# Compact Commissions and Interstate Water Administration

Compacts and Interstate Water Allocation CBA-CLE Denver, CO May 9, 2014



**COLORADO Division of Water Resources** Department of Natural Resources

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#### Colorado's Treaty & Compact Obligations

#### Colorado is bound by:

National Treaty Mexican Treaty on Rio Grand, Tijuana, and Colorado Rivers - 1945 Interstate Compacts Colorado River Compact - 1922 (Shared responsibility with the CWCB) La Plata River Compact - 1922 (SEO responsibility) South Platte River Compact - 1923 (SEO responsibility) Rio Grande River Compact - 1938 (SEO responsibility) Republican River Compact - 1942 (SEO responsibility) Costilla Creek Compact - 1944 (Rev. 1963) (SEO responsibility) Upper Colorado River Compact - 1948 (Shared responsibility of the CWCB) Arkansas River Compact - 1948 (Shared responsibility with the CWCB) Animas-La Plata Project Compact - 1969 (Shared responsibility with the CWCB) U.S. Supreme Court Decrees (SEO responsibility) Nebraska v. Wyoming - 1945, 2001 (North Platte River) Wyoming v. Colorado - 1957 (Laramie River) Agreements/Understandings Pot Creek Memorandum of Undersatnding-2005 (1958) Sand Creek Memorandum of Agreement–1997



#### STATE OF COLORADO INTERSTATE COMPACTS Methods of Allocating Water Among States

- Allocation of a portion of the long-term undepleted basin water supply to each state on the basis of consumptive use (man-made depletions)
  - Colorado River Compact Acre-feet per year of depletions
  - Republican River Compact Acre-feet per year of depletions
- Delivery of a portion of an indexed supply to the stateline
  - Rio Grande Compact Variable index and delivery obligation for calendar year
  - La Plata River Compact One-half of indexed flow to stateline the next day
- Application of Doctrine of Prior Appropriation across stateline
  - Costilla Creek Compact
  - South Platte River Compact includes administration based on flows and the doctrine of prior appropriation



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### 19 States & Mexico Rely on Colorado Water





## Methods of Allocating Water Between States

- Litigation
  - Court Decides
- Federal
  - Federal Government Decides
- Agreement
  - States Agree (Compact)







### **General Administrative Authority**

- General authority-C.R.S. §§37-80-101, et seq.
- •Surface water administration—C.R.S. §§37-92-102, -301
- •Ground water administration—C.R.S. §§37-90-110, -111, -138, §37-90.5-102, §§37-92-102, -301
- •Administrative orders-C.R.S. §§37-92-502, -503
- •Rule making authority—C.R.S. §§37-80-102(1)(g), -102(1)(k), §37-92-501 ("Water Rule Power")



### General Administrative Authority (cont.)

- •Fines, damages, enforcement and injunctions— C.R.S. §§37-89-101, -103, §37-92-503(6) - (8) and §37-92-504
- •Reservoir administration-C.R.S. §37-84-117
- •Compact administration—C.R.S. §37-81-102 & §37-80-104 ("Compact Rule Power")



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- Don't always anticipate modern developments (extensive well development between 1950-1980)—took some time for both science and law to catch up up (some thought ground water was an inchoate right based on land ownership)
- Failure to comply with compact
- Did not envision issues with Environmental Species Act or reserved rights and bypass flows
- Available funding for staffing for administration and enforcement



- May shield us from excessive downstream demands but also require that we meet certain delivery requirements—may mean shutting off our water users and paying damages for violating compact
- Limit amount of water Colorado can develop and consume—limits economic development—price we pay



- Climate change (affects timing and amount of runoff, ET of crops and native vegetation, higher evaporation from water surfaces)
- Development (population growth, reservoirs, increases in irrigation efficiencies, vegetative growth, conservation measures) has affected streamflow, water quality, stream morphology and transit losses



- May not contain provisions to provide flexible and practical methods of administration with the necessity of advancing age
- Many compacts were established following the passage of several Federal Acts to address reduced water supply from irrigation development. Irrigated acreage has peaked and continues to decline as other water development occurs and conversion of agricultural water is converted to other uses (M&I, augmentation, energy). Therefore, provisions of compacts may not fully address the change in type, duration, frequency of use and value of new uses. For example, navigation was an original use and a ferry was actually used on the Lower Colorado at one time.



