Hat Island

WILDLIFE MANAGEMENT AREA



HABITAT MANAGEMENT PLAN



Prepared by: UTAH DIVISION OF WILDLIFE RESOURCES - NORTHERN REGION

EXECUTIVE SUMMARY

Hat Island Wildlife Management Area Habitat Management Plan January 2020

The habitat management plan for the Hat Island Wildlife Management Area (HIWMA) contains the following sections: background information (property description and location, encumbrances, land acquisition and management history, historic uses, purpose of ownership, and key wildlife species); property inventory (existing capital improvements, cultural resources, Species of Greatest Conservation Need, important habitats, habitat conditions and limitations, human use-related problems, and potential impacts from adjacent land uses); management goals and objectives; strategies for property management; strategies for habitat management; summary of proposed uses; and monitoring and evaluation. The appendices contain location maps of HIWMA, acquisition and legal documents, and species lists and distribution maps. This habitat management plan provides background information and management direction to Utah Division of Wildlife Resources personnel. Listed below is a short summary of important aspects of the habitat management plan for HIWMA.

Primary Purpose of Hat Island Wildlife Management Area

The primary purpose of the Hat Island Wildlife Management Area (HIWMA) is to preserve and protect Hat Island for wildlife use in perpetuity, particularly for colonial nesting species such as California gull, black-crowned night-heron, great blue heron, Caspian tern, and American white pelican. Any public use of HIWMA is expressly prohibited, including a one-mile buffer surrounding Hat Island from the shoreline at the lake elevation of 4,200 feet above mean sea level.

Property Location, Acquisition, and Encumbrances

The Hat Island Wildlife Management Area within Box Elder County, Utah lies between Carrington and Gilbert bays in the central part of Great Salt Lake. It is 22.07 acres approximately three miles north-northwest of Carrington Island and roughly 12 miles southwest of the southern tip of Promontory Point.

For the purpose of protecting nesting American white pelicans, the Pelican Management Act, enacted by the Utah legislature and signed into law by the governor in 1977, authorized the condemnation and purchase of Hat Island and Gunnison Island, which were privately held under mineral patent. The final court decree and purchase of the islands were completed in 1980. The decree allowed the previous owner to retain their subsurface mineral rights, but placed strict limits on where, when, and how the rights could be utilized. These rights have not been acted upon and could be considered expired in a court of law.

Wildlife Species

Hat Island is considered one of the more valuable colonial bird nesting sites in the state and is one of the largest (top six) California gull nesting colonies in North America. The island's isolation from predators and human disturbances, and its location on Great Salt Lake make it an ideal nesting location to several bird species that inhabit the area. Hat Island is crucial to maintaining a healthy and productive environment for these bird populations at Great Salt Lake and across their range.

Other bird species known to nest or have nested on the island in the past are Caspian tern, American white pelican, great blue heron, black-crowned night-heron, and prairie falcon. The area is home to two reptiles (Great Basin whiptail lizard and northern side-blotched lizard) and two mammals (North American deermouse and a subspecies of the chisel-toothed kangaroo rat). There are no springs or seeps on the island, so no fish, aquatic mollusks, or amphibians live on the island.

Capital Improvements

There is only one functional structure on the island, which is a weather station owned by the Utah Division of Wildlife Resources and maintained by the University of Utah. The structure is maintained on an annual or semiannual basis, and it is serviced when impacts to breeding California gulls and herons can be minimized.

Cultural Resources

Without any archaeological investigation, it is unclear the number or distribution of cultural resources on the island, but at the minimum, there are three possible historic-period sites and potential for other historic or prehistoric resources. There is a rock jetty on the southeast side of Hat Island and a rock-lined path extending from the jetty to the highest point of the island marked by a rock cairn holding up a wooden board.

Habitat Conditions/Problems

Some invasive plant species range over the island (e.g., cheatgrass brome and prickly Russian thistle), but they do not pose problems for nesting California gulls or herons, since plenty of space exists to accommodate all nesting birds.

The biggest threat to nesting birds and other wildlife at HIWMA are low water levels in Great Salt Lake. Great Salt Lake is a terminal lake with no outflow. Lake levels rise with inputs by precipitation, groundwater, and rivers; and lake levels fall with evaporation. Low water levels expose a land bridge to HIWMA from the south, where people and land-based predators can access the island. Coyotes have been documented on the island when the land bridge is exposed, but no major disturbance has been observed from occasional predator or human researcher visits.

Table of Contents

I. Background Information1	L
Property Description and Location	l
Encumbrances	3
Land Acquisition and Management History	3
Historic Uses	1
Purpose of Division Ownership	1
Federal Aid Grant	1
Key Wildlife Species Occurring on Hat Island Wildlife Management Area	5
Public Recreation Opportunities	5
Conservation Partners Involved in Acquisition	5
II. Property Inventory	5
Existing Capital Improvements	5
Cultural Resources	5
Species of Greatest Conservation Need	7
Important Fish and Wildlife Habitats	3
General Condition of Habitats)
Plant Community Species)
Habitat Limitations)
Human Use-Related Problems10)
Adjacent Land Uses and Potential Impacts10)
III. Management Goals and Objectives	L
Strategic Plan of the Utah Division of Wildlife Resources12	2
Utah Wildlife Action Plan	2
Great Salt Lake Comprehensive Management Plan and Mineral Leasing Plan	3
Great Salt Lake Drainage Management Plan14	1
Intermountain West Waterbird Conservation Plan14	1
IV. Strategies for Property Management	ł
Development Activities	1
Annual Maintenance Activities14	1
Compatibility of Proposed Uses with Local Government General Plans and Zoning and Land Use Ordinances	1
V. Strategies for Habitat Management	5
Unit Management Plans for Wildlife Species15	5

Habitat Improvement Plan	15
Access Management Plan	15
Fire Management Plan	15
Wood Products Plan	15
Livestock Grazing Plan	15
Other Plans	15
Compatibility of Proposed Plans with Local Government General Plans and Zoni Land Use Ordinances	
VI. Summary Statement of Proposed Uses	15
VII. Monitoring and Evaluation	15
VIII. Appendices	16
Appendix A – Maps	17
Appendix B – Legal Description and Encumbrances, Agreements, Enhancements Easements	·
Appendix C – Plants and Birds	
Appendix D – Literature Cited	

Hat Island Wildlife Management Area Habitat Management Plan

January 2020

I. Background Information

Property Description and Location

Hat Island Wildlife Management Area (HIWMA) is near the south-central border of Box Elder County, Utah and occurs in Great Salt Lake between Carrington Bay on the west and Gilbert Bay on the east. Specifically, HIWMA is found within Section 24, Township 4 North, Range 7 West, Salt Lake Base and Meridian. It is approximately 42 miles northwest of Salt Lake City and roughly 3.3 miles north of the Carrington Island (Appendix A). The name of Hat Island originates from the crew members of the Howard Stansbury expedition that surveyed GSL in 1849 and 1850 (Van Cott, 1990), but it has been also referred to as Bird Island (Rawley, 1976).

Hat Island covers 22.07 acres with a roughly eggshaped perimeter about two-thirds of a mile in length at an average lake elevation, and extending from its southern shore is a natural, sand spit nearly one-mile long (Figure 1). In profile reminiscent of a wide-brimmed hat, the island has a central, north-south rock outcrop that slopes down to the perimeter becoming more gradual toward the shore. The northwestern quadrant of the island has additional rock outcrops,



Figure 1. Hat Island Wildlife Management Area, Great Salt Lake, Utah. Aerial image taken looking south on May 29, 2019.

but the rest of the island is rather flat and covered in loose rocks. The bedrock is composed of metamorphic glacial deposits of Precambrian age. The slaty, black rocks look like a conglomerate with bits of quartzite and similar metaphoric rocks embedded inside (Stokes, 1980). It has a relief of 75 feet with a maximum elevation of 4,275 feet above sea level (Figure 2).

The island is considered one of the more valuable colonial bird nesting sites in the state and was historically home to an American white pelican (*Pelecanus erythrorhynchos*) colony. Hat Island's isolation from predators and human disturbances, and location on Great Salt Lake make it an ideal

nesting location to several bird species that inhabit the area. Hat Island is crucial to maintaining a healthy and productive environment for these bird populations at Great Salt Lake and across their range.



Figure 2. Map showing Hat Island Wildlife Management Area, Great Salt Lake, Utah. Selected cultural feature locations shown. A natural, sand spit extends south from the island. Aerial imagery from National Agriculture Imagery Program taken August 17, 2018 with a Great Salt Lake elevation of 4,193.0 feet above mean sea level.

The lakebed surrounding Hat Island WMA and below the Great Salt Lake meander line is sovereign land owned by the State of Utah and managed for the Public Trust by the Utah Division of Forestry, Fire and State Lands (Map 1, Appendix A; Trimmer and Kappe). The closest upland areas to Hat Island are a mix of private and federal ownership of Carrington Island to the south. The federal land is managed by the United States Bureau of Land Management.

