

## 5-YEAR REVIEW

Short Form Summary

**Species Reviewed:** *Clermontia samuelii* (‘ōhā wai)

**Current Classification:** Endangered

### **Federal Register Notice announcing initiation of this review:**

[USFWS] U.S. Fish and Wildlife Service. 2021. Endangered and Threatened Wildlife and Plants; Initiation of 5-Year Status reviews for 77 Species in Oregon, Washington, Idaho, and Hawaii. Federal Register 86(120): 33726–33728, June 25, 2021.

### **Lead Region/Field Office:**

Region 1/Pacific Islands Fish and Wildlife Office (PIFWO), Honolulu, Hawai‘i

### **Name of Reviewer:**

Cheryl Phillipson, Biologist, PIFWO

Lauren Weisenberger, Plant Recovery Coordinator, Acting Recovery Team Manager, PIFWO

### **Methodology used to complete this 5-year review:**

This review was conducted by staff of the Pacific Islands Fish and Wildlife Office (PIFWO) of the U.S. Fish and Wildlife Service (Service) beginning in October 2021. The review was based on a review of current, available information since the last 5-year review for *Clermontia samuelii* (USFWS 2018). The evaluation by Cheryl Phillipson, Biologist, was reviewed by Lauren Weisenberger, Plant Recovery Coordinator, and Acting Recovery Team Manager.

### **Background:**

For information regarding the species’ listing history and other facts, please refer to the Fish and Wildlife Service’s Environmental Conservation On-line System (ECOS) database for threatened and endangered species (<http://ecos.fws.gov/ecp/species/729>).

### **Review Analysis:**

Please refer to the previous 5-year reviews for *Clermontia samuelii* published in the Federal Register on August 22, 2011, and October 22, 2018 (available at [https://ecos.fws.gov/docs/tess/species\\_nonpublish/1762.pdf](https://ecos.fws.gov/docs/tess/species_nonpublish/1762.pdf) and [https://ecos.fws.gov/docs/tess/species\\_nonpublish/2615.pdf](https://ecos.fws.gov/docs/tess/species_nonpublish/2615.pdf)) for a complete review of the species’ status, threats, management efforts, and references cited. We are not aware of any significant new information regarding the species’ biological status since listing to warrant a change in the Federal listing status of *C. samuelii*.

This short-lived perennial shrub in the Campanulaceae (bellflower) family is endangered and is known from the northern slopes of Haleakalā (east Maui). The status and trends for both subspecies, *Clermontia samuelii* ssp. *hanaensis* and *C. samuelii* ssp. *samuelii*, are provided in the tables below.

#### New Status Information:

- In 1999, the two subspecies, *Clermontia samuelii* ssp. *hanaensis* and *C. samuelii* ssp. *samuelii* were listed as Endangered at the species level. The 2018 five-year review combined data on populations of both subspecies to total 300 individuals on Haleakalā (east Maui). *Clermontia samuelii* ssp. *hanaensis* was estimated to total between 247 to 257 individuals and *C. samuelii* ssp. *samuelii* was estimated to total fewer than 50 individuals. Currently, observations of *C. samuelii* ssp. *hanaensis* at Kahawaihāpapa, Pa‘akea, Waiho‘i Valley, and Kopili‘ula total more than 126 individuals (Oppenheimer et al. 2020a; Oppenheimer 2020; Maui Plant Extinction Prevention Program [Maui PEPP] 2023). At Helele‘ike‘ōhā there are 23 wild individuals; at least six individuals were not relocated at Kūhiwa and Kauakau‘ai (Maui PEPP 2021, 2022). Recent observations of *C. samuelii* ssp. *samuelii* at Hanawī and Helele‘ike‘ōhā total 19 individuals (Oppenheimer et al. 2016; Oppenheimer et al. 2019a; Oppenheimer et al. 2019b; Oppenheimer and Severson 2020). Haleakalā National Park (HALE NP) reported that there are fewer than 20 individuals of *C. samuelii* ssp. *samuelii* in the upper Hāna rainforest (Gates 2021, pers. comm.). In 2021, HALE NP reported that at least 185 individuals of *C. samuelii* ssp. *samuelii* were mapped (and may have consisted of both wild and translocated individuals), however, 34 of those were observed to have died (HALE NP 2021, pp. 6–18). In summary, there are approximately 226 wild individuals of subspecies *hanaensis* and 28 wild individuals of subspecies *samuelii*. Since the last 5-year review, 17 individuals of subspecies *hanaensis* have been translocated to one location, and approximately 80 individuals of subspecies *samuelii* have been translocated to three locations (Maui PEPP 2019–2023).
- Currently there are three populations and at least five founders of *Clermontia samuelii* ssp. *hanaensis* represented in *ex situ* collections (Lyon Arboretum 2022). There are at least 13 founders of *Clermontia samuelii* ssp. *samuelii* represented in *ex situ* collections, and many additional combinations of those founders as a result of a controlled breeding effort at HALE NP (Lyon Arboretum 2022; Haleakala National Park [HALE NP] 2022; Olinda Rare Plant Facility [ORPF] 2023).

