



Time Forward Allocation Basics

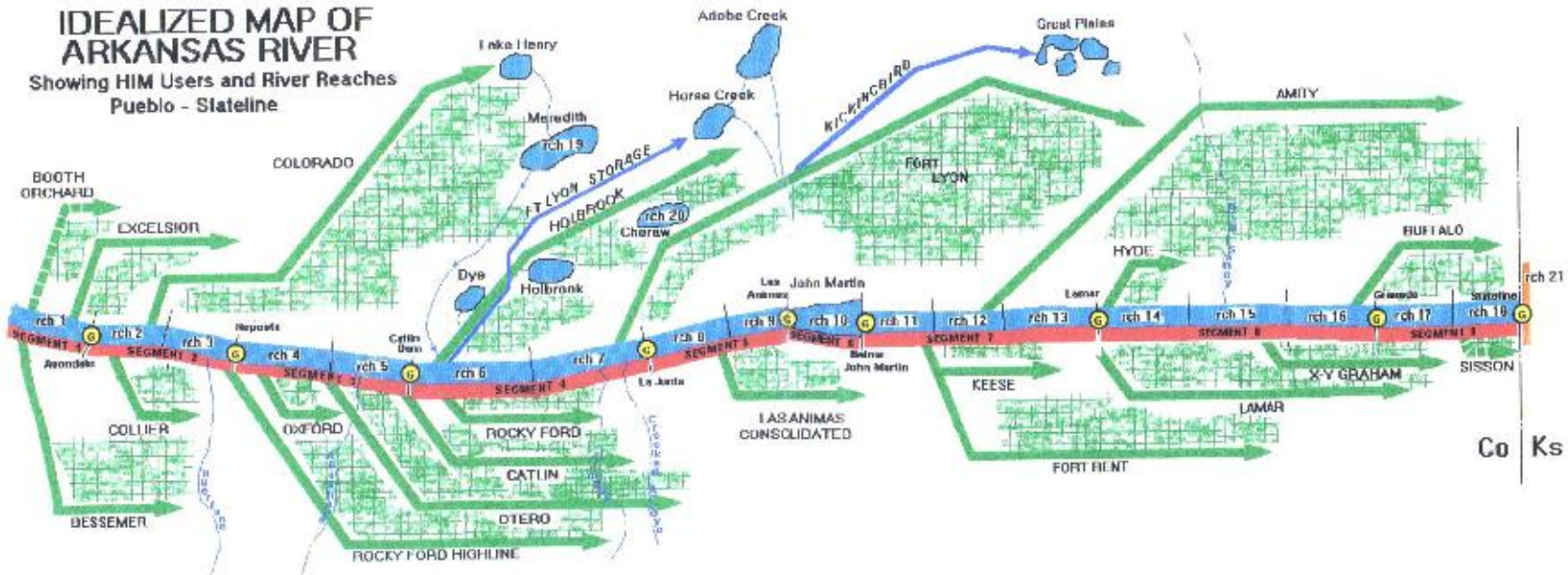
SECWCD Allocation Committee Meeting

January 7, 2014

Agricultural Allocation – First Use

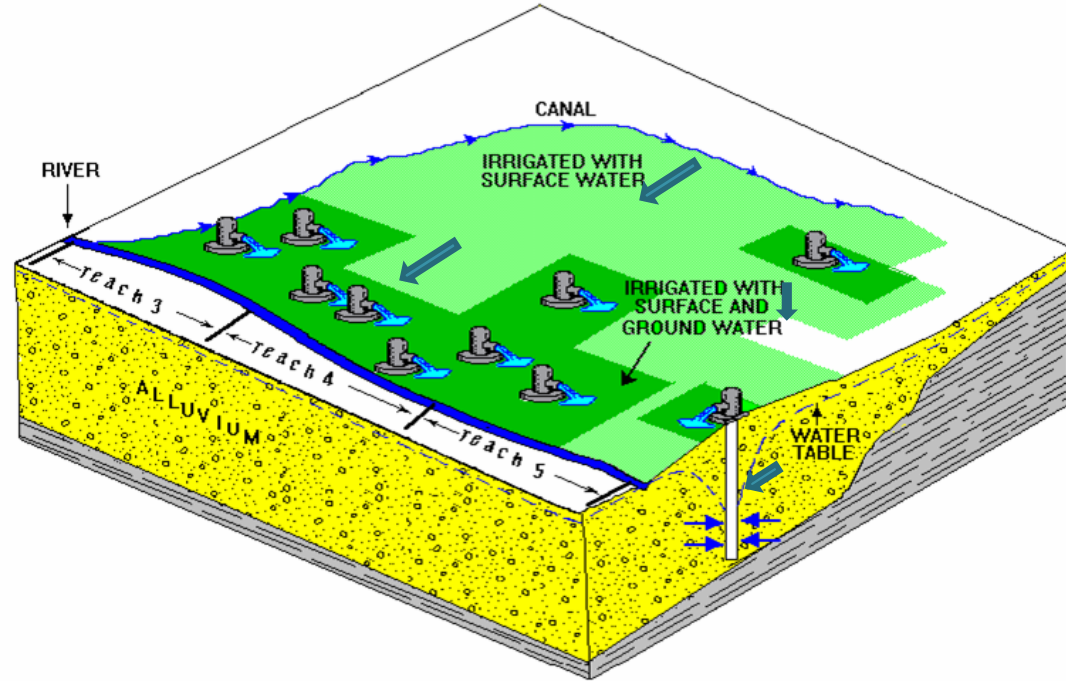
- Allocated to ditches within District boundaries
- Allocated proportionately to the number of eligible acres

First Use Ag Project Water is Allocated to Canals within the SECWCD Boundaries



What are Fry-Ark Return Flows?

- Project Water Delivered to Farms has losses that return to the river
 - Canal/Lateral Losses
 - Runoff from fields on surface
 - Seepage through ground water table back to river



Basic Assumptions About Fry-Ark Ag Return Flows

- Based on a USBR Study it is assumed that 40% of the amount delivered to each ditch will result in return flows (won't be consumed by crop or otherwise lost)
- Timing of return flows back to the river is different for each ditch
- Most of the return flow comes back within three years of delivery, but some return flows extend beyond three years

Time-Forward Concept

- Allocate return flows based on anticipated headgate delivery of Fry-Ark First Use water
- Account for actual deliveries to headgates and adjust allocations accordingly
- Division 2 Office models timing of return flows based on actual deliveries

Simplified Example – Fort Lyon

- In this example SECWCD allocates First Use Project water to Fort Lyon in the amount of 12,500 acre-feet per year for three straight years
- Let's assume there is a loss of 20% to deliver to the Fort Lyon headgate so each year 10,000 acre-feet arrives at the headgate
- Assume that 40% will come back as return flows so each year 4,000 acre-feet can be allocated
- Under the Fort Lyon approximately 50% of the return flow arrives at the river in year one after delivery, 20% arrives in year two, 10% in year three and the balance after that time

Return Flow Allocation Assumptions

- For simplicity let's assume SECWCD allocates to two entities, A and B, equally
- For year one each entity is given 50% or 2,000 acre-feet of time-forward allocation
- Actual delivery in year one at the Fort Lyon headgate is 10,000 acre-feet so allocations don't have to be adjusted