Encumbrances

• <u>Mineral Rights</u>:

Prior private ownership of Hat Island by the Utah Fertilizer Company retained all mineral rights following the condemnation and sale of Hat Island by the State of Utah in the First District Court in and for Box Elder County on February 28, 1980, Civil Number 14375. The area was designated as Lot No. 4693 by the Surveyor General on April 29, 1902 and became a privately held mineral patent on October 10, 1903 owned by P. W. Madsen and Thomas R. Cutler. Their 'Birds Nest' placer mining claim was issued under the name of President Theodore Roosevelt. All lands lie within Section 24 of Township 4 North, Range 7 West, Salt Lake Base and Meridian (Appendix B).

The court decree says "in the event of a mineral discovery, it shall be obtained by off-shore slant drilling or mining." The decree sets strict limits on mineral extraction such as where, when, and how the mineral extraction activities can occur. Any island activity must be limited to "the south end of Hat Island." Activities can only take place from October 1st to February 28th. Additionally, bird life cannot be disturbed and any structures or equipment "shall be so erected or placed as to avoid disturbing the natural habitat of and migratory patterns of the bird life on said property, including camouflaging the same where necessary." A stipulation in the decree revokes the right "to remove oil and/or natural gas . . . after twenty (20) years from the date of the settlement" if discovery and extraction was not acted upon. These rights have not been acted upon since 1980 and could be considered expired in a court of law.

- <u>Water Rights/shares</u> No water rights were identified for HIWMA.
- <u>Easements/Rights-of-Way (ROW's)/MOU's</u>: Easements, rights-of-way, and memorandums of understanding do not currently exist.
- <u>Grazing</u>

Grazing on HIWMA is not allowed in order to protect colonial nesting California gulls and other wildlife from disturbance.

Land Acquisition and Management History

In 1977, Utah enacted the Pelican Management Act, Utah Code Annotated, Section 23-21a, which allowed for the condemnation and purchase of Hat Island and Gunnison Island for the purpose of protecting American white pelicans and designating the islands as wildlife management areas (Appendix B). The Act appropriated \$11,000 in non-lapsing funds for the appraisal and toward the purchase of the islands. On February 14, 1980, the Utah Legislature appropriated and approved another \$30,000 in non-lapsing funds for the final purchase of Hat and Gunnison islands by the Utah Division of Wildlife Resources (DWR). The purchase cost totaled \$39,239.50. After payment, the DWR was officially declared owner of Hat Island on February 28, 1980 by court decree, Civil Number 14375 in the First District Court in and for Box Elder County, Utah (Appendix B). An internal record of ownership of the islands by the DWR, based on the court decree, was submitted to the Utah Division of Forestry, Fire and State Lands on May 29, 1990 (Appendix B).

Although current ownership of Hat Island by the DWR followed the path described above, other history shows that Great Salt Lake, including Hat Island through a quirk in its surveyed boundaries, has always been "owned" by Utah ever since the time of statehood on January 4, 1896. This determination involved a decade long court case between the State of Utah and the United States Bureau of Land Management that finally ended on June 28, 1976 after several trips to the Supreme Court of the United States (1975; Appendix B). As a result of this case, the United States Bureau of Land Management was denied all claims of ownership to Great Salt Lake, and Utah reasserted ownership (Dewsnup and Jensen, 1980).

At the time of statehood, Utah obtained ownership of Great Salt Lake under the Equal Footing Doctrine, which gave States ownership of all navigable waterways and the land beneath them. The United States' official survey of Great Salt Lake determined the boundaries or meander line of the lake over 18 separate surveys from 1855 to 1966. Any water, lakebed, or unsurveyed land within the surveyed meander line was granted to Utah as sovereign land (Trimmer and Kappe, 2002). At the time of statehood, Hat Island was considered unsurveyed land within Great Salt Lake and considered state sovereign land. Only later was Hat Island surveyed and the final meander line placed around it.

Utah's dispute with the United States Bureau of Land Management arose when they wanted to designate the boundary of Great Salt Lake at its elevation at the time of statehood, which was 4,201.8 feet above mean sea level. The decrees from the Supreme Court of the United States ended the dispute, but Hat Island was privately held under mineral patent previously issued on October 10, 1903 by the United State Bureau of Land Management (see *Mineral Rights* in previous section for more details). As mentioned above, the Pelican Management Act started the process of ownership transfer to the DWR.

Historic Uses

During the mid-1890s into the early 1900s, guano sifters began collecting rich deposits of guano from the nesting California gulls (*Larus californicus*) and American white pelicans. The guano sifters eventually filed for and received a mineral patent from the United States Bureau of Land Management for Hat Island, thereby gaining ownership of the land. See previous section, Land Acquisition and Management History, for additional details on the patent. Sightseeing tours took place prior to the island being protected (Behle, 1935). Hat Island, along with two other locations around Great Salt Lake, were used as bombing practice by the United States Air Force in October 1940 ("Bombers 'Attack' Isles", 1940).

Purpose of Division Ownership

In 1977, Utah enacted the Pelican Management Act, Utah Code Annotated, Section 23-21a, which designated Gunnison and Hat islands "as wildlife management areas under jurisdiction of the Utah state Division of Wildlife Resources to be administered for the protection and perpetuation of the American white pelican" (Appendix B).

Federal Aid Grant None.

Key Wildlife Species Occurring on Hat Island Wildlife Management Area

A total of 14 avian species have been documented on Hat Island, and five of these species are known to have nested on Hat Island: California gull, Caspian tern (*Hydroprogne caspia*), American white pelican, great blue heron (*Ardea herodias*), black-crowned night-heron (*Nycticorax Nycticorax*), and prairie falcon (*Falco mexicanus*) (Appendix C; Behle, 1958). Hat Island is critical for these nesting birds.

Hat Island serves a vital role in the Great Salt Lake ecosystem by providing a safe haven for colonial nesting species susceptible to disturbance. Historically, American white pelicans have nested on the island with up to 8,000 adults, and they are listed as a Species of Greatest Conservation Need in the Wildlife Action Plan for Utah (Behle, 1958; Utah Wildlife Action Plan Joint Team, 2015). Pelicans are extremely susceptible to disturbance and will abandon their nests if human encroachment and activity becomes too close or frequent. When the artist and author Alfred Lambourne homesteaded on Gunnison Island (1895-1897), he noted that no pelicans nested on the island. Instead, they nested on Hat Island, presumably, due to his presence, other visitors, and the activities of guano collectors (Behle, 1958; Morgan, 1995).

Great Salt Lake is home to the largest concentration of breeding California gulls in the world. Several islands, including Hat, are important to this population. A 2010 survey of the large complex of California gulls nesting on Hat Island estimated around 20,000 breeding adults or approximately 17% of the total breeding population at Great Salt Lake. Hat Island is also one of the most secure sites over time for breeding California gulls. They have nested here during both the historic low and historic high lake elevations. Gilbert Bay is a Global IBA (Important Bird Area), a designation given by the National Audubon Society under the auspices of an initiative by BirdLife International, in part, because of the large population of nesting California gulls on HIWMA. An area qualifies as a Global IBA if it has more than 1% of the continental population of a species during the year or more than 5% during a season (Evans and Martinson, 2008). Caspian terns are historical nesters with up to 50 nests. Great blue herons and black-crowned night-herons are current nesters with 10-20 nests, but great blue herons historically had as many as 40 nests on Hat Island (Behle, 1958).

Two reptiles and four mammals are known to occur on the Hat Island Wildlife Management Area. Behle (1935) documented the Great Basin whiptail (*Aspidoscelis tigris tigris*), and Rawley (1976) observed the northern side-blotched lizard (*Uta stansburiana stansburiana*). The four mammals are the North American deermouse (*Peromyscus maniculatus sonoriensis*), a subspecies of the chisel-toothed kangaroo rat (*Dipodomys microps subtenuis*), house mouse (*Mus musculus*), though it likely came from a tourist vessel, and coyote (*Canis latrans lestes*) (Marshall, 1940; Setzer, 1949; Rawley, 1976; Hayssen, 1991). No fish or amphibians reside on the WMA or in the surrounding water due to the arid habitat, no freshwater, and the high salinity of lake water. Mollusks have not been described on the WMA.

Public Recreation Opportunities

Public recreation is not permitted on Hat Island or within one mile in any direction from the shoreline at the 4,200-foot mean sea level elevation. This restriction is year-round and detailed in DWR Administrative Rule: R657-15 – Closure of Gunnison, Cub and Hat Islands (Appendix B).

Conservation Partners Involved in Acquisition

Acquisition money for the purchase of Hat Island came from the Utah State Legislature. Lobbying for the purchase and protection of both Gunnison and Hat islands was from concerned citizens, researchers, and organizations like The Nature Conservancy and Utah Audubon Society (Knopf, 1975; Kijowski et al., 2020).

