



COLORADO LAW

# Water Markets in the Western US: A Colorado Case Study

*Dean David Getches  
University of Colorado Law School*

**WATER:**

***How Alberta Can Do More with Less!***

**Alberta Water Research Institute**

**Calgary**

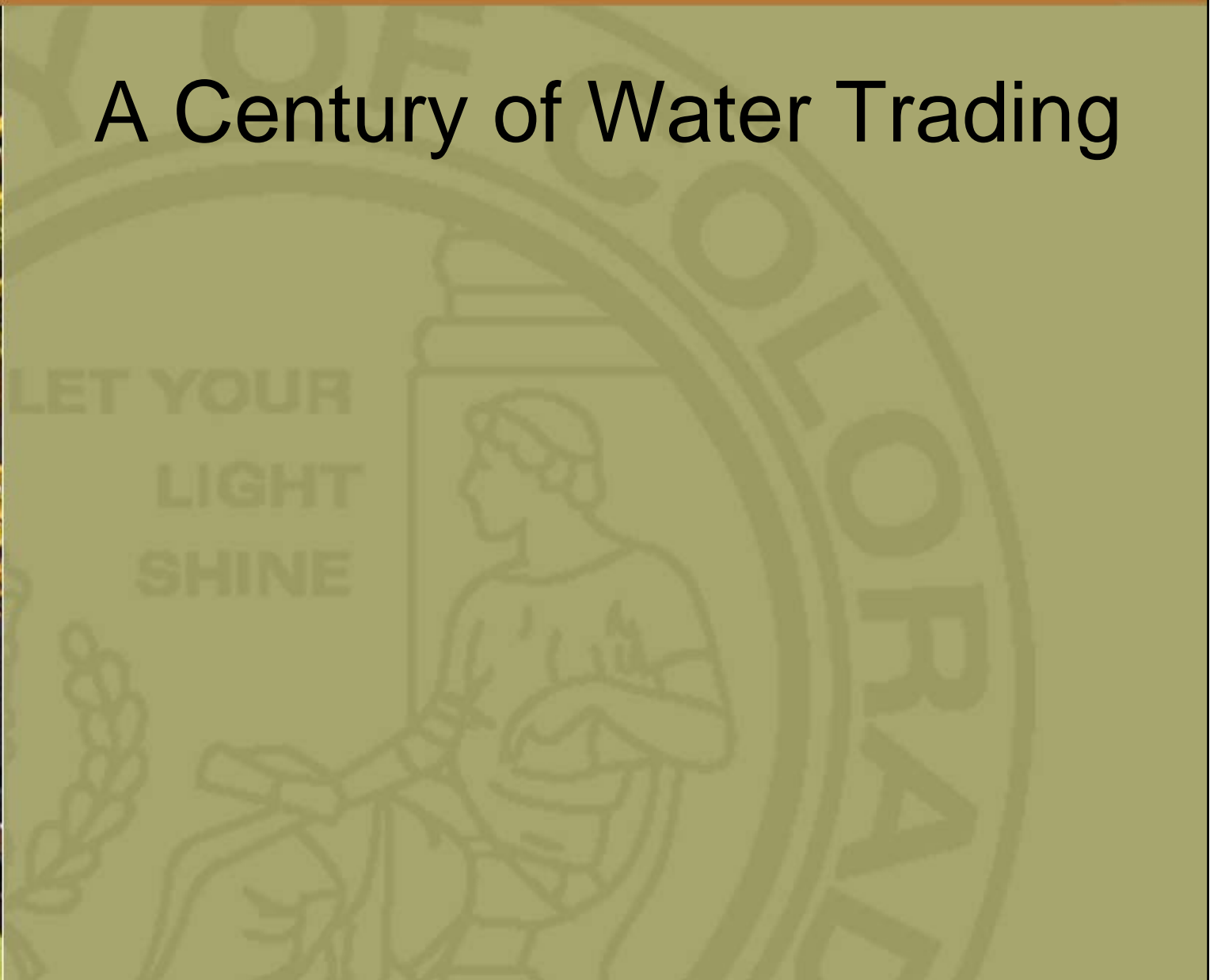
**March 4, 2009**





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# A Century of Water Trading





## Colorado Water Law System: “Prior Appropriation”

- *First in Time, First in Right*
- *Must put water to a Beneficial Use*
- *Rights lost by Nonuse*
- *No permits; Water Court “recognizes” rights*



