



# Managing Wyoming's Water Resources

GRAD592

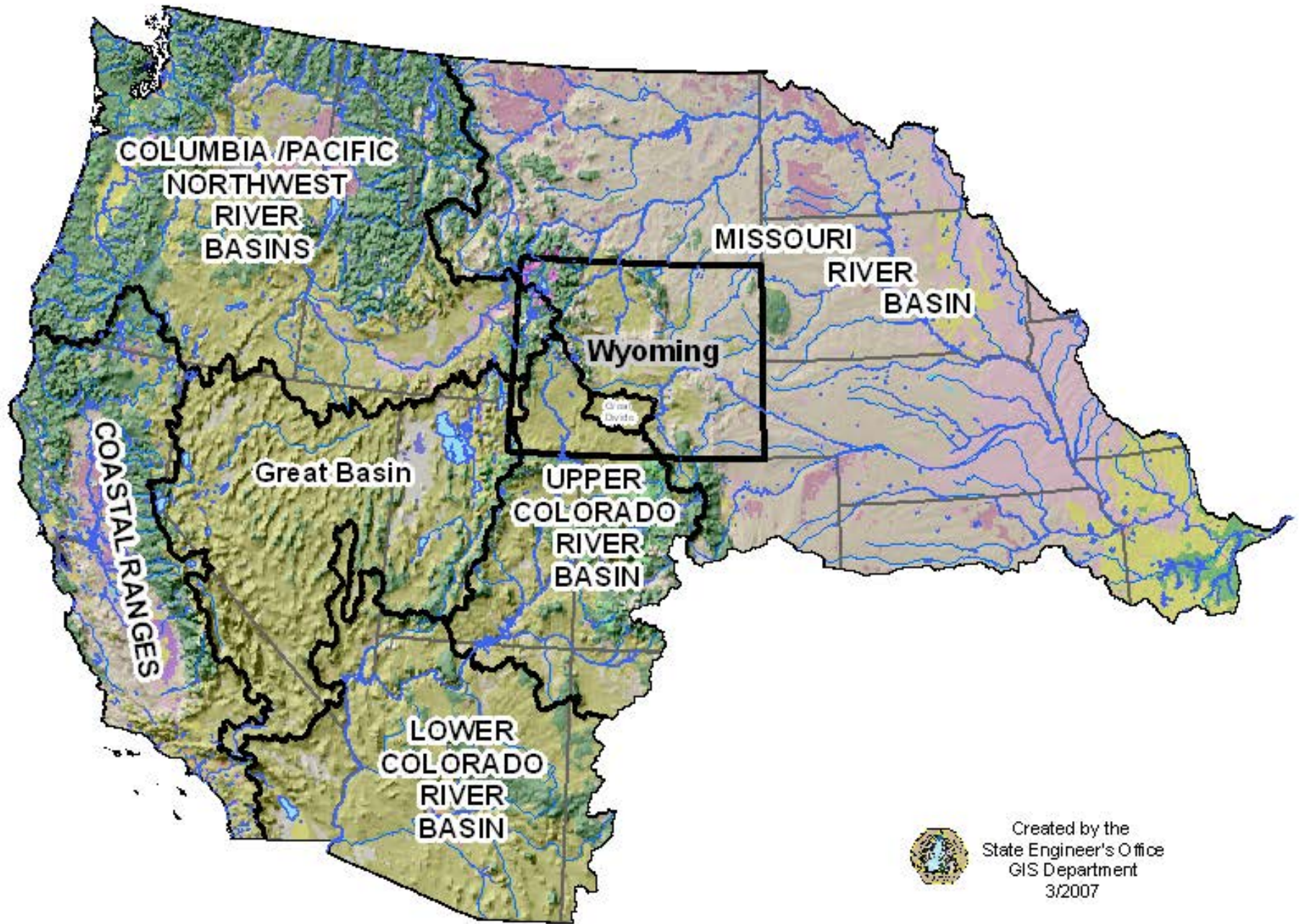
Colorado State University  
23 September, 2019

# Presentation Outline

- ❖ Wyoming's Water Resources
- ❖ Overview of Wyoming Water Administration
- ❖ Interstate Compacts and Decrees Overview
- ❖ Interstate Issues (past and present)