II. Property Inventory

Existing Capital Improvements

There are not any existing roads, fences, facilities, water rights, water developments, harbors or piers, or wood products on HIWMA. There is only one functional structure on the island, a weather station owned by the DWR and maintained by the University of Utah (Figure 3).

Cultural Resources

Known cultural resources (see Figure 2 for locations) include a handmade rock jetty (Figure 4) on the southeast side of the island with a path cleared of bordered bv and rocks extending from the jetty toward the peak of Hat Island for sightseers (Figure 5), a rock cairn supporting а wooden stake at highest point of Hat Island (Figure 3), and the metal remains of the 1940 test bombing (Bombers 'Attack' Isles. 1940). Remains of other historical objects may also be present,



Figure 3. Modern weather station located next to the highest point of Hat Island Wildlife Management Area, which is marked with a wooden stake supported by a rock cairn. Image taken looking west on October 21, 2020.



Figure 4. Handmade rock jetty on southeast side of Hat Island. Image taken looking west on October 21, 2020.

including remnants from Howard Stansbury's expedition of 1849 and 1850 to survey Great Salt Lake. On April 10, 1850, they visited Hat Island to erect a triangulation station (Stansbury, 1852). Historical photos and accounts show a shack likely constructed by sifters guano who began harvesting guano from nesting bird colonies in the mid-1890s and a wooden boat pier that no longer exists (Figure 6).

Species of Greatest Conservation Need

There are two wildlife species that have been known to occur on HIWMA and are considered a Species of Greatest Conservation Need as designated in the 2015-2025 Utah Wildlife Action Plan

(Table 1; Utah Wildlife Action Plan Joint Team, 2015). Neither species, pelican American white and Caspian tern, has recently occurred on HIWMA. Not since the midhave American 1900s white pelicans nested on HIWMA. The last year with known nesting was in 1943 (Behle, 1958; Lies and Behle, 1960). For Caspian terns, nesting was only known before 1920 (Behle, 1958). An additional two species on these lists (snowy plover and kit fox) may reside in the nearby mainland and could potentially migrate to or take up residence on the WMA given the habitat types present (Table 1).



Figure 5. Rock-cleared path located on the east side of Hat Island Wildlife Management Area, Great Salt Lake, Utah. Image taken looking southeast on October 21, 2020.

Pelicans are extremely susceptible to disturbance and will abandon their nests if human encroachment and activity become too close or frequent. Their sensitivity goes so far that even the



Figure 6. Possible guano sifters shack and wooden pier located on Hat Island Wildlife Management Area, Great Salt Lake, Utah. Image from Utah State Historical Society taken in 1921 on south side of island.

disruption of nesting substrate during the non-breeding season can cause colony abandonment. Tourist visits and the activities of guano collectors during the nesting season may have contributed to the abandonment of HIWMA by pelicans and terns; however, low lake elevations expose a land bridge to Hat Island and increase the chance of land-based disturbance by people or predators. A consistent period of time with lake elevations above 4,199 feet would provide sufficient protection against land-based disturbance and may encourage reestablishment of pelican and tern colonies.

Table 1. Species and potential species, given habitat present, on Hat Island Wildlife Management Area that are designated as Utah Species of Greatest Conservation Need. B--Known Breeder; P-Potential Breeder/Migrant.

Species	Scientific Name	Status
American White Pelican	Pelecanus erythrorhynchos	В
Caspian Tern	Hydroprogne caspia	В
Snowy Plover	Charadrius nivosus	Р
Kit Fox	Vulpes macrotis	Р

The Species of Greatest Conservation Need listed in Table 1 do not have specific management plans to guide their management. In the future, as species management plans are written and adopted by the Utah Wildlife Board, they may be implemented at HIWMA.

Important Fish and Wildlife Habitats

No fish habitat is present on HIWMA or in the surrounding water due to the high salt content of Gilbert and Carrington bays. The commercially profitable brine shrimp (*Artemia franciscana*) flourishes in this part of Great Salt Lake, and there is active harvest of brine shrimp cysts from the shore and lake during the harvest season from October 1st to January 31st each year. Harvesters are not permitted to be within 1-mile of HIWMA on land, water, or in air.

The island is devoid of any freshwater streams, seeps or springs. The remoteness and isolation of HIWMA, sparse vegetation, and gently sloping shores of the island provide important habitat for colonial nesting birds, such as black-crowned night-herons, great blue herons, and California gulls. The habitat on HIWMA is not considered a key terrestrial or aquatic habitat type as defined in the Utah Wildlife Action Plan.

Hat Island is remote enough to provide security, yet it is still within a reasonable distance of some of the food rich marshes and riverine environments along the Wasatch Mountains. These areas provide the herons and gulls with important foraging areas. Greasewood and other vegetation, rock outcrops, and driftwood provide shade for many of the young, flightless birds during the long and hot summer period.

Hat Island WMA has several features that accentuate its importance. It is isolated, fairly small, and not easily accessible by land. The relief of the island is enough that it still provides nesting habitat in high water years; however, at the lake elevations between 4,199 and 4,198 feet above mean sea level, a land-bridge develops allowing land-based predators and human disturbance to access the island (Baskin, 2005). Low lake conditions since 2002 have exposed the land-bridge, but high lake levels from 1982 to 2002 did not see the return of nesting pelicans and Caspian terms to Hat Island. Prior to 1982, lake elevations were low for 50 years with an exposed land-bridge to

Hat Island (United States Geological Survey, 2020).

General Condition of Habitats

Plant Community Species

The habitat on HIWMA is cold desert shrub (Figure 7, Figure 8, Figure 9, and Figure 10. Vegetative cover descriptions and species maps were last completed during the mid-1970s (Appendix C). The described species are forbs, grasses, and shrubs (Table 2).



Figure 7. Carrington Island in the distance and the sand spit seen from the highest point of Hat Island Wildlife Management Area. Image taken looking south on October 21, 2020.



Figure 8. Shrubs among the rock outcrops near the highest point of Hat Island Wildlife Management Area. Image taken looking north-northeast on June 22, 2010.



Figure 9. Nesting California gulls on Hat Island Wildlife Management Area. Image taken looking northwest on June 22, 2010.



Figure 10. Vegetation on the mudflat surrounding Hat Island Wildlife Management Area. Image taken looking northwest on June 22, 2010.

Habitat Limitations

In general, there are no major habitat concerns or problems at HIWMA. The island is isolated and relatively free from disturbance and habitat manipulation. Although there are several invasive or

non-native plants (e.g., cheatgrass brome and prickly Russian thistle), these species do not seem to interfere or limit the nesting areas for the herons and California gulls. If any habitat management techniques were to be needed, access and application of the treatments would be technically and fiscally challenging due to the remoteness of HIWMA. Access by all-terrain vehicles is only possible over the exposed land bridge when lake levels are below 4,198.5 feet above mean sea level.

Table 2. List of native, introduced (*), and undetermined (†) plants species (forbs, grasses, and shrubs) found on Hat Island Wildlife Management Area (Rawley, 1976; United States Department of Agriculture, 2020).

Grasses	Forbs (continued)
Cheatgrass brome (Bromus tectorum)*	Mountain tansymustard (Descurainia
	richardsonii)
<u>Shrubs</u>	Herb sophia (Descurainia sophia)*
Rubber rabbitbrush (Ericameria nauseosa)	Saltlover (Halogeton glomeratus)*
Greasewood (Sarcobatus vermiculatus)	Burningbush (Bassia scoparia)*
	Prickly lettuce (Lactuca serriola)*
<u>Forbs</u>	Nuttall's povertyweed (Monolepis nuttalliana)
Bristly fiddleneck (Amsinckia tessellata)	Alyssum evening primrose (Camissonia boothii)
Lambsquarters (Chenopodium album) [†]	Prickly Russian thistle (Salsola tragus)*
Western tansymustard (Descurainia pinnata)	Tall tumblemustard (Sisymbrium altissimum)*

Human Use-Related Problems

Hat Island WMA is off limits to the general public, so problems related to human use are restricted to official fieldwork and trespass. The remoteness of HIWMA limits access by humans either by boat or by land, so impacts are reduced. Access to the island by boat under low lake conditions is more difficult due to the extensive mudflat and shallow water surrounding the island along with the lack of a good landing location. Official fieldwork associated with monitoring the colonial nesting species typically requires 2-3 biologists on the ground or in a plane circling while taking pictures. Impacts to the colony are not significant during aerial surveys and are limited during ground surveys by conducting research in the morning when temperatures are cooler and keeping time spent on the island to a minimum. Annual maintenance of the weather station is done outside of the breeding season.

Adjacent Land Uses and Potential Impacts

There are no adjacent land use issues, since HIWMA is an island and surrounded by lakebed that is state sovereign land. There are no existing leases surrounding Hat Island. The surrounding lakebed is considered Class 3 by the Great Salt Lake Comprehensive Management plan meaning it is managed as "open for consideration of any use." Leasing of the land near Hat Island is not allowed for mineral extraction, but the brines may be used. Oil and gas leasing is allowed surrounding Hat Island, but surface occupancy is not allowed.

