



WESTERN RESOURCE
ADVOCATES

July 9, 2009

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Re: Comments on Division of Water Quality 401 Certification Process Relative to U.S. Army Corps of Engineers Evaluation of the Great Salt Lake Minerals Proposed 91,000-acre Expansion of Solar Evaporation Reservoirs on Great Salt Lake (SPK-2007-00121)

Dear Walt and Shelly,

Thank you for this opportunity to comment on the Division of Water Quality (DWQ) 401 Certification Process relative to U.S. Army Corps of Engineers (Army Corps) evaluation of the Great Salt Lake Minerals Proposed 91,000-acre Expansion of Solar Evaporation Reservoirs on Great Salt Lake (Mining Company Expansion Proposal). I make these comments on behalf of FRIENDS of Great Salt Lake, National Audubon Society, Wasatch Audubon Society, Great Salt Lake Audubon Society, Utah Waterfowl Association, Utah Airboat Association, Utah Rivers Council, League of Women Voters of Salt Lake, League of Women Voters of Utah, Utah Chapter of the Sierra Club, Western Wildlife Conservancy and Physicians for a Healthy Environment (collectively "FRIENDS"). We hope that as you examine the significant water quality impacts of the Mining Company Expansion Proposal, you will consider the following.

I. Introduction

The local, national and international value of Great Salt Lake, its islands, and its wetlands cannot be overstated. Overall, 257 avian species use the Great Salt Lake ecosystem. Of these, 112 species are exclusively associated with the Lake's varied wetland areas, while 117 species reportedly nest on the Lakes periphery or on its islands. At least 33 species of shorebirds representing 2 to 5 million individuals use Great Salt Lake annually, stopping along routes that take them elsewhere in North, Central or South America. In addition, up to 5 million waterfowl migrate through the Lake each year.

Approximately 30 percent of the waterfowl migrating along the Pacific Flyway depend upon the Great Salt Lake wetlands. For these migrants, the Lake provides a critical food supply, allowing them to restore depleted energy reserves and fuel up for the rest of their migrations, sometimes doubling their body weight before they leave. In recognition of its role in these international flights, Great Salt Lake is designated as **one of only eight** sites with a “hemispheric” designation – as opposed to regional or international designation – of the 40 Western Hemisphere Shorebird Reserve Network sites in the United States.

The importance of Great Salt Lake to the birds of the Americas is borne out by the sheer numbers that depend on its resources, including

- 60 to 80 percent of the world’s population of Wilson’s phalaropes;
- One of the two largest staging concentrations of eared grebes in North America;
- The world’s largest breeding population of white-faced ibis and California gulls;
- Over half of the entire breeding population of snowy plovers west of the Rocky Mountains;
- More than three quarters of the entire western population of tundra swan;
- One of the three largest breeding colonies of American white pelicans; and,
- One of the ten largest wintering populations of bald eagle in the lower 48 states.

Not surprisingly, hundreds of thousands of bird watchers comb the shores of Great Salt Lake to be rewarded by incredible views of feeding, flying and nesting birds that journey thousands of miles to gorge on the bounty of our nation’s largest inland “sea.” The Lake also attracts recreationists enjoying other water-based activities such as sailing, boating, rowing, floating, wading and kayaking. Others hike, ride horseback and mountain bike to enjoy scenery, solitude and wildlife. Great Salt Lake also supports a robust community of waterfowl enthusiasts who not only enjoy hunting but are working to preserve and protect Utah’s waterfowl, its unique and rich habitat and its rich heritage.

The North Arm of Great Salt Lake is an area of particular significance to the Lake’s ecosystem. Commenting specifically on the Mining Company expansion proposal, the Utah Division of Wildlife Resources (DWR) and the U.S. Fish and Wildlife Service (FWS) noted that the North Arm of Great Salt Lake becomes critical to migratory and other waterbirds during high water years. Exhibits 1 & 2, attached. This is because, during these times, the salinity in the North Arm best supports brine shrimp – an important food source for many of the Lake’s birds. *See* DWR Comments at 2-3 (documenting the crucial importance of the North Arm to wildlife during the 1980s and early 1990s); July 19, 2007 Letter from Don Paul to Mr. Styler and Mr. Buehler at 2, Exhibit 3, attached (“During periods when the GSL elevation occurs between 4193 and 4206 feet above sea level (asl), there are several aquatic bird species that occur at the Lake in continental and hemispheric numbers of importance at the GSL and largely in the Gilbert Bay. These are the Wilson’s Phalarope, Red-necked Phalarope, and the Eared Grebe. Some years these populations are in excess of 1,200,000, and 1,300,000 respectively during their seasonal occurrence at Great Salt Lake.

At times, these numbers of Wilson's Phalaropes and Eared Grebes represent 50 to 70% of the population that occur in the world.”¹ Great Salt Lake Mineral Leasing Plan at 33 (“[D]uring the high water years from 1983 to 1987, there were increase populations of brine shrimp in the north arm as salinity decreased [and] . . . eared grebes followed the brine shrimp into the north arm, abandoning sites along the Antelope Island causeway . . .”).

As recognized by the Utah Legislature, the North Arm is of significant importance as a refuge for one of the last remaining populations of the American white pelican, which breeds on Gunnison Island.² In addition, the North Arm offers outstanding recreational opportunities. This unique and remote area is enjoyed for its stark beauty, wildlife and bird life and stunning landscapes. That this area is more difficult to access and less frequented than the South Arm does not diminish its significant recreational and aesthetic value. Moreover, although navigation to and from this area is currently impeded by the causeway, there is no reason to believe that this obstruction is permanent³ and every reason to believe that the demand for access to this area will increase.

Likewise, Bear River Bay and the Willard Spur are of outstanding value for both recreation and wildlife habitat. Here there is a fishery that persists when the lake elevation is higher than 4,200 feet above sea level of vital importance to piscivorous birds. The avian community at Willard Spur is exceptionally complex. With its species richness, diversity and overall abundance, this area continually provides one of the most magnificent displays of bird life on the lake.

Recognizing these values, DWR has underscored the tremendous ecological importance of the lease parcels the applicant proposes to develop:

¹ Mr. Paul also states: “This was the case in the high lake years of the 1980s (1983 to 1988). The migratory populations of Phalaropes and Eared Grebes were totally reliant upon Gunnison Bay for the food and energy reserves needed to complete their annual winter migrations which sometimes exceed 2,000 miles. Much of the foraging of these species took place along the west shorelines of promontory point, around Gunnison Island and west toward the Hogup Mountains (the ostensible GSL Minerals diking and ponding site), (DWR SLO files).” Exhibit 3 at 2.