*Extra Credit!*





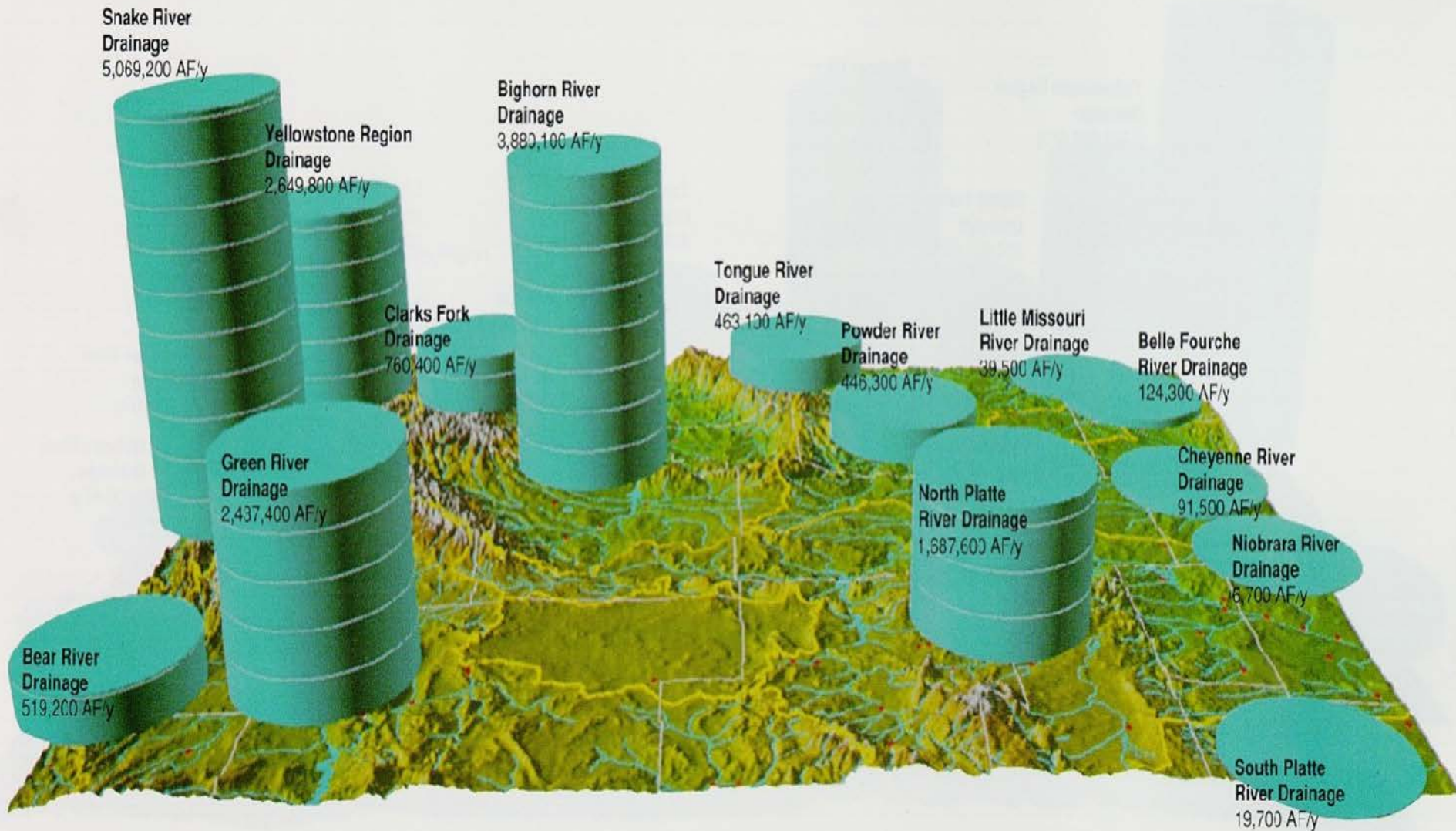
Created by the  
State Engineer's Office  
GIS Department  
3/2007

# Wyoming Basins: Land Area and Streamflow

<b>RIVER BASIN</b>	<b>DRAINAGE AREA (millions acres)</b>	<b>LAND AREA</b>	<b>SURFACE WATER (millions a-f)</b>	<b>SURFACE WATER</b>
<b>Missouri</b>	<b>45.0</b>	<b>71.8%</b>	<b>9.9</b>	<b>57.2%</b>
<b>Colorado</b>	<b>13.4</b>	<b>21.4%</b>	<b>2.3</b>	<b>13.3%</b>
<b>Columbia</b>	<b>3.3</b>	<b>5.3%</b>	<b>4.7</b>	<b>27.2%</b>
<b>Great Basin</b>	<b>1.0</b>	<b>1.5%</b>	<b>0.4</b>	<b>2.3%</b>
<b>TOTAL</b>	<b>62.7</b>	<b>100%</b>	<b>17.3</b>	<b>100%</b>

Wyoming uses about 3.5 million a-f annually and has about the same amount available for development considering institutional constraints.