III. Management Goals and Objectives

Management Goals

- 1. Protect the existing resources, wildlife and habitat from unnecessary disturbances with an emphasis on colonial nesting birds.
- 2. Educate and inform the public about the Great Salt Lake ecosystem with an emphasis on the island and its value to colonial nesting birds in Utah and the continent.
- 3. Maintain and monitor the island's habitat and wildlife with special attention paid to mitigate against disturbance, abandonment, and mortality of colonial nesting species.

Management Objectives

- 1. Continue periodic California gull population surveys to monitor status and trends and cooperate with the continental conservation efforts by sharing these data for regional and continental roll-up of population data and trends.
- 2. Educate the public at large, lake industries, and other agencies as to the value of Hat Island and its role in the continental population of American white pelicans.

Property Management Objectives

- 1. Limit access on island to essential studies or surveys.
- 2. Maintain a 1-mile buffer zone and closure (R657-15) on and around the island that cannot be trespassed upon unless authorized by DWR as provided for by Rule R657-15-2 and Utah Code Annotated 23-21a-3.
- 3. Maintain a 1-mile "no fly zone" around the island that cannot be compromised unless otherwise authorized by DWR as provided for by Rule R657-15-2 and Utah Code Annotated 23-21a-3.
- 4. Provide access and cooperate with official personnel to maintain the weather station.
- 5. Protect and preserve archaeological and historical resources as compatible with wildlife management needs, and consult with the Utah State Historic Preservation Office on proposed undertakings pursuant to Utah Code Annotated 9-8-404.
- 6. Collaborate with State History to complete archaeological inventories and potential National Register of Historic Places nominations for identified resources.

Habitat Management Objectives

- 1. Monitor general habitat conditions during annual colonial nesting survey and other periodic visits to the island.
- 2. Update vegetation maps as needed.

Hat Island WMA management is based primarily upon the goals, objectives, and strategies of various plans summarized below.

Strategic Plan (2019) of the Utah Division of Wildlife Resources

The management of HIWMA has relevance to the following goals and objectives as outlined in the Strategic Plan of the DWR.

- <u>Constituency Goal</u>: Strengthen support for wildlife management by demonstrating the value and importance of wildlife to all Utahns.
 - *Objective* C5 *Improve our understanding of how the broader public views and values wildlife – and how it contributes to their quality of life – and take reasonable steps to address their needs, wishes and priorities.*
 - *Objective* C8 *Maintain and/or increase public understanding and political support for our agency and Utah's wildlife.*
 - <u>Resource Goal</u>: Conserve, enhance and actively manage Utah's protected wildlife populations.
 - *Objective R1 Increase, decrease or maintain wildlife populations, as needed, to meet the objectives in our management plans.*
 - *Objective R2 Maintain existing wildlife habitat and increase the quality of critical habitats and watersheds throughout the state.*
 - Objective R4 Decrease risks to species and their habitats through integrated implementation of the Wildlife Action Plan, species recovery plans, conservation agreements and other management plans (species, AIS, disease, etc.).
 - *Objective R5* Manage sensitive species populations to prevent them from being federally listed as threatened or endangered, and work to delist those species that are currently listed.

These goals and objectives will be accomplished by properly managing the vegetation, wildlife, and human components of HIWMA according to those strategies mentioned in the property and habitat management sections below. These sections detail property maintenance and development, wildlife species and habitat management, and access and fire management on the WMA.

Utah Wildlife Action Plan

The 2015-2025 edition of the Utah Wildlife Action Plan (WAP) was created with the express purpose and goal of managing native wildlife species and their habitats to help prevent listings under the Endangered Species Act. To help achieve this goal, the WAP provides a statewide approach for the partnership-based, coordinated planning and implementation of wildlife and habitat conservation practices. The WAP addresses the following elements:

- Conservation targets include species of greatest conservation need, and those species' key habitats; information about the status and distribution of these species; and information about the location and condition of these key habitats.
- Threats and limiting factors facing designated species and habitats and the research required to help managers more effectively address these problems. Threats are measured and prioritized on a statewide basis and based on how many targets they impact and how

severely the targets are impacted.

- Conservation actions required to abate the highest-priority threats and improve the supply of these limiting factors.
- Monitoring the status of these targets, and in particular the effectiveness of these actions.
- Approaches for including the public, partners, and stakeholders, in consideration of the mission and authority of partners.
- Provisions for coordinating the WAP with other natural resource management plans.

The HIWMA habitat management plan process is used to address wildlife species and habitats found on the WMA by explicitly including their needs in routine, novel, and emergency management activities. This aligns well with the intent of the WAP, which identifies specific management actions that can be taken to reduce priority threats to these species and habitats.

Great Salt Lake Comprehensive Management Plan and Mineral Leasing Plan

In order to more specifically articulate the Utah Department of Natural Resources (DNR) management objectives for the resources of Great Salt Lake, and to reconcile the diverse mandates of the seven divisions within DNR, the Great Salt Lake Planning Project was initiated. The DWR has authority for managing wildlife in, on and around Great Salt Lake, and participated in the development of both the Great Salt Lake Comprehensive Management Plan and the Mineral Leasing Plan (Utah Division of Forestry, Fire and State Lands, 2013a; Utah Division of Forestry, Fire and State Lands, 2013b). The Utah Division of Forestry, Fire and State Lands has been given authority (via Utah Code Annotated 65A-2; and Utah Administrative Code R652-90) to prepare and adopt comprehensive management plans for sovereign lands and resources, including Great Salt Lake, and was the lead agency in developing these plans.

There are several purposes of the Great Salt Lake Planning project:

- Establish unifying DNR management objectives and policies for Great Salt Lake trust resources.
- Coordinate the management, planning, and research activities of DNR divisions on Great Salt Lake.
- Improve coordination among DNR divisions, establish a decision-making proposal review and appeal process, resolve some issues between divisions, and improve management of the lake and its resources.
- Develop a sovereign land and resource management plan for the lake that balances multiple-uses and sustainability issues.
- Establish processes for plan implementation, monitoring, evaluation, and amendment.

The comprehensive management plan covers a wide range of elements of Great Salt Lake including information about the hydrology, chemistry, water quality, wetlands, air quality, climate, biology, ecosystem, land, minerals and hydrocarbons, recreation, tourism, paleontological and cultural resources, commercial and industrial use, agriculture, transportation, law enforcement, search and rescue, open space, critical lands, and visual resource management. It also developed a Great Salt Lake level matrix and lake level management strategies to help guide the timing of various management strategies to minimize impacts to trust resources.

The mineral leasing plan identifies the extractive resources found on, in, adjacent to or under Great Salt Lake. It further identifies critical wildlife habitat areas where habitat protection is the preferred option. One of the goals of this planning effort is to integrate mineral resource planning with other resources and resource planning efforts.

Although these plans do not classify sovereign land adjacent to Hat Island as protecting potential or existing resource preservation, there are no existing leases. Potential future leases for mineral extraction may only take lake brines. Oil and gas leases may not have any surface occupancy.

Great Salt Lake Drainage Management Plan

The DWR's Great Salt Lake Drainage Management Plan (Utah Division of Wildlife Resources, 2011) mainly describes and catalogs the aquatic resources of the many diverse habitats of Great Salt Lake and the surrounding wetlands, but it does briefly mention some terrestrial reptiles and the abundance of birds utilizing the resources of the lake. The plan also mentions major resource issues concerning Great Salt Lake: water use; habitat fragmentation and loss; pollution; land ownership; hunting and wildlife viewing; boating and sailing; camping, hiking, and off-highway vehicle use; industry; commercial lake use; and species of concern. Management objectives pertinent to the Hat Island Wildlife Management Area are listed below.

- Identify, monitor, and manage the avian resources utilizing Great Salt Lake throughout the whole year.
- Monitor populations of native aquatic species and reptiles.
- Coordinate all objective actions to reduce potential conflicts.

Intermountain West Waterbird Conservation Plan

The DWR is supportive of the Intermountain West Waterbird Conservation Plan and the state has benefitted from several Intermountain West Joint Venture projects, although no specific projects have been completed on HIWMA.

IV. Strategies for Property Management

Development Activities

• <u>Communication needs</u>: Communicate with law enforcement, brine shrimp harvesters, and the boating public to discuss ways to limit trespass by land, by water or by air within one mile of Hat Island.

Annual Maintenance Activities

• <u>Weather station</u>: Transport and assist personnel who conduct annual maintenance of the Hat Island weather station. Assure that California gulls and other nesting birds are not disturbed.

Compatibility of Proposed Uses with Local Government General Plans and Zoning and Land Use Ordinances

There are no known conflicts with existing local government general plans, zoning regulations or land use ordinances.

V. Strategies for Habitat Management

Unit Management Plans for Wildlife Species

There are no management plans for the individual species that utilize HIWMA.

