

**TOWN OF MOUNTAIN VILLAGE
GREEN TEAM COMMITTEE MEETING
TUESDAY, SEPTEMBER 8, 2020, 2:00 PM**

**TO BE HELD REMOTELY VIA GOOGLE MEET:
meet.google.com/muu-axgh-dct
(see login details below)
AGENDA**

Agenda Item	TOD	Time Requested	Presenter	Type	Title
1	14:00:00		Jett		Call to order
2	14:00:00	::5	Jett	Action	Approval of the August 11, 2020 Green Team Committee Meeting Minutes
3	14:05:00	::5	Wheels	Informational	Presentation of 2021 Eco Action Partners Proposal for Services
4	14:10:00	::5	Jett	Action	Consideration of Appointment of New Green Team Members
5	14:15:00	::20	Ferguson	Informational	Lotus presentation of Climate Action Plan to be presented at the September Town Council Meeting
2021 BUDGET WORKSESSION ITEMS					
6	14:35:00	::10	Greenspan	Action	Glass Grinder Costs, Location, Feasibility
7	14:45:00	::10	Johansson	Action	Planet Over Plastics Business Outreach Costs & Feasibility
8	14:55:00	::10	Jett	Action	"Simple Solar" Residential Program Costs and Feasibility
9	15:05:00	::10	Greenspan	Action	Expansion of Community Composting Program: Plan, Costs, Feasibility
10	15:15:00	::10	Jett	Action	Creation of Environmental Sustainability Department
11	15:25:00	::15	Berry	Action	Comparison of 2019 Green House Gas Inventory Data Collection
13	15:40:00		Jett	Informational	Items for Consideration: A. Snowmelt options for Chondola walkways B. San Miguel Watershed Coalition Update C. Beaver Issue D. Finn Kjome to speak about Mountain Village water E. Adopt a Highway F. 2020 January – March: 1st Quarter Green Team Quarterly Report. Present in APRIL G. 2020 April – June: 2nd Quarter Green Team Quarterly Report. Present in JULY H. 2020 July – Sept: 3rd Quarter Green Team Quarterly Report. Present in OCT I. 2020 Oct – Dec: 4th Quarter Green Team Quarterly Report. Present in JAN J. Ordinance and Initiative Timeline K. Forest health - infestation? Blowdown Management? L. Review Bruin Contract - 6 month review due Feb 2021. Need reports by JAN meeting M. Weed Management
14	15:40:00	::5	Jett	Informational	Other Business
15	15:45:00	::5	Jett		Adjourn
Log in with GOOGLE MEET Meeting ID meet.google.com/muu-axgh-dct Phone Numbers (US) +1 404-796-8764 PIN: 370 477 276#					

**TOWN OF MOUNTAIN VILLAGE
MINUTES OF THE AUGUST 11, 2020
GREEN TEAM MEETING DRAFT**

The meeting of the Green Team Committee was called to order by Cath Jett on Tuesday, August 11, 2020 at 2:00 p.m. via Zoom.

Zoom Attendance:

The following Green Team Committee members were present:

Cath Jett, Chair and Mountain Village Resident
Jonathan Greenspan, Vice-Chair and Mountain Village Resident
Jeff Proteau, Telluride Ski and Golf Company
Patrick Berry, Mountain Village Town Council
Marti Prohaska, Mountain Village Town Council
Inga Johansson, Alternate Seat
Mike Follen, At Large Member

The following Green Team Committee members were absent:

Heidi Stenhammer, Secretary and Telluride Mountain Village Owner's Association

The following were also in attendance:

Julia Ferguson, Lotus Engineering
Rachel Meier, Lotus Engineering
Tyler Simmons, Eco Action Partners
Kim Wheels, Eco Action Partners
Todd Brown, Town of Telluride
Heather Knox, Mountain Village Resident
Marla Meredith, Mountain Village Resident

Zoe Dohnal, Town of Mountain Village

- Agenda Item 2- Consideration and Approval of July 14, 2020 Green Team Committee Meeting Minutes

On a **MOTION** by Jonathan Greenspan and seconded by Jeff Proteau, the Green Team Committee voted unanimously to approve the July 14, 2020 meeting minutes as presented.

- Agenda Item 3- Town Clean Up Subcommittee Update
 - Zoe Dohnal gave an update from the Town Perspective.
 - Advertising will start on Thursday.
 - Application has been received and just needs to receive direction on what is required from Town Staff.
 - Someone still needs to check in with Grace Franklin so that the county is aware of the event.
 - Next Steps: Mike will reach out to Grace Franklin.
 - Zoe will start promoting on Thursday.

➤ Agenda Item 4- Composting Subcommittee Update

- Jonathan Greenspan provided an update regarding the deficiencies of the composters. Much of the issues are coming from poor manufacturing during the start of COVID.
- We are still waiting for the last few units that are still in manufacturing.
- Patrick is worried that the manufacturing difficulties will diminish confidence in the program.
- He also has concerns that dicing up food waste into small pieces is not viable for a commercial solution.
 - **NEXT STEPS:**
 - Jonathan will reach out to the vendor to see what the next size up would be and if there is a commercial solution.

➤ Agenda Item 5- EAP Partnership for the future

- EAP was worried that the change in funding was a performance-based issue. He has assured them that this is a budgetary issue and MV employees not having the time to engage because of these budget cuts. He would like to commit to the regional solutions that they provide.
- They already have the partnerships at the regional level and Lotus does not.
- There is concern from members of the team that there aren't concrete measurables from EAP.
- There is concern that billing transparency is not there.
- There is concern that MV is not being allowed to set the rules of how MV programs will happen.
- Do we need their assistance for MV specific programs, or should we consider them only for the GHG inventory?
- Does this put the EAP in jeopardy? If it does, what is a regional solution?
- There is concern that actual programs with results need to start happening.
- Staff likes how Lotus tracks the data and will give us the tools we need to work with EAP.
 - **NEXT STEPS:** The team will take a side by side comparison of the Lotus report and the EAP report.
 - We need to get behind the data and come up with solutions.

➤ Agenda Items 6-12 - 2021 Budget Work Session

- Many of the team members need to leave the meeting at 3:00 pm—an open discussion regarding preferred budget items where each member provided their priority import. A freeform discussion took place.
 - Jeff's preferences:
 - Planet over Plastics Professional Assistance for Businesses (\$10,000)
 - Community Composting - let's wait and see
 - GHG - good to have two companies looking at the data
 - Patrick's preferences:
 - PT Sustainability Coordinator but has questions about mechanics and how that functions.

- Community Composting should continue if we can get the manufacturing solutions figured out.
 - Expanding community composting to a commercial solution
 - The strategy will be a big part of figuring out the budget.
 - Marti's Preference
 - Community Composting - need to continue this program to see the results. Examine Carbondale's solution?
 - Inga suggests using Mark Sturdevant.
 - Jonathan - Community Composting - we do a local program and keep everything here to limit transportation and the environmental impacts that transportation causes. We need to look at it as a whole picture of what we want to see come out of this program.
 - Cath - take the expansion of the residential, add the Farm to Community program, and add commercial to that.
 - Mike's Preferences:
 - PT Sustainability Coordinator that focuses on implementing what we want to do
 - Focus on smaller amount of things and do them well.
 - Inga
 - PT Sustainability Coordinator needs to be very specific and have measurables.
 - Cath
 - PT Sustainability Coordinator - needs to have experience and an environmental degree or relevant experience.
 - Jonathan
 - PT Sustainability Coordinator - this person needs to implement our programs.
 - Marti
 - PT Sustainability Coordinator - remember, there is a hiring freeze, and we need to be creative with how to present it to the council.
 - Zoe
 - Human Resources is responsible for the environmental efforts within the town. We have been partnering with EAP to come up with strategies and implement them. We should review if/how EAP is doing this.
 - We should create the work plan and offer clear direction to whoever we choose to see that the programs are working.
 - Treat that partner more as an employee with better communication.
- Agenda Item #7 -Planet Over Plastics Business Outreach
- Cath thanked Inga for creating the proposal. Discussion ensued.
 - This is a slap in the face that we are not walking the walk.
 - The professional companies could be used for zero waste plan implementation.
 - Does EAP have the capacity to offer Zero Waste programming for businesses?
- Agenda Item #9 - Farm to Community Composting Program
- Heather Knox presented a proposal to the Green Team to create a program where a trailer is supplied for compost from the Farm to Community program, which would go back to the supplying farms. It could also be used by restaurants and other residents. Transportation is one of the major issues.

Discussion from the Green Team ensued.

- She does not recommend the earth cubes because of the amount of work that it takes.
 - This could be part of the Sustainability Coordinator's job.
 - This would allow us to meet the wishes of the Town Council to expand the composting program.
 - Zoe - there will be fewer people in the program next year.
 - NEXT STEPS: Heather suggests creating a survey to see who would be willing to participate. Her personal use for one family is about 2 gallons per week.
 - She will also find out how long it takes Butcher and Baker to fill up their trailer, which is similar in size.
- Agenda Item #6 - Zero Waste Green Team Initiatives Work Plan
- Cath quickly reviewed these and how they are all tying in with our budget items.
 - Jonathan discussed a community glass grinder. It was presented at the TMVOA Merchant's Meeting. All the businesses at that meeting sound interested in purchasing one and seeing if it could be installed at the Wells Fargo enclosure.
 - The link he discussed is [HERE](#).
- Agenda Item #12 - Consideration of Proposals for 2020 Green House Gas Inventory Data Collection
- Because of Patrick's request to compare Lotus and EAP partners inventories and the reports, this was postponed to a later date.
- **BUDGET NEXT STEPS:** Cath will work with the subcommittees to put together numbers for the September meeting.
- Agenda Item #15 - Lotus presentation of Climate Action Plan
- Zoe introduced the discussion and stated that the plan needs to be postponed until September. Lotus is still waiting for data from Tri-State and has been working with Patrick on some of these edits. She would like us to see the full report and not a partial report. Julia will give us an overview and where we should be focusing our efforts.
 - Julia Ferguson from Lotus Engineering presented some strategies and supporting actions that could mesh with our budget plans.
 - Transportation
 - Increase EV chargers. State grants available. Bulk purchasing with EV dealer.
 - Transition buses to alternative energy sources.
 - Promote the expansion of EVs in the community.
 - Transition municipal fleet.
 - Develop targeted branding and education programs reducing single-use vehicles and investing in EVs.
 - Building Energy
 - Updating building codes (REMP, snowmelt offset calculations) for both residential and commercial construction.
 - Commercial benchmarking program. Summit County has a great program.
 - Require and incentivize commercial building retro-commissioning

- Renewable Energy
 - More solar or other renewable installation or purchasing RECs
 - Encourage more participation in SMPA's Totally Green Program
 - Consider partnerships with solar organizations to help with community programs.
 - Consider the feasibility of and applicability for local renewable energies.
- Waste
 - Develop a green materials purchase policy
 - Develop incentives for commercial composting
 - Set aside gleaned food for those in need.
 - **NEXT STEPS:** Julia is working with Patrick on population numbers to see how these numbers look. The plan will be finalized for the September meeting.
- Agenda Item #14 - Discussion of adding EV chargers to new construction
 - Cath was approached by our SMPA representative about adding EV chargers to all new construction in MV. She has also spoken to the Planning Director. That department will need information on voltage, costs, and so forth.
- Agenda Item #15 - Other Business
 - Jonathan will send out proofs of the new "Live Like a Local Campaign" to the members of the team for review

There being no further business, on a **MOTION** by Jonathan Greenspan and seconded by Inga Johanssen, the Green Team Committee voted unanimously to adjourn the meeting at 3:42 p.m.

Reminder:

The next Green Team Committee meeting will take place on Tuesday, September 8, 2020 at 2:00 p.m. via Zoom.

Respectfully submitted,

Cath Jett, Chairperson
Mountain Village Green Team

FW: Mountain Village Green Team Committee

1 message

Christina Lambert <CLambert@mtnvillage.org>

To: Kevin Pisters <kwj.pisters@me.com>

Cc: Zoe Dohnal <ZDohnal@mtnvillage.org>, "cathjett@gmail.com" <cathjett@gmail.com>, mvclerk <mvclerk@mtnvillage.org>

Mr. Pisters,

Thank you for your interest in serving on the Mountain Village Green Team Committee. I will include your resume and letter of intent in the packet materials for the September 17, 2020 Regu

Best,

Christina

Christina Lambert, CMC

Senior Deputy Town Clerk

Town of Mountain Village

O :: 970.369.6404

C :: 970.708.1694

[Website](#) | [Facebook](#) | [Twitter](#) | [Instagram](#) | [Email Signup](#)

For information about The Town of Mountain Village's response to COVID-19 (Coronavirus), please visit townofmountainvillage.com/coronavirus/

From: Kevin Pisters <kwj.pisters@me.com>**Sent:** Thursday, September 3, 2020 10:29 PM**To:** mvclerk <mvclerk@mtnvillage.org>**Subject:** Mountain Village Green Team Committee

Hello there!