# State-Line Outflow—Variability between basins



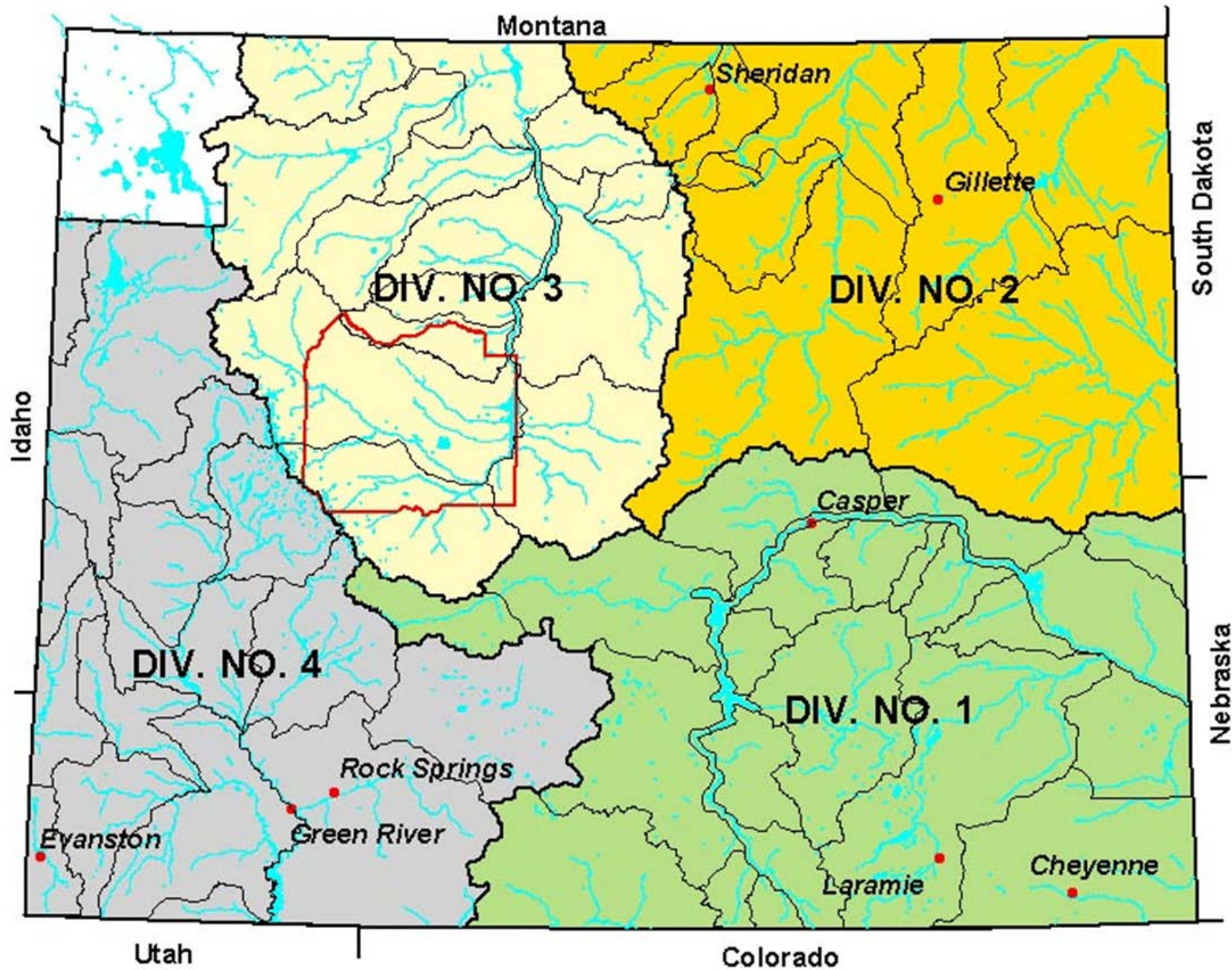
# Wyoming Water Administration

## The Wyoming Constitution Provides:

- ❖ The Wyoming Constitution (Article 8, Section 1) establishes water is State property. “The water of all natural streams, springs, lakes or other collections of still water, within the boundaries of the state, are hereby declared to be the property of the state.”
- ❖ The State Engineer is charged with general supervision of waters of the State - responsibility for administering interstate and intrastate streams and rivers.

# Functions of the Wyoming State Engineer's Office:

- ❖ Permitting and Regulatory Responsibilities of surface and groundwater
- ❖ Interstate Compact/Decree Administration and Representation of Wyoming's Interests in Interstate Matters
- ❖ Water Resource Data Collection, Preservation & Distribution
- ❖ Water Education

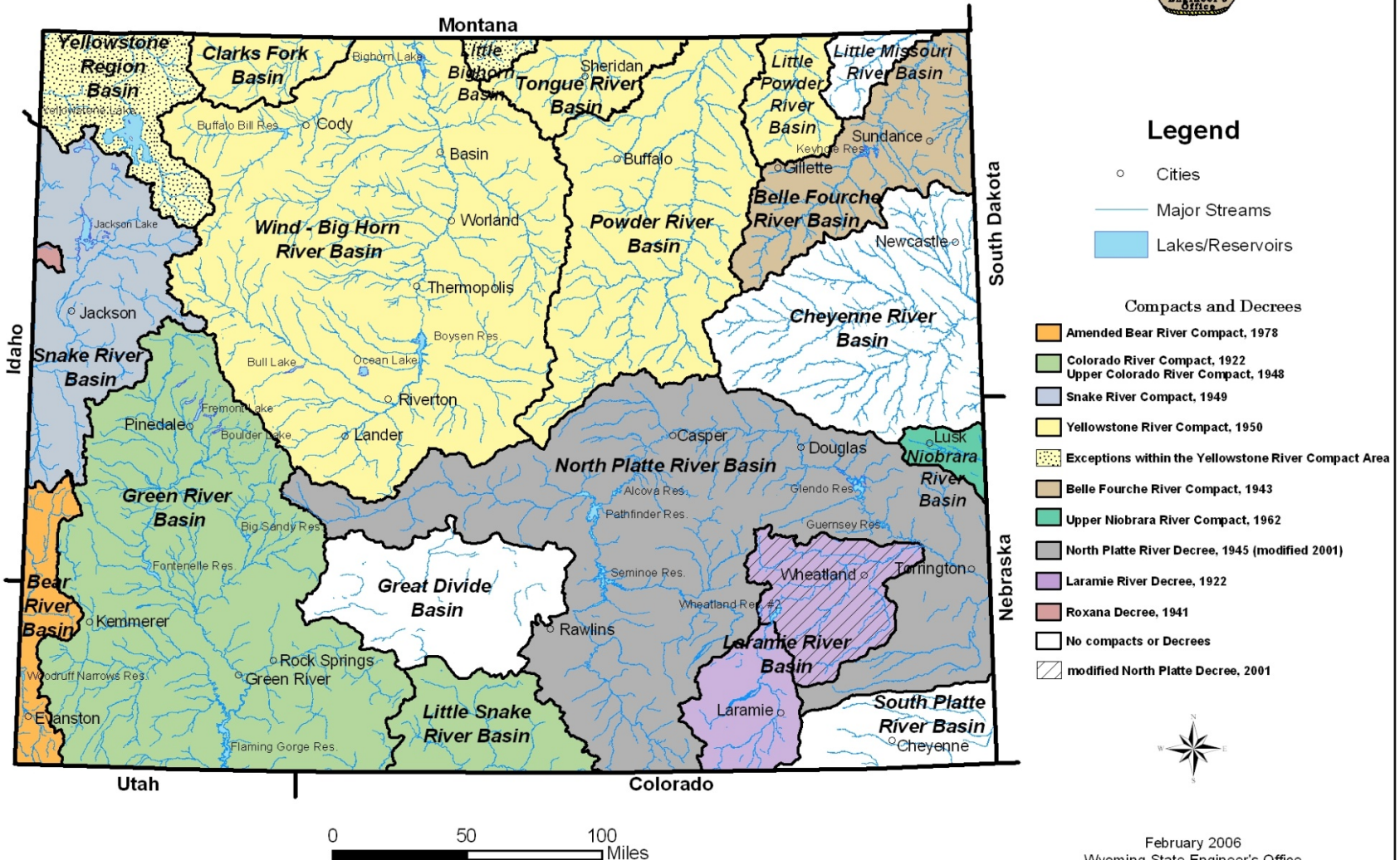




# Board of Control

- ❖ Established by Article 8, Section 2 of the Wyoming Constitution
- ❖ Composed of the four Water Division Superintendents & State Engineer
- ❖ Acts on adjudications, changes in point of diversion, change in use, transfers of adjudicated rights
- ❖ Only western state to adjudicate water rights administratively (not through a court system)
- ❖ Meets quarterly

# Wyoming River Basin Compacts and Decrees



# Laramie River Decree - 1922

- ❖ Limited Colorado's diversions
- ❖ SCOTUS recognized priority dates across state boundaries
- ❖ We all need to thank Delph Carpenter!



