



City Council Staff Report

Subject: Regenerative Agriculture on City Lands
Author: Luke Cartin
Department: Sustainability
Date: July 12th, 2018
Type of Item: Informative

Executive Summary

Park City has purchased land for open space, placed conservation easements on parcels, and worked to secure land from development. Some of the lands placed under conservation easement allow agricultural practices. Park City Staff would like to discuss with City Council the concept of using certain agricultural practices to improve soil health, water quality, and soil sequestration.

Background

- On September 24, 2015 City Council discussed elevating Energy to a Critical Priority and to potentially set a goal of net zero carbon emissions for municipal operations by 2022 and citywide by 2032. ([link](#))
- March 25, 2016, City Council adopts Resolution 04-16 that sets the goal of net zero carbon emissions for municipal operations by 2022 and citywide by 2032. ([link](#))
- On March 9, 2017 Park City's Municipal Operation Carbon Footprint was presented to City Council. ([link](#))
- July 20, 2017 City Council discussed and approved using open space as a carbon sink ([link](#)).

Discussion

Park City has ambitious climate goals. The city has taken large steps to reduce its carbon footprint, including energy efficiency, electric busses, and joint cooperative clean energy agreement with the utility. Many of these efforts are focused on reducing or eliminating our carbon footprint. There are challenges and constraints to move all of these carbon sources to zero.

Park City has measured the carbon sequestration rate of open space (owned and conservation easements funded by the City). This tool has been useful in understanding the additional climate benefit of open space to sequester carbon into the soil.

Due to the past agricultural operation around the McPolin Farm, the lands have been enjoyed by the community as both a visual representation Park City's agricultural history, as well as winter time recreation. Certain conservation easements allow agricultural practices to be used on certain parcels. An example is the McPolin

conservation easement that directly mentions agriculture. Here are references to agricultural practices in the conservation easement:

- 1. Purpose: "... protecting in perpetuity it's scenic, open, **agricultural**, wildlife and recreational value...."
- 3. Reserved Use Rights:
 - a. "Recreational, **agricultural**,... not inconsistent with Conservation Values;"
 - c. "The use of motorized equipment for **agricultural** purposes...."

The full conservation easement is attached to this staff report.

The concept of integrative and [regenerative agricultural](#) practices is seeing large growth across the West. Here are some examples of ranches and programs currently underway:

- [Yale UCross High Plains Stewardship Initiative](#): Works with ranches throughout the west to research integrative management strategies that focus on mapping, water, wildlife, grazing, botany, and people. They have also developed the "Quick Carbon" tool that allows for field-based rapid assessment of soil carbon.
- [AR1K Smart Farm Research Consortium](#): a partnership of Glencoe Farms, University of Arkansas, and Berkeley lab that focuses on sustainable and profitable agriculture through research. The role of soil microbes are well researched at their large scale operation. They use [machine learning](#) to scale effective agricultural practices and measure impacts.
- [TomKat Ranch Educational Foundation](#): TomKat Ranch "serves as a learning laboratory for animal agriculture focused on climate stability, nature's benefits, healthy food, biodiversity, and vibrant community." They are a leader in field based education as well as incorporating sustainability into their operational practices.
- [Marin Carbon Project](#): Their Carbon Farming program is running on three ranches. They are a leader in using compost application to improve soil health and increase stored carbon. They have been successful at partnering with the Natural Resources Conservation Service, local land trusts, and ranchers to research improving agricultural practices.
- [Noble Research Institute](#): The institute has led on many groundbreaking scientific discoveries and education. They have expertise in the microbiome of livestock as well as drought management techniques. Education of agricultural professionals as well as the public is critical to their mission.

Potential partnerships with these experts could aid Park City in creating an effective program to educate the public, improve the land health, and improve the sequestration of carbon.

Feedback Requested from City Council

Would City Council support the following goals for the lands around McPolin Farm?

Goals:

- Improve soil health, water quality, and carbon sequestration through regenerative agricultural practices. This could include the use of livestock, limited agricultural equipment use, seeding, and watering.
- Develop tool to measure soil carbon and sequestration.
- Educate the public and stakeholders on what projects are underway to accomplish the goals as well as Park City's agricultural history.
- Partner with universities, land managers, conservation groups, and others to share best practices.

One key point to note is that this proposal is not a traditional grazing lease. This is using agricultural practices to improve soil health and water quality. We are not maximizing the profitability of the land, rather educating and researching ways to improve agricultural land.

Department Review

Sustainability, Legal and Executive

Funding Source

No funding is required at this time.

Attachment

McPolin Conservation Easement