



2021

# ROUTT COUNTY

*Climate Action Plan*





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# 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)*.

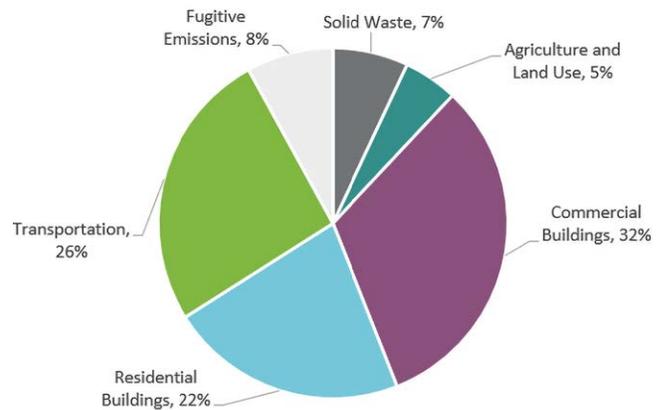


Figure ES1: Routt County's 2018 Emissions by Sector

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.

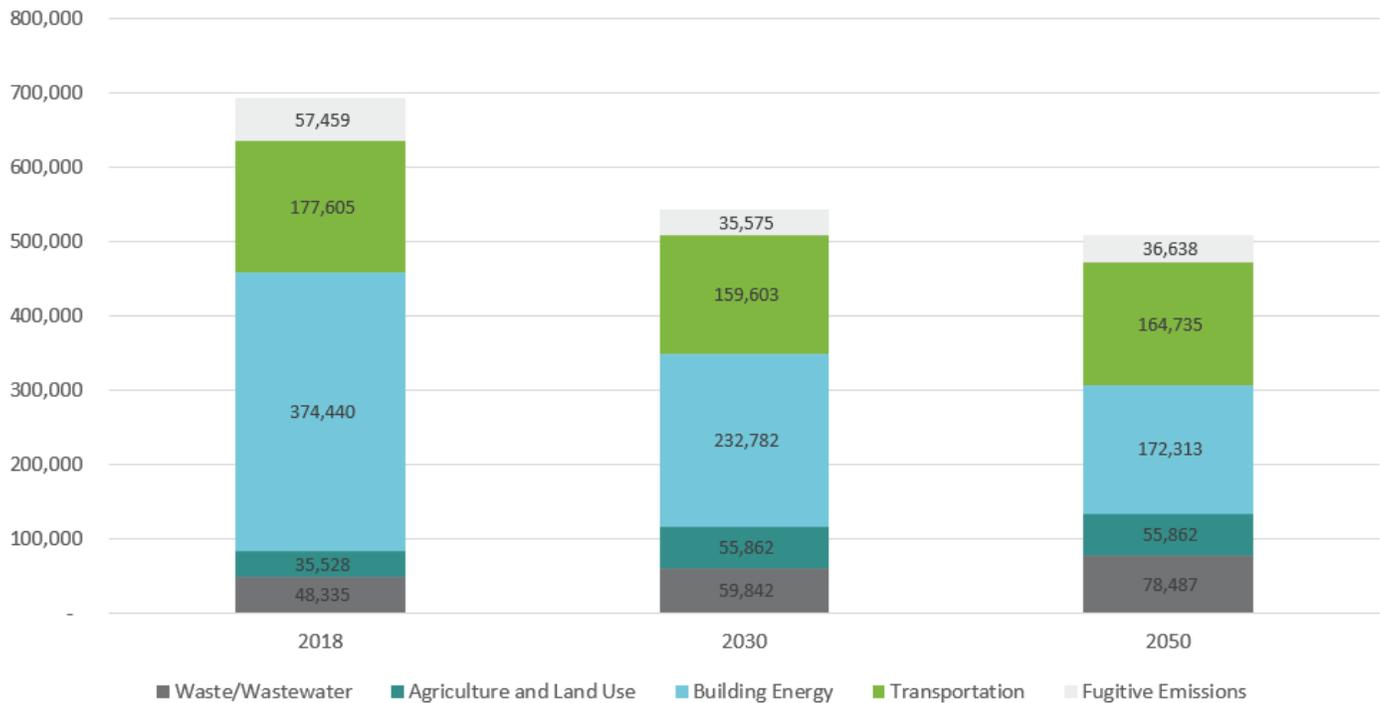


Figure ES2: Rott County's business-as-usual emissions projections.

**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.



# ROUTT COUNTY: FOCUSED ON CLIMATE ACTION

*Located in northwest Colorado and home to extensive natural beauty, abundant outdoor recreation opportunities, and the native wilderness of the Rocky Mountains, Routt County (the County) is completely synonymous with the outdoors.*

Incorporated in 1877 and with a full-time resident population of around 26,000 people, the County sees a significant increase in population in the winter and summer months due to its world-class skiing, the Yampa River, local hot springs, and other recreational offerings of the surrounding Routt National Forest and White River National Forest, including the Mount Zirkel and Sarvis Creek Wilderness Areas. Routt County is home to a few small unincorporated communities, the Towns of Hayden, Oak Creek, and Yampa (the Towns), as well as the County-seat, the City of Steamboat Springs (Steamboat Springs or the City).

The County has a rich agricultural heritage and a strong tie to the surrounding natural landscape. The local economy and way of life is intrinsically linked to the health of the environment and local ecosystems through the abundant jobs, recreation opportunities, and culture that derive from the natural environment. In return, Routt County has committed to creating a healthier, more sustainable, and more resilient County inclusive of all community members.

Project and community partners have worked to analyze and estimate community greenhouse gas (GHG) emissions since 2005 and have developed many plans to help address sustainability in the natural and built environments, including the Hazard Mitigation Plan, the Yampa River Stream Health Management Plan, and the Fish Creek Community Wildfire Protection Plan (among others). Steamboat Springs, Routt County's population center and a primary tourist and economic destination in the community, has also 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)*. Across the County, the community is committed to addressing environmental sustainability and climate action through County and municipal operations as well as community-based programs and policies.

In 2020, the County embarked upon an effort to better understand the community's impact on climate change and identify relevant and impactful GHG emissions mitigation strategies, while working to enhance the quality of life in the community.

The resulting Climate Action Plan (CAP) was developed through a process that included an extensive stakeholder and technical expert engagement process, public outreach via a survey, website, and community meeting, developing a list of strategies and actions, modeling the GHG emission reduction impact of the strategies, and setting viable targets for specific strategies and the County as a whole. The CAP creates 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 level.

The result of the CAP planning process includes a matrix of climate action strategies (i.e., the intent to be accomplished), actions (i.e., what specifically will be done), and tactics (i.e., how the work will be implemented); this format will ensure the community can immediately begin taking action to address the climate crisis through local policies, programs, and initiatives.

***The outcome is an actionable CAP that guides the community to reduce its community wide GHG emissions by 74 percent between 2020 and 2050 (based on a 2018 emissions baseline).***

## The Call To Action

The Intergovernmental Panel on Climate Change's (IPCC) 2018 report on the impacts of a 1.5 degree Celsius (2.7 degrees Fahrenheit) increase in global temperatures illustrates the grave results on ecosystems and human health if humans do not act quickly, collectively, and effectively to mitigate GHG emissions.<sup>2</sup>

**Globally, cities, towns, and populated areas are estimated to be responsible for approximately 75 percent of carbon dioxide emissions. Local governments can have a broad influence and impact on efforts to address climate change mitigation and adaptation and are an integral part of the solution to the climate crisis.**<sup>3</sup>

Across the United States, communities like Routt County are declaring commitments to carbon reduction. Through intentional action and collaboration with the County and local, regional, and state partners, Routt County can have an outsized influence because of its ability to not only positively impact their residents but hundreds of thousands of annual tourists.

In 2019 Colorado Governor Jared Polis signed into law House Bill 1261, committing the State to a series of GHG reductions, including reducing emissions by 26 percent by 2025, 50 percent by 2030, and 90 percent by 2050 from 2005 levels. In setting these commitments, the State recognizes the need to reduce GHG emissions across Colorado's economy in order to not only stave off the worst effects of climate change, but also to improve air quality, enhance community and natural resource resiliency, and incur other benefits to residents across Colorado in an equitable manner.

At the time the State adopted House Bill 1261, the Routt County 2018 GHG inventory was under development; this inventory compares data and trends between 2005 (the County's first inventory year) and 2018 and examines expected levels of emissions to the year 2050. This inventory was intended to help inform potential future climate action planning on the part of Routt County, Steamboat Springs, and other local stakeholders.

**Routt County, the City, and the Towns recognize the urgent need to reduce emissions globally and prevent the worst impacts of climate change.**

If current emissions levels are not abated, the County and similar mountain and tourist-based communities across Colorado and the southwest are in danger of experiencing significant negative impacts due to 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.<sup>4</sup>

As the State's recently-released Greenhouse Gas Pollution Reduction Roadmap notes, climate change is an issue that impacts economic development, public health, natural resources, and community resilience and emergency response. In addition to increasing incidences of wildfire and changes in precipitation, communities across the State are at increased risk for droughts, flooding, water quality issues associated with warmer water, and reduced watershed and ecosystem health.<sup>5</sup> If current emissions levels are not abated, Routt County and similar mountain communities and local tourism-based economies across Colorado and the Southwest are in danger of experiencing complex variations that will impact the economy and quality of life.

Taking a proactive stance on climate change will allow Routt County to be better prepared for anticipated changes in the regional climate and the impact those changes will have on citizens, landowners, and businesses. By developing and implementing this CAP, Routt County will be helping to protect the health and safety of local individuals, businesses, and natural resources and help ensure the County remains a vibrant and thriving community for years to come.

2 IPCC, 2018: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.)]. In Press.

3 United Nations. Cities and Climate Change. Retrieved from <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/cities/cities-and-climate-change>.

4 Environmental Protection Agency. (2017). What Climate Change Means for Colorado. Retrieved from <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-co.pdf> on June 20, 2020.

5 Office of Governor Jared Polis: Colorado Greenhouse Gas Pollution Reduction Roadmap (2021). Retrieved from [https://drive.google.com/file/d/1jzLvFcrDryhhs9ZkT\\_UXkQM\\_0LiYzfq/view](https://drive.google.com/file/d/1jzLvFcrDryhhs9ZkT_UXkQM_0LiYzfq/view).

## THE CREATION OF THE CAP

*In 2020, recognizing the need to take a role in reducing global GHG emissions and to diminish or prevent the direct impacts from climate change, Routt County decided to continue to build on project partners' past efforts and work towards significantly reducing GHG emissions.*

The process of developing the Routt County CAP occurred between March 2020 and April 2021. A Project Management Team including representatives from the County, the City of Steamboat Springs, Steamboat Ski and Resort Corporation, and Steamboat Springs Chamber supported the planning process by engaging stakeholders and providing feedback throughout the process. An Oversight Committee composed of elected officials and those in leadership positions within the local governments provided guidance throughout the planning process.

While originally planned to include a robust and in-person community and stakeholder engagement process, the COVID-19 pandemic and the resulting impact on Routt County forced the project team to pivot towards virtual engagement. Throughout the CAP planning process, advocacy groups that represent a variety of diverse viewpoints and perspectives, including those both in favor of and opposed to sweeping action on climate change, were engaged. The full list of all individuals who were interviewed or who participated in focus groups, workshops, or other conversations regarding the development of the CAP, including further details about the timing and topics of specific conversations, can be found in Appendix C: Public and Stakeholder Engagement Activities. At a high level, the engagement activities that occurred to support the development of the CAP included:

- **Informational interviews** regarding current efforts and future opportunities with key decision-makers. A total of 13 decision-makers were interviewed.
- Five **virtual focus groups** intended to brainstorm specific climate action strategies and actions. These focus groups included community members as well as experts in the technical strategy areas that are included in the CAP. Interviews were also held with specific experts who were unable to attend the focus group meetings. A total of 45 individuals participated in the focus groups and follow-up interviews.

- Research on similar **peer communities'** sustainability efforts. Peer communities that were researched include Pitkin County, Eagle County, Summit County, Aspen, Telluride, Durango, and Crested Butte (Colorado), as well as Bozeman and Missoula (Montana), Taos Ski Valley (New Mexico), and Summit County (Utah).
- A **community survey** to collect citizens' feedback on proposed strategies and actions and community priorities. There were a total of 276 responses to the survey.
- Two virtual **stakeholder workshops** to refine the final list of strategies and actions and to set measurable targets associated with the strategies.
- Two virtual **implementation focus groups** to determine the details and tactics for implementation of the climate actions.
- An **emissions reduction model** that quantifies the total impact of various strategies on community GHG emissions.
- A second **community questionnaire and virtual open house**.

Although meeting in person was no longer an option, the COVID-19 global health pandemic did shine a light on vulnerabilities that exist locally, regionally, and nationally, and many people noted that they were motivated to participate in a planning process that could help to guide the community towards greater resiliency in the long run.

Additionally, the GHG emissions reduction potential of select climate action strategies were modeled in order to set meaningful and quantifiable targets for the strategies, and to better understand the relative impact of the strategies selected. The CAP includes 22 strategies and 78 specific implementation actions that the Routt County community and the municipalities will embark on in the coming years to reduce the community's GHG emissions. The CAP presents a menu of options from which the County, the City, and the Towns can choose based on their priorities and capacity.

Please note that the work identified in this document may be able to be enhanced in future years as technology improves and regulatory guidance and frameworks change. In return, the CAP will be iterated upon in future years.

## COMMUNITY VALUES AND CO-BENEFITS OF CLIMATE ACTION

*The CAP project team gathered feedback from stakeholders and community members regarding the community values and ‘co-benefits’ of climate action strategies that the community wishes to see accrued.*

‘Co-benefits’ are defined as the secondary benefits and positive impacts of the climate action strategies, outside of GHG emission reductions. The following are the top values identified during the meetings and through the community questionnaire:

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 top co-benefits of climate action that were identified during the meetings and through the community questionnaire:

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 create a circular economy, reduce waste, and sequester 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.

## ADAPTATION OPPORTUNITIES IN ROUTT COUNTY

*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.

The County and its partners recognize that the region will experience some adverse impacts from climate change regardless of the CAP planning process. In return, the CAP project team determined that outlining the key risks and potential adaptation opportunities for Routt was a proactive first step in the CAP process. The consultant team hosted ten informational interviews with Routt County experts in natural lands management, water resources, the local economy, and the agricultural community to identify the key risks, impacts, and adaptation opportunities for Routt to consider when embarking on a full-scale adaptation planning effort.

Routt County faces five key risks that will be exacerbated by climate change: drought; extreme heat; flooding; shifts in seasonal weather patterns; and wildfire.<sup>6</sup> Because of these climate risks, Routt County is likely to see adverse effects in six key impact areas: agriculture; air quality; cultural heritage; the local economy (including tourism); public health; and water quality, supply, and watershed health. Based on the high-level risk assessment and impact and opportunity analysis conducted, the following is a list of the primary recommendations for Routt County to consider as next steps towards building a more climate adaptive and resilient 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 and other recently developed plans that relate to climate adaptability.
- Continue to develop and deepen collaborations and conversations between land management, forest health, and watershed management groups to leverage synergies and optimize resources.

6 Western Water Alliance. (2014). Climate Change in Colorado. Retrieved from <https://www.colorado.edu/climate/co2014report/#:~:text=The%20Report,precipitation%2C%20snowpack%2C%20and%20streamflow>.

- 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.

While this is a climate mitigation plan, climate mitigation and adaptation strategies frequently overlap in terms of implementation and impact; strategies that have a primary impact on reducing GHG emissions may have adaptation benefits as well, and vice versa. For example, investing in locally distributed energy systems that are powered by renewable resources and include energy storage will lower GHG emissions while also providing backup power for critical infrastructure in the case of a hazardous event.

See the Appendix B. Memo on Routt County Adaptation: Risks, Impacts, Priorities, and Recommendations for more information.

## BEYOND 2021

*The success of the plan relies on broad collaboration and coordination within the Routt County community.*

Implementing the strategies and achieving the targets identified in this plan will reduce the County’s GHG emissions by 35 percent by 2030 and by 74 percent by the year 2050 (as compared to our 2018 baseline). In doing so, we have the opportunity to improve community health through cleaner air and water, enhanced recreation opportunities, and a more resilient economy.

The CAP is considered to be a living document, which will be updated at least every five years as new opportunities and technologies become available. We recognize that the work identified in this document will change in future years as technology improves and regulatory guidance and frameworks change. The goal and intent are to continue to identify additional opportunities to iterate upon this plan in the future years. As the CAP is updated, the targets and total emissions reduction that is likely to be achieved will change.

This CAP was developed through a community-driven process, and, as such, is a plan for the entire community, not just one entity or geographic area. Throughout implementation, entities and partners across the community will be engaged to achieve the CAP goals, and some may take a leadership role on specific strategies or actions. For example, engaging the top 5 or 10 energy and wastewater users in the community in

efficiency efforts will drive community energy reductions and allow these entities to become leaders in the region in regard to climate action and sustainability.

To be successful, this CAP will require concentrated coordination across the governments of Routt County with local leading organizations and community members. The CAP will be operationalized on an ongoing basis, including each partner entity determining which strategies and actions they will implement or support over the coming year, and budgeting for those activities appropriately. Funding for the implementation of this plan will come from a variety of different sources, and having this plan in place positions the County and its partners will pursue external funding sources such as State and federal grants. The cost of implementation will vary based on the priorities selected by the partners in any given year and the funding resources that are available.

## A Note on Implementation

### **Routt County Climate Action Collaborative**

To ensure a healthy, equitable, and livable future, it is critical that project partners come together to address climate change. The CAP strategies, actions, and tactics are intended to provide a menu of options for the County, City, Towns, and other stakeholders to select from as they move forward with their climate action work. As Routt County embarks upon this work, it would benefit from working collaboratively. A successful strategy that has been implemented in other mountain communities is the creation of a Climate Action Collaborative (Collaborative). A Collaborative model creates a framework for accountability, partnership, and coordination across local governments and organizations, and connects stakeholders to resources to implement the CAP.

While the specific structure of a potential Collaborative is yet to be determined, it would likely include a series of technical working groups focused on each of the CAP sectors. A steering committee would guide the activities of a Collaborative and ensure that it is managing implementation appropriately, as well as tracking and regularly reporting on progress towards the CAP goals to the broader community. A managing entity could coordinate and communicate work happening across the region related to the implementation of the CAP and may also be tasked with identifying funding resources for implementation.

# SETTING THE STAGE: ROUTT COUNTY'S GHG EMISSIONS PROFILE

Routt County's emissions profile clarifies the sectors and sources of emissions that may be targeted to have the greatest immediate impact towards reducing community GHG emissions. The key takeaways of the 2018 emission inventory include:

- A total emissions value of 693,367 metric tons of carbon dioxide equivalent (mt CO<sub>2</sub>e).
- Thirty-seven percent of that total emissions were generated by activities occurring in Steamboat Springs. The remaining 63 percent came from Hayden, Oak Creek, Yampa, and unincorporated Routt County.
- Energy use (electricity, natural gas, propane, diesel, and wood) in commercial and industrial buildings generated the most emissions in Routt County (32 percent). Residential buildings made up 22 percent of the emissions.
- Electricity use made up 37 percent of Routt County's emissions, followed by gasoline and natural gas (17 percent and 12 percent, respectively).
- Emissions from the transportation sector accounted for 26 percent of the community's total. Within the transportation sector, the largest source of emissions in Routt County comes from gasoline vehicles, followed by emissions from diesel vehicles, aviation, railways, and waterborne craft.
- Solid waste disposal resulted in seven percent of the community's total emissions in 2018.
- Emissions from agricultural activities and land impacts (including forest fires) comprised five percent of the total emissions.
- Fugitive emissions, including from natural gas leakage and coal mining, comprised eight percent of the total emissions.

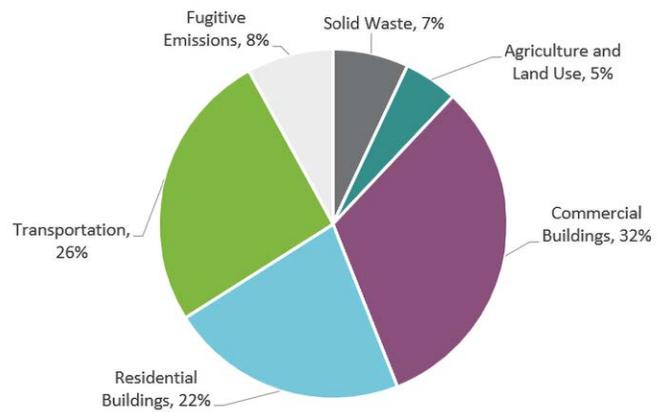


Figure 1: Routt County's 2018 emissions by sector.

The Hayden Power Plant emitted 2,486,846 mt CO<sub>2</sub>e in 2018 (over three and a half times the community's total); however, those emissions are not included in the community's total per the Global Protocol for Community-Scale Greenhouse Gas Inventories (GPC) guidelines.<sup>7</sup>

Additional details on the County's emissions profile can be found on [the County's website](#).

By analyzing future emissions scenarios, the County and its partners can better understand how emissions are likely to change over time in the case of inaction, and how policy decisions and climate action projects can impact emission trajectories. A GHG emissions forecast estimates that future emissions for the community will decrease 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 use. Routt County (with the exception of the town of Oak Creek) is provided electricity by Yampa Valley Electric Association (YVEA), an electric cooperative that purchases power wholesale from Xcel Energy. Xcel has 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 the County in the coming years.

<sup>7</sup> The GHG inventory was developed using the Global Protocol for Community-Scale Greenhouse Gas emissions; according to that protocol, emissions from activities such as coal mining and coal power plant production are not included in the inventory's emissions sectors; however, it was important for the community to understand and report on this impact, therefore, these emissions are included as information-only items in the 2018 inventory.

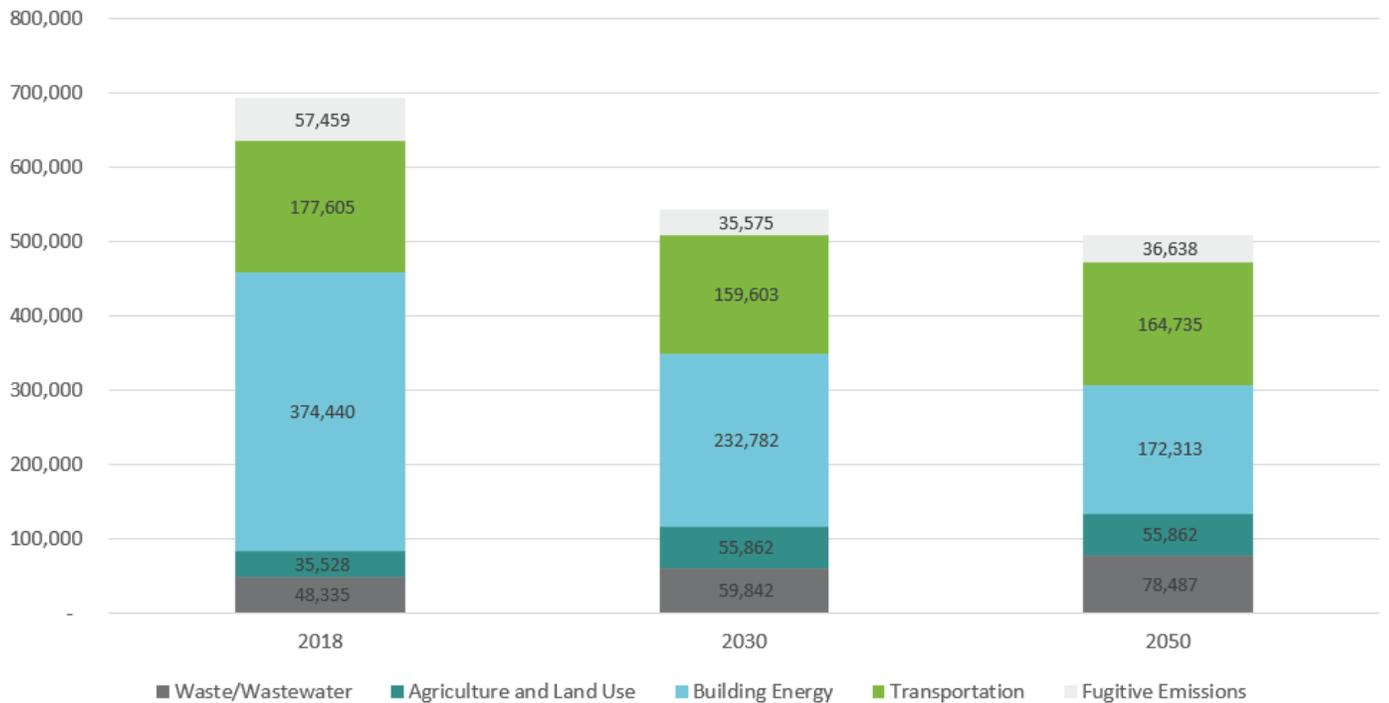


Figure 2: Routt County’s business-as-usual emissions projections.

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 2).

These future emissions projections provide another useful tool for understanding where and how Routt County and its partners can have the greatest impact on emissions generated locally. While emissions from energy use in buildings are projected to decrease in the long term, population growth projections hint at the need to mitigate emissions that will come from new buildings that are constructed over the coming years. Emissions from the transportation sector will comprise a much larger proportion of community emissions by 2050 and implementing smart growth strategies that expand mobility access across the community will be important for maintaining good air quality and mitigating GHG emissions.

### Routt County’s Emission Reduction Goals

As the planning team identified the climate action strategies that are most appropriate for Routt County, the degree to which high-impact strategies will affect future emissions were modeled against the business-as-usual case scenario. This allowed the planning team to determine what the most high-impact strategies are, the metrics that will be used to measure progress on climate action, as well as the emission reduction goals that Routt County will strive for in implementing this work. Targets were also selected for each strategy to help the community monitor progress and report on outcomes.

***If all 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 additional emissions reductions (i.e., those above and beyond the decrease that is anticipated based on business-as-usual projections) will come from specific strategies in the transportation, building energy, and waste sectors (see Figure 3).



Figure 3: Routt County business-as-usual emissions projection to 2050 (mt CO2e).

The strategies selected by Routt County, along with the emissions goal for each sector, are detailed in the section Getting to Work: Strategies, Actions, and Tactics.

The County’s 2030 emissions goals were developed through a granular process that focused on what is reasonable and achievable locally. These goals do not meet the statewide targets for emissions reductions across Colorado’s economy (where [HB19-1261](#) calls for a 50 percent reduction in emissions by 2030 and a 90 percent reduction in emissions by 2050). However, the County and its stakeholders did not feel it was appropriate to assume emissions reductions in difficult-to-address sectors over which the County and its partners have little control (such as coal mining) or where there is

no or little market-ready technology to reduce emissions currently (such as for aviation).

It is assumed that as action occurs at the state and federal levels (such as limiting emissions from coal mining and coal power plants) and as technological advances are made (such as the development of cleaner aviation fuels), the County will be able to update the goals and strategies within the CAP to leverage these advancements. It should also be noted that the State’s goals are based on a 2005 baseline; while Routt County does have a 2005 emissions inventory, the data used in the 2018 inventory is of higher quality and more verifiable, hence why 2018 was used for the County’s baseline emissions values.

# GETTING TO WORK

## STRATEGIES | ACTIONS | TACTICS

The following pages highlight the strategies, actions, and specific tactics that Routt County will implement to reduce GHG emissions generated in the community. The strategies, actions, and tactics are not listed in any particular order. If all the actions are implemented, it is anticipated that the County will reduce its emissions profile by 74 percent by 2050 (as compared to 2018 emissions levels).

Within each sector, detail is provided regarding the strategies that the community selected for climate action, the GHG impact of strategies that were modeled, any metrics and targets associated with the strategy, the specific actions that are an essential component of each strategy, and the preliminary implementation tactics. It can be useful to think of the strategies as the intent of the work, the actions as what will be done, and the tactics as specifically how the work will be implemented.