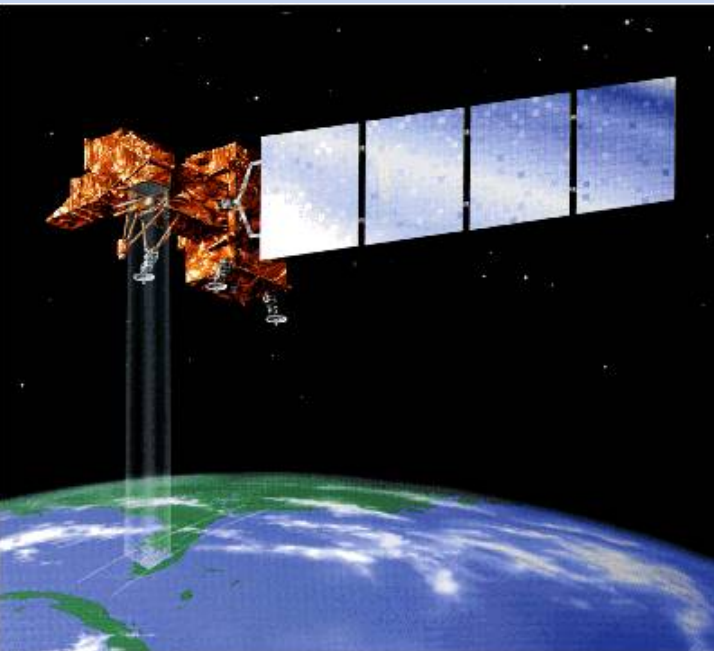
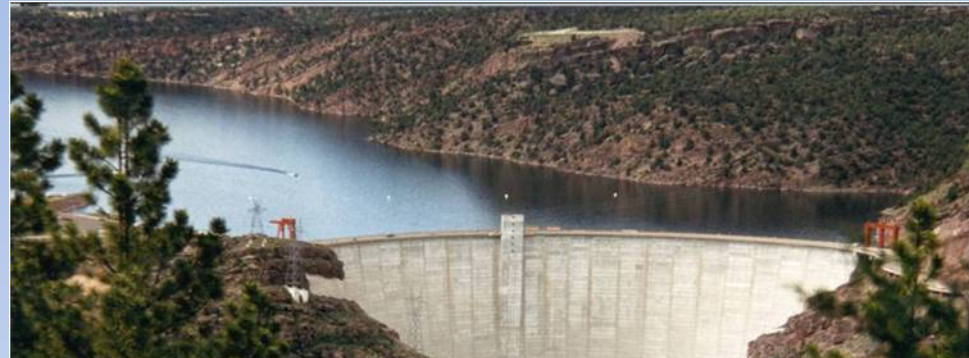
# Green & Little Snake River Basins

- Colorado River Compact (1922)
- Upper Colorado River Basin Compact (1948)
- Colorado River Basin Salinity Control Program (1972)



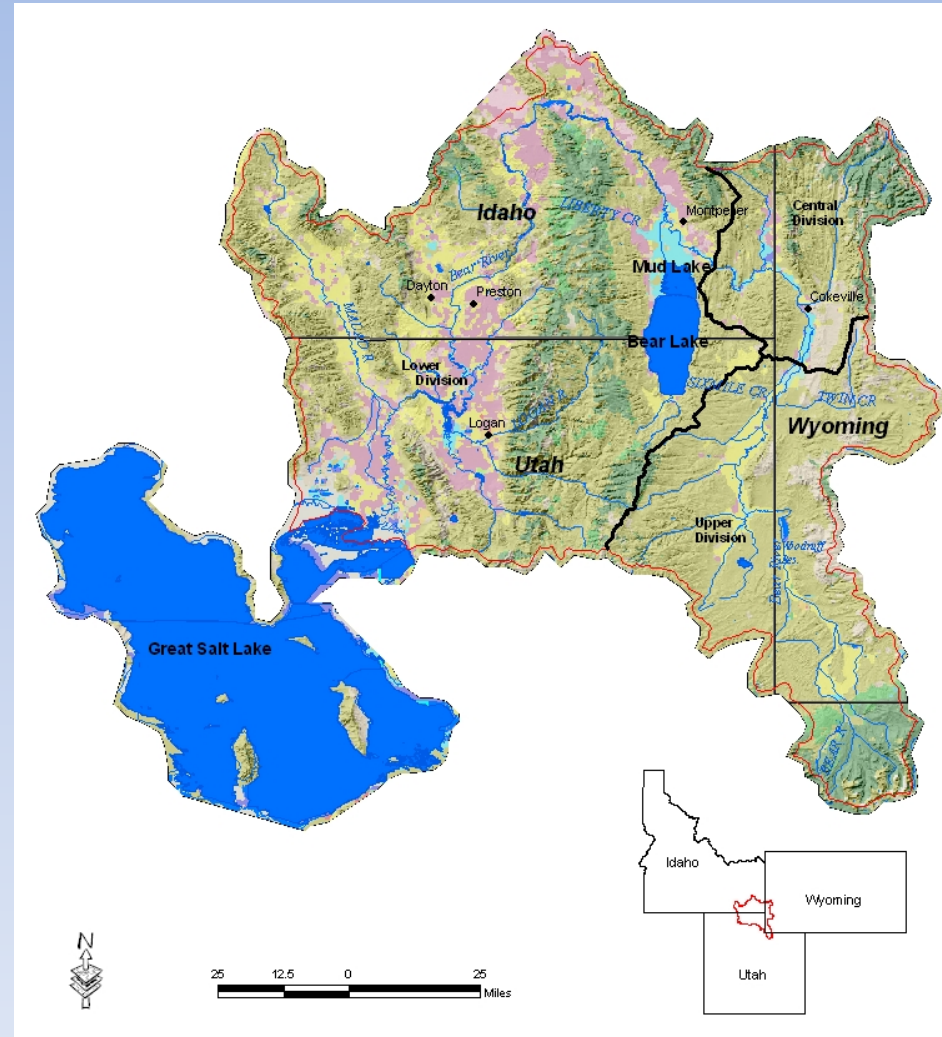
# Green & Little Snake River Basins

- Current Issues
  - You folks know them all .....