I apologize for the late submission for consideration of the Mountain Village Green Team Committee! I had mixed up the dates in my head by mistake. Nonetheless I'd love to reach out and pi

An executive summary of my qualifications would be as follows:

I am a 27 year old, full time resident of Mountain Village having moved here in December of 2019. I have an avid passion for wildlife of all shapes and sizes. During my free time, you can find

I graduated from Rice University in 2017 with degrees in both Ecology and Business. While at Rice, I founded the Rice Wildlife Conservation Corps, a new organization devoted to protectin fact safe, and a good idea!).

Following my time at Rice, I interned for the Texas Wolf Dog Project, a non-profit with the mission of rescuing wolf-dog hybrids from being euthanized in shelters across Texas and America. via Proposition 114 in November's upcoming election. This has also gained me numerous contacts in the ecological field here in Colorado, which I have used to gain a better understanding of

As soon as I saw the posting for the Mountain Village Green Team Committee, I knew I had to be a part of it. I believe I could bring a number of fresh perspectives as a new resident, as son

Some of the main issues I've noticed are:

- Bird-window collisions

- Improper Bear Interactions (with a focus on education)

- Not respecting the mountain while in use (refuse left up on the mountain.

- Could we organize a community clean up of the ski area over the summer? I've found some crazy stuff up there!

Another idea I've contemplated would be a community news letter, perhaps a little brochure, distributed monthly that would highlight specific wildlife found in and around Mountain Village. I f

I would be humbled for the opportunity to be considered for this committee. Additionally, I have attached a copy of my résumé. In the interest of time, it is not currently updated within the past

I truly believe I could bring a fresh perspective to the Committee and hope that I will have the chance to be considered!

Regardless of whether I am on the Committee or not, I look forward to keeping up with the Mountain Village Green Team Committee's happenings! It's exciting to see an organization like that

Thank you for your consideration and I look forward to hearing from you soon!

-Kevin Pisters-

Rice University Class of 2017

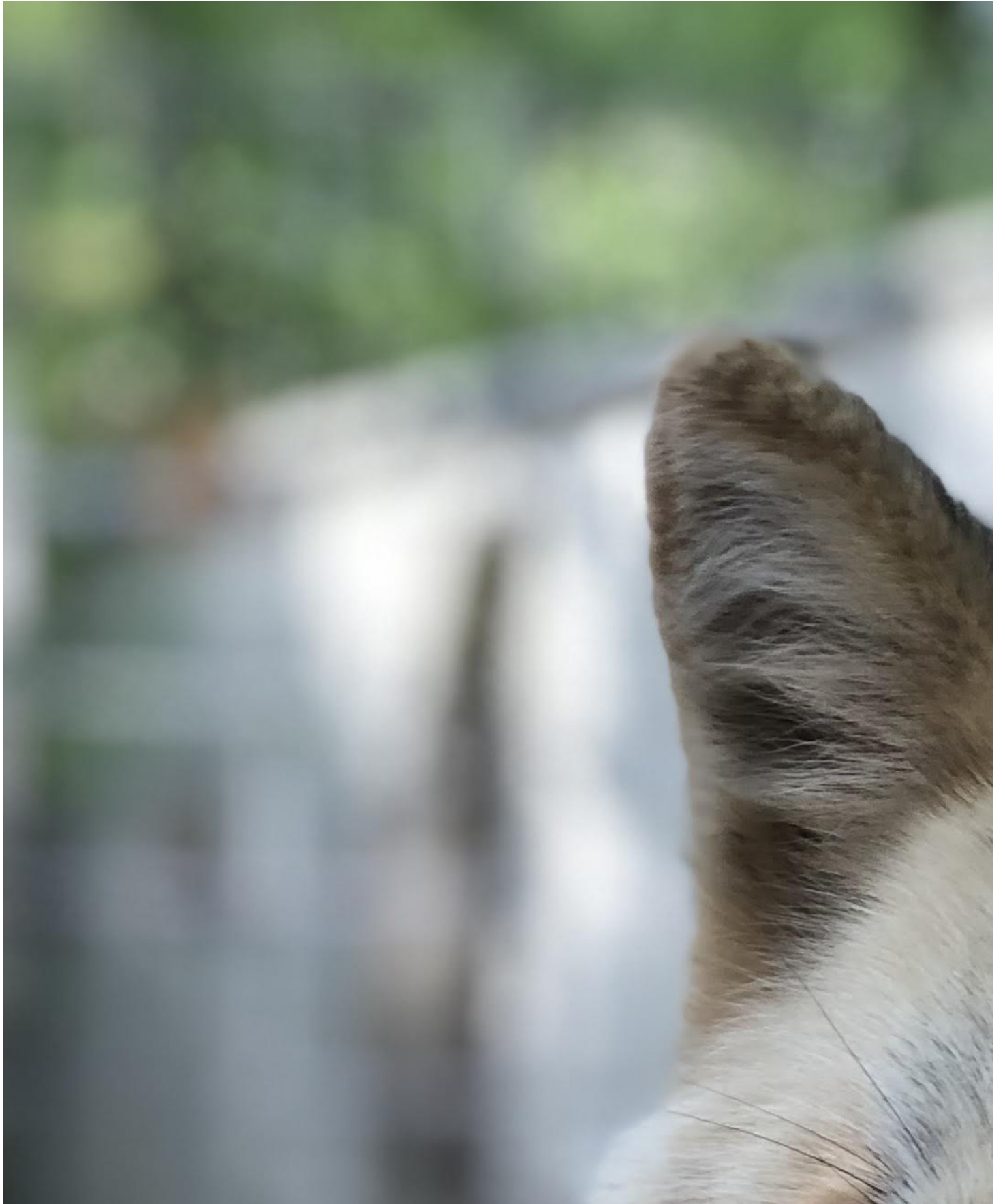
Kwj.Pisters@mac.com

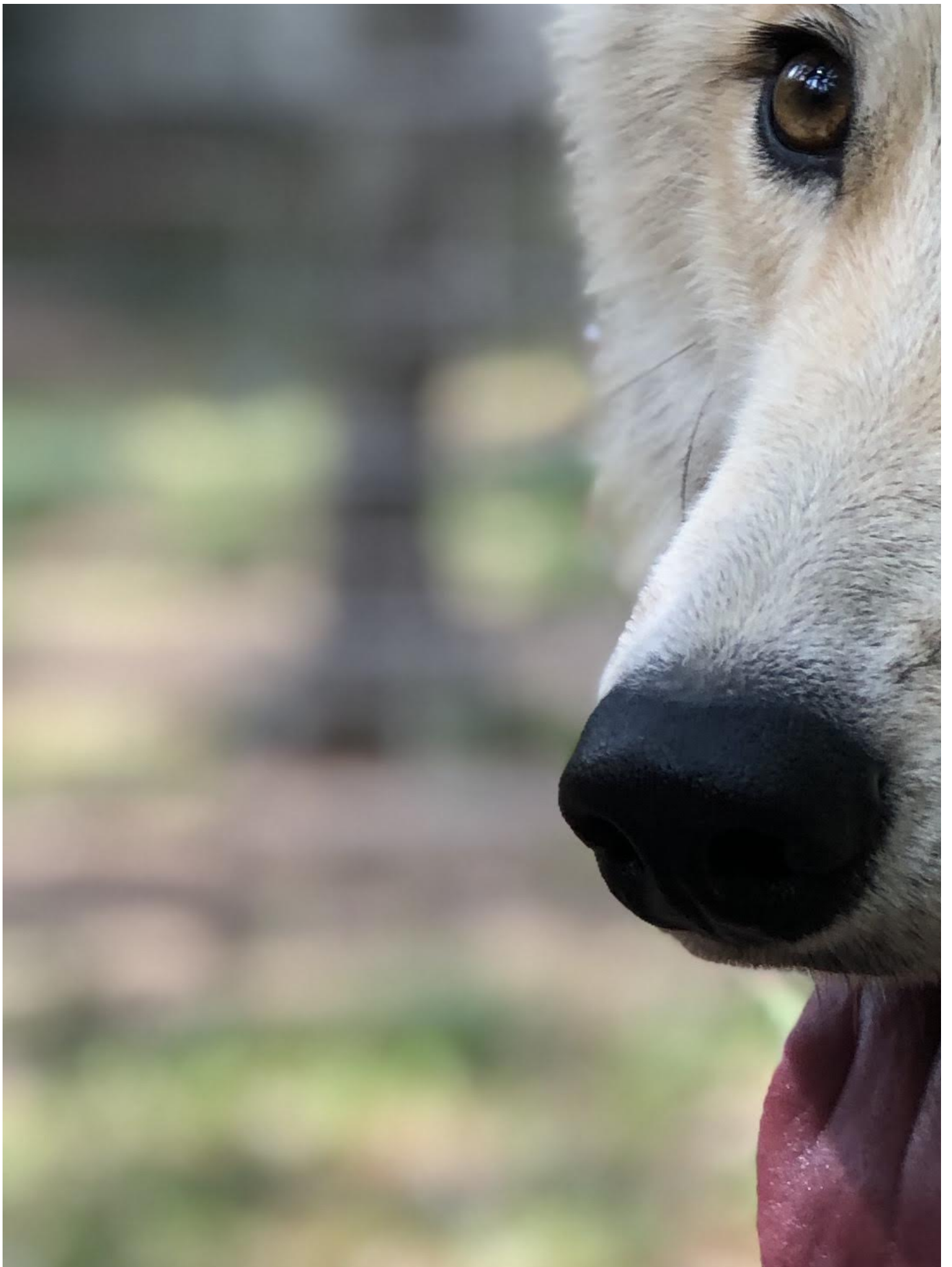
832-752-8067

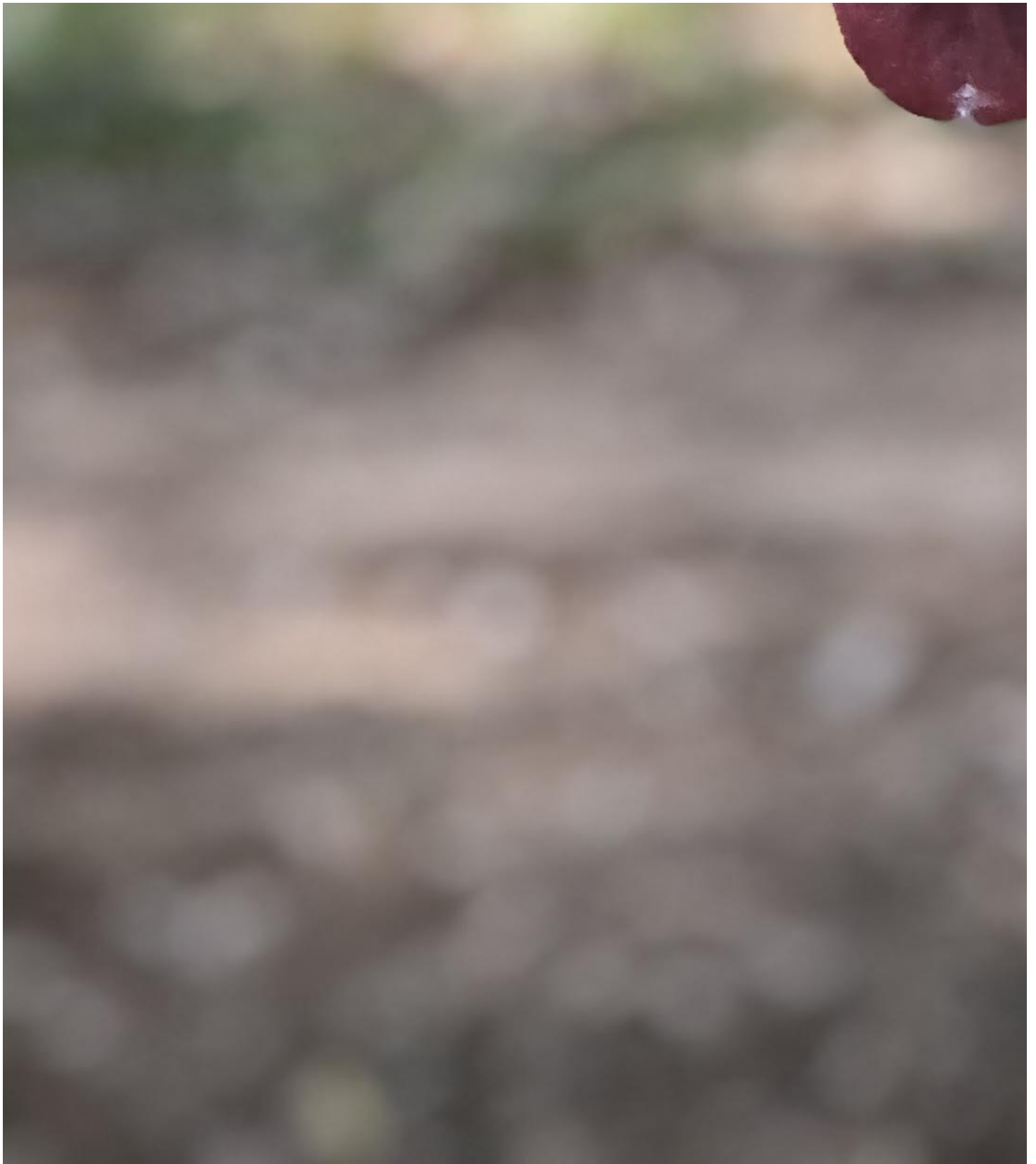
PS, I have attached two pictures of a few of the wolf-dog hybrids I have had the pleasure to work with! Truly incredible animals (but very challenging as pets!).











