



2021

# ROUTT COUNTY

*Climate Action Plan*



# EXECUTIVE SUMMARY

## BACKGROUND AND HISTORY

*Routt County is undeniably remarkable with its extensive natural beauty, western spirit, abundant outdoor recreation opportunities, and the native wilderness of the Rocky Mountains.*

Routt County recognizes the urgent need to reduce emissions and prevent the worst impacts of climate change. If current emissions levels are not abated, the County and similar mountain communities and local tourism-based economies across Colorado and the Southwest are in danger of experiencing significant impacts from changes in the regional climate. These impacts may include changes in precipitation and the seasonability of precipitation, increased wildfire risk, and reduced snowpack, leading to lower flow levels in waterways, reduced water availability, and decreased agricultural yields. These impacts are likely to result in complex variations that will significantly impact the economy.

In return, sustainability is a top priority for Routt County and municipal leaders. Project and community partners have participated in regional work to analyze and estimate community greenhouse gas (GHG) emissions since 2005 and developed plans to maintain a healthy environment and adapt to a changing climate, including the Hazard Mitigation Plan, the Yampa River Stream Health Management Plan, and the Fish Creek Community Wildfire Protection Plan. The City of Steamboat Springs, Routt County's population center and a primary tourist and economic destination in the community, has been actively engaged in sustainability work for several years, including developing a *Sustainability Action Plan in 2017* and receiving 4-star designation from the *Sustainability Tool for Assessing and Rating Communities (STARs)*.

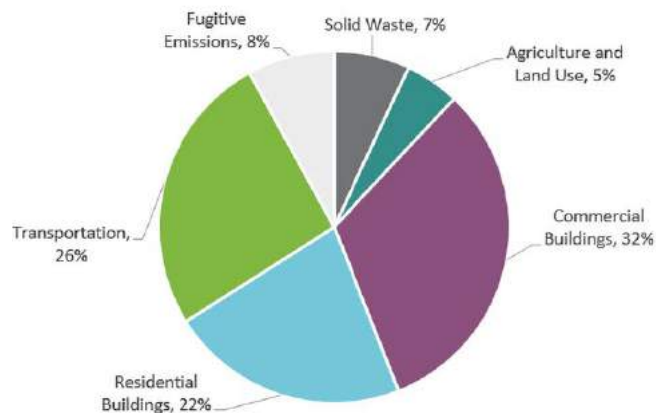


Figure ES1: Routt County's 2018 Emissions by Sector

The *2018 GHG emissions inventory* showed that Routt County's emissions, including the City of Steamboat Springs, totaled 693,367 metric tons of carbon dioxide equivalent (mt CO<sub>2</sub>e). Thirty-seven percent of emissions were generated from activities occurring in Steamboat Springs alone. The remaining 63 percent of emissions were generated from activities in the Towns of Hayden, Oak Creek, Yampa, and in unincorporated Routt County. Emissions from the use of energy in commercial and residential buildings comprise the largest source of GHG emissions within Routt County (54 percent), followed by transportation (26 percent), and waste (seven percent). See Figure ES 1. Power generation from burning coal at the Hayden Power Station produced an additional 2,486,846 mt CO<sub>2</sub>e that is not included in the community's total emissions value of 693,367 mt CO<sub>2</sub>e.

