

Irrigation Water Loss and Recovery in Utah Quickguide

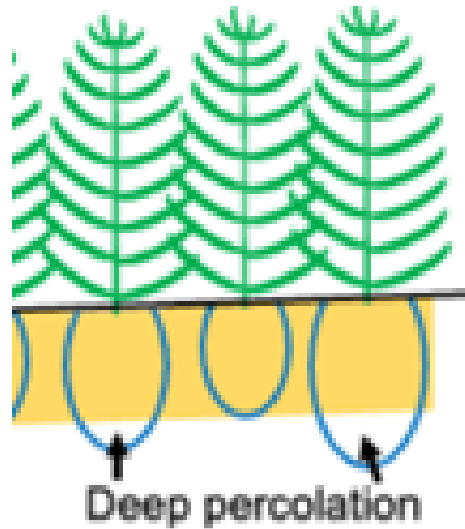


When deciding which irrigation systems to adopt, permit, or promote, it is important to consider how their efficiency and losses affect the water balance of Utah's watersheds and drainage basins. Sprinkler, surface, or drip irrigation systems each have trade-offs in irrigation application efficiency, cost, and other factors. While some irrigation systems can be more efficient than others, the destination of consumptive uses, or "lost water," is a vital consideration for long-term water balance management, as other system types have losses that are potentially recoverable.

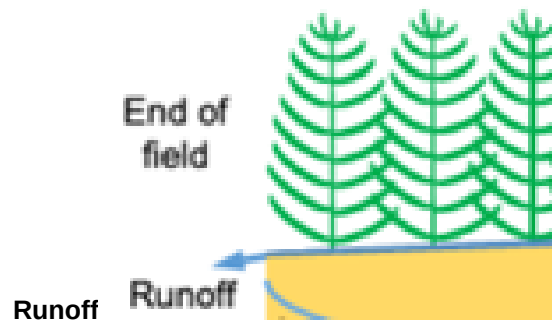
Recoverable Water Loss (Return Flow)

Water that returns to Utah's water sources

Deep Percolation



Deep percolation occurs when more water infiltrates into the soil than can be stored in the root zone. It is recoverable as it moves into the groundwater.

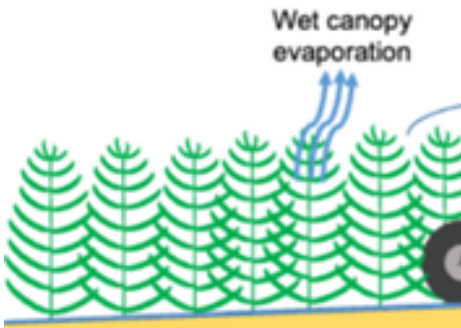


Runoff is visible, and most irrigators can easily see and manage it. Runoff leaves the field and often returns to other water sources like streams.

Non-Recoverable Water Loss (Consumptive Use)

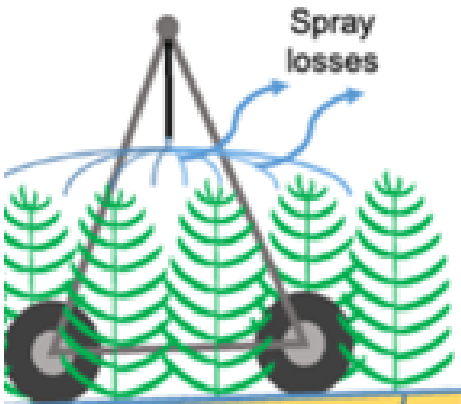
Water Utah does not get back

Wetted Crop Canopy Evaporation



The amount of evaporation from a wetted crop canopy depends on the canopy size and weather but is expected to be about 4% water loss of each irrigation.

Wind Drift



Wind drift is water that is blown away before reaching the crop is not recoverable.

Each irrigation system type has benefits and drawbacks viewed from the perspective of a grower, a water manager, or other stakeholders. Although there are more efficient irrigation systems, based on the fraction of recoverable losses, some fields and areas in Utah with declining aquifers may be best served by continuing to use less efficient surface irrigation systems, depending on the considered trade-offs, needs, and constraints of a particular area.

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References

- [View Full Factsheet Here](#)

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