

- 1 RBJGNY-1
- 2 By Senator Chambliss
- 3 RFD: State Governmental Affairs
- 4 First Read: 03-May-23

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6 2023 Regular Session



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SYNOPSIS:

This bill would provide for the inspection of certain dams and reservoirs by an engineer who shall submit an accompanying report to the Alabama Department of Environmental Management. The department would serve as a public repository for dam related documents.

This bill would require certain dam owners to notify the department of any new dam construction or enlargement, as well as require certain dam owners to develop and file emergency action plans with the department.

This bill would also provide for a Dam

Rehabilitation Loan Program to be used in assisting dam

owners in repairing and rehabilitating their dams.

TO BE ENTITLED

A BILL

AN ACT

Relating to dam safety; to provide for the inspection of certain dams and reservoirs by an engineer; to provide for the Alabama Department of Environmental Management to serve as a public repository for dam related documents; to require certain dam owners to develop emergency action plans; to require certain dam owners to notify the department of any new



- 30 dam construction or enlargement; and to provide for a Dam
- 31 Rehabilitation Loan Program.
- 32 BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:
- 33 Section 1. This act shall apply only to state-owned
- dams and reservoirs and dams and reservoirs whose owner or
- owners have elected to be subject to this act.
- 36 Section 2. For the purposes of this act, the following
- 37 terms have the following meanings:
- 38 (1) ABANDON or ABANDONMENT. To render a dam
- 39 non-impounding by dewatering and filling the reservoir created
- 40 by the dam with solid materials, by diverting the natural
- drainway around the site, or by removing a portion of a dam to
- 42 allow drainage to occur the same, or nearly the same, as
- 43 before the construction of the dam.
- 44 (2) ADVERSE CONSEQUENCES. Negative impacts that may
- occur upstream, downstream, or at locations remote from the
- 46 dam. The primary concerns are loss of human life, disruption
- 47 of public infrastructure, environmental impact, and economic
- 48 loss, including property damage.
- 49 (3) ALTERATIONS or REPAIRS. Alterations or repairs to
- an existing dam and appurtenant structures that affect the
- 51 safety of the dam or reservoir.
- 52 (4) APPURTENANT WORKS. The structures or machinery
- 53 incident or annexed to a dam that are built to operate,
- 54 assist, and maintain a dam. The term includes spillways,
- 55 either in the dam or separate therefrom, the reservoir and its
- 56 rim, low level outlet works, and water conduits, including
- tunnels, pipelines, or penstocks, either through the dam or



- 58 its abutments.
- 59 (5) BREACH. Partial removal of a dam, creating a
- 60 channel through the dam to the original stream bottom
- 61 elevation.
- 62 (6) DAM.
- a. An artificial barrier, including appurtenant works,
- 64 with the ability to impound water, wastewater, or liquid borne
- 65 materials and to which either of the following apply:
- 1. Is 25 feet or more in height from the natural bed of
- 67 the stream or watercourse measured at the downstream toe of
- the barrier, or from the lowest elevation of the outside limit
- of the barrier, if it is not across a stream channel or
- 70 watercourse, to the maximum water storage elevation.
- 71 2. Has an impounding capacity at maximum water storage
- 72 elevation of 50 acre feet or more.
- 73 b. The term includes a fill or structure for highway or
- 74 railroad use or for any other purpose which impounds water.
- 75 c. This definition does not apply to any barrier not in
- 76 excess of six feet in height regardless of storage capacity or
- 77 which has a storage capacity at maximum water storage
- 78 elevation not greater than 15 acre feet regardless of height,
- 79 unless the barrier, due to its location or other physical
- 80 characteristics, is classified as a high hazard potential dam.
- d. This definition does not apply to any dam subject to
- 82 the jurisdiction of any other state or federal agency.
- e. The term does not include any obstruction in a canal
- 84 used to raise or lower water.
- f. This term does not include privately owned dams,



