BLAINE COUNTY – CLIMATE ACTION PLAN

A REGIONAL FRAMEWORK FOR MITIGATION AND ADAPTATION THROUGH STRATEGIC PARTNERSHIPS

Executive Summary

The Blaine County Climate Action Plan (CAP) is a guiding document for enhancing climate change mitigation and adaptation outcomes on a regional level. Its intent is to encourage efficient use of partnerships and resources to achieve improved outcomes across four key topic areas:

- Land and Water Conservation
- Land Use and Transportation (Mobility)
- Clean Energy and Green Building
- Solid Waste and the Circular Economy

Each of these topic areas is complex, requiring significant understanding of what is currently in place (baseline conditions) and accounting for administrative capacity to achieve goals. As such, the plan starts with a high-level vision for each of these areas of impact. It then digs deeper into baseline conditions to establish programmatic opportunities. Careful consideration was made for not only environmental factors in this plan, but also economic and social components to ensure a comprehensive and balanced approach. The planning team, through a literature review and significant outreach to local stakeholders, canvassed existing programming, resources and outcomes to ensure a relatively complete accounting of factors relevant to this plan.

Nineteen key performance indicators (KPIs) were then identified across the topic areas that will empower Blaine County and partners to track the progress and efficacy of a dedicated set of actions. The selected KPIs are important features of this plan because they consist of explicit, measurable data points that can be tracked year over year to determine program efficacy. Each of the actions associated with the KPIs will further be evaluated by objectives—specific, measurable, achievable (assignable), relevant and time-bound (SMART) outcomes that guide us towards our broader goals and vision[1]. This plan is intended to be iterated upon going forward and evolve with current and future climate and administrative realities, as needed. Where appropriate, if objectives are not being met, the plan can be amended to account for new strategies.

Climate Action Implementation Elements:

- Key Performance Indicators (KPIs): units of measurement (metrics) that allow us to track progress between baselines and objectives

[1] Doran, George T. There's a S.M.A.R.T. Way to Write Management's Objective's and Goals [There's a S.M.A.R.T. way to write managements's goals and objectives. (temple.edu)]

- Goals: high level view of what we would like to see happen in each focus area
- Baselines: current measurable status of a particular focus area
- Objectives: specific, measurable, achievable, relevant, time-bound (SMART) outcomes to achieve our goals
- Actions: Discreet programmatic or project-based tasks needed to achieve objectives

Central to this plan's outcomes are the partners who helped to create it, and their roles in implementation. Blaine County does not have the bandwidth or authority to tackle all elements contained within this plan, so the plan explicitly calls out action areas where partners may take the lead. The broader administrative theme of this plan can be aligned with John Heywood's idiom of "Many hands make light work." **Through partnerships (municipal, NGO, corporate/private, citizens, state and federal) we can assure that our purview is relatively expansive and our ability to work across administrative boundaries is thoughtful, legal, strategic and appropriate.**

The KPIs and actions in this plan are in chapters 4 - 8.

Next steps and supporting efforts: In the summer of 2024, Blaine County and municipal partners will conduct an additional greenhouse gas (GHG) emissions inventory based on 2023 data. This will paint a picture of how well current programming is working relative to stated objectives—as tracked against available 2018 data. In the fall of 2024, the county will build a Geographic Information System (GIS) dashboard that allows tracking progress of KPIs. With these near-term horizons in the pipeline, the county acknowledges that some of the objectives and actions contained in this plan will need to evolve through a continuous improvement process.

Chapter 1: Introduction

1.1 Statement from the Blaine County Board of Commissioners

Mitigation of and adaptation to climate change is one of the greatest responsibilities of our time, and Blaine County is committed to doing our part. Climate action will empower our community to build resilience against environmental changes while fostering sustainable growth. By proactively addressing climate risks, we hope to protect our livelihoods, enhance infrastructure, and ensure the wellbeing of Blaine County residents. Even though we are a small community, we believe we can create meaningful change that will have a ripple effect—especially given the high number of visitors who come to our region every year. Thoughtfully addressing climate change with locally specific tactics is essential to safeguard our environment, promote economic stability, and enhance our way of life. These investments will position Blaine County to thrive long into the future.

"Achieving scale means that actions are not taken in silos—by partnering across jurisdictions and industries, small actions can add up to big change. Reaching critical mass enables us to tip the scales—it signifies that we have implemented enough actions—through partnerships—to ensure that this work can grow with momentum."

When it comes to climate action, there is what we ***want*** to do and what we ***can*** do. Occasionally, the two are at odds, however this doesn't mean we can't find alignment and spaces where progress can occur. This plan is intended to be grounded in rational, pragmatic approaches to both climate adaptation and mitigation. Partnerships play a key role in this work and allow us the opportunity to achieve two critical elements: **scale and critical mass**.

Given the heft of some of the actions being undertaken in this plan, it makes more sense to bring together multiple partners and work across multiple jurisdictions to ensure we are right sized in our approach (scale) and that the resources needed to achieve outcomes match the size of the program or project (critical mass). Through this model, even small actions can add up to big change. We understand not all entities within Blaine County will buy into this entire plan or support its metrics and actions. We didn't set out to be all things to all people. Rather, we intend to work towards outcomes that universally benefit the residents of Blaine County, now and long into the future. Some of the gains achieved from this plan will not be realized in the short term. Some are abstract and nebulous, but meaningful against the broader set of goals. All are part of an ecosystem of action that we believe will lead to justifiable results and create a more resilient and livable Blaine County for generations to come. **Blaine County believes this is the right approach to climate action because it celebrates the realities of local considerations and empowers both the county and its many partners to achieve the vision it sets out to achieve.**

Finally, this plan would not have been possible without the contributions of over 100 local stakeholders, who passionately contributed data, feedback, and guidance. You can find the names of the task force members in section 1.6.

Within that group were two especially important individuals, whom we would like to acknowledge. Lynne Barker, Blaine County's first Sustainability Manager (2020-2023) was responsible for developing the first phases of the county's Sustainability program and assembled the community stakeholders who make up 5B CAN (Blaine County Climate Action Network). Lynne worked tirelessly to lay the foundation for a productive program and created hundreds of critical alliances across Blaine County and the United States. Sadly, Lynne passed away at the end of 2023, however her contributions will be forever recognized through this plan and corresponding action.

Commissioner Dick Fosbury was a champion in many respects, not the least of which includes advancing the county's energy resilience, hazard mitigation and grants portfolio—directly benefitting the community and county's Sustainability program.

Commissioner Fosbury offered a kind and rational voice on behalf of Blaine County in statewide policy discussions through his membership in the Idaho Strategic Energy Alliance (ISEA). He also worked with the Idaho Governor's Office of Energy and Mineral Resources and Idaho National Laboratory on a variety of initiatives that will benefit Blaine County residents for generations to come. Commissioner Fosbury also sadly passed away in 2023.

We are forever grateful for Lynne and Dick's contributions, as well as dozens of other community champions who have gotten involved. We are immensely grateful to the countless individuals and organizations who have supported Blaine County in this work and look forward to many successes in our efforts to combat human caused climate change at the local level.

The vision, objectives, and actions set forth in this Plan are intended to guide the Board and its partners in developing strategies to combat the climate crisis. While the Board views the implementation of this Plan as a high priority, it cannot ignore legal and fiscal limitations. Nothing in this Plan shall be construed as a binding commitment or contractual obligation.

1.2 What Sustainability Looks Like in Blaine County

The meaning of the word "sustainability" has evolved over time. It used to reflect austerity and broader considerations of how we allocate scarce resources. Today, it is inextricably linked to climate change and how we both preserve our sensitive ecosystems and advance our resilience against abundant climate challenges. For Blaine County, sustainability means preserving our natural resources and limiting our carbon emissions in a manner that promotes thoughtful, equitable growth. The good news is that we aren't starting from scratch. In Blaine County, many leaders are already taking action to shore up our climate and sustainability challenges. To 'set the table' in this plan, we look at some of the actions already underway in the local community.

INDIVIDUAL ACTION

Elizabeth Jeffery—NGO leader:

Elizabeth Jeffery is a founder of the Climate Action Coalition of the Wood River Valley (CAC) and advocate for local level action.

In her own words:

"Important role models in my youth cemented an early commitment to environmental stewardship and continue to draw me into interesting work outside of my teaching career.

I spent a sabbatical year establishing a city-wide compost program for a Minneapolis suburb and, when I moved to Hailey, I helped with the Hailey Community Climate Challenge grant by managing 3 projects: developing contractor incentives for diverting construction waste from landfills, assisting a small group of families to take steps to cut their homes' carbon footprints, and developing outreach and education to reduce the use of single-use plastic bags. As my knowledge and awareness of the climate crisis grew, my husband and I continue to make small and large changes in our own lifestyle to address our personal carbon footprint.

After the 2018 Climate Report our climate anxiety continued to grow, and we felt there may be others with similar feelings. As there was nobody in the valley addressing climate change directly, we reached out to a couple of people who we felt would be equally interested in discussing the issues and opened up a public meeting for anyone interested in joining the conversation. This meeting drew 30 people and has led to the grassroots Climate Action Coalition of the Wood River Valley. We have grown to over 200 people and work to promote and support local climate action through education, marches, government and non-profit outreach and partnerships, volunteer opportunities, building our annual Earth Day Fest in the valley, and focused work on varying 6–9-month initiatives allowing our CAC membership to take leadership roles in promoting the varied personal and community steps to a more sustainable climate future.

Working together to address this existential threat has helped reduce our climate anxiety and allowed us to enjoy the work and our community as we make small steps forward."

INDIVIDUAL ACTION

Scott Runkel—Educator:

Scott Runkel is a science educator in the community who has helped countless children learn about conservation and science—many of whom have gone on to pursue additional education and careers in climate action.

In his own words:

"The phrase "shattering the luxury of ignorance" has always resonated with me. In my thirty-five years as a middle and high school science educator (thirty in the valley), I have seen how students react when they first learn about the environmental threats facing our planet and how current practices continue to jeopardize the water, air, climate, and food that we rely on. They quickly recognize the urgency and the need to change course as a society if we hope to live in balance with the ecosystems that support us.

Students have a clear-eyed way of understanding these problems and are much more willing to embrace new ideas, not encumbered by the burdens of a lifetime of experience.

In addition, adults listen to them; their voices carry significant weight, as they should since they are the ones inheriting these problems. They will be the decision-makers of the future, the executives of the future, the consumers of the future, and therefore we need them to understand the complexities and interconnectedness of life on a finite planet with finite resources. I know all too well the hopelessness and anxiety that this topic can bring with it. Because of this, I couple my teaching of environmental problems with teaching the solutions, and then I work with students to make changes at our school and in our community that help move towards the solutions.

Over the years, I have worked with students in middle and high school on numerous projects: they have organized a community climate march and a social media competition to encourage the use of reusable coffee mugs; they started a school-wide composting program and worked with Atkinsons' to promote fair trade products; they have built electric cars and a sustainably designed tiny house to support refugees in Twin Falls; they have conducted research studies on mercury and PFAS contamination in fish in the supermarket and our valley's reservoirs; they have restored sections of Trail Creek, increasing the setback from the river, reducing our school's coveted parking to improve the health of the riparian habitat; they have planted gardens and started a school farm-to-table lunch program. Through these projects and others, they were able to see that change is possible. None of these actions alone solve the vast problems our society faces; however, they do show students that with passion and commitment,

positive change happens. In addition, students learn through this work that their anxiety turns to hope, and with hard work change occurs. As they move into the world, they can take those successes with them and continue to dedicate themselves to being stewards of our planet."

INDIVIDUAL ACTION

Rebecca Bundy—design professional:

🔔 In her own words:

Since childhood, Rebecca's life philosophy has been to look for ways to live lightly on our planet. Today's climate change reality has made that outlook even more imperative. Rebecca's architecture studies and practice focused on design in response to a specific site: using indigenous materials, active and passive solar techniques, incorporating inherent climatic conditions into design decisions, and responsible, energy and resource efficient design while also addressing social concerns like supply of affordable housing. In addition to her architectural career, Rebecca served as a City Planner for both Ketchum and Hailey where she worked to enact more sustainable City practices, green building and energy efficiency codes, energy audits of City facilities, and wrote grant applications for sustainable projects. In her free time, she has been a member of the Ketchum Sustainability Advisory Committee since 2018, and, until recently, served on the AIA Idaho's advocacy committee.

While Rebecca feels that government needs to lead the way in order for us to make meaningful progress in tackling climate change, she also believes that individual action is necessary.

She has created a master plan towards reaching her personal sustainability goals and benchmarks her progress. In 2011, she and her partner commissioned an energy audit for their home. This audit yielded: adding insulation, caulking, sealing, replacing light bulbs with LEDs, replacing the refrigerator to a more efficient version, replacing windows/doors, replacing the hot water heater with a more efficient heat pump model, and adding solar panels to their roof. This has reduced her home's energy use by 40% since 2011. She also has plans to replace the existing 25-year-old furnace with a heat pump heating/cooling system when it gives up, and she is

saving for an electric vehicle to replace her well-worn, 22-year-old car. Rebecca minimizes/combines trips and utilizes non-vehicular modes of travel when possible. Of particular interest in her quest to live lightly is food. Rebecca is a vegetarian and primarily eats a plant-based diet. She grows and preserves much of her food and purchases from local farmers; and runs a neighborhood composting operation.

Private Sector and Non-Profit Action:

Many local businesses and Non-governmental Organizations (NGOs) are taking thoughtful climate action in their business practices. From actions as small as changing out lightbulbs to re-evaluating entire supply chains, there are many actions that local businesses can take to make progress on human-caused climate change. Blaine County's more than 300 local nonprofits are also diligently working in areas associated with or adjacent to climate action. We could not execute the full breadth of this plan without their contributions. We have highlighted some of these local actions below.

Sun Valley Company:

Building on the foundation of past projects and programs, Sun Valley Resort is leading a renewed focus on reducing the footprint of operations and collaborating with internal and external stakeholders to accelerate action on climate change. Sun Valley Resort is focusing on technical projects to reduce waste and energy consumption and incorporate responsible procurement practices. Sun Valley Resort is also committed to improving forest health and outdoors experiences on Bald Mountain and the Sawtooth National Recreation Area through the Bald Mountain Stewardship Project.

This fall, community volunteers will plant 3,000 trees within the 65-acre treatment area on Bald Mountain to improve species diversity.

Hempitecture:

Hempitecture is pioneering biobased building materials from right here in the Wood River Valley. Hempitecture's low carbon,

natural insulation products provide energy-efficient thermal and sound insulation. By using industrial hemp and other plant-based fibers, Hempitecture reduces its environmental impact and supports agricultural communities. Hempitecture's products are made in Jerome, Idaho with distribution nationwide.

Wood River Land Trust:

The new Community Planning program at the Wood River Land Trust builds local capacity to steward a livable future in Blaine County. Across sectors, the Land Trust will engage community members and partner organizations to share information and rollout solutions across five overlapping focus areas: habitat conservation, water availability, transportation mobility, community housing, and community ethos. Understanding the impacts that land-use decisions and community design have on our natural environment, the Land Trust is committed to playing a role in managing growth and protecting the beloved lands, waters, and quality of life in Blaine County.

The Hunger Coalition:

The Hunger Coalition builds a healthy community through access to good food and addresses the root causes of food insecurity in collaboration with key partners. Root causes of food insecurity range widely from cost of housing and childcare to access to equitable education. Root causes of food insecurity also include the lack of leaders from underrepresented communities at community planning, decision, and action-taking tables. The Hunger Coalition will work to engage the full diversity of our community members in these realms to support the success of climate action planning across our community.

Government Action:

Local governments in Blaine County have been hard at work addressing more sustainable approaches to operations. Most local units of government have upgraded their facilities with LED lighting, and many are working on insulation, windows, solar and fleet electrification efforts in the near term. Some examples are noted below:

Blaine County

- 2023 Greenhouse Gas (GHG) emissions inventory
- 2024 Climate Action Plan (CAP) creation and adoption
- Hiring of a new Sustainability Manager and Sustainability Fellow (2023)
- Smart Thermostat upgrades on county facilities through an Energy Efficiency Conservation Block Grant (2024)
- Installation of high efficiency mini split systems at the Blaine County Recycle Center (2023)
- High efficiency boiler upgrade at the Judicial Building (2024)
- LED lighting upgrades throughout county facilities (ongoing)

- Began fleet electrification through the purchase of the county's first EV through the state's Energy Efficiency Conservation Block Grant (EECBG-2024)
- Land Use and Building Services division is transitioning to paperless systems
- Updates to transfer of development rights (TDR) program
- Submittal of a Federal Emergency Management Agency (FEMA) scoping grant for construction of a Micro Grid in Blaine County
- Project lead and grant recipient of the Safe Streets for All (SS4A) Safety Action Planning initiative
- Supported the successful Solar for All grant application for Idaho
- Contributor to the Idaho Department of Environmental Quality's Gem State Air Quality Initiative (GSAQI)
- Coordination of Sustainability efforts between county, NGO and Cities
- Bicycle/pedestrian infrastructure evaluation and enhancements through Blaine County Bike/Ped Master Plan update
- Contributed investments towards Mountain Rides electric bus facility
- Regional coordination of elective pay rebates for county and municipal energy and EV projects

Ketchum

- Supports Blaine County Sustainability program through an MOU
- Supports the Ketchum Sustainability Advisory Committee (KSAC) and related initiatives
- Incorporating Sustainability into comprehensive planning efforts in 2024
- Addition of a Ford F-150 Lightening electric pickup in the Public Works division
- LEED Silver certification on the new Ketchum Fire station
- Plans to install solar on the new fire station
- Tree planting initiatives associated with upgrades to main street planning and creating a more walkable city
- 2023 GHG emissions inventory participant
- Participant in the Safe Streets for All (SS4A) Safety Action Planning initiative
- SolSmart member community
- Bicycle/pedestrian infrastructure eval and enhancements through the Blaine County Bike/Ped Master Plan update
- Contributed investments towards Mountain Rides electric bus facility
- Addition of a new cardboard recycling compactor (2024)

Hailey

- Recipient of EECBG funding to install rooftop solar panels on city hall
- Addition of a Ford F-150 Lightening electric pickup in the Public Works division

- Incorporating Sustainability into comprehensive planning efforts in 2024-5
- Addition of citywide composting drop off sites through Department of Environmental Quality (DEQ) grant
- 2023 GHG emissions inventory participant
- Participant in the Safe Streets for All (SS4A) Safety Action Planning initiative
- SolSmart member community
- Bicycle and pedestrian infrastructure evaluation and enhancements through the Blaine County Bike/Ped Master Plan update
- Contributed investments towards Mountain Rides electric bus facility
- Partner in community cardboard recycling compactor (River Street)

Bellevue

- Evaluation of transportation upgrades to facilitate more efficient throughput commerce and workforce on Highway 75
- 2023 GHG emissions inventory participant
- Participant in the Safe Streets for All (SS4A) Safety Action Planning initiative
- Bicycle and pedestrian infrastructure evaluation and enhancements through the Blaine County Bike/Ped Master Plan update

Carey

- Evaluation of transportation upgrades to facilitate more efficient throughput of commerce and workforce on Highways 20 and 26
- Participant in the Safe Streets for All (SS4A) Safety Action Planning initiative
- Bicycle and pedestrian infrastructure evaluation and enhancements through the Blaine County Bike/Ped Master Plan update

Sun Valley

- Evaluation of transportation upgrades to facilitate more efficient throughput commerce and workforce on Highway 75
- Participant in the Safe Streets for All (SS4A) Safety Action Planning initiative

- Bicycle and pedestrian infrastructure evaluation and enhancements through the Blaine County Bike/Ped Master Plan update
- Contributed investments towards Mountain Rides electric bus facility

1.3 How We Got Here + Community Engagement

The County Commissioners authorize the Blaine County Climate Action Plan (CAP), which aligns with Chapter 5: The Natural Environment: Resources, Hazard Area, and Conservation of the comprehensive plan and focuses on climate change mitigation. Comprehensive planning at the county level is authorized through the Local Land Use Planning Act (LLUPA)—to include local elements pertinent to governance like climate, geography and conservation—especially as they relate to land planning in Idaho.

Sustainability has been an important topic of discussion in Blaine County for more than 20 years. Initial policy and programming discussions surrounding wildfire mitigation and water conservation go back even farther. Comprehensive plans at the municipal and county levels include various elements of sustainability and climate action. However, there has not been a scalable, unified vision for climate action and sustainability in Blaine County to date. Until now.

"Climate adaptation planning and strategies will increase our resiliency. Blaine County recognizes that predicted changes in climate will impact the County in many ways. The Intermountain West may see changes in mountain snowpack levels, earlier and potentially higher spring runoff, increased wildfires, more insect damage in our forests and changes to crop-growing seasons. Planning for climate change is a challenge, and finding solutions to increasing resiliency is a priority."

The Ketchum Sustainability Advisory Committee (KSAC) was formed in 2018. That group established an initial sustainability action plan for Ketchum that was heavily focused on awareness and education, as well as upgrades to municipal facilities. Further efforts to create a county-based full-time department were successful, and in 2020 Blaine County hired its first Sustainability Manager. The City of Hailey also concurrently built in staff time for its community development and planning team to tackle climate action initiatives, based on the directives of the City Council and Mayor. Bellevue, Sun Valley and Carey have also regularly worked on transportation, land use and bike/ped efforts that aid in better outcomes for citizens and the environment.

Four distinct task forces were established in 2022: land & water conservation, land use & transportation; solid waste & the circular economy, and clean energy & green building. A platform for climate action was also formed in 2022: the Blaine County Climate Action Network (5B CAN). Over 100 community members were engaged at this time, and a vision started to come into focus that would elevate the climate action planning process. In October of 2022, these teams joined forces through a community-wide charette to better define their goals.

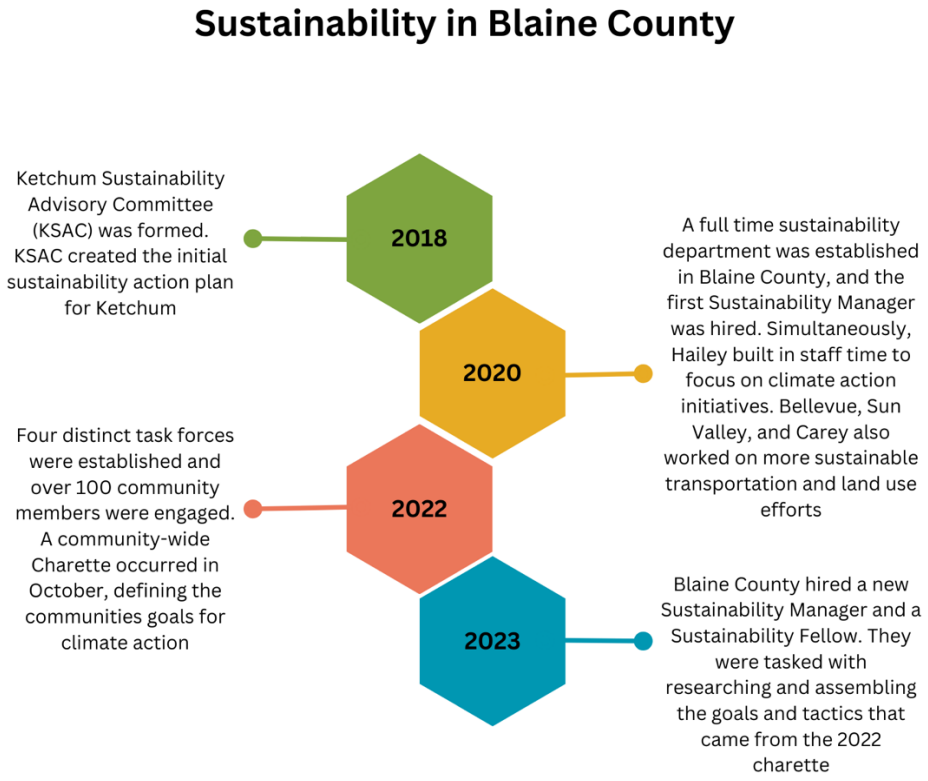
In the summer of 2023, Blaine County hired a new Sustainability Manager, tasked with assembling and researching the goals and tactics that came out of the 2022 charette. A Sustainability Fellow was also brought on to work on this important effort. The resulting document is below, as adopted. It serves as the North Star for Blaine County's climate action efficacy.

Regional Plan Integration/Alignment:

It is vital that this plan aligns with, to the extent possible, the Blaine County comprehensive plan and municipal comprehensive plans. As such, each of these plans we consulted periodically during the creation of this climate action plan. The Friedman Memorial Airport Climate Action Strategy, Brendle Group Clean Energy Study and numerous other local initiatives from both public and NGO partners were also evaluated as needed.

Local Plans Considered or Consulted:

Friedman Memorial Airport Climate Action Strategy[2]
Blaine County Comprehensive Plan[3]
Ketchum Sustainability Action Plan[4]
Ketchum Comprehensive Plan[5]
Hailey Comprehensive Plan[6]
Sun Valley Comprehensive Plan[7]
Bellevue Comprehensive Plan[8]
Carey Comprehensive Plan[9]
Brendle Group Clean Energy Study[10]



---

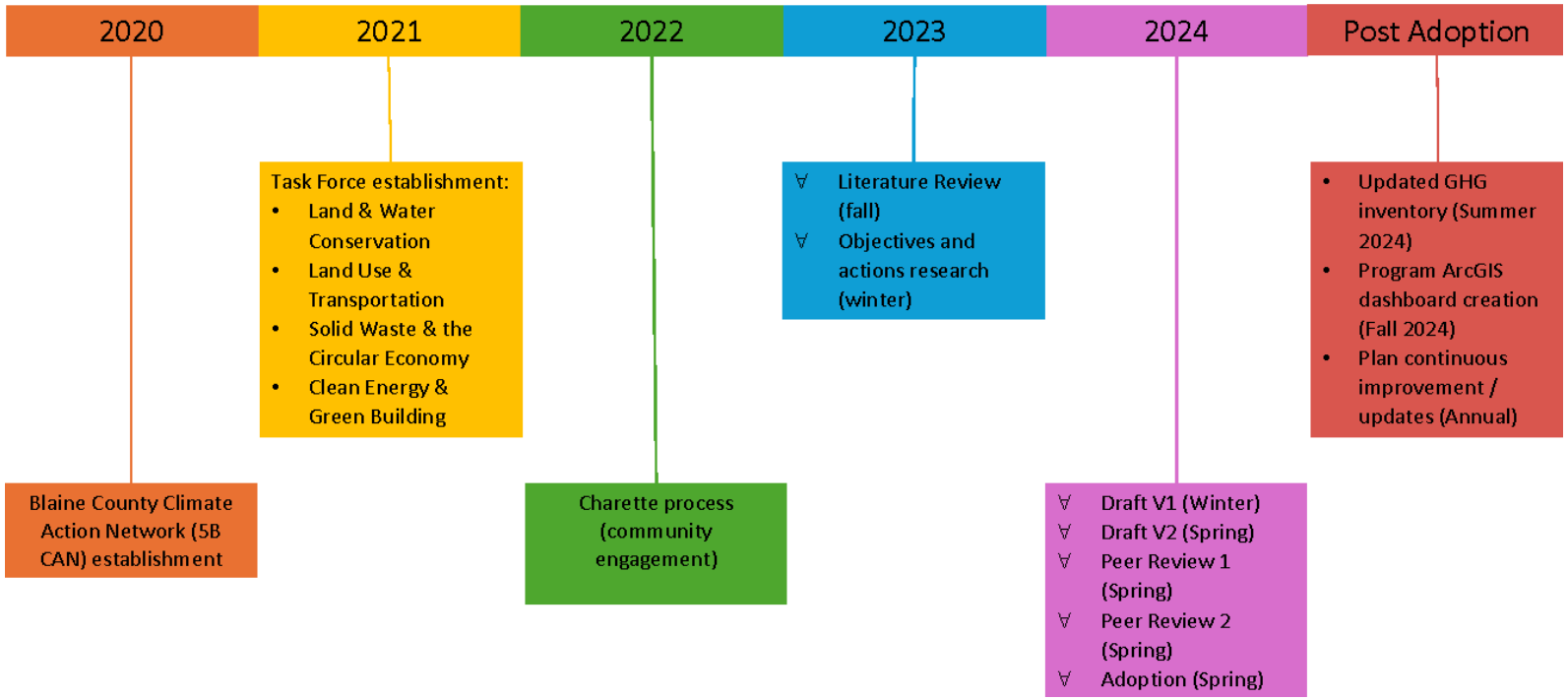
[2] Friedman Memorial Airport (SUN) Climate Action Strategy. 2022. SUN-Climate-Action-Strategy.pdf (iflysun.com)
[3] Blaine County Comprehensive Plan. 2021. Blaine County Comprehensive Plan | Blaine County, ID
[4] Ketchum Sustainability Action Plan. 2020. ketchum_sustainability_action_plan_2020_final.pdf (ketchumidaho.org)
[5] Ketchum Comprehensive Plan Comprehensive Plan | City of Ketchum Idaho
[6] Hailey Comprehensive Plan 2024 Comprehensive Plan Update | City of Hailey, ID (haileycityhall.org)
[7] Sun Valley Comprehensive Plan Sun Valley Comprehensive Plan - City of Sun Valley, ID (sunvalleyidaho.gov)
[8] Bellevue Comprehensive Plan City of Bellevue Comprehensive Plan - Bellevue, Idaho (bellevueidaho.us)
[9] Carey Comprehensive Plan PREFACE (cityofcarey.org)
[10] Brendle Group Clean Energy Study. 2022. Clean Energy | Blaine County, ID

1.4 Plan Methodology, Structure & Process:

This plan was created with a lens on the business concept of the triple bottom line, and specifically considers dynamic supply and demand factors, where appropriate.[11] Staff gathered data from internal and external sources and consulted international best practices for climate action plans. While the structure of this plan is unique to Blaine County, it incorporates various elements from plans created by similar communities.