Kevin W.J. Pisters

166 Country Club Drive. Telluride, Colorado. 81435.

(832) 752-8067 • Kwj.pisters@mac.com

Summary: Kevin is a recent graduate from a top 15 U.S. University. He is a self-starter, small business owner, and is extremely passionate about outdoor recreation, environmental conservation, wildlife conservation, and providing positive customer service experiences. Kevin has excellent people skills, a great attitude, is physically fit, is skilled in photography, and working with his hands in either an outdoor or indoor environment. He has strong work ethic, great communication and business skills, and has extremely high potential. Additionally, he is adept at problem solving with the ability at teaching himself new skills to solve unforeseen problems.

Education

Rice University

Houston, TX

Fall 2013 – Spring 2017

Major: Ecology and Evolutionary Biology

Minors: Business and Finance

Environmental Studies and Sustainability

University of Vermont: Honors College

Burlington, Vermont

Fall 2012 - Spring 2013

Major: Business Management

Skills/Abilities

- Proficient in Rental Client, POS, and Close in
- Extremely personable, diverse background, able to work well individually or in a team.
- Works well outdoors, avid hiker, nature lover, lifelong skier & adventure outdoorsman.
- Project management, organizational start ups, and team-based leadership/collaboration
- Basic carpentry skills, and experience maintaining grounds, trails, outdoor spaces.
- Photography and videography (including aerial photography).

Microsoft Office, Excel, PowerPoint, and Adobe.

Work and Volunteer Experience

Telluride Sports: Cashier and Rental Technician

Telluride Sports Gondola Plaza, Telluride, Colorado.

- Cashier and rental tech at Telluride Sports' premier rental location
 - Excels at providing guests with the experience of a lifetime, excellent customer service skills.
 - Rapidly gained knowledge and proficiency in computer programs associated with job.

Small Business Owner/Founder: Twisted Tails Woodworking

Houston, Texas / Toronto, Ontario. 10 hrs/day, 4-5 days/week

May 2017 – Present

- Started own woodworking business involving custom live edge furniture with epoxy finishes.
 - Learned intricacies of managing and running all aspects of small business. Manages all finances, sales, marketing, builds, and delivery.
 - Basic carpentry skills, experience with a wide array of hand and power tools.

Lead Intern / Tour Guide

Texas Wolf-Dog Project & Rescue, Montgomery, Texas. 7-8 hrs/day, 3-4 days/week

January 2019 – Present

- Intern charged with spearheading enclosure improvements, fundraising, social media content, and grounds keeping.
 - Responsible for leading tours, engaging with visitors, animal care/husbandry, and enclosure maintenance.
 - Lead project design, creative thinker charged with making most of resources around facility.

Rice Wildlife Conservation Corps (RWCC): President & Founder

Rice University, Houston, Texas 2 hrs/day, 7 days/week

August 2015 – May 2017

President and founder member of RWCC, now boasts 60+ members.

Founder a brand new on-campus organization: Drafted constitution, appointed executive cabinet.

Tasked with securing proper documentation, fundraising, faculty endorsement, targeted social media campaigns.

Rice Environmental Society Board Member

Rice University, Houston, Texas

August 2015 – May 2017

Senior voting member / Campus wide sustainability representative

Voted on campus wide sustainability initiatives, including bringing a city-wide bike share program to campus.

Developed skills to bring together student goals with university administration policies.

Kevin W.J. Pisters • (647) -712-3133 • Kwj.pisters@mac.com

Alternative Spring Break Coordinator (2 Years)

Mission: Wolf, Wolf and Wolf-Dog Sanctuary, Westcliffe, Colorado

September 2015 – March 2017

One of two lead coordinators/financial moderators of 15-member trip to a remote wolf sanctuary in Colorado.

Head logistical analyst for the financial and logistical planning, including securing funding, rental cars, supplies.

Tasked with maintaining trip records and excel spreadsheets of financial information.

Volunteerism

Woodlands Wildlife Sanctuary, Summer 2016.

Head animal caretaker / environmental analyst.

Rice Freshman Orientation Week Advisor, Fall 2015

Lead advisor for incoming freshman and transfer students.

Rice Mentors, Fall 2013-Spring 2014.

Tutored students at inner city elementary schools twice a week.

Extracurricular Activities/Interest

Avid outdoorsman, Skier, fisherman, hiker, mountain biker, camper, dedicated dog father

Freelance Photographer.

Rice University Varsity Cheerleading

Environmental Conservationist.

Fitness Enthusiast

Former personal trainer

World Traveler

20 countries visited on every continent (excluding Antarctica)

Rice R.O.P.E. (Rice Outdoor Programs and Education)

Group leader and member

References will be provided upon request.

From: [Marla Meridith](#)
To: [Heidi Stenhammer](#)
Subject: Green Team
Date: Thursday, September 3, 2020 6:17:58 PM
Attachments: [fb.png](#)
[ln.png](#)
[tt.png](#)
[gp.png](#)
[yt.png](#)
[it.png](#)

Hi Heidi,

I wanted to share a bit more information on how I can offer my services to the Green Team and our community.

I'm especially interested in diving further into how we can best re-purpose our large levels of food scraps. Those coming from both residential properties and restaurants.

Through the years, I've observed very smart ways around the world demonstrating that certain food scraps and leftovers can be carefully treated and used for livestock.

With several rural communities surrounding us, it would be great to team up with farmers to donate food scraps that can easily be processed into safe food for farm animals, specifically swine.

Extra incentives would be potential tax deductions that can make the donations both cost effective and financially beneficial.

I can frontline the conversation with farmers and really help get this program off the ground, helping Mountain Village reach it's sustainable goals.

I will also help to create very user friendly systems for residents and the food service employees to best manage their scraps.

Thanks so much!
Marla Meridith

Marla Meridith

Lifestyle Blogger + Cookbook Author

M: +1 970 708 8788

E: marla@marlameridith.com | marlameridith.com

As seen on FOX, ABC, NBC, Sirius XM, Home & Family





HIGH ALPINE CUISINE

Inspired Dishes from Extraordinary Mountain Escapes Around the World

MARLA MERIDITH

Founder of MarlaMeridith.com



FW: TMVOA Green Team Seat

6 messages

Heidi Stenhammer <heidi@tmvoa.org>
To: Cath Jett <cathjett@gmail.com>
Cc: "jg@sunrisetelluride.com" <jg@sunrisetelluride.com>

Mon, Aug 10, 2020 at 1:36 PM

From: hknox9500@gmail.com <hknox9500@gmail.com>
Sent: Tuesday, August 4, 2020 7:01 PM
To: Heidi Stenhammer <heidi@tmvoa.org>
Subject: TMVOA Green Team Seat

Hello!

Please consider my resume for the TMVOA Green Team seat. I'm very interested.

Please reach out if you have questions. I'm interested to learn more about what the expectations are for this position.

Thank you very much,

Heather Knox

Hknox9500@gmail.com

(970)729-3362

PO Box 2441

Telluride, CO 81435

HEATHER KNOX

PO BOX 2441, TELLURIDE, CO 81435 | 970.729.3362 | HKNOX9500@GMAIL.COM

CURRENT PROJECTS

Composting & Waste Reduction Proposal for Town of Mountain Village Farm to Community Program and Village Court Apartments
Currently developing a plan in partnership with the Fresh Food Hub out of Norwood, CO for waste reduction and composting services for the Town of Mountain Village's Farm to Community Food Program. The proposed plan achieves the directive from MV Town Council to expand composting services, and it brings valuable organic matter to the farmers that grow the food for the program.

Recycle Colorado Western Slope Council Member since inception **2019 – CURRENT**
RCWS Council works together on the issues of recycling, composting and waste that impact our Western Slope haulers, recyclers and landfills. The council is celebrating its one-year anniversary this August.

Consulting, Grant Writing & Guidance for future EcoFuel Technology Business (converting waste plastic to energy) **2019 – CURRENT**
Assisting with planning & budgeting for EcoFuel in preparation for writing, & submitting Grants in 2021 including Rural Economic Jump Start Grant for Montrose County, and a possible 2021 RREO Infrastructure Grant.

Colorado Department of Public Health & Environment: Pollution Prevention Advisory Board Assistance Committee **2017 – CURRENT**
The Recycling Resources Economic Opportunity (RREO) Program provides funding that promotes economic development through the management of materials that would otherwise be landfilled. Funds are available to support recycling, composting, anaerobic digestion, source reduction, and beneficial use/reuse. Grants and rebates are overseen by the Pollution Prevention Advisory Board and its corresponding Assistance Committee. Since its inception in 2007, the program has awarded nearly \$25 million to businesses, local governments, nonprofit organizations, and schools and universities to help develop recycling infrastructure and promote sustainable behavior change in communities across Colorado. Committee consists of 13 individuals representing CDPHE, CO Energy Office, CO Economic Development Office, urban and rural municipalities, and non-profit organizations; committee meets monthly or bi-monthly.

PREVIOUS EXPERIENCE

EcoAction Partners: Executive Director **Jan. 2014 – Dec. 2019**

Directs EcoAction Partners, the regional sustainability organization serving the towns of Telluride, Mountain Village, Ophir, Norwood, Ridgway and Ouray, and San Miguel and Ouray Counties

Strategic Partnerships & Accomplishments:

- **Green Projects Grant Program:** 2018 – 2019 Created and developed Telluride Green Grants to measurably reduce greenhouse gas emissions through public and private energy reduction projects. The Green Grants were adopted by the Town of Telluride in 2018 and projects funded through 2019. All Telluride-specific marketing materials and implementation regulations were created by my team. Telluride Green Grants is a rolling annual program for energy reduction projects utilizing \$50K in Town of Telluride Energy Impact fees.
- **Composting for the Town of Ophir:** 2018 Secured State of Colorado Resource Recovery, Recycling, Economic Opportunity Mini-Grant for equipment & implementation of neighborhood composting program for the Town of Ophir, located at 9,700' elevation. The continued success of this program diverts & composts approx. 9,000+ pounds of food waste annually. Soil is used in the Ophir's Community Garden.
- **Established Partnership with Energy Outreach Colorado and San Miguel Power Association:** Implemented San Miguel Power Association's Income Qualified Weatherization Program (SMPA IQ) 2016 - 2020. SMPA IQ brings home weatherization services to low & mid-income families served by SMPA in San Miguel, Ouray, Montrose, Delores and San Juan counties. Black Hills Energy joined the program in 2019. The weatherization program is the precursor for the SMPA IQ Solar program, which provides solar panels to further off-set utility costs for low income. Since its inception in 2016, Energy Outreach Colorado, SMPA & Black Hills have provided over \$350K in funding for weatherization improvements to these needy homes.
- **Coordinated Twice/Year Electronics Recycling:** 2014 – 2019 Provided Regional electronics recycling services through a contractor for San Miguel County, San Miguel County and the Town of Telluride.
- **Proposed & Implemented San Miguel County Green Projects Grant Program (GPGP)** 2014 - 2015, utilizing a \$100K energy impact fee for local energy reduction projects. Developed application, marketing materials, grant analysis/scoring, facilitated grant committee, provided review materials, awarded grants, and handled follow-up. Matching grants awarded to 18 public and private entities for projects reducing carbon by 1.5M pounds over project lifespan.
- **Developed & Accomplished the Green Lights LED Program:** 2015 – 2019 with San Miguel Power Association and regional governments. Greenlights has allowed residents and businesses to purchase LED bulbs at up to 75% off by leveraging the SMPA LED light bulb rebate of up to 50% along with a government match. Through this regional program 15,500 LED bulbs were purchased and installed, reducing approximately 275 mt-CO2e of GHG emissions annually. The program served 9 regional governments in 2019.
- **Expanded Truth or Dare School Program:** 2014 - 2019 partnered with San Miguel Power Association and regional schools to reach seven regional school districts. This weeklong school program reduces energy and waste, and educates students on lasting sustainability habits.
- **Participant with the Sneffels Energy Board:** A regional sustainability group with SMPA and Black Hills Energy serving the governments of Telluride, Mountain Village, Norwood, Ophir, Ridgway, Ouray, and San Miguel and Ouray Counties, and citizen groups.
- **Compost, Recycling & Trash Services (CRT)** 2014 -2019: Served regional festivals including Mountain Film, Telluride Bluegrass Festival, 4th of July Celebration, The Ride, Blues and Brews, TMVOA Sunset Concerts, and more sorting Compost, Recycling & Waste.