#### New Threats:

- None reported.

#### New Management Actions:

- Surveys and monitoring—Maui PEPP surveys for and monitors populations of both subspecies on east Maui (Maui PEPP 2019–2023). Populations at Hanawī are ungulate-free, essentially free of nonnative invasive plants, with the presence of avian pollinators and dispersers (PEPP 2019, p. 14).
- Collection and propagation for genetic storage and reintroduction—
  - In 2022, the Lyon Arboretum Seed Conservation Laboratory reported the addition of 515 seeds representing one founder of *Clermontia samuelii* ssp. *hanaensis* at Pa‘akea to their existing *ex situ* collection of over 60,000 seeds from the Kawakoe and Kawaihāpapa populations representing many founders

- (maternal lines). There are also more than 1,356 seeds representing three founders of subspecies *samuelii* at Hanawī (Lyon Arboretum 2022).
- In 2020, HALE NP nursery conducted cross pollinations with 27 plants representing 17 different parent combinations of subspecies *samuelii*, collecting 31 fruits from those and 300 additional seeds collected from one other founder. Cuttings were collected from wild plants at Manawainui (21), New Greensword Bog (13), near Camp Smith (HEL-B-30; 3), Transect 10 (27), Mid Camp Bog (6), and various nursery-sourced plants (>140) (HALE NP 2020a, p. 15; HALE NP 2020b; HALE NP 2021, p. 21). In 2020 and 2021, HALE NP collected cuttings from two founders but propagation was not successful (HALE NP 2020a, p. 15; HALE NP 2021, p. 21). In 2022, HALE NP reported collection of 360 fruit and 300 seeds from several subspecies *samuelii* nursery crosses. Also in 2022, HALE NP reported propagation of 5 plants representing 1 founder at Kaukau‘ai, 2 plants representing 1 founder at Haleakalā, 32 plants representing 7 founders at Helele‘ike‘ōhā, and 1 plant representing 1 founder at Hanawī (HALE NP 2022). In addition, nursery crosses between a founder at Kaukau‘ai and at Helele‘ike‘ōhā produced 313 plants.
  - In 2019, the Olinda Rare Plant Facility (ORPF) reported storage of 24 plants in the nursery representing six founders of subspecies *samuelii* from Hanawī, Hāna rainforest, Kuiki, and ‘Ohe‘o (ORPF 2020). In 2022, ORPF reported propagation and storage of 35 seedlings representing 1 founder of subspecies *samuelii* at Hanawī, 73 individuals representing 2 founders at Helele‘ike‘ōhā, and 8 individuals representing 1 founder at ‘Ohe‘o (ORPF 2023).
  - In 2021 and 2023, Maui PEPP reported collections of cuttings representing one founder of subspecies *samuelii* from Hanawī (Maui PEPP 2021, 2023).
  - Translocation and augmentation—
    - In 2019, 48 individuals of subspecies *samuelii* were translocated to Hanawī (Oppenheimer and Severson 2019).
    - HALE NP reported that 355 individuals of subspecies *samuelii* have been outplanted since 2016; however, data on survival of the outplantings is pending (Gates 2021, pers. comm.). Total individuals outplanted in 2019 are 38 individuals to high elevation bogs (as of 2017) and 43 outplanted in the Manawainui-Hāna rainforest area (HALE NP 2019, pp. 176, 292). The status of natural regeneration is unknown or unreported (HALE NP 2019, p. 301). In 2020, 142 individuals were outplanted to the Hāna rainforest (HALE NP 2020a, pp. 6–18). In 2021, HALE NP reported 48 individuals of subspecies *samuelii* translocated to the Hāna rainforest (HALE NP 2021, pp. 23–28). In 2022, HALE NP reported 11 individuals of subspecies *samuelii* translocated to the Hana rainforest (HALE NP 2022).
    - In 2019, Maui PEPP reported translocation of 57 individuals of subspecies *samuelii* representing at least 4 founders to Hanawī. In 2022, 25 individuals of subspecies *samuelii* were translocated to Heleleikeoha and 17 individuals were translocated to Kawakoe (Maui PEPP 2019, 2022).