[11] Miller, Kelsey. Harvard Business School. 2020. The Triple Bottom Line: What it is and Why it's Important The Triple Bottom Line: What It Is & Why It's Important (hbs.edu)

Blaine County Climate Action Plan Timeline



Important terms and plan structure/navigation:

Chapters 4 – 8 provide a deeper understanding of the action framework being used in this plan. These chapters are organized to account for the who, what, why, when. where and how of climate action in Blaine County:

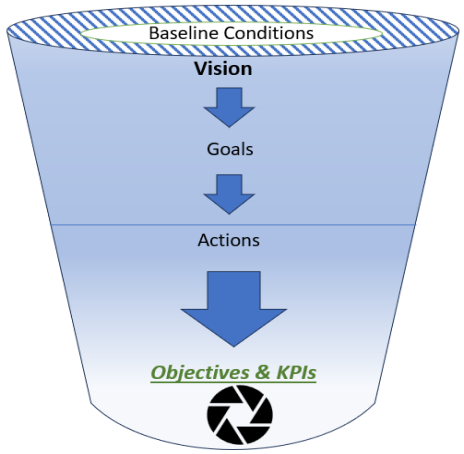
- Who, What & Why:
    - Vision: this is the big picture—what we envision for the future (direction)

- Overview: accounting of baseline conditions—illustrating topic relevance and structural insights including economic, environmental and social considerations as well as existing programming, partnerships and other relevant data
- Goals: purposeful outcomes we would like to see on our way to the broader vision

- When, Where & How:

  - Actions: the instruments through which we reach our objectives and achieve our objectives and vision
  - Objectives: specific, measurable, achievable, relevant, and time-bound outcomes (SMART)
  - KPIs: how we measure success/progress against baseline data

The strategic action funnel:



1.5 A Vision for a Sustainable Future

The vision of 5B CAN and the Blaine County Climate Action Plan at its core is:

A Blaine County that proactively mitigates its contributions to human caused climate change—ensuring clean air, clean water, emissions reductions, resilient and efficient public infrastructure, social equity, thoughtful growth, conservation, and waste reduction—while strategically preparing for new climate realities.

"Social Equity is the fair, just, and equitable management of all institutions serving the public directly or by contract, and the fair and equitable distribution of public services, and implementation of public policy, and the commitment to promote fairness, justice, and equity in the formation of public." [12]

We implement social equity as a metric to ensure that all residents in Blaine County, no matter their economic, racial, disability or geographic standing, can enjoy the benefits of the work contained within this plan.

Blaine County's residents, businesses and governmental entities can create a meaningful, measurable and visible impact on human caused climate change that accounts for behavioral (social), economic and environmental features—known as the triple bottom line. **Specific efforts in this plan have been further broken down into two well-defined buckets: mitigation and adaptation.** Mitigation efforts refer to actions that reduce greenhouse gas emissions and therefore help reduce the severity of climate change impacts. We focused adaptation efforts on how the county can be resilient in the face of climate change—with deference for the fact that the climate has already changed and will continue to change[13]. It is important that these actions help ensure the cultural, economic, and environmental longevity of the Wood River Valley despite these changes. To our benefit, many actions can achieve both adaptation and mitigation goals simultaneously. For example: regenerative agriculture and climate smart practices can both reduce the demand for water, creating resilience in the face of climate-induced water scarcity, as well as increase carbon sequestration, mitigating agriculture related emissions.[14]

---

[12] American Society for Public Administration. (n.d.). *What Is Social Equity? Diversity? Equity? Inclusion? Accessibility?*. American Society for Public Administration. https://www.aspanet.org/ASPA/ASPA/About-ASPA/Social-Equity-Center/Definitions.aspx

[13] NOAA Climate Change Monitor Climate Change: Global Temperature | NOAA Climate.gov

[14] Jay, A. K., Crimmins, A. R., Avery, C. W., Dahl, T. A., Dodder, R. S., Hamlington, B. D., Lustig, A., Marvel, K., Méndez-Lazaro, P. A., Osler, M. S., Terando, A., Weeks, E. S., & Zycherman, A. (2023). Overview: Understanding risks, impacts, and responses. In A. R. Crimmins, C. W. Avery, D. R. Easterling, K. E. Kunkel, B. C. Stewart, & T. K. Maycock (Eds.), *Fifth National Climate Assessment*. U.S. Global Change Research Program. https://doi.org/10.7930/NCA5.2023.CH1

Mitigation refers to reducing our greenhouse gas emissions and therefore reducing our contribution to climate change.

Adaptation refers to amending our daily practices and preparing our infrastructure (social, economic and environmental) to ensure our community's long-term resilience.

This wholistic orientation allows us to approach a historically 'environment-only' topic from a broader perspective, with the intention of building an inclusive climate action community and creating net-positive outcomes for all community members. This expanded method also better aligns Blaine County's internal resources with external funding opportunities associated with the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA)—most notably the community benefit planning requirements and Justice 40 metrics (see Appendix A).

In sum, this work has brought us to a point where we can better align efforts between the County, municipal entities, the state of Idaho, federal agencies/programs, the community and our local and regional non-profit and foundation partners.

1.6 Task Force Acknowledgement

A diverse group of passionate community members with a wide range of technical expertise leads the 5B CAN climate action network and its subcommittees. Engineers, planners, non-profit leaders, business leaders, farmers, elected officials, Hispanic community members, and county residents have all been invaluable in the climate action planning process. This Climate Action Plan was created largely by members of the communities within Blaine County. To capture the intentions of the people who live in Blaine County, the organizers shepherded a significant public engagement process. The plan authors, listed below, merely took these inputs, performed a literature review and evaluation of best practices, and assembled objectives and actions based on research and guidance from the community:

Plan assembly and research team:

Andrew Mentzer, MPA
Blaine County Sustainability Manager

Eve Preucil
Blaine County Sustainability Fellow

Task force chairs:

Mark Davidson & Amy Mattias
Land & Conservation

Emily Rodrigue, Scott Boetger, Cece Osborn, Amber Perkes
Land Use & Transportation

Elizabeth Jeffery & Emily Williams
Solid Waste & the Circular Economy

Scott Runkel & Scott Lewis
Clean Energy & Green Building

Task Force Members:

Use & Transportation		Land & Water Conservation	
Emily Rodrigue	Kim MacPherson	Amy Mattias	Emily Williams
Scott Boettger	Wally Morgus	Mark Davidson	Reide Whitehead
Amber Perkes	Zoe Ann Olsen	Brett Stevenson	Herbert Romero
Shawn Benion	David Patrie	Chris Johnson	Jen Smith
Brandi Hennefer	Chris Pomeroy	Erika Phillips	Jeurg Stauffacher
Andrew Young	Ryan Redman—Flourish Foundation	Josh Johnson	Lynea Newcomer
Dan Coonce	Brad Rolf	Kaz Thea	Cory McCaffery
Paige Nied	Herbert Romero	Rachel Martin	Neil Crescenti
Brittany Skelton	Ashley Dyer	Nicholas Purdy	Ed Zinader
Heidi Goedhart	Betsy Mizel	Scott Friedman	Mike Higgs
Scott Fortner	Mark Davidson	Wendy Pabich	Kathleen Bean
Scott Friedman	Cece Osborn	Mike McKenna	Grant Loomis
Harry Griffith	Ken Kanowick	Muffy Davis	Lance Davisson
Lisa Horowitz	Sarah Michael	Keri York	Sheila Plowman
Wendy Jaquet	Angenie McCleary	Briana Swette	
Becky Lopez	Ben Whipple	Chris Corwin	
		Dan Ratliffe	

Solid Waste and Circular Economy		Clean Energy and Green Building	
Nate Francisco	Cody Michal	Scott Runkel	Wendolyn Holland
Elizabeth Jeffery	Lynea Newcomer	Scott Lewis	Ben Varner
Emily Williams	Craig Barry	Jeff Giese	Courtney Hamilton
Lindsay Mollinaeux	Winn Weaver	Amber Perkes	
Nicole Lichtenberg	Ben Whipple	Mitch Norton	
	Hannah Harris		

1.7 Guiding Principles: Equity, Efficacy, Outcomes

Equity, Efficacy, and Outcomes are the guiding principles behind this plan. These three foundations serve as the

backbone of the planning process to ensure that the final product contains real action and objectives that create impactful change for the entire community.

Equity: **Climate solutions must be equitable; we recognize the disproportionate impact of climate change on historically underserved communities**. In this regard, we define social equity as ensuring all residents in Blaine County, no matter their economic, racial, disability or geographic standing, can enjoy the benefits of the work contained within this plan. We are committed to taking additional, proactive measures to engage with the BIPOC community as well, to ensure all voices are heard and opportunities are accessible to all. By prioritizing equity, the plan aims to ensure that the burdens and benefits of climate action are distributed fairly, addressing disparities and fostering inclusivity.

Efficacy: The focus on efficacy is to ensure that the goals and actions included are accomplished in the most pragmatic and impactful manner possible. They must also be grounded in realistic administrative and resource channels. As a governmental entity, every dollar of spending counts. We want to ensure that members of the community support the changes that their tax dollars are going towards, while aligning with statutory and legal requirements. Objectives and actions need to be attainable, thoughtfully prioritized and have corresponding resources, otherwise they will fall into purely aspirational spaces. We hope to avoid this by ensuring we have the partnerships and resources to achieve real action.

Outcomes: Results matter and we created this plan to "keep it off the shelf." By consistently referring to our baseline data and key performance indicators we will create logical, measurable, and realistic goals, actions and objectives, so we can track real progress.

Note: Governance and authority elements need to be further evaluated before any action in this plan with a regulatory component can be fully implemented. Any action items undertaken by Blaine County staff should be done in concert with guidance from both the Blaine County Board of Commissioners and Blaine County legal counsel to ensure compliance with state and local statute. Should any element, objective or action within this plan come into conflict with statute, or be advised against otherwise by legal counsel, adaptations may be made on an as-needed basis.

1.8 Local Climate Impacts:

Have you noticed any changes to the climate? Perhaps you noticed a shorter ski or fishing season. Or, that a mountain by your house has melted off quicker than normal. Or it never got much snow in the first place. Blaine County has already experienced the impacts of climate change and will continue to do so. Idaho's average annual temperature has increased by almost 2°F, on

track with global temperature changes[15,16]. Higher temperatures are one metric of climate change that have myriad day-to-day impacts. These include changes in precipitation patterns and extreme weather events. The mountains of southern Idaho, which Blaine County is a part of and draws its water from, have already seen significant changes in precipitation. They see between 40-70 days where temperatures hover around freezing. It is during these temperatures that 30%-60% of the largest storms occur. An increase in temperature by just two degrees could see the precipitation from those storms falling as rain, rather than snow[17].

Indeed, since 1950, there has been an increase in the percentage of precipitation falling as rain rather than snow, by 10-15% in some areas. This change will raise the snow line—the average lowest elevation at which the snow falls[18]. This has important implications for water storage and water use planning. Snow acts as water storage, slowly releasing the water into the streams and reservoirs as it melts in the spring and summer. With the increase in average annual temperatures there are increases in spring temperatures. This results in an earlier and often shorter snowmelt season. This pattern has strong links to increased summer drought as well as wildfires[19]. Winter and spring precipitation is projected to increase, while summer and fall precipitation is projected to stay the same or decrease. And, as mentioned above, that increased precipitation will likely fall as rain, rather than snow. Extreme precipitation events are projected to become more frequent, increasing the risk of flooding. On top of that, even if total precipitation increases, summer droughts will likely become more intense[20]. Climate change can cause drought by reducing summer water supply while simultaneously increasing water demand. Water demand increases from higher rates of evaporation and evapotranspiration in higher temperatures. High temperatures also increase the rate of soil moisture loss during dry spells, and a reduced snowpack also decreases soil moisture.

The spring and summer drought of 2021 is an example of how climate change may impact the way water supply and needs evolve here in Blaine County. Average winter snow levels preceded the spring of 2021. Water planners therefore planned for an average water year. But low spring precipitation coupled with high spring and summer temperatures caught them off guard. This led to one of the most extreme droughts in Blaine County on record. Big Wood Canal Co. operates Magic Reservoir and

---

15 Abatzoglou, John T, Adrienne M Marshall, and Grant L Harley. "Observed and Projected Changes in Idaho's Climate," n.d.

16 Runkle, J., K.E. Kunkel, R. Frankson, S.M. Champion, L.E. Stevens, and J. Abatzoglou, 2022: Idaho State Climate Summary 2022. NOAA Technical Report NESDIS 150-ID. NOAA/NESDIS, Silver Spring, MD, 4 pp.

17 Bales, R. C., Molotch, N. P., Painter, T. H., Dettinger, M. D., Rice, R., & Dozier, J. (2006). Mountain hydrology of the western United States. *Water Resources Research*, *42*(8). https://doi.org/10.1029/2005WR004387

18 Runkle, J., K.E. Kunkel, R. Frankson, S.M. Champion, L.E. Stevens, and J. Abatzoglou, 2022: Idaho State Climate Summary 2022. NOAA Technical Report NESDIS 150-ID. NOAA/NESDIS, Silver Spring, MD, 4 pp.

19 Kunkel, Melvin, and J. Pierce. "Reconstructing Snowmelt in Idaho's Watershed Using Historic Streamflow Records." *Climatic Change* 98 (September 1, 2010): 155–76. https://doi.org/10.1007/s10584-009-9651-x.

20 Runkle, J., K.E. Kunkel, R. Frankson, S.M. Champion, L.E. Stevens, and J. Abatzoglou, 2022: Idaho State Climate Summary 2022. NOAA Technical Report NESDIS 150-ID. NOAA/NESDIS, Silver Spring, MD, 4 pp.

delivers irrigation water to downstream users. In June, low reservoir levels forced them to shut off water deliveries three months earlier than the typical time in September.[21] While 2021 was not a significant fire year for Blaine County, droughts do generally increase the frequency and severity of wildfire potential.

The impacts of climate change vary globally, and adaptation measures must be as locally specific as the effects are. The Intergovernmental Panel on Climate Change (IPCC) has modeled several different pathways of warming, based on a spectrum of political and economic activity. RCP 4.5 is the "moderate to high action" scenario and predicts Idaho's average temperature to increase 6°F by 2100.[22]

Even under a low emissions scenario, annual average temperatures are expected to exceed historical records within the century. Several studies have researched the impact of climate change on winter activities such as skiing and snowmobiling. Since recreation is a major aspect of Blaine County's economy, these impacts are essential to consider. Wobus et al. studied the impacts on Idaho specifically; they found that under RCP4.5, increased temperatures reduced the snowpack and limited the ability of snowmaking to provide adequate snow. This is projected to shorten Bald Mountain's ski season by 17 days by 2050, and 34 days by 2090. Accounting for population growth to increase recreation, they estimated that this could cause a loss of over $35 million in the state of Idaho.

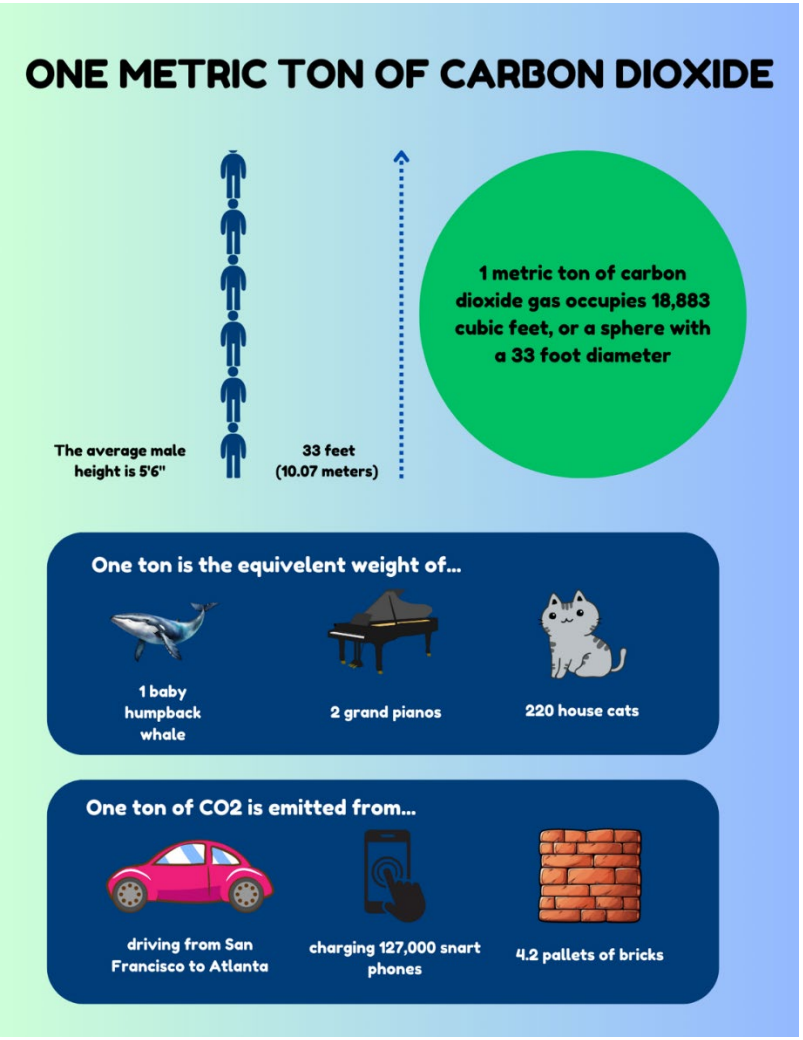
Scientists agree that anthropogenic greenhouse gas emissions are the primary driver of climate change.[23] As we release more greenhouse gases into the atmosphere, the impacts of climate change will continue to intensify. The social cost of carbon refers to the financial impact of the burden of climate change. Crop losses due to drought, high electricity bills, illness, or death from extreme heat are all examples of the burden of climate change. With every ton of carbon, we prevent from being released into the atmosphere, we are preventing those consequences. There have been calls to action across the globe, with governments committing to reducing emissions and a just energy transition. The Blaine County Climate Action Plan provides a roadmap that shows how we can help reduce emissions globally while protecting our way of life and the longevity of our industries.

---

[21] Rinaldi, N. (2022, January 14). *The 2021 water year: Anything but normal*. Protect The Source. https://protectthesource.org/2021/10/12/the-2021-water-year-anything-but-normal/

[22] Wobus, C., Small, E. E., Hosterman, H., Mills, D., Stein, J., Rissing, M., Jones, R., Duckworth, M., Hall, R., Kolian, M., Creason, J., & Martinich, J. (2017). Projected climate change impacts on skiing and snowmobiling: A case study of the United States. *Global Environmental Change*, *45*, 1–14. https://doi.org/10.1016/j.gloenvcha.2017.04.006

[23] IPCC, 2023: Summary for Policymakers. In: *Climate Change 2023: Synthesis Report.*Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001



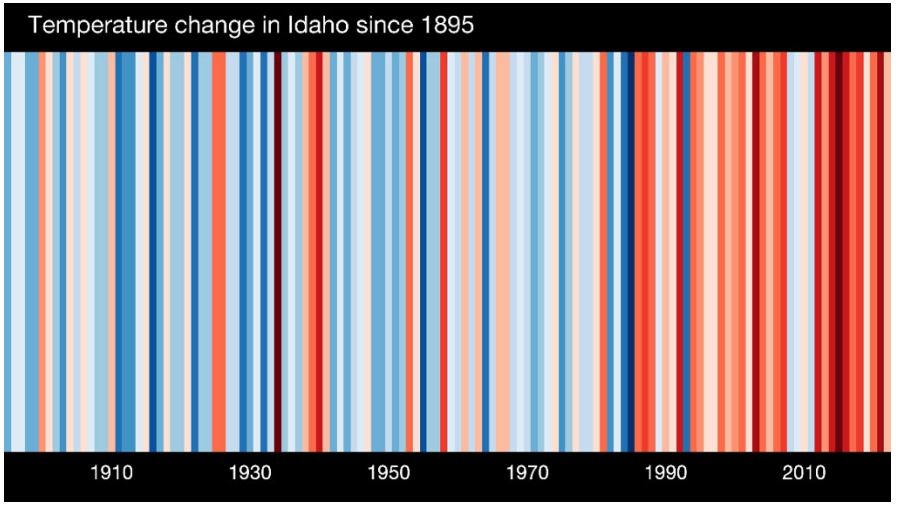


Figure 1: Temperature change in Idaho [24]

[24] Hawkins, E. (n.d.). *Show your stripes*. #ShowYourStripes. https://showyourstripes.info/l/northamerica/unitedstatesofamerica/all/

Figure 1 shows how the temperature has changed in Idaho for 100 years. The blue stripes represent a temperature cooler than the 100-year average, and the red stripes represent temperature warmer than the 100-year average. You can see that through time, the average temperature is increasing.

To achieve meaningful outputs for Blaine County's Climate Action plan, we first need to understand where we currently are in the broader sustainability discussion. Blaine County has several economic factors that make sustainability difficult:

- Second home proliferation that burdens our energy consumption metrics (many of which sit vacant much of the year)
- Housing inequities that require a significant portion of our labor force to commute from longer than typical distances
- Transportation considerations associated with the above-mentioned housing metrics
- Economic disparity stemming from an economy with a significant amount of seasonal jobs
- Geographic remoteness with lack of access to major shipping and transit routes resulting in increased vehicle and/or air miles traveled for residents to access basic goods (supply chain)

Even so, there is a lot we can do as a community to become more climate resilient, more equitable, more thoughtfully planned/developed and less wasteful—all while reducing our greenhouse gas emissions and lowering the cost of living for residents. This is our 'why' when it comes to climate action**. If we can create a more equitable and resilient community, we will have succeeded not only in our climate action goals, but also in making Blaine County one of the best places to live in the United States.**

1.9 Climate Action Strengths, Weaknesses, Opportunities, and Threats (SWOT):

We conducted a condensed Strength, Weaknesses, Opportunities, and Threats (SWOT) analysis in order to explore what our best levels are related to effective climate action. The strengths represent characteristics of Blaine County that foster effective action. Opportunities listed include national, regional, and local initiatives that we may capitalize on. Weaknesses are characteristics of Blaine County that may make it difficult to achieve long-term action. Threats are characteristics of Blaine County that require immediate and thoughtful attention.

Strengths:	Opportunities:
1. 345 non-profits in the county to facilitate programming and partnerships[25] 2. Well-coordinated government partners 3. Significant financial resources from both community members and tax base 4. Favorable local politics 5. Notably useful baseline data 6. A significant amount of land within the county is public land, acting as a large carbon sink and is protected from development	1. Bipartisan Infrastructure Law (BIL) funding 2. Inflation Reduction Act rebates and tax incentives 3. Expanded partnerships across county and municipal boundaries (scale) 4. Local / regional foundation grant opportunities
Weaknesses:	**Threats:**
1. Communication and accountability between and among partners (governance) could be improved 2. Large and dynamic geographic size/type 3. Talent development and retention in key sectors (trades, design, etc.)	1. Wildfire danger and associated insurance challenges 2. Flood danger and associated insurance challenges 3. Air quality issues associated with pollution wildfire, smoke 4. Housing inequality and access 5. Transportation / transit inequality and access 6. Cost of living increases can limit short term adoption of clean technologies 7. Second home proliferation 8. Limiting policies and statutes

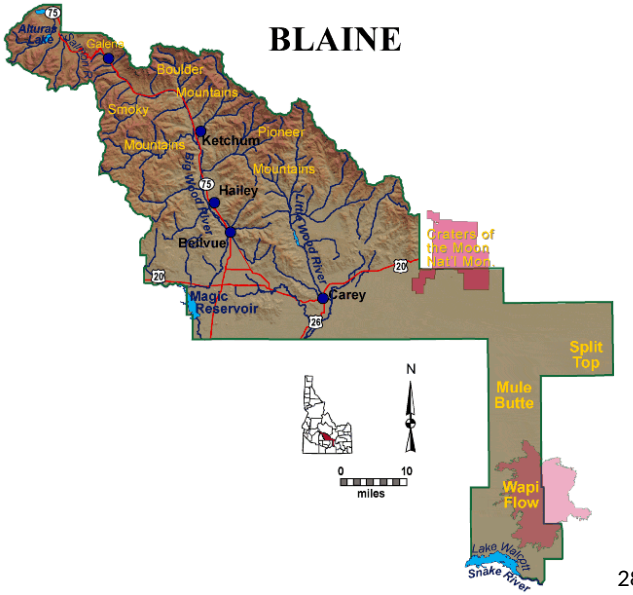
[25] Guidestar.org. Blaine County Non-Profit Search. 12/12/2023. Nonprofit data for donors, grantmakers, and businesses | GuideStar | Candid

2.3 Community Profile

Blaine County's unique environmental, social and economic factors require careful consideration of how we prioritize mitigation and adaptation actions. As a mountain community with dynamic base industry, visitor, fire and flood metrics, a careful balance must be struck that allocates resources correctly while leveraging partnerships effectively. Some of the guiding indicators for making these types of decisions include population, geography, and economic/political factors.

2.3.1 Population:

The vast majority of Blaine County's 24,866 residents (2022) live in the western part of the county off Highways 75, 20 and 26, near the Big Wood River and Silver Creek drainages[27].



28

[27]University of Idaho Extension. (n.d.). *Indicators Idaho*. Indicators idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16013

[28] Idaho State University. (n.d.). *Blaine*. Blaine County. https://digitalatlas.cose.isu.edu/counties/blaine/blaine.htm

Within the county, the population breaks down as follows:

- 19.9% under age 18
- 59.1% age 18-64
- 21% age 65+

94.2% of the population identifies as white, including Hispanic and Latino white, while 23.7% identifies as Hispanic or Latino. There is one federally designated Disadvantaged Community (DAC) in Blaine County, straddling parts of Hailey and Bellevue. This community qualifies as a DAC due to low-income and lack of high school diploma rates.[29]

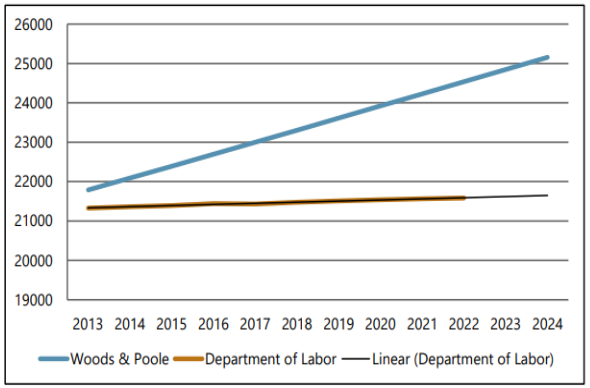
For the purposes of this report, we have used census data to determine the population metrics. We recognize that census data does not capture all residents in a community, most notably working-class residents who are not citizens.

In 2014, Blaine County commissioned a population study from Woods and Poole that correctly **indicated the population of the county would outpace the population growth rate of the United States**. Should this trend continue, pressures on local infrastructure and the environment will need to be carefully considered, especially from the perspective of regionalization and community design.[30]

[29] U.S. Environmental Protection Agency (EPA), 2017. EJScreen Technical Documentation. https://ejscreen.epa.gov/mapper/

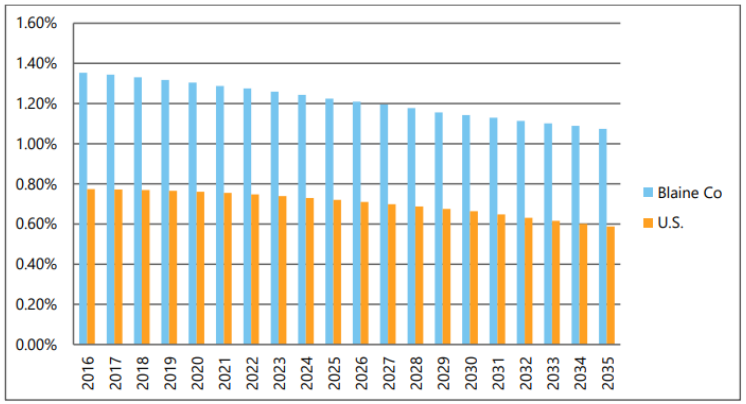
[30] Woods & Poole Economics: Chp-0-Community-Profile (blaine.id.us)

Chart 3: Total Blaine County Population Projections to 2024



Sources: Woods & Poole Economics, Inc., and QCEW Employees - EMSI 2014.2 Class of Worker

Chart 4: Projected Rate of Population Growth



Source: Woods & Poole Economics, Inc.

2.3.2 Geography:

Blaine County (2,661 square miles in size) consists of sagebrush steppe in the southern part of the county, with rugged mountains and alpine forests in the north. The county's elevation profile ranges from agriculture-friendly lowlands in the south (2,887 ft.)—with 203 active farming operations (2022)—to nearly 12,000 ft. in high alpine environments—supporting one of the more robust recreation tourism economic bases in the Western United States. The county is serviced by Highways 75, 20, 93 and 26.

