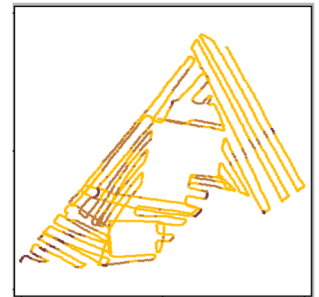
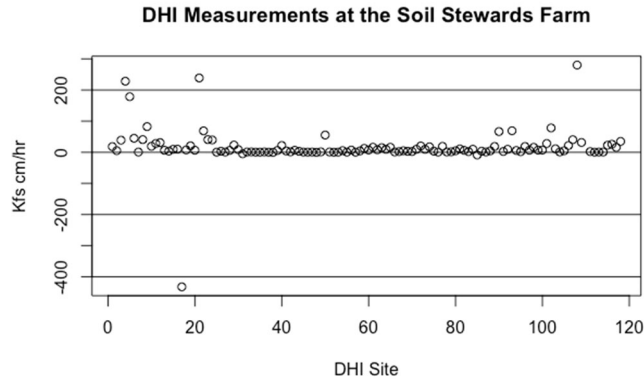


## Understanding water use efficiency on for small plot organic operations in the Palouse

As local growers look to capitalize on the premium organic produce is being purchased for in local farmer's markets and food co-ops, an interest is building for establishing acre-sized vegetable farms in lieu of traditional cropland or pasture. Due to dryland irrigation being the method for virtually all crops produced in the Palouse region, little is known about water application rates for irrigated row crops. It is the intent of this study to evaluate several soil physical properties, such as electrical conductivity (EC) and infiltration ( $K_{sf}$ ), while recording varying water application rates in comparison to crop yield. Additionally, because the footprint of the Soil Stewards Farm has seen multiple uses, this study may also provide insight on how to manage urban agricultural operations.



The SSF was previously used as a wood-chip processing station, overlayed with construction backfill.



Sample EMI map from June 2020. Average measurements range from 0.7 to 1.2 mS/cm.

Infiltration rates are measured using the Decagon Dual Head Infiltrometer (DHI) and initial results show an average rate 16.6 cm/hr. CMD 1 by GF Instruments interprets the apparent electrical conductivity of soil to a depth of 1.5 meters.

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