

SALINE LAKE ECOSYSTEMS IN THE GREAT BASIN
STATES PROGRAM ACT OF 2021

NOVEMBER 16, 2022.—Committed to the Committee of the Whole House on the
State of the Union and ordered to be printed

Mr. GRIJALVA, from the Committee on Natural Resources,
submitted the following

R E P O R T

[To accompany H.R. 5345]

[Including cost estimate of the Congressional Budget Office]

The Committee on Natural Resources, to whom was referred the bill (H.R. 5345) to authorize the Director of the United States Geological Survey to establish a regional program to assess, monitor, and benefit the hydrology of saline lakes in the Great Basin and the migratory birds and other wildlife dependent on those habitats, and for other purposes, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Saline Lake Ecosystems in the Great Basin States Program Act of 2021”.

SEC. 2. SALINE LAKE ECOSYSTEMS IN THE GREAT BASIN STATES ASSESSMENT AND MONITORING PROGRAM.

(a) **DEFINITIONS.**—In this section:

(1) **PROGRAM.**—The term “Program” means the Saline Lake Ecosystems in the Great Basin States Assessment and Monitoring Program established under subsection (b).

(2) **SALINE LAKE ECOSYSTEMS.**—The term “saline lake ecosystems” means the ecosystems associated with the following lakes:

- (A) Abert Lake in Oregon.
- (B) Carson Lake in Nevada.
- (C) Carson Sink in Nevada.
- (D) Eagle Lake in California.
- (E) Franklin Lake in Nevada.
- (F) Goose Lake in California and Oregon.
- (G) Great Salt Lake in Utah.

- (H) Harney Lake in Oregon.
 - (I) Honey Lake in California.
 - (J) Malheur Lake in Oregon.
 - (K) Mono Lake in California.
 - (L) Owens Lake in California.
 - (M) Pyramid Lake in Nevada.
 - (N) Ruby Lake in Nevada.
 - (O) Sevier Lake in Utah.
 - (P) Silver Lake in Oregon.
 - (Q) Summer Lake in Oregon.
 - (R) Walker Lake in Nevada.
 - (S) Warner Lake in Oregon.
 - (T) Winnemucca Lake in Nevada.
- (3) SECRETARY.—The term “Secretary” means the Secretary of the Interior, acting through the Director of the United States Geological Survey.
- (b) ESTABLISHMENT.—The Secretary shall establish a Saline Lake Ecosystems in the Great Basin States Assessment and Monitoring Program to assess and monitor the hydrology of saline lake ecosystems in the Great Basin and the migratory birds and other wildlife that depend on those ecosystems to inform and support coordinated management and conservation actions to benefit those ecosystems, migratory birds, and other wildlife.
- (c) WORK AND IMPLEMENTATION PLAN.—
- (1) IN GENERAL.—Under the Program, the Secretary, in coordination with the Director of the United States Fish and Wildlife Service and the entities described in paragraph (2), shall establish a multiyear work and implementation plan to assess, monitor, and conserve saline lake ecosystems in the Great Basin and the migratory birds and other wildlife that depend on those ecosystems.
 - (2) COORDINATING ENTITIES.—The entities referred to in paragraph (1) include—
 - (A) Federal, State, Tribal, and local agencies;
 - (B) institutions of higher education;
 - (C) nonprofit organizations; and
 - (D) other local stakeholders.
 - (3) INCLUSIONS.—The work and implementation plan established under paragraph (1) shall include—
 - (A) a synthesis of available information, literature, and data, and an assessment of scientific and informational needs, relating to—
 - (i) water quantity, water quality, water use, and water demand;
 - (ii) migratory bird and other wildlife populations, habitats, and ecology;
 - (iii) annual lifecycle needs of migratory birds; and
 - (iv) environmental changes and other stressors, including climatic stressors;
 - (B) a description of how the plan should be implemented to address the scientific and informational needs described in subparagraph (A), including proposed activities, such as monitoring, data infrastructure needs, and development of tools necessary to implement the Program;
 - (C) recommendations and a cost assessment for the implementation of the plan; and
 - (D) such other matters as the Secretary determines to be appropriate.
 - (4) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the work and implementation plan established under paragraph (1).
- (d) IMPLEMENTATION.—The Secretary shall implement the Program based on the information, findings, and recommendations contained in the work and implementation plan established under subsection (c).
- (e) COOPERATIVE AGREEMENTS AND GRANTS.—Using such sums as the Secretary considers to be appropriate of amounts made available for each fiscal year under subsection (g), the Secretary may enter into cooperative funding agreements with, or provide grants to, entities described in subsection (c)(2) for the purposes of—
- (1) participating in developing, or providing information to inform the development of, the work and implementation plan under subsection (c);
 - (2) carrying out assessments and monitoring of water quality, quantity, use, and demand under the Program; and
 - (3) carrying out ecological, biological, and avian assessments and monitoring under the Program.
- (f) EFFECT.—The work and implementation plan established under subsection (c)(1) shall not affect—

- (1) any interstate water compacts in existence on the date of enactment of this Act, including full development of any apportionment made in accordance with those compacts;
 - (2) valid and existing water rights in any State located wholly or partially within the Great Basin;
 - (3) water rights held by the United States in the Great Basin; and
 - (4) the management and operation of Bear Lake or Stewart Dam, including the storage, management, and release of water.
- (g) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out the Program \$5,000,000 for each of fiscal years 2022 through 2027.