## KEY FOR THE PLAN

### PRIORITY



(Low)

Priority level indicates the level of importance the County and its partners have assigned to this action.

### COMPLEXITY



(Medium)

Complexity is a high-level measure of the degree of staff time, collaboration, or additional resources that may be required to implement an action.

### TACTICS

The tactics identified for each action are listed below each action.

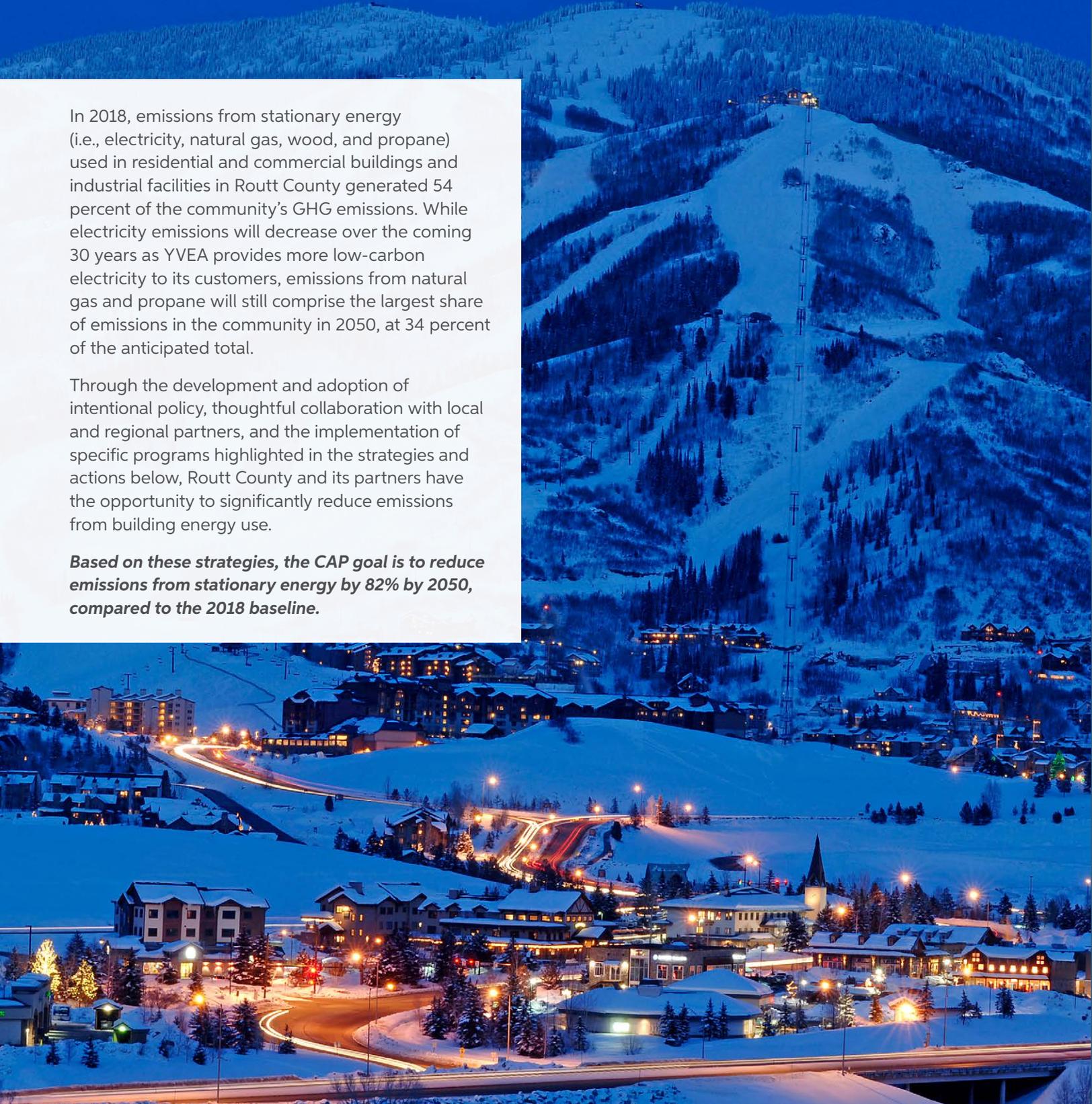


# ENERGY

In 2018, emissions from stationary energy (i.e., electricity, natural gas, wood, and propane) used in residential and commercial buildings and industrial facilities in Routt County generated 54 percent of the community's GHG emissions. While electricity emissions will decrease over the coming 30 years as YVEA provides more low-carbon electricity to its customers, emissions from natural gas and propane will still comprise the largest share of emissions in the community in 2050, at 34 percent of the anticipated total.

Through the development and adoption of intentional policy, thoughtful collaboration with local and regional partners, and the implementation of specific programs highlighted in the strategies and actions below, Routt County and its partners have the opportunity to significantly reduce emissions from building energy use.

***Based on these strategies, the CAP goal is to reduce emissions from stationary energy by 82% by 2050, compared to the 2018 baseline.***



The energy sector contains three high-level strategies and 17 discrete actions that the County and its partners can pursue to reduce GHG emissions and protect the quality of life within the community.

## STRATEGY 1

### Increase adoption of renewable or other clean energy and fuel sources.

Within Routt County, addressing regulatory and economic barriers to the development of renewable energy projects and supporting renewable energy development through policy and partnerships are key to the success of this strategy.

The targets for this strategy are:

- Ensure that 10 percent of natural gas supplied to the community is renewable by 2030.
- Ensure that 15 percent of natural gas supplied to the community is renewable by 2050.
- Ensure the County supports work to achieve the State's goal of 100 percent renewable electricity across Colorado by 2040.

*Note that renewable natural gas (i.e., gas generated from organic waste material) is not widely available in Colorado, but multiple natural gas utilities are interested in expanding their development of renewable natural gas across the State. Initial conversations at the State level indicate that renewable natural gas may be available in the future through a voluntary program that customers can opt-in to, similar to renewable energy credit programs available through many electricity providers.*

*This strategy also has an adaptation benefit for the community; renewable energy systems that include energy storage or have demand response capabilities provide resiliency in times of outages and allow for more flexible demand management.*

## STRATEGY 2

### Increase energy efficiency.

In 2018, energy used in residential buildings in Routt County accounted for 22 percent of County-wide GHG emissions, while the energy used in commercial buildings accounted for 32 percent of emissions. By improving the energy efficiency of existing buildings in the County, and ensuring new buildings are built to the highest possible degree of efficiency, Routt County will be helping community members save money on energy bills, improving indoor and outdoor air quality, supporting local jobs, and increasing the comfort for building inhabitants.

The targets for this strategy are:

- Ensure that 30 percent of residential buildings have participated in efficiency programs by 2030 and 90 percent by 2050.
- Ensure that 35 percent of commercial buildings have participated in efficiency programs by 2030 and 85 percent by 2050.

*A thoughtful approach to energy codes and policies, and energy efficiency programs will ensure that existing infrastructure keeps pace with current technology and reaps the benefits of increased efficiency.*

## STRATEGY

### Promote fuel switching (i.e., electrification).

Based on data from the 2018 GHG emissions inventory for Routt County, 12 percent of community-wide emissions came from the use of natural gas, and an additional three percent came from other stationary energy and heating sources (i.e., propane, stationary diesel, or wood burning). As Xcel Energy (who YVEA purchases wholesale power from) pursues its commitment to reduce carbon emissions by 80 percent by 2030 and be a carbon-free electricity provider by 2050, emissions from the use of electricity in the County will decrease significantly and be near zero by 2050.<sup>8</sup> By transitioning building systems that are traditionally powered with stationary fuel sources (including space heating, water heating, and cooking) to being powered by electricity, the County can realize significant emissions savings.

The County has established targets for participation in for retrofitting existing buildings to all-electric:

- Ensure that 15 percent of existing buildings are retrofitted to be all-electric by 2030.
- Ensure that 75 percent of existing buildings are retrofitted to be all-electric by 2050.

*YVEA supports fuel switching in homes and buildings owned by its members, and there is ample opportunity to collaborate with the cooperative to achieve the community's electrification targets.*

*Xcel's progress towards its carbon reduction goals has a significant bearing on the ultimate impact of this strategy; likewise, achieving the State's target of 100 percent renewable energy by 2040 is also a key factor of this strategy having the anticipated impact on emissions that is modeled.*

<sup>8</sup> The Town of Oak Creek runs an electrical utility for residents and businesses within its boundaries and currently purchases power from the Municipal Energy Agency of Nebraska (MEAN), a wholesale power provider; MEAN has not announced a zero-carbon goal for its power supply. Electricity use in Oak Creek represents a small portion (approximately two percent in 2018) of overall community energy use.



## STRATEGY 1

### Increase adoption of renewable or other clean energy and fuel sources.

### ACTION 1

Reduce barriers to deployment of renewables (solar, wind, other) through review and modification of codes and policies and tracking and implementation of state and federal support mechanisms.

PRIORITY



COMPLEXITY



Based on conversations with stakeholders and feedback received from community members, there are multiple complex steps needed to receive permits for solar deployment within each community in Routt County. The complexity, number of steps, rules surrounding solar deployment, and the patchwork of incentives and rules create barriers to solar access and deployment. Simplifying this process through review and modification of code and policy, as well as providing information on state and federal rules and incentives will support greater solar deployment.

### TACTICS

- 1 Identify barriers (infrastructure, financing, code, policy, etc.) for deployment of renewable energy.

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- 2 Review and modify codes and policies to reduce barriers for deployment of renewables.

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- 3 Track and communicate state and federal regulations that reduce barriers for deployment.

### ACTION 2

Ensure that the County, the City, and the Towns across Routt County lead by example powering buildings with renewable energy.

PRIORITY



COMPLEXITY



By powering the energy used in public facilities with renewable resources, the County, City, and Towns will not only lead by example, but also reduce GHG emissions associated with energy use in those buildings as well as long-term operational costs in those facilities. If energy storage projects were developed at any municipal facilities, this may provide a resiliency benefit in regard to continuity of services in the event of a disaster that impacts grid services.

### TACTICS

- 1 Identify renewable energy projects on County and municipality facilities.

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- 2 Secure funding for projects.

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- 3 Communicate and educate the public about renewable energy opportunities in commercial buildings.

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- 4 Track renewable energy production.



## STRATEGY 1

**Increase adoption of renewable or other clean energy and fuel sources.**

### ACTION 3

Become a solar-ready, renewable gas-ready, and/or renewable-ready community as per existing programs such as SolSmart.

PRIORITY

COMPLEXITY

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Although the cost of solar panels continues to drop as the technology becomes more widespread, the ‘soft costs’ associated with going solar (i.e., the cost of installation and processing, including permits and administrative costs) have remained relatively flat over recent years, and often comprise a significant portion of the overall project costs. By updating permitting processes and policies to become a solar- or renewable-ready community, the County and its partners can help to bring down the soft costs and make it easier for solar companies and consumers to work together. The City of Steamboat Springs has gained designation from SolSmart, a Department of Energy program, for its work to reduce barriers to solar in code and policy.

### TACTICS

- 1 Review existing programs to become renewable energy ready.

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- 2 Adopt renewable energy ready programs that are the best fit for the community.

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- 3 Implement steps to become renewable energy ready as outlined in the adopted program.

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- 4 Track and communicate efforts to become a renewable energy community.

### ACTION 4

Create incentive programs to support the development of renewable energy and related infrastructure.

PRIORITY

COMPLEXITY

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Investing in renewable energy systems often requires significant upfront capital or the ability to take on financing. In order to remove that barrier for customers, the County and its partners may create incentive programs to support investments in renewable energy. While there are existing programs that provide some level of support for renewable energy and related infrastructure, enhancing these offerings through more robust incentives, education, and outreach will benefit more residents and businesses.

There may be an opportunity for a County-wide incentive program that could benefit all electricity users, not just those that are members of a single utility (i.e., YVEA or Town of Oak Creek). Identifying where new programs can be layered or stacked on top of existing incentives will also maximize the benefits to consumers.

### TACTICS

- 1 Identify partners at the state and local level that could help support rebate and incentive programs.

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- 2 Work with partners to develop rebate and incentive programs with federal, state, and local support.

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- 3 Track and communicate rebate and incentive opportunities to the community.



## STRATEGY 1

**Increase adoption of renewable or other clean energy and fuel sources.**

### ACTION 5

Prepare and adopt community and/or county plans that include a comprehensive programmatic and policy approach to shift the community towards alternative fuels and renewable energy sources.

PRIORITY



COMPLEXITY



A cohesive strategy for renewable energy growth needs to be developed to drive the use of clean fuels and renewable energy resources.

### TACTICS

- 1** Prepare and adopt a community plan that shifts the community toward renewable energy and alternative fuels.

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- 2** Review and modify policies and codes that will support the goals of the community plan.

### ACTION 6

Develop or support renewable energy projects that benefit the whole county (e.g., community solar, etc.).

PRIORITY



COMPLEXITY



Renewable energy projects that benefit the whole county (e.g., reduce emissions and provide reliable energy service) could include a community solar installation and/or a solar system tied to energy storage for key critical facilities in the community. Support could take the form of technical support, financial support, and outreach and engagement support through the collaboration of community partners, utilities, and potential funding sources.

### TACTICS

- 1** Work with local utilities, community stakeholders and potential funding partners to develop new renewable energy projects; support the development of renewable energy projects with technical, financial, and/or outreach support.

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- 2** Support current renewable energy projects with technical, financial, and/or outreach support.

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- 3** Support utility provider transition to green energy.



## STRATEGY 1

Increase adoption of renewable or other clean energy and fuel sources.

### ACTION 7

Create and implement a Renewable Energy Mitigation Program.

PRIORITY

COMPLEXITY



Renewable Energy Mitigation Programs (REMPs) are currently an effective tool in neighboring Eagle and Pitkin Counties for reducing the impact of energy use in new large buildings and external equipment such as hot tubs and snowmelt systems. As part of the energy code in Pitkin County, this program requires new homes to either offset excessive energy use through renewable energy systems on site (such as solar photovoltaics, solar water heating, or geothermal heat pumps) or pay a fee to mitigate the excessive energy use.<sup>9</sup> A REMP could be used to mitigate the impact of large residences and commercial energy users while providing funds to support other community climate action work.

#### TACTICS

- 1 Create and adopt a renewable energy mitigation program at the County.
- 2 Implement a REMP program through the County Building Department and support energy efficiency and renewable energy programs with the proceeds.

### ACTION 8

Partner with the federal and state government to advance clean energy.

PRIORITY

COMPLEXITY



Colorado Governor Jared Polis has set a goal for the State to achieve 100 percent renewable electricity by 2040; additionally, there is significant interest in developing opportunities and infrastructure to support the development and use of renewable natural gas in Colorado. While the County cannot dictate the policies and programs developed and implemented by the State, it can work in tandem with State agencies to support the State's goals and ensure that the community is able to participate in the transition to renewable resources.

#### TACTICS

- 1 Develop a policy platform to identify state and federal policy to support.
- 2 Track state and federal regulation and create opportunities for community engagement in support.

<sup>9</sup> More information about the REMP program in Pitkin County can be found at <https://pitkincounty.com/206/Building-Energy-Codes>.



## STRATEGY 2

**Increase energy efficiency.**

### ACTION 1

Adopt and implement a strategic action plan to improve the energy efficiency of residential and commercial buildings and industrial processes in the community.

PRIORITY



COMPLEXITY



There is significant opportunity to reduce emissions generated in the community by ensuring that the current stock of homes and buildings are as efficient as possible, and that new homes and buildings are built to the highest possible standards of efficiency. A strategic plan that identifies the specific opportunities (e.g., high use facilities) to reduce energy use and enhance efficiency by building type (i.e., residential, commercial, industrial, existing, new) will be needed to guide policy and code development in the near term and long term.

### TACTICS

- 1** Prepare and adopt a strategic action plan to improve energy efficiency.

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- 2** Review and modify policies and codes that will support goals of the strategic action plan to improve energy efficiency.

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- 3** Implement the strategic plan with large energy consumers as case studies to highlight and showcase beneficial outcomes of implementing the plan.

### ACTION 2

Adopt an energy use information disclosure ordinance requiring energy users to disclose consumption levels (targeted to sector, building size, or other criteria).

PRIORITY



COMPLEXITY



Energy use disclosure programs, also known as benchmarking programs,<sup>10</sup> often require commercial building owners over a certain size to assess and report their annual energy use on a public platform; this assessment and reporting often results in building owners better understanding energy use and efficiency opportunities within their buildings and can create some level of ‘friendly competition’ among building owners that are reporting into the benchmarking system. These programs also provide transparency to lessees, so they better understand potential energy costs before signing a lease. The State Legislature is currently reviewing a bill that would require benchmarking for commercial buildings over 50,000 square feet; the County should work in tandem with any relevant State initiatives to move this work forward.

### TACTICS

- 1** Review and modify codes to require energy use information disclosure ordinance requiring energy users to disclose consumption levels (can be targeted to sector, building size, or other criteria).

---

- 2** Work with community partners and businesses to educate about these changes in codes.

<sup>10</sup> The City and County of Denver shares data from its benchmarking program on <https://energizeddenver.org/>. Further details about the ordinance can be found at <https://www.denvergov.org/content/denvergov/en/climate-sustainability/goals-policy/benchmarking-ordinance.html>.



# ENERGY

## STRATEGY 2

Increase energy efficiency.

### ACTION 3

Adopt or upgrade codes and policies to ensure that new and renovated buildings are more energy efficient.

PRIORITY

COMPLEXITY

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New construction (and major renovations of existing buildings) should be built to the highest possible standards of efficiency; it is much more economical and efficient to build as efficiently as possible than to attempt to retrofit after the fact. In addition to adopting the most recent version of the International Energy Conservation Code soon after its release, adopting additional 'stretch' or 'green' codes that are phased in will further increase building efficiency and quality over time. The specific process and approach for updating codes will be detailed in the strategic plan referenced in ES2 A1.

Proper mechanisms for enforcing energy codes should be in place to make sure builders are complying with the code.

### TACTICS

- 1 Review and modify codes to ensure that new and renovated buildings are more energy efficient.

---

- 2 Work with community partners and businesses to educate about these changes in codes.

### ACTION 4

Create an education and outreach campaign or challenge to engage various target audiences in energy efficiency efforts.

PRIORITY

COMPLEXITY

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A cohesive outreach campaign regarding energy efficiency that provides clear messaging to audiences does not exist. This action will develop an education and outreach campaign that clearly communicates the important information and relevant benefits of efficiency efforts, including information on how to participate. Outreach campaigns will be targeted to their audience (i.e., homeowners and renters, property owners, industrial users).

### TACTICS

- 1 Create an education and outreach campaign for residential and multi-unit housing to engage homeowners and renters in energy efficiency.

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- 2 Create an education and outreach campaign for commercial property owners to improve energy efficiency.

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- 3 Create an education and outreach campaign for industrial users and processes to improve energy efficiency.



## STRATEGY 2

Increase energy efficiency.

### ACTION 5

Ensure that the County, the City, and the Towns across Routt County lead by example.

PRIORITY



COMPLEXITY



Reducing energy use in municipal and County-owned buildings will help reduce long-term utility costs associated with these facilities. Additionally, if the County, City, or Towns were to pursue any creative approaches to efficiency at their facilities, these projects could potentially be used to inform and educate the community about opportunities for efficiency in commercial buildings and how this work can be implemented. Financial and technical assistance may be available from the State through programs (e.g., Energy Performance Contracting (EPC) and Commercial Property Assessed Clean Energy (C-PACE)) or grants.

### TACTICS

- 1 Conduct building energy audits and identify energy efficiency projects on County and municipality facilities.

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- 2 Adopt policies requiring all new public buildings to meet LEED Certification or other nationally recognized green building certification programs.

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- 3 Secure funding for projects.

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- 4 Track and communicate energy efficiency projects and energy use and emissions reductions.

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- 5 Update facility plans.



## STRATEGY 2

Increase energy efficiency.

### ACTION 6

Expand energy audit and energy commissioning programs and access to these programs.

PRIORITY

COMPLEXITY

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Yampa Valley Sustainability Council (YVSC) provides energy audits to Routt County homeowners; some additional support for energy efficiency is available to commercial customers through YVEA. Expanding access to energy audit and commissioning programs for all customer types in the County will help energy users to understand how they are using energy, and where efficiency can be improved in specific buildings. This work will require collaboration with community partners and specific outreach and education to different types of building owners.

The sale process during which a home or building is transitioning from one owner to another can be a key intervention point during which to incentivize or require energy auditing and commissioning. Many communities have implemented requirements or incentives for assessing and reporting on a home or building's energy performance, including efficiency measures and standard utility costs, during the sale transaction process. Communicating the impact of building efficiency on operating costs, and highlighting the economic (and quality of life) benefits of energy efficiency during this time, can be a key way to drive investments in commissioning and efficiency improvements for existing buildings.

### TACTICS

- 1 Work with local utilities, municipalities, and community partners to review available energy audit and commissioning programs; identify ways to expand these programs and fund them.

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- 2 Develop an education and outreach strategy to highlight sustainability, cost savings, and available programming for auditing and commissioning.

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- 3 Provide technical assistance to property owners to support the implementation of energy efficiency strategies identified in the audit process.



## STRATEGY 2

Increase energy efficiency.

### ACTION 7

Create incentives for businesses, lessors, homeowners, and renters to improve the energy efficiency of their existing buildings and homes.

PRIORITY

COMPLEXITY



YVEA currently provides incentives and support for homeowners to perform some energy efficiency upgrades in their homes. In order to drive greater gains in energy efficiency in existing homes, these programs can be reinforced with greater incentives, technical assistance, and targeted education by audience type (i.e., homeowners/renters, property owners, industrial users). Ensuring in particular that low-to-moderate income households have access to tools and resources must be considered.

Routt County’s existing building stock varies widely in terms of age, condition, and building envelope structure. The projects and technologies that can increase efficiency in these buildings will vary widely based on these factors. Regardless, existing buildings are generally only required to make certain efficiency updates when a renovation or retrofit project reaches a certain size. For this reason, both prescriptive codes and incentives in the form of financial and technical assistance are necessary to compel buildings to reduce energy use.

### TACTICS

- 1 Identify partners at the state and local level that could help support rebate and incentive programs.

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- 2 Work with partners to develop rebate and incentive programs with federal, state, and local support.

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- 3 Track and communicate rebate and incentive opportunities to the community.



## STRATEGY 3

Promote fuel switching (i.e., building electrification).

### ACTION 1

Develop and implement fuel switching programs.

#### PRIORITY



#### COMPLEXITY



Supporting builders and building owners in transitioning to all-electric building systems will require the use of policy change, education, and incentives. Studies show that building 100 percent electric is already cost-effective in new construction due to cost savings resulting from not having to develop new natural gas infrastructure.<sup>11</sup> In retrofit situations, currently electric heating and water heating systems using heat pump technologies (which are the most efficient form of electrical heating and water heating) come at a cost premium over most traditional fuel combustion appliances. However, the market for this technology is rapidly evolving as many Colorado communities are implementing building electrification programs, and there is interest at the State level. It is likely that, due to these circumstances, heat pump technologies, especially cold-climate heat pumps that are most appropriate for Routt's climate, will become more cost competitive over the coming years.

### TACTICS

- 1 Work with local utilities, municipalities, and community partners to develop fuel switching programs. Identify pilot programs and partnerships to increase fuel switching.

<sup>11</sup> Billimoria, et al. (2018). The Economics of Electrifying Buildings. Retrieved from <https://rmi.org/insight/the-economics-of-electrifying-buildings/>.



## STRATEGY 3

### Promote fuel switching (i.e., building electrification).

#### ACTION 2

Carry out education and outreach surrounding the benefits of and promoting electrification.

PRIORITY



COMPLEXITY



Building electrification reduces indoor air pollution that results from combustion appliances and fuels from buildings; this benefit is especially important for small children and those with compromised immune systems. Additionally, all-electric buildings tend to maintain a more consistent temperature (leading to enhanced thermal comfort), offer cooling in addition to heating (which may not be necessary in Routt County currently, but may be useful if temperatures rise over the coming years), and provide an opportunity for greater grid management and demand flexibility on the part of the utility. This action can leverage current work across the state to support building electrification including work being done by Physicians for Social Responsibility to espouse the health benefits of electrification, and Denver, Climate Nexus, and others to develop messaging and outreach regarding electrification to different audiences.

#### TACTICS

- 1 Develop an education and outreach strategy to highlight the sustainability, cost savings, and available programming to support fuel switching.

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- 2 Provide technical assistance to property owners regarding beneficial electrification costs, processes, and outcomes.

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- 3 Review and adopt codes to support beneficial electrification.



# TRANSPORTATION

In 2018, emissions from transportation activities (i.e., on-road vehicles, aviation, and railways) in Routt County generated 26 percent of the community's GHG emissions. Two-thirds of these emissions were generated from the use of gasoline vehicles, and another quarter was generated from the use of diesel vehicles.

In general, the County and its municipalities do not have the ability to significantly alter transportation activity within aviation, and have limited influence over railways, and therefore have little control over the emissions produced from those activities. For this reason, the strategies within the transportation sector for the CAP focus primarily on increasing access to multimodal transportation options and supporting the use of electric vehicles (EVs) in the community. Particular attention will be given during the implementation of these strategies to increase access to transit services and multimodal options in the western and southern parts of the County.

As emissions from the energy sector decrease due to the electricity grid becoming cleaner, transportation emissions will comprise a much larger portion of the community's total by 2050, making this an important sector to focus on during implementation.

***The CAP goal is to reduce emissions from the transportation sector by 98 percent by 2050 compared to the 2018 baseline.***

The majority of these emissions savings come from the transition to EVs throughout the community.



The transportation sector contains four high-level strategies and 12 discrete actions that the County and its partners can pursue to reduce GHG emissions and protect the quality of life within the community.

## STRATEGY 1

### Improve safe and equitable multimodal access throughout each community to reduce Vehicle Miles Traveled (VMT).

Expanding multimodal access throughout the County includes enhancing active transportation networks (i.e., bike and walking trails) as well as expanding access to transit services throughout the community. Improving transit access and making active transportation a safer and easier option for residents and visitors of Routt County was a high-priority item for the stakeholders engaged in the CAP development process.

The targets for this strategy are:

- Increase transit ridership by 25 percent by 2030 and 50 percent by 2050.
- Increase the share of people traveling by active transportation mode by 10 percent by 2030 and 15 percent by 2050.

## STRATEGY 2

### Increase adoption of electric vehicles such that 20% of registered vehicles in Routt County are EVs by 2030 and 95% are EVs by 2050.

While improving transit and multimodal transportation access throughout the community is intended to reduce the use of vehicles, it is unlikely that all vehicular travel will disappear. EVs are a viable option to reduce emissions from gasoline and diesel vehicles currently on the road; they produce no tailpipe emissions, and when powered by clean electricity they also significantly reduce GHG emissions.

While the EV market is rapidly growing and evolving, currently there are a limited number of available EVs that may be more appropriate for Routt County's geography and terrain, including pick-up trucks, sport utility vehicles, and four-wheel-drive vehicles. As new models are introduced, it is expected that EV adoption will increase.

The targets for this strategy are:

- Increase electric vehicle adoption to 20 percent of registered vehicles by 2030 and 95 percent of registered vehicles by 2050.

*As of 2019, the percentage of vehicles registered in the community that were EVs was less than one percent.*

*Steamboat Springs adopted the [Steamboat Springs EV Readiness Plan](#) in April 2021. The EV plan identifies the specific strategies and actions necessary to increase EV adoption in the City; many of the items identified in that Plan are also relevant to Routt County at large. Therefore, to avoid duplication or any potentially conflicting guidance between these documents, the EV-related strategies in the CAP are approached more broadly, leaving many of the specific details on tactics to be addressed in the EV Readiness Plan.*

*While the current emphasis remains on EVs, other non-fossil burning transportation options would be considered as a key component of reducing vehicle emissions as those technologies become more viable and cost-effective.*

### STRATEGY 3

#### Reduce single occupancy vehicle travel.

The ways that we travel within and around our community tends to be driven by deeply personal choices and drivers—factors such as level of fitness, comfort of navigating a transit system, and ability to easily get from one location to another quickly can all play a significant role in how we travel.