- 86 regardless of the hazard designation, unless the owner has
- voluntarily elected to participate in the program in
- 88 accordance with this act.
- (7) DAYS. In establishing deadlines, means all calendar
- 90 days, including Sundays and holidays.
- 91 (8) DEPARTMENT. The Alabama Department of Environmental
- 92 Management.
- 93 (9) DIRECTOR. The Director of the Alabama Department of
- 94 Environmental Management.
- 95 (10) EMERGENCY. Includes all conditions leading to or
- 96 causing a breach, overtopping, or any other condition of a dam
- 97 and its appurtenant structures that may be construed as unsafe
- 98 or threatening to life or property.
- 99 (11) EMERGENCY ACTION PLAN. A plan that identifies the
- 100 area that would likely be inundated by the failure of a dam
- 101 and the actions that should be taken in the event of a failure
- or threatening condition at the dam.
- 103 (12) ENGINEER. An engineer who has a background in
- 104 civil engineering and:
- 105 a. Is a licensed professional engineer.
- b. Is competent in areas related to dam investigation,
- design, construction, and operation for the type of dam being
- 108 investigated, designed, constructed, or operated.
- 109 c. Has relevant experience in areas such as
- investigation, design, construction, reconstruction,
- 111 enlargement, repair, alteration, maintenance, operation,
- 112 breach, removal, or abandonment of dams.
- d. Understands adverse dam incidents, failures, and the



114 potential causes and consequences of failures.

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- e. Continues with necessary training and continuing
 education to keep abreast of the state of the practice in dam
 safety engineering.
 - (13) ENLARGEMENT. Any change in or addition to an existing dam or reservoir that raises or may raise the water storage elevation of the water impounded by the dam.
 - (14) HAZARD POTENTIAL. The possible adverse incremental consequences that result from the release of water or stored contents due to failure of the dam or misoperation of the dam or appurtenances. The hazard potential classification of a dam does not reflect in any way on the current condition of the dam and its appurtenant structures, including safety, structural integrity, or flood routing capacity.
- 128 (15) HIGH HAZARD POTENTIAL DAM. A dam assigned the high 129 hazard potential classification where the dam's failure or 130 misoperation will likely cause loss of human life.
 - (16) LOW HAZARD POTENTIAL DAM. A dam assigned the low hazard potential classification where failure or misoperation results in no probable loss of human life and low economic or environmental losses with those economic losses that do occur being principally limited to the owner's property.
- 136 (17) PARTICIPATING OWNER. The state and its
 137 departments, institutions, or agencies that own a dam or
 138 reservoir. The term may also include all of the following that
 139 elect to be included in this definition by written affidavit
 140 delivered to the department:
- 141 a. Any municipal or quasi-municipal corporation.



- b. Any county or quasi-county corporation.
- 143 c. Any public utility.
- d. Any district as defined by Section 11-99A-2, Code of
- 145 Alabama 1975.
- e. Any person.
- f. The duly authorized agent, lessee, or trustee of any
- 148 of the foregoing.
- q. Receivers or trustees appointed by any court for any
- of the foregoing.
- 151 (18) PERSON. Any individual, bankruptcy trustee, firm,
- association, organization, partnership, business trust,
- 153 corporation, LLC, LLP, or company.
- 154 (19) PROBABLE. More likely than not to occur;
- 155 reasonably expected; realistic.
- 156 (20) RECONSTRUCTION. Removal and replacement of an
- 157 existing dam or a portion thereof.
- 158 (21) REMOVAL. Complete elimination of the dam
- 159 embankment or structure to restore the approximate original
- 160 topographic contours of the valley.
- 161 (22) RESERVOIR. Any area that contains or will contain
- impounded water, wastewater, or liquid-borne materials by
- virtue of its having been impounded by a dam. This term does
- 164 not include privately owned reservoirs, regardless of the
- 165 hazard designation, unless the owner has elected to
- 166 participate in the program in accordance with this act.
- 167 (23) SIGNIFICANT HAZARD POTENTIAL DAM. A dam assigned
- 168 the significant hazard potential classification where failure
- or misoperation results in no probable loss of human life but



- can result in major economic loss, environmental damage,
 disruption of lifeline facilities, or other issues impacting
- 172 public safety and welfare.