**Table 1. Status and trends of *Clermontia samuelii* from listing through current 5-year review.**

<b>Date</b>	<b>No. wild individuals</b>	<b>No. outplanted</b>	<b>Stability Criteria identified in Recovery Plan</b>	<b>Stability Criteria Completed?</b>
1999 (listing)	400	0	All threats managed in all 3 populations	No
			Complete genetic storage	No
			3 populations with 50 mature individuals each	No
2011 (5-year review)	300–400	1	All threats managed in all 3 populations	Partially
			Complete genetic storage	Partially
			3 populations with 50 mature individuals each	Partially, 1 population >50 individuals
<b>Date</b>	<b>No. wild individuals</b>	<b>No. outplanted</b>	<b>*Preventing Extinction Criteria identified by HPPRCC</b>	<b>*Preventing Extinction Criteria Completed?</b>
2018 (5-year review)	ca 300	>10	All threats managed in all 3 populations	No
			Reproduction (i.e., viable seeds, seedlings) at all 3 populations	No
			Complete genetic storage	Partially, complete for <i>C. samuelii</i> ssp. <i>samuelii</i>
			3 populations with 50 mature individuals each	Partially, 2 populations of ssp. <i>hanaensis</i> >50 individuals

2023 (5-year review)	ca 226 ssp. <i>hanaensis</i> ; 28 ssp. <i>samuelii</i>	17 ssp. <i>hanaensis</i> ; >400 ssp. <i>samuelii</i>	All threats managed in all 3 populations	Partially, fencing at Kūhiwa, Hanawī NAR, and Haleakalā NP
			Complete genetic storage	Partially for ssp. <i>hanaensis</i> ; mostly complete for ssp. <i>samuelii</i>
			Natural reproduction at all 3 populations	Partially, 1 seedling observed at Kūhiwa
			3 populations with 50 mature individuals each	2 populations >50 ssp. <i>hanaensis</i>

\* The Preventing Extinction Stage was established in 2011. Prior to 2011, the Interim Stabilization Stage was the first stage towards recovery (now it is the second stage after Preventing Extinction).

**Table 2. Threats to *Clermontia samuelii* and ongoing conservation efforts.**

Threat	Listing factor	Current Status	Conservation/ Management Efforts
Degradation and destruction of habitat by feral ungulates	A	Ongoing	Partial, fencing at Kūhiwa, Hanawī NAR, and Haleakalā NP
Established ecosystem altering invasive plant species degradation of habitat	A	Ongoing	Partial, nonnative plant control within exclosures
Flooding destruction and degradation of habitat	A	Ongoing	None
Climate change degradation or loss of habitat	A	Ongoing	None
Predation and herbivory by feral ungulates	C	Ongoing	Partial, fencing at Kūhiwa, Hanawī NAR, and Haleakalā NP
Predation and herbivory by rodents	C	Ongoing	None
Predation and herbivory by invertebrates	C	Ongoing	None

**Synthesis:**

Surveys conducted since the last 5-year review for *Clermontia samuelii* located new and dead individuals, showing a decline in the number of subspecies *hanaensis* than as reported in the previous 5-year review. Cuttings collections have been made representing dozens of wild individuals and new combinations of wild individuals due to controlled breeding; however, most are not successfully propagated. Genetic storage is incomplete for subspecies *hanaensis*, and close to completion for subspecies *samuelii*. Translocations of subspecies *samuelii* are ongoing with only one translocated population of subspecies *hanaensis*. Three locations of wild and translocated individuals are in protected (fenced) and managed areas.