Heather Knox Consulting: Events, grants, & non-profit management consulting **Sept – Dec 2013**

Clients include:

- Telluride Adaptive Sports Program, Grants Manager
- EcoAction Partners, Transition Manager & Interim Executive Director

Telluride School District: Executive Director of the Michael D. Palm Theatre & Palm Arts**Aug 2007 – Sept 2013**

Managed all aspects of the Michael D. Palm Theatre, a 30,000 square foot versatile performance facility with comfortable seating for 660, a 3,332 square foot stage, a full fly rail system with 38 line sets, 288 dimmed lighting circuits, performance sound equipment, and wide screen cinema with dual 35 mm projectors and a large format digital projector and surround sound, welcoming approximately 15,000+ annual visitors.

Highlights:

- 2008 – Navigated the Palm Theatre through the culmination of a five-year \$100K annual funding commitment. Created a trustee program to provide \$30K in annual operating support. Developed new revenue streams for long term sustainability.
- 2009 – Directed the creation of a new 501c3 organization, **Palm Arts, Inc.** to facilitate donations, secure special event liquor sales, for greater event rental income and direct support of the Michael D. Palm Theatre. Rental income increase by 20% year over year.
- 2011 – Developed the business plan, pro forma, and implemented an after-school dance education program. Palm Arts Dance Program now offers a full array of dance classes (23+ per week) for students, preschool through 12th grade. Palm Arts Dance School provides more than 25% of the Palm Theatre's annual operating budget.
- 2013 – Created a Summer Dance Series to bring professional dance performances to Telluride in the summers. Series drew 1000+ attendees in two performances and engaged new sponsors and donors.

Duties & Accomplishments:

- Selected national and international talent for the Live at the Palm Series (5-8 performances per season). Coordinated with the Rocky Mountain Arts Consortium (RMAC) on routing opportunities for the artists selected. Negotiated performance contracts and executed commitments; oversaw event marketing and ticket sales. Managed a \$65-75K series budget; leveraged grant funds and sponsorship to maximize budget.
- Managed all event rentals for the 25+ groups who use the Palm theatre for 175 annual event days. Increased rental and services income by 30% over 3 years through new bookings, partnerships, and appropriately billing for services.
- Coordinated all aspects of the special event liquor license permitting process. Submitted event plans to the Board of Education for approval. Managed the liquor application process (applications, fees, postings, product purchases) and event-day staff management. TIPS Certified on safe liquor service practices. Liquor sales generate approximately \$20K annually for Palm Arts.
- Introduced risk-free digital programming (50+ events per year) to increase use of the Palm Theatre. Digital programming brought \$10K annually through earned income and fundraising program support.
- Provided professional oversight of the Palm Arts Dance School to ensure success; managed an annual budget of \$120K.
- Launched a capital campaign and managed the construction and budget (\$55K) for a dedicated dance studio.
- Researched and wrote grants for Michael D. Palm Theatre & Palm Arts. Increased grant funding by 70% from FY 2008 to FY 2013, despite an overall reduction in state, local and national grant funding available.
- Developed and managed the Palm Theatre's annual budget of \$300K. Created long and short term equipment, maintenance and capital repair/replacement plans.

Town of Mountain Village**1995 - 2007****Director of Economic Development****October 2005 – September 2007**

Directed all activities and operations of Economic Development in Mountain Village: developed and produced new and existing events, managed public relations and communications, coordinated destination marketing, directed guest services, provided economic analysis for strategic facility development and managed existing facilities.

Duties & Accomplishments:

- Managed the 50+ personnel in the departments that collectively comprised the Economic Development Department: Guest Services, the Telluride Conference Center, Mountain Village Events, Marketing and Communications, and the proposed Mountain Village Adventure Center.
- Determined levels of staff, equipment and resources needed to effectively accomplish departmental services and programs. Assessed needs and strategically planned for the future of the various departments.
- Developed and implemented departmental operating and capital budgets of \$2.4 million annually.
- Developed a strategic grant process using Return on Investment Reports for Mountain Village Owners Association (now TMVOA) and the Town of Mountain Village; directed the grant process, which awarded \$640K in grant funding to more than 35 organizations (2006).
- Directed the development and production of 25+ Mountain Village signature events and more than 35 outside promoted events (2006).
- Developed and executed town-wide customer service strategy for all business license holders. Worked in conjunction with Telluride Ski and Golf Co. and the Telluride Tourism Board to implement initiatives.
- Managed communications and marketing to all Mountain Village stakeholders through newsletters, press releases, advertising, website design and content, surveys, and event and facility marketing.
- Implemented directives from Mountain Village Owners Association Board of Directors and Mountain Village Town Council, and handled special projects on behalf of the Town Manager.

Director of the Telluride Conference Center (Held concurrently with the Director of Economic Development position from 2005)**2002 - September 2007**

Managed all aspects of the Telluride Conference Center, a 20,000+ square foot multi-use meeting and events facility with on-site audiovisual, catering and beverage service, which serves 10,000+ annual guests for conferences and events.

Duties & Accomplishments:

- Reduced annual deficit by 82% from \$946K in 2001 to \$178K in 2006 through creative revenue generation and a reduction in overhead.
- Implemented in-house food & beverage service (2002-2003). Created policies and procedures to ensure high quality catering service; created policies and procedures to ensure the security of the liquor license, inventory, and cash revenue. F&B netted \$244K annually (2006).
- Managed all rental and event contracts for groups utilizing the facility.
- Developed and managed revenue and expense budgets of \$662K and \$840K respectively (2006).
- Hired and managed 30+ full time and part time staff.

- Created long and short term plans for facility upkeep, capital improvements, repair, replacement and maintenance.
- Standardized a consistent, high-quality customer experience for event coordinators and guests utilizing the facility.
- Worked closely with the Telluride Tourism Board on Telluride Conference Center marketing, advertising and Familiarization (FAM) Trips.
- Established a commission structure for lodging properties to incentivize group bookings.

EDUCATION

El Pomar Non-Profit Executive Leadership Program

2013

One of twenty Colorado executives selected by application for this certification

The Colorado College Colorado Springs, CO

1990 – 1994

Bachelor of Arts; Graduated with honors

REFERENCES AVAILABLE UPON REQUEST

Fwd: Green Team bio

1 message

jg@sunrisetelluride.com <jg@sunrisetelluride.com>
To: Cath Jett <cathjett@gmail.com>

Fri, Sep 4, 2020 at 3:47 PM

Begin forwarded message:

From: Jonathan Greenspan <Jg@sunrisetelluride.com>
Subject: Green Team bio
Date: August 8, 2020 at 2:38:07 PM MDT
To: Susan Johnston <SJohnston@mtnvillage.org>

To the honorable Mtn Village Town Council

I have been on the Green Team committee for the last 3-4 years since its inception. Im a resident of the Mountain Village for approx. 16 years but have been living in the region for 31 years. I have been a Mtn Village Town Councilor, Metro district director and on the TMVOA board in many different capacities including Mayor pro tem for four years, and commercial rep for TMVOA as well as residential rep while being president for two of those years. Fourteen years in total.

I just had my 19 Th. anniversary with the Telluride Volunteer fire department and will be continuing for as long as I can. I was part of the group that created our zero waste action plan back in 2008. After that plan was built there were three years of meetings to plan for a zero waste program. I am also on the Ecology Commission of the Town of Telluride and the Western Slope Recycling Committee for Colorado. Currently I'm working with the state house of Colorado and the governors office to put a ban in place for certain types of plastics. Im on the Recycle Colorado policy committee that sets the policy for the next legislative session to set laws to increase recycle rates and landfill diversion in rural ,resort and large municipalities.

I have owned and operated the local zero waste center for almost 20 years and specialized in composting green and brown feed stock, end use markets for materials collected, bio mass, and many other aspects landfill diversion. All of this and more affect our carbon footprint, waste stream systems, and being responsible for our import and export of all that comes to our valley. Im a member or have been involved with many organizations related to all above including National Recycling Coalition, Colorado Recycles, USFS forest planning and trails committee to just name a few.

I also participate in most trade shows and educational seminars. I have my certification for zero waste and composting that are national certifications.

Thx from Jonathan Greenspan
[2 Spring Creek dr](#)
Mtn Village CO



AGENDA ITEM #5

DATE: September 8, 2020

TO: Green Team Committee

FROM: Cath Jett, Chairperson

SUBJECT: LOTUS FINAL CLIMATE ACTION PLAN AND MODEL

Lotus Engineering will be presenting their final Climate Action Plan and Model to the Green Team for approval before presenting to Town Council at the September 17, 2020 meeting.

These items are attached.

IMPORTANT:

- Please review the CAP **prior to our conversation next Tuesday.**
- **Please focus on the 'Estimated Savings' tab of the model** and think about/play around with the blue cells in columns F and H--these are the strategy targets, and the numeric values there will impact the final emissions reduction goal. They should not make changes to white cells, as those include formulas and calculations.

Just a reminder that The Green Team has already reviewed the Community and Municipal Inventories and Comparison Memos, these will be presented to Council along with the CAP at the Sept meeting. Let me know if you would like to have the GT relook at these for any reason before going to Council.

All assets can be found [here](#).



TOWN OF MOUNTAIN VILLAGE CLIMATE ACTION PLAN

SEPTEMBER 2020



ACKNOWLEDGEMENTS

The completion of this work would not have been possible without the support and input of the following individuals, to whom the Town of Mountain Village (Mountain Village/Town) is grateful. These individuals helped guide the process by providing data related to Mountain Village’s greenhouse gas emissions inventory and feedback on Mountain Village’s climate action strategies. Individuals noted in *italics* were members of the Mountain Village Green Team Committee.

Adam Wozniak, Colorado Department of Public Health and the Environment (CDPHE)
Bill Goldsworthy, Town of Telluride
Brad Wilson, Town of Mountain Village
Brien Gardner, Black Hills Energy
Cath Jett, Community Member
Christina Lambert, Senior Deputy Town Clerk
Dale Wells, CDPHE
Heidi Stenhammer, Telluride Mountain Village Owners Association
Inga Johansson, Community Member
JD Wise, Town of Mountain Village
Jeff Proteau, Telluride Ski and Golf Company

Jim Loebe, Town of Mountain Village
Jonathan Greenspan, Community Member
Kim Holstrom, San Miguel County Commissioner
Kim Wheels, Eco Action Partners
Marti Prohaska, Mountain Village Town Council
Michael Martelon, Visit Telluride
Mike Follen, Community Member
Patrick Berry, Town of Mountain Village Council
Terry Schuyler, San Miguel Power Association
Tyler Simmons, Eco Action Partners
Wiley Freeman, San Miguel Power Association
Zoe Dohnal, Town of Mountain Village

Consultant Team

Lotus Engineering and Sustainability, LLC, supported this work:

Julia Ferguson, Project Lead
Emily Artale
Hillary Dobos
Rachel Meier

Pictures

Cover photo from Will Truettner via Unsplash. Solar installation picture on page 20 is from Science in HD from Unsplash. All other photos throughout are courtesy of Mountain Village.

