

Avian Importance – Great Salt Lake Ecosystem



Great Salt Lake Advisory Council

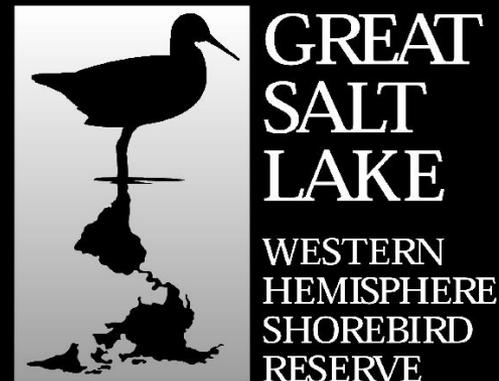
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Western Hemisphere Shorebird Reserve Network

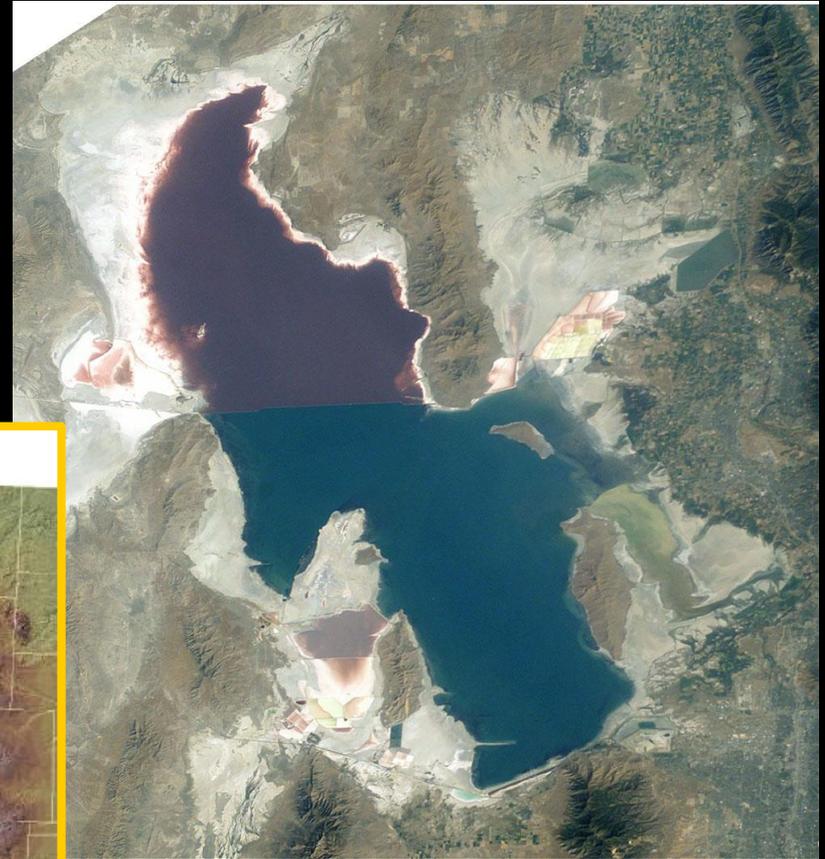
- Hemispheric Site
 - ◆ 30% of a species population or
 - ◆ 500,000 birds in migration
- GSL qualifies with one species...

