



Improving Wetland Restoration Success Water Rights & Wetland Restoration

WESTERN WATER RIGHTS – WHAT YOU NEED TO KNOW

Presented by Alan Leak, P.E.



February 23, 2016



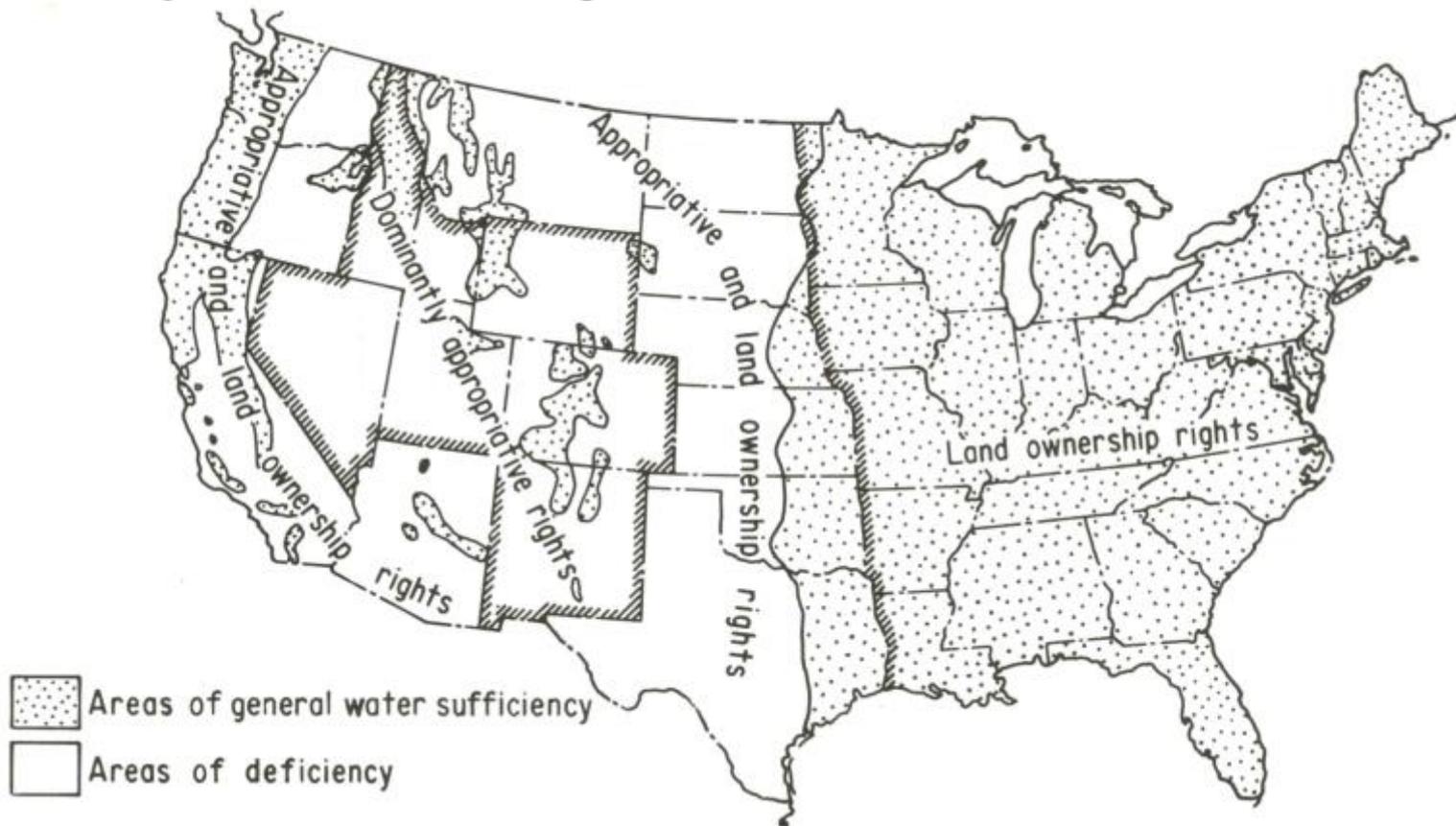
WHAT YOU WILL LEARN IN THIS WEBINAR

- Basic Understanding of Water Rights Laws and Administration
- Where to Go for Information on Your State's Water Laws and Administration
- Wetland Water Right Requirements And Processes
- Specific Issues in Colorado, the Most Complex Water Rights System in the United States
- Colorado Wetland Example