Stabilizing (interim), downlisting, and delisting objectives are provided in the Addendum to the Recovery Plan for the Multi-Island Plants (USFWS 2002) and have been updated according to the draft revised recovery objective guidelines developed by the Hawai‘i and Pacific Plants Recovery Coordinating Committee (HPPRCC 2011). The HPPRCC identifies an additional initial objective, the Preventing Extinction Stage, in addition to the Interim Stabilization, Delisting, and Downlisting objectives. Furthermore, life history traits such as breeding system, population size fluctuation or decline, and reproduction type (sexual or vegetative), have been included in the calculation of goals for the number of populations and reproducing individuals for each stage. The goals for each stage remain grouped by life span defined as annual, short-lived perennial (fewer than 10 years), or long-lived perennial.

*Clermontia samuelii* is a short-lived perennial shrub. To prevent extinction, which is the first step in recovering the species, the taxon must be managed to control threats (e.g., fenced) and have 50 individuals (or the total number of individuals if fewer than 50 exist) from each of three populations represented in *ex situ* (secured off-site, such as a nursery or seed bank) collections that are well managed. In addition, a minimum of a total of three populations should be documented on Maui and Lāna‘i where they now occur or occurred historically. Each of these populations must be naturally reproducing (e.g., viable seeds, seedlings) and increasing in number, with a minimum of 50 mature, reproducing individuals per population.

The preventing extinction goals for *Clermontia samuelii* have not been met. There are two populations totaling more than 50 mature, reproducing individuals of only subspecies *hanaensis* (Table 1). Genetic representation is not complete for subspecies *hanaensis*, and close to completion for subspecies *samuelii*. Two locations for subspecies *hanaensis* are fenced, and individuals of subspecies *samuelii* that occur within HALE NP and Hanawī NAR are fenced. Other threats including flooding, climate change, and rodent and invertebrate herbivory are not being managed (Table 1, Table 2). Therefore, *C. samuelii* meets the definition of Endangered as it remains in danger of extinction throughout its range.

#### **Recommendations for Future Actions:**

No significant new information regarding the species' biological status has been reported since the last 5-year review in 2018. Thus, the following recommendations for future actions are updated or reiterated for the 5-year review for 2023.

- Ungulate monitoring and control—Continue to construct and maintain exclosures to protect individuals from the negative impacts of habitat destruction and herbivory by feral ungulates.
- Invasive nonnative plant monitoring and control—Continue control of established ecosystem-altering nonnative invasive plant species at all wild and translocated populations.
- Climate change adaptation strategy—Assess the modeled effects of climate change and determine future landscape needed for the recovery of this subspecies.
- Captive propagation for genetic storage and reintroduction—Continue collection and propagation efforts for maintenance of genetic stock and for translocation.
- Translocation and augmentation—Continue translocation of individuals of both subspecies into suitable habitat within historic range that is being managed for known threats.
- Build resiliency, redundancy, and representation—Continue to augment wild populations and translocate individuals into suitable habitat that is being managed for known threats to this species to reduce impacts of herbivory and flooding.
- Alliance and partnership development—Continue to work with partners and other land managers in planning and implementation of ecosystem-level restoration and management to benefit both subspecies.

#### References:

Gates, N. 2021, pers. comm. National Park Service comments on initiation of 5-year status reviews for 77 species in Oregon, Washington, Idaho, and Hawaii, *Clermontia samuelii* ssp. *samuelii*. 19 AUG 2021.

[HALE NP] Haleakalā National Park. 2019. Natural Resource Condition Assessment Haleakala National Park, Natural Resource Report NPS/HALE/NRR—2019/1977, National Park Service, US Dept of the Interior, Natural Resource Stewardship and Science. 386 pp.

[HALE NP] 2020a. Annual report for T & E species permit TE014497-15, Haleakalā National Park Resource Management Vegetation Management 2020, 20 pp.

[HALE NP] 2020b. Report on controlled propagation of listed species, as designated under the U.S. Endangered Species Act. Unpublished report submitted to the U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, Honolulu, Hawai‘i.

