

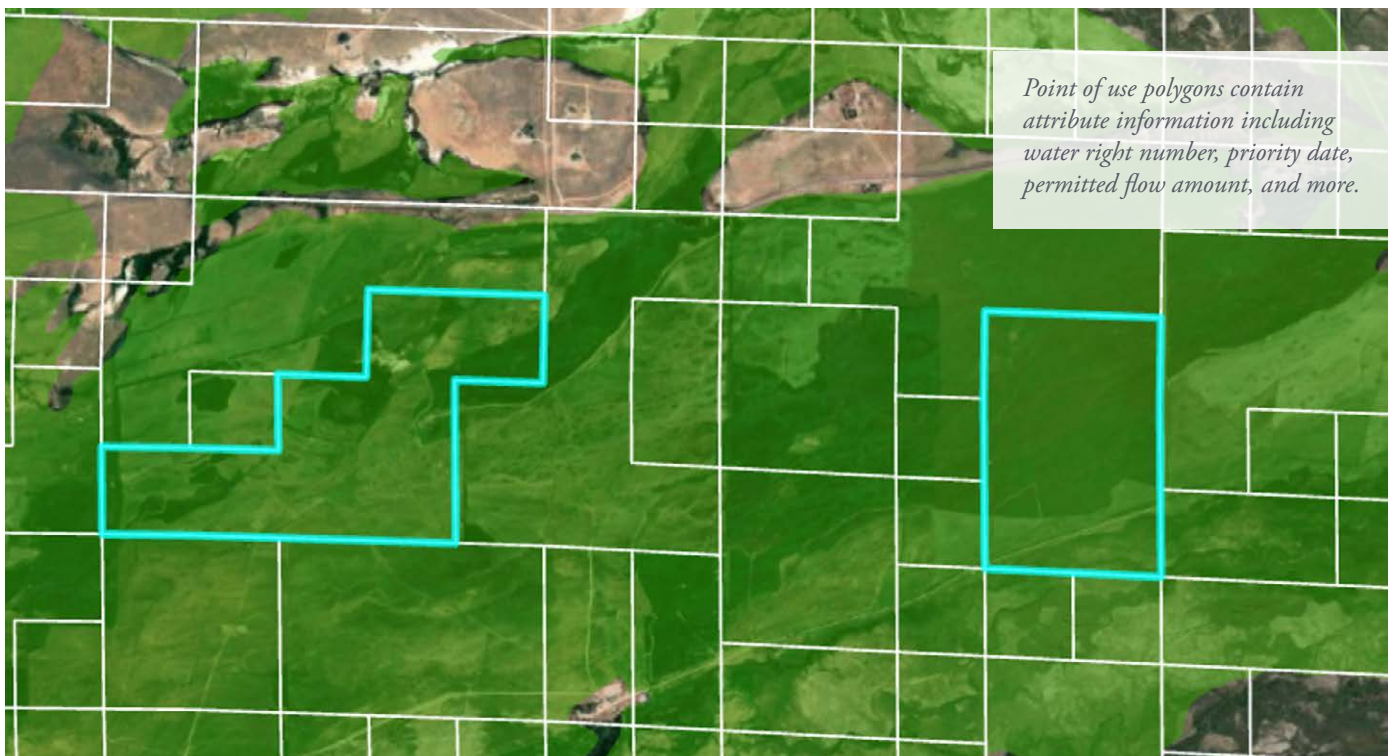
Surface Water Irrigation Rights Dataset

Green River Basin in Sublette County, Wyoming

What is the dataset?

This is a geospatial dataset displaying fully adjudicated surface water irrigation rights in the Green River Basin of Sublette County, Wyoming. It displays point of use polygons across the county which contain attribute information on water right characteristics such as water right number, priority date, permitted flow amount, and more.

The raw data were downloaded from the Wyoming State Engineer's Office E-Permit database (<https://seoweb.wyo.gov/e-Permit/>) and converted to a geospatial format using workflows developed by the Wyoming Water Development Office. The dataset was originally created by Lucas Thorsness, a graduate student in the University of Wyoming's Haub School of Environment and Natural Resources, for his graduate project in collaboration with the Jackson Hole Land Trust.



