesic *Diospyros sandwicensis-Metrosideros polymorpha* forest, *M. polymorpha-Dodonaea viscosa* shrubland, or *M. polymorpha-Styphelia tameiameiae* shrubland. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Melicope mucronulata*—c

This unit is critical habitat for *Melicope mucronulata* and is 72 ha (177 ac) on private land (Molokai Forest Reserve), containing a portion of Kuhuaawi Gulch. This unit, in combination with unit 6—*Melicope mucronulata*—d, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Melicope mucronulata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, steep, west- or north-facing slopes in mesic *Diospyros sandwicensis-Metrosideros polymorpha* forest, *M. polymorpha-Dodonaea viscosa* shrubland, or *M. polymorpha-Styphelia tameiameiae* shrubland. This unit, together with the other unit, provides for one population within this multi-island species' historical range on Molokai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Melicope mucronulata*—d

This unit is critical habitat for *Melicope mucronulata* and is 127 ha (314 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kaunakakai and Kapaakea Gulches. This unit in combination, with unit 6—*Melicope mucronulata*—c, provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Melicope mucronulata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, steep, west- or north-facing slopes in mesic *Diospyros sandwicensis-Metrosideros polymorpha* forest, *M. polymorpha-Dodonaea viscosa* shrubland, or *M. polymorpha-Styphelia tameiameiae* shrubland. This unit, together with the other unit, provides for one population within this multi-island species' historical range on Molokai that is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Melicope mucronulata*—e

This unit is critical habitat for *Melicope mucronulata* and is 89 ha (221 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Pelekunu, Ohia, Manawai, and Kahananui Gulches. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Melicope mucronulata* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, steep, west- or north-facing slopes in mesic *Diospyros sandwicensis-Metrosideros polymorpha* forest, *M. polymorpha-Dodonaea viscosa* shrubland, or *M. polymorpha-Styphelia tameiameiae* shrubland. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Melicope reflexa*—a

This unit is critical habitat for *Melicope reflexa* and is 484 ha (1,195 ac) on State (Molokai Forest Reserve and Olokui NAR) and private lands. The unit contains a portion of Kapapa Pali, Olokui and Pohakuulaula Summits. This unit provides habitat for 2 populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope reflexa* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, wet *Metrosideros polymorpha*-dominated forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Melicope reflexa*—b

This unit is critical habitat for *Melicope reflexa* and is 2,226 ha (5,500 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kahiwa and Papalaua Falls, Kaholoapele, Kamakou, Kaunupahu, Kawaiuliuli, Keahiakalio, Naehu, Pakui, Pohakuloa, Puu Lua, Puu o Wahaula, Puu Ohelo, Puuau, Uapa, and Waiopipi Summits, and Kapea Stream. This unit provides habitat for 6 populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope reflexa* and is currently occupied by an unknown number of plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, wet *Metrosideros polymorpha*-dominated forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Neraudia sericea*—a

This unit is critical habitat for *Neraudia sericea* and is 116 ha (286 ac) on private land (Molokai Forest Reserve), located just below Puu Kolekole. This unit provides habitat for 6 populations of 300 mature, reproducing individuals of the short-lived perennial *Neraudia sericea* and is currently occupied by 50 to 100 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, gulch slopes and bottoms in lowland dry to mesic *Metrosideros polymorpha-Dodonaea viscosa-Styphelia tameiameiae* shrubland or forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 5—*Peucedanum sandwicense*—a

This unit is critical habitat for *Peucedanum sandwicense* and is 4 ha (10 ac) on State land (Mokapu Bird Sanctuary). This unit is Mokapu Island. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Peucedanum sandwicense* and is currently occupied by an unknown number of plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, cliff habitats in brown soil and talus in *Chamaesyce celastroides* var. *amplectans-Chenopodium oahuense* coastal dry shrubland or *Diospyros sandwicensis* forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Peucedanum sandwicense*—b

This unit is critical habitat for *Peucedanum sandwicense* and is 61 ha (151 ac) on State land (Kalaupapa National Historical Park). The unit contains a portion of Alapai Beach and Leinaopapio Point. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Peucedanum sandwicense* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, cliff habitats in brown soil and talus in *Chamaesyce celastroides* var. *amplectans-Chenopodium oahuense* coastal dry shrubland or *Diospyros sandwicensis* forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Peucedanum sandwicense*—c

This unit is critical habitat for *Peucedanum sandwicense* and is 84 ha (208 ac) on private land. The unit contains a portion of Kahiwa Falls, Lepau Point, Waiokala Cape, and Waiahookalo Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Peucedanum sandwicense* and is currently occupied by 7 to 8 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, cliff habitats in brown soil and talus in *Chamaesyce celastroides* var. *amplectans-Chenopodium oahuense* coastal dry shrubland or *Diospyros sandwicensis* forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Phyllostegia mannii*—a

This unit is critical habitat for *Phyllostegia mannii* and is 480 ha (1,185 ac) on State land (Kalaupapa National Historical Park and Puu Alii NAR), containing a portion of Ohialele Summit. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia mannii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, shaded sites in foggy and windswept, wet, open *Metrosideros polymorpha*-dominated montane forest, unique to Molokai for this species. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Phyllostegia mannii*—b

This unit is critical habitat for *Phyllostegia mannii* and is 496 ha (1,226 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kaholoapele, Kamakou, Pakui, Puu o Wahaula, and Uapa Summits, and Kalapa Konomanu and Kuana Ridges. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia mannii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, shaded sites in foggy and windswept, wet, open *Metrosideros polymorpha*-dominated montane forest, unique to Molokai for this species. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Phyllostegia mannii*—c

This unit is critical habitat for *Phyllostegia mannii* and is 452 ha (1,117 ac) on State (Molokai Forest Reserve, Olokui NAR) and private lands. The unit contains a portion of Kapapa Pali, and Olokui and Pohakuulaula Summits. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia mannii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, shaded sites in foggy and windswept, wet, open *Metrosideros polymorpha*-dominated montane forest, unique to Molokai for this species. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Plantago princeps*—a

This unit is critical habitat for *Plantago princeps* and is 52 ha (129 ac) on private land (Molokai Forest Reserve). The unit contains a portion of Kakakawawai and Puu Kolekole Summits. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Plantago princeps* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, streambanks in *Metrosideros polymorpha* lowland mesic forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Pteris lidgatei*—a

This unit is critical habitat for *Pteris lidgatei* and is 1,227 ha (3,031 ac) on State (Molokai Forest Reserve and Olokui NAR) and private lands. The unit contains a portion of Kolo and Pohakaunoho Ridges. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Pteris lidgatei* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, steep streambanks in wet forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Schiedea lydgatei*—a

This unit is critical habitat for *Schiedea lydgatei* and is 261 ha (645 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Onini and Kawela Gulch. This unit provides habitat for 6 populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea lydgatei* and is currently occupied by over 300 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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 dry to mesic grassland, shrubland, or forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Schiedea lydgatei*—b

This unit is critical habitat for *Schiedea lydgatei* and is 163 ha (403 ac) on private land (Molokai Forest Reserve). The unit contains a portion of Kapuaokoolau and Waiakuilani Gulches. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea lydgatei* and is currently occupied by thousands of plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridges in dry to mesic grassland, shrubland, or forest. This unit is geographically separated from the other unit designated

as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Schiedea nuttallii*—a

This unit is critical habitat for *Schiedea nuttallii* and is 138 ha (340 ac) on State land (Puu Alii NAR), containing a portion of the eastern ridge of Waikolu Valley. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Schiedea nuttallii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, streamside grottos in wet *Metrosideros polymorpha-Cheirodendron trigynum* forest, unique to Molokai for this species. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Schiedea nuttallii*—b

This unit is critical habitat for *Schiedea nuttallii* and is 127 ha (313 ac) on private land, containing a portion of Lehuula Summit. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial Schiedea nuttallii and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, streamside grottos in wet *Metrosideros polymorpha-Cheirodendron trigynum* forest, unique to Molokai for this species. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Schiedea sarmentosa*—a

This unit is critical habitat for *Schiedea sarmentosa* and is 608 ha (1,502 ac) on State (Molokai Forest Reserve) and private lands, containing a portion of Kupaia Gulch. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea sarmentosa* and is currently occupied by an unknown number of plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, slopes in *Metrosideros polymorpha-Dodonaea viscosa* lowland dry or mesic shrubland or dry to mesic forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—Schiedea *sarmentosa*—b

This unit is critical habitat for *Schiedea sarmentosa* and is 266 ha (657 ac) on private land (Molokai Forest Reserve), containing a portion of Na Puu Kula Summit. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea sarmentosa* and is currently occupied by over 1,100 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, slopes in *Metrosideros polymorpha-Dodonaea viscosa* lowland dry or mesic shrubland or dry to mesic forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 2—*Sesbania tomentosa*—a

This unit is critical habitat for *Sesbania tomentosa* and is 58 ha (143 ac) on State and private lands. The unit contains a portion of Anahaki Gulch, and Hinanaulua, Kahinaakalani, and Naaukahihi Capes. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Sesbania tomentosa* and is currently occupied by 114 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, *Scaevola sericea* coastal dry shrubland on windswept slopes, sea cliffs and weathered basaltic slopes, unique to Molokai for this species. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 9—*Sesbania tomentosa*—b

This unit is critical habitat for *Sesbania tomentosa* and is 88 ha (217 ac) on State land, containing a portion of Kamiloloa, just above Makakiloia. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Sesbania tomentosa* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, *Scaevola sericea* coastal dry shrubland on windswept slopes, sea cliffs and weathered basaltic slopes, unique to Molokai for this species. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Silene alexandri*—a

This unit is critical habitat for *Silene alexandri* and is 608 ha (1,502 ac) on State (Molokai Forest Reserve) and private lands, containing a portion of Kupaia Gulch. This unit provides habitat for 4 populations of 300 mature, reproducing individuals of the short-lived perennial *Silene alexandri* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, moderate to steep slopes or cliffs in dry forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Silene alexandri*—b

This unit is critical habitat for *Silene alexandri* and is 266 ha (657 ac) on private land (Molokai Forest Reserve), containing a portion of Na Puu Kulua Summit. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Silene alexandri* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, moderate to steep slopes or cliffs in dry forest. This unit is geographically separated from the other unit designated as critical habitat for this island-endemic species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Silene lanceolata*—a

This unit is critical habitat for *Silene lanceolata* and is 289 ha (714 ac) on private land (Molokai Forest Reserve). The unit contains a portion of Pohakuloa Summit, and Kapuakoolau and Waiakuilani Gulches. This unit provides habitat for 2 populations of 300 mature, reproducing individuals of the short-lived perennial *Silene lanceolata* and is currently occupied by 100 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, gulch slopes, ridge tops, and cliffs in dry to mesic shrubland, unique to Molokai for this species. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Spermolepis hawaiiensis*—a

This unit is critical habitat for *Spermolepis hawaiiensis* and is 85 ha (211 ac) on private land (Molokai Forest Reserve). The unit contains a portion of Kapuakoolau and Waiakuilani Gulches. This unit provides habitat for one population of 500 mature, reproducing individuals of the annual *Spermolepis hawaiiensis* and is currently occupied by 600 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, ridge crests and gulch slopes in dry to mesic shrubland. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Stenogyne bifida*—a

This unit is critical habitat for *Stenogyne bifida* and is 585 ha (1,445 ac) on State (Molokai Forest Reserve) and private lands. The unit contains a portion of Kakakawawai, Lehuula, Puu Haha, and Puu Kolekole Summits, and Kalapa Konomanu and Kalapamoa Ridges. This unit provides habitat for 3 populations of 300 mature, reproducing individuals of the short-lived perennial *Stenogyne bifida* and is currently occupied by one plant. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, gulch slopes in *Metrosideros polymorpha*-dominated montane mesic to wet forest. This unit is of appropriate size so that each potential recovery population of this island-endemic species is geographically separated enough to avoid their destruction by one naturally occurring catastrophic event.

Molokai 1—*Tetramolopium rockii*—a

This unit is critical habitat for *Tetramolopium rockii* and is 68 ha (167 ac) on private land. The unit contains a portion of Manalo Gulch and the area between the two radio towers to the west of Manalo Gulch. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium rockii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, hardened calcareous sand dunes or ash-covered basalt in the coastal spray zone or coastal dry shrubland and grassland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 2—*Tetramolopium rockii*—b

This unit is critical habitat for *Tetramolopium rockii* and is 112 ha (278 ac) on State and private lands. The unit contains a portion of Anahaki Gulch and Kahinaakalani and Naaukahihi Capes. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium rockii* based on the recovery criteria listed in the recovery plan and is currently occupied by 40,000 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, hardened calcareous sand dunes or ash-covered basalt in the coastal spray zone or coastal dry shrubland and grassland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 3—*Tetramolopium rockii*—c

This unit is critical habitat for *Tetramolopium rockii* and is 105 ha (260 ac) on State and Federal lands (Kalaupapa National Historical Park). The unit contains a portion of Lae Hoolehua, Kaupikiawa, Makalii, and Mokio Capes. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium rockii* based on the recovery criteria listed in the recovery plan and is currently occupied by 50,000 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential for the expansion of the present population. The habitat features contained in this unit that are essential for this species include, but are not limited to, hardened calcareous sand dunes or ash-covered basalt in the coastal spray zone or coastal dry shrubland and grassland.

Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 5—*Tetramolopium rockii*—d

This unit is critical habitat for *Tetramolopium rockii* and is 4 ha (10 ac) on State lands (Mokapu Bird Sanctuary). The unit is Mokapu Island. This unit provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium rockii* and is currently unoccupied. This unit is essential to the conservation of the species because it supports habitat that is necessary to the establishment of additional populations on Molokai 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, hardened calcareous sand dunes or ash-covered basalt in the coastal spray zone or coastal dry shrubland and grassland. Although we do not believe that enough habitat currently exists to reach the recovery goal of 8 to 10 populations for this species, this unit is geographically separated from the other three units designated as critical habitat for this island-endemic species to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Molokai 6—*Zanthoxylum hawaiiense*—a

This unit is critical habitat for *Zanthoxylum hawaiiense* and is 259 ha (640 ac) on private land (Molokai Forest Reserve). The unit contains a portion of Kapuakoolau and Waiakuilani Gulches. This unit provides habitat for one population of 100 mature, reproducing individuals of the long-lived perennial *Zanthoxylum hawaiiense* and is currently occupied by 3 plants. This unit is essential to the conservation of the species because it supports an extant colony of this species and includes habitat that is essential 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, gulch slopes in mesic *Metrosideros polymorpha* or *Diospyros sandwicensis* forest. In addition, it is some distance away from the other critical habitat for this species, in order to avoid all recovery populations from being destroyed by one naturally occurring catastrophic event.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Destruction or adverse modification of critical habitat occurs when a Federal action directly or indirectly alters critical habitat to the extent that it appreciably diminishes the value of critical habitat for the conservation of the species. Individuals, organizations, States, local governments, and other non-Federal entities are directly affected by the designation of critical habitat only if their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding.

Section 7(a) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened, and with respect to its critical habitat, if any is designated or proposed. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies (action agency) to confer with us on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in the destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the action agency in eliminating conflicts that may be caused by the proposed action. The conservation measures in a conference report are advisory.

We may issue a formal conference report, if requested by the Federal action agency. Formal conference reports include an opinion that is prepared according to 50 CFR 402.14, as if the species were listed or critical habitat designated. We may adopt the formal conference report as the biological opinion when the species is listed or critical habitat designated, if no substantial new information or changes in the action alter the content of the opinion (*see* 50 CFR 402.10(d)).

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of that species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal action agency must enter into consultation with us. Through this consultation, the action agency would ensure that the permitted actions do not destroy or adversely modify critical habitat.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions under certain circumstances, including instances when critical habitat is subsequently designated and the Federal agency has retained discretionary involvement, or control over the action has been retained or is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation or conferencing with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat or adversely modify or destroy proposed critical habitat.

If we issue a biological opinion concluding that a project is likely to result in the destruction or adverse modification of critical habitat, we also provide ''reasonable and prudent alternatives'' to the project, if any are identifiable. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that we believe would avoid the likelihood of resulting in the destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Activities on Federal lands that may affect critical habitat of *Adenophorus periens, Alectryon macrococcus, Bidens wiebkei, Brighamia rockii, Canavalia molokaiensis, Centaurium sebaeoides, Clermontia oblongifolia* ssp. *brevipes, Ctenitis squamigera, Cyanea dunbarii, Cyanea grimesiana* ssp. *grimesiana, Cyanea mannii, Cyanea procera, Diellia erecta, Diplazium molokaiense, Eugenia koolauensis, Flueggea neowawraea, Hesperomannia arborescens, Hibiscus arnottianus* ssp. *immaculatus, Hibiscus brackenridgei, Ischaemum byrone, Isodendrion pyrifolium, Labordia triflora, Lysimachia maxima, Mariscus fauriei, Melicope mucronulata, Melicope reflexa, Neraudia sericea,*

Peucedanum sandwicense, Phyllostegia mannii, Plantago princeps, Pteris lidgatei, Schiedea lydgatei, Schiedea nuttallii, Schiedea sarmentosa, Sesbania tomentosa, Silene alexandri, Silene lanceolata, Spermolepis hawaiiensis, Stenogyne bifida, Tetramolopium rockii, and *Zanthoxylum hawaiiense* will require section 7 consultation. Activities on private or State lands requiring a permit from a Federal agency (such as a permit from the U.S. Army Corps of Engineers (Corps) under section 404 of the Clean Water Act (33 U.S.C. 1344 *et seq.*)), the Department of Housing and Urban Development, or a section 10(a)(1)(B) permit from us; or some other Federal action, including funding (*e.g.*, from the Federal Highway Administration, Federal Aviation Administration (FAA), Federal Emergency Management Agency (FEMA), Environmental Protection Agency (EPA), or Department of Energy), regulation of airport improvement activities by the FAA, and construction of communication sites licensed by the Federal Communications Commission (FCC), will also continue to be subject to the section 7 consultation process. Federal actions not affecting critical habitat and actions on non-Federal lands that are not federally funded, authorized, or permitted do not require section 7 consultation.

Section 4(b)(8) of the Act requires us to briefly describe and evaluate in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may adversely modify that habitat or that may be affected by that designation. We note that such activities may also jeopardize the continued existence of the species.

Activities that, when carried out, funded, or authorized by a Federal agency, may directly or indirectly destroy or adversely modify critical habitat include, but are not limited to:

(1) Activities that appreciably degrade or destroy the primary constituent elements including, but not limited to: Overgrazing; maintenance of feral ungulates; clearing or cutting of native live trees and shrubs, whether by burning or mechanical, chemical, or other means (*e.g.*, woodcutting, bulldozing, construction, road building, mining, herbicide application); introducing or enabling the spread of non-native species; and taking actions that pose a risk of fire;

(2) Activities that alter watershed characteristics in ways that would appreciably reduce groundwater recharge or alter natural, dynamic wetland or other vegetative communities. 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;

(3) Rural residential construction that includes concrete pads for foundations and the installation of septic systems in wetlands where a permit under section 404 of the Clean Water Act would be required by the Corps;

(4) Recreational activities that appreciably degrade vegetation;

(5) Mining of sand or other minerals;

(6) Introducing or encouraging the spread of non-native plant species into critical habitat units; and

(7) Importation of non-native species for research, agriculture, and aquaculture, and the release of biological control agents that would have unanticipated effects on the listed species and the primary constituent elements of their habitat.

If you have questions regarding whether specific activities will likely constitute adverse modification of critical habitat, contact the Field Supervisor, Pacific Islands Ecological Services Field Office (*see* **ADDRESSES** section). Requests for copies of the regulations on listed plants and animals, and inquiries about prohibitions and permits may be addressed to the U.S. Fish and Wildlife Service, Branch of Endangered Species/Permits, 911 N.E. 11th Ave., Portland, OR 97232–4181 (telephone 503/231–2063; facsimile 503/231–6243).

Analysis of Impacts Under Section 4(b)(2)

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific information available, and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species concerned.

Economic Impacts

Following the publication of the revised proposed critical habitat designation on April 5, 2002, a draft economic analysis was prepared to estimate the potential economic impact of the proposed designation in accordance with the *N.M. Cattlegrowers Ass'n* v. *U.S. Fish and Wildlife Serv.,* 248 F.3d 1277 (10th Cir. 2001). The draft analysis was made available for review on August 12, 2002 (67 FR 52419). We accepted comments on the draft analysis until September 30, 2002.

Our draft economic analysis evaluated the potential direct and indirect economic impacts associated with the proposed critical habitat designation for the 46 Molokai plant species over the next ten years. Direct impacts are those related to consultations under section 7 of the Act. They include the cost of completing the section 7 consultation process and potential project modifications resulting from the consultation. Indirect impacts are secondary costs and benefits not directly related to the Act. Examples of indirect impacts include potential effects to property values, potential effects of redistricting of land from agricultural or urban to conservation, and social welfare benefits of ecological improvements.

The categories of potential direct and indirect costs considered in the analysis included the costs associated with: (1) Conducting section 7 consultations associated with the listing or with the critical habitat, including incremental consultations and technical assistance; (2) modifications to projects, activities, or land uses resulting from the section 7 consultations; (3) uncertainty and public perceptions resulting from the designation of critical habitat including potential indirect costs resulting from the loss of hunting opportunities and the interaction of State and local laws; and (4) potential offsetting beneficial costs associated with critical habitat, including educational benefits. The most likely economic effects of critical habitat designation are on activities funded, authorized, or carried out by a Federal agency (*i.e.*, direct costs).

The draft economic analysis included an evaluation of the economic impacts associated implementation of the section 7 provisions of the Act for the 46 Molokai plant species. To quantify the proportion of total potential economic impacts attributable to section 7 implementation, including both the section 7 listing provisions and the proposed critical habitat designation, the analysis evaluated a ''without section 7'' baseline and compared it to a ''with section 7'' scenario. The ''without section 7'' baseline represented the current and expected economic activity under all modifications except those associated with section 7, including protections afforded the species under Federal and State laws. The difference between the two scenarios measured the net change in economic activity attributable to the

implementation of section 7 for the 46 Molokai plant species.

Following the close of the comment period on the draft economic analysis, an addendum was completed that incorporated public comments on the draft analysis and made other changes in the draft as necessary. These changes were primarily the result of modifications made to the proposed critical habitat designation based on biological information received during the comment period. In addition, we have examined the economic effects of including the areas identified in the proposed rule as areas not meeting the definition of critical habitat because they were not in need of special management under section 3(5)(a) of the Act.

Together, the draft economic analysis, the addendum and the addendum amendment constitute our final economic analysis. The final economic analysis estimates that, over the next 10 years, the designation co-extensive with the listing may result in potential direct economic costs of between $54,470 and $269,150, and concludes that economic impacts from the designation of critical habitat would not be significant. The reduction of up to $536,600 from the costs estimated in the draft economic analysis is due to the exclusion of proposed unit Molokai E2 from final designation and the significant reduction in size of proposed units Molokai A1, A2, B1, C, D, F, and G (designation of 9,843 ha (24,323 ac) versus 17,614 ha (43,532 ac) as proposed critical habitat, a reduction of approximately 7,771 ha (19,209 ac)).

While our final economic analysis includes an evaluation of potential indirect costs associated with the designation of critical habitat for 46 plant species on Molokai, the reported costs are highly speculative and, in general, thought to have a low probability of occurrence. In addition, the final economic analysis discusses economic benefits in qualitative terms rather than providing quantitative estimates because of the lack of information available to estimate the economic benefits of endangered species preservation and ecosystem improvements.

A more detailed discussion of our economic analysis is contained in the draft economic analysis and the addendum. Both documents are included in our administrative record and are available for inspection at the Pacific Islands Fish and Wildlife Office (*see* **ADDRESSES** section).

No critical habitat units in the proposed rule were excluded or modified due to economic impacts because the expected cost of the designation is not significant. The likely direct cost impact of designating critical habitat on Molokai for the 46 plant species is estimated to be between $5,447 and $27,000 per year over the next ten years.

Other Impacts

Pursuant to section 4(b)(2) of the Act, the Service has decided to exclude approximately 3,731 ha (9,218 ac) within three areas managed by TNCH from final critical habitat designation because the benefits provided by such an exclusion outweigh the benefits provided by a designation of critical habitat.

In the proposed rule (April 4, 2002, 67 FR 16557), the Service solicited comments from the public as to whether certain areas on Molokai should be excluded from final critical habitat, and what methodology we might use to determine if the benefits of such exclusions outweigh the benefits of including such areas as critical habitat. The rationale for our final decision is described below.

Section 4(b)(2) of the Act requires us to consider other relevant impacts, in addition to economic impacts, of designating critical habitat. In the revised proposed determinations of prudency and proposed designations of critical habitat for plant species from the island of Molokai, Hawaii (April 5, 2002; 67 FR 16492), we indicated that we believed that lands managed by TNCH provided adequate special management or protection for 19 of these species, and if any management plans were submitted during the open comment period we would consider whether such plans provide such protections. This was based the definition of critical habitat (section 3(5)), which specifies critical habitat as areas within the geographical area occupied by the species on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection. In order to give meaning to this last clause, we considered that if an area was already adequately managed then there would be no requirement for special management considerations or protection. We believed that adequate special management or protection would be provided by a legally operative plan that addresses the maintenance and improvement of essential habitat elements and that provides for the long-term conservation of the species. The three criteria identified in the proposed rule for determining if a plan provides adequate special management or protection are as follows: (1) A current plan or agreement must be complete and provide sufficient conservation benefit to the species; (2) the plan or agreement must provide assurances that the conservation management strategies will be implemented; and (3) the plan or agreement must provide assurances that the conservation management strategies will be effective (*i.e.*, provide for periodic monitoring and revisions as necessary).

