SECTION 2

Bucket Strategies: Unique Contents + Connected Concepts and Partners = Progress

The following 39 pages contain our comprehensive Bucket Strategies.

Each bucket describes key goals and activities to meet them. However, each bucket looks a bit different from one another—they have evolved not only just from our Community Climate Summits, but also from ongoing community planning efforts, process and conversations. Hence, some buckets have identified leaders, others, not yet. Some buckets, like "Local Food and Agriculture" or "Water Conservation and Protection", have clear momentum because various community groups and partners are fully active. Other buckets, like "Renewable Energy" need an infusion of energy and leadership. Also of note, some buckets are cross-sectoral, including "Education and Outreach," "Healthy, Thriving Community," and "Metrics." The key activities and strategies contained therein apply to all of the buckets.

Additionally, many Missoula area partners have had a significant hand in developing these goals and strategies. Additional partners have been identified but have not yet participated. To include all, we list everyone as *potential* partners moving forward.

We recognize that many of the strategies are ambitious. Many are dependent on efforts of community partners. Most need more funding. Some need policy changes from the state or federal level. We are not deterred!

As mentioned, Climate Smart Missoula can in no way tackle all these activities alone. Progress and success will only come with continued interconnection with the City of Missoula and by the diligent and strategic linking of crucial community partners around the connected concepts, projects and goals represented in each focal area. Let's get started.

Education and Outreach……12
Green Building, Energy Efficiency, and Conservation…… 14
Healthy, Thriving Community…… 18
Inventory and Metrics…… 22
Local Food and Agriculture…… 25
Renewable Energy…… 28
Smart Growth…… 32
Sustainable Economic Development and Financing…… 35
Transportation…… 38
Urban and Wildland Forests and Open Lands…… 41
Water Conservation and Protection…… 45
Zero Waste…… 48

EDUCATION and OUTREACH

We envision a knowledgeable Missoula community that is informed on the issue of climate change, understands the community's goal to be carbon neutral, and is aware of the various community networks that are addressing climate-related issues.

Our community will build synergies among those motivated to take climate action, facilitate cross-sector collaboration, creating targeted education and policy changes.

Snapshot: Climate change is a complex problem that brings with it both challenges and opportunities. Effectively reducing greenhouse gas emissions will require sustained education and engagement across multiple sectors in the Missoula-area community. Working with partners and friends across the Missoula community, we hope to incorporate interactive, dynamic, and exciting education programs in each of Climate Smart Missoula's focal areas – aka our "buckets". Given the overlap of this bucket, we've set up this strategy document a bit differently from the others. We aim these to fit the Missoula culture - creative, hopeful, bold and smart.

REACHING OUT AND EDUCATING FOR AN INFORMED AND ACTIVE MISSOULA

WHAT: Build on the interests, passions, and motivations of those in our community already committed to climate action:

- Learn about different sectors, initiatives, and leaders in our community working on initiatives related to climate change mitigation and political action.
- Identify existing mechanisms for cross-sector collaboration.
- Encourage cross-sector collaboration (government, business, agency, tribes, non-profit organizations) between entities working on climate change mitigation and adaptation/resiliency.
- Activate specific sectors of the community to address needed policy changes.

WHO: Target specific sectors for education about climate change mitigation and adaptation

- Target specific neighborhoods. Engage with property managers and renters or neighborhood associations to develop education and assistance programs for energy efficiency, renewable energy, and water conservation.
- Consider developing community "Extension Agents".
- Engage with tourism industry (e.g., encourage tourism into burned areas, such as bird watching and mushroom picking).
- Engage with health care sector (e.g., to limit public's exposure to smoke health hazard).
- Engage with Confederated Salish & Kootenai Tribes, including linking their climate change curriculum to Missoula Community Public Schools.

HOW: Educate and activate the community through on-line forums and community dialogue processes

- Create an active online presence and community to showcase successes and progress made and educate about initiatives and opportunities.
- Set up a community dialogue process to catalyze and support ongoing efforts.
- Convene bi-monthly gatherings to talk about one specific climate change topic related to climate change.
- Create a visual/brand/symbol to identify those committed to climate action – possibly "delta degree" (Climate Smart Logo).

- Conduct climate scenario planning, including a discussion of "climate refuges" and how we can prepare for new community members
- Display a carbon thermometer
- Through ART – engage with artistic community.

WHEN: every week, every month, every year (though we do need to take a break and recharge).

A CLIMATE SMART WAY FORWARD

Clearly, education and outreach fit just about everywhere as a community works toward carbon neutrality and climate resiliency. In creative and positive ways, we hope to:

Showcase

- Define Missoula as a leader in climate change action.
- Integrate sustainability and energy conservation into our community's culture.
- Recognize different values and define the positive opportunities for our community.
- Attract funding for projects.

Be the Connecter and Networker

- Find synergies across sectors and encourage collaboration.
- Engage with non-traditional allies, low income, and vulnerable populations.
- Keep network knowledgeable of projects, initiatives, and policies.
- Create a grassroots political movement through community organizing.

Within each of our other 11 Buckets we have identified specific strategies for "Education and Outreach". This bucket intersects them all.

Potential Partners are too many to list and include the partners listed within every other bucket!

Developing education and outreach strategies during Summit #2

GREEN BUILDING, ENERGY EFFICIENCY and CONSERVATION

We envision a community where the built environment is part of the climate solution, where resident, business, non-profit, and government buildings are increasingly energy efficient, and where community members of all socio-economic status benefit.

Our Community will reduce greenhouse gas emissions that stem from buildings and develop a high demand for green buildings (new and retrofits) from all community sectors. We will verify that the community is making progress and that specific buildings are performing as designed.

Snapshot: The building industry has huge potential to impact our climate and environment, either positively or negatively. It is estimated that the majority of anthropogenic greenhouse gasses are attributable to the building industry, from the making and transporting of building materials to operating and maintaining buildings over their lifetime. Buildings, particularly homes, have the potential to give occupants control of their environmental impacts and create positive connections with nature.

According to Missoula's Climate Wise report (2011), one of the impacts expected in Missoula is growth. People may move here from other areas to escape climate change related problems. This will have a direct impact on the building industry and such growth will push against greenhouse gas reduction goals. This issue requires cross sector, high-level discussions about how best to reduce Missoula's greenhouse gas footprint due to buildings. Options are many and could include mandatory energy budgets for new construction, offsetting strategies, or replacement of current energy sources with renewables. Additionally, many residential homes and businesses are sorely in need of efficiency and conservation upgrades, to save occupants money and reduce energy footprints. We are lucky to have engaged community members – from architects to bankers to neighborhood leaders – to engage the Missoula area in these opportunities.

KEY STRATEGIES:

1. Support Five Valleys High Performance Building Collaborative

Goal: Create and support a network of green-building design, building and finance experts that openly share knowledge and work together for a better built environment in the Missoula area. The collaborative will help determine how to overcome barriers and how to mainstream energy and resource efficient building construction.

Note: The Five Valleys High Performance Building Collaborative was created in the spring of 2015 (stemming from the Climate Smart Summit #2) and now meets monthly. Industry professionals, including designers, engineers, architects, builders, bankers, real estate agents, LEED and sustainability consultants, meet and discuss opportunities and challenges to institutionalizing high performance building construction throughout the Missoula area, and are developing specific strategies to move our community in a stronger direction.

Activities:

A. Continue to meet monthly to network, share ideas, and address barriers and policy needs.
B. Help develop community education to promote green building, energy efficiency and conservation, and water conservation.
    i. Web-based information sharing
    ii. Organize or support speaker/symposium

iii. Outreach to showcase success stories
iv. Support neighborhood programs (see Activity #2).

C. Potential specific activities for this collaborative:
i. Create a comprehensive green building policy for both new and existing buildings in the Missoula area (marry this with Smart Growth bucket).
ii. Research and adopt certification system (possibilities include Passivehouse, LEED, Energy Star, etc.)
iii. Develop Builder/homeowner/landlord incentives and enforcement
iv. Create system for energy use reporting, transparency, and, where need be, enforcement
v. Adopt local energy efficiency codes (performance based)
vi. Develop realtor licensing/certification program

D. Research and develop additional local policy recommendations that incentives green building and energy retrofitting. For example, provide incentives for energy efficient "above-code" green building and development to reduce developer and owner/tenant costs and work to remove the disincentives that exist in local rules and codes. (see Activity #2)

Metrics and Timetable.

a. The collaborative formed in spring 2015 and support is ongoing. The collaborative will share meeting notes and track outcomes and policies.
b. Green building speaker/event in fall 2015; likely more in future years. Education shared with Climate Smart Missoula website in 2015 and beyond.
c. Begin discussion of these policy-oriented activities in 2015; working with local government and elected officials, develop specific plan for 2016 and beyond.

2. Develop and encourage financing and funding opportunities

Goal: meet the need for new, creative and equitable funding opportunities for developers, building owners, business leaders, and local government.