PURPOSE OF THE BILL

The purpose of H.R. 5345 is to authorize the Director of the United States Geological Survey to establish a regional program to assess, monitor, and conserve the hydrology of saline lake ecosystems in the Great Basin states.

BACKGROUND AND NEED FOR LEGISLATION

The Great Basin is an approximately 200,000 square-mile area that drains internally—meaning all precipitation either evaporates, is absorbed by the ground, or flows into lakes rather than draining to the ocean.¹ The Great Basin stretches across most of Nevada and includes parts of Utah, Idaho, Wyoming, Oregon, and California, as well.²

Saline lakes are landlocked waterbodies often referred to as terminal lakes because they have no outlets.³ As water is lost through evaporation and diversions, incoming salts and minerals tend to accumulate in the lakes, making them increasingly saline.⁴

Great Basin saline lakes provide benefits for economies and migratory bird species, alike. For example, the Great Salt Lake in Utah, the largest saline lake in the Western Hemisphere, contributes \$1.3 billion annually to Utah's economy⁵ while providing important habitat for 10 million migratory birds.⁶ In general, the Great Basin saline lakes offer a network of habitat along the Central and Pacific Flyways. Migratory birds often stop at two or three Great Basin saline lakes during their migration.⁷

The West's saline lakes are shrinking and becoming saltier due to water diversions for human use and climate-induced drought.⁸

¹*The Great Basin*, NPS, <https://www.nps.gov/grba/planyourvisit/the-great-basin.htm> (last updated Apr. 22, 2021).

²*Id.* Also see generally CHAD B. WILSEY, LOTEM TAYLOR, NICOLE MICHEL & KARYN STOCKDALE, NAT'L AUDUBON SOC'Y, WATER AND BIRDS IN THE ARID WEST: HABITATS IN DECLINE (2017) [hereinafter AUDUBON WATER AND BIRDS STUDY], https://nas-national-prod.s3.amazonaws.com/wbaw_report_5july17_updated.pdf—of which the above text is largely excerpts.

³AUDUBON WATER AND BIRDS STUDY, *supra* note 2, at 28.

⁴*Id.*

⁵GREAT SALT LAKE ADVISORY COUNCIL, 11TH ANNUAL REPORT TO THE UTAH STATE LEGISLATURE NATURAL RESOURCES APPROPRIATIONS SUBCOMMITTEE 3, 4 (2021), <https://documents.deq.utah.gov/water-quality/standards-technical-services/great-salt-lake-advisory-council/annual-reports/DWQ-2021-008732.pdf>.

⁶Utah Dep't of Nat. Res., Utah Geological Surv., Press Release, Drought Negatively Impacting Great Salt Lake Microbialites and Ecosystem (July 15, 2021), <https://geology.utah.gov/drought-negatively-impacting-great-salt-lake-microbialites-and-ecosystem/>.

⁷Susan M. Haig, Sean P. Murphy, John H. Matthews, Ivan Arismendi & Mohammad Safaeq, *Climate-Altered Wetlands Challenge Waterbird Use and Migratory Connectivity in Arid Landscapes*, 9:4666 SCI. REPS. 1 (2019), available at <https://doi.org/10.1038/s41598-019-41135-y>.

⁸Wayne A. Wurtsbaugh et al., *Decline of the World's Saline Lakes*, 10 NATURE GEOSCIENCE 816 (2017), available at https://www.fs.usda.gov/rm/pubs_journals/2017/rmrs_2017_wurtsbaugh_w001.pdf (doi:10.1038/NGEO3052); Johnnie N. Moore, *Recent Desiccation of Western Great Basin Saline Lakes: Lessons from Lake Abert, Oregon, U.S.A.*, 554–55 SCI. OF THE TOTAL ENV'T 142 (2016), available at <https://doi.org/10.1016/j.scitotenv.2016.02.161>.