We proposed to not include the TNCH lands pursuant to this interpretation of the definition of critical habitat. However, in a recent opinion (*Center for Biological Diversity* v. *Norton,* Civ. No. 01–409 TUC DCB D. Ariz. Jan. 13, 2003), a Federal district court determined that our definition of critical habitat, as it applies to special management, is not correct. The court stated that ''whether habitat does or does not require special management by defendant or FWS is not determinative on whether or not the habitat is 'critical' to a threatened or endangered species (pages 13–14 of the court's decision).'' We continue to believe that our interpretation was reasonable. However, we nevertheless have not declined to include areas from this final designation because they are adequately managed.

It is important to note that this Court ruling also concluded that, under section 4(b)(2) of the Act, ''It is certainly reasonable to consider a positive working relationship relevant, particularly when that relationship results in the implementation of beneficial natural resource programs, including species preservation.

We have come to a similar conclusion in relation to certain non-Federal lands on Molokai. As explained below, we believe that the exclusion of TNCH lands from critical habitat will help improve and maintain our relationship with TNCH, and it will also provide incentives to other landowners on Molokai to consider implementing similar voluntary conservation activities on their lands. The Service believes such an outcome will provide greater conservation benefits to these listed species than would a critical habitat designation on these TNCH lands.

The Nature Conservancy of Hawaii

TNCH's Kamakou, Moomomi, and Pelekunu Preserves are occupied habitat for 14 species and unoccupied habitat for five species. According to our published recovery plans, recovery of these species will require reproducing, self-sustaining populations located in a geographic array across the landscape,

with population numbers and population locations of sufficient robustness to withstand periodic threats due to natural disaster or biological threats (Service 1995a, 1995b, 1996a, 1996b, 1996c, 1997, 1998a, 1998b, 1998c, 1999, 2001). The highest priority recovery tasks include active management such as plant propagation and reintroduction, fire control, non-native species removal, and ungulate fencing. Failure to implement these active management measures, all of which require voluntary landowner support and participation, virtually assures the extinction of these species. Many of these types of conservation actions in these areas of Molokai are carried out as part of TNCH's participation with landowner incentive-based programs and by actions taken on the landowner's initiative. These activities, which are described in more detail below, require substantial voluntary cooperation by TNCH and other cooperating landowners and local residents.

The following analysis describes the likely conservation benefits of a critical habitat designation compared to the conservation benefits without critical habitat designation. The Service paid particular attention to the following issues: to what extent a critical habitat designation would confer regulatory conservation benefits on these species; to what extent the designation would educate members of the public such that conservation efforts would be noticeably enhanced; and whether a critical habitat designation would have a positive, neutral, or negative impact on voluntary conservation efforts on this privately-owned TNCH land as well as other non-Federal lands on Molokai that could contribute to recovery.

If a critical habitat designation reduces the likelihood that voluntary conservation activities will be carried out on Molokai, and at the same time fails to confer a counter-balancing positive regulatory or educational benefit to the species, then the benefits of excluding such areas from critical habitat outweigh the benefits of including them. Although the results of this type of evaluation will vary significantly depending on the landowners, geographic areas, and species involved, we believe the TNCH lands on Molokai merit this evaluation.

(1) Benefits of Inclusion

Suitable habitat in TNCH's Kamakou, Moomomi, and Pelekunu Preserves exists for the following species: *Bidens wiebkei, Canavalia molokaiensis, Centaurium sebaeoides, Clermontia oblongifolia* ssp. *brevipes, Cyanea mannii, Cyanea procera, Hedyotis mannii, Labordia triflora, Lysimachia maxima, Mariscus fauriei, Melicope mucronulata, Phyllostegia mannii, Phyllostegia mollis, Platanthera holochila, Schiedea sarmentosa, Silene alexandrii, Stenogyne bifida, Tetramolopium rockii,* and *Vigna o—wahuense.* The primary direct benefit of inclusion of these lands as critical habitat would result from the requirement under section 7 of the Act that Federal agencies consult with us to ensure that any proposed Federal actions do not destroy or adversely modify critical habitat.

The benefit of a critical habitat designation would ensure that any actions authorized, funded, or carried out by a Federal agency would not likely destroy or adversely modify any critical habitat. Without critical habitat, some site-specific projects might not trigger consultation requirements under the Act in areas where species are not currently present; in contrast, Federal actions in areas occupied by listed species would still require consultation under section 7 of the Act.

Seventy-four percent of the area on these lands is already occupied habitat for 14 of the 19 listed species. Therefore, any Federal activities that may affect these areas will in all likelihood require section 7 consultation. Historically, we have conducted 19 informal and no formal consultations under section 7 on the entire island of Molokai for any of these plant species. None of these consultations involved the TNCH lands. As a result of the low level of previous Federal activity on these TNCH lands, and after considering the future Federal activities that might occur on these lands, it is the Service's opinion that there is likely to be a low number of future Federal activities that would negatively affect habitat on TNCH lands. The land is in permanent conservation and is not expected to be developed. Section 7 is expected to be limited to Federal funding for conservation activities to improve the habitat for these species, not adversely modify it. The possibility of such activity cannot be ruled out entirely, but it can best be described as having a low likelihood of occurrence. Therefore, we anticipate little additional regulatory benefits from including these preserves in critical habitat beyond what is already provided by the existing section 7 nexus for habitat areas occupied by the listed extant species.

Another possible benefit is that the designation of critical habitat can serve to educate the public regarding the potential conservation value of an area, and this may focus and contribute to conservation efforts by other parties by clearly delineating areas of high conservation value for certain species. Information about the 19 species for which suitable habitat was identified on TNCH lands on Molokai that reaches a wide audience, including other parties engaged in conservation activities, could have a positive conservation benefit.

While we believe this educational outcome is important for the conservation of these 19 species, we believe it has already been achieved through the existing management, education, and public outreach efforts carried out by TNCH and their conservation partners. The Nature Conservancy of Hawaii has a well-developed public outreach infrastructure that includes magazines, newsletters, and well-publicized public events on Molokai and throughout Hawaii. These and other media extol and explain the conservation importance of these Molokai reserves and their conservation value. A final designation of critical habitat would add little to this effort and would simply affirm what is already known and widely accepted by Hawaii's conservationists, public agencies, and much of the general public concerning the conservation value of these lands. The following discussion on each of the three preserves demonstrates that the public is already aware of the importance of this area for the conservation of these 19 species.

Nineteen species (*Bidens wiebkei, Canavalia molokaiensis, Centaurium sebaeoides, Clermontia oblongifolia* ssp. *brevipes, Cyanea mannii, Cyanea procera, Hedyotis mannii, Labordia triflora, Lysimachia maxima, Mariscus fauriei, Melicope mucronulata, Phyllostegia mannii, Phyllostegia mollis, Platanthera holochila, Schiedea sarmentosa, Silene alexandrii, Stenogyne bifida, Tetramolopium rockii, Vigna o-wahuense*) are reported from TNCH's Moomomi, Kamakou, and Pelekunu Preserves, which are located on Molokai's northwest coast (Moomomi) and in the East Molokai mountains (Kamakou and Pelekunu) (GDSI 2000; HINHP database 2000; TNCH 1993, 1994a, 1994b, 1997, 1999a, 1999b, 1999c). Two of the preserves (Moomomi and Pelekunu) are owned by TNCH, while Kamakou was established by a grant of a perpetual conservation easement from the private landowner to TNCH. All three preserves are included in the State's Natural Area Partnership (NAP) program, which provides matching funds for the management of private lands that have been permanently dedicated to conservation

(TNCH 1993, 1994a, 1994b, 1997, 1999a, 1999b, 1999c).

Under the NAP program, the State of Hawaii provides matching funds on a two-to-one basis for management of private lands dedicated to conservation. In order to qualify for this program, the land must be dedicated in perpetuity through transfer of fee title or a conservation easement to the State or a cooperating entity. The land must be managed by the cooperating entity or a qualified landowner according to a detailed management plan approved by the Board of Land and Natural Resources. Once approved, the 6-year partnership agreement between the State and the managing entity is automatically renewed each year so that there are always 6 years remaining in the term, although the management plan is updated and funding amounts are re-authorized by the board at least every 6 years. By April 1 of any year, the managing partner may notify the State that it does not intend to renew the agreement; however, in such case, the partnership agreement remains in effect for the balance of the existing 6-year term, and the conservation easement remains in full effect in perpetuity. The conservation easement may be revoked by the landowner only if State funding is terminated without the concurrence of the landowner and cooperating entity. Prior to terminating funding, the State must conduct one or more public hearings. The NAP program is funded through real estate conveyance taxes which are placed in a Natural Area Reserve Fund. Participants in the NAP program must provide annual reports to the DLNR and DLNR makes annual inspections of the work in the reserve areas. *See* Haw. Rev. Stat. Secs. 195–1–195–11 and Hawaii Administrative Rules Secs. 13–210.

Management programs within the three preserves are documented in long-range management plans and yearly operational plans. These plans detail management measures that protect, restore, and enhance the rare plants and their habitats within the preserves and in adjacent areas (TNCH 1993, 1994a, 1994b, 1997, 1999a, 1999b, 1999c). These management measures address the factors which led to the listing of the 19 species including control of non-native species of ungulates, rodents, weeds, and fire control. In addition, habitat restoration and monitoring are also included in these plans.

Kamakou Preserve

The primary management goals within Kamakou Preserve are to prevent degradation of native forest by reducing feral ungulate damage; suppress wildfires; and improve or maintain the integrity of native ecosystems in selected areas of the preserve by reducing the effects of non-native plants.

Specific management actions to address feral ungulate impacts include the construction of fences, including strategic fencing (fences placed in proximity to natural barriers such as cliffs); staff hunting; and implementation of organized hunting through the Molokai Hunters Working Group. By monitoring ungulate activity within the preserve, the staff are able to direct hunters to problem areas, thereby increasing hunting success. If increased hunting pressure does not reduce feral ungulate activity in the preserve, the preserve staff will work with the hunting group to identify and implement alternative methods (TNCH 1994, 1999).

The non-native plant control program within Kamakou Preserve focuses on habitat-modifying non-native plants (weeds) and prioritizes them according to the degree of threat to native ecosystems. A weed priority list has been compiled for the preserve, and control and monitoring of the highest priority species are ongoing. Weeds are controlled manually, chemically, or through a combination of both. Preventive measures (prevention protocol) are required by all who enter the preserve. This protocol includes such things as brushing footgear before entering the preserve to remove seeds of non-native plants. In addition, the staff are actively promoting awareness of aggressive non-native plants in Hawaii and their impacts to native ecosystems in the local communities on Molokai through public education at schools, fairs, and displays at the airport.

Wildfire pre-suppression and response plans are coordinated with the Maui County Fire Department and the DOFAW Maui District Forester. The Kamakou Wildfire Management Plan is reviewed annually with the fire department and updated as necessary (TNCH 1994, 1999). In the event of fires in areas bordering the preserve, staff from Kamakou assist with fire suppression in concert with DOFAW staff.

Natural resource monitoring and research address the need to track the biological and physical resources of the preserve and evaluate changes in these resources to guide management programs. Vegetation is monitored throughout the preserve to document long-term ecological changes; rare plant species are monitored to assess population status; and, following fires on the boundaries or within the preserve, burned areas are assessed for ingress of weeds and recovery of native plants. In addition, the preserve staff provide logistical support to scientists and others who are conducting research within the preserve.

In addition, TNCH, DOFAW, the Service and other Federal agencies including the National Park Service, and neighboring landowners of East Molokai's watershed areas have formed a partnership (East Molokai Watershed Partnership) through a memorandum of understanding to ensure the protection of over 8,903 ha (22,000 ac) of land on the island. While the partnership is still in its infancy, the members have agreed, in principle, to participate in cooperative management activities within the East Molokai watershed because they believe that effective management is best achieved through the coordinated actions of all major landowners in the watershed.

Kamakou Preserve provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Bidens wiebkei;* four populations of 300 mature, reproducing individuals of the short-lived perennial *Canavalia molokaiensis;* two populations of 300 mature, reproducing individuals of the short-lived perennial *Clermontia oblongifolia* ssp. *brevipes;* five populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea mannii;* four populations of 300 mature, reproducing individuals of the short-lived perennial *Cyanea procera;* four populations of 300 mature, reproducing individuals of the short-lived perennial *Labordia triflora;* one population of 300 mature, reproducing individuals of the short-lived perennial *Lysimachia maxima;* three populations of 300 mature, reproducing individuals of the short-lived perennial *Schiedea sarmentosa;* three populations of 300 mature, reproducing individuals of the short-lived perennial *Silene alexandri;* and three populations of 300 mature, reproducing individuals of the short-lived perennial *Stenogyne bifida.* Critical habitat is designated for these 10 island-endemic species elsewhere on Molokai within their historical ranges to reach the recovery goal of 8 to 10 populations for each species (*see* ''*Descriptions of Critical Habitat Units*'' section). This preserve provides habitat for three populations of 500 mature, reproducing individuals of the short-lived perennial *Mariscus fauriei;* three populations of 100 mature, reproducing individuals of the long-lived perennial *Melicope mucronulata;* and one population of 300 mature, reproducing individuals of the short-lived perennial

Phyllostegia mannii. Critical habitat is designated for these multi-island species elsewhere on Molokai, and proposed on other islands within their historical range to reach the recovery goal of 8 to 10 populations for each species (*see* ''*Descriptions of Critical Habitat Units*'' section).

Kamakou Preserve provides unoccupied habitat for four populations of 300 mature, reproducing individuals of the short-lived perennial *Hedyotis mannii.* Critical habitat is proposed for this multi-island species on Maui and recovery habitat is provided for this species on Lanai under terms of a Memorandum of Agreement with the private landowner (68 FR 1220) within its historical range to reach the recovery goal of 8 to 10 populations. This preserve provides unoccupied habitat for three populations of 300 mature, reproducing individuals of the short-lived perennial *Phyllostegia mollis.* Critical habitat is proposed for this multi-island species on other islands within its historical range to reach the recovery goal of 8 to 10 populations. This preserve provides unoccupied habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Platanthera holochila.* Critical habitat is also being designated for this multi-island species on Kauai and is proposed on other islands within its historical range to reach the recovery goal of 8 to 10 populations. Lastly, this preserve provides unoccupied habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Vigna o-wahuensis.* Critical habitat is proposed for this multi-island species on other islands within its historical range to reach the recovery goal of 8 to 10 populations.

Moomomi Preserve

The primary management goals within Moomomi Preserve are to prevent degradation of natural communities by reducing feral ungulate damage, and improve or maintain the integrity of native ecosystems in selected areas of the preserve by reducing the effects of non-native plants (TNCH 1999).

Specific management actions to address feral ungulate impacts include the construction of a perimeter fence to keep out livestock and an agreement with the neighboring landowner, Molokai Ranch, in which they will remove livestock within 48 hours of ingress. Analysis of monitoring data collected within the axis deer exclosure will guide future management strategies (TNCH 1999).

As with Kamakou Preserve, the non-native plant control program within Moomomi Preserve focuses on habitat-modifying non-native plants and prioritizes them according to the degree of threat to native ecosystems. A weed priority list has been compiled for the preserve, and control and monitoring of the highest priority species are on-going. Weeds are controlled manually, chemically, or a through a combination of both. Preventive measures (prevention protocol) are required by all who enter the preserve. This protocol includes such things as brushing footgear before entering the preserve to remove seeds of non-native plants. In addition, the staff are actively promoting awareness of aggressive non-native plants in Hawaii and their impacts to native ecosystems in the local communities on Molokai through public education at schools, fairs, and displays at the airport (TNCH 1999).

Natural resource monitoring and research address the need to track the biological and physical resources of the preserve and evaluate changes in these resources to guide management programs. Vegetation is monitored throughout the preserve to document long-term ecological changes; rare plant species are monitored to assess population status. In addition, the preserve staff provide logistical support to scientists and others who are conducting research within the preserve (TNCH 1999).

Moomomi Preserve provides habitat for one population of 300 mature, reproducing individuals of the short-lived perennial *Tetramolopium rockii.* Critical habitat is designated for this island-endemic species elsewhere on Molokai within its historical range (*see* ''*Descriptions of Critical Habitat Units*'' section). This preserve provides habitat for one population of 500 mature, reproducing individuals of the annual *Centaurium sebaeoides.* Critical habitat is designated for this species elsewhere on Molokai, on Kauai, and is proposed on other islands within its historical range to reach the recovery goal of 8 to10 populations (*see* ''*Descriptions of Critical Habitat Units*'' section).

Pelekunu Preserve

The primary management goals within Pelekunu Preserve are to prevent degradation of native forest by reducing feral ungulate damage; and improve or maintain the integrity of native ecosystems in selected areas of the preserve by reducing the effects of non-native plants.

Specific management actions to address feral ungulate impacts include staff hunting; implementation of organized hunting through the Molokai Hunters Working Group; and quarterly transect and aerial monitoring of ungulate activity. By monitoring ungulate activity within the preserve, the staff are able to direct hunters to problem areas, thereby increasing hunting success. If increased hunting pressure does not reduce feral ungulate activity in the preserve, the preserve staff will work with the hunting group to identify and implement alternative methods (TNCH 1999).

As with the other two preserves on Molokai, the non-native plant control program within Pelekunu Preserve focuses on habitat-modifying non-native plants and prioritizes them according to the degree of threat to native ecosystems. A weed priority list has been compiled for the preserve, and control and monitoring of the highest priority species are ongoing. Weeds are controlled manually, chemically, or through a combination of both. Preventive measures (prevention protocol) are required by all who enter the preserve. This protocol includes such things as brushing footgear before entering the preserve to remove seeds of non-native plants. In addition, the staff are actively promoting awareness of aggressive non-native plants in Hawaii and their impacts to native ecosystems in the local communities on Molokai through public education at schools, fairs, and displays at the airport.

Natural resource monitoring and research address the need to track the biological and physical resources of the preserve and evaluate changes in these resources to guide management programs. Vegetation is monitored in the preserve to document long-term ecological changes; and rare plant species are monitored to assess population status. In addition, the preserve staff provide logistical support to scientists and others who are conducting research within the preserve.

Pelekunu Preserve provides habitat for two populations of 300 mature, reproducing individuals of the short-lived perennial *Bidens wiebkei;* one population of 300 mature, reproducing individuals of the short-lived perennial *Canavalia molokaiensis;* and four populations of 300 mature, reproducing individuals of the short-lived perennial *Stenogyne bifida.* Critical habitat is designated for these three island-endemic species elsewhere on Molokai within their historical ranges to reach the recovery goal of 8 to 10 populations for each species (*see* ''*Descriptions of Critical Habitat Units*'' section).

In sum, the Service believes that a critical habitat designation for listed

plants on TNCH lands on Molokai would provide a relatively low level of additional regulatory conservation benefit to each of the plant species beyond what is already provided by existing section 7 consultation requirements due to the physical presence of 14 of the 19 listed species. Any regulatory conservation benefits would accrue through the benefit associated with additional section 7 consultation associated with critical habitat. Based on a review of past consultations and consideration of the likely future activities in this specific area, there is little Federal activity expected to occur on this privately owned land that would trigger section 7 consultation. The Service also believes that a final critical habitat designation provides little additional educational benefits since the conservation value is already well known by the landowner, the State, Federal agencies, private organizations, and the general public, and the area has been identified as suitable and important to the conservation of 19 Molokai plant species through publication in the proposed critical habitat rule and in this final rule.

(2) Benefits of Exclusion

Proactive voluntary conservation efforts are necessary to prevent the extinction and promote the recovery of these listed plant species on Molokai and other Hawaiian islands (Shogren *et al.* 1999, Wilcove and Chen 1998, Wilcove *et al.* 1998). Consideration of this concern is especially important in areas where species have been extirpated and their recovery requires access and permission for reintroduction efforts (Bean 2002, Wilcove *et al.* 1998). For example, five of the 19 species associated with these preserves are extirpated from TNCH lands, and repopulation is likely not possible without human assistance and landowner cooperation.

As described earlier, TNCH has a history of entering into conservation agreements with various Federal and State agencies and other private organizations on their lands. The Nature Conservancy's mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. The Service believes that each of the listed species within TNCH's preserves will benefit substantially from TNCH's voluntary management actions due to a reduction in ungulate browsing and habitat conversion, a reduction in competition with non-native weeds, a reduction in risk of fire, and the reintroduction of species currently extirpated from various areas and for which the technical ability to propagate these species currently exists or will be developed in the near future.

The conservation benefits of critical habitat are primarily regulatory or prohibitive in nature. But on Molokai, simply preventing ''harmful activities'' will not slow the extinction of listed plant species (Bean 2002). Where consistent with the discretion provided by the Act, the Service believes it is necessary to implement policies that provide positive incentives to private landowners to voluntarily conserve natural resources and that remove or reduce disincentives to conservation (Wilcove *et al.* 1998). Thus, we believe it is essential for the recovery of these 19 species to build on continued conservation activities such as these with a proven partner, and to provide positive incentives for other private landowners on Molokai who might be considering implementing voluntary conservation activities but have concerns about incurring incidental regulatory or economic impacts.

Approximately 80 percent of imperiled species in the United States occur partly or solely on private lands where the Service has little management authority (Wilcove *et al.* 1996). In addition, recovery actions involving the reintroduction of listed species onto private lands require the voluntary cooperation of the landowner (Bean 2002, James 2002, Knight 1999, Main *et al.* 1999, Norton 2000, Shogren *et al.* 1999, Wilcove *et al.* 1998). Therefore, ''a successful recovery program is highly dependent on developing working partnerships with a wide variety of entities, and the voluntary cooperation of thousands of non-Federal landowners and others is essential to accomplishing recovery for listed species'' (Crouse *et al.* 2002). Because the Federal government owns relatively little land on Molokai, and because large tracts of land suitable for conservation of threatened and endangered species are mostly owned by private landowners, successful recovery of listed species on Molokai is especially dependent upon working partnerships and the voluntary cooperation of non-Federal landowners.

(3) The Benefits of Exclusion Outweigh the Benefits of Inclusion

Based on the above considerations, and consistent with the direction provided in section 4(b)(2) of the Act and the recent Federal District Court decision concerning critical habitat (*Center for Biological Diversity* v. *Norton, Civ. No. 01–409 TUC DCB* D. Ariz. Jan. 13, 2003), we have determined that the benefits of excluding TNCH's Molokai preserves as critical habitat outweigh the benefits of including them as critical habitat for *Bidens wiebkei, Canavalia molokaiensis, Centaurium sebaeoides, Clermontia oblongifolia* ssp. *brevipes, Cyanea mannii, Cyanea procera, Hedyotis mannii, Labordia triflora, Lysimachia maxima, Mariscus fauriei, Melicope mucronulata, Phyllostegia mannii, Phyllostegia mollis, Platanthera holochila, Schiedea sarmentosa, Silene alexandrii, Stenogyne bifida, Tetramolopium rockii,* and *Vigna o-wahuense.*

This conclusion is based on the following factors:

1. TNCH's mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. Therefore, all of their preserve lands are currently being managed on a voluntary basis in cooperation with the Service, State, and other private organizations to achieve important conservation goals.

2. In the past, TNCH has cooperated with Federal and State agencies, and private organizations to implement voluntary conservation activities on their lands that have resulted in tangible conservation benefits.

3. Simple regulation of ''harmful activities'' is not sufficient to conserve these species. Landowner cooperation and support is required to prevent the extinction and promote the recovery of all of the listed species on Molokai due to the need to implement proactive conservation actions such as ungulate management, weed control, fire suppression, plant propagation, and outplanting. This need for landowner cooperation is especially acute because the preserves are unoccupied by five of the 19 species. Future conservation efforts, such as translocation of these five plant species back into unoccupied habitat on these lands and expansion of the extant species, will require the cooperation of TNCH and other non-Federal landowners on Molokai. Exclusion of TNCH lands from this critical habitat designation will help the Service maintain and improve this partnership by formally recognizing the positive contributions of TNC to plant recovery, and by streamlining or reducing unnecessary regulatory oversight.

4. Given the current partnership agreements between TNCH and many organizations, the Service believes the additional regulatory and educational benefits of including these lands as critical habitat are relatively small. The designation of critical habitat can serve to educate the general public as well as

conservation organizations regarding the potential conservation value of an area, but this goal is already being accomplished through the identification of this area in the management plans described above. Likewise, there will be little additional Federal regulatory benefit to the species because (a) there is a low likelihood that these proposed critical habitat units will be negatively affected to any significant degree by Federal activities requiring section 7 consultation, and (b) much are already occupied by 14 listed species and a section 7 nexus already exists. The Service is unable to identify any other potential benefits associated with critical habitat for these TNCH preserves.

5. It is well documented that publicly owned lands and lands owned by conservation organizations such as TNCH, alone, are too small and poorly distributed to provide for the conservation of most listed species (Bean 2002, Crouse *et al.* 2002). Excluding these TNCH lands from critical habitat may, by way of example, provide positive social, legal, and economic incentives to other non-Federal landowners on Molokai who own lands that could contribute to listed species recovery if voluntary conservation measures on these lands are implemented (Norton 2000, Main *et al.* 1999, Shogren *et al.* 1999, Wilcove and Chen 1998). As resources allow, the Service would be willing to consider future revisions or amendments to this final critical habitat rule if landowners affected by this rule develop conservation programs or partnerships (*e.g.*, Habitat Conservation Plans, Safe Harbor Agreements, conservation agreements, etc.) on their lands that outweigh the regulatory and educational benefits of a critical habitat designation.