There are no targets associated with this specific strategy.

### STRATEGY 4

#### Engage in statewide discussions and policy work.

Transportation planning impacts the daily lives of every Coloradoan, and the State has an interest in coordinating across regions and developing policy and programs to support smarter transportation options. The Colorado Department of Transportation (CDOT) and the Colorado Department of Public Health and the Environment (CDPHE) are developing a number of initiatives to reduce emissions from the transportation sector statewide, including evaluating the GHG impact of CDOT projects, developing transportation demand management programs for large employers, and a recently developed [Colorado Electric Vehicle Plan](#). As it develops and implements this work, the State is working with local and regional entities to support transportation planning and infrastructure investments and programs.

Engaging in statewide discussions and policy work to advocate for transportation issues at the regional level and collaborating on transportation issues within Routt County and across northwest Colorado is important if our region is to benefit from State transportation initiatives. This work includes supporting increased investment in transportation planning and infrastructure through tax questions and other mechanisms, as appropriate.

There are no targets associated with this specific strategy.



## STRATEGY 1

Improve safe and equitable multimodal access throughout each community to reduce Vehicle Miles Traveled (VMT).

### ACTION 1

Expand and improve the bike/pedestrian infrastructure and systems throughout the County with a focus on infrastructure that will support a reduction in vehicle miles traveled.

PRIORITY



COMPLEXITY



Steamboat Springs has a robust existing trail system that connects many neighborhoods and points of interest across the City. Outside of the City, there are a limited number of trail systems to connect the other Towns and communities in Routt County to one another. In order to encourage and provide access for more community members to utilize active transportation options, trails will be developed in key priority areas of the County, and existing trails will be connected to each other to enhance connectivity across communities in the County. Additionally, improving signage and wayfinding on trails and providing education on active transportation options and networks in the community may encourage greater use of these systems.

### TACTICS

- 1 Develop multi-modal transportation plans to prioritize pedestrian and bike infrastructure development while considering equity and accessibility.

---

- 2 Adopt a complete streets policy that addresses all users, applies to all projects with limited exceptions, and includes specific next steps for implementation.

---

- 3 Identify, develop, and implement projects that increase bike/ped infrastructure.

---

- 4 Review and update development codes to require bicycle and pedestrian infrastructure.

---

- 5 Ensure compliance of new projects with codes and standards that create complete streets.

---

- 6 Ensure amenities (e.g., bike racks, benches) are available to support bicycle and pedestrian use.



## STRATEGY 1

Improve safe and equitable multimodal access throughout each community to reduce Vehicle Miles Traveled (VMT).

## ACTION 2

Increase local transit services in Steamboat Springs.

PRIORITY

COMPLEXITY



As the population center, primary employment center, and main tourist destination in Routt County, improving Steamboat Springs' transit service will provide enhanced transit opportunities for a significant portion of daily trips in the community and is likely to significantly decrease single-occupancy vehicle travel.

## TACTICS

- 1 Secure dedicated funding for local transit.

---

- 2 Identify partnerships and collaborations.

---

- 3 Plan transit service that utilizes available funding and infrastructure.

---

- 4 Carry out feasibility studies to identify new local transit options.

---

- 5 Improve bus infrastructure (e.g., bus stops, bus lanes) which improves visibility and efficiency of transit.

---

- 6 Conduct education and outreach, including highlighting affordability of transit compared to single occupancy vehicles and the environmental benefits of transit.

---

- 7 Improve transit quality and experience.



## STRATEGY 1

Improve safe and equitable multimodal access throughout each community to reduce Vehicle Miles Traveled (VMT).

## ACTION 3

Increase regional transit services throughout the area.

PRIORITY



COMPLEXITY



Currently, Steamboat Springs Transit provides high-quality bus service in the City of Steamboat Springs as well as regionally between Steamboat Springs and nearby Craig, Hayden, and Milner along State Highway 40. However, transportation options to travel throughout the County without a car are limited especially in the southern portions of the County, and the transit service to the western portion of the County has a limited schedule.

Enhancing mobility throughout the region will require a significant amount of collaboration with other regional entities and could include the development of a regional transportation authority that might provide coordination, collaboration, and accountability within one cohesive entity for transportation management. Currently there is a transportation task force that is discussing the development of such an entity.

## TACTICS

- 1 Identify partnerships and collaborations.

---

- 2 Research Regional Transportation Authority options.

---

- 3 Identify or create an organization to carry out regional transit.

---

- 4 Plan transit service that utilizes available funding and infrastructure.

---

- 5 Secure dedicated funding for regional transit.

---

- 6 Improve bus infrastructure (i.e., bus stops, bus lanes) which improve visibility and efficiency of transit.

---

- 7 Conduct education and outreach, including highlighting the affordability of transit compared to single occupancy vehicles.



## STRATEGY 2

Increase adoption of electric vehicles such that 20% of registered vehicles in Routt County are EVs by 2030 and 95% are EVs by 2050.

### ACTION 1

Adopt plans, policies, and codes to support the transition to electric or other clean power vehicles.

PRIORITY

COMPLEXITY



Steamboat Springs has adopted the Steamboat Springs Electric Vehicle Readiness Plan, which outlines plans, policies, and codes to support the transition to electric vehicles. This plan may serve as a model for the County and Towns as they move forward in their efforts to support the transition to electric or other clean power vehicles.

### TACTICS

- 1 Develop, adopt, and implement Electric Vehicle Readiness Plans for communities and the county.

---

- 2 Identify barriers to residential, workplace, and commercial charging in each community and across the county and modify codes in order to remove identified barriers.

---

- 3 Review model EV codes and adopt building codes which require installation of wiring/conduit and/or charging infrastructure to enable future EV charging installation in all new residential, multi-family, and commercial construction.

---

- 4 Integrate EV planning into other relevant County and community plans.

---

- 5 Establish minimum requirements and/or incentives to promote designated EV parking for new and renovated construction.

---

- 6 Adopt code incentives such as fee reductions and/or permitting priority to support private investment in chargers.



## STRATEGY 2

Increase adoption of electric vehicles such that 20% of registered vehicles in Routt County are EVs by 2030 and 95% are EVs by 2050.

### ACTION 2

Increase EV charging infrastructure (community, workplace, residential, commercial).

PRIORITY

COMPLEXITY



Installation of EV charging infrastructure is critical to support the transition to electric vehicles. As many residential properties within the County may not be able to easily install residential chargers, it will be important to also support development of public community, workplace, and commercial charging options. The State has identified US Highway 40, which runs through Routt County, as a high-priority location for fast-charging infrastructure and there are opportunities to partner with the State to support this expansion of infrastructure.<sup>12</sup> Further specific details on charging infrastructure will be addressed in the Steamboat Springs EV Readiness Plan.

### TACTICS

- 1 Develop a workplace charging program to facilitate charger integration for local agencies, businesses, education providers, medical centers, cultural centers, and recreation centers.

---

- 2 Install Level 2 chargers near destinations with mid-range dwell times with the goal of providing one level 2 charger for every 12 registered electric vehicles.

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- 3 Install one or more Level 3 chargers in each community along the Highway 40 corridor.

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- 4 Support the adoption of mixed-level charging near multi-family or affordable housing to support both overnight and quick charge options.

---

- 5 Facilitate and/or incentivize EV charger deployment at high-traffic areas such as state parks, airports, community centers, libraries, park-and-rides, ski resorts, the fairgrounds and other locations utilizing dwell time and siting criteria.

---

- 6 Combine EV charging with solar where possible to reduce carbon footprint and enhance charging for short-range EVs.

---

- 7 Identify existing incentives, create new incentives, and promote incentives for installing EV charging infrastructure.

<sup>12</sup> This is noted in Colorado's EV Plan, which can be found at <https://drive.google.com/file/d/1-z-INQMU0pymcTQEh8OvnemgTbwQnFhq/view>.



# TRANSPORTATION

## STRATEGY 2

Increase adoption of electric vehicles such that 20% of registered vehicles in Routt County are EVs by 2030 and 95% are EVs by 2050.

### ACTION 3

Develop and disseminate education and outreach to support EV adoption.

PRIORITY

COMPLEXITY



EV adoption across the community will be supported by effective and relevant education and outreach campaigns that address, among other issues of misinformation, concerns about range anxiety, environmental impact, and charging availability.

### TACTICS

- 1 Carry out education and outreach to the general public around EV basics, cost effectiveness, environmental benefits, models available, batteries, winter operation, and other topics to stimulate EV adoption.

---

- 2 Develop and implement an EV education and outreach program focused on workplaces.

---

- 3 Carry out education and outreach to stimulate EV infrastructure development, especially for multi-family and residential charging.

---

- 4 Host Ride-and-Drive events to stimulate interest and understanding of EVs.

---

- 5 Provide education and outreach information in multiple languages.



## STRATEGY 2

Increase adoption of electric vehicles such that 20% of registered vehicles in Routt County are EVs by 2030 and 95% are EVs by 2050.

### ACTION 4

Promote fleet transition to electric or other clean energy vehicles.

PRIORITY



COMPLEXITY



By purchasing EVs and low-emitting vehicles through the fleet replacement cycle in their own fleets, the governments of Routt County can lead by example, reducing their own fleets emissions footprint, and providing their staff with the opportunity to become comfortable with EVs. Further, the governments of Routt County could support other fleet owners in the community to adopt EVs by providing toolkits and resources, such as their own fleet transition plans as guidance documents.

### TACTICS

- 1 Perform fleet analysis and develop plans for fleet transitions to clean energy vehicles for municipal, county, school district, and private fleets.

---

- 2 Carry out a fleet vehicle sizing needs assessment to identify needed vehicle characteristics and compare to available clean energy models.

---

- 3 Identify opportunities to replace conventional school buses with low or no emitting school buses.

---

- 4 Carry out demonstration projects to show clean energy mid-and heavy-duty fleet vehicle feasibility.

---

- 5 Provide or facilitate incentives and grants for fleet conversions and/or charging/fueling stations.

---

- 6 Carry out education and outreach on fleet planning and transition to fleet owners and managers.



## STRATEGY 3

### Reduce single occupancy vehicle travel.

#### ACTION 1

Encourage the public to make behavior changes to reduce single occupancy VMT.

PRIORITY

COMPLEXITY

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● ○ ○

Increased information and encouragement to promote active transportation options (including using E-bikes), utilize car or ride-sharing programs, and take advantage of local transit options will support a transition away from single-occupancy vehicles in the community. Additionally, an engaging public education campaign leveraging the values of health, recreation, and the beautiful landscape in Routt County will encourage more people to opt for taking transit or biking or walking to their destination.

In addition, educating people on how to maintain a vehicle properly (e.g., regular oil changes, etc.) and reducing engine idling time will have a positive impact on air quality and GHG emissions throughout the community.

#### TACTICS

- 1 Promote E-bikes in lieu of gas-powered vehicles and support equitable E-bike adoption.

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- 2 Develop education and outreach campaigns to encourage and sustain behavior change, including walking, biking, using transit, anti-idling, and proper vehicle maintenance.

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- 3 Ensure tourists are aware of, and are encouraged to use, alternative transportation options available in the community.

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- 4 Create programs and incentives for community-wide ride sharing.

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- 5 Create an EV car share and/or community bike share program.

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- 6 Review existing plans to identify potential incentives and disincentives to support behavior change to reduce VMT.



## STRATEGY 3

### Reduce single occupancy vehicle travel.

## ACTION 2

Develop a regional approach to employee and visitor shuttles and transportation services.

PRIORITY

COMPLEXITY



With approximately 500,000 annual visitors to Routt County, the impact on Routt County's roads and transportation network is significant.<sup>13</sup> Encouraging and educating visitors to utilize transit, shuttles, and active transportation options in the community will help to reduce the number of cars on the road, improve local air quality, and reduce GHG emissions within the transportation sector.

Many of the lodging and resort companies in the community provide some level of visitor shuttle service, and some additionally provide shuttles for employees to get to and from work. Improving the coordination of these shuttle services, connecting shuttle service with general transit service, and better communicating about these services to employees and visitors may be an effective way to further reduce single occupancy vehicle use in the community.

## TACTICS

- 1 Identify current providers, assess services provided, and explore potential partnerships and collaborations.

---

- 2 Consider employee and visitor shuttles and transportation services within the context of an RTA.

---

- 3 Host annual meetings of stakeholders, transportation providers, and others to enhance shared understanding and nurture partnerships and collaborations.

---

- 4 Create an education and outreach campaign to promote regional services for visitors and employees.

<sup>13</sup> Based on data from Steamboat Springs Chamber.



# TRANSPORTATION

## STRATEGY 3

Reduce single occupancy vehicle travel.

### ACTION 1

Encourage and increase work from home.

PRIORITY

COMPLEXITY

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YVEA is expanding its services to include broadband internet access across the County, with a priority focus on the more rural parts of the County that are less likely to have reliable internet service. Expanding broadband access will make working and going to school from home a more viable option that may lead to fewer car trips for those that are able to engage remotely in work and school.

### TACTICS

- 1** Work with YVEA to support the cooperative's efforts to expand broadband access Countywide.

---

- 2** Encourage greater use of telecommuting within the County.

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- 3** Carry out an education campaign promoting teleworking.



## STRATEGY 4

Engage in statewide discussions and policy work.

### ACTION 1

Advocate for Routt County and Northwest Colorado.

PRIORITY

● ○ ○

COMPLEXITY

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Advocating for the needs of the region within statewide discussions and exploring opportunities regarding the transition of the local rail system for future multi-modal use is important to local transportation efforts. The current rail system will be defunct in the coming years as mining production ceases; this presents several opportunities that can be explored for reuse or re-purposing of the rail infrastructure.

### TACTICS

- 1 Actively participate in regional and statewide groups to advocate for Routt County and Northwest Colorado.

---

- 2 Regularly communicate with relevant officials in state, federal, and regional transportation agencies.

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- 3 Participate in discussions regarding the transition of the rail system.

### ACTION 2

Support tax questions which would provide additional transportation funding to our area.

PRIORITY

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COMPLEXITY

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In order for transportation services to be accessible, equitable, and long-lasting, sustainable funding must be allocated or secured. This action identifies working collaboratively across the region and state to support legislative and regulatory updates that would lead to increased funding for transportation services locally and regionally.

### TACTICS

- 1 Educate elected officials and community members about proposed tax initiatives.

---

- 2 Review and provide feedback to state agencies and organizations regarding proposed initiatives.

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- 3 Carry out education and outreach around initiatives which provide additional transportation funding.



# WASTE

Emissions from waste generated in Routt County comprised seven percent of the community's GHG emissions in 2018. Nearly all (94 percent) of these emissions were generated from solid waste disposal. Compost activities generated one percent of waste emissions, wastewater treatment generated four percent of waste emissions, and septic systems generated one percent of waste emissions.

The County and its municipalities have limited ability to significantly alter the emissions generated from wastewater treatment beyond ensuring that the centralized treatment system is as efficient as possible; many of these improvements have already been undertaken. The County also has little ability to reduce emissions from septic systems based on current technology and regulatory requirements. For this reason, the waste strategies focus primarily on reducing the amount of waste disposed and increasing waste diversion (composting and recycling) across the community. Recent successes in the waste sector include:

- Steamboat Springs instituted a plastic bag ban and a paper bag fee in 2019.<sup>14</sup>
- In 2019 YVSC worked with a group of stakeholders and experts locally to develop the *2019 Waste Diversion Strategic Plan for Routt County*.
- Residential composting of food waste is available and expanding.

By 2050 emissions from waste activities in the County are anticipated to make up 15 percent of the community's overall emissions profile, representing a significant growth in emissions. Through the development and adoption of intentional policy, thoughtful collaboration with local and regional partners, and the implementation of specific programs highlighted in the strategies and actions below, Routt County has the potential to reduce emissions from waste significantly.

**The CAP goal is to reduce emissions from the waste sector by 69 percent by 2050 compared to the 2018 baseline.**



<sup>14</sup> More information can be found at <https://steamboatsprings.net/939/Plastic-Paper-Bags>.

Photo: City of Steamboat Springs

The waste sector contains three high-level strategies and 12 discrete actions that the County and its partners can pursue to reduce GHG emissions and promote the development of a circular economy within the community.

**STRATEGY 1**

**Reduce the amount of solid waste disposed of in the landfill.**

Strategies and actions in WS1 and WS2 are intended to reduce solid waste generated in the County and disposed of in landfills and to increase diversion opportunities across the County. In 2018 the County’s waste diversion rate was 23 percent.

The targets for this strategy are:

- Increase community waste diversion to 46 percent of solid waste diverted from the landfill by 2030 and 85 percent diverted from the landfill by 2050.

*This target exceeds the current statewide target of a 45 percent diversion rate by 2036. After extensive conversations with stakeholders in the community, it was clear that ‘zero waste’ is an important guiding principle for this work, but at this time, and likely for years into the future, there are certain items in the waste stream that do not have a diversion option*

*available. As such, setting a target of 100 percent waste diversion was seen as likely unachievable; however, this may change as diversion options for other materials become available over the coming years, and, like other targets, this target may be updated in future updates to this CAP.*

**STRATEGY 2**

**Increase waste diversion.**

A key component to reducing waste sent to the landfill is making waste diversion the easy and economical choice for all residents and visitors. The County and its partners can facilitate the development of waste diversion infrastructure and programs throughout the community.

There are no targets associated with this specific strategy.

**STRATEGY 3**

**Support waste reduction initiatives at the State level.**

Working collaboratively with the State (e.g., Colorado Department of Public Health and the Environment (CDPHE)) and local, regional, and statewide advocacy organizations (e.g., Recycle Colorado and Eco Cycle) to identify and implement waste reduction solutions that are specifically relevant to Routt County and northwest Colorado will be an essential component of achieving the community’s waste reduction goals.

There are no targets associated with this specific strategy.



## STRATEGY 1

Reduce the amount of solid waste disposed of in the landfill.

### ACTION 1

Maintain and update the Waste Diversion Strategic Plan every 3-5 years.

PRIORITY

COMPLEXITY



The community-wide *2019 Waste Diversion Strategic Plan* was developed by the Yampa Valley Sustainability Council (YVSC) on behalf of Routt County and the community, with a goal to reduce waste and increase materials recovery through a comprehensive stakeholder process. In order to remain relevant to the needs of the community and the current diversion opportunities available, the plan will need to be implemented in an ongoing fashion and updated on a regular basis.

### TACTICS

- 1 Identify a stakeholder group to meet on a regular basis.

---

- 2 Identify or update short and long-term strategies and goals with a focus on developing the appropriate infrastructure.

---

- 3 Update the plan and present to local officials on the status and for approval on an annual basis.

---

- 4 Implement identified strategies for waste diversion (e.g., curbside recycling, organics recovery, business waste diversion, construction waste, transfer station, education & events).



## STRATEGY 1

**Reduce the amount of solid waste disposed of in the landfill.**

### ACTION 2

Develop or expand community-wide organics recycling programs, infrastructure, and facilities. Work towards making composting equally accessible throughout the county.

PRIORITY



COMPLEXITY



While composting is still available to some community members in Steamboat Springs, the service is not widely available across the County and is not financially attainable for many residents. Establishing financially and logistically accessible compost infrastructure that encourages all residents and businesses to compost their waste is a key priority for this CAP.

### TACTICS

- 1** Develop plans (or update the Waste Diversion Strategic Plan) to support local organics recycling facilities and access to composting for low-income households.

---

- 2** Implement strategies from the Waste Diversion Strategic Plan for organics recycling, ensuring compliance with all applicable regulations.

---

- 3** Integrate organics recycling throughout the county by supporting the development of local programs and facilities.

---

- 4** Develop programs to incentivize and assist local businesses (e.g., restaurants) to implement organics recycling programs.

---

- 5** Create outreach and education programs that include working with schools.



## STRATEGY 1

**Reduce the amount of solid waste disposed of in the landfill.**

### ACTION 3

Incentivize and encourage local government and businesses to develop, adopt and implement waste management plans that increase waste diversion.

PRIORITY



COMPLEXITY



The CAP calls for the development and adoption of internal policies and practices on behalf of the County, City, and Towns that can then be shared with the broader community to compel them to adopt green purchasing and waste reduction policies. Green purchasing policies can include policies that prioritize purchasing more sustainable materials and supplies, such as items made of post-consumer recycled content or with low toxicity levels.

### TACTICS

- 1** Create templates for business and organizational waste management plans.

---

- 2** Identify barriers and areas needed for support.

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- 3** Identify policy and incentive options.

---

- 4** Develop and implement outreach and education programs.

---

- 5** Provide leadership through the County and municipalities by developing agency waste management plans.



## STRATEGY 1

Reduce the amount of solid waste disposed of in the landfill.

### ACTION 4

Adopt specific programs, policies, and codes to limit or eliminate the availability of certain products that will significantly advance progress towards waste reduction goals.

PRIORITY



COMPLEXITY



Steamboat Springs' plastic bag ban has been successful and has an additional benefit of generating revenue through the paper bag fee; this revenue is in turn used to fund other waste diversion projects within the City. Additionally, the [2020 Steamboat Springs community survey](#) shows that approximately 70 percent of the community supports measures banning plastic and Styrofoam take-out containers, single use water bottles, and plastic straws, indicating that there is interest in limiting the availability of other products.

### TACTICS

- 1 Identify product ban or fee opportunities from stakeholder input, surveys, and research of other communities.

---

- 2 Identify community and local/state government support for specific product bans and/or fees.

---

- 3 Develop proposals and programs to deter use of specific products either through the use of bans or the application of fees.

---

- 4 Attain local government support (ordinances).

---

- 5 Implement plans and develop and launch education and outreach programs and continue to identify new opportunities.



## STRATEGY 1

Reduce the amount of solid waste disposed of in the landfill.

### ACTION 5

Develop a county-wide approach to waste management, data collection, and reporting.

PRIORITY

COMPLEXITY



A County-wide approach (e.g., ordinance) to waste management is the first step to ensuring that there is accurate and regularly updated data regarding waste activities in the community.<sup>15</sup>

### TACTICS

- 1 Conduct a county-wide waste study to determine material volume and fate.

---

- 2 Develop a county-wide solid waste management plan based on data from the study to increase waste diversion and efficiencies.

---

- 3 Investigate and propose a county-wide hauler licensing program and consider single-hauler contracts throughout the county.

---

- 4 Investigate the development of a Solid Waste Authority.

<sup>15</sup> For example, see the Boulder County's hauler licensing ordinance: <https://www.bouldercounty.org/environment/trash/hauler-license/>.



## STRATEGY 1

**Reduce the amount of solid waste disposed of in the landfill.**

### ACTION 6

Develop or participate in a regional coalition that enhances the community's ability to address waste management targets.

PRIORITY

COMPLEXITY



In order to successfully make progress on waste reduction in the community, a coalition of partners and regional entities must be engaged in the work. Waste issues in many ways surpass local geographic and political boundaries, and therefore relevant parties to include in this regional coalition include neighboring jurisdictions, haulers, owners of diversion-focused businesses, waste advocacy organizations, and local businesses. The regional coalition will work to identify and develop regional solutions that will support mutually beneficial goals.

### TACTICS

- 1** Develop a framework for collaboration between haulers, towns, and nearby counties.

---

- 2** Set up a schedule for ongoing meetings with regional partners.

---

- 3** Identify areas where collaboration is beneficial.

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- 4** Implement regional collaborative efforts.



# WASTE

## STRATEGY 1

Reduce the amount of solid waste disposed of in the landfill.

### ACTION 7

Develop a construction and demolition diversion program.

#### PRIORITY



#### COMPLEXITY



Routt County sees a significant amount of new construction and retrofits in the residential and commercial building sectors annually (in addition to public works projects); all of these activities generate a large amount of waste, much of which could be diverted from the landfill. The County and its partners will develop a construction and demolition (C&D) diversion program that may include internal policies regarding waste diversion from C&D public works projects, as well as collaborations to provide resources, best practices, and incentives to developers and builders in Routt County to also divert waste from their projects.

### TACTICS

- 1 Research opportunities, needs, and gaps.  
\_\_\_\_\_
- 2 Research end markets.  
\_\_\_\_\_
- 3 Develop partnerships.  
\_\_\_\_\_
- 4 Develop a model program.  
\_\_\_\_\_
- 5 Identify regulatory framework and create model code.  
\_\_\_\_\_
- 6 Identify and implement incentives.  
\_\_\_\_\_
- 7 Conduct education and outreach.



## STRATEGY 1

**Reduce the amount of solid waste disposed of in the landfill.**

### ACTION 8

Create a public education campaign or focused outreach effort to inform residents and businesses of their roles in achieving waste reduction targets.

PRIORITY



COMPLEXITY



Waste diversion policies and practices can vary between communities, and even within different entities in a single community. Developing consistent and clear policies around waste and using common language, imagery, and infrastructure for waste diversion is a clear way to help people understand and adopt the appropriate waste diversion practices within the community. A community-wide campaign and ensuring that signage and infrastructure are consistent may empower and engage community members to support these goals.

### TACTICS

- 1** Create partnerships around education and outreach.

---

- 2** Develop content, consistent messaging, imagery, and infrastructure to ensure all residents and visitors understand how waste is managed in the community and how to properly divert their waste.

---

- 3** Develop an implementation strategy (consider community based social marketing).

---

- 4** Secure ongoing funding.



## STRATEGY 2

Increase diversion.

### ACTION 1

Adopt zero waste policies and incentivize zero-waste for events and facilities.

PRIORITY

COMPLEXITY



Moving toward zero waste events and facilities will decrease waste streams and increase composting and recycling in support of CAP goals and strategies.

### TACTICS

- 1 Develop the capacity for zero-waste services either through collaborations, partnerships, program development, or new business formation.

---

- 2 Develop policies to support the end goal and pass new rules at the local and county level.

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- 3 Develop incentives for participation and consider recognition programs for business.

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- 4 Develop a Zero-Waste Plan for events and facilities.

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- 5 Identify and obtain needed infrastructure for zero waste events & facilities.

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- 6 Develop a system to ensure oversight at events.

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- 7 Work with the compost facility to identify preferred zero waste products and ensure events are using those products.



## STRATEGY 2

**Increase diversion.**

### ACTION 2

Ensure that residents, businesses, and organizations have access to affordable recycling in order to reduce their waste footprint.

PRIORITY

COMPLEXITY



Access to recycling is still limited in parts of the County, leaving many residents and businesses with few options to appropriately dispose of divertible waste. Drop off recycling centers help to address this gap and YVSC hosts annual events to collect divertible materials, including some hard-to-recycle and household hazardous waste items. However, securing stable and sustainable access to recycle different materials throughout the year would likely compel many more households and businesses to divert those items from the landfill.

### TACTICS

- 1 Research diversion options, including curbside, single stream and source separation, composting, multifamily, transfer station, drop off locations and recycling events.

---

- 2 Identify opportunities, needs, and gaps.

---

- 3 Create partnerships.

---

- 4 Create model code.

---

- 5 Develop necessary infrastructure to support selected recycling programs.

---

- 6 Increase opportunities to recycle and properly dispose of hard-to-recycle and household hazardous waste items in the County.



## STRATEGY 2

Increase diversion.

### ACTION 3

Perform a comprehensive recycling study and develop specific plans for community recycling.

PRIORITY

COMPLEXITY



A comprehensive study of the local recycling stream, including an understanding of the quantity and types of materials collected and the paths that these materials are taking to disposal/recycling/repurposing, is necessary in order to build the appropriate infrastructure and resources to increase community-wide diversion. Because of these varied needs and the different infrastructure and resources available across the community, recycling plans must be developed that are specific to those needs, challenges, and opportunities.

### TACTICS

- 1 Research other communities and their programs, plans, and studies.

---

- 2 Identify recycling opportunities, needs, and gaps and create a comprehensive recycling plan.

---

- 3 Audit waste streams to identify and track contamination and volume of recyclable materials.

