Boulder County owns approximately 25,000 acres of productive agricultural land. A diversity of operations are found throughout the county—from small-scale diversified vegetable farms to medium sized cattle operations to large-scale commodity crop producers. Land is leased to local farmers and ranchers who are Boulder County’s valued partners in conservation.

### BY THE NUMBERS
- 13,000 irrigated acres
- 3,000 dryland acres
- 7,000 rangeland acres
- 2,000 acres out-of-production
- 213 properties
- 130 leases
- 65 tenants

### WATER RIGHTS
- 61 incorporated ditches
- 31 unincorporated ditches
- 13 reservoirs
- More than 57 directly held water rights
- Representation on 20 irrigation company Board of Directors
Boulder County agriculture experienced catastrophic weather events in 2018. The crop year started out dry, but with good snowpack. In April, a major wind event caused significant loss of top soil on many properties, and supports the need for cover crops. In June, a severe hail storm devastated thousands of acres of crops in the county. Many farmers replanted where they had lost crops in June, only to have two more hail storms hit in July. Several farmers lost not one, but two crops in 2018. Losses across the board were significant, and impacted our crop share revenue as well.

Gross revenue from ag leases totaled $904,396. Boulder County processed 94 cash leases and 37 crop-share and grazing leases. Cash leases totaled 54% of income, with crop-share leases making up the balance. Revenue has been declining due to historically low commodity prices, high input costs, subsidized organic rent rates, prairie dog/wildlife damages, severe weather events, and increased water assessments. Water assessments in 2018 were similar to the prior year. The division renewed 27 leases and two leases went out to bid.

### 2018 Gross Revenue by Category

<table>
<thead>
<tr>
<th>Category</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Rent, $489,841</td>
<td>54%</td>
<td>54%</td>
<td>54%</td>
<td>54%</td>
<td>54%</td>
<td>54%</td>
</tr>
<tr>
<td>Barley, $103,221</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Corn, $130,979</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Millet, $840</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Sorghum X Sudan, $37,229</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Sugar Beets, $38,904</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Alfalfa/Grass Mix, $5,304</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Alfalfa, $13,040</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Water Assessments</td>
<td>345,250</td>
<td>430,904</td>
<td>366,620</td>
<td>397,316</td>
<td>453,156</td>
<td>455,134</td>
</tr>
<tr>
<td>Crop Share Expenses</td>
<td>522,057</td>
<td>479,903</td>
<td>350,236</td>
<td>414,866</td>
<td>404,724</td>
<td>322,870</td>
</tr>
<tr>
<td>Gross Revenue</td>
<td>1,465,826</td>
<td>1,428,012</td>
<td>1,217,689</td>
<td>1,291,989</td>
<td>1,128,419</td>
<td>904,396</td>
</tr>
<tr>
<td>Net Revenue</td>
<td>598,519</td>
<td>517,204</td>
<td>500,833</td>
<td>479,808</td>
<td>270,539</td>
<td>126,393</td>
</tr>
</tbody>
</table>
In 2018, Ag Resources installed three new center pivot irrigation systems and completed 74 other projects. Large irrigation projects are typically funded by three sources—Parks & Open Space (both O & M and CIP), ag tenant cost share, and the Environmental Quality Incentive Program (EQIP) grants from the Natural Resources Conservation Service. Leveraging EQIP funds has allowed the Ag Division to install three times more irrigation systems than would have been with the Ag Division budget alone. The breakdown of these expenses for 2018 is found in the chart below.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Projects</th>
<th>Ag O &amp; M</th>
<th>Ag CIP</th>
<th>Other (NRCS EQIP)</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation</td>
<td>32</td>
<td>77,514</td>
<td>42,685</td>
<td>161,037</td>
<td>281,237</td>
<td>56%</td>
</tr>
<tr>
<td>Livestock</td>
<td>15</td>
<td>27,892</td>
<td>0</td>
<td>0</td>
<td>27,892</td>
<td>6%</td>
</tr>
<tr>
<td>Organic/Market Farms</td>
<td>20</td>
<td>88,880</td>
<td>32,279</td>
<td>64,815</td>
<td>185,973</td>
<td>37%</td>
</tr>
<tr>
<td>Land Maintenance</td>
<td>10</td>
<td>11,007</td>
<td>0</td>
<td>0</td>
<td>11,007</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>77</strong></td>
<td><strong>205,293</strong></td>
<td><strong>74,964</strong></td>
<td><strong>225,852</strong></td>
<td><strong>506,109</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

![2018 Sprinkler Funding Sources](image)
The Cropland Policy, originally adopted in 2011, links the goals of the Boulder County Comprehensive Plan with the operational activities of Parks & Open Space on agricultural properties. The policy addresses a number of elements including administration of ag leases, development of market and small acreage farms, management of the department’s extensive water portfolio, livestock management, insuring the economic vitality of operations, and monitoring of soil health, agricultural inputs, and water quality.