In conclusion, we find that the exclusion of critical habitat on the TNCH Molokai preserves would most likely have a net positive conservation effect on the recovery and conservation of these 19 plant species when compared to the positive conservation effects of a critical habitat designation. As described above, the overall benefits to these species of a critical habitat designation for these TNCH areas are relatively small. In contrast, we believe that this exclusion will enhance our existing partnership with TNCH, and it will set a positive example and provide positive incentives to other non-Federal landowners who may be considering implementing voluntary conservation activities on their lands. We conclude there is a higher likelihood of beneficial conservation activities occurring in these and other areas of Molokai without designated critical habitat than there would be with designated critical habitat in these TNCH preserves.

(4) Exclusion of This Unit Will Not Cause Extinction of the Species

In considering whether or not exclusion of these Preserves might result in the extinction of any of these 19 species, the Service first considered the impacts to the 11 species endemic to Molokai (*Bidens wiebkei*, *Canavalia molokaiensis*, *Clermontia oblongifolia* ssp. *brevipes*, *Cyanea mannii*, *Cyanea procera*, *Labordia triflora*, *Lysimachia maxima*, *Schiedea sarmentosa*, *Silene alexandrii*, *Stenogyne bifida*, and *Tetramolopium rockii*), and second to the eight species known from Molokai and one or more other Hawaiian islands (*Centaurium sebaeoides*, *Hedyotis mannii*, *Mariscus fauriei*, *Melicope mucronulata*, *Phyllostegia mannii*, *Phyllostegia mollis*, *Platanthera holochila*, and *Vigna o-wahuense*).

For both the 11 endemic and the eight ''multi-island'' species, it is the Service's conclusion that the TNCH's mission and management plans will provide as much or more net conservation benefits as would be provided if these preserves were designated as critical habitat. These management plans, which are described above, will provide tangible proactive conservation benefits that will reduce the likelihood of extinction for the listed plants in these areas of Molokai and increase their likelihood of recovery. Extinction for any of these species as a consequence of this exclusion is unlikely because there are no known threats in these preserves due to any current or reasonably anticipated Federal actions that might be regulated under section 7 of the Act. Further, these areas are already occupied by 14 of the 19 species and thereby benefit from the section 7 protections of the Act, should such an unlikely Federal threat actually materialize. The exclusion of these preserves will not increase the risk of extinction to any of these species, and it may increase the likelihood these species will recover by encouraging other landowners to implement voluntary conservation activities as TNCH has done.

In addition, critical habitat is being designated on other areas of Molokai for all 11 of the endemic species (Molokai 6—*Bidens wiebkei*—a, Molokai 7—*Bidens wiebkei*—b, Molokai 8—*Bidens wiebkei*—c, Molokai 6—*Canavalia molokaiensis*—a, Molokai 6—*Canavalia molokaiensis*—b, Molokai 6—*Canavalia molokaiensis*—c, Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—a, Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—b, Molokai 6—*Cyanea mannii*—a, Molokai 6—*Cyanea mannii*—b, Molokai 6—*Cyanea mannii*—c, Molokai 6—*Cyanea mannii*—d, Molokai 6—*Cyanea mannii*—e, Molokai 6—*Cyanea procera*—a, Molokai 6—*Cyanea procera*—b, Molokai 6—*Labordia triflora*—a, Molokai 6—*Labordia triflora*—b, Molokai 6—*Labordia triflora*—c, Molokai 6—*Labordia triflora*—d, Molokai 6—*Lysimachia maxima*—a, Molokai 6—*Lysimachia maxima*—b, Molokai 6—*Schiedea sarmentosa*—a, Molokai 6—*Schiedea sarmentosa*—b, Molokai 6—*Silene alexandrii*—a, Molokai 6—*Silene alexandrii*—b, Molokai 6—*Stenogyne bifida*—a, Molokai 1—*Tetramolopium rockii*—a, Molokai 2—*Tetramolopium rockii*—b, Molokai 3—*Tetramolopium rockii*—c, Molokai 5—*Tetramolopium rockii*—d), and critical habitat has been designated elsewhere on Molokai, and or designated on other islands for the remaining eight multi-island species consistent with the guidance in recovery plans. These other designations identify conservation areas for the maintenance and expansion of the existing populations.

In sum, the above analysis concludes that an exclusion of TNCH lands from final critical habitat on Molokai will have a net beneficial impact with little risk of negative impacts. Therefore, the exclusion of these lands will not cause extinction and should in fact improve the chances of recovery for *Bidens wiebkei*, *Canavalia molokaiensis*, *Centaurium sebaeoides*, *Clermontia oblongifolia* ssp. *brevipes*, *Cyanea mannii*, *Cyanea procera*, *Hedyotis mannii*, *Labordia triflora*, *Lysimachia maxima*, *Mariscus fauriei*, *Melicope mucronulata*, *Phyllostegia mannii*, *Phyllostegia mollis*, *Platanthera holochila*, *Schiedea sarmentosa*, *Silene alexandrii*, *Stenogyne bifida*, *Tetramolopium rockii*, and *Vigna o-wahuense*.

Taxonomic Changes

At the time we listed *Cyanea grimesiana* ssp. *grimesiana*, *Hibiscus brackenridgei*, *Mariscus fauriei*, and *Phyllostegia mollis*, we followed the taxonomic treatments in Wagner *et al.* (1990), the widely used and accepted *Manual of the Flowering Plants of Hawaii*. Subsequent to the final listing, we became aware of new taxonomic treatments of these species. Also, the soon-to-be-published book *Hawaii's Ferns and Fern Allies* (Palmer, in press) has changed the family name for *Ctenitis squamigera* (from Aspleniaceae to Dryopteridaceae). Due to the court-ordered deadlines, we are required to

publish this final rule to designate critical habitat on Molokai before we can prepare and publish a notice of taxonomic changes for these five species. We plan to publish a notice of taxonomic change for these five species after we have published the final critical habitat designations on Molokai.

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order 12866, the Office of Management and Budget (OMB) has determined that this critical habitat designation is not a significant regulatory action. This rule will not have an annual economic effect of $100 million or more or adversely affect any economic sector, productivity, competition, jobs, the environment, or other units of government. This designation will not create inconsistencies with other agencies' actions or otherwise interfere with an action taken or planned by another agency. It will not materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. Finally, this designation will not raise novel legal or policy issues. Accordingly, OMB has not reviewed this final critical habitat designation.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA) (as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever a Federal agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended the RFA to require Federal agencies to provide a statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities.

Based on the information in our economic analysis (draft economic analysis and addendum), we are certifying that the critical habitat designation for 41 Molokai plant species will not have a significant effect on a substantial number of small entities because a substantial number of small entities are not affected by the designation. In addition, the economic analysis concludes that the economic impacts from the designation of critical habitat would not be significant, based on the estimated cost of the designation which may result in potential direct economic costs of between $5,447 and $27,000 per year over the next 10 years.

Federal courts and Congress have indicated that an RFA/SBREFA analysis may be limited to all impacts to entities directly subject to the requirements of the regulation (Service 2002). As such, entities indirectly impacted by the plant listings and critical habitat and, therefore, not directly regulated by the listing or critical habitat designation are not considered in this section of the analysis.

Small entities include small organizations, such as independent non-profit organizations, and small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents, as well as small businesses. Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than $5 million in annual sales, general and heavy construction businesses with less than $27.5 million in annual business, special trade contractors doing less than $11.5 million in annual business, and agricultural businesses with annual sales less than $750,000. The RFA/SBREFA defines ''small governmental jurisdiction'' as the government of a city, county, town, school district, or special district with a population of less than 50,000. By this definition, Maui County is not a small governmental jurisdiction because its population was 128,100 in 2000. Although certain State agencies, such as DLNR, Department of Agriculture (DOA), and Department of Transportation (DOT) may be affected by the critical habitat designation, State governments are considered independent sovereigns, not small governments, for the purposes of the RFA. To determine if potential economic impacts to these small entities are significant, we consider the types of activities that might trigger regulatory impacts under this rule as well as the types of project modifications that may result. In general, the term ''significant economic impact'' is meant to apply to a typical small business firm's business operations.

To determine if the rule would affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (*e.g.*, housing development, grazing, oil and gas production, timber harvesting, etc.). We apply the ''substantial number'' test individually to each industry to determine if certification is appropriate. In estimating the numbers of small entities potentially affected, we also consider whether their activities have any Federal involvement; some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation.

The primary projects and activities that might be affected by the designation that could affect small entities include ranching operations and conservation projects. Based on our draft economic analysis and addendum, there were 170 cattle livestock operations in Maui County in 2000. The combined cattle sales of all of these operations in 2000 was about $3.2 million (Statistics of Hawaii Agriculture, 2000). Since this implies average annual cattle sales per business of $19,000, it is likely that all or almost all of the Maui County cattle operations, including those on Molokai, meet the definition of a small business (annual sales less than $750,000). Thus, our draft economic analysis concluded that the proposed critical habitat designation might affect two to three businesses out of 170 (one to two percent) of the small businesses in the cattle industry in Maui County. It also found that one community organization was likely to enter into section 7 consultation for coastal strand restoration due to the receipt of funding from the Service. Because the Service is also the funding entity and will likely provide technical assistance to the organization, the impact on this organization was found to be minimal. In addition, the consultation would have occurred regardless of designation of critical habitat. For these reasons, the draft economic analysis critical habitat designation would not be likely to affect small community organizations.

However, even though the proposed designation would not affect a ''substantial'' number of small businesses in each industry, an estimate of the impact was provided in the draft economic analysis. The cost of consultations with Pu'u o Hoku Ranch was estimated to be $15,300 to $25,800. The cost of the consultations with one to two unknown ranching operations was estimated to be $9,700 to $41,200. These costs reflect costs to the Service and NRCS to participate in the consultations; in general, none of the consultation costs are absorbed by the rancher. The estimated cost of consultations with Hui Malama o Mo'omomi was $5,200 to $10,400.

Again, these costs reflect costs to the Service to conduct the consultation.

The actual impacts of the final rule may even be smaller. These estimates were based on the proposed designations. However, this final rule designates 5,771 hectares (19,199 acres) less than had been proposed, or a 44 percent reduction.

These conclusions are supported by the history of consultations on Molokai. Since these 41 plant species were listed (between 1991 and 1999), we have conducted only 19 informal consultations and no formal consultations on the island of Molokai, in addition to consultations on Federal grants to State wildlife programs, which would not affect small entities. The 19 informal consultations have concerned seven of the 41 species (*Centaurium sebaeoides*, *Cyanea mannii*, *Cyanea procera*, *Eugenia koolauensis*, *Labordia triflora*, *Sesbania tomentosa*, and *Tetramolopium rockii*) and were conducted with the U.S. Department of the Navy (Navy), NRCS, State of Hawaii, Maui County, Corps, FCC, and private parties. One informal consultation was conducted with the U.S. Navy regarding a proposed U.S. Marine Corps training area on privately-owned leased land in west Molokai. Three of the 41 species, *Centaurium sebaeoides*, *Sesbania tomentosa*, and *Tetramolopium rockii*, were reported from the project area. One informal consultation was conducted on behalf of a private non-profit organization, requesting a species list for Kamalo and Kapualei. Three of the 41 species, *Cyanea mannii*, *Cyanea procera*, and *Labordia triflora*, were reported from this area. One informal consultation was conducted on behalf of a private consulting firm, requesting a species list for a proposed project regarding a VHF direction-finder in Mauna Loa. Two of the 41 species, *Eugenia koolauensis* and *Sesbania tomentosa*, were reported from the project area. Six informal consultations were conducted on behalf of private individuals or consulting firms, requesting species lists for different locations on Molokai. None of the 41 species were reported from these locations. Five informal consultations were conducted on behalf of the NRCS, requesting species lists or regarding revegetation or habitat restoration projects at different locations on Molokai. None of the 41 species were reported from these locations. Two informal consultations were conducted on behalf of the State of Hawaii and Maui County regarding proposed landfill projects. None of the 41 species were reported from these locations. Two informal consultations were conducted on behalf of the U.S. Army Corps of Engineers, regarding a stream restoration project and unexploded ordinance removal activities at Papohaku Rangelands Bombing Range and Punakua Land Target Area. None of the 41 species were reported from the project areas. One informal consultation was conducted on behalf of the FCC regarding an antenna cell site in Kaunakakai. None of the 41 species were reported from the project area.

Seven of the informal consultations may have concerned small entities (the private individuals, consulting firms, or the non-profit organization). However, these seven informal consultations were requests for species lists and not for our concurrence on a specific proposed project. We have determined that the State of Hawaii and Maui County are not small entities. The Corps, NRCS, FCC, and the Navy are not small entities. For the 12 informal consultations with the State of Hawaii, Maui County, and Federal agencies, we concurred with each agency's or entity's determination that the project, as proposed, was not likely to adversely affect listed species. Although four of the NRCS projects are ongoing, they do not directly affect nor concern small entities.

In addition, on Molokai, 49 percent of the designations are on private lands, 50 percent of the designations are on State lands, and 1 percent of the designations are on Federal lands. Nearly all of the land within the critical habitat units is unsuitable for development, land uses, and activities. This is due to their remote locations, lack of access, and rugged terrain. Approximately 89 percent of this land is within the State Conservation District where State land-use controls severely limit development and most activities.

Even where the requirements of section 7 might apply due to critical habitat, based on our experience with section 7 consultations for all listed species, virtually all projects—including those that, in their initial proposed form, would result in jeopardy or adverse modification determinations under section 7—can be implemented successfully with, at most, the adoption of reasonable and prudent alternatives. These measures by definition must be economically feasible and within the scope of authority of the Federal agency involved in the consultation.

For these reasons, we are certifying that the designation of critical habitat for *Adenophorus periens*, *Alectryon macrococcus*, *Bidens wiebkei*, *Brighamia rockii*, *Canavalia molokaiensis*, *Centaurium sebaeoides*, *Clermontia oblongifolia* ssp. *brevipes*, *Ctenitis squamigera*, *Cyanea dunbarii*, *Cyanea grimesiana* ssp. *grimesiana*, *Cyanea mannii*, *Cyanea procera*, *Diellia erecta*, *Diplazium molokaiense*, *Eugenia koolauensis*, *Flueggea neowawraea*, *Hesperomannia arborescens*, *Hibiscus arnottianus* ssp. *immaculatus*, *Hibiscus brackenridgei*, *Ischaemum byrone*, *Isodendrion pyrifolium*, *Labordia triflora*, *Lysimachia maxima*, *Mariscus fauriei*, *Melicope mucronulata*, *Melicope reflexa*, *Neraudia sericea*, *Peucedanum sandwicense*, *Phyllostegia mannii*, *Plantago princeps*, *Pteris lidgatei*, *Schiedea lydgatei*, *Schiedea nuttallii*, *Schiedea sarmentosa*, *Sesbania tomentosa*, *Silene alexandri*, *Silene lanceolata*, *Spermolepis hawaiiensis*, *Stenogyne bifida*, *Tetramolopium rockii*, and *Zanthoxylum hawaiiense* will not have a significant economic impact on a substantial number of small entities. Therefore, a regulatory flexibility analysis is not required.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 804(2))

Under the Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 801 *et seq.*), this rule is not a major rule. Our detailed assessment of the economic effects of this designation are described in the draft economic analysis and the final addendum to the economic analysis. Based on the effects identified in these documents, we believe that this rule will not have an effect on the economy of $100 million or more, will not cause a major increase in costs or prices for consumers, and will not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. Refer to the final addendum to the economic analysis for a discussion of the effects of this determination.

Executive Order 13211

On May 18, 2001, the President issued Executive Order 13211, on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Although this rule is a significant regulatory action under Executive Order 12866, it is not expected to significantly affect energy production supply and distribution facilities because no energy production, supply, and distribution facilities are included within designated critical habitat. Further, for the reasons described in the economic analysis, we do not believe that designation of critical habitat for the 41 Molokai plants

will affect future energy production. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*):

(a) For reasons described in an economic analysis, this rule will not produce a Federal mandate on State or local governments or the private sector of $100 million or greater in any year, that is, it is not a ''significant regulatory action'' under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no direct obligations on State or local governments.

(b) This rule will not ''significantly or uniquely'' affect small governments so a Small Government Agency Plan is not required. Small governments will not be affected unless they propose an action requiring Federal funds, permits, or other authorizations. Any such activities will require that the Federal agency ensure that the action will not adversely modify or destroy designated critical habitat.

Takings

In accordance with Executive Order 12630 (''Government Actions and Interference with Constitutionally Protected Private Property Rights''), we have analyzed the potential takings implications of designating critical habitat for the 41 species from Molokai in a takings implications assessment. The takings implications assessment concludes that this final rule does not pose significant takings implications.

Federalism

In accordance with Executive Order 13132, this final rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of Interior policy, we requested information from appropriate State agencies in Hawaii. The designations may have some benefit to these governments, in that the areas essential to the conservation of these species are more clearly defined and the primary constituent elements of the habitat necessary to the survival of the species are specifically identified. While this definition and identification do not alter where and what federally sponsored activities may occur, they may assist these local governments in long-range planning, rather than waiting for case-by-case section 7 consultation to occur.

Civil Justice Reform

In accordance with Executive Order 12988, the Department of the Interior's Office of the Solicitor has determined that this rule does not unduly burden the judicial system and does meet the requirements of sections 3(a) and 3(b)(2) of the Order. We have designated critical habitat in accordance with the provisions of the Endangered Species Act. The rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the 41 plant species from Molokai.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any information collection requirements for which OMB approval under the Paperwork Reduction Act is required. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number.

National Environmental Policy Act

We have determined that we do not need to prepare an Environmental Assessment and/or an Environmental Impact Statement as defined by the National Environmental Policy Act of 1969 in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act. We published a notice outlining our reason for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This determination does not constitute a major Federal action significantly affecting the quality of the human environment.

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951) Executive Order 13175 and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. We have determined that there are no Tribal lands essential for the conservation of these 41 plant species. Therefore, designation of critical habitat for these 41 species does not involve any Tribal lands.

References Cited

A complete list of all references cited in this final rule is available upon request from the Pacific Islands Fish and Wildlife Office (see **ADDRESSES** section).

Authors

The authors of this final rule are staff of the Pacific Islands Fish and Wildlife Office (see **ADDRESSES** section).

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we hereby amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. Amend § 17.12(h), the List of Endangered and Threatened Plants, as set forth below:

a. Under the table's heading FLOWERING PLANTS, by revising the entries for *Alectryon macrococcus, Bidens wiebkei, Brighamia rockii, Canavalia molokaiensis, Centaurium sebaeoides, Clermontia oblongifolia* ssp. *brevipes, Cyanea dunbarii, Cyanea grimesiana* ssp. *grimesiana, Cyanea mannii, Cyanea procera, Eugenia koolauensis, Flueggea neowawraea, Hesperomannia arborescens, Hibiscus arnottianus* ssp. *immaculatus, Hibiscus brackenridgei, Ischaemum byrone, Isodendrion pyrifolium, Labordia triflora, Lysimachia maxima, Mariscus fauriei, Melicope mucronulata, Melicope reflexa, Neraudia sericea, Peucedanum sandwicense, Phyllostegia mannii, Plantago princeps, Schiedea lydgatei, Schiedea nuttallii, Schiedea sarmentosa, Sesbania tomentosa, Silene alexandri, Silene lanceolata, Spermolepis hawaiiensis, Stenogyne bifida, Tetramolopium rockii,* and *Zanthoxylum hawaiiense,* to read as follows; and

b. Under the table's heading FERNS AND ALLIES, by revising the entries for *Adenophorus periens, Ctenitis squamigera, Diellia erecta, Diplazium molokaiense,* and *Pteris lidgatei,* to read as follows.

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
*	*	*	*	*	*		*
Alectryon macroccoccus.	Mahoe	U.S.A. (HI)	Sapindaceae	E	467	17.99(a) (1) and (c)	NA
*	*	*	*	*	*		*
Bidens wiebkei	Kookoolau	U.S.A. (HI)	Asteraceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Brighamia rockii	Puaala	U.S.A. (HI)	Campanulaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Canavalia molokaiensis.	Awikiwiki	U.S.A. (HI)	Fabaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Centaurium sebaeoides.	Awiwi	U.S.A. (HI)	Gentianaceae	E	448	17.99(a) (1) and (c)	NA
*	*	*	*	*	*		*
Clermontia oblongifolia ssp. *brevipes*.	Oha wai	U.S.A. (HI)	Campanulaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Cyanea dunbarii	Haha	U.S.A. (HI)	Campanulaceae	E	594	17.99(c)	NA
*	*	*	*	*	*		*
Cyanea grimesiana ssp. *grimesiana*.	Haha	U.S.A. (HI)	Campanulaceae	E	592	17.99(c)	NA
*	*	*	*	*	*		*
Cyanea mannii	Haha	U.S.A. (HI)	Campanulaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Cyanea procera	Haha	U.S.A. (HI)	Campanulaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Eugenia koolauensis	Nioi	U.S.A. (HI)	Myrtaceae	E	536	17.99(c)	NA
*	*	*	*	*	*		*
Flueggea neowawraea.	Mehamehame	U.S.A. (HI)	Euphorbiaceae	E	559	17.99(a) (1) and (c)	NA
*	*	*	*	*	*		*
Hesperomannia arborescens.	None	U.S.A. (HI)	Asteraceae	E	536	17.99(c)	NA
*	*	*	*	*	*		*
Hibiscus arnottianus ssp. *immaculatus*.	Kokio keokeo	U.S.A. (HI)	Malvaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Hibiscus brackenridgei.	Mao hau hele	U.S.A. (HI)	Malvaceae	E	559	17.99(c)	NA
*	*	*	*	*	*		*
Ischaemum bryone	Hilo ischaemum	U.S.A. (HI)	Poaceae	E	532	17.99(a) (1) and (c)	NA
*	*	*	*	*	*		*
Isodendrion pyrifolium.	Wahine noho kula	U.S.A. (HI)	Violaceae	E	532	17.99(c)	NA
*	*	*	*	*	*		*
Labordia triflora	Kamakahala	U.S.A. (HI)	Loganiaceae	E	666	17.99(c)	NA
*	*	*	*	*	*		*
Lysimachia maxima	None	U.S.A. (HI)	Primulaceae	E	594	17.99(c)	NA
*	*	*	*	*	*		*
Mariscus fauriei	None	U.S.A. (HI)	Cyperaceae	E	532	17.99(c)	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
*	*	*	*	*	*		*
Melicope mucronulata.	Alani	U.S.A. (HI)	Rutaceae	E	467	17.99(c)	NA
*	*	*	*	*	*		*
Melicope reflexa	Alani	U.S.A. (HI)	Rutaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Neraudia sericea	None	U.S.A. (HI)	Urticaceae	E	559	17.99(c)	NA
*	*	*	*	*	*		*
Peucedanum sandwicense.	Makou	U.S.A. (HI)	Apiaceae	T	530	17.99(a)(1) and (c)	NA
*	*	*	*	*	*		*
Phyllostegia mannii	None	U.S.A. (HI)	Lamiaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Plantago princeps	Laukahi kuahiwi	U.S.A. (HI)	Plantaginaceae	E	559	17.99(a)(1) and (c)	NA
*	*	*	*	*	*		*
Schiedea lydgatei	None	U.S.A. (HI)	Caryophyllaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Schiedea nuttallii	None	U.S.A. (HI)	Caryophyllaceae	E	592	17.99(a)(1) and (c)	NA
Schiedea sarmentosa.	None	U.S.A. (HI)	Caryophyllaceae	E	594	17.99(c)	NA
*	*	*	*	*	*		*
Sesbania tomentosa	Ohai	U.S.A. (HI)	Fabaceae	E	559	17.99(a)(1) and (c)	NA
*	*	*	*	*	*		*
Silene alexandri	None	U.S.A. (HI)	Caryophyllaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Silene lanceolata	None	U.S.A. (HI)	Caryophyllaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Spermolepis hawaiiensis.	None	U.S.A. (HI)	Apiaceae	E	559	17.99(a)(1) and (c)	NA
*	*	*	*	*	*		*
Stenogyne bifida	None	U.S.A. (HI)	Lamiaceae	E	480	17.99(c)	NA
*	*	*	*	*	*		*
Tetramolopium rockii	None	U.S.A. (HI)	Asteraceae	T	480	17.99(c)	NA
*	*	*	*	*	*		*
Zanthoxylum hawaiiense.	Ae	U.S.A. (HI)	Rutaceae	E	532	17.99(a)(1) and (c)	NA
*	*	*	*	*	*		*
FERNS AND ALLIES							
Adenophorus periens	Pendant kihi fern	U.S.A. (HI)	Grammitidaceae	E	559	17.99(a)(1) and (c)	NA
*	*	*	*	*	*		*
Ctenitis squamigera	Pauoa	U.S.A. (HI)	Aspleniaceae	E	553	17.99(a)(1) and (c)	NA
*	*	*	*	*	*		*
Diellia erecta	Asplenium-leaved diellia.	U.S.A. (HI)	Aspleniaceae	E	559	17.99(a)(1) and (c)	NA
*	*	*	*	*	*		*
Diplazium molokaiense.	None	U.S.A. (HI)	Aspleniaceae	E	553	17.99(a)(1) and (c)	NA

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
*	*	*	*	*	*		*
Pteris lidgatei	None	U.S.A. (HI)	Adiantaceae	E	553	17.99(c)	NA
*	*	*	*	*	*		*

3. Amend § 17.99 as set forth below:

a. By revising the section heading and the heading for paragraph (a) to read as follows; and

b. By adding new paragraphs (c) and (d) to read as follows.