Activities:

A. Identify mechanisms, innovative zoning provisions, incentives, and financing tools to promote the construction and retrofitting of green building, with a priority on affordability to mid and lower income residents and small businesses.
B. Partner to help pass fuel tax, or other broad-based fund that can return monies to consumers for energy upgrades, retrofits, and green building projects.
C. Create energy bond fund / loans to homeowners to finance energy and water efficiency retrofits.

Metrics and Timetable

a. The Collaborative (see Activity #1) has started this conversation. Based on their capacity and abilities, we will expand this effort to ensure simultaneous progress on multiple fronts. Ongoing, with an eye for every other year state legislative sessions (where state law needs updating).

3. Initiate neighborhood energy efficiency and conservation projects

Goal: Initiate and enhance community education efforts and awareness about energy use and ways to reduce via projects, incentives, and competitions.

Activities:

A. Develop project objectives and specifics and potential ways to fund (foundation grants, public-private partnerships, etc.).
B. Enlist lead organizers and engage Neighborhood Councils and Transition Streets/Transition Missoula.
C. Develop and implement incentives and competitions programs.
D. Possible connection with WRAP: Weatherization & Retrofit Assistance Program (originally University of Montana College of Technology project), a project to incentivize homeowners' and renters' retrofits.
E. Extend to energy saving efforts within Missoula County Public Schools and the University of Montana.
F. Focus not just on inside building, but also on yard and outdoor environment and potential for energy savings.

Metrics and Timetable

a. Although both interest and need is high, must first increase the community's capacity (within Climate Smart and other community groups) and funding. Priority to begin in 2016 and efforts will be ongoing.

4. Develop energy efficiency projects within specific community sectors

Goal: Create the right synergies and support to take on higher profile or specific built environment projects, where the need is unmet and the return-on-investment is high.

Activities:

A. Provide free or affordable energy audits and consultations to homeowners, renters, and businesses.
B. Initiate a "Cool Roofs" project in which living roofs or reflective colored roofs are incentivized or required. (Possible tax credits or fee reductions to participating homes and buildings).
C. Implement streetlight and traffic light efficiency retrofits (LEDs).
D. Implement zero landfill building and manufacturing policy, emphasize reusing materials.
E. Require life-cycle assessment of energy and water consumption into bids for City and County projects.
F. Encourage upgrades to mobile home parks to meet current safety standards and as potential redevelopment areas for other affordable housing types.
G. Establish mandatory reporting of energy consumption for homes and commercial buildings, including existing private buildings, existing public buildings and new construction.
H. Encourage more public performance contracting – University of Montana, DEQ.
I. Enhance contractor licensing.

Metrics and Timetable

a. These are measurable projects but at this point are aspirational yet possible and not time-bound. We will track the results of any efforts as part of our

A CLIMATE SMART WAY FORWARD:

No doubt there are incredible opportunities for the Missoula community and surrounding region to make great strides in building efficiencies and design. We have a talented pool of professionals who know all too well that challenges abound. We need to develop and pass the requisite policies to help low income afford green energy, energy efficiency. In particular, we need to:

- Remove the built in incentives for cheap upfront products and materials, and instead incorporate long term pricing and pay off.
- Reconcile high-tech/low-tech approaches to green building
- Ensure lower income and vulnerable populations receive assistance and projects
- Connect diverse array of interested parties
- Identify clear entry points for all involved

With leadership from the new Five Valleys High Performance Building Collaborative and Climate Smart Missoula we are excited to accelerate Missoula's progress.

Potential Partners: City of Missoula, Missoula County, University of Montana, Missoula College, Missoula Federal Credit Union, First Interstate Bank, St Patrick Hospital, Missoula County Public Schools, Homeword, Home ReSource, various private contracting and consulting businesses, architects, engineers and developers, local and state elected officials, and more.

Developing green building, energy efficiency and conservation strategies during Summit #2

Healthy, Thriving Community

We envision Missoula as a caring community, focusing on health, preparedness, personal and community resilience to create a healthy community in which people thrive, even in the midst of climate change stress.

Our community will enhance our climate-related disaster and threats preparedness, educate Missoulians about the climate-health link, and build more resilient individuals and community.

Snapshot: Climate change poses risks to human health both directly (heat exposure, forest fires, flooding, and insect-borne disease) and indirectly (depression, anxiety, scarcity, and community chaos), and many people in Missoula are interested in reducing the risks of climate change for our health, our community, and the natural world. Building connections across the community, developing compassion for others, and developing resilience in ourselves and in our social structures will make it easier to reduce risks of climate change and create better health.

KEY STRATEGIES:

1. Enhance community disaster and threats preparedness

Goal: Build a community approach to disaster preparedness to support community members, businesses, and groups in the face of climate related events and threats.

Activities:

A. Support networks such as neighborhood councils, churches, and affinity groups to prepare to work together as needed.
B. Help assure that community wide preparation is occurring for anticipated threats: fire, flooding, avalanche, high temperatures, air pollution, and drought.
C. Launch Wildfire Summer-Smart and Heat Initiative to, in part:
    i. Assess and improve current communication strategies during times of high smoke and heat.
    ii. Conduct assessment of options on air alert days (emphasize youth, vulnerable populations), and provide indoor spaces for recreation, exercise, and health needs during high smoke and high pollution days.
    iii. Educate about health risks and avoidance strategies.
    iv. Work with housing experts on long-range plan for energy efficient homes.
D. Work with existing programs to encourage sharing of resources (such as water) when scarce.

Metrics and Timetable:

a. Develop guidelines or discussion items for councils, churches and groups to consider in their planning. These items will focus on increasing awareness of climate risk, and examples from other communities of how communities and neighborhoods work together in the face of this risk. Draft completed spring 2016.
b. Missoula City-County Disaster Preparedness Plan includes provisions for climate related disaster such as fires, flooding, avalanche, heat, and drought. Examine 2015 plan. Establish contact with planners for 2016 plan and incorporate new ideas and strategies.
c. Track success initially by the number of participants in Wildfire Summer Smart programs; track number of educational events or actions about smoke health. Develop program in 2015. Expand

educational materials 2016 and beyond.

d. Assessment performed of relevant groups by end of 2015. Sharing mechanisms developed and trialed by December 2016.

2. Link health and climate change

Goal: Link health impacts of climate change to most or all discussions about climate change and work to improve health. A health message is shown to be effective in motivating change.

Activities:

A. Engage with the City-County Health Department and other health related agencies to include health impacts of climate change in the annual Health Impacts Assessment.
B. Work with Health Department to share information about climate risks to health.
C. Identify list of resources for dealing with health impacts.
D. Encourage hospitals and clinics to be prepared for periods of high smoke exposure, high temperatures and other risks.
E. Develop metrics for reporting on climate related risks and health events

Metrics and Timetable

a. Climate change related health information readily available through health department and government agencies by December 2016.
b. Contacts from Health Department identified as team members in 2015.
c. List of climate change related health resources created and posted on Climate Smart website by December 2015.
d. Risks identified through conversations with health providers, hospital administrators, Emergency Medical personnel by December 2015. White paper encouraging preparedness submitted to hospitals and providers by May 2016.
e. Expected health impacts for western Montana will be identified by September 2015. Data on occurrence of each risk will be collected by December 2015, and tracked annually.

3. Build personal and community resilience

Goal: Build personal and community resilience for better coping and connectedness during times of climate stress.

Activities:

A. Offer education on emotional well-being to help build resources to recover from difficulty.
B. Teach methodologies to reduce stress and fight/flight response.
C. Build and support social networks: neighborhoods, churches, affinity groups.
D. Create opportunities for public dialogue and participation with a high degree of tolerance and trust (safe forums).
E. Link with other communities in Montana and the northwest to share strengths and resources.
F. Reward and recognize acts of kindness.
G. Build compassionate altruism.

Metrics and Timetable

a. Educational materials identified by December 2015 and shared with service agencies, schools, businesses, and the public by June 2016.
b. Align with existing groups to offer stress reduction classes, and skill building to cope with emergencies as well as chronic stress. Identify groups by December 2015. Include environmental stress as aspect of skill building by June 2016.
c. Identify the many ways Missoulians build networks currently. Share this information in positive stories on the Climate Smart Missoula website by June 2016.
d. Work with existing groups to build a Resilient Missoula, including hosting public dialogues about climate change related stressors.
e. Reach out to other cities in Montana and Idaho to compare notes about Climate planning. Share resources and develop networks. Make first contact by the end of 2015.
f. Tell more positive stories about the kindnesses of Missoulians. Connect the dots that support each other, make us stronger and more resilient as a community, even in the face of climate change. Post at least one story/month on the Climate Smart website, beginning Sept. 2015.
g. Measure compassionate altruism in surveys of the general population annually.

ADDITIONAL STRATEGIES:

- Research other communities with a "Happiness Initiative" and assess opportunities. Use well-being of our community as a key component in city-wide planning and policy efforts.
- Work with artists and art educators to link climate action with arts, culture, and local celebrations. Include music related to resilience and climate and "art eruptions" to catch interest, shift awareness, have fun.
- Impact Policy. Mobilize public comments and participation when health related energy topics arise in legislation or city-county decision making.
- Engage in future planning processes to help maintain a focus on creating a healthy, thriving community.