2.3.3 Political/Economic:

Above average household income in Blaine County, transient recreation tourism metrics and a significant proliferation of second homes and vacation rentals drive many of the climate outcomes and political orientations of the region. Despite the above-average household income, many households are still experiencing housing and food insecurity. In 2022, 34% of households in Blaine County are Asset Limited-Income Constrained-Employed (ALICE) households, and 6% were living in poverty. ALICE households earn more income than the federal poverty designation, but still not enough to afford the basic cost of living. ALICE households in Blaine County can be making $75,000 per year for a family of four and still living paycheck-

to-paycheck because of the high cost of living.[31, 32]

Additional quick facts:[33]

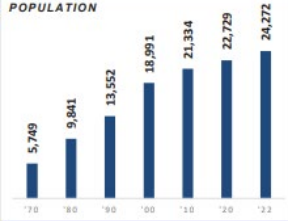
[31] City of Ketchum. (n.d.). *The hunger coalition joins forces with Ketchum Housing Action Plan*. Ketchum Idaho. https://www.ketchumidaho.org/administration/page/hunger-coalition-joins-forces-ketchum-housing-action-plan

[32] *Research Center-Idaho*. UnitedForALICE. (n.d.). https://www.unitedforalice.org/county-reports/idaho

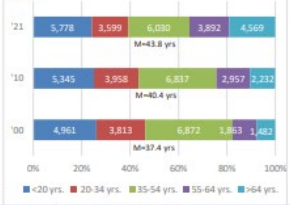
[33] SVED Annual Economic Profiles (2022) https://sunvalleyeconomy.com/profiles/

COUNTY DEMOGRAPHICS

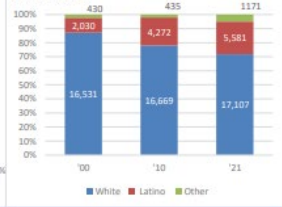
POPULATION



AGE

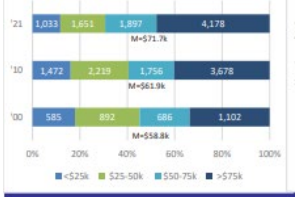


Race/Ethnicity

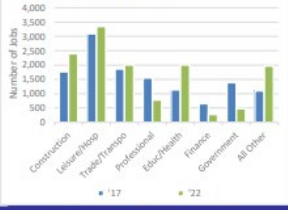


COUNTY EMPLOYMENT & INCOME

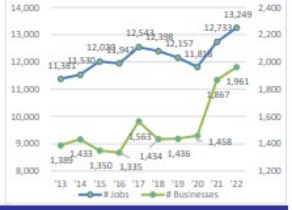
HOUSEHOLD INCOME DISTRIBUTION



JOBS BY INDUSTRY SECTOR

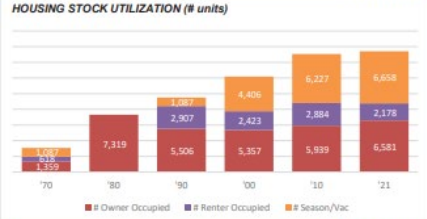


NUMBER JOBS AND BUSINESSES



COUNTY HOUSING STOCK

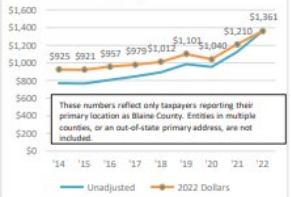
HOUSING STOCK UTILIZATION (# units)



RESIDENTIAL UNIT PRICE ($000s)

COUNTY BUSINESS ACTIVITY

REPORTED SALES ($M)



REPORTED WAGES ($M)

NON-EMPLOYER STATS ($M & #)

For additional information, visit www.sunvalleyeconomy.org

COUNTY RESIDENTIAL ACTIVITY

RESIDENTIAL BUILDING PERMITS ($000)

RESIDENTIAL SALES TRANSACTIONS ($000)

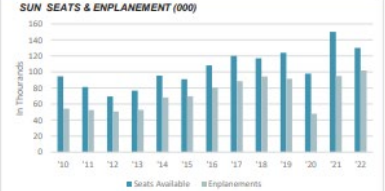
COUNTY COMMERCIAL ACTIVITY

COMMERCIAL BUILDING PERMITS ($000)

COMMERCIAL SALES TRANSACTIONS ($000)

COUNTY TOURISM MEASURES

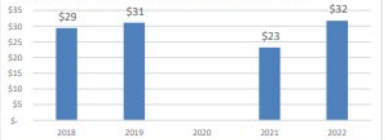
SUN SEATS & ENPLANEMENT (000)



ROOM NIGHTS SOLD & OCCUPANCY RATE

COUNTY GOVERNMENT EXPENDITURES

BLAINE CO. GOVERNMENT EXPENDITURES ($M)



BLAINE CO. GOVERNMENT CAPEX ($M)

OTHER STATISTICS

RELATIVE COMPARISIONS:	Blaine	Idaho	U.S.
Unemployment Rate (%)	2.5%	2.8%	3.5%
School Spending ($000/pupil)	$18.30	$8.30	$14.30
Graduation Rates (%)	86%	82%	86%
Bachelors Degree or Higher (%)	42%	31%	38%
Population Density (per mile²)	9	22	94
Travel time to work (minutes)	18	22	28
Home Electrical Rates ($/kWh)	$0.08	$0.08	$0.16
Serious Crime (per 100k)	2.5%	2.4%	N/A
Per Capita Income ('21, $000)	$134.70	$52.30	$64.10

OTHER COUNTY DATA:	2022	2021	2020	2019	2018
Unemployment	2.5%	3.5%	8.0%	2.6%	2.8%
Serious Crime (per 100k)	2.5%	1.9%	1.8%	2.1%	2.0%

Large Employers:

1. Sun Valley Co.
2. Blaine County School District
3. St. Lukes Wood River
4. Atkinsons
5. Power Engineers

For additional information, visit www.sunvalleyeconomy.org

planning staff responsible for Sustainability efforts. These team members work regularly with Blaine County staff on collaborative initiatives and have a standing sustainability-focused monthly meeting. Bellevue, Carey, and Sun Valley are regularly engaged on Sustainability initiatives related to transportation and land use.

3.1.3 NGO/Non-Profit:

345 non-profit organizations exist in Blaine County, many of which have a focus on climate action and/or sustainability. These organizations perform notable work alongside industry and government to enhance efforts across the region. Specific areas of influence include:

- Regenerative agriculture and local food systems
- Flora, fauna, and watershed health
- Ecosystem management
- Trails and pedestrian infrastructure
- Forestry and wildfire management/mitigation
- Climate action
- Community health
- Recycling and circularity

The breadth of work these organizations achieve is incredible, and by working together to implement climate action we can accomplish far more than by working in silos.

3.1.4 Private Sector:

As noted in chapter 1, many businesses, small and large, have established climate action frameworks and green initiatives in recent years. **Given the region's recreation tourism offerings, an emerging trend towards snowpack preservation is central in many of these efforts—making an economic argument for sustainability programming in the private sector.** There are also private entities making a profit on value-added sustainability businesses, including local composting, waste reduction and reuse programming. Having the voice of businesses inform the creation of this plan provided an essential perspective.

3.1.5 Individual Action:

This plan is intended to serve as a framework to be adopted at scale, but it will only succeed with community support. Many tactics exist to encourage more individuals to act on their own, be it through home energy efficiency upgrades, utilizing public transit and carpooling options, recycling rather than wasting, or supporting local food growers. A helpful starting point for individual action is by utilizing tools such as the Nature Conservancy's GHG calculator and then taking actions to reduce your own footprint[34].

3.1.6 What's Needed:

Despite all the great work already underway in Blaine County by public, private and non-profit entities, a central point of coordination with communication and operational structures has yet to be fully operationalized. This plan recommends, through 5B CAN, the creation of a regular meeting structure that will be implementation-focused and highly collaborative. This structure will bring together 5B CAN quarterly to evaluate benchmarks and advance climate action initiatives on a regional basis, while tracking progress and return on investment annually. Specific deliverables could include project management and program development, writing letters of support for grants, sharing of scalable ideas for strategic integration and pulling together volunteers for local efforts like event coordination, volunteer days at the Recycle Center, and stakeholder engagement. This environment is intended to be highly supportive and focused—with a keen eye on priority areas.

Governance: The Blaine County Board of Commissioners (BOCC), City leadership and staff will guide the execution of the initiatives under Blaine County's purview and ensure compliance with local comprehensive planning and legal requirements, however the structure is intended to be data-driven and facilitative for all members. Regarding Blaine County's specific initiatives, the BOCC will make final/formal determinations, consistent with their charter.

[34] TNC Individual GHG Calculator. https://www.nature.org/en-us/get-involved/how-to-help/carbon-footprint-calculator/

4.2 Vision:

A Blaine County that thoughtfully uses land and protects access to scarce resources such as fertile soil and water in the most climate-smart and equitable manner possible. This should allow agriculture and recreation to flourish for generations to come while preserving ecosystem structure and function.

Prioritizing healthy soils and sustainable water use is critical to maintaining and improving our natural systems and wellbeing. Doing so will also improve access to healthy foods while encouraging growth in our local economy. The community has broken down this line of effort into three key categories: land, water, and habitat conservation. The land conservation objectives focus on soil restoration and access to healthy, locally raised food. The water conservation objectives are centered on ensuring sustainable access to clean water, even as climate change impacts water scarcity. They aim to preserve and enhance water quality and aquatic ecosystems while balancing the competing needs of natural and human systems. Finally, the habitat conservation goals were created to preserve the precious wild spaces of our landscape, providing essential habitat to wildlife, and functioning as natural carbon sinks.

4.3 Overview

4.3.1 Land Conservation Overview

81% of land in Blaine County is publicly owned and operated by federal and state entities. Public land is an asset to the community, providing natural beauty, areas to recreate, grazing land, wildlife habitat, and carbon sinks that help clean our air and water. Because much of the private land in the valley is uniquely situated adjacent to public land, development poses significant risks to habitats, and ecosystem health directly impacts private land. A significant percentage of Blaine County also lies in the wildland-urban interface (WUI), an area that is especially vulnerable to wildfire threats. Agriculture makes up 58% of private land in Blaine County, with over 80,000 acres preserved through conservation easements. This provides a unique opportunity to implement soil-based climate solutions while improving access to healthy, local food[39]. Organizations such as the Sun Valley Institute for Resilience, the Hunger Coalition, and the Wood River Farmer's Market are dedicated to improving access to healthy, locally grown food.

[39] United States Department of Agriculture. (2018). *Census of Agriculture*. USDA. https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Idaho/

Soils, and ecosystems in general, can be important carbon sinks, sequestering carbon from the atmosphere via plant uptake and storage. Healthy, resilient soils retain more nutrients and water, reducing water demand while improving the nutrient content of the produce[40]. Agricultural practices and landscaping choices play an important role in determining whether soils are carbon sources or sinks. Extensive tilling churns up the ground, releasing carbon that is being stored in the soil into the atmosphere. Regenerative and climate smart farming practices have been proven to restore soil health and often require less machinery. Practices such as no-till, cover cropping, and rotational grazing can not only prevent the release of soil carbon into the atmosphere but encourage more efficient carbon capture from the air for storage below ground. Additionally, healthy, resilient, carbon-capturing soils tend to be able to hold more water, which reduces their overall water demand. Reducing the demand of water from agricultural practices will become an increasingly important adaptation measure as climate-induced water scarcity continues to exacerbate water shortages in our arid climate.

Globally, food transport accounts for nearly 20% of emissions from agriculture[41]. By prioritizing locally grown food, we can reduce agriculture-related emissions while prioritizing our local economy rather than spending our dollars elsewhere. Similarly, it is also our responsibility to maintain private non-agricultural land in a thoughtful and sustainable manner. Fertilizer, pesticide, and herbicide runoff from both agricultural land and non-agricultural land damages natural ecosystems and prevents them from functioning at their natural capacity. Excess nitrate from fertilizer runoff has been shown to cause "dead zones", or anoxic aquatic areas with insufficient oxygen to maintain fish populations.[42] It is important to think about how landscaping selections in private lawns and beyond impact the ecosystems located around our valley, from both a water use standpoint as well as from the lens of pollinators, soil health, carbon sequestration, and native ecosystems.

4.3.2 Water Conservation Overview

Water in the Wood River Valley is fed by three main rivers: Big Wood River, Little Wood River, and Silver Creek. These rivers and the entirety of Blaine County are part of the Snake River Watershed, which in turn is part of the larger Columbia River Watershed. While the Big and Little Wood rivers are primarily fed by snowmelt, Silver Creek in the Southern part of the county is fed by upwelling groundwater. Groundwater comes from two aquifers: the northern part of the county is above a valley-fed, unconsolidated aquifer while the southern part of the county is above the Snake River Plain Aquifer, a massive, consolidated aquifer that underlays much of Southern Idaho. The largest water use in the county is by agriculture, with over

---

[40] Montgomery, D. R., Biklé, A., Archuleta, R., Brown, P., & Jordan, J. (2022). Soil health and nutrient density: Preliminary comparison of regenerative and conventional farming. *PeerJ*, *10*, e12848. https://doi.org/10.7717/peerj.12848

[41] Li, M., Jia, N., Lenzen, M., Malik, A., Wei, L., Jin, Y. and Raubenheimer, D. (2022) Global food-miles account for nearly 20% of total food-systems emissions. *Nature Food*, 3(6): 445–453.

[42] Biello, D. (2008, March 14). *Fertilizer runoff overwhelms streams and rivers--creating vast "dead zones."* Scientific American. https://www.scientificamerican.com/article/fertilizer-runoff-overwhelms-streams/

125,000-acre feet used per year. The five irrigation companies in the valley collectively irrigate around 23,845 acres. Climate action in the realm of water conservation falls primarily in the adaptation space-climate change is altering our water supply and we must adapt. Most of the precipitation that feeds surface water resources falls during the winter as snow. The snow is then stored through the winter, melting throughout spring and summer to provide water during the dry summer months. This is shown through the annual hydrograph, with snowmelt-dominated high flows occurring from April to July, and peak flows typically occurring in May or June. The lowest flows then occur in the late summer/early fall, between September and October. However, on average, our winters are shortening, more precipitation is falling as rain, and the melt season is occurring earlier and faster. Simultaneously, summers are becoming hotter and longer, stressing the demand on the shifting water supply. Because of this fragile dynamic, the Valley's water resources must be responsibly managed amidst the changing supply so that all users may have their needs met. Studies have shown that increased extreme precipitation events and increasing temperatures, two consequences of climate change that have already begun to intensify, reduces soil's ability to retain and infiltrate water through compaction and a reduction in soil organic matter.[43] Surface diversions for irrigation in the Big Wood watershed have been steadily declining since the 1970s, further highlighting the need to creatively conserve water while maintaining agricultural operations[44]. Changes in water temperature and streamflow can also have serious consequences on water quality in streams, lakes, and reservoirs. In recent years, due to reduced streamflow, higher temperatures, and increased runoff, harmful algal blooms have become an increasing concern.[45]

The Big Wood River Ground Water Management Area (BWRDGWMA) was established in 1991 under the findings that the surface and ground waters of the Big Wood River are interconnected. A new BWRGWMA management plan was adopted in 2022. Groundwater diversions from wells can deplete surface water flows in streams and rivers, causing broad impacts for a diverse range of stakeholders. The primary action of the plan is to maintain a 32 cfs four-day moving average streamflow from May 1 to September 30 at Station 10 near Richfield. This goal has been identified to maintain the supply of water of senior surface water right holders, stream health, and aquifer health.[46]

The Big Wood River Atlas was created by Blaine County after severe flooding in 2017 made it apparent that a more comprehensive understanding of the Big Wood River and its threats was imperative. The goals include building trust and

---

[43] Hatzenbuehler, P., Wardropper, C., Adjesiwor, A., Owusu Ansah, E., Burnham, M., de Haro-Martí, Dentzman, K., Findlay, J. R., Glaze Jr., J. B., Hinds, J., Jansen, V., Karl, J., Lamichhane, R., Lew, R., Olsen, N., Powell, M., Running, K., Sagers, J., Schott, L., Walsh, O., and Wilson, B. Economic Impacts of Climate Change on Agriculture in Idaho. Idaho Climate-Economy Impacts Assessment. James A. & Louise McClure Center for Public Policy Research, University of Idaho. Boise, ID. Economic Impacts of Climate Change on Agriculture

[44] Hill, Zach. (2023) Water and Watershed Management. *Wood River Land Trust.* *https://new.express.adobe.com/webpage/Kwur5j2eR4pZN*

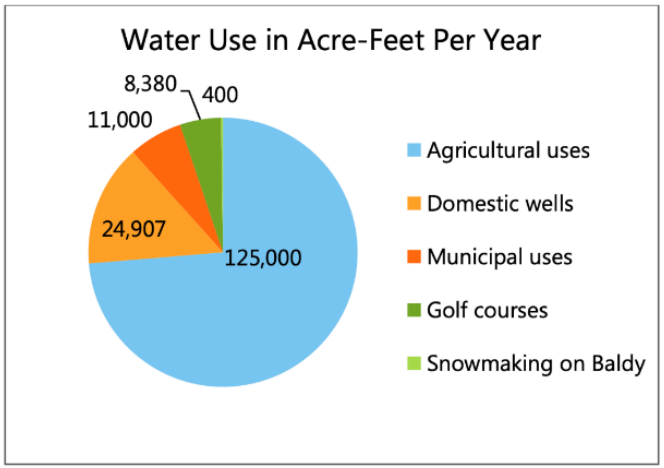
[45] Idaho DEQ. (2023, August 3). *Cyanobacteria harmful algal blooms*. Idaho Department of Environmental Quality. https://www.deq.idaho.gov/water-quality/surface-water/cyanobacteria-harmful-algal-blooms/

[46] State of Idaho. (2022, April 22). *Big Wood River Ground Management Plan*. Idaho Department of Water Resources. https://idwr.idaho.gov/wp-content/uploads/sites/2/groundwater-mgmt/big-wood-gwma-advisory-comm/BWRGWMA-Draft-Management-Plan-Second-Revised-Draft-Management-Plan-April-2022.pdf

collaboration over river management, understand historic and current river processes, developing a flood risk management framework that supports the connectivity of floodplains, developing a decision-making framework to identify and evaluate restoration projects, and assisting river managers with best management practices for development within the river.[47]

"Projected climatic trends, increased frequency of wildfires, and changing hydrology are likely to increase sediment yields [in Idaho Rivers]… These elevated sediment yields will likely impact downstream [streams, rivers and] reservoirs, which were designed under conditions of historically lower sediment yield"[48]

In addition to adaptation measures responding to climate change induced water scarcity, it is important to look at how our own actions may exacerbate the issue. In Hailey for example, all water use needs are met through the fall and winter from the Indian Creek Spring. In the spring, when demand for water spikes to accommodate landscaping needs, the city and its residents are forced to start pumping water from the wells.



Source: Water District 37 (June 2016)

The images and charts above outline the main water uses in the county and the Big Wood River watershed.[49]

---

[47] Big Wood River Atlas. https://www.co.blaine.id.us/DocumentCenter/View/13047/Big-Wood-River-Atlas_Final_LowRes_NoPrint_042220

[48] Big Wood River Atlas. Page 16. https://www.co.blaine.id.us/DocumentCenter/View/13047/Big-Wood-River-Atlas_Final_LowRes_NoPrint_042220

[49] Blaine All Hazard Mitigation Plan. 2022. ITEM-Attachment-001-0482de16841342ba94053228e3f819e0.pdf (usgovcloudapi.net)

4.3.3 Habitat Conservation Overview

The practice of conserving our natural resources is not a new concept to the Wood River Valley. The Land, Water and Wildlife program was a two-year property tax levy voted on in 2008 to protect land, water, and wildlife. It was the first county-level, taxpayer-supported conservation program in the history of Idaho[50]. Local nonprofits such as The Wood River Land Trust, Idaho Conservation League, and the Nature conservancy have worked to protect and sustain the Valley's landscapes and waterways for more than 50 years through conservation easements, public preserves, river restoration projects, and more.

The Wood River Valley Community Forest Management Plan was established to improve and enhance the forests in and around Blaine County. It is a collaborative effort between the county, municipalities, and non-profits to optimize tree coverage in the face of hazards, climate resilience, and community forest asset management. The Collaborative Forest Enhancement Project (CFE) has several goals and projects underway for 2024 including establishing tree inventories for cities and the county and advancing forest health by leading trainings for hazardous tree pruning and supporting fire breaks. [51]

The Idaho Forest Restoration Partnership is a state-wide organization that brought together stakeholders who share a common interest in preserving forests and forest health in the state. The 5B Restoration Coalition is Blaine County's chapter of this partnership and includes individual community members, Sun Summit South, Sun Valley Economic Development, Sawtooth Backcountry Horsemen, Blaine County Recreation District, Bureau of Land Management, Idaho Conservation League, Blaine County Commission, US Forest Service (Sawtooth National Forest), and Wood River Trails Coalition and is facilitated by the National Forest Foundation. Their flagship project has been the Deer Creek restoration project after almost 70% of the drainage burned in the Beaver Creek Fire and heavy rain then caused debris to block channels, damage roads, and destroy trails.

Natural ecosystems are carbon sinks, which is why preserving these spaces is an important part of this plan. There are abundant sagebrush-steppe ecosystems, riparian areas, high mountain deserts, meadows, and alpine forests.[52] The Department of Interior defines nature-based solutions as actions that incorporate natural features and processes to protect, conserve, restore, sustainably use, and manage natural or modified ecosystems to address socio-environmental challenges while providing measurable co-benefits to and benefit both people and nature.[53] Sustainable management of the ecosystems in Blaine County would emphasize nature-based climate solutions and increase and preserve naturally occurring carbon sinks.

---

[50] Blaine County Comprehensive Plan. 2021. Blaine County Comprehensive Plan | Blaine County, ID

[51] Blaine County Community Forest Management Plan (CFE). 2023. Microsoft Word - WoodRiverValley_ForestResourcesPlan_Final_9_11_23.docx (squarespace.com)

[52] Blaine County Comprehensive Plan. Chapter 5. 2021. Blaine County Comprehensive Plan | Blaine County, ID

[53] *Nature-based solutions*. U.S. Department of the Interior. (2023, November 2). https://www.doi.gov/ppa/integrative/nature-based-solutions

With 81% of county land being publicly owned, must all work together to ensure that these spaces remain carbon sinks, rather than transform to carbon sources.

4.4 Environmental, Social, and Economic Considerations

Blaine County is rich in land and water resources—The mountains and valleys around the county are vibrant ecosystems, providing habitat for wildlife, supporting our wellbeing with recreation and natural beauty, rangeland for livestock, cropland for farms, and more. The rivers and aquifers formed from collected snowmelt are home to abundant fish and wildlife, riparian habitat, and provide water to our homes, cities, and agriculture. Protecting these resources protects our way of life and ensures that the mountains, valleys, pastures, and rivers may be enjoyed for generations to come.

Environmental:

- Protecting and improving soil health, water resources, and natural habitats provides longstanding benefits by sequestering carbon and helping reach greenhouse gas mitigation goals.

- Healthier ecosystems are more resilient to natural disasters, such as floods and droughts. This resilience helps protect communities from the adverse effects of climate change and extreme weather events, enhancing overall safety and stability.

Social:

- Natural spaces are critical to our wellbeing. Spending time in nature is linked to cognitive benefits and improvements in mental, physical, and emotional wellbeing. These spaces provide opportunities for recreation, connection, and appreciating beauty.
- Increasing local production of and access to healthy food in a sustainable manner also has the potential to improve the health of our disadvantaged communities. Health impacts from poor nutrition such as heart disease and diabetes, among others, can be reduced by improving access to healthy food.

- Community projects focused on improving land, water, and soil health can bring people together, fostering collaboration and strengthening social bonds. Shared efforts towards environmental stewardship can enhance community cohesion and a collective sense of purpose.

Economic:

- Investing in the health of our natural environment in turn means an investment in our recreation and agricultural industries, which keeps money in the valley and boosts our local economy. Not only do these goals encourage recreational tourism and the economic opportunities that the tourism industry provides, but they also have the potential to reduce costs for farmers and create alternate streams of income. With more agricultural land being converted across the country every year, investing in this local industry is ever more important.

- Conservation ensures the long-term availability of natural resources, which is crucial for industries that rely on them, such as agriculture, fisheries, and forestry. Sustainable use of these resources supports economic stability and growth.

- Healthy ecosystems are more resilient to natural disasters, such as floods and droughts. Conservation practices that improve land and water health can mitigate these events' impacts, reducing the economic costs associated with disaster response and recovery.

- Conservation practices can reduce the need for expensive inputs like chemical fertilizers, pesticides, and irrigation. By enhancing natural soil fertility and water retention, farmers can save on these costs, increasing their overall profitability.

- Healthy soil and efficient water management lead to higher crop yields and more reliable harvests. This boosts the profitability of farming and reduces the risk of crop failure, ensuring a steady income for farmers.

4.5 Partners and Resources

The objectives and actions in this section cannot be completed without help from our municipal, non-profit, and private partners, who each play an important role in the Land, Water, and Habitat conservation space. Partners may include:

- Blaine County Extension
- Blaine Soil Conservation District
- The Nature Conservancy
- Regenerative Agriculture Network of Idaho
- Sun Valley Institute for Resilience
- The Hunger Coalition
- Wood River Land Trust

- Northwest Center for Alternatives to Pesticides
- Environmental Resource Center
- Climate Action Coalition
- Winn's Compost
- Public Works Departments (municipal)
- Blaine County Noxious Weeds Department
- Parks and Rec Departments (municipal)
- The Keystone Concept Group

Resources for implementation can be found in Appendix A.

4.6 Implementation

Below we lay out the structural elements of how we achieve productive climate action for land, water and habitat conservation in Blaine County. We utilize the following strategic action elements to frame our approach:

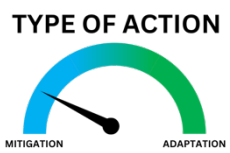
- Key Performance Indicators (KPIs): units of measurement (metrics) that allow us to track progress between baselines and objectives
- Goals: high level view of what we would like to see happen in this space
- Baselines: current measurable status of a particular topic
- Objectives: specific, measurable, achievable, realistic, time-bound (SMART) outcomes to achieve our goals
- Actions: Discreet programmatic or project-based tasks needed to achieve objectives

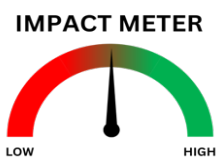
KPI 1: Adoption (# farms + # acres) of climate-smart agriculture practices
KPI 2: Adoption of water-smart landscaping (# acres and/or reduction in water use for specific sites)
KPI 3: Access to locally grown food (# farms selling food locally, # farms accepting SNAP and WIC)
KPI 4: Acres preserved through conservation easements, wilderness designations, national monuments, etc.
KPI 5: Water Plan KPIs TBD
KPI 6: Acres dedicated to wildlife corridors and connectivity
KPI 7: Restoration / treatment projects completed (acres treated)

Goal 1: Land Conservation, soil health: With agriculture being the main use of privately-owned land as well as the largest water user in the county, climate smart agriculture provides a valuable chance to reduce water consumption while increasing carbon sequestration. Climate Smart Agriculture (CSA) has been recognized by the USDA and the World Bank as an essential aspect of curbing greenhouse gas emissions and offers an effective method to achieve aspects of Blaine County's environmental goals while ensuring equitable economic prosperity for growers and ranchers. CSA is defined by the USDA as an integrated approach by farmers, ranchers, and landowners to reduce and/or remove greenhouse gas emissions to mitigate climate change, as well as building resilience and adaptation in their operations to the changing climate, all while sustainably increasing agricultural productivity and income[54]. This concept has emerged as a holistic approach to tackling some of the world's greatest issues and has received billions of dollars in funding from global and national organizations in recent years. In Blaine County, encouraging climate-smart agriculture can help ensure the protection of agricultural land by increasing the income of ag operations and creating resilience in the face of climate-change-induced water scarcity and extreme weather events.

[54] *Climate-smart agriculture and forestry*. US Department of Agriculture. (n.d.). https://www.nrcs.usda.gov/sites/default/files/2023-04/Climate-Smart Agriculture and Forestry factsheet.pdf

CSA, also known as regenerative agriculture, has many forms, but the most implemented and highest-studied practices include using cover crops to reduce moisture loss, and using reduced or no-till practices to preserve soil carbon. In Blaine County, there are currently ten farms reporting using cover crops, nine farms using reduced tillage, and four farms using no-till practices. Therefore, the primary goal for land conservation is to **increase awareness and adoption of soil health and regenerative resource management practices on public and private lands in Blaine County to increase the supply of carbon sinks.**





Baselines/Objectives:

- Baseline 1: Regenerative practices (2023)
    - 22 farms using cover crops (2,680 acres)
    - 21 farms using reduced tillage (3,663 acres)
    - 21 farms using no till (2,619 acres)
    - 153 total cropland farms (65,168 acres)
    - 144 farms with harvested cropland (52,396 acres)
    - 177 farms w/ irrigated land (65,992 acres)
    - 36 farms reporting conventional tillage (15,668 acres)

- Objective 1: Increase the number of farms using regenerative practices by 10% by the 2028 ag census. This would mean 54% of farms reporting at least one type of regenerative agriculture practice.

    We are using the National Agriculture Census, conducted every five years, to inform the regenerative agriculture numbers. We recognize that the census does not always provide comprehensive or complete data. In the most recent census (2022), 66 harvested cropland farms did not report tillage methods if we assume that the farms reporting reduced tillage and no-tillage do not overlap. It is possible that the same farms using no-till on some areas of the land are using reduced tillage on other areas of the farm. At the present moment, there is no reliable way to discern these numbers. If a more accurate source should

arise, we will adjust the numbers accordingly.

Actions:

a) Establish a Farmer Learning Network in Blaine County for peer-peer knowledge sharing and establishing shared metrics for success.