BASIC UNDERSTANDING OF WATER RIGHTS LAWS AND ADMINISTRATION

- U.S. by Water Rights Doctrine



BASIC UNDERSTANDING OF WATER RIGHTS LAWS AND ADMINISTRATION

- **Riparian Rights Doctrine**

- In all 29 states east of MN-LA meridian except MS, LA
- Typically applied where water supply is usually plentiful
- Tied to ownership of land adjacent to natural waterway
- Water is a “common resource” – not actually owned by user
- When water supply is insufficient, shortfall shared by all
- Some States have now instituted permitting due to growth/drought issues



BASIC UNDERSTANDING OF WATER RIGHTS LAWS AND ADMINISTRATION

- **Prior Appropriation Doctrine (“Colorado Doctrine”)**

- Eight western states and Alaska
- Typically applied in more arid regions, especially the West, where demand exceeds supply (finite resource)
- “First in time, first in right”
- Priority system awards right to divert and use water for beneficial uses
- When water supply is insufficient, shortfall is borne by those users with lower-priority, or “junior” water rights
- Water rights owners have a right to “use”, not of ownership



BASIC UNDERSTANDING OF WATER RIGHTS LAWS AND ADMINISTRATION

- **Hybrid Systems (“California Doctrine”)**
 - Nine mid-west and western states
 - Mixture of riparian and prior appropriation doctrines
 - Generally begin as riparian, converted to prior appropriation, and retain recognition of riparian
- **Exceptions**
 - Louisiana water law is adapted from French Civil Code
 - Hawaii water law is combination of ancient Hawaiian Kingdom and recent statutes



WHERE TO GO FOR INFORMATION ON YOUR STATE'S WATER LAWS AND ADMINISTRATION

MyAccount | Login | Create Account | Home | Contact | Help



Strong States, Strong Nation

ABOUT US | LEGISLATORS & STAFF | RESEARCH | MEETINGS & TRAINING | NCSL IN D.C. | MAGAZINE | BLOG



STATE WATER WITHDRAWAL REGULATIONS

2/20/2013

This provides 50-state information on state surface water and groundwater withdrawal laws and regulations, including the doctrine of appropriation; administering agency; water withdrawal permit and application requirements; state water withdrawal fees; water withdrawal statutes and administrative codes; and links to other state-specific water withdrawal resources.

The box allows you to search by state.

Colorado

CONTACT

Scott Hendrick

NAVIGATE

Home

- ▶ About State Legislatures
- ▶ Agriculture and Rural Development
- ▶ Civil and Criminal Justice
- ▶ Education
- ▶ Elections and Campaigns
- ▶ Energy
- ▼ Environment and Natural Resources
 - Climate Change and Air Quality

www.ncsl.org/research/environment-and-natural-resources/state-water-withdrawal-regulations.aspx



WHERE TO GO FOR INFORMATION ON YOUR STATE'S WATER LAWS AND ADMINISTRATION



STATE WATER WITHDRAWAL REGULATIONS

2/20/2013

This provides 50-state information on state surface water and groundwater withdrawal laws and regulations, including the doctrine of appropriation; administering agency; water withdrawal permit and application requirements; state water withdrawal fees; water withdrawal statutes and administrative codes and links to other state-specific water withdrawal resources.

The box allows you to search by state.

Colorado

CONTACT

Scott Hendrick

NAVIGATE

Home

- ▶ About State Legislatures
- ▶ Agriculture and Rural Development
- ▶ Civil and Criminal Justice
- ▶ Education
- ▶ Elections and Campaigns
- ▶ Energy
- ▶ Environment and Natural Resources
- ▶ Climate Change and Air Quality
- ▶ Environmental Health
- ▶ Federal Issues | Environment and Natural

Type in State Here



WHERE TO GO FOR INFORMATION ON YOUR STATE'S WATER LAWS AND ADMINISTRATION

Colorado

General Information

In Colorado, to obtain the right to withdraw either surface or groundwater, an application must be filed with one of the seven Water Courts in the state. The application must be filed in the division in which the diversion is located. Once an application is filed with the appropriate court, a summary (or the application in full) is published in "the resume" and in the local newspaper. Upon publication in the resume and paper, a statement of opposition can be filed by any person. Oppositions must be filed within a forty-five day period following publication. A statement of opposition must outline the reasons why an application should not be granted or should be granted on different terms. At the end of the month following the month of publication of the application, the referee examines the application and the statements of opposition. The referee consults with the division engineer. Within thirty days, the engineer files a written report containing the recommendations. This report is then filed with the court. The referee, who must then mail copies to all parties in the case. The referee can then either approve or deny (in whole or in part) the application. Protests to the referee's ruling can be filed with the court. If a protest is filed before the twentieth day following the mailing of the referee's ruling, the ruling is signed by the referee as a decree of the court. If a protest is filed after the twentieth day, a hearing is held before the water judge. The hearing can also be referred to the water judge directly by the referee and engineer. When a matter is referred to the water judge, a trial is set and the case proceeds before the water judge who either grants or denies the application based upon factual issues in the case and how they relate to statutory and case law criteria. A granted application is considered a "decreed water right."