TABLE OF CONTENTS

- Executive summary 3
 - Mountain Village: A Community Focused on Climate Action 3
 - Mountain Village’s 2019 Greenhouse Gas Emissions Inventory 4
 - Mountain Village’s Climate Action Framework 5
 - Mountain Village: Leading on Climate Action..... 6
- Introduction 7
 - Mountain Village: Focused on Climate Action..... 7
 - The Call to Action 8
 - Working Towards a More Sustainable Future 9
- Greenhouse gas emissions inventory 10
 - Inventory Methodology 10
 - Key Findings from the 2019 Inventory..... 12
- Climate Mitigation Strategies 15
 - Community Values for Climate Action..... 15
 - Overview of Greenhouse Gas Reduction Strategies..... 15
 - Business-as-Usual Modeling Results..... 15
- Mountain Village: Poised for Climate Action 16
 - Transportation Strategies 17
 - Building Energy Strategies 19
 - Renewable Energy Strategies 20
 - Waste Strategies 22
- Conclusion..... 23

EXECUTIVE SUMMARY

MOUNTAIN VILLAGE: A COMMUNITY FOCUSED ON CLIMATE ACTION

Nestled in the San Juan Mountains and surrounded by natural beauty, abundant outdoor recreation opportunities, and the native wilderness of the Rocky Mountains, the Town of Mountain Village (the Town / Mountain Village) is committed to protecting and enhancing the natural environment. Since the Town's incorporation, sustainability has been a top priority for Mountain Village's community and leaders.



The Town has participated in regional work to analyze and estimate community greenhouse gas (GHG) emissions since 2010 and has developed and supported many community programs to reduce energy use and community-generated waste, such as the [Smart Building Incentive Program](#) and the [Compost Incentive Program](#).

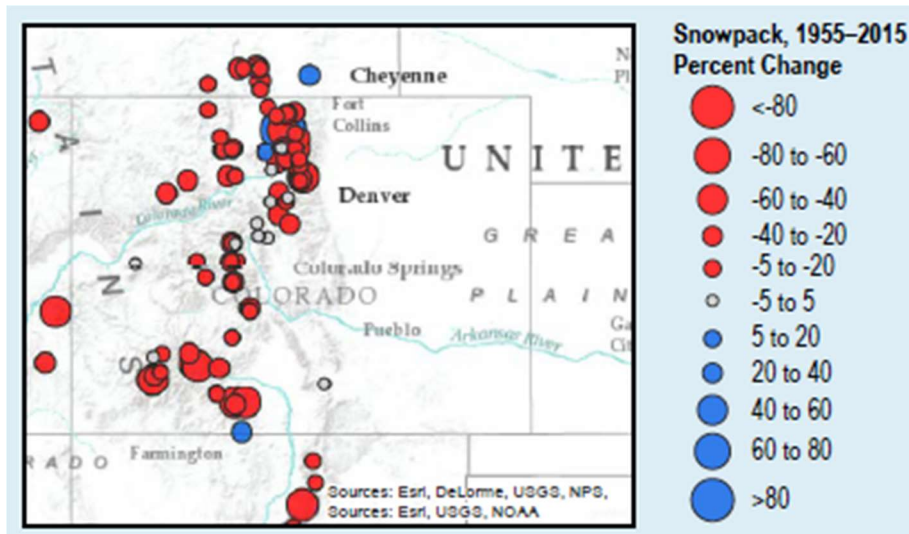


Figure ES 1: Anticipated changes in snowpack. Source: "What Climate Change Means for Colorado"; EPA, 2016.

Mountain Village recognizes the urgent need to reduce emissions and prevent the worst impacts of climate change. If current emissions levels are not abated, the Town and similar mountain and tourist-based communities across Colorado and the southwest are in danger of experiencing significant changes in precipitation, seasonality, and snowpack as evidenced by historic data, see Figure ES 1 and Figure ES 2.¹

¹ Environmental Protection Agency. (2017). What Climate Change Means for Colorado. Retrieved from <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-co.pdf> on June 20, 2020.

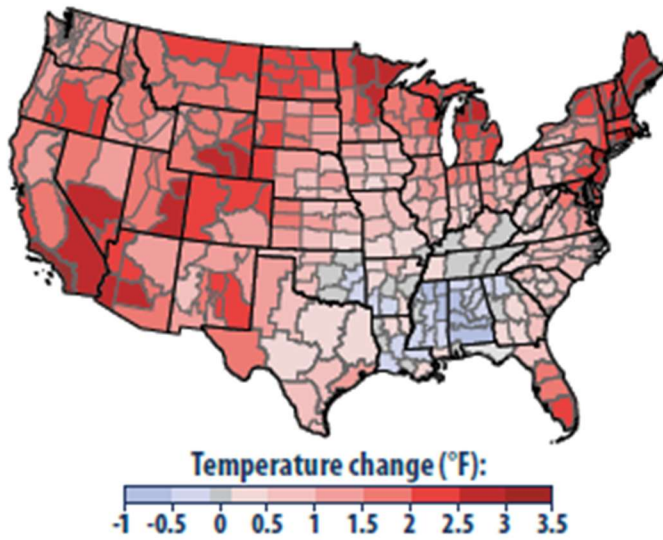


Figure ES 2: Rising temperatures over the last century. Source: "What Climate Change Means for Colorado"; EPA, 2016.

In 2020, recognizing the need to take a more proactive role in reducing global GHG emissions and help to prevent the most dire impacts from climate change, Mountain Village decided to build off the Town's past efforts and work towards becoming a carbon-neutral community by 2050. This effort required developing a community-wide GHG inventory in order to understand the specific emissions sources and impacts that the Town could influence, as well as modeling the status-quo emission projections over the coming years. The resulting Climate Action Plan (CAP) for Mountain Village presents the framework for achieving significant emissions reductions in the community between 2020 and 2050.

MOUNTAIN VILLAGE'S 2019 GREENHOUSE GAS EMISSIONS INVENTORY

Mountain Village's 2019 GHG emissions inventory provides an analysis of community-based activities and shows an emissions total of 72,269 metric tons of carbon dioxide equivalent (mt CO₂e), with a majority of emissions coming from the energy used in buildings. See Figure ES 3.

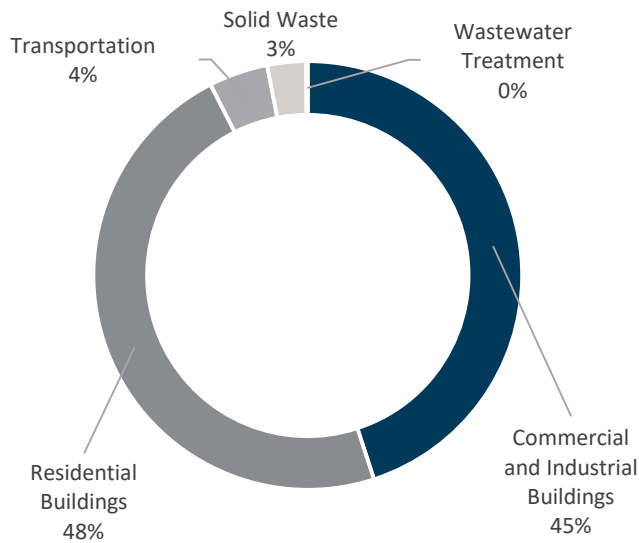


Figure ES 3: Mountain Villages' 2019 emissions by sector.

The largest share of emissions comes from the use of energy to power, heat, and cool buildings and outdoor systems (such as snow melt systems). Emissions from residential buildings make up 48 percent of the community's total, while commercial and industrial buildings make up 45 percent of the community's total. Due to its small size and abundant transit options, Mountain Village has relatively fewer than average emissions from transportation activities in the community (4 percent).² Three percent of emissions come from solid waste disposal in landfills. One-tenth of one percent of emissions come from wastewater treatment processes.

² Based on Lotus' familiarity with community-generated emissions inventories in Colorado from other work. Transportation in Mountain Village accounts for 4 percent of the 2019 GHG emissions inventory, compared to an average of around 30 percent of emissions for many communities.

MOUNTAIN VILLAGE'S CLIMATE ACTION FRAMEWORK

Mountain Village's top priority is ensuring that the climate action work benefits all community members by enhancing quality of life and protecting the valued natural resources and surroundings. Through conversations with Town staff and the Town's Green Team Committee, six key community values for the Town's climate action work were identified; see the grey box to the right. By referencing these values throughout the implementation of the climate action strategies and as the Town identifies specific policies and programs that are relevant to pursue, the Town will ensure that its climate action work continues to align with the vision of a future it wishes to maintain for Mountain Village.

A final list of strategies for emissions reductions will help the community move towards its 2050 carbon neutrality goal and support its community values. The resulting CAP includes 11 strategies with a collective 33 suggested implementation actions that the Town and the broader Mountain Village community will embark on in the coming years to reduce the community's GHG emissions. If all strategies and targets established in the CAP are achieved, Mountain Village will reduce its emissions by over 85 percent by the year 2050, based on a 2010 emissions baseline. Mountain Village's climate action strategies are:

Mountain Village's Climate Action Values

- Promote fiscal responsibility.
- Enhance the quality of life for residents and visitors.
- Support a circular economy and equitable, higher quality, less impactful products.
- Promote cultural and behavioral change through education and engagement programs.
- Support regional food networks and local food sourcing.
- Enhance equity throughout the community.

1. Reduce single occupancy vehicle use through increased biking, walking, and transit use.
2. Support equitable electric vehicle adoption.
3. Switch government fleet vehicles to electric vehicles.
4. Educate the public on behavior changes.
5. Promote and expand residential energy efficiency programs.
6. Promote and expand commercial energy efficiency programs.
7. Promote fuel switching (i.e., electrification programs for buildings).
8. Reduce energy usage in municipal buildings.
9. Implement policies and programs that support comprehensive renewable energy growth for the community.
10. Support policies to advance a clean energy agenda in the state.
11. Reduce solid waste and increase diversion.

Each climate action strategy includes at least one, if not several, specific implementation actions that are intended to ensure the strategy is impactful, including suggestions on specific programs and policies that may be most effective to employ for the community to reach its goals.

MOUNTAIN VILLAGE: LEADING ON CLIMATE ACTION

Mountain Village is prepared to help prevent the worst effects of climate change and recognizes that by addressing climate change through the implementation of the strategies outlined in this document, the community can improve quality of life and protect the area's treasured natural resources. As Mountain Village embarks upon this work, it will benefit from working collaboratively with its local partners, including utilities, regional organizations, and



state and national agencies and entities that are also interested in this work; through collaboration and strategic implementation of this climate action plan Mountain Village can achieve its emission reduction goal while ensuring a healthy, equitable, and livable future.

INTRODUCTION

The Town of Mountain Village (Town/Mountain Village) is committed to creating a healthier, more sustainable, and greener future inclusive of all community members. In 2020, the Town embarked upon multiple efforts to better understand the community’s impact on climate change and identify relevant and impactful greenhouse gas (GHG) emissions mitigation strategies, while working to enhance the quality of life in the community.



Lotus Engineering and Sustainability, LLC (Lotus) completed this work and it included developing the Town’s 2019 community-wide GHG emissions inventory, completing an additional GHG inventory for municipal operations, identifying trends and changes between past and current emissions inventories, creating inventory management plans so that future inventories can be completed in-house, identifying the community’s values and most impactful and realistic strategies for climate action, and modeling emissions under a business-as-usual case scenario. The result is an actionable climate action plan framework that guides the community to reduce its community wide GHG emissions by 85 percent between 2020 and 2050 (based on a 2010 emissions baseline).

MOUNTAIN VILLAGE: FOCUSED ON CLIMATE ACTION

Mountain Village is committed to addressing environmental sustainability and climate action through Town operations as well as community-based programs and policies. Incorporated in 1995 and with a full-time resident population of almost 1,500 people, the Town sees a significant increase in population in the winter and summer months due to its adjacency to world-class skiing facilities, the town of Telluride (the two communities are connected via a gondola system), and the recreational offerings of the surrounding ecosystem.



Since the Town’s incorporation, sustainability has been a top priority for Mountain Village’s community and leaders. In partnership with other communities across San Miguel and Ouray counties, Mountain Village supported the development of a Sustainability Strategy and Action Plan for the region for the

years from 2010 through 2020; through this Mountain Village committed itself to understanding and reducing its environmental impact through a variety of programs and actions. The Town has participated in regional work to analyze and estimate community GHG emissions since 2010 and has developed and supported many community programs to reduce energy use and community-generated waste, such as the [Smart Building Incentive Program](#) and the [Compost Incentive Program](#).

