



# *Historical Consumptive Use (HCU), Changes of Water Rights, and Alternative Transfer Mechanisms*

Water Resources Review Committee

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Division of Water Resources



**COLORADO**

Department of Natural Resources

# Nature of a Water Right

- A water right is decreed with:
  - A priority date,
  - A specific, non-speculative type of beneficial use (for example, Irrigation)
  - A place of use,
  - An amount (cubic feet per second, cfs)

# Change of Water Right

- A water right can be transferred to another use
  - Retains its senior priority
  - For example, Irrigation water right transferred to Municipal
- However, it requires a legal/engineering process: “Change of Water Right”
  - Ensures the water is not used to a greater extent under the new use than it was under the old use...
  - Thereby ensuring that other water users on the river are not impacted by the change (material injury)

# Change of Water Right

- Direction from Supreme Court
  - No injury
  - Limit the transferrable amount to the “...historic beneficial consumptive use of the appropriation for its decreed purpose at its place of use.”

# Change of Water Right

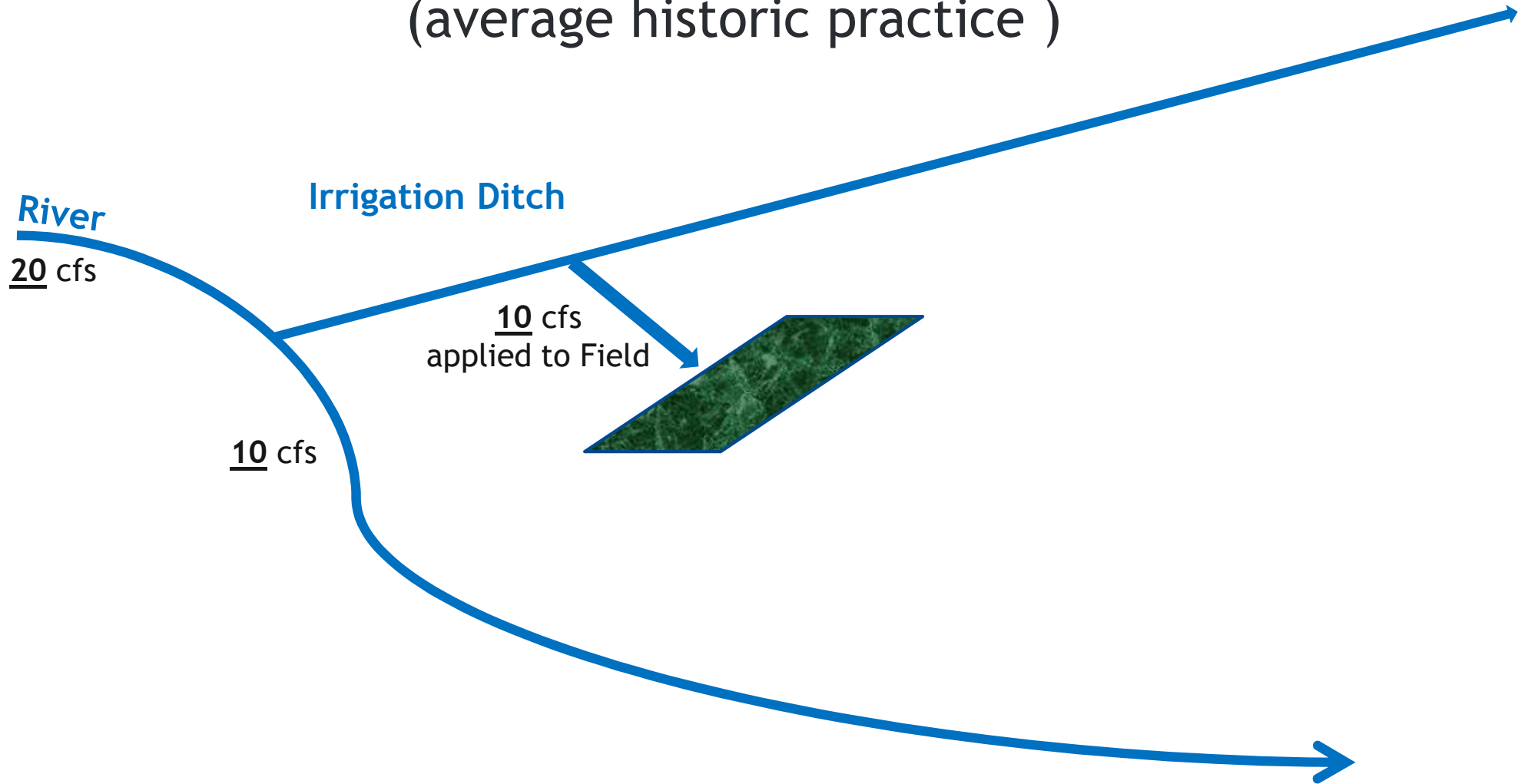
- Two standards; no injury and limit on the transferrable amount of water:
  - Requires analysis of the historical practice
    - How much water was consumed?
    - How did the unconsumed amount (return flows) accrue to the river (time, location, and amount)?
  - This analysis is difficult and contentious.