Wilson's Phalaropes

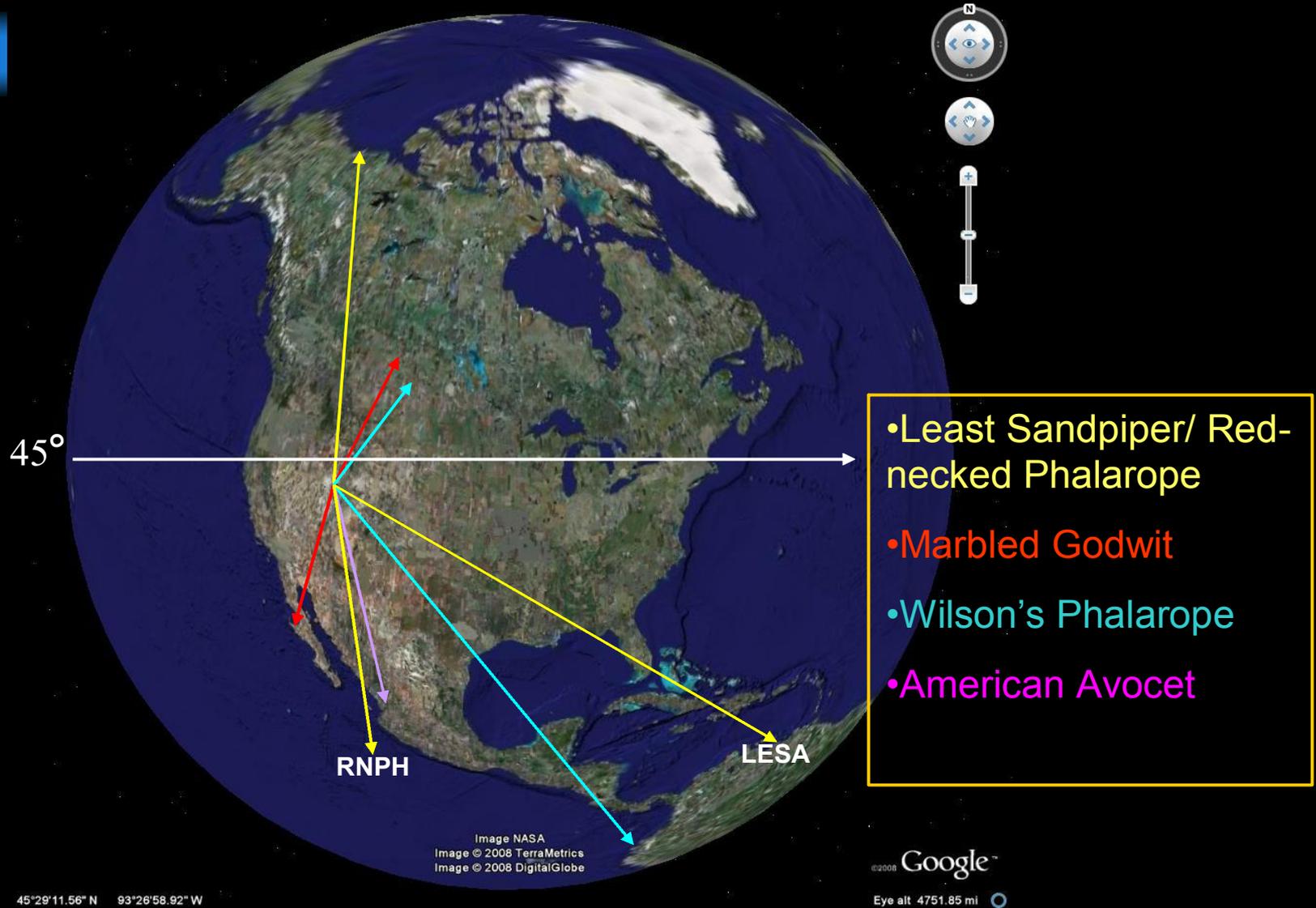


Why is GSL so important to birds?