---

- 4 Track progress over time (including GHG reductions).



## STRATEGY 3

Support waste reduction initiatives at the state level.

### ACTION 1

Engage in collaborative efforts to develop, promote, and support legislation that reduces waste and increases diversion.

PRIORITY



COMPLEXITY



Supporting state-level activity to address waste diversion, implement new policies to reduce waste going to the landfill, and implement extended producer responsibility (EPR) programs that will create infrastructure and support for greater waste diversion of specific materials is important as local recycling depends on the statewide recycling framework. A good example of a recently implemented statewide EPR program is [PaintCare](#), through which residents and businesses can recycle old cans of paint at no cost due to a nominal fee on paint that is included in the cost of the item at time of purchase.

### TACTICS

- 1 Track and follow state direction and tactics.

---

- 2 Support relevant bills.

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- 3 Participate in stakeholder processes with CDPHE and Recycle Colorado.

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- 4 Coordinate with local producers.

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- 5 Develop advocacy and position statements that may be relevant to local businesses and organizations.



# LAND USE

Emissions from agricultural activities and wildfires (i.e., those identified as AFOLU emissions in the 2018 inventory) resulted in five percent of Routt County's GHG emissions in 2018. All of these emissions were generated in unincorporated lands or in the most rural parts of the Towns; no AFOLU emissions were generated within Steamboat Springs. The majority of emissions came from manure management on ranches in the County, followed by emissions from forest fires.

Routt County's agricultural community is an important part of the County's heritage and current day culture, and respect for the work that ranchers and agricultural producers do every day is integral to the implementation of this action. These producers are deeply knowledgeable about their work and their land. Working closely with landowners, producers, and other stakeholders for productive lands within the County is essential to developing and implementing natural climate solutions on these lands.

The following strategies and actions are important for not only supporting the local agricultural community, but also for ensuring that all residents and visitors to the County are able to continue enjoying a high quality of life, clean air, and abundant and healthy natural systems.



Photo: Routt County

There are four strategies and 12 actions within the land use sector.

## STRATEGY 1

**Promote land management practices that increase carbon sequestration and storage across forests, wetlands, riparian corridors, and agricultural lands/rangelands and preserve carbon sinks, especially forests and wetlands, and designate future land uses to maximize carbon sequestration.**

Natural climate solutions, including projects and programs that are focused on reforestation, conservation, restoration, and improved land management activities, can result in increases in the amount of carbon stored in a landscape or otherwise avoiding GHG emissions from landscapes.<sup>16</sup> Common examples of natural climate solutions include regenerative farming, reforestation, and timber and logging management initiatives. In Routt County the primary opportunities for natural climate solutions include forest management activities and rangeland and grassland management, particularly in collaboration with the local ranching community.

## STRATEGY 2

**Increase and support cross-boundary efforts to conserve and maintain natural lands and to promote resiliency across the landscape within the County.**

Stakeholders involved in the CAP process and deeply familiar with forest, water, and land management recognized that decisions made both within and outside of Routt County can impact what happens on land and within waterways and watersheds within the County. Therefore, a collaborative and cross-boundary approach to natural land management, forest health, and watershed health was recognized as essential to support the work that the County and its partners implement in-boundary.

<sup>16</sup> More about natural climate solutions can be found at <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/natural-climate-solutions/>.

## STRATEGY 3

### Promote water conservation measures and reduce energy consumed in water production, distribution, and wastewater treatment.

Colorado has been in a state of drought for several years, with most of Routt County classified as in a state of ‘extreme’ or ‘exceptional’ drought in the spring of 2021.<sup>17</sup> Water conservation measures and policies were frequently cited by community members as important to consider within the CAP based on survey responses, and there are several local and regional entities that are already working on water conservation measures and infrastructure improvements within the community.

## STRATEGY 4

### Promote compact development patterns to achieve more sustainable development and preserve natural land use types.

As Routt County grows in population it is inevitable that development will occur—this includes the construction of new roads, infrastructure, and buildings to support a growing population and increased visitors into the future. Careful consideration of where development can and should be focused and how future development can be integrated into existing development and land uses with minimal impacts will help to preserve natural land uses. As an additional benefit, concentrating future development on principles of sustainable design, Smart Growth, and preservation of natural lands will preserve the character of the community, limit increases in vehicular travel, and ensure that mobility options remain accessible for all community members.

The County has existing land use regulations in place that help to control urban sprawl, and this strategy will build off of those existing policies. Additionally, the County will soon be updating its Master Plan, and the consideration of future growth across the County will be an important consideration within that update.

<sup>17</sup> For more information see <https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CO>.



## STRATEGY 1

Promote land management practices that increase carbon sequestration and storage.

### ACTION 1

Implement specific natural climate solutions for wetlands and riparian corridors within the County.

PRIORITY



COMPLEXITY



An understanding of the current condition and health of wetlands and riparian areas in the County is essential to identifying and implementing specific natural climate solutions for those spaces. Therefore, conducting inventories of these areas and then working with collaborators to identify restoration opportunities and other natural climate solutions that are likely to improve the health of these areas is critical. Following that, projects may be identified and implemented with partners.

### TACTICS

- 1 Create partnerships and collaborations.

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- 2 Secure funding.

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- 3 Carry out wetlands and riparian inventories; identify restoration opportunities and prioritize; carry out restoration feasibility studies; education and outreach; carry out wetlands and riparian corridor projects. Support and implement natural climate solutions to lands within the County.

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- 4 Maintain and monitor projects once complete.



## STRATEGY 1

Promote land management practices that increase carbon sequestration and storage.

## ACTION 2

Work to implement specific natural climate solutions for croplands and rangelands within the County.

PRIORITY

COMPLEXITY



Priority should be placed on conservation of land and solutions that will improve the lives and economics of landowners and managers on these spaces, including by identifying financing strategies and incentives that will support the conservation of working lands and those that manage them. By providing support and resources for the County’s agricultural producers to implement natural climate solutions, this action may open the door to additional revenue streams, operational efficiencies, and ways to connect with new consumers. From a climate perspective, supporting agricultural producers in implementing practices that sequesters carbon and protects landscapes can help to reduce emissions from agricultural operations and pull more carbon out of the atmosphere.

### TACTICS

- 1 Create partnerships and collaborations with landowners, producers, and stakeholders.

---

- 2 Secure funding.

---

- 3 Research to identify soil management activities that are appropriate for this region that are carbon mitigating; inventory and assess lands which fall into carbon mitigating soil management activities in the region; prioritize soil mitigation needs and actions; carry out feasibility studies; carry out projects; conduct education and outreach.

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- 4 Encourage owners of working lands to conserve their properties in perpetuity.

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- 5 Develop financing strategies or incentives to conserve working lands and support ongoing conservation efforts; conduct education and outreach.

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- 6 Connect landowners to technical assistance to support implementation of natural climate solutions.



## STRATEGY 1

Promote land management practices that increase carbon sequestration and storage.

### ACTION 3

Protect and enhance wetlands and riparian corridors.

#### PRIORITY



#### COMPLEXITY



Routt County is home to multiple ecologically and biologically diverse waterways and many accompanying wetlands and watersheds; these include the Elk River, Yampa River, Sarvis Creek, Oak Creek, and many others. The County’s wetlands are integral to the overall health of the ecosystem regionally. Many of the professionals working in land use, water, and forest management in Routt County recognize the interrelated nature of the health and vitality of these waterways and ensuring a systemic and collaborative approach to riparian and wetland management was a common theme throughout stakeholder conversations.

Adopting policies and codes to incentivize and encourage wetland and riparian corridor protection and restoration is critical to ensuring that wetlands are not lost to development and other activities.

### TACTICS

- 1 Develop model code (i.e., adopt land use regulations that establish or update appropriate wetland, stream, and shoreline buffer widths and adjacent land uses) for wetlands and riparian corridor protection at the local level.

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- 2 Adopt “no net loss of wetlands” policies.

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- 3 Create incentives for wetlands and riparian protection and restoration.

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- 4 Inventory wetlands; monitor wetlands for quality and change.



## STRATEGY 1

Promote land management practices that increase carbon sequestration and storage.

### ACTION 4

Work to implement specific natural climate solutions for forests within the County.

PRIORITY

COMPLEXITY



A large amount of land within the County is owned by the State, and the federal government (note, the County, City and Towns own very little land). Working collaboratively across these entities, in partnership with private landowners, will ensure coordination and, very likely, more successful results related to forest protection and carbon sequestration. An understanding of the current health of forested lands in the community is essential to identifying and implementing specific natural climate solutions for those spaces. Additionally, partnerships with landowners, including both public landowners and private landowners, will be crucial to ensuring that forest health improves across land ownership boundaries.

### TACTICS

- 1 Inventory and assess forest health; develop partnerships and collaborations which cross land ownership boundaries.

---

- 2 Create and support programs and projects which result in healthy, robust forest communities; coordinate and integrate planning for surrounding forests that cross land ownership boundaries; conduct education and outreach; conduct monitoring and reporting.

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- 3 Collaborate with the United State Forest Service (USFS), Colorado State Forest Service (CSFS), and private landowners forested lands.



## STRATEGY 1

Promote land management practices that increase carbon sequestration and storage.

## ACTION 5

Integrate green infrastructure concepts and improvements that promote carbon mitigation.

PRIORITY



COMPLEXITY



As owners and managers of land within the community, the County, City, and Towns have a responsibility to ensure that lands they own and manage are maintained for optimal health and carbon mitigation potential. From the management of street trees, open spaces, and parks, to the revegetation of natural lands and landscaping of public spaces, this action provides an opportunity to implement carbon mitigating solutions on lands they manage, lead by example, and educate the community regarding these practices. This action can also encourage private landowners, especially those who own large tracts of land, to adopt the same practices.

## TACTICS

- 1 Create and implement model code, standards, policies, and procedures to integrate green infrastructure concepts and improvements that promote carbon mitigation.

---

- 2 Create and/or expand street tree programs, including inventories of green space and street trees in municipalities; develop a plan to maintain current green spaces and street trees; identify opportunities to add additional urban green spaces and street trees; develop programs and procedures to review and improve tree preservation, landscaping, and revegetation standards; conduct education and outreach.



## STRATEGY 2

Increase and support cross-boundary efforts to conserve and maintain natural lands and to promote resiliency within the County.

### ACTION 1

Protect natural resources that promote carbon mitigation.

PRIORITY

COMPLEXITY



Natural resources, especially forests, wetlands, and grasslands, are important resources for carbon mitigation via their ability to store carbon from the atmosphere; it is important that these lands remain protected in their natural state in order to reap these benefits. Developing financing solutions for land conservation and communicating this work to the community through education and outreach will ensure that these resources remain abundant, healthy, and able to support carbon mitigation activities long into the future.

### TACTICS

- 1 Review landscape standards within existing development codes; create model landscape standards, tree preservation standards, and revegetation standards to benefit carbon mitigation and ensure that those appropriate to the region are prioritized.

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- 2 Develop a plan to protect and restore natural resources through land conservation, corridor connectivity, and restoration of biological integrity and location; develop partnerships and collaborations; conduct education and outreach.

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- 3 Enhance land use strategies to incentivize permanent land conservation; restore, maintain, and monitor conserved natural lands to increase natural resource resilience, adaptability, and biological integrity; develop financing and funding strategies to acquire land or development easements or to fund restoration and maintenance activities.



## STRATEGY 2

**Increase and support cross-boundary efforts to conserve and maintain natural lands and to promote resiliency within the County.**

### ACTION 2

Encourage and facilitate private landowner and public agency participation in landscape scale treatments that promote a resilient and healthy forest condition in Routt County.

PRIORITY



COMPLEXITY



Routt County is no stranger to disastrous wildfire. In 2020 alone the Middle Fork Fire burned upwards of 20,000 acres in the County during Colorado’s most extreme wildfire year on record.<sup>18</sup> Stakeholders recognized the need to expand forest treatments and, where possible, utilize healthy controlled fires to reduce the severity of future fire events and enhance the community’s resilience to fire. By working across entities and landowners within the community to reduce the threat of catastrophic wildfire, Routt County will be protecting these vital natural resources while also protecting the health and safety of the community at large.

### TACTICS

- 1 Encourage cross boundary treatments through tools such as the Good Neighbor Authority.

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- 2 Support educational efforts to inform both the public and public officials on fire mitigation and fire use.

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- 3 Work with the Routt County Wildfire Mitigation Council and utilize the council as a focal point for providing public information, public feedback, and other critical information.

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- 4 Support prescribed fire as one component of a suite of tools available to create landscape resiliency (mostly in shrub/sage/grass types).

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- 5 Support and facilitate prescribed fire for pile burning in coordination with local fire districts, the County Office of Emergency Management and the State Air Pollution Control Division.

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- 6 Support local forest product companies through policy, tax incentives, and zoning.

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- 7 Support existing and develop new reforestation approaches.

<sup>18</sup> More information on the Middle Fork Fire and other fires in Colorado in 2020 can be found at <https://inciweb.nwcg.gov/incident/7153/>.



## STRATEGY 2

**Increase and support cross-boundary efforts to conserve and maintain natural lands and to promote resiliency within the County.**

### ACTION 3

Expand the acquisition of open spaces and the use of conservation easements to preserve natural landscapes and the County’s agricultural heritage.

PRIORITY

COMPLEXITY

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Land trusts hold more than 27,000 acres of land across the community under conservation easements. This results in thousands of acres that will remain open as wildlife corridors, viewsheds, and biologically and ecologically significant assets, which also protect and enhance the rural heritage and character of the community. Expanding protected public open space and private conserved lands will ensure preservation of local landscapes.

### TACTICS

- 1** Identify the need for, prioritize, and develop a plan for acquisition of recreational open space and conservation of natural landscapes.

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- 2** Develop partnership with private landowners to support conservation of natural landscapes.

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- 3** Work collaboratively to acquire private open space from willing property owners.



## STRATEGY 3

Promote water conservation measures and reduce energy consumed in water production, distribution, and wastewater treatment.

### ACTION 1

Enhance regional water and energy conservation.

PRIORITY



COMPLEXITY



Water conservation is necessary to ensure the long-term continual supply of clean water, as well as the protection of natural systems throughout the region. Additionally, water treatment, distribution, and management are energy-intensive processes. The City of Steamboat Springs has already implemented many infrastructure improvements to reduce energy and water use at treatment and distribution facilities, and continually monitors further opportunities to enhance efficiency. Beyond the work that the City is doing, the development of further community-wide water conservation plans, including those specific to the Towns, and enhancements of policy and education for reducing water use across all user types will be essential to enhancing regional water conservation and related energy use.

### TACTICS

- 1 Implement existing water conservation master plans (such as the *Water Conservation Plan for Steamboat Springs and Mount Werner Water and Sanitation District*) and develop new water conservation master plans for areas not covered under existing plans.

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- 2 Enhance policies and education programs aimed at increasing residential, commercial, and municipal water conservation across all sectors of the community.

---

- 3 Identify and enact leadership opportunities; develop or enhance incentive programs; review code to identify water and energy conservation opportunities; develop and implement model codes to enhance regional water and energy conservation; develop partnerships and collaborations.



## STRATEGY 3

Promote water conservation measures and reduce energy consumed in water production, distribution, and wastewater treatment.

### ACTION 2

Expand the acquisition of open spaces and the use of conservation easements to preserve natural landscapes and the County’s agricultural heritage.

PRIORITY

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COMPLEXITY

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Natural systems may be able to be utilized across the community to reduce the energy and water-intensity of existing treatment and distribution systems. This action will identify the opportunities to utilize nature-based solutions to enhance water and energy conservation within water treatment and delivery infrastructure.

### TACTICS

- 1 Inventory and assess infrastructure; research nature-based solutions to water and energy efficiency in water and wastewater infrastructure; identify options for implementation.

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- 2 Secure funding; create and enhance incentives; plan projects; implement projects.



## STRATEGY 4

Promote compact development patterns to achieve more sustainable development and preserve natural land use types.

### ACTION 1

Enhance policies, guidelines, and incentives for Smart Growth and compact development.

PRIORITY

COMPLEXITY



Smart Growth is an approach to community design and transportation planning that focuses on concentrating growth and development in compact communities and areas that are walkable, bikeable, or otherwise provide multimodal access. Smart Growth principles integrate considerations of economic prosperity, environmental sustainability, and social equity into community design by focusing on integration of building uses and types (i.e., residential and commercial) with diverse housing and transportation options.<sup>19</sup>

Integrating guidelines for Smart Growth and compact development into future community growth will also help to mitigate the growth of future GHG emissions driven by development in the outlying areas of the community, specifically that which is related to transportation activities. Additionally, compact urban development can support more vibrant neighborhoods with active transportation opportunities, services available close to where residents live, and commercial districts that support economic development.

### TACTICS

- 1 Integrate Smart Growth and compact development policies into community comprehensive plans; identify priority areas for compact development in future land use plans.

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- 2 Prioritize local infrastructure improvements to revitalize redevelopment and spur private investment in targeted areas; enhance development review policies and procedures to consider implications more comprehensively for sustainability.

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- 3 Educate community members, developers, elected officials, and others on benefits of compact development design and Smart Growth principles.

<sup>19</sup> For more information, see <https://smartgrowthamerica.org/>.



## STRATEGY 4

Promote compact development patterns to achieve more sustainable development and preserve natural land use types.

### ACTION 2

Partners will allocate annual funding to implement their priority strategies in the CAP.

PRIORITY

COMPLEXITY



Outside of specific Smart Growth guidelines and principles, development codes and zoning should support compact development, including through addressing residential and employment density, parking standards that encourage compact development and reduce vehicular travel, and design standards that encourage redevelopment of existing spaces. Codes should be reviewed for standards that conflict with compact development and Smart Growth and revised as needed.

### TACTICS

- 1 Adopt zoning and regulatory standards to increase residential and employment densities in areas identified for compact development.

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- 2 Review and update parking standards and other transportation-related development standards to reflect compact development policies.

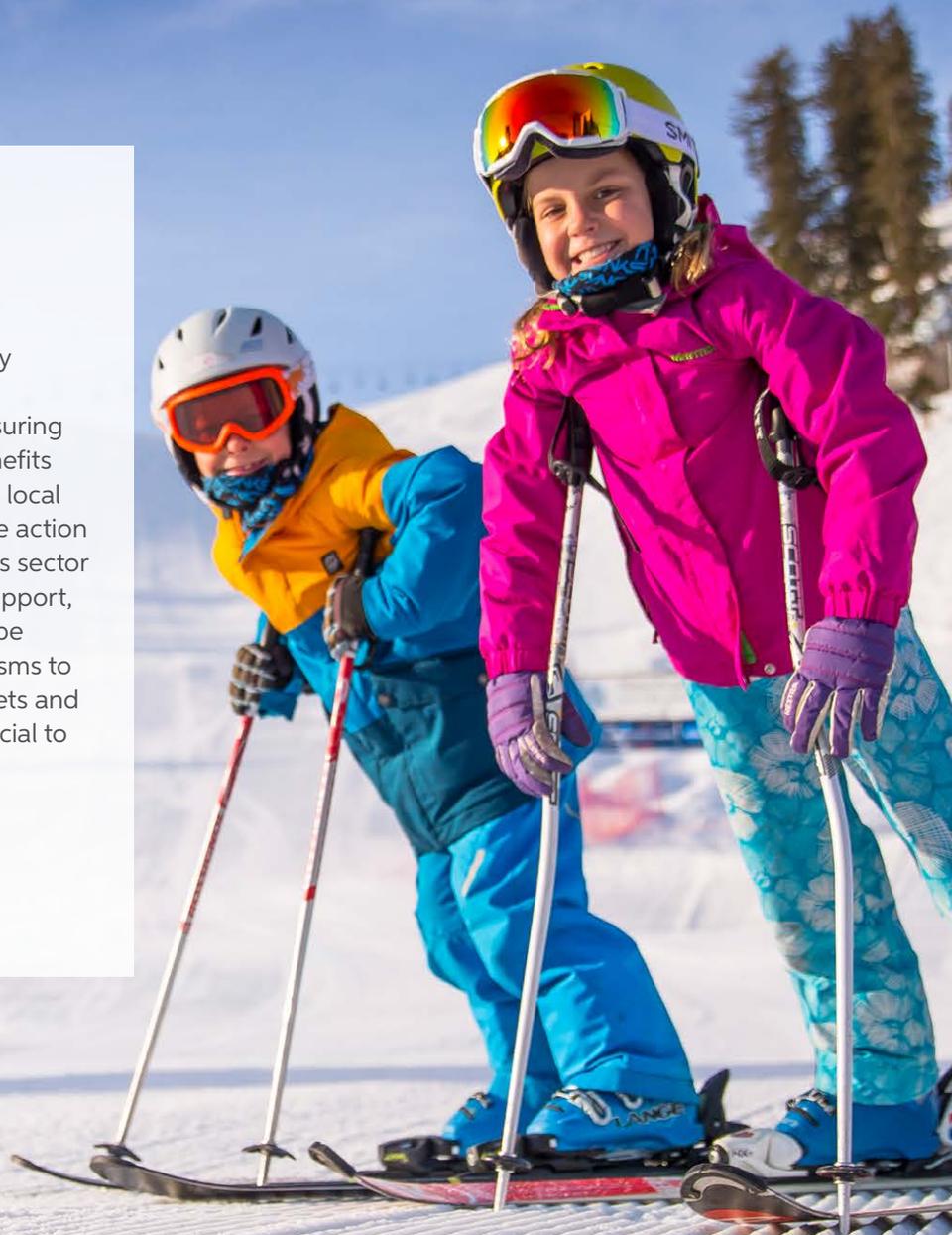
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- 3 Identify development and design standards and incentives to encourage infill and redevelopment projects; review codes to identify conflicting standards and disincentives.



# ECONOMY

The strategies and actions within the economy sector do not have a direct emissions impact; however, these strategies are essential for ensuring that the entire County and local economy benefits from climate action work, and specifically that local businesses are supported to engage in climate action efforts across the County. The strategies in this sector focus on ensuring that businesses have the support, resources, and information that they need to be more sustainable, and that there are mechanisms to support the development of new green markets and a trained and ready workforce that will be crucial to achieving this CAP's goals.



*Photo: City of Steamboat Springs*

The economy sector has four strategies and eight specific actions. All of these actions should be implemented county-wide, including through strong collaboration with all business and trade organizations and local business leaders.

## **STRATEGY 1**

### **Consume goods with lower embedded carbon emissions.**

Embedded carbon emissions (or sometimes referred to as embodied carbon emissions) are the full emissions profile of a good or material, from sourcing the raw materials, to production and use of the good, to disposal of the finished product. Life cycle assessments (LCAs) are often used to determine the embodied carbon emissions of a material or good.

## **STRATEGY 2**

### **Develop green markets.**

'Green markets' here are defined as economic development (i.e., new and expanding businesses and jobs) that is focused on green technologies, products, and services.

## **STRATEGY 3**

### **Expand base industries for regional self-reliance.**

Routt County has many local manufacturers and producers of goods, from agricultural products, to food items, to sports equipment, and much more. Highlighting these local base employers and encouraging local governments, businesses, and consumers to support them will ensure these businesses continue to thrive, attract new talent, and grow the local economy.

## **STRATEGY 4**

### **Enhance environmental sustainability efforts undertaken by business.**

The entire Routt County community, including all local businesses, needs to be engaged in climate action work in order for the community's goals to be met. Supporting environmental sustainability efforts at businesses throughout the community will ensure that the appropriate resources and support mechanisms are available for businesses to engage in and embrace this work.



## STRATEGY 1

Consume goods with lower embedded carbon emissions.

### ACTION 1

Develop green purchasing programs at government, commercial, and residential levels.

PRIORITY

COMPLEXITY



Green purchasing programs place priority on the purchase of materials that have lower embedded emissions or a lower environmental impact than alternatives. Examples of items that could be prioritized in green purchasing programs include materials produced locally, those made with recycled products, or those with a lower content of toxic materials or volatile organic compounds. Developing green purchasing programs will help to reduce the carbon footprint of materials consumed in the community.

### TACTICS

- 1 Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a green purchasing program.

---

- 2 Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations.

---

- 3 Hire or reassign staff to conduct research, develop and implement program(s) with stakeholder input and support.

---

- 4 Assess program outcomes with stakeholders to readjust, expand, or end program as needed.



## STRATEGY 1

Consume goods with lower embedded carbon emissions.

### ACTION 2

Expand green and energy certified building stock for government, commercial, and residential sectors.

PRIORITY

COMPLEXITY



Buildings that are certified as ‘green’, such as those that have obtained LEED status, US Green Building Council recognition, or EnergyStar certification, often result in reduced energy expenditures, increased inhabitant comfort and health, and (in the case of commercial facilities) increased worker productivity. These buildings can also be used as an education and communication tool to help developers, property managers, and building and homeowners understand what options are available in terms of efficient and green building technologies, and what they look like in practice.

### TACTICS

- 1 Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a green and energy certified building stock program.

---

- 2 Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations.

---

- 3 Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support.

---

- 4 Assess program outcomes with stakeholders to readjust, expand, or end program as needed.



## STRATEGY 1

Consume goods with lower embedded carbon emissions.

## ACTION 3

Transition to clean power for government, commercial, and residential.

PRIORITY



COMPLEXITY



Transitioning to green power across the community by supporting on-site renewable energy installations, programs that allow for purchasing off-site renewables, and working in partnership with utilities and other organizations will directly support the goals of the CAP.

## TACTICS

- 1** Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a buy local, local production, and local consumption program.

---

- 2** Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations.

---

- 3** Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support.

---

- 4** Assess program outcomes with stakeholders to readjust, expand, or end program as needed.



## STRATEGY 2

Develop green markets.

### ACTION 4

Develop and implement economic plans to increase demand for green jobs, technology, products and services.

PRIORITY

COMPLEXITY



Specific plans that identify opportunity areas for green market development, including in manufacturing, efficiency, clean transportation, and renewable energy, are needed to identify how, when, and where the demand for these markets can and will evolve in Routt County. Supporting the development of local green markets will expand the local tax base, increase the number of quality jobs, and support a more resilient economy locally.

### TACTICS

- 1 Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a buy local, local production, and local consumption program.

---

- 2 Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations.

---

- 3 Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support.

---

- 4 Secure funding and implement plans.

---

- 5 Assess program outcomes with stakeholders to readjust, expand, or end program as needed.



## STRATEGY 3

Expand base industries for regional self-reliance.

### ACTION 1

Institute a buy local, local production, and local consumption program.

PRIORITY



COMPLEXITY



Routt County has many local manufacturers and producers of goods, from agricultural products, to food items, to sports equipment, and much more. Highlighting these local base employers and encouraging local governments, businesses, and consumers to support them will ensure these businesses continue to thrive, attract new talent, and grow the local economy.

### TACTICS

- 1 Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a buy local, local production, and local consumption program.

---

- 2 Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations.

---

- 3 Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support.

---

- 4 Assess program outcomes with stakeholders to readjust, expand, or end program as needed.



## STRATEGY 3

Expand base industries for regional self-reliance.

### ACTION 2

Institute a local green industry cluster and business development program.

PRIORITY

COMPLEXITY



Local industries and businesses that are focused on 'green' or sustainable products and services may benefit significantly from an industry cluster that provides services and resources specific to their needs. This could include networking events, shared spaces, or workforce development programs specific to this industry's needs. Additionally, such a cluster will support the development of additional green industries and may help to make Routt County a regional center for these types of businesses and jobs.

### TACTICS

- 1 Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a buy local, local production, and local consumption program.

---

- 2 Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations.

---

- 3 Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support.

---

- 4 Assess program outcomes with stakeholders to readjust, expand, or end program as needed.



## STRATEGY 3

Expand base industries for regional self-reliance.

### ACTION 3

Institute a hire-local campaign.

PRIORITY

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COMPLEXITY

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Routt County and the surrounding region has a diverse and educated workforce; local businesses should be encouraged first to seek new hires from this talented pool of applicants before bringing in new employees from outside the region. A “hire local” campaign will improve the quality of lives of residents in the County, may reduce employee recruitment and retention costs for businesses, and will enhance local investment into the community.