### How some issues have been dealt with

- Promulgation of rules and regulations; Well Measurement Rules in Republican, Arkansas, and Rio Grande; Well Use Rules in Arkansas and Rio Grande
- Must avoid Tragedy of the Commons (or more aptly the Tragedy of the Unregulated Commons)

   need to develop long term strategies for development of unallocated water under Colorado River Compact; Rio Grande basin, Denver basin, and Republican River basin - need to develop strategies for sustainability



### How some issues have been dealt with

- Use Decision Support Systems to analyze "what ifs" regarding compact compliance
- Need import statute?
- What about national security issues? Food and energy?



### How some issues have been dealt with

- Five of nine compacts have interstate commissions or administrators to work out such future issues (Upper Colorado, Rio Grande, Republican, Costilla Creek, Arkansas)
- Also have North Platte Decree Committee



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## Colorado River Compact Administration

• No formal administrative body established

BUT

• Governor appointed representatives from each of the 7-Colorado River Basin States (Wyoming, Colorado, Utah, New Mexico, Arizona, California, Nevada) play key roles.

• Coordinate with each other and the federal government to promote systematic coordination of facts regarding flow, appropriation and consumption of Colorado River water under the Colorado River Compact

•Secretary of the Interior required to report to Governors and representatives on operation of Colorado River reservoirs and consult on modifications to operating criteria. Section 602(b), Colo. River Basin Project Act



## Duties of the Administration

•No official duties because no administration.

#### BUT

• Recent decisional documents by Secretary of the Interior and Agreements among the Governor appointed representatives for the 7-Basin States require consultation on river management and good faith efforts to problem solve.

See 2007 Record of Decision for Colorado River Interim Guidelines for Lower Basin Shortages and Coordination Operations for Lakes Powell and Mead.
See April 2007 Basin States Agreement.
See 2012 MOA between IBWC, BOR, and 7-States representatives regarding Minute 319.



## Organization of the Administration

- Governor appointed representatives serve as Principals
  - CA Chair of Colorado River Board of California
  - AZ Director of AZ. Dept. of Water Resources
  - NV Director of Southern Nevada Water Authority and Director of Nevada's Colorado River Commission
  - Upper Basin States Upper Colorado River Commissioners

• Principals rely on respective staff to form committees to consult, problem solve, and perform technical / legal work. Committees report to Principals for decision making.

•Per 2007 Basin States Agreement, Governor representatives meet at least once a year, oftentimes more frequently depending on issues.



## **Problem Solving**

•Recent examples include:

 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Powell and Mead – 2007

•Minutes 316, 317, 318 and 319 to 1944 Mexico Water Treaty – 2010-2017

•Basin Water Supply and Demand Study - 2012

•Contingency Planning for Colorado River Basin – Currently being evaluated





### La Plata River Compact Administration

•No formal administration (Colorado and New Mexico).

BUT

•The State Engineers from Colorado and New Mexico get together as needed to address any issues that may arise regarding the operations of the compact



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## Duties of the Administration

•No official duties because no administration.

BUT

•Cooperate with state officials in the determination of facts as to the flow and diversion of waters of the La Plata River

•Prescribe procedures for the administration of the Compact

Investigate alleged violations of the Compact



## Organization of the Administration

•Meetings

•Meetings held as needed



## **Problem Solving**

•Evaluate alternative delivery operations of water to state line

•Developing administrative protocol for nearly completed Long Hollow Reservoir





### South Platte River Compact Administration

No formal administration (Colorado and Nebraska)
State Engineer is Commissioner for Colorado
Representative from Nebraska is DNR Director



## Duties of the Administration

•No official duties because no administration.

BUT

•Cooperate with state officials in the determination of facts as to the flow and diversion of waters of the South Platte in Compact reaches

- •Prescribe procedures for the administration of the Compact
- •Investigate alleged violations of the Compact
- No formal reporting done



## Organization of the Administration

•Committees

- •Ad Hoc Committees possible
- •Meetings
  - •No formal meetings held—meet as needed



### **Problem Solving**

•No current issues





### **Rio Grande Compact Administration**

- The Administration is composed of 4 members:
   One representative from each state appointed by the respective governors (Colorado (State Engineer), New Mexico (State Engineer), Texas (private attorney appointed by TCEQ))
  - •An ex officio member representing the United States appointed by the President of the United States
  - Rules and Regulations for Administration approved in 1938.