PARTNER PROJECT

b) Explore options to fund a program that provides incentives that support the implementation of regenerative practices and sustainable stewardship

PARTNER PROJECT

c) Highlight a demonstration farm that will serve as an educational space for Blaine County farmers and Ranchers

PARTNER PROJECT

d) Organize an annual soil health workshop (potentially aligned with a broader sustainability conference), open to the public, to increase education on best practices for soil health

PARTNER PROJECT

e) Create an educational resource focused on soil health, pollinator-friendly, drought-tolerant, and native landscaping, that targets landscaping companies, HOAs, schools, municipalities, and the public

PARTNER PROJECT

f) Develop and implement a policy to reduce synthetic fertilizer, pesticide, and herbicide use on municipal and county-managed lands

Goal 2: Land Conservation, local food supply: The poverty rate in Blaine was 7.2% in 2021. A major consequence of poverty, or near-poverty, is food insecurity. In 2020, 10% of Blaine County's population registered as food-insecure[55]. As a largely agricultural community, we have the opportunity to provide local food, reduce greenhouse gas emissions associated with the supply chain from imported foods, and decrease food insecurity. At the moment, one of the barriers to accessing locally grown food is cost. Therefore, our second land goal is to **increase the supply of and access to regionally grown and culturally relevant food.**

Actions:

g) Strengthen the local food system by creating a local food advisory council

PARTNER PROJECT

h) Develop a local Food Strategy that will address supply chain barriers, food security, local purchasing, incentive programs and policies wholistically — including private sector action, government action and individual action

PARTNER PROJECT

Goal 3: Water Conservation: As a high mountain desert, water resources in Blaine County fluctuate seasonally. The majority of our surface water comes in the form of snow, falling during the winter months and melting throughout spring and summer. Climate change is already altering this pattern, and we must adapt in order to ensure sufficient water availability for all uses and users. Increasing temperatures shifting precipitation patterns, decreasing snow, increasing rain, shorter winters, and increasing melt speed. The increasing temperatures are also increasing plant water demand through higher rates of evapotranspiration. This nexus of changing supply and increasing demand make indicates the need to **develop a water plan that utilizes voluntary participation to address both surface water and groundwater—prioritizing protecting water sources from contamination, establishing a water budget, and improving watersheds in a way that better balances demand for water resources with the quality and supply of water.**

Baseline 1: 169,687 acre-feet of water used per year county-wide
Baseline 2: County operations water use is 3,036,000 gallons

Objective 1: Reduction in water use through water-efficient landscaping and appliances
Actions:

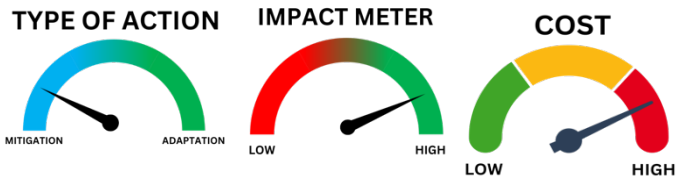
a. Establish a water plan

PARTNER PROJECT

Water plan elements:

i. Countywide ground- and surface water assessment with trend analysis and species analysis
ii. Water policy inventory and assessment (state and local policies)
iii. Establish goals and tactics based on policy and water assessment that identifies strategies to improve quality and quantity of water resources within the proper political framework (quality and quantity)
iv. Establish a suggested water budget by user type to assess progress against goals
v. Establish policy implementation and performance metrics based on best management practices (BMP's)
vi. Establish a communication and outreach strategy
vii. To the extent that it makes sense, actively participate in relevant Idaho Department of Water Resources (IDWR) proceedings related to new water right applications, applications to change an existing water right, or new statutory claim
viii. Meet or exceed the requirements of the Big Wood Ground Water Management Area Ground Water Management Plan

Goal 4: Habitat Conservation The majority of Blaine County lies within a wildland-urban interface. 81% of the county is also public land. Access to the outdoors is a primary reason people live in and visit the Wood River Valley, making it imperative that we work to preserve the quality and quantity of open space assets. Therefore, our primary conservation goal is to **evaluate and improve the health and resilience of the sagebrush-steppe rangelands, forests, and riparian zones within the urban interface and community forests within Blaine County in order to increase the supply of natural carbon sinks.**



Baseline 1: 80,264 acres of protected private land through conservation easements[23]

Objective 1: Increase the acreage of protected private land by 10% by 2030, focusing on riparian habitat
Baseline 2: 81% of Blaine County is publicly owned
Objective 2: Support cities, county departments, the USFS and state of Idaho in efforts to protect and preserve public lands

Actions:

a. Evaluate the current condition of rangeland health within the county and develop a plan for management of healthy and resilient sagebrush steppe habitat.

PARTNER PROJECT

b. Establish a diverse, qualified advisory group to conduct assessments of the health and condition of the forests and rangelands in and around Blaine County, and implement tactics identified in the Community Forest Management Plan (2024).

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

c. Establish regular communication and project support across a spectrum of stakeholders (federal land managers, non-profit land holders/stewards, technical advisors, etc.).

PARTNER PROJECT

d. Complete 2024-25 CFE project list for forest/wildfire, riparian and weeds restoration (see Appendix B-1)

PARTNER PROJECT

4.7 Conclusion:

The natural resources in and around Blaine County are boundless, and it is our prerogative to protect them. By preserving ecosystems, enhancing soil and ecosystem health, and protecting water, we can mitigate our contributions to climate change while enhancing our resilience and bolstering our economy. In addition to the actions outlined above, below are steps individuals, businesses and local units of government can take to improve climate outcomes in Blaine County:

Individual Action:

Individuals can make a big impact and it is important for everyone to do their part. For land and water conservation, this can take many different forms:

- Shop local and seasonal—pay attention to where your food is coming from and choose locally produced food when you can. Not only does that boost the local economy and ensure our agricultural heritage lives on, but it also reduces carbon emissions associated with food transportation

- Reduce water consumption—look into zero-scaping and drought-tolerant landscaping options rather than water-hungry lawns. Try to cut back on excess water use in your home, whether that means taking shorter showers or investing in more water-efficient toilets, dishwashers, and laundry machines.

- Reduce fertilizer and pesticide use whenever possible

- Conserve habitat—when you hike, bike, or otherwise recreate, learn about and pay attention to the vegetation around you. Stay on the trail and remove invasive species when you see them. This helps encourage the growth of our natural ecosystems, which evolved to be low-water users and carbon sinks.

- Utilize leave-no-trace and pack-it-in, pack-it-out best practices when recreating.

Private Sector Action:

Businesses have the unique ability to make it easier for individuals to choose more sustainable options. Many of the individual actions can be applied to businesses as well.

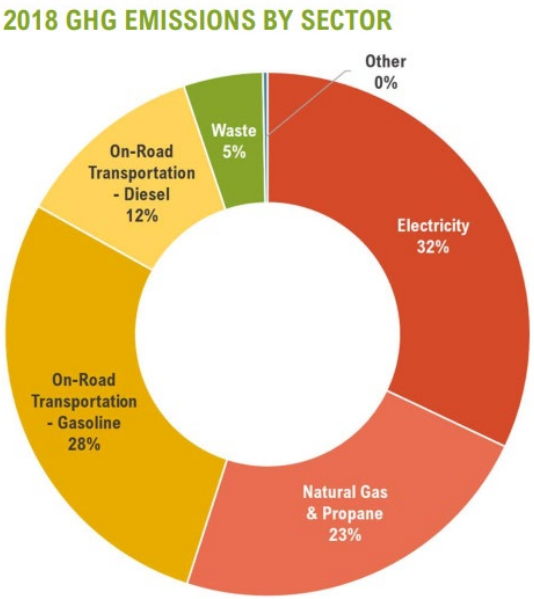
- Look into water-efficient landscaping and eliminating fertilizer and pesticide use for your business
- Supply locally grown produce
- If you are a grower or rancher, look into regenerative methods that could make sense for your operation.
- Opt for water smart appliances in buildings

Government Action:

Blaine County is committing to reduce water use and conserve land wherever possible, and we encourage municipalities to do the same. We aim to create a productive environment and culture around the conservation of natural assets for long-term sustainability through the goals and tactics listed above.

- Evaluate if native and water-efficient landscaping on city properties is feasible
- Opt for water smart appliances in buildings
- Evaluate if participation in the action laid out in this section makes sense for you

through thoughtful land use planning that addresses housing needs while increasing walkability and bike-ability in downtown cores.



This plan focuses on both the supply and demand metrics—with transit-oriented design as a guiding practice to achieve several key outcomes:

- Density
- Walkability
- Reduced vehicle trips (single and multiple occupancy)
- Shortened commute times
- Reduction of transportation-related greenhouse gas emissions
- Reduced energy emissions associated with inefficient homes, offices and commercial buildings
- Improved quality of life for the residents of Blaine County
- Increased ridership on Mountain Rides infrastructure
- Increased roadway safety, towards a goal of zero fatalities
- Advancement of existing sustainability initiatives at Friedman Memorial Airport

5.3 Overview

5.3.1 Transportation Overview

A safe, functional transportation system is foundational to the wellbeing of the residents and visitors of Blaine County. In early 2024 discussions, the cities of Ketchum, Hailey, Sun Valley, Bellevue and Carey, along with the county, generally agreed that state highways and local roads need to facilitate movement of people throughout the valley in the most efficient manner possible—with a heavy emphasis on roadway efficiency that supports the workforce, and commerce more broadly. Many residents live more than 10 miles from where they work due to housing costs and inventory factors. The resulting commuting traffic contributes to greenhouse gas emissions, traffic congestion, and some areas of safety concern for both drivers and

pedestrians. As such, a system-wide approach is encouraged that considers the impacts of upstream and downstream roadway improvements, not just individual intersections. This is imperative due to the seasonal nature of our region, not to mention the high volume of visitors to the region.

Additionally, the transportation, bike, pedestrian and transit systems in Blaine County should be designed in a manner that reduces single occupancy vehicle trips and offers preference/incentives for the most efficient modes of transportation, especially within constrained corridors at peak travel times.

Pedestrian safety is critical to get more cars off the road, both in town and out of town. As such, encouraging active transit within downtown cores is a priority, and the safer pedestrians feel, the more likely individuals may be to choose transportation alternatives (additional details are available in 5.3.2). Alternative corridors should be considered alongside the performance of major arterials, and right-of-way allocations should be, to the extent possible, future proofed. Aesthetics, functionality, safety, environmental impact, and accounting for wildlife should all also be integrated into regional transportation design.

Through discussions with municipal partners, the following regional design elements should be further evaluated going forward:

- Integration of a dedicated or preferred travel lane for Mountain Rides buses—optimally approaching and transiting all constrained corridors. Doing so will ensure the functionality and timeliness of valley-wide transit services.
- Addition of HOV lanes on Highway 75, pending statutory and design considerations.
- Localized traffic light management.
- Evaluation of roundabout designs, especially at higher traffic intersections that bottleneck regularly.
- Aesthetic and safety components (including proactive maintenance) should meet local design features and promote pedestrian infrastructure utilization.
- Single occupancy vehicle trip reduction methods.

Current functional classification of key transportation corridors:

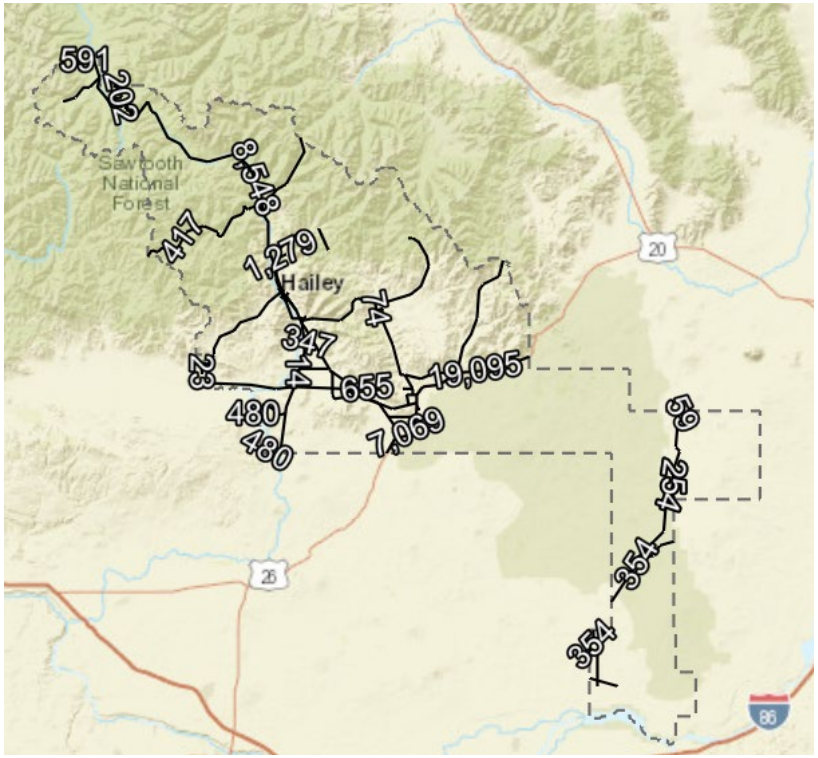
1. Highway 75: Minor Arterial[62]
2. Highway 20: Other Principal Arterial
3. Highway 26: Other Principal Arterial

Current functional classification of key transportation corridors:

4. Highway 75: Minor Arterial[63]
5. Highway 20: Other Principal Arterial
6. Highway 26: Other Principal Arterial

Current functional classification of key transportation corridors:

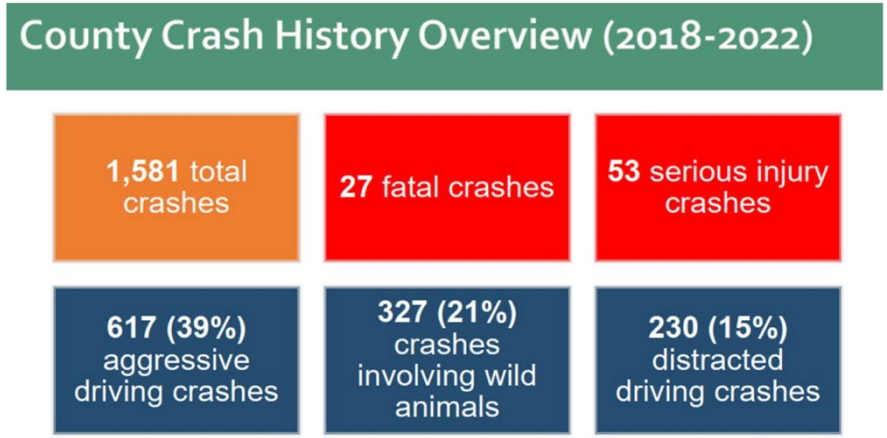
7. Highway 75: Minor Arterial[64]
8. Highway 20: Other Principal Arterial
9. Highway 26: Other Principal Arterial



*AADT VMT (Daily Vehicle Miles Traveled on Main Roads in Blaine County)[65]

[62] ITD Functional Classifications Idaho's Statewide Systems Map (arcgis.com)
[63] ITD Functional Classifications Idaho's Statewide Systems Map (arcgis.com)
[64] ITD Functional Classifications Idaho's Statewide Systems Map (arcgis.com)
[65] Hales Engineering (DRAFT) AADT_VMT Data from ITD (2023)

Roadway design and heavy utilization coalesce to create both challenges and opportunities in roadway safety. Between 2018 and 2022, Blaine County saw 1,581 total reported crashes, with 27 fatalities and 53 serious injury crashes.[66] These numbers reflect some of the challenges at play in overall roadway functionality and offer insights into how we can simultaneously enhance safety, reduce or eliminate fatalities, reduce GHG emissions and improve the quality of life of residents. Highway 75 can see more than 20,000 vehicle trips per day during peak traffic[67]. Broadly, we need to work towards planning for mobility in Blaine County, coordinated at the county, municipal and regional levels. In 2024 the Wood River Land Trust began coordinating some of this work regionally through their new community planning initiative. Other focus areas include water, habitat, livability and housing.



5.3.2 Transportation Demand Management and "Mode Shift" Overview:

Given the significant population growth Blaine County has seen in the last 15 years (jumping from just over 20,000 residents in 2010 to approximately 25,000 today), it has become imperative that multi-modal transit and pedestrian infrastructure be scaled and prioritized to match population growth. This requires what is known in the transportation sector as a "mode shift."

> ***"Partially shifting private vehicles to other transport modes like cycling, public- and shared transport has several benefits like improving public health and is an essential step towards reducing greenhouse emissions and air pollution. This can also be economically beneficial as traffic congestion holds back our economy through lost time and productivity."***[68]

To achieve a mode shift, we need to make strategic investments in our bicycle and pedestrian infrastructure, public transit and create broader incentives for users to reduce their own single occupancy vehicle trips regularly. Currently, most cities within Blaine County have main streets that double as state highways. This creates a large amount of vehicle flow through the center of towns, reducing pedestrian safety and discouraging mode shift.

---

[66] ITD Roadway Data. 2024. Road Data | Idaho Transportation Department

[67] Wood River Land Trust Community Planning-Transportation Baseline Characteristics. 2024. eba3ce_e2dd9ceadb05423e811ae8a5f0ef4710.pdf (woodriverlandtrust.org)

[68] SWARCO What is the transport mode shift? | SWARCO

Bike / Pedestrian: The Blaine County bike/ped master plan calls out various project areas where enhancements would better serve the residents of Blaine County. Making strategic enhancements to bicycle and pedestrian infrastructure results in more options for residents and a higher likelihood an effective mode shift will occur Projects were prioritized based on safety, connectivity, community desire, economic factors, and health impacts.

> *"By integrating various modes like road networks, public transit, cycling lanes, and pedestrian pathways, we ensure efficient and sustainable mobility, reducing congestion and environmental impact while fostering positive health outcomes. Multimodal planning strengthens the resilience of our urban environments by improving public health and reducing disparities, making it a crucial strategy for enhancing quality of life and promoting social equity."*[69]

[69] Bike/Ped Master Plan. 2024.

Top Projects for Each Area

	PROJECT ID	PROJECT NAME	PRIORITY	POSSIBLE FUNDING SOURCES	RESPONSIBLE PARTIES	COST ESTIMATE
NORTH VALLEY AREA	**N2**	Improve Surface of Harriman Trail	MID TERM	Grants/ private $	BCRD	
KETCHUM AREA	**K1**	4th Street Safety Improvements	SHORT TERM	Urban Renewal Agency (URA)	City of Ketchum	
	K4	Improve and Upgrade Sidewalks- Complete Streets	CHALLENGE	URA	City/ ITD	
	K5	Alternate Routes to Downtown	CHALLENGE	URA/City	City	
	K7	Separated Path Saddle Road to Knob Hill Inn	CHALLENGE	URA/City	City	$500k
	K8	Warm Springs Road Improvements	SHORT TERM	URA/City	City	
SUN VALLEY AREA	**SV5**	Build a Bike Lane by Striping and Signing Fairway Rd	SHORT TERM	General Fund	City	
	SV6	Crosswalk Improvements	MID TERM		City/ Partner Weyyakin HOA, Lane Ranch HOA	
	SV7	Improvements at Sun Valley Road and Saddle/Dollar Int.	CHALLENGE		City	$3.5 Mill
	SV8	Pathway Amenities	MID TERM		SV Elkhorn Ass.	
	SV9	Festival Meadow Bike Amenities	MID TERM		City	
	SV10	Construct Bike Lane or Separated Path along Juniper Rd	LONG TERM		City	

MAIN VALLEY AREA	**M1**	East Fork Bike Lanes and Intersection Improvements	LONG TERM	Levy/grants	County	
	M2	Deer Creek Road Improvements	LONG TERM		County	
	M3	Croy Creek Road Improvements	CHALLENGE		County	
	M4	Broadford Road Improvements	CHALLENGE		County	
	M5	Bike Lanes along SH-75	MID TERM		ITD	
	M6	"Toe of the Hill" connection Hailey and Bellevue	LONG TERM	Annexation?	BCRD	
	M8	Sidewalk on East Side of Hospital Dr	MID TERM	Grant	County	
HAILEY AREA	**H1**	River Street Improvements	LONG TERM	Developers, URA, Competitive Grants	City	$13 Mill, $1 Mil/block
	H2	Connections to the Visitor's Center and Wertheimer Park	CHALLENGE	URA, Community Partnerships	City	$10 Mill
	H7	Airport Way Complete Streets	SHORT TERM		City	$5 Mill
SOUTH VALLEY AREA	**S1**	Gannett Road Improvements	LONG TERM	Levy	Co	
	S2	South WRT Terminus and Extension to Carey	LONG TERM		BCRD/City	
	S3	City of Carey Pathway Connectivity	SHORT TERM	Grant- safe routes to school	BCRD/City	
BELLEVUE AREA	**B1**	WRT and Street Intersection Improvements	CHALLENGE		City	
	B2	Roundabout at Gannett Road and SH-75	LONG TERM		ITD/City	
	B3	Safety Improvements at Popular Hwy Crossings	CHALLENGE	Grant-Safe streets for all	ITD/City	
	B4	Pedestrian Safety and Connectivity to Major Amenities	CHALLENGE		City	
	B5	Toe of the Hill Trail	MID TERM		BCRD	
	B6	South Bellevue WRT Terminus Extension	SHORT TERM		BCRD	

5.3.3 Safe Routes to School (SRTS) Overview:

The Environmental Resource Center (ERC) in Ketchum currently administers the Safe Routes to School program for Blaine County. This program was formerly administered by Mountain Rides Regional Transit Authority but has since been realigned. SRTS promotes fewer vehicle trips for school drop off and pick up through promoting and investing in local pedestrian infrastructure to and from local schools.

5.3.4 Mountain Rides Transportation Authority (MRTA) Overview:

Central to Blaine County's mode shift is a critical partner already operating in Blaine County. **Mountain Rides Transportation Authority (MRTA) provides free transit service in Blaine County and is a leader in efficiency and clean technology utilization.** They provide fixed-route bus, vanpool, and demand-response transit services for non-emergency medical transportation and people living with disabilities and have proven to be a central force in single occupancy vehicle trip reduction.[70] A significant portion of their bus fleet has been electrified in recent years, lowering their carbon footprint. Ridership is approaching 750,000 annually, especially noteworthy is the GHG reductions and fuel savings from electrifying their fleet. In October of 2023, 45% of Mountain Rides vehicle miles were from battery electric busses (BEBs). The electricity cost for these buses was just 33% of their fuel expense for the same period the prior year—reflecting significant cost savings per annum. For that same month, greenhouse gas emissions were reduced by 81 tons.

MRTA is also breaking ground in 2024 on a new $6.3M BEB bus depot facility in Bellevue (in-service anticipated-Spring 2025). Mountain Rides' benchmarks for success associated with their battery electric bus program are noted below:

- Summer 2021: Initial four (4) BEBs - New Flyer's Xcelsior Charge (NFXE35)
- Summer 2022: Additional seven (7) NFXE35s put in-service
    - Total fuel costs (BEBs + ICBs):
        - November 2022: $28,271
            - BEBs: $2,521
            - ICBs: $25,750
        - November 2023: $10,026 (-65% year-over-year)
            - BEBs: $7,964 (+216% year-over-year)
            - ICBs: $2,062 (-92% year-over-year)
    - GHG emissions reductions driven by BEBs replacing ICBs in the fleet and in-service
    - Service miles (BEBs + ICBs):

[70] Mountain Rides, 2024 Home - Mountain Rides

- November 2022: 43,680 miles (BEBs + ICBs)
    - BEBs: 7,667 miles
    - ICBs: 36,013 miles
- November 2023: 44,296 miles (+1.5% year-over-year)
    - BEBs: 40,429 miles (+427% year-over-year)
    - ICBs: 3,867 miles (-89% year-over-year)

- GHG emissions reductions (via BEB service miles)
    - November 2022: -17 tons GHGs
    - November 2023: -91 tons GHGs (+435% year-over-year)
- GHG emissions remaining (via ICB service miles)
    - November 2022: 81 tons GHGs
    - November 2023: 9 tons GHGs (-89% year-over-year)[71]

Mountain Rides is currently working on a strategic plan that will take them beyond 2030, and capture the excellent work done to date. Blaine County's Climate Action Plan seeks to align with their adopted strategy and lend support to their strategic efforts, as appropriate and as resources allow. The transit goals in this section focus heavily on celebrating and elevating the work of Mountain Rides.

Mountain Rides
Ridership by Route
Sep 30, 2023

FYTD @ Sep 30										
Route	FY20	FY21	FY22	FY23	FY23 : FY22		FY23 : FY21		FY23 : FY20	
Blue	146,780	107,621	151,185	199,282	+ 48,097	131.8%	+ 91,661	185.2%	+ 52,502	135.8%
Valley	146,361	169,433	219,580	337,743	+118,163	153.8%	+168,310	199.3%	+191,382	230.8%
Hailey	24,532	24,225	28,835	37,832	+ 8,997	131.2%	+ 13,607	156.2%	+ 13,300	154.2%
Red	9,386	8,656	10,482	14,260	+ 3,778	136.0%	+ 5,604	164.7%	+ 4,874	151.9%
Bronze	10,476	10,423	14,048	20,221	+ 6,173	143.9%	+ 9,798	194.0%	+ 9,745	193.0%
Silver	41,938	22,100	40,079	56,389	+ 16,310	140.7%	+ 34,289	255.2%	+ 14,451	134.5%
Gold	34,378	18,374	32,890	39,576	+ 6,686	120.3%	+ 21,202	215.4%	+ 5,198	115.1%
TWF NEMT	-	325	1,785	863	- 922	48.3%	+ 538	265.5%	+ 863	0.0%
Galena	993	968	723	-	- 723	0.0%	- 968	0.0%	- 993	0.0%
Total	414,844	362,125	499,607	706,166	+ 206,559	141.3%	+ 344,041	195.0%	+ 291,322	170.2%

Figure 2: Mountain Rides Ridership

Figure 2 shows Mountain Rides ridership rates on all routes since the 2020 fiscal year. A noteworthy improvement is that between 2020 and 2023, ridership has increased by 170%.

[71] Mountain Rides Data: Board of Directors and Public Meeting Info - Mountain Rides

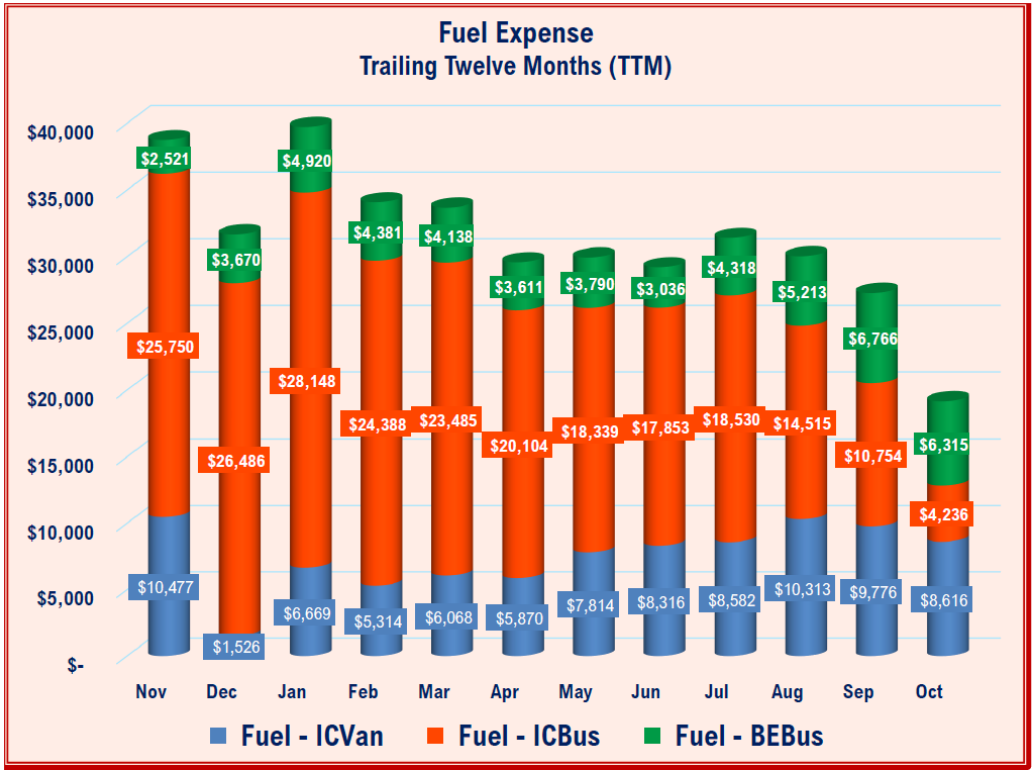


Figure 3: Mountain Rides Fuel Expense

Figure 3 shows the fuel costs for each type of Mountain Rides vehicle. The transition to battery electric buses reduces fuel needs for internal combustion engine buses without increasing battery expenses to the same degree. This will save Mountain Rides thousands of dollars in fuel expenses year over year.

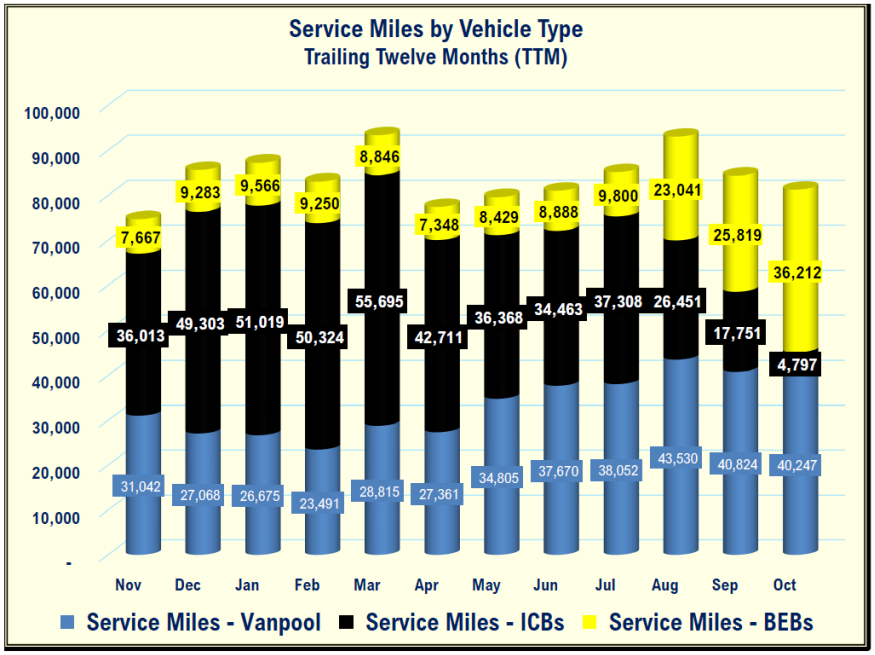


Figure 4: Mountain Rides Vehicle Miles

Figure 4 highlights the transition to battery electric buses in the 2023 fiscal year. This highlights the impact transitioning their fleet to battery electric buses has had and will continue to have, already having replaced over 30,000 monthly VMT of emissions producing internal combustion engine miles with battery powered miles.

Figure 5 outlines Mountain Rides' progress over the 2023 fiscal year to reach their own greenhouse gas emissions goals. Noteworthy progress is the 81-ton emissions reductions in October 2023, leaving only 11 tons of emissions remaining.

