

Washington Water Resources



Putting a Positive Spin on
a Washing Machine Stuck
in the Low Water Cycle

A scenic view of a lake at sunset or sunrise. The sky is a mix of orange, yellow, and blue, with soft clouds. The water is calm, reflecting the colors of the sky. In the background, there are dark, silhouetted mountains. A small boat is visible on the left side of the lake.

Jon K. Culp

Washington State Conservation
Commission

Why Conserve Water?



What is Irrigation Efficiency ?



The quantity applied versus the amount used by the plant. . .

System Efficiency Potential Ratings

- Flood Irrigation 30-50%
- Rill or Furrow Irrigation 50-65%
- Hand line and Wheel line 65%
- Center pivot and Lateral Move 70-85%
- Pivot with L.E.P.A. 98%

Where does the Water go?



Consumptive use
Versus
Conveyance loss

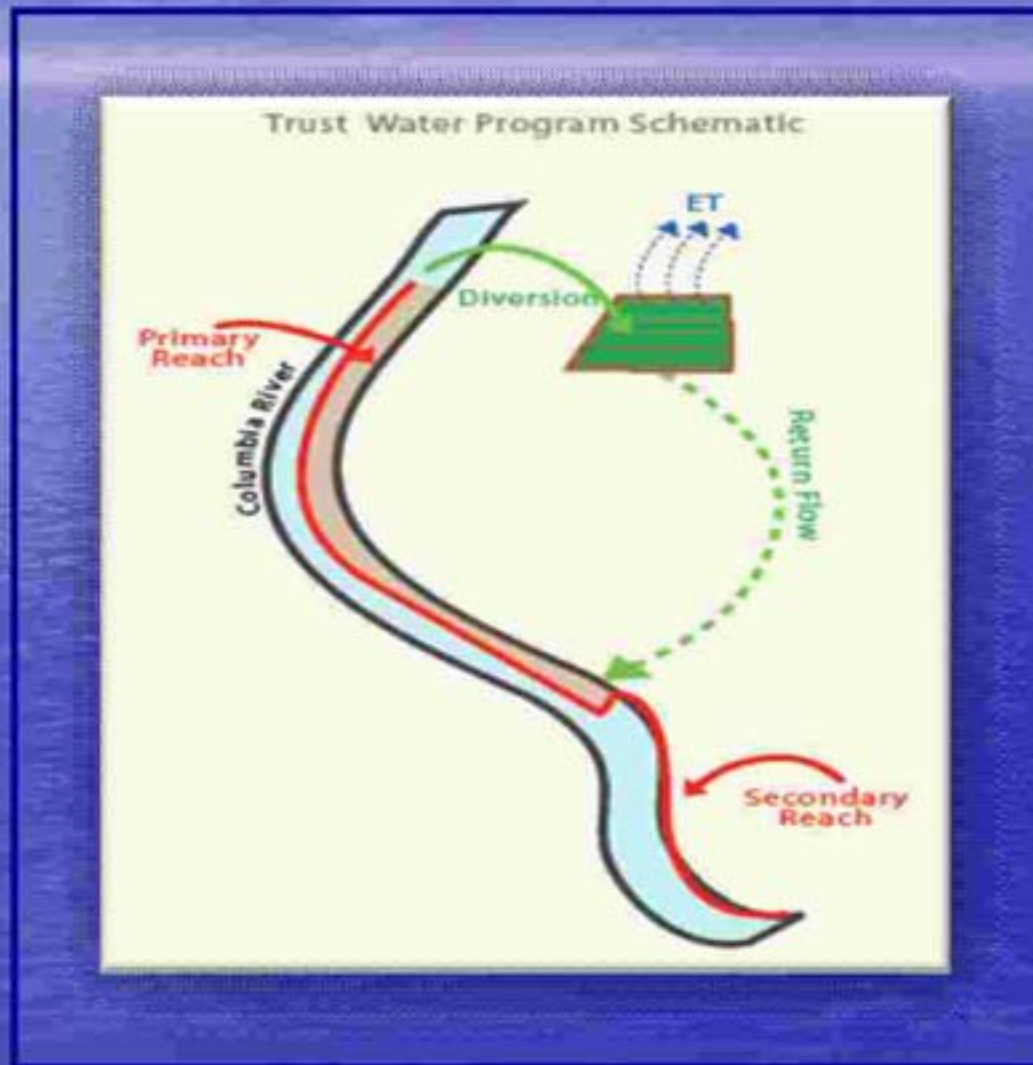
Consumptive Use Water

- No longer available to other users
 - Evaporation
 - Transpiration

Conveyance or Non-Consumptive

- Diverted water that does become available to other users in the basin
 - Conveyance losses—ditch loss, wind drift, etc.
 - Lateral flow from field—surface runoff
 - Deep percolation— water pushed beyond the root zone
 - Operational tail water

Why it matters. . .