A CLIMATE SMART WAY FORWARD. We know this is an all-encompassing, rather daunting bucket. We believe that by talking about the challenges that are here today and that lie ahead, in hopeful and positive terms, we can build a more resilient Missoula. And by bringing new community members to this conversation, from mental health professionals, to medical practitioners, to artists, we will build strong connections. A challenge may be capacity—it can be difficult to bring these busy professionals together!

And Remember…

--- Include all who are interested --- Emphasize co-benefits ---Build on existing processes
--- Include the arts --- Remember humor --- Give voice to the vulnerable

Potential Partners: St Patrick Hospital, Community Medical Center, Missoula City-County Health Department, City of Missoula, Missoula County, American Lung Association of the Mountain Pacific, University of Montana, Missoula County Public Schools, Poverello Center, Learning Center at Red Willow, Turning the Wheel, National Coalition Building Institute, Living Art, Zootown Arts Community Center, The Hive, faith communities, Jeanette Ranken Peace Center, local and state elected officials, individuals, and more.

Developing Healthy, Thriving Community strategies during Summit #2

Inventory and Metrics

We envision a vibrant and resilient Missoula community that has established the necessary metrics and carbon emissions inventory to track, report, and make progress toward Climate Smart Missoula goals.

Our community will create a framework for conducting a community wide carbon emissions inventory, establish the necessary infrastructure to complete successive inventory updates with replicable methodology, and work with each Climate Smart bucket to create appropriate metrics that will track the progress of mitigation and resiliency projects and initiatives.

Snapshot: Having a specific, accessible system to assess progress is critical to achieving the goals of the Missoula Community's Climate Smart Action Plan. The Inventory and Metrics bucket is the newest focal area, arising out of a desire for having a more concrete understanding of success in each of the buckets. We understand that some focal areas lend themselves much more to quantitative assessments, such as Transportation, whereas other focal areas are by nature more qualitative, such as Healthy, Thriving Community. This effort will overcome that divide by working closely with stakeholders to develop appropriate specific metrics for each bucket and their projects or efforts. By creating an open and inclusive conversation around what success means, this bucket will design, implement, measure, and report on metrics across all eleven buckets.

KEY STRATEGIES:

1. Conduct community carbon emissions inventory

Goal: Design and complete the first community-wide carbon emissions inventory for the City of Missoula and surrounding area, using ICLEI's ClearPath community greenhouse gas inventory calculator.

Activities:

A. Capitalize on the City of Missoula's carbon emissions inventory experience and ClearPath membership to begin defining the boundaries and necessary inputs for a community-wide carbon emissions inventory.
B. Collect necessary community data from local utility, fuel providers, transportation organizations, industries, and water and waste managers and conduct emissions inventory using ClearPath protocols and calculators.
C. Compile community emissions inventory results and analysis into an accessible, readable format and distribute to the Missoula community electronically and in print.
D. July 2016: Create replicable system for collecting, analyzing, and communicating inventory and institutionalize it into internal documents for future annual updates.
E. August 2016: Establish target year for carbon neutrality and interim goals, as well as timeline for future inventory updates.

Metrics and Accountability:

a. Boundary and inputs defined (fall 2015)
b. Data collected (2015 – spring 2016)
c. Report completed (summer 2016)
d. Replicable system created, with instructions for continued use (2016)
e. Carbon neutrality goals and timelines established and commitments made (2016).

Note: Climate Smart Missoula staff will spearhead this effort with the leadership of Chase Jones, Energy Conservation Coordinator at the City of Missoula and the AmeriCorps Energy Corps service member hosted by the City of Missoula.

2. Develop and track Bucket specific metrics

Goal: work with stakeholders and leaders of each bucket to design both an overarching metric and activity-specific metrics for each bucket, and implement and track appropriate metrics.

Activities:

A. Engage with bucket stakeholders to determine most appropriate metric(s) for overall bucket success, progress, and health.
B. Engage with bucket stakeholders to determine most appropriate metric(s) for specific bucket activities.
C. Research other community metrics and how they have been implemented elsewhere.
D. Combine bucket input with research to design clear, measurable metrics for both overall bucket and individual project success.
E. Implement and actively track metrics on a quarterly basis.

Metrics and timetable:

a. Meetings initiated (2015-16)
b. Research completed (2015)
c. Metrics developed (spring 2016)
d. Implementation will begin in 2016 and is ongoing.

3. Create communication and education plan

Goal: Work with every bucket to design a comprehensive and multi-pronged education and communication plan that will actively report information about project and initiative progress to the Missoula community.

Activities:

A. Compile quarterly measurements of each bucket into a year-long assessment.
B. Perform analysis on year's metrics for each bucket.
C. Engage with bucket stakeholders to determine the best medium to communicate the results from the year.
D. Develop communication and education documents.
E. Distribute results documents in the method deemed appropriate by the bucket stakeholders.

Metrics and timetable:

a. Assessment and analysis completed fall 2016.
b. Develop communications document (2107).

A CLIMATE SMART WAY FORWARD:

Assessing the timely progress of the myriad community sustainability actions is no small order and will remain a challenge. Climate Smart Missoula team created this Metrics and Inventory bucket to help the community measure success. This work is key to fine-tuning the approach of each of the buckets, maximizing the effectiveness of each and every project, and gaining community investment through

communication of and education around the results of each bucket. Climate Smart Missoula staff will lead this effort with active input from community stakeholders.

Potential Partners: City of Missoula, Missoula Community Foundation, Missoula County, University of Montana, NorthWestern Energy, various consulting groups, and more. Really, we'll need everyone!

LOCAL FOOD AND AGRICULTURE

We envision a vibrant, affordable, and resilient local food and agriculture economy in the Missoula community with an educated consumer base that creates sufficient demand for local food.

Our community will educate Missoulians about the importance of climate change's effect on local agriculture, assist farmers in food production and irrigation efficiencies, enhance our ability to use local foods, and protect our remaining agricultural land from future development.

Snapshot: Western Montana's changing climate will alter the agricultural industry in the region, with research pointing to hotter and dryer summers, more aggressive weeds and pests, and a decline in crop yields as well as an increase in costs. Coupled with these local challenges will be external pressures from other food producing regions of the nation more severely affected by climate change, creating increased demand for our locally produced food. We also face the anticipated need to feed incoming "climate refuges". And growing and consuming local foods reduces our carbon footprint by shortening the food miles travelled. Given these concerns and opportunities, we must take immediate steps to secure our future food security from anticipated climate change by engaging in the strategies outlined here. We believe these efforts will work together to create a vibrant, and healthy local food and agriculture industry in Missoula that is accessible to all and strengthens our regional economy.

KEY STRATEGIES:

1. Engage in comprehensive education

Goal: Create a multi-pronged education and messaging strategy to target producers, consumers, institutions, and youth by stressing the impact of climate change on our future food security and provide options for minimizing the adverse effects of climate change.

Activities:

A. Develop and deliver educational materials for producers that will assist them in understanding the differences between normal weather fluctuations and long term climate change, as well as provide information on the agricultural crops, varieties, and methods most suitable for our area.
B. Develop and deliver educational materials for irrigators and incentivize implementation of educational materials to improve irrigation methods to conserve water and reduce sediment, fertilizer, pesticide, and herbicide runoff into waterways.
C. Develop and deliver educational materials for community members to establish a consumer base for local foods by developing the message and distributing it to the general public.
D. Develop and implement a curriculum around local food, climate change, and food security for local public schools.
E. Continue Farm Field Days. Expand CFAC sponsored "Beginning Farmer Education" programs throughout Western Montana.
F. Encourage and incentivize personal and neighborhood backyard fruit and vegetable gardens.

Metrics and Timetable:

a. 3-5 roundtable discussions convened (1 in 2015; rest in 2016)
b. Educational materials for producers, irrigators, and consumers developed and distributed. Use Climate Smart Missoula website to make these available to all.
c. 5 workshops and field days to connect farmers for sharing best practices in 2015-2016.

2. Expand local food distribution and establish food processing facilities

Goal: Enhance existing distribution centers, as well as plan for and build food processing facilities in order to meet the expected increase in demand for locally grown food products.

Activities:

A. Coordinate with the University of Montana, local hospitals and schools to expand their use of local foods.
B. Create or expand facilities to source and distribute local foods; work with Western Montana Growers Co-op and the Missoula Food Co-Op, and other commercial food processing centers.
C. Encourage CSAs, markets, urban gardens, etc. and provide support incentives for these projects.
D. Analyze the need and start planning for local food processing plants to include a mobile animal slaughter unit.
E. Conduct outreach on newly passed state legislation regarding "cottage food industries" (Yes)

Metrics and Timelines:

a. Connect with Farm to School and UM Dining to provide resources to area schools and other institutions to increase local food procurement.
b. Provide resources to restaurants, local producers and independent grocery markets for Choose Local Campaign to incentivize local food purchases during Fall 2015.
c. Expand Double SNAP Dollar Program to area independent grocery stores and CSA markets.