THE CALL TO ACTION

The Intergovernmental Panel on Climate Change’s 2018 report on the impacts of a 1.5 degree Celsius (2.7 degrees Fahrenheit) increase in global temperatures illustrates the grave results on ecosystems, human health, and our ability to thrive if we do not act quickly, collectively, and effectively to mitigate GHG emissions.³

Globally, cities, towns, and urban areas are estimated to be responsible for approximately 75 percent of global carbon dioxide emissions due to the large amount of concentrated activity occurring in densely populated places. These communities can have broad influence and impact on efforts to address climate change mitigation and adaptation and are an integral part of the solution to the climate crisis.⁴ Towns like Mountain Village, while small in population, can have an outsized impact in their role in fighting the climate crisis because of their ability to not only ensure their community is an environmentally sustainable option for travel, but also through educating and influencing visitors to do their part while visiting and after traveling back home.

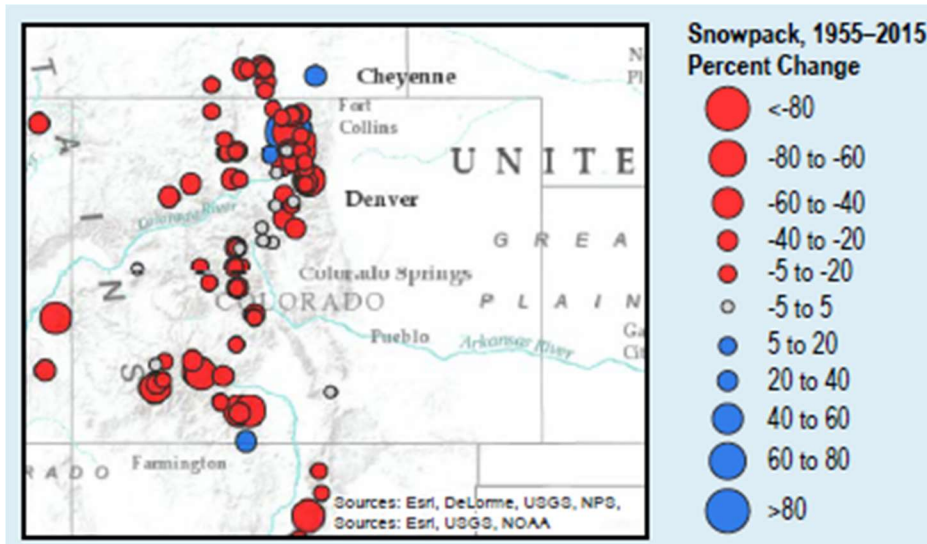


Figure 1. Changes in snowpack. Source: "What Climate Change Means for Colorado"; EPA, 2016.

Mountain Village recognizes the urgent need to reduce emissions globally and prevent the worst impacts of climate change. If current emissions levels are not abated, the Town and similar mountain and tourist-based communities across Colorado and the southwest are in danger of experiencing significant impacts to their very way of life

³ For more information see <https://www.ipcc.ch/sr15/>.

⁴ For more information see <https://www.unenvironment.org/explore-topics/resource-efficiency/what-we-do/cities/cities-and-climate-change>.

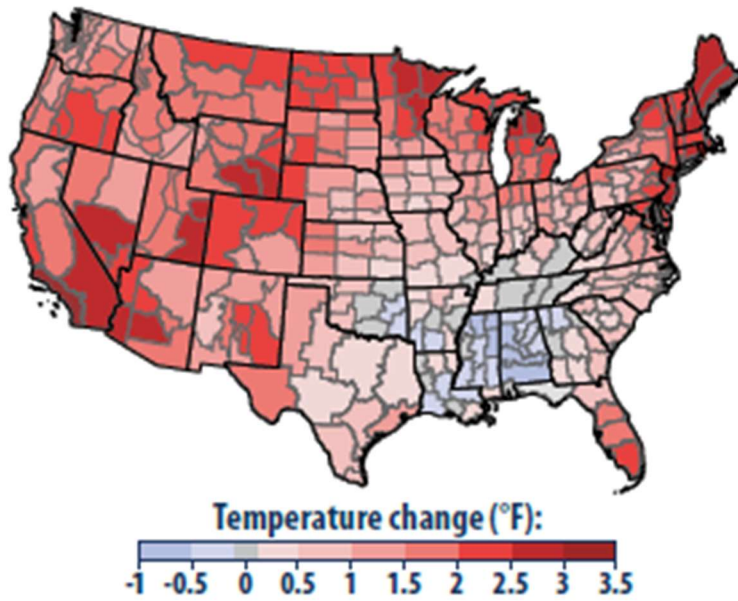


Figure 2. Rising temperatures over the last century. Source: "What Climate Change Means for Colorado"; EPA, 2016.

due to changes in precipitation, seasonality, and snowpack as evidenced by historic data, see Figures 1 and 2.⁵

Across the United States, states and towns like Mountain Village are declaring commitments to carbon reduction. Through intentional action and collaboration with the Town’s community and local, regional, and state partners, Mountain Village can do its part in mitigating climate change and ensuring a high quality of life for current and future generations of residents and visitors.

WORKING TOWARDS A MORE SUSTAINABLE FUTURE

In 2020, recognizing the need to take a bigger role in reducing global GHG emissions and prevent the most dire impacts from climate change, Mountain Village decided to build off the Town’s past efforts and work towards becoming a carbon-neutral community by 2050. This effort required developing a community-wide GHG inventory to understand the specific emissions sources and impacts that the Town could influence, as well as modeling the status-quo emission projections over the coming years. In addition to these activities, Lotus completed research and met with community representatives, including the Town’s active Green Team Committee, to build consensus around the high-level strategies that would be most impactful and realistic for the community to implement over the coming years. The resulting Climate Action Plan (CAP) for Mountain Village presents the framework for achieving significant emissions reductions in the community between 2020 and 2050.

The CAP includes 11 strategies with a collective 33 suggested implementation actions that the Town and the broader Mountain Village community will embark on in the coming years to reduce the community’s GHG emissions. If all strategies and targets established in the CAP are implemented and achieved, Mountain Village will reduce its emissions by over 85 percent by the year 2050, based on a 2010 emissions baseline.

⁵ Environmental Protection Agency. (2017). What Climate Change Means for Colorado. Retrieved from <https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-co.pdf> on June 20, 2020.



GREENHOUSE GAS EMISSIONS INVENTORY

INVENTORY METHODOLOGY

Mountain Village’s 2019 GHG emissions inventory provides an analysis of community-based activities in the 2019 calendar year that resulted in GHG emissions. The inventory is compliant with the Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC protocol), which is a global standard for GHG emission accounting and reporting. The GPC protocol was developed and launched in 2014 and provides a template from which communities can create comparable and standard emission inventories. The GPC protocol defines what emissions must be reported, as well as how those emissions are to be calculated and reported.

The GPC includes two different reporting levels, BASIC and BASIC+:

- **BASIC:** The BASIC methodology covers stationary energy, in-boundary transportation, and community-generated waste.
- **BASIC+:** The BASIC+ level includes BASIC emission sources, as well as a more comprehensive coverage of emissions sources such as trans-boundary transportation; energy transmission and distribution losses (i.e., the loss of some amount of electricity during the delivery process from the supplier to the customer); industrial processes and product use (IPPU); and agriculture, forestry and other land uses (AFOLU).

Mountain Village chose to complete a BASIC inventory that includes additional emissions from aviation occurring outside the community. The GHGs accounted for in the inventory include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Emissions are calculated in an inventory workbook

created specifically for Mountain Village, and results are totaled as metric tons of carbon dioxide equivalents (mt CO₂e). Accompanying the community inventory workbook, Lotus also created a corporate GHG inventory for Town operations and identified the key drivers of changes in emissions from the original emissions analysis conducted in 2010 through the current inventory. Lotus also prepared inventory management plans that detail how to collect data and complete an emissions inventory in-house in future years.

The inventory categorizes emissions by scopes, sectors, and sources. Scopes are defined by globally recognized protocols and provide a very high-level view of emissions with combined sectors and sources within. Per the GPC protocol,⁶ the following definitions apply to emission scopes (see Figure 3).

- Scope 1: GHG emissions from sources located within the boundary.
- Scope 2: GHG emissions occurring as a result of the use of grid-supplied electricity, heat, steam and/or cooling within the boundary.
- Scope 3: All other GHG emissions that occur outside the boundary as a result of activities taking place within the boundary.

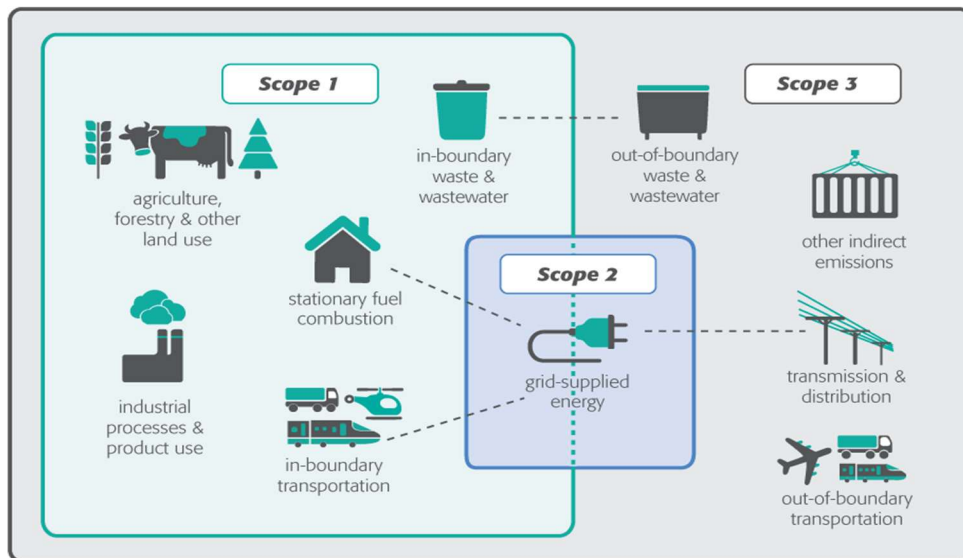


Figure 3. Definitions of emissions scopes.

The boundaries of the 2019 GHG inventory were set as Mountain Village’s town limits.

⁶ For more information see https://ghgprotocol.org/sites/default/files/standards_supporting/GPC_Executive_Summary_1.pdf.

Key Findings from the 2019 Inventory

Total Emissions

The inventory showed a 2019 BASIC emissions value of 72,269 metric tons of carbon dioxide equivalent (mt CO₂e). An additional 129 mt CO₂e are attributable to Mountain Village from air travel in the region.

The largest share of emissions comes from the use of energy to power, heat, and cool buildings and outdoor systems (such as snow melt systems). Emissions from residential buildings make up 48 percent of the community's total, while commercial and industrial buildings make up 45 percent of the community's total. Due to its small size, Mountain Village has a smaller proportion of emissions than typically generated from transportation activities in the community.⁷ Three percent of emissions come from solid waste disposal in landfills. One-tenth of one percent of emissions come from wastewater treatment processes. See Figure 4.

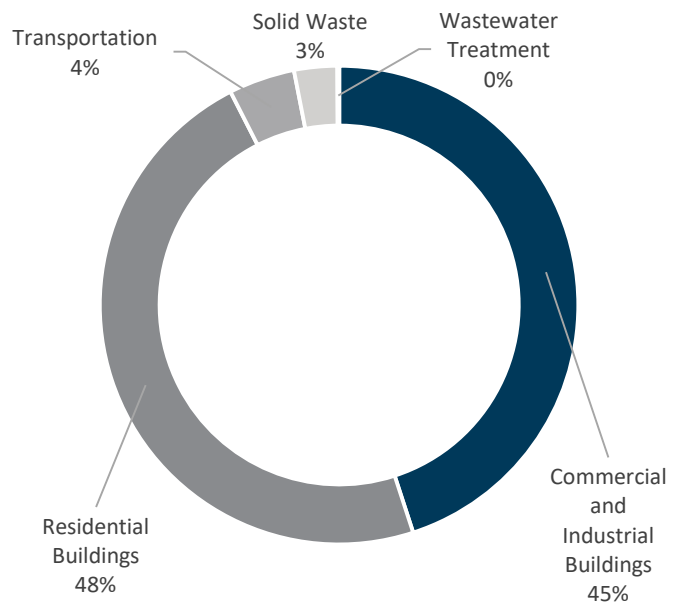


Figure 4: BASIC community emissions by sector, 2019.