- Setting
- Landscape
- Ecology

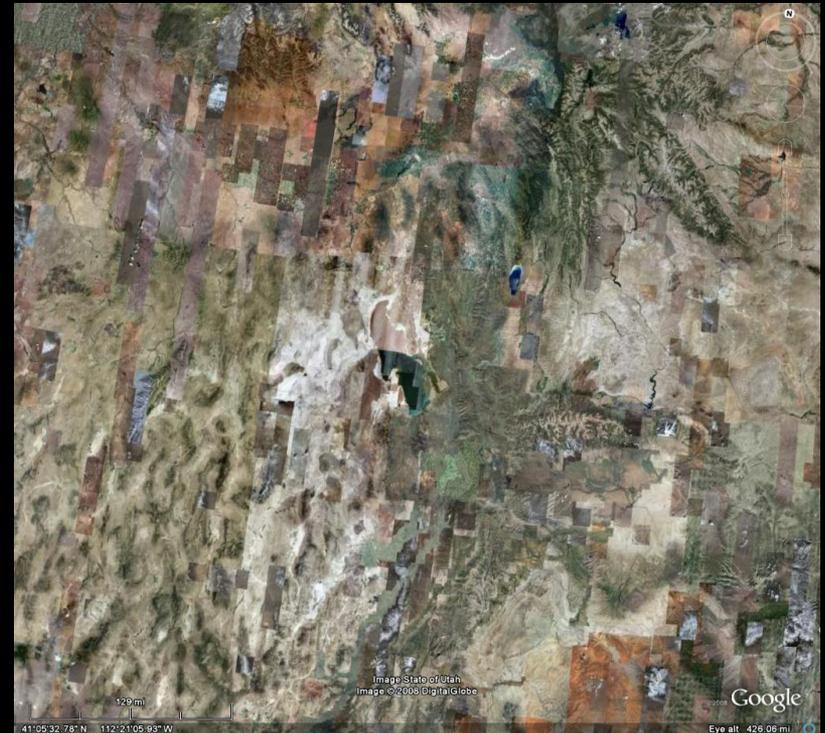


Setting: location, location, location



Climate

- Vast arid region extending from the Boreal Forest to the tropics modified by intermittent mountain ranges



“Oases” defined by isolation

Refueling stations
along the migratory
pathway



GSL's terminal lake environment

- Abiotic condition:
 - ◆ Fourth largest terminal lake in the world
 - ◆ Interface between Pacific and Central Flyways
 - ◆ Sediment and mineral filled geologic basin
 - ◆ Low gradient bottom
 - ◆ Salt lake with significant brine (salt) densities
 - ◆ Salt water, fresh water and gradients in between
 - ◆ Distinct ecological units



Terminal lake environment

- Biotic condition:
 - ◆ Ecosystem with two contrasting but complementary ecologies
 - Salt lake
 - Freshwater wetlands
 - ◆ Salt lake
 - Brine densities that foster halophiles (brine shrimp/ flies)
 - Abundant food during migration and nesting seasons
 - ◆ Wetlands
 - Fresh water
 - Different suite of macro invertebrates and periods of productivity
 - Nesting cover
 - Shelter
 - Fresh water/ salt water interface



Avian importance of GSL



>70 aquatic species



Bird Use Days: one bird spending 24 hours within the study area

Year	Mean Bird Days
1998	89,183,180
1999	77,469,285
2000	88,889,577
2001	85,349,660