² Utah Code Ann. § 23-21a-2 (“The legislature of the state of Utah recognizes that the number of breeding sites of the American white pelican has been reduced from in excess of 50 prior to 1932 to only seven major sites in 1976 as a result of the removal of water barriers around breeding sites, loss of food supply, and **human disturbance of nesting colonies**. The legislature of the state of Utah further recognizes that Gunnison Island in the Great Salt Lake, one of the seven remaining pelican rookeries in North America, produces over 20% of the world's population of the American white pelican, and is the only remaining major pelican rookery that does not have refuge status. It is hereby declared to be the policy of the state of Utah that areas that will support certain threatened life forms shall be preserved for their benefit and for the benefit and enjoyment of present and future generations of people.”) (emphasis added).

³ The causeway has stood only since 1959, when it replaced a trestle built in 1902.

These lands . . . are valued by DWR for periods when lake level falls below 4200' in Bear River Bay. DWR is particularly interested in lands which are north and northwest of the existing dikes . . . because of bulrush colonies in this area that are important to colony nesting birds and as forage for birds. Also, at lower lake levels, this is the low point of the channel and is important as an area where the water creates a natural lake within the bay.

IMC Kalium/DWR Memo, August 28, 1998, Exhibit 4 at 3. Moreover, this area of the Lake receives high levels of recreational use, is appreciated for its scenic beauty by many, and is critical to navigation of the Lake. Bear River Bay and Willard Spur enjoy a high number of days of recreational use. Air boat operators and others access this area through a public access site and two guiding services also operate in the area. There are at least two private duck clubs that are located along the shore of this area.

II. The Mining Company Expansion Proposal

Mining Company currently operates about 47,000 acres of evaporative ponds in the northern part of Great Salt Lake; 25,000 acres of ponds in the North Arm and 22,000 acres of ponds in Bear River Bay. North Arm brine is transported to Bear River Bay via the 21-mile Behrens Trench, taking a week to make the journey.

In 2007, Mining Company proposed expanding their operations by 33,000 acres. The proposed expansion would have consisted of an 18,000-acre pond adjacent to Gunnison Island, a 7,000-acre pond in the southern end of Clyman Bay and an 8,000 pond in Bear River Bay. While the lease for the 8,000 acre Bear River Bay portion was purportedly already approved by the Division of Forestry, Fires and State Lands (Division) prior to the proposal, the necessary leases for the 25,000 acres of ponds in the North Arm were also approved by the Division in July, 2007. Subsequent to that approval, the Army Corps began the Environmental Impact Statement process associated with the 404 permit for the entire 33,000 acres.

Subsequent to approval of the required leases by the Division but prior to approval by the Army Corps, Mining Company expanded that proposal to 91,000 acres – of which 80,000 acres fall within the confines of the Lake. The new proposal is in place of, rather than supplementing, the 2007 proposal. Of the 91,000 acres 83,000 acres would be located in the North Arm and 8,000 acres would be added to the northeast portion of Mining Company's current Bear River Bay facilities.

To support this expansion, Mining Company has also applied for 336,360 additional acre feet of water rights taken from the North Arm and 16,640 acre feet of water taken from Bear River Bay. Currently, Mining Company holds 156,000 acre feet of consumptive water rights within the Lake as well as 67,000 acre feet of water rights in Bear River Bay. Because the railroad causeway substantially reduces the interchange between the South and the North Arms, the withdrawals of water from the North Arm proposed by Mining Company will have a disproportionate impact on that portion of the Lake. This is especially true at lower Lake levels, when the effectiveness of the causeway breach is minimized. Adding to the impact is the

purported lack of recurring maintenance of the two culverts by the railroad. As a result, and absent the effects of the proposed evaporation reservoirs, the withdrawal of this water from the North Arm will have an enormous and uneven effect on that portion of the Lake because of the North Arm's hydrologic isolation from the rest of the Lake.

In addition, the majority of the proposed 91,000 acres of new evaporation reservoirs will fall outside of the natural boundary of the Lake at normal water levels. In other words, both because the reservoirs are close to the shore and because Mining Company proposes to withdraw a huge amount of water from the main body of the Lake to sequester in these reservoirs, the main body of the Lake will shrink below natural levels and the sequestered water will be spread out over tens of thousands of acres, largely, if not completely above the main body of the Lake. As a result, the company's proposal artificially expands the surface area of the Lake and, thus, will result in an increase in the natural rate of evaporation and a significant draw down of water volume in the Lake.

III. Legal Framework

A. Water Quality Law

Before the Army Corps can authorize the discharge of dredge and fill for the Mining Company Expansion Proposal under Section 404 of the Clean Water Act, Section 401 of the Act requires Mining Company to obtain certification from DWQ that the planned activity will comply with all applicable requirements of federal and state water quality law, including Utah's Water Quality Standards. Utah Admin. Code r. 317-2 (2009). DWQ must verify, first, under 401(a), that any discharge of dredge and fill material associated with the Mining Company's planned 91,000 acres of industrial facilities, largely on the bed of Great Salt Lake, will comply with state water quality standards and, second, under 401(d), that "any effluent limitations and other limitations, and monitoring requirements necessary to assure that" Mining Company will adhere to any other applicable discharge requirements under the Act, and with "any other appropriate requirement of state law." 33 U.S.C.A. §1341(a) & (d) (1977). Section 401(a) thus requires DWQ to certify the legality of the discharge of dredge and fill in the process of building and maintaining dikes and other facilities, and section 401(d) requires certification regarding all of Mining Company current and proposed construction and operation activities, including the sequestration of waters of the United States, the discharge of bitterns during the reservoir flushing process and the discharge of any other wastes that may be released as part of the construction and extraction processes.

In keeping with the requirements of the Clean Water Act, the State of Utah has classified all the waters within its boundaries and designated beneficial uses for each class. The water quality standards consist of narrative and numeric water quality criteria, as well as antidegradation requirements. DWQ must, at all times, guarantee that all beneficial uses of water are sustained.

Except for the recent promulgation of a water quality criterion for selenium, DWQ has not assigned any numeric water quality standards for the Lake.⁴ The State has classified the Great Salt Lake as a Class 5 waterway. Utah Admin. Code r. 317-2-6.5, dividing the Lake into five distinct sections, each with unique beneficial use designations. The sections of the Lake directly affected by the proposed discharge and related activities are Gunnison Bay (5B) and Bear River Bay (5C). The water quality standards for each of these sections are as follows:⁵

R317-2-6.5b Class 5B Gunnison Bay

Geographical Boundary – All open waters at or below approximately 4,208-foot elevation north of the Union Pacific Causeway and west of the Promontory Mountains, excluding salt evaporation ponds.

Beneficial Uses – Protected for primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

R317-2-6.5c Class 5C Bear River Bay

Geographical Boundary – All open waters at or below approximately 4,208-foot elevation north of the Union Pacific Causeway and east of the Promontory Mountains, excluding salt evaporation ponds.