Habitat Improvement Plan

Habitat improvements for HIWMA are not planned. If regular and cursory monitoring of the habitat notes significant changes worthy of attention (e.g., fire damage), then a plan will be developed to address the problem.

Access Management Plan

The general public is not permitted on HIWMA, so an access management plan has not been developed.

Fire Management Plan

Due to the remoteness of HIWMA a fire management plan has not been developed.

Wood Products Plan

The general public is not permitted on HIWMA, so a wood products plan has not been developed.

Livestock Grazing Plan

Livestock are not permitted on the property due to lack of forage quality and quantity, and lack of freshwater sources. A livestock grazing plan has not been developed.

Other Plans

Other plans have not been developed for HIWMA, since it receives very little use.

Compatibility of Proposed Plans with Local Government General Plans and Zoning and Land Use Ordinances

There are no known conflicts with existing local government general plans, zoning regulations or land use ordinances.

VI. Summary Statement of Proposed Uses

The primary purpose of HIWMA is to preserve and protect Hat Island in perpetuity for California gulls, black-crowned night-herons, great blue herons, other potential colonial nesting species (i.e., American white pelicans and Caspian terns), and other wildlife. Any public use of HIWMA, including a one-mile buffer surrounding Hat Island from the shoreline at the lake elevation of 4,200 feet above mean sea level, is expressly prohibited. Any authorized use is at the behest of the Program Manager for the Great Salt Lake Ecosystem Program or certified peace officers and emergency personnel acting under the direction of the DWR.

VII. Monitoring and Evaluation

Monitoring and evaluation is accomplished through cursory site assessments by land and by plane, colonial nesting surveys, and through general observations. The Program Manager for the Great Salt Lake Ecosystem Program is responsible for monitoring projects to ensure they meet all stated goals and objectives. Assistance will be required and requested, as needed, from other sections

within DWR and from divisions within the Utah Department of Natural Resources.

VIII. Appendices

Appendix A – Maps

- Great Salt Lake and Vicinity (Map 1)
- Land Ownership (Map 2)
- Master Title Plat (Map 3)

Appendix B – Legal Description and Encumbrances, Agreements, Enhancements, and Easements

- Supreme Court of the United States Decree, Utah v. United States, 427 U.S. 461
- Chapter 21a Pelican Management Act
- Utah First District Court Final Order of Condemnation, Civil No. 14375
- Utah Division of Wildlife Resources Land Acquisition Record
- Federal Land Status Historical Index Page for Township 4 North Range 7 West
- R657-15. Closure of Gunnison, Cub and Hat Islands

Appendix C – Plants and Birds

- Vegetative Map of Hat Island
- Bird List for Hat Island Wildlife Management Area

Appendix D – Literature Cited

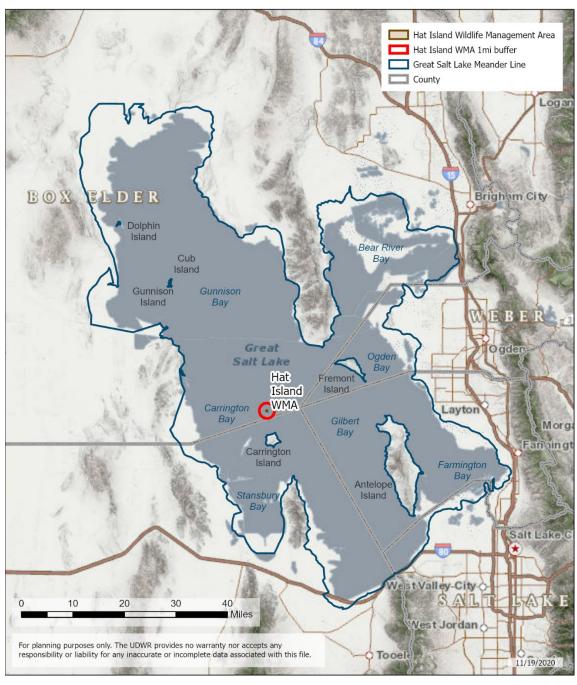
Appendix A – Maps

Ν

 \wedge



Hat Island Wildlife Management Area General Location



Map 1. Map showing Hat Island Wildlife Management Area within Great Salt Lake in northern Utah. Great Salt Lake extent shows an approximate long-term average elevation of 4,200 feet above mean sea level.



Map 2. Land ownership map of Hat Island Wildlife Management Area within Great Salt Lake, Utah. Aerial imagery from National Agriculture Imagery Program taken August 17, 2018 with a Great Salt Lake elevation of 4,193.0 feet above mean sea level.

STATUS OF PUBLIC DOMAIN

BOX ELDER COUNTY

INDEX TO SEGREGATED TRACTS RESURVEY CRIGINAL SURVEY TRACTING T R SEC SUBDIVISION +--+-· · · ·

FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENT F.ED LANDS WITHDRAWN FOR CLASSIFICATION WINRENLS, WATER AND/OR OTHER PUBLIC PURPOSES. REFER TO INDEX OF WISCELLANEOUS DOCUMENTS

Suprema Court Decree, 6/25/1076 Title passed to the State of Utch all lends lying below the récord meader line, except lands within the Bear River Migratory Refuge, where Basin Pederal Reclamation Project, and Hill Air Force Base.



Lat. Long.

.

Map 3. Master Title Plat for Hat Island, Great Salt Lake, Utah

5 M L T

GREAT

SCALE 10 20 30 30 chains to the

io 50 turnaturat

LAKE

Appendix B – Legal Description and Encumbrances, Agreements, Enhancements, and Easements

UTAH v. UNITED STATES

461

Decree

UTAH v. UNITED STATES

ON BILL OF COMPLAINT

No. 31, Orig. Decided February 19, 1975—Decree entered February 19, 1975—Further decree entered June 28, 1976

Further decree is entered.

Opinion reported: 403 U. S. 9; decree reported: 406 U. S. 484; per curiam and decree reported: 420 U. S. 304.

DECREE

IT IS ORDERED, ADJUDGED, AND DECREED THAT:

1. Taking into consideration Sections 1, 2, and 5 of the decree of this Court entered May 22, 1972, Utah v. United States, 406 U. S. 484, 485–486, Sections 1, 2, and 4 of the decree of this Court entered February 19, 1975, Utah v. United States, 420 U. S. 304, 305–306, and the further proceedings had herein pursuant to the decree of this Court entered February 19, 1975, Utah v. United States, 420 U. S. 304, and

2. Subject to any federal regulatory authority that may extend to the Great Salt Lake or its shorelands, the United States of America, its departments and agencies, are enjoined from asserting against the State of Utah any claim of right, title and interest:

(a) to any lands within the meander line of the Great Salt Lake (as duly surveyed prior to or in accordance with Section 1 of the Act of June 3, 1966, 80 Stat. 192), with the exception of any lands within the Bear River Migratory Bird Refuge, the Weber Basin Federal Reclamation Project, and the Hill Air Force Range (as bounded by water's edge June 15, 1967), the title to which last-named parcel is not decided by this decree;

(b) to the natural resources and living organisms in or beneath the lands delineated in (a) above; and

Decree

(c) to the natural resources and living organisms either within the waters of the Great Salt Lake, or extracted therefrom, as delineated in (a) above.

3. The State of Utah is not required to pay the United States for the lands, including the minerals, delineated in paragraph 2 above of this decree.

4. The prayer of the United States in its answer to the State of Utah's Complaint that this Court "confirm, declare and establish that the United States is the owner of all right, title and interest in all of the lands described in Section 2 of the Act of June 3, 1966, 80 Stat. 192, as amended by the Act of August 23, 1966, 80 Stat. 349, and that the State of Utah is without any right, title or interest in such lands, save for the right to have these lands conveyed to it by the United States, and to pay for them, in accordance with the provisions of the Act of June 3, 1966, as amended," is denied.*

MR. JUSTICE MARSHALL took no part in the consideration or decision of this decree.

^{*}When "lands" appears in this decree to describe the interests involved, the word is used to include the brines and minerals in solution in the brines or precipitated or extracted therefrom.

Chapter 21a Pelican Management Act

23-21a-1 Short title.

This act shall be known and may be cited as the "Pelican Management Act."

Enacted by Chapter 103, 1977 General Session

23-21a-2 Legislative findings and policy.

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.

Enacted by Chapter 103, 1977 General Session

23-21a-3 State to condemn and purchase islands in Great Salt Lake -- Protection of American white pelican.

This act proposes to implement the policy set forth in Section 23-21a-2 by initiating the condemnation and purchase of the 163-acre Gunnison Island and the 22-acre Hat (Bird) Island in the Great Salt Lake situated in Box Elder County in the state of Utah, to be designated as wildlife management areas under jurisdiction of the Utah state Division of Wildlife Resources to be administered for the protection and perpetuation of the American white pelican.