Water rights in Colorado can be either absolute or conditional. An absolute right is a right that will be developed in the future. A conditional right maintains its priority until the project is complete. In order to maintain a conditional water right, the owner must file an application for a final decree with the water court. The applicant must prove that he or she has been diligently pursuing completion of the project. Upon completion, the

State Web Site Links

appropriation date for which the conditional right was awarded.

Doctrine of Appropriation: Prior-appropriation

Regulatory System: Judicial "permitting"

Administering Agency: Colorado Water Courts

Statutes: Water Rights Determination and Administration (Colo. Rev. Stat. §§ 37-92-101 to 106 (1969))

Administrative Code:

Other: Colorado Constitution (Colo. Cons. Art. XVI §6)



WHERE TO GO FOR INFORMATION ON YOUR STATE'S WATER LAWS AND ADMINISTRATION

Doctrine of Appropriation: Prior-appropriation

Regulatory System: Judicial "permitting"

Administering Agency: Colorado Water Courts

Statutes: Water Rights Determination and Administration

Administrative Code:

Other: Colorado Constitution (Colo. Cons. Art. XVI §6)



BASIC UNDERSTANDING OF WATER RIGHTS LAWS AND ADMINISTRATION

- **Key Water Right Terms**

- **Appropriation** – The overt act of placing a certain amount of water to a beneficial use. This may require the physical diversion of the water or may allow appropriation without a physical diversion (i.e. an instream flow right).
- **Beneficial Use** – The placement and use of water for purposes defined by the individual state. Examples include domestic, irrigation, industrial, piscatorial, power. Beneficial Use by Wetlands may fall under wetlands, irrigation, aquatic plant production, or other terms defined in state law.



BASIC UNDERSTANDING OF WATER RIGHTS LAWS AND ADMINISTRATION

- **Key Water Right Terms (cont.)**
 - **Evapotranspiration** – Is the total amount of water transpired by a plant and evaporated from adjacent soil and water surfaces under existing climatological and soil-moisture conditions.
 - **Consumptive Use** – This is the amount of water which does not return to a stream or groundwater system after application.
 - **Stream Depletion** – This is the effect on the stream system from a stream diversion. It is the amount of stream diversions that do not return to the stream system.



BASIC UNDERSTANDING OF WATER RIGHTS LAWS AND ADMINISTRATION

- **Types of Water Rights**
 - **Direct Flow** – Water that is diverted and immediately placed to beneficial use.
 - **Storage** – Water that is diverted and placed into storage for future application to a beneficial use.
 - **Instream Flow** – Water that is left in a stream but accounted for on paper against a water right.



WETLAND WATER RIGHT REQUIREMENTS AND PROCESSES

- **STEP 1 – Determine if you need a water right:**
 - Depends on the water right laws in your State but most likely the answer will be yes in the western United States.
 - Depends on the type of wetlands project you are constructing. If the project increases the amount of water consumed over pre-project conditions, then you will likely need a water right.