Practical Application

Why not upgrade everything to the latest technology available?

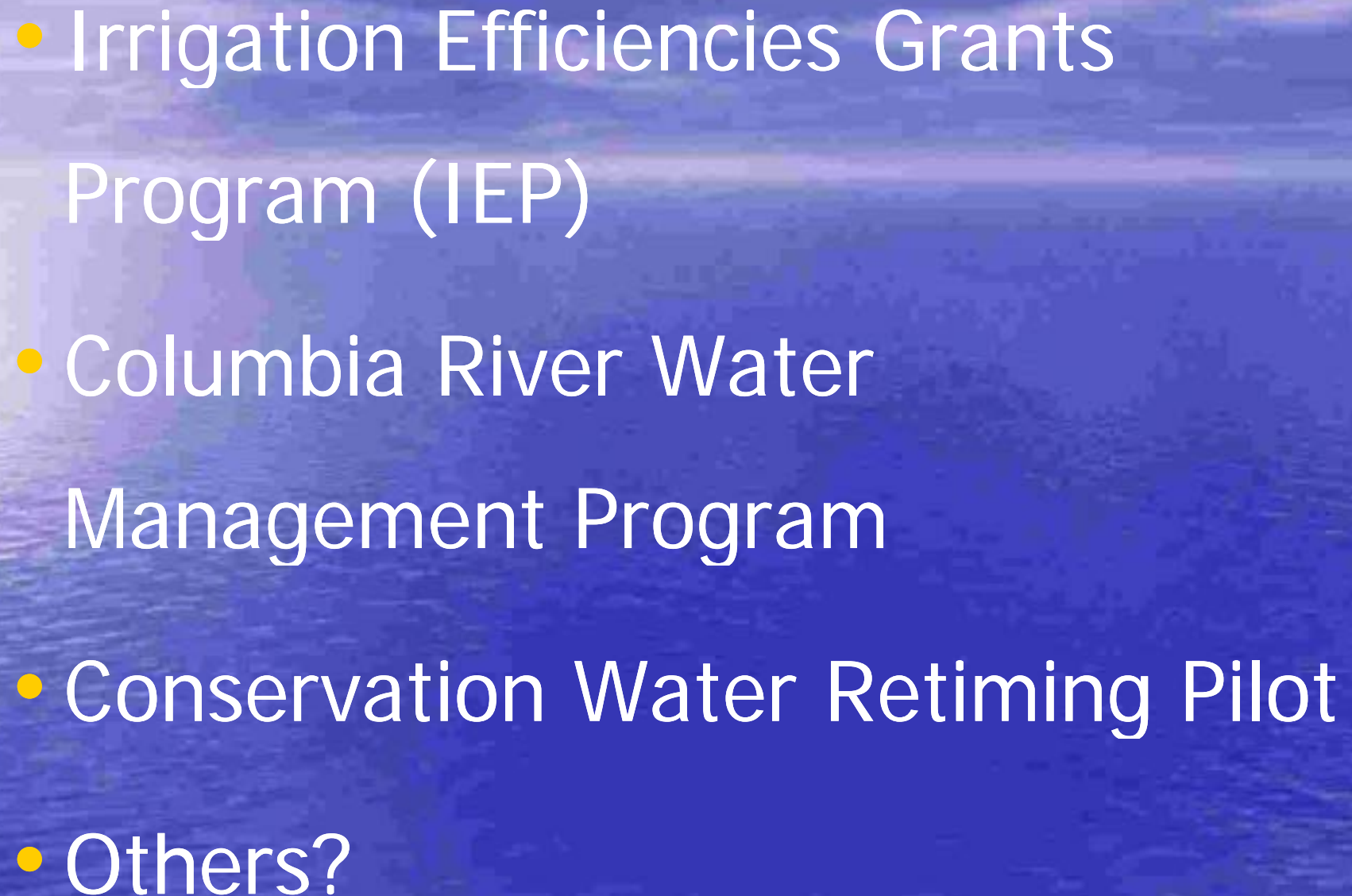
- Site specific factors
- Farmability
- Water availability/delivery system
- Power availability and requirements AND. . .