[HALE NP] 2021. Annual report for T & E species permit TE014497-15, Haleakalā National Park Resource Management Vegetation Management 2021, 30 pp.

[HALE NP] 2022. Report on controlled propagation of listed species, as designated under the U.S. Endangered Species Act. Unpublished report submitted to the U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, Honolulu, Hawai‘i.

[HPPRCC] Hawai‘i and Pacific Plants Recovery Coordinating Committee. 2011. Revised recovery objective guidelines. 8 pp.

Lyon Arboretum. 2022. Report on controlled propagation of listed species, as designated under the U.S. Endangered Species Act. Unpublished report submitted to the U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, Honolulu, Hawai‘i.

Mallinson, W. 2017. Hawai‘i Rare Plant Restoration Group (HRPRG) Field Data Form *in* PEPP 2022: Plant Extinction Prevention Program, FY 2022 Annual Report (Oct 1, 2021-Sep 30, 2022), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F19AC00532 (Interim Report), December 29, 2022, UH Mānoa, PCSU, PEPP. 50 pp. BioPacifica database record for *Clermontia samuelii*, Pacific Islands Fish and Wildlife Office.

[Maui PEPP] Maui Plant Extinction Prevention Program. 2019–2023. Monthly Maui Nui plant species survey reports.

[ORPF] Olinda Rare Plant Facility. 2020. Report on controlled propagation of listed species, as designated under the U.S. Endangered Species Act. Unpublished report submitted to the U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, Honolulu, Hawai‘i.

[ORPF] 2023. Report on controlled propagation of listed species, as designated under the U.S. Endangered Species Act. Unpublished report submitted to the U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, Honolulu, Hawai‘i.

Oppenheimer, H., M. Padgett, and W. Mallinson. 2016. Hawai‘i Rare Plant Restoration Group (HRPRG) Field Data Form *in* PEPP 2022: Plant Extinction Prevention Program, FY 2022 Annual Report (Oct 1, 2021-Sep 30, 2022), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F19AC00532 (Interim Report), December 29, 2022, UH Mānoa, PCSU, PEPP. 50 pp. BioPacifica database record for *Clermontia samuelii*, Pacific Islands Fish and Wildlife Office.

Oppenheimer, H. and K. Severson. 2019. Hawai‘i Rare Plant Restoration Group (HRPRG) Field Data Form *in* PEPP 2022: Plant Extinction Prevention Program, FY 2022 Annual Report (Oct 1, 2021-Sep 30, 2022), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F19AC00532 (Interim Report), December 29, 2022, UH Mānoa, PCSU, PEPP. 50 pp. BioPacifica database record for *Clermontia samuelii*, Pacific Islands Fish and Wildlife Office.

Oppenheimer, H., K. Severson, and M. Wirth 2019a. Hawai‘i Rare Plant Restoration Group (HRPRG) Field Data Form *in* PEPP 2022: Plant Extinction Prevention

