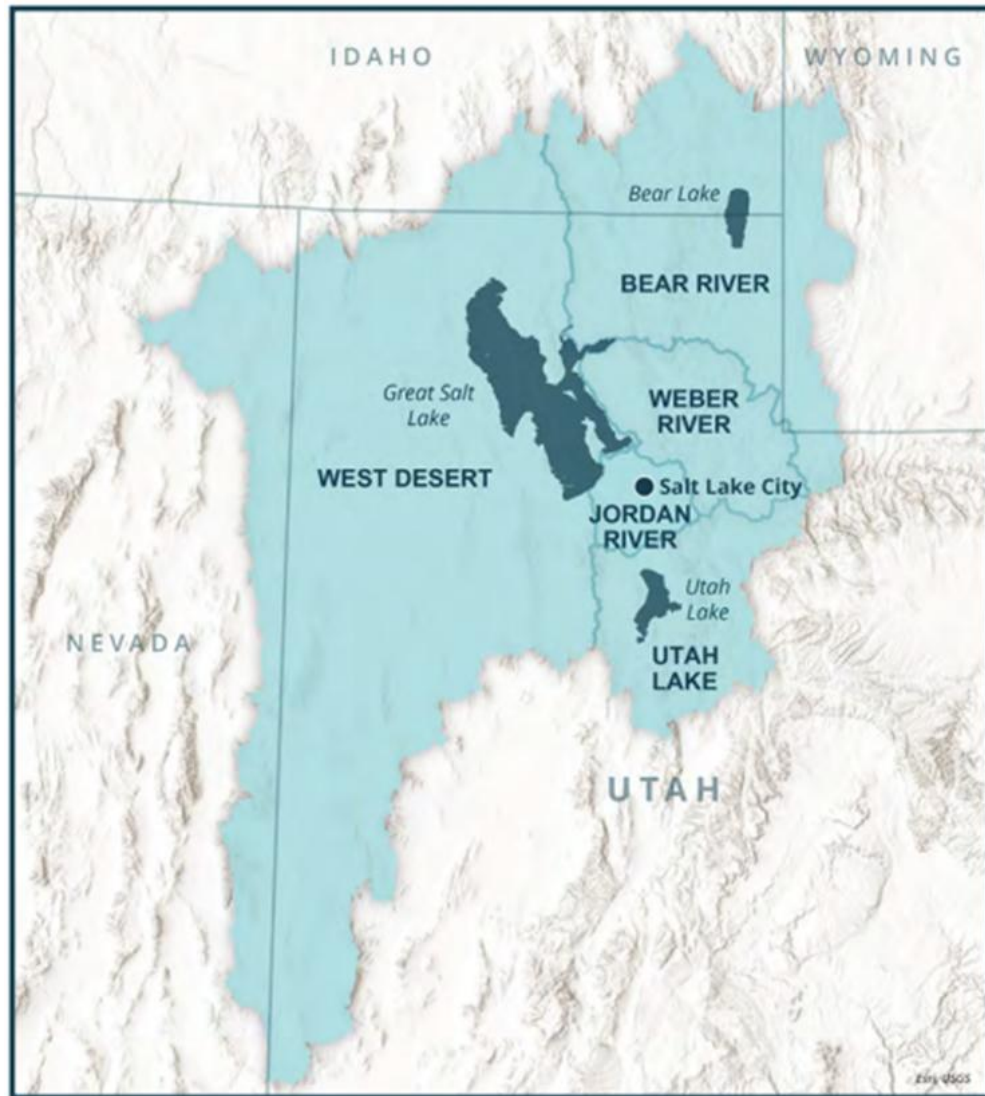


# Keeping up with the speed of nature.

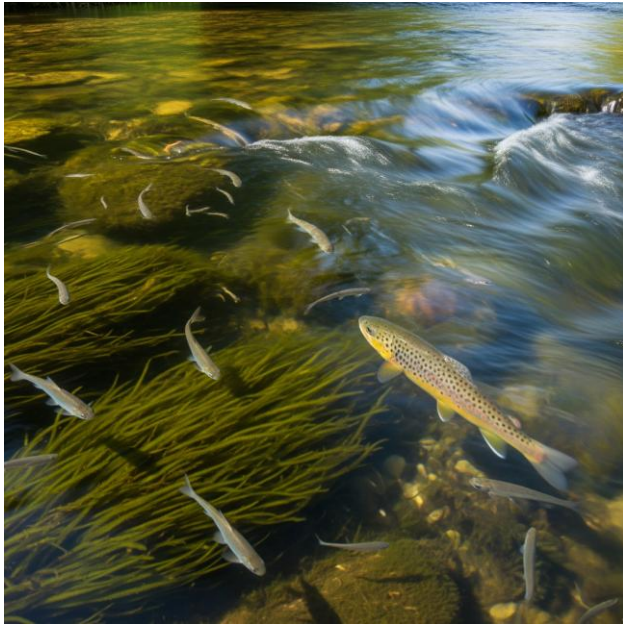
(Applying historic laws in times of change)



Western States Water Council  
Snowbird June 2025



# Three examples from Utah



# Instream Flow

	1986-1989	1992
Who	Division of Wildlife Resources	
What	Perfected Water Right  Required legislative approval for title or long term interest	
Where	Natural Channels (point to point)	
Why	Preservation or propagation of fish	
When (Priority)		
Special terms	No new appropriation  No eminent domain  Supporting studies	



# Instream Flow

	1986-1989	1992
Who	Division of Wildlife Resources	Division of Wildlife Resources and Division of Parks and Recreation
What	Perfected water right  Required legislative approval for title or long term interest	Perfected water right  Required legislative approval for title for fish  No approval for donation
Where	Natural Channels (point to point)	Natural stream or Altered natural stream channel (point to point)
Why	Preservation or propagation of fish	Propagation of fish  Public recreation  Reasonable preservation or enhancement of the natural stream environment
When (Priority)		
Special terms	No new appropriation  No eminent domain  Supporting studies	No new appropriation  No eminent domain  Supporting studies (public benefit)  No physical structure or physical diversion required



# Instream Flow

	1992	2008
Who	Division of Wildlife Resources and Division of Parks and Recreation	Fishing group added but only with DWR approval
What	Perfected water right  Required legislative approval for title  No approval for donation	Same as 1992  (legislative appropriation)
Where	Natural stream or Altered natural stream channel (point to point)	Same as 1992, but can't move original point of diversion upstream nor extend downstream point past next physical diversion (probably only applied to fishing group)
Why	Propagation of fish  Public recreation  Reasonable preservation or enhancement of the natural stream environment	Same as 1992  Fishing group only to protect or restore for native Bonneville cutthroat, Colorado River cutthroat, or Yellowstone cutthroat.
When (Priority)		Distributed according to change priority date within the stream section
Special terms	No new appropriation  No eminent domain  Supporting studies (public benefit)  No physical structure or physical diversion required	Same as 1992  Water is considered to be beneficially used  Application doesn't create right of public access