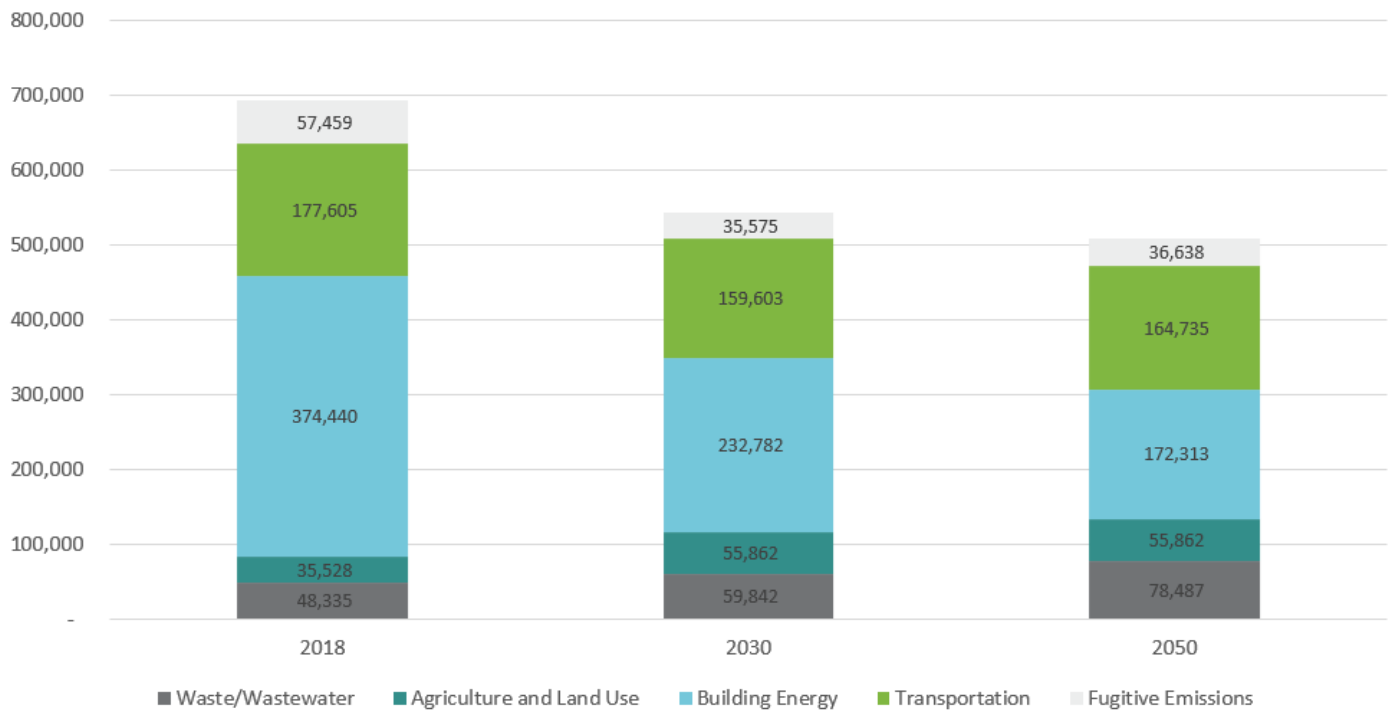


Figure ES2: Rott County’s business-as-usual emissions projections.

**Based on population projections, State-level climate targets, and recent utility announcements, it is estimated that in a business-as-usual case scenario Rott County will decrease emissions by 27 percent by 2050 from the baseline year of 2018.**

This decrease is primarily driven by the greening of the grid and the resulting lower emission from electricity provided by Yampa Valley Electric Association, an electric cooperative that purchases power wholesale from Xcel Energy. Xcel announced goals to increase the amount of renewable energy in its energy mix and decrease carbon emissions from electricity production; this will result in a decreased emission factor for electricity used in Rott County in the coming years. Emissions from all remaining sectors are expected to change in correlation with population estimates, housing and economic trends, and policy and regulatory requirements (such as Colorado’s clean fuel standards for vehicles) through 2050; see Figure ES 2.

Although the projected emissions to 2050 do include a number of assumptions, this analysis provides the clearest possible picture of the current emissions and the community’s projected future emissions; this in turn will allow Rott County to focus its work on sectors and strategies that will have the greatest impact on achieving deep emissions reductions between now and 2050.

## THE CLIMATE ACTION PLAN

*In 2020, recognizing the need to take a more proactive role in reducing global GHG emissions and help to prevent the most dire impacts from climate change, Rott County and its partners (the City of Steamboat Springs, Steamboat Ski and Resort Corp, and the Steamboat Springs Chamber) embarked on work to build off the community’s past efforts and work towards reducing community generated GHG emissions through a Climate Action Plan (CAP).*

Rather than setting a lofty goal and working backwards to identify strategies needed to meet the goal, this CAP identifies attainable strategies, actions, and tactics accessible to various stakeholders and partners, that together create a clear roadmap for reducing emissions from different sectors (e.g., energy, transportation, waste, etc.). Having this plan in place also opens up access for the County, municipalities, and partner organizations to grants and other funding and technical assistance resources that are currently or may soon be available at the state and federal levels.

**First, the CAP team identified the community's climate adaptation risks and impacts.**

While the primary focus of the CAP remains on climate mitigation, or the reduction of GHG emissions generated from community-based activities, understanding climate change impacts and risks will support future work towards climate adaptation. Climate adaptation refers to the specific strategies and work that will help the community adapt to coming changes in the climate and the associated risks and impacts from those changes.

Routt County faces many climate risks in the form of drought, extreme heat, flooding, wildfires, and shifts in seasonal weather patterns that will significantly impact daily life for residents and visitors in the future. These risks include drought, extreme heat, flooding, wildfires, and shifts in seasonal weather patterns. The primary climate impact areas likely to have adverse effects on the community include agriculture, air quality, cultural fabric, complex and variable economic impacts, public health, and water quality, supply, and watershed health.

Based on a high-level risk assessment and impact and opportunity analysis conducted (see Appendix B), Routt County may consider the following next steps to enhance climate adaptivity and resiliency across the community.

- Convene stakeholder groups and invest in the development of a full-scale climate adaptation plan.
- Identify potential funding opportunities to implement strategies in the 2020 Hazard Mitigation Plan.
- Continue to develop and deepen collaborations and conversations between land management, forest health, and watershed management groups or agencies and organizations to leverage synergies and optimize resources.
- Leverage every opportunity to invest in mitigation and adaptation simultaneously (i.e., through renewable energy and transportation related projects).
- Conduct a watershed health risk analysis and renew a wildfire risk assessment.

Tangential to the development of the CAP, project partners also recently completed a tourism adaptation study that recommends opportunities to enhance the adaptive capacity of the tourism industry locally. One of the specific recommendations from this study is to collaboratively develop destination management programs that address the maintenance of quality resources and experiences on local, state, and federal lands.

