

October 17, 2022

Agricultural exemption application for 3178 Hwy 162, Eden, Utah

In 2021 we established Thistle Seed Farm, LLC (TSF) on our property at 3178 Hwy 162 in Ogden Valley, Utah. TSF will grow a combination of annual and perennial flowers, woody ornamentals, and flowering shrub branches for sale to florists, event planners, end consumers, etc. in raw form with a long-term goal of propagating Utah native wildflower varieties.

The primary focus of the farm's infrastructure development will be to research, implement, and optimize water conservation techniques. We will accomplish this through thoughtful planning based on the land's slope characteristics, strategically calculated shade tree plantings, drip irrigation systems, state-approved rain catchment, companion planting, and more.

At the time of purchase in late 2020, the area of the lot SW of Liberty Springs Creek was primarily road base and a former home site (the home burned down in early 2020). NE of Liberty Springs Creek is still pasture land that is used to grow hay for horses in the area. We purchased the lot from Charles Brad Story, whose family had owned the land for several decades.

The fundamental plan for the farm will evolve in three phases.

Phase 1 (Completed successfully in 2022):

Till a portion of the land SW of Liberty Springs Creek in order to

- 1.) Remove the top layer of road base/rocks
- 2.) Test the soil quality of the lower layers
- 3.) Grow a sampling of well-known deer-resistant flower varieties for viability
- 4.) Gauge weed pressure
- 5.) Identify local pests
- 6.) Plant trees for full shade and dappled shade, strategically to keep the crops' water from evaporating before reaching their roots.

Phase 2 (Anticipated 2023)

Implement a water-wise irrigation plan with the following elements

- 1.) Construct an agricultural building on the high point of the lot.
 - a. The building will also house farm equipment and growing supplies.
 - b. The building will have no electrical, plumbing, or mechanical.
 - c. The building will be aesthetically pleasing with windows for light, a site-conscious roof color, and barn-board siding using boards from a very old lean-to on the property.
- 2.) Place gutters on top of, and a state-approved water storage tank below the building to collect water from the roof of the building.

- 3.) Connect a drip irrigation system to the tank with automatic turn on/shut off based on soil moisture levels. The lot slopes naturally downward all the way to Liberty Springs Creek and will provide gravity assist for filling the drip lines. (We have worked with another Utah farmer to deliver nutrient-rich compost for the crops so that no chemicals will be used or leaked into the Liberty Springs Creek.)
- 4.) The harvested water would otherwise have fallen onto road base and been absorbed there so there would be no loss of water entering the streams.

Phase 3 (No time projection until the success of Phase 2):

Restore the pasture area to native vegetation

- 1.) Research historically native plants of Ogden Valley
- 2.) Re-establish native wildflowers and grasses in the pasture
- 3.) Harvest seeds from the native plants and work with organizations to catalogue and bank the seeds for use in the case of burn-scarring in applicable areas
- 4.) No irrigation will be implemented in the pasture area

The above plan for Thistle Seed Farm, LLC is designed to benefit the Ogden Valley community aesthetically, environmentally, socially, and economically.