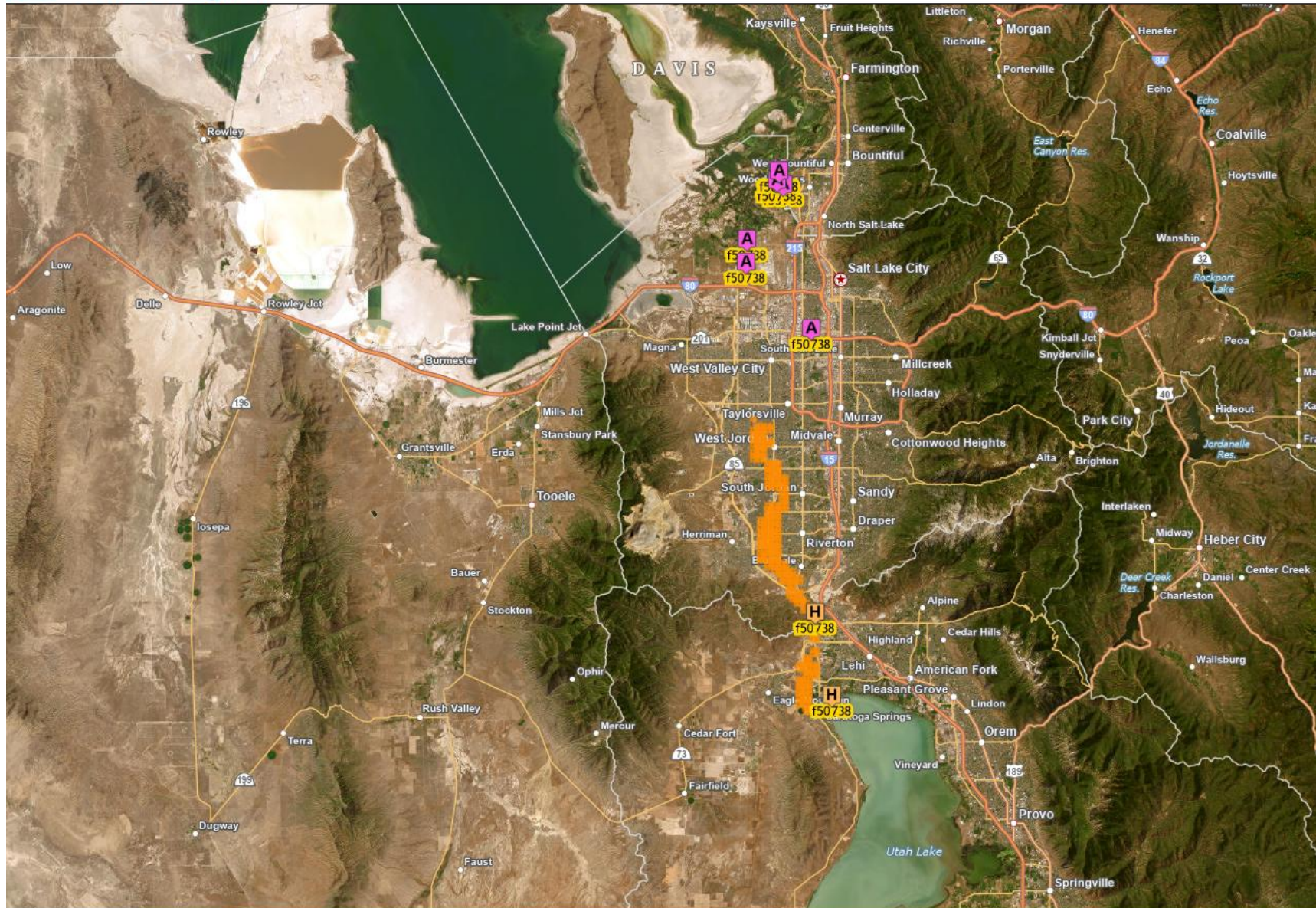


	2008	2022
Who	Division of Wildlife Resources Division of State Parks	<del>Fishing group</del> Division of Forestry, Fire and State Lands Person entitled to the use of water (with division director's approval)
What	For a division: Perfected water right Required legislative appropriation for title No approval for donation	For a division: Perfected water right Required legislative appropriation for title No approval for donation
Where	Natural stream or Altered natural stream channel (point to point)  Can't move original point of diversion upstream nor extend downstream point past next physical diversion (probably only applied to fishing group)	Instream flow within a specified section of a natural or altered stream  For use on sovereign lands (navigable waterways at time of statehood) <del>Can't move original point of diversion upstream nor extend downstream point past next physical diversion</del>
Why	Propagation of fish  Public recreation  Reasonable preservation or enhancement of the natural stream environment  Fishing group only to protect or restore for native Bonneville cutthroat, Colorado River cutthroat, or Yellowstone cutthroat.	Propagation <del>or maintenance</del> of wildlife  Management of state parks  Reasonable preservation or enhancement of natural aquatic environment  <del>Fishing group only to protect or restore for native Bonneville cutthroat, Colorado River cutthroat, or Yellowstone cutthroat</del>
When (Priority)	Distributed according to change priority date within the stream section	<del>Distributed according to change priority date within the stream section</del>
Special terms	No new appropriation No eminent domain Supporting studies (public benefit) No physical structure or physical diversion required Water is considered to be beneficially used Application doesn't create right of public access	No new appropriation No eminent domain Supporting studies (public benefit and necessity for instream flow <del>or use on sovereign lands</del> ) No physical structure or physical diversion required Water is considered to be beneficially used Application doesn't create right of public access