Enacted by Chapter 103, 1977 General Session

23-21a-4 Payment of fair market value to landowners -- Impartial appraisal.

The state of Utah, through condemnation, will pay to the landowners a sum equal to the fair market value, as determined by impartial appraisal, for their right, title and interest in and to the surface of said lands.

Enacted by Chapter 103, 1977 General Session

23-21a-5 Mineral rights retained by landowners -- Oil discovery.

The landowners will retain the mineral rights to said lands and in the event of oil discovery, it shall be obtained by off-shore slant drilling.

Enacted by Chapter 103, 1977 General Session

23-21a-6 Nonlapsing appropriation for appraisal and purchase.

There is appropriated from the General Fund to the Division of Wildlife Resources the sum of \$11,000 for appraisal and purchase of the lands designated in Section 23-21a-3. This appropriation shall be non-lapsing.

Enacted by Chapter 103, 1977 General Session

BOOK 329PAGE 311

STEPHEN C. WARD Assistant Attorney General 115 State Capitol Salt Lake City, Utah 84114 Telephone: 533-6684 Telephone: 543-77777777777777777777777777777777

IN THE FIRST DISTRICT COURT IN AND FOR BOX ELDER COUNTY

STATE OF UTAH

STATE OF UTAH, DEPARTMENT		
OF NATURAL RESOURCES,		
DIVISION OF WILDLIFE	2	
RESOURCES,		
Plaintiff,	3 2 3	FINAL ORDER OF CONDEMNATION
-vs-	:	
		Civil No. 14375
UTAH FERTILIZER COMPANY,		
a Utah Corporation; REED		
and KATHERYN BULLEN;		
LEONE H. GURR; and		TOTAL PAYMENT: \$39,239.50
MAXINE AHLEEN,		
Defendants.		

It appearing to the Court and the Court now finds that heretofore, on the 5th day of February, 1980, this Court made and entered its Judgment on Stipulation in the above entitled proceeding, and said Judgment is hereby referred to; and

It appearing to the Court and the Court now finds that pursuant to the law and the said Judgment, the plaintiff did pay said Judgment to the defendants, Utah Fertilizer Company, a Utah Corporation, Reed and Katheryn Bullen, Leone H. Gurr, and Maxine Ahleen, together with all interest required by said Judgment to be paid; and

It further appearing to the Court that the plaintiff has made all payments as required by law and order of this Court, and that this is not a case where any bond was required to be given, and all and singular the law in the premises being given by the Court understood and fully considered,

IT IS, THEREFORE, ORDERED, ADJUDGED AND DECREDD that the parcels of land hereinafter described are hereby taken and condemned in fee simple title as to Parcels No. 1, 2, 3, 4 for

~ 24 ~

BOOK 329PAGE 312

the purpose described and set forth in the plaintiff's complaint, i.e., for the use of the plaintiff, State of Utah, Department of Natural Resources, Division of Wildlife Resources for wildlife management areas.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that said use is a public use and a use authorized by law.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that a copy of this Final Order of Condemnation be filed with the County Recorder of Box Elder County, State of Utah, and thereupon the property interests hereinafter referred to and set forth shall vest in fee simple title as to Parcels No. 1, 2, 3, 4, in the plaintiff. The following is a description of the property so ordered and condemned as hereinabove provided, which is hereby vested in fee simple title as to Parcel Nos. 1, 2, 3, 4, in the plaintiff, all of such property being situated in Box Elder County, State of Utah, and is more particularly described as follows:

Parcel No. 1:

GUNNISON ISLAND

That land designated as lots numbered three, four, five, six and seven of section ten, Township 7 North, Range 9 West of the Salt Lake Meridian, in the County of Box Elder and State of Utah, containing 76.81 acres (recorded owner: Utah Fertilizer Company).

Parcel 2:

That land designated as lots numbered one, two, three, and four of section fifteen, Township 7 North, Range 9 West of the Salt Lake Meridian, in the County of Box Elder and State of Utah, containing 69.61 acres (recorded owner: Reed Bullen).

Parcel No. 3:

That land designated as lot number one of section sixteen, Township 7 North, Range 9 West of the Salt Lake Meridian, in the County of Box Elder and State of Utah, containing 7.10 acres (recorded owners: Leone H. Gurr and Maxine Ahleen).

Parcel No. 4:

HAT (BIRD) ISLAND

That land designated on April 29, 1902 by the Surveyor General as Lot No. 4693, known as Birds Nest placer mining claim and embracing a portion of the unsurveyed public domain in the Mining District in the County of Box Elder and State of Utah in the District of Land subject to sale at Salt Lake City and bounded described and platted as follows: with magnetic variation 17°29' East beginning at corner No. 1 from which U.S. location monument No. 1 bears North 54°24' West, 762 feet distant; thence first course North 16°11' West 458.9 feet to corner No. 2; thence second course North 33°51' West 358.3 feet to corner No. 3; thence third course North 54°20' West 348.2 feet to corner No. 4; thence fourth course South 88°46' West 180.1 feet to corner No. 5; thence fifth course South 52°5' West 276.7 feet to corner No. 6; thence sixth course South 52°5' West 277.5 feet to corner No. 7; thence seventh course South 8°27' East 617.7 feet to corner No. 8; thence eighth course, South 61° East 436.6 feet to corner No. 10; then tenth course, North 86°58' East 366.2 feet to corner No. 10; then tenth course, North 47°2' East 358.1 feet to corner No. 1 the place of beginning. Being in Township 4 North, Range 7 West of the Salt Lake Meridian, in the County of Box Elder and State of Utah, containing 22.07 acres (recorded owner: Utah Fertilizer Company).

The landowners of both islands will retain the mineral rights to said land, and in the event of a mineral discovery, it shall be obtained by off-shore slant drilling or mining. The minerals operation can in no way disturb the surface of the two islands, subject to the following exception:

The present owners of the property, their assigns and lessees will be permitted to remove oil and/or natural gas from the two islands under the following terms and conditions:

> (a) All activities on the islands will take place between January 1 to February 28 and October 1 to December 31 of any given year;

(b) The right to remove oil and/or natural gas from the property in question shall cease after twenty (20) years from the date of the settlement unless oil and/or natural gas has been discovered and is being commercially removed from the property, in which case that activity may continue for such period of time until the removal of said oil and/or natural gas ceases. However, when it is no longer commercially feasible to remove either oil or gas from the islands, the owners shall remove at their own expense any improvements they may have put on the islands;

(c) The right to conduct activities on the islands shall include the right of constructing and maintaining all necessary drilling and exploration equipment, and erection of all necessary dock and access facilities, and the performance of any and all other activities normally associated with exploring for, drilling of, and removal of oil and/or natural gas;

(d) Any equipment, roads, docks, storage tanks and the like which is constructed or placed upon said propperty shall be so erected or placed as to avoid disturbing the natural habitat of and migratory patterns of the bird life on said property, including camouflaging the same where necessary; (e) All pumping and removal of oil and/or gas shall occur only during January 1 to February 28 and October 1 to December 31 periods;

(f) The exploration, storage, pumping and drilling activities will be limited to Lot No. 1 of Section 16 and Lot Nos. 3 and 4 of Section 15, Township 7 North, Range 9 West of the Salt Lake Base and Meridian of Gunnison Island and the south end of Hat Island, except that insofar as it would not disturb the existing bird life on the said islands and subject to the ap-proval of the State of Utah, Division of Wildlife Resources, exploration, drilling and storage may be conducted on other parts of Gunnison Island or Hat (Bird) Island.

DATED this _28th day of thruany _, 1980. BY THE COURT:

/S/ Ve Noy Christoffersen

DISTRICT JUDGE

FIRST JUDICIAL DISTRICT STATE OF UTAH BOW FLDER COUNTY BOW ELDER COUNTY I, the undersigned Clerk of the First Dietrict Court for the Sittle of Ulah, do hereby cently that the annexed and foregoing is a troe, and his oppy of an original document on the in my office as said Clerk. Witness my hogd, and the asai of seid Court With 21 of Statistical and the asai of seid Court Witness My hogd, and the asai of seid Court Not My hogd, and the asai of seid Court Not My hogd, and the asai of seid Court Witness My hogd, and the asai of seid Court Not My hogd, and the asai of seid Court My hogd, and the asai of seid Cou

ABTO IN BOOK a or lice man 4" A of See jug 386-C of Lice jug 47/2 16 of Lice jug 69 V Index-