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- 173 (24) WATER STORAGE ELEVATION. The maximum elevation of water surface which can be obtained by the dam or reservoir.
- Section 3.(a) The department has neither inspection nor regulatory duty or responsibility.
- 177 (b) Records pertaining to dams and reservoirs kept by
 178 and in the possession of the department shall be public
 179 documents. The department shall act as a repository to allow
 180 public access to documents related to dams.
- 181 (c) Nothing in this act shall be construed to relieve a
 182 participating owner or operator of a dam or reservoir of the
 183 legal duties, obligations, or liabilities incident to the
 184 ownership or operation of the dam or reservoir.
- Section 4. (a) A participating owner shall ensure plans and specifications for initial construction, reconstruction, enlargement, alteration, repair, operation, breach, abandonment, or removal of dams and reservoirs, and the supervision of the construction of dams and reservoirs shall be in the charge of an engineer and assisted by qualified geologists and other specialists as necessary.
 - (b) A participating owner of any dam or reservoir shall ensure the dam or reservoir is inspected a minimum of once every two years by an engineer who shall file with the department a record of the inspection.
- 196 (c) A participating owner shall notify the department 197 in writing of the construction or the enlargement of any dam



- or reservoir. Plans and specifications signed and sealed by the design engineer shall accompany the notification.
- 200 (d) Prior to the transfer of ownership of any dam or
 201 reservoir, the current participating owner shall notify the
 202 department of any proposed change in ownership. The subsequent
 203 owner may elect to continue participating in the inspection
 204 program but may also elect to cease participation with no
 205 penalty.
- Section 5. (a) It shall be the duty of the inspecting engineer to assign a hazard potential classification to dams and reservoirs.
- 209 (b) In order to protect life and property, participating owners of high and significant hazard potential 210 211 dams and reservoirs shall develop and file with the department 212 an emergency action plan prepared by an engineer in 213 consultation with the director of the local emergency 214 management organization for the county or municipality in 215 which the dam or reservoir is located which shall be 216 implemented in the event of an emergency involving that 217 participating owner's dam or dams. The participating owners of 218 such dams shall periodically test and update this emergency 219 action plan. This plan shall include all of the following 220 elements:
- 221 (1) Emergency notification plan with flowchart.
- 222 (2) Statement of purpose.
- 223 (3) Project description.
- 224 (4) Emergency detection, evaluation, and
- 225 classification.



- 226 (5) General responsibilities.
- 227 (6) Preparedness.
- 228 (7) Inundation maps or other acceptable description of the inundated area.
- 230 (8) Appendices.

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- 231 (c) Participating owners of dams and reservoirs have 232 the responsibility for determining when an emergency involving 233 a dam or reservoir may exist. When the participating owner of 234 a dam or reservoir makes this determination, the participating 235 owner shall immediately implement the emergency action plan 236 required by this section, notify any person who may be endangered if the dam should fail, notify emergency management 237 238 organizations, and take additional actions necessary to 239 safeguard life, health, and property.
 - Section 6. (a) The department shall create a Dam

 Rehabilitation Loan Program or may partner with other public or private agencies or organizations to create a Dam

 Rehabilitation Loan Program, which shall be a revolving fund to be used exclusively for the purposes of this act.
- 245 (b) The program shall initially be funded with monies 246 appropriated by the Legislature. Subsequently, the program 247 shall be funded through additional monies appropriated by the 248 Legislature, payments of principal and interest collected by the department, monies paid to the fund pursuant to a 249 250 directive of the Legislature, and all interest earned on the 251 investment of monies in the fund by the State Treasurer. The Legislature may also subsequently authorize funding to expand 252 253 the financial size of the program.



- (c) The Dam Rehabilitation Loan Program may obtain

 funds through partnerships with any private or public bonding

 or loaning agency or organization.
- 257 (d) State funding to the Dam Rehabilitation Loan
 258 Program shall not be reduced because of federal funds provided
 259 for a rehabilitation loan program.
- 260 (e) Monies in the Dam Rehabilitation Loan Program shall
 261 not revert to the State General Fund. Monies in the fund are
 262 exempt from lapsing.

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- Section 7. (a) If the balance of the Dam Rehabilitation Loan Program exceeds one million dollars (\$1,000,000), no single loan shall be made for more than 20 percent of the monies available in the fund. No loan shall be made to any participating owner that, at the time of the loan application, has more than 20 percent of the outstanding loans of the fund.
- 269 (b) The loans granted by the department shall be for a
 270 term of not more than 20 years and the loans shall bear
 271 interest at rates set by the department in the rules.
- (c) Each loan shall be evidenced by a contract between
 the participating owner and the department acting on behalf of
 this state. The contract shall provide for the loan by this
 state of a stated amount to defray some or all eligible costs.
 The contract shall provide for equal annual payments of
- 277 principal and interest for the term of the loan.
- 278 (d) All of the following costs and fees shall be 279 eliqible costs pursuant to subsection (c):
- 280 (1) Any costs directly related to rehabilitating safety deficiencies of a dam.