- Program, FY 2022 Annual Report (Oct 1, 2021-Sep 30, 2022), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F19AC00532 (Interim Report), December 29, 2022, UH Mānoa, PCSU, PEPP. 50 pp. BioPacifica database record for *Clermontia samuelii*, Pacific Islands Fish and Wildlife Office.
- Oppenheimer, H., P. Welton, and M. Osgood 2019b. Hawai‘i Rare Plant Restoration Group (HRPRG) Field Data Form *in* PEPP 2022: Plant Extinction Prevention Program, FY 2022 Annual Report (Oct 1, 2021-Sep 30, 2022), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F19AC00532 (Interim Report), December 29, 2022, UH Mānoa, PCSU, PEPP. 50 pp. BioPacifica database record for *Clermontia samuelii*, Pacific Islands Fish and Wildlife Office.
- Oppenheimer, H. 2020. Hawai‘i Rare Plant Restoration Group (HRPRG) Field Data Form *in* PEPP 2022: Plant Extinction Prevention Program, FY 2022 Annual Report (Oct 1, 2021-Sep 30, 2022), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F19AC00532 (Interim Report), December 29, 2022, UH Mānoa, PCSU, PEPP. 50 pp. BioPacifica database record for *Clermontia samuelii*, Pacific Islands Fish and Wildlife Office.
- Oppenheimer, H. and M. Osgood. 2020. Hawai‘i Rare Plant Restoration Group (HRPRG) Field Data Form *in* PEPP 2022: Plant Extinction Prevention Program, FY 2022 Annual Report (Oct 1, 2021-Sep 30, 2022), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F19AC00532 (Interim Report), December 29, 2022, UH Mānoa, PCSU, PEPP. 50 pp. BioPacifica database record for *Clermontia samuelii*, Pacific Islands Fish and Wildlife Office.
- Oppenheimer, H. and K. Severson 2020a. Hawai‘i Rare Plant Restoration Group (HRPRG) Field Data Form *in* PEPP 2022: Plant Extinction Prevention Program, FY 2022 Annual Report (Oct 1, 2021-Sep 30, 2022), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F19AC00532 (Interim Report), December 29, 2022, UH Mānoa, PCSU, PEPP. 50 pp. BioPacifica database record for *Clermontia samuelii*, Pacific Islands Fish and Wildlife Office.
- Oppenheimer, H. and K. Severson. 2020b. Hawai‘i Rare Plant Restoration Group (HRPRG) Field Data Form *in* PEPP 2022: Plant Extinction Prevention Program, FY 2022 Annual Report (Oct 1, 2021-Sep 30, 2022), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F19AC00532 (Interim Report), December 29, 2022, UH Mānoa, PCSU, PEPP. 50 pp. BioPacifica database record for *Clermontia samuelii*, Pacific Islands Fish and Wildlife Office.

Oppenheimer, H., C. Radford, and N. Andrade. 2020. Hawai'i Rare Plant Restoration Group (HRPRG) Field Data Form *in* PEPP 2022: Plant Extinction Prevention Program, FY 2022 Annual Report (Oct 1, 2021-Sep 30, 2022), USFWS CFDA Program #15.657, Endangered Species Conservation-Recovery Implementation Funds, Coop Agreement F19AC00532 (Interim Report), December 29, 2022, UH Mānoa, PCSU, PEPP. 50 pp. BioPacifica database record for *Clermontia samuelii*, Pacific Islands Fish and Wildlife Office.

[PEPP] Plant Extinction Prevention Program. 2019. Hawai'i Department of Land and Natural Resources Division of Forestry & Wildlife, rare plant program Section 6 interim performance report grant number F16AF00882, performance period July 1, 2018-June 30, 2019. 192 pp.

[USFWS] U.S. Fish and Wildlife Service. 2002. Addendum to the Recovery Plan for the Multi-Island Plants. Portland. 2002. 93 pp. + appendices.

[USFWS] 2011. *Clermontia samuelii* 5-year review summary and evaluation. USFWS Pacific Islands Fish and Wildlife Office, Honolulu, HI.  
[https://ecos.fws.gov/docs/tess/species\\_nonpublish/1762.pdf](https://ecos.fws.gov/docs/tess/species_nonpublish/1762.pdf).

[USFWS] 2018. *Clermontia samuelii* 5-year review summary and evaluation. USFWS Pacific Islands Fish and Wildlife Office, Honolulu, HI.  
[https://ecos.fws.gov/docs/tess/species\\_nonpublish/2615.pdf](https://ecos.fws.gov/docs/tess/species_nonpublish/2615.pdf).

[USFWS]. 2021. Endangered and Threatened wildlife and plants; initiation of 5-year status reviews for 77 Species in Oregon, Washington, Idaho, and Hawaii. Federal Register 86(120):33726–33728, June 25, 2021.

**U.S. FISH AND WILDLIFE SERVICE**  
SIGNATURE PAGE for 5-YEAR REVIEW of *Clermontia samuelii* ('ōhā wai)

**Pre-1996 DPS listing still considered a listable entity?**   N/A  

**Recommendation resulting from the 5-year review:**

- Delisting
- Reclassify from Endangered to Threatened status
- Reclassify from Threatened to Endangered status
- No Change in listing status

**For Field Supervisor, Pacific Islands Fish and Wildlife Office**

\_\_\_\_\_ Date \_\_\_\_\_