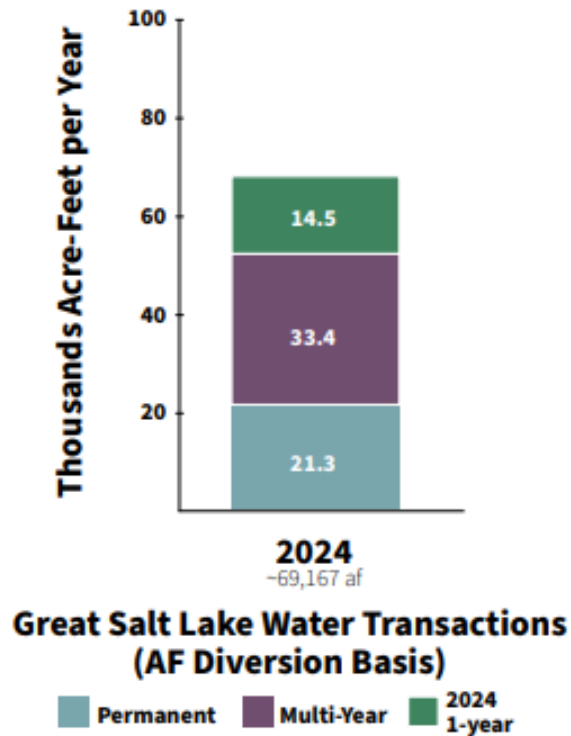


## Division of Water Rights





# Instream Flow / Use on Sovereign Land



Approximately 69,000 acre-feet of water transactions for Great Salt Lake in 2024.



Strategically timed the release of water to benefit Great Salt Lake and surrounding ecosystems.



Utilized Utah's new and existing water policies to implement water transactions.



Partnered with state agencies and other water users throughout the Great Salt Lake Basin.



# Water Reuse

## Common Law Concepts

Underlying Utah's water law is a strong policy to promote conservation. Improvements to prevent seepage support this policy. Even in the event of deprivation of water to others, water system improvements have been allowed to further this public policy (Steed v New Escalante Irrigation (1992))

Utah is one of the arid states and the conservation of water is of utmost importance to the public welfare. To waste water is to injure that welfare and it is the duty of the user of water to return surplus or waste water to the stream from which it was taken so that further use can be made by others. (Brian v Fremont Irrigation Company (1947))



# Water Reuse

## Common Law Concepts (Cont)

The appropriator of water may, so long as the water is under his control, sell or transfer the right to the use of such waters to someone other than the appropriator of the waste water as long as he does so in good faith and the waters are beneficially used, or he may capture and use them for further beneficial use if he does so before they get beyond his property and control.  
(McNaughton v Eaton (1952))