## Priority (first in time, first in right) means --

- Oldest water rights are best, most valuable
- In drought prior (senior) rights get all and junior rights are reduced or may get none – *No sharing of shortages*
- Even in normal hydrologic cycles some junior rights get little or nothing



## Water Rights are Transferable

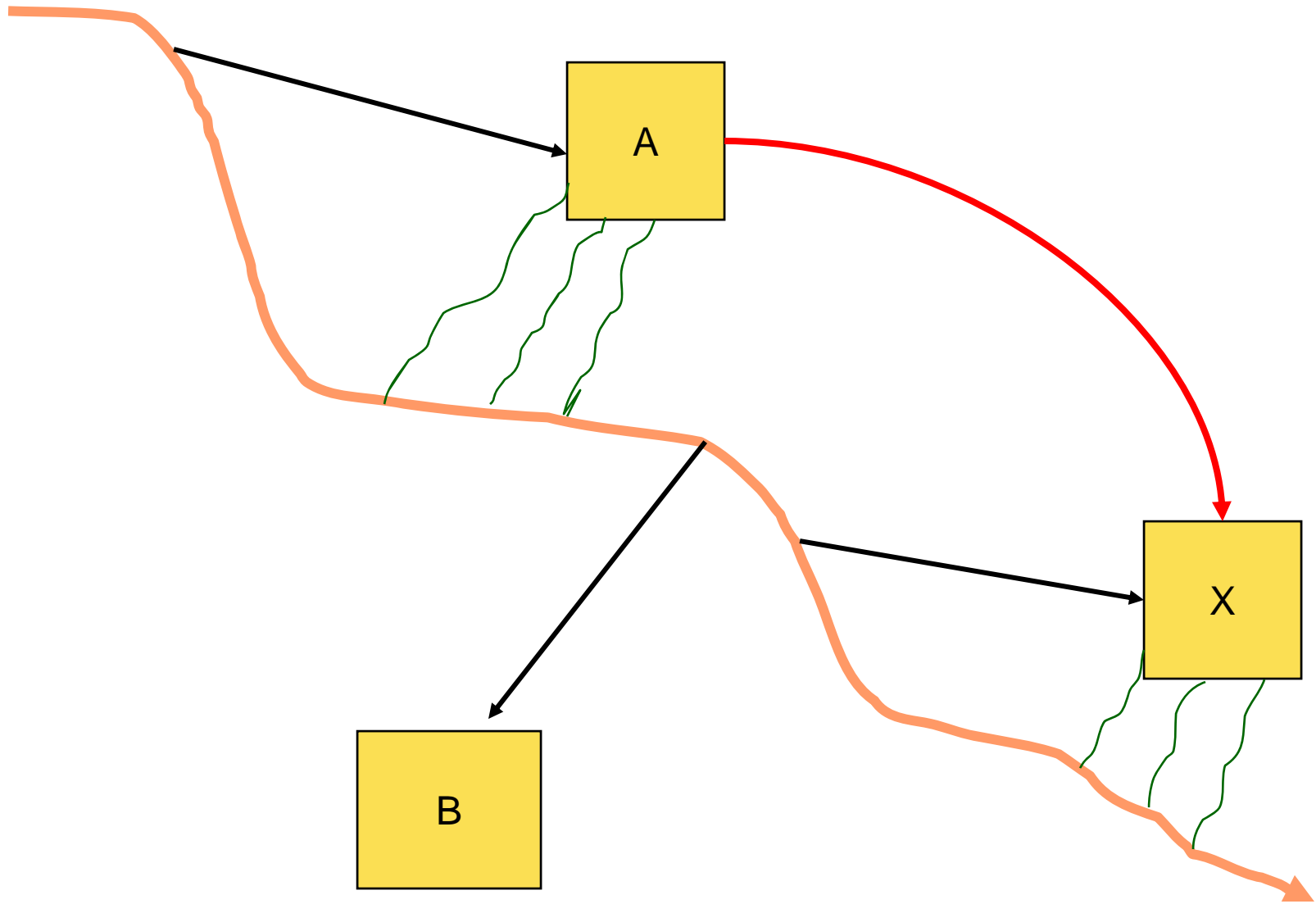
- *Can be bought and sold*
- *Subject to “no injury” rule*
  - *Must show no other water rights are harmed*
  - *No restriction on harm to public interest*
  - *Water Court reviews all “changes of use” (change in place of use, point of diversion, etc.)*



