



Parks & Open Space

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BOCC PUBLIC HEARING

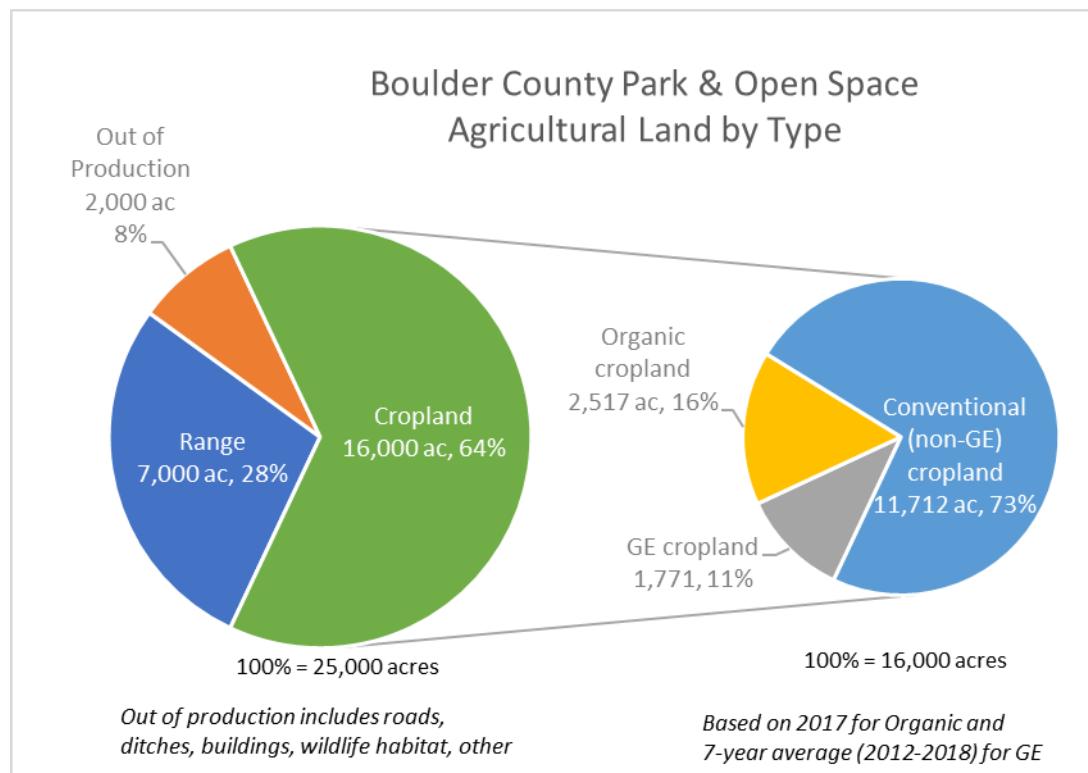
Time/Date of Meeting: 4 p.m., Monday, June 3, 2019