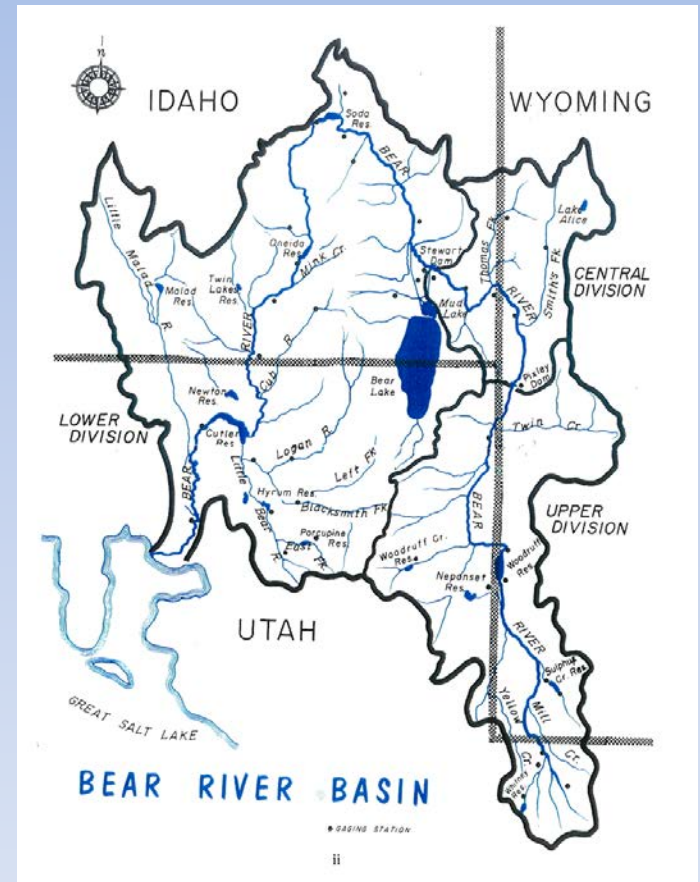
# Bear River Basin

- Bear River Compact (as amended 1978)
  - Between Utah, Idaho and Wyoming
  - All storage privately developed-no federal storage presence
  - Water quality integrated into Compact Commission



# Bear River Basin

- Only Wyoming Compact with required review
  - “At intervals not exceeding twenty years, the Commission shall review the provisions hereof, and after notice and public hearing, may propose amendments to any such provision, ...” - Article XIV
- Completed review in spring 2018.



# Bear Lake Filing (Idaho & Utah)

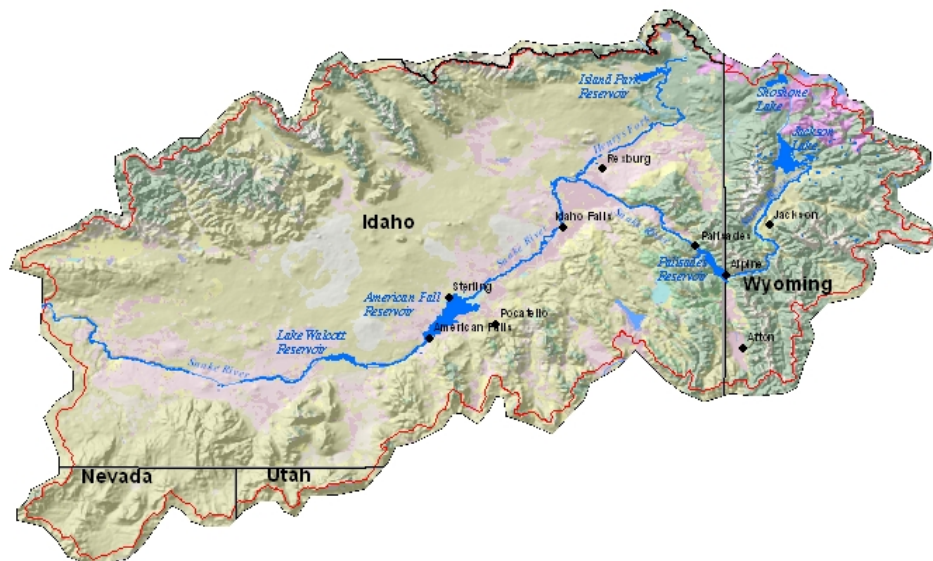
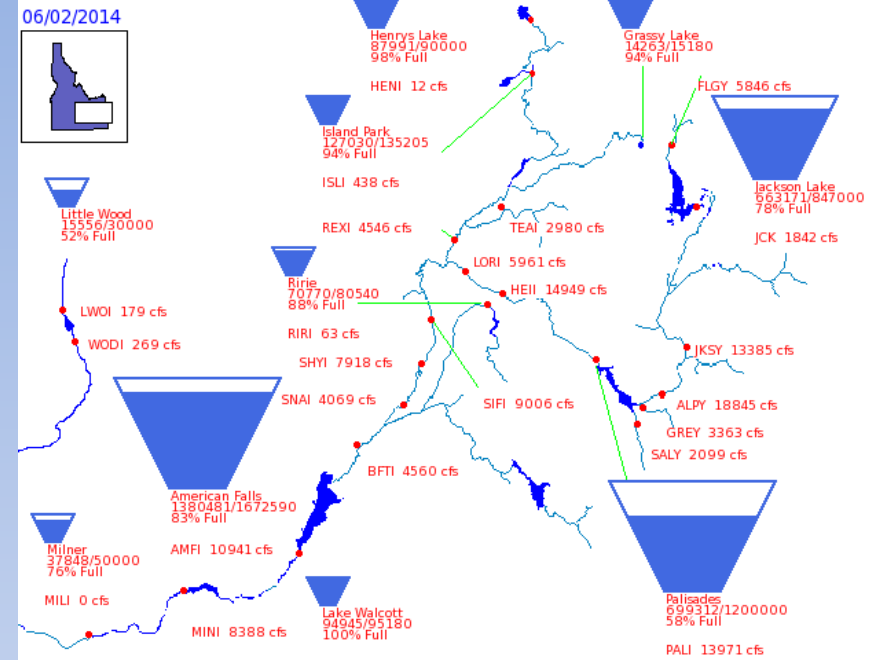
- Quantify the increased storage capacity of Bear Lake that could be achieved by adjusting flood control target elevations and downstream flow constraints