Beneficial Uses – Protected for primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain.

The Lake as a whole, including Gilbert Bay (Class 5A), Farmington Bay (Class 5D), and Transitional Waters along the Shoreline of the Great Salt Lake Geographical Boundary (Class 5E), have similar designated uses as above. While not directly affected, these sections of the Lake and their designated uses may also be impaired to the extent that the proposed expansion will result in lower lake levels, concentration of pollutants, and the loss of beneficial uses in those sections.

The Utah Water Quality Standards also include an antidegradation policy for purposes of compliance with EPA's antidegradation regulation. EPA regulation requires that:

(a) The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

(1) Existing instream water uses and the level of water quality necessary to protect the **existing uses shall be maintained and protected.**

⁴ The selenium standards went into effect January 12, 2009. Utah Admin. Code r. 317-2-14 (Table 2.14.2). However, the standard has not been approved by the U.S. Environmental Protection Agency (EPA).

⁵ Again, these rules have not been approved by EPA.

(2) **Where the quality of the waters exceed levels necessary** to support propagation of fish, shellfish, and wildlife and recreation in and on the water, **that quality shall be maintained and protected** unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. **Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.** Antidegradation Policy, 40 C.F.R. § 131.12 (1992).

Utah's antidegradation regulation under R317-2-3 seeks to comply with EPA mandate through an antidegradation review under R317-2-3.5. For these purposes, Great Salt Lake as a whole is categorized as a Level III waterway, requiring an antidegradation analysis consisting of two levels of review. The first level review is "conducted to insure that existing uses will be maintained and protected" and if any degradation is *de minimus* in nature it does not require any further review. Utah Admin. Code r. 317-2-3.5b. If the impacts are not *de minimus*, the activity is subject to the second level review process. This requires determination of whether all statutory and regulatory requirements are met, if there are any reasonable less-degrading alternatives, whether the activity has economic and social importance, if the applicant has proposed any type of mitigation, water quality standards are met, existing uses are maintained and protected, and if the existing use is a higher use than the current designated use. Utah Admin. Code r. 317-2-3.5c. If the activity at issue requires a 404 permit, the State also requires there be a) a determination that the proposed activity discharges are unavoidable (i.e., necessary); b) examines alternatives to the proposed activity and authorizes only the least damaging practicable alternative; and, c) requires mitigation for all impacts associated with the activity. Utah Admin. Code r. 317-2-3.5c(3).

As stated above, except for the selenium standard, DWQ has not established numeric water quality standards for the Great Salt Lake or any of its subsections. While there is a narrative standard for the Lake and designated uses have been established, the lack of sufficient numeric standards requires the state to use other analytical methods to ensure that beneficial uses are adequately protected. It is therefore all the more crucial to evaluate whether the construction and operation the Mining Company Expansion Proposal will impair the designated uses. Section 401 requires the state to certify compliance with all components of water quality standards, not just numeric water quality criteria.

The United States Supreme Court confirmed this requirement in *PUD No. 1 of Jefferson County v. Wash Dept. Ecology*, in which an applicant argued that the state "may not require them to operate their dam in a manner consistent with a designated 'use'" but that "the state may only

require that the project comply with specific numerical ‘criteria.’” 511 U.S. 700, 714 (1994). The court squarely rejected this argument, holding that the text of the Clean Water Act “makes it plain that water quality standards contain two components” and is “most naturally read to require that a project be consistent with *both* components, namely, the designated use and the water quality criteria.” *Id.* at 714-15 (emphasis added). A project therefore “does not comply with the applicable water quality standards” if a project does not comply with the designated use. *Id.* at 715. The numeric qualifications often ensure the designated uses are protected, but are not determinative. *Id.* Compliance with numeric qualifications and protection of designated uses are completely independent analyses. *Id.* In regard to Great Salt Lake which does not have numeric standards, the protection of the designated uses must still be independently analyzed in relation to the proposal.

Based on the above, the proposed activity and discharge of the Mining Company expansion plan do not meet the requirements for 401 certification because a) the proposed discharge and its associated activities will impair if not destroy designated and existing uses in large portions of the lake, b) certification would improperly and unlawfully downgrade large portions of the lake from the current designated uses to none, in violation of EPA’s WQS regulations and Utah’s antidegradation rule; and c) the applicant’s discharges of massive quantities of bitterns and other wastes back into the lake have not been shown to meet applicable CWA permitting requirements and effluent limitations.

B. The Public Trust Doctrine

In making determinations regarding water rights applications affecting Great Salt Lake, DWQ must abide by the Public Trust Doctrine, which requires the State of Utah to hold sovereign lands in trust for the benefit of the public. For purposes of sovereignty, and in fact, Great Salt Lake is a navigable water. *Utah v. United States*, 403 U.S. 9, 10 (1971). When Utah was admitted to the Union, the state succeeded to the United States’ title to the beds of all navigable waters within its boundaries, including Great Salt Lake, under the equal footing doctrine. *Id.* at 9-10; see *United States v. Alaska*, 521 U.S. 1, 5 (1997) (“Ownership of submerged lands – which carries with it the power to control navigation, fishing, and other public uses of water – is an essential attribute of sovereignty.”).⁶

These sovereign lands are afforded special status and shielded by the Public Trust Doctrine, which “protects the ecological integrity of public lands and their public recreational uses for the benefit of the public at large.” *National Parks and Cons. Ass’n v. Bd. of State Lands*, 869 P.2d 909, 919 (Utah 1993). See *Illinois Cent. R.R. v. Illinois*, 146 U.S. 387, 455-56 (1892) (holding Public Trust Doctrine prevented Illinois legislature from divesting bed of Lake Michigan to private railroad); see also, e.g., *Marks v. Whitney*, 491 P.2d 374 (Cal. 1971);

⁶ See also 43 U.S.C. §§ 1301 *et seq.* (2008) (“Submerged Lands Act”). With passage of the Submerged Lands Act in 1953, Congress “‘confirmed’ and ‘established’ states’ equal footing rights to and interest in ‘lands beneath navigable waters within the boundaries of the respective States.’” *United States v. Alaska*, 521 U.S. at 5-6 (quoting 43 U.S.C. § 1311(a)).

National Audubon Soc. v. Superior Court, 658 P.2d 709 (Cal. 1983); *Wade v. Kramer*, 459 N.E.2d 1025 (Ill. 1984); *Save Ourselves, Inc. v. Louisiana Env'tl. Control Comm'n*, 452 So.2d 1154 (La. 1984); *Orion Corp. v. Washington*, 747 P.2d 1062 (Wash. 1987); *United States v. State Water Res. Control Bd.*, 182 Cal. App. 3d 82, 227 Cal. Rptr. 161 (1986). Under the Utah Constitution, at statehood the state accepted sovereign lands, including the bed of Great Salt Lake, “to be held in trust for the people . . . for the respective purposes for which they have been or may be granted.” Utah Const. art. XX, § 1.