## Duties of the Administration

- •Cooperate with state officials in the determination of facts as to the flow and diversion of waters of the Rio Grande
- •Prescribe procedures for the administration of the Compact
- Investigate alleged violations of the Compact
- •Report annually to the governors and to the President
- Annual water accounting for Compact
- Adopt annual budget
- Approve contact with USGS for gaging services



## Organization of the Administration

•Committees

- •Legal Committee
- Engineering Committee
- •Ad Hoc Committees possible

•Meetings

- Annual meetings held each spring and alternates between each state
- •Special meetings as needed

•Voting

each state gets one vote: consensus required to take any action

•Federal Representative is non-voting.



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## **Problem Solving**

Cooperate on addressing ESA Issues
Computation of evaporation in Elephant Butte Reservoir
Operations of the Rio Grande Project (i.e., Elephant Butte Reservoir - Operating Agreement)
Dealing with extreme drought






## Laramie River Decree and Sand Creek Agreement Administration

•No formal administration (Colorado and Wyoming).

BUT

 Representatives from Colorado and Wyoming meet as needed



•No official duties because no administration.

#### BUT

•Cooperate with state officials in the determination of facts as to the flow and diversion of waters of the Laramie River and Sand Creek. Wyoming notifies Colorado each year when their users demand reaches 40 cfs on Sand Creek and then DWR administers

•Prescribe procedures for the administration of the Decree and Agreement

•Investigate alleged violations of the Decree or Agreement

•Report of transbasin diversions every year



•Meetings

•Meetings held as needed



•No current issues





### Republican River Compact Administration

•The Administration is composed of 3 members:

One representative from each state appointed by the respective governors (Colorado (State Engineer), Kansas (Chief Engineer) and Nebraska (DNR Director))
Administration governed by Bylaws



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•Cooperate with state officials in the determination of facts as to the flow and diversion of waters of the Republican River Basin

•Prescribe procedures for the administration of the Compact

Investigate alleged violations of the Compact
Produce annual report of activities and water accounting.



#### •Committees

- •Legal Committee
- Engineering Committee
- •Ad Hoc Committees possible

•Meetings

- •Annual meetings held each summer
- •Special meetings as needed
- •Voting each state gets one vote: consensus required to take any action



•Final Settlement Stipulation (FSS) in 2002 Issues can be resolved informally or formally through the **Dispute Resolution Process of FSS** •Well Measurement Rules Adopted in 2008 in Colorado Compact Compliance Pipeline (CCP) approved for one year in 2013 for operation in 2014 Continuing negotiations for permanent approval of CCP and Bonny Reservoir operations Continuing arbitrations on Nebraska's Rock Creek Project, N-CORPE Project (Medicine Creek) and Water Short Year Administration





#### **Costilla Creek Compact Administration**

- The Administration is composed of 2 members:
  One representative from each state appointed by the respective governors (Colorado (State Engineer) and New Mexico (State Engineer))
  - •Officers rotate Chairmanship between states in alternating years
  - The Costilla Creek Compact Commission has developed a Water Master Manual for operations.



•Cooperate with state officials in the determination of facts as to the flow and diversion of waters of Costilla Creek

- •Prescribe procedures for the administration of the Compact
- •Investigate alleged violations of the Compact



**COLORADO Division of Water Resources** 

•Committees

- Engineering Committee
- •Ad Hoc Committees possible
- •Meetings
  - •Annual meeting held each year and alternates
  - between states
  - •Special meetings as needed

•Voting – each state gets one vote: consensus required to take any action



•Development of the Water Master Manual in 2005 eliminated issues on water operations between the States.





# North Platte Decree Administration

•The North Platte Decree Committee (NPDC) was established by the States of Nebraska, Wyoming and Colorado and the United States of America to assist in administering the North Platte Decree

•Administration is composed of 4 members:

The Wyoming Area Manager of the United States Bureau of Reclamation or his or her designee
The Director of the Nebraska Department of the Natural Resources or his or her designee
The Wyoming State Engineer or his or her designee
The Colorado State Engineer or his or her designee



•Cooperate with state officials in the determination of facts as to the flow and diversion of waters of the North Platte

The NPDC is tasked with assisting with monitoring, administering and implementing the Modified North Platte Decree and the Final Settlement Stipulation
Semi-annual status reports and updates as required by the Settlement Stipulation



•Committees

- •Ground Water Wells Subcommittee
- Control Crest Subcommittee
- •Replacement of Water Subcommittee
- •Finance Subcommittee
- Consumptive Use Standing Subcommittee
- Ad Hoc Subcommittees as needed

•Meetings

•The NPDC meets at least twice per year: one meeting to be no later than April 15 (held in Nebraska) and the second meeting to be held in October or November (held in Wyoming) •Special meetings as needed

•Voting – Each NPDC member gets one vote on each issue submitted to the NPDC. A negative vote by any representative shall prevent the proposed action from being adopted.