# Snake River Basin

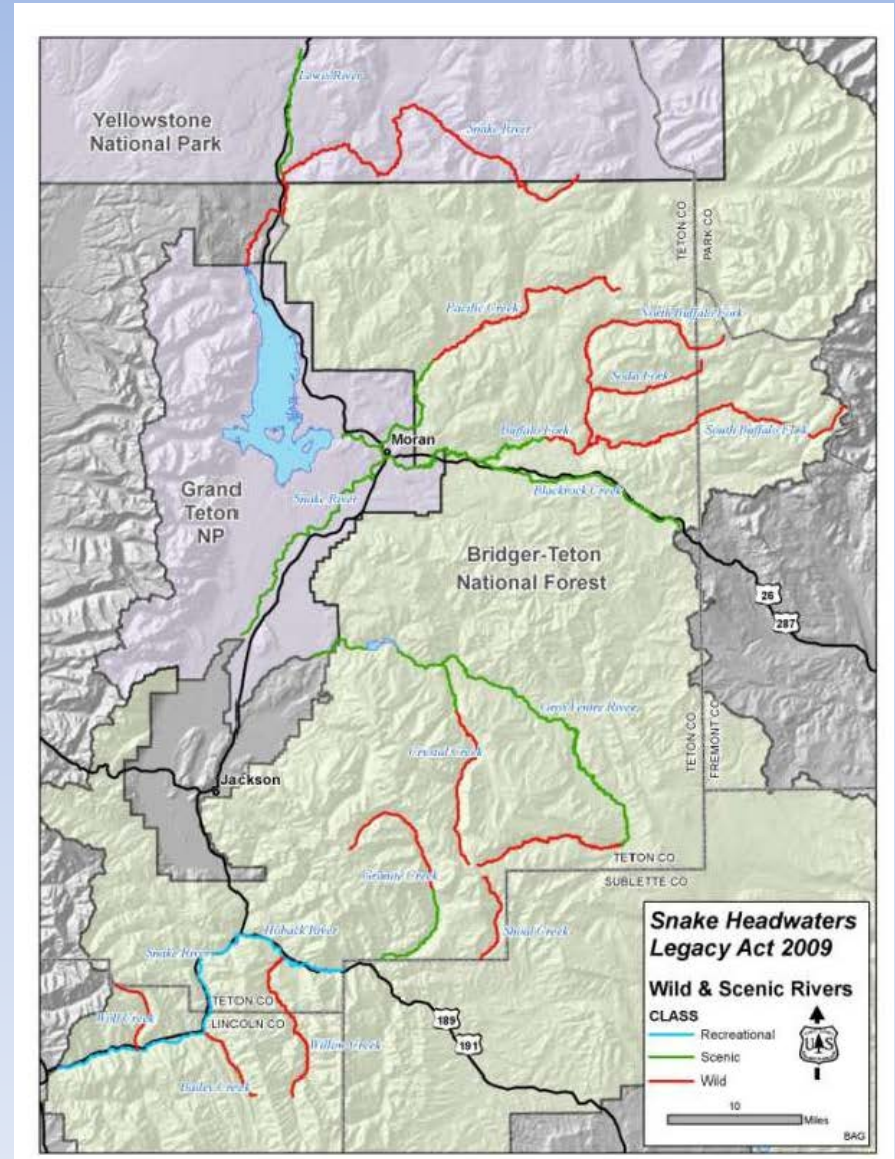
- Snake River Compact (1949)
- Roxana Decree (1941)



- Jackson Lake Dam

# Snake River Basin

- Current Issues
  - Wild & Scenic Designations (2009)
  - Wyoming's Palisades Reservoir Storage (rental pool)



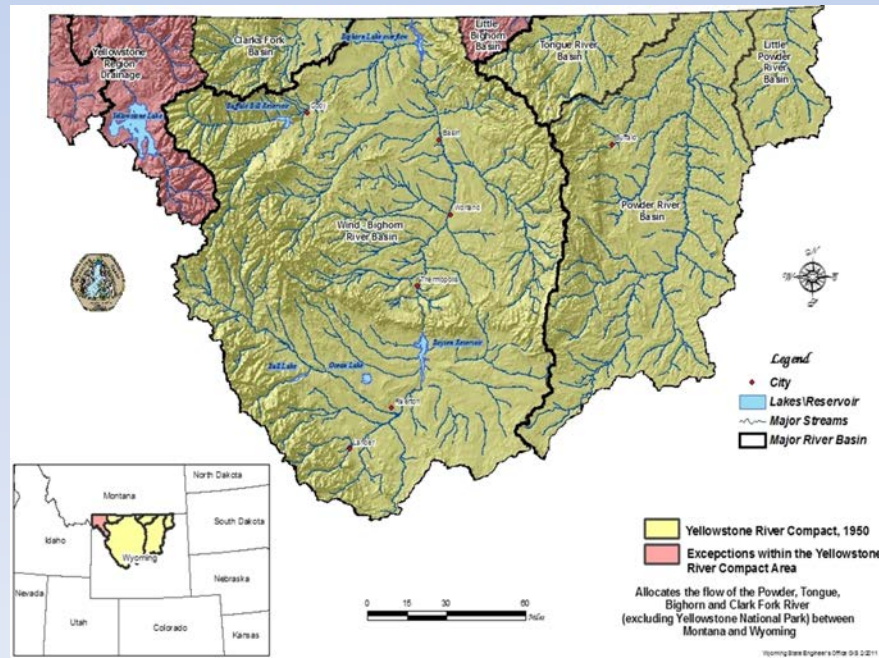
# Yellowstone River Basin

- Big Horn General Adjudication
- Yellowstone River Compact (1950)
  - Montana vs. Wyoming (2007)
- Yellowtail Reservoir Operations



# Big Horn General Adjudication

- Began in 1977, final decree 2015 (38 year-long litigation)
- 8 Wyoming Supreme Court Decisions
- General Adjudication – finalized state, federal and tribal rights
- One of the few state/federal/tribal general adjudications finished in the west



YOU WON'T MIND TAKING  
A FEW MORE OF THOSE  
WILL YOU JEFF?