# Water Reuse

## Common Law Concepts (Cont)

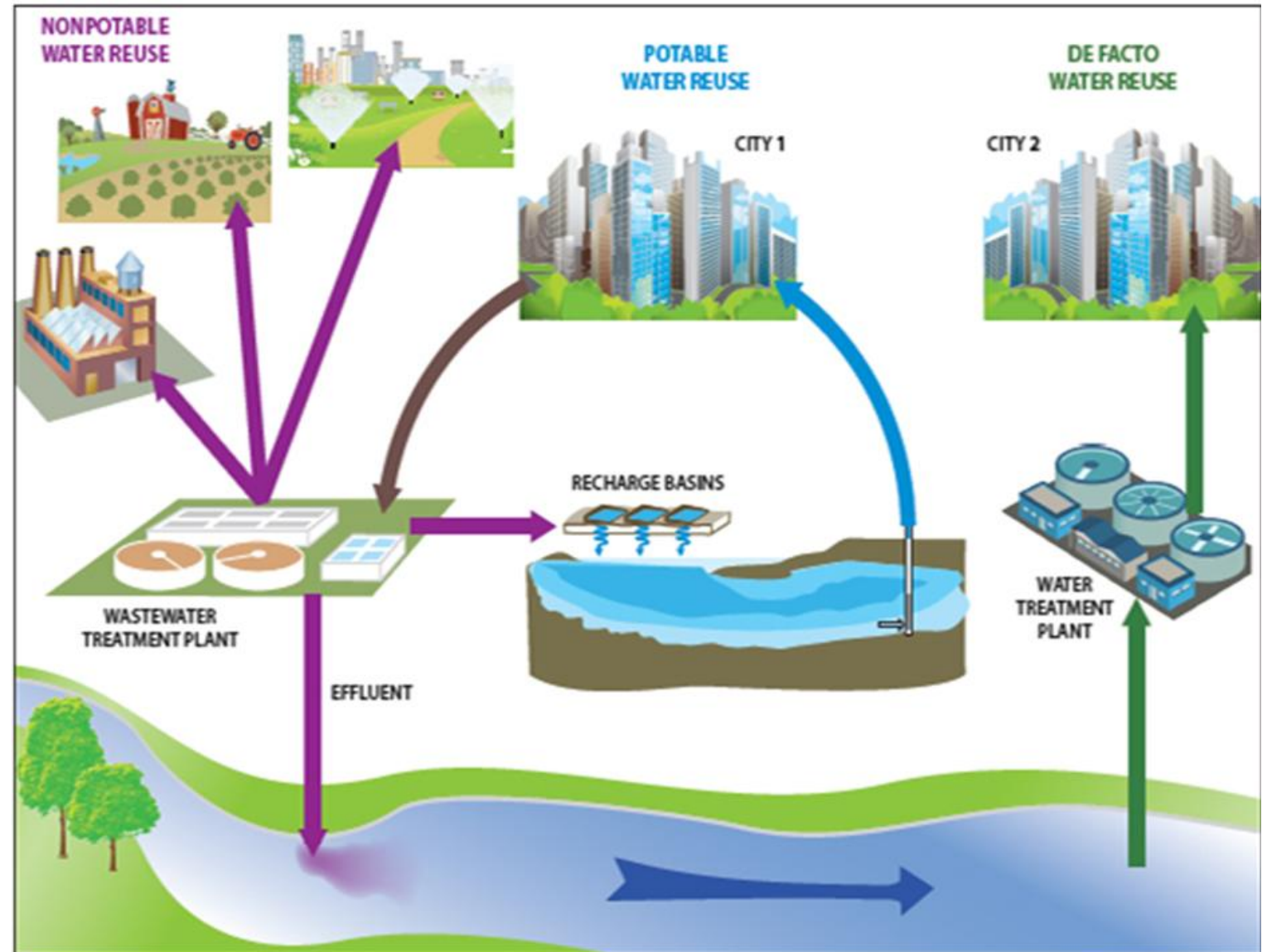
Once water has passed from the control of the appropriator or user and flows into another stream it becomes part of the stream. (Smithfield West bench Irrigation Co v Union Central Life Ins Co (1943))

After water has run through canals and been used on the lands of the appropriators they have no interest or right in the water which leaves their lands and finds its way again into the main channel either as run-off water or as seepage water, for as soon as it reaches the main channel its identity is lost and it becomes a part of the natural flow. (Salt Lake City v Telluride Power Company (1932))