In accordance with the Public Trust Doctrine, the Utah legislature has directed the Division of Forestry, Fire and State Lands, the agency deemed responsible for managing sovereign land values for the benefit of the public, to administer all uses of sovereign lands in a way that “serve[s] the public interest **and do[es] not interfere with the public trust.**” Utah Code Ann. § 65A-10-1 (2008) (emphasis added). Based on these principles, the Division’s own rule recognizes “a public trust over and upon the beds” of the state’s navigable waters, including Great Salt Lake. Utah Admin. Rule R652-2-200 (1991). The rule further mandates that the Division must manage these “basic resources of the state” for the “**protection of navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality.**” *Id.* (emphasis added).⁷

While the legislature has explicitly directed the Division to carry out the Public Trust Doctrine, the underlying principle applies equally to all agencies of the State whose management activities and decision making impact public trust values – the Utah Constitution requires all agencies of the State to ensure that sovereign lands are held for the people of Utah so that public trust values are conserved and private uses of sovereign lands do not interfere with this conservation. Utah Const. art. XX, § 1.

IV. The Proposed Discharge and Associated Activities will Significantly Impair Designated Uses of Great Salt Lake.

Mining Company’s proposed discharges and associated activities will destroy both designated and existing uses of the Lake, in violation of both state water quality standards and EPA’s water quality standards regulations. Under the Utah Water Quality Standards, as well as the Clean Water Act and applicable EPA regulations, designated uses of a water must be

⁷ Rule 652-2-200 does suggest, somewhat problematically, a weighing of Public Trust values with economic values, such that an economic justification could trump protection of public trust resources. *See* Utah Admin. Code r. 652-2-200 (Public Trust values “balanced against the navigational or economic necessity or justification for, or benefit to be derived from, any proposed use”). However, such a reading of the rule would conflict with the Public Trust Doctrine generally and with § 65A-10-1 specifically. The latter commands that **no** use of sovereign lands may “interfere with the public trust.” Utah Code Ann. § 65A-10-1. Under the plain language of the statute, any Rule R652-2-200 balancing must comply with § 65A-10-1 and ultimately ensure non-interference with and protection of navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality.

protected as part of the maintenance of water quality standards. Designation of Uses, 40 C.F.R. § 131.10 (1992); UT Admin Code R317-2-7. In addition, Utah's antidegradation rule provides that "proposed activities can only be allowed if 'existing uses'⁸ will be maintained and protected." Utah Admin. Code r. 317-2- 3.5c(7); *see, also*, 40 C.F.R. § 131.12. As stated in the water quality standards, the designated uses of the Bear River Bay and Gunnison Bay are "primary and secondary contact recreation, waterfowl, shore birds and other water-oriented wildlife including their necessary food chain," all of which are existing uses. Utah Admin. Code r. 317-2-6.5.

A. Destruction of Wildlife and Wildlife Habitat Use

Bear River Bay

1. Existing Wildlife Use as a Vital Habitat for Resident and Migratory Birds and Components of Their Food Chain

The Department of Natural Resources, in a special publication on the Avian ecology of the Great Salt Lake, has recognized the critical importance of the Bear River Bay to Waterbirds:

Bear River Bay is the freshest region and receives the largest volume of riverine inflow. Its near-surface salinity is similar to that of the Bear River. This system is bounded on the north and east by state, federal, and private wetlands; on the south by industry; and to the west by the Promontory Mountains. This bay is fresh enough to support a community of submergent hydrophytes including sago pondweed (*Potamogeton pectinatus*) and widgeon grass (*Ruppia maritima*). There are significant islands of emergent wetlands here, especially in the east part of the bay in the Willard Spur. . . . An ecological element of vital importance to piscivorous birds in this area is the fishery that persists when the lake elevation is higher than 4,200 feet (1,280.2 m) above sea level. The avian community at Willard Spur is exceptionally complex. With its species richness, diversity and overall abundance, this area continually provides one of the most magnificent displays of bird life on the lake. Although the smallest region on the lake, it makes an exceptional contribution to the lake's avian population.⁹

The Utah Division of Wildlife conducted a multiple year survey documenting the use of the Lake by birds. *The Great Salt Lake Waterbird Survey*, conducted from 1997 to 2001,

⁸ EPA regulations define "existing uses" as "those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards." 40 C.F.R. § 131.3(e).

⁹ *Avian Ecology of Great Salt Lake*, by Tom Aldrich and Don Paul from Great Salt Lake: An Overview of Change, edited by J. Wallace Gwynn, Ph.D., Special Publication of the Utah Department of Natural Resources, 2002.

underscored the importance of the Bear River Bay to waterbirds.¹⁰ This survey was undertaken in 12 different areas of the total Bear River Bay complex, and occurred numerous times from early spring through fall during these five years. The Survey extensively documents the nature, magnitude, and importance of wildlife habitat and use of areas that will be directly affected by the proposed discharges, and should be consulted extensively by DWQ to document the extensive existing uses of this region that must be protected under both federal and state law.

The Great Salt Lake, notably the Bear River Bay has also been designated as a Globally Important Bird Area (IBA) by BirdLife International:

The IBA Program purpose is to identify, monitor, and conserve a network of sites to help maintain naturally occurring bird populations for which a site-based approach is appropriate. IBA's are places of significance for the conservation of birds across multiple landscape scales. The program biological rationale is in recognition that some sites are exceptionally important for bird conservation. Therefore, the consequences of the loss or degradation of these sites may be disproportionately large.¹¹

The *Great Salt Lake Waterbird Survey* and BirdLife International noted that there were fifteen species "recognized based upon having over 1% of the North American population at one time or 5% over a season" in the Bear River Bay.¹² The Long Billed Curlew has been labeled as a Global Species of Conservation Concern with Bear River Bay supporting 130 breeding individuals while the global criteria for the classification is 30 individuals.¹³ In addition, the survey noted the following peak survey numbers of some of the birds: 89,395 American Avocet, 35,924 American White Pelican, 36,327 Black-necked Stilt, 26,042 California Gull, 16,632 Cinnamon Teal, 1,412 Forster's Tern, 29,073 Franklin's Gull, 200,818 Green-winged Teal, 26,203 Long-billed Dowitcher, 43,860, 43,860 marbled Godwit, 41,868 Tundra Swan, 4,412 Western Grebe, 190,000 Western Sandpiper, 57,615 White-faced Ibis, and 136, 305 Wilson's Phalarope.¹⁴

The Bear River Bay is an internationally recognized area for its environment suited for wildlife use. Because of the importance of this water body to wildlife habitat, particularly close examination of the impacts of the current and proposed expansion on ecosystem values must be undertaken.