Download the dataset

<https://data.geospatialhub.org/datasets/1ffe786e44ca4c93bc0f9d4b92691ad6/about>

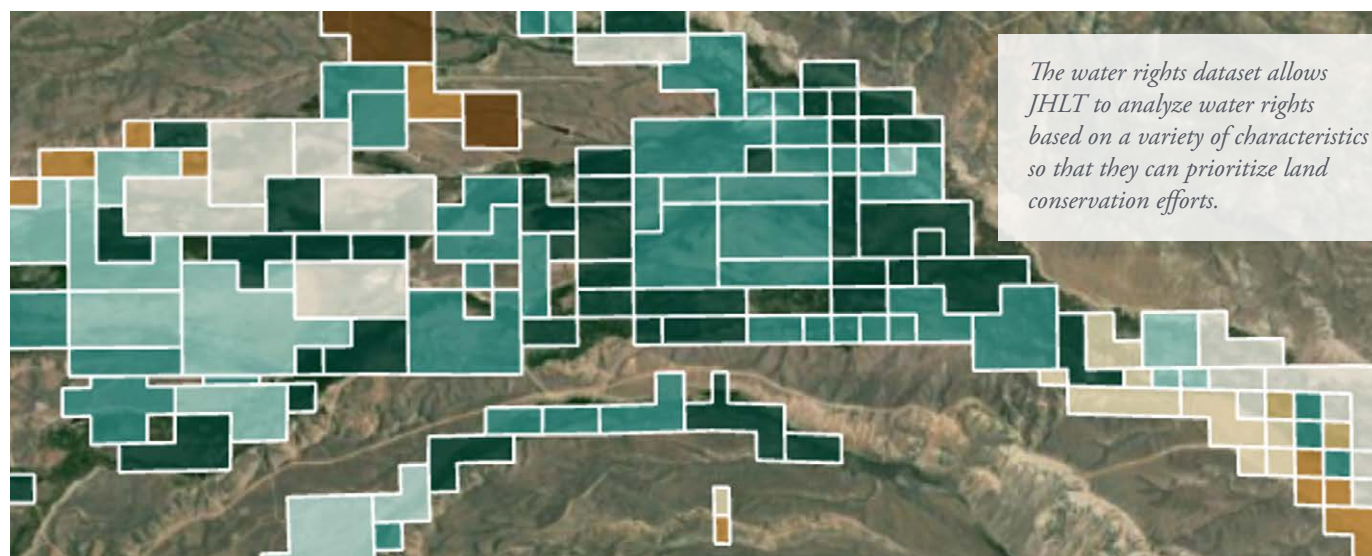
Potential uses for the dataset

The potential uses and audiences for this dataset are wide ranging. Water resource management, especially in the Green River Basin, is of key importance to agricultural water users, natural resource agencies, and many non-profit organizations. Irrigation is the primary water use in the basin, and gaining a better understanding of the distribution and characteristics of surface water irrigation rights is a priority for many stakeholders in the region. State and local natural resource management agencies and non-profit organizations could use this dataset to support resource management and as a project planning tool to quickly display water right information in their project areas across Sublette County.

Application to conservation planning

The Jackson Hole Land Trust (JHLT) came to the Haub School in 2022 with the goal of mapping water rights in their Green River Valley service area. JHLT wanted to better understand the network of irrigation water rights in the valley that play such a pivotal role in supporting agricultural livelihoods and influencing ecosystem dynamics. This collaboration gave rise to the graduate research project that ultimately created this dataset. JHLT currently employs this dataset for their conservation planning efforts to help prioritize protecting the valley's most important and agriculturally productive privately owned lands. Specifically, the water rights dataset helps them visualize those rights that are thought to be most immune to stressors such as climate change and potential curtailment under interstate water compacts.

The water rights dataset allows JHLT to analyze water rights based on a variety of characteristics so that they can prioritize land conservation efforts.



Limitations

All information used to create this dataset is publicly available, primarily through the Wyoming State Engineer's Office e-Permit database. The dataset is therefore subject to the completeness and timeliness of that database and the information it contains. The data were acquired from e-Permit between June 2023 and February 2024. This dataset should be used only for general reference and not for legal or survey purposes.

For more information

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