### TACTICS

- 1 Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a buy local, local production, and local consumption program.

---

- 2 Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations.

---

- 3 Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support.

---

- 4 Assess program outcomes with stakeholders to readjust, expand, or end program as needed.



## STRATEGY 4

Enhance environmental sustainability efforts undertaken by business.

### ACTION 1

Create a business environmental sustainability program.

PRIORITY

COMPLEXITY



A business sustainability program will offer support and resources to local businesses to enhance the environmental sustainability of their operations. This could include everything from sharing resources on green purchasing programs, to providing support for efficiency or renewable energy investment, to providing forums for business owners and operators to learn from each other, to recognizing local businesses that are leading in this space.

### TACTICS

- 1 Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a buy local, local production, and local consumption program.

---

- 2 Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations.

---

- 3 Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support.

---

- 4 Assess program outcomes with stakeholders to readjust, expand, or end program as needed.



# ACCOUNTABILITY

Building accountability measures into the CAP from the very beginning is a necessary component of ensuring that the CAP is actionable, measurable, and achieves the stated goals for the community. Accountability strategies and actions do not have a direct impact on GHG emissions, but they are crucial to ensuring that the strategies identified in other sectors are implemented and communicated effectively across the community.

The work of implementing the sector-specific strategies within the CAP will be spread across numerous entities, including the County, the City, the Towns, and many partner organizations and entities. The activities identified for implementation within the accountability sector will ensure that all parties, including residents, businesses, and visitors, understand the role that they have to play in ensuring that the CAP is successful, and the community achieves its climate action goals.



*Opposite: City of Steamboat Springs*

## **STRATEGY 1**

### **Ensure adequate funding for the CAP.**

Without adequate funding resources being made available many of the specific strategies and actions identified within the CAP will not be implemented. Funding for climate action work remains the responsibility of all stakeholders, and funding may come from a variety of sources including, but not limited to, general funds, grants, public-private partnerships, and new or innovative revenue streams.

## **STRATEGY 2**

### **Establish accountability mechanisms for the CAP.**

Accountability mechanisms, including regular monitoring of progress on CAP strategies and actions and reporting on that progress to the community, are an important component of ensuring follow through on the commitments to the community identified within this document.

## **STRATEGY 3**

### **Align with other community plans.**

Aligning the CAP with other future community planning documents will be important to solidifying implementation.

## **STRATEGY 4**

### **Carry out educational programs in support of the CAP.**

Clear, consistent, targeted and meaningful communication to Routt County's residents, businesses, and visitors regarding the CAP and the specific implementation activities will be an essential component of implementation.



## STRATEGY 1

Ensure adequate funding for the CAP.

### ACTION 1

Identify and develop funding sources for climate action work.

PRIORITY



COMPLEXITY



Funding for CAP strategies may come from partners and existing sources, including grants, partnerships, and collaborations, as well as new sources, such as programs developed from the CAP (like the REMP program) or innovative programs like a carbon-offset program.

#### TACTICS

- 1 Investigate a voluntary County-wide carbon offset program.
- 2 Investigate the use of REMP funding.
- 3 Leverage grant funding; develop partnerships and collaborations.
- 4 Create a long-term funding plan.

### ACTION 2

Develop collaborative programs to share resources and jointly fund projects.

PRIORITY



COMPLEXITY



Many of the strategies and actions within the CAP may align with the priorities and goals of other local, regional, or statewide organizations or initiatives. These mutual goals and synergistic efforts should be leveraged to the greatest degree possible to identify and fund targeted strategies and actions within the CAP.

#### TACTICS

- 1 Identify potential partners, create a collaborative framework, and establish ground rules.
- 2 Develop and prioritize a targeted project list.
- 3 Secure funding commitments and seek outside funding.
- 4 Carry out joint projects and measure outcomes.



# ACCOUNTABILITY

## STRATEGY 1

Ensure adequate funding for the CAP.

## ACTION 3

Partners will allocate annual funding to implement their priority strategies in the CAP.

PRIORITY

COMPLEXITY



Partners and stakeholders in the CAP will work together to allocate funding towards their priority strategies and actions, as appropriate.

## TACTICS

- 1** Identify partners and determine appropriate levels of funding and amount needed for prioritized strategies, actions, and tactics.

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- 2** Engage in budget processes.

---

- 3** Secure funding commitments.



# ACCOUNTABILITY

## STRATEGY 2

Establish accountability mechanisms for the CAP.

### ACTION 1

Carry out community surveys to collect data relevant to the CAP.

PRIORITY



COMPLEXITY



Regular surveys of community priorities, interest in various climate action endeavors, and ability to access and utilize climate action programs and resources will ensure that the CAP remains relevant to the community and is implemented in a way that is meaningful, equitable, and impactful across the community.

#### TACTICS

- 1 Incorporate CAP questions into existing surveys, including support for CAP strategies and support for various actions.

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- 2 Measure the success of education/outreach efforts.

### ACTION 2

Update the GHG inventory every 5 years.

PRIORITY



COMPLEXITY



Regularly updating the County's GHG inventory will allow for tracking actual impact of CAP initiatives against the CAP goals and will allow the County and its partners to understand whether the anticipated impact of the strategies measures up to the actual emissions generated by community activities. This may also help to inform the focus of future work and efforts on CAP implementation.

#### TACTICS

- 1 Convene stakeholders.

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- 2 Issue an RFP and select a vendor.

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- 3 Perform the project and publicize the results.



# ACCOUNTABILITY

## STRATEGY 2

Establish accountability mechanisms for the CAP.

### ACTION 3

Update the Climate Action Plan every five years or as triggers are met.

PRIORITY

COMPLEXITY



As policies change, technologies evolve, community priorities shift, and new organizations and businesses develop locally, updating the CAP regularly will allow project partners and stakeholders to ensure that resources, including funding and staff time, remain focused on the strategies and actions that are most relevant to the community and most likely to achieve community goals. Additionally, updating the CAP regularly will allow incorporation of new technologies and the impacts of statewide or federal policy and regulation in a way that supports local climate action goals.

#### TACTICS

- 1 Convene the stakeholders to identify and assess potential metrics.

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- 2 Establish a set of “triggers” for when a new plan should be developed.

### ACTION 4

Establish CAP metrics and report annually on these metrics.

PRIORITY

COMPLEXITY



Progress on the CAP needs to be regularly tracked using metrics that are relevant, measurable, and specific to the CAP strategies and actions that they are intended to measure. These metrics should include those that are related to the targets for specific CAP strategies, as well as other metrics that will allow an understanding of how implementation is going and where resources should be focused in future years.

#### TACTICS

- 1 Convene stakeholders to identify and assess potential metrics.

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- 2 Select final metrics for tracking.

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- 3 Track and report on metrics annually.

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- 4 Publicize results.



# ACCOUNTABILITY

## STRATEGY 2

Establish accountability mechanisms for the CAP.

### ACTION 5

Create a mechanism to report CAP progress and outcomes.

PRIORITY



COMPLEXITY



Regular reporting on the CAP progress and outcomes is essential to ensuring that the community understands this work and the impact that it has locally and towards State climate goals. Regular reporting also ensures greater accountability towards implementation on the part of partners that are engaged in the work.

#### TACTICS

- 1 Develop partnerships or collaborations.  
\_\_\_\_\_
- 2 Identify metrics to measure and track.  
\_\_\_\_\_
- 3 Identify mechanisms for reporting.  
\_\_\_\_\_
- 4 Publicize progress and outcomes on an annual or more frequent basis.

### ACTION 6

Establish a transparent process for adjusting strategies and targets, as necessary.

PRIORITY



COMPLEXITY



Similar to Accountability Sector 2, Action 3, strategies and targets may need to be updated to accommodate changing realities.

#### TACTICS

- 1 Convene oversight committee to identify process options.  
\_\_\_\_\_
- 2 Select a process and implement it.



# ACCOUNTABILITY

## STRATEGY 2

### Establish accountability mechanisms for the CAP.

#### ACTION 7

Create a collaborative partnership to coordinate CAP implementation efforts.

PRIORITY

COMPLEXITY



The implementation of the CAP will require collaboration across entities in the County in order to be successful, and cohesive coordination of these implementation efforts is needed in order to optimize the use of available resources and ensure synergy throughout this work. Other mountain communities have developed a collaborative model (the “Collaborative”) for implementation that holds great promise for this area. The Collaborative model includes convening working groups, working with a steering committee to guide implementation, communicating on progress, and ensuring that the CAP strategies and actions are being implemented within the appropriate time and scale for the community.

#### TACTICS

- 1 Promote the CAP and carry out education activities.
- 2 Determine the collaborative’s function.
- 3 Identify potential partners and invite partners to participate.
- 4 Set goals for the collaborative and get buy-in.
- 5 Develop sub-committees within the collaborative.
- 6 Begin meeting to implement the plans and goals of the CAP.

#### ACTION 8

Consider the ways that climate action strategies, as well as inaction on climate change, impact all members of the community differently; measure and monitor to ensure that no groups are disproportionately burdened by this work.

PRIORITY

COMPLEXITY



The implementation of various strategies within the CAP will have a direct impact on the residents, business, and visitors of Routt County; ensuring that these impacts do not result in disproportionate burdens to any particular group or groups is important. The CAP is intended to improve quality of life within Routt County, and ensure that the benefits of this work are also equitably distributed across the County. These are key to the community’s long-term success.

#### TACTICS

- 1 Conduct periodic analysis of implemented actions and their beneficiaries to ensure equity.



# ACCOUNTABILITY

## STRATEGY 3

Align with other community plans.

### ACTION 1

Ensure that new and updated community plans integrate the strategies and actions from this Climate Action Plan

PRIORITY

COMPLEXITY



As other community planning documents are created and updated this CAP will be referenced to ensure that the CAP strategies and actions are integrated into those other planning documents.

### TACTICS

- 1 Ensure the City and County have the tools and resources needed to implement the CAP within other community plans.

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- 2 Hold regular meetings between County and municipalities specifically about CAP.

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- 3 City/County needs to support the incentives and strategies and incorporate them into their work.



# ACCOUNTABILITY

## STRATEGY 4

Carry out educational programs in support of the CAP.

### ACTION 1

Work with diverse stakeholders across the County to promote the CAP.

PRIORITY



COMPLEXITY



Routt County is a diverse community with many different interests, priorities, and a range of values. Promoting the CAP will ensure that the community understands the CAP, the goals and outcomes that will result from this work, and how it will relate to their daily lives.

#### TACTICS

- 1 Host educational talks.

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- 2 Create a communications campaign including flyers, articles in the newspaper, and outreach through websites and social media.

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- 3 Create a sign up for businesses and individuals to make GHG pledges on the website and register projects/progress.

### ACTION 2

Work with diverse stakeholders across the County to implement strategies to educate visitors.

PRIORITY



COMPLEXITY



Routt County is a popular destination for winter and summer tourism, and on any given day non-resident visitors may make up a significant portion of the population in the County. Communicating to visitors about the CAP and its goals will ensure that these visitors are able to make choices that support the community's goals (such as opting to take public transit while visiting). As an added benefit, educating visitors about the CAP may also result in them taking some of the values of this work back when they return to their home communities.

#### TACTICS

- 1 Work with lodging and short-term rental purveyors to provide information to their guests.

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- 2 Expand education for visitors and tourists.

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- 3 Implement Destination Management programs.



## STRATEGY 4

Carry out educational programs in support of the CAP.

### ACTION 3

Analyze the social or actual carbon cost of all climate action and decarbonization opportunities, and clearly communicate the cost of inaction to residents and visitors.

PRIORITY



COMPLEXITY



The social cost of carbon is the total measure of the economic harm from the impacts of carbon pollution; these impacts include changing and extreme weather events, increased vector-borne disease, human health issues, food insecurity, and a host of other threats. Current estimates put the social cost of carbon at above \$50 per metric ton of carbon dioxide released into the atmosphere.<sup>20</sup>

Understanding the social cost of carbon can help add a financial or economic perspective to community GHG emissions and communicating this value can help individuals to understand why action and investment in climate solutions may be needed in the near term.

### TACTICS

- 1 Identify which activities should be involved in this effort.

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- 2 Identify expertise to bring to the table, develop a committee of interested people, and get buy-in.

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- 3 Set goals for the group and begin meeting.

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- 4 Allocate resources to communications efforts.

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- 5 Communicate through the schools (public, private, and higher education).

<sup>20</sup> Environmental Defense Fund. (2020). The True Cost of Carbon Pollution. Retrieved from <https://www.edf.org/true-cost-carbon-pollution>.



# ACCOUNTABILITY

## STRATEGY 4

Carry out educational programs in support of the CAP.

### ACTION 4

Ensure that the CAP education and outreach activities are accessible to diverse populations across the County.

PRIORITY

COMPLEXITY



CAP education and outreach activities need to ensure that the entire community can participate in and benefit from this work. Essential to this will be ensuring that outreach and education are available and accessible to the whole County; this includes providing these materials and resources in relevant languages, at appropriate literacy and education levels, and within formats that are accessible to diverse audiences of different needs.

### TACTICS

- 1 Develop a branded outreach campaign that provides information and education in accessible ways (i.e., diverse languages, reading levels, etc.).

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- 2 Work with partners to host events and outreach that are accessible for all community members.



## STRATEGY 4

Carry out educational programs in support of the CAP.

### ACTION 5

Develop and/or support educational programs as needed to support all of the strategies and sectors.

PRIORITY



COMPLEXITY



Integration of the CAP engagement and educational efforts with partners across the County that work to educate, support, and provide services to diverse populations across the community will ensure that all members of the community can reap the benefits from this work, and no one group or population is left behind.

### TACTICS

- 1 Explore and leverage existing outreach and education programs for engaging people and empowering them to take action on climate issues.

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- 2 Leverage existing programs and events in the community and create a partnership with the relevant entities hosting these events and programs.

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- 3 Determine what educational materials/ programs are already available and identify missing topic areas/programs.

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- 4 Develop educational materials or programs for what is missing.

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- 5 Create a plan for how to get the materials out to the right community members and how to engage community members in the programs.

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## PROJECT MANAGEMENT TEAM

- John Bristol, Steamboat Springs Chamber
- Sarah Jones, Steamboat Springs Ski & Resort Corporation
- Scott Cowman, Routt County
- Winnie Delliquadri, City of Steamboat Springs

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- Brian Ashley, Town of Yampa
- David Torgler, Town of Oak Creek
- Matt Mendisco, Town of Hayden
- Sonja Macys, City of Steamboat Springs

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- Emi Cooper, Citizen
- Eric Washburn, Citizen
- Gail Garey, Citizen
- Jared Geiger, Atmos Energy
- Jennifer Altieri, Atmos Energy
- Jennifer Wellman, The Nature Conservancy
- Jeremy Behling, YV Tire Company
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## The Routt County Community

It is with deep gratitude to our community that we present this Climate Action Plan. The feedback from residents and community members received via survey responses, [project website](#) comments, and inquiries to the project team were essential for creating a plan that is reflective of our community.

## Consultant Team

Lotus Engineering & Sustainability, LLC, supported this work:

- Julia Newman, Lead Consultant
- Emily Artale
- Hillary Dobos
- Rachel Meier
- Diane Ernst
- Adrian Newman (graphic design)

# APPENDIX A *Full List of Strategies and Actions*

Sector	Strategy	Actions	Tactics
Energy	ES1. Increase adoption of renewable or other clean energy and fuel sources.	ES1 A1: Reduce barriers to deployment of renewables (solar, wind, other) through review and modification of codes and policies, and tracking and implementation of state and federal support mechanisms.	ES1 A1 T1. Identify barriers (infrastructure, financing, code, policy, etc.) for deployment of renewable energy;
			ES1 A1 T2. Review and modify codes and policies to reduce barriers for deployment of renewables;
			ES1 A1 T3. Track and communicate state and federal regulations that reduce barriers for deployment.
		ES1 A2: Ensure that the County, the City, and the Towns across Routt County lead by example powering buildings with renewable energy.	ES1 A2 T1. Identify renewable energy projects on County and municipality facilities;
			ES1 A2 T2. Secure funding for projects;
			ES1 A2 T4: Communicate and educate the public about renewable energy opportunities in commercial buildings;
		ES1 A3: Become a solar-ready, renewable gas-ready, and/or renewable-ready community as per existing programs such as SolSmart.	ES1 A2 T3. Track renewable energy production.
			ES1 A3 T1. Review existing programs to become renewable energy ready;
			ES1 A3 T2. Adopt renewable energy ready programs that are the best fit for the community;
			ES1 A3 T3. Implement steps to become renewable energy-ready as outlined in the adopted program;
		ES1 A4: Create incentive programs to support the development of renewable energy and related infrastructure.	ES1 A3 T4. Track and communicate efforts to become a renewable energy community.
			ES1 A4 T1. Identify partners at the state and local level that could help support rebate and incentive programs.;
			ES1 A4 T2. Work with partners to develop rebate and incentive program with federal, state and local support;
		ES1 A5: Prepare and adopt community and/or county plans that include a comprehensive programmatic and policy approach to shift the community towards alternative fuels and renewable energy sources.	ES1 A4 T3. Track and communicate rebate and incentive opportunities to the community.
			ES1 A5 T1. Prepare and adopt a community plan that shifts the community toward renewable energy and alternative fuels;
		ES1 A6: Develop or support renewable energy projects that benefit the whole county (e.g., community solar, etc.).	ES1 A5 T2. Review and modify policies and codes that will support goals of the community plan.
			ES1 A6 T1. Work with local utilities, community stakeholders and potential funding partners to develop new renewable energy projects; support the development of renewable energy projects with technical, financial and/or outreach support;
			ES1 A6 T2. Support current renewable energy projects with technical, financial and/or outreach support.
		ES1 A7: Create and implement a Renewable Energy Mitigation Program.	ES1 A6 T3. Support utility provider transition to green energy.
			ES1 A7 T1. Create and adopt a renewable energy mitigation program at the County;
		ES1 A8: Partner with the federal and state government to advance clean energy.	ES1 A7 T2. Implement a REMP program through the County Building Department and support energy efficiency and renewable energy programs with the proceeds.
			ES1 A8 T1. Develop a policy platform to identify state and federal policy to support;
			ES1 A8 T2. Track state and federal regulation and create opportunities for community engagement in support.

Sector	Strategy	Actions	Tactics
Energy	ES2. Increase energy efficiency.	ES2 A1: Adopt and implements a strategic action plan to improve the energy efficiency of residential and commercial buildings and industrial processes in the community.	ES2 A1 T1. Prepare and adopt a strategic action plan to improve energy efficiency;
			ES2 A1 T2. Review and modify policies and codes that will support goals of the strategic action plan to improve energy efficiency.
			ES2 A1 T3. Implement the strategic plan with large energy consumers as case studies to highlight and showcase beneficial outcomes of implementing the plan.
		ES2 A2: Adopt an energy use information disclosure ordinance requiring energy users to disclose consumption levels (targeted to sector, building size, or other criteria).	ES2 A2 T1. Review and modify codes to require energy use information disclosure ordinance requiring energy users to disclose consumption levels (can be targeted to sector, building size, or other criteria);
			ES2 A2 T2: Work with community partners and businesses to educate about these changes in codes.
		ES2 A3: Adopt or upgrade codes and policies to ensure that new and renovated buildings are more energy efficient.	ES2 A3 T1: Review and modify codes to ensure that new and renovated buildings are more energy efficient;
			ES2 A3 T2: Work with community partners and businesses to educate about these changes in codes.
		ES2 A4: Create an education and outreach campaign or challenge to engage various target audiences in energy efficiency efforts.	ES2 A4 T1. Create an education and outreach campaign for residential and multi-unit housing to engage homeowners and renters in energy efficiency;
			ES2 A4 T2. Create an education and outreach campaign for commercial property owners to improve energy efficiency;
			ES2 A4 T3. Create an education and outreach campaign for industrial users and processes to improve energy efficiency.
		ES2 A5: Ensure that the County, the City, and the Towns across Routt County lead by example.	ES1 A5 T1. Conduct building energy audits and identify energy efficiency projects on County and municipality facilities;
			ES1 A5 T2: Adopt policies requiring all new public buildings to meet LEED Certification or other nationally recognized green building certification programs;
			ES1 A5 T3: Secure funding for projects;
			ES1 A5 T4: Track and communicate energy efficiency projects and energy use and emissions reductions;
			ES1 A5 T5: Update facility plans.
		ES2 A6: Expand energy audit and energy commissioning programs and access to these programs.	ES2 A6 T1. Work with local utilities, municipalities, and community partners to review available energy audit and commissioning programs; identify ways to expand these programs and fund them.
			ES2 A6 T2. Develop an education and outreach strategy to highlight sustainability, cost savings, and available programming for auditing and commissioning.
			ES2 A6 T3. Provide technical assistance to property owners to support implementation of energy efficiency strategies identified in the audit process.
		ES2 A7: Create incentives for businesses, lessors, homeowners, and renters to improve the energy efficiency of their existing buildings and homes.	ES2 A7 T1. Identify partners at the state and local level that could help support rebate and incentive programs;
			ES2 A7 T2. Work with partners to develop rebate and incentive program with federal, state and local support;
			ES2 A7 T3. Track and communicate rebate and incentive opportunities to the community.

Sector	Strategy	Actions	Tactics
Energy	ES3: Promote fuel switching (i.e. electrification).	ES3 A1: Develop and implement fuel switching programs.	ES3 A1 T1. Work with local utilities, municipalities and community partners to develop fuel switching programs. Identify pilot programs and partnerships to increase fuel switching.
		ES3 A2: Carry out education and outreach surrounding the benefits of and promoting electrification.	ES3 A2 T1. Develop an education and outreach strategy to highlight the sustainability, cost savings, and available programming to support fuel switching.
			ES3 A2 T2. Provide technical assistance to property owners regarding beneficial electrification costs, processes, and outcomes.
			ES3 A2 T3: Review and adopt codes to support beneficial electrification.

Sector	Strategy	Actions	Tactics
Transportation	TS1. Improve safe and equitable multimodal access throughout each community to reduce Vehicle Miles Traveled.	TS1 A1: Expand and improve the bike/pedestrian infrastructure and systems throughout the County with a focus on infrastructure that will support a reduction in vehicle miles traveled.	TS1 A1 T1. Develop multi-modal transportation plans to prioritize pedestrian and bike infrastructure development while considering equity and accessibility;
			TS1 A1 T2. Adopt a complete streets policy that addresses all users, applies to all projects with limited exceptions, and includes specific next steps for implementation;
			TS1 A1 T3. Identify, develop, and implement projects that increase bike/ped infrastructure;
			TS1 A1 T4. Review and update development codes to require bicycle and pedestrian infrastructure;
			TS1 A1 T5. Ensure compliance of new projects with codes and standards that create complete streets;
			TS1 A1 T6. Ensure amenities (e.g., bike racks, benches) are available to support bicycle and pedestrian use.
		TS1 A2: Increase local transit services in Steamboat Springs.	TS1 A2 T1. Secure dedicated funding for local transit;
			TS1 A2 T2. Identify partnerships and collaborations;
			TS1 A2 T3. Plan transit service that utilizes available funding and infrastructure;
			TS1 A2 T4. Carry out feasibility studies to identify new local transit options;
			TS1 A2 T5. Improve bus infrastructure (e.g., bus stops, bus lanes) which improve visibility and efficiency of transit;
			TS1 A2 T6. Conduct education and outreach, including highlighting affordability of transit compared to SOV and the environmental benefits of transit;
			TS1 A2 T7. Improve transit quality and experience.
		TS1 A3: Increase regional transit services throughout the area.	TS1 A3 T1. Identify partnerships and collaborations;
			TS1 A3 T2. Research Regional Transportation Authority options;
			TS1 A3 T3. Identify or create organization to carry out regional transit;
			TS1 A3 T4. Plan transit service that utilizes available funding and infrastructure;
			TS1 A3 T5. Secure dedicated funding for regional transit;
			TS1 A3 T6. Improve bus infrastructure (bus stops, bus lanes) which improve visibility and efficiency of transit;
			TS1 A3 T7. Conduct education and outreach, including highlighting the affordability of transit compared to single occupancy vehicles.

Sector	Strategy	Actions	Tactics
Transportation	TS2. Increase adoption of electric vehicles such that 20% of registered vehicles in Routt County are EVs by 2030 and 95% are EVs by 2050.	TS2 A1: Adopt plans, policies, and codes to support the transition to electric vehicles or other clean power vehicles.	TS2 A1 T1. Develop, adopt, and implement Electric Vehicle Readiness Plans for communities and the county;
			TS2 A1 T2. Identify barriers to residential, workplace, and commercial charging in each community and across the county and modify codes in order to remove identified barriers;
			TS2 A1 T3. Review model EV codes and adopt building codes which require installation of wiring/conduit and/or charging infrastructure to enable future EV charging installation in all new residential, multi-family, and commercial construction;
			TS2 A1 T4. Integrate EV planning into other relevant County and community plans;
			TS2 A1 T5. Establish minimum requirements and/or incentives to promote designated EV parking for new and renovated construction;
			TS2 A1 T6. Adopt code incentives such as fee reductions and/or permitting priority to support private investment in chargers.
		TS2 A2: Increase EV charging infrastructure (community, workplace, residential, commercial).	TS2 A2 T1. Develop a workplace charging program to facilitate charger integration for local agencies, businesses, education providers, medical centers, cultural centers, and recreation centers;
			TS2 A2 T2. Install Level 2 chargers near destinations with mid-range dwell times with the goal of providing one level 2 charger for every 12 registered electric vehicles;
			TS2 A2 T3. Install one or more Level 3 chargers in each community along the Highway 40 corridor;
			TS2 A2 T4. Support the adoption of mixed-level charging near multi-family or affordable housing to support both overnight and quick charge options;
			TS2 A2 T5. Facilitate and/or incentivize EV charger deployment at high-traffic areas such as state parks, airports, community centers, libraries, park-and-rides, ski resorts, the fairgrounds and other locations utilizing dwell time and siting criteria.
			TS2 A2 T6. Combine EV charging with solar where possible to reduce carbon footprint and enhance charging for short-range EVs.
			TS2 A2 T7. Identify existing incentives, create new incentives, and promote incentives for installing EV charging infrastructure.
		TS2 A3: Develop and disseminate education and outreach to support EV adoption.	TS2 A3 T1. Carry out education and outreach to the general public around EV basics, cost effectiveness, environmental benefits, models available, batteries, winter operation, and other topics to stimulate EV adoption;
			TS2 A3 T2. Develop and implement an EV education and outreach program focused on workplaces;
			TS2 A3 T3. Carry out education and outreach to stimulate EV infrastructure development, especially for multi-family and residential charging;
			TS2 A3 T4. Host Ride-and-Drive events to stimulate interest and understanding of EVs;
			TS2 A3 T5. Provide education and outreach information in multiple languages.
		TS2 A4: Promote fleet transition to electric or other clean energy vehicles.	TS2 A4 T1. Perform fleet analysis and develop plans for fleet transitions to clean energy vehicles for municipal, county, school district, and private fleets;
			TS2 A4 T2. Carry out a fleet vehicle sizing needs assessment to identify needed vehicle characteristics and compare to available clean energy models;
			TS2 A4 T3. Identify opportunities to replace conventional school buses with low or no emitting school buses;
TS2 A4 T4. Carry out demonstration projects to show clean energy mid-and heavy-duty fleet vehicle feasibility;			
TS2 A4 T5. Provide or facilitate incentives and grants for fleet conversions and/or charging/fueling stations;			
TS2 A4 T6. Carry out education and outreach on fleet planning and transition to fleet owners and managers.			

