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# A BILL FOR AN ACT

RELATING TO CORAL REEF RESILIENCE.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. The legislature finds that coral reefs are  
2 critically valuable to the State and its residents. Coral reefs  
3 provide coastal protection from erosion caused by rising sea  
4 levels and larger ocean swells caused by warmer oceans, and they  
5 produce sand that helps to replenish beaches. Coral reefs also  
6 sustain fisheries, create recreational opportunities, support  
7 tourism, and provide important spiritual connections.

8           However, the legislature believes that the State's reefs  
9 have experienced substantial decline and face catastrophic  
10 failure in the years and decades to come unless the State  
11 intervenes and makes significant changes to coral reef  
12 management. More specifically, this decline has been driven by  
13 sedimentation and the run-off of excess nutrients from sewage  
14 and fertilizers; increasing climate-driven ocean warming and  
15 acidification that destabilizes reef ecosystems and causes more  
16 frequent and severe coral bleaching; unaddressed overfishing and



1 recreational overcrowding; and the commercial extraction of  
2 marine species, among other factors.

3       The legislature further finds that the National Oceanic and  
4 Atmospheric Administration has defined twenty-five per cent live  
5 coral cover as the absolute minimum necessary to maintain a  
6 healthy reef ecosystem and physical structure. Live coral cover  
7 on coral reefs around the State currently range from less than  
8 one per cent to sixty-nine percent. Many reef species are also  
9 at critically low levels of less than five or ten per cent of  
10 their naturally occurring potential. In addition, entire  
11 species have already disappeared from some areas.

12       The legislature recognizes that the ecological resilience  
13 of coral reefs, in terms of both resistance to and recovery from  
14 various threats, depends critically on the diversity of species,  
15 with each species playing a role that contributes to the  
16 ecosystem, and on the health of herbivorous fish that eat  
17 seaweed and other benthic algae, which keeps reef surfaces clean  
18 so corals can thrive. Among herbivorous fish species, data show  
19 that a minimum total fish biomass of at least forty grams per  
20 square meter is necessary to sustain the State's coral reef  
21 ecosystems. However, many reefs, especially those on the island



1 of Oahu and parts of the islands of Kauai and Maui, are already  
2 well below this minimum threshold. Multiple analyses, studies,  
3 and decades of real-world degradation demonstrate that, with its  
4 current trajectory, the State will likely lose the majority of  
5 its remaining coral reef ecosystems in the coming decades.

6 The legislature believes that significant and immediate  
7 planning is needed to protect and restore the State's coral reef  
8 ecosystems and the diversity and biomass of the marine species  
9 within those ecosystems to levels far closer to their naturally  
10 occurring potential. These plans will have goals of ensuring  
11 that coral reefs are robustly prepared to absorb significant  
12 losses and survive catastrophic events and impacts in the years  
13 and decades to come, thereby ensuring the survival of this  
14 critical resource for the State's future generations.

15 Accordingly, the purpose of this Act is to:

16 (1) Require the division of aquatic resources of the  
17 department of land and natural resources to manage the  
18 aquatic life and aquatic resources of the State with  
19 the highest priority being to protect, restore, and  
20 maintain ecosystem integrity using the best scientific  
21 data available; and



1 (2) Require the division of aquatic resources to develop  
 2 plans necessary to substantially improve coral reef  
 3 resilience around the island of Oahu, which is the  
 4 island with the most endangered reefs.

5 SECTION 2. Chapter 187A, Hawaii Revised Statutes, is  
 6 amended by adding a new section to part I to be appropriately  
 7 designated and to read as follows:

8 "§187A- Reef ecosystem resilience. (a) The division  
 9 shall restore and maintain reef ecosystems and each indigenous  
 10 species within the reef ecosystem to a level that is not less  
 11 than per cent of the ecosystem or indigenous species'  
 12 natural biomass potential within each respective moku, as  
 13 determined by the best available science.

14 (b) The division shall expand and maintain live coral  
 15 cover at not less than twenty-five per cent on reefs that have  
 16 historically supported naturally occurring live coral cover, as  
 17 determined by the best available science.

18 (c) The division shall:

19 (1) Collaborate with institutions and organizations having  
 20 demonstrated expertise and experience with the State's



- 1           coral reef science to achieve the goals of this  
2           section;
- 3           (2) Ensure qualitative measurement of progress each year  
4           using the best available science; and
- 5           (3) Incorporate the requirements of this section into all  
6           of its plans and decisions.
- 7           (d) The department may adopt rules pursuant to chapter 91  
8 necessary to achieve the goals of this section.
- 9           (e) No later than twenty days prior to the convening of  
10 each regular session, the division shall submit a report to the  
11 legislature on the division's progress in meeting the  
12 requirements of subsections (a) and (b), including any measures  
13 of progress collected pursuant to subsection (c)(2)."