Location: BOCC Hearing Room, 1325 Pearl Street, 3rd Floor, Boulder, CO

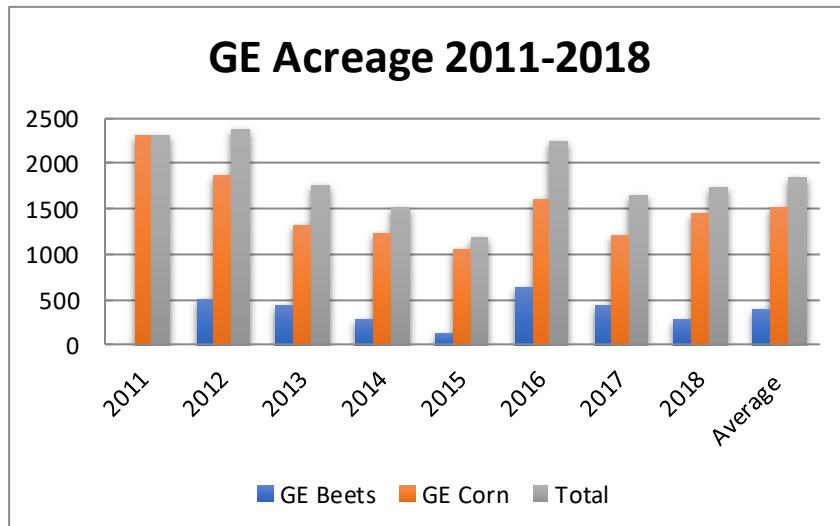
TO: Board of County Commissioners
FROM: Eric Lane, Director, Parks & Open Space
RE: Blake Cooper, Agricultural Resources Manager, Parks & Open Space
Updating the Transition Plan for Genetically-Engineered Crops and
Neonicotinoid Pesticides on Boulder County Parks & Open Space
Properties
DATE: May 30, 2019

In April 2017, the Board of County Commissioners (BOCC) approved changes to the Boulder County Parks & Open Space (BCPOS) Cropland Policy, originally adopted on December 20, 2011. These changes ended the approved use of genetically engineered (GE) corn and sugar beets, along with neonicotinoid pesticides, on agricultural lands leased from Boulder County and adopted a structured phase out of these crops over five years.

The county owns approximately 25,000 acres of agricultural land and leases it to qualified operators. Of the 16,000 acres of dedicated cropland, an average of 1,771 acres of GE crops have been planted annually.



While sugar beets have been grown locally for decades, GE beets were introduced and first planted in 2012. An annual breakout of cropland acreage by crop type is provided below. There are ten (10) GE-transition affected farmers on BCPOS lands.



BCPOS has undertaken a number of projects in order to facilitate the transition from GE corn and sugar beets to non-GE crops, and help maintain or improve agricultural sustainability (including environmental, economic, and cultural facets) on broad acre farms. For example, POS has implemented the following activities:

Environmental Monitoring

Staff increased environmental monitoring in several important areas:

- Water – water quality monitoring
- Soil – soil health assessments, Dynamic Soil Properties Colorado Soil Carbon Project, soil pesticide monitoring
- Pollinators – volunteer pollinator monitoring, local research by Drs. Kearns and Oliveras, pollen analysis for pesticides

Initiatives

- Sustainable Agriculture Research and Innovation Initiative (SARI) – In 2017, Boulder County proposed the development of a research farm to investigate questions related to local agriculture production (including GE crops) that balanced environmental sensitivity with farm economics. This effort was unsuccessful and not implemented.

On-Farm Research Projects

- Winter cereals demonstration plots 2017/2018 – Staff seeded winter cereals on the Swanson property. The plots consisted of twelve new and promising winter wheat varieties and two high yielding European two-row winter malt barley varieties. Each variety was drilled both with and without the addition of biochar. Unfortunately, the

hailstorm on June 19, 2018, resulted in severe crop damage and the subsequent cancellation of the plot harvest and a public field day.

- Spring barley demonstration plots 2018 – Tenants drilled spring barley on the Quicksilver property. Four high yielding European two-row spring malting barley varieties were planted in large one-quarter acre strip plots. Again, staff canceled the public field day and plot harvest due to the crop damage caused by the hail storm.
- Winter cereals demonstration plots 2018/2019 – Staff and tenants planted twelve hard winter wheats and three two-row winter malt barleys on the LUH property.
- Spring cereals trials 2019 – Tenant and staff planted one-acre strips of new spring wheat and barley varieties.
- Lentil/pea demonstration plot 2019 – Tenant and staff planted 2.5 acres of pulses on the Vicklund property which will be included in a summer field tour on July 2, 2019.

Alternative Crops

Tenants and staff have researched and grown many crop alternatives: small grains, organic corn for animal feed, comparisons of GE and organic hybrid corn, edible dry beans, rye, oats, heritage grains, high fiber barley, hemp, organic alfalfa, and herbs with the potential to make essential oils.