**Organic Transition**

Included in Cropland Policy was a goal to transition 20% of county-owned ag properties to certified organic by 2020. That goal was later increased to 25% by 2020 in the department’s 2020 Vision.

Approximately 3,597 acres, or 22% of the 16,000 acres of BCPOS cropland, were certified or transitioning to organic by the end of 2018. Of these acres, 1,181 were certified organic and 2,416 were in the transition process.

**Monitoring Programs**

Ag staff monitors various natural resources as outlined in the Cropland Policy. In 2018, monitoring programs included:

**Soil Health**
- Staff and volunteers assessed six properties using the soil health card known as the NRCS Cropland Resource Concern Assessment.
- Ward Labs performed the Haney Test on soil from all six properties.

**Pollinators and Pesticides**
- Integrated Pest Management (IPM) is required by all tenants.

**Rangeland**
- Photo Monitoring — Staff and volunteers monitored 75 locations on 22 properties
- Vegetation Monitoring — Contractor monitored five properties
Accomplishments

- Completed the first filling of Swede Reservoir following its reconstruction after a five year storage hold order.
- Successful state inspections occurred at the newly reconstructed Swede Reservoir and Gaynor Lake.
- Initiated new dam inspection protocols for tighter oversight and closer integration with State Office of Dam Safety.
- Delivery efficiencies installed on Kenosha Open Space to improve conveyance and increase accuracy of accounting.
- 3.3 cfs and 90 acre feet of the conditional water right at Walden Ponds was made absolute.
- Staff collaborated in an active roll on the design and implementation of five flood restoration projects and one diversion reconstruction project.
- Litigation of Kenosha Ponds change of use case continued with a decree issuance likely in 2019.
- Additional agricultural water rights acquired in nine ditches associated with open space purchases totaling roughly $1.75 million dollars.
- Expanded Water Resources staffing to include a full-time technician.
The Ag Division engages in a number of outreach avenues, including hosting tours, presenting at conferences, hosting a booth at STEAMFest, participating in From Our Lands to Your Hands, publishing articles, posting on social media, and sponsoring the Boulder County Youth Corps.

**Boulder County Youth Corps**

The agriculture and water resources Youth Corps teams:

- Built 610 feet, removed 1,841 feet, and maintained 1,824 feet of fence
- Weeded and removed willows from 87,131 sq feet
- Removed 377 feet of material, 100 t-posts and 22 bags of debris
- Planted 1,800 sq feet of cabbage
- Weeded 1.5 acres
- Removed 7,120 pounds of woody debris
- Installed/removed 405 feet of material

**Soil Revolution Conference**

Boulder County Agricultural Resources co-hosted the third annual Soil Revolution conference on December 12, 2018, at the Boulder JCC. Featured speakers included Dr. David Montgomery, John Kempf, Darrin Unruh, Dr. Dannele Peck, and local farmers. Learn more at www.SoilRev.org
2018 End of Year Summary

- Multiple hailstorms devastated Boulder County crops.
- Gross rental income totaled $904,396, with a net revenue of $126,393.
- Approximately 3,597 acres, or 22% of county-owned cropland is certified or transitioning to organic.
- The Ag Division co-hosted the third annual Soil Revolution conference.
- Expanded water resources staff to better manage the water portfolio.
- Carbon Sequestration project with Colorado State University studying effects of compost and cover crops on irrigated cropland and rangeland.

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Resource Specialist
Jim Michal
Project Manager
Justin Odle
Resource Specialist
Levi Priest
Technician
Jason Sauer
Technician II
Amy Schwartz
Wildlife Technician
Karen Martinez
Senior Water Specialist
Audrey Butler
Water Resources Specialist
Chris Williams
Water Resources Technician

Photos (clockwise):
Horses on winter pasture at Toteve; organic squash on Darby; rangeland in full bloom at Centennial Ranch; corn planted using strip-tillage on Macy.