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Attorneys for Plaintiffs Utah Physicians for a Healthy Environment, American Bird Conservancy, Center for Biological Diversity, Sierra Club, and Utah Rivers Council

THIRD JUDICIAL DISTRICT COURT
SALT LAKE COUNTY, STATE OF UTAH

UTAH PHYSICIANS FOR A HEALTHY ENVIRONMENT, AMERICAN BIRD CONSERVANCY, CENTER FOR BIOLOGICAL DIVERSITY, SIERRA CLUB, and UTAH RIVERS COUNCIL,

Plaintiffs,

v.

UTAH DEPARTMENT OF NATURAL RESOURCES; UTAH DIVISION OF WATER RIGHTS; and UTAH DIVISION OF FORESTRY, FIRE AND STATE LANDS,

Defendants.

COMPLAINT

(Tier 2)

Case No. _____

Honorable _____

INTRODUCTION

1. This suit seeks to protect the Great Salt Lake, the bed, banks, and waters of which are held in trust for the public by the State of Utah. The Great Salt Lake is the largest saline lake in North America. A variety of industries, including brine shrimp fishing, tourism, recreation, mineral extraction, and skiing, depend on the Lake's waters and the conditions they create, collectively contributing billions of dollars each year to Utah's economy and providing thousands of jobs. The Lake is also among the most important shorebird and waterfowl sites in North America, annually providing food and habitat for more than 10 million migratory birds. Furthermore, by its continued presence, the Lake prevents a major public health threat.

2. But the Great Salt Lake is facing a mortal threat. The Lake's viability depends primarily on inflows of water from upstream runoff, which refill its basin and offset loss of the Lake's water that occurs through usage and evaporation. Water diversions, however, have driven the Great Salt Lake into structural decline and threaten its ecological collapse. Since 2020, the Lake has suffered a water deficit of more than a million acre-feet of water per year, and the Lake's elevation recently dropped to a level near 4,188 feet above sea level, ten feet below the minimum healthy elevation identified by experts.

3. Compared to its historic natural baseline level over the period from 1850 to 2016, the Lake had lost approximately 73 percent of its water and 60 percent of its surface area as of the fall of 2022. The resulting contraction of the Great Salt Lake is visible from space.

4. This already dire situation threatens to get worse. Earlier this year, scientists predicted that the ecological integrity of the Lake could collapse entirely within five years. If that happens, Utahns will lose billions of dollars each year, as well as thousands of jobs.

5. Further depletion of the Lake's water supplies will imperil myriad species, each of which plays a critical and interrelated role in the ecological health of the Lake. These species include brine flies, brine shrimp, and many shorebirds and waterfowl that depend on the flies and shrimp as a critical food source, especially during migration when the Lake is an essential feeding and stopover site on the birds' lengthy migratory paths between the northern and southern hemispheres.

6. Depletion of the Lake has already exposed, and will continue to expose, lakebed sediments that consist of fine-scale dust containing arsenic, mercury, nickel, lead, and other pollutants toxic to humans. Breathing these exposed lakebed sediments is harmful to human health in multiple ways. In areas of the lakebed uncovered by water loss, these sediments have already been carried away by wind and inhaled by millions of Utahns; this process would be amplified by the further disappearance of the Lake, endangering many lives and likely costing the State millions of dollars per year in healthcare and mitigation.

7. These ongoing and anticipated harms to the Great Salt Lake represent not only an economic and environmental catastrophe, but also a violation of the public trust.

8. The public trust doctrine is well-established in Utah law, confirmed by statutes, Supreme Court decisions, and the Utah constitution. Under this doctrine, the public owns many natural resources, and the State holds and manages them in trust for the public, which is the beneficiary of the trust. Such resources include the Great Salt Lake—a historically navigable waterway—and the sovereign lands underlying the Lake. As trustee, the State of Utah has an ongoing obligation to protect the Great Salt Lake's waters and underlying lands, so that Utahns

can continue to use them for navigation, commerce, brine shrimp fishing, recreation, and other uses recognized under the public trust doctrine.

9. Upstream water diversions are subject to the public trust doctrine and to the State's continuing obligation to manage them so that they do not impair public trust uses. Appropriators may use water only in a manner that does not impair public trust resources, including the Lake and its bed. The State, through its administrative agencies, authorizes and oversees all water appropriations in Utah. The State's public trust obligations include a responsibility to ensure that such water use by appropriators is consistent with maintaining public trust resources. Accordingly, the State of Utah has the authority and duty to review and, where necessary, modify those diversions to protect and preserve the public trust.

10. The State of Utah, however, has failed to review and modify upstream diversions, notwithstanding the harm they are causing to the Great Salt Lake, a public trust resource, and notwithstanding the numerous feasible ways of increasing flows to the Lake, including by modifying diversions.

11. By far the most significant cause of the Lake's precipitous decline is the unsustainable quantity of water diverted away from the Lake upstream. Of the roughly 3.1 million acre-feet of water that would naturally flow into the Lake each year, 2.1 million acre-feet are diverted by upstream water users pursuant to State authorizations and thus never reach the Lake.

12. Scientists and State officials themselves have repeatedly determined that addressing upstream diversions must be the linchpin of any Lake recovery program.

13. More specifically, the State of Utah has determined that the range of lake-water elevations consistent with a healthy Great Salt Lake is between 4,198 feet and 4,205 feet. The State’s experts determined that lake elevations below 4,198 feet—the minimum healthy lake level—impair trust uses and threaten the Lake’s ecological integrity. Reaching this minimum level requires reducing the quantities of upstream water diverted from the Lake.

14. In spite of these determinations, the State has failed to review, much less to modify, upstream diversions to ensure that adequate water reaches the Lake to sustain an elevation of at least 4,198 feet. As a result, the Lake has declined to approximately 4,192 feet and will continue to decline this year, notwithstanding the runoff from last winter’s record snowpack. The State’s failure to protect the Great Salt Lake violates its fiduciary duties under the public trust doctrine.

15. Plaintiffs Utah Physicians for a Healthy Environment (“UPHE”), American Bird Conservancy (“ABC”), Center for Biological Diversity (“CBD”), Sierra Club, and Utah Rivers Council (“URC”) turn to this Court to ensure the State of Utah complies with its public trust obligations. As beneficiaries of the public trust, Plaintiffs rely on the State to manage the Lake consistent with the principles of loyalty, impartiality, and prudent administration.

16. Specifically, Plaintiffs pray that this Court declare that the State of Utah has breached its trust duty to ensure water flows into the Great Salt Lake sufficient to maintain the Lake at an elevation consistent with protected trust uses—that is, at least 4,198 feet, which corresponds to a grand total surface area of 924,415 acres. To redress this breach, Plaintiffs request that the Court direct the State to halt any further decline in the Lake’s average annual elevation within two years of this Court’s judgment and restore a Lake elevation of 4,198 feet

(and corresponding surface area) within ten years, including, as necessary, by modifying upstream diversions to ensure sufficient water reaches the Great Salt Lake to maintain this range and thereby protect and sustain public trust uses.

JURISDICTION AND VENUE

17. This Court has jurisdiction over this action pursuant to UTAH CONST., art. VIII, § 5, and Utah Code § 78A-5-102(1), which provides district courts with original jurisdiction over all civil and criminal matters except as set forth in the constitution or statute.

18. This Court has the power to grant declaratory and equitable relief pursuant to the Utah Declaratory Judgment Act, Utah Code Ann. § 78B-6-401 *et seq.*, as well as *id.* § 75-7-1001 and the general equitable powers of this Court.

19. The Lake and its tributaries are situated in Salt Lake County, among other counties, and the impacts from Defendants' failures to protect the Lake are felt in Salt Lake County as well. Accordingly, venue is proper in this court pursuant to Utah Code § 78B-3-301 *et seq.*, including but not limited to Utah Code § 78B-3-307(1).

20. This Court has personal jurisdiction over the Defendants. *See* Utah R. Civ. P. 17. Defendants are state government entities and officials, sued in their official capacities, who reside and conduct their official business in the State of Utah.

PARTIES

21. Plaintiff Utah Physicians for a Healthy Environment (“UPHE”) is a 501(c)(3) non-profit organization dedicated to reducing the public health consequences of environmental degradation, particularly air pollution. It is the largest civic organization of healthcare professionals in Utah, and one of the largest in the Western United States. Since its inception in

2007, UPHE has pursued improved environmental and climate public policy to protect the health and well-being of the residents of Utah, the Intermountain West, and the country at large.

22. Plaintiff American Bird Conservancy (“ABC”) is a 501(c)(3) non-profit organization dedicated to conserving wild birds and their habitats throughout the Americas. ABC has been working for nearly thirty years to protect threatened birds from population decline. ABC members in Utah derive recreational, conservation, aesthetic, and other benefits from the bird life breeding, migrating through, and wintering in the Great Salt Lake.

23. Plaintiff Center for Biological Diversity (“CBD”) is a 501(c)(3) non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, creative media, and environmental law. CBD has over 1.7 million members and supporters throughout Utah and the United States, including supporters who live in the Wasatch Front and derive benefit from a healthy Great Salt Lake. CBD’s Great Basin program focuses on the protection of wildlife and endangered species, the preservation of public lands, and the sustainability of precious water resources.

24. Plaintiff Sierra Club is a 501(c)(4) non-profit organization and the nation’s oldest grassroots environmental organization. Sierra Club’s members and supporters are dedicated to the purpose of exploring, enjoying, and protecting the wild places of the Earth; practicing and promoting the responsible use of the Earth’s ecosystems and resources; educating and enlisting humanity to protect and restore the quality of the natural and human environment; and using all lawful means to carry out these objectives. The Sierra Club has more than 715,000 members nationwide, and Sierra Club’s Utah Chapter has more than 5,000 members.

25. Plaintiff Utah Rivers Council (“URC”) is a 501(c)(3) non-profit organization that advocates for the protection of Utah’s watersheds and the communities they support. Founded in 1994, URC works to protect Utah’s rivers and clean water sources for today’s citizens, future generations, and healthy, sustainable natural ecosystems. URC implements its mission through grassroots organizing, direct advocacy, research, education, community leadership, and litigation. URC has been working on water management issues in the Great Salt Lake Basin since 1994, and, as a result of its policy expertise and organizing efforts, has succeeded in implementing statewide water conservation measures and protecting lands directly adjacent to Great Salt Lake tributaries.

26. Members of the Plaintiff groups use the Great Salt Lake for navigation, brine shrimp fishing, commerce, recreation, and to ensure the cleanliness of the air they breathe. For instance, Jim Hopkins, a member of URC, long relied on the Lake as a brine shrimper and employee at an area ski resort. Mike Olsen, another member of URC, likewise relied on the Lake as a place to frequently sail in his 25-foot Catalina sloop. Craig Provost, a member of the Sierra Club, has been regularly using the Lake for birding for more than twenty years. Robert Weir, a member of UPHE and a neurologist and psychiatrist who can see the Lake from his home, uses the Lake for recreation with his wife and three small children. Matthew Berry, an employee at and member of URC, is a U.S. Army veteran and survivor of cancer who depends on the Lake to cover the potentially carcinogenic particulates on its bed and prevent these from becoming airborne.

27. Yet the decline in the Lake’s elevation, due to the State’s failure to fulfill its trust obligations and maintain the Lake at an elevation consistent with protected trust uses, has

harmed each of these members' interests in the Lake. In 2022, Jim Hopkins stopped brine shrimping in part due to the inconvenience and uncertainty created by the Lake's historically low elevation; he fears for his future in the ski industry, as dust from the increasingly exposed lakebed falls on the snowpack and threatens to harm the area's famous skiing. So too, Mike Olsen was forced to take his boat out of the Lake last year due to the low water levels; he has not put his boat back into the Lake given the reality that Lake levels will continue to decline due to the State's failure to fulfill its trust obligations. In recent years, Craig Provost has had more difficulty accessing and seeing birds, since the Lake's falling elevation has increased salinity levels and risks of predation, harming the many birds (and birders) that rely on the Lake. As the Lake's elevation has reached historic lows, Robert Weir worries that the exposed lakebed will result in worsening air quality, harming his three young children who are (due to their age) disproportionately at risk of cognitive and psychiatric issues. Matthew Berry fears the increase in particulate matter in the air will cause his cancer to return, something to which he (as a cancer survivor) is disproportionately vulnerable.

28. The Utah Department of Natural Resources ("DNR") is the governmental body responsible for protecting the state's natural resources. DNR houses the Division of Water Rights and Division of Forestry, Fire & State Lands, which are, respectively, responsible for managing the upstream diversions that are imperiling the Lake and ensuring the maintenance of the Lake's bed. DNR is thus responsible for supervising the agencies of the Utah state government that have the power and obligation to fulfill the state's trust duties with respect to the Great Salt Lake and its bed.

29. Defendant Division of Water Rights (“DWR”) is the water rights authority of the State of Utah. DWR is endowed with the power and obligation to oversee water appropriations across the state—including those that are unsustainably diverting water away from the Great Salt Lake in a manner that is imperiling its utility for navigation, commerce, brine shrimp fishing, recreation, and other trust uses. DWR is responsible for administering and supervising the appropriation of the waters of the State, and is thus responsible for overseeing the upstream diversions that unsustainably interrupt the natural flow of water into the Great Salt Lake and its bed, which are vital trust resources.

30. Defendant Division of Forestry, Fire & State Lands (“DFFSL”) is the executive authority for the management of sovereign lands, with sovereign lands defined as those lands lying below the ordinary high-water mark of navigable bodies of water at the date of statehood and owned by the State by virtue of its sovereignty. DFFSL is thus responsible for managing the bed of the Great Salt Lake, which is protected under the public trust doctrine.

FACTUAL BACKGROUND

I. The Great Salt Lake

31. The Great Salt Lake is an iconic water body for not only Utah but the entire American West. As the Utah Supreme Court has described it:

The Great Salt Lake constitutes an irregularly shaped body of water which on January 4, 1896, was approximately 77 miles long and 32.5 miles wide, and lies in its entirety within the boundaries of this State. Several streams flow into the lake but it has no outlet. The depth of the lake varies from less than five feet to approximately 30 feet. The waters of the lake have a high salt content and substantial areas of saline lands surround the water.

Utah State Road Comm’n v. Hardy Salt Co., 486 P.2d 391, 392 (Utah 1971).

32. The Great Salt Lake also looms large in Utah's history and culture. Indigenous people from the Shoshone, Ute, and Paiute Tribes have lived near and relied on the Lake for thousands of years. More recently, the Great Salt Lake offered a haven to members of the Mormon Church, who first arrived at its shore in July 1847.

33. Today, the Great Salt Lake is of enormous economic importance to the State of Utah. The Lake provides approximately \$2.5 billion in economic productivity each year and supports roughly 9,000 jobs, primarily in the realms of mineral extraction, recreation, and brine shrimp fishing.

34. In addition, evaporation from the Lake increases annual snowfall in nearby mountains by 5 to 10 percent, fueling Utah's skiing commerce and supporting another 20,000 jobs and an additional \$1.8 billion in economic activity each year.

35. The largest saline lake in North America, the Great Salt Lake is also a key link in the Pacific flyway, providing essential habitat and food for more than 10 million migratory birds.

36. The Lake hosts the world's largest concentration of Wilson's Phalaropes, representing over a third of the world population.

37. The Lake hosts as many as 5 million Eared Grebes, at times 50 to 90 percent of the North American population.

38. The Lake hosts as many as 20 percent of the continent's population of Snowy Plovers.

39. The Lake is the only staging area in the U.S. interior for Marbled Godwits.

40. The Lake is one of the most important breeding grounds for American White Pelicans and American Avocets.

41. The Lake is one of the most significant wintering sites for Bald Eagles.

42. In total, over three hundred bird species depend on the Lake's biologically diverse environs. One expert has characterized the Lake as "the most important shorebird site in North America."¹

II. Range of Healthy Elevations

43. The ability of the Great Salt Lake to provide these economic and environmental benefits depends on water, and specifically on sufficient inflow to maintain the Lake at a level that will sustain such benefits.

44. The Lake's elevation in the fall of 2022 was between 4,188 and 4,189 feet.² As of September 1, 2023, the Lake's elevation is approximately 4,192 feet.

45. Experts have determined the range of elevations consistent with a healthy Lake to be 4,198 feet to 4,205 feet. This represents the range of elevations between which the Lake's ecosystem can function at a level that sustains its economic and environmental benefits. A lake elevation of 4,198 feet corresponds with a grand total surface area of approximately 924,415 acres.³

46. DNR (acting through DFFSL) determined this elevation range in a 2013 Comprehensive Management Plan prepared by the agency pursuant to Utah Code § 65A-10-203(2) (formerly § 65A-10-8(1)). DNR developed this range by examining existing elevation-

¹ Bonnie K. Baxter, *Great Salt Lake Microbiology: A Historical Perspective*, 21 INT'L MICROBIOLOGY 79, 81 (2018).

² Lake elevation is typically measured at the U.S. Geological Survey gauge at the Saltair Boat Harbor.

³ See David Tarboton, *Great Salt Lake Bathymetry*, HYDROSHARE (Oct. 28, 2017), <https://www.hydroshare.org/resource/582060f00f6b443bb26e896426d9f62a/>.

specific data, including scientific data, technical reports, white papers from government agencies and research specialists, and stakeholder communications. Such data revealed a number of reasons why a healthy Lake requires an elevation of at least 4,198 feet above sea level.

47. At a Lake elevation below 4,198 feet, many of the Lake's islands become connected to the mainland, allowing predators and other species to reach the islands and disturb nesting sites for birds, resulting in significant bird mortality.

48. At a Lake elevation below 4,198 feet, salinity levels increase, making the Lake less habitable for brine shrimp, which threatens both commercial brine shrimp fishing and wildlife that depend on the shrimp for food.

49. At a Lake elevation below 4,198 feet, wildlife-rich wetlands dry up or become dominated by invasive plant species, such as exotic phragmites.

50. At a Lake elevation below 4,198 feet, boat launches become increasingly unusable and a whole host of other deleterious impacts ensue.

51. For all of these reasons and others, a lake elevation low point of 4,198 feet marks the minimum elevation necessary for supporting public trust resources.

52. Below this elevation, the Lake is too low for ordinary navigation; it is too low for optimal brine shrimp fishing, as salinity rises too high for many brine shrimp to survive; and it is too low for ordinary commerce, as the brine flies and shrimp die off due to excessive salinity levels, and as recreation becomes impossible or at least unduly burdensome.

53. Below this elevation, the Lake's ecological integrity suffers harm, as food sources and refuges for millions of migratory birds disappear, formerly protected nesting sites become

accessible to predators, and the birds themselves are forced to alter migration or breeding routes—or simply die off.

54. Furthermore, Lake elevations below 4,198 square feet expose the lakebed, turning these sovereign lands into a source of air pollution that threatens public health.

III. The Current Threat to the Lake

55. The Great Salt Lake’s level is now well below the minimum elevation consistent with a healthy Lake. Accordingly, the Lake faces a mortal threat.

56. In recent years, the Great Salt Lake has entered a period of “structural decline.” Since 2020, the Lake has lost more than 1 million acre-feet of water per year, putting the integrity of the Lake’s natural environment on track to collapse “in the next five years,” experts warned in January 2023.⁴

57. Specifically, in the fall of 2022, the Lake was 10 feet and 6.9 million acre-feet of water below its minimum healthy level of 4,198 feet. The Lake was 19 feet below its average natural level since 1850 and, measured against that level, it lost 73 percent of its water and 60 percent of its surface area. This put the Lake “in uncharted territory,” according to the same experts.

58. Already this has resulted in a reduction of the Lake’s surface area from a historic high of 2.1 million acres to barely 600,000 acres in the fall of 2022.

59. The Lake’s iconic islands—including Antelope Island, Gunnison Island, and many others—ceased to exist as islands. Instead, diminishing Lake waters exposed land bridges

⁴ Benjamin W. Abbott, *et al.*, *Emergency Measures Needed to Recue Great Salt Lake from Ongoing Collapse 5* (2023), <https://pws.byu.edu/GSL%20report%202023> [hereinafter *Emergency Measures*].

at the end of 2022, connecting the islands to the mainland. The Lake's eastern lobes (Bear River and Farmington Bays) and their associated wetlands, which had provided abundant wildlife habitat, largely disappeared.

60. The Lake's salinity level increased so rapidly that state officials were forced to raise a man-made berm separating the northern and southern arms of the Lake to preserve a salinity level in the southern arm that is consistent with brine shrimp and fly existence. While optimal salinity for brine shrimp and flies is 12 to 16 percent, the southern arm's salinity increased to 18–19 percent in the fall of 2022, and the northern arm's salinity was 27 percent.

61. These dire conditions were somewhat mitigated on a temporary basis by unusually high precipitation in the winter of 2022–23, which resulted in record snowmelt in the spring of 2023 that raised the Lake's elevation by a few feet. Experts evaluating the impact of this snowmelt concluded that it may have extended the timeframe for destruction of the Lake's integrity by two to two-and-a-half years but did not alter the Lake's grim long-term outlook. In sum, the Lake is still on a path to ecological collapse within the next decade.

62. Further, even at its peak in June 2023, the Lake's elevation was barely above 4,193 feet. Currently, the Lake's elevation is approximately 4,192 feet, below this recent peak.

As the State itself has acknowledged:

GSL resources begin to be adversely impacted at a range of low lake levels, but by the time GSL reaches 4,193 feet, nearly all of the resources have begun to be impaired. For example, all islands would be accessible by land (leaving nesting birds more vulnerable to predation and increasing the risk of trespassing); fringe and impounded wetlands would be drying up and vulnerable to *Phragmites* intrusion; and habitat for open water, shoreline, and island colonial nesters would decrease. Further, recreation access and

opportunities would be minimized, search-and-rescue efforts would become more challenging, and several existing mineral extraction operations would be compromised.⁵

63. This rapid deterioration of the Lake and its environment is the result of human uses, authorized by the State. In January 2023, experts noted that over the last three years, the Lake received less than a third of its natural inflow “because of excessive water diversions.”⁶

64. Upstream water diversion accounts for 2.1 million acre-feet per year. Roughly 74 percent of this diverted water is used in agriculture—primarily for the irrigation of alfalfa, hay, and other crops. An additional 5 to 10 percent is used indirectly through storage and transport losses; mineral extraction from the Lake accounts for another 9 percent of water use; and cities and industry represent the final 9 percent of consumptive use, some 90 percent of which is for outdoor use, such as irrigation of lawns and decorative plants.

65. Indoor water use has little direct effect on Lake level because approximately 95 percent is returned to the Lake. Thus, the problem of excessive upstream diversions has little to do with the way that most Utah residents use water. It is due primarily to three uses: agriculture, extractive industry, and unsustainable outdoor use, which collectively account for 67 to 73 percent of the Lake’s diminution.

IV. Available Pathways to Restore the Lake

66. Experts have determined multiple pathways to returning the Lake to the elevation necessary to support the Lake’s ecological integrity and utility for navigation, commerce, brine

⁵ Utah Dep’t of Nat. Res., Final Great Salt Lake Comprehensive Management Plan and Record of Decision 3-5 (2013), <https://ffsl.utah.gov/wp-content/uploads/OnlineGSL-CMPandROD-March2013.pdf> (“2013 CMP”).

⁶ *Emergency Measures, supra*, at 5.

shrimp fishing, recreation, and other trust uses, all of which depend on increasing inflow to the Lake.

67. The Great Salt Lake Strike Team, a group of experts that includes officials from DNR, DWR, and DFFSL, recently identified conservation targets needed to maintain and restore the Lake to a target elevation of 4,198. The Team estimated that a 17.5 percent reduction in water use would be needed just to “prevent further losses to the lake.” To “begin to refill the lake to the target level” of 4,198 feet (i.e., approximately 6 feet higher than the elevation as of September 1, 2023) within 20 years “would require between 500,000 and 1,100,000 acre-feet per year of additional water delivered to the lake.”⁷

68. The Strike Team’s analysis identified three viable scenarios to refill the Lake to 4,198 feet within 20 years: (1) 35 percent reduction in water used by the agriculture, mineral extraction, and municipal/industrial sectors; (2) 20 percent reduction in water use in agriculture and 69 percent reduction in mineral extraction and municipal/industrial use; and (3) 42 percent reduction in water use in agriculture and 20 percent reduction in mineral extraction and municipal/industrial use.

69. Defendants have the authority to implement each of these strategies.

70. Yet the State has failed to adopt or implement any of these strategies, or any other strategy to limit upstream diversions sufficiently to prevent further losses to the Lake, much less to refill the Lake to an elevation of 4,198 feet. Instead, and in spite of considerable attention and

⁷ Great Salt Lake Strike Team, Great Salt Lake Policy Assessment 16–17 (2023), <https://gardner.utah.edu/wp-content/uploads/GSL-Assessment-Feb2023.pdf?x71849>.

resources, the State has continued to allow existing diversions that are depleting the Lake and impairing the public trust.

71. Further, although various water conservancy districts undertook voluntary efforts to increase streamflow to the Lake in 2022, those efforts, while laudable, did not make a “measurable difference in the level of the lake,” according to FFSL.⁸

72. To date, the State’s efforts have largely focused on trying to persuade individual water users to undertake voluntary measures to reduce their consumption or increase their efficiency. Like the voluntary efforts undertaken in 2022 by water conservancy districts, these efforts, while laudable, remain inadequate to address the fundamental problem: that 2.1 million acre-feet of water (of the 3.1 million acre-feet that would naturally flow into the Lake) are diverted away each year.

73. In particular, the State has sidestepped the problem of unsustainable diversions pursuant to appropriations overseen by the State itself. In fact, the State has explicitly exempted any effort to address such unsustainable appropriation diversions from the menu of options available to the State official who is specifically charged with Lake protection. In early 2023, the Utah legislature passed legislation creating a Great Salt Lake Commissioner, who is empowered to prepare a “strategic plan” to protect the Lake, Utah Code § 73-32-204(1), but this legislation specified that the statute did not “override, substitute, or modify a water right within the state or the role and authority of the state engineer.” *Id.* § 73-32-203(3).

⁸ Leia Larsen, *Water Districts Vowed to Send Billions of Gallons to the Great Salt Lake This Year. Here’s How It’s Going*, SALT LAKE TRIB. (Dec. 8, 2022), <https://www.sltrib.com/news/environment/2022/12/08/water-districts-vowed-send/>.

74. Similarly, in late 2022 the Governor suspended new water appropriations within the Great Salt Lake Basin, yet this proclamation, too, specified that it would have no effect on existing appropriations.

75. Further, the State has failed to establish a clear objective for Lake restoration to protect public trust uses—and indeed has specifically declined to do so. In early 2023, the Utah legislature rejected a resolution that would establish 4,198 feet as a nonbinding elevation goal for the Great Salt Lake, notwithstanding the conclusion of the State’s own experts that this level represented the low end of the range of healthy Lake elevations.

76. The legislative and executive branches of the Utah government have thus refused to address the overwhelming cause of the Lake’s decline—or of setting a science-based elevation goal crucial to its restoration and protection. Plaintiffs therefore turn to this Court for relief to protect the public trust in the Great Salt Lake.

LEGAL BACKGROUND

I. The Public Trust Doctrine

77. As a navigable water body at the time Utah entered the union, the Great Salt Lake is protected under the public trust doctrine, meaning it is held in trust by the State for the benefit of the people of Utah. *See Utah v. United States*, 403 U.S. 9, 10–12 (1971); *Hardy Salt Co.*, 486 P.2d at 392–93; *see also Morton Int’l, Inc. v. S. Pac. Transp. Co.*, 495 P.2d 31, 32–34 (Utah 1972). The bed of the Great Salt Lake also falls within the public trust doctrine’s ambit, as do the “lands surrounding the Great Salt Lake.” *Hardy Salt Co.*, 486 P.2d at 392–93; *see also Colman v. Utah State Land Bd.*, 795 P.2d 622, 635–36 (Utah 1990).

78. Under the public trust doctrine, states hold myriad natural resources in trust for the public. The doctrine is “founded upon the necessity” of “preserving” these resources for public use and enjoyment. *Illinois Cent. R. Co. v. Illinois*, 146 U.S. 387, 436 (1892).

79. In the United States, the public trust doctrine’s scope includes navigable coastal waters and lands, as well as navigable inland rivers and lakes and their beds. *PPL Montana, LLC v. Montana*, 565 U.S. 576, 590 (2012); *Illinois Cent.*, 146 U.S. at 435–37.

80. Utah courts have long recognized that, under the common law public trust doctrine, the State holds navigable waters and the lands underlying navigable waters in trust for the public. *Utah Stream Access Coal. v. VR Acquisitions, LLC*, 439 P.3d 593, 601, 610 (Utah 2019); *Colman*, 795 P.2d at 635.

81. Historically, the doctrine guaranteed the public’s right to use navigable waters for navigation, commerce, and fishing. *See, e.g., Idaho v. Coeur d’Alene Tribe of Idaho*, 521 U.S. 261, 284 (1997); *Illinois Cent.*, 146 U.S. at 452. In Utah, the public right to trust resources includes this traditional triad as well as “the right to float leisure craft” and hunt. *J.J.N.P. Co. v. Utah*, 655 P.2d 1133, 1137 (Utah 1982). The doctrine likewise protects the “ecological integrity” of trust resources. *Nat’l Parks & Conservation Ass’n v. Bd. of State Lands*, 869 P.2d 909, 919 (Utah 1993). The State’s obligation to maintain the “ecological integrity” of trust resources is foundational to the public’s ability to use these resources for navigation, commerce, fishing, leisure, and other trust purposes. *Id.*

82. The public trust doctrine also covers public lands, including the bed of the Great Salt Lake. The state’s obligation to protect these lands dates from Utah’s entrance into the union,

when the state took title to all lands underlying navigable waters. *Utah Div. of State Lands v. United States*, 482 U.S. 193, 195–96 (1987).

83. Title to these sovereign lands was vested in the state “for the benefit of the whole people.” *Utah Div. of State Lands*, 482 U.S. at 196. That is, the state’s title is “held in trust for the people of the state.” *Illinois Cent.*, 146 U.S. at 452.

84. The Utah Constitution further establishes this public trust, stating that all sovereign lands “are declared to be the public lands of the State; and shall be held in trust for the people.” UTAH CONST. art. XX, § 1. These public lands include the bed of the Great Salt Lake. *Hardy Salt Co.*, 486 P.2d at 392–93. The Legislature has delegated the management of such lands to Defendants, specifically to DFFSL, Utah Code §§ 65A-1-1(6), 65A-1-4(1)(b), which acts under the supervision of DNR, *id.* § 65A-1-4(1)(a).

85. At the heart of the Constitution’s trust provision is the “necessity” of “preserving” trust land. *Illinois Cent.*, 146 U.S. at 436–37; *see also VR Acquisitions, LLC*, 439 P.3d at 608 n.5.

86. The State has confirmed its role as trustee of the Great Salt Lake within the 2013 Comprehensive Management Plan for the Lake, which was mandated by the Utah Legislature. That Plan affirms that “[DFFSL] will manage [the Great Salt Lake] and its resources under multiple-use, sustained yield principles by implementing legislative policies and accommodating public and private uses to the extent that those policies and uses do not substantially impair Public Trust resources and or the lake’s sustainability.”⁹

⁹ 2013 CMP, *supra*, at 7 (citations omitted).

II. The Duties of Utah as Trustee

87. Utah courts have long “applied common-law trust principles” in interpreting the public trust doctrine. *VR Acquisitions, LLC*, 439 P.3d at 610. Such principles include the fiduciary duties that “[a]ll trustees owe” to the beneficiaries of a trust. *Nat’l Parks & Conservation Ass’n*, 869 P.2d at 918.

88. The State as trustee is required by law to manage public trust resources, such as the Great Salt Lake and its bed, consistent with the terms of the trust, the interests of its beneficiaries, and the principles of loyalty, impartiality, and prudent administration. Restatement (Third) of Trusts §§ 76–79 (Am. L. Inst. 2007) (updated 2023); *see also* Utah Code §§ 75-7-801 to -804.

89. The State has the duty to “administer the trust as a prudent person would,” exercising “reasonable care, skill, and caution.” Utah Code § 75-7-804; Restatement (Third) of Trusts § 77. Prudence is an objective—not subjective—metric, assessed “in light of the purpose of the trust and the circumstances of each case.” *Kramer v. City of Lake Oswego*, 446 P.3d 1, 17–18 (Or. 2019) (internal quotation marks omitted). “Although a trustee is empowered to exercise discretion with respect to the proper treatment of the corpus of the trust, that discretion is limited by the purpose of the trust and the trustee’s fiduciary duties, and does not equate to mere subjective judgment.” *Pa. Env’t Def. Found. v. Commonwealth*, 161 A.3d 911, 933 (Pa. 2017) (internal quotation marks omitted).

90. Integral to prudent stewardship of the public trust is the duty of continuing supervision—the state’s ongoing obligation to act to ensure the protection of trust resources. This “duty of continuing supervision” extends to “the taking and use of the appropriated water” that

impacts public trust resources and endows the state with the power and responsibility to reconsider previous water allocation decisions if and when new information makes clear that such allocations are imperiling the trust. *Nat'l Audubon Soc'y v. Superior Court*, 658 P.2d 709, 728 (Cal. 1983). The State may not simply abrogate the public trust by authorizing or allowing a use inconsistent with the trust. Rather, it must protect public trust uses and must determine and undertake all feasible means of doing so.

91. This duty of continuing supervision is inherent in Utah public resources law. Utah's water code makes clear that the State Engineer's approval of an application to appropriate water gives an individual only a usufructuary interest—the individual's authorization to use the water always depends on the individual's usage not imperiling the public trust in water. The State Engineer's obligation to ensure that private appropriators are using water reasonably is an “ongoing” requirement, *Delta Canal Co. v. Frank Vincent Family Ranch, LC*, 420 P.3d 1052, 1059 (Utah 2013), and the Engineer is empowered to modify water appropriations if the use of water pursuant to such an appropriation operates in a manner that impairs trust resources, *Adams v. Portage Irrigation, Reservoir & Power Co.*, 72 P.2d 648, 654 (Utah 1937).

DEFENDANTS' FAILURE TO FULFILL THEIR TRUST DUTIES

92. The State's failure to ensure adequate flows to the Lake to sustain a minimum elevation of at least 4,198 feet is already damaging public trust resources. Moreover, the consequences of further inadequate State action are projected to be catastrophic for the public trust.

93. Further depletion of the Lake will make navigation, commerce, and brine shrimp fishing impossible, precluding the canonical uses assured under the public trust doctrine. It is

impossible to navigate, fish within, or use for commerce a Lake that is so diminished that vast areas of its lakebed are exposed and its remaining waters are too saline to support life.

94. Depletion of the Lake also will harm its ecological integrity. As the Lake evaporates, its salinity increases, which negatively impacts the microbialites (i.e., organic sedimentary deposits) that cover approximately 20 percent of the lakebed. Harm to the microbialites, in turn, negatively impacts the development of the brine fly and brine shrimp, which are a vital food source for millions of shorebirds, as well as a subject of commerce in the case of the brine shrimp.

95. Already, the decline in Lake elevation and microbialite cover has had marked impacts on migratory birds that have long relied on the Lake as a refuge, migratory stopover, or breeding ground. Historically, the Lake hosted one of the largest breeding colonies of American White Pelicans, with up to 20,000 nesting at Gunnison Island; yet the decline in water elevation has led to the emergence of a land bridge connecting Gunnison Island to the shore, which has allowed predators to threaten the pelicans, and, as a result, only half of the pelicans' peak number have been stopping at the Lake in recent years.

96. Likewise, the disappearance of Farmington Bay has led to a decline in the American Avocet population at the Lake, which, at its peak, had been as high as 250,000.

97. The numbers of many duck species that nest or migrate at the Lake—including the Redhead and Common Goldeneye—have also fallen as their food sources have died off.

98. Further, the disappearance of Bear River Bay has harmed a range of bird species, as the populations of pelicans, avocets, ducks, American Wigeons, and Northern Pintails at the Bay are correlated with water levels.

99. Depletion of the Lake will further damage the lakebed, another resource protected under the public trust doctrine. In particular, contraction of the Lake will expose Utahns to greater concentrations of lakebed sediments, especially coarse, fine, and ultrafine particulate matter that can reach the deepest parts of the lungs.

100. In areas exposed by the Lake's retreat, these particulates are being transported as dust and inhaled downwind by millions of Utahns; this process will worsen as the Lake shrinks. The particulate matter from dried lakebeds can increase rates of acute and chronic disease (including many of the same diseases known to be caused by smoking cigarettes), such as cancer, lung and cardiovascular diseases, reproductive dysfunction, poor pregnancy outcomes, developmental defects, endocrine disorders, neurologic diseases, and cognitive impairment. Such outcomes have already been observed in the populations downwind of dried-up lakebeds in other parts of the world (including communities surrounding Owens Lake in California and the Aral Sea in Uzbekistan).

101. Poorer Utahns and racial/ethnic minorities have been disproportionately impacted by exposure to this particulate matter.

102. Reduction in the Lake's area will also expose Utahns to greater quantities of lakebed sediments that are toxic to humans. For years, sediments likely containing heavy metals (e.g., arsenic, mercury, nickel, lead, etc.) and other pollutants have accumulated in the lakebed, due to coal burning, smelting, mining, agriculture, and urban runoff. As a result of the Lake's shrinkage, these materials are already being transported downwind, a process that will increase as the Lake's area continues to diminish.

103. Another consequence of the increased dispersion of lakebed sediments is the increased presence of dark dust particles on the nearby snowpack of the Wasatch and Uinta Mountains. Scientists refer to the dust from the Lakebed as “light absorbing particles” or “LAPs,” and the presence of LAPs results in more solar radiation being absorbed into the snowpack. This, in turn, results in earlier and more rapid snowmelt, which essentially translates into water loss to the entire ecosystem. This positive feedback loop decreases “lake effect” snowpack. This process will likewise increase as the Lake’s area continues to diminish, enhancing the risk of flooding in the late winter and spring and of water shortages in the late spring and summer, as well as overall accelerated shrinking of the Lake.

104. Additionally, the Lake’s further disappearance will cost the State billions of dollars and thousands of jobs. A recent analysis prepared for the State estimated that the declining Lake could cost between \$1.7 to \$2.2 billion annually and eliminate over 6,500 jobs.¹⁰

105. In short, under Defendants’ current course of management and failure to adequately address key causal factors, the Great Salt Lake has substantially diminished and will continue to diminish, with catastrophic consequences for Utah’s economy, public health, and environmental integrity—and the public trust.

¹⁰ Assessment of Potential Costs of Declining Water Levels in Great Salt Lake, at iii (Great Salt Lake Advisory Council, 2019), <https://documents.deq.utah.gov/water-quality/standards-technical-services/great-salt-lake-advisory-council/activities/DWQ-2019-012913.pdf>.

CLAIM FOR RELIEF
(Breach of Trust Duty to Undertake Feasible Means of Achieving
a Lake Level Consistent with Continued Trust Uses)

106. Plaintiffs hereby reallege, as if fully set forth herein, each and every allegation contained in paragraphs 1 through 105.

107. As discussed, the public trust doctrine requires Defendants to protect the Great Salt Lake's waters and underlying lands that are held by the State in public trust.

108. Defendants have failed to undertake all feasible means of maintaining the Great Salt Lake at least at the minimum elevation consistent with protecting trust uses—that is, 4,198 feet—including the modification of upstream diversions that are impairing those trust uses. Defendants have failed even to establish a clear objective for Lake restoration to protect public trust uses, despite the fact that their own scientists have identified 4,198 feet as the low point of the range of elevations necessary to sustain a healthy Lake.

109. This failure to undertake all feasible means of maintaining the Lake at a healthy elevation constitutes a breach of Defendants' duty to manage the Great Salt Lake consistent with the principles of prudent administration. Defendants cannot comply with this duty without promptly undertaking all feasible means of maintaining the Lake's physical and ecological integrity, thus protecting its continued use for public trust purposes of navigation, commerce, brine shrimp fishing, hunting, and recreation. Defendants have the authority as trustees to ensure that water is diverted in Utah consistent with public trust obligations. If water diversions impair trust values, Defendants have the power and obligation to modify those diversions to protect the trust. By failing to exercise this authority despite the growing existential threat to the Great Salt

Lake, which is caused by excessive upstream diversions, Defendants have abdicated their duties as trustees.

110. This failure constitutes a breach of Defendants' fiduciary duty of continuing supervision. This duty requires Defendants to reconsider allocation decisions based on new information, such as the impairment of the Great Salt Lake due to upstream diversions. By failing to undertake all feasible means of ensuring the health of the Great Salt Lake for continued trust uses, including by the modification of upstream diversions, Defendants have abdicated their trust duties.

111. This failure constitutes a breach of the constitutional trust duty to maintain sovereign land "held in trust for the people." UTAH CONST. art. XX, § 1. This land, which includes the bed of the Great Salt Lake, *Hardy Salt Co.*, 486 P.2d at 392–93, is imperiled by declines in the Lake level, which have exposed, and will continue to expose, the lakebed to winds, which will disturb the now-settled surface and disperse its toxic sediments far afield (and into the lungs of millions of nearby Utahns). The lakebed is thus being converted from a public trust resource into a public health threat. By failing to implement all feasible means of protecting the lakebed from displacement by maintaining a minimum lake level of 4,198 feet, Defendants have breached the trust obligation contained in the Utah Constitution.

REQUEST FOR RELIEF

Therefore, Plaintiffs respectfully request that this Court:

1. Grant declaratory relief, pursuant to Utah Code § 78B-6-401, specifying that:
 - a. The public trust doctrine imposes a duty on Defendants to maintain the Great Salt Lake at least at the minimum elevation consistent with public

trust uses—that is, 4,198 feet, which corresponds to a grand total surface area of approximately 924,415 acres.¹¹

- b. By allowing the water level of the Great Salt Lake to decline in a manner that adversely impacts the Lake, its ecosystem, and trust uses of the Lake, Defendants have failed to protect public trust resources, and thus they have violated the public trust duty.
- c. The public trust doctrine imposes a duty on Defendants to identify and implement feasible means of maintaining the Great Salt Lake at least at the aforementioned minimum elevation, including the reduction of unsustainable upstream diversions.
- d. The public trust doctrine creates a duty of continuing supervision over the taking and use of appropriated water and requires Defendants to modify water allocations based on new information as necessary to protect and preserve the public trust.

2. Grant injunctive relief, pursuant to Utah Code Ann. § 75-7-1001 and this Court's equitable authority, ordering that:

- a. Defendants must take action sufficient to ensure that any further decline in the Lake's average annual elevation ceases within two years of this Court's judgment. Defendants must further take action sufficient to restore the Great Salt Lake to at least the minimum elevation consistent with

¹¹ Plaintiffs recognize that the Lake's elevation fluctuates each year, as seasonal precipitation leads to greater inflows in the spring. Thus, 4,198 feet indicates the low-point of the range of acceptable elevations, rather than an average elevation.

continued public trust uses, i.e., 4,198 feet, which corresponds to a grand total surface area of approximately 924,415 acres, within ten years of this Court's judgment.

- b. In doing so, Defendants must review all existing water diversions from the Great Salt Lake watershed and determine feasible means to ensure compliance with their mandatory public trust duties. Defendants must then modify any diversions that are inconsistent with the restoration and maintenance of the Lake as specified above.
 - c. Following implementation of these modifications, Defendants must continue to monitor water usage consistent with their duty of continuing supervision and manage water diversions as necessary to protect the public trust.
 - d. Defendants must facilitate public involvement in the identification and implementation of these modifications through the maintenance of a public record, the establishment of a process for public comment, and the publication of documents describing state activities in a medium accessible to the general public.
3. Award Plaintiffs their reasonable attorneys' fees and costs.
 4. Grant such other and further relief as the Court deems just, equitable, and proper.

Respectfully submitted this 6th day of September, 2023.

ZIMMERMAN BOOHER

/s/ Troy L. Booher

Troy L. Booher

LaShel Shaw

EARTHJUSTICE

/s/ Heidi McIntosh

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**Pro hac vice application forthcoming*