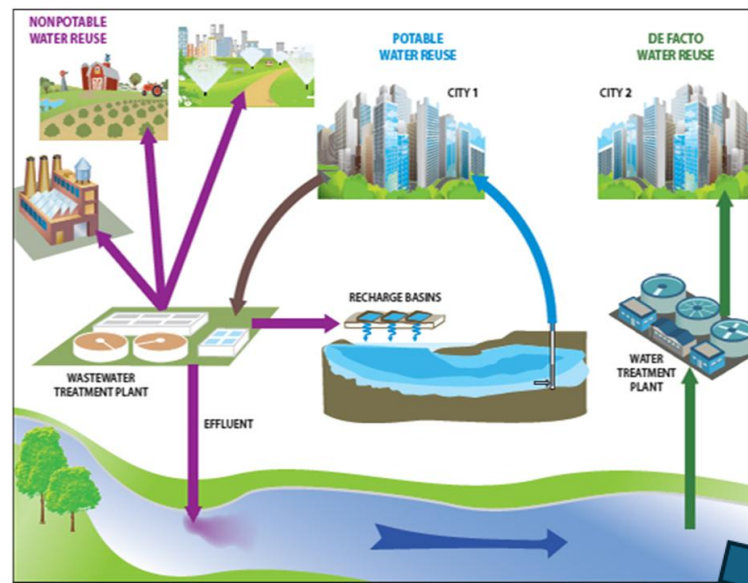




# Water Reuse



# Water Reuse



# Water Reuse

## 73-3c-302 Application to the state engineer.

- (1)(a) A public agency proposing a water reuse project shall apply to the state engineer.
- (b) The state engineer's approval of a water reuse project application filed under this section is conditioned on the approval of the director under Section 73-3c-301.
- (6)(a) The state engineer shall approve a water reuse application if the state engineer concludes that the proposed water reuse:
  - (i) is consistent with the underlying water right; and
  - (ii) **for an application in which the water would have otherwise been discharged into a tributary of the Great Salt Lake, includes an adequate replacement plan** provided by the applicant.
- (7)(a) For an application in which the water would have otherwise been discharged into a tributary of the Great Salt Lake, the **applicant shall submit a water replacement plan that provides an equivalent amount of water to the Great Salt Lake.**
- (b) The state engineer may:
  - (i) approve the application in part or with conditions to assure equivalent replacement of water to the Great Salt Lake; or
  - (ii) deny an application if the replacement plan cannot assure equivalent replacement of water to the Great Salt Lake.



# Water Reuse

## 73-3c-302 Application to the state engineer.

- (1)(a) A public agency proposing a water reuse project shall apply to the state engineer.
- (b) The state engineer's approval of a water reuse project application filed under this section is conditioned on the approval of the director under Section 73-3c-301.
- (6)(a) The state engineer shall approve a water reuse application if the state engineer concludes that the proposed water reuse:
  - (i) is consistent with the underlying water right; and
  - (ii) **for an application in which the water would have otherwise been discharged into a tributary of the Great Salt Lake, includes an adequate replacement plan** provided by the applicant.
- (7)(a) For an application in which the water would have otherwise been discharged into a tributary of the Great Salt Lake, the **applicant shall submit a water replacement plan that provides an equivalent amount of water to the Great Salt Lake.**
- (b) The state engineer may:
  - (i) approve the application in part or with conditions to assure equivalent replacement of water to the Great Salt Lake; or
  - (ii) deny an application if the replacement plan cannot assure equivalent replacement of water to the Great Salt Lake.