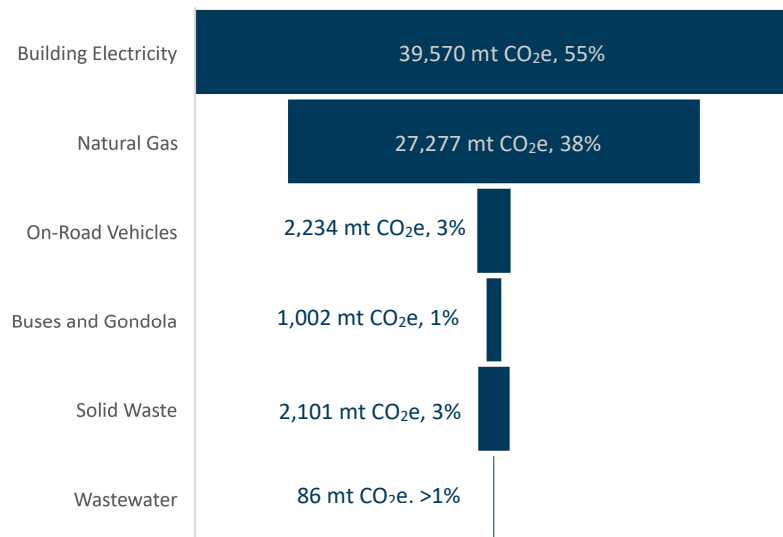


Figure 5: Community emissions by source activity, mt CO₂e.

More than half (55 percent) of Mountain Village's emissions were generated from the use of electricity to power buildings. Electricity in Mountain Village is provided by San Miguel Power Association (SMPA), a member-owned electricity cooperative that purchases most of the power it provides members from Tri-State Generation and Transmission (Tri-State). Thirty-eight percent of community emissions are generated from the burning on natural gas in the Town, primarily to heat buildings, provide hot water, and operate snowmelt systems. Natural gas in

⁷ Based on Lotus' familiarity with community-generated emissions inventories in Colorado from other work. Transportation in Mountain Village accounts for 4 percent of the 2019 GHG emissions inventory, compared to an average of around 30 percent of emissions for many communities.

the community is provided by Black Hills Energy. See Figure 5 for a detailed illustration of other emissions by the source activity for Mountain Village.

Mountain Village’s emissions per capita are 50.4 mt CO₂e based on a 2019 resident population of 1,434 people. This is higher than average for many communities across the county, but it should be noted that the large number of tourists in the community on a daily basis has a significant impact on the community’s energy use and related emissions. When considering tourists in the community,⁸ in 2019 the total per capita emissions for all residents plus visitors was 12.7 mt CO₂e, which is much more in-line with leading communities across the state.⁹ As Mountain Village continues to monitor its progress towards emission-reduction goals, analyzing the per capita emissions value will allow the Town to better understand how economic and community growth are impacting changes in emissions overall.

Building and Stationary Energy Emissions

The stationary energy sector includes emissions from energy used in building systems, snowmelt systems, outdoor lighting, and other energy use tied to stationary sources. This sector also includes emissions generated from the leakage of natural gas during the distribution process. Electricity use produces more than half of the emissions from stationary energy, with residential electricity use making up 32 percent of the pie and commercial electricity use making up 28 percent. Commercial buildings generate 20 percent of stationary emissions from natural gas use, with natural gas use in residential buildings generating 19 percent of stationary emissions. See Figure 6.

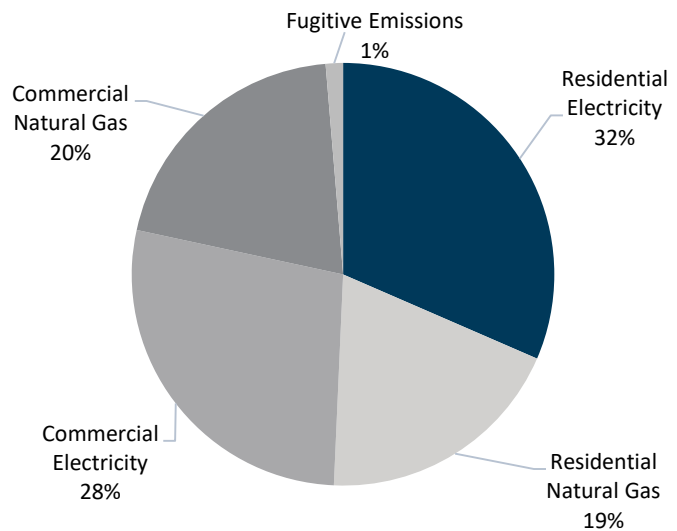


Figure 6: Stationary emissions detail.

GPC does not allow communities to subtract negative emissions from the purchase of renewable energy credits (RECs) or other emission offsets in their official inventory, but many communities include information on these offsets or ‘avoided emissions’ to understand the impact of local decisions.

In 2019, 1,880 mt CO₂e, (representing just over 2.5 percent of the Town’s total emissions) were avoided by the purchase of RECs, community solar subscriptions, or through on-site solar installations in the community. SMPA owns the RECs associated with any on-site solar in Mountain Village, and some customers in the community additionally choose to purchase RECs to offset the impact of their energy use. RECs owned by SMPA are included in the calculation of Mountain Village’s electricity emission factor. If the use of on-site solar were to increase in Mountain Village, one could assume that the utility would continue to retain the RECs associated with this renewable production, and therefore, increased solar would contribute to a lower emissions factor (i.e., carbon intensity) of the electricity provided by SMPA, leading to lower emissions from electricity use in future inventories.

⁸ Based on data provided by Visit Telluride, the average daily population in Mountain Village in 2019 for residents plus visitors was estimated to be 5,693 people.

⁹ Based on Lotus’ work and research. Boulder’s (CO) per capita emissions value is 13.7 mt CO₂e (2019), Denver’s (CO) is 11.6 (2019), Fort Collins (CO) is 12 (2017).

As the vast majority (92 percent) of Mountain Village’s emissions are generated from energy use in buildings (refer to Figure 4), addressing and reducing energy use powering building systems with less carbon-intensive energy resources will be the Town’s most effective approach for reducing community-wide GHG emissions.

Transportation Emissions

Mountain Village’s transportation system is unique among many of its peers. Due to its small size, the Town see less vehicular on-road activity that may be typical of other Colorado communities. In addition to emissions produced from on-road gasoline, diesel, and electric vehicles (which together comprise over 66 percent of all transportation emissions), the Town operates a public transportation gondola system in collaboration with nearby Telluride. The gondola provides access to the Town center, the ski areas, and Telluride and is used frequently by residents and visitors. In addition to the gondola system, the Town operates a summer bus line and a Dial-A-Ride shuttle service in the winter and summer seasons; due to their frequency of use by visitors to the community, hotel shuttles were also included in the calculation of emissions from transit. As seen in Figure 7, transit activity comprised nearly 31 percent of all transportation emissions in the community.

The gondola runs on electricity. The Town purchases RECs and has installed on-site solar systems to offset the energy used for the gondola; these purchases qualify the gondola system as an Environmental Protection Agency (EPA) Green Power Partner.¹⁰

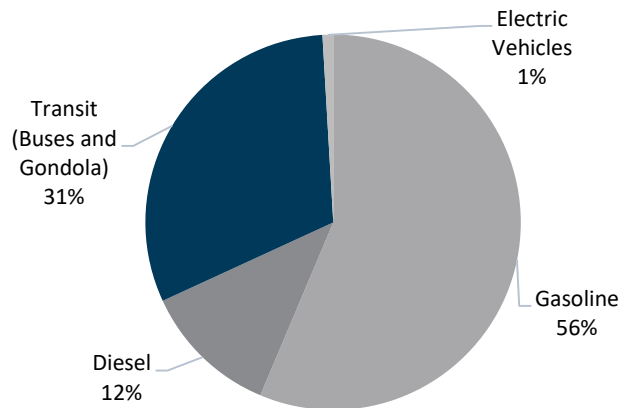


Figure 7: Transportation emissions detail.



Waste and Wastewater Emissions

In the waste and wastewater sector, which comprises 3 percent of total community emissions, the majority of emissions are from the collection and disposal of solid waste generated and landfilled by the community, which makes up approximately 96 percent of the total emissions from this sector. Currently, large-scale composting activities are not being tracked in the community; backyard composting is assumed to occur at residential homes and is supported through the Town’s composting incentive program, whereby residents can apply to receive a free home composting bin.

¹⁰ For more information see <https://townofmountainvillage.com/green-living/energy-use/alternative-energy/>.

As is the case with renewable energy, the GPC does not allow communities to subtract emissions avoided through recycling in the community; however, these data points are useful for understanding the full impact of a community's decisions. In 2019, 4,830 mt CO₂e (representing nearly 7 percent of the community's total emissions) were avoided from recycling activities. These avoided emissions represent a life-cycle impact and include reduced virgin inputs being needed for new materials and reduced landfill disposal.

CLIMATE MITIGATION STRATEGIES

Mountain Village has a goal of becoming a carbon-neutral community by 2050, meaning that the community reduces all emissions to the degree possible and offsets emissions that cannot be reduced through the purchase of RECs or through other measures. Understanding the environmental impact of community activities ensures that as the Town continues to address climate action, it does so in a way that makes a significant impact on overall emissions and supports key community values.

Lotus analyzed common and effective emission-reduction strategies being employed by communities of similar size and character to Mountain Village to identify the primary strategies that may be utilized locally to reduce emissions. Following this research, Lotus presented a list of potential solutions and gathered feedback from Town staff and the Green Team Committee to determine which strategies the Town would like to pursue. Lotus also collected feedback from the Green Team Committee on the community values and attributes of living in and visiting Mountain Village that are considered important to maintain and enhance through the Town's climate action work.

COMMUNITY VALUES FOR CLIMATE ACTION

As community-based emission reduction solutions do not occur in a vacuum, Mountain Village identified the primary community values and attributes that should be enhanced through the Town's emission reduction work. The list to the right represents the values and ideals that Mountain Village's climate action strategies should align with in order to ensure that the entire community benefits from this work. As Mountain Village takes the next steps to identify specific implementation steps for the Town's climate action work, any potential policies and programs should be vetted against this list to ensure that the benefits of the work are not restricted to reducing emissions, but also results in a higher quality of life for the whole community.

Mountain Village's Climate Action Values

- Promote fiscal responsibility.
- Enhance the quality of life for residents and visitors.
- Support a circular economy and equitable, higher quality, less impactful products.
- Promote cultural and behavioral change through education and engagement programs.
- Support regional food networks and local food sourcing.
- Enhance equity throughout the community.

OVERVIEW OF GREENHOUSE GAS REDUCTION STRATEGIES

Business-as-Usual Modeling Results

In addition to understanding Mountain Village's current emissions, the Town was also interested in understanding what projected emissions would be based on community growth and a status-quo case scenario from the baseline year of 2010 through 2050. Lotus collected data on past emissions estimates,

the anticipated growth of the Mountain Village resident population, and projected emissions factors for electricity to generate an estimate of the change in emissions for the community.

Between 2010 and 2019 Mountain Village reduced its emissions by 7 percent; 2010 emissions were 5,593 mt CO₂e higher than the 2019 emissions value. This reduction was likely caused by a combination of community programs and less carbon-intensive electricity from SMPA in 2019 as compared to 2010.

Between 2010 and 2050, Mountain Village’s population is anticipated to grow by 184 percent,¹¹ and under a status-quo case scenario, population growth will cause higher emissions from the building energy, transportation, and waste sectors. The growth in emissions from each sector will be somewhat balanced by fewer emissions coming from electricity use; this is based on announcements from Tri-State, SMPA’s wholesale power provider, regarding a goal that the generation utility provide 70 percent carbon free electricity by 2030.¹² The result of these impacts is a 2050 emissions value that is approximately 14 percent lower than the 2010 emissions value (77,991 mt CO₂e in 2010 and 66,991 mt CO₂e in 2050); see Figure 8.