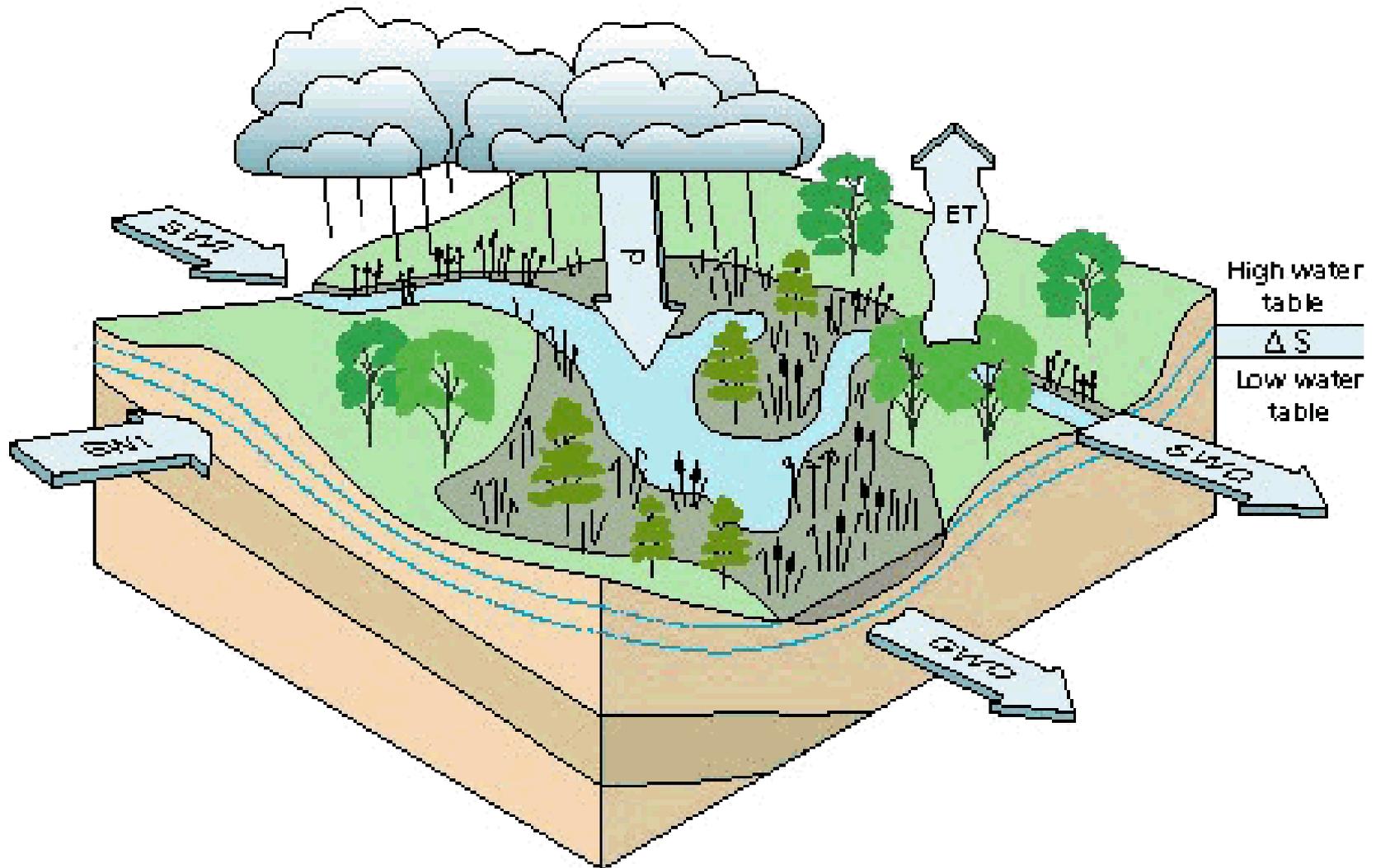


WETLAND WATER RIGHT REQUIREMENTS AND PROCESSES

- **STEP 2 – If you need a water right, how much water do you need:**
 - Determine the consumptive use (evapotranspiration) of your project.
 - Determine the amount and type of water supply needed:
 - Precipitation
 - Groundwater
 - Surface Water (Natural or Diverted)
 - Determine if you will have return flows from the project (what is the stream depletion amount).
 - Surface Water
 - Groundwater



WETLAND WATER RIGHT REQUIREMENTS AND PROCESSES



WETLAND WATER RIGHT REQUIREMENTS AND PROCESSES

- **STEP 3 – Obtain a water right which has the required amount of supply and consumptive use:**
 - Secure an new junior water right, or
 - Obtain an existing water right and change and/or transfer that water right to the proposed wetland location



WETLAND WATER RIGHT REQUIREMENTS AND PROCESSES

- **Findings needed to secure a new water right or to change or transfer an existing water right:**
 - You have followed the necessary steps to appropriate the water right
 - Your diversion amount is physically and legally available
 - You are applying the water to an appropriate beneficial use
 - Your priority date based upon the date that you proved your intent to secure the water right and place it to beneficial use
 - Your project will not injure more senior water rights



WETLANDS AND COLORADO WATER RIGHTS

- **Can you _____ without a water right?**
 - Increase the area of an existing wetland? No
 - Restore a historic wetland? Maybe
 - Protect an existing wetland? No
 - Move a wetland as part of a stream restoration project? Maybe if not increasing the consumptive use over that which currently occurs
 - Construct a mitigation wetland at a different location? No
 - Increasing the groundwater level that creates a wetland? Maybe



WETLANDS AND COLORADO WATER RIGHTS

- **How to Obtain a Colorado Water Right for a Wetland**
 - **Can the Wetland be covered by filing for a junior water right?** Typically No. Most stream systems in Colorado are considered to be “over-appropriated”. Therefore the water right likely will not be in priority for a long enough time and thus will likely cause injury to existing water right holders.
 - **Will intermittent availability of the water supply meet the wetland water demand?** This only typically works for a constructed wetland where water is diverted to the wetland only when in priority.