3. Promote the use of land planning tools

Goal: Promote land use planning tools and policies that will preserve our agricultural lands, keep wildlife habitat connected, protect our riparian areas, guide development away from sensitive areas, and provide predictability in land use planning.

Activities:

A. Support policies in the Missoula County revision of subdivision regulations that will more effectively mitigate the loss of agricultural land to development. This is ongoing through the Community Food and Agriculture Coalition (CFAC)
B. Build support for and pass a new Open Space Bond.
C. Review other proposed tools for preserving agricultural land to enhance future food security.
D. Help with outreach for meetings, public comment periods, and additional

Metrics and timeline:

a. Missoula County commissioners will make these final land use decisions fall of 2015, and we'll know of our success for this specific planning regulation then.
b. We can track participation in public hearings and open comment periods.

ADDITIONAL STRATEGIES:

- Study the possibilities of a water trust and water rights reallocation to coordinate water use across the region and ensure water sustainability (see Water bucket).
- Promote Conservation Stewardship Program and reward conservation practices through available federal programs.

- Involve County Extension Office and Natural Resource Conservation Services (NRCS) as well as other existing agencies to further our goals.
- Work with community social service partners to provide health care and other support for labor workers in our local food system.
- Encourage local food vendors to use locally produced fresh and/or prepared food for farmers' markets, festivals, and other community events.
- Promote locally produced food as a community amenity that can enhance tourism and economic development.
- Encourage and support the acceptance of Electronic Benefits Transfer (formerly food stamps) at all markets and groceries, and educate EBT/SNAP users about using their benefits to purchase local food. Develop a Double SNAP Dollar program at all participating Farmers Markets, and expand the program to new farmers markets within communities.

A CLIMATE SMART WAY FORWARD

Presently there is a strong and growing enthusiasm in the Missoula area for enhancing local good and building resilient local agriculture systems, yet our dedicated community organizations need additional capacity to advance all these interwoven efforts. We also need to continue to build programs that allow lower income community members opportunities to grow and enjoy local foods. Climate Smart can help foster productive conversations between a diverse group of stakeholders in the industry, including interested and curious community members. These conversations can inform the process moving forward to advance the bucket's goals.

Potential Partners: Community Food and Agriculture Coalition, Missoula Open Lands Committee, Western Montana Grower's Cooperative, Five Valleys Land Trust, Garden City Harvest, University of Montana Sustainability Center and Dining Services, Center for Rural Affairs, 10,000 New Gardens, Clark Fork Coalition, Farm to School, Clark Fork Farmers Market, Missoula Food Bank, Missoula County Public Schools, City of Missoula, Missoula County, and more.

Developing Local Food and Agriculture strategies during Summit #2

RENEWABLE ENERGY

We envision a Missoula area that is powered by renewable energy and where community members are engaged with and have control over affordable energy systems.

Our community will significantly reduce our reliance on carbon-based fuels and increase the percentage of renewable energy in Missoula's energy budget. By 2050, we will generate enough energy through renewable sources to supply the entire Missoula community's electrical energy needs.

Snapshot: Renewable energy reduces the amount of carbon pollution associated with fossil-fuel sources. Most often, developing renewable energy is thought of as a mitigation strategy to climate change; while this is true, it is also an adaptation strategy as developing cleaner, local energy sources can be an economic driver and hedge against volatile and increasing energy prices. Already the site of one of the largest solar photovoltaic arrays in the state, opportunities abound within the Missoula community for additional renewable energy implementations. Both small and large-scale projects and accompanying state policy changes are necessary to meet our ultimate goal of community carbon neutrality. When combined with energy conservation and efficiency measures—everything from smart meters to building insulation—renewable energy projects can significantly reduce, and ultimately eliminate, the portion of Missoula's energy generation from coal, and it can do so in an affordable way. Clearly, our Renewable Energy bucket is very intertwined with Green Building, Energy efficiency and conservation Bucket.

KEY STRATEGIES:

1. Accelerate renewable energy development in Missoula

Goal: Develop at least one large renewable energy project to showcase and inspire our community while simultaneously facilitating the accelerated adoption of rooftop solar and other small-scale renewable energy projects.

Activities:

A. Encourage and help with efforts to bring a "Solarize Missoula" group purchasing campaign to fruition. Solarize Missoula would accelerate the adoption of rooftop solar in Missoula by bringing together contractors and customers to facilitate volume-based discounts on rooftop solar installations.
   a. Work with Montana Renewable Energy Association (MREA) to launch Solarize Missoula.
   b. Enhance outreach and opportunities to grow the program.
   c. Track success as measured with our community greenhouse gas inventory

B. Support the University of Montana as it explores an expansive renewable energy project.

C. Help build support for new biogas electrical generation project at the wastewater treatment plant.

D. With the Missoula Energy and Climate Team, consider and assist with a community fundraiser to install solar on a municipal or nonprofit building.

E. Work with financial institutions and local and state government to address upfront financing costs.

Metrics and timetable

a. Kick off Solarize Missoula in 2015. Track number of solar installations and business impacts.
b. Track success of UM, City of Missoula's projects over the course of next five years.
c. Biogas generation moving forward in 2016 (completed by 2018).

2. Advocate for needed policy

Goal: Develop strategies to understand and advocate for crucial policy changes to allow more individual and community scale renewable energy.

Activities:

A. Research and document barriers and outdated local and state policies that hamper efforts to move renewable energy forward.
B. Build support for needed policies that promote distribution of energy within neighborhoods and communities (net metering, community solar, etc.)
C. Encourage pro-renewable energy policy with both Montana's Public Service Commission and NorthWestern Energy.
D. Legislative change. Each legislative session, prioritize proactive clean energy policies, such as:
    i. State Renewable Portfolio Standard Increase (e.g., 25% by 2025)
    ii. Improved net-metering laws (increase cap, allow for neighborhood/community aggregation, roll over credits beyond one year, etc.).
    iii. Legislation that allows PACE Programs – Property Accessed Clean Energy.
    iv. Legislation to legalize crowd-funding (e.g., Mosaic) in Montana to increase abilities of individuals and businesses to invest in renewable energy
    v. Legislation that allows solar-leasing.
    vi. For all, be part of smart campaign strategy. Identify specific project to showcase during next legislative session, have the right messengers tell stories, work with partners across Montana.
        - Identify ways to streamline local and state permitting processes for renewable energy production. Provide incentives and remove barriers.
        - Generally advocate in support of current good rules, regulations, and laws (play defense when necessary).

Metrics and Timetable

a. Results of policy assessment and financing options would be shared widely and dissemination and utility documented (through 2017 Legislative session).
b. Success defined by laws passed or rules established. Document success and disappointments at each of our every-other-year State legislative session.

3. Engage in education and outreach

Goal: Enhance community understanding of and enthusiasm for renewable energy, in terms of both its carbon footprint and its economic benefit.

Activities:

A. Work with partners to develop outreach materials, utilizing Climate Smart website, social media, and more.
B. Co-sponsor MREA's fall Clean Energy Fair

C. Help showcase renewable energy at other local fairs and events (Earth Day, River City Roots festival, etc.

Metrics and Timetable

a. Track materials produced and disseminated. Ongoing
b. Track participation in events and attendees. Ongoing

ADDITIONAL STRATEGIES:

- Develop and implement Community Renewable Energy Loan Fund program (see Helena ex.).
- Build support for and expand technologies to utilize additional forward thinking energy projects:
  - landfill methane co-generation system
  - micro-hydropower
  - Solar roadways
  - Geothermal home heating and cooling, ground source heat pump
  - Energy transmission optimization
  - Smart Grid prototype
- Develop system for carbon offsets.
- Develop additional financing mechanisms beyond state and federal renewable energy tax credit (see ClearSky Climate Solutions).
- Improve marketing of renewable energy technology.

A CLIMATE SMART WAY FORWARD:

Progress on the local renewable energy front requires many pieces of the puzzle to come together: better policy and financing combined with bold individuals and groups and individuals who are willing to, at times, take risks and consider the long view. State policy changes are needed to permit large-scale generation projects and many net-metering installations. The community likely needs to attract significant capital investment from the private sector for large-scale renewable energy projects. Additional financing tools are needed to lower upfront capital investment requirements and enable broader implementation of renewable energy projects by businesses and homeowners. As we implement our community greenhouse gas inventory, we will need solid energy data, and although this will be a challenge, we hope improvements can be made in the years to come. For instance, Smart Grid implementation throughout the Missoula community, would allow us to use clear and readily available data regarding Missoula's energy use and generation profile. Although the challenges to wide-scale use of renewable energy are real, the Missoula Community can position itself to be closer to the cutting edge and really make things happen.

And Remember:

- Work together, with partners and experts
- Build and support energy systems that support all our community members, especially lower income.
- Be persistent—systematic and real change will take a while. NASA didn't know exactly how they'd get to the moon – or Pluto – they just knew they needed to try, one step at a time.