282 (2) Fees for analysis, feasibility work, alternative 283 evaluation, and engineering design after construction has been 284 initiated, or at the point that analysis has shown a dam to be 285 in compliance.

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- (3) Up to 100 percent of rehabilitation costs for a dam. Participating owners may use multiple programs or sources to fund the rehabilitation costs for a dam.
- 289 (4) Any costs directly related to compliance with other
 290 laws that are above the state's minimum dam safety
 291 requirements.
- 292 (5) Any costs for state agency-required fish passage, 293 if the costs are part of an overall rehabilitation project.
- 294 (e) The department may take mutually agreeable security
 295 interest in the participating owner's property in exchange for
 296 the loan. If the department chooses to take a security
 297 interest in the participating owner's property, the department
 298 shall perfect that security interest by filing appropriate
 299 documentation with the proper authorities.
 - (f) The Attorney General or the department's legal counsel, with the consent of the department, may commence whatever actions are necessary to enforce the contract and achieve repayment of loans provided by the department pursuant to this act.
- Section 8. The participating owner's responsibilities under the Dam Rehabilitation Loan Program shall include all of the following:
- 308 (1) As part of the application process, participating 309 owners must demonstrate the ability to appropriately operate



- 310 and maintain the dam after rehabilitation is complete.
- 311 (2) Once a loan has been granted, creating an operation 312 and maintenance plan with written, regularly scheduled reports
- 313 so as to maintain and keep the structure and its appurtenant
- 314 works in the state of repair and operating condition required
- 315 by the exercise of prudence; due regard for life or property;
- 316 the application of sound and accepted engineering principles;
- 317 and applicable rules, guidelines, and policies.
- 318 (3) As part of any rehabilitation project utilizing
- 319 funds from this program, developing an emergency action plan
- 320 if one does not currently exist.
- 321 (4) Cooperating with the department's agents,
- engineers, and other employees in the conduct of the statute.
- 323 (5) Facilitating access to the structure or
- 324 appurtenance.
- 325 (6) Furnishing, upon request, the plans,
- 326 specifications, operating and maintenance data, or other
- 327 information that is pertinent to the structure, appurtenance,
- 328 and loan.
- 329 Section 9. The following general loan guidelines apply:
- 330 (1) Participating owners of dams without taxing
- 331 authority shall be allowed to participate in the Dam
- 332 Rehabilitation Loan Program.
- 333 (2) Complete rehabilitations are to be encouraged, but
- 334 phased projects can be funded.
- 335 (3) Removal of dams as a rehabilitation alternative
- 336 shall be allowed.
- 337 (4) Participating owners are allowed to partner with an



- individual, local agency, or organization for purposes of the loan and for purposes of operation and maintenance.
- 340 (5) Rehabilitation projects that are in compliance with 341 state statutes and rules, and are permitted, accepted, and 342 approved by the department are eligible to be funded through 343 the Dam Rehabilitation Loan Program.
- 344 (6) Costs for lake enhancement projects such as lake 345 dredging, sediment removal projects, or boat ramps, which do 346 not enhance the safety of the dam, are not eligible to be 347 funded through the Dam Rehabilitation Loan Program.

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- (7) For dams and reservoirs for which a loan has been applied for, the department and its agents, engineers, and other employees may enter upon the land on which the dam is located or water which forms the reservoir without a search warrant or liability for trespass.
- (8) This act does not create a liability for damages against the department, its officers, agents, and employees caused by or arising out of any of the following:
- 356 a. The construction, maintenance, operation, or failure 357 of a dam or appurtenant works.
- 358 b. The issuance and enforcement of an order or a rule 359 issued by the department to carry out the department's duties.
- 360 (9) The state does not assume ownership obligations, 361 responsibilities, or liabilities if a participating owner 362 defaults on a loan.
- 363 Section 10. The department shall adopt rules as necessary to implement and administer this act.
- 365 Section 11. This act shall become effective on the



366	first day of the third month	following its passage and
367	approval by the Governor, or	its otherwise becoming law.
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