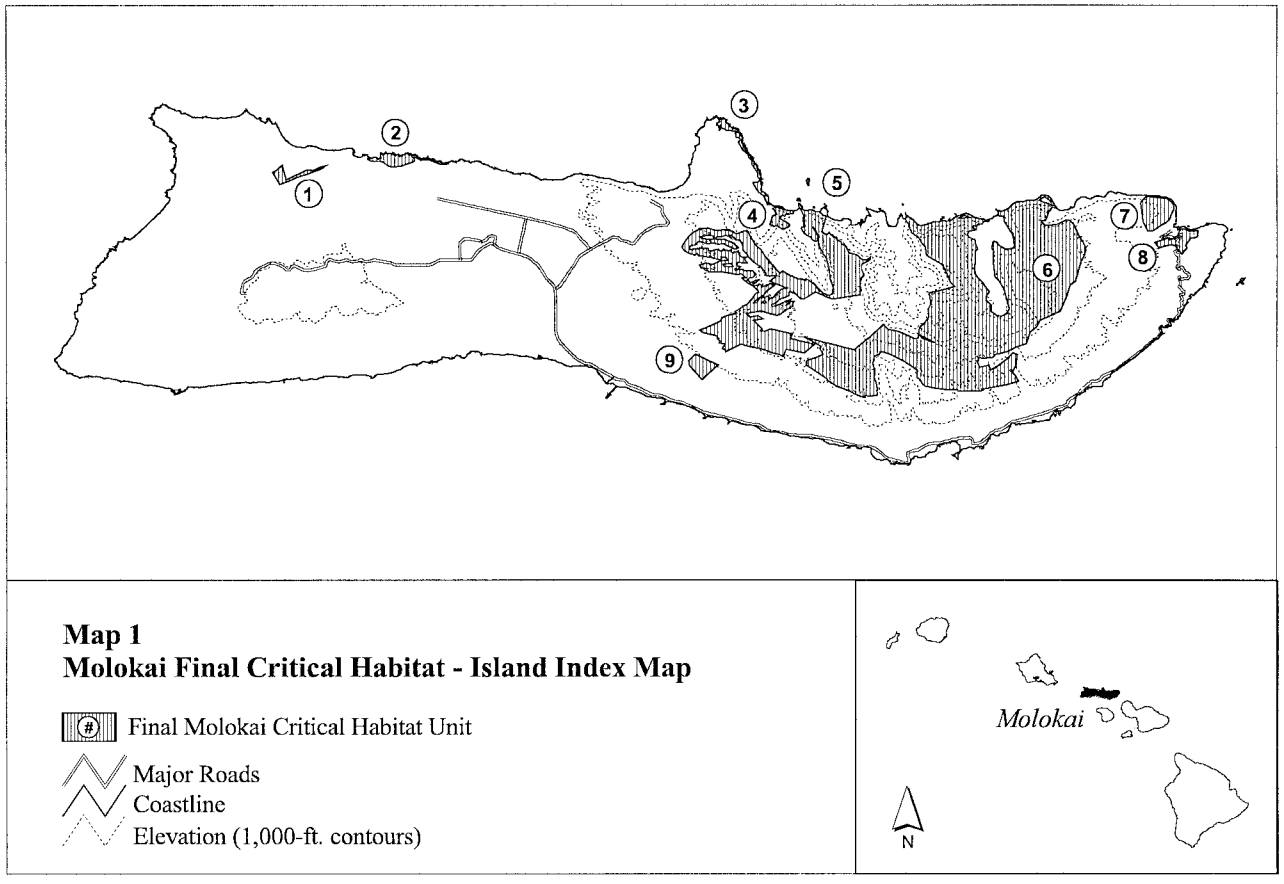
§ 17.99 Critical habitat; plants on the islands of Kauai, Niihau, and Molokai, HI..

(a) *Maps and critical habitat unit descriptions for the islands of Kauai and Niihau, HI.* * * *

* * * * *

(c) *Maps and critical habitat unit descriptions for the island of Molokai, HI.* The following paragraphs contain the legal descriptions of the critical habitat units designated for the island of Molokai, HI. Existing manmade features and structures within the critical habitat units, such as buildings; roads; aqueducts and other watersystem features, including but not limited to reservoirs, diversions, flumes, pumping stations, irrigation ditches, pipelines, siphons, tunnels, water tanks, gaging stations, intakes, and wells; telecommunications equipment towers and associated structures, electrical power transmission lines and distribution and regularly maintained associated rights-of-way and access ways; radars and telemetry antennas; missile launch sites; campgrounds; existing trails; arboreta and gardens, heiau (indigenous places of worship or shrines) and other archaeological sites; airports; other paved areas; lawns and other rural residential landscaped areas do not contain the primary constituent elements described for each species in paragraph (d) of this section and therefore are not included in the critical habitat designations. Coordinates are in UTM Zone 4 with units in meters using North American Datum of 1983 (NAD83). The following map shows the general locations of the 88 critical habitat units designated on the island of Molokai.

(1) **Note:** Map 1–Index map follows:

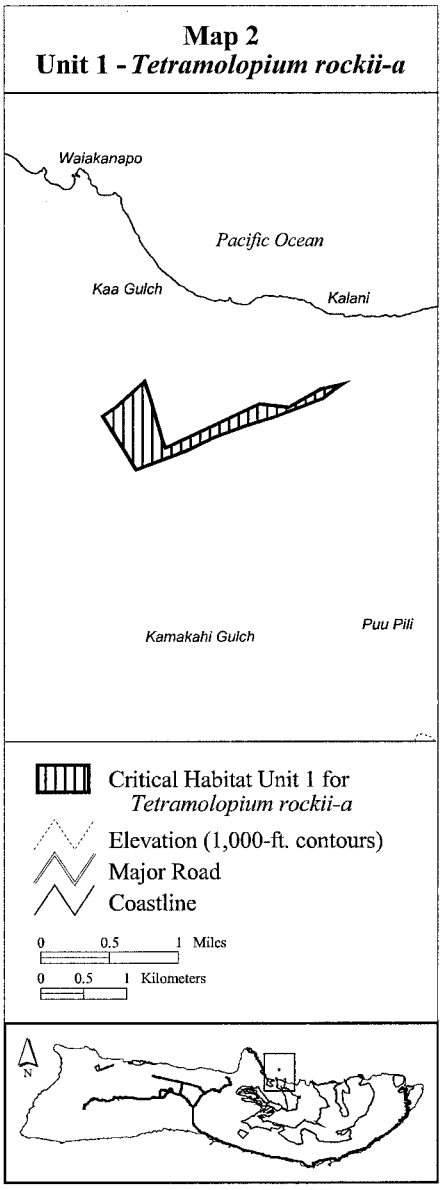


(2) Molokai 1—*Tetramolopium rockii*—a (68 ha; 167 ac)

(i) Unit consists of the following 18 boundary points: Start at 689772, 2344661; 689621, 2344539; 689052, 2344319; 688718, 2344221; 688327, 2344075; 688023, 2343926; 687408, 2343701; 687025, 2344327; 687025, 2344327; 687188, 2344441; 687513, 2344733; 687571, 2344549; 687727, 2344013; 687757, 2343953; 688857, 2344469; 689205, 2344430; 689575,

2344638; 689833, 2344699; return to starting point.

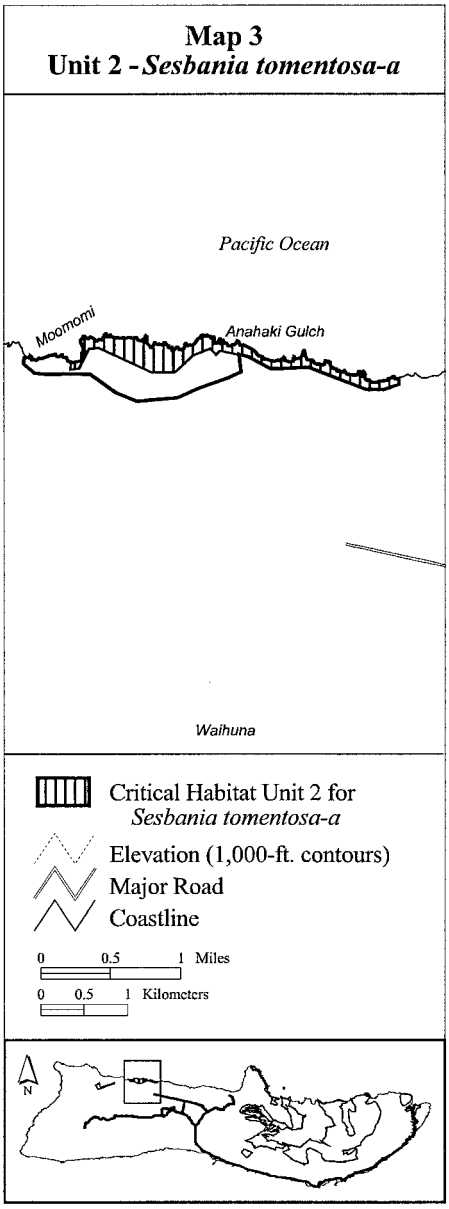
(ii) **Note:** Map 2 follows:



(3) Molokai 2—*Sesbania tomentosa*—a (58 ha; 143 ac)

(i) Unit consists of the following 16 boundary points and the intermediate coastline: Start at 696391, 2344805; 696219, 2344744; 696015, 2344744; 6953, 2345000; 694917, 2344983; 694654, 2345127; 694330, 2345195; 694288, 2345144; 694220, 2345221; 694024, 2345136; 693811, 2344940; 693548, 2344940; 692944, 2345229; 692833, 2345221; 692714, 2344991; 692614, 2344974; follow coastline and return to starting point.

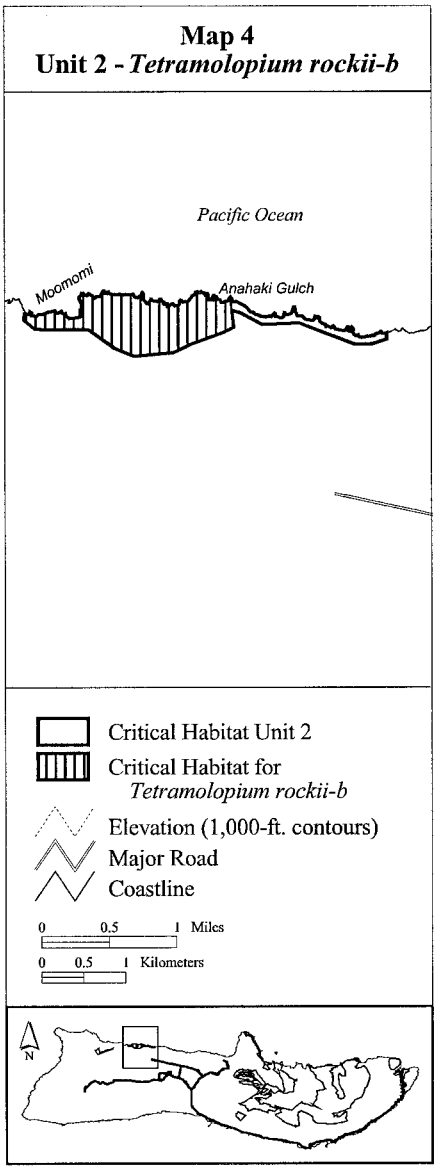
(ii) **Note:** Map 3 follows:



(4) Molokai 2—*Tetramolopium rockii*—b (112 ha; 278 ac)

(i) Unit consists of the following 13 boundary points and the intermediate coastline: Start at 694570, 2344946; 694440, 2344889; 694073, 2344750; 693846, 2344653; 693382, 2344612; 693146, 2344702; 692844, 2344921; 692641, 2344929; 692389, 2344922; 692389, 2344921; 692356, 2344921; 692201, 2344938; 692071, 2345043; follow coastline and return to starting point.

(ii) **Note:** Map 4 follows:

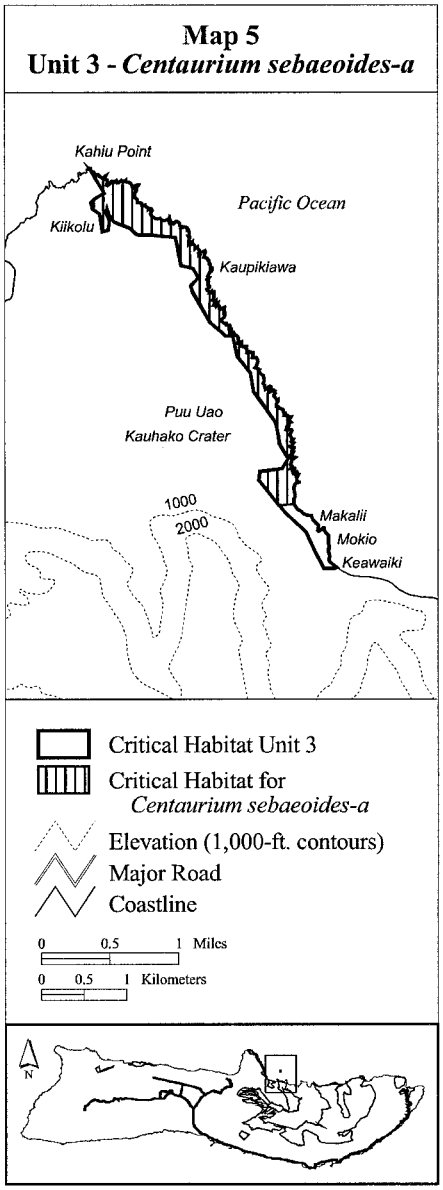


(5) Molokai 3—*Centaurium sebaeoides*—a (96 ha; 238 ac)

(i) Unit consists of the following 38 boundary points and the intermediate coastline: Start at 710676, 2347273; 712999, 2343399; 712824, 2343386; 712590, 2343678; 712603, 2343781; 712863, 2343820; 712941, 2343944; 712837, 2344106; 712792, 2344340; 712668, 2344541; 712526, 2344729; 712493, 2344936; 712337, 2345131; 712279, 2345365; 712214, 2345371; 712035, 2345519; 711799, 2345942; 711883, 2346053; 711827, 2346164; 711683, 2346195; 711618, 2346528; 711159, 2346569; 711092, 2346637; 710917, 2346701; 710858, 2346756; 710816, 2346864; 710811, 2346802; 710845, 2346718; 710832, 2346611; 710768, 2346591; 710734, 2346806; 710652, 2346855; 710629, 2346935; 710676, 2346982; 710788, 2347050; 710636, 2347297; 710642, 2347291;

710661, 2347288; follow coastline and return to starting point.

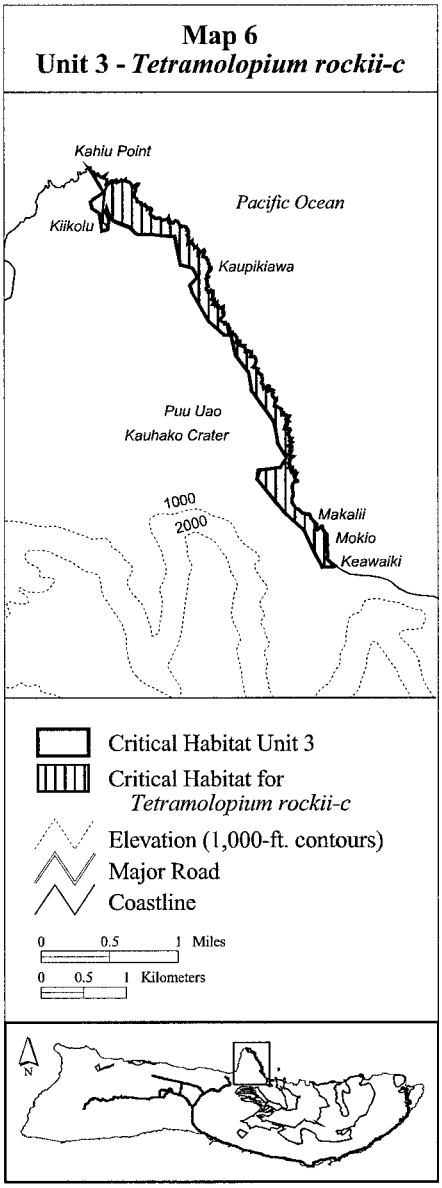
(ii) **Note:** Map 5 follows:



(6) Molokai 3—*Tetramolopium rockii*—c (106 ha; 260 ac)

(i) Unit consists of the following 34 boundary points and the intermediate coastline: Start at 713501, 2342654; 713473, 2342635; 713351, 2342635; 713245, 2342841; 713138, 2343077; 712902, 2343290; 712773, 2343465; 712591, 2343679; 712625, 2343781; 712863, 2343814; 712934, 2343924; 712831, 2344099; 712805, 2344327; 712526, 2344716; 712500, 2344936; 712337, 2345131; 712279, 2345365; 712208, 2345371; 712019, 2345540; 711819, 2345873; 711799, 2345962; 711883, 2346040; 711838, 2346156; 711689, 2346202; 711624, 2346539; 711169, 2346559; 711098, 2346649; 710890, 2346727; 710817, 2346864; 710810, 2346810; 710849, 2346706; 710832, 2346656; 710759, 2346712; 710802, 2347065; follow coastline and return to starting point.

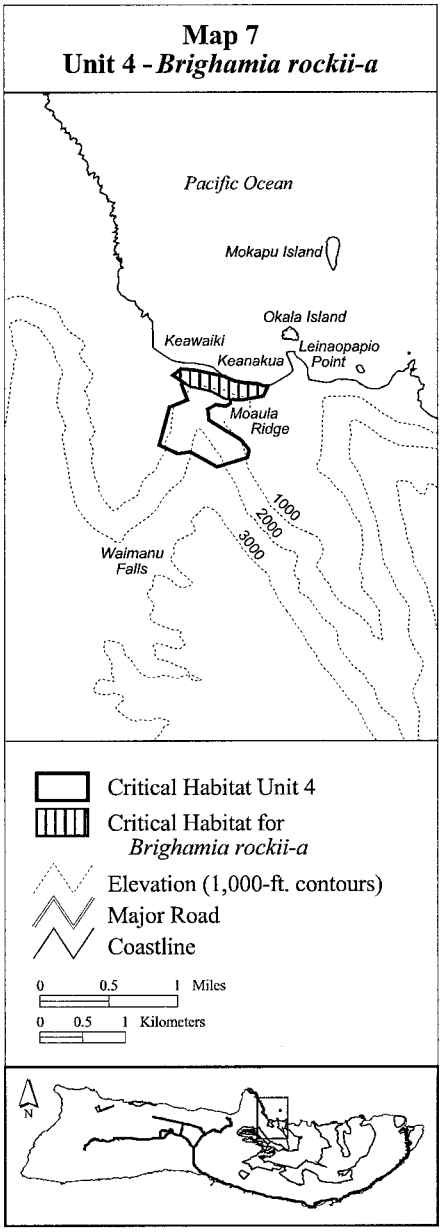
(ii) **Note:** Map 6 follows:



(7) Molokai 4—*Brighamia rockii*—a (20 ha; 51 ac)

(i) Unit consists of the following 9 boundary points and the intermediate coastline: Start at 714246, 2342381; 714703, 2342153; 714446, 2342101; 714255, 2342116; 714094, 2342204; 713837, 2342263; 713646, 2342395; 713740, 2342469; 713902, 2342456; follow coastline and return to starting point.

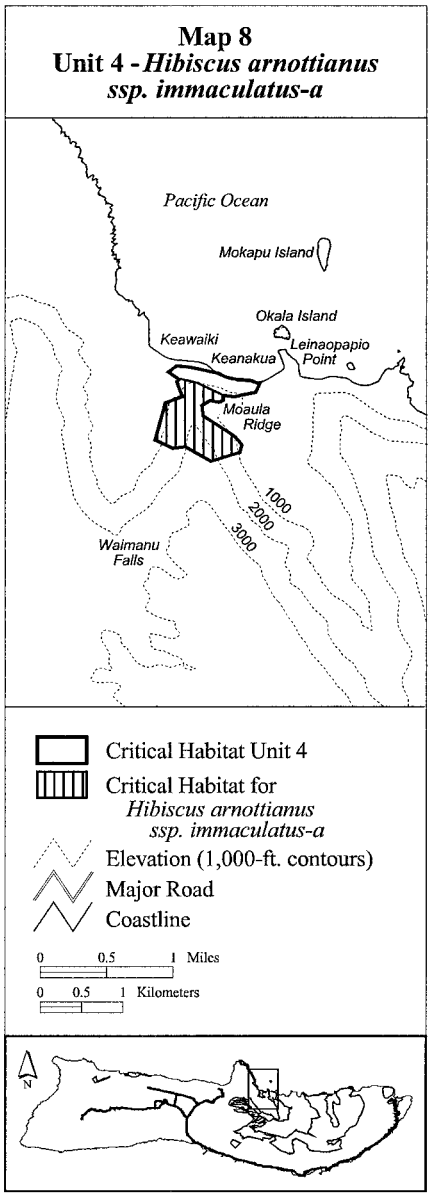
(ii) **Note:** Map 7 follows:



(8) Molokai 4—*Hibiscus arnottianus* ssp. *immaculatus*—a (56 ha; 139 ac)

(i) Unit consists of the following 20 boundary points: Start at 714313, 2342111; 714313, 2342061; 714263, 2342030; 714146, 2342049; 714053, 2341993; 714065, 2341869; 714443, 2341627; 714530, 2341522; 714511, 2341429; 714158, 2341318; 713848, 2341497; 713697, 2341473; 713483, 2341578; 713601, 2342024; 713813, 2342101; 713769, 2342222; 713769, 2342222; 713743, 2342284; 713786, 2342315; 713991, 2342266; return to starting point.

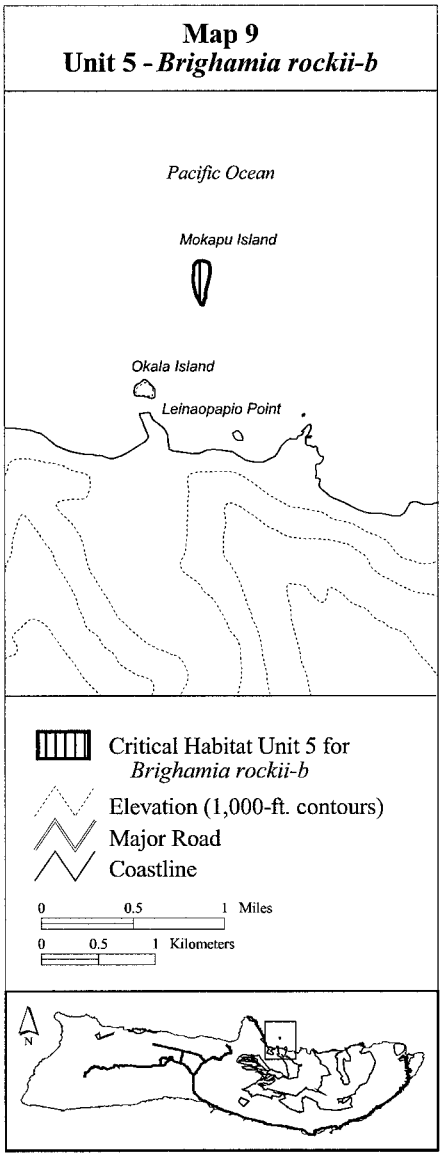
(ii) **Note:** Map 8 follows:



(9) Molokai 5—*Brighamia rockii*—b (4 ha; 10 ac)

(i) Area consists of the entire offshore island located at approximately: 715517, 2343847.

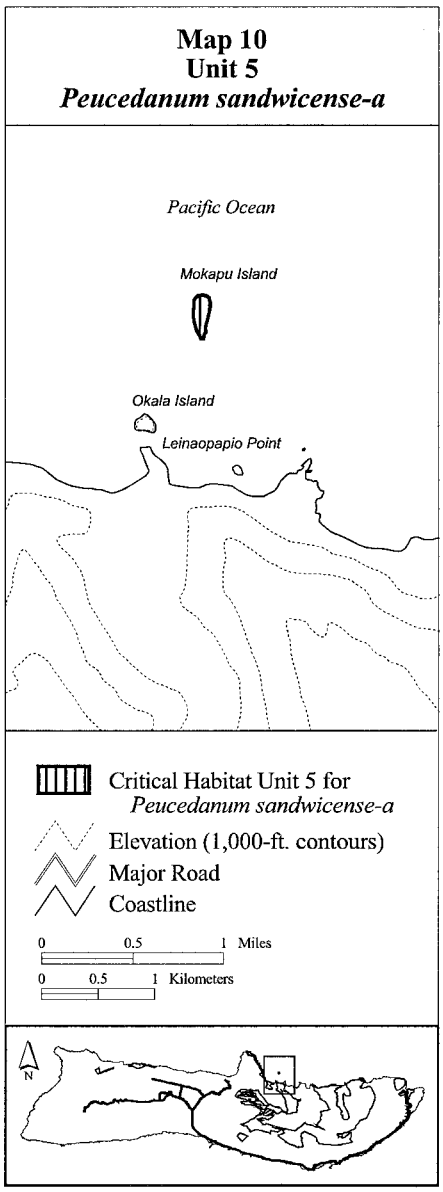
(ii) **Note:** Map 9 follows:



(10) Molokai 5—*Peucedanum sandwicense*—a (4 ha; 10 ac)

(i) Area consists of the entire offshore island located at approximately: 715517, 2343847.