**Next, the CAP team focused on identifying Routt County's values and the co-benefits of climate action.**

Feedback was gathered from stakeholders and community members that was intended to help vet and prioritize the strategies and actions that are included in this CAP. Input was gathered regarding the community values that should be considered alongside potential strategies for climate action, as well as the 'co-benefits' of climate action strategies that the residents wish to see accrued.<sup>1</sup> The following are the top values identified during the meetings and through the community questionnaire. These values are listed in order of their frequency of being mentioned in the community survey and in focus groups.

1. The intrinsic beauty and functionality of the County's natural environment.
2. Our County's agricultural, recreation, and western history and culture.
3. A healthy community with access to recreation, healthy food, attainable housing, social opportunities, clean air and water resources and, a healthy community now and into the future.
4. Environmental, economic, and social justice and equity throughout the community, including between full-time residents, part-time residents, and visitors.

The following are the co-benefits of climate action that were identified during the meetings and through the community questionnaire. These benefits are listed in order of their frequency of being mentioned in the community survey and in focus groups.

1. A community that is healthy and resilient to environmental, economic, and social impacts.
2. Future generations will be able to enjoy the same quality of life as current residents do today.
3. Improved river and watershed health (including enhanced water quality and quantity) and healthy, thriving, fire-adapted, and resilient forests.
4. Expanded and improved local food, agricultural, and goods production systems that creates a circular economy, reduces waste, and sequesters carbon.
5. Reduced reliance on fossil fuels and increased use of clean and locally produced energy resources.
6. Enhanced and expanded transportation options to connect all corners of the County through increased public transportation and multi-modal transit options.

<sup>1</sup> Co-benefits' are defined as the secondary benefits and positive impacts of the climate action strategies, outside of greenhouse gas emission reductions.

**Finally, the CAP focused on the strategies, actions, and tactics that will reduce emissions and support the co-benefits desired in the community.**



After an extensive stakeholder engagement process, 22 strategies to reduce emissions and increase sustainability across the community were developed; the emissions reduction potential from the implementation of those strategies were modeled out to 2050 to understand the relative impact of the work Routt County intends to do.

**If all of the strategies and actions are implemented successfully, Routt County is anticipated to reduce community wide GHG emissions by 35% by 2030 and by 74% by 2050, as compared to the 2018 emissions baseline.**

The strategies selected by Routt County are detailed in Table ES1 below. The strategies are not prioritized or listed in any particular order.

Based on the geographic and cultural diversity in Routt County, many of the strategies and actions within the CAP are relevant for the whole County to pursue, while other strategies are only relevant for certain parts of the County (i.e., the City of Steamboat Springs, unincorporated Routt County, etc.). The full CAP provides further detail on why these strategies and actions were selected, how and where they will be implemented, and the impact that this CAP is expected to have on community wide GHG emissions and other benefits to the community that will be realized through this work.

## ROUTT COUNTY'S CLIMATE ACTION STRATEGIES.

ENERGY	STRATEGIES
	<ol style="list-style-type: none"><li>1 Increase adoption of renewable or other clean energy and fuel sources.</li><li>2 Increase energy efficiency.</li><li>3 Promote fuel switching (i.e., electrification).</li></ol>
TRANSPORTATION	STRATEGIES
	<ol style="list-style-type: none"><li>1 Improve safe and equitable multimodal access throughout each community to reduce vehicle miles traveled (VMT).</li><li>2 Increase adoption of electric vehicles such that 20% of registered vehicles in Routt County are electric vehicles (EVs) by 2030 and 95% are EVs (or other non-carbon emission producing vehicles) by 2050.</li><li>3 Reduce single occupancy vehicle travel.</li><li>4 Engage in statewide discussions and policy work.</li></ol>

## WASTE



## STRATEGIES

- 1 Reduce the amount of solid waste disposed of in the landfill.
- 2 Increase waste diversion.
- 3 Support waste reduction initiatives at the State level.

## LAND USE



## STRATEGIES

- 1 Promote land management practices (e.g., reforestation, restoration, conservation, natural climate solutions) that increase carbon sequestration and storage across forests, wetlands, riparian corridors, and ag/rangelands and preserve carbon sinks, especially forests and wetlands, and designate future land uses to maximize carbon sequestration.
- 2 Increase and support cross-boundary efforts to conserve and maintain natural lands and to promote resilience across the landscape within the County.
- 3 Promote water conservation measures and reduce energy consumed in water production, distribution, and wastewater treatment.
- 4 Promote compact development patterns to achieve more sustainable development and preserve natural land use types.

## ECONOMY



## STRATEGIES

- 1 Consume goods with lower embedded carbon emissions.
- 2 Develop green markets.
- 3 Expand base industries for regional self-reliance.
- 4 Enhance environmental sustainability efforts undertaken by business.

## ACCOUNTABILITY



## STRATEGIES

- 1 Ensure adequate funding for the CAP.
- 2 Establish accountability mechanisms for the CAP.
- 3 Align with other community plans.
- 4 Carry out educational programs in support of the CAP.