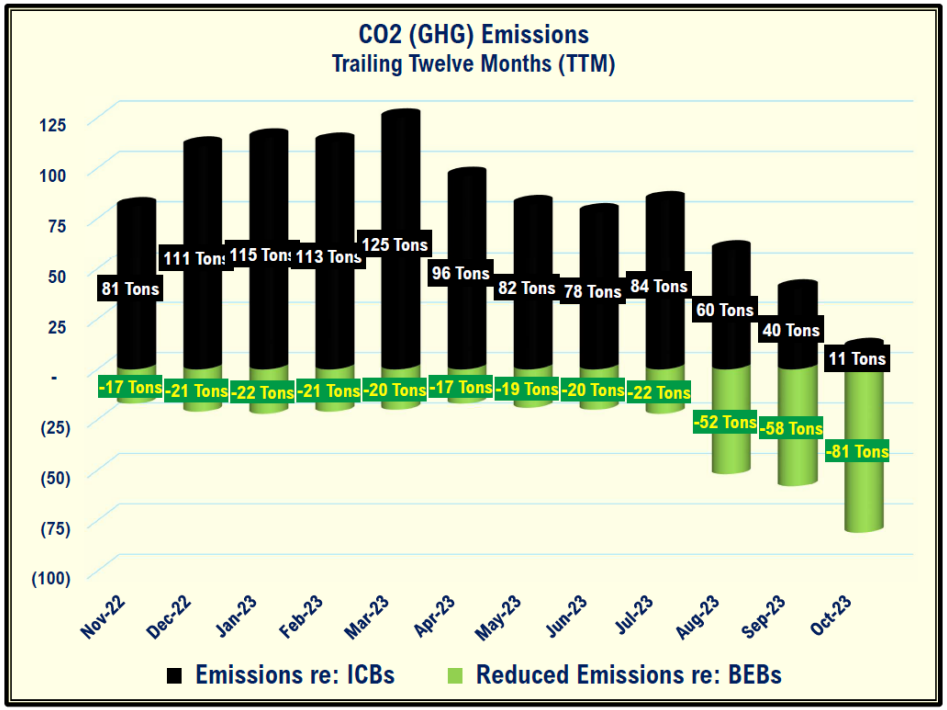
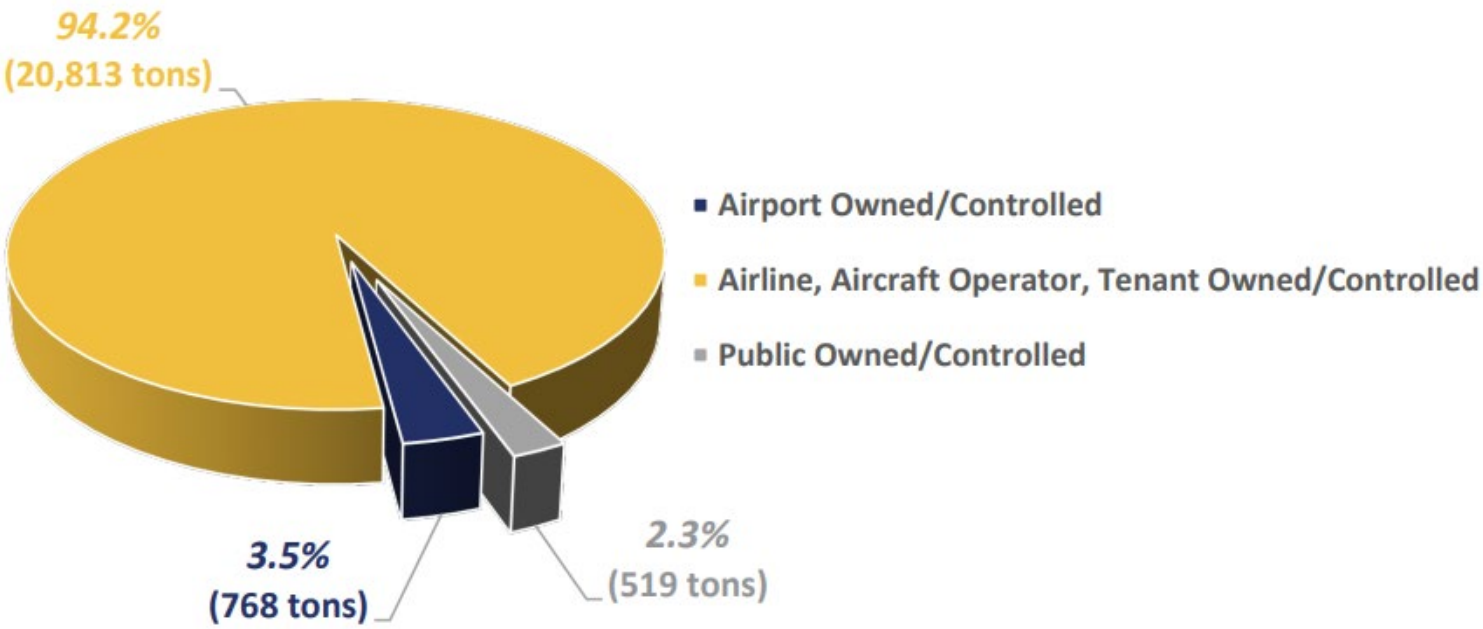


Figure 5: Mountain Rides Greenhouse Gas Emissions

5.3.5 Friedman Memorial Airport (FMA) Overview:[72]

Greenhouse gas emissions contributed by a community's airport are worthy of discussion to paint a complete picture and ensure thorough accounting of goals and tactics. For Blaine County, Friedman Memorial Airport has adopted its own Climate Action Plan that breaks down emissions into three categories, totaling 22,100 metric tons as of 2020[73]. Key elements from that plan are pulled out below for reference:

- Airport-owned/controlled—3.5% of emissions
- Tenant-owned/controlled (i.e., Airlines, Fixed Based Operator (FBO), aircraft operators)—94.2% of emissions
- Public-owned/controlled (private vehicles visiting the airport, i.e. dropping off/picking up passengers)—2.3% of emissions



[72] Friedman Memorial Airport (SUN) Climate Action Strategy. 2022. SUN-Climate-Action-Strategy.pdf (iflysun.com)

[73] Friedman Memorial Airport (SUN) Climate Action Strategy. 2022. SUN-Climate-Action-Strategy.pdf (iflysun.com)

Current & future airport initiatives:[74]

- Participates actively in the Blaine County Regional Sustainability & Climate Advisory Committee.
- Developed a Greenhouse Gas Emissions Inventory to track airport-related emissions.
- Replaced all Runway Edge lighting system with LED lights.
- Replaced all Terminal, FBO, De-Icing apron, and Parking lot overhead lights with LED lights.
- Continuing replacement of all interior lighting in Airport Admin/Operations Building, and cold storage building to LEDs.
- Acquired two snowplow/broom combination "multi-tasking units" that have removed the need to use multiple pieces of equipment for snowplow and broom tasks, and minimized need for labor hours, resulting in reduced energy usage needed to maintain runway conditions during snow events.
- Acquired new Runway-Deicing truck that replaced three separate vehicles to accomplish same function/maintenance.

Service	Business	ESG/ Sustainability Plan	Priorities
Airlines	Alaska, United, Delta	Y	Net zero, Sustainable Aviation Fuels (SAF), electrification/charging infrastructure, resilience, workforce, community, diversion from landfills
Car Rental	Avis, Budget, Hertz, Enterprise, National	(Hertz – Y)	Electrification/charging infrastructure, workforce,
Ground Transportation	Uber, Lyft	Y	Electrification/charging infrastructure, community
FBO	Atlantic	Y	Net zero and SAF, energy efficiency, spill prevention, community

Given FMAs existing commitment to sustainability, Blaine County encourages partnership on key initiatives where scale can be better achieved through working with municipalities and the county. A full list of airport sustainability initiatives is available in the reference

[74] Friedman Memorial Airport (SUN) Climate Action Strategy. 2022. SUN-Climate-Action-Strategy.pdf (iflysun.com)

appendix (Appendix B).

5.3.6 Land Use Overview:

Fundamental to Blaine County's long term growth management strategy are land use (and housing) elements—which have an outsized impact on greenhouse gas emissions. **How we grow and develop determines the feel and tone of the community in the long term**. Our transportation systems are reflected in this reality as well—especially when it comes to housing and social equity. If the majority of your workforce commutes from more than 10 miles away, at some point the community loses its character and sense of place. As such, Blaine County, alongside municipal partners, seeks to direct density into areas with existing infrastructure while preserving open space and encouraging smart growth practices. Many of the goals and tactics associated with land use align with Blaine County and municipal comprehensive plans. These features of the CAP reflect both adaptation and mitigation metrics. Adaption strategies are achieved through directing development away from the wildland-urban interface (WUE) and consolidating the efficiency of resource utilization. Mitigation strategies are achieved through reducing GHG emissions associated with long commute times resulting from sprawl and low-density transportation emissions.

To address these and other concerns, the Blaine County Land Use and Building Services department (LUBS) is updating the current transfer of development rights (TDR) policy for the county.

Transfer of Development Rights (TDR) is a voluntary, incentive-based program that allows landowners to sell development rights from their land to a developer or other interested party who then can use these rights to increase the density of development at another designated location.[75]

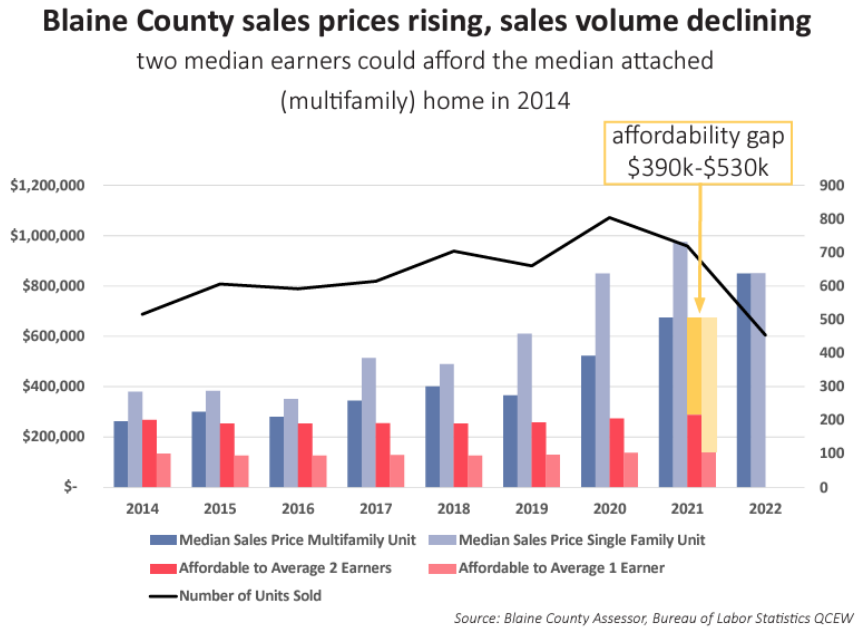
5.3.7 Housing Overview:

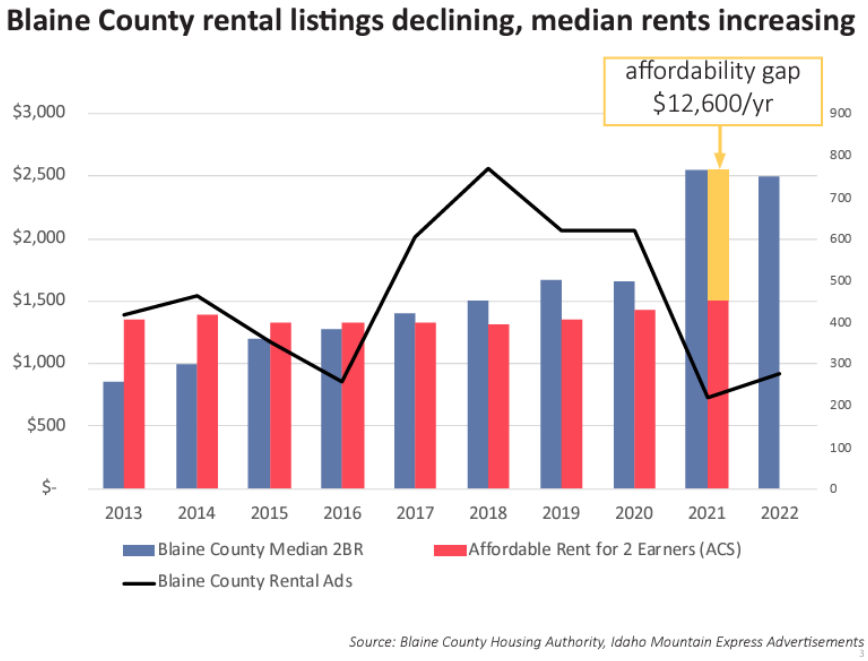
Sustainable, affordable local housing in Blaine County is one of the greatest challenges facing the community. With an average home sales price of $948,926 in 2024 and severely constrained inventory (with high demand), cost metrics are forcing much of the workforce out beyond a 10-mile commute distance from home to work.[76] This creates congested transportation infrastructure, can strain transit systems and inevitably increases GHG emissions significantly over time. Fair Market Rent

[75] University of Wisconsin Center for Land Use Education, TDR Guidance: https://www3.uwsp.edu/cnr-ap/clue/Documents/PlanImplementation/Transfer_of_Development_Rights.pdf

[76] University of Idaho Extension. (n.d.). *Indicators Idaho*. Indicators idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16013

(FMR), according to the federal government, is well below actual observed market rates, which can create additional challenges when trying to ensure rents don't exceed 30% of income.





Between the Blaine County Housing Authority (BCHA) and ARCH Community Housing, as of March 2024, there are 1,036 mostly deed restricted "community housing" units being managed in Blaine County, with additional non-deed-restricted units dedicated by way of land leasing structures, private employer sponsored programming or other mechanisms. An additional 94 deed-restricted units are also currently under construction, with over 244 additional units currently in the permitting process, including employee housing units for the Community School in Sun Valley. BCHA estimates that the county will need at least 4,700 additional units by 2032.[77]

BCHA, ARCH, and local governments are all making strategic investments in community housing as well. Blaine County is not eligible to receive a Local Option Tax (LOT) and is therefore limited in funding resources for housing. However, in

[77] Housing Action Plan (DRAFT), Year 2

2021, Blaine County was able to dedicate more than $1.6 million of American Rescue Plan Act (ARPA) funding towards affordable and workforce housing projects and organizations in the county. The numbers below are estimates for FY2024, and can change greatly from year to year:

- ARCH: $550,000 (programs and operations) + $3,000,000 for new construction
- Hailey: $500k (Housing Capital Fund) + approx. $80,000 in additional LOT funds
- Ketchum: $2,150,000 (programs and operations) + $2,670,000 for new construction
- BCHA: $775,000
- Blaine County: $150,000 (via Ketchum to BCHA)
- Sun Valley: $4,900,000 for new construction and approximately $10,000 for programming
- TOTAL: approximately $4,000,000 in programming funds and approximately $10,500,000 in construction funds

5.4 Environmental, Social, and Economic Considerations

Between transportation infrastructure, transit/mobility and land use, we can see how interconnected these topics are when it comes to GHG emissions. Transit oriented design (TOD), while a land use theme, cannot succeed without scalable transit. Mode shift cannot occur without thoughtful land use patterns and density. Infrastructure planning cannot meet local needs unless it accounts for multimodal advancements. We can break these notions down further into environmental, social, and economic categories.

Environmental:

- Land use determines density, and therefore transportation needs. Reducing the need for single occupancy vehicle transportation reduces greenhouse gas emissions
- Ground transportation reflects 40% of Blaine County's greenhouse gas emissions[78], so reducing the vehicle miles associated with that transportation will reduce greenhouse gas emissions
- Reducing transportation infrastructure shortcomings can mitigate sprawl and development outside of urban areas

Social:

[78] Brendle Group Clean Energy Study. 2022. Clean Energy | Blaine County, ID

- With significant wealth disparities from North Blaine County to South, resulting in 10+ mile commutes for many residents, access to free or affordable transportation can dramatically impact their ability to access jobs and opportunities.
- In order to preserve our natural environment in an equitable manner, it is important to create thoughtful density in Blaine County that limits sprawl.

Economic:

- Housing costs being high has resulted in longer commute times in Blaine County for many residents, especially low- and middle- income residents traveling from the southern part of the county where housing is more affordable to the northern part of the county where jobs tend to be more lucrative. Affordable / free, clean and safe public transportation is central to mitigating housing inequities in Blaine County.
- Transit oriented development encourages dense development along bus routes for the benefit of all residents' pocketbooks.
- Increasing density and walkability in downtown cores encourage year-round commerce and helps ease the reliance on tourism.

5.5 Partners & Resources:

The objectives and actions in this section cannot be completed without help from our municipal, non-profit, and private partners, who each play an important role in the land use and transportation (mobility) space.
Partners may include:

- Carey
- Bellevue
- Hailey
- Ketchum
- Sun Valley
- Blaine County Road and Bridge
- LHTAC
- Mountain Rides
- Idaho Transportation Department
- Friedman Memorial Airport
- Environmental Resource Center (SRTS)
- Blaine County School District (BCSD)
- Blaine County Recreation District (BCRD)
- Blaine County Housing Authority

- ARCH Community Housing

Resources for implementation are listed in Appendix A.

5.6 Implementation

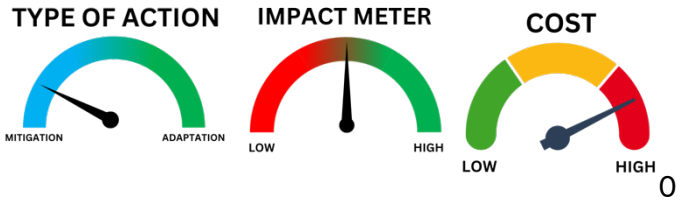
Below we lay out the structural elements of how we achieve productive climate action for land use and transportation in Blaine County. We utilize the following strategic action elements to frame our approach:

- Key Performance Indicators (KPIs): units of measurement (metrics) that allow us to track progress between baselines and objectives
- Goals: high level view of what we would like to see happen in this space
- Baselines: current measurable status of a particular topic
- Objectives: specific, measurable, achievable, relevant, time-bound (SMART) outcomes to achieve our goals
- Actions: Discreet programmatic or project-based tasks needed to achieve objectives

Key Performance Indicators (KPIs):

- Airport GHG emissions (tons)
- Transportation (all) GHG emissions
- Vehicle Miles Traveled (VMT) rates
- Average Daily Trip (ADT) rates
- Single Occupancy Vehicle (SOV) rates
- Fatal and injury accident rates
- Infrastructure (roadway) functional classification
- Land use efficiency rates (TBD)
- Local housing units/resources per capita
- Bike/pedestrian infrastructure utilization rates
- Public transit ridership rates
- EV adoption rates

Goal 1: Friedman Memorial Airport: FMAA has identified various sustainability action items in their adopted climate action plan. As such, Blaine County will **support the airport in its effort to achieve lower GHG emissions and lower energy consumption over time.**



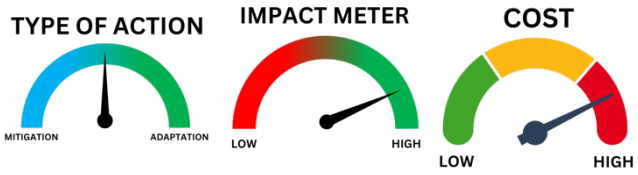
Baselines & Objectives

Baseline 1: 22,100 metric tons GHG (2020)
Objective 1: GHG reductions to be determined by forthcoming emissions inventory and the Airport Board

a) Coordinate regular meetings with the airport administration under the 5B CAN collaborative framework and align strategies and resources appropriately (ongoing).

BLAINE COUNTY PROJECT | MUNICIPAL PROJECT

Goal 2: Transportation: Blaine County is facing significant growth pressures, especially in recent years. Limited supply of available land, cost of land, mid-valley (between Hailey and Ketchum) density challenges and infrastructure limitations have created bottlenecks in how and when more dense growth patterns can occur, resulting is added pressures on the transportation system regionally—and ongoing challenges for transit service, especially during peak times. Therefore, the County, alongside municipal partners and ITD, seeks to **realize a productive common vision for transportation in Blaine County in the long term that encourages the throughput of people and commerce between and among the communities of Blaine County, while reducing greenhouse gas emissions from single occupancy vehicles, increasing safety, and reducing vehicle trips.**



Baseline 1: 75% estimated SOV rate[79]
Objective 1: 50% SOV rate by 2030

Baseline 2: 27 fatal crashes (2018 – 2022)
Objective 2: Zero fatal crashes by 2030

Baseline 3: 223,366,495 VMT / per annum
Objective 3: TBD reduction in VMT by 2030 (to be evaluated by 5B CAN task force, based on population metrics and corresponding vision/planning efforts)

a) Complete the Safe Streets for All (SS4A) Safety Action Plan (2024).

BLAINE COUNTY PROJECT | MUNICIPAL PROJECT

b) Develop a multi-modal, multi-jurisdictional (system-wide) transportation demand management vision and plan including the following elements (2025):

PARTNER PROJECT | BLAINE COUNTY PROJECT | MUNICIPAL PROJECT

1. Clear goals/directives
2. Defined mode shift (how many vehicles are we adapting, vehicle miles traveled reductions, occupancy metrics, TDM strategies (travel demand)
3. Infrastructure for transit/amenities including heated bus shelters, wifi, HOV lanes and bus stops
4. Offsetting travel time metrics
5. Local industry telework elements to reduce transit demand
6. Population realities/incentive structures (affluent, lower income, visitors, etc.)
7. Seasonality/weather metrics
8. Bus, transit, ride share, functional classification metrics
9. Service delivery/coverage (distribution of travel to denser areas)

[79] City of Ketchum Community Outreach (DRAFT)

10. Parking policies that encourage transit usage and mode shift
11. Housing, winter maintenance of bike/ped, micro-mobility enhancements, emerging technology/disruptors (self-driving cars, etc.)
12. Build/enhance the administrative foundation for implementation: grant writing/admin, administrative support, planning & technical staff, compliance, communication support and staff capacity for outreach
13. Determine and pursue related implementation funding
14. Perform transportation workshops: community education and outreach
    a. Stakeholders
    b. Businesses
    c. Individuals
    d. Governments

Goal 3: Land Use - Efficiency: Implementation of land use regulations in Blaine County follows differing standards from jurisdiction to jurisdiction. Densities range from large acreages to over 50 units per acre, depending on location (and available infrastructure). Collaborating on policies that make sense for each jurisdiction could lead to ***improvements to land use efficiency to prevent urban sprawl and preserve open space throughout the county.***

Land Use Efficiency Definition (National Institutes of Health):

> *"Land use efficiency (LUE) refers to an increase in the output of a unit land area related to regional social and economic activities. LUE is a representative concept adhering to the sustainable development paradigm and is the result of dynamic processes driven by economic, social, traffic, and political factors. Many indices, such as development density, population density, employment density, investment intensity, and economic output per land unit have been employed to measure the LUE in many previous studies."*[80]

Baseline 3: Current land use efficiency (TBD)—to be determined through additional analysis.

[80] National Institutes of Health. Identification of Urban Land Use Efficiency By Indicator. 2020. Identification of urban land use efficiency by indicator-SDG 11.3.1 - PMC (nih.gov)

Objective 3: Achieve goals determined by land use efficiency toolkit referenced below.

a. Action 1: Build out and deploy a land use efficiency toolkit for city and county governments to review and adopt that directs at least 85% of new development into cities and areas of City impact. Features could include (2025):

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

   i. Reduced parking requirements
   ii. Reduced building height restrictions
   iii. Increase densities and ADU allowances
   iv. Increase housing diversity/types
   v. Reduce or eliminate minimum lot size requirements
   vi. Restrict large lot consolidation
   vii. Prohibition of net loss of units with redevelopment
   viii. Offer incentives, including density bonuses
   ix. Encourage mixed use development
   x. Strategic dense development along transit corridors

b. Action 2: Update transfer of development rights program and bank countywide (2024).

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

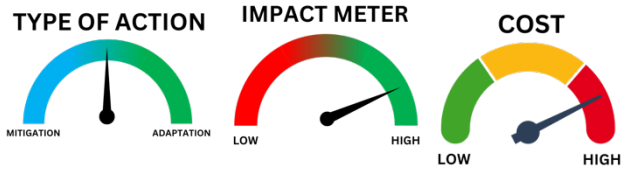
c. Action 3: Establish a working group to protect and conserve sensitive landscapes through land use ordinances and cross-sector partnerships (2024).

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

d. Action 4: Evaluate the expansion of urban renewal districts in all municipalities (2025)

PARTNER PROJECT MUNICIPAL PROJECT

Goal 4: Housing: The further the workforce has to travel, the more the GHG emissions we typically create as a community. Therefore, Blaine County and its partners should **increase the volume of community housing units throughout the county.**

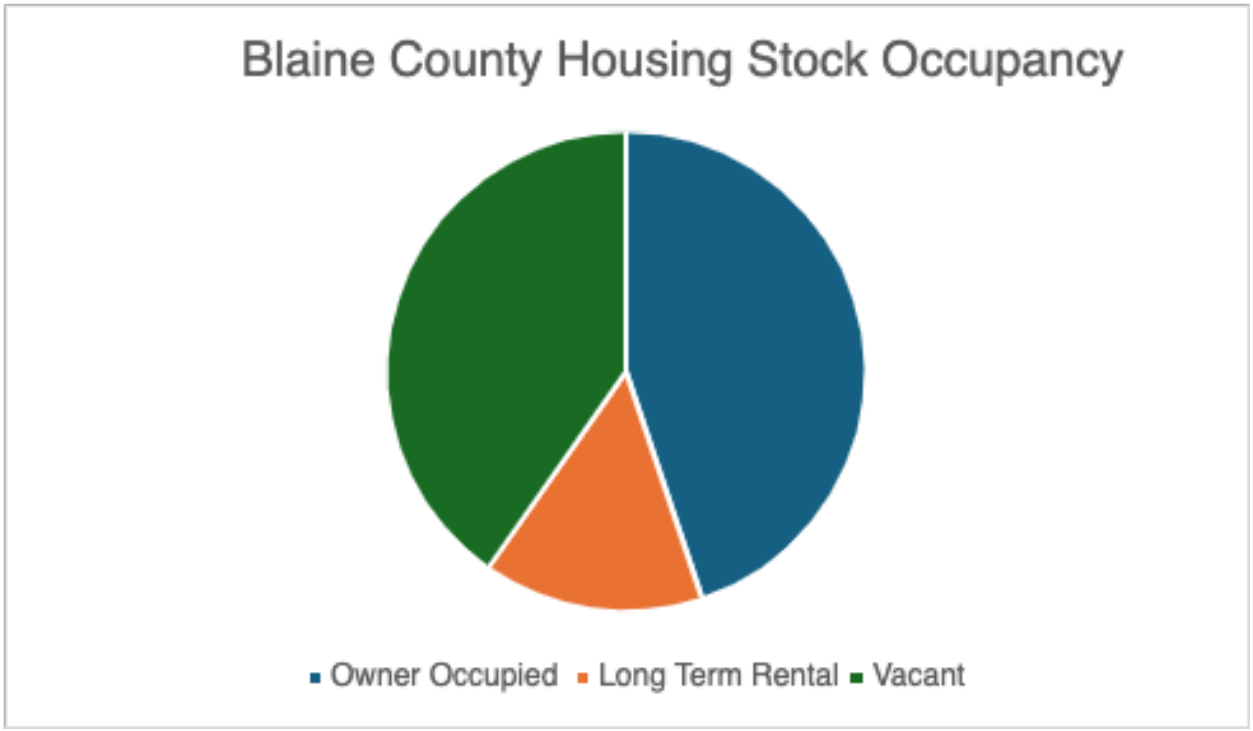


Baseline 1: 40.3% housing vacancy rate (accounting largely for second homes and vacation rentals) 15,959 housing units (2022) against 24,866 population (2022)[81]
Objective 1: 10% reduction in second home and vacation rentals by volume—with units being converted to long term rentals or through allocation of new inventory

Baseline 2: Current (2024) community housing funding allocation approx. $14,500,000 (program + construction funding)
Objective 2: 20% increase in funding allocation across a 10-year average

Baseline 3: 1,036 community housing units (2024)
Objective 3: 4,700 additional community housing units by 2032

[81] Annual Estimates of Housing Units for Counties in Idaho: April 1, 2020 to July 1, 2022 (CO-EST2022-HU-16). Source: U.S. Census Bureau, Population Division. Release Date: May 2023.



82

a) Action 1: Create a consistent, dedicated funding stream for affordable housing (2026).

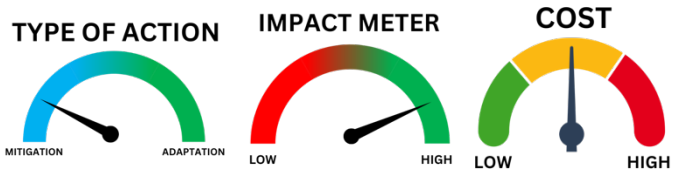
PARTNER PROJECT

b) Action 2: Build, convert or otherwise acquire 4,700 new community housing units (2032).

PARTNER PROJECT

82 University of Idaho Extension. (n.d.). *Indicators Idaho*. Indicators idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16013

Goal 5: Transit: Since 2008, Mountain Rides has seen meteoric ridership increases, indicating strong demand for free and clean transit service in Blaine County. BCRD, Blaine County, and municipalities have also advanced trail/bike/ped offerings extensively in recent years. The community would like to see reduced emissions from vehicle trips wholistically, while improving the quality of life for residents through shorter and more enjoyable commutes. Therefore, Blaine County should continue to **support bike/ped infrastructure and Mountain Rides in their efforts to expand service and increase public ridership through policy instruments, partnership coordination/collaboration and strategic planning in the transportation and transit sectors.**



Baseline 1: Mountain Rides ridership—750,000 annually
Objective 1: Mountain Rides ridership—850,000 by 2030

Baseline 2: 75% single occupancy vehicle rate (estimated)
Objective 2: 50% single occupancy vehicle rate by 2030

Baseline 3: 400,000 user days / year on the Wood River Trail (estimated, 2023-BCRD)
Objective 3: 10% increase in bike/ped usage for commutes by 2030

a. Action 1: Support Mtn. Rides in its 2030 vision, pursuant of valley wide bus transit being the preferred public transportation mode in the Wood River Valley, to include (Ongoing):

BLAINE COUNTY PROJECT | MUNICIPAL PROJECT

i. Roadway infrastructure needs
ii. Facilities needs
iii. Transit signal priority integration
iv. Route expansion/evaluation needs
v. BEB adoption/integration
vi. School District ridership facilitation
vii. Carpool and vanpool expansion

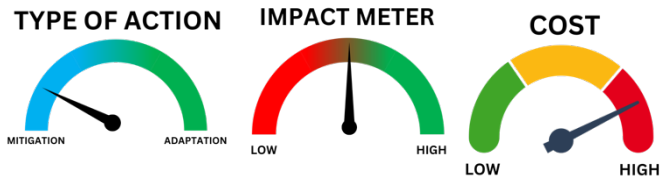
viii. Employer transit incentives
ix. Park & Ride expansion for in-county and out-of-county patrons
x. Expanded bike/ped connections

b. Action 2: Support BCRD and municipal partners in their strategic planning and implementation for bike/ped infrastructure, to include (Ongoing):

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

i. Expanded year-round bicycle, pedestrian, and micro-mobility infrastructure.
ii. Establish a seasonal e-bike and e-scooter share program
iii. Promote active commutes through education and outreach and incentive programs.
iv. Implementation of the Blaine County Bike/Ped Master Plan.