Water levels in the Great Salt Lake recently hit historic lows, dropping below the previous record set in 1963, with declines accelerated by worsening drought conditions and below-average water flows.⁹ More than half of the arid West's saline systems most important to birds have shrunk 50 to 95 percent in the past 150 years.¹⁰ Climate change is predicted to further threaten the health of saline lakes with increased temperatures, more frequent and severe drought, and shifts in precipitation patterns.¹¹

Declining water levels at saline lakes in the western United States present challenges for public health, critical habitat, migratory birds, and nearby economies. Dust exposed from drying lakebeds threatens air quality for neighboring communities. For example, airborne dust around the shrinking Great Salt Lake can worsen the region's already polluted air, posing a health risk to millions of people.¹²

Additionally, water level declines increase salinity, which affects the availability of habitat and food sources for migratory birds and other wildlife.¹³ At Lake Abert, a saline lake in Oregon, bird sightings recently declined by as much as 82 percent during periods of low water and high salinity.¹⁴ Furthermore, since Great Basin saline lakes function as an interconnected network, water level declines threaten the integrity of the entire system, putting millions of migratory birds at risk.¹⁵

Managing the increasingly strained network of saline lakes requires additional assessment, monitoring, and conservation efforts.¹⁶ Currently, significant data gaps make it difficult to assess long-term changes in hydrology and associated wildlife populations across the network of Great Basin saline lakes.¹⁷ H.R. 5345 would direct the United States Geological Survey (USGS) to establish a "Saline Lake Ecosystems in the Great Basin States Assessment and Monitoring Program" to assess and monitor the hydrology of saline lake ecosystems in the Great Basin and support coordinated management and conservation actions to benefit these ecosystems.

The bill further would direct USGS to establish a multi-year work and implementation plan to assess, monitor, and conserve saline lake ecosystems in the Great Basin and associated wildlife in coordination with the United States Fish and Wildlife Service and other coordinating entities, including federal, tribal, state, and local governments; research universities; non-profit organizations; and local stakeholders. The legislation further would authorize USGS to enter into cooperative agreements with and issue grants to coordinating entities for the purposes of developing and carrying out the plan. The plan would not affect any interstate water compacts,

⁹U.S. Geological Survey, Great Salt Lake Reaches New Historic Low (July 24, 2021) (online at <https://www.usgs.gov/news/great-salt-lake-reaches-new-historic-low>).

¹⁰AUDUBON WATER AND BIRDS STUDY, *supra* note 2, at 7.

¹¹*E.g., id.* at 39.

¹²*Utah's Great Salt Lake Is Turning Into Dust*, NPR: ALL THINGS CONSIDERED (July 20, 2021), <https://www.npr.org/2021/07/20/1018501136/utahs-great-salt-lake-is-turning-into-dust>.

¹³Nathan R. Senner, Johnnie N. Moore, S. Trent Seager, Steve Dougill, Keith Kreuz, Stanley E. Senner, *A Salt Lake Under Stress: Relationships Among Birds, Water Levels, and Invertebrates at a Great Basin Saline Lake*, 220 BIOLOGICAL CONSERVATION 320 (2018), available at <https://doi.org/10.1016/j.biocon.2018.02.003>.

¹⁴*Id.*; see also Univ. of Mont., Press Release, Waterbirds Affected by Low Water, High Salt Levels in Lakes (Mar. 22, 2018), available at <https://www.sciencedaily.com/releases/2018/03/180322181152.htm>.

¹⁵AUDUBON WATER AND BIRDS STUDY, *supra* note 2, at 41.

¹⁶*E.g., Moore, supra* note 8.

¹⁷AUDUBON WATER AND BIRDS STUDY, *supra* note 2, at 40.

water rights in the Great Basin, or the operation of designated reservoirs. Additionally, the bill would direct USGS to submit a report to Congress describing the work and implementation plan within a year. H.R. 5345 would authorize \$5 million annually for the program for FY2022–2027.

The Committee recognizes the significant and pressing conservation needs associated with several saline lake ecosystems across the Great Basin states and expects the Director of the United States Geological Survey to give priority consideration to the following saline lake ecosystems during the implementation of H.R. 5345: Lake Abert in Oregon; Great Salt Lake in Utah; Lahontan Valley Wetlands, including Carson Sink, Carson Lake, and Stillwater Marsh in Nevada; Ruby Lake in Nevada; Walker Lake in Nevada; Mono Lake in California; Owens Lake in California, and Summer Lake in Oregon.

COMMITTEE ACTION

H.R. 5345 was introduced on September 23, 2021, by Representative Blake D. Moore (R–UT). The bill was referred solely to the Committee on Natural Resources, and within the Committee to the Subcommittee on Water, Oceans, and Wildlife. On November 4, 2021, the Subcommittee held a hearing on the bill. On November 17, 2021, the Natural Resources Committee met to consider the bill. The Subcommittee was discharged by unanimous consent. Rep. Moore offered an amendment designated Moore #1 revised. The amendment was agreed to by unanimous consent. The bill, as amended, was adopted and ordered favorably reported to the House of Representatives by unanimous consent.

