Key Takeaways Surface Water Management

The unpredictable nature of available surface water in the Harney Basin can make water management challenging. Management during the years of heavy snowpack and rapid runoff is very different from managing during years of limited precipitation and early drought. The variability of runoff is also different among the tributary sub-basins.

There is a documented over appropriation of 160,000 acre-feet/year from Silvies River system including Cow Creek and Poison Creek. Silver Creek has nearly 29,000 acre-feet/year over appropriation of water and the Donner and Blitzen River is over-appropriated by some 175,000 acre-feet/year.add date of legal decrees

Most regulation and monitoring activity occurs in the Silvies and, to a lesser extent, Silver Creek watersheds. This activity is predominantly complaint driven after spring runoff.

The reluctance of some water users to work cooperatively presents a significant challenge to system management. Gall and Spriet of the Oregon Water Resources Department in 2021 identified the following issues:

- Excessive water diversion at Point of Diversion
- Excessive water diversion from shared ditches
- System-wide: inefficient conveyance (flat, brushy ditches)
- 20 feet of fall over 20 miles; the whole basin is flat
- Assertive use of dams; not passing water down to other users

- Flooding across junior lands to get to senior lands Other barriers and concerns developed by the Water Management Work Group optimizing water for irrigation include:
  - Legally allocated water not reaching its intended destination (stockpiling)
  - Water diverted to lands with no water right from the said Point of Diversion
  - Water being diverted to junior rights that are not within the current priority date
  - Second season irrigation (Some producers are able to use water for additional use when others do not)
  - Ditches not being cleared from growth and debris
  - Lack of water gauging systems at Five Mile Dam, Mill Dam, East/West river split
  - Needed infrastructure improvements across the system by OWRD and private landowners
  - Ongoing concerns related to lack of regulation/enforcement

Forage, hay, and pasture are the foundation of Harney County's economic base. Agriculture including hay, cattle, sheep, goats, etc. and flyway habitat, all rely on proper surface water management. The appropriate applications of surface water management (OWRD and individual water right holders) will positively impact the ecology, economy and community prosperity.

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