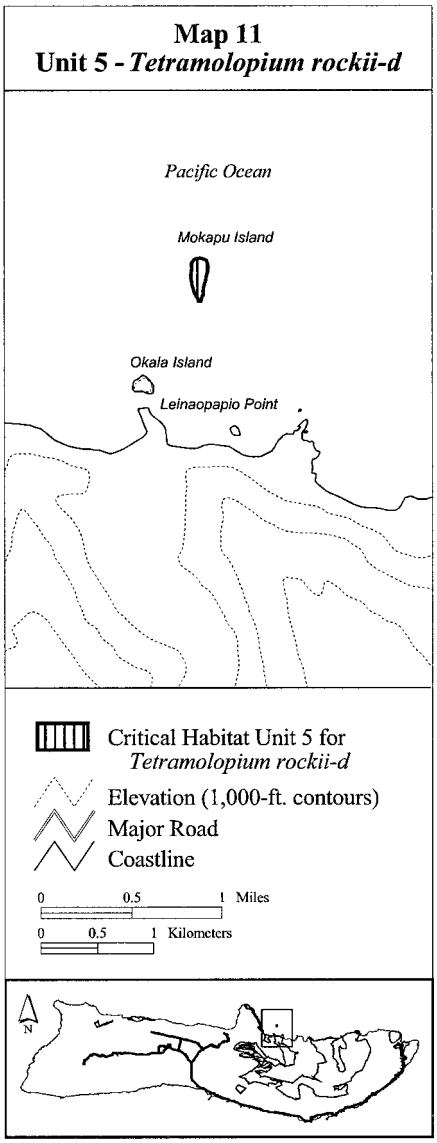
(ii) **Note:** Map 10 follows:



(11) Molokai 5—*Tetramolopium rockii*—d (4 ha; 10 ac)

(i) Area consists of the entire offshore island located at approximately: 715517, 2343847.

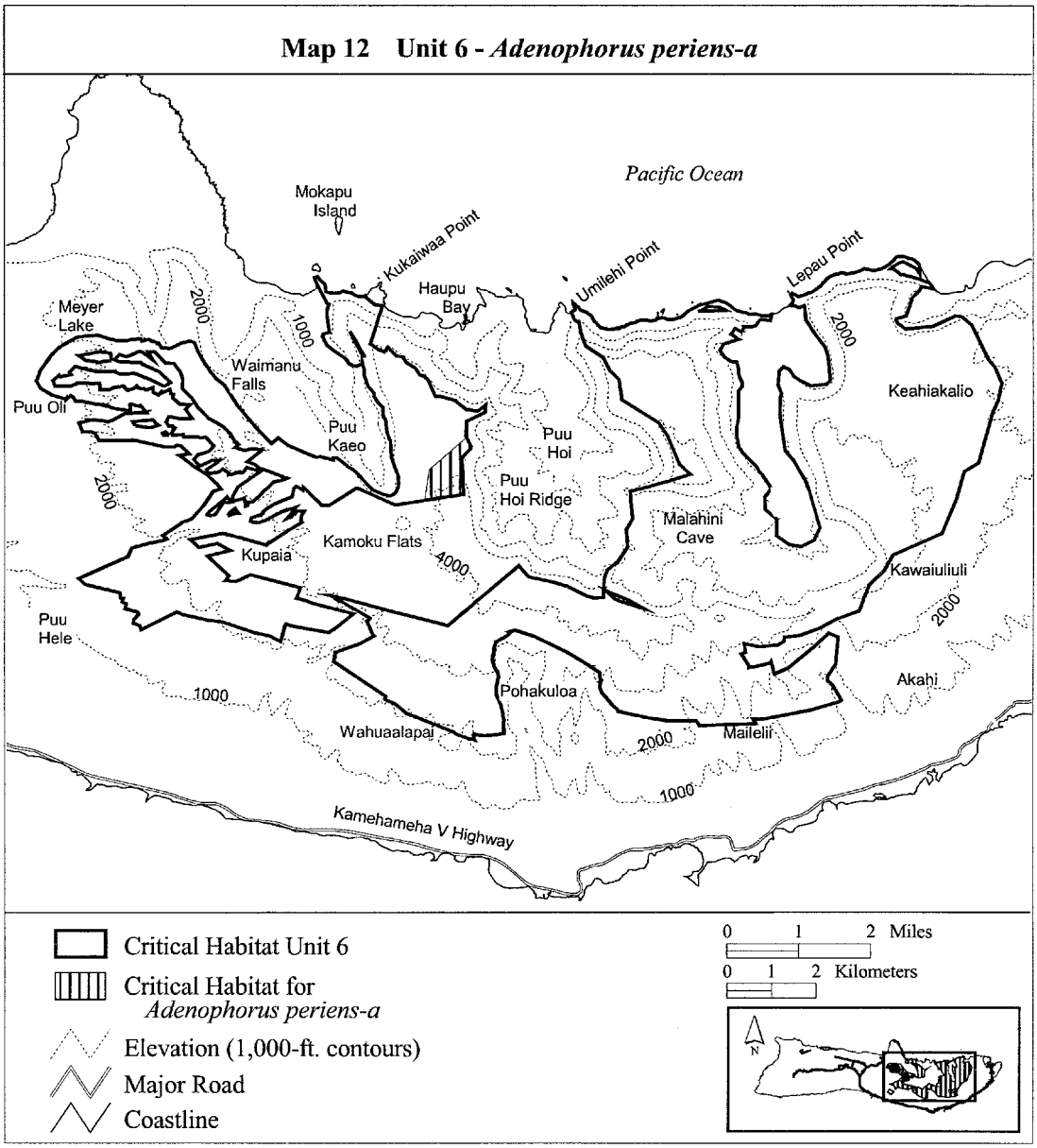
(ii) **Note:** Map 11 follows:



(12) Molokai 6—*Adenophorus periens*—a (79 ha; 194 ac)

(i) Unit consists of the following 6 boundary points: Start at 718366, 2339098; 718483, 2338864; 718272, 2338643; 718311, 2337817; 717446, 2337682; 717549, 2338376; return to starting point.

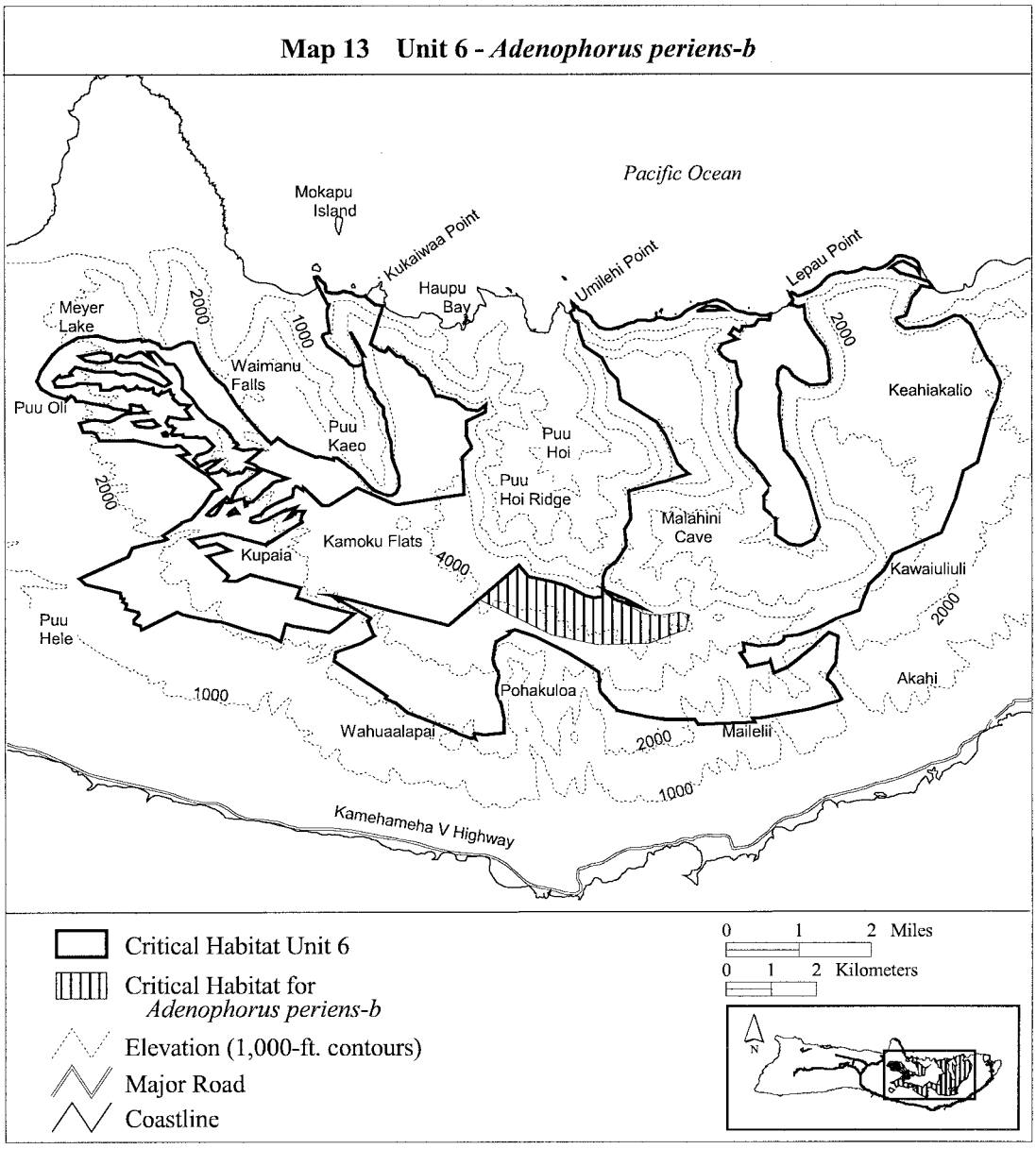
(ii) **Note:** Map 12 follows:



(13) Molokai 6—*Adenophorus periens*—b (396 ha; 980 ac)

(i) Unit consists of the following 19 boundary points: Start at 721394, 2335607; 722329, 2335129; 722733, 2335104; 723117, 2335165; 723342, 2335105; 723236, 2334774; 723034, 2334703; 722442, 2334466; 721281, 2334442; 720262, 2334655; 718639, 2335464; 719529, 2336227; 719749, 2335976; 720611, 2335749; 721062, 2335514; 721066, 2335513; 721206, 2335488; 721387, 2335499; 721388, 2335510; return to starting point.

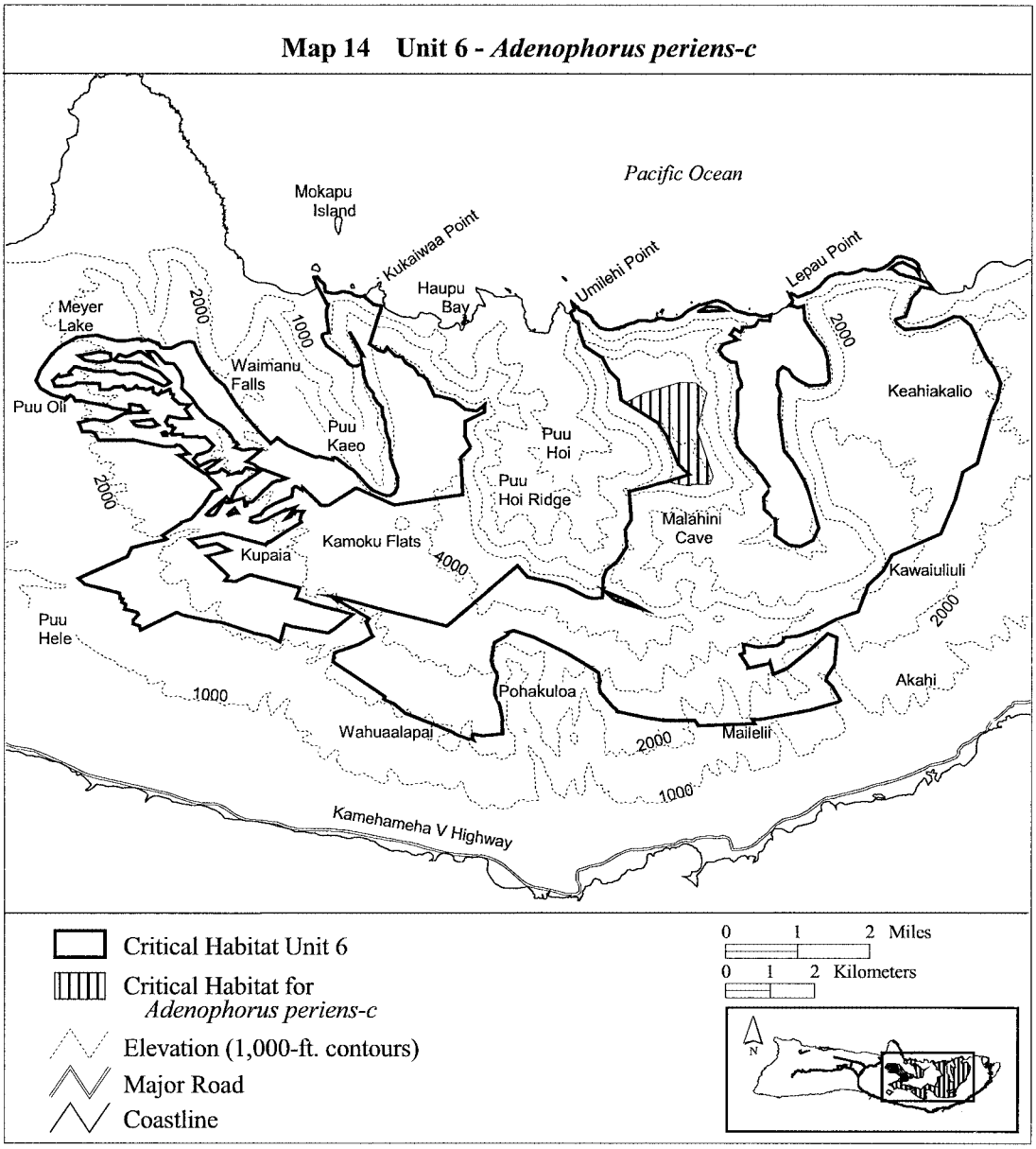
(ii) **Note:** Map 13 follows:



(14) Molokai 6—*Adenophorus periens*—c (214 ha; 530 ac)

(i) Unit consists of the following 20 boundary points: Start at 723720, 2340102; 723501, 2339267; 723764, 2338476; 723865, 2338213; 723777, 2338050; 723639, 2338043; 723426, 2338056; 723331, 2338018; 722967, 2338062; 722873, 2338122; 723352, 2338246; 723352, 2338246; 723351, 2338247; 723088, 2338481; 722803, 2339144; 722612, 2339432; 721900, 2339870; 722315, 2340090; 723124, 2340328; 723469, 2340315; return to starting point.

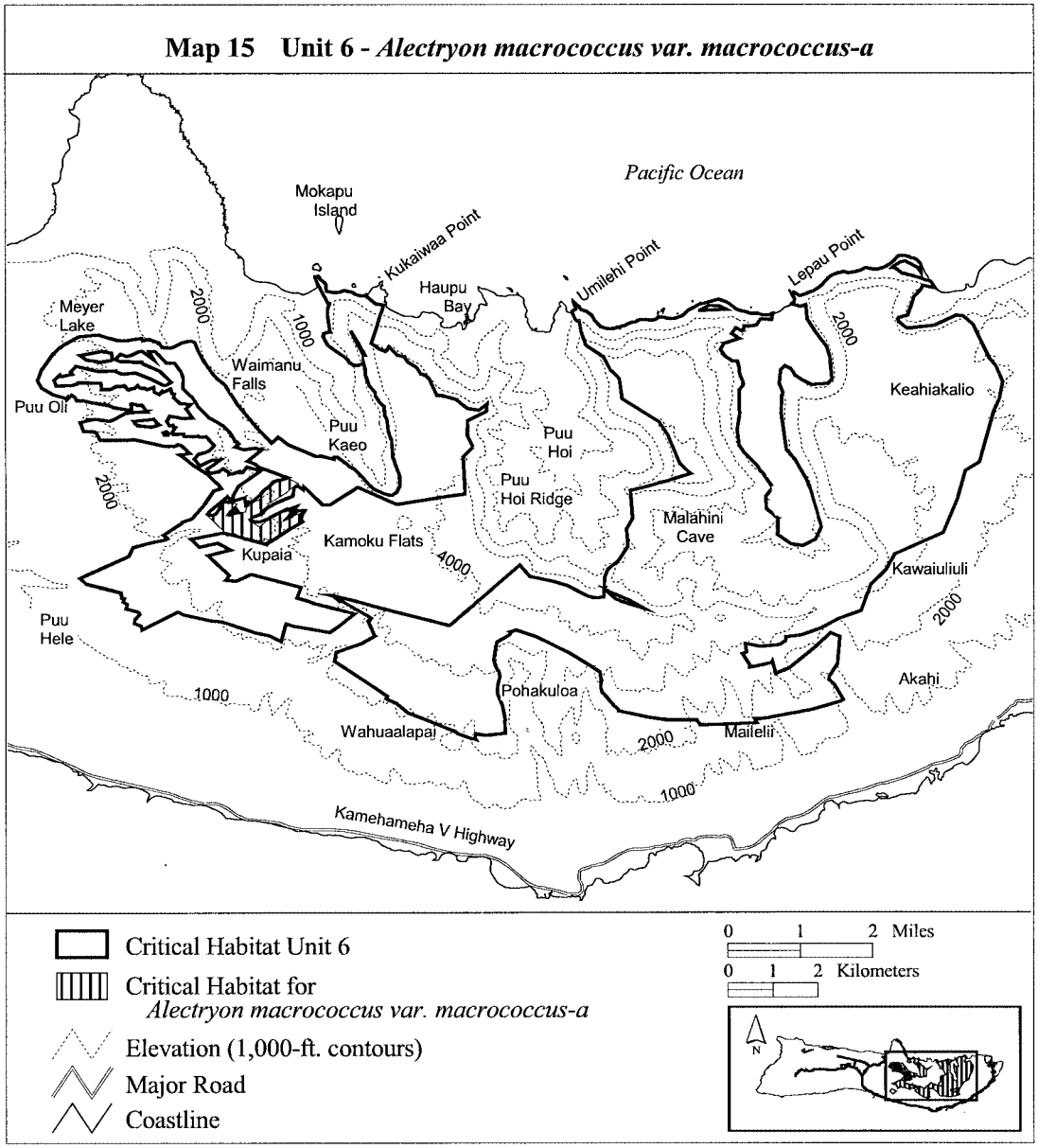
(ii) **Note:** Map 14 follows:



(15) Molokai 6—*Alectryon macrococcus*—a (125 ha; 309 ac)

(i) Unit consists of the following 38 boundary points: Start at 712844, 2337089; 712698, 2337229; 712592, 2337339; 712695, 2337321; 712881, 2337456; 712940, 2337659; 713244, 2337600; 712999, 2337330; 713210, 2337389; 713430, 2337414; 713497, 2337642; 713742, 2337668; 713818, 2337870; 714080, 2338090; 714258, 2338132; 714331, 2338177; 714454, 2338134; 714593, 2338051; 714604, 2338018; 714460, 2337955; 714325, 2337836; 713954, 2337608; 713818, 2337397; 713489, 2337254; 713742, 2337076; 713970, 2337296; 714283, 2337448; 714553, 2337532; 714359, 2337279; 714722, 2337423; 714604, 2337228; 714660, 2337178; 714025, 2336784; 713852, 2336821; 713844, 2336766; 713421, 2336814; 713160, 2336950; 713033, 2336916; return to starting point.

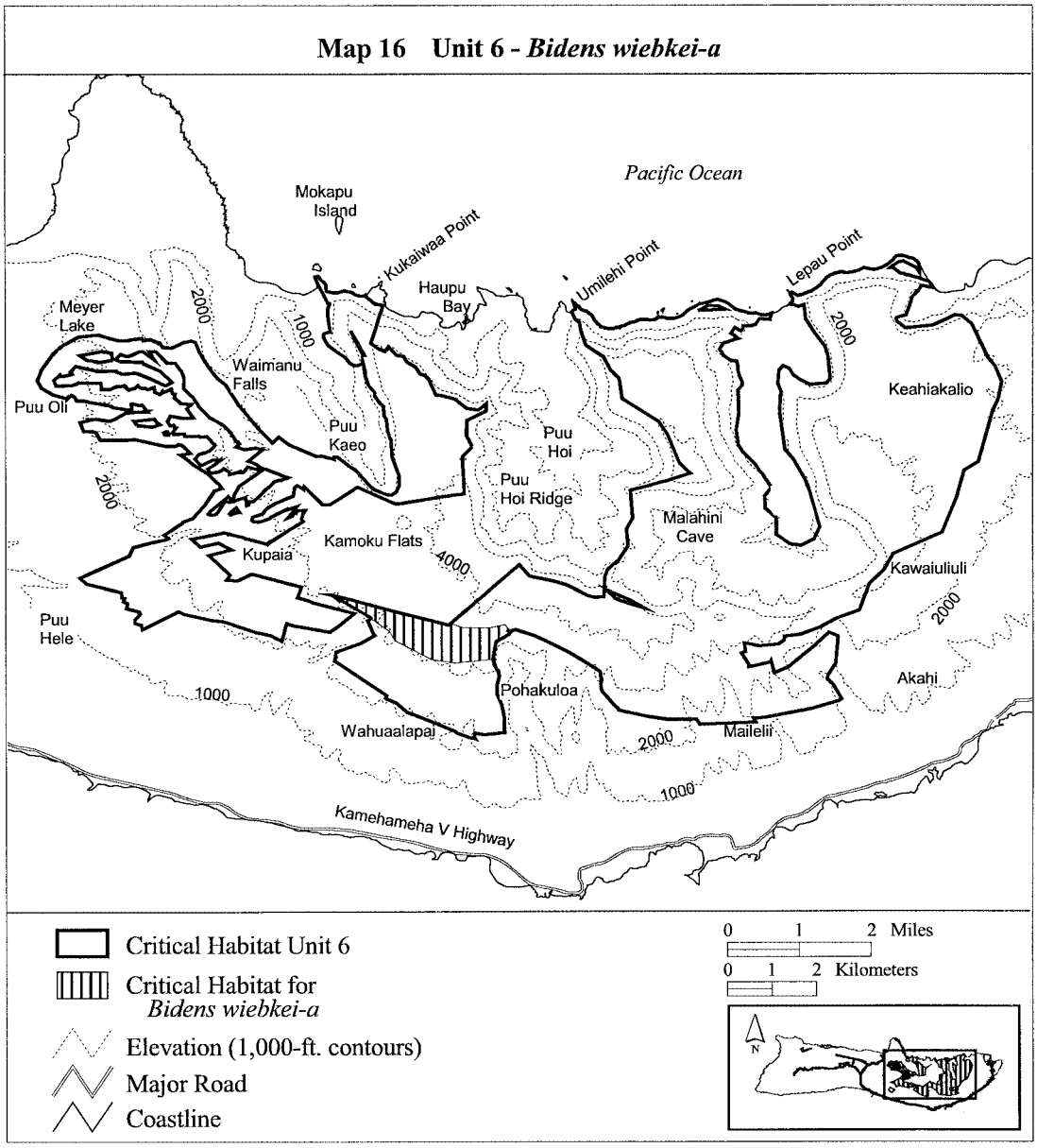
(ii) **Note:** Map 15 follows:



(16) Molokai 6—*Bidens wiebkei*—a (219 ha; 542 ac)

(i) Unit consists of the following 20 boundary points: Start at 718006, 2334920; 718258, 2334825; 718858, 2334816; 719204, 2334884; 719331, 2334723; 719289, 2334656; 719289, 2334656; 719020, 2334504; 719018, 2334503; 719018, 2334503; 719018, 2334503; 718994, 2334425; 718934, 2334106; 718097, 2334022; 717573, 2334098; 716744, 2334529; 716634, 2334732; 716135, 2335095; 715347, 2335551; 717956, 2334877; return to starting point.