Potential Partners: Montana Renewable Energy Association (MREA), University of Montana, Missoula College, US Forest Service, Alternative Energy Resource Association, City of Missoula, Missoula County, and more.

Developing Renewable Energy strategies during Summit #2

SMART GROWTH

We envision a community that focuses growth inward in the direction of existing infrastructure, neighborhoods and public services to reduce our contribution to climate change and prepare us for its impacts.

Our community will develop infrastructure and new growth that is sustainable, adaptable, and in the direction of existing services.

Snapshot: There is great opportunity to both mitigate climate change and build resilience (adapt) to the effects of climate change with how Missoula develops. Redeveloping or developing new areas near existing infrastructure, schools, business, parks and services is efficient, reduces capital and household costs, encourages sustainable, healthy transportation options, builds community and conserves open space and agricultural land. Additionally, it positions Missoula to be more resilient in the face of climate change impacts like flooding and wildfire. This growth, development, and land use pattern emphasizes the triple bottom line: environmental health, economic prosperity and social equity, and increases the quality of life in Missoula.

KEY STRATEGIES:

1. Utilize "Trails as Transportation" designation

Goal: Attain Trails as Transportation designation and utilize associated allowances and funding streams to implement the projects that this designation enables.

Activities:

A. Examine current federal, state and local laws and regulations and identify necessary changes
B. Energize and coordinate key stakeholders, elected officials and public
C. Pursue changes and attain Trails as Transportation designation
D. Identify and implement projects that this designation enables.

Metrics and Timetable:

a. Trails for transportation designation attained (2017)

2. Foster Transit Oriented Development (TOD) corridor development

Goal: Develop Transit Oriented Development (TOD) corridor strategy

Activities:

A. Define corridor(s)
B. Define mode (Ex: Trolley)
C. Explore and identify funding
D. Research land use and zoning that supports TOD and consider possible needed changes
E. Develop private sector and major employer attraction/investment
F. Concentrate public funding on corridor
G. Make a contingent overlay to prime project when funding becomes available
H. Identify ways to reduce (investment) risk

Metrics and Timetable:

a. Will work with multiple partners to determine next steps and timeline in 2016.

3. Create updated parking management strategy

Goal: Develop business and residential parking management strategy that balances financial, environmental, and social benefits.

Activities:

A. Work with elected officials, parking commission and others to develop analysis of parking fee structure and revise according to management strategy
B. Encourage and build more parking structures (if and when demand dictates rather than surface parking)
C. Examine and develop parking turnover strategy
D. Develop parking with improved access/synergy to biking, walking, bus, etc.
E. Further reinvest parking revenues into biking, walking, bus, etc. infrastructure and encouragement
F. Secure neighborhood and residential parking (especially downtown)
G. Educate business owners, residents, and public

Metrics and Timetable:

a. Initial meetings in 2016 and this will determine path forward.
b. Education is ongoing.

ADDITIONAL STRATEGIES:

Focus Inward

- Create incentives to develop inward
- Utilizing ADUs (Accessory Dwelling Units)
- Analyze school locations
- Appropriate urban design and public spaces
- More parks and trails in town
- Explore and launch car sharing program
- Explore mixed use rezoning

Resource Protection

- Plan wisely for Wildland-Urban Interface (WUI)
- Limit development in high fire risk areas
- Create system of incentives
- Build support for and pass new open space bond (conservation and trails)
- Promote agricultural land protection
- Analyze rural zoning
- Implement natural flood control
- Protect wildlife habitat
- Utilize easements
- Identify vulnerable infrastructure and develop mitigation requirements

A CLIMATE SMART WAY FORWARD:

The strategies in this bucket represent actions that rose to priority from public/private cross sector smart growth and land use experts during Climate Smart Missoula's 2nd Community Climate Summit.

Both the City of Missoula and Missoula County are currently updating comprehensive growth policies with extensive public outreach and participation. Climate Smart Missoula leadership has positioned itself as a long-term resource and important partner through active participation and input, in particular for the City of Missoula "Our Missoula" growth policy update process, at listening sessions, as part of multiple focus groups, and by our presence on the steering committee team during policy development process. In draft form, smart growth and land use principles, including support for the strategies above, permeate the Our Missoula documents. Upon adoption, anticipated to be in late 2015/early 2016, Climate Smart Missoula will reconvene with public officials tasked with overseeing and applying local growth policy, and work with them to support implementation of these strategies as well as other goals, objectives, and actions contained therein that promote a climate smart Missoula development pattern.

Potential Partners: Missoula Metropolitan Planning Organization members, City of Missoula Development Services, City of Missoula Parks and Recreation, Missoula County Community and Planning Services (CAPS), Montana Department of Transportation, local and state elected officials, Federal Highway Administration, Municipal League of Cities and Towns, Bike Walk Alliance of Montana, Adventure Cycling, various Missoula area architects, developers, and engineers, Missoula Housing Authority, Homeword, Missoula Downtown Partnership, Missoula Parking Commission, Missoula Chamber of Commerce, Sustainable Business Council, Missoula Architects and Engineers, and Developers, and more.

Developing Smart Growth strategies during Summit #2

Sustainable Economic Development and Financing

We envision a local economy that is increasingly prepared for forthcoming climatic challenges and opportunities, and that works for all people, the planet, and profits.

Our community will develop and strengthen long-term economic strategies, policies, and financing for the Missoula area that fits the latest climate science, follows relevant resiliency recommendations, and builds social equity in our community.

Snapshot: In Missoula, many economic development organizations, agencies, and individuals are working to bring or enhance sustainable and viable business opportunities to the region, consistent with our community values and sense of place. At present, there is a need to bring together these stakeholders to help create, enhance, and analyze business opportunities utilizing a sustainability and climate "lens." There is also a recognized need to enhance funding opportunities and develop and implement necessary forward-thinking economic and finance policies. By coming together and engaging in and intertwining this effort with the Healthy, Thriving Community Bucket and other Buckets, we can collectively address poverty, equity, health, and the built environment. Together we can help to create a Missoula area future that works for all community members and builds long-term economic prosperity.

KEY STRATEGIES:

1. Initiate a climate smart economic conversation

Goal: Bring together stakeholders to discuss economic development opportunities through a sustainability and climate "lens", to help weave environmental sustainability and equity into business themes in Missoula.

A. Working with the Mayor of Missoula, organize stakeholder meeting with key economic development entities in order to:
    i. Garner support for collaborative sustainable economic development planning.
    ii. Gauge support for effort to run new or enhanced economic opportunities through a sustainability, equity, adaptation, and mitigation matrix to prioritize and support accordingly.
    iii. Integrate climate strategies into strategic objectives of economic development groups and partners, where and when appropriate.
    iv. Ensure low income population needs are considered by bringing supporter groups into the conversation and strategy development. Identify barriers to addressing climate and equity in business.
    v. If supported, develop this conversation into a standing stakeholder group.
B. Work with partners to articulate and showcase economic benefits of restoration, climate adaptation, energy savings/carbon reduction efforts, and triple bottom line: people, planet, profit.
C. Research and share successful sustainable business frameworks stemming from other communities.

Metrics and Timetable

a. Meetings convened with major players participating (fall 2015 to convene; continue in 2016).
b. Success stories showcased in media and events (at least on in 2015, 2 in 2016, ongoing).

c. Successful community review completed (2016).

2. Develop funding mechanisms

Goal: Increase available and effective financing mechanisms, via Climate Smart staff, the economic stakeholder group (see above), and other experts including those from Green Building (Five Valleys High Performance Collaborative) and Renewable Energy Buckets.

Activities:

A. Research and develop guidance documents to clearly define opportunities, barriers, and needs in order to increase local funding and financing mechanisms.
   a. Research funding options and develop opportunities to encourage large scale, collaborative sustainability or clean energy projects, and share findings with community leaders. Possibilities include specific fees, tourism tax dollars, foundation support, etc.
   b. Research, develop or support other financing mechanisms like Renewable Energy Tax Credit and Renewable Energy Loan Fund, with consideration that funding can specifically benefit our lower income populations.
   c. Research the feasibility of tax increment dollars or an Energy Bond fund for new energy efficiency efforts and upgrades.
   d. Consider the development of a Community Capital Vehicle with Return On Investment and set monetary goal for fund.
   e. Consider the creation of Sustainable Enterprise District. Research other programs (e.g., PDX, Fort Collins, and others) and clearly define for Missoula.
   f. Develop communication strategies, and solidify leadership support necessary to move the best of these programs forward.

B. Create incentive programs to encourage green building and energy efficiency efforts and businesses; utilize best funding options (see A, above).

C. Track programs, monies raised and utilized, and impacts.

D. Help support, via fundraising and contributions, Climate Smart Missoula. Think strategically and apply for foundation grants, matching funds, government grants (EPA, EE, and state grants).

Metrics and Timetable

a. Initial meeting convened to determine scope of work and process (late 2015 or early 2016). Guidance document developed that outlines options and makes recommendations (2016).
b. At least one incentive program created (2017 and beyond)
c. Tracking system established and metrics developed to track success (2016)

3. Develop strategies for enhancing state level policy

Goal: Inform and encourage state legislative and executive branch efforts to support sustainable economic priorities, renewable energy efforts, and other policies to allow local business and government to creatively build a resilient community.