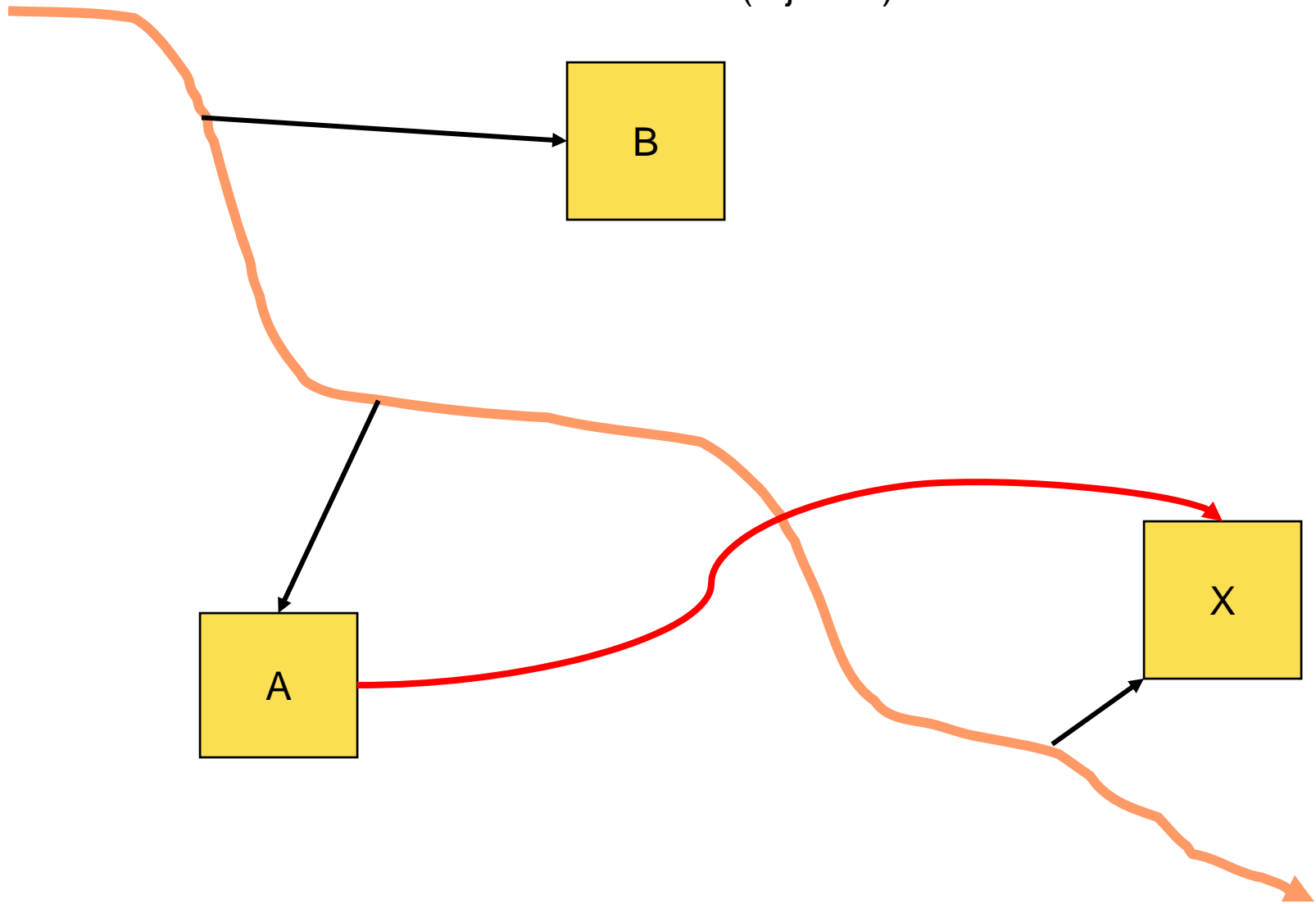
## Water Court Review

- *“Change of Use” requested*
- *Notice to all other water users in watershed*
- *Objections filed by other water users*
- *Referee reviews*
- *Court hearing as needed*
- *Lawyers for all parties*
- *Engineers present expert testimony, models, theories*
- *Can take years, thousands of dollars*