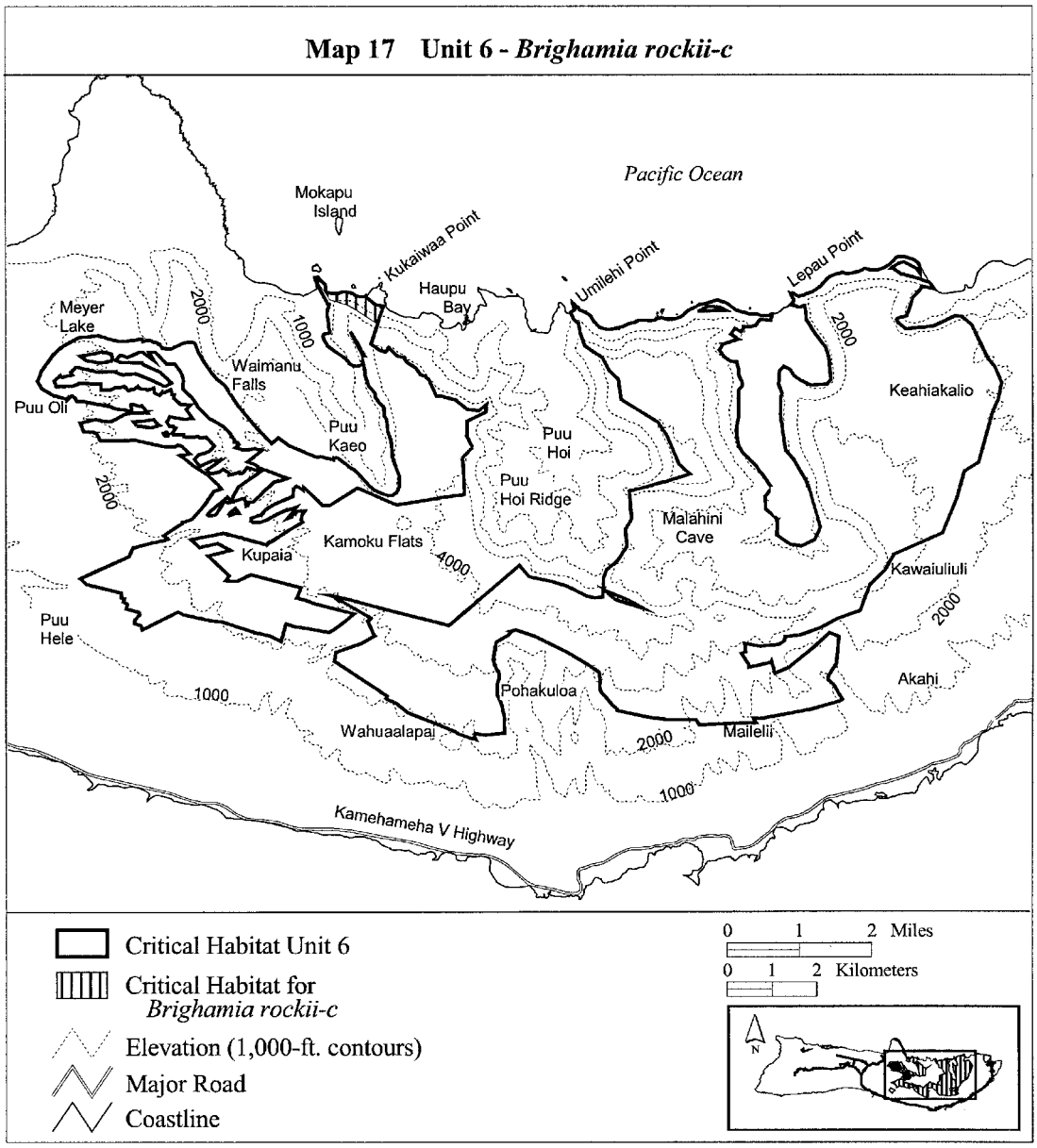
(ii) **Note:** Map 16 follows:



(17) Molokai 6—*Brighamia rockii*—c (38 ha; 95 ac)

(i) Unit consists of the following 9 boundary points and the intermediate coastline: Start at 716089, 2342247; 716263, 2342102; 716347, 2341969; 716482, 2341996; 716375, 2341657; 716328, 2341655; 715888, 2341942; 715686, 2342053; 715313, 2342170; follow coastline and return to starting point.

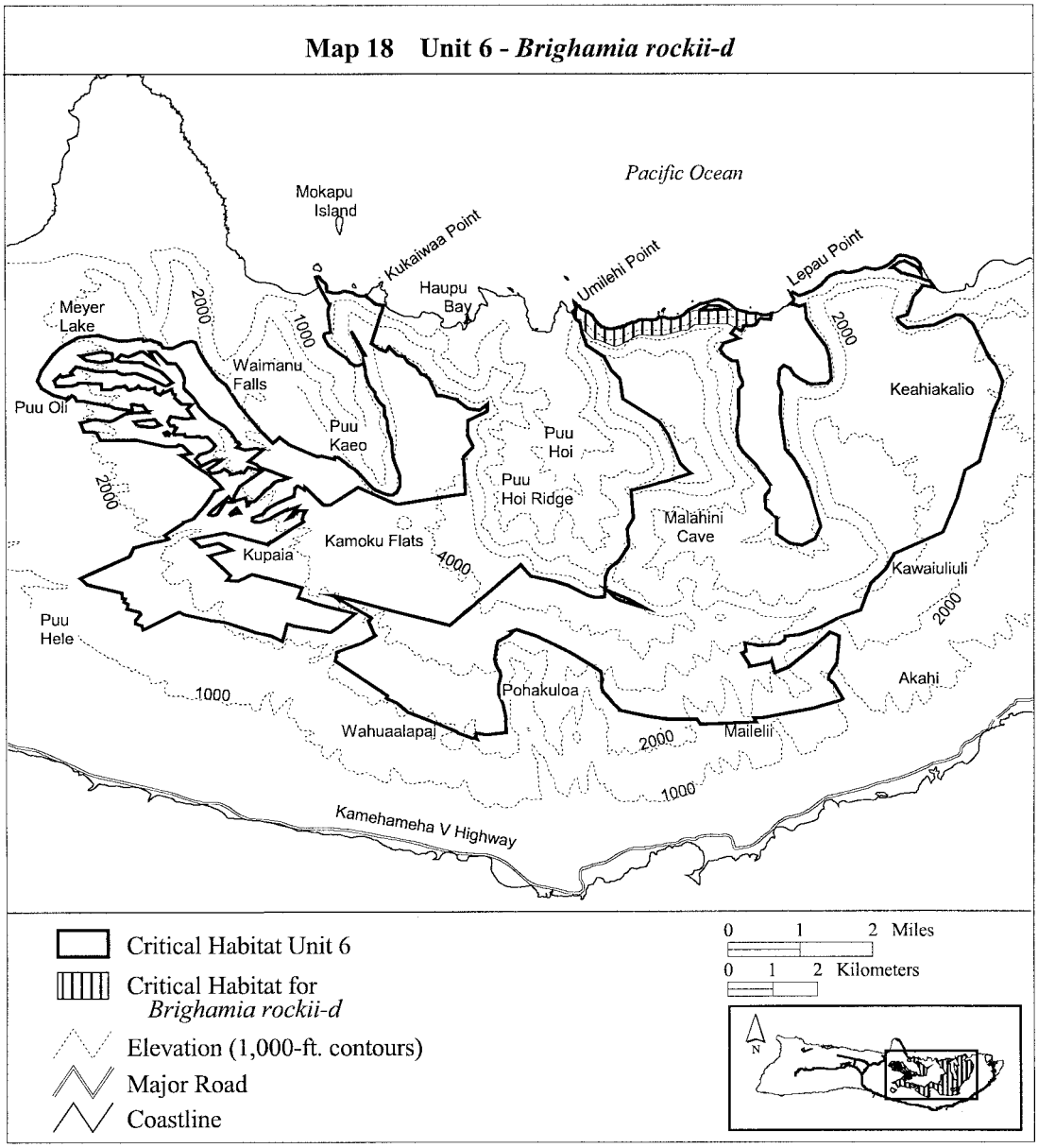
(ii) **Note:** Map 17 follows:



(18) Molokai 6—*Brighamia rockii*—d (145 ha; 358 ac)

(i) Unit consists of the following 35 boundary points and the intermediate coastline: Start at 720770, 2341981; 723204, 2341840; 723220, 2341842; 723377, 2341891; 724326, 2341946; 724920, 2341803; 724885, 2341725; 724781, 2341588; 724671, 2341562; 724262, 2341549; 724190, 2341601; 723996, 2341614; 723405, 2341582; 723256, 2341465; 723139, 2341465; 722691, 2341348; 722509, 2341348; 722158, 2341374; 721756, 2341147; 721620, 2341102; 721256, 2341251; 721139, 2341270; 720872, 2341522; 720861, 2341600; 720856, 2341640; 720767, 2341699; 720682, 2341883; 720682, 2341883; 720682, 2341883; 720690, 2341897; 720716, 2341917; 720755, 2341929; 720769, 2341936; 720777, 2341952; 720777, 2341970; follow coastline and return to starting point.

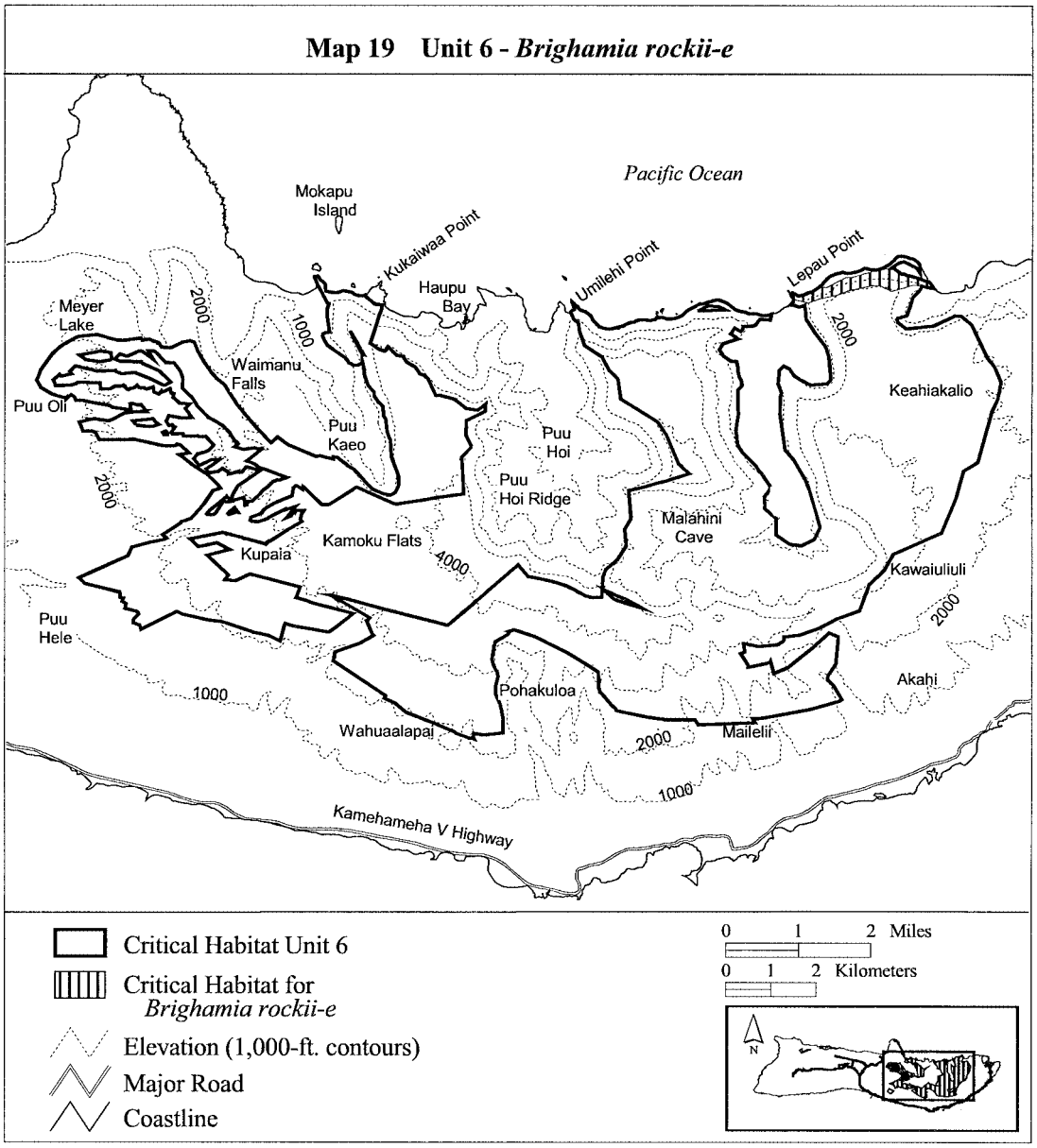
(ii) **Note:** Map 18 follows:



(19) Molokai 6—*Brighamia rockii*—e (83 ha; 206 ac)

(i) Unit consists of the following 24 boundary points and the intermediate coastline: Start at 726360, 2342420; 726777, 2342655; 726909, 2342655; 727223, 2342748; 727399, 2342787; 727757, 2342861; 727860, 2342856; 728070, 2342704; 728207, 2342694; 728394, 2342640; 728580, 2342567; 728635, 2342558; 728678, 2342429; 728305, 2342483; 727815, 2342351; 727571, 2342464; 727394, 2342478; 726860, 2342366; 726591, 2342258; 726194, 2342170; 725949, 2342077; 725660, 2342155; 725633, 2342168; 725632, 2342174; follow coastline and return to starting point.

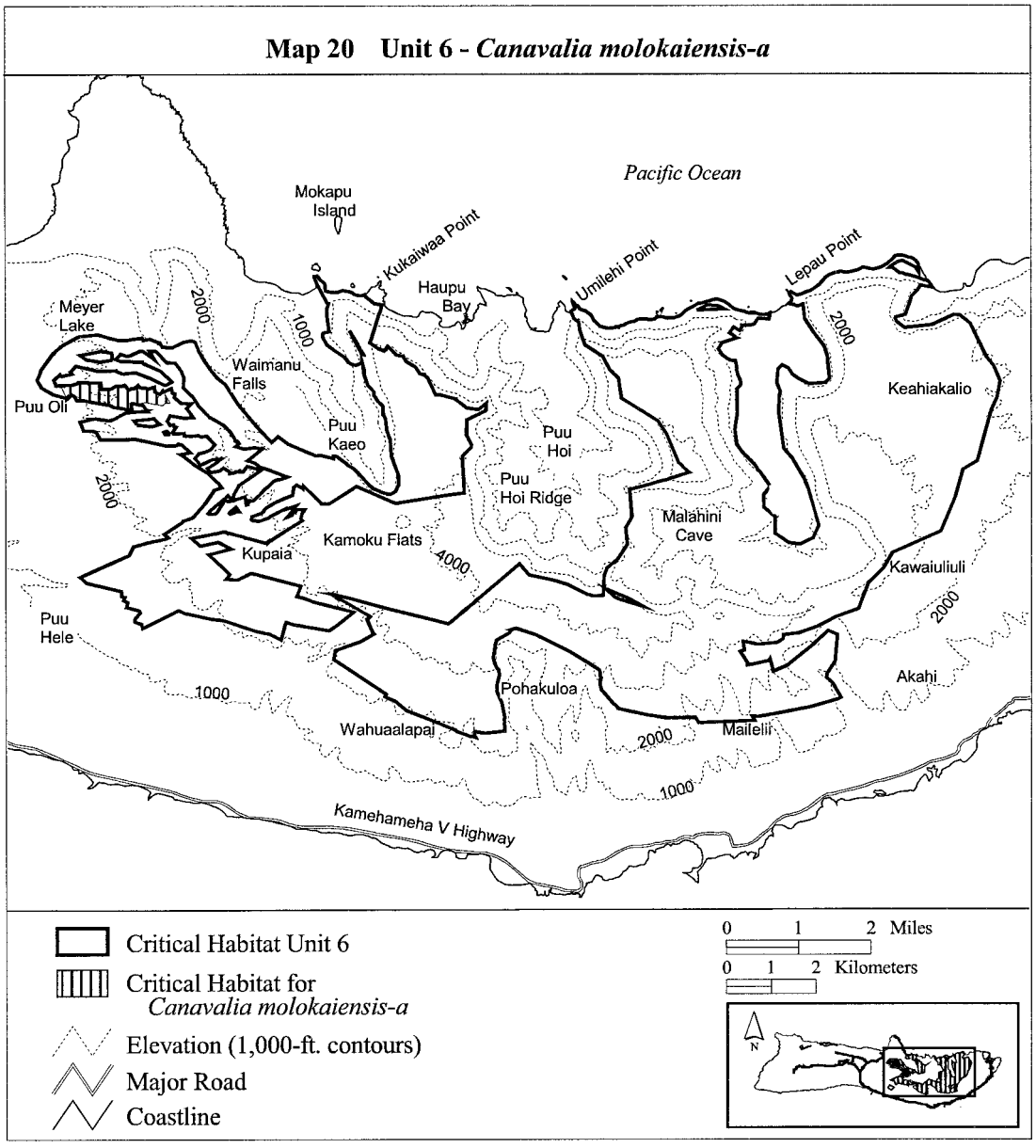
(ii) **Note:** Map 19 follows:



(20) Molokai 6—*Canavalia molokaiensis*—a (80 ha; 197 ac)

(i) Unit consists of the following 28 boundary points: Start at 711585, 2340110; 711750, 2339841; 711652, 2339833; 711589, 2339786; 711148, 2339857; 711062, 2339810; 710951, 2339857; 710881, 2339810; 710881, 2339715; 710487, 2339755; 710251, 2339841; 709913, 2339873; 709574, 2340038; 709469, 2339940; 709322, 2340226; 709637, 2340243; 709724, 2340298; 710220, 2340290; 710227, 2340156; 710338, 2340109; 710542, 2340211; 710778, 2340219; 710818, 2340125; 710936, 2340125; 711077, 2340188; 711376, 2340133; 711463, 2340038; 711455, 2339952; return to starting point.

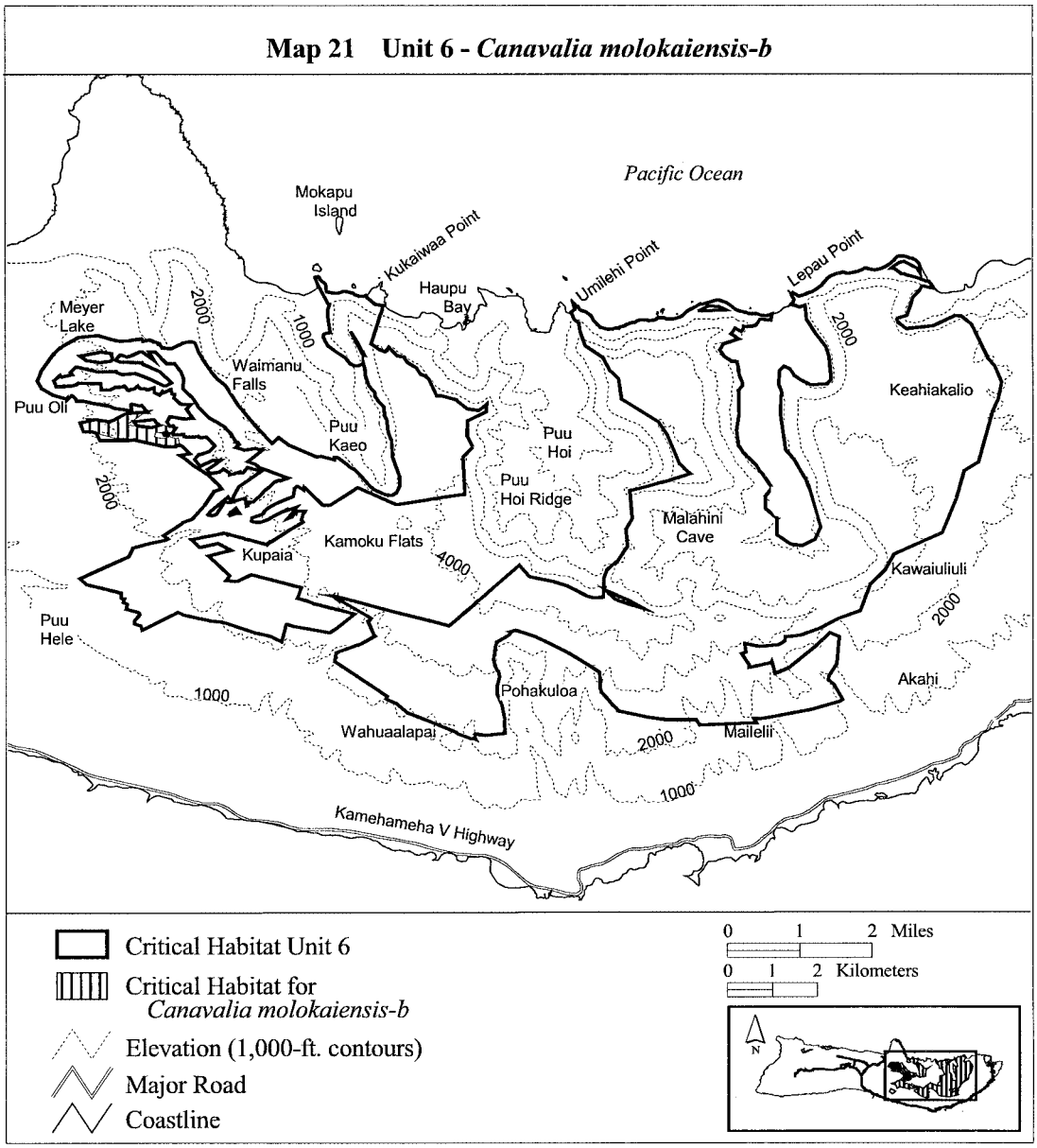
(ii) **Note:** Map 20 follows:



(21) Molokai 6—*Canavalia molokaiensis*—b (76 ha; 187 ac)

(i) Unit consists of the following 27 boundary points: Start at 711826, 2339337; 711860, 2339273; 711809, 2339212; 711431, 2339196; 711408, 2339109; 711589, 2339062; 711746, 2339109; 711880, 2339062; 711947, 2339066; 711971, 2338928; 711873, 2338886; 711654, 2338886; 710802, 2339069; 710534, 2339069; 710041, 2339210; 709997, 2339210; 709997, 2339210; 709837, 2339210; 709751, 2339417; 710102, 2339495; 710424, 2339432; 710763, 2339613; 711203, 2339660; 710794, 2339377; 711258, 2339283; 711573, 2339377; 711778, 2339330; return to starting point.

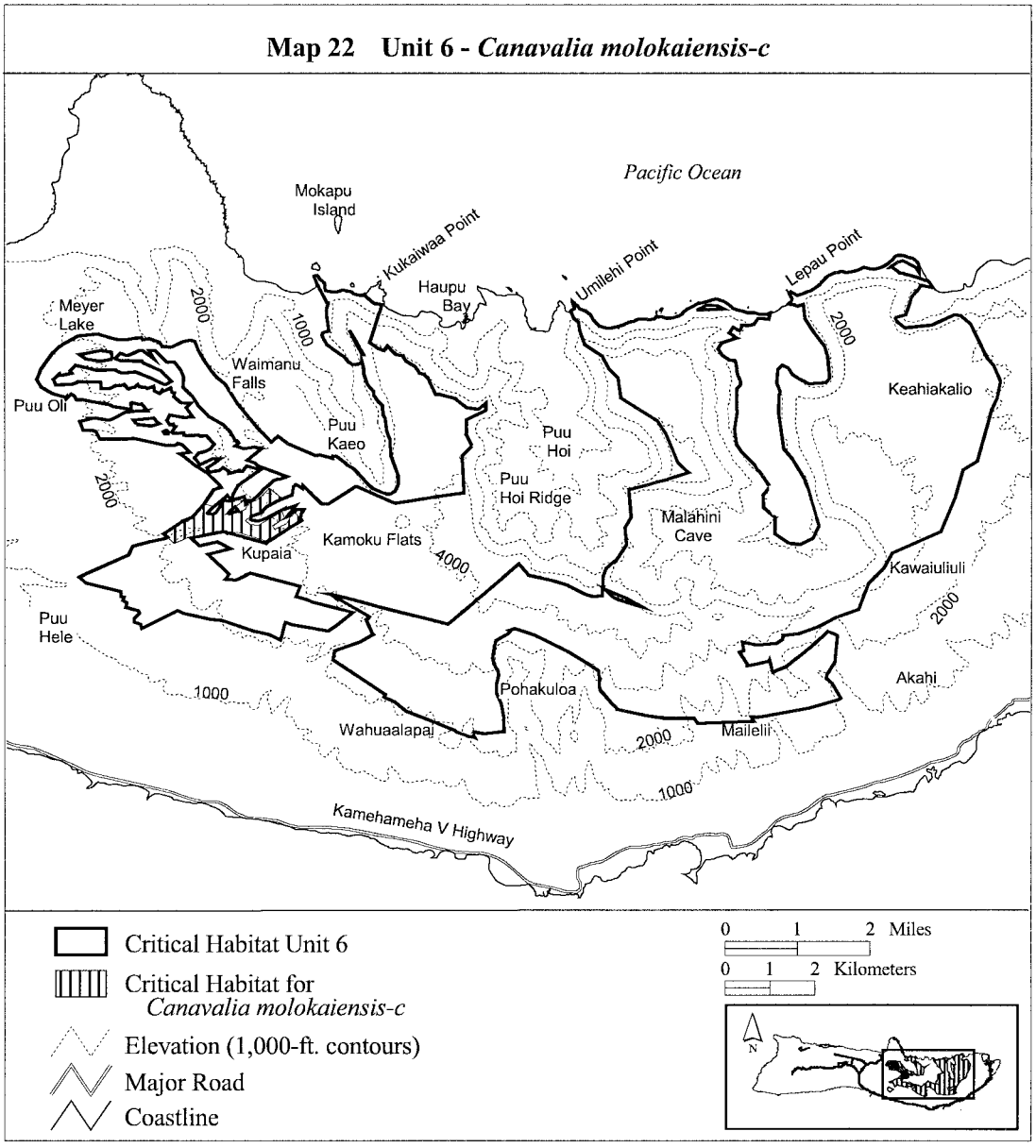
(ii) **Note:** Map 21 follows:



(22) Molokai 6—*Canavalia molokaiensis*—c (150 ha; 371 ac)

(i) Unit consists of the following 36 boundary points: Start at 711848, 2336679; 711615, 2336901; 712021, 2337169; 712152, 2337176; 712518, 2337570; 712704, 2337521; 712587, 2337356; 712746, 2337335; 712939, 2337632; 713415, 2337666; 712987, 2337335; 713236, 2337363; 713457, 2337452; 713477, 2337590; 713678, 2337653; 713919, 2337860; 713966, 2337927; 714259, 2337694; 713940, 2337542; 713781, 2337363; 713512, 2337266; 713443, 2337197; 713533, 2337114; 713719, 2337087; 713995, 2337252; 714250, 2337404; 714299, 2337252; 714043, 2337073; 714085, 2336997; 714354, 2337121; 714517, 2337419; 714705, 2337206; 713938, 2336730; 713284, 2336921; 712794, 2336955; 712139, 2336804; return to starting point.