¹⁰ Don Paul and Ann Manning, *Great Salt Lake Waterbird Survey*, (Utah Division of Wildlife Resources 2001).

¹¹ Keith Evans & Wayne Martinson, Utah's Featured Birds and Viewing Sites 3, (Utah Important Bird Area Program 2008).

¹² *Id.* at 179

¹³ *Id.*

¹⁴ *Id.*

2. Effects on Existing Wildlife Use as a Result of Proposed and Existing Mining Company Activities and Discharges.

Wildlife habitat, populations and individuals will be greatly impaired by Mining Company activities and discharges that will result in increased salinity, a drawdown of the lake, and reduction of important habitat areas, which in turn will impair existing wildlife uses of the Bear River Bay.

- a. *The expansion of Mining Company Evaporation Reservoirs will result in a significantly decreased area of the habitat shore birds and other water-oriented wildlife including the organisms that make up their necessary food chain.*

Mining Company's proposal to sequester for industrial use 8,000 acres of Bear River Bay, in addition to the current 22,000 acres already covered by evaporation reservoirs in the bay, will entirely eliminate a significant habitat for shore birds and other water-oriented wildlife, including organisms that make up their necessary food chain.¹⁵ At average lake levels, Bear River Bay is 142,268 acres, so the existing and planned reservoirs would potentially occupy 21% of the area and considerably more when lake levels are low. The evaporation reservoirs contain extremely high concentrations of salts and are sterile – completely unable to support a plant or wildlife habitat. So, in expanding the reservoirs in the Bear River Bay, Mining Company is destroying the existing use of a substantial portion of the Bay. As noted above, the Bear River Bay has been recognized for its importance as a bird habitat. Given the importance of the Bay to numerous species, and given the Bay's beneficial use to support shorebirds and other water dependant wildlife, a 21% reduction in habitat would impermissibly destroy the existing use of the Bay.

- b. *The expansion of Mining Company's activities will result in a drawdown of lake levels thereby adversely affecting the use of the Bear River Bay as habitat for shore birds and other water-oriented wildlife including their necessary food chain.*

Mining Company itself currently has the authority to take 230 cfs, or 156,000 acre feet, from the Lake each year. Mining Company has, as part of its expansion proposal, applied to the Utah State Engineer to appropriate an additional 353,000 acre feet of water from the Lake, including 16,640 acre feet directly from Bear River Bay. In addition, according to the Division, there are currently 11 perfected water rights to divert water directly from the lake totaling 362,306 acre feet a year. Great Salt Lake Comprehensive Management Plan Resource Document (Resource Document) at 13.¹⁶ This use is consumptive. *Id.* The State Engineer has

¹⁵ See maps showing dispersal of various species in the Bear River Bay in *Great Salt Lake Waterbird Survey* Appendix 5 (Species Accounts), Appendix 6 (Species Distribution by Survey Area), Appendix 7 (species at high and low lake elevations) – maps showing the dispersal of the various bird species in the Bear River Bay

¹⁶ Available at <http://www.ffsl.utah.gov/SovLands/gsl.php> (“Resource Guide”)

approved applications to appropriate an additional 444,562 acre feet of water per year from the Lake, also for consumptive use. *Id.* Finally, pending before the State Engineer are applications for 657,565 acre feet, largely if not completely for consumptive use, above and beyond Mining Company's current application for 353,000 acre feet of water. *Id.* Thus, appropriators are now entitled to consume a total of 806,868 acre feet of water from the lake each year – only slightly less than enters the Lake each year from **both** the Jordan and Weber rivers. *Id.* at 10. When the amount of water requested in pending applications is considered, the total water demands on the Lake reaches 1,464,433 acre feet a year – more water than flows from the Bear River into Great Salt Lake each year. In this context, Mining Company requests an additional 353,000 acre feet. This pending application would raise demands on Great Salt Lake water to 1,817,433 acre feet per year – 76% of the water that enters the Lake each year from all sources. If the Mining Company application is approved, appropriators would be entitled to siphon off 1.2 million acre feet of water from the Lake each year.

Plainly, DWQ must determine the adverse impacts that these water appropriations will have on water quality in Bear River Bay and ensure full protection of beneficial uses and compliance with water quality standards. At this point there has been little study or analysis available to the public on the effects of existing – much less proposed – withdrawals on water quality and beneficial uses of Bear River Bay. Declining water levels will concentrate pollutants, increase air pollution, decrease open water habitat, dry out wetlands and mudflats, and otherwise reduce available wildlife habitat, especially under low water conditions in an area already diminished by the evaporation reservoirs themselves.

- c. *Mining Company flushing will result in an increased salinity level in the Bear River Bay that will alter the delicate chemical balance that supports wildlife habitat.*

As part of its operations, Mining Company flushes its evaporation reservoirs after it mines the desired materials and discharges very large quantities of unused brines (“bitterns”) and potentially other waste material into the southern portion of Bear River Bay. Those discharges will increase significantly under expanded operations. The fate and effect of these discharges have not been studied, and the consequences of this activity are likely to change due to the further constriction and alteration of flow patterns between Willard Spur, Bear River Bay and Gilbert Bay due to the additional proposed diking. However, depending on circulation patterns at various times of the year, and under the highly variable hydrological conditions experienced in Great Salt Lake, there almost certainly will be an increased level of salinity in the Bay as a result of the flushing process of the evaporation ponds and discharge into the Bay. Gunnison Bay, from which Mining Company pumps water into their evaporation ponds, has an average salinity level between 24.3 to 25.7 percent, with its lowest level at 14.5 to 15.3 percent during the high water years from 1982-87.¹⁷ According to analysis done in the 1990s, the reason for this high concentration is that there is only a small quantity of fresh water inflow and large quantities of

¹⁷ *Great Salt Lake Comprehensive Management Plan Resource Document* 38-39 (Utah Dept. of Natural Resources 2000).

salty south arm inflow.¹⁸ Bear River Bay, on the other hand, into which Mining Company pollutants are discharged, maintains an upper layer of water containing only 1 to 2 percent salt and with a fluctuating tongue of salty water that moves through the bidirectional flow of water through the relatively small opening in the railroad causeway.¹⁹ This increased salinity promises to disrupt the already delicate salinity balance in the ecosystem, affecting plant communities, aquatic organisms and the Bay's fishery, which in turn affects the use of the area as a wildlife habitat. The waterfowl that make use of the area rely on the plant life for food as well as for nesting and protection from predators, while the seasonal fishery is of vital importance as a food source. The ability of Bear River Bay to support a fish population is highly dependent on the direction of water flow and weather conditions and will be adversely impacted by increased salinity.

d. Additional pollutants, which have not been fully disclosed or studied, will accumulate in both the sediment and the water column affecting the food chain.