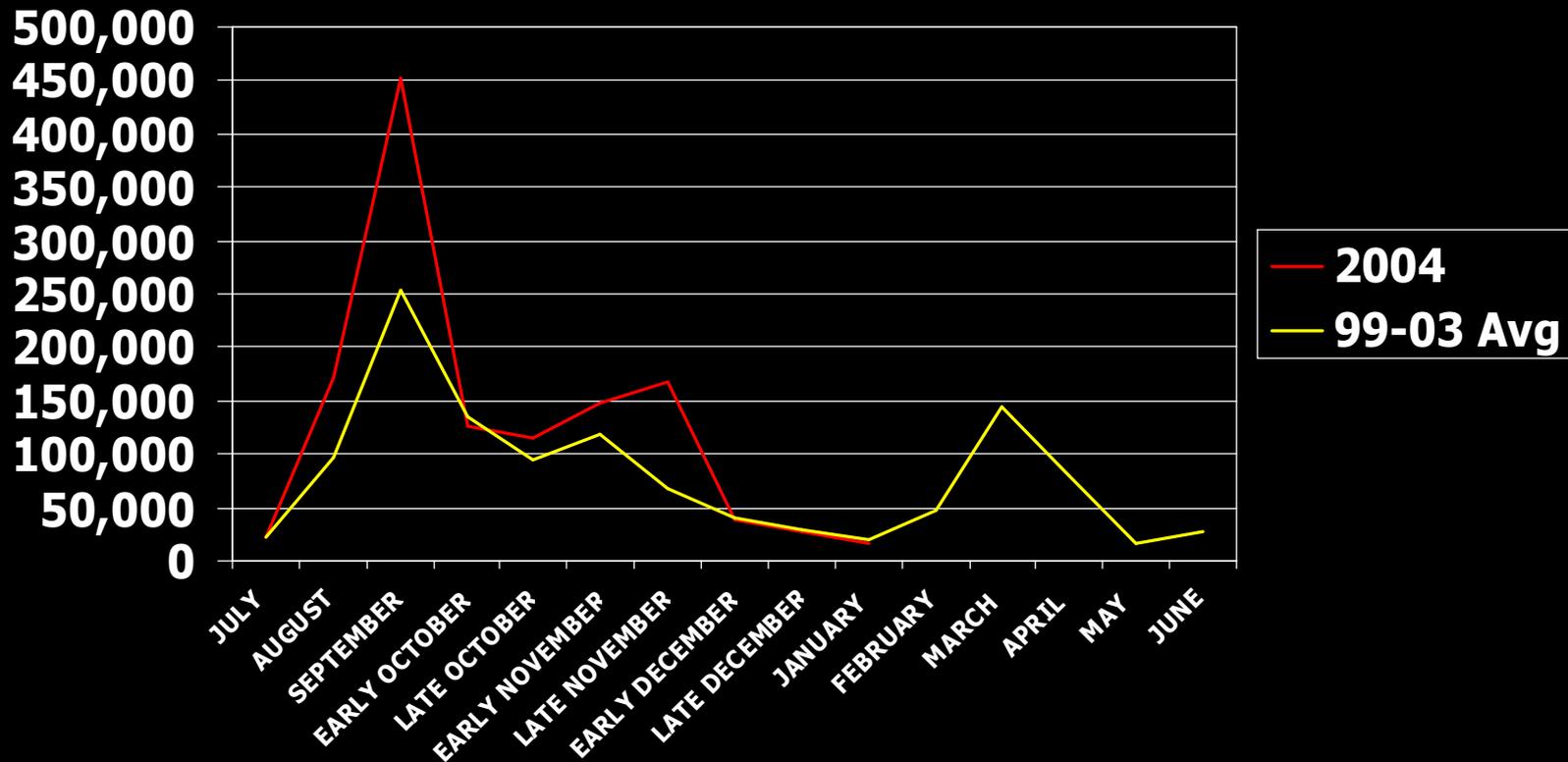
Suite	Five-Year Mean Bird Days
Avocets and Stilts	14,696,844
Dowitchers	1,133,536
Waterfowl	32,563,640
Gulls	22,062,838
Herons and Egrets	262,739
Small Sandpipers	2,030,585
Phalaropes	7,044,632
All Waterbirds	86,752,258



Potential Breeding Adults: an estimate based on occurrence during peak nesting period

Species	Number of potential breeding adults
California gull	95,183
American avocet	63,806
Franklin's gull	30,652
White-faced ibis	28,626
Black-necked stilt	20,502
American white pelican	9,898
Forster's tern	1,586
Snowy egret	1,353
Snowy plover	541
Great blue heron	460
Black-crowned night heron	342
Cattle egret	53

Duck Populations on State WMAs



GSL Species of Importance

- Eared Grebe
- American White Pelican
- Cinnamon Teal
- California Gull
- White-faced Ibis
- American Avocet
- Black-necked Stilt
- Snowy Plover



GSL Species of Importance

- Wilson's Phalarope
- Red-necked Phalarope
- Marbled Godwit
- Franklin's Gull
- Northern Pintail
- Tundra Swan
- Common Goldeneye