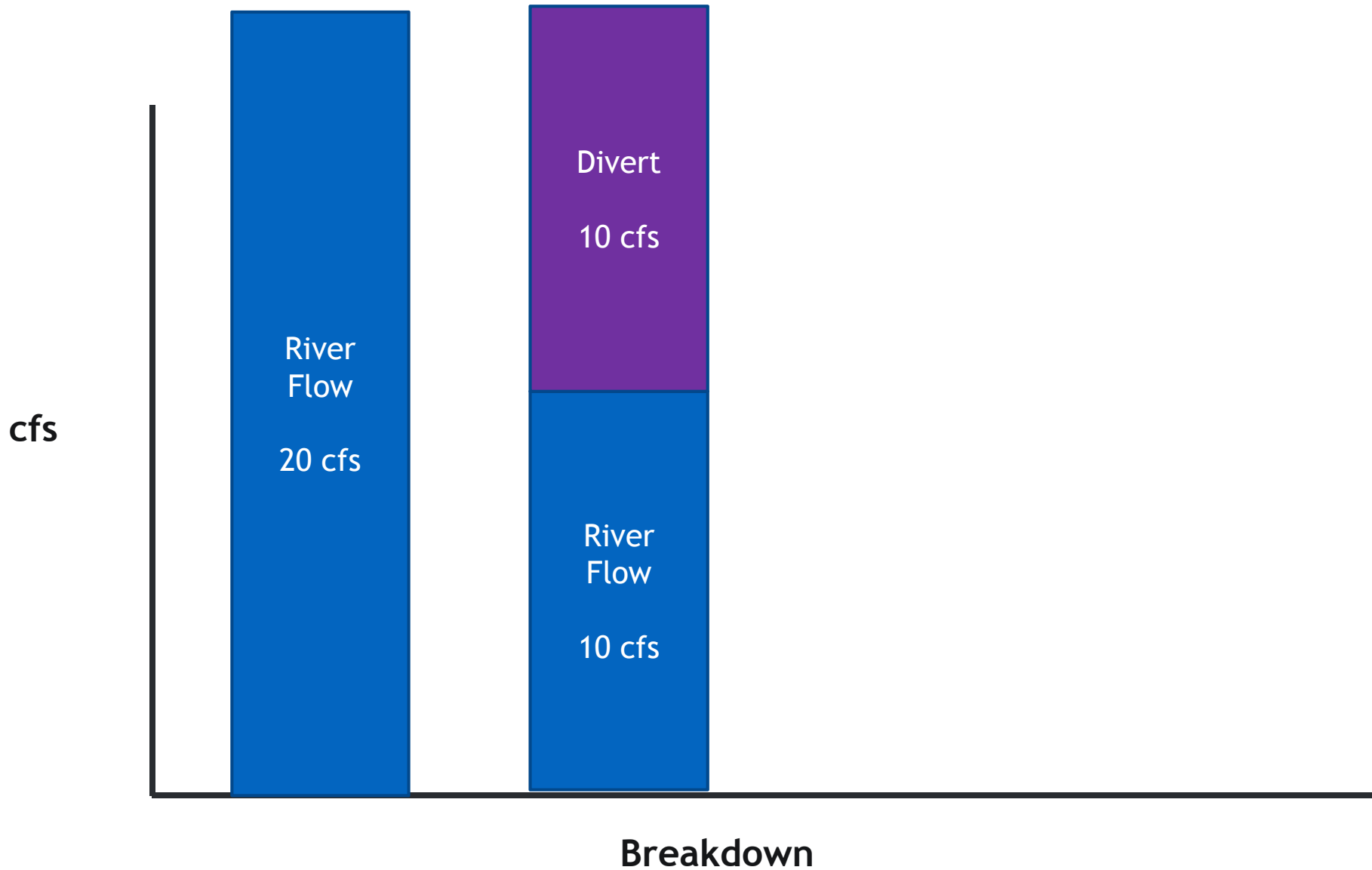
# Change of Water Right

- Consider a decreed water right for an agricultural ditch
- Decree allows a diversion of 15 cfs for defined land

# Change of Use

(average historic practice )







# Questions

Okay, we diverted 10 cfs.