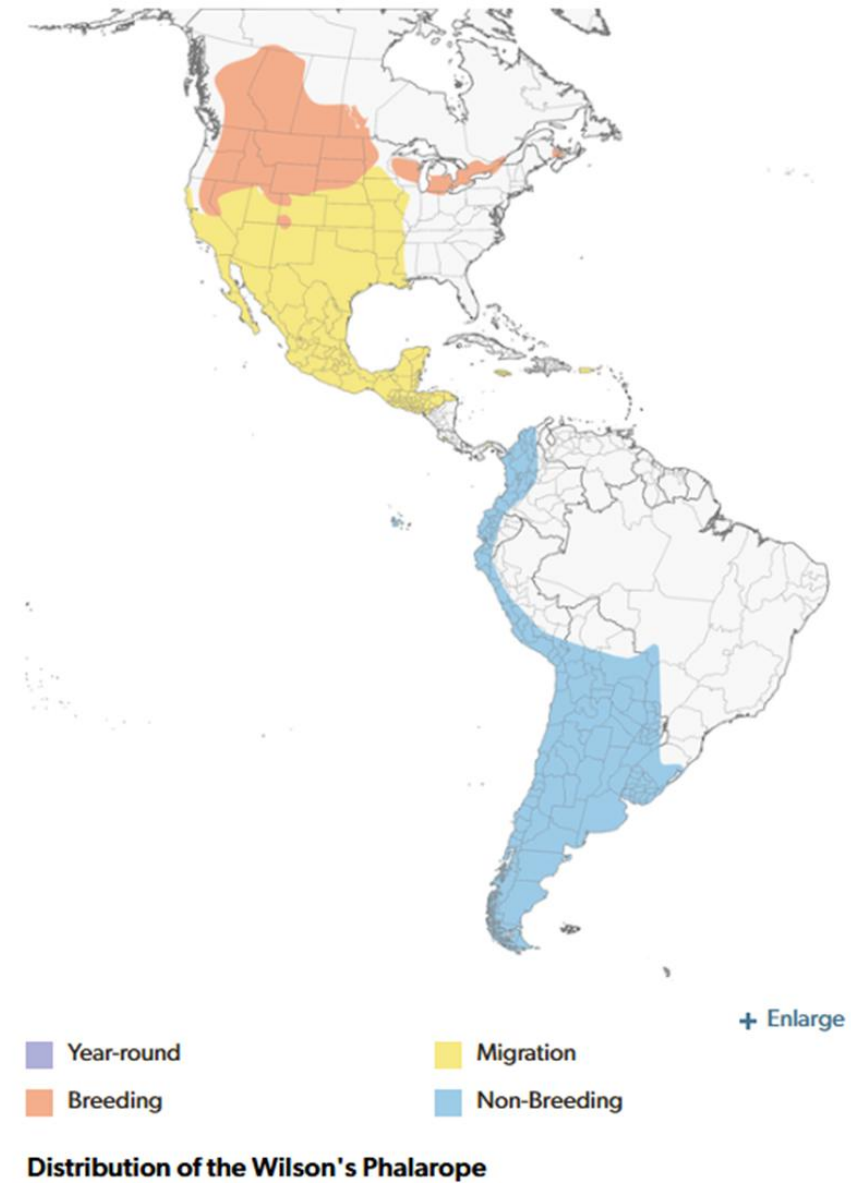




# Wilson's Phalarope



<https://birdsoftheworld.org/bow/species/wilpha/1.0/introduction>



Utah Division of Water Rights

[waterrights.utah.gov](http://waterrights.utah.gov)

# Wilson's Phalarope

Country	Site	State/Province	High count prior to 2010	High count since 2010	High count since 2020	Sources (historic, since 2010, and since 2020, respectively)
USA	Great Salt Lake	Utah	603,000 (Jul 1991)	337,698 <sup>c</sup> (Jul 2019, <del>4</del> )	122,850 <sup>d</sup> (July 2020, <del>3</del> )	Jehl 1988, Carle et al. 2021, Carle et al. 2021
	Mono Lake	California	93,000 (Jul 1976)	45,143 <sup>e</sup> (Jul 2021, <del>4</del> )	45,143 <sup>e</sup> (Jul 2021, <del>3</del> )	Winkler 1977, Carle et al. 2021, Carle et al. 2021