Sector	Strategy	Actions	Tactics
Transportation	TS3. Reduce single occupancy vehicle travel.	TS3 A1: Encourage the public to make behavior changes to reduce single occupancy VMT.	TS3 A1 T1. Promote E-bikes in lieu of gas-powered vehicles and support equitable E-bike adoption;
			TS3 A1 T2. Develop education and outreach campaigns to encourage and sustain behavior change, including walking, biking, using transit, anti-idling, and proper vehicle maintenance;
			TS3 A1 T3. Ensure tourists are aware of, and are encouraged to use, alternative transportation options available in the community;
			TS3 A1 T4. Create programs and incentives for community-wide ride sharing;
			TS3 A1 T5. Create an EV car share and/or community bike share program.
			TS3 A1 T6. Review existing plans to identify potential incentives and disincentives to support behavior change to reduce VMT.
		TS3 A2: Develop a regional approach to employee and visitor shuttles and transportation services.	TS3 A2 T1. Identify current providers, assess services provided, and explore potential partnerships and collaborations;
			TS3 A2 T2. Consider employee and visitor shuttles and transportation services within the context of an RTA;
			TS3 A2 T3. Host annual meetings of stakeholders, transportation providers, and others to enhance shared understanding and nurture partnerships and collaborations;
	TS3 A2 T4. Create an education and outreach campaign to promote regional services for visitors and employees.		
	TS3 A3: Encourage and increase work from home.	TS3 A3 T1. Work with YVEA to support the cooperative's efforts to expand broadband access Countywide;	
		TS3 A3 T2. Encourage greater use of telecommuting within the County;	
		TS3 A3 T3. Carry out an education campaign promoting teleworking.	
	TS4. Engage in statewide discussions and policy work.	TS4 A1: Advocate for Routt County and NW Colorado.	TS4 A1 T1. Actively participate in regional and statewide groups (TPR, CAST, CASTA, CML, CCI, NWCCOG, etc.) to advocate for Routt County and NW Colorado;
			TS4 A1 T2. Regularly communicate with relevant officials in state, federal, and regional transportation agencies;
TS4 A1 T3. Participate in discussions regarding transition of rail system.			
TS4 A2: Support tax questions which would provide additional transportation funding to our area.		TS4 A2 T1. Educate elected officials and community members about proposed tax initiatives;	
		TS4 A2 T2. Review and provide feedback to state agencies and organizations regarding proposed initiatives;	
		TS4 A2 T3. Carry out education and outreach around initiatives which provide additional transportation funding.	

Sector	Strategy	Actions	Tactics
Waste	WS1: Reduce the amount of solid waste disposed of in the landfill.	WS1 A1: Maintain and update the Waste Diversion Strategic Plan every 3-5 years.	WS1 A1 T1: Identify a stakeholder group to meet on a regular basis;
			WS1 A1 T2: Identify or update short and long-term strategies and goals with a focus on developing the appropriate infrastructure;
			WS1 A1 T3: Update the plan and present to local officials on the status and for approval on an annual basis.
			WS1 A1 T4: Implement identified strategies for waste diversion (e.g., curbside recycling, organics recovery, business waste diversion, C&D, transfer station, education & events).
		WS1 A2: Develop or expand community-wide organics recycling programs, infrastructure and facilities. Work towards making composting equally accessible throughout the community.	WS1 A2 T1: Develop plans (or update WSP) to support local organics recycling facilities and access to composting for low income households;
			WS1 A2 T2: Implement strategies from the WSP for organics recycling, ensuring compliance with all applicable regulations;
			WS1 A2 T3: Integrate organics recycling throughout the county by supporting the development of local programs and facilities;
			WS1 A2 T4: Develop programs to incentivize and assist local businesses (e.g., restaurants) to implement organics recycling programs;
			WS1 A2 T5: Create outreach and education programs that include working with schools.
		WS1 A3: Incentivize and encourage local government and businesses to develop, adopt and implement waste management plans that increase waste diversion.	WS1 A3 T1: Create templates for business and organizational waste management plans;
			WS1 A3 T2: Identify barriers and areas needed for support;
			WS1 A3 T3: Identify policy and incentive options;
			WS1 A3 T4: Develop and implement outreach and education programs;
			WS1 A3 T5: Provide leadership through the County and municipalities by developing agency waste management plans.
		WS1 A4: Adopt specific programs, policies, and codes to limit or eliminate the availability of certain products that will significantly advance progress towards waste reduction goals.	WS1 A4 T1: Identify product ban or fee opportunities from stakeholder input, surveys, and research of other communities;
			WS1 A4 T2: Identify community and local/state government support for specific product bans and/or fees;
			WS1 A4 T3: Develop proposals and programs to deter use of specific products either through the use of bans or the application of fees;
			WS1 A4 T4: Attain local government support (ordinances);
			WS1 A4 T5: Implement plans and develop and launch education and outreach programs and continue to identify new opportunities.
		WS1 A5: Develop a county-wide approach to waste management, data collection, and reporting.	WS1 A5 T1: Conduct a county-wide waste study to determine material volume and fate;
			WS1 A5 T2: Develop a county-wide solid waste management plan based on data from the study to increase waste diversion and efficiencies;
			WS1 A5 T3: Investigate and propose a county-wide hauler licensing program and consider single-hauler contracts throughout the county;
			WS1 A5 T4: Investigate the development of a Solid Waste Authority.
		WS1 A6: Develop or participate in a regional coalition that enhances the community's ability to address waste management targets.	WS1 A6 T1: Develop a framework for collaboration between haulers, towns, and nearby counties;
WS1 A6 T2: Set up schedule for ongoing meetings with regional partners;			
WS1 A6 T3: Identify areas where collaboration is beneficial;			
WS1 A6 T4: Implement regional collaborative efforts.			

Sector	Strategy	Actions	Tactics
Waste	WS1: Reduce the amount of solid waste disposed of in the landfill.	WS1 A1: Maintain and update the Waste Diversion Strategic Plan every 3-5 years.	WS1 A1 T1: Identify a stakeholder group to meet on a regular basis;
			WS1 A1 T2: Identify or update short and long-term strategies and goals with a focus on developing the appropriate infrastructure;
			WS1 A1 T3: Update the plan and present to local officials on the status and for approval on an annual basis.
			WS1 A1 T4: Implement identified strategies for waste diversion (e.g., curbside recycling, organics recovery, business waste diversion, C&D, transfer station, education & events).
		WS1 A2: Develop or expand community-wide organics recycling programs, infrastructure and facilities. Work towards making composting equally accessible throughout the community.	WS1 A2 T1: Develop plans (or update WSP) to support local organics recycling facilities and access to composting for low income households;
			WS1 A2 T2: Implement strategies from the WSP for organics recycling, ensuring compliance with all applicable regulations;
			WS1 A2 T3: Integrate organics recycling throughout the county by supporting the development of local programs and facilities;
			WS1 A2 T4: Develop programs to incentivize and assist local businesses (e.g., restaurants) to implement organics recycling programs;
			WS1 A2 T5: Create outreach and education programs that include working with schools.
		WS1 A3: Incentivize and encourage local government and businesses to develop, adopt and implement waste management plans that increase waste diversion.	WS1 A3 T1: Create templates for business and organizational waste management plans;
			WS1 A3 T2: Identify barriers and areas needed for support;
			WS1 A3 T3: Identify policy and incentive options;
			WS1 A3 T4: Develop and implement outreach and education programs;
		WS1 A4: Adopt specific programs, policies, and codes to limit or eliminate the availability of certain products that will significantly advance progress towards waste reduction goals.	WS1 A4 T1: Identify product ban or fee opportunities from stakeholder input, surveys, and research of other communities;
			WS1 A4 T2: Identify community and local/state government support for specific product bans and/or fees;
			WS1 A4 T3: Develop proposals and programs to deter use of specific products either through the use of bans of the application of fees;
			WS1 A4 T4: Attain local government support (ordinances);
			WS1 A4 T5: Implement plans and develop and launch education and outreach programs and continue to identify new opportunities.
		WS1 A5: Develop a county-wide approach to waste management, data collection, and reporting.	WS1 A5 T1: Conduct a county-wide waste study to determine material volume and fate;
			WS1 A5 T2: Develop a county-wide solid waste management plan based on data from the study to increase waste diversion and efficiencies;
			WS1 A5 T3: Investigate and propose a county-wide hauler licensing program and consider single-hauler contracts throughout the county;
			WS1 A5 T4: Investigate the development of a Solid Waste Authority.
		WS1 A6: Develop or participate in a regional coalition that enhances the community's ability to address waste management targets.	WS1 A6 T1: Develop a framework for collaboration between haulers, towns, and nearby counties;
			WS1 A6 T2: Set up schedule for ongoing meetings with regional partners;
			WS1 A6 T3: Identify areas where collaboration is beneficial;
			WS1 A6 T4: Implement regional collaborative efforts.
		WS1 A7: Develop a construction and demolition diversion program.	WS1 A7 T1: Research opportunities, needs, and gaps;
			WS1 A7 T2: Research end markets;
WS1 A7 T3: Develop partnerships;			
WS1 A7 T4: Develop model program;			
WS1 A7 T5: Identify regulatory framework and create model code;			
WS1 A7 T6: Identify and implement incentives;			
WS1 A7 T7: Conduct education and outreach.			

Sector	Strategy	Actions	Tactics			
Waste	WS1: Reduce the amount of solid waste disposed of in the landfill.	WS1 A8: Create a public education campaign or focused outreach effort to inform residents and businesses of their roles in achieving waste reduction targets.	WS1 A8 T1: Create partnerships around education and outreach;			
			WS1 A8 T2: Develop content, consistent messaging, imagery, and infrastructure to ensure all residents and visitors understand how waste is managed in the community and how to properly divert their waste;			
			WS1 A8 T3: Develop an implementation strategy (consider community based social marketing);			
			WS1 A8 T4: Secure ongoing funding.			
	WS2: Increase diversion.	WS2 A1: Adopt zero waste policies and incentivize zero-waste for events and facilities.	WS2 A1 T1: Develop the capacity for zero-waste services either through collaborations, partnerships, program development, or new business formation.	WS2 A1 T2: Develop policies to support end goal and pass new rules at the local and county level;		
				WS2 A1 T3: Develop incentives for participation and consider recognition programs for business;		
				WS2 A1 T4: Develop a Zero-Waste Plan for events and facilities;		
				WS2 A1 T5: Identify and attain needed infrastructure for zero waste events & facilities;		
				WS2 A1 T6: Develop a system to ensure oversight at events;		
				WS2 A1 T7: Work with the compost facility to identify preferred zero waste products and ensure events are using those products.		
				WS2 A2: Ensure that residents, businesses, and organizations have access to affordable recycling in order to reduce their waste footprint.	WS2 A2 T1: Research diversion options, including curbside, single stream and source separation, composting, multifamily, transfer station, drop off locations and recycling events;	WS2 A2 T2: Identify opportunities, needs, and gaps;
						WS2 A2 T3: Create partnerships;
		WS2 A2 T4: Create model code;				
		WS2 A2 T5: Develop necessary infrastructure to support selected recycling program;				
		WS2 A2 T6: Increase opportunities to recycle & properly dispose of hard-to-recycle and household hazardous waste items in the County.				
		WS2 A3: Perform a comprehensive recycling study and develop specific plans for community recycling.	WS2 A3 T1: Research other communities and their programs, plans, and studies;			WS2 A3 T2: Identify recycling opportunities, needs, and gaps and create a comprehensive recycling plan;
						WS2 A3 T3: Audit waste streams to identify and track contamination and volume of recyclable materials;
						WS2 A3 T4: Track progress over time (including GHG reductions).
				WS3: Support waste reduction initiatives at the state level.	WS3 A1: Engage in collaborative efforts to develop, promote, and support legislation that reduces waste and increases diversion.	WS3 A1 T1: Track and follow state direction and tactics;
		WS3 A1 T2: Support relevant bills;				
WS3 A1 T3: Participate in stakeholder processes with CDPHE and Recycle Colorado;						
WS3 A1 T4: Coordinate with local producers;						
			WS3 A1 T5: Develop advocacy and position statements that may be relevant to local businesses and organizations.			

Sector	Strategy	Actions	Tactics
Land use	LUS1. Promote land management practices that increase carbon sequestration and storage across forests, wetlands, riparian corridors, and agricultural lands/rangelands and preserve carbon sinks, especially forests and wetlands, and designate future land uses to maximize carbon sequestration.	LUS1 A1: Implement specific natural climate solutions for wetlands and riparian corridors within the County.	LUS1 A1 T1: Create partnerships and collaborations;
			LUS1 A1 T2: Secure funding;
			LUS1 A1 T3: Carry out wetlands and riparian inventories; identify restoration opportunities and prioritize; carry out restoration feasibility studies; education and outreach; carry out wetlands and riparian corridor projects. Support and implement natural climate solutions to lands within the County;
			LUS1 A1 T4: Maintain and monitor projects once complete.
		LUS1 A2: Work to implement specific natural climate solutions for croplands and rangelands within the County.	LUS1 A2 T1: Create partnerships and collaborations with land owners, producers, and other stakeholders;
			LUS1 A2 T2: Secure funding;
			LUS1 A2 T3: Create partnerships and collaborations with land owners, producers, and other stakeholders; research to identify soil management activities that are appropriate for this region that are carbon mitigating; inventory and assess lands which fall into carbon mitigating soil management activities in the region; prioritize soil mitigation needs and actions; carry out feasibility studies; carry out projects; conduct education and outreach;
			LUS1 A2 T4: Encourage owners of working lands to conserve their properties in perpetuity;
			LUS1 A2 T5: Develop financing strategies or incentives to conserve working lands and support ongoing conservation efforts; conduct education and outreach.
			LUS1 A2 T6: Connect landowners to technical assistance to support implementation of natural climate solutions.
		LUS1 A3: Protect and enhance wetlands and riparian corridors.	LUS1 A3 T1: Develop model code (i.e., adopt land use regulations that establish or update appropriate wetland, stream, and shoreline buffer widths and adjacent land uses) for wetlands and riparian corridor protection at the local level;
			LUS1 A3 T2: Adopt "no net loss of wetlands" policies;
			LUS1 A3 T3: Create incentives for wetlands and riparian protection and restoration;
			LUS1 A3 T4: Inventory wetlands; monitor wetlands for quality and change.
		LUS1 A4: Work to implement specific natural climate solutions for forests within the County.	LUS1 A4 T1: Inventory and assess forest health; develop partnerships and collaborations which cross land ownership boundaries;
			LUS1 A4 T2: Create and support programs and projects which result in healthy, robust forest communities; coordinate and integrate planning for surrounding forests that cross land ownership boundaries; conduct education and outreach; conduct monitoring and reporting.
LUS1 A4 T3: Collaborate with USFS, CSFS, and private landowners to implement natural climate solutions on forested lands.			
LUS1 A5: Integrate green infrastructure concepts and improvements that promote carbon mitigation.	LUS1 A5 T1: Create and implement model code, standards, policies, and procedures to integrate green infrastructure concepts and improvements that promote carbon mitigation;		
	LUS1 A5 T2: Create and/or expand street tree programs, including inventories of green space and street trees in municipalities; develop a plan to maintain current green spaces and street trees; identify opportunities to add additional urban green spaces and street trees; develop programs and procedures to review and improve tree preservation, landscaping, and revegetation standards; conduct education and outreach.		

Sector	Strategy	Actions	Tactics
Land Use	LUS2: Increase and support cross-boundary efforts to conserve and maintain natural lands and to promote resiliency across the landscape within the County.	LUS2 A1: Protect natural resources that promote carbon mitigation.	LUS2 A1 T1: Review landscape standards within existing development codes; create model landscape standards, tree preservation standards, and revegetation standards to benefit carbon mitigation and ensure that those appropriate to the region are prioritized.
			LUS2 A1 T2: Develop a plan to protect and restore natural resources through land conservation, corridor connectivity, and restoration of biological integrity and location; develop partnerships and collaborations; conduct education and outreach;
			LUS2 A1 T3: Enhance land use strategies to incentivize permanent land conservation; restore, maintain, and monitor conserved natural lands to increase natural resource resilience, adaptability, and biological integrity; develop financing and funding strategies to acquire land or development easements or to fund restoration and maintenance activities.
		LUS2 A2: Encourage and facilitate private landowner and public agency participation in landscape scale treatments that promote a resilient and healthy forest condition in Routt County.	LUS2 A2 T1: Encourage cross boundary treatments through tools such as the Good Neighbor Authority;
			LUS2 A2 T2: Support educational efforts to inform both the public and public officials on fire mitigation and fire use;
			LUS2 A2 T3: Work with the Routt County Wildfire Mitigation Council and utilize the council as a focal point for providing public information, public feedback, and other critical information;
			LUS2 A2 T4: Support prescribed fire as one component of a suite of tools available to create landscape resiliency (mostly in shrub/sage/grass types);
			LUS2 A2 T5: Support and facilitate prescribed fire for pile burning in coordination with local fire districts, the County OEM, and APCD;
			LUS2 A2 T6: Support local forest product companies through policy, tax incentives, and zoning;
	LUS2 A3: Expand the acquisition of open spaces and the use of conservation easements to preserve natural landscapes and the County's agricultural heritage.	LUS2 A2 T7: Support existing and develop new reforestation approaches.	
		LUS2 A3 T1: Identify the need for, prioritize, and develop a plan for acquisition of recreational open space and conservation of natural landscapes.	
		LUS2 A3 T2: Develop partnership with private land owners to support conservation of natural landscapes.	
	LUS3: Promote water conservation measures and reduce energy consumed in water production, distribution, and waste water treatment.	LUS3 A1: Enhance regional water and energy conservation.	LUS2 A3 T3: Work collaboratively to acquire private open space from willing property owners.
			LUS3 A1 T1: Implement existing water conservation master plans and develop new water conservation master plans for areas not covered under existing plans.
			LUS3 A1 T2: Enhance policies and education programs aimed at increasing residential, commercial, and municipal water conservation across all sectors of the community;
LUS3 A2: Improve water and waste water infrastructure to reduce water and energy use using nature-based solutions.		LUS3 A1 T3: Identify and enact leadership opportunities; develop or enhance incentive programs; review code to identify water and energy conservation opportunities; develop and implement model codes to enhance regional water and energy conservation; develop partnerships and collaborations.	
		LUS3 A2 T1: Inventory and assess infrastructure; research nature based solutions to water and energy efficiency in water and waste water infrastructure; identify options for implementation.	
		LUS3 A2 T2: Secure funding; create and enhance incentives; plan projects; implement projects.	

Sector	Strategy	Actions	Tactics
Land use	LUS4: Promote compact development patterns to achieve more sustainable development and preserve natural land use types.	LUS4 A1: Enhance policies, guidelines, and incentives for Smart Growth and compact development.	LUS4 A1 T1: Integrate Smart Growth and compact development policies into community comprehensive plans; identify priority areas for compact development in future land use plans.
			LUS4 A1 T2: Prioritize local infrastructure improvements to revitalize redevelopment and spur private investment in targeted areas; enhance development review policies and procedures to more comprehensively consider implications for sustainability.
			LUS4 A1 T3: Educate community members, developers, elected officials, and others on benefits of compact development design and Smart Growth principles.
		LUS4 A2: Update development and zoning codes to implement compact development goals and policies.	LUS4 A2 T1: Adopt zoning and regulatory standards to increase residential and employment densities in areas identified for compact development.
			LUS4 A2 T2: Review and update parking standards and other transportation-related development standards to reflect compact development policies.
			LUS4 A2 T3: Identify development and design standards and incentives to encourage infill and redevelopment projects; review codes to identify conflicting standards and disincentives.
Economy	ECS1: Consume goods with lower embedded carbon emissions.	ECS1 A1: Develop green purchasing programs at government, commercial, and residential levels.	ECS1 A1 T1: Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a green purchasing program;
			ECS1 A1 T2: Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations;
			ECS1 A1 T3: Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support;
			ECS1 A1 T4: Assess program outcomes with stakeholders to readjust, expand, or end program as needed.
		ECS1 A2: Expand green and energy certified building stock for government, commercial and residential sectors.	ECS1 A2 T1: Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a green and energy certified building stock program;
			ECS1 A2 T2: Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations;
			ECS1 A2 T3: Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support;
			ECS1 A2 T4: Assess program outcomes with stakeholders to readjust, expand, or end program as needed.
		ECS1 A3: Transition to clean power for government, commercial, and residential.	ECS1 A3 T1: Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a transition to green power program;
			ECS1 A3 T2: Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations;
			ECS1 A3 T3: Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support;
			ECS1 A3 T4: Assess program outcomes with stakeholders to readjust, expand, or end program as needed.
	ECS 2: Develop green markets.	ECS2 A1: Develop and implement economic plans to increase demand for green jobs, technology, products and services.	ECS2 A1 T1: Identify lead agency, stakeholders, and secure initial leadership to assist with the development of economic plans to increase demand for green jobs, technology, products and services.
			ECS2 A1 T2: Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations;
			ECS2 A1 T3: Hire or reassign staff to conduct research, develop program(s) with stakeholder input and support;
ECS2 A1 T4: Secure funding and implement plans;			
ECS2 A1 T5: Assess program outcomes with stakeholders to readjust, expand, or end program as needed.			

Sector	Strategy	Actions	Tactics
Economy	ECS3: Expand base industries for regional self-reliance.	ECS3 A1: Institute a buy local, local production, and local consumption program.	ECS3 A1 T1: Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a buy local, local production, and local consumption program;
			ECS3 A1 T2: Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations;
			ECS3 A1 T3: Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support;
			ECS3 A1 T4: Assess program outcomes with stakeholders to readjust, expand, or end program as needed.
		ECS3 A2: Institute a local green industry cluster and business development program.	ECS3 A2 T1: Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a local green industry cluster and business development program;
			ECS3 A2 T2: Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations;
			ECS3 A2 T3: Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support;
			ECS3 A2 T4: Assess program outcomes with stakeholders to readjust, expand, or end program as needed.
		ECS3 A3: Institute a hire-local campaign.	ECS3 A3 T1: Identify lead agency, stakeholders, and secure initial leadership to assist with the development of hire-local campaign;
	ECS3 A3 T2: Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations;		
	ECS3 A3 T3: Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support;		
	ECS3 A3 T4: Assess program outcomes with stakeholders to readjust, expand, or end program as needed.		
ECS4: Enhance environmental sustainability efforts undertaken by business.	ECS4 A1: Create a business environmental sustainability program.	ECS4 A1 T1: Identify lead agency, stakeholders, and secure initial leadership to assist with the development of a business environmental sustainability program;	
		ECS4 A1 T2: Identify and secure short-term funding for program development and implementation, as well as long-term funding for ongoing program operations;	
		ECS4 A1 T3: Hire or reassign staff to conduct research, develop, and implement program(s) with stakeholder input and support;	
		ECS4 A1 T4: Assess program outcomes with stakeholders to readjust, expand, or end program as needed.	

Accountability	AS1. Ensure adequate funding for the Climate Action Plan	AS1 A1: Identify and develop funding sources for climate action work.	AS1 A1 T1: Investigate a voluntary County-wide carbon offset program;
			AS1 A1 T2: Investigate the use of REMP funding;
			AS1 A1 T3: Leverage grant funding; develop partnerships and collaboration;
			AS1 A1 T4: Create a long term funding plan.
		AS1 A2: Develop collaborative programs to share resources and jointly fund projects.	AS1 A2 T1: Identify potential partners, create a collaborative framework, and establish ground rules;
			AS1 A2 T2: Develop and prioritize a targeted project list;
			AS1 A2 T3: Secure funding commitments and seek outside funding;
			AS1 A2 T4: Carry out joint projects and measure outcomes.
		AS1 A3: Partners will allocate annual funding to implement their priority strategies in the CAP.	AS1 A3 T1: Identify partners and determine appropriate levels of funding and amount needed for prioritized strategies, actions and tactics;
	AS1 A3 T2: Engage in budget processes;		
	AS1 A3 T3: Secure funding commitments.		
	AS2. Establish accountability mechanisms for the CAP.	AS2 A1: Carry out community surveys to collect data relevant to the CAP.	AS2 A1 T1: Incorporate CAP questions into existing surveys, including support for CAP strategies and support for various actions;
AS2 A1 T2: Measure the success of education/outreach efforts.			
AS2 A2: Update the GHG inventory every 5 years.		AS2 A2 T1: Convene stakeholders;	
		AS2 A2 T2: Issue an RFP and select a vendor;	
		AS2 A2 T3: Perform the project and publicize the results.	

Sector	Strategy	Actions	Tactics
Accountability	AS2: Establish accountability mechanisms for the CAP.	AS2 A3: Update the Climate Action Plan every five years or as triggers are met.	AS2 A3 T1: Convene the stakeholders to identify and assess potential metrics;
			AS2 A3 T2: Establish a set of 'triggers' for when a new plan should be developed.
		AS2 A4: Establish CAP metrics and report annually on these metrics.	AS2 A4 T1: Convene stakeholders to identify and assess potential metrics;
			AS2 A4 T2: Select final metrics for tracking;
			AS2 A4 T3: Track and report on metrics annually;
			AS2 A4 T4: Publicize results.
		AS2 A5: Create a mechanism to report CAP progress and outcomes.	AS2 A5 T1: Develop partnerships or collaboration;
			AS2 A5 T2: Identify metrics to measure and track;
	AS2 A5 T3: Identify mechanism for reporting.		
	AS2 A5 T4: Publicize progress and outcomes on an annual or more frequent basis.		
	AS2 A6: Establish a transparent process for adjusting strategies and targets, as necessary.	AS2 A6 T1: Convene oversight committee to identify process options;	
		AS2 A6 T2: Select a process and implement it.	
	AS2 A7: Create a collaborative partnership to coordinate CAP implementation efforts.	AS2 A7 T1: Promote the CAP and carry out education activities;	
		AS2 A7 T2: Determine the collaborative's function;	
		AS2 A7 T3: Identify potential partners and invite partners to participate;	
		AS2 A7 T4: Set goals for the collaborative and get buy-in;	
		AS2 A7 T5: Develop sub-committees within the collaborative;	
		AS2 A7 T6: Begin meeting to implement the plans and goals of CAP.	
	AS2 A8: Consider the ways that climate action strategies, as well as inaction on climate change, impact all members of the community differently; measure and monitor to ensure that no groups are disproportionately burdened by this work.	AS2 A8 T1: Conduct periodic analysis of implemented actions and their beneficiaries to ensure equity.	
	AS3: Align with other community plans.	AS3 A1: Ensure that new and updated community plans integrate the strategies and actions from this Climate Action Plan.	AS3 A1 T1: Ensure the County and Towns have the tools and resources needed to implement the CAP within other community plans;
			AS3 A1 T2: Hold regular meetings between County and municipalities specifically about CAP;
AS3 A1 T3: City/County needs to support the incentives and strategies and incorporate them into their work.			
AS4: Carry out educational programs in support of the CAP.	AS4 A1: Work with diverse stakeholders across the County to promote the Climate Action Plan.	AS4 A1 T1: Host educational talks;	
		AS4 A1 T2: Create a communications campaign including flyers, articles in the newspaper, and outreach through websites and social media.	
		AS4 A1 T3: Create a signup for businesses and individuals to make GHG pledges on the website and register projects/ progress.	
	AS4 A2: Work with diverse stakeholders across the County to implement strategies to educate visitors.	AS4 A2 T1: Work with lodging and short-term rental purveyors to provide information to their guests.	
		AS4 A2 T2: Expand education for visitors and tourists.	
		AS4 A2 T3: Implement Destination Management programs.	

Sector	Strategy	Actions	Tactics
Accountability	AS4: Carry out educational programs in support of the CAP.	AS4 A3: Analyze the social or actual carbon cost of all climate action and decarbonization opportunities, and clearly communicate the cost of inaction to residents and visitors.	AS4 A3 T1: Identify which activities should be involved in this effort;
			AS4 A3 T2: Identify expertise to bring to the table, develop a committee of interested people, and get buy-in;
			AS4 A3 T3: Set goals for the group and begin meeting;
			AS4 A3 T4: Allocate resources to communication efforts;
			AS4 A3 T5: Communicate through the schools (public, private, and higher education).
		AS4 A4: Ensure that the CAP education and outreach activities are accessible to diverse populations across the County.	AS4 A4 T1: Develop a branded outreach campaign that provides information and education in accessible ways (i.e., diver languages, reading levels, etc.);
			AS4 A4 T2: Work with partners to host events and outreach that are accessible for all community members.
		AS4 A5: Develop and/or support educational programs as needed to support all of the strategies and sectors.	AS4 A5 T1: Explore and leverage existing outreach and education programs for engaging people and empowering them to take action on climate issues;
			AS4 A5 T2: Leverage existing programs and events in the community and create a partnership with the relevant entities hosting these events and programs;
			AS4 A5 T3: Determine what educational materials/programs are already available and identify missing topic areas/programs;
			AS4 A5 T4: Develop educational materials or programs for what is missing;
			AS4 A5 T5: Create a plan for how to get the materials out to the right community members and how to engage community members in the programs.