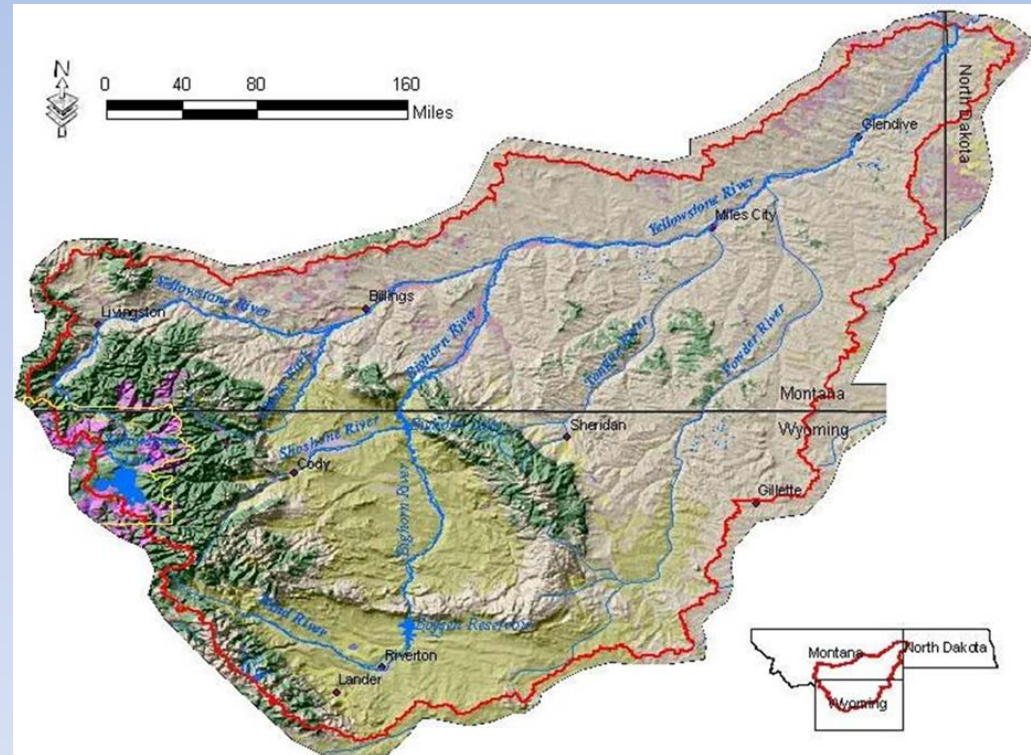


WARREN MILLER  
CARTOONIST

# *Yellowstone River Compact*

❖ The Compact governs interstate use of the Clarks Fork, Wind/Big Horn, Tongue, and Powder Rivers.

❖ Took effect January 1, 1950.



# *Montana v. Wyoming: The Case*

- ❖ In 2007, Montana alleged Wyoming violated the Yellowstone River Compact in the Tongue and Powder River Basins.
- ❖ U.S. Supreme Court appointed Special Master Barton H. Thompson, Jr., a law professor at Stanford Law School.
- ❖ Special Master's Website:  
<http://www.stanford.edu/dept/law/mvn/>
  - This website contains PDFs of everything filed with the Special Master.

# Top Five Pre-Trial Developments

1. Montana's Bill of Complaint only alleged violations of Article V(A)— Article V(B) Not heard.
2. Doctrine of Appropriation governs Article V(A):
3. Pre-1950 water rights can increase consumption under their existing rights without violating the Compact. Largest, wet-water issue.
4. Not a mass-delivery compact—When Montana's pre-1950 rights are not receiving water, Montana must place a call on the river for Wyoming to curtail its post-1950 rights.
5. Montana dropped all claims related to Powder River (6/28/2013).



# Main Trial Issues

- ❖ Whether Montana made a call when it was receiving insufficient water to enjoy its pre-1950 rights;
- ❖ Whether Montana did not receive sufficient water to enjoy its pre-1950 rights;
- ❖ Whether Wyoming allowed post-1950 storage or use of water while Montana was suffering a pre-1950 shortage; and

# The Call

- ❖ The doctrine of appropriation “requires senior appropriators to notify junior appropriators when they are short of water if they wish junior appropriators to reduce their diversions – an action known as ‘calling the river.’”
- ❖ Wyoming conceded early on that Montana made a call for water in both 2004 and 2006.