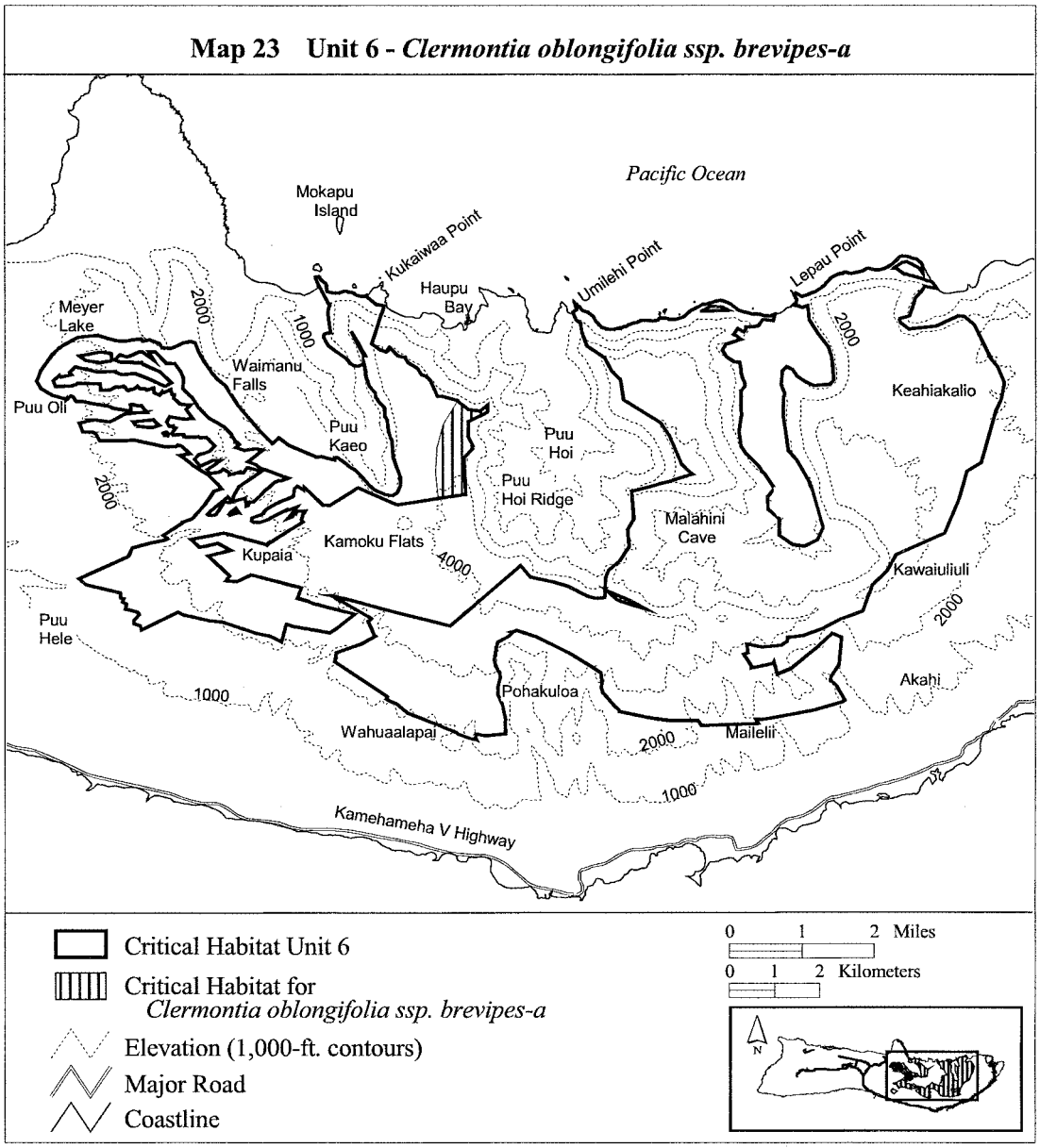
(ii) **Note:** Map 22 follows:



(23) Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—a (131 ha; 325 ac)

(i) Unit consists of the following 14 boundary points: Start at 717701, 2337728; 717628, 2338298; 717674, 2338869; 717807, 2339393; 718126, 2339914; 718369, 2339712; 718630, 2339684; 718798, 2339820; 718794, 2339660; 718369, 2339448; 718361, 2339127; 718483, 2338864; 718272, 2338643; 718311, 2337817; return to starting point.

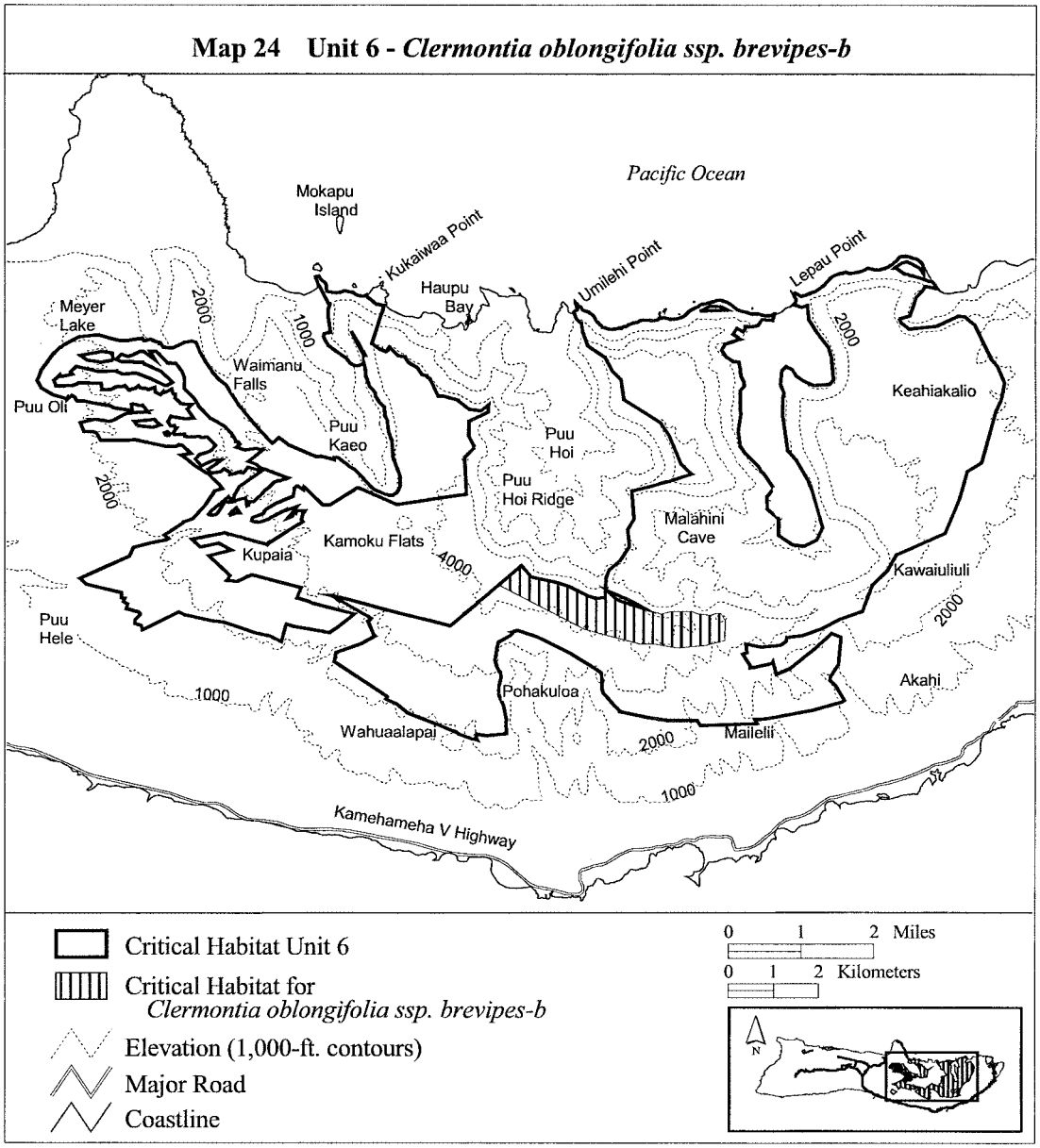
(ii) **Note:** Map 23 follows:



(24) Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—b (358 ha; 884 ac)

(i) Unit consists of the following 27 boundary points: Start at 721397, 2335692; 721668, 2335452; 721947, 2335359; 722644, 2335147; 722856, 2335193; 723314, 2335207; 723493, 2335140; 723765, 2335120; 723904, 2335173; 723977, 2335160; 724070, 2335007; 724063, 2334550; 723652, 2334443; 723002, 2334377; 722511, 2334470; 722166, 2334470; 720938, 2334795; 719017, 2335788; 719529, 2336227; 719749, 2335976; 720611, 2335749; 720920, 2335559; 721062, 2335514; 721066, 2335513; 721206, 2335488; 721388, 2335510; 721396, 2335678; return to starting point.

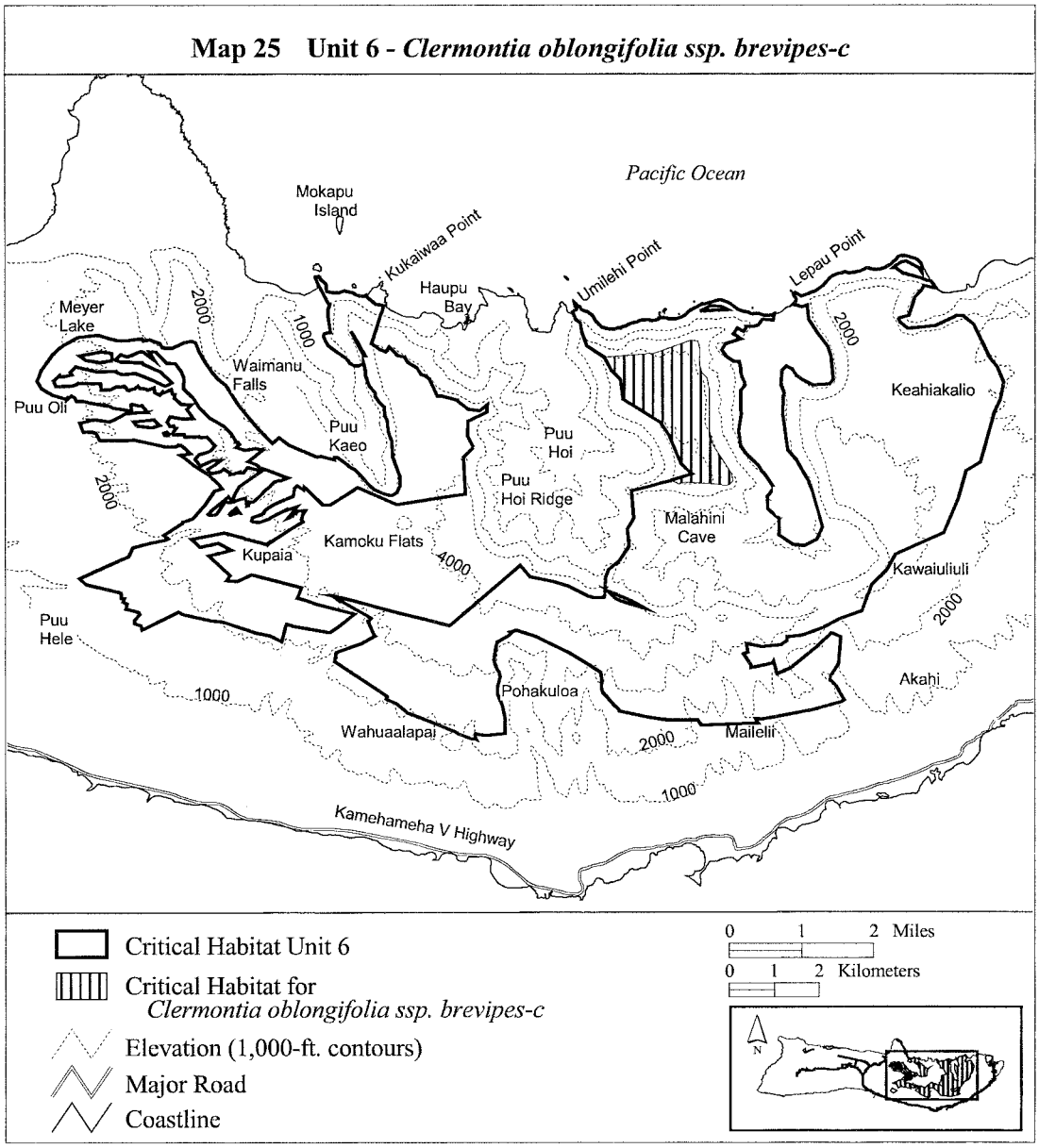
(ii) **Note:** Map 24 follows:



(25) Molokai 6—*Clermontia oblongifolia* ssp. *brevipes*—c (427 ha; 1,054 ac)

(i) Unit consists of the following 28 boundary points: Start at 722484, 2340959; 723300, 2341251; 723453, 2341231; 723499, 2341052; 723492, 2340727; 723539, 2340534; 723652, 2340415; 723711, 2340170; 723718, 2339871; 723711, 2339267; 723778, 2338922; 724196, 2338272; 724229, 2338099; 724149, 2338033; 724063, 2338006; 723844, 2338046; 723174, 2338080; 723028, 2338046; 722869, 2338119; 722868, 2338120; 723331, 2338266; 723088, 2338481; 722803, 2339144; 722612, 2339432; 721796, 2339934; 721731, 2340378; 721548, 2340570; 721380, 2340876; return to starting point.

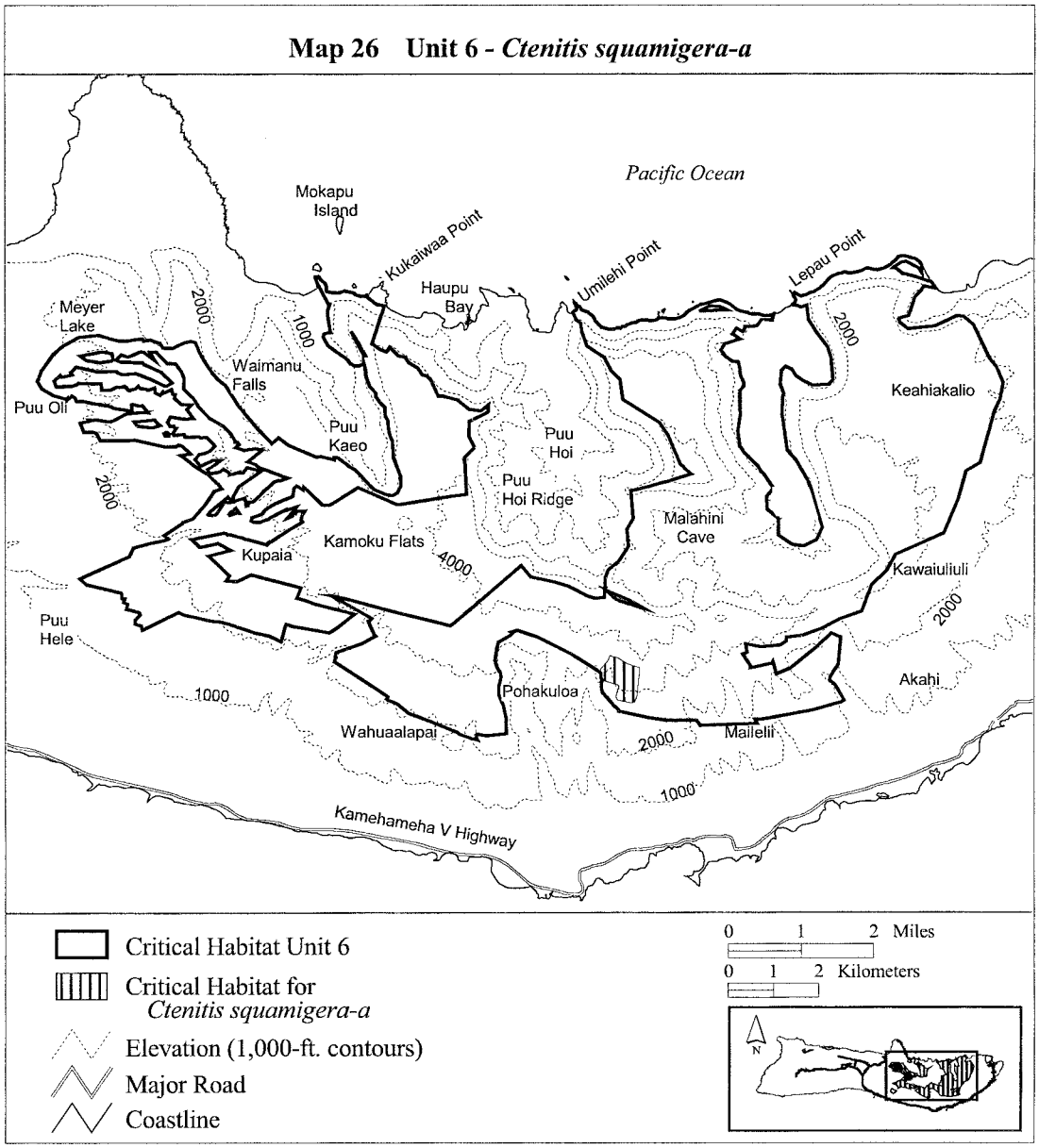
(ii) **Note:** Map 25 follows:



(26) Molokai 6—*Ctenitis squamigera*—a (58 ha; 144 ac)

(i) Unit consists of the following 21 boundary points: Start at 721326, 2333655; 721317, 2333769; 721287, 2333895; 721466, 2334108; 721505, 2334200; 721670, 2334169; 721897, 2334030; 722041, 2333969; 722176, 2333943; 722167, 2333799; 722145, 2333638; 722128, 2333429; 722119, 2333298; 722054, 2333159; 721988, 2333146; 721692, 2333207; 721666, 2333237; 721644, 2333298; 721697, 2333464; 721714, 2333525; 721679, 2333560; return to starting point.

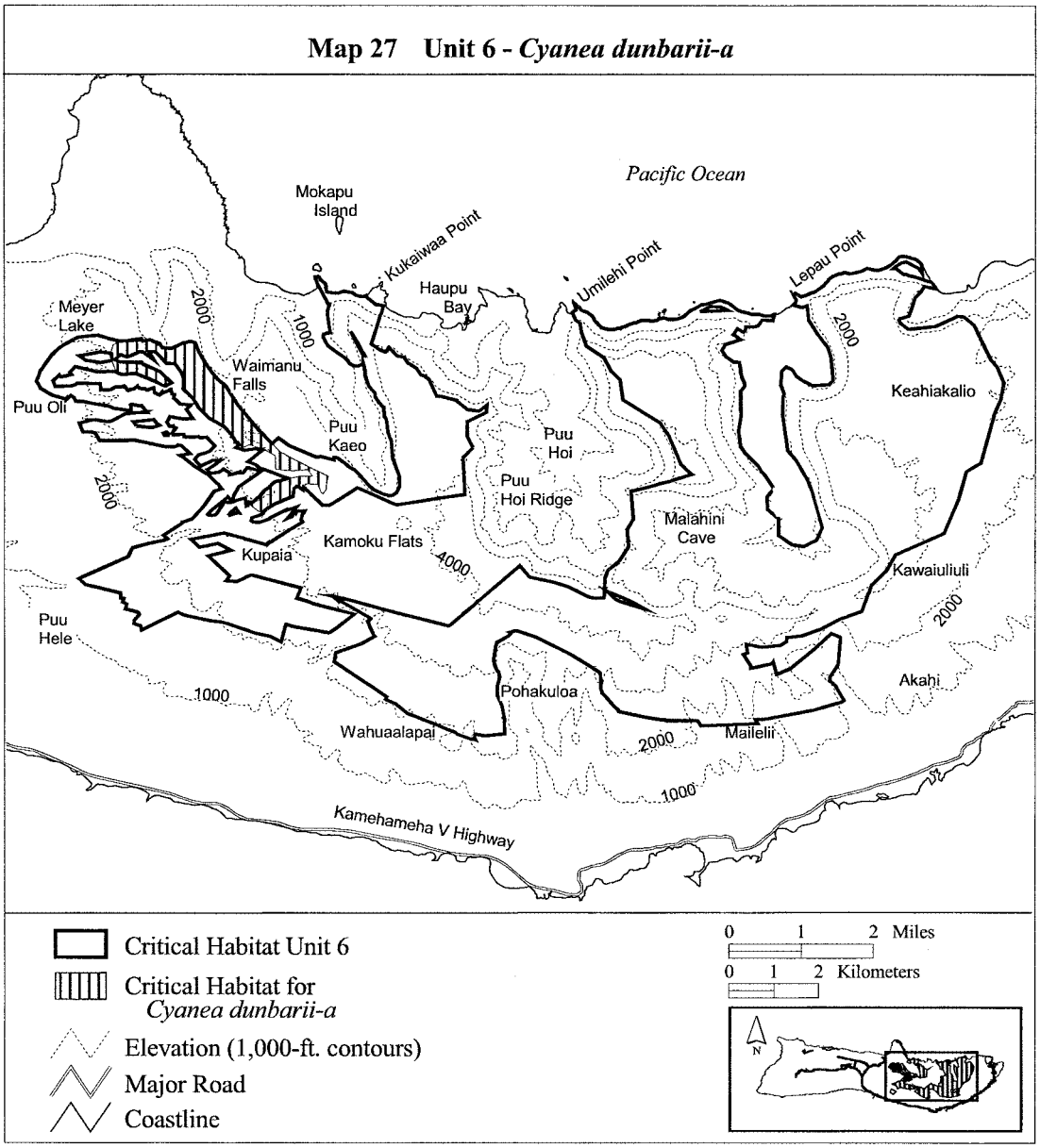
(ii) **Note:** Map 26 follows:



(27) Molokai 6—*Cyanea dunbarii*—a (328 ha; 810 ac)

(i) Unit consists of the following 90 boundary points: Start at 712383, 2341010; 712509, 2340781; 712677, 2340542; 712803, 2340388; 712971, 2340262; 713243, 2339841; 713266, 2339806; 713715, 2339259; 714220, 2338754; 714297, 2338733; 714374, 2338677; 714760, 2338473; 715273, 2338222; 715234, 2338101; 715225, 2337922; 715157, 2337836; 715115, 2337848; 715023, 2338037; 714756, 2338059; 714707, 2337911; 714567, 2338002; 714503, 2337946; 714489, 2337777; 714272, 2337679; 713969, 2337560; 713829, 2337426; 713749, 2337418; 713485, 2337618; 713716, 2337686; 713906, 2337932; 714103, 2338087; 714609, 2338220; 714918, 2338213; 714813, 2338368; 714419, 2338347; 714103, 2338389; 714089, 2338684; 713829, 2338832; 713499, 2338930; 713358, 2338860; 713246, 2338979; 713158, 2339000; 713210, 2339000; 713105, 2339162; 712936, 2339352; 712620, 2339534; 712395, 2339759; 712248, 2339991; 712044, 2340188; 712051, 2340406; 711988, 2340567; 711861, 2340729; 711679, 2340743; 711433, 2341003; 711081, 2340996; 710800, 2340884; 710660, 2340940; 710547, 2340827; 710653, 2340778; 710856, 2340778; 711123, 2340743; 711531, 2340560; 711791, 2340321; 711666, 2340244; 711599, 2340252; 711348, 2340378; 711130, 2340462; 710976, 2340525; 710695, 2340497; 710564, 2340545; 710482, 2340767; 710454, 2340998; 710489, 2341159; 710587, 2341201; 711050, 2341229; 711309, 2341265; 711407, 2341229; 711520, 2341187; 711520, 2341187; 711590, 2341089; 711621, 2341088; 711621, 2341088; 711786, 2341082; 712007, 2341178; 712060, 2341201; 712183, 2341226; 712235, 2341236; 712236, 2341236; 712305, 2341201; 712382, 2341012; return to starting point.