Activities:

A. Identify local priorities for local economic development that need creation or alteration of state law or rulemaking.

B. Work with current Governor's office to identify administrative rule making improvements.

C. Gain endorsement from local leaders for local priorities, utilizing the stakeholder group (#1) to inspire and educate local and state elected officials.
D. Ahead of legislative session, identify supportive state leaders to move legislative ideas forward and ensure no backsliding (defend good laws and rules already in existence).
E. Develop a leadership strategy for creating, enhancing, and implementing policy via statewide coalitions or councils, working with other Montana communities.

Metrics and Timetable

a. For all, begin conversations in 2016, prepare for 2017 legislative session (and beyond).

ADDITIONAL STRATEGIES:

- Organize specific business sectors that are directly affected by climate change or whom most clearly part of the climate solution: Outdoor recreation, tourism, health care, renewable energy, local food and agri-business.
- Provide start-up loans for businesses that provide value-added wood products, like blue stain pine, biochar, and biofuel.
- Work with Sustainable Business Council and others to bring local businesses into conversation.
- Encourage climate "incubators".
- Research and make specific recommendations re carbon offsets.

A CLIMATE SMART WAY FORWARD:

At this juncture, communities that plan ahead and build local economies that explicitly recognize the added challenges of climate and sustainability are undoubtedly going to thrive and attract new businesses and top-notch workers. We recognize it's no easy task to bring such partners, entities, and individuals together as missions and strategies are varied. Nonetheless, Missoula is known to be a forward-thinking community that places high regard (and no shortage of our economic base) upon our natural amenities—our rivers, mountains, and open spaces. It's in our DNA to hedge against threats to our economic base and move toward business and economic systems that improve all our resident's lives. We acknowledge there are capacity and resource challenges at representing organizations. And of courses, much of where we'd like to head requires improved state if not federal legislation, and it is difficult for Missoulians to make these changes at the pace we need them. Yet with support from our Mayor and key leaders, no doubt we can make progress.

Potential Partners: City of Missoula, Missoula Redevelopment Agency, Missoula Economic Partnership, Sustainable Business Council, University of Montana, Bitter Root Economic Development District, Montana Community Development Corporation, Montana Downtown Partnership and Business Improvement District, Hellgate Ventures, individual entrepreneurs, local and state elected officials, and more.

Developing Sustainable Economic Development strategies during Summit #2

Transportation

We envision a safe, comprehensive transportation system that empowers people to choose active transportation, helping them to save money, breathe cleaner air, and reduce their carbon footprint, and that helps create a community that is resilient to economic volatility and growth.

Our community will design and deliver education and outreach programs that reinforce "multi-modal" as an efficient, affordable, and sustainable way to meet our transportation, and we'll work to reducing vehicle miles traveled, expand access to affordable public transit, and held build sustainable infrastructure for a promising future.

Snapshot: Transportation is the second largest source of total US greenhouse gas emissions, and reducing those emissions will provide a wealth of environmental, health, and community benefits. This arena faces great challenges but maintains even greater hope. Transportation is multi-faceted and local planning efforts are intertwined with multiple State and Federal transportation agencies. While nearly a century of auto-centric development has influenced travel habits that are counter to sustainability, community leaders are excited by the possibilities of using education and outreach to shift cultural understanding of what it means to transport people and goods. Missoula is growing, and planning for a multi-modal, active, efficient, and accessible transportation system ensures that we hedges against the harmful effects of climate change, remains fiscally responsible, and maintains public health. We simply cannot afford to build and maintain a single occupant vehicle transportation system in these times.

KEY STRATEGIES:

1. Reduce Vehicle Miles Traveled (VMT)

Goal: Work with key community entities to establish a benchmark for vehicle miles traveled (VMT) in Missoula, set reduction goals for VMT, and launch a community wide education program to work towards those goals.

Action Steps:

A. Work with the City of Missoula, Missoula in Motion (MiM), Bike Walk Alliance Missoula (BWAM), Missoula Institute for Sustainable Transportation (MIST), the Montana Department of Transportation (MDT), University of Montana, Missoula Urban Transportation District/Mountain Line, and others to determine the current benchmark of total VMT in Missoula.
B. Measure the greenhouse gas emissions associated with community VMT.
C. Establish a target goal and year, as well as interim goals, for VMT reduction.
D. Assist transportation planning entities with policies and strategies that will work towards the VMT reduction goal.
E. Working with partners, develop and implement a public education campaign that explains the importance of reducing VMT, its relationship to climate change, and ways to utilize sustainable transportation. Ensure it is creative, fun and engaging.
F. Partner with MiM, BWAM, Free Cycle, Adventure Cycling, myriad bike shops, University of Montana, etc. to increase ease of owning or renting bikes.
G. Celebrate Active transportation. Help showcase key events that feature biking and walking options: Sunday streets, River City Roots and other downtown festivals, etc.

Metrics and Timetable:

a. Success measured by and established benchmark for vehicle miles traveled in Missoula, both end and interim reduction goals set (in 2016), and a Climate Smart outreach program is initiated (2016-17).
b. Greenhouse Gas savings measured (fall 2016).
c. Goal established (2016).
d. Engaged in policy discussions, education, outreach and celebration. Successful plans, products, and events tracked (2016 and ongoing).

2. Enhance expansive, accessible, and affordable public transit

Goal: Work to expand services and accessibility of fare free Mountain Line and University of Montana bus services.

Activities:

A. Encourage Mountain Line to continue upgrades and increased capacity.
B. Improve transit infrastructure to industry best practices, like pullouts, shelters at bus stops, and pedestrian crossings.
C. Continue to build support with community Fare-Free partners to extend pilot beyond three years, making fare-free permanent.
D. Advocate for additional late night bus service.
E. Develop outreach specific to poor air quality time periods (wildfire smoke in summer, inversions in winter) to encourage bus use during these times.
F. Continue to coordinate with Associated Students of University of Montana (ASUM) transportation to ensure optimal transit service city-wide.
G. Advocate for public transportation support in state and federal legislation.
H. Encourage a transition to electric buses, with identifiable renewable energy available or purchased (to fuel buses).

Metrics and Timetable:

a. Mountain Line has long term plan (30 year Master Plan) in place; assist as needed
b. Confirmed long-term support for fare free bus service.
c. Air quality education developed (2016)

3. Develop safe, comprehensive transportation infrastructure

Goal: Working with Smart Growth efforts, encourage transit-oriented corridor development, with a focus on "looking inward" and other infrastructure and smart growth improvements. Note: The following suggested activities here are expanded upon in the **Smart Growth** bucket.

Activities:

A. Support pedestrian-scale design that encourages non-motorized transportation and social interaction, especially in areas of the City that are now predominantly vehicular-oriented
B. Conduct education and outreach to show how transit-oriented development
C. Work with the City of Missoula to implement the transportation objectives of the Our Missoula growth plan
D. Work with the Montana Department of Transportation (MDT) to revise traffic model to include recent and projected demographic shifts, current traffic trends and climate action threats and impacts.

E. Work to obtain designation of trails as transportation corridors, to provide access to funding and improved decision making.
F. Develop design standards (such as a prescription street width) that promote the safety of bikers and pedestrians and decrease conflicts with motor vehicles.
G. Fund maintenance and improvement of infrastructure in preparation for impacts from climate change (e.g. trucking hubs, roundabouts, street design, lane width considerations, Front-Main St. conversion)
H. Create a non-motorized street in Missoula's downtown area.
I. Support parking policy changes including creation of districts, address parking meters, disincentives for large box stores with increased impact fees, educate re downtown tax base study.

Metrics and Accountability:

See Smart Growth bucket

Additional Activities:

- Develop alternative fuel stations in the area, especially electric, and ensure some of these are in public spaces.
- Expand options to outlying areas (Bitterroot Rail, transit in four directions, aim to connect major towns)
- Expand bike-share and car-share programs.
- Implement no idling policy.
- Implement a 2% gas tax in Missoula County and use revenue for energy reduction and climate action projects.

A CLIMATE SMART WAY FORWARD:
At this juncture, sustainable transportation in the Missoula area has strong advocates, a great deal of technically skilled proponents, and a strong agenda. Bringing the climate piece into the transportation conversation can, if communicated well, bring additional support for the necessary planning and funding to make it all possible. We also need to build a strong coalition to enable stronger state and federal laws, rules, options and funding. Clearly, we look forward to linking the transportation and smart growth buckets.

Potential Partners: City of Missoula, Missoula in Motion, University of Montana, Missoula Urban Transportation District/Mountain Line, Bike Walk Alliance Missoula, Missoula Institute for Sustainable Transportation, Adventure Cycling, Free Cycles, Montana Department of Transportation, local and state elected officials, various bike shops and bike tourism businesses, and more (see also Smart Growth Bucket partners).