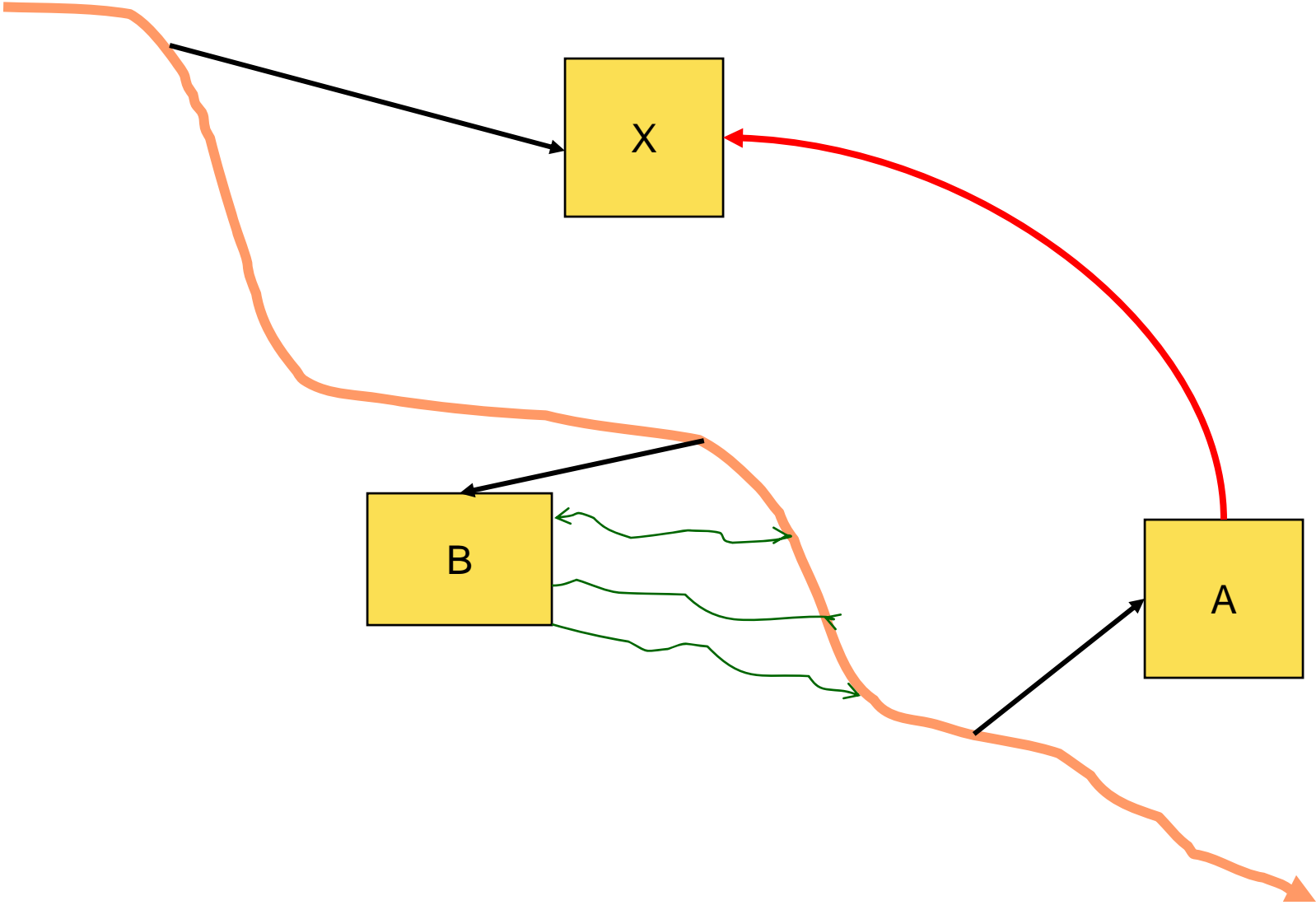
A changes point of diversion and place of use downstream.  
How might B (a junior) be harmed?