# APPENDIX B

## Memo On Routt County Adaptation: Risks, Impacts, Priorities, And Recommendation

### BACKGROUND

Routt County's Climate Action Plan (CAP) will identify key actions and strategies that the community can take immediately and in the next five years to mitigate climate change. It is also critical for Routt County (the County) to understand how the community is likely to be impacted by the climate crisis over the coming years, and how it might adapt to those impacts.

Lotus Engineering & Sustainability, LLC (Lotus), researched the impacts of climate variability that are likely to be relevant for Routt County. Informational interviews were also held with key stakeholders to understand the threats to Routt County and the primary opportunities to address those threats. These conversations and research efforts aimed to answer the following questions:

- What are the primary climate risks threatening Routt County, and what are the associated impacts from those risks?
- What opportunities might Routt County consider to enhance its adaptive capacity in the face of those impacts?
- What are the primary next steps that the County community may take regarding climate adaptation?

Several plans and reports previously produced by the County and its partners were reviewed to understand recent and current planning efforts, priorities, and concerns. Lotus also sourced information on the likely climate, ecosystem, and economic impacts to Routt County from data that is localized to Colorado and the mountainous region specifically. Regional, state, and national reports on climate change risks and vulnerabilities were reviewed to create a list of impacts that will likely affect Routt County. Some of the plans and reports are listed below.

### Routt County Community Plans

- Steamboat Springs Water Conservation Plan (2020)
- Fish Creek Critical Community Watershed Wildfire Protection Plan (2019)
- Routt County Hazard Mitigation Plan (DRAFT 2020)<sup>21</sup>
- Yampa River Streamflow Management Plan (2018)
- Steamboat Springs Water Supply Master Plan (2019)
- Yampa River Fund Summit Economics Report (2019)

### Climate Vulnerability and Variability Studies

- Colorado Vulnerability Report (2015)
- Climate Change in Colorado Report (2014)
- Climate Change Impacts in the US (2014)
- Rocky Mountain Forests at Risk (2014)
- Examining the Economic Impacts of Climate Change on the Colorado Ski Industry (2016)

<sup>21</sup> This DRAFT report identifies the broad hazard risks threatening the County as: wildfire; severe weather; severe winter storm; avalanche; flood; dam/levee failure; landslide/subsidence; and earthquake. The risks identified in this memo are specific to climate change risks.

Additionally, ten informational interviews with members of the Routt County community (including experts working in the fields of water/watershed management, agriculture, forestry, energy, and tourism) were conducted to evaluate the local risks and concerns regarding climate adaptation, feedback regarding the best practices for adaptation currently being employed in tourist and agricultural-based communities, and any opportunities or ideas that may be uniquely suited for Routt County. The ten individuals interviewed are:

- Beth Melton, Just Transition.
- Carolina Manriquez, CO State Forest Service.
- Dave Hunter, Steamboat Ski & Resort Corporation.
- Kara Stoller, Steamboat Springs Chamber.
- Kelly Romero-Heaney, City of Steamboat Springs.
- Megan Moore-Kemp and Benjamin Hoffner, Yampa Valley Electric Association (YVEA).
- Michelle Stewart, Yampa Valley Sustainability Council.
- Mo DeMorat, Routt County.
- Tara Umphries, US Forest Service.
- Todd Hagenbuch, CSU Extension.

This memo will synthesize what was learned through the literature review and informational interviews. Further, it provides the suggested adaptation actions (based on conversations with stakeholders) that the County can consider to become more resilient to those risks and impacts.

It is worth noting that there are several ways in which climate mitigation and climate adaptation strategies overlap. Multiple opportunities to address adaptation in Routt County may also reduce greenhouse gas emission as well. Throughout this memo, adaptation opportunities that may also have an emissions mitigation impact have been noted; additionally, in the final CAP, mitigation strategies that have an adaptation benefit will be noted. Once Routt County's CAP is completed, the information included in this memo will be included in the final plan; additionally, further work through the CAP process may result in some updates to the recommendations and next steps identified in this document.

## CLIMATE RISKS FOR ROUTT COUNTY

### Key Climate Risks

Further information on each of the key climate risks that threaten Routt County is detailed below. Information is based on recent studies on climate variability in Colorado including those listed above.

#### Drought

Since the National Oceanic and Atmospheric Administration (NOAA) introduced the U.S. Drought Monitor in 2000, Colorado has been in a near-constant state of drought. This year (2020) the majority of the state is in a moderate or severe state of drought, and Routt County is in a Moderate, Severe, or Extreme state of drought as of August 27 (see Figure B1).<sup>22</sup>

Colorado's river and stream flows are highly variable and dependent on winter snowpack and spring runoff. Drought impacts the ability of agricultural communities and other industries to continue to thrive; this results in direct economic impacts that can ripple throughout the community. Based on data in Colorado's recently developed Future Avoided Cost Explorer tool, the current state of drought in Routt County costs the community approximately \$3.9 million in annual damages, primarily due to the impact on key tourism-based industries such as rafting, fishing and skiing, as well as the negative impacts of drought on cattle and crop production. These annual impacts could grow to as much as \$21 million in 2050 if no mitigating or adaptive actions are taken.<sup>23</sup>

#### Extreme Heat

Summer and winter temperatures are expected to increase over the next century. By 2050, the average annual statewide temperature is projected to increase by 3.5°F to 6.5°F.<sup>24</sup> Temperatures above 100°F bring increasingly serious health risks, especially for vulnerable populations, and lead to increased wildfire risk, increased severity of drought, and impacts the high alpine snowpack. Temperatures above 90°F also bring health risks including heat exhaustion and sun stroke. While average temperatures in Routt County historically have not exceeded 90°F, projections show that, if no action is taken to mitigate climate change, the County could experience an average of 11 days per year with temperatures exceeding 90°F by late century (i.e., 2070).<sup>25</sup> See Figure B2.

<sup>22</sup> See Colorado Drought map: <https://droughtmonitor.unl.edu/>.

<sup>23</sup> Damage estimates are from the Future Avoided Cost Explorer tool; 2050 estimates are based on the 'more severe climate' scenario with 'medium growth' in population. See <https://storymaps.arcgis.com/stories/4e653ffb2b654e8e95848c9ba8ff316e> for more information.

<sup>24</sup> From Killer Heat in the United States report, see: <https://www.ucsusa.org/sites/default/files/attach/2019/07/killer-heat-analysis-full-report.pdf>.

<sup>25</sup> See Killer Heat in the United States: The Future of Dangerously Hot Days, ArcGIS StoryMap; <https://ucsusa.maps.arcgis.com/apps/MapSeries/index.html?appid=e4e9082a1ec343c794d27f3e12dd006d>.

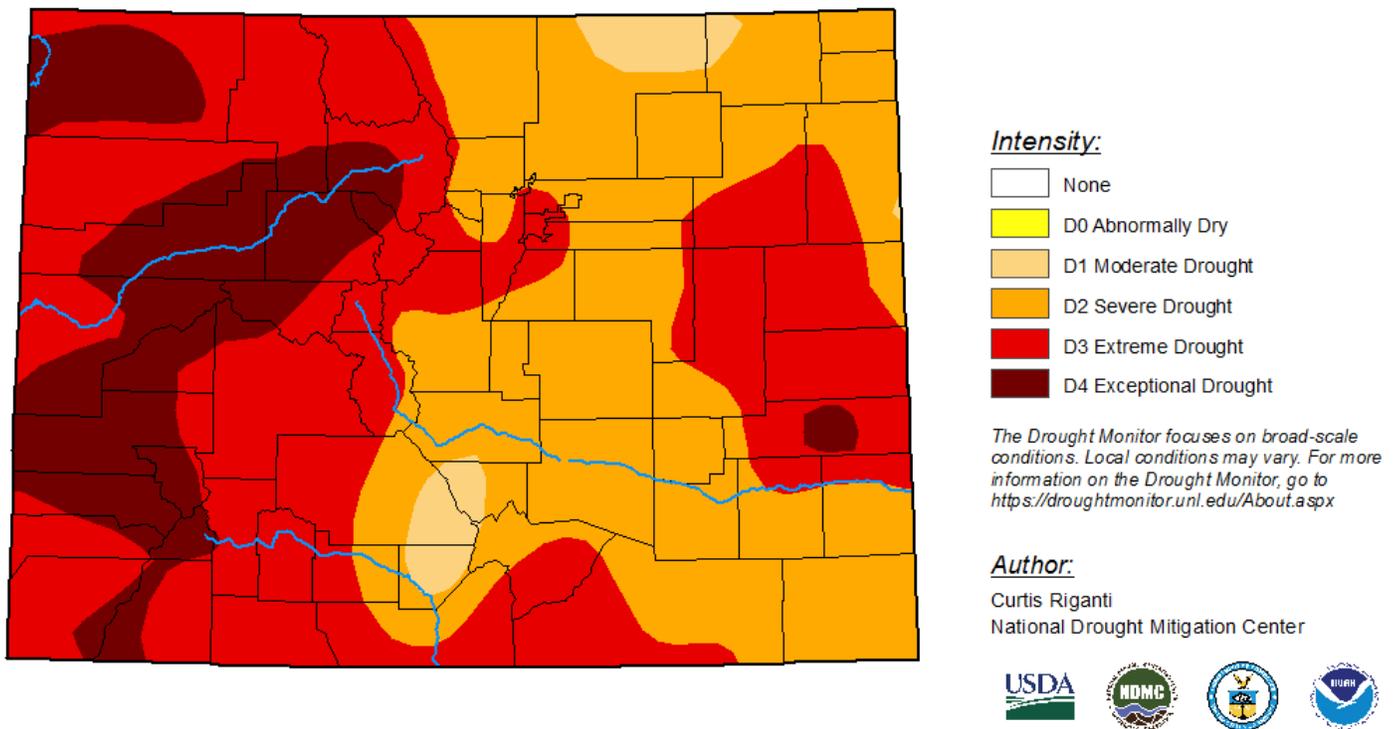


Figure B1. Map of drought conditions in Colorado on October 15, 2020.

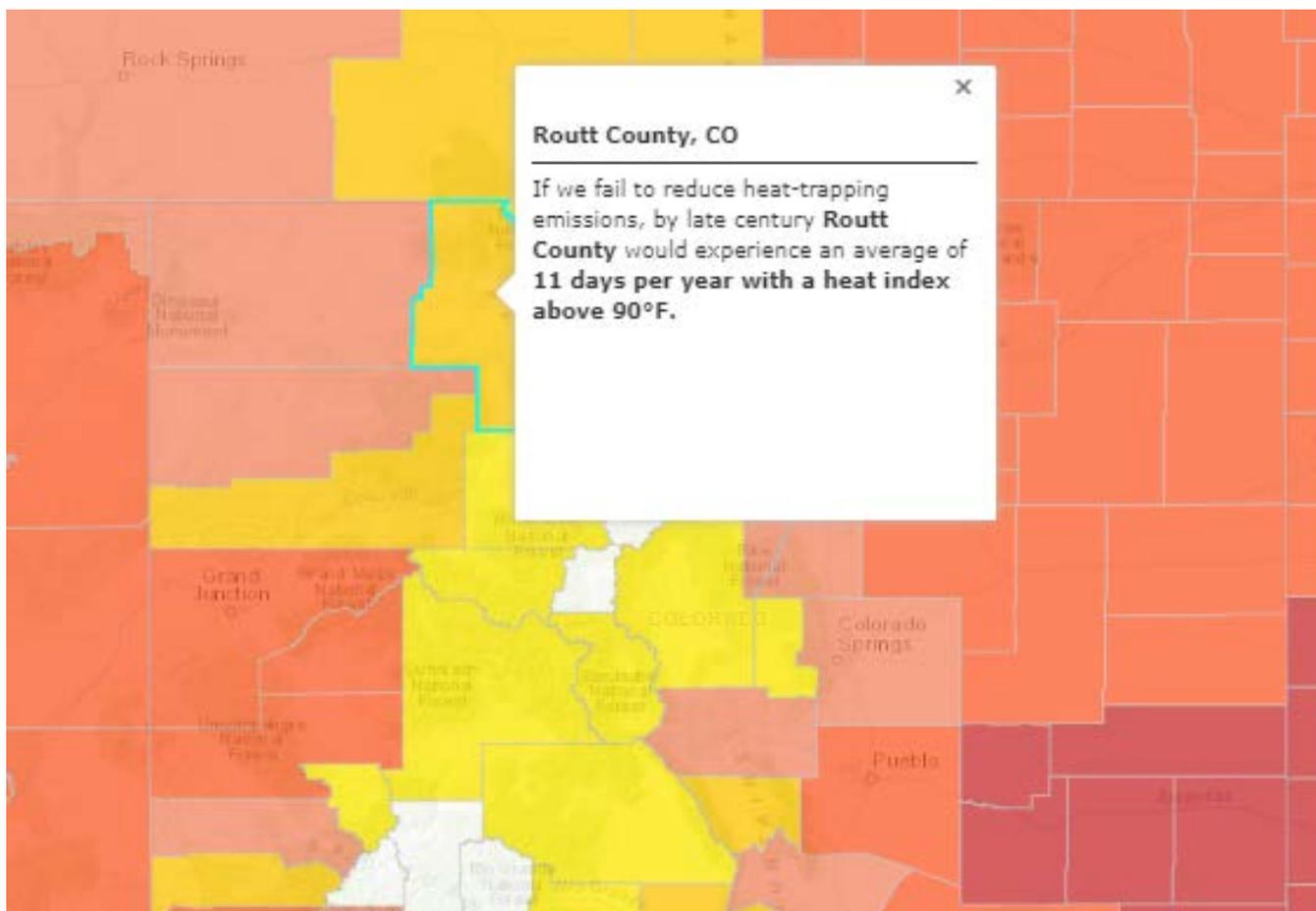


Figure B2. Projections of late-century extreme heat in Routt County.<sup>26</sup>

26 Ibid.

## Flood

Precipitation has become more variable over recent years and this trend is expected to continue as climate change progresses.<sup>27</sup> Extreme precipitation events combined with earlier spring runoff can lead to disastrous flooding events. This is a major hazard for businesses and homes in the floodplain and can damage the community's drinking and wastewater infrastructure. The economic impact of this damage, in Routt County, is currently estimated around \$2.5 million annually; this is predicted to grow to approximately \$7 million by 2050.<sup>28</sup>

## Shifts in Seasonal Weather Patterns

Both winter and summer precipitation are expected to become more variable in the future. This means that there will be fewer precipitation events, and those events that do occur will be more extreme and heavier.<sup>29</sup> Changing precipitation patterns are leading to increased variability in vegetation patterns, increasing wildfire risk, and less predictable growing seasons. In the winter, increased variability can lead to larger snowstorms or rain on snow events, both of which can increase variability in snow conditions and resulting avalanche danger.<sup>30</sup>

## Wildfire

Warmer temperatures, increasingly sporadic precipitation, earlier spring run-off, and drought conditions all contribute to dryer forests and other lands in Routt County. Warmer temperatures also cause stress to trees, weakening them to disease and infestation; a recent illustration is the mountain pine beetle epidemic that killed millions of acres of lodgepole pine in Routt County. Between 1996 and 2019, in Routt County:

- 345,000 acres have been affected by the mountain pine beetle.
- 85,000 acres have been affected by the spruce beetle.
- 5,600 acres have been affected by the western balsam bark beetle.
- 5,100 acres have been affected by the Douglas-fir beetle.
- 1,230 acres have been affected by the western spruce budworm.<sup>31</sup>

27 From Climate Change in Colorado report, see: <https://www.colorado.edu/climate/co2014report/>.

28 Damage estimates are from the Future Avoided Cost Explorer tool; 2050 estimates are based on the 'more severe climate' scenario with 'medium growth' in population. See <https://storymaps.arcgis.com/stories/4e653ffb2b654ebe95848c9ba8ff316e> for more information.

29 From Climate Change in Colorado report, see: <https://www.colorado.edu/climate/co2014report/>.

30 Ibid.

31 See: <https://csfs.colostate.edu/forest-management/common-forest-insects-diseases/#1578934956429-f1724b71-af2e>.

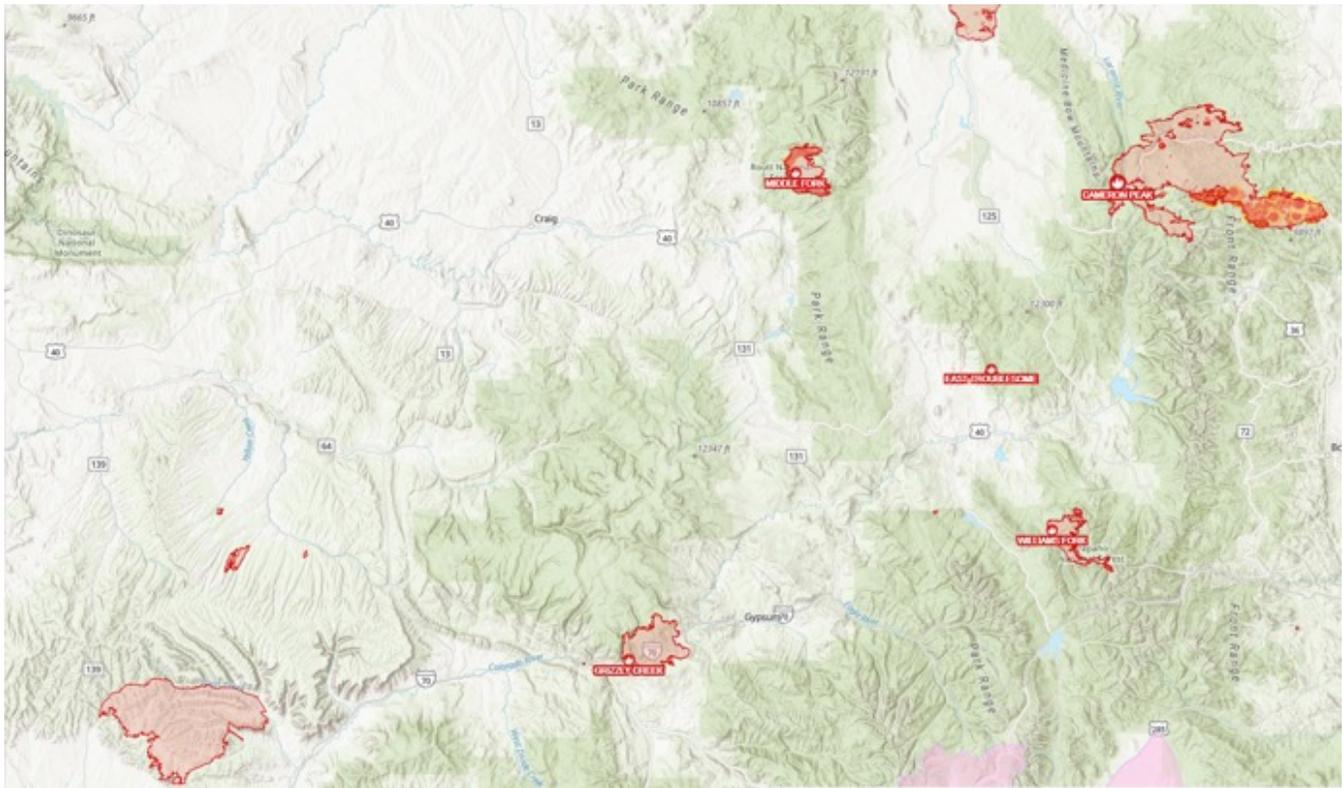


Figure B3: Current fires burning in Colorado as of October 15, 2020.<sup>32</sup>

Figure B3 shows active wildfires in Colorado as of October 2020. Dead and dry vegetation pose a great risk for wildfires, which are projected to increase in frequency, intensity, and size due to climate change.<sup>33</sup> This threatens human safety and health, property, and our natural resources. In a moderate climate change scenario, wildfire is anticipated to inflict approximately \$520,000 annually in costs to Routt County via damage to property and increased fire suppression costs. These figures do not include additional serious wildfire impacts such as public health impacts, economic impacts (e.g., lost revenue from reduced tourism), and broader ecosystem impacts.<sup>34</sup>

## KEY CLIMATE IMPACT AREAS

The climate risks facing Routt County are likely to have a wide range of adverse effects on the community. The primary climate impact areas that were identified as top concerns by community stakeholders include those listed below. A more detailed and complete study of adaptation threats and opportunities in Routt County may result in the identification of additional impacts.

## Agriculture

Increasing temperatures, increasing fire risk, and decreasing water security will inevitably impact agricultural productivity in Routt County. As the climate becomes more variable and less predictable, productive land management becomes more challenging. Aside from threatening the livelihoods and culture of the vibrant and historic agricultural community in Routt County, the threat to agriculture in Routt County will also have a direct economic impact in the community; it is estimated that the regional agricultural economy in the northern mountains will suffer close to \$3.2 million annually in damages due to loss of crop and cattle production.<sup>35</sup>

32 See: <https://www.arcgis.com/apps/webappviewer/index.html?id=2ff1677111ae4018ac705fccc7c3312f&extent=-15210677969%2C1603071.4131%2C-5426738.3485%2C7815873.0721%2C102100>.

33 See: <https://disasterresponse.maps.arcgis.com/apps/opsdashboard/index.html#/785c2e6618a44187b75d1a868858b448>.

34 Damage estimates are from the Future Avoided Cost Explorer tool; 2050 estimates are based on the 'more severe climate' scenario with 'medium growth' in population. See <https://storymaps.arcgis.com/stories/4e653ffb2b654e95848c9ba8ff316e> for more information.

35 Damage estimates are from the Future Avoided Cost Explorer tool; 2050 estimates are based on the 'more severe climate' scenario with 'medium growth' in population for the Northern Mountain region. See <https://storymaps.arcgis.com/stories/4e653ffb2b654e95848c9ba8ff316e> for more information.

## Air Quality

As greenhouse gas emissions and temperatures continue to increase, the likelihood of more air quality alert days simultaneously increases (Figure B4). Decreased air quality can lead to detrimental health effects for particularly vulnerable populations, including the elderly, young children, outdoor workers, and people with compromised immune systems. These health effects include worsening asthma and chronic obstructive pulmonary disease (COPD) symptoms, wheezing, coughing, shortness of breath, and fatigue.<sup>36</sup>

## Cultural Fabric

Due to the compounding impacts from climate change threats described above, many stakeholders noted that the broader community cultural fabric is threatened from climate change. Impacts on the County's agricultural heritage, tourism and the recreation industry, and the natural landscapes that are meaningful to the residents of Routt County do not exist within silos. Without proper mitigation and adaptation to climate change, the vibrant cultural fabric of Routt County is at risk of being upended.

## Economic Impacts, Including on Tourism

Routt County's economy is heavily reliant on tourism and other sectors (such as agriculture) that are extremely vulnerable to the negative impacts of climate change. Specifically, in regard to impacts on tourism, as the climate changes and becomes less predictable, it is broadly assumed that both ski-based tourism in the winter, as well as the volume of summer visitors, will decrease. In the northern mountain region of Colorado where Routt County sits, estimates indicate that the damages to tourism-based industry and related economic activity by the year 2050 may reach \$10 million annually from ski-season tourism reductions, and up to \$480 million annually reduced from summer-season tourism.<sup>37</sup>



Figure B4: Smoke from the Middle Fork Fire in summer of 2020, photo from Sonja Macys.

## Public Health

Climate change increases the risk of spreading vector-borne diseases. Several vector-borne diseases that Coloradans are particularly vulnerable to include West Nile virus, hantavirus, plague, rabies, tularemia, and tick-borne diseases.<sup>38</sup> According to the Centers for Disease Control and Prevention, incidences of West Nile Virus have increased by 586 percent since the virus' introduction to Colorado in 2002.<sup>39</sup> Recently, the global COVID-19 pandemic has exposed the dangers of a massive public health crisis and the catastrophic impacts of such an event to the County economically and socially. While COVID-19 is not directly caused by climate change, recent research and reports indicate that incidences of vector-borne illness and large-scale health crises are likely to increase with climate change.

## Water Quality, Supply, and Watershed Health

Climate change poses significant risks to the County's water supply and the quality of the water available to the community. As climate change impacts threaten the health of the watershed as a whole (through more frequent wildfire risk, increasing air temperatures, and increased prevalence of droughts), there is a recognition of the inter-related nature of the watershed health and the community's water supply and quality.

36 See: <https://simplestepsbetterair.org/get-smart/>.

37 Damage estimates are from the Future Avoided Cost Explorer tool; 2050 estimates are based on the 'more severe climate' scenario with 'medium growth' in population for the Northern Mountain Region. Summer tourism numbers based primarily on the boating industry. See <https://storymaps.arcgis.com/stories/4e653ffb2b654e95848c9ba8ff316e> for more information.

38 From Colorado Climate Change Vulnerability Study, see: <https://www.colorado.edu/climate/co2015vulnerability/>.

39 See: <https://www.cdc.gov/westnile/statsmaps/cumMapsData.html>.

## OPPORTUNITIES IDENTIFIED BY STAKEHOLDERS TO ENHANCE ADAPTATION

The following is a list of the opportunities identified by ten stakeholders and are items that the County may explore further. Each opportunity (in bold) is followed by important actions that the community could take; where an action addresses both climate change adaptation and mitigation, this is noted. It should be noted that this list does not represent all adaptation strategies or a commitment to action. We have made every attempt to accurately portray the comments shared by interviewees; these suggestions do not necessarily represent the views of Lotus, the County, or the organizations represented on the CAP project management team. Steamboat Springs is currently in the process of completing a Tourism Resiliency and Adaptation study that will be finalized around the same time as the Routt County CAP, therefore tourism opportunities are not addressed here.

### **1. Enhance collaboration between those working to support watershed health, those working on fire mitigation, and those working within agriculture.**

- Future efforts should build off existing work being done by multiple community institutions. Moving forward, it will be important to prioritize locating financial resources to support investments that will facilitate this work.
- Leverage work to improve irrigation practices in the agricultural community to retain more moisture in the soil and the upper valley.
  - This could include deploying more efficient watering equipment such as drip irrigation and working with the agricultural community to improve the efficiency of irrigation practices.
  - This also could include supporting research regarding opportunities to store more water in the soil through education and adoption of new irrigation and water conservation practices.
- Consider conducting a regional risk analysis for the watershed to identify hazards and threats. Update the community wildfire risk analysis when appropriate.
  - Water is a critical resource for County residents and climate change has major impacts on water quality and availability. In order to adapt to these impacts

the County should conduct a risk analysis to better understand what the state of the local watershed is currently and the threats and hazards to maintaining the preferred state of the watershed. This analysis should occur at a watershed-scale, and therefore involve regional partners outside of the County boundary.

- Continue work to enhance water conservation throughout the community, including in agricultural uses, commercial uses, and within households.
  - This will help to preserve the water in the streams and rivers so the health of the watershed can remain intact.
  - This has a dual mitigation and adaptation benefit, as reduced water consumption also reduces the energy requirements associated with transporting and processing water.
- Explore opportunities to improve land management in ways that support water quality and ecosystem health, such as through further streambank restoration.
  - Continue the tree planting work along the Yampa River to help reduce water temperatures in the river as well as to reduce the amount of chemical runoff that enters the ecosystem.
- Review local development plans and codes to ensure that agricultural land remains preserved, as well as accessible in cost, to the traditional users.
  - Look at the requirements for agricultural tax designation and consider how those can be leveraged to encourage more sustainable land management practices.
  - Leverage opportunities to integrate these priorities into the updated County Master Plan. This will help maintain the culture and character of the community as it works to adapt to a changing climate.
- Continue to invest in fire mitigation and education work and identify opportunities to further incentivize private landowners to invest in wildfire mitigation.
  - This could include partnering with local or regional non-profit organizations that focus on community wildfire readiness and fire mitigation work.