- Monitor and update irrigated area in Colorado annually not to exceed 145,000 acres
- •Monitor storage in Colorado annually not to exceed 17,000 AF/yr
- •Monitor export of water out of the North Platte River Basin in Jackson County to any other basin not to exceed 60,000 AF in any period of ten consecutive years





# Upper Colorado River Compact Administration

- •The Administration is composed of 5 members:
  - •One representative from each state appointed by the respective governors (Colorado, Wyoming, New Mexico and Utah)
  - •A member representing the United States appointed by the President of the United States
  - •The representative of the United States presides over Commission meetings.
  - •The Commission has an administrative staff.



The powers and responsibilities of the UCRC are described in Article VIII of the Compact.
Report annually to the governors and to the President



•Committees

- Legal Committee
- Engineering Committee
- •Ad Hoc Committees possible

UCRC Staff

- •Executive Director, Assistant to Executive Director,
- General Counsel, Administrative Secretary

•Meetings

- •Meetings held annually
- •Special meetings as needed

•Voting – each state and U.S. gets one vote: consensus required to take any action



Oversight and Administration of Implementation of the Interim Guidelines for Lower Basin
Shortages and Coordinated Operations for Lake Powell and Lake Mead

- •Negotiations with Mexico Regarding Shortage Management and Augmentation of the Supply
- Implementation of the Colorado River Basin Fund MOA
- Lees Ferry Stream Gage on the Colorado River
- Upper Division States Drought Contingency Planning
  Colorado River Basin Supply and Demand Study





## Arkansas River Compact Administration

•The Administration is composed of 7 members:

Three representatives from each state appointed by the respective governors (Colorado and Kansas)
An ex officio member representing the United States appointed by the President of the United States
Officers Established by Bylaws



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Cooperate with state officials in the determination of facts as to the flow and diversion of waters of the Arkansas
Prescribe procedures for the administration of the Compact

- •Cooperate in the operation of John Martin Reservoir
- Investigate alleged violations of the Compact
- •Report annually to the governors and to the President
- Adopt annual budget
- Contract with USGS for gaging support



•Committees

- Administrative and Legal Committee
- •Engineering Committee
- •Operations Committee
- •Ad Hoc Committees possible

•Meetings

- •Annual meetings held each 2<sup>nd</sup> Tuesday of December
- Special meetings as needed

•Voting – each state gets one vote: consensus required to take any action



•35 issues distinct from those litigated, have been identified in an Issues Matrix by the Operations Committee (13 remain unresolved)
•Well Measurement Rules adopted in 1995
•Well Use Rules adopted in 1996
•Irrigation Improvement Rules adopted in 2010.



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### Pot Creek Agreement

•Revised Memorandum of Understanding and Agreement

- •State Engineer of Utah and State Engineer of Colorado have exclusive authority to administer the terms of the Memorandum
- •Waters are administered pursuant to a combined administration list



Cooperate with state officials in the determination of facts as to the flow and diversion of waters of Pot Creek
Prescribe procedures for the administration of the Agreement

•Selection of the water commissioner (four year term) and determination of salary



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•Committees

•Board of Directors consisting of one water user from Utah, one water user from Colorado and a representative from the Utah Division of Wildlife Resources

•Meetings

•Annual meeting held in Vernal, Utah

•Voting – Every water user that pays a portion of the annual assessment fee. The State of Colorado pays the assessment fee for the Colorado water users and thus is considered a voting member.



•Ensuring that all gauging stations and measuring devices are properly operating to assure the accurate allocation of the waters of Pot Creek.





#### **A-LP Project Compact Administration**

•No active administration (Colorado and New Mexico).

BUT

•OM&R Association established to oversee operations of A-LP Project operations including Lake Nighthorse



•No official duties because no administration.



•No official meetings since no administration.

BUT

•OM&R Association established to oversee operations of A-LP Project operations including Lake Nighthorse



•Developed Colorado Division of Water Resources' Protocol for Administration of the Animas-La Plata Project Water Rights, August 26, 2013









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