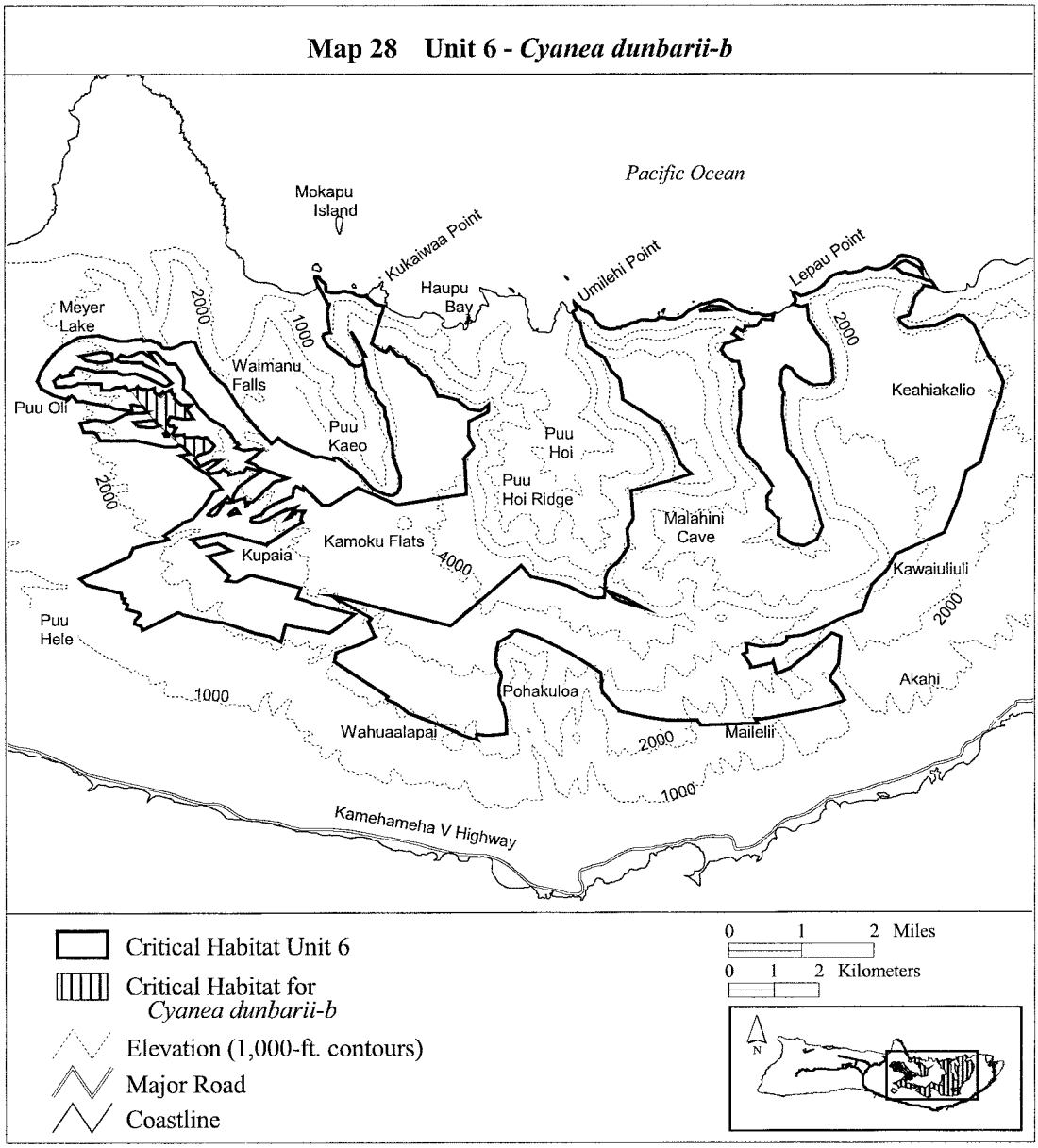
(ii) **Note:** Map 27 follows:



(28) Molokai 6—*Cyanea dunbarii*—b (88 ha; 218 ac)

(i) Unit consists of the following 38 boundary points: Start at 712268, 2338661; 711464, 2339411; 711167, 2339755; 710877, 2340154; 710985, 2340181; 711039, 2340242; 711079, 2340187; 711133, 2340181; 711133, 2340113; 711295, 2340160; 711397, 2340201; 711410, 2340052; 711545, 2339985; 711687, 2340106; 711849, 2340046; 711836, 2339971; 711991, 2339830; 712227, 2339823; 712119, 2339721; 712261, 2339519; 712059, 2339505; 711755, 2339553; 711687, 2339445; 711748, 2339343; 711829, 2339350; 711843, 2339309; 711883, 2339303; 711802, 2339181; 711843, 2339120; 712011, 2339134; 712140, 2339087; 712194, 2339080; 712383, 2339114; 712423, 2339087; 712565, 2339093; 712741, 2338904; 712639, 2338796; 712525, 2338742; return to starting point.

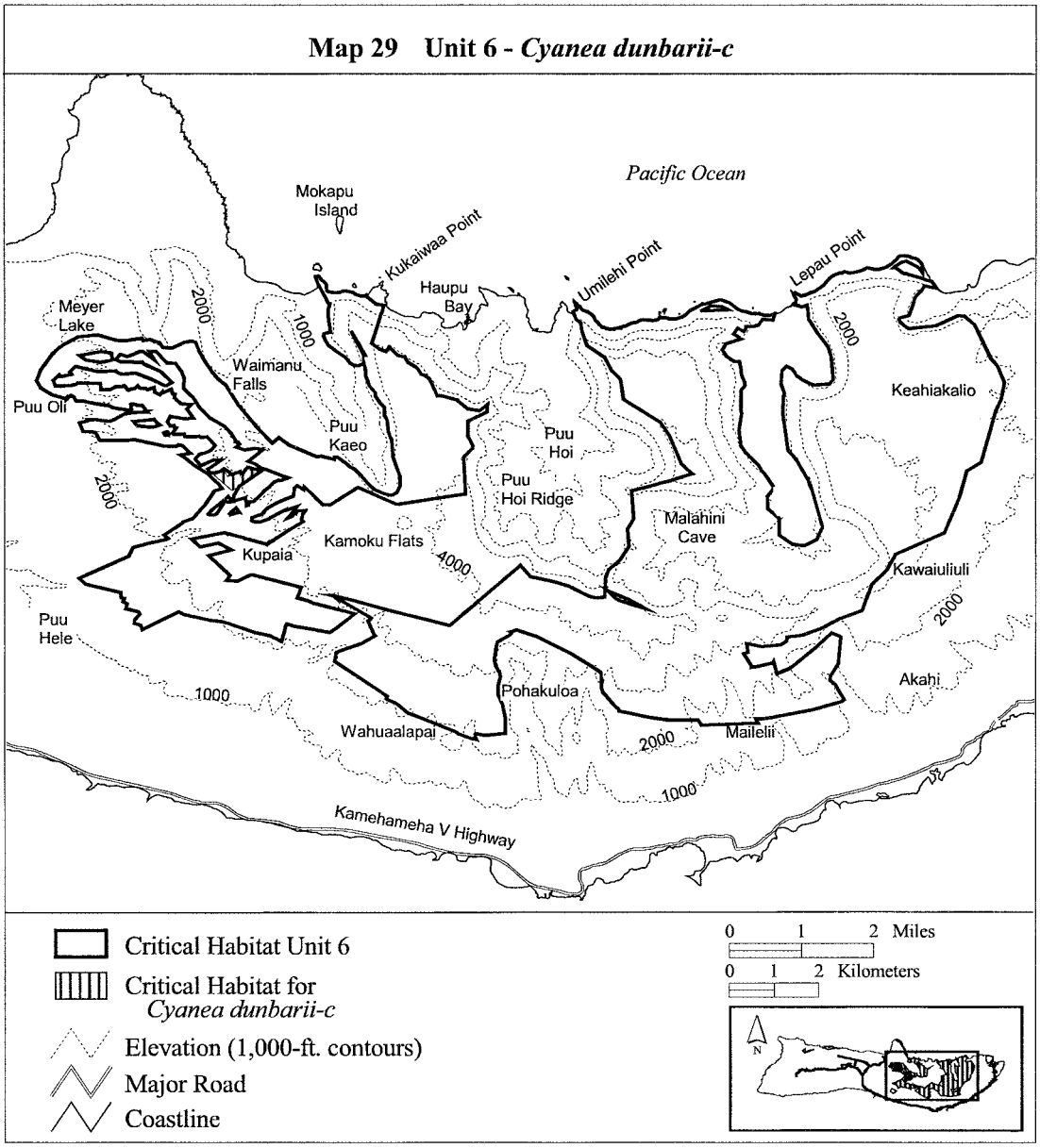
(ii) **Note:** Map 28 follows:



(29) Molokai 6—*Cyanea dunbarii*—c (23 ha; 56 ac)

(i) Unit consists of the following 8 boundary points: Start at 713119, 2337891; 712721, 2338242; 712943, 2338337; 713018, 2338202; 713295, 2338323; 713301, 2338229; 713470, 2338418; 713767, 2338337; return to starting point.

(ii) **Note:** Map 29 follows:

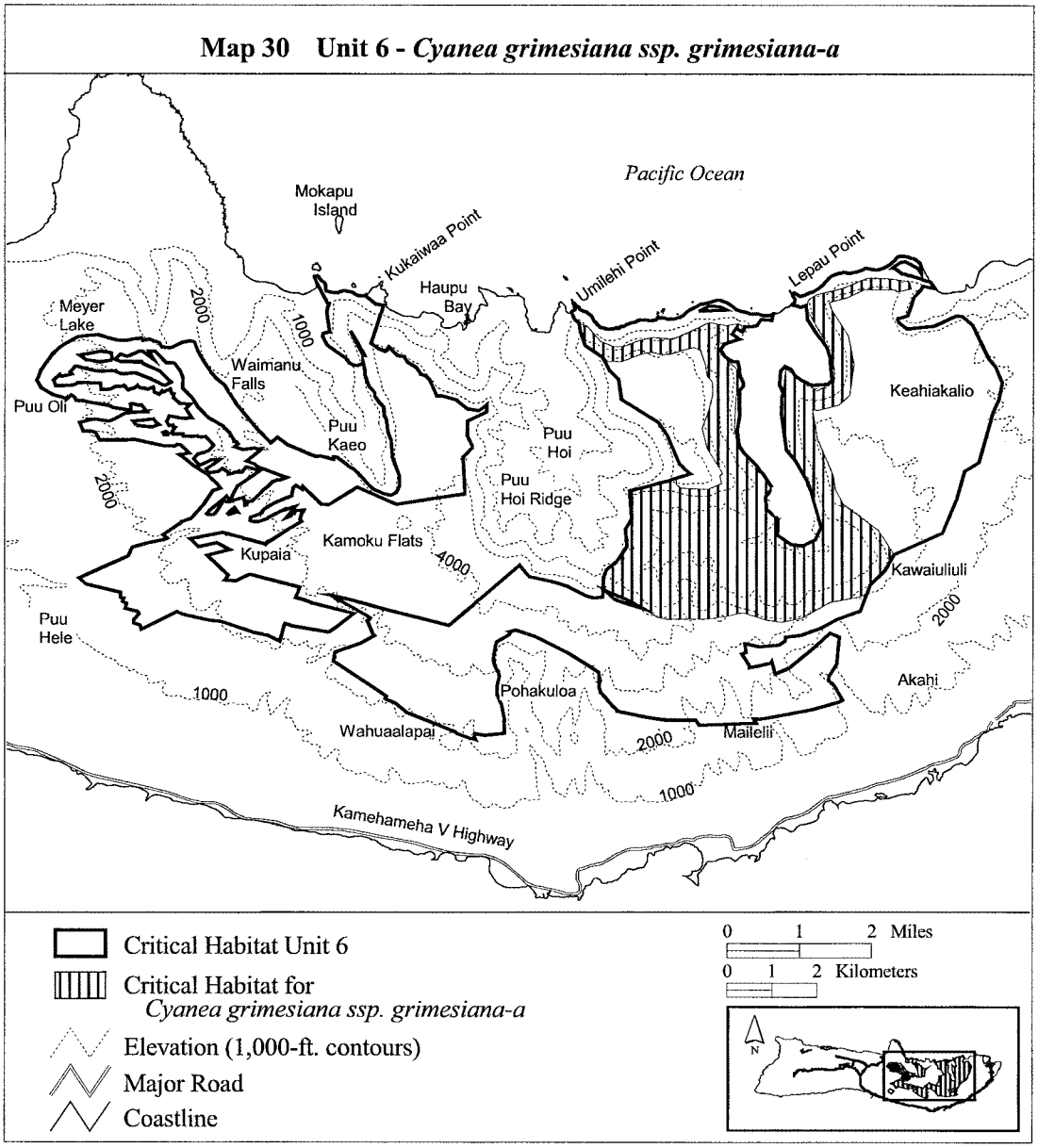


(30) Molokai 6—*Cyanea grimesiana* ssp. *grimesiana*—a (2,133 ha; 5,272 ac)

(i) Unit consists of the following 147 boundary points: Start at 724402, 2341280; 724061, 2341168; 723989, 2341034; 724140, 2340797; 724323, 2340631; 724436, 2340432; 724436, 2340432; 724485, 2340334; 724485, 2340334; 724485, 2340334; 724496, 2340239; 724495, 2340236; 724406, 2340142; 724406, 2340141; 724328, 2339992; 724289, 2339246; 724392, 2338911; 724498, 2338755; 724498, 2338755; 724580, 2338634; 724934, 2338251; 725144, 2337958; 724994, 2337760; 725003, 2337485; 725003, 2337479; 725003, 2337479; 725257, 2337263; 725252, 2336892; 725552, 2336696; 725813, 2336660; 726097, 2336793; 726225, 2337071; 726132, 2337378; 725950, 2337999; 725950, 2337999; 725948, 2337998; 725947, 2337998; 725906, 2338120; 725645, 2338566; 725448, 2338803; 725338, 2339603; 725350, 2340002; 725368, 2340078; 725368, 2340079; 725431, 2340616; 726134, 2340129; 726517, 2340344; 726517, 2340585; 726288, 2341264; 725894, 2341967; 725924, 2342152; 726122, 2342269; 726708, 2342417; 727260, 2342635; 727711, 2342629; 728174, 2342570; 728226, 2342394; 727905, 2342331; 727855, 2342374; 727164, 2342368; 726825, 2342214; 726406, 2342096; 726455, 2341942; 726831, 2341350; 726961, 2340727; 726862, 2340024; 726619, 2339809; 726149, 2339695; 726027, 2339695; 726106, 2339243; 726139, 2339057; 726506, 2338221; 726534, 2337929; 726712, 2337601; 727511, 2336999; 727854, 2336466; 727650, 2336110; 727313, 2335793; 727248, 2335596; 727088, 2335525; 726421, 2335393; 725792, 2335036; 725341, 2334952; 725013, 2334999; 724477, 2335168; 724109, 2335080; 723632, 2335018; 722824, 2335018; 722627, 2335055; 721913, 2335459; 721396, 2335678; 721470, 2336127; 721713, 2336326; 721929, 2336656; 721893, 2337028; 722037, 2337255; 721980, 2337890; 722331, 2337981; 723022, 2338160; 723014, 2338043; 723114, 2337949; 723297, 2337942; 723717, 2337932; 724017, 2338052; 723979, 2338221; 724036, 2338277; 723697, 2338841; 723585, 2339283; 723733, 2339688; 723818, 2340054; 723803, 2340329; 723696, 2340449; 723662,

2340693; 723538, 2341038; 723396, 2341086; 723176, 2341034; 722908, 2340945; 722675, 2340943; 722677, 2340938; 722661, 2340941; 722639, 2340938; 722637, 2340946; 722457, 2340989; 722243, 2340955; 721785, 2340772; 721651, 2340790; 721486, 2340778; 721475, 2340813; 720997, 2341127; 720995, 2341131; 720861, 2341600; 720942, 2341609; 721062, 2341540; 721334, 2341227; 721651, 2341103; 721861, 2341113; 722188, 2341248; 722488, 2341323; 722939, 2341279; 723503, 2341530; 723727, 2341654; 724109, 2341592; 724378, 2341623; 724450, 2341588; 724473, 2341445; 724325, 2341519; 724244, 2341392; return to starting point.

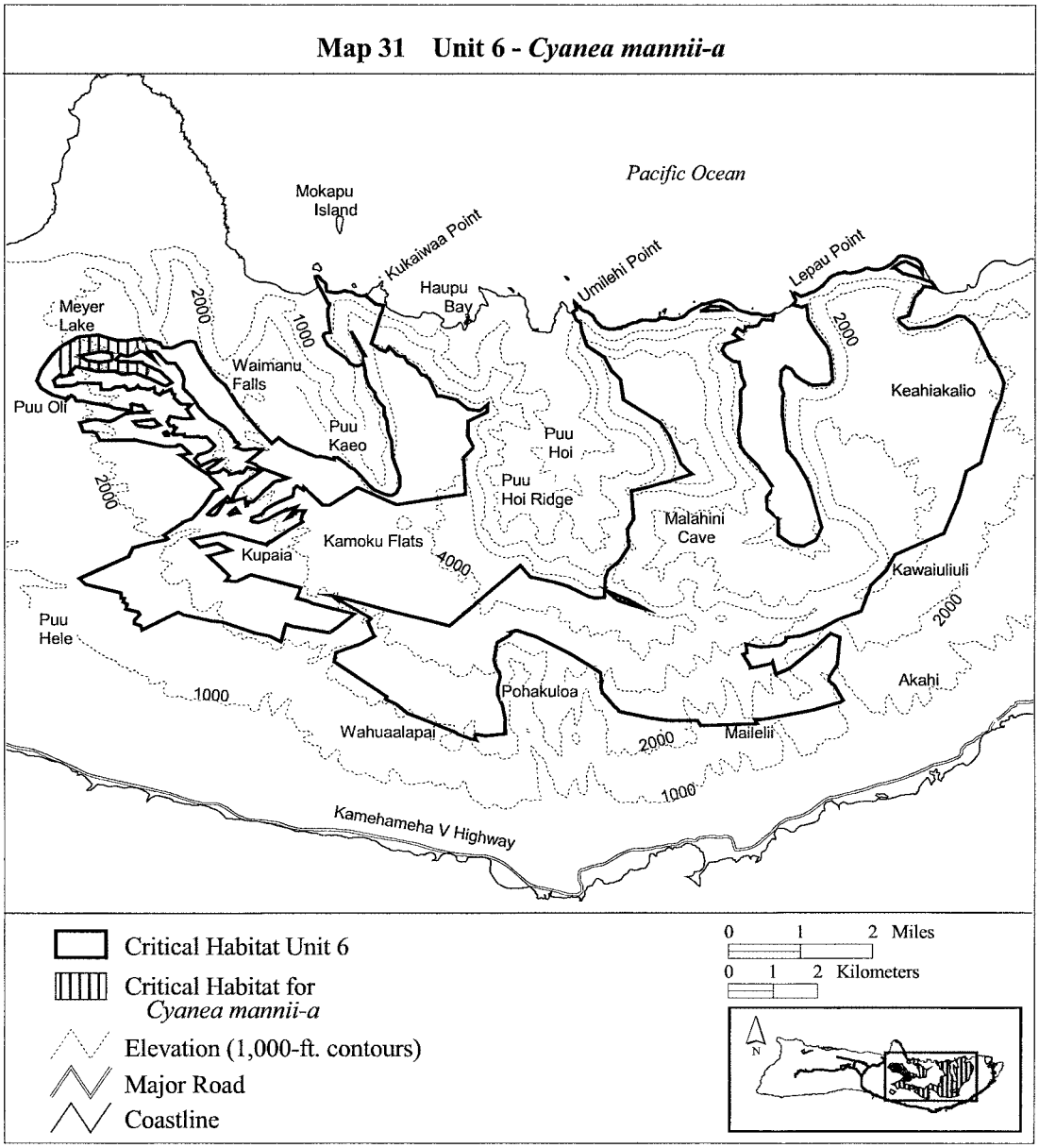
(ii) **Note:** Map 30 follows:



(31) Molokai 6—*Cyanea mannii*—a (110 ha; 272 ac)

(i) Unit consists of the following 31 boundary points: Start at 709340, 2340505; 709294, 2340681; 709294, 2340850; 709317, 2341088; 709693, 2341288; 710007, 2341357; 710238, 2341334; 710614, 2341241; 710790, 2341242; 710928, 2341272; 711128, 2341288; 711412, 2340812; 711005, 2341103; 710913, 2340927; 710215, 2341004; 709647, 2340888; 709977, 2340773; 710084, 2340781; 710199, 2340766; 710491, 2340812; 710783, 2340750; 710867, 2340758; 711136, 2340758; 711297, 2340581; 711235, 2340428; 711005, 2340520; 710783, 2340543; 710575, 2340566; 710146, 2340551; 709670, 2340666; 709462, 2340482; return to starting point.

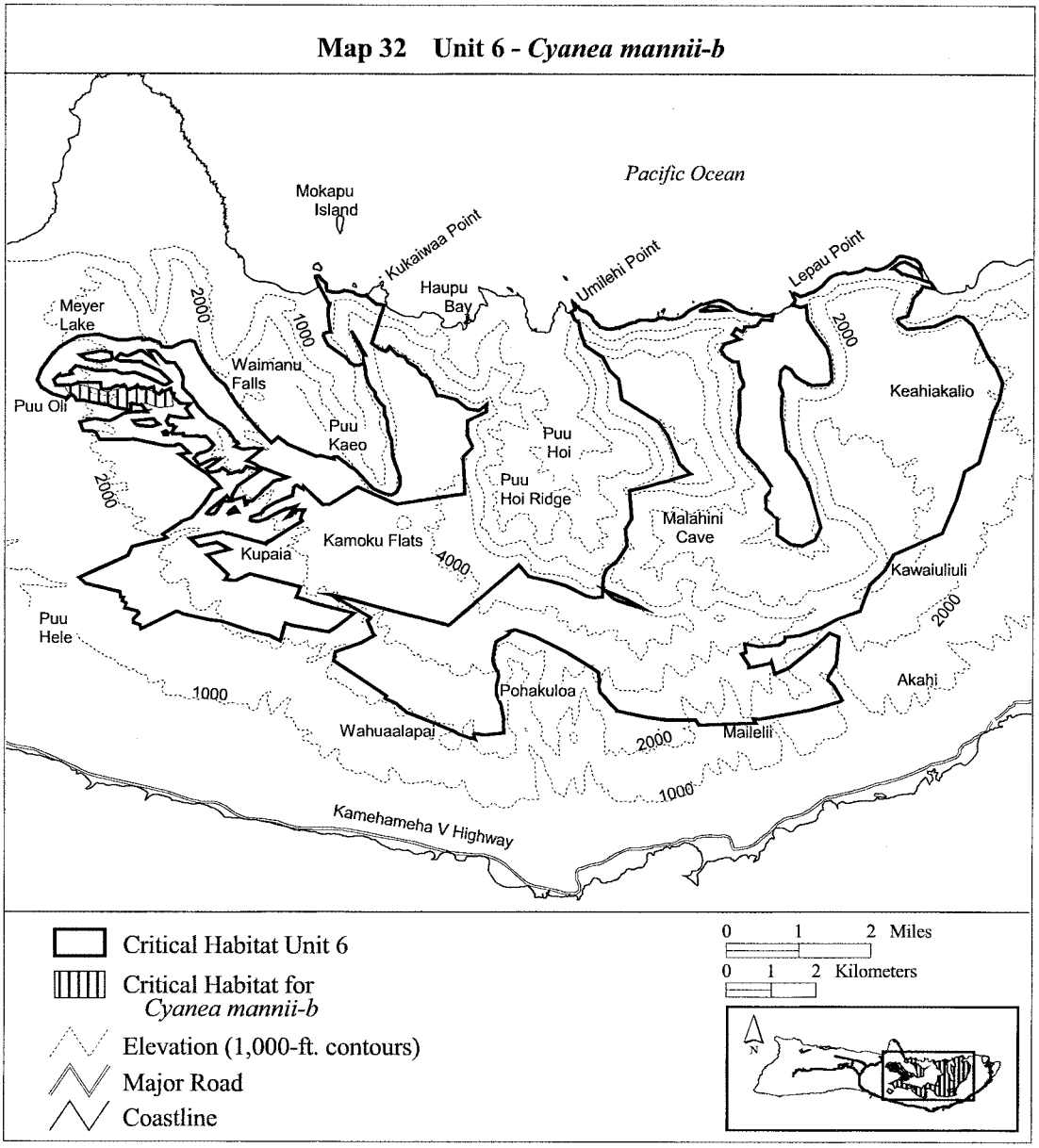
(ii) **Note:** Map 31 follows:



(32) Molokai 6—*Cyanea mannii*—b (81 ha; 199 ac)

(i) Unit consists of the following 25 boundary points: Start at 709386, 2340236; 709700, 2340251; 709777, 2340244; 710360, 2340090; 710721, 2340190; 710890, 2340113; 711036, 2340244; 711105, 2340121; 711312, 2340129; 711527, 2340036; 711780, 2340167; 711842, 2339768; 711527, 2339729; 711205, 2339837; 711082, 2339791; 710890, 2339837; 710905, 2339683; 710583, 2339737; 710499, 2339745; 710391, 2339791; 709992, 2339860; 709839, 2339891; 709685, 2339898; 709624, 2339983; 709501, 2340067; return to starting point.

(ii) **Note:** Map 32 follows:



(33) Molokai 6—*Cyanea mannii*—c (78 ha; 192 ac)

(i) Unit consists of the following 25 boundary points: Start at 709961, 2339476; 710399, 2339438; 710644, 2339522; 710867, 2339568; 711159, 2339607; 711059, 2339476; 710821, 2339422; 710951, 2339353; 711320, 2339315; 711673, 2339307; 711865, 2339284; 711612, 2339184; 711642, 2339131; 712057, 2339154; 712087, 2339062; 712256, 2338962; 712172, 2338816; 712103, 2338900; 711888, 2338916; 711719, 2338931; 711581, 2338908; 711542, 2338954; 711220, 2339039; 710836, 2339023; 710207, 2339023; return to starting point.

(ii) **Note:** Map 33 follows: