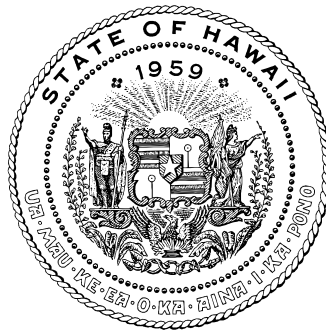


Report to the Thirty-Third Legislature
2026 Regular Session

**THE HAWAII DAM AND RESERVOIR SAFETY PROGRAM
STATE FISCAL YEAR 2025**



Prepared by the
Department of Land and Natural Resources
State of Hawaii

In response to
Section 179D-29, Hawaii Revised Statutes

November 2025

THE HAWAII DAM AND RESERVOIR SAFETY PROGRAM STATE FISCAL YEAR 2025

This report is prepared pursuant to Hawaii Revised Statutes (HRS) Section 179D-29 and covers the period from July 1, 2024, through June 30, 2025.

INTRODUCTION

The Department of Land and Natural Resources Engineering Division (Department) administers the Hawaii Dam and Reservoir Safety Act of 2007 (Act), codified as Hawaii Revised Statutes (HRS) Chapter 179D (Dam and Reservoir Safety Program). This Act, in conjunction with Hawaii Administrative Rules (HAR) Chapter 13-190.1, "Dams and Reservoirs", governs the design, construction, operation, maintenance, enlargement, alteration, repair, and removal of dams, reservoirs, and their appurtenant works in the State of Hawaii, to protect the health, safety, and welfare of the citizens of the State by reducing the risk of failure of the dams or reservoirs. Pursuant to HRS Section 179D-29, the Department shall submit an annual report to the governor and the legislature by January 5 of each year concerning the activities of the Department relating to this chapter for the preceding fiscal year. The report shall include but not be limited to information on the following:

- (1) Approvals of plans and specifications for the construction of dams and reservoirs and for alterations, modifications, repairs, removal, and enlargements of any dams and reservoirs;
- (2) A listing of dam and reservoir safety inspections made;
- (3) Use of appropriated funds;
- (4) Rules adopted or amended;
- (5) Enforcement orders and proceedings;
- (6) Dam and reservoir failures and department evaluations of the reasons for the failure, if known; and
- (7) Any other available data regarding the effectiveness of the State's dam and reservoir safety program.

This information can be found in the Dam Safety Program Activities section of this report.

BACKGROUND

Historically, dams and reservoirs in Hawaii were predominately developed by the agriculture industry in the early 1900s. Today, dams and reservoirs continue to be used by the agriculture industry, in addition to providing storage for drinking water, fire protection, flood control, ground water recharge, hydro-electric generation, recreation and other purposes.

Only dams that meet a certain jurisdictional size criteria (height and volume) are regulated by the Department. Regulated dams are identified as having artificial barriers which are 25-feet or more in height or have an impounding capacity of 50-acre-feet (~17 million gallons) or more.

At the end of Fiscal Year (FY) 2025 there were 123 regulated dams on the Department's inventory. Figure 1 shows some basic statistics for Hawaii's Regulated Dams.

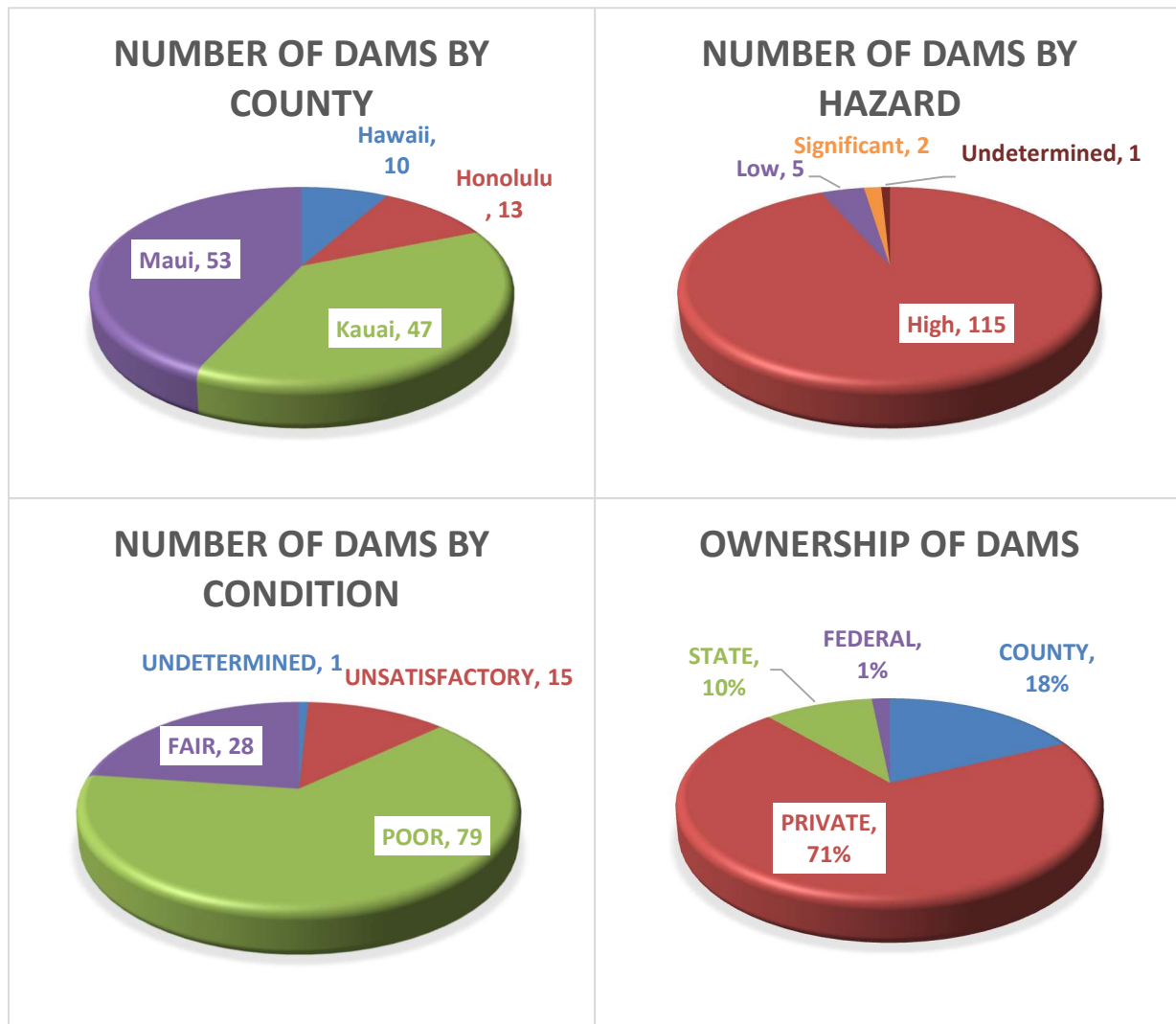


Figure 1: Number of Regulated Dams by County, Hazard Class, and Condition. Percentage of Regulated dams by Ownership.

THE HAWAII DAM AND RESERVOIR SAFETY PROGRAM

The Dam and Reservoir Safety Program is comprised of several core functions as shown in Figure 2.

Dam Safety Construction Permits: A permit from the Board of Land and Natural Resources (Board) is required for all dam construction, alteration, enlargement, modification, or removal work. Dams are uniquely engineered structures that require knowledge and experience in dam safety, particularly how to safely handle water flows in and out of the structure through appurtenant features, as well as mitigating the hazards of water passing through the dam embankment itself (seepage). Dams sustain high hydrostatic water loads, which can result in failure of the embankment if they are not properly designed and constructed. Dam safety permits allow the Department to review and check proposed improvements for concurrence with current dam safety practices and guidelines. Work that is not considered routine maintenance requires prior approval from the Board. Detailed procedures and requirements for this permitting process are provided in HAR Chapter 190.1. A listing of current and closed permits for FY 2025 is listed in Section A of the Dam Safety Program Activities.

Dam Safety Inspections: The Department staff routinely inspects regulated structures statewide and retains consultants as necessary to assist with the assessments. Staff conducted 89 dam safety inspections, construction site visits and informal inspections in FY 2025. The list of the dams inspected in this fiscal year is described in Dam Safety Activities Section B of this report.



Figure 2: Core Functions of Dam and Reservoir Safety Program.

Enforcement Actions: The Hawaii Dam and Reservoir Safety Act of 2007 authorized the Department to take enforcement action for both emergencies and any other violations of the Act. The Department has established administrative enforcement action procedures that are initiated by various actions such as the following:

- Failure to timely address unsafe or emergency conditions
- Conducting construction work on a dam without a permit
- Non-compliance with dam safety permit general terms and special conditions
- Failure to furnish requested information or submit required documents or reports
- Failure to submit a required emergency action plan (EAP) or EAP update
- Failure to pay the annual dam owner fee
- Failure to complete corrective actions as ordered by the Board or its agent

The Department has worked with dam owners to set reasonable rehabilitation or compliance schedules for their dam facilities. Enforcement actions pursued by the Department in FY 2025 are described in the Dam Safety Program Activities, Section E.

Regulated Dam Inventory and Dam Classifications: The Department maintains a database of regulated structures, including classifications of each regarding size, hazard potential and overall condition. The inventory of regulated dams is continuously updated based on information gathered during inspections or assessments. In FY 2025 one regulated dam (added in FY 2024) began the assessment process, but the assessment was not completed. All other assessment classifications have been updated based on Phase I investigations completed between 2018-2024.

Emergency Preparedness: HRS Chapter 179D requires that all dam owners of High and Significant Hazard Potential dams complete and submit an Emergency Action Plan (EAP) to the Department. The Department developed guidelines and an EAP template for dam owners to utilize in formulating and executing a plan of action should a possible threat or deficiency occur on their dam facilities. The Department provides training and technical assistance to dam owners and emergency management officials to assist them in their roles and implementation of the EAPs.

In FY 2025, the Department completed a Federal Emergency Management Agency (FEMA) Collaborative Technical Assistance (CTA) program (which began in FY 2024). This program is a multi-agency collaborative effort to improve emergency preparedness. More CTA details and recent changes to the EAP template are discussed in Dam Safety Activities, Section G.

Certificate of Approval to Impound: The Certificate of Approval to Impound (CAI) water requirement was included in the Hawaii Dam and Reservoir Safety Act of 2007. After developing guideline procedures and sending CAI applications to all owners of regulated dams, it became evident that with the average age of the dams in our inventory being 91 years, the dams were all constructed before the development of any modern dam safety standards and would not meet the conditions of the CAI. Therefore, the Department is working with owners to establish a reasonable improvement schedule for these facilities to meet current regulations. In the interim period, the Department is working with owners to mitigate these deficiencies through operational restrictions or other types of mitigative actions.

Technical Assistance, Training and Outreach: The Department provides technical assistance to the dam owners, operators, and consultants, as well as to the broader community of hazard mitigation partners and agencies. The Department is a member of the Association of State Dam Safety Officials, (ASDSO) and collaborates on public outreach and national awareness of the importance of dam and reservoir safety programs.

The Department maintains an online inventory of regulated dams in the state and makes this inventory available to the public at dams.hawaii.gov. This website continues to be improved to offer more information and easier use for the public, emergency managers, owners, and the Department employees.

Additional information on highlights of technical assistance offered by the Department can be found in Dam Safety Activities, Section G.

DAM SAFETY PROGRAM ACTIVITIES:

- A. Approvals of plans and specifications for the construction of dam and reservoirs and for alterations, modifications, repairs, removals, and enlargements of any dams and reservoirs. The following is a listing of active permits and permit reviews in FY 2025 and their status:

Permits Issued:

Permit No.	State ID	Dam Name	Description of Improvements	Status / Comments
39	KA-0113	Omao Reservoir	Dam removal	Dam has been physically removed and only final paperwork is pending
53	HA-0042	Waimea 60 MG Reservoir (Puukapu)	Dam improvement - lining, outlet slip-line, upstream control, subdrain	Construction completed, pending issuing of as-built drawings and permit close-out.
59	HA-0040	Waikoloa Reservoir No. 1	Major repair.	Construction restart pending funding resourcing.
66	OA-0001	Nuuanu No. 4 Res.	Repair and improvement	Construction completion pending revising the sluice gates design and reissuing a construction contract for the same.
68	OA-137	Oahu Reservoir 155	Improvement	Owner evaluating whether to continue project because of cost overruns.
71	KA-0061	Lower Kapahi Reservoir	Removal	Owner resubmitting with new project scope
77	MA-0140	Ukumehame Reservoirs	Removal	Approved; Construction completed. Finalizing permit closeout.
83	OA-0129	Waimanalo 60 MG - Crest Modifications	Repair and improvement	Construction completed, close-out pending final as-built drawings.
88	MA-0094	Kapalaalaea	Removal	Approved, Construction completed. Finalizing permit closeout.

Permit Applications Under Review:

State ID	Dam Name	Description of Improvements	Status / Comments
HA-0049	Keaiwa Reservoir	Removal / Reduction	Owner rescoping project
HA-0123	Puu Pulehu Reservoir	Remediation	Application under review
KA-0010	Waiakalua Reservoir	Spillway capacity and stability	Permit resubmitted at end of FY 2025 and is being reviewed
KA-0015	Kaneha Reservoir	Remediation. Spillway, stability, seepage, and outlet improvements	Owner working on various auxiliary permits
KA-0024	Kalihiwai Reservoir	Removal	Permit not issued, owners are completing permit prerequisites.
KA-0118	Manuhonuhonu Reservoir	Removal/Reduction	Review pending owner revisions to plans based on comments.

State ID	Dam Name	Description of Improvements	Status / Comments
MA-0058	Honokowai Dam	Reduction	Permit Application under Review.
MA-0070	Maui Reservoir 20	Removal	Permit Application under Review.
MA-0073	HC&S Reservoir 24	Removal / Reduction	Preliminary Review
MA-0095	Haiku Reservoir	Remediation	Preliminary Review
MA-0126	Kahana Nui Dam	Repair	Preliminary permit review.
MA-0151	Wailuku Water 10	Removal	Preliminary Permit Review.
OA-0017	Wahiawa Dam (Dole)	Remediation	Owner rescoping project
OA-0021	Kemoo 5 Reservoir	Removal	Application under review
OA-0022	Upper Helemano Reservoir	Remediation	Preliminary review
OA-0023	Helemano 6 Reservoir	Removal / Reduction	Preliminary review
OA-0154	Nuuuanu 1 Reservoir	Remediation	Application under review

Permits closed or cancelled in FY 2025:

Permit No.	State ID	Dam Name	Description of Improvements	Status / Comments
84	KA-0065	Upper Anahola Reservoir	Removal	This dam was removed from Inventory in FY 2025
93	KA-0067	Field 1 Kealia Reservoir	Removal	This dam was removed from Inventory in FY 2025

B. Listing of dam and reservoir safety inspections.

In FY 2025, Dam and Reservoir Safety Program staff conducted 81 visual dam safety inspections, two construction inspections, five informal inspections and one Phase 1 inspection all on regulated dams (with one exception), for a total of 89 inspections. The rules require that all regulated dams be inspected every 5 years, and at the end of FY 2025 all regulated dams had been inspected within a 3-year period. A listing of the inspections is provided below:

State ID	Dam Name	Inspection Type	Inspection Date
OA-0129	WAIMANALO 60 MG RESERVOIR	Visual Dam Safety	07/17/2024
MA-0054	HORNER RESERVOIR	Visual Dam Safety	07/26/2024
MA-0056	HANAKAOO RESERVOIR	Visual Dam Safety	07/26/2024
OA-0124	KANEOHE DAM	Visual Dam Safety	08/28/2024
HA-0147	PUNAWAI RESERVOIR	Visual Dam Safety	09/04/2024

State ID	Dam Name	Inspection Type	Inspection Date
KA-0113	OMAO RESERVOIR	Construction	09/16/2024
KA-0016	MIMINO RESERVOIR	Visual Dam Safety	09/16/2024
KA-0155	POND NO. 1 AT KAUAI RANCH	Visual Dam Safety	09/16/2024
KA-0103	AEPO RESERVOIR	Visual Dam Safety	10/02/2024
KA-0110	AEPOALUA RESERVOIR	Visual Dam Safety	10/02/2024
KA-0111	AEPOEKOLU RESERVOIR	Visual Dam Safety	10/02/2024
KA-0108	KAUPALE RESERVOIR	Visual Dam Safety	10/02/2024
KA-0106	KUMANO RESERVOIR	Visual Dam Safety	10/02/2024
KA-0158	PINAU RESERVOIR	Phase I	10/03/2024
KA-0062	TWIN RESERVOIRS	Visual Dam Safety	10/03/2024
OA-0018	OPAEULA 01 RESERVOIR	Visual Dam Safety	10/16/2024
KA-0009	KAAWANUI RESERVOIR	Visual Dam Safety	10/21/2024
KA-0008	WAIKOLOI RESERVOIR	Visual Dam Safety	10/21/2024
MA-0143	KAILI ILI RESERVOIR	Visual Dam Safety	10/30/2024
MA-0139	MAUI FIELD 290 RESERVOIR	Visual Dam Safety	10/30/2024
OA-0156	KOOLAU RESERVOIR	Visual Dam Safety	11/14/2024
OA-0025	KU TREE RESERVOIR	Visual Dam Safety	11/14/2024
KA-0005	MANA RESERVOIR	Visual Dam Safety	11/20/2024
KA-0003	PUU OPAE RESERVOIR	Visual Dam Safety	11/20/2024
MA-0092	PAPAAEA RESERVOIR	Visual Dam Safety	11/25/2024
MA-0151	WAILUKU WATER RESERVOIR 10	Informal	12/03/2024
KA-0015	KANEHA RESERVOIR	Visual Dam Safety	01/08/2025
KA-0146	HALAULA RESERVOIR	Visual Dam Safety	01/08/2025
HA-0136	WAIKOLOA RESERVOIR NO. 3	Visual Dam Safety	01/22/2025
HA-0122	WAIKOLOA RESERVOIR NO. 2	Visual Dam Safety	01/22/2025
HA-0040	WAIKOLOA RESERVOIR NO. 1	Visual Dam Safety	01/22/2025
MA-0070	MAUI RESERVOIR 20	Visual Dam Safety	01/29/2025
MA-0071	MAUI RESERVOIR 21	Visual Dam Safety	01/29/2025
KA-0099	WAITA RESERVOIR	Informal	02/10/2025
KA-0014	OKINAWA RESERVOIR	Visual Dam Safety	02/10/2025
KA-0012	KAPAIA RESERVOIR	Visual Dam Safety	02/10/2025
KA-0011	AII RESERVOIR	Visual Dam Safety	02/10/2025
MA-0074	MAUI RESERVOIR 25	Visual Dam Safety	02/12/2025
MA-0072	MAUI RESERVOIR 22	Visual Dam Safety	02/12/2025
MA-0080	MAUI RESERVOIR 60	Visual Dam Safety	02/19/2025
MA-0076	MAUI RESERVOIR 33	Visual Dam Safety	02/19/2025

State ID	Dam Name	Inspection Type	Inspection Date
MA-0075	MAUI RESERVOIR 30	Visual Dam Safety	02/19/2025
KA-0010	WAIKALUA RESERVOIR	Visual Dam Safety	02/21/2025
KA-0024	KALIHIWAI RESERVOIR	Visual Dam Safety	02/21/2025
KA-0030	KALOKO RESERVOIR	Visual Dam Safety	02/24/2025
MA-0079	MAUI RESERVOIR 52	Visual Dam Safety	02/26/2025
MA-0081	MAUI RESERVOIR 61	Visual Dam Safety	02/26/2025
KA-0113	OMAO RESERVOIR	Construction	03/05/2025
MA-0082	MAUI RESERVOIR 70	Visual Dam Safety	03/05/2025
MA-0077	MAUI RESERVOIR 40	Visual Dam Safety	03/05/2025
MA-0085	MAUI RESERVOIR 80	Visual Dam Safety	03/12/2025
MA-0078	MAUI RESERVOIR 42	Visual Dam Safety	03/12/2025
OA-0137	OAHU RESERVOIR 155	Informal	03/14/2025
HA-0123	PUU PULEHU RESERVOIR	Visual Dam Safety	03/21/2025
HA-0042	WAIMEA 60 MG RESERVOIR	Visual Dam Safety	03/21/2025
MA-0088	MAUI RESERVOIR 84	Visual Dam Safety	04/02/2025
MA-0086	MAUI RESERVOIR 81	Visual Dam Safety	04/02/2025
MA-0089	MAUI RESERVOIR 90	Visual Dam Safety	04/09/2025
MA-0087	MAUI RESERVOIR 82	Visual Dam Safety	04/09/2025
MA-0090	MAUI RESERVOIR 92	Visual Dam Safety	04/09/2025
MA-0151	WAILUKU WATER RESERVOIR 10	Visual Dam Safety	04/16/2025
MA-0126	KAHANA NUI DAM	Visual Dam Safety	04/16/2025
MA-0150	WAILUKU WATER RESERVOIR 6	Visual Dam Safety	04/16/2025
MA-0141	KEHALANI OFFSITE RETENTION BASIN	Visual Dam Safety	04/21/2025
MA-0058	HONOKOWAI RESERVOIR	Visual Dam Safety	04/21/2025
MA-0096	PAUWELA RESERVOIR	Visual Dam Safety	04/25/2025
MA-0095	HAIKU RESERVOIR	Visual Dam Safety	04/25/2025
MA-0057	KAHOMA RESERVOIR	Visual Dam Safety	04/25/2025
MA-0083	MAUI RESERVOIR 73	Visual Dam Safety	04/30/2025
MA-0084	MAUI RESERVOIR 74	Visual Dam Safety	04/30/2025
KA-0158	PINAU RESERVOIR	Informal	05/05/2025
UKA-1040	WAILUA HOUSELOTS RESERVOIR	Informal	05/05/2025
KA-0114	PIWAI RESERVOIR	Visual Dam Safety	05/05/2025
MA-0144	MAHINAHINA RESERVOIR	Visual Dam Safety	05/07/2025
MA-0047	PIIHOLO 50 MG RESERVOIR	Visual Dam Safety	05/07/2025
MA-0138	KAHAKAPAO RESERVOIRS	Visual Dam Safety	05/14/2025
MA-0048	OLINDA RESERVOIR	Visual Dam Safety	05/14/2025

State ID	Dam Name	Inspection Type	Inspection Date
MA-0091	PEAHI RESERVOIR	Visual Dam Safety	05/16/2025
MA-0069	MAUI RESERVOIR 15	Visual Dam Safety	05/16/2025
MA-0068	MAUI RESERVOIR 14	Visual Dam Safety	05/16/2025
KA-0102	IOLEAU RESERVOIR	Visual Dam Safety	05/19/2025
KA-0109	IPUOLONO RESERVOIR	Visual Dam Safety	05/19/2025
HA-0043	PUUKAPU WATERSHED RETARDING DAM R-1	Visual Dam Safety	05/30/2025
MA-0073	MAUI RESERVOIR 24	Visual Dam Safety	05/30/2025
MA-0059	RESERVOIR 140	Visual Dam Safety	05/30/2025
HA-0131	PAAUILO RESERVOIR	Visual Dam Safety	05/30/2025
MA-0152	WAIKAMOI RESERVOIRS	Visual Dam Safety	06/04/2025
MA-0046	WAIKAMOI DAM NO. 2	Visual Dam Safety	06/04/2025
MO-0041	KUALAPUU RESERVOIR	Visual Dam Safety	06/18/2025

C. Use of Appropriated Funds:

Appropriated funds for the dam and reservoir safety program are authorized under the LNR810 program. These operating funds for the LNR 810 Program support multiple sub-programs which include the State oversight of the National Flood Insurance Program, the State General Flood Control Plan, the Dam and Reservoir Safety Program and the newly established Dam and Appurtenance Improvement or Removal Grant Program (DAIRG). Some assumptions were taken to separate the Dam and Reservoir Safety Program appropriation amounts and costs for this report. The Dam and Reservoir Safety Program was awarded one federal grant from the United States Department of Homeland Security, Federal Emergency Management Agency (FEMA) in FY 2025.

No State general funds were appropriated for the program in FY 2025 for the administration of the Dam Safety Program. State general funding was appropriated for the DAIRG program.

The DAIRG program was established under Act 134, Session Laws of Hawaii (SLH) 2023 (Act 134), and amended by Act 232, SLH 2024 by creating a special fund for the grant program. \$5,000,000 was appropriated out of State general revenues to the DAIRG special fund for use in appropriating grants to private owners of high hazard potential dams in poor or unsatisfactory condition. Act 134 also appropriated for \$220,000 for two permanent positions and operating costs for this new grant program.

The dam and reservoir safety special fund has an annual appropriation ceiling spending limit of \$1,300,000 for the program administration, and \$5,000,000 ceiling spending limit for the DAIRG program. The following is a breakdown of appropriated funds received by the Department and the funding source for its dam safety activities in FY 2025:

Dam Safety Program – Appropriated funding for FY 2025

Department Special Land and Development Fund	\$ 845,000
– Dam Safety Program (Payroll & Operating)	
– Dam Safety Program (Hazard Pay for Covid)	
State of Hawaii – Dam Safety Program (Operating)	\$ 0
State of Hawaii – Dam & App. Imp. or Removal Grant Special Fund (DAIRG)	\$ 5,000,000
(one time funding from General Revenues)	
State of Hawaii – Dam and App. Imp. or Removal Grant Program (DAIRG)	
(Payroll & Operating for DAIRG program only)	\$ 220,000
FEMA National Dam Safety Program Grant (Fed FY 2024)	\$ 59,621
Total Appropriated Funding from All Sources	\$ 6,124,621

FY 2025 expenditures from the various funding sources were made as follows:

	LNR810 SLDF (Payroll & Operating)	Dam and Reservoir Safety Special Fund (Operating)	DAIRG Awards	DAIRG (Payroll & Operating)	Federal Funds	Total
Personnel Services	\$ 792,190	\$ 0	\$ 0	\$ 0	\$ 0	\$ 792,190
Consultant Services Expenditures (Encumbered)		\$513,340 (\$ 496,890)	\$ 0	\$ 0 (\$ 190,000)	\$ 0	\$513,340 (\$ 686,890)
Inspections Costs		\$ 24,880	\$ 0	\$ 0	\$ 0	\$ 24,880
Training Expense		\$ 3,140	\$0	\$ 0	\$10,660	\$ 13,800
Other Expenses (Supplies, Operating & Equipment)	\$ 3,330	\$ 6,320	\$ 0	\$ 0	\$ 19,580	\$ 29,230
B&F Special Fund Assessment (SFA)	\$ 17,350	\$ 45,650	\$ 250,000	\$ 0	\$ 0	\$ 313,000
	\$ 812,870	\$ 593,330	\$ 250,000	\$ 0	\$ 30,240	\$ 1,686,440

No dam and appurtenance improvement or removal grants were awarded in FY 2025. The department has solicited for applicants, reviewed the applicants and are in the process of initiating the awards. The Dam Safety Program was also awarded \$ 10.36 million National Dam Safety Program's Fall High Hazard Potential Dam Grant in FY 2024; however, these funds have not been released to the Department by FEMA.

Federal funds are awarded on a federal fiscal calendar (October 1 to September 30). Some adjustments were made in expenditures to match the state fiscal year.

D. Rules adopted or amended.

No Dam Safety rules were adopted or amended in FY 2025.

E. Enforcement orders and proceedings.

In FY 2025, the Department issued five enforcement actions through the Civil Resource Violation System (CRVS) and one based on enforcement actions from the Board of Land and Natural Resources. Note that one CRVS at the end of FY 2025 is still working through a resolution. The table below shows the Enforcement activities:

State ID	Dam Name	Fine Amount	Description
OA-0017	Wahiawa Reservoir	\$20,000	Late on BLNR remediation schedule (Fine paid)
KA-0158	Pinau Reservoir	\$ 145	Late payment fee and interest on dam fees (issued in FY 2025, pending resolution)
KA-0006	Waikaia Reservoir	\$5,000	Failure to submit technical studies by NOD deadline (Fine paid)
KA-0007	Kepani Reservoir	\$5,000	Failure to submit technical studies by NOD deadline (Fine paid)
KA-0008	Waikaloi Reservoir	\$5,000	Failure to submit technical studies by NOD deadline (Fine Paid)
KA-0009	Kaawawanui Reservoir	\$5,000	Failure to submit technical studies by NOD deadline (Fine Paid)

The Department issued 13 Notice of Deficiency (NOD) Letters or other enforcement letters during FY 2025 for a total of 25 dams. Some of these were follow-ups to previously issued NODs where clarification was needed due to missed deadlines or changing status, while some were new NODs. The dam structures receiving NODs or other enforcement actions in FY 2025 are listed below:

State ID	Dam Name	Action Type
KA-0110	AEPOALUA RESERVOIR	NOD
KA-0098	ALEXANDER	NOD
KA-0100	KAPA RESERVOIR	NOD
KA-0101	HUKIWAI RESERVOIR	NOD
KA-0102	IOLEAU RESERVOIR	NOD
KA-0103	AEPO RESERVOIR	NOD
KA-0104	HUINAWAI RESERVOIR	NOD
KA-0105	ELIMA RESERVOIR	NOD
KA-0106	KUMANO RESERVOIR	NOD
KA-0108	KAUPALE RESERVOIR	NOD
KA-0109	IPUOLONO RESERVOIR	NOD
KA-0110	AEPOALUA RESERVOIR	NOD
KA-0111	AEPOEKOLU RESERVOIR	NOD
KA-0116	MAU RESERVOIR	NOD
KA-0117	ELUA RESERVOIR	NOD
KA-0011	AII RESERVOIR	NOD
KA-0012	KAPAIA RESERVOIR	NOD
KA-0099	WAITA RESERVOIR	NOD
KA-0120	PAPUAA RESERVOIR	NOD
KA-0005	MANA RESERVOIR	NOD
KA-0006	WAIKAIA RESERVOIR	NOD
KA-0007	KEPANI RESERVOIR	NOD
KA-0008	WAIKOLOI RESERVOIR	NOD
KA-0009	KAAWANUI RESERVOIR	NOD

The Department also maintained and added the following dam restrictions. As we have evaluated risk for our various dams, we have found that level restrictions are a very important part in effectively reducing risk of catastrophic failure.

State ID	Dam Name	Deficiency	DLNR Gage Water Level Restriction (in feet)
HA-0049	KEAIWA RESERVOIR	Earthquake damaged embankment concrete lining.	Keep Empty
KA-0002	PUU LUA RESERVOIR	No Spillway (Top of Dam = 111 ft)	59
KA-0003	PUU OPAAE RESERVOIR	Abandoned Condition	Keep Empty

State ID	Dam Name	Deficiency	DLNR Gage Water Level Restriction (in feet)
KA-0005	MANA RESERVOIR	No Spillway	Keep Empty
KA-0010	WAIAKALUA RESERVOIR	Spillway undersized and stability concerns	9
KA-0011	AII RESERVOIR	Spillway Capacity and Slope Stability	15
KA-0012	KAPAIA RESERVOIR	Spillway Capacity, Seepage and Slope Stability	40
KA-0014	OKINAWA RESERVOIR	Spillway Undersized	5
KA-0015	KANEHA RESERVOIR	Spillway Undersized and stability concerns	22
KA-0016	MIMINO RESERVOIR	Spillway Undersized	26
KA-0024	KALIHAIWAI RESERVOIR	Spillway undersized and outlet needs repair	10.2
KA-0030	KALOKO RESERVOIR	Partially Breached - No Permanent Repair (Spillway 22.7', Top > 40')	21
KA-0061	LOWER KAPAHI RESERVOIR	No Defined Spillway/Abandoned Condition	Keep Empty
KA-0062	TWIN RESERVOIRS	Spillway Undersized / Abandoned Condition	Keep Empty
KA-0063	AAHOAKA RESERVOIR	No Functioning Outlet / Spillway Undersized. Keep at Outlet elevation	426.8
KA-0099	WAITA RESERVOIR	Spillway Capacity and Slope Stability	16
KA-0100	KAPA RESERVOIR	Requires Hydraulic and Stability Studies	6
KA-0101	HUKIWAI RESERVOIR	No Spillway (Top at 17')	12
KA-0102	IOLEAU RESERVOIR	Spillway Undersized	25
KA-0104	HUINAWAI RESERVOIR	Overtopping, seepage, and stability concerns	26
KA-0105	ELIMA RESERVOIR	Spillway Undersized	7
KA-0106	KUMANO RESERVOIR	No Spillway	Keep Empty
KA-0107	PUU O HEWA RESERVOIR	Requires Hydraulic and Stability Studies	8
KA-0108	KAUPALE RESERVOIR	Spillway Undersized	Keep Empty

State ID	Dam Name	Deficiency	DLNR Gage Water Level Restriction (in feet)
KA-0109	IPUOLONO RESERVOIR	Spillway Undersized	25
KA-0110	AEPOALUA RESERVOIR	Spillway Capacity	20
KA-0111	AEPOEKOLU RESERVOIR	Spillway Undersized	Keep Empty
KA-0112	AEPOEHA RESERVOIR	Spillway Undersized	27
KA-0113	OMAO RESERVOIR	Spillway Undersized	Keep Empty
KA-0114	PIWAI RESERVOIR	Spillway Undersized	Keep Empty
KA-0115	PIA MILL RESERVOIR	Requires Hydraulic and Stability Studies	8.5
KA-0116	MAU RESERVOIR	Spillway Undersized	Keep Empty
KA-0117	ELUA RESERVOIR	Spillway Undersized	16
KA-0118	MANUHONUHONU RESERVOIR	No Spillway	Keep Empty
KA-0119	MAUKA RESERVOIR	Spillway undersized	5.5
KA-0120	PAPUAA RESERVOIR	Spillway Capacity and Slope Stability	35
KA-0121	HALENANAHU RESERVOIR	Spillway undersized	11
KA-0146	HALAULA RESERVOIR	Requires Hydraulic and Stability Studies	21.5
MA-0054	HORNER RESERVOIR	Requires Hydraulic and Stability Studies	25
MA-0068	MAUI RESERVOIR 14	Reservoir Overtops from Design	Keep Empty
MA-0069	MAUI RESERVOIR 15	No H&H	Keep Empty
MA-0070	MAUI RESERVOIR 20	Reservoir Overtops from Design Rainstorm event	Keep Empty
MA-0073	MAUI RESERVOIR 24	No H&H	Keep Empty
MA-0074	MAUI RESERVOIR 25	Reservoir Overtops from Design Rainstorm event	3
MA-0076	MAUI RESERVOIR 33	Requires H&H and stability study	22.5

State ID	Dam Name	Deficiency	DLNR Gage Water Level Restriction (in feet)
MA-0078	MAUI RESERVOIR 42	Poor Condition, requires H&H and stability study	17
MA-0079	MAUI RESERVOIR 52	Reservoir Overtops from Design Rainstorm event	Keep Empty
MA-0080	MAUI RESERVOIR 60	Reservoir Overtops from Design Rainstorm event	Keep Empty
MA-0081	MAUI RESERVOIR 61	Reservoir does not have required safety freeboard	16
MA-0082	MAUI RESERVOIR 70	Reservoir does not have required safety freeboard	9
MA-0083	MAUI RESERVOIR 73	Repairs needed, requires H&H a stability study	Keep Empty
MA-0084	MAUI RESERVOIR 74	Reservoir Overtops from Design Rainstorm event	Keep Empty
MA-0085	MAUI RESERVOIR 80	Requires H&H and stability study	17
MA-0086	MAUI RESERVOIR 81	Requires H&H and stability study	12
MA-0087	MAUI RESERVOIR 82	Poor condition, require Freeboard Buffer	5.5
MA-0088	MAUI RESERVOIR 84	Reservoir Overtops from Design Rainstorm event	Keep Empty
MA-0089	MAUI RESERVOIR 90	Requires H&H and stability study	10
MA-0090	MAUI RESERVOIR 92	Reservoir Overtops from Design Rainstorm event	15
MA-0091	PEAHI RESERVOIR	Reservoir Overtops from Design Rainstorm event	Keep Empty
MA-0092	PAPAAEA RESERVOIR	Repairs needed, requires H&H an stability study	Keep Empty
MA-0095	HAIKU RESERVOIR	Reservoir Overtops from Design Rainstorm event and has piping along outlet	Keep Empty
MA-0096	PAUWELA RESERVOIR	Reservoir Overtops from Design Rainstorm event	2
MA-0151	WAILUKU WATER RESERVOIR 10	Requires Hydraulic and Stability Studies	9
OA-0017	WAHIAWA DAM	Undersized & deteriorated spillway and embankment stability issues.	65
OA-0022	UPPER HELEMANO RESERVOIR	Deteriorated spillway	44

State ID	Dam Name	Deficiency	DLNR Gage Water Level Restriction (in feet)
OA-0023	HELEMANO 6 RESERVOIR	Spillway erosion	21
OA-0025	KU TREE RESERVOIR	Kept empty because of undersized spillway and deteriorated state of dam structure.	Keep Empty
OA-0154	NUUANU RESERVOIR NO. 1	No Functioning Outlet / Spillway Undersized	381.5
OA-0156	KOOLAU RESERVOIR	Inoperable outlet works, clogged spillway, and abandoned condition of dam structure.	Keep Empty
HA-0049	KEAIWA RESERVOIR	Earthquake damaged embankment concrete lining.	Keep Empty

F. Dam and reservoir failures and department evaluations of the reasons for the failure, if known;

There were no known dam failures in FY 2025. There were no known incidents in FY 2025.

G. Other available data regarding the effectiveness of the State's Dam and Reservoir Safety Program.

This year, the Dam Safety Program and Kauai Emergency Management Agency (KEMA) completed the FEMA Planning for Dam Emergencies Collaborative Technical Assistance (CTA) program that was begun in FY 2024. This program aims to enhance the emergency preparedness of communities with dams through a variety of targeted training sessions and resources. The dam safety team in collaboration with KEMA, National Weather Service (NWS), other emergency agencies and a select group of Kauai dam owners went through several in person and online training sessions over a year-long period which clarified the understanding of the roles and responsibilities of each agency during a dam emergency, and how each group could improve response during these emergencies.

The Dam and Reservoir Safety Program has been working with dam owners in the preparation of their Emergency Action Plans (EAP) for their facilities for several years. EAPs are required by Statute for all high and significant hazard potential classifications of dams. All regulated dams except one low hazard dam and two newly added dams have EAPs on file with the Department. Through the CTA program and some exercises conducted in collaboration with Maui County, areas of improvement for the EAP templates were identified and those improvements were implemented on our dam safety website. While not completed in FY 2025, planning for additional EAP training sessions were begun in the Fall of 2025 (FY 2026).

In FY 2024, the Department completed an update of the statewide Probable Maximum Precipitation (PMP) data through a two-year study that used methods that reflect the current dam safety industry standard of practice in defining PMP data, including comprehensive meteorological data and processes to ensure the best estimate of natural maximum rainfall. The Study is proposed to be the new standard for statewide PMP data, replacing the current standard, the HMR-39 which was developed more than 60 years ago. In conjunction with the PMP study, the department started developing guidelines to assist owners of regulated dams to use the results of the study to meet requirements for spillway designs. During the update of the guidelines, additional studies were started in FY 2025 to make sure that any effects of climate change were considered before the guidelines were published.

Upgrades were also completed on the dam safety website (dams.hawaii.gov) to allow safer and more secure login for dam owners and other partners to our dam safety program.

In FY 2024 the Dam Safety Program was awarded a \$10.36 million grant from National Dam Safety Program's High Hazard Potential Dam Program (HHPD). The dam safety program undertook significant effort in securing this grant and conducted numerous risk analysis compilations in order to meet the application requirements. Currently these funds have yet to be released by FEMA and the potential rehabilitation projects may be at risk for losing these funds.

Similarly, the dam safety program continued efforts in establishing and awarding state grants for the Dam and Appurtenance Improvement or Removal Grant program. This grant program was established by Act 134, SLH 2023 and amended by Act 232, SLH 2024. Significant effort was put into the reviewing of the applications and ongoing coordination with prospective award projects are being undertaken. Though the funding has not yet been awarded to the individual dam owners, the improvements that would be funded by this grant program will greatly increase safety of the downstream public.