	Lake Abert	Oregon	67,000 (1982)	230,000 <sup>f</sup> (Jul 2013, <del>10</del> )	21,830 (Jul 2020, <del>3</del> )	Jehl 1999, Carle et al. 2021, Carle et al. 2021
	Lahontan Valley	Nevada	67,000	No data	No data	Neel and and Henry 1986
	Cheyenne Bottoms	Kansas	52,184 (1990)	26,835 (2014, <del>8</del> )	191	Robert Penner, <i>in litt</i> , Robert Penner, <i>in litt</i>
	Big Lake	Montana	40,000 (Jul 1986)	No data	No data	Jehl 1988
	San Francisco Bay	California	40,000	1,988 (July 2014)	767 (July 2020, <del>3</del> )	Jehl 1988, SFBBO unpublished data, Burns et al. 2023
	Moss Landing	California	350,000	No data	No data	ISS
	Bowdoin NWR	Montana	28,000-33,000 (Jul 1986)	No data	No data	Jehl 1988
	Walker Lake	Nevada	No data	100,000 (Sep 2016, <del>1</del> )	No data	R. Lowry, <i>in litt</i>



# Wilson's Phalarope

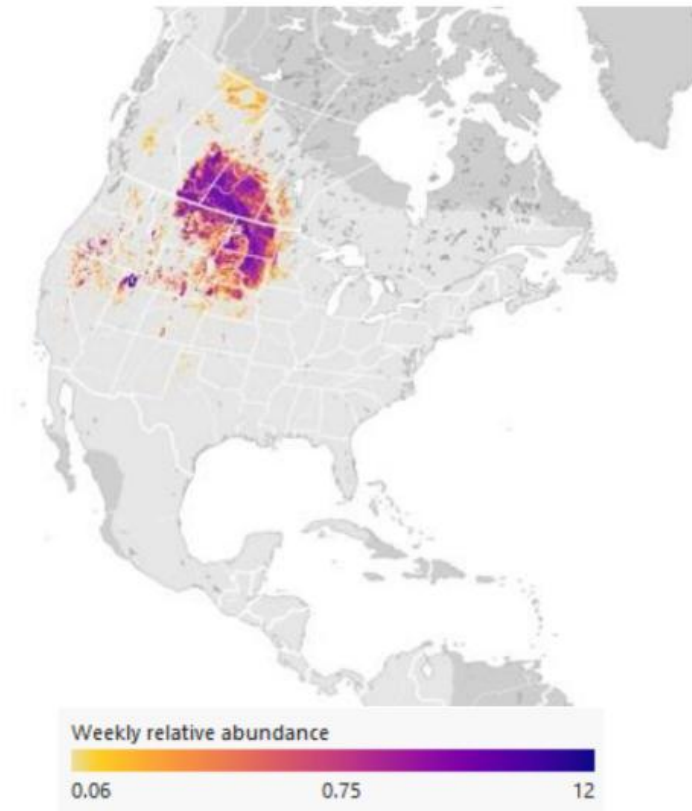
(Petition)