/ · · ·		
		ERESTS IN LAND
م ک	CQUIRED OR DISPOSE	D OF BY STATE AGENCIES
Instructions: 1. This form not required for la May 10, 1955. 2. Please type. 3. Complete a separate form 4. Submit this form each tim disposes of land.	for each land parce!	 5. Additional forms available from Division of State I and Forestry at above address. 6. Complete form in duplicate and return both cop Division of State Lands and Forestry. 7. If land fails in two countles, complete form in trip and return all copies.
	2	
Agency NATURAL E	RESOURCES	
County in which land is locate	ed BOX ELDER	
Date land 🗋 acquired 📋	disposed ofFEBRUARY_	28, 1980
Name of 🗌 grantar or lesso	r 🗌 grantee or lesseeCOUR	T ORDER
UTAH FERTILIZER COMPANY	, REED & KATHERYN BULLEN,	LEONE H. GURR, MAXINE AHLEEN
Address		
		State UTAH Zip
		of Interest
		Temple, Salt Lake City, Utah 84116
	Boulces, 1970 West Holen	
		5
Land Interest: [] fee simple		license 🗌 other
Lond description (Continue of HAT (BIRD) ISLAND Parcel No. 4: That la known as Birds Nest pla the Mining District in to sale at Salt Lake C: 17°29' East beginning a West, 762 feet distant second course North 33' 348.2 feet to corner Ne thence eighth course 86°58' East 366.2 feet No. 1 the place of beg: Utah Fertilizer Company discovery, it shall be	and designated on April 29 acer mining claim and embr the County of Box Elder a try and bounded described at corner No. 1 from which thence first course Nort '51' West 358.3 feet to co . 4; thence fourth course tht 52°5' West 276.7 feet her No. 7; thence seventh e, South 61° East 436.6 fe to corner No. 10; then te inning. Being in T4N, R7W will retain the mineral obtained by off-shore sla	5
Land description (Continue of Parcel No. 4: That la known as Birds Nest pla the Mining District in to sale at Salt Lake C 17°29' East beginning a West, 762 feet distant second course North 33' 348.2 feet to corner Ne thence fifth course Soo West 227.5 feet to corn 8; thence eighth course 86°58' East 366.2 feet No. 1 the place of beg: Utah Fertilizer Company discovery, it shall be	and designated on April 29 acer mining claim and embr the County of Box Elder a lty and bounded described at corner No. 1 from which thence first course Nort 51' West 358.3 feet to co 0.4; thence fourth course with 52°5' West 276.7 feet her No. 7; thence seventh a, South 61° East 436.6 fe to corner No. 10; then te inning. Being in T4N, R7W will retain the mineral obtained by off-shore sla surface of the island, sub	Incense other
Land description (Continue of HAT (BIRD) ISLAND Parcel No. 4: That la known as Birds Nest plu the Mining District in to sale at Salt Lake Gi 17°29' East beginning a West, 762 feet distant second course North 33' 348.2 feet to corner No thence fifth course Soo West 227.5 feet to corn 8; thence eighth courses 86°58' East 366.2 feet No. 1 the place of begi Utah Fertilizer Company discovery, it shall be in no way disturb the s	and designated on April 29 acer mining claim and embr the County of Box Elder a lty and bounded described at corner No. 1 from which thence first course Nort 51' West 358.3 feet to co 0.4; thence fourth course with 52°5' West 276.7 feet her No. 7; thence seventh a, South 61° East 436.6 fe to corner No. 10; then te inning. Being in T4N, R7W will retain the mineral obtained by off-shore sla surface of the island, sub	Itcense other
Land description (Continue of Parcel No. 4: That la known as Birds Nest pla the Mining District in to sale at Salt Lake Ci 17°29' East beginning a West, 762 feet distant, second course North 33' 348.2 feet to corner Ne thence fifth course Soo West 227.5 feet to corn 8; thence eighth course 86°58' East 366.2 feet No. 1 the place of begi Utah Fertilizer Company discovery, it shall be in no way disturb the s	and designated on April 29 acer mining claim and embr the County of Box Elder a lty and bounded described at corner No. 1 from which thence first course Nort 51' West 358.3 feet to co o. 4; thence fourth course with 52°5' West 276.7 feet her No. 7; thence seventh a, South 61° East 436.6 feet to corner No. 10; then te inning. Being in T4N, R7W will retain the mineral obtained by off-shore sla surface of the island, sub rd: ADMINISTRATIVE	Itcense other

SECTION OR TRACT	a 1	γ.		1			SU	BOIVIS	ION		ACRES	KIND OF ENTRY PURPOSE OF ORDER	SERIAL FILE	DATE OF ACTION		AN, UTAH
	NE	1/4	NA	1 1/4	5	*/4	8	E 1/4 NV SV SE	LOTS	OTHER DESCRIPTION			ORDER NUMBER		DATE	
	IE NW	EW SI	Par lour		T T					FFECTING DISPOSAL OR USE	OF UNIDENTIF	ED LANDS WITHORAWN FOR CLASSIFI	CATION, MINERALS, W	TER, AND/OF O	THER PUBLIC P	UFPOSES, REFER TO INDEX OF MISCELLANEOUS COCUNENTS
		Ħ	H		Ħ	tt	Ħ			All Secs. 16 5 36	1	Territorial Grant	Act of Cong.	1/21/1855	1	Title to fix on approval of survey; subj. to prior rights
										All Secs. 2,16,32 \$ 36		\$i	Act of Cong.	1/16/1894		Title to fix on approval of survey; subj. to prior rights
MSĄ									HS-4693	10 July 10 July 10	22.07	M: Pat.	37225	10/10/1903	1 A 1	WC-3141
·										All Secs. 2, 15,32 5 36	1 <u>8</u> 1	Si Amends Act 7/16/1894	Act of Cang.	1/25/1927	(1 + 1)	Extends Act 7/16/1894 to Min. lands; subj. tr prior rights
25	-								HSB		22.070	zi will: wildlife seruge	5349	5/18/1930		Avi, 60 5515. 12/15/1550
25									HCB ·		22, 070	Et Row, Udl, Utidiife Refuge	5515	12/15/1930		
	AU 1	ands	elow	record	man	ser Li	10 31		alt Lake			PL) adl of minorels	4474	7/2/1968	•	from appropriation under the public land and mining laws, not nin leasing laws. U 6866, Udo nin other than briess and min in solution or extracted from brings
				1	11					· · · · · · · · · · · · · · · · · · ·					1 1 1 1 1 1	
						1.1			*		1.1				· · ·	
			1		11	++					1.1	and the second second				
			1		11		+		· · ·							
						11	+				· · · ·					
-	-			1	\square	11	+ +	-++-							1.1.1	
			Ľ.	1	++	14	+	-	· · · ·					4		
					++	1	++				· · · · ·					
-	-			1		++		++	· · · · ·		1.1.1			1.1.1	1.1.1.1	
-	-		11	*	++	-	+		· ·							
-	1	-			++	+++	+	-	1		1.1.1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
·			1	11	++			-								
	-	-	·		-	-			5. 1 . L							
	-	-		1.1	++	-	+								9	
-		++-	++			+							1	1.		
-	÷		H	++-	-	+ +		++				1				
-	-		-	++-	+	++							1			
- 1		H						++							1.00	
	1	+	1		Ħ	11							24. 1 10			
-	-	-	H	+	Ħ	++		-							N. 1. 1.	
	+		H.		++						1					
			H	++	+	++	-	-					· · · ·			
(1	ř-	H		+				. 119		1				1	
-	+				+					1			1		1.1.1	
-	1	Ĺ.	H	tt	+	11						and the state of the second	· · · · · · · · · · · · ·		2.1	
			\uparrow	11	11	11					1.1.1	the state of the s		· · · · ·		
			$\uparrow \uparrow$		$\uparrow \uparrow$										1. Sec. 1.	
				1					·		1					
			1							1	1997 - 19				1. 1.	
	1	۶.										· · · · · · · · · · · · · · · · · · ·				
	,î Î								1						1. 1. 1. 1.	
						-			1. 1. 1			and the second	1		1.2.2.2	
											·	en en la companya de	12111		12 2	
								1								
÷.,				1							1 · · · · · ·		2		1.1	
											11.0				star-1	
				· · ·											1. 1. 1.	
-	-							1		5			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	1							-								
							~ 1	1		1			1.1.1.1.1.		1.2	
1.1	1		T	I					- 18 - 19 - 1				1.1.1	1.1.1.		
				1.1.								· · · · · · · · · · · · · · · · ·	-		Same -	
				11			1		1 12 1					11 1 1 1 1 N	1.1.1.1.1.1.1	- '이는 '에'에 가지 않는 것이 같은 것이 가지 않는 것이 가지 않는 것이 가지 않는 것을 했다.

R657. Natural Resources, Wildlife Resources.

R657-15. Closure of Gunnison, Cub and Hat Islands.

R657-15-1. Purpose and Authority.

Under authority of Section 23-21a-3, this rule provides for the management of Gunnison, Cub, and Hat islands for the protection and perpetuation of the American white pelican, *Pelacanus erythrorhynchos*, and other avian species.

R657-15-2. Closed Areas.

(1) The following areas are closed to air, water, and land trespass as a conservation measure to protect colonial bird nesting areas:

(a) Gunnison and Cub islands, located in Sections 9, 10, 15 and 16, Township 7 North, Range 9 West, Salt Lake Base and Meridian; and

(b) Hat Island, located in Section 24, Township 4 North, Range 7 West, Salt Lake Base and Meridian.