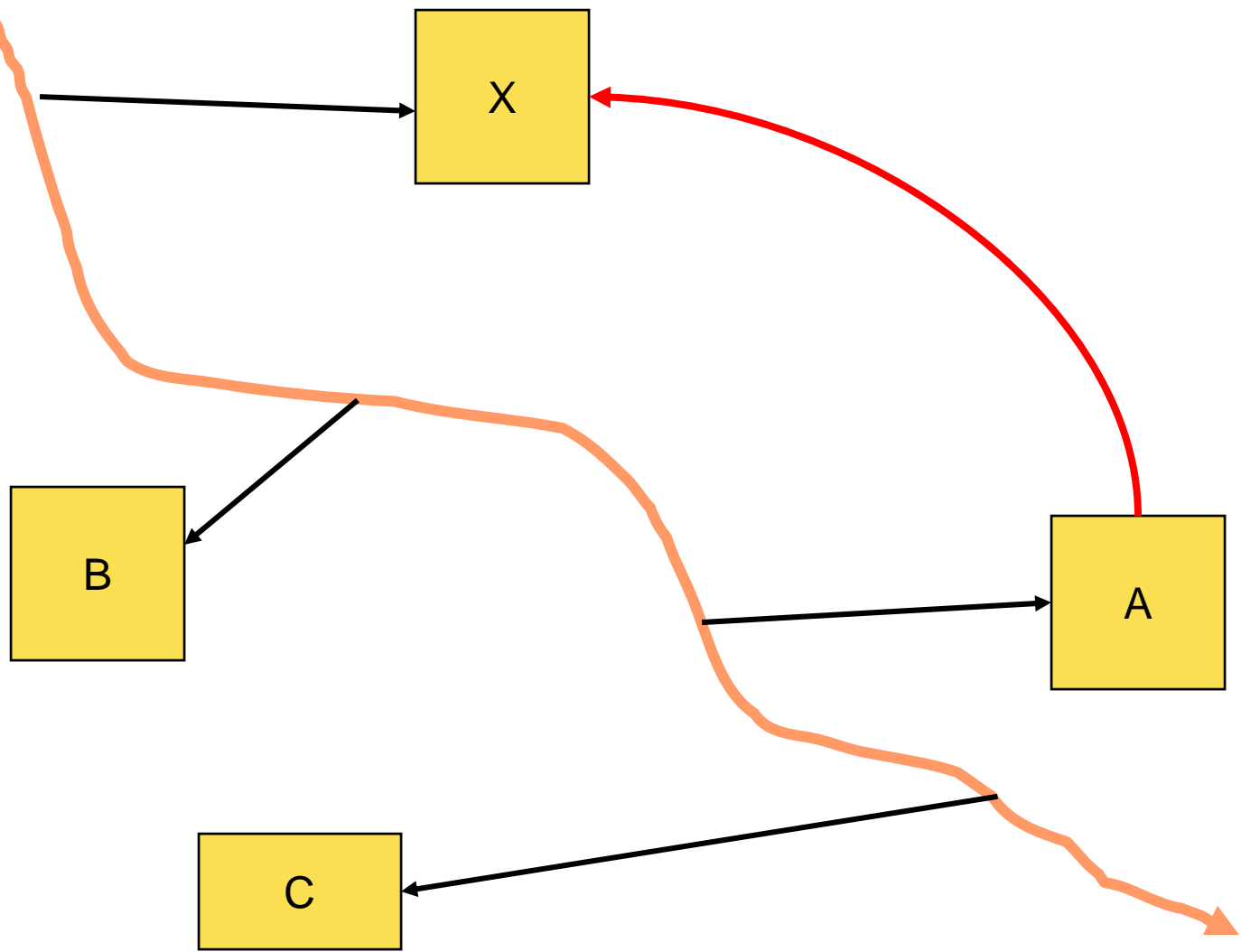
A changes point of diversion and place of use downstream.  
Under what circumstances could B (a junior) be harmed?



A moves diversion and place of use upstream.  
How might B (a junior) be harmed?



A changes diversion and use upstream. C is junior to B who is junior to A.  
How might C be harmed?