## 2. Invest in distributed energy resources and continue broadband deployment.

- Expanding broadband throughout the County in order to create economic diversification.
  - This would help the County's economy weather impacts by climate change.
- Specifically, look at opportunities for micro-hydro in rural areas and agricultural operations.
  - This would provide local renewable energy, especially to those areas that may be further from the traditional grid system.
  - This is an action that addresses both mitigation and adaptation.
- Work closely with YVEA to expand both solar, small-scale storage, and beneficial electrification across the service territory.
  - Beneficial electrification replaces all carbon-intensive electricity infrastructure in buildings with carbon neutral renewable energy sources. As the grid and electric supply progress towards 100% renewable energy, all-electric buildings become carbon neutral.
  - This action addresses both climate change mitigation and adaptation.
- Engage and educate consumers about energy use and energy distribution to encourage everyone to make choices that support better load management in a more distributed grid.
  - Adjusting the load so that electricity demand is steady throughout the course of the day helps electric companies balance the electric load and reduces costs for the consumer.
  - Microgrids achieve resiliency by islanding from the central grid during an outage.
  - This action addresses both climate change mitigation and adaptation.
- Explore ways to reduce the permitting and regulatory burden on larger energy projects such as hydroelectric projects, wind farm development, large-scale solar, and nuclear fusion (and in the future) fission.
  - Regulations and the permitting process for larger energy projects can be cumbersome and time-consuming, sometimes resulting in canceled projects due to the timelines and economics not penciling out. A thorough assessment and review of regulatory

and permitting processes may identify opportunities to expand clean energy development in the region.

- This action addresses both climate change mitigation and adaptation.
- Expand broadband development to enhance opportunities for more location-neutral employment in the community, and to ensure the grid continues to be managed safely and reliably.
  - Expanded broadband would allow for more location-neutral employment and also ensure that the entire community can equitably access technology that is crucial to economic and job growth. Additionally, expanded broadband access allows utility providers to have better access to data, information, and communications to improve grid management.
  - Expanded broadband would also allow the grid to be managed to ensure reliability in the event of wildfires, hailstorms, flood, and other extreme weather events.
- This action addresses both climate change mitigation and adaptation.

## 3. Support the development of expanded transportation infrastructure.

- Collaborate across governments and private sector institutions to develop a county-wide regional transportation system that provides reliable and regular service to all of Routt County.
  - High-quality and reliable transit service ensures that the community can move around freely and can access needed goods and services, especially in cases of emergencies.
  - To further mitigate climate change, this system could utilize electric buses. The County could also work to collaborate with other regional transportation systems to reduce the amount of emissions from transportation that result from tourists.
  - An expanded, reliable transportation service within the County will help the economy be self-sustaining by providing equitable access to all necessary and other non-essential services.
  - This action addresses both climate change mitigation and adaptation.

- Investigate the opportunity to repurpose the current rail line from Craig to a passenger rail or freight rail service to bring people and goods to and from the County.
  - Also explore alternative uses of the rail line, such as for trail development.
  - Performing a cost-benefit analysis of different options for repurposing the rail line is a necessary step of this process.
- This action addresses both climate change mitigation and adaptation.

**4. Study disproportionate impacts of climate variability across the community and develop an economic transition plan.**

- Conduct a study on the impacts of climate variability across the community to better understand the sectors of the community and economy that are most vulnerable.
  - This study can build off of multiple existing efforts in the community, including the Tourism Economy Vulnerability Study being conducted currently by the Steamboat Springs Chamber.
- Develop a plan to support diverse economic development across all sectors in the community. Focus on opportunities to grow non-tourism-based businesses and those that are location-neutral.
  - Consider both the new industries and sectors that could be brought to the County, as well as how to support the growth and expansion of existing businesses and sectors that are in the community.
- Explore the opportunity for funding hazard mitigation and adaptation work through the hazard mitigation plan.
  - Leverage all grants (i.e., Federal Emergency Management Agency [FEMA] grants) made available through the Hazard Mitigation Planning process.
  - Prioritize approving grant matching funds in the County/City budget process.

**5. Focus on nature-based solutions to climate mitigation and adaptation.**

- Support reforestation efforts in areas of the County where forests have been damaged or otherwise compromised
  - Collaborate with local stakeholders to determine best practices for replanting forests in the County.
  - This action addresses both climate change mitigation and adaptation.
- Engage the agricultural community in conversations around land management and carbon storage. Consider developing a program that pays or otherwise incentivizes ranchers and producers to invest in soil carbon building practices.
  - This could involve collaborating with the Natural Resource Conservation Service from the United States Department of Agriculture (USDA) to connect local farmers and ranchers with resources and incentives available to them.
- This action addresses both climate change mitigation and adaptation.
- Enhance the collaborative approach to watershed management through the basin roundtable groups; bring in other regional partners as needed.
  - Collaboration can lead to shared learning for all stakeholders. It will be critical to take a systems-thinking approach to managing the watershed, and all decisions made in regard to the watershed should consider impacts to the entire watershed and ecosystem.
  - This action addresses both climate change mitigation and adaptation.
- Develop regional collaborations to address issues of land management, land preservation, and development.
  - Work with local stakeholders to develop best practices and educate the community on implementing those best practices.
  - This action addresses both climate change mitigation and adaptation.

## PRIMARY RECOMMENDATIONS FOR NEXT STEPS

Based on the high-level risk assessment and impact and opportunity analysis conducted, the following is a list of the primary recommendations for the Routt County community to consider as next steps towards building a more climate adaptive and resilient community.

- Convene stakeholder groups and invest in the development of a full-scale climate adaptation plan using the above framework of priorities and opportunities as a guide.
  - Build off current work to develop an adaptation plan for the tourism industry.
- Identify potential funding opportunities to implement strategies in the DRAFT Hazard Mitigation Plan and other recently developed plans that relate to climate adaptability and attempt to acquire funding.
  - Explore ways to update the budgeting process in order to ensure that adaptation and mitigation work is ranked as a higher budget priority.
- Continue to develop and deepen collaborations and conversations between land management, forest health, and watershed management groups to leverage synergies and optimize time and resources invested by each group.
- 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.
  - Leverage potential funding from FEMA.

# APPENDIX C *Public and Stakeholder Engagement Activities*

The Routt County Climate Action Plan (CAP) was developed based on the input and feedback of community members, stakeholders who are deeply familiar with the CAP sectors, and local officials and members of elected leadership. While the original scope of work for the project included in-person community and stakeholder engagement activities, the project team pivoted in the spring of 2020 to leading a nearly all-virtual engagement process out of necessity due to the COVID-19 pandemic.

The details of the public and stakeholder engagement activities that were a component of the CAP development are provided below.

## **PUBLIC ENGAGEMENT**

### **Routt Climate Action Website**

A project plan website was developed that would act as a resource of information about the planning process throughout the project. The website can be found at <https://www.routtclimateaction.com/>.

The website was launched in late July 2020. There have been 692 visits to the website since its launch, 541 of which are unique visitors generating 1,731 page views (as of May 19, 2021).

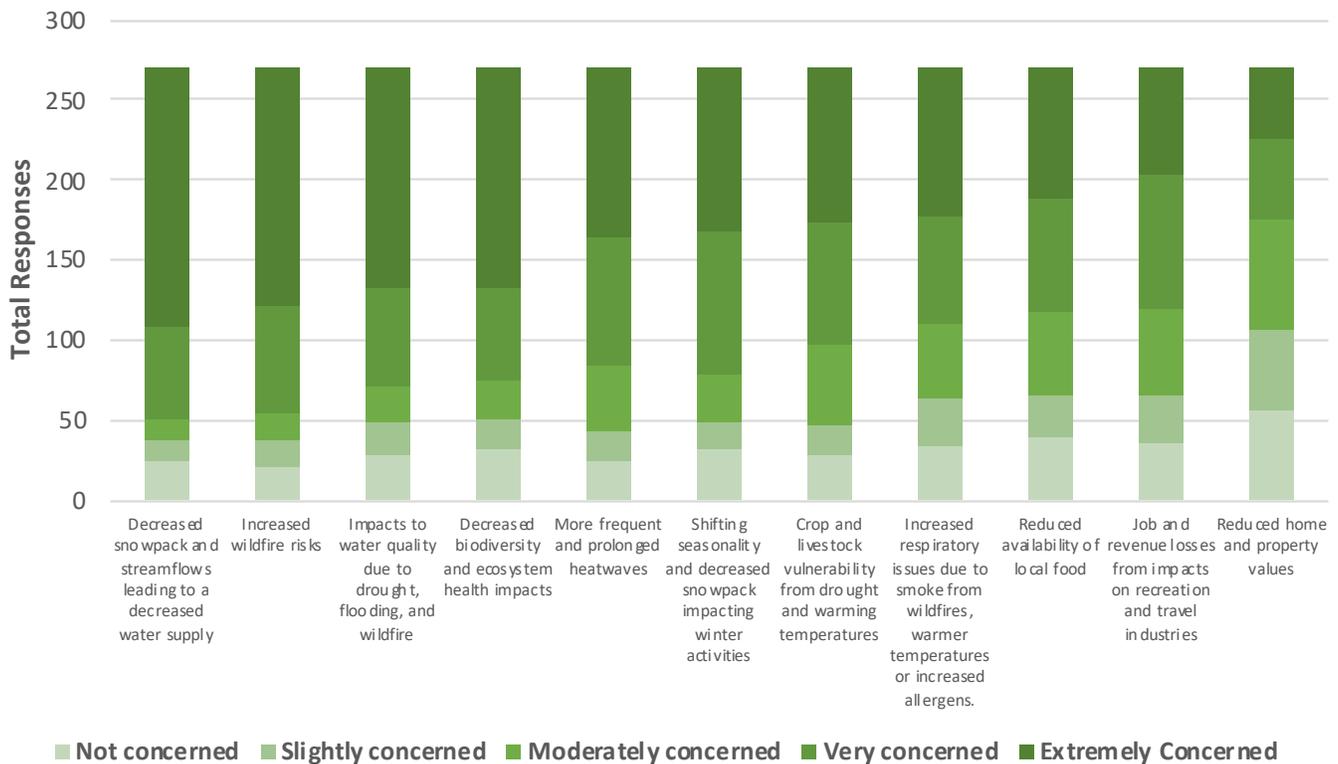
The website includes a home page with general information on the CAP; a Greenhouse Gas Analysis page that shares a high level overview of the results of Routt County's 2018 emissions inventory and forecast; a The Process page that provides details on the process and timeline for plan development; a Resources page that shares information on local, regional, statewide, and national and international climate action resources; and a Get Involved page that provides links to recent news articles regarding the CAP, links to any open community questionnaires, and a form to submit feedback regarding the CAP. Additionally, there is a The Climate Action Plan

page that defines the long-term community emissions reduction goals and links to a subpage for each sector that details the sector-specific strategies and emissions and community impact related to those strategies.

Seventeen comments were submitted through the Get Involved page on the website. The general themes within the comments submitted included:

- Feedback regarding suggested improvements to make to the community questionnaire.
- Comments in opposition to the plan:
  - One comment stating that climate change is a constant.
  - Comments regarding overreach of the government and/or stating that local emissions will not impact global emission trends.
  - Comments in opposition to building electrification.
- Comments requesting more information regarding building electrification and renewable natural gas.
- Comments in support of various elements of the CAP, including:
  - Subsidized recycling initiatives and the use of flood irrigation.
  - Improving local food systems.
  - Comments expressing the desire to be informed of how they can participate in the implementation work.
  - Comments expressing support for dedicated communications planning to support implementation.

## Concern about Climate Change Impacts to Routt County



### Initial CAP Community Questionnaire

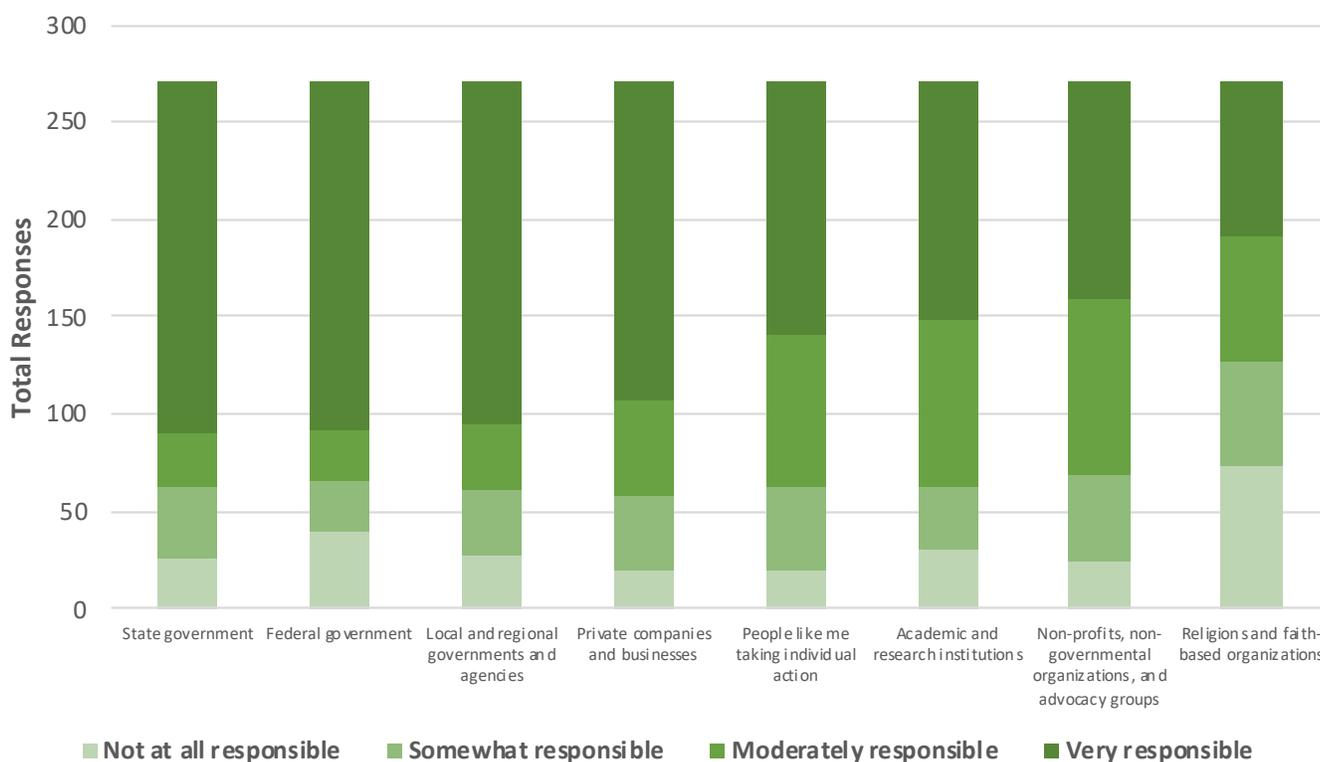
A community questionnaire was linked on the project website and promoted through social media and community newsletters. The purpose of the questionnaire was to gain an understanding of the community’s knowledge of climate action and the impacts of climate change, as well as feedback on community climate action priorities, opportunities, and challenges. The questionnaire was open from August 3rd, 2020, through September 24th, 2020, and received 276 responses. Some of the key takeaways from the questionnaire include:

- Routt County residents are aware of the impacts of climate change that threaten their community. Eighty-nine percent of residents replied that they understand how climate change will impact life in Routt County.
- The top three climate change impacts residents are most concerned about are decreased snowpack and streamflow leading to a decreased water supply; increased wildfire risks; and impacts to water quality due to drought, flooding, and wildfires. Residents are least concerned about reduced home and property

values, and jobs and revenue losses from impacts on recreation and travel industries.

- Respondents overwhelmingly believe that those most responsible for taking climate actions are federal, state, and local governments, followed closely by private businesses/companies.
- The top actions that residents would be interested in taking include commercial composting programs; purchasing a hybrid or all-electric vehicle; and installing solar PV on their rooftops.
- Routt County residents are most likely to help the County achieve its climate action goals if there are clear energy and/or economic savings for their household and if there was a clear economic benefit for the community.
- Cost of implementation; difficulty in changing behaviors; and lack of government support are key barriers to addressing climate change according to Routt County residents. Fourteen percent of residents believe there are no barriers or any need to address climate change.

## Responsibility for Taking Climate Action



### CAP Open House

A hybrid in-person and virtual CAP Open House was hosted on May 10th, 2021, to gather feedback from community members regarding the strategies and actions within the DRAFT CAP. Twelve attendees joined the event in person, and 47 registered for the online event.

Feedback received during the Open House on CAP strategies and actions was primarily positive; some participants had questions regarding the specifics of some strategies and actions. The feedback received by sector included:

### Energy sector:

- Questions were asked regarding how the plan addresses oil and gas drilling; the development of a carbon offset program; the details of a renewable energy mitigation program; the potential to repurpose the Hayden Station as a renewable energy source; and how the CAP goal compares to the federal net-zero by 2050 target.
- Suggestions included offering significant financial assistance for low-income households for energy efficiency; expanding solar in the community; exploring battery back-up for energy storage; and encouraging Yampa Valley Electric Association (YVEA) to enter into more renewable energy contracts sooner.

**Transportation sector:**

- A question was asked regarding whether the plan addresses the number of flights into the community.
- Suggestions included exploring the possibility of reinstating passenger rail on the train from Craig to Steamboat; reducing idling and enforcing cleaner exhaust systems for vehicles; providing incentives for installing home level 2 EV chargers; conducting education on EVs; developing a regional transportation district that includes resort shuttles; and completing multimodal trails from Steamboat to Hayden.

**Waste sector:**

- Suggestions included increasing curbside recycling to include multi-family housing; requiring haulers to report accurate diversion numbers and requiring the highest diversion rate from one hauler to be required for all haulers; ensuring that removal of diseased trees is not dis-incentivized; requiring zero waste for events and facilities; banning polystyrene; requiring compostable take-out containers and utensils; requiring hauler licensing; and ensuring the Waste Diversion Strategic Plan is supported and funded.

**Land Use sector:**

- Questions were asked regarding how this plan relates to federal carbon mitigation plans; whether offset projects were considered in reaching the 2050 target; whether markets may evolve that support the development and selling of offset projects; whether ordinances will be adopted in support of urban tree canopy management with high bars for variances; and whether compact development regulations also support affordable housing work.
- Suggestions included building more multifamily housing in cities and towns by only requiring one tap fee per building; adding open space areas in or close to towns; developing methods to 'count' land-based emissions reductions; increasing density; and educating the community on land use as a climate change mitigation and adaptation solution.

**Economy sector:**

- Questions were asked regarding how the plan will address economic development and a Just Transition for coal communities; what measures will be taken to ensure electric grid reliability as coal-fires power is reduced; and if owners of rental space will be required to disclose emissions efficiency of buildings.
- Suggestions included developing a green business program; requiring vendors to monitor and disclose emissions; creating tools to measure jobs created with green technology compared to jobs lost in traditional resource extraction; encouraging historic preservation; adopting a tax to fund CAP actions; and adopting policies to mandate the use of compost.
- One comment that this sector will be difficult to track separately.

**Accountability sector:**

- Questions were asked regarding how the results of the online survey and the open house will be incorporated into the subsequent presentation to council and whether remote sensing and monitoring is being considered to measure CAP results.
- One suggestion that goals are updated as policies at the state and federal level evolved.

## CAP Strategies and Actions Questionnaire

A second community questionnaire was hosted on the CAP website from April 15, 2021 until May 17th, 2021; there were 110 responses to the questionnaire. Responses ranged from those who believed the CAP was not aggressive enough, to those who supported the CAP in its current form, to those who felt the CAP represented government overreach and should be abandoned.

The general categories of feedback received within each sector includes:

- Comments in support of the CAP or requesting more aggressive action within the CAP:
  - Comments in favor of expanding ‘renewable’ energy as defined in the plan to also include geothermal, nuclear, and hydropower.
  - Comments indicating that the goals should be more aggressive.
  - Comments in support of aggressive oil and gas regulations.
  - Comments suggesting working with YVEA to promote the renewable energy and efficiency programs, especially for high energy users.
  - Comments noting that public resources such as pension funds should not be invested in fossil fuel companies.
  - Comments on eliminating the coal power plant or repurposing it to be a renewable energy resource.
  - Comments in support of expanded electric vehicle charging access, including at state parks.
  - Comments suggesting minimum renewable energy requirements for new construction.
  - Comments advocating for emissions testing for vehicles.
  - Comments in support of expanded public transit, including electric buses.
  - Comments in support of improved cycling infrastructure and safety.
  - Comments in support of improving trail access and transition the current rail line to a passenger rail.
  - Comments in support of hydrogen and CNG vehicles.
  - Comments in support of paid parking.
  - Comments noting that incentives and disincentives should be used during implementation.
  - Comments noting that landfill operators and haulers should be held accountable.
- Comments suggesting programs that support local food production year-round.
- Comments noting support for education and outreach.
- Neutral comments:
  - Comments questioning the cost of CAP actions compared to other government spending, or where funding will come from for the plan.
  - Comments noting that cost effectiveness should be prioritized during implementation.
  - Comments noting that implementation should focus on incentives and education, not mandates and regulation.
  - Comments noting that waste programs should pay for themselves.
- Comments opposed to elements in the CAP:
  - Comments opposed to any policy or government action perceived as limiting consumer choice.
  - Comments noting that the fossil fuel industry is currently and needs to remain a part of the local economy.
  - Comments regarding the environmental impact of renewable energy and batteries, including mining materials for these technologies.
  - Comments requesting that a statement be added to the CAP that no taxpayer funds will be expended to reach the CAP goals.
  - Comments regarding the reliability of renewable energy resources.
  - Comments regarding allowing the free market to dictate consumer behavior instead of any government interventions.
  - Comments noting that climate change does not exist.
  - Comments noting that Routt County won’t make a dent in climate change regardless of action because other countries pollute at a much greater rate.
  - Comments opposed to electrification in the building and transportation sector.
  - Comments noting that the CAP may increase costs for some community members.
  - Comments noting that recycling is a myth.
  - Comments opposed to product bans.

## Presentation of the Draft Plan

The Draft CAP was presented to a joint session of City Council and the Board of County Commissioners on May 18th. Elected officials and the public had the opportunity to make comments regarding the plan; those comments are summarized below.

- Elected official comments:
  - One elected official asked a question regarding what the cost of implementation is and who pays. This person also noted that an appendix of stakeholders and outreach would be helpful.
  - One elected official expressed that they were concerned that the targets are not achievable given that the State is already not on-track to meet its emission reduction goals.
  - One elected official noted that the targets and timeframe are not aggressive enough.
  - Multiple elected officials noted that they are comfortable with the targets, especially given the intent to update the plan every five years.
- Public comments:
  - One member of the public requested that dark sky provisions be considered for inclusion in the CAP, along with tree planting initiatives and undergrounding electric wires.
  - One member of the public expressed enthusiasm and excitement over the plan and supporting implementation.

## STAKEHOLDER ENGAGEMENT

### Informational Interviews

Seven informational interviews were held virtually with local elected officials, leadership from local government, and representatives of agencies that are necessary to engage in partnerships for the implementation of the CAP. An additional five interviews were held with people that did were invited to but did not participate in focus groups, for a total of 12 interviews that included:

- Gary Suiter—Steamboat Springs City Manager
- Mark Collins—Routt County Manager
- John Bristol—Steamboat Springs Chamber
- Kara Stoller—Steamboat Springs Chamber
- Megan Moore-Kemp—Yampa Valley Electric Association
- Beth Melton—Routt County Commissioner
- Brian Ashley—Town of Yampa Council
- Kelly McElfish—Town of Oak Creek Council
- Sonja Macys—City of Steamboat Springs Council
- Matthew Mendisco—Town of Hayden Town Manager
- Chris Johnson—Town of Oak Creek Town Administrator
- Janet Reyes—Town Clerk at Town of Yampa
- Liz Schnackenberg—US Forest Service
- Nelly Navarro—Integrated Communities
- Pascal Ginesta—Steamboat Springs School District
- Kevin Booth—Yampa Valley Regional Airport

### Stakeholder Focus Groups and Workshops

A series of focus groups and workshops were hosted with representatives of various sectors of the community to ensure that the correct strategies and actions are included in the CAP and to support implementation. The specific sessions are detailed below.

- Five strategy development focus groups were held virtually between July 30th and August 28th, 2020. Participants included representatives of local government, community organizations, local business, and regional, State, and federal agencies. Participants discussed and identified the strategies that could be included in each sector of the CAP. The focus groups included a total of 40 participants across the following meetings (note, some participants attended more than one meeting):

- July 30, 2020--Community values and community-wide strategy brainstorming
- August 12, 2020--Community values and land use, water, agriculture, and planning and development strategy brainstorming
- August 17, 2020--Community values and transportation and education and outreach strategy brainstorming
- August 20, 2020--Community values and energy and waste strategy brainstorming
- August 28, 2020--Community values and waste, land use, and education and outreach strategy brainstorming
- Two workshops were held virtually to confirm the CAP strategies and identify and confirm the CAP actions. These meetings were held on October 15th and 20th, 2020, and included 16 community participants. Participants reviewed the strategies for climate action, evaluated and prioritized those strategies, and discussed barriers to implementation.
- Two implementation focus groups were held virtually on December 7th and 8th, 2020, to identify the implementation details associated with each CAP strategy and action. A total of 31 participants were engaged in the implementation focus groups. Participants brainstormed the timeline for implementation, accountable parties, potential partners, and tactics for implementation for the climate action strategies.
- A final stakeholder workshop to confirm the CAP strategy targets was held on January 5, 2021. There were 11 participants in the workshop. Participants reviewed the business-as-usual emission projections, the impact of selected strategies and targets, and provided feedback on the strategy targets.

The full list of stakeholders who participated in at least one of these conversations includes:

- Brandon Voegtle, Bureau of Land Management
- Carolina Manriquez, CO State Forest Service
- Dan LeBlanc, CO Building Performance
- Dave Hunter, Steamboat Ski & Resort
- Emi Cooper, Citizen
- Eric Washburn, Citizen
- Gail Garey, Citizen
- Jared Geiger, Atmos Energy
- Jennifer Altieri, Atmos Energy
- Jennifer Wellman, The Nature Conservancy
- Jeremy Behling, YV Tire Company
- Joe Haines, Yampatika
- John Spezia, Citizen
- Johnathon Flint, City of Steamboat Springs
- Jon Snyder, City of Steamboat Springs
- Julie Baxter, City of Steamboat Springs
- Kara Stoller, City of Steamboat Springs Chamber
- Kelly Latterman, Steamboat Springs School District
- Kelly Romero-Heaney, City of Steamboat Springs
- Kristy Winsor, Routt County
- Len Zanni, Big Agnes
- Madison Muxworthy, Yampa Valley Sustainability Council
- Mark Anderson, Craig Scheckman Family Foundation
- Megan Moore-Kemp, Yampa Valley Electric Cooperative
- Melissa Dressen, US Forest Service
- Michele Meyer, Community Agricultural Alliance
- Michelle Stewart, Yampa Valley Sustainability Council
- Mo DeMorat, Routt County Emergency Manager
- Nathan Stewart, CO Mountain College
- Patrick Stanko, Community Agricultural Alliance
- Rob Leivo, Atmos Energy
- Scott Conner, Yampa Valley Sustainability Council
- Scott Cook, Cook Chevrolet
- Suzie Romig, Yampa Valley Sustainability Council
- Tammy Delaney, Town of Hayden
- Tara Umphries, US Forest Service
- Tim Sullivan, The Nature Conservancy
- Todd Carr, Routt County
- Todd Hagenbuch, CSU Extension
- Winn Cowman, Souder Miller

# ROUTT COUNTY

## Climate Action Plan



Above: Nathan Anderson  
Below: Larry Pierce