Goal 6: Electric Vehicles: Electric vehicles are proven to lower greenhouse gas emissions considerably across their lifespan. With transportation being one of the largest contributors to GHG in Blaine County, this presents one of the most important opportunities in the next decade. Blaine County and partners should work to **increase on-road electric vehicle adoption such that 10% of registered vehicles are electric by 2030**



County	Fuel Type	Count

BLAINE	Diesel	2,920
	Electric Vehicle	**262**
	Flexible	2,547
	Gas	27,000
	Electric and Gas Hybrid	835
	Plug In Hybrid Electric Vehicle	**126**
	TOTAL	**33,690**

Blaine County EV Registration Numbers

Baseline 1: 262 EVs registered in Blaine County, reflecting less than 1% of vehicle registrations (as of DEC 2023)
Objective 1: ~3,500 EV registrations by 2030

Baseline 2: 1 (one) DCFC charger in Blaine County (March 2024)
Objective 2: 10 DCFC chargers by 2030

c. Action 1: Create regional electric vehicle infrastructure plan that drives market adoption and lowers barriers for existing EV owners (2025).

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

i. Increase electric vehicle charging stations
ii. Dedicate electric vehicle parking spaces near businesses and employment
iii. Evaluate electric vehicle-ready building code
iv. Begin transitioning municipal and county fleets and equipment to electric
v. Large business EV fleet conversion
vi. Electric bus conversion
    1. MRTA

2. BCSD

5.7 Conclusion:

Through the broader themes of transit-oriented design (TOD) and mode shift, we can see that there are many ways the community can participate in climate action surrounding land use and transportation. Below are additional steps individuals, businesses and local units of government can take to improve climate outcomes in Blaine County:

Individual Action:

- Utilize public transit
- Consolidate/limit trips
- Ride share
- Ride your bike or walk
- Build or rent a smaller home in a denser area
- Buy or lease an EV

Private Sector Action:

- Utilize density/developer incentives
- Create employee incentives for transit utilization and/or consider implementing a rideshare program for your employees
- Transition corporate fleets to EVs

Government Action:

- Offer density bonuses and land use efficiency enhancements to developers
- Enhance transit funding
- Allocate dedicated right-of-way for transit
- Transition fleets to EVs
- Consider if/how the actions listed above may fit in with your planning capacity

6.2 Vision:

A carbon-neutral Blaine County powered by renewable energy that is affordable and equitably distributed while protecting our resources, preserving our way of life, and improving air quality for generations to come.

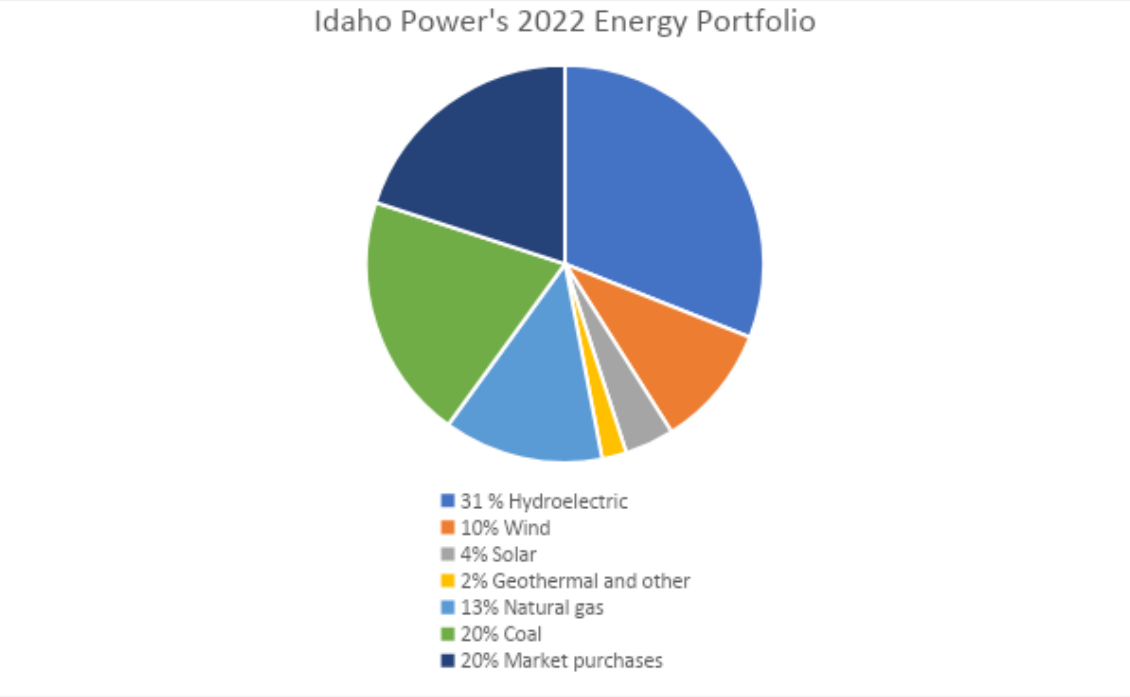
6.3 Overview

6.3.1 Clean Energy Overview

Blaine County receives 99% of its electricity from Idaho Power and the remaining 1% from Salmon River Electric Cooperative. The majority of natural gas is provided by Intermountain Gas Company. Because the bulk of electricity is provided by Idaho Power, it is reasonable to equate Idaho Power's energy make-up as that of Blaine County's as well. Idaho Power's 2022 energy mix was 47% carbon neutral, including 31% hydroelectric, 10% wind, 4% solar, 2% geothermal and other, 13% natural gas, 20% coal, and 20% market purchases. Market purchases refer to electricity Idaho Power has purchased from a different electricity provider to supplement their own production. The type of electricity purchased varies year to year, based on various production levels and prices. This may impact the overall level of carbon emissions released from energy provision in Blaine County. Idaho is part of the Western Interconnection, which includes parts of Montana, Washington, New Mexico, South Dakota, Texas, Wyoming, Arizona, California, Colorado, Idaho, Nevada, Oregon, and Utah. The Western Interconnection energy make-makeup is 25.2% hydroelectric, 9.9% wind, 7.6% solar, 1.8% geothermal, 6.8% nuclear, 32.1% natural gas, 15.2% coal, and 1.3% other sources.[84] We can therefore assume that market purchases reflect a similar energy make-up. It is important to note that some of the renewable energy produced by Idaho Power may be bought by other electric utilities in the Western Interconnection, rather than delivered to customers. Idaho Power has a roadmap to achieving 100% clean energy by 2045. As this unfolds, all electrified buildings will become carbon-free. Idaho Power has already reduced the share of energy production from coal by 15% and has plans to reduce coal's share of production by an additional 10% by 2025. Their 2023 Integrated Resource Plan (IRP) includes adding on 3,325 MW of solar, 1,800 MW of wind power, 1,453 MW of battery storage, 360 MW of energy efficiency, 340 MW of peaking hydrogen, 160 MW of incremental demand response, and 30 MW of geothermal. This is in an effort to simultaneously meet their renewable energy demands as well as the growing energy demands of their customers. Idaho Power is currently working towards offering more options for clean energy credits, including the Clean Energy Your Way program (approved by the Idaho PUC October 2023). The take rate for these credit programs informs demand metrics for clean energy in Idaho. As such, this is an opportunity to advance Blaine County's clean energy production and consumption goals.

[84] WECC. (n.d.). NET generation // . https://www.wecc.org/epubs/StateOfTheInterconnection/Pages/Net-Generation0706-7913.aspx

It is important to note that Idaho Power's future emissions projections in its IRP do not consider Renewable Energy Certificate (REC) ownership. To our awareness, there is no alternate resource that accounts for REC ownership in projected emissions for our area, so Blaine County is relying on Idaho Power's IRP as the closest estimate from which to base our goals. We recognize that this could lead to double-counting issues regarding zero-emission renewable energy and will adjust our plan should a better-published resource on projected emissions become available.[85]



To encourage clean energy production, increase energy independence, and reduce power outages, the County and Cities encourage distributed energy projects such as rooftop solar where appropriate.

There are currently an estimated 243 solar systems installed in Blaine County, providing a total of 2.367 MW of energy.

The County's Land Use and Building Service department (LUBS) is also working towards updating the mountain overlay district to potentially allow for rooftop solar in this otherwise protected area.

[85] Guidance from Idaho Power

2018 EMISSIONS BY JURISDICTIONS IN MT CO2e

SECTOR	BLAINE COUNTY	CITY OF HAILEY	CITY OF KETCHUM	CITY OF SUN VALLEY
TRANSPORTATION	133,981	21,284	10,923	27,144
COMMERCIAL ENERGY	53,356	20,775	23,455	6,012
INDUSTRIAL ENERGY	7,847	0	2,299	5,533
RESIDENTIAL ENERGY	114,402	23,918	40,024	25,353
SOLID WASTE	17,292	3,456	1,870	474
WATER & WASTEWATER	40	1,404	390	802
ELECTRIC IRRIGATION	6,799	189	0	0
PROCESS & FUGITIVE EMISSIONS	2,390	508	952	448
TOTAL	**336,107**	**71,534**	**79,913**	**65,766**
PERCENT TOTAL	**100%**	**21%**	**24%**	**20%**

[86]

The table above highlights the overall results of the 2018 Clean Energy Study and emissions breakdown by sector and jurisdiction. The results of that study led to high levels of clean energy and energy efficiency goals. It is important to note that those goals were created under the political realm of 2018, and do not account for current statutory realities. Because of this we have taken those high-level goals as the "best in class" results, and created updated objectives and actions that are grounded in what is currently possible in the Wood River Valley. The objectives and actions for this CAP are meant to be the more actionable objectives and actions that will lead us towards the initial goals from the 2018 study. All noted items are to be coordinated with relevant partners (Idaho Power, etc.).

[86] Brendle Group Clean Energy Study. 2022. Clean Energy | Blaine County, ID

Under current policy scenarios, the National Renewable Energy Laboratory (NREL) emissions scenarios projects Idaho's emissions to drop through 2035 before rising again through 2050.[87] The main changes to the energy make up is massive growth in the solar and wind sector. While the increase in emissions raises questions about the realistic probability of achieving long term, meaningful emissions reductions against population growth and other factors, we must do everything in our power to continue along the path of renewable energy generation. We are constantly evolving our approach to climate action, based on the best available information and may need to alter approaches should new information present itself.

6.3.2 Green Building Overview

Blaine County and the cities have been working on increasing green building adoption for almost 15 years. Here, we outline the history of green building codes in the Valley and the State, as well as where our current opportunities reside. In 2011, Blaine County voted to alter building codes such that any home built greater than 2500 square feet was required to meet an above-code building standard. Acceptable code standards include the National Green Building Standard, Leadership in Energy and Environmental Design (LEED), or Residential Energy Service Network (RESNET) Home Energy Rating Score (HERS). The county was able to calculate a rough estimate of how many buildings have been built with one of these standards. Between 2011 and 2023 of the 353 permits issued, 283 are likely to meet an above-code energy program. In 2012, the City of Ketchum required that new homes are Silver certified from either LEED or the National Green Building Standard. Also in 2012, the city of Hailey adopted a Build Better Program, prioritizing energy-efficiency and sustainable building practices. In 2021, the Idaho state legislature updated the statewide building code to implement the 2018 version of the International Energy Conservation Code.

Since then, there have been two updates to state-wide energy policy. Passed in 2022, HB660 prevented local governments from adopting stricter building standards than the statewide standard but included a clause allowing localities with existing above-standard codes to maintain their standards. In 2023, HB287 removed that clause, forcing all local governments to follow the statewide standard, preempting Blaine County, Hailey, and Ketchum's requirements.[88]

Any energy efficiency codes above the 2018 standard have since been repealed and the 2018 standard has been adopted. Because of this, the county and cities may only encourage voluntary (market-based) participation in energy efficiency standards through education and training programs.

[87] NREL. (n.d.-a). Scenario Viewer. https://scenarioviewer.nrel.gov/?project=03ad535d-f0ed-4a6b-8323-c582a606e92c&mode=view&layout=Default

[88] Carmel, M. (2023, March 22). Bill Rolling Back compromise on energy code requirements sails to the Senate floor. BoiseDev. https://boisedev.com/news/2023/03/22/bill-restricting-energy-code-requirements/

6.4 Environmental, Social, and Economic Considerations

Transitioning to clean energy sources for buildings will have major environmental, social, and economic benefits in the long run. Buildings are currently responsible for about 39% of energy-related emissions worldwide[89]. By using renewable energy sources like solar or wind to power electric appliances like stoves, household heaters, water heaters, etc. we are not only reducing emissions but also oftentimes improving the air quality of our homes. Many of these upgrades require significant initial investments but can have the potential to save money in the long run.

Environmental:

- Renewable energy and energy efficient appliances and practices reduce greenhouse gas emissions.
- Green building emphasizes the use of sustainable, renewable, and locally sourced materials. This reduces the depletion of non-renewable resources and minimizes the environmental impact of material transportation.
- Green buildings use low-emission materials and advanced ventilation systems, which reduce indoor and outdoor air pollution. This leads to healthier environments and contributes to better overall air quality in the surrounding area.
- Green building practices often include water-saving fixtures and landscaping with drought-resistant plants. These measures help conserve water resources and reduce the strain on local water supplies.
- During construction, green building practices prioritize the use of sustainable materials, recycling, and reducing waste. By minimizing construction waste and promoting the use of recycled and recyclable materials, green buildings help reduce landfill contributions.

Social:

[89] Embodied carbon. World Green Building Council. (2022, October 28). https://worldgbc.org/advancing-net-zero/embodied-carbon/

- Sustainable building practices and energy generation help reduce the social cost of carbon. By making green building practices standardized we can equitably increase quality of life through healthier living spaces and lower energy costs for renters and homeowners.
- Green buildings often include features that enhance resilience against natural disasters, such as better insulation and sustainable materials, which can make communities safer and more prepared for extreme weather events.
- Green buildings can revitalize neighborhoods by promoting sustainable development that includes green spaces, community gardens, and recreational areas, fostering a sense of community and enhancing overall quality of life.
- Green buildings often use non-toxic materials and promote better indoor air quality, leading to healthier living and working environments. Enhanced natural lighting and better ventilation also contribute to the well-being of occupants.

Economic:

- Investments in energy efficiency reduce overall energy consumption and therefore reduce energy costs.
- Renewable energy sources are just that, renewable, so once initial investments have been made into infrastructure, the energy will continue to be produced at low cost. The current buy-in for renewable energy is extremely high, making it out of reach for lower income residents. We are committed to cost conscious projects that make renewable energy and energy efficiency accessible to all.
- By increasing public knowledge of green building practices and standards, there is also the potential to create new green-building jobs.
- Over time, economies of scale for green building technologies and local workforce training lowers prices and increases value for consumers.

6.5 Partners and Resources

The objectives and actions in this section cannot be completed without help from our municipal, non-profit, and private partners, who each play an important role in clean energy and green building space.

Partners may include:

a. Carey
b. Bellevue
c. Hailey
d. Ketchum
e. Sun Valley
f. Idaho Power
g. National Renewable Energy Laboratory (NREL)
h. Idaho National Laboratory (INL)
i. Salmon River Electric
j. Idaho Governor's Office of Energy & Mineral Resources (OEMR)
k. Wood River Climate Action Coalition (CAC)
l. Local architects/engineers
m. Power Engineers
n. University of Idaho Integrated Design Laboratory (IDL)
o. College of Southern Idaho

Resources for implementation are listed in Appendix A.

6.6 Implementation

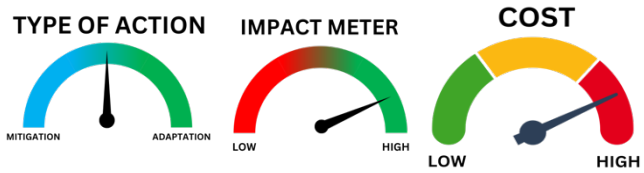
Below we lay out the structural elements of how we achieve productive climate action for clean energy and green building in Blaine County. We utilize the following strategic action elements to frame our approach:

- Key Performance Indicators (KPIs): units of measurement (metrics) that allow us to track progress between baselines and objectives
- Goals: high level view of what we would like to see happen in this space
- Baselines: current measurable status of a particular topic
- Objectives: specific, measurable, achievable, relevant, time-bound (SMART) outcomes to achieve our goals
- Actions: Discreet programmatic or project-based tasks needed to achieve objectives

To further our efforts on climate change mitigation and adaptation, we have determined two broad objectives related to clean energy and green building: **increasing the supply of clean energy and reducing the demand of energy**. For each objective, we have outlined specific actions to take that are necessary to achieve our objectives. Actions are measured from a baseline and benchmarked through to a locally determined science-based waypoint. Additionally, we have identified key performance indicators (KPIs) that will serve as our measurable outputs to track progress in achieving these objectives.

Key performance Indicators (KPIs):
KPI 1: Greenhouse gas emissions from residential and commercial buildings (MTCO2e)
KPI 2: Supply of renewable energy (# subscriptions to clean energy your way, # distributed energy such as solar installed)
KPI 3: Energy demand from buildings (# buildings voluntarily meeting energy efficiency standards)

Goal 1: Clean Energy: The most impactful way of curbing GHG emissions is by reducing or eliminating the burning of fossil fuels. In the energy sector, that means integrating renewable alternatives. This can be achieved through adoption of clean energy credits, utility scale domestic production of renewables and local distributed energy projects (like community solar). Therefore, our first clean energy goal is to **increase the supply of clean energy in Blaine County.**



Baselines and Objectives:
Baseline 1: 2018 total county-wide electricity emissions were 107,554.24 MTCO2e
Objective 1: Reduce carbon emissions from grid-supplied electricity by 30% by 2030 (to be coordinated with Idaho Idaho)
Baseline 2: As of 2022, there were 243 solar energy systems installed in Blaine County, generating a total of 2.367 MW (Idaho Power Customers)[40]
Objective 2: Expand local clean energy generation by 22% each year through 2030
Baseline 3: # of current subscriptions to green energy program, Clean Energy Your Way—to be evaluated Summer of 2025
Objective 3: 50% of County residents subscribe to Idaho Power's Clean Energy Your Way program by 2030

Actions:

a. Promote county-wide (government, business, individual) opt-in for Idaho Power's Clean Energy Your Way program.

BLAINE COUNTY PROJECT | MUNICIPAL PROJECT

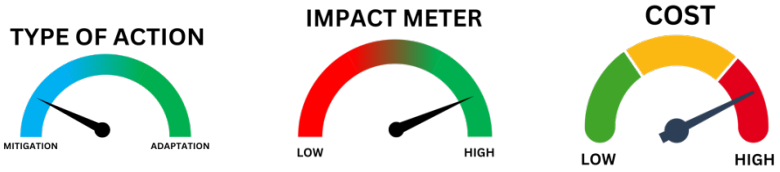
b. Build out a local clean energy plan, coordinated with Idaho Power, cities, local industry, nonprofits, Idaho National Lab, and other experts that evaluates pathways and leads to implementation of the following:

BLAINE COUNTY PROJECT | MUNICIPAL PROJECT | PARTNER PROJECT

i. Brendle Group Clean Energy Study goals and actions
ii. Advocacy for advancing stated clean energy goals in IRP
~~iii.~~ Evaluation of state and local permitting policies
iv. Cost-benefit analysis and market trends
v. Promotion of local case studies and outcomes, including a local EE award/recognition program
vi. Development and deployment of educational materials
vii. Evaluate and implement local clean energy and green building education programs and training opportunities (BCSD, CSI)
viii. Distributed energy
    1. Rooftop PVE
    2. Community Solar (Solarize Blaine)
    3. Geothermal
    4. Wind
    5. Battery storage

ix. Distributed energy grants

Goal 2: As important as renewable energy is, all energy generation uses resources. As such, the most sustainable energy use would be low or no use. Weatherizing and retrofitting buildings, as well as opting for energy-efficient designs and appliances can greatly reduce the demand for energy. The lower the total energy demand for Blaine County, the easier it will be to ensure the energy that is needed can be provided by renewable sources. As such, the second energy goal is to **reduce demand for energy through energy efficiency improvements and consumption reduction methods.**



Baselines and Objectives:

Baseline 1: 2018 residential and commercial use of electricity was 341,996,080 kWh, emitting 100,902 metric tons of CO2
Objectives 1: Reduce Carbon Emissions from existing residential and commercial buildings by 20% by 2030

Baseline 2: Blaine County operational power use 658,506 kWh (2023)
Objective 2: Reduce Blaine County operational power use by 20% by 2030.

Baseline 3: Approximately 280 homes in the county currently meet RESNET Home Energy Rating Score (HERS).
Objective 3: 50% of new residential and commercial buildings meet building performance standards by 2025 and 100% by 2030, with a focus on electric, net-zero homes.

Action 1: Awareness, training, and outreach (community):

a. Develop training programs for auditors, designers, builders, developers, and weatherization experts to expand workforce expertise in weatherization, energy efficient design, and efficient electric appliance installation.

PARTNER PROJECT

b. Hold outreach events targeted at the public for DIY energy efficiency home upgrades created by industry leaders (USGBC, DOE, etc.)

PARTNER PROJECT

c. Increase knowledge about and access to existing weatherization, energy efficiency, and green building incentives and programs.

PARTNER PROJECT

d. Host a regionally organized green building, building electrification demonstration event to increase awareness and adoption of green building practices, new technologies, and practices.

PARTNER PROJECT

e. Create a green building supply chain cohort for local builder/developers to lower the cost of electrification on scale.

PARTNER PROJECT

f. Distribute green building performance standard materials with each new building permit.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

g. Build and deploy an awareness campaign with relevant stakeholders to include tours of existing homes/facilities, demonstration projects and collateral and web-based materials.

PARTNER PROJECT

Action 2: Government implementation:

h. Assess improvements to jurisdictional procurement policies to encourage high-efficiency electric heating and cooling systems for renovations and replacements of jurisdictional buildings.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

a.

Obtain funding for energy audits and efficiency upgrades at community facilities, as needed/appropriate.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

Action 3: Policy evaluation and updates:

a. Evaluate development of a county- and/or partner- funded grant program that incentivizes and assists with weatherization and efficiency upgrades for residential and commercial buildings.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

b. Continue improving The Blaine County building energy efficiency code requirements at each code adoption opportunity; with appropriate provisions to address the challenges of housing affordability.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

c. Evaluate home size regulatory frameworks that could limit square footage.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

d. Research and define which green building standard(s) are most appropriate to local jurisdictions, compliant with statute and will likely be most successful if implemented under a voluntary program.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

e. Evaluate the design/structure and deployment of a voluntary green building incentive program to include:

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

a. Financial incentives
b. Expedited permitting
c. Lower fees
d. Tax rebates
e. Other incentives, as appropriate

6.7 Conclusion:

How we keep the lights on matters. 32% of Blaine County's greenhouse gas emissions are from electricity generation, and 23% of emissions are from on-site combustion of natural gas and propane. These two emitters are most widely used to heat homes and run appliances, but there are multiple ways to reduce these emissions. Below are additional steps individuals, businesses and local units of government can take to improve climate outcomes in Blaine County:

Individual Action:

- Turn down the heat and turn off the lights when you are not at home
- Add insulation, replace windows, and put in a programmable thermostat to lower your energy consumption without lowering your quality of life
- Look into putting solar panels on your roof to help offset some of your energy use
- Choose Idaho Power's clean energy your way subscription plan
- Check out various incentive programs listed in Appendix A that provide cash rebates for installing energy-efficient appliances and improvements to your home.

Private Sector Action:

- Turn down the heat and turn off the lights when the building is not in use
- Add insulation, replace windows, and put in a programmable thermostat to lower your energy consumption and costs
- Look into putting solar panels on the roof to help offset some of your energy use
- Choose Idaho Power's clean energy your way subscription plan to power your business
- Appendix A highlights cash rebate incentives that are specifically targeted for businesses, including energy-efficient food service equipment and heating and cooling options. There are also specific incentives for agriculture businesses to install solar or wind energy to power the day-to-day farm operations.
- We encourage businesses such as construction companies, architecture firms, and lighting and plumbing companies to investigate green building strategies and consider implementing them in their own practices. Customers are more likely to choose green building services/appliances if the option is presented to them.

Government Action:
Blaine County is committed to working with key stakeholders in the energy and building industries to create a governmental environment that encourages and fosters sustainable practices. Many of the previous tactics are aimed at reducing administrative inefficiencies and lifting individual and private sector efforts. Additionally, Blaine County is looking into opportunities for energy efficiency upgrades and renewable energy generation on county owned land, and encourages municipalities to do the same, where appropriate.

Please refer to actions listed for objectives 1 and 2 in this section, especially the "government implementation" and "policy actions" within objective 2's actions for more specific action items.

We explore what these actions could look like below, expanding on the base concept of circularity using the '5 R's'—to account for Blaine County's existing programming and waste diversion efforts:[92] The two main tactical categories utilized in this plan to achieve better circularity are **diversion** of waste from the landfill, and **recovery** of diverted waste, into a beneficial second use. Additional efforts to **reduce** the initial consumption of waste are also critical.

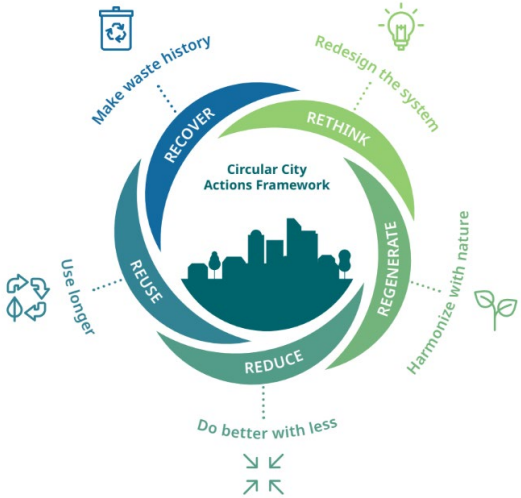
Rethink: Redesign systems to lay the foundation for circular activities and enable the transition to a circular economy

Regenerate: Harmonize with nature by promoting infrastructure, production systems and sourcing that allows natural ecosystems to thrive

Reduce: Do better with less by using and supporting infrastructure, processes and products that are designed to minimize material, water and energy use and waste generation from production to end of use

Reuse: Use longer and more often by extending and intensifying use of existing resources, products, spaces and infrastructure

Recover: Eliminate waste by maximizing the recovery of resources at the end of the use phase so that they can be reintroduced into production processes



[92] ICLEI – Local Governments for Sustainability, Circle Economy, Metabolic, and Ellen MacArthur Foundation, 2021. *Circular City Actions Framework: Bringing the circular economy to every city.* Bonn, Germany. Circular Cities Action Framework-PDF

7.2 Vision:

A Blaine County that consumes in a more circular fashion, diverts 50%+ of its waste, and scales its recycling efforts in an intentional and proactive manner[93]

The solid waste and circular economy task force was assembled in 2021 to determine reasonable goals and objectives to enhance our existing efforts locally and prepare for emerging advancements on a regional level. The team from this task force includes solid waste experts, composters, team members from the Blaine County Recycle Center, municipal staff, nonprofit partners and interested/engaged citizens.

7.3 Overview

7.3.1 Blaine County Recycling, Waste and Infrastructure Overview:

The Blaine County Recycle Center, located at the Ohio Gulch Transfer Station is a 10,000sf industrial facility with a bailer, sorters, scale system and offices. It has heavy machinery and trucks, with an annual operating structure that recycles 4,800,000 lbs of material annually (2023). The majority of recyclable materials come in the form of corrugated cardboard (70%), followed by glass, plastics, aluminum and tin.
Recyclables in Blaine County:

[93] Becqué, R., Holvast, L., Lacouture, E., Wang, K., Hearn, B., Oliva, A. (2021). Circular Indicators for Governments. The Hague, Netherlands: Platform for Accelerating the Circular Economy (PACE).

Additional transfer stations and drop off locations are located throughout the county:

- Blaine County Recycling Center – 110 Ohio Gulch Rd, Hailey, ID 83333
- Carey Transfer Station – 19401 US-20, Carey, ID 83320
- Review Drive Drop Off
- Hailey Park and Ride Drop Off
- Smiley Creek Drop Off – Located across the street from the Smiley Creek Lodge
- Ketchum Drop Off – 215 Lewis St, Ketchum, ID, 83340
- Bellevue Fire Station – 517 2nd Bellevue, ID, 83313

All solid waste from Blaine County that doesn't get recycled or composted (see 7.3.3 for composting details) ends up at the Milner Butte landfill, 2 hours south of Hailey in Cassia County, operated by Southern Idaho Solid Waste (SISW). Approximately 74,000,000 lbs (37,000 tons) of waste gets landfilled here annually (2022). That facility has a state-of-the-art waste-to-gas conversion system that generates 3.9 MW of utility scale power—enough to power approximately 3,500 homes. The co-location of energy generation technology with existing transmission lines has created some interesting scalability opportunities across Southern Idaho. SISW is currently working to integrate additional chemical recycling technologies, along with an industrial scale Dirty Materials Recovery Facility ("Dirty MRF") that would allow for the waste stream to arrive unsorted and would effectively divert approximately 50% of arriving waste back to beneficial uses. The modeling for this type of technology integration has been tested in and integrated[94][95]

Additionally, the Ohio Gulch Transfer Station (operated by SISW) collects municipal solid waste, yard waste and construction and demolition materials (C&D)—an additional 9,000 tons of (C&D) is sent to Ohio Gulch annually.

BLAINE COUNTY RECYCLE CENTER

POUNDS RECOVERED IN FY 2023

OCTOBER	**402,595 lbs.**
NOVEMBER	**348,232 lbs.**
DECEMBER	**412,980 lbs.**
JANUARY	**440,616 lbs.**
FEBRUARY	**360,453 lbs.**
MARCH	**364,096 lbs.**
APRIL	**332,747 lbs.**
MAY	**369,514 lbs.**
JUNE	**450,267 lbs.**
JULY	**456,348 lbs.**
AUGUST	**476,733 lbs.**
SEPTEMBER	**409,366 lbs.**
TOTAL	**4,823,947 lbs.**

To date, much has been done to advance Blaine County's Circularity and waste reduction metrics.