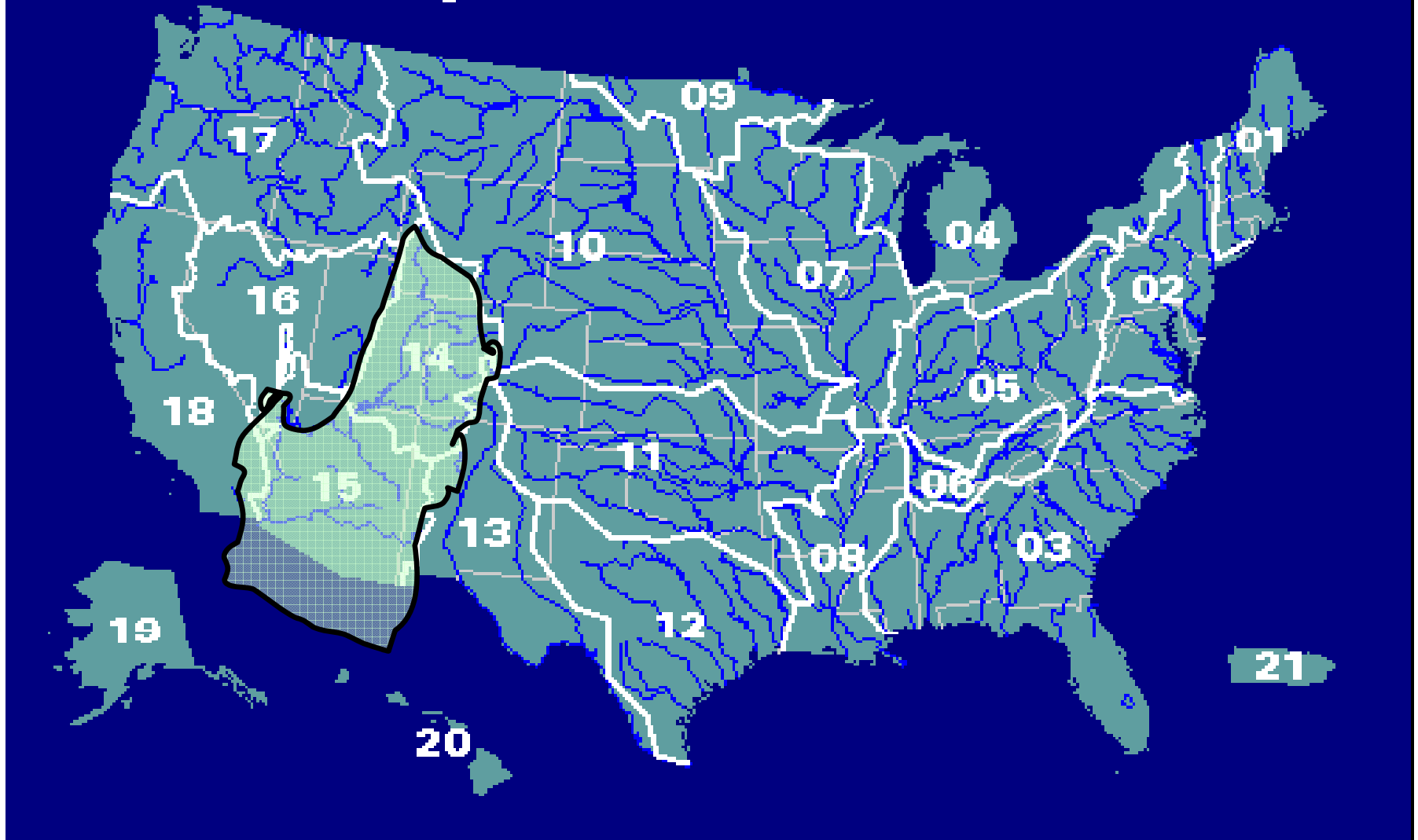
**Colorado's – and the West's  
– most vibrant and active  
water market operates  
outside the Water Court  
system**