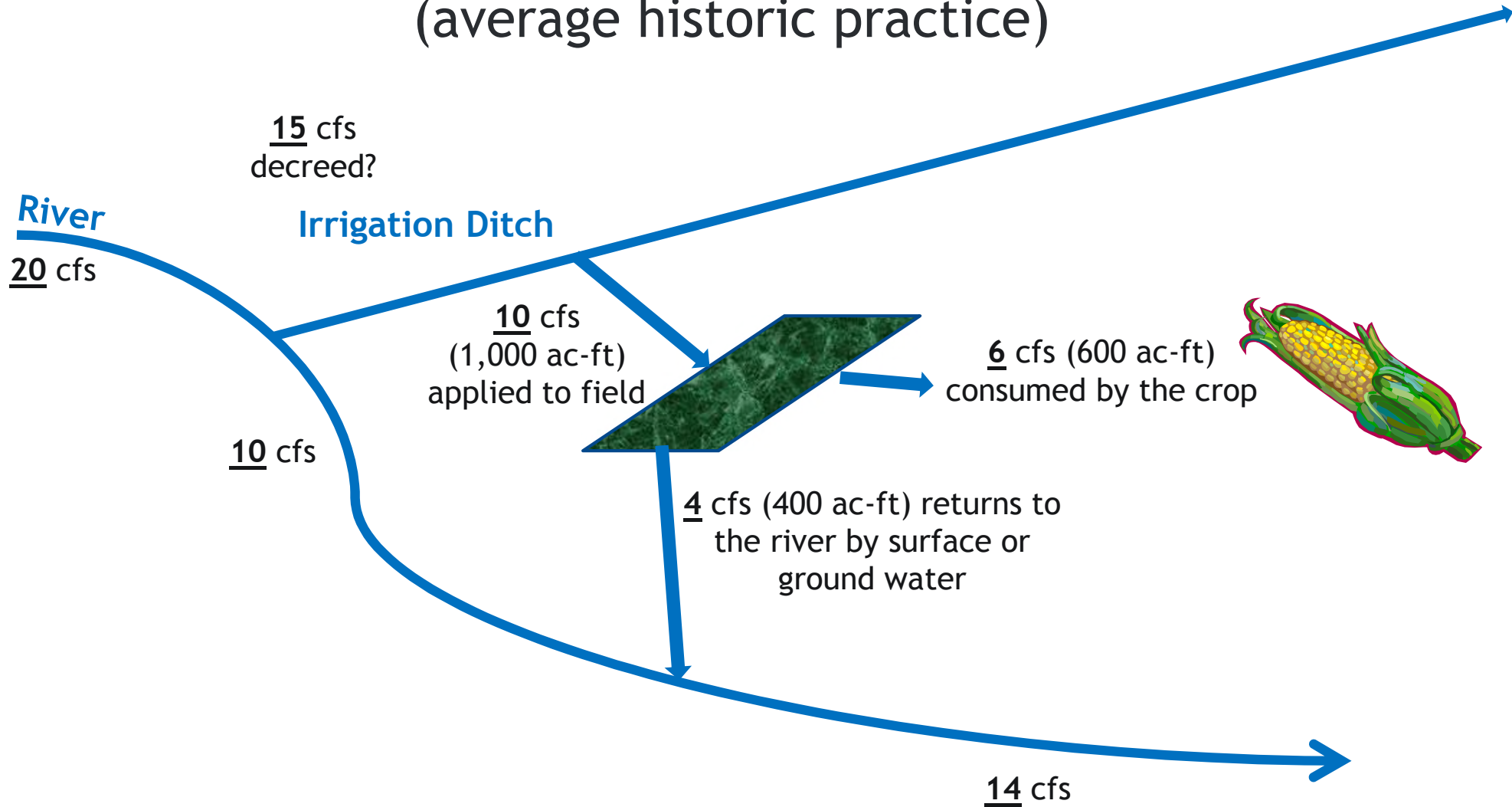
- What is our Diversion?
  - Of course we know that it's 10 cfs
- What is our Consumptive Use?
  - We don't quite know yet
- What is our Return Flow?
  - We don't quite know yet