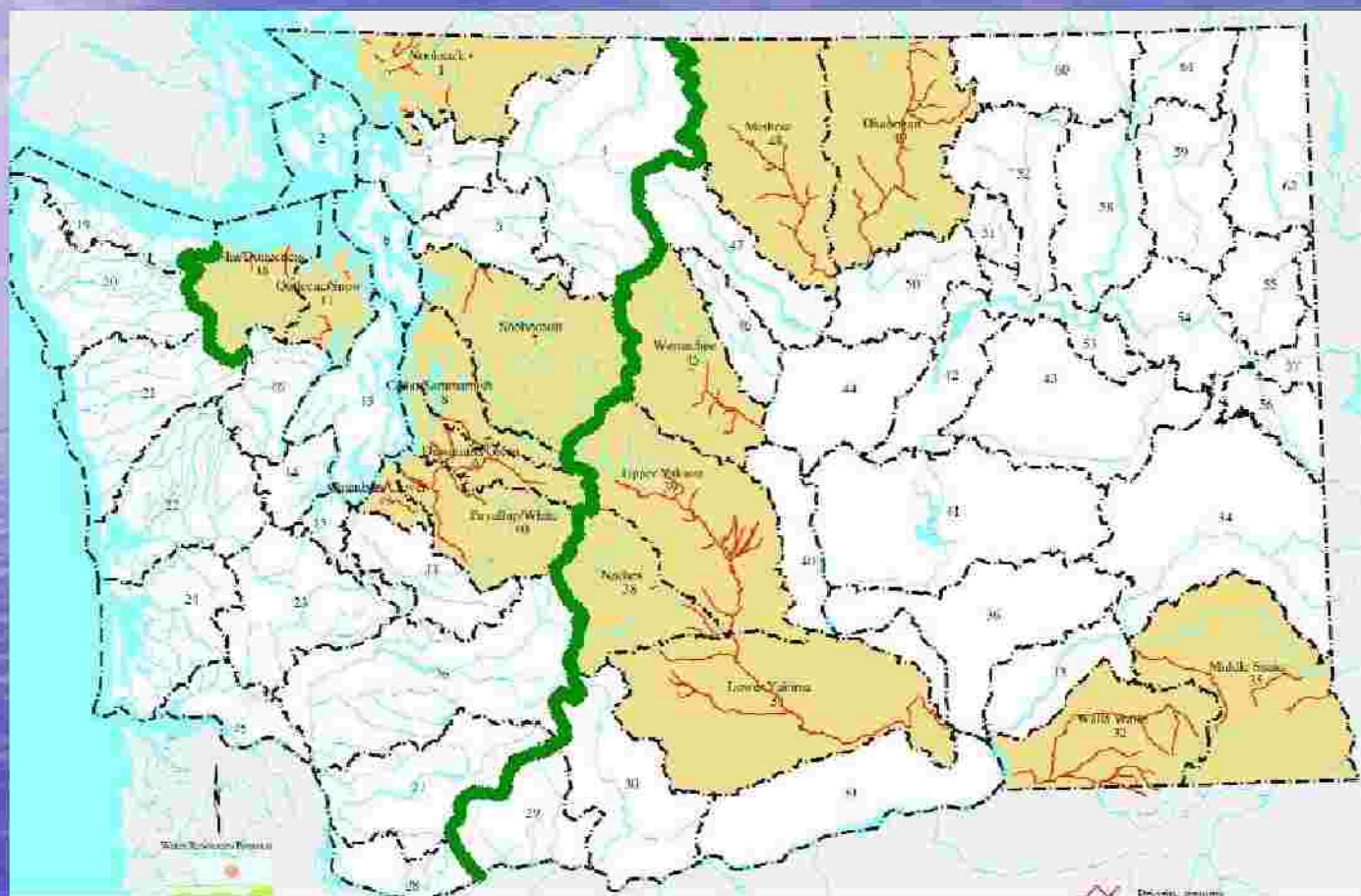
A blue-tinted photograph of a sunset or sunrise over a body of water. The sky is filled with soft, wispy clouds, and the sun is low on the horizon, creating a bright glow. The water reflects the light from the sky. In the center of the image, there is a small, yellow, cylindrical object floating on the water's surface.

\$ COST \$



Our Programs

- 
- Irrigation Efficiencies Grants Program (IEP)
 - Columbia River Water Management Program
 - Conservation Water Retiming Pilot
 - Others?



Retiming

How do you retime conserved water without storage?



*I know, I know. . . We've seen
this picture already. . .*



Bear with me. . . .

New Uses



Questions?

*Serving the conservation districts of Washington State
with pride*

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