HEARINGS

For the purposes of clause 3(c)(6) of House rule XIII, the following hearing was used to develop or consider this measure: hearing by the Subcommittee on Water, Oceans, and Wildlife held on November 4, 2021.

COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

Regarding clause 2(b)(1) of rule X and clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee on Natural Resources' oversight findings and recommendations are reflected in the body of this report.

COMPLIANCE WITH HOUSE RULE XIII AND CONGRESSIONAL BUDGET ACT

1. *Cost of Legislation and the Congressional Budget Act.* With respect to the requirements of clause 3(c)(2) and (3) of rule XIII of the Rules of the House of Representatives and sections 308(a) and 402 of the Congressional Budget Act of 1974, as well as clause 3(d) of rule XIII of the Rules of the House of Representatives, the Committee has received the following estimate for the bill from the Director of the Congressional Budget Office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, March 15, 2022.

Hon. RAÚL M. GRIJALVA,
*Chairman, Committee on Natural Resources,
House of Representatives, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 5345, the Saline Lake Ecosystems in the Great Basin States Program Act of 2021.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Robert Reese.

Sincerely,

PHILLIP L. SWAGEL,
Director.

Enclosure.

H.R. 5345, Saline Lake Ecosystems in the Great Basin States Program Act of 2021			
As ordered reported by the House Committee on Natural Resources on November 17, 2021			
By Fiscal Year, Millions of Dollars	2022	2022-2026	2022-2031
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	*	23	30
Statutory pay-as-you-go procedures apply?	No	Mandate Effects	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2032?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No
* = between zero and \$500,000.			

H.R. 5345 would authorize the appropriation of \$5 million annually over the 2022–2027 period for the United States Geological Survey (USGS) to establish and implement a plan to assess, monitor, and conserve saline lake ecosystems and wildlife in the Great Basin. Those funds would be available for federal planning, research, and conservation activities as well as grants to and cooperative agreements with state, local, and tribal governments, and certain private entities.

Using historical spending patterns for similar USGS programs and assuming appropriation of the authorized amounts, CBO estimates that implementing the bill would cost \$23 million over the 2022–2026 period and \$7 million after 2026.

The costs of the legislation, detailed in Table 1, fall within budget function 300 (natural resources and environment).

TABLE 1.—ESTIMATED INCREASES IN SPENDING SUBJECT TO APPROPRIATION UNDER H.R. 5345

	By fiscal year, millions of dollars—					
	2022	2023	2024	2025	2026	2022–2026
Authorization	5	5	5	5	5	25
Estimated Outlays	*	7	6	5	5	23

* = between zero and \$500,000.

The CBO staff contact for this estimate is Robert Reese. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.

2. *General Performance Goals and Objectives.* As required by clause 3(c)(4) of rule XIII, the general performance goals and objectives of this bill are to authorize the Director of the United States Geological Survey to establish a regional program to assess, monitor, and conserve the hydrology of saline lake ecosystems in the Great Basin states.

EARMARK STATEMENT

This bill does not contain any Congressional earmarks, limited tax benefits, or limited tariff benefits as defined under clause 9(e), 9(f), and 9(g) of rule XXI of the Rules of the House of Representatives.

UNFUNDED MANDATES REFORM ACT STATEMENT

According to CBO, this bill contains no unfunded mandates as defined by the Unfunded Mandates Reform Act.

EXISTING PROGRAMS

This bill does not establish or reauthorize a program of the federal government known to be duplicative of another program. Such program was not included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111–139. The grant program authorized by this bill would be related and complementary to, but not duplicative of, the following programs identified in the most recent Catalog of Federal Domestic Assistance published pursuant to 31 U.S.C. § 6104: Agricultural Water Use Efficiency Program (CFDA No. 15.572); North American Wetlands Conservation Fund (CFDA No. 15.623); Neotropical Migratory Bird Conservation (CFDA No. 15.635); Migratory Bird Joint Ventures (CFDA No. 15.637); Migratory Bird Conservation (CFDA No. 15.647); Migratory Bird Monitoring, Assessment and Conservation (CFDA No. 15.655); and Cooperative Research Units (CFDA No. 15.812).

APPLICABILITY TO LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act.

PREEMPTION OF STATE, LOCAL, OR TRIBAL LAW

Any preemptive effect of this bill over state, local, or tribal law is intended to be consistent with the bill's purposes and text and the Supremacy Clause of Article VI of the U.S. Constitution.

CHANGES IN EXISTING LAW

If enacted, this bill would make no changes to existing law.

SUPPLEMENTAL, MINORITY, ADDITIONAL, OR DISSENTING VIEWS
None.