Developing Transportation strategies during Summit #2

URBAN AND WILDLAND FORESTS and OPEN LANDS

We envision that our surrounding forests and open lands, together with our urban forests, are healthy and adapted to local climate conditions, contribute to climate mitigation, and are supported by a broad sector of the community.

Our Community will work together to enhance forests and local habitats that are resilient and adapted to changing climate conditions so they can provide a broad array of goods and services including: shade and cool temperatures, carbon capture and storage, clean and abundant water, diverse wildlife habitat, and renewable wood products.

Snapshot: Change in our forest systems is a constant. Fire, beetles and other disturbance are change agents that are part of the ecological backdrop upon which we now add increasingly rapid climate change. The combined impacts of increased temperatures, changes in streamflow and spring runoff, increased wildfire, and shifts in aquatic and terrestrial species have begun to shift forest landscapes and the overall composition of ecosystems. Modelled projections and recent experience indicates that some components have and will change at an unprecedented rate with negative consequences, such as longer wildfire seasons resulting in more smoke and more severe wildfires. Yet other changes may not happen very fast nor be detrimental and some may be advantageous.

Due to complex land ownership and management systems, collaboration between public agencies, local government, and private landowners is absolutely essential when devising new adaptation, mitigation, and restoration projects that could both minimize detrimental impacts to forest ecosystems and encourage our forests to be a major part of the climate solution. Missoula community remains an excellent place to tackle these issues. We have a tremendous set of intellectual and experiential capacity for conservation and forestry, between agencies, the University of Montana, and non-profit groups, , both national and local addressing these topics and trying to work across boundaries.

KEY STRATEGIES:

1. Support and enhance our urban forestry

Goal: Increase urban forest canopy cover as a carbon collection and storage system that also provides cooling shade, reduces energy consumption, and increases community well-being.

Activities:

A. Work with City's Parks and Recreation Department and Urban Forestry Division, Missoula County, Montana Dept. of Natural Resources and Conservation (DNRC) to identify funding, education, and project opportunities to enhance our urban forest; link to climate change. Use City's Urban Forestry Plan as starting point.
B. Partner with treesformissoula.org and add carbon benefits, and help advertise this site.
C. Create a carbon offset program to help finance implementation of a strong Urban Forestry program.
D. Develop and advocate for local and state policy changes which can incentivize urban forests and greenscapes.
E. Work with local government and developers to ensure all socio-economic groups have access to trees and nature.

Metrics and Timetable

a. Meeting of interested parties convened (2015)
b. Initiate outreach for and with treesformissoula.org (2015)
c. Urban forestry offset program developed and known in the community (2016).
d. Initiate policy discussion (2016), encourage action at next legislative session (2017).
e. Ongoing.

2. Re-plant and restore open space and public and private lands

Goal: Re-see, re-plant and restore forests and other key habitats to a resilient condition that can store carbon and reduce carbon released by wildfires and post-fire decay. Reduce carbon released from forest management.

Activities:

A. Educate about and incentivize native plantings, bring costs down, and make it easy for community members and businesses.
B. Work closely with the Five Valleys High Performance Building Collaborative (FVHPBC) and Green Building Bucket to tie forest management and sustainable construction together. Specifically expand the use of wood in construction in place of energy intensive materials. Explore use of local woody residuals for right-sized energy projects.
C. Develop a Missoula County Connectivity Project. This would identify reforestation needs, promote landscape connectivity to facilitate movement of species, and connect groups and programs with a shared vision. Detailed project scope needs to be defined.
D. Evaluate feasibility of a carbon offset funding program that is more expansive than urban forests.
E. Plan for and use appropriate prescribed fire in roadless and small wilderness areas (e.g., Welcome Creek and Rattlesnake NRA). Include education and outreach
F. Plan for and use appropriate timber harvest, typically in conjunction with fire, to create resilient forests, emphasizing Wildland Urban Interface (WUI).
G. Develop and advocate for local and state policy changes which can support or incentivize xeriscaping.

Metrics and Timetable

a. Education outreach through Climate Smart (2015)
b. Engage with FVHPBC and develop plan of action (2016-17).
c. Missoula Connectivity Project established and scope defined (2016).
d. Assess number of acres in need of appropriate treatment over long-term (e.g., 500,000 acres in County by 2025).

3. Connect forests and water.

Goal: Develop a partnership among landowner, managers, and other professionals to help adapt our forest management techniques to provide water flow benefits. Work with the Water Bucket.

Activities:

1. Develop Forest and Water "Best Management Practices" that will blend the desire for water quality with increased water yield and timing.
    - Convene watershed working group to determine best practices (Clark Fork Coalition, Montana DNRC, Montana Fish Wildlife and Parks, US Forest Service, University of Montana, and others). Determine progress made with Lolo National Forest and Clark Fork Coalition (and others) with a Watershed Vulnerability Assessment.
    - Use output strategies and tactics (e.g., from Northern Rockies Adaptation Partnership workshops)
    - Conduct outreach to US Forest Service and their partners to learn what Missoula might adopt from Denver, Flagstaff, Santa Fe and other "Forest to Faucet" initiatives to develop payments for enhanced watershed function to benefit their users.
2. Encourage agencies to remove and/or replace under-sized culverts that make roads vulnerable to "rain on snow" or other flood events.
3. Conduct forest activities that enhance forest resilience and provide water yield benefits (see #2).

Metrics and Timetable

a. Convene partners (2016) and develop and share BMP's (2017)
b. Track culverts removed or replaced (ongoing)

4. Engage in forest and climate education

Goal: Engage in and boost education and awareness of value of ecosystem goods and services and value of trees and forests for all community members, given climate change to come.

Activities:

A. Educate about value of open forest/open space, building support to preserve and expand.
B. Partner with local, state and federal governments and non-government organizations to offer education to private landowners about wildfires, fire use, and dynamic nature of ecosystems. Showcase research conducted by Missoula Fire Sciences Laboratory (Fire Lab).
C. Educate and support sustainable forestry that builds resilient habitats and watersheds, with priority in the Wildland-Urban Interface (WUI).

Metrics and Timetable

a. Education efforts are ongoing as capacity allows.

ADDITIONAL STRATEGIES:

- Research where and when it would be appropriate to utilize forest resources (e.g., trees, waste, forest management byproducts, etc.) for biomass energy. Work with University and other partners to educate public on right-sized project for this community. Implement pilot and then subsequent projects.
- Develop green living carbon offset or incentive program. Work with Green Building Bucket and housing and building groups to set this up and get word out.
- Protect native species and habitats via invasive species monitoring and removal; focus on rehabilitation of burned in the WUI and surrounding forests.
- Use forest management to address "air sheds"; clean air for all in the Missoula area and surrounding valleys.

- Help incorporate climate change into existing forest and open lands planning processes and rulemaking.
- Determine how to address climate issues within current forest and open lands regulatory process.
- Establish or support seed banks to address shifts in habitats, microclimates, bioclimatic envelopes.
- Improve support for federal and state land management activities that align with climate change considerations (risks and alterations).

A CLIMATE SMART WAY FORWARD:

Land managers, foresters, scientists, hydrologists, and watershed managers all recognize the ongoing and potential future impacts of climate change. This sector has been engaged in dynamic discussions regarding restoration and resiliency for decades, resulting in many effective public-private partnerships across the state of Montana and the creation of the cross-sector Montana Forest Restoration Committee. Yet this sector continues to face a unique challenge as relates to implementing new rules, coming to a shared understanding and acceptance regarding management decisions, and funding projects across ownership boundaries. Continued conversation and efforts to engage the full spectrum of Missoulians who care about forests and open lands are needed, and funding from agencies or others would not doubt help facilitate such efforts. Working within our "Urban Forest" can be less controversial, but funding and education are both needed to support a thriving program that the community is behind. This is a really big bucket, and efforts to make sustained progress will be ongoing for decades.

Potential Partners: Missoula's Parks and Recreation Department and Urban Forestry Division, Missoula County, US Forest Service, Bureau of Land Management, Montana Dept. of Natural Resources and Conservation (DNRC), University of Montana's College of Forestry and Conservation, Clark Fork Coalition, National Forest Foundation, ClearSky Climate Solutions, treesformissoula.org, Five Valleys Land Trust, local and state elected officials, individuals, and more.

Developing Urban and Wildland Forestry strategies during Summit #2

WATER CONSERVATION and PROTECTION

We envision the Missoula area will have sustained quality and quality of water needed for human, animal and ecosystem health.

Our community will enhance Missoula's water resources and floodplains so they have the resiliency to withstand new pressures imposed by climate change and continue to provide clean water and ecosystem benefits to our community.

Snapshot: In the arid west, availability of clean and abundant water is crucial for climate change planning. We seek to Restore resiliency to streams and floodplains and protect water sources from ever-increasing pressures of climate-related environmental changes and societal responses to climate change. Currently there are a number of efforts underway to protect groundwater and surface water and reduce conflict between land uses and natural processes affecting water resources. It is a goal of Climate Smart Missoula to link those together to form strong cross-sectional leadership to conserve, protect and restore our water resources.

KEY STRATEGIES:

1. **Enhance stream and wetland protection and restoration**

Goal: Adopt strategies that emphasize stream and wetland protection and restoration

Activities:

A. Identify and catalog current efforts underway across the community
B. Prioritize restoration types and areas; develop funding strategy
C. Coordinate with Montana Watershed Coordination Council (MWCC), local watershed groups, Conservation District (CD)and federal agencies for restoration, education and outreach
D. Strengthen riparian/stream/wetland protection in local ordinances and regulations where feasible

Metrics and timetable:

a. The primary organization addressing stream and wetland protection and restoration is the Clark Fork Coalition. These goals align with their annual plan.
b. Catalog current efforts by end of 2015
c. Develop funding strategy each year
d. Coordinate with groups listed by Summer 2016
e. Work on strengthening protection when possible, and in 2017 legislature

2. Protect floodplains and wetlands to reduce flooding and enhance groundwater infiltration

Goal: Work with planning agencies to protect floodplains and wetlands to reduce risks of flooding and property damage while enhancing groundwater infiltration.

Activities:

A. Prevent new infrastructure in floodplain and Channel Migration Zone (CMZ) areas.
B. Develop funding mechanism/plan for CMZ mapping in targeted areas.
C. Do cost/benefit analysis of protecting or developing floodplain (start with benefits of protecting) and create unified position paper.
D. Explore use of FEMA funding/easements to buy out flood-prone homes (e.g., Tower St.) and restore floodplain function.
E. Improve grazing management, agricultural runoff management, and stormwater management in floodplains.

Metrics and timetable:

a. The primary organization addressing stream and wetland protection and restoration is the Clark Fork Coalition. These goals align with their annual plan.
b. Address county development policy when occasion arises to prevent more floodplain development in targeted areas.
c. Floodplain cost benefit analysis by July, 2016
d. Explore buy out of flood-prone home-sites by end of 2016

3. Expand water-focused education initiatives

Goal: Provide robust public education plan for citizens of our community, public agencies, and businesses to deepen understanding of functions of a healthy water-linked ecosystem, including impacts on public health and well-being.

Activities

A. Identify and promote existing efforts
B. Work with Montana Watershed Coordination Council and Conservation Districts to develop action plan
C. Focus on expanding "tech-savvy" communication efforts
D. Develop "marketing strategy" for these issues with guidelines and target markets
E. Develop educational materials covering the link between water resources and climate change

Metrics and timetable:

a. The primary organization addressing stream and wetland protection and restoration is the Clark Fork Coalition. These goals align with their annual plan.
b. Develop action plan by end of 2015
c. Tech-savvy communication by end of 2015
d. Marketing strategy by summer 2016
e. Educational materials linking climate change by summer 2016

ADDITIONAL STRATEGIES:

General

- Improve geographical understanding of groundwater/surface water interactions and water balance; improve understanding of how models work together; improve metrics used in modeling and communication.

- Identify strategies for keeping water instream for fish, wildlife, recreation, and aesthetics, while meeting new water demands—e.g., groundwater mitigation banking, water conservation, and preventing proliferation of permit-exempt wells.
- Expand and improve drought management and planning
- Dovetail with Smart Growth Bucket to address development in floodplains; influence policy to improve flexibility to change water rights and points of diversion; improve policies for updating irrigation infrastructure
- Integrate stormwater planning with development standards to decrease impermeable surface
- Allocate more funding to prevent and mitigate effects of flooding after fire
- Encourage State incentives to improve energy efficiency of pumping

Conserve

- Develop projects to conserve water and lower associated energy use
- Establish system of water banks for users to conserve water and voluntarily reallocate water where it's most needed
- Evaluate potential for reintroduction of beaver and wetland restoration in headwaters for water banking
- Work with Agriculture Bucket to improve irrigation methods for water users
- Encourage and showcase xeriscaping

Protect

- Support public ownership of Missoula's drinking water supply
- Coordinate with economic development and planning agencies to support delineation and protection of floodplains, CMZs and wetlands
- Work with developers, agencies, and elected officials to steer development away from floodplains and invest in natural flood control
- Identify infrastructure that is vulnerable to flooding and develop plans to mitigate threats.
- Enhance community understanding of ecosystem values of wetlands and floodplains
- Monitor storm water inputs and improve storm water management

A CLIMATE WAY FORWARD

The Clark Fork Coalition has been effective for 30 years and will continue to be the lead organization as they work with local, regional, state and federal agencies, landowners, ranchers, and businesses in an attempt to conserve, protect and restore valuable water resources. This is complex and challenging work, but arguably some of the most essential for health of humans and ecosystems in our area.

Potential Partners: Clark Fork Coalition, Missoula Water Quality District, US Forest Service, Montana Trout Unlimited, Mountain Water Co., City of Missoula, Great West Engineering, Confederated Salish and Kootenai Tribes, local businesses, local and state elected officials, and more.

Developing Water Conservation and Protection strategies during Summit #2 (right)

ZERO WASTE

We envision a community that continually reduces its waste by reducing, reusing and recycling all materials possible, providing opportunities and incentives to do so for members of all socio-economic groups.

Our Community will actively work to become a Zero Waste Community.

Snapshot: Reducing our waste by using less, reusing more, and recycling as much as markets allow reduces greenhouse gases (GHG) that come from manufacturing, transportation and landfilling. Promoting the development of polices, programs, incentives, and local business endeavors that reduce waste and provide goods and services make our community more resilient and less reliant on distant markets, thereby further reducing consumption-related GHG emissions. This group recognizes the many opportunities for waste reduction in the Missoula area.

A key objective for this Bucket is to work with Missoula's City Council to develop and adopt a Zero Waste Resolution, which will:

- Declare to the community that the City is committed to reducing waste;
- Establish a community-wide waste reduction goal and timeline with benchmarks;
- Invigorate the development of policies, programs, and incentives to promote waste reduction activities and opportunities. Possibilities include an ordinance to increase deconstruction practices, a community-wide food scraps composting program, bans on plastic bags and Styrofoam recycling.

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KEY STRATEGIES:

1. Build support for waste reduction across sectors

Goal: Discover opportunities for local government, institutions, businesses and organizations to lead Missoula toward Zero Waste.

Activities:

A. Partner with City Council champions to develop a Missoula Zero Waste Resolution to present to City Council;
B. Encourage local entities already committed to sustainability to prioritize community-wide waste reduction in their strategic objectives;
C. Engage business community in recognizing opportunities for innovation and entrepreneurship as Missoula moves toward Zero Waste.

Metrics and Timetable

a. Resolution complete April, 2015
b. Gain support from local entities by end of year 2015
c. Engage business community in ongoing fashion, including plan for outreach to businesses by summer 2016.

2. Investigate community waste behaviors and barriers to waste reduction

Goal: Develop an understanding of current behaviors, needs, and perceptions to support program development and steward a shift toward a culture of waste reduction in Missoula.

Activities:

A. Conduct a community survey;
B. Host focus group discussions about waste;
C. Identify behaviors and barriers that can be addressed via education, policies, and/or programs.

Metrics and Timetable

a. Survey completed Summer 2015
b. Host focus groups throughout fall-winter 2015
c. Analyze findings to identify target behaviors by summer 2016

3. Foster community understanding of benefits of waste reduction.

Goal: Identify opportunities for community education particularly in support of any new waste reduction policies adopted by the City of Missoula.

Activities:

1. Outreach to the community around waste reduction with a balance between local issues and general information;
2. Educate community leaders as to best practices for waste reduction incentives and disincentives for wasting;
3. Advocate for a Zero Waste community that values transparency and clarity in its waste reduction policies, programs and practices.

Metrics and Timetable

a. Toward Zero Waste guide (already published in April 2015) continually updated for websites and shared widely.
b. Develop education plan for community leaders by summer 2016
c. Community education and outreach plan by summer 2016

ADDITIONAL STRATEGIES

- Increase solutions for reuse of glass
- Identify jobs benefits of moving toward zero waste; create cost-benefit analysis
- Create zero waste competitions
- Identify effective marketing strategy that is fun, challenging and informative, and that invites citizens to participate
- Create certification structure whereby individuals and businesses can be recognized for their efforts

A CLIMATE SMART WAY FORWARD:
Having emerged from Climate Smart Missoula organizing efforts, Zero Waste Missoula represents the diverse support for waste reduction that already exists in our community. It is a group of Missoula businesses, nonprofits, and individuals dedicated to working with the Missoula community to conserve and recover all landfill-bound resources and to utilize discards in ways that contribute productively to natural systems and our local and regional economies. See zwia.org for a comprehensive definition of "Zero Waste" from the Zero Waste International Alliance. This bucket is motivated and had momentum to make systemic and significant improvements in our waste system.

Potential Partners: Home ReSource, City of Missoula, Sustainable Business Council, various local recycling businesses, St Patrick Hospital, University of Montana, Missoula College, local and state elected officials, Transition Missoula, and more.

Developing Zero Waste strategies during Summit #2