In addition to the known bittern discharge, the complete composition of the flushed materials is uncertain due to lack of studies and evaluation, or because the information has not been disclosed by Mining Company.²⁰ Preliminary information at the Army Corps scoping meetings suggests that there may be mercury, methyl mercury and other toxic pollutants in the discharges – pollutants which will accumulate in both the sediment and water column. These toxic materials have the potential for bioaccumulation or biomagnification in the Lake food chain, potentially affecting the entire web of life, from algae populations to wildlife populations.

e. Wildlife use will likely be impacted during construction.

The proposal to dike 8,000 acres of Bear River Bay is a huge construction process, requiring the use of heavy equipment and machinery and the disturbance and movement of tons of sediment and fill. This process will adversely impact wildlife that uses the area, especially from the noise generated, as well as from increased turbidity and other effects of the fill discharge itself. Recent studies have shown that “increased noise pollution may cause [wildlife] to alter their behavior and move to less-optimal habitat...most animals rely on hearing to communicate, avoid predators, and find food.”²¹ In addition to noise pollution, construction of the dikes and trenches will physically displace wildlife and habitat, disturb lake bed sediments and stir up contaminants, while the use of motors, motorized vehicles and other equipment as a result of the development could adversely impact water quality.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ The discharges either are not monitored properly or assessed for chemical composition, or if they have been monitored, that data have not been released to the public. Section 308 of the Clean Water Act requires such data to be collected and made available to the public.

²¹ Elizabeth Ann Johnson & Michael W. Klemens, Nature in Fragments 38 (Columbia University Press (2005)).

- f. Impacts of significant changes to the currents and water circulation, and water exchange between Bear River Bay and Gilbert Bay by narrowing the channel as evaporation ponds are expanded*

Diking, industrialization and destruction of the Great Salt Lake Ecosystem impacts water quality because it interferes with the natural ebb and flow of the lake, as well as the mixing of the Lake's waters. This change in water quality in turn affects the food chain and the use of the area as a wildlife habitat. The significant proposed expansion of evaporation ponds in Bear River Bay would drastically constrict the flow and water exchange between Gilbert Bay and Bear River Bay, at best, leaving only a channel running parallel to Promontory Point. The nature and magnitude of effect this further constriction will have on Bear River Bay, and on the Lake as a whole, has not been studied properly or disclosed to the public. Given the effects the northern railroad causeway and other existing hydrological alterations of the system, this further restriction on the Lake will likely also have individual and cumulative effects that have not been studied adequately at this point.

- g. Artificial dikes create predator corridors and allow access to parts of the lake formerly protected.*

The dikes that are proposed as part of the evaporation reservoir expansion function as a corridor for predators to access remote parts of the Lake, that formerly would have been less or inaccessible. One of the reasons the Lake is an important migratory habitat is because the birds are sheltered from predators. The series of dikes, in conjunction with the draw down of lake levels, will work to open access to predators to additional areas of the Bear River Bay, limiting the parts of the Bay that still provide nesting and feeding habitat.

Gunnison Bay

1. Existing Wildlife Use

Gunnison Bay was recognized in the Great Salt Lake Waterbird Survey for its large bird populations, found chiefly on Gunnison Island and in Locomotive Springs Waterfowl Management Area, Salt Wells Flat Habitat Management Area, as well as along the west shore of the Bay. Gunnison Bay is recognized as a Globally Important Bird Area based on three species that use the area. Moreover, during years with significant freshwater runoff and/or high precipitation, Gunnison Bay provides crucial habitat for brine shrimp, brine flies and migratory and resident birds that take advantage of reduced salinity in the Bay. During these high water years, habitat in the south and east portions of the Lake are less suitable for these bird species than is Gunnison Bay.

Gunnison Island supports a large breeding colony of American white pelican. The number of birds exceeds 20,000 and constitutes over 11% of the North American population. California gulls also breed on the island, numbering over 23,000, which is about 4% of the estimated North American population. Gunnison Island provides high value habitat for pelicans

because it is isolated and safe from predators. It is an ideal nesting ground for these birds because they are very sensitive to disturbances during the nesting season. It provides an ideal isolated location, with access to a nearby food source in Bear River Bay.²²

The long-billed curlew that breeds at Locomotive Springs and Salt Wells Flat is a Global Species of Conservation Concern. Locomotive Springs and the Salt Wells Flat also support populations of American avocets (over 400), black-necked stilts (over 180), and of special importance to Utah as a Utah Wildlife Action Plan priority species, the snowy plover (over 370).²³

The Salt Wells Flat and the west shore of Gunnison Bay are also of extreme importance as a habitat for the snowy plover, which is also recognized as a Globally Important Species and is listed in the Utah Comprehensive Wildlife Conservation Strategy as a species of greatest conservation concern. Its numbers in the state have been steadily declining.²⁴

2. Effects on Existing Wildlife Use as a Result of Proposed Mining Company Activities and Discharges

- a. *The use of water for the evaporation reservoirs will likely cause a substantial drawdown of the Lake affecting surrounding wetland, springs, and shoreline habitats.*

As indicated above, Mining Company's current and proposed activities involve significant diversion of water from Gunnison Bay. Moreover, approved, but yet untapped water appropriations, as well as pending applications to appropriate water constitute an enormous claim on Great Salt Lake's water resources. Since Gunnison Bay is isolated from the rest of the Lake due to the Northern Railroad Causeway, the Bay will see the greatest loss in water. The first areas to be affected by this drawdown would be Locomotive Springs and the surrounding wetlands. As mentioned above, Locomotive Springs is an important nesting and breeding ground for wildlife. If these areas are dried up due to the drawdown, the areas will no longer be able to support wildlife use.

The drawdown will also further expose Gunnison Island and allow predator access. The Mining Company Expansion Proposal will expose the island to predatory access on a much more frequent basis, destroying any use by the sensitive pelican populations that rely on the isolation and protection of the Island.

Finally, the construction of the vast network of dikes in Gunnison Bay, as well as the maintenance and operation of the facilities, along with the loss of water and concentration of

²² *Id.*

²³ Keith Evans & Wayne Martinson, Utah's Featured Birds and Viewing Sites_177, (Utah Important Bird Area Program 2008).

²⁴ *Id.* at 52

pollutants in the Bay, promise to have adverse effects on wildlife and habitat. These activities will adversely affect water quality in the Bay, which further degrades habitat.

- b. The expansion of the evaporation reservoirs in Gunnison Bay would substantially diminish wildlife habitat.*

Currently Mining Company occupies 25,000 acres of industrial facilities in Gunnison Bay. The proposed expansion will increase the footprint of the company's industrial facilities to a total of 108,000 acres along the west side shore of the Bay. This is a substantial expansion into areas occupied by wildlife. As stated above, snowy plover and other bird species use these western mud flats and this area is of particular importance to additional bird species during high water years. Also as noted above, the snowy plover is internationally recognized as species characterized by declining numbers. A destruction of its habitat on the western shore will further jeopardize this species.

B. Destruction of Recreation Uses

DWQ has established as a beneficial use of Great Salt Lake, primary and secondary contact recreation. Great Salt Lake provides recreational activities for local, national and international visitors. The Lake is frequently used for boating, hunting, bird watching, study, photography, swimming and wading. The Mining Company Expansion Proposal will impair the use of the Lake for these purposes.

1. Boating

Boating is a popular activity on the Lake, including sailboats, airboats, kayaks, and canoes. Although access to the North Arm is limited, the area still attracts boaters, sightseers and other recreationists. The Bear River Bay is most frequented by airboaters for hunting access. In addition, there is economic reliance on the continued use of the area for airboats by manufacturers in the area and hired hunting guides that use the boats. The Utah Airboat Association has expressed its commitment to the preservation of the Great Salt Lake, especially the Bear River Bay area, because of their longstanding recreational use of the area:

The Utah Airboat Association (known legally as Utah Air Boat Inc.) has a long history here in Utah. In the early 1940's, workers at the Bear River Migratory Bird Refuge in Brigham City built an airboat to help get around in the marsh. By the late 1950's there was a growing popularity of airboats in Utah and in the early 1960's a group of hunters decided to form an organization of likeminded individuals with airboats. The Utah Airboat Association was born out of the desire of these people to work toward wetland conservation as well as enjoying the hobby that they loved.

Utah Air Boat Inc promotes the interests of airboating, cooperates with state and federal agencies for the enforcement of wildlife rules and regulations, and works toward conservation of wetlands and waterfowl. After the flooding of the 80's, the Utah Airboat

Association started building nesting platforms for ducks and geese at several Waterfowl Management Areas in Utah. The last 3 years, UABI has joined together with the Utah Waterfowl Association in their duck nesting project at Farmington Bay WMA. The UABI supplies manpower, airboats and fuel to install and maintain duck and goose nesting structures. Each year, the Airboat Association performs service projects that have included lakefront debris cleanups, beach cleanups at Antelope Island, cleanup of Decker Lake, nesting structures, and boat ramp repairs/maintenance, including ramps located within state Waterfowl Management Areas. The Airboat Association has also been involved with spraying and control of the invasive species of Phragmites that is currently destroying the marsh along the Wasatch Front.

There are a number of pressures that affect the Airboat Association's ability to recreate on the GSL, including the reduction of water inflows coming to the lake and its corresponding wetland complex, the phragmites invasion, and the loss of waterfowl habitat due to industrial development. The Airboat Association members have a deep love and concern for the Great Salt Lake and its marshes. With threats to the lake's complex ecosystem arising more and more frequently, airboaters feel it is vitally important to help protect this valuable and beautiful Utah resource.²⁵

Boaters have a strong interest in the preservation of their uses in Bear River Bay. The pond expansion proposal in the Bay will greatly reduce their access and navigation in substantial parts of the Bay thus diminishing their existing uses of the area. Moreover, the water quality in the evaporation reservoirs will not sustain primary and secondary recreation.

2. *Hunting*

Hunting is a very popular activity in the fall in the Bear River Bay. As a major bird habitat, the Bay presents excellent recreational opportunities during hunting season for local and out of state hunters. Hunting guidebooks note the value and use of the Great Salt Lake as an ideal hunting ground for waterfowl, stating that "the one habitat which yields by far the most ducks and geese to Utah licensees is the east shoreline of the Great Salt Lake."²⁶ The area is frequently used during hunting season and a reduction in the wildlife habitat also means there is a reduction in the recreational use in the way of hunting.

Hunting along the shores of Great Salt Lake is popular activity with significant economic benefits. The proposed project will destroy 91,000 acres of Great Salt Lake wildlife habitat and areas previously open for hunting. In addition, these areas will no longer support primary and secondary contact recreation.

²⁵ R. Jefre Hicks, Utah Airboat Assoc, http://www.gslcouncil.utah.gov/docs/AirBoat_Association_102908.pdf.

²⁶ Harrt Wixom, Fishing and Hunting Guide to Utah 206 (Lighting Source Inc 1999).

3. Bird Watching

Bird watching has become an increasingly popular activity, especially in Utah. Since 1999, Davis County Department of Community and Economic Development has been organizing the Great Salt Lake Bird Festival in response to the increase participation in birdwatching. The goal of the festival is “to increase conservation of the Great Salt Lake ecosystem through education and tourism.”²⁷ Participation in festival activities, including seminars, workshops, and field trips focused on bird watching and bird species in the Great Salt Lake area, has steadily grown. In *Understanding Great Salt Lake Bird Festival Visitors: Applying the Recreational Specialization Framework*, Steven W. Burr and David Scott, point out the growing interest in bird watching and the importance of the Great Salt Lake:

The growth of bird watching over the last two decades has been staggering. According to the recent National Survey of Recreation and the Environment (NSRE) (2000-2002), one-third (33%) of American adults said they went bird watching at least once during the previous 12 months. According to NSRE data, the number of people who regarded themselves as birdwatchers increased 27% between 1995 and 2001 and an incredible 225% between 1982 and 1991. Although most people watch birds exclusively in their yards, 40% of birdwatchers leave their homes to look at birds (U.S. Department of Interior, Fish and Wildlife Service and U.S. Department of Commerce, U.S. Census Bureau, 2002). The economic impacts of bird watching are remarkable as well, with thousands of birders visiting birding “hotspots” and collectively spending millions of dollars during such outings, resulting in significant economic benefits locally (Crandall, Leones, & Colby, 1992; Kerlinger & Wiedner, 1994; Kim, Scott, Thigpen, & Kim, 1997; Eubanks, Kerlinger, & Payne, 1993). This has spurred community development and conservation leaders to develop festivals and special events attractive to birdwatchers. Today, there are approximately 200 bird watching and wildlife-watching festivals held throughout the United States and Canada (American Birding Association, 2001). One of these is the Great Salt Lake Bird Festival, which was established in 1999 and has experienced growth over the years in the number of visitors attending, with approximately 3,000 visitors attending in 2002 and 3,500 attending in 2003 (N. Roundy, personal communication, July 15, 2003).

According to the Great Salt Lake Bird Festival Organizing Committees (2003) promotional material, the September 2002 issue of Audubon Magazine listed the Great Salt Lake Birding Trails as some of America’s best. The September/October 2002 issue of Bird Watcher’s digest named the Great Salt Lake as one of the 25 North American birdwatching sites to visit. Sunset Magazine in November 2002 highlighted the U.S. Fish

²⁷ David Scott & Steven W. Burr, *Understanding Great Salt Lake Bird Festival Visitors: Applying the Recreational Specialization Framework*, Tourism Trends and Issues 201, 204 (2003).

& Wildlife Service's Bear River Migratory Bird Refuge, one of the field trip sites for the GSLFB, as one of the "Fantastic Five" top western birding destinations.²⁸

Bird watching around Great Salt Lake is clearly on the rise. This activity generates significant economic benefits for the state as more visitors are attracted to the area. The proposed project will convert 91,000 acres of Great Salt Lake wildlife habitat with industrial facilities, as well degrade and destroy additional habitat.

V. Certification Would Unlawfully Destroy Great Salt Lake Designated and Existing Uses.

As discussed above, the proposed expansion would **entirely** eliminate the existing and designated uses of 91,000 acres of Great Salt Lake.²⁹ Those areas, currently used extensively by wildlife and for recreational uses such as swimming, wading, boating, hunting and wildlife viewing, would be diked off and converted exclusively for industrial use. Moreover, the effects of the proposed expansion would significantly impair existing and designated uses in other portions of the lake as well. As a result, certification of the Mining Company Expansion Proposal would violate EPA and state antidegradation requirements, and would constitute an unlawful downgrading of uses pursuant to the Clean Water Act and EPA regulations. By the same token the construction and operation of the 91,000 expansion will violate Utah's narrative water quality standard.

The fundamental objective Congress articulated in section 101 of the Clean Water Act is to "**restore and maintain** the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251 (emphasis added). As one method of implementing that objective, EPA requires states to adopt and to implement an antidegradation policy that strictly protects all existing uses: "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." 40 C.F.R. §131.12(a)(1) (1993) (emphasis added). The Supreme Court in *PUD No.1 of Jefferson County* further pointed out that the EPA has explained that "no activity is allowable...which could **partially or completely eliminate any existing use.**" *Answers on Antidegradation 3* (Aug. 1985), cited in *PUD No. 1 of Jefferson County v. Wash Dept. Ecology*, 511 U.S. 718-19 (1994) (emphasis added). The Court pointed out that "states must implement their antidegradation policy in a manner 'consistent' with existing uses of the stream." *Id.* The Utah antidegradation policy, which follows the EPA regulation, states that "existing instream water uses **shall** be maintained and protected...no water quality degradation is allowable which would interfere with or become injurious to existing instream water uses." Utah Admin. Code r. 317-2-3.1 (emphasis added). According to the state regulatory language, existing uses must be maintained regardless of whether "allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located." *Id.* If DWQ were to certify the Mining Company Expansion Proposal, it would thereby allow a significant part of the Lake to be converted into industrial

²⁸ *Id.* at 205

²⁹ For perspective, 80,000 lake acres is larger than all but 17 freshwater and saline lakes in the continental United States, excluding the Great Lakes.

facilities that do not support those existing uses. As a result “the existing instream water uses” will not be “maintained and protected,” as specifically required by both the EPA and Utah regulations, and as recognized by the United States Supreme Court.

Moreover, certification of a project that would convert 91,000 acres of the Lake to a purely industrial use would constitute a *de facto* and unlawful downgrading of water body uses in violation of both the procedural and substantive aspects of EPA’s regulation regarding designation of uses. 40 C.F.R. § 131.10 (e), (h). As stated in the Utah regulations and above, the lake has been divided into five parts and designated uses specified for each of those sections. Moreover, as documented above, each of these uses are “existing uses” as defined by EPA regulation, *id.* § 131.3(e), because they have been met on or after November 28, 1975. Utah’s new rule that designates beneficial uses for Great Salt Lake specifically articulates that salt evaporation ponds are **not** included in the geographic boundaries of each section of the Lake. Therefore, any parts of the Lake occupied by new evaporation reservoirs would, *de facto*, be excluded from these boundaries. As a result, these waters of the Lake would no longer have “designated” uses and would no longer support designated and existing uses. A 401 certification of the expansion proposal would therefore unlawfully downgrade substantial portions of the Lake from the current designated uses to no beneficial uses.

EPA regulation provides: “Prior to adding or removing any use ... the State shall provide notice and an opportunity for a public hearing under § 131.20(b) of this regulation.” *Id.* § 131.10(e). Moreover, the results of any such analysis must be submitted to EPA for review and approval, together with any accompanying use attainability analysis. *Id.* § 131.20(c). More important, even if the State were to act pursuant to the correct public process, EPA regulations would flatly prohibit the proposed downgrading because the designated uses being lost are existing uses: “States may not remove designated uses if: (1) They are existing uses, as defined in §131.3, unless a use requiring more stringent criteria is added[.]” *Id.* § 131.10(h). The State cannot accomplish through the backdoor of a section 401 certification what would be prohibited through the front door of a water quality standards revision conducted through the appropriate process. In any case, such a downgrade would plainly violate the Public Trust Doctrine.

VI. Mining Company’s Current and Proposed Discharges Cannot be Certified as Meeting Applicable Clean Water Act Permitting Requirements and Effluent Limitations.

The Mining Company’s discharges of bitterns and other wastes back into the Lake have not been shown to meet applicable Clean Water Act permitting requirements and effluent limitations. For a 401 certification, the Clean Water Act requires that “any certification provided under this section shall set forth effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with **any** applicable effluent limitations and other limitations.” 33 U.S.C.A. §1341(d) (emphasis added). While the 401 certification is for the proposed dredge and fill activities and discharges, Mining Company is also required to show that any other discharges resulting from proposed project, or current operations, also meet the Act’s permitting and effluent limitations requirements. The flushing process of bitterns and wastes into the Bear

River Bay from the evaporation reservoirs requires a UPDES permit and should be subject to all applicable technology-based and water quality-based effluent limitations. A 401 certification can therefore not be allowed until those UPDES requirements are met for the flushing process.

VII. Procedural Process at this Early Scoping Phase

This notice came early in the scoping phase. At this point there is insufficient information to allow the public to comment adequately on the water quality aspects of the project. Unless DWQ denies certification on purely legal grounds (as discussed above), an opportunity for additional comment should be provided at the Draft EIS stage when more information and analysis about the project and its impacts are made available.

In addition, absent an outright denial of certification, DWQ should state to the Army Corps that if DWQ plans to reserve judgment until later in the process, it is not implicitly waiving certification under the Army Corps permitting regulations. *See* 33 C.F.R. § 325.2(b)(ii).

VII. Conclusion

Wherefore, FRIENDS respectfully requests that DWQ refuse to certify the Mining Company Expansion Proposal because it does not meet federal and state water quality standards and because the plan otherwise fails to comply with applicable law and violations the Public Trust Doctrine. We also request that a public hearing be held while you consider the 401 certification and that we receive notice of these hearings.

/s/

JORO WALKER

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