Allocation/Use Year One

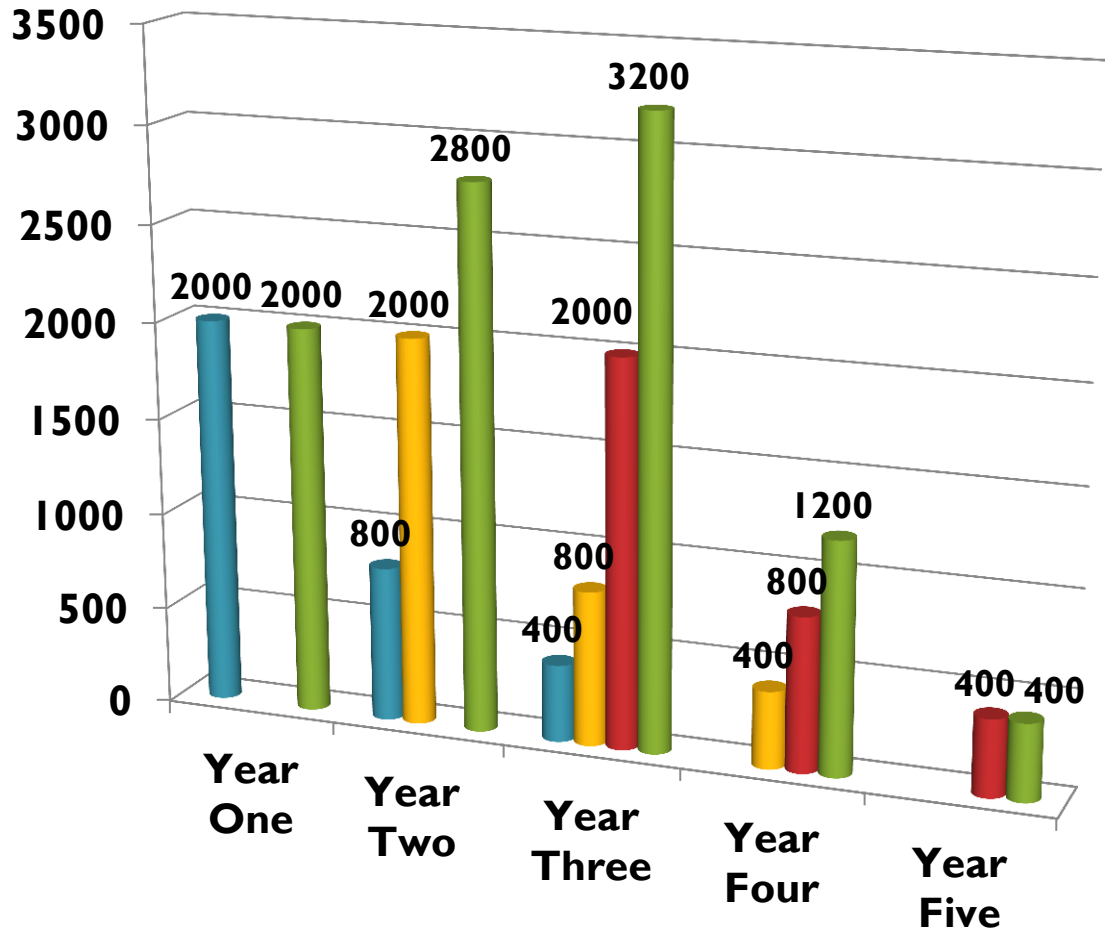
- Entity A and B each get 2000 acre-feet whenever it arrives at the river
- In Year One that means 1000 acre-feet will arrive within one year of delivery

Allocation/Use Year Two

- Fort Lyon receives their second 12,500 acre-foot allocation and receives 10,000 acre-feet at their headgate; return flows allocated as in Year One
- Entity A and B will get 1,000 acre-feet from the Year Two delivery and 400 acre-feet (2,000 times 20%) from Year One delivery return flows for a total of 1,400 acre-feet to be used that year

Allocation/Use Year Three

- Fort Lyon receives their third 12,500 acre-foot allocation and receives 10,000 acre-feet at their headgate; return flows allocated as in Years One and Two
- Entity A and B will get 1,000 acre-feet from the Year Three delivery and 400 acre-feet (2,000 times 20%) from Year Two delivery return flows and 200 acre-feet (2,000 times 10%) from Year One delivery return flows for a total of 1,600 acre-feet to be used that year



- Year One
- Year Two
- Year Three
- Total



Questions?