Grant Applications

BCPOS applied for two USDA grants related to soil health and carbon sequestration. Although neither proposal was successful, staff will continue to pursue such opportunities in the future.

- Targeted Conservation Proposal – BCPOS partnered with the Boulder Valley and Longmont Conservation Districts, the City of Boulder OSMP, Mad Agriculture, and the NRCS. The goal was to encourage adoption of soil health practices such as composting, crop rotation, no till, cover crops, mulching, reduced tillage, filter strips, prescribed grazing, nutrient management, forage and biomass planting, and Integrated Pest Management. These practices could have been included in the targeted conservation program cost-shared by the NRCS with participating local farmers.
- Conservation Innovation Grant – BCPOS applied for a Conservation Innovation Grant to supplement the Carbon Sequestration Phase 2 Study. The CIG proposal requested \$164,772 for staff time and overhead in addition to \$793,724 for contractual costs of compost and compost application for a total of \$958,496.

Carbon Sequestration Project

The Boulder County Sustainability Office, in conjunction with BCPOS and the City of Boulder, contracted with Colorado State University to complete a Boulder County Carbon Sequestration Pilot Feasibility Study. One section of the study focused on agricultural greenhouse gas mitigation systems. Included in these systems are several practices on cropland including: application of compost, converting from conventional/intensive tillage to no-tillage and strip tillage, planting appropriate cover crops, using nitrification inhibitors, and planting combined pollinator strips/windbreaks on windward sides of irrigated fields and adjacent to perennial/ephemeral streams with little or no vegetative cover. Phase 2 is currently underway including compost application this spring.

Conferences and Workshops

- Soil Revolution – March 2017
- Colorado Pollinator Conservation Short Course, Xerces Society for Invertebrate Conservation – August 2017
- Soil Revolution – December 2017
- Soil Revolution – December 2018

However, despite these efforts, our progress in creating compelling pathways to transition for all producers affected by the GE transition is falling short of our expectations while the structured phase-out deadline moves closer. To remedy this, last fall we contracted with Dr. Phil Taylor of Mad Agriculture to meet one-on-one with each of the GE-affected producers to learn more about their needs, opportunities, desires, and concerns. Unsurprisingly, each farm and farmer is unique. The impact of transitioning off GE sugar beets is not equal, in large part due to the variable access each producer has to private farmland acres (necessary to grow sugar beets in a typical four-year crop rotation) with which to fulfill their Western Sugar Cooperative contracts. Furthermore, the directions in which different producers wish to take their businesses also vary. Success in transitioning to new crops and farming practices will likely require unique solutions for many, if not all, of the producers. Consequently, BCPOS believes that the most viable path to success in implementing an effective and timely transition off GE crops will require additional investment that:

- Delivers customized support to each producer, taking into account their unique situation, including financial considerations;
- Sets a revised timeline for transition that reflects the varied realities of our tenant-producers; and
- Facilitates the continued adoption and implementation of practices that build soil health and water retention, reduce inputs (especially pesticides), and mitigate climate impacts.

As a part of this contract, Dr. Taylor helped develop a proposal that we believe can achieve these objectives and improve our opportunity for a successful transition from GE crops and neonicotinoids in a timely manner. Given his work this past fall and winter with each producer, we believe he and Mad Agriculture are uniquely qualified and positioned to help us co-create with our tenants numerous individualized pathways to successful transition that will benefit the tenants and county land. This will be a process of discovery for the county and tenants – an exploration of profitable and sustainable non-GE cropping systems as well as a process that we believe can best deliver on the vision of sustainable agriculture outlined in the Cropland Policy.