- *Northern Colorado Water Conservancy District*



# Watersheds – U.S.

## Water Resources Regions





## US Index Map

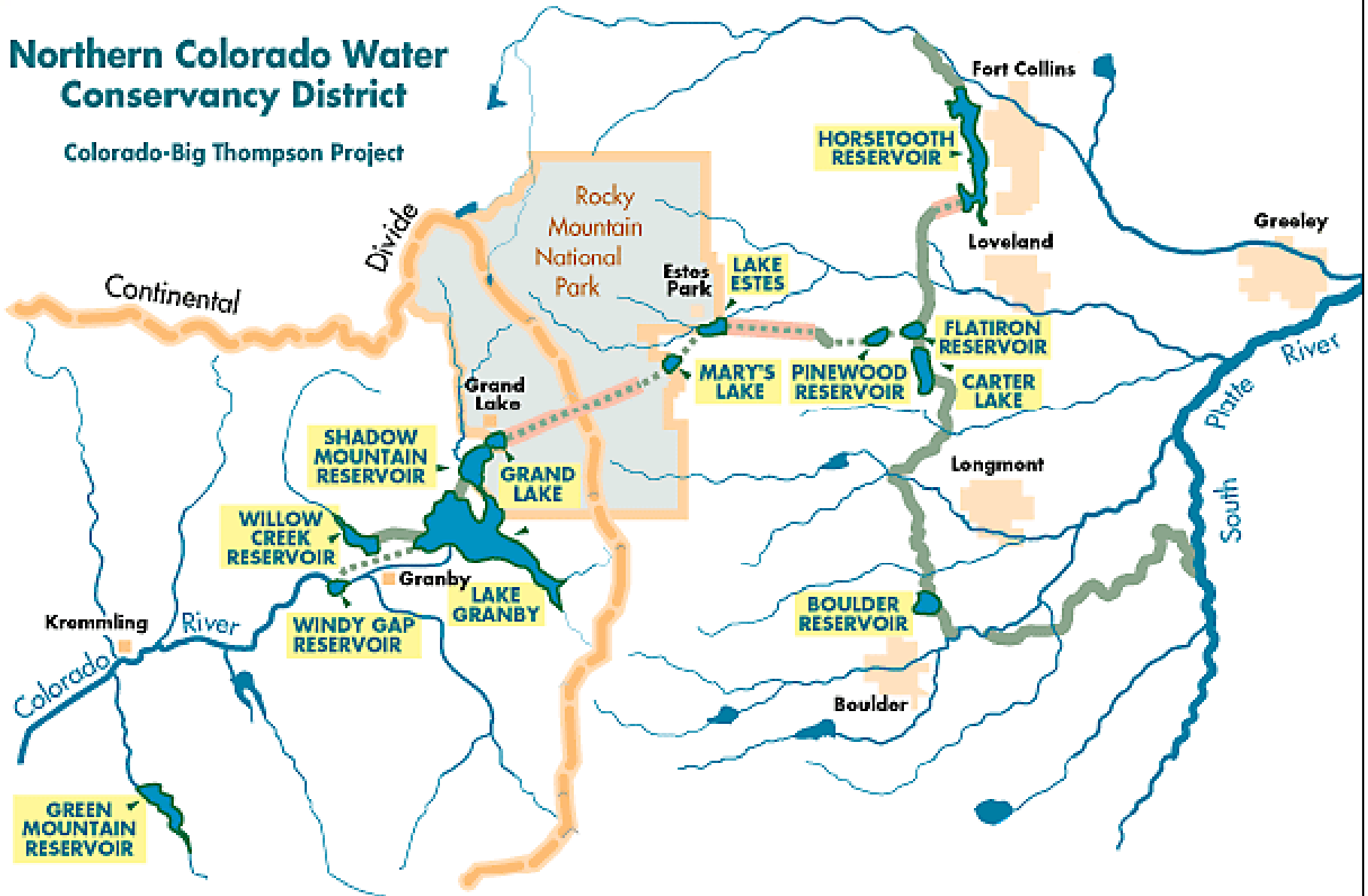


## Colorado Index Map



# Northern Colorado Water Conservancy District

Colorado-Big Thompson Project





# History of Colorado-Big Thompson Project

- ***1937 Drought***
- ***Supplemental agricultural water for eastern Colorado needed; growing cities***
- ***Western Colorado (west of Continental Divide) largely undeveloped***
- ***Federal government provided funding for transbasin diversion – from Colorado River basin to South Platte basin (Big T River)***
  - ***US Bureau of Reclamation – was formed in 1902, to aid in expansion of West; mostly agricultural water***
  - ***State and local interests lobbied in Congress***
  - ***Western communities protested; special provision added to authorizing legislation: “compensatory storage”***





## Northern Colorado Water Conservancy District

- ***NCWCD formed under state law to administer Colorado-Big Thompson Project (C-BT) [completed 1957]***
- ***Includes agricultural lands and several cities***
- ***Water rights owned by district – treated like one big water rights holder***
- ***30% of total supply in South Platte***



Within NCDWCD --

- ***Landowners with existing water rights got “shares” of district water***
- ***Shares can be transferred among water users in district***