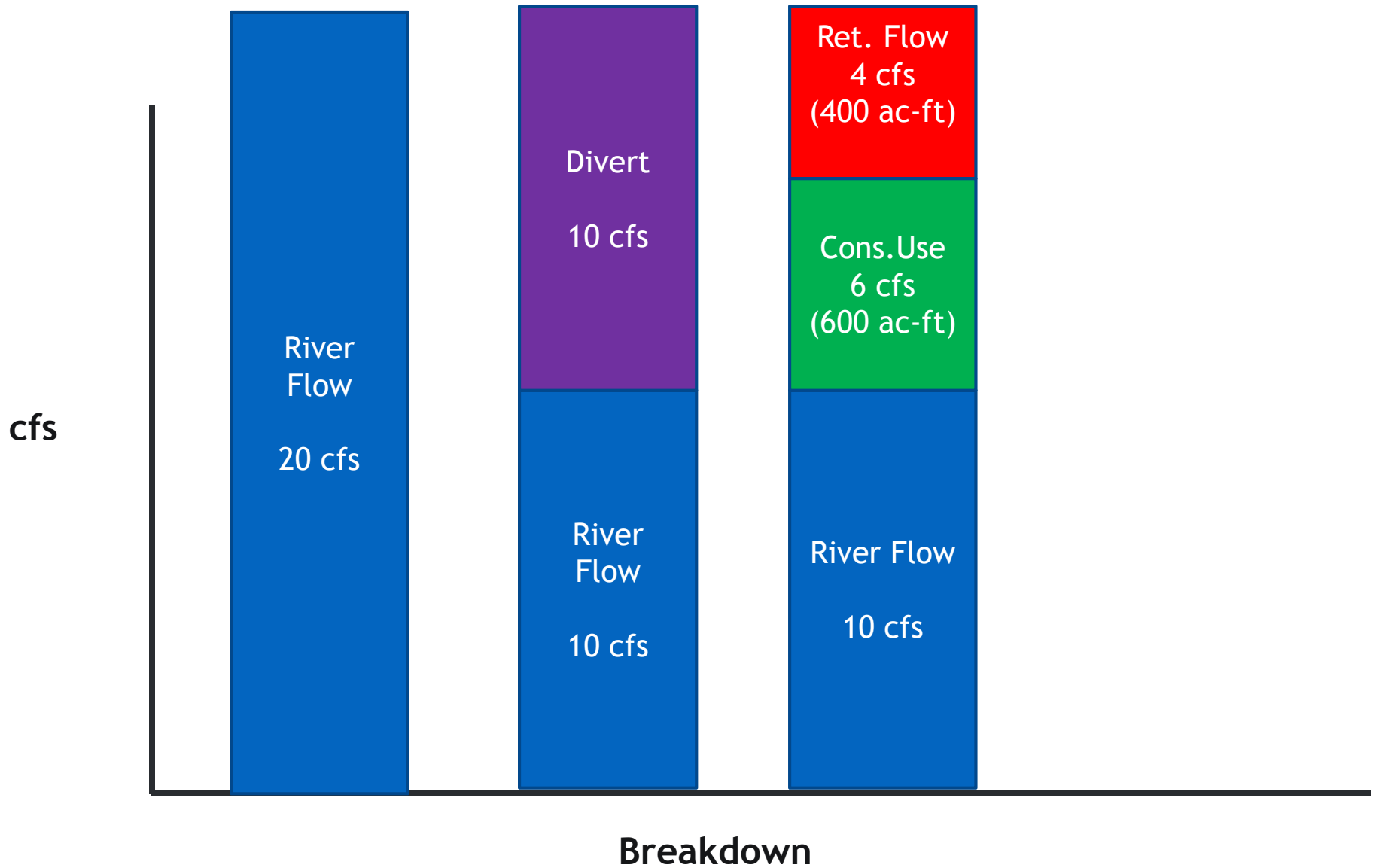
# Change of Use

- What is the measure of our water right
  - what are we allowed to transfer?