# Special Master Conclusions

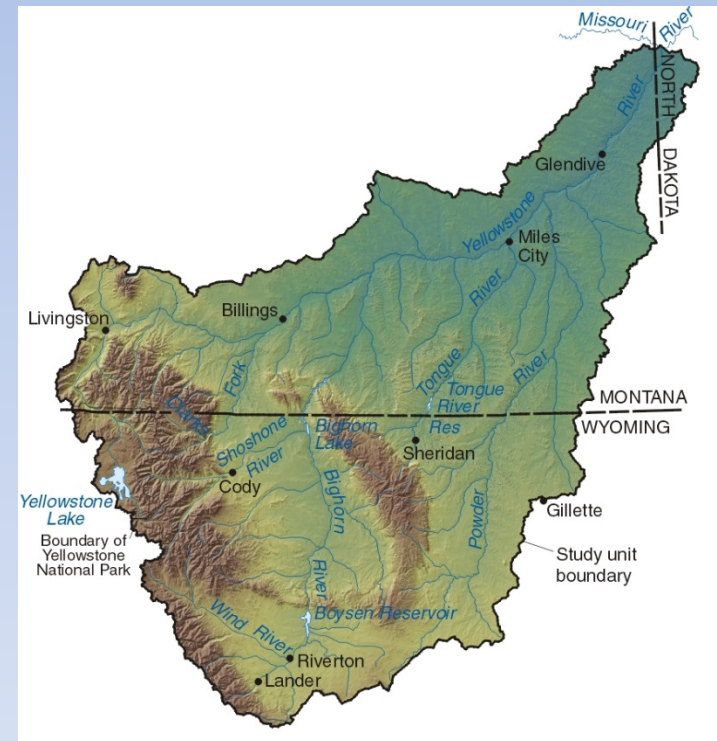
- ❖ The Special Master recommended that the Supreme Court find Wyoming not liable for violating the Compact for thirteen of the fifteen years claimed by Montana.
- ❖ He concluded that Wyoming violated the Compact in 2004 and 2006 by diverting and/or storing water under post-1950 rights after Montana made a call.
- ❖ After making adjustments for conveyance losses to the Stateline, he recommended that the Supreme Court find Wyoming liable to Montana in the amount of 1,300 acre feet for 2004, and 56 acre feet for 2006.

# Supreme Court

- ❖ U.S. Supreme Court accepted Special Master's Second Interim Report for filing on February 23, 2015.
- ❖ After recognizing the small nature of Wyoming's past violations, it stated: "The parties are therefore directed to consider carefully whether it is appropriate for them to continue invoking the jurisdiction of this Court." "The Special Master is encouraged to facilitate efforts to resolve the parties' dispute without the need for a damages proceeding[.]"

# Tongue River Administration Under the New Decree

- Montana and Wyoming working cooperatively on implementation
- Wyoming has installed gages on 5 reservoirs in the Bighorn Mountains to monitor storage
- Calls were made by Montana in 2015 (50 days) and 2016 (15 days)
- Though litigation is not a recommended path, we believe the decree has made both states manage water resources in the basin much more efficiently



# Belle Fourche Basin

- Belle Fourche River Compact (1943)
  - Annual meeting between Wyoming and South Dakota
  - Discuss Keyhole and Belle Fourche Reservoir operations with water users and agencies



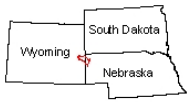
# Cheyenne River Basin

Compact was negotiated between Wyoming and South Dakota in the 1940's but never ratified by the Wyoming Legislature



# Niobrara River Basin

Niobrara River Basin



0 9 18 miles

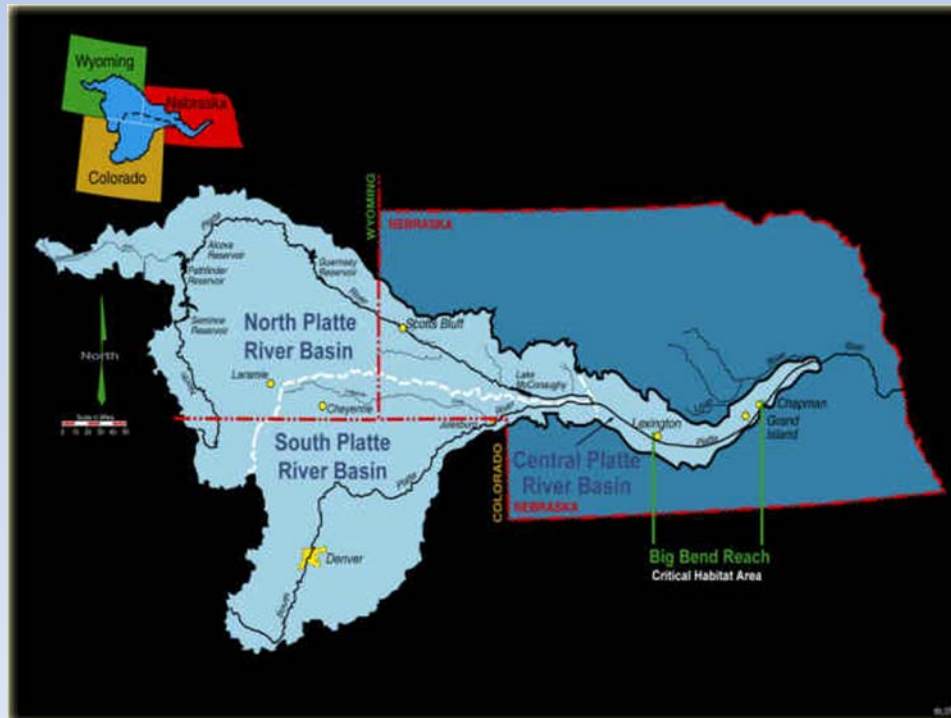


- Compact between Nebraska and Wyoming
- Groundwater Component
- Compact does not cover entire basin
- States meet twice per year to discuss any issues



# Platte River Basin

- North Platte Decree (1945; modified 2001)
- Platte River Recovery Implementation Program



# Platte River Basin

- Current Issues:
  - Decree working smoothly  
..... except
  - PRRIP - seeking reauthorization in 2019
  - Glendo flood pool work



# Looking Ahead .....Groundwater!

- Groundwater heavily used only in some parts of WY
- Ogallala (High Plains) aquifer only real source of water in central/eastern Laramie County. Became a Groundwater Control Area in 1981.
- Both had seen conflicts for decades
- LaGrange/Horse Creel Order - July 19, 2013 (Amended and reissued May 31, 2017)
- Laramie County Control Area (LCCA) Order - April 1, 2015
- LCCA Order informed by public interest analysis on a related permit
- No similar orders ever entered by a Wyoming State Engineer
  
- Agua Caliente
- Mississippi v. Tennessee



Go Pokes!