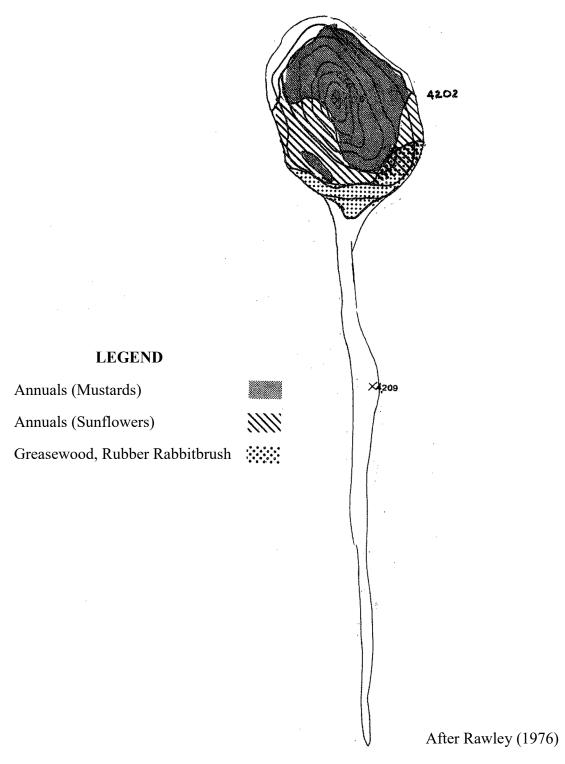
(2) This closure encompasses all of Gunnison, Cub, and Hat islands and the surrounding waters and beaches of the Great Salt Lake one mile in every direction from the 4200-foot mean sea level elevation shoreline of Gunnison, Cub, and Hat islands.

(3) The provisions of this rule do not apply to division personnel while performing their official duties, or to certified peace officers and emergency personnel acting under their direction when engaged in exigent law enforcement activities or emergency rescue operations.

KEY: wildlife, birds, conservation, wildlife management **Date of Enactment or Last Substantive Amendment:** July 5, 2005 **Notice of Continuation:** March 3, 2015 **Authorizing, and implemented or Interpreted Law:** 23-21a-3

Appendix C – Plants and Birds

Vegetative Map of Hat Island



Bird List for Hat Island Wildlife Management Area

Taxonomic list (Order, Family, Common Name and Scientific Name) of 15 bird species found on Hat Island as reported by Palmer (1916), Behle (1958), Rawley (1976), and subsequent visits by the Utah Division of Wildlife Resources. Underlined species (6) are known to have nested on the islands. The one species preceded by an asterisk (*) was documented on the island since Behle (1958) and Rawley (1976).

CHARADRIIFORMES

Charadriidae (Plovers & Lapwings) Killdeer, Charadrius vociferus Scolopacidae (Sandpipers and Allies) Sanderling, Calidris alba Laridae (Gulls, Terns, and Skimmers) <u>California Gull, Larus californicus</u> <u>Caspian Tern, Hydroprogne caspia</u>

PELECANIFORMES

Pelecanidae (Pelicans) <u>American White Pelican, Pelecanus</u> erythrorhynchos Ardeidae (Herons, Egrets, and Bitterns) <u>Great Blue Heron, Ardea herodias</u> <u>*Black-crowned Night-Heron, Nycticorax nycticorax</u>

FALCONIFORMES

Falconidae (Falcons and Caracaras) Prairie Falcon, *Falco mexicanus*

PASSERIFORMES

Tyrannidae (Tyrant Flycatchers) Western Wood-Pewee, Contopus sordidulus Alaudidae (Larks) Horned Lark, Eremophila alpestris Troglodytidae (Wrens) Rock Wren, Salpinctes obsoletus Passerellidae (New World Sparrows) Brewer's Sparrow, Spizella breweri Green-tailed Towhee, Pipilo chlorurus Parulidae (New World Warblers) Yellow Warbler, Setophaga petechia

Appendix D – Literature Cited

- Baskin, R. L. 2005. Calculation of area and volume for the south part of Great Salt Lake, Utah. U.S. Geological Survey Open-File Report 2005–2894. Accessed 9/21/2020 at <u>https://pubs.usgs.gov/of/2005/2894/</u>.
- Behle, W.H. 1935. A history of the bird colonies of the Great Salt Lake with map. The Condor 37: 24-35.
- Behle, W.H. 1958. The bird life of the Great Salt Lake. Univ. Utah Press, Salt Lake City. 230 pp.
- Bombers 'Attack' Isles in Great Salt Lake in War Games Monday. 1940, October 17. Springville Herald, p. 2.
- Dewsnup, R.L. and D.W. Jensen. 1980. Legal battles over ownership of the Great Salt Lake *in* Gwynn, J.W., editor. Great Salt Lake: a scientific, historical, and economic overview. Utah Geological and Mineral Survey Bulletin 116, p. 15-18.
- Evans, K. and W. Martinson. 2008. Utah's featured birds and viewing sites: a conservation platform for IBAs and BHCAs. Sun Lithio, Salt Lake City, Utah.
- Hayssen, V. 1991. Dipodomys microps. Mammalian Species 389: 1-9.
- Kijowski, A.K., J. Neill, A. Wickline, J. Swift, J.K. Butler, D.A. Kimberly, J. VanLeeuwen, J. Luft, and K. Stone. 2020. American white pelicans of Gunnison Island. In: Baxter, B.K. and J.K. Butler (eds) Great Salt Lake biology: a terminal lake in a time of change. Springer, Cham
- Knopf, F.L. 1975. Spatial and temporal aspects of colonial nesting of the white pelican (*Pelecanus erythrorhynchos*). Ph.D. Dissertation. Utah State University, Logan, pp 1–86
- Lies, M. F. and W. H. Behle. 1966. Status of the white pelican in the United States and Canada through 1964. The Condor 68: 279-292.
- Marshall, W.H. 1940. A survey of the mammals of the islands in Great Salt Lake, Utah. Journal of Mammalogy 21: 144-159.
- Morgan, D.L. 1995. The Great Salt Lake. Salt Lake City, UT: Scribner.
- Palmer, R.H. 1916. A visit to Hat and Egg Islands, Great Salt Lake. Condor 18: 113-123.
- Rawley, E.V. 1976. Small islands of the Great Salt Lake. Publication Number 76-19. Utah Division of Wildlife Resources, Salt Lake City. 109 pp.
- Setzer, H.W. 1949. Subspeciation in the Kangaroo Rat, *Dipodomys ordii*. University of Kansas Publications, Museum of Natural History 1: 473-573.
- Stansbury, H. 1852. Exploration and survey of the valley of the Great Salt Lake of Utah, including a reconnaissance of a new route through the Rocky Mountains. Philadelphia, PA: Lippincott, Grambo & Co.
- Stokes, W.L. 1980. Geologic setting of Great Salt Lake *in* Gwynn, J. W., editor. Great Salt Lake: a scientific, historical and economic overview. Utah Geological and Mineral Survey Bulletin 116, p. 55-68.
- Supreme Court Of The United States. 1975. U.S. Reports: Utah v. United States, 427 U.S. 461. [Periodical] Retrieved from the Library of Congress, https://www.loc.gov/item/usrep427461/.
- Trimmer, E. and K. Kappe. 2002. History of state ownership, resource development, and management of Great Salt Lake *in* Gwynn, J. W., ed. Great Salt Lake: an overview of change. Utah Department of Natural Resources Special Publication, p. 523-540.

- United States Geological Survey. 2020. USGS surface-water daily data for the nation. Accessed 9/21/2020 at <u>https://waterdata.usgs.gov/nwis/dv?referred_module=sw&site_no=</u> 10010000.
- United States Department of Agriculture. 2020. The PLANTS Database. Accessed 9/22/2020 at <u>http://plants.usda.gov</u>.
- Utah Division of Forestry, Fire and State Lands. 2013a. Final Great Salt Lake comprehensive management plan and record of decision. Utah Division of Forestry, Fire and State Lands, Salt Lake City. 391 pp.
- Utah Division of Forestry, Fire and State Lands. 2013b. Final Great Salt Lake mineral leasing plan and record of decision. Utah Division of Forestry, Fire and State Lands, Salt Lake City. 105 pp.
- Utah Division of Wildlife Resources. 2011. Great Salt Lake drainage management plan: hydrologic unit 16020310. Publication Number 11-11. Utah Division of Wildlife Resources, Salt Lake City. 80 pp.
- Utah Wildlife Action Plan Joint Team. 2015. Utah wildlife action plan: a plan for managing native wildlife species and their habitats to help prevent listings under the Endangered Species Act. Publication Number 15-14. Utah Division of Wildlife Resources, Salt Lake City. 374 pp.
- Van Cott, J.W. 1990. Utah place names. University of Utah Press, Salt Lake City. 453 pp.