*Wilson's phalarope is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, qualifying it as Threatened under the Endangered Species Act.*



# Wilson's Phalarope

## (Petition) (Breeding Range)



**Figure 8:** Average Wilson's phalarope abundance from analysis of eBird data for the week of June 7<sup>th</sup>, reflecting the species' breeding range. Color scale shows relative abundance across a 3 km × 3 km spatial grid. Relative abundance is defined as the count of individuals of a given species detected by an expert eBirder on a 1 hour, 2 kilometer traveling checklist at the optimal time of day. For example, if relative abundance is 10 in one area and 5 in another area, then abundance is estimated to be twice as high in the first area—thus, dark purple areas reflecting relative abundances of >12 birds (sometimes much greater) have 12x or greater abundances than yellow, orange, or light purple areas with relative abundances <1. Map from [eBird 2023](#).





# Wilson's Phalarope (Petition)

*Wilson's phalarope is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, qualifying it as Threatened under the Endangered Species Act.*



# Threats

- Major threats affecting saline lakes and breeding habitats
  - Habitat loss
    - Crop conversion of breeding grounds
  - Water diversion
    - Human use
    - Mining
  - Climate change
    - Higher temperatures
    - Decreased snowpack
    - Shortened hydro-period
    - Increased evapotranspiration rates
    - SW U.S. may have “more frequent and longer droughts”



Photo: Josh Fecteau-Macaulay Library



for mining (Salar de Surire, Chile; see section 3. Energy Production & Mining).

## 2. Agriculture & Aquaculture

The massive loss of prairie wetlands in North America is believed to have had a significant impact on the past and current population of the species (Jehl & Colwell 2020). Once a vast expanse of grasslands with numerous wetlands, the prairies are now an agrarian system dominated by croplands (Dahl & Johnson 1991).

The remaining prairie wetlands are impacted by a number of agricultural practices that result in elevated sedimentation rates (Martin & Hartman 1987, Gleason & Euliss 1996), unnatural variance in water-level fluctuation (Euliss & Mushet 1996) and altered vegetative communities (Kantrud & Newton 1996).

One of the most severely affected parts of the prairies is the Prairie Pothole Region (covering the U.S. states of Iowa, western



and economic pressures continue to drive the conversion of more marginal areas (Dahl 2005). Conversion of pastures to corn and soybean crops within the Prairie Pothole Region has increased in recent years in response to increasing demand for biofuel feedstocks (Wright & Wimberly 2013, Alemu *et al.* 2020). Pastures and grasslands in the U.S. portion of the Prairie Pothole region experienced a significant net decreasing trend of almost a third between 2006-2018 (Alemu *et al.* 2020). However, recent habitat restoration and wetland re-establishment efforts have resulted in a net positive trend in wetland extent in the U.S., with a nearly 281,500 hectares increase in freshwater ponds 1998–2004 (Dahl 2005) and a 1% increase in emergent freshwa-





# Conservation Needs

- Priority actions and strategies
  - Securing water inflow
  - Habitat protection
  - Monitoring
  - International coordination and collaboration
    - International Phalarope Working Group meeting in Argentina, Feb. 2024







# Thank you.

Mark Stratford

Legal Advisor to State Engineer

[mstratford@utah.gov](mailto:mstratford@utah.gov)

801-538-7380



Utah Division of Water Rights

[waterrights.utah.gov](http://waterrights.utah.gov)