- In 2021, the County worked with Warm Springs Consulting and Southern Idaho Solid Waste to commission a waste characterization study (referenced extensively below).
- In 2023-4, the County commissioned Sloan Vazquez and McAfee to conduct an assessment of existing recycling infrastructure and strategic opportunities associated with scaling up operations against population metrics.

- The Climate Action Coalition of the Wood River Valley and Environmental Resource Center work routinely on local initiatives to reduce waste at public events, educate the public and visitors about how to recycle, offer reuse and 'Repair Café' clinics and

[95] Sloan Vazquez McAfee Solid Waste and Recycling Assessment. 2024. Blaine-County-SVM-Report---02-2024---Final-Draft

volunteer at the Blaine County Recycle Center.

- Winn's Compost, a private entity, diverts a significant amount of organic waste annually from the landfill, thereby reducing GHG (methane) emissions and carbon emissions associated with transporting waste long distances.

- The Climate Action Coalition hosts Earth Fest in April of each year since its founding in 2019—a celebration of sustainability and climate action across the region.

- Clear Creek Disposal, the Blaine County and municipal waste hauler of record, is a strong strategic partner for recycling, waste reduction and composting efforts underway in the region, including Christmas light recycling, material collection from satellite locations and curbside source separated recycling servicing in most areas.

- Private sector partners like Building Material Thrift and The Gold Mine offer second use opportunities for many goods and construction materials that may otherwise end up in the landfill. Sun Valley Company is also scaling up its recycling and waste reduction efforts alongside partners.

Figure 9. Blaine County Waste Composition - Annual Tonnages

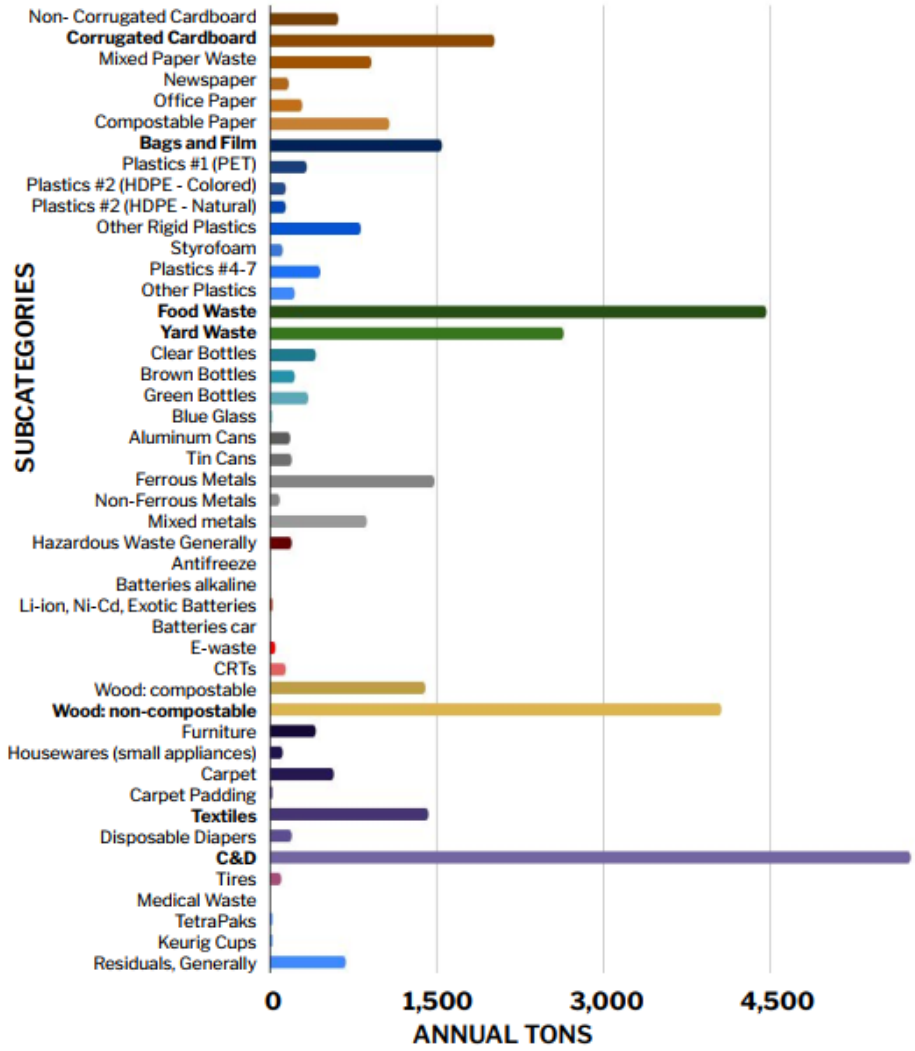
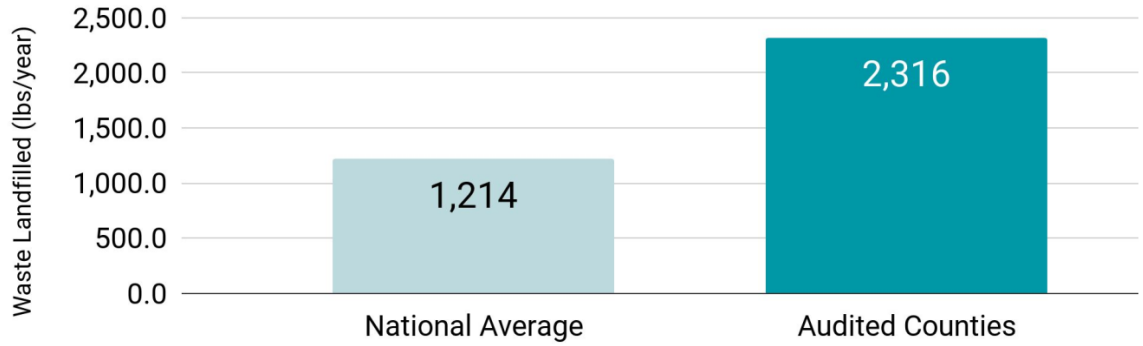


Figure 20. Annual Waste Landfilled per Capita Compared to National Average



7.3.3 Private Sector Composting (Organics) Overview:

Winn's composting diverts approximately 23,000,000 lbs. of organic material annually at their 20-acre facility, located adjacent to the Ohio Gulch transfer station/recycle center. Winn's is the contracted recipient of Ketchum's DEQ-regulated solid waste sewage byproducts. The majority of Winn's diversion comes in the form of mixed wood waste, dirt, sod, grass and green waste. Winn sells approximately the following volumes of compost annually (2023):

- 851 yards of topsoil
- 2087 yards of garden compost
- 950 yards of mulch
- 6342 yards of topsoil mix
- 303 yards topsoil w/ rock
- **Totaling 10,631 yards**

Total lbs. of raw product received/diverted:

- 3,802,111 lbs. mixed wood
- 2,381,964 lbs. clean dirt
- 7,709,263 lbs. sod/dirt
- 5,352,170 lbs. thatch/grass
- 3,627,230 lbs. green waste
- **22,873,152 TOTAL pounds**

7.3.4 Collection Overview:

Clear Creek Disposal, based in Ketchum, is a private operator performing collection of both municipal solid waste and recyclable materials through local franchise agreements. Having a well-established, flexible and quality partner in waste management makes innovation much more straightforward, and implementation much easier.

7.4 Environmental, Social, and Economic Considerations

We can further break down our goals and tactics into the three buckets of the triple bottom line, all of which require thoughtful integration of the 5 R's. A more circular economy in Blaine County would drive emission reductions, including:

Environmental:

- Reduced methane emissions from the landfill
- Reduced embodied carbon emissions from buildings and construction materials
- Reduced consumption-based emissions from supply chains and the transportation of goods
- Less waste also reduces littering and the impacts of plastic on the natural environment (referenced in Chapter 5).

Social:

- The social cost of carbon quantifies the impact that greenhouse gases have on society through the financial value of its impacts on health, labor, building and heating/cooling costs, and more. This formula applies to the greenhouse gases (including carbon, methane, and nitrous oxide) that is released from waste[97]
- Additional considerations of food waste economics, embodied carbon (upstream emissions) and pollution in and around areas where disadvantaged communities live are also key to this discussion.

Economic:

- Waste equates to lost revenue. Whether it's food products, construction materials, clothing or other goods, reducing that waste will mean more goods circulating in the economy and a better return on investment.
- Landfill costs: maintaining landfills costs money, and by sending less waste to the landfill you are limiting the costs needed for maintenance.
- How waste affects individual citizens, governments and businesses bottom line is also an important factor to consider in Blaine County's climate action planning. Supply and demand metrics, scalability of green technologies and durable lifespan of goods is critical to adoption, retention, and public education.

7.5 Partners & Resources:

- Clear Creek Disposal
- Southern Idaho Solid Waste
- Blaine County Recycle Center
- Ketchum Sustainability Advisory Committee

[97] EPA Guidance on SC-GHG EPA Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances

- Wood River Climate Action Coalition
- Environmental Resource Center
- Building Material Thrift
- Winn's Composting
- Sun Valley Company
- Blaine County School District
- St. Lukes Wood River
- Municipalities
    - Hailey
    - Bellevue
    - Ketchum
    - Sun Valley
    - Carey
- The Hunger Coalition

Resources are highlighted in Appendix A.

7.6 Implementation

Below we lay out the structural elements of how we achieve productive climate action for solid waste and the circular economy in Blaine County. We utilize the following strategic action elements to frame our approach:

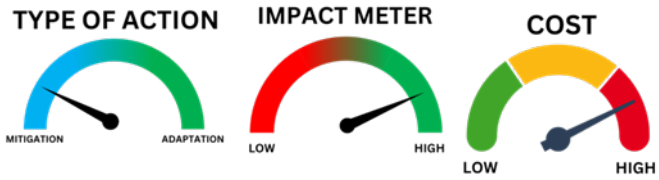
- Key Performance Indicators (KPIs): units of measurement (metrics) that allow us to track progress between baselines and objectives
- Goals: high level view of what we would like to see happen in this space
- Baselines: current measurable status of a particular topic
- Objectives: specific, measurable, achievable, relevant, time-bound (SMART) outcomes to achieve our goals
- Actions: Discreet programmatic or project-based tasks needed to achieve objectives

Key Performance Indicators (KPIs):

- Recycling rates
- Waste production (consumption) rates

- Waste diversion rates

1. **Goal 1—Diversion** (Recover, Rethink, Regenerate, Reuse): Blaine County has significant existing infrastructure in place that currently diverts approximately 35% of waste from the landfill (46% including private sector partners). With population growth continuing to create scale opportunities, and advancements in technologies favoring rural communities, **Blaine County seeks to establish and maintain 50% or greater waste diversion going forward, through integration of various benchmarked technologies, partnerships and processes.**



Baseline 1: 46% waste diversion (current)
Objective 1: 50% waste diversion by 2028

a. Action 1: Support and partner with SISW in their efforts to integrate a Dirty MRF system at Milner Butte.

BLAINE COUNTY PROJECT | MUNICIPAL PROJECT

b. Action 2: Evaluate feasibility and appropriateness of existing strategic opportunities for expanded diversion of waste included in the SVM report, to include:

BLAINE COUNTY PROJECT | MUNICIPAL PROJECT

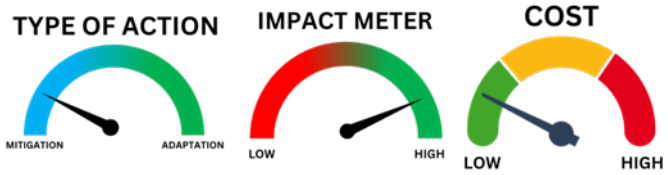
i. Mini-MRF system at Ohio Gulch
ii. Winn's Compost expansion opportunities
iii. Public education program scaling

iv. Resident, business and government diversion enhancement programming opportunities
v. Blue Bag program
vi. Building material Thrift Diversion Program

c. Action 3: Evaluate potential for food waste reduction through establishment of a gleaning and food recovery program, similar to City of Good and Rolling Tomato in Boise.

PARTNER PROJECT

2. **Goal #2**—Consumption Reduction (Reduce, Rethink): Blaine County is part of the Southern Idaho Solid Waste District—where residents produce significantly higher rates of waste than the national average. As such, **Blaine County should encourage residents and businesses to reduce per capita waste production rate by at least 50% by 2030 in order to lower greenhouse gas emissions associated with consumer product manufacturing and distribution, as well as methane production associated with post-life landfilling and carbon emissions from transporting waste to the landfill in Milner Butte.**



Baseline 1: 2,316 lbs. of waste landfilled per capita per year
Objective 1: 1,214 lbs. of waste landfilled per capita (parity w/ national average) by 2028
Objective 2: 1,000 lbs. of waste landfilled per capita by 2030

Regulatory Actions:

a. Action 1: Evaluate state and local policies related to single use plastics and work with municipal and NGO partners to minimize consumption metrics.

b. Action 2: Evaluate and expand existing C&D diversion and deconstruction opportunities through public private partnerships.

c. Action 3: Evaluate statutory options related to waste diversion and recycling to determine regulatory thresholds.

Education / Outreach Actions:

d. Action 4: Create a comprehensive, multi-year, bilingual marketing, education, and outreach campaign focused on raising awareness within the community that leverages partnerships to broaden reach to locals, visitors and businesses.

e. Action 5: Survey residents, businesses and visitors about their awareness of existing recycling programs, program expansion, waste reduction / circularity awareness and performance opportunities.

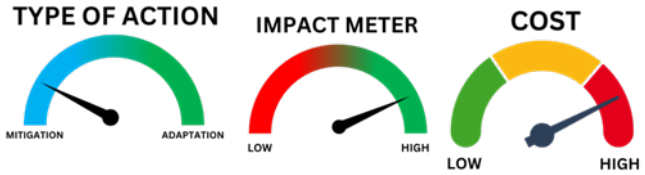
f. Action 6: Create no less than two public circularity events during the first year (i.e. repair workshop, panel, speaker, idea fair, public rummage/yard sale)

Programmatic Actions

g. Action 7: Formalize the 5B CAN work plan related to circularity with well-defined goals and actions. BLAINE COUNTY PROJECT

h. Action 8: Create incentive program for businesses, schools, and governmental departments to develop a culture of action around the circular economy.
BLAINE COUNTY PROJECT MUNICIPAL PROJECT

Goal #3—Recycling (Rethink, Regenerate, Reuse, Recover): With Blaine County's current, highly functional recycling program growing year over year, it is becoming more important to proactively plan for future needs and technological evolutions and opportunities. As such, **in addition to maintaining at least a 50% waste diversion rate, Blaine County aims to enhance existing recycling facilities and processes to ensure long term success.**



Baselines/Objectives:
Baseline 1: 2,600 tons of material currently being recycled (193lbs per capita)

Objective 1: 200 lbs. per capita
Objective 2: 250 lbs. per capita

a. Action 1: Evaluate feasibility of SVM recommendations for infrastructure investments and Recycle Center facility expansion.
BLAINE COUNTY PROJECT

b. Action 2: Evaluate programmatic opportunities to expand partnerships with Winn's Composting, municipalities, SISW and private businesses interested in expanding their recycling portfolio.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

c. Action 3: Evaluate the feasibility of a common C&D diversion ordinance that could be adopted by municipalities and county.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

d. Action 4: Expand existing bilingual marketing and communications efforts to ensure long term awareness of recycling programs across all audiences.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

e. Action 5: Evaluate the expansion of community drop off sites.

BLAINE COUNTY PROJECT MUNICIPAL PROJECT

7.7 Conclusion:

Blaine County is well-positioned to make advancements in its waste reduction goals, given extensive high-functioning infrastructure, processes and partnerships. The county has the opportunity to scale up existing infrastructure alongside population demands instead of having to create new systems from scratch. Below are additional steps individuals, businesses and local units of government can take to improve climate outcomes in Blaine County:

Individual Action:

- Set a personal recycling goal and educate yourself and neighbors about ways to reduce your own consumption
- Take the time to look into what products your purchase can be recycled
- Bring a reusable shopping bag with you when you go to the grocery store

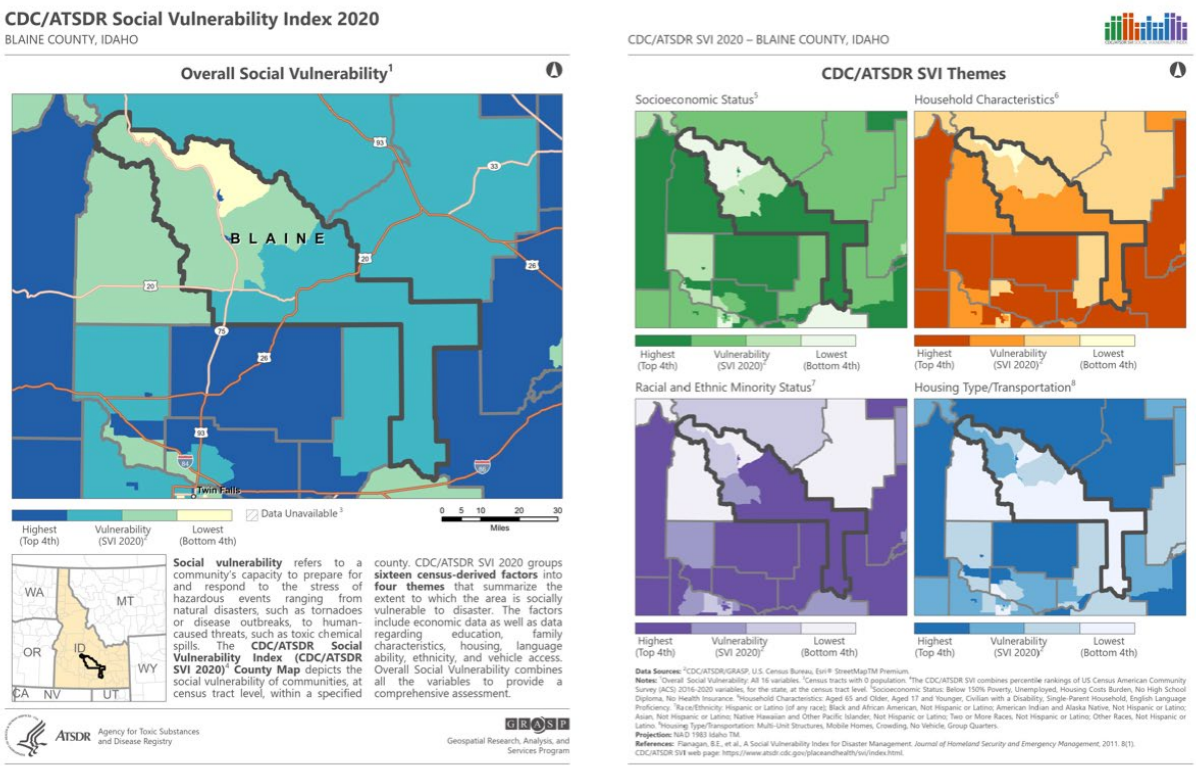
- Try to buy in bulk wherever possible to reduce the amount of plastic you consume (individually packaged goods generally create more plastic packaging waste)

Private Sector Action:

- Participate in local recycling and composting programming
- Explore supply chain enhancements to potentially opt in for recycled products
- Set operational waste reduction goals. This could be achieved by setting internal single-use plastic policies and/or looking at the costs and benefits of transitioning products into compostable or recyclable packaging.

Government Action:

- Establish and adopt clean/green procurement policy standards, compliant with Idaho code
- Evaluate infrastructure enhancements at Recycle Center
- Evaluate recycling/composting enhancements at government buildings and/or in public spaces (recycling options at government buildings, parks, and city streets)
- Expand educational opportunities and leverage NGO partnerships
- Evaluate programming potential to provide technical assistance to the private sector for businesses wanting to reduce waste



100

The image above is of the Center for Disease Control Social Vulnerability Index for Blaine County. It identifies factors that contribute to the ability of a community to respond to natural disasters ranging from wildfires and floods to disease outbreaks. Overall, Blaine County ranks 0.44 on a scale of 0 to 1, indicating low to medium vulnerability. Within Blaine County, community vulnerability ranges from 0.05 to 0.87.

Whether you are an individual, business owner, or government agency/entity, there are things you can do to adapt around current and future climate realities:

[100] Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry/Geospatial Research, Analysis, and Services Program. CDC/ATSDR Social Vulnerability Index Interactive Map 2020 Database State. https://svi.cdc.gov/Documents/CountyMaps/2020/Idaho/Idaho2020_Blaine.pdf. Accessed on 5/9/202.

Individual Action:

Firewise is a landscaping technique that gives a building the best chance for surviving a wildfire. Tactics include ensuring log piles are more than 30 feet from your home and trimming any tree branches that brush against the side of your home.

- Utilize Firewise/defensible space tactics around your home.
- Work with your neighbors to create a more defensible neighborhood. Check out Firewise USA for techniques.
- Avoid building your home in high-risk areas, including both where historic flood and fire danger are well documented as well as the future floodplain lines. Climate change exacerbates hazards such as floods and fires in areas that we are used to them occurring, but it can also expose new areas to these old hazards.
- Utilize less household and landscaping water, especially during drought years.
- Utilize clean energy technologies noted in above chapters.
- Install high efficiency indoor air quality filtration systems for use during fire season.
- Install solar and battery storage to become more energy resilient.

Private sector action:

- For our farmer friends—consider integration of regenerative agriculture practices and pesticide reduction
- Install indoor air quality systems at retail and office establishments
- Local insurers—share with policyholders the benefits of Firewise practices and defensible space tactics and offer incentives for adopters.
- Tourism sector—offer alternatives during peak fire of low snowpack years.
- Construction sector—train up staff on installation of solar as a pathway to energy independence and to place less stress on the grid.
- Install solar to become more energy independent.
- Landscapers—integrate Firewise and defensible space measures into landscape design.
- Realtors—educate and inform sellers and buyers about insurance risks associated with fire and flood.

Government:

- Evaluate revisions to floodplain development standards to ensure water quality & habitat. Instead of rip rap, which is harmful to aquatic and riparian habitat, explore the benefits of alternatives such as Turf Reinforcement Mats (TRM). Find FEMA's floodplain maps here.
- Implement water efficiency standards in parks and building landscaping: replace grass with native and drought-tolerant landscaping.
- Install indoor air quality systems at office establishments.
- Utilize Firewise and defensible space measures for exposed or higher risk properties.
- Utilize software for structure assessments and create a toolkit for property owners.

Additional formal government adaptation and resilience action is accounted for in Blaine County through the 2022 adopted All Hazards Mitigation Plan. Wildfire, drought, flooding, and cybersecurity—and more broadly, climate change itself, pose significant risks to the citizens of Blaine County. Below we outline the high-level threats the community faces, as well as what is being done to prepare for these threats. This information has been pulled directly from the Blaine County All Hazards Mitigation Plan.[101]

High risk threats:

- Wildfire
- Drought
- Climate Change
- Flooding
- Cybersecurity

[101] Blaine All Hazard Mitigation Plan ITEM-Attachment-001-0482de16841342ba94053228e3f819e0.pdf (usgovcloudapi.net)

Wildfire

Hazard Overview: Wildfire		
Location:	County-wide	
Frequency/Previous Occurrence:	High	
Impact/Consequence:	High	
Community Vulnerability:	High	
Overall Hazard Ranking by Jurisdiction		
Blaine County	Carey	Bellevue
High	High	High
Sun Valley	Ketchum	Hailey
High	High	High
Blaine County School District	Flood Control Dist. 9	
High	High	

Wildfire is considered vital aspect of natural ecology. However, when wildfires burn close to businesses or towns, it si considered a threat to human activity. Much of Blaine County is within the Wildland Urban Interface (WUI), where human activities are adjacent to wildlands. Wildfires are a natural threat to human activities, but climate change is exacerbating the hot and dry conditions that make the area prone to wildfire.

Wildfire Mitigation Objectives:

- Improve protection through the proper use of ordinances, codes, mutual aid agreements and MOUs
- Improve access to areas prone to wildland Fire
- Conduct roadside vegetation treatments to reduce flammable fuels immediately adjacent to roads in high-risk areas
- Implement a countywide fuels reduction program
- Update and improve road signing and rural addressing
- Improve wildland urban interface planning
- Mitigate impacts of wildfire through vegetation management
- Reduce exposure to wildfire smoke

*A new community wildfire plan will be published in 2024 and should be referenced going forward.

DROUGHT:

DROUGHT

Hazard Overview: Drought		
Location:	County-wide	
Frequency/Previous Occurrence:	Medium	
Impact/Consequence:	High	
Community Vulnerability:	Medium	
Overall Hazard Ranking by Jurisdiction		
Blaine County	Carey	Bellevue
High	High	High
Sun Valley	Ketchum	Hailey
High	High	High
Blaine County School District	Flood Control Dist. 9	
Rare	Rare	

Drought is a common occurrence in most geographical areas and has many definitions based on location and use case. Here, we loosely define drought as a significant decrease in water supply relative to what is considered “normal” in that area.

Drought Mitigation Objectives:

- Improve the safety of county roads and bridges
- Improve drought response
- Increase water conservation so that the aquifer is not depleted
- Secure water needs
- Maximize water re-use

Climate Change

Hazard Overview: Climate Change		
Location:	County-wide	
Frequency/Previous Occurrence:	Low	
Impact/Consequence:	High	
Community Vulnerability:	Medium	
Overall Hazard Ranking by Jurisdiction		
Blaine County	Carey	Bellevue
High	High	High
Sun Valley	Ketchum	Hailey
High	High	High
Blaine County School District	Flood Control Dist. 9	
High	High	

Climate change is considered a hazard because of the impact that increasing temperatures has on extreme weather events. While extreme weather such as extreme heat or cold, drought, flooding, and wildfires occurs within natural climatic cycles, climate change is exacerbating these threats. Increased temperatures due to climate change are linked to changes in weather patterns and increases in extreme weather events. The All-Hazard Mitigation plan identifies climate change as contributing to economic and social losses in almost every area. This includes food insecurity, agricultural losses, infrastructure damage, emotional and physical harm, power outages, and environmental loss. As such, it is considered a hazard in its own right, as well as a contributing factor to existing hazards.

Climate Change Mitigation Objectives:

- Provide backup power in the cases of power outages
- Reduce emissions

Flooding

Hazard Overview: Flooding		
Location:	County-wide	
Frequency/Previous Occurrence:	Medium	
Impact/Consequence:	High	
Community Vulnerability:	High	
Overall Hazard Ranking by Jurisdiction		
Blaine County	Carey	Bellevue
High	High	High
Sun Valley	Ketchum	Hailey
High	High	High
Blaine County School District	Flood Control Dist. 9	
Rare	High	

Flooding is defined by the National Weather Service as "the inundation of normally dry areas as a result of increased water levels in an established water course." Blaine County's main flood risk is river flooding- when the river rises to overflow its natural banks. This can be caused by prolonged rainfall, locally intense thunderstorms, snowmelt, and ice jams. In addition to these natural events, there are a number of human activities that may cause or contribute to flooding. These include dam failure, levee failure, and activities that increase the rate and amount of runoff such as paving, reducing ground cover, and clearing forested areas. The land along rivers that is identified as being susceptible to flooding is called the floodplain.

Flood Mitigation Objectives:

- Maintain the NFIP Requirements
- Improve Drainage System
- Provide Big Wood River Flood Fight Capability
- Big Wood River Flood Mitigation Broadford Rd.
- Big Wood River Flood Mitigation for Hospital Bridge
- Flood Warnings Along County Roads
- Big Wood River Flood Mitigation and Protection of utilities for Highway 75 near Lake Creek
- Big Wood River Flood Mitigation
- Big Wood River Flood Mitigation and Protection of Point of Diversion near Hiawatha Canal
- Big Wood River Flood Mitigation and Protection of roadway near Angela Drive

- Big Wood River Flood Mitigation and Protection of Glendale Bridge
- Big Wood River Stream Restoration and Protection of Pedestrian Bridge
- Reduce Damage from overland flooding due to rain on snow events
- Reduce damage from flooding after wildfires

Conclusion:

The portfolio of climate action in Blaine County is already well on its way. While additional assessment is needed in some categories, much of the work identified in this plan has already begun through existing programming and partnerships. We are lucky to have such a great foundation going forward.

The urgency of this topic requires an equally urgent response. Having this climate action plan authorized and adopted will empower the public with information and data, municipal governments with strategic direction and Blaine County with the tools needed to better coordinate across administrative boundaries.

We sincerely hope you will join us in climate action implementation now and in the future.

Appendix Guide:

A. Resource Bank (continuously evolving)
B. References and Supporting Documents

Glossary:

Term	Definition
Adaptation	Anticipating the adverse effects of climate change and taking action to prevent or minimize damage or maximize opportunities.
Advocacy	Activities that aim to influence public policy decisions.
Beneficial Electrification	Replacing direct fossil fuel use (e.g., natural gas, propane, etc.) with electricity in a way that reduces overall emissions and energy costs
Carbon Neutral	Achieving net zero carbon dioxide emissions.
Carbon Offset	A certificate representing the reduction of one metric ton of carbon dioxide emissions.
Circular Economy	An economic system aimed at eliminating waste and the continual use of resources.
Charette	A meeting in which all stakeholders in a project attempt to resolve conflicts and map solutions
Clean Electricity	Electrical power produced by methods that do not cause pollution, including photovoltaic solar, geothermal, wind, hydroelectric, and waste heat recovery technologies.
Clean Energy	Existing large-scale hydro-electric facilities. In the future, this interpretation could be modified based on advances in energy technology, regulatory changes or other relevant reasons.
Clean Heat	Another name for beneficial electrification, with an emphasis on clean energy replacing direct fossil fuel use for heating purposes.
Climate Action	Activities to reduce greenhouse gas emissions and strengthen resilience and adaptation to climate-included impacts.
Climate Change	A change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use (IPCC, 2012).
Climate Migration	The movement of a person or groups of persons who, predominantly for reasons of sudden or progressive change in the environment due to climate change, are obliged to leave their habitual place of residence, or choose to do so, either temporarily or permanently, within a state or across an international border.
Climate Justice	The fair treatment of all people and the freedom from discrimination in the creation of policies and projects that address climate change as well as the systems that create climate change and perpetuate discrimination.
Community Solar	A medium-sized solar array (e.g. 500 kW) that can provide electricity for a small group of homes or businesses. Members of the community can subscribe to community solar to offset a portion of or all their electricity bill.