14           SECTION 3. Section 187A-1, Hawaii Revised Statutes, is  
15 amended by adding two new definitions to be appropriately  
16 inserted and to read as follows:

17           "Division" means the division of aquatic resources of the  
18 department.

19           "Moku" refers to a traditional type of land district that  
20 is larger than an ahupuaa."



1 SECTION 4. Section 187A-2, Hawaii Revised Statutes, is  
2 amended to read as follows:

3 **"§187A-2 Powers and duties of department.** The department  
4 shall:

- 5 (1) Manage and administer the aquatic life and aquatic  
6 resources of the State[+], with the highest priority  
7 being to protect, restore, and maintain ecosystem  
8 integrity, including restoring and maintaining reef  
9 ecosystem resiliency pursuant to section 187A- ;
- 10 (2) Establish and maintain aquatic life propagating  
11 station or stations;
- 12 (3) Establish, manage, and regulate public fishing areas,  
13 artificial reefs, fish aggregating devices, marine  
14 life conservation districts, shoreline fishery  
15 management areas, refuges, and other areas pursuant to  
16 title 12;
- 17 (4) Subject to this title, import aquatic life for the  
18 purpose of propagating and disseminating the same in  
19 the State and the waters subject to its jurisdiction;
- 20 (5) Distribute, free of charge, as the department deems to  
21 be in the public interest, aquatic life, for the



1           purpose of increasing the food supply of the State;  
2           provided that when, in the discretion of the  
3           department, the public interest shall not be  
4           materially interfered with by so doing, the department  
5           may propagate and furnish aquatic life to private  
6           parties, upon such reasonable terms, conditions, and  
7           prices determined by the department;

8           (6) ~~[Gather]~~ Using the best available science, gather and  
9           compile information and statistics concerning the  
10          habitat and character of, and increase and decrease  
11          in, aquatic resources in the State, including the care  
12          and propagation of aquatic resources for protective,  
13          productive, and aesthetic purposes, and other useful  
14          information~~[, which]~~ that the department deems proper;

15          (7) Enforce all laws relating to the protecting, taking,  
16          killing, propagating, or increasing of aquatic life  
17          within the State and the waters subject to its  
18          jurisdiction; and

19          (8) Formulate and from time to time recommend to the  
20          governor and legislature ~~[such]~~ additional legislation



1           necessary or desirable to implement the objectives of  
2           title 12."

3           SECTION 5. The division of aquatic resources of the  
4 department of land and natural resources shall develop plans  
5 necessary to significantly increase coral reef resilience around  
6 the island of Oahu pursuant to section 187A- , Hawaii Revised  
7 Statutes, including attaining the following goals:

8           (1) By July 1, 2027, a plan to increase the amount of live  
9 coral cover to not less than twenty-five per cent on  
10 reefs that have historically supported naturally  
11 occurring live coral cover;

12           (2) By July 1, 2027, a plan to increase the density of  
13 herbivorous fish inhabiting reefs to at least:

14           (A) Forty grams per square meter; or

15           (B)           per cent of the potential biomass of the  
16           respective moku, as determined by the best  
17           available science; and

18           (3) By July 1, 2028, a plan to increase the density of all  
19 other indigenous species not otherwise specified in  
20 this section to at least           per cent of the



1 potential biomass of the respective moku, as  
2 determined by the best available science.

3 SECTION 6. If any provision of this Act, or the  
4 application thereof to any person or circumstance, is held  
5 invalid, the invalidity does not affect other provisions or  
6 applications of the Act that can be given effect without the  
7 invalid provision or application, and to this end the provisions  
8 of this Act are severable.

9 SECTION 7. Statutory material to be repealed is bracketed  
10 and stricken. New statutory material is underscored.

11 SECTION 8. This Act shall take effect on July 1, 2050.



**Report Title:**

DLNR; DAR; Aquatic Resources; Coral Reef Resilience; Ecosystem Resilience; Reports

**Description:**

Requires the Division of Aquatic Resources of the Department of Land and Natural Resources to: (1) manage and administer aquatic life and resources, with the highest priority being to protect, restore, and maintain ecosystem integrity, using the best scientific data available; (2) make plans by certain dates for the restoration of reef ecosystems and indigenous species to a level that is not less than an unspecified per cent of their natural biomass potential; and (3) make a plan by 7/1/2027 for the expansion of live coral cover at not less than twenty-five per cent on reefs that have historically supported naturally occurring live coral cover. Requires annual reports to the Legislature. Effective 7/1/2050. (SD1)

*The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.*