Lastly, BCPOS believes that success in facilitating this transition for different farmers in potentially several different ways may create replicable models of viable pathways for other farmers in Colorado and elsewhere who wish to make the same kinds of transitions. Although our tenants wouldn't be the first to succeed in this way, their successful transition would provide meaningful demonstrations of how it can be done in ways that are mindful of the environment and the economic realities that many broad acre producers face. Importantly, success will also mean retaining and diversifying our tenants' experience and expertise while maintaining their valued role and heritage as land stewards in our community.

Public Input

Stakeholder feedback on the revised transition plan for genetically engineered (GE) crops was received through public testimony and written comments over a four-week period beginning in May. Below is a brief overview of the forums offered to receive comments, and a summary of key themes.

On May 7, 2019, the Board of County Commissioners (BOCC) held a public hearing to receive feedback from community stakeholders on the proposal to amend the transition plan. Thirteen (13) members of the public provided testimony. Those who spoke in favor of the proposal generally expressed support for the individual farm plan and the collaborative approach to formulating the plan to reduce and eliminate GE crops. The collaborative approach addresses concerns of affected farmers as well as the broader community. Community members who voiced concerns with extending the timeframe for transitioning from GE crops expressed the view that the currently approved plan is a reasonable transition period and was already agreed upon through previous extensive public process.

Written comments also were received through email or an online comment form on the cropland policy web page. Fifteen (15) unique comments were received by noon on May 29, the deadline published to receive comments in order to ensure consideration by the Board prior to the June 3 public hearing (Attachment 1). The online comment form will continue to be available as a forum to submit feedback until this public hearing. Visit the [cropland policy web page](#) to view the compendium of public comments, which may include additional comments received since May 29.

Key Themes

- Concern about impacts to public health of GE farming practices and pesticides, particularly glyphosate and neonicotinoid insecticides, on BCPOS owned agricultural lands.
- Concern about impacts of neonicotinoid use on the food-chain, pollinators, and other species, and the ecosystem.
- Desire for greater transparency in the progress to transition from GE crops, including a schedule of milestones.
- Support for increased regenerative organic agriculture on publicly owned BCPOS agricultural cropland, and a desire expressed by some stakeholders to achieve 100% certified organic practices.
- Overall support for continuing to utilize the services of Mad Agriculture to facilitate the transition plan, whether or not the proposal to extend the timeline of the transition is advanced.
- More information on alternative practices considered and available to reduce use of pesticides on BCPOS owned agricultural lands.
- Stay the course in transitioning our open space lands to be free of GE crops in a way that is supportive to our local farmers.
- Developing markets for non-GE crops and higher value crops should be incorporated into the proposed transition plan.

Changes to the Proposal Since May 7, 2019, Hearing

Based upon feedback from the public and additional consideration, our proposal (Attachment 2) as it pertains to the Cropland Policy has been modified in the following ways:

1. Rather than a four-year extension for GE corn as originally proposed, we recommend extending the possibility of growing GE corn for two additional years through 2021.
2. Rather than a four to twelve-year extension for GE sugar beets as originally proposed, we recommend extending the possibility of growing GE sugar beets for four additional years through 2025, which will allow for one additional planting of sugar beets. Any extension beyond 2025 will be limited to consideration to those few tenants who scored “high” on the severity index and who have demonstrated meaningful action to resolve the dilemma of their contractual beet share obligations.
3. If the timeline to transition from GE corn and/or sugar beets is extended, the only extension of permissible use of neonicotinoids will be for seed coatings for these specific crops. No other neonicotinoids will be permitted beyond the current timeline in effect.

BCPOS views these proposed extensions as the maximum allowable time for planting GE corn and sugar beets with the aim of finding profitable and sustainable crop alternatives that can be substituted before the extensions are fully exhausted.

BOCC Action Requested

Approval of the revised GE Transition Plan and Timeline along with expenditures of funds to implement the attached proposal, approval of a Cropland Policy amendment necessary to implement the revised plan, and request to staff to return to a business meeting with final documents.

Attachments

1. Compendium of Public Comments
2. *Revised Proposed Transition Program for Boulder County GE Farmers*