# Change of Use Example

(average historic practice)





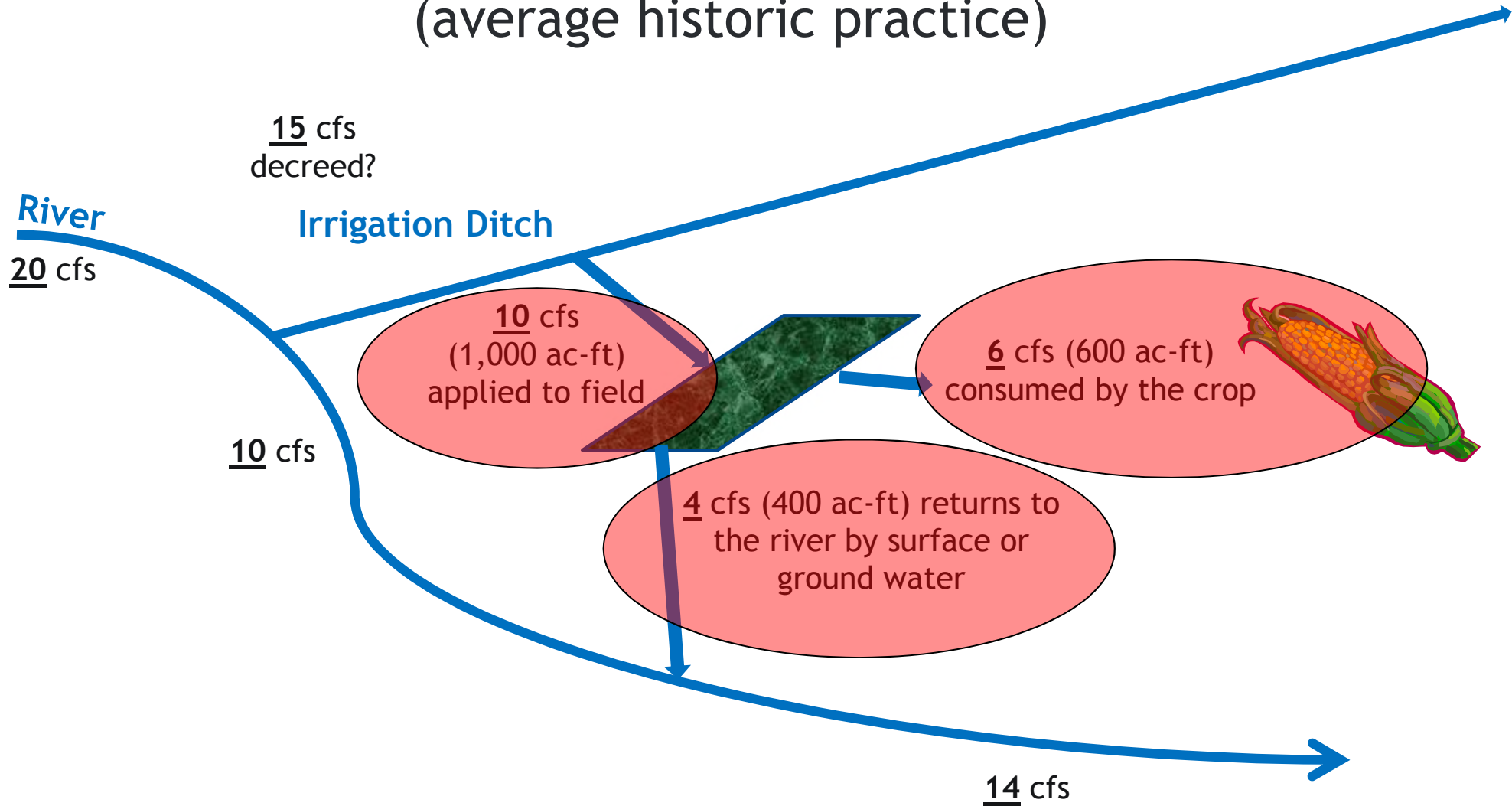
# Question

We diverted 10 cfs.

- What is our Diversion?
  - Of course we know that it's 10 cfs
- What is our Consumptive Use?
  - 6 cfs, 600 acre-feet
- What is our Return Flow?
  - 4 cfs, 400 acre-feet

# Change of Use Example

(average historic practice)



# Change of Water Right

- Contentious because:
  - Consumptive use
    - Assumptions
    - Scientific factors
    - Historic Irrigation practice?
  - Return flows
    - Assumptions
    - Scientific factors
  - Impact of different analyses

# Change of Water Right

Value of streamlined  
approach



# Going Forward From Here

- Objectives
- Alternatives