Demand Side Management (DSM) Program	Modification of consumer demand for energy through various methods, including education and financial incentives. DSM aims to encourage consumers to decrease energy consumption, especially during peak hours or to shift time of energy use to off-peak periods, such as nighttime and weekend.
Distributed Renewable Energy	Electricity that is generated from sources (often renewable energy sources), near the point of use, instead of centralized generation sources from power plants
Eco-District	A neighborhood-scale development focused on advancing sustainability through green building, smart infrastructure, and behavior.
Electric Vehicle (EV)	A vehicle that uses an electric engine for all or part of its propulsion.
Energy Cost Burdon	Percentage of gross household income spent on energy costs.
Environmental Justice	The fair treatment and meaningful of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.
Equity	The state, quality or ideal of being just, impartial and fair.
First/last Mile	The beginning or end of an individual trip, most commonly by public transportation.
Food Desert	An area that has limited access to affordable and nutritious food.
Food Insecurity	Lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods. Food-insecure households are not necessarily food insecure all the time. Food insecurity may reflect a household's need to make trade-offs between important basic needs, such as housing or medical bills, and purchasing nutritionally adequate foods.
Food security	Having reliable access to affordable nutritious food.
Food swamp	Area with a high-density of establishments selling junk food.
Frontline communities	Communities that experience the first and worst consequences of climate change.
Geothermal energy	An energy source that comes from heat stored inside the earth's core and is considered renewable. Energy is provided to residential and business customers in the form of hot water pumped directly from the ground. It is used primarily for heating buildings.
Greywater	Wastewater generated in homes and businesses that does not contain fecal contamination.
Greenhouse gases (GHG)	Gases in the atmosphere that absorb and emit radiation and significantly contribute to climate change. The primary greenhouse gases in the earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.
Green Building Code	A roadmap for builders and developers interested in incorporating sustainable, energy efficient components into their buildings beyond the minimum requirements of the current code.

Green power rate	An alternative to traditional electricity rates in which a utility provides interested parties with renewable energy at a contracted unit cost over time.
Green stormwater infrastructure	A system designed to mimic nature and capture rainwater where if falls, reducing and treating stormwater at its source while also providing other community benefits.
Heat pump	An energy-efficient alternative to furnaces and air conditioners that collects heat from the outside air, water, or ground and concentrates it for use inside.
Heavy-duty vehicle (HEV)	Commercial vehicles over a minimum Gross Vehicle Weight Rating (GVRW) of 8,500 lbs.
Hybrid electric vehicle (HEV)	Contains both an electric motor and a gasoline engine. The gasoline engine powers a generator that charges the electric motor. No external battery charger is used. Runs at a constant speed, which increases fuel efficiency
International Green Construction Code (IGCC)	A code that regulates construction of new and existing commercial buildings to meet sustainable, resilience, and high-performance standards.
Integrated Resource Plan (IRP)	The required planning process that utilities undergo to estimate their future loads and determine what sources will be used to meet those loads.
Internal combustion engine (ICE)	A heat engine in which the combustion of fuel occurs with an oxidizer in a combustion chamber that is an integral part of the working fluid flow circuit.
International Panel on Climate Change (IPCC)	The United Nations body for assessing the science related to climate change.
Kilowatt (kW)	A measure of 1,000 watts of electrical power.
Kilowatt hour (KWh)	A unit of electricity consumption.
Leadership in Energy and Environmental Design (LEED)	A green building certification program.
Light-duty vehicle	Passenger cars with a maximum Gross Vehicle Weight Rating (GVRW) of 8,500 lbs.
Low impact development	Systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat
Megawatt (MW)	A unit of electric power equal to 1 million watts.
Metric tons of carbon dioxide equivalent (MTCO2e)	A unit of measure for greenhouse gas emissions. The unit "CO2e" represents an amount of a greenhouse gas whose atmospheric impact has been standardized to that of one-unit mass of carbon dioxide (CO2), based on the global warming potential (GWP) of the gas.

Microgrid	A local energy grid with control capability, which means it can disconnect from the traditional grid and operate autonomously.
Micro-mobility	Transportation using lightweight vehicles such as bicycles or scooters, especially electric ones that may be borrowed as part of a self-service rental program in which people rent vehicles for short-term use.
Mitigation	(*of climate change)* A human intervention to reduce the sources or enhance the sinks of greenhouse gases (IPCC, 2012). (of disaster risk and disaster) The lessening of the potential adverse impacts of physical hazards (including those that are human induced) through actions that reduce hazard, exposure, and vulnerability (IPCC, 2012).
Net-zero emissions	Removal of all human-caused GHG emissions from the atmosphere through reduction and removal measures.
Net zero energy building	A building where the total amount of energy used by the building is equal to the amount of renewable energy generated on the site.
Parallel communities	Community groups (i.e., refugee, immigrant, Mexican, etc.) that exist in a silo within a larger community.
Plug in hyprid electric vehicle (PHEV)	A vehicle with a combination of both an electric motor and gasoline engine. The battery is charged through a plug and the fuel tank is filled with gasoline.
Resilience	The capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning and transformation (IPCC, 2018).
Renewable energy	Energy generated from fuel sources that naturally regenerate over a short period of time. Examples of these fuel sources include sunlight, wind, moving water, biomass, and geothermal. New and existing energy sources that are generally non- reliant on fossil or carbon-based fuels including solar, wind, geothermal and new small-scale hydro-electric facilities. This list is not exhaustive and other renewable energy technologies or practices may be considered on a case-by-case basis. In the future, this interpretation could be modified based on advances in energy technology, regulatory changes or other relevant reasons.
Renewable energy credit (REC)	Non-tangible property rights of electricity generated by renewable sources – the clean energy attributes, where 1 megawatt-hour of electricity is equal to 1 REC.
Renewable natural gas (RNG)	An alternative to conventional natural gas that comes from sources such as wastewater treatment and agricultural or municipal waste streams. The gas that is generated from these processes can be upgraded for use in conventional natural gas equipment. These sources are considered renewable because the process of burning renewable natural gas is carbon neutral.
Social cost of carbon	A measure of the economic harm from the impacts from emitting carbon dioxide in the atmosphere.
Social Equity	Social Equity is fair, just, and equitable management of all institutions serving the public directly or by contract, and the fair and equitable distribution of public services, and implementation of public policy, and the commitment to promote fairness, justice, and equity in the formation of public policy

Solar photovoltaic (PV)	Solar cells/panels that convert sunlight into electricity (convert light, or photons, into electricity, or voltage).
SolSmart	A national designation program recognizing cities, counties, and regional organizations that foster the development of mature local solar markets.
Sustainability	Meeting the needs of the present without compromising the ability of future generations to meet their needs. This means striking a balance between the environment and economy; producing goods and living in a manner that preserves scarce resources without limiting development. In the context of climate change, it means limiting the use of resources and energy sources that emit greenhouse gases into the atmosphere, in order to ensure a livable planet for generations to come.
Thermal energy	Energy that is used to heat, such as space heating, water heating, and cooking for homes and businesses as well as process loads for industrial facilities. Natural gas and geothermal energy use generally fall into this category.
Triple Bottom Line	A sustainability framework that measures a business's success in three key areas: profit, people, and the planet
Underserved communities	Community members/groups who face systemic inequities and barriers to resources/information.
Utility-scale renewable electricity	Very large renewable electricity installations (e.g. greater than 1 MW) that are implemented by the utility and feed directly into the utility's electric grid. These installation projects do not require a utility customer to opt-in to receive electricity from these sources.
Water renewal	The cleaning of used water (e.g., water that goes down the drain, toilet, etc.).
Vehicle miles traveled (VMT)	A measure of the amount of travel for all vehicles in a geographic region, over a given time period (typically one year). It is the sum of all miles traveled by all vehicles.
Vulnerable populations	Community members/groups whose condition (i.e. age, housing situation) expose them to greater risks.
Zero emission vehicles (ZEV)	A vehicle that never emits exhaust gas from the onboard source of power.
Zero emissions standard	A requirement for buildings to be designed and equipped so that all energy use on an annual basis is highly efficient and comes only from clean energy sources.

Appendix A: Resource Bank

UNDER CONSTRUCTION—to be updated annually
UPDATED FACT SHEET: Bipartisan Infrastructure Investment and Jobs Act | The White House
Funding Resources
Land and Water Conservation:

- Soil health awareness and practice: EXPLANATION + GOALS SUMMARY + LIST/LINKS
    - GSAQI/CPRG Gem State Air Quality Initiative | Idaho Department of Environmental Quality
    - Farm Bill: Includes a mix of mitigation and adaptation funding
        - Conservation Reserve Enhancement Program: Farmers and ranchers are paid an annual rental rate in exchange for removing environmentally sensitive land from production and establishing permanent resource conserving species https://www.fsa.usda.gov/programs-and-services/conservation-programs/conservation-reserve-enhancement/index
        - Emergency Conservation Program: provides funding and technical assistance to repair damage to farmlands caused by natural disasters, this also includes establishing water conservation methods during severe drought https://www.fsa.usda.gov/programs-and-services/conservation-programs/emergency-conservation/index
        - Livestock Forage Disaster Program (LFP): compensates livestock producers who have experienced grazing loss due to drought, fire, or other qualifying loss https://www.fsa.usda.gov/Assets/USDA-FSA-Public/usdafiles/FactSheets/fsa_lfp_livestockforageprogramfactsheet_2022.pdf
        - Microloan Program: issues small loans to small, new, niche, or non-traditional farm operations including those who participate in farmer's markets, community supported agriculture (CSA), or organic growers. May be used for soil and water conservation projects or building repairs and improvements https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/microloans/index
    - Sun Valley Institute for Resilience Impact Idaho Fund: This fund provides local businesses and non-profits with low or no-interest loans. These loans focus on businesses and farms that are increasing local food production and availability as well as implementing regenerative land management practices https://www.sunvalleyinstitute.org/impactidahofund
    - HCRI @ Boise State
    - Bipartisan Infrastructure Law:
        - Building Resilient Infrastructure and Communities (BRIC): provides funding for projects that enhance resilience to natural disasters, potentially including soil health and drought-resistent projects. https://ioem.idaho.gov/grants/non-disaster-grants/building-resilient-infrastructure-and-communities-bric/
        - STORM Revolving Loan Fund Program: provides loans for hazard mitigation projects

        - WaterSMART Water and Energy Efficiency Grants: provides funding through 50/50 cost sharing for projects that conserve water, increase water use efficiency, increase hydropower production, and contribute to water supply reliability https://www.usbr.gov/watersmart/weeg/
        - WaterSMART Small-Scale Water Efficiency Projects: provides 50/50 cost sharing for projects sych as installation of flow measurement or automation, lining of a canal section, or other similar scale water efficiency projects. https://www.usbr.gov/watersmart/swep/index.html
        - Drinking Water and Clean Water State Revolving Funds: provides low-interest loans to qualified recipients to improve wastewater facilities https://www.deq.idaho.gov/water-quality/grants-and-loans/construction-loans/
        - Drinking Water Emerging Contaminants: provides funding for new or upgrades to treatment facilities, new source development, consolidation, pilot testing alternative treatments, and new community systems for individuals with private wells or surface water intakes. Projects have a preference for addressing per and poly-fluoroalkyl substances (PFAS) https://www.deq.idaho.gov/water-quality/grants-and-loans/
    - Blaine Co. Extension (University of Idaho)—Grant Loomis
    - Innovative Agriculture and Marketing Partnership: program with University of Idaho. UI received $55 million in funding to implement programs that incentivise climate-smart agriculture in Idaho. Program details not yet established, applications not yet open. https://iamp.uidaho.edu/
    - Sustainable Agriculture Research and Education (SARE): Provides grants and education to farmers, ranchers, and researchers interested in implementing sustainable practices. https://www.sare.org/
        - Grants: Grants may be used fund research and/or education programs relating to sustainable agriculture
        - Professional development: provides training, grants, and resources for ag professionals to build knowledge and skills in the sustainable agriculture space
    - Inflation Reduction Act (IRA): In the conservation and agriculture space, the IRA provided $19.5 billion dollars of extra funding towards the Natural Resources Conservation Services (NRCS) existing programs. See below for more details on those funding opportunities
    - Natural Resources Conservation Services (NRCS):
    - ISDA
    - USDA
- Local food
- Water plan
    - Idaho Rural Water Association
    - NRCS
    - Region IV Economic Development

    - Army Corps
    - Bureau of Reclamation
    - Canal Districts? / Ditch Riders
- Flora health and carbon
    - ICLEI
    - Quick look through BIL
    - Keystone Concept—Lance Davisson
    - IDL tree canopy program
    - USFS

Clean Energy / Green Building:

- OEMR (state + DOE)
    - Government Leading By Example: procedes energy audits and retrofit assistance for government buildings
    - Energy Efficiency Block Grant (EECBG)
        - State
        - Federal formula (we don't qualify)
        - Federal competitive (we do qualify)
    - School district Energy Efficiency Program: Assists with costs for building energy efficient school buildings. https://oemr.idaho.gov/wp-content/uploads/2016/06/incentives_for_schools.pdf
    - State Energy Loan Program: offers low-interest loans to develop energy projects for homes located in Idaho. Single family housing loans have a minimum of $1,000 and a maximum of $30,000.
    - - Energy and Mineral Resources (idaho.gov)
    - Idaho Residential Alternative Energy Tax Deduction: The residential alternative energy tax deduction allows taxpayers an income tax deduction of 40% of the cost of a solar, wind, geothermal, and certain biomass energy devices used for heating or electricity generation. This can be applied in the year that the energy system is installed. 20% can be deducted each year for an additional three years. The maximum deduction in any one year is $5,000. The total maximum deduction is $20,000.
    - Weatherization Assistance Program: provides weatherization assistance to qualified low-income homes
- IRA rebates and incentives:

States are expected to apply for funding for green building credits and rebates throughout 2024. Idaho is currently preparing the application but has been allocated a potential $80,972,230 in consumer rebates and program

administration. Please note that the final amount allocated to Idaho and specific availability to Idaho builders and residents has not yet been determined (https://www.energy.gov/save/rebates).

- Sec. 179D: Tax deduction for energy-efficient commercial buildings (new or retrofits), including multifamily residential buildings
- Sec. 48: Clean Electricity Investment Tax Credit, tax credit of up to 30% of cost of solar, geothermal, combined heat and power, storage, or more
- Sec. 30C: Alternative Fuel Vehicle Refueling Property Credit, tax credit of up to 30% cost of new electric vehicle chargers
- Sec. 45L: New Energy Efficient Homes Credit, tax credit up to $5,000 per home or unit for new energy-efficient residential construction
- Sec. 25C Energy Efficient Home Improvement Credit, tax credit f up to 30% or $3,200 for eligle energy efficieny improvements

- LIHEAP IDHW (weatherization): program provides financial assistance towards a households energy bill and/or emergency assistance if a households energy service is shut off https://www.benefits.gov/benefit/1555
- Idaho Power programs
  - For homes:
    - Rebates and Offers; https://www.idahopower.com/energy-environment/ways-to-save/savings-for-your-home/rebates-and-offers/
      - Heating and Cooling Efficiency Program: incentives for the purchase and installation of energy-saving equipment and services for heating and cooling your home
      - A/C Cool Credit: Earn $5 per month bill credit when you allow Idaho Power to cycle your air conditioner in summer months
      - Shade Tree Project: Shade trees can reduce energy needed for summer cooling by 15%
    - Income Qualified Customers: https://www.idahopower.com/energy-environment/ways-to-save/savings-for-your-home/income-qualified-customers/
      - Weatherization Programs: income qualified customers with electrically-heated homes can get free weatherization improvements
      - Easy Savings Program: get a coupon for a free electric furnace or heat pump
    - Home Energy Audit: Idaho Power offers discounted home energy audits to learn how your home uses energy and determine areas to improve https://www.idahopower.com/energy-environment/ways-to-save/savings-for-your-home/home-energy-audit/

        - New Construction: https://www.idahopower.com/energy-environment/ways-to-save/savings-for-your-home/new-construction/
            - New Energy Star Manufactured Homes: receive a $1000 rebate
            - Residential New Const. Program: new electrically heated home 10 to 20% above code can receive a $1200-$2000 rebate
            - Multifamily Energy Efficiency Program: Incentives for multifamily projects with five or more units per building
    - For businesses: https://www.idahopower.com/energy-environment/ways-to-save/savings-for-your-business/
        - New construction and Major Renovations: cash incentives for building energy-efficient features into a commercial or industrial project
        - Retrofits
        - Custom Projects
        - Flex Peak Program
        - Irrigation Programs
        - Commercial/Industrial Training
- Intermountain Gas Incentives: Offers cash incentives for energy efficient appliances from $100 to $800, depending on the appliance. Builders may receive rebates of up to $900 for reaching certain energy efficiency standards, which may be stacked with appliance rebates. https://www.intgas.com/energy-efficiency_program/residential-energy-efficiency/
-

Land Use / Transportation:

- See LHTAC program notes
- See Hawaii tracker
- Region 4 Economic Development and CEDS
- ITD state transportation funding
- CBPA-- https://driveelectric.gov/clean-bus-planning-awards
- FTA and FHWA funding

Solid Waste / Circular:

- Gem State Air Quality Initiative | Idaho Department of Environmental Quality
- DEQ
- EPA
- SWIFR

- SISW—statute and governance
- Public private partnerships

Consumer Recycling Education and Outreach Grant Program | US EPA
Partnership Opportunities:
Land and Water Conservation:
Clean Energy and Green Building:
Land Use and Transportation:
Solid Waste and Circular Economy:

Appendix B: References and Supporting Documents

Abatzoglou, J. T., Marshall, A. M., & Harley, G. L. (2021). *Observed and Projected Changes in Idaho's Climate*.

American Society for Public Administration. (n.d.). *What Is Social Equity? Diversity? Equity? Inclusion? Accessibility?*. American Society for Public Administration. https://www.aspanet.org/ASPA/ASPA/About-ASPA/Social-Equity-Center/Definitions.aspx

Annual Estimates of Housing Units for Counties in Idaho: April 1, 2020 to July 1, 2022 (CO-EST2022-HU-16). Source: U.S. Census Bureau, Population Division. Release Date: May 2023.

Bales, R. C., Molotch, N. P., Painter, T. H., Dettinger, M. D., Rice, R., & Dozier, J. (2006). Mountain hydrology of the western United States. *Water Resources Research*, *42*(8). https://doi.org/10.1029/2005WR004387

Becqué, R., Holvast, L., Lacouture, E., Wang, K., Hearn, B., Oliva, A. (2021). Circular Indicators for Governments. The Hague, Netherlands: Platform for Accelerating the Circular Economy (PACE).

Bellevue Comprehensive Plan City of Bellevue Comprehensive Plan - Bellevue, Idaho (bellevueidaho.us)

Biello, D. (2008, March 14). *Fertilizer runoff overwhelms streams and rivers--creating vast "dead zones."* Scientific American. https://www.scientificamerican.com/article/fertilizer-runoff-overwhelms-streams/

Big Wood River Atlas. https://www.co.blaine.id.us/DocumentCenter/View/13047/Big-Wood-River-Atlas_Final_LowRes_NoPrint_042220

Bike/Ped Master Plan. 2024.

Blaine All Hazard Mitigation Plan. 2022. ITEM-Attachment-001-0482de16841342ba94053228e3f819e0.pdf (usgovcloudapi.net)

Blaine County Comprehensive Plan. 2021. Blaine County Comprehensive Plan | Blaine County, ID

Blaine County Community Forest Management Plan (CFE). 2023. Microsoft Word - WoodRiverValley_ForestResourcesPlan_Final_9_11_23.docx (squarespace.com)

Brendle Group Clean Energy Study. 2022. Clean Energy | Blaine County, ID

Carey Comprehensive Plan PREFACE (cityofcarey.org)

Carmel, M. (2023, March 22). Bill Rolling Back compromise on energy code requirements sails to the Senate floor. BoiseDev. https://boisedev.com/news/2023/03/22/bill-restricting-energy-code-requirements/

Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry/Geospatial Research, Analysis, and Services Program. CDC/ATSDR Social Vulnerability Index Interactive Map **2020** Database **State**. https://svi.cdc.gov/Documents/CountyMaps/2020/Idaho/Idaho2020_Blaine.pdf. Accessed on 5/9/202

City of Ketchum. (n.d.). *The hunger coalition joins forces with Ketchum Housing Action Plan*. Ketchum Idaho. https://www.ketchumidaho.org/administration/page/hunger-coalition-joins-forces-ketchum-housing-action-plan

City of Ketchum Community Outreach (DRAFT)

Climate-smart agriculture and forestry. US Department of Agriculture. (n.d.). https://www.nrcs.usda.gov/sites/default/files/2023-04/Climate-Smart Agriculture and Forestry factsheet.pdf

CMRA. (n.d.-a). Climate Mapping for Resilience and Adaptation. https://livingatlas.arcgis.com/assessment-tool/search

Council on Environmental Quality. (n.d.). *Climate and Economic Justice Screening Tool*. Screeningtool.geoplatform.gov. https://screeningtool.geoplatform.gov/en/#8.81/43.3833/-114.2254

Embodied carbon. World Green Building Council. (2022, October 28). https://worldgbc.org/advancing-net-zero/embodied-carbon/

EPA Guidance on SC-GHG EPA Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances

Friedman Memorial Airport (SUN) Climate Action Strategy. 2022. SUN-Climate-Action-Strategy.pdf (iflysun.com)

Guidestar.org. Blaine County Non-Profit Search. 12/12/2023. Nonprofit data for donors, grantmakers, and businesses | GuideStar | Candid
Hailey Comprehensive Plan 2024 Comprehensive Plan Update | City of Hailey, ID (haileycityhall.org)

Hales Engineering (DRAFT) VMT data from ITD (2023)

Hales Engineering (DRAFT) AADT_VMT Data from ITD (2023)

Hales Engineering (DRAFT) available crash data performed under SS4A grant scope of work (2024)

Hatzenbuehler, P., Wardropper, C., Adjesiwor, A., Owusu Ansah, E., Burnham, M., de Haro-Martí, Dentzman, K., Findlay, J. R., Glaze Jr., J. B., Hinds, J., Jansen, V., Karl, J., Lamichhane, R., Lew, R., Olsen, N., Powell, M., Running, K., Sagers, J., Schott, L., Walsh, O., and Wilson, B. Economic Impacts of Climate Change on Agriculture in Idaho. Idaho Climate-Economy Impacts Assessment. James A. & Louise McClure Center for Public Policy Research, University of Idaho. Boise, ID. Economic Impacts of Climate Change on Agriculture

Hawkins, E. (n.d.). *Show your stripes*. #ShowYourStripes. https://showyourstripes.info/l/northamerica/unitedstatesofamerica/all/

Hill, Zach. (2023) Water and Watershed Management. *Wood River Land Trust. https://new.express.adobe.com/webpage/Kwur5j2eR4pZN*

Housing Action Plan (DRAFT), Year 2

Hunger & Poverty in Blaine County, Idaho: Map the meal gap. Feeding America. (n.d.-b). https://map.feedingamerica.org/county/2021/overall/idaho/county/blaine

ICLEI – Local Governments for Sustainability, Circle Economy, Metabolic, and Ellen MacArthur Foundation, 2021. *Circular City Actions Framework: Bringing the circular economy to every city.* Bonn, Germany. Circular Cities Action Framework-PDF

Idaho DEQ. (2023, August 3). *Cyanobacteria harmful algal blooms*. Idaho Department of Environmental Quality. https://www.deq.idaho.gov/water-quality/surface-water/cyanobacteria-harmful-algal-blooms/

Idaho State University. (n.d.). *Blaine*. Blaine County. https://digitalatlas.cose.isu.edu/counties/blaine/blaine.htm

IPCC, 2023: Summary for Policymakers. In: *Climate Change 2023: Synthesis Report*.Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001

ITD ADT Counts ATR 068 - Hailey (idaho.gov)

ITD Functional Classifications Idaho's Statewide Systems Map (arcgis.com)

ITD Roadway Data. 2024. Road Data | Idaho Transportation Department

Jay, A. K., Crimmins, A. R., Avery, C. W., Dahl, T. A., Dodder, R. S., Hamlington, B. D., Lustig, A., Marvel, K., Méndez-Lazaro, P. A., Osler, M. S., Terando, A., Weeks, E. S., & Zycherman, A. (2023). Overview: Understanding risks, impacts, and responses. In A. R. Crimmins, C. W. Avery, D. R. Easterling, K. E. Kunkel, B. C. Stewart, & T. K. Maycock (Eds.), *Fifth National Climate Assessment*. U.S. Global Change Research Program. https://doi.org/10.7930/NCA5.2023.CH1

Ketchum Sustainability Action Plan. 2020. ketchum_sustainability_action_plan_2020_final.pdf (ketchumidaho.org)

Ketchum Comprehensive Plan Comprehensive Plan | City of Ketchum Idaho

Kunkel, Melvin, and J. Pierce. "Reconstructing Snowmelt in Idaho's Watershed Using Historic Streamflow Records." *Climatic Change* 98 (September 1, 2010): 155–76. https://doi.org/10.1007/s10584-009-9651-x.

Li, M., Jia, N., Lenzen, M., Malik, A., Wei, L., Jin, Y. and Raubenheimer, D. (2022) Global food-miles account for nearly 20% of total food-systems emissions. *Nature Food*, 3(6): 445–453.

Matthew Fraser, Laxmi Haigh, & Alvaro Conde Soria. (2023). *The Circularity Gap Report 2023*. Circle Economy; Policy Commons. https://policycommons.net/artifacts/3370831/63c5511395a3b8eba384baa9_cgr20202320-20report/

Miller, Kelsey. Harvard Business School. 2020. The Triple Bottom Line: What it is and Why it's Important The Triple Bottom Line: What It Is & Why It's Important (hbs.edu)

Montgomery, D. R., Biklé, A., Archuleta, R., Brown, P., & Jordan, J. (2022). Soil health and nutrient density: Preliminary comparison of regenerative and conventional farming. *PeerJ*, *10*, e12848. https://doi.org/10.7717/peerj.12848

Mountain Rides, 2024 Home - Mountain Rides

Mountain Rides Data: Board of Directors and Public Meeting Info - Mountain Rides

National Institutes of Health. Identification of Urban Land Use Efficiency By Indicator. 2020. Identification of urban land use efficiency by indicator-SDG 11.3.1 - PMC (nih.gov)

Nature-based solutions. U.S. Department of the Interior. (2023, November 2). https://www.doi.gov/ppa/integrative/nature-based-solutions

NIH/see other: Identification of urban land use efficiency by indicator-SDG 11.3.1 - PMC (nih.gov)

NOAA Climate Change Monitor Climate Change: Global Temperature | NOAA Climate.gov

NREL. (n.d.-a). Scenario Viewer. https://scenarioviewer.nrel.gov/?project=03ad535d-f0ed-4a6b-8323-c582a606e92c&mode=view&layout=Default

Research Center-Idaho. UnitedForALICE. (n.d.). https://www.unitedforalice.org/county-reports/idaho

Rinaldi, N. (2022, January 14). *The 2021 water year: Anything but normal*. Protect The Source. https://protectthesource.org/2021/10/12/the-2021-water-year-anything-but-normal/

Runkle, J., K.E. Kunkel, R. Frankson, S.M. Champion, L.E. Stevens, and J. Abatzoglou, 2022: Idaho State Climate Summary 2022. NOAA Technical Report NESDIS 150-ID. NOAA/NESDIS, Silver Spring, MD, 4 pp.

Sloan Vazquez McAfee Solid Waste and Recycling Assessment. 2024. Blaine-County-SVM-Report---02-2024---Final-Draft

State of Idaho. (2022, April 22). *Big Wood River Ground Management Plan*. Idaho Department of Water Resources. https://idwr.idaho.gov/wp-content/uploads/sites/2/groundwater-mgmt/big-wood-gwma-advisory-comm/BWRGWMA-Draft-Management-Plan-Second-Revised-Draft-Management-Plan-April-2022.pdf

Sun Valley Comprehensive Plan Sun Valley Comprehensive Plan - City of Sun Valley, ID (sunvalleyidaho.gov)

SVED Annual Economic Profiles (2022) https://sunvalleyeconomy.com/profiles/

SWARCO What is the transport mode shift? | SWARCO

TNC Individual GHG Calculator. https://www.nature.org/en-us/get-involved/how-to-help/carbon-footprint-calculator/

United States Department of Agriculture. (2018). *Census of Agriculture*. USDA. https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Idaho/

University of Idaho Extension. (n.d.). *Indicators Idaho*. Indicators idaho. http://indicatorsidaho.org/DrawRegion.aspx?RegionID=16013

University of Wisconsin Center for Land Use Education, TDR Guidance: https://www3.uwsp.edu/cnr-ap/clue/Documents/PlanImplementation/Transfer_of_Development_Rights.pdf

U.S. Environmental Protection Agency (EPA), 2017. EJScreen Technical Documentation. https://ejscreen.epa.gov/mapper/

Warm Springs Consulting Waste Characterization Study (2021)

WECC. (n.d.). NET generation // . https://www.wecc.org/epubs/StateOfTheInterconnection/Pages/Net-Generation0706-7913.aspx

Wobus, C., Small, E. E., Hosterman, H., Mills, D., Stein, J., Rissing, M., Jones, R., Duckworth, M., Hall, R., Kolian, M., Creason, J., & Martinich, J. (2017). Projected climate change impacts on skiing and snowmobiling: A case study of the United States. *Global Environmental Change*, *45*, 1–14. https://doi.org/10.1016/j.gloenvcha.2017.04.006

Woods & Poole Economics: Chp-0-Community-Profile (blaine.id.us)

Wood River Land Trust Community Planning-Transportation Baseline Characteristics. 2024. eba3ce_e2dd9ceadb05423e811ae8a5f0ef4710.pdf (woodriverlandtrust.org)