Ten Years of Linking



Linking Communities

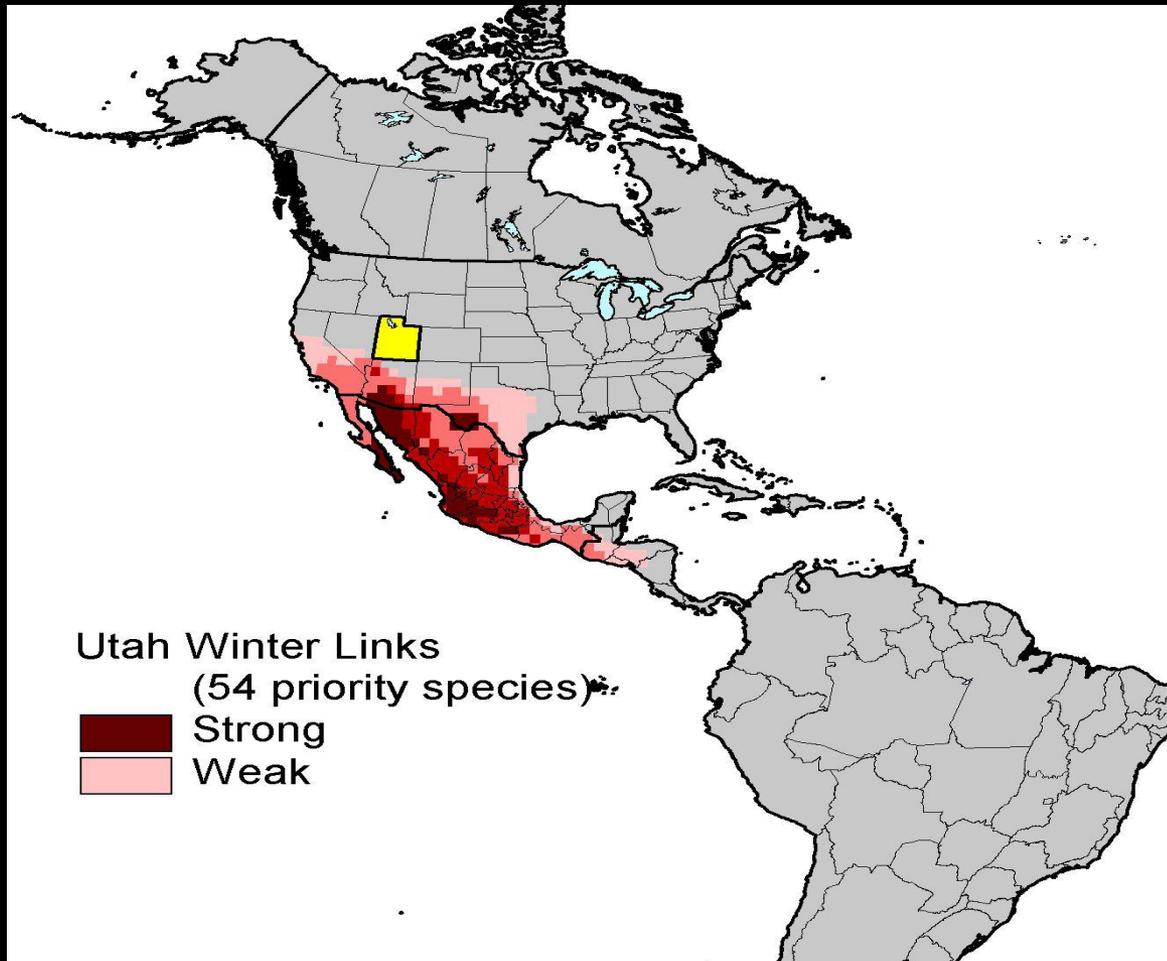
WETLANDS & MIGRATORY BIRDS

Range-Wide Conservation



- **Key Objectives:**
- Species conservation at all seasons and all sites
- International partnerships
- “Acting locally, thinking globally”
- Facilitate ideas & experience exchange

Compelling Reasons for International Conservation



"The GSL is ornithologically the
single most important site in
North America"

Dr. Joseph R Jehl