WETLANDS AND COLORADO WATER RIGHTS

- **How to Obtain a Colorado Water Right for a Wetland**
 - **Purchase a Water Right? Yes**
 - Typically an irrigation right, shares in a mutual ditch company, or other transbasin/non-tributary water rights.
 - Must acquire sufficient consumptive use water to replace the annual dry year wetlands water demand.
 - Must provide year round replacement; therefore must also have a place to store the excess summer credits for release in the winter.
 - If purchased water right is downstream of wetlands, will need an plan for exchange as well.



WETLANDS AND COLORADO WATER RIGHTS

- **How to Obtain a Colorado Water Right for a Wetland**
 - **How to Purchase a Water Right?**
 - Usually through a water broker or through professional contacts in the water rights field.
 - **Purchase Price?**
 - Determine between a knowledgeable buyer and knowledgeable sell dealing at arms length
 - Depends on Availability / Need / Location
 - Can be approximated by comparable sales
 - Have the water rights appraised
 - Discuss with Water Attorney / Water Engineer



FILING FOR AN APPROPRIATION OR CHANGE OF WATER RIGHTS IN COLORADO

- File an application with the Water Court
- Those concerned that the application will cause injury file a statement of opposition
- Engineering analysis prepared, expert reports filed, proposed decree filed, and negotiations occur
- If case not settled, trial conducted in front of a water judge
- Judge issues ruling. If not satisfied, case appealed to the Colorado Supreme Court whose ruling is final
- **Start to finish can take two or more years**
- Operate and account for water right use



WETLANDS AND COLORADO WATER RIGHTS

Example – Colorado Department of Transportation (CDOT) Chatfield Arboretum



WETLANDS AND COLORADO WATER RIGHTS

Example – Colorado Department of Transportation (CDOT) Chatfield Arboretum



WETLANDS AND COLORADO WATER RIGHTS

Example – Colorado Department of Transportation (CDOT) Chatfield Arboretum

- 404 Permit required that the replacement wetlands be sustainable and have a dependable source of water.
- New wetlands had no water rights. Therefore, water could not be diverted into the wetlands except in very wet years (once in about 5 years). This was considered insufficient.
- Therefore, water rights needed to meet 404 permit conditions and to sustain the wetlands.



WETLANDS AND COLORADO WATER RIGHTS

Example – Colorado Department of Transportation (CDOT) Chatfield Arboretum

- Solution – CDOT owns non-tributary water rights under I-25 in Castle Rock
- Castle Rock had need for additional water supplies.
- CDOT's water rights could be used in Castle Rock and Castle Rock would dedicate a like amount of water from its wastewater discharge to CDOT.
- An application was made to the Water Court for a plan of augmentation and exchange in order for this water to be used at the Arboretum.



WETLANDS AND COLORADO WATER RIGHTS

Example – Colorado Department of Transportation (CDOT) Chatfield Arboretum



WETLANDS AND COLORADO WATER RIGHTS

Example – Colorado Department of Transportation (CDOT) Chatfield Arboretum

- Without water rights the wetlands would have received water maybe once every five years
- With water rights the wetlands receive water every year
- Delivery of water from Castle Rock must be timed to meet periods when Deer Creek is flowing such that a physical supply is available
- Decreed for 17.9 acre-feet of storage at a diversion rate of 3 cfs.
- Water right applied for in 2007, decreed in 2016!!



WETLANDS AND COLORADO WATER RIGHTS

Example – Colorado Department of Transportation (CDOT) Chatfield Arboretum



THANK YOU

Alan Leak, P.E.

Program Manager – Water Rights and
Infrastructure

Direct 720-775-6406

alan.leak@respec.com

The logo for RESPEC, featuring the word "RESPEC" in a bold, blue, sans-serif font. The letters are slightly italicized and have a modern, clean appearance. The background of the slide features two large, overlapping circles: a blue one in the upper right and a green one in the lower right, both partially cut off by the edge of the frame.

RESPEC