## How the market works:

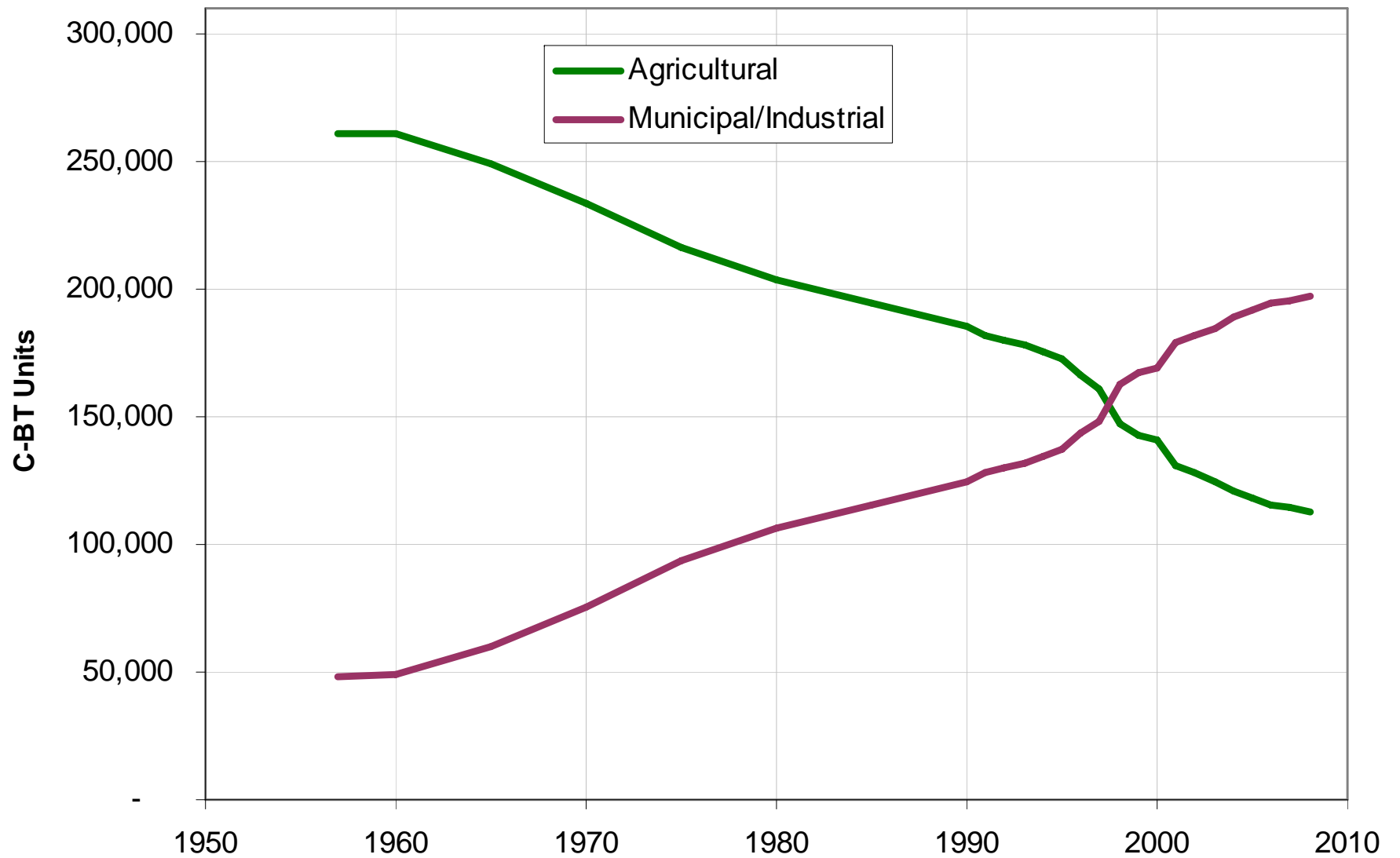
- *Owner of shares can sell them*
- *Buyer must have a use for water*
- *A share represents a “unit” of water – a quota set by district*
  - *Recently from .6 acre-foot to .9 acre-foot*
  - *Based on presumed need*
- *District puts limits on sales: can only sell for uses in district boundaries*
- *Price is set by market (has varied between \$9,000-\$11,000 per unit)*



## Today . . .

- Most (~90%) transfers are from agriculture to municipal uses
  - Irrigators sell to cities or to developers who transfer to cities to get water taps
  - Brokers are involved
- 100-200 transactions per year (2000-6000 units)
- Now 64% of shares owned by municipalities
  - But Ag gets 60% of deliveries

## Agricultural vs. Municipal/Industrial Ownership





## Why it works

- Infrastructure – water deliverable throughout district
- Easy to trade – homogeneous shares
- Low transaction costs
- Plenty of demand within district





*Issues:*

- ***What happens to agriculture?***
- ***What about the environment?***
- ***What about West Slope?***
- ***Why not allow out of district transfers?***





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