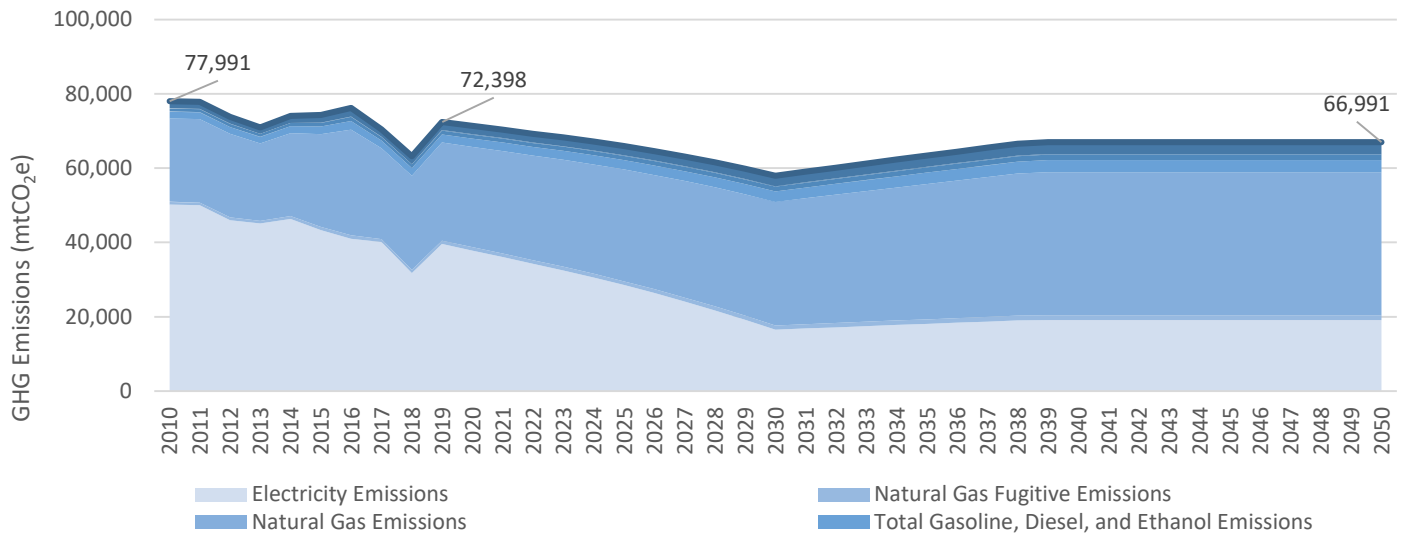


Figure 8: Status-quo emissions projections to 2050.

MOUNTAIN VILLAGE: POISED FOR CLIMATE ACTION

The final list of climate action strategies for Mountain Village was compared against the business-as-usual case scenario to understand the quantitative impact of the Town’s strategies towards achieving the carbon neutrality goal. It is estimated that, if the Town were to successfully implement the strategies using the participation targets applied in the model, Mountain Village will be able to reduce its 2050 emissions by 85 percent from the 2010 baseline, for a 2050 emissions value of approximately

¹¹ Based on anticipated population growth for San Miguel County as provided by the Colorado Department of Local Affairs.

¹² Based on conversations with representatives of Tri-State Energy. For more information please see <https://energynews.us/2020/01/21/west/tri-state-ceo-says-wholesalers-clean-energy-transition-will-pay-dividends/>.

11,644 mt CO₂e, see Figure 9. If the Town reaches its goal, per capita emissions for residents and visitors in the community will be drop dramatically from 12.7 mt CO₂e to approximately 1.4 mt CO₂.¹³

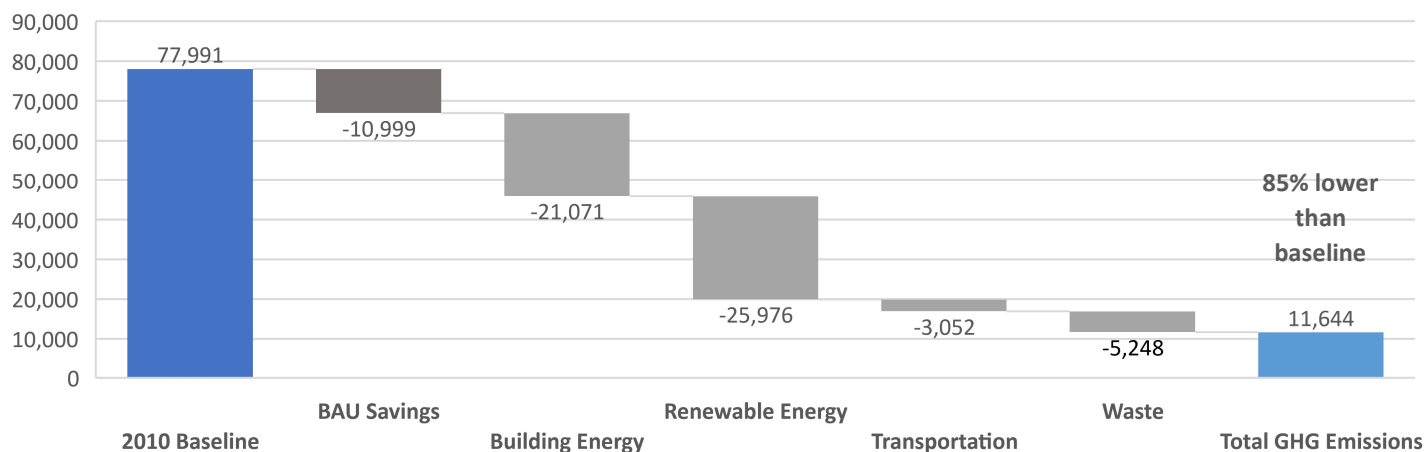


Figure 9: Mountain Villages' emission reductions by sector based on CAP strategies.

The final list of high-level climate action strategies for Mountain Village are outlined below. Using data on current activities in Mountain Village and on energy use and transportation patterns nationally, Lotus estimated the potential for these strategies to reduce community emissions over the coming years. These strategies present a framework for the Town to follow when determining where and how to invest staff time and resources over the coming years. Discussions with Town staff, the Green Team Committee, and other stakeholders helped identify some of the specific actions that the community can take to convert this plan into action, and an important next step will be for Mountain Village to meet with its community of residents and business owners, local leaders, and regional partners to determine the specific implementation details for ensuring this work is completed.

TRANSPORTATION STRATEGIES

There are four transportation strategies for Mountain Village to pursue; the combined impact of these strategies is a 4 percent reduction in emissions from the 2010 baseline in the year 2050. See Table 1.

Table 1: Transportation strategies for Mountain Village.

Transportation Strategy	Suggested Supporting Action	Reduction from 2010 Baseline
T1. Reduce single occupancy vehicle travel through increased biking, walking, and transit use.	T1a. Expand multimodal connectivity.	1%
	T1b. Expand transit-oriented development throughout the community.	
	T1c. Accelerate development of walkable/bikeable networks.	
T2. Support equitable electric vehicle adoption.	T2a. Increase the presence of electric vehicle chargers.	3%
	T2b. Transition school buses to use alternative energy sources (i.e., electricity, CNG).	

¹³ This assumes a 2050 emissions value of 11,644 mt CO₂e and a 2050 population of 8,126, which is the Town's growth cap.

	T2c. Promote expansion of EVs in the community.	
T3. Switch government fleet vehicles to electric vehicles.	T3a. Transition municipal fleet to an electric vehicle fleet.	N/A*
	T3b. Consider low-emissions vehicle alternatives for the municipal fleet and equipment where electric vehicles are not a viable option.	
T4. Educate the public on behavior changes.	T4a. Develop a targeted branding and education campaign around reducing single occupancy vehicle use and investing in EVs.	N/A*

**Strategies for which the emissions reduction potential is assumed to be minimal were not included in the modeling effort.*

The greatest opportunity to reduce transportation emissions comes from support a transition to electric vehicles (EVs) across the community, followed by reducing travel in single-occupancy vehicles. EVs are vehicles that use an electrical motor rather than an internal combustion engine (ICE) to power the vehicles. It should be noted that EVs still do produce emissions associated with the electricity that powers them; however, even at current and projected electricity emissions levels for SMPA, the transition to electric vehicles will reduce the community’s emissions by 3 percent by 2050 (assuming 70 percent of vehicles on the road in 2050 are EVs). If Mountain Village were to be powered by 100 percent renewable energy or offset the community’s total electricity use with the purchase of RECs, the emissions savings could be even greater. Mountain Village can encourage greater adoption of EVs in the community through expanding the number and availability of charging stations (currently there are five charging stations); promoting programs and events that expand EV awareness and incentives (such as ride-and-drive events or group bulk purchasing programs for the community); greening the municipal fleet vehicles when they come up in the replacement cycle; and working with local special districts, including the school district, to help them transition to cleaner and less-polluting vehicles. A crucial component of supporting EV adoption is ensuring there is a local market of service providers to support vehicle sales and maintenance; Mountain Village will benefit from supporting the development of a regional EV market that can provide these services.

Mountain Village has a strong gondola-based transit system that is used for transit between the Town and the ski area and surrounding communities. By encouraging or requiring all new developments and growth in the community to be centered with easy access to transit and multi-modal connectivity options, and by enhancing signage and wayfinding for multimodal connections, the Town can help its community to reduce their time spent traveling alone in a car while prioritizing active transportation alternatives. This effort should include a cohesive branding campaign that educates residents and visitors about transportation options in the community, including the ease of using public transit and bike trails, enhanced route marking and wayfinding for multimodal travel, the



availability of EV charging infrastructure, and cost savings and air quality benefits that come with replacing ICE vehicles with EVs.

BUILDING ENERGY STRATEGIES

Mountain Village has identified four strategies to reduce emissions from the building energy sector; see Table 2. Combined, these strategies are anticipated to reduce the community’s GHG emissions by approximately 27 percent from the 2010 baseline between now and 2050.

Table 2: Building energy strategies for Mountain Village.

Building Energy Strategy	Suggested Supporting Action	Reduction from 2010 Baseline
B1. Promote and expand residential energy efficiency programs.	B1a. Implement residential benchmarking program.	4%
	B1b. Accelerate low-to-moderate income energy efficiency retrofit programs.	
	B1c. Provide mechanisms to encourage the reduction of energy in moderate to high income households.	
	B1d. Address needed updates in building codes and the REMP program to address snowmelt systems and the calculation of solar offsets.	
B2. Promote and expand commercial energy efficiency programs.	B2a. Implement commercial benchmarking program.	6%
	B2b. Provide mechanisms to encourage the reduction of energy in commercial buildings.	
	B2c. Require and incentivize commercial building retro-commissioning.	
	B2d. Address needed updates in building codes and the REMP program to address snowmelt systems and the calculation of solar offsets.	
B3. Promote fuel switching (i.e., electrification programs for buildings).	B3a. Work with building owners to convert commercial and residential buildings from natural gas systems to electric systems and offset electricity use with an on-site solar system or RECs.	18%
B4. Reduce energy usage in municipal buildings.	B4a. Reduce energy use in municipally owned buildings.	N/A*
	B4b. Build net-zero energy municipal buildings.	

**Strategies for which the emissions reduction potential is assumed to be minimal were not included in the modeling effort.*

The Town should continue to work with SMPA and local partner agencies to market and expand the available energy efficiency programs for commercial and residential buildings. Requiring or incentivizing building energy benchmarking will ensure that community members better understand and are aware of how their buildings use energy and where there may be opportunities to reduce that energy use. On the commercial side, policies that require or incentivize building retro-commissioning will ensure that building systems continue to operate efficiently and effectively and may also result in energy cost savings for building owners and managers.



Based on conversations with individuals familiar with the Town’s current energy programs and codes, continuing to adopt the most recent International Energy Conservation Code (IECC) when it is released and addressing updates in the Town’s Renewable Energy Mitigation Program (REMP), which addresses exterior energy use, will be important measures to make sure that the Town continues to reduce building energy use across the community. The impact of the strategies aimed at promoting and

expanding energy efficiency programs for both the commercial and residential sectors is likely to reduce the Town’s 2050 emissions by 10 percent from the 2010 baseline.

The Town has been actively working to reduce energy use in municipal buildings over the last several years; because municipal energy use is a small portion of overall community energy use, the strategy to reduce energy use in municipal buildings was not included in the GHG emissions reduction model. Regardless, this work should continue into the future to ensure the Town continues to lead by example.

While the emissions associated with electricity use in the community at this point are relatively high, as Tri-State works towards its carbon-reduction goals that electricity will become less carbon intensive over the years. Based on modeled projections, Tri-State’s emission factor is expected to decrease between 2019 and 2030; by 2022, the emissions factor is expected to be so low that the use of electricity for heating and water heating systems will result in fewer emissions than using natural gas for the same purpose.¹⁴ As such, Mountain Village is encouraged to develop programs and incentives that will result in fuel switching in buildings (i.e., transitioning to electrical heating and water heating where applicable).

RENEWABLE ENERGY STRATEGIES

There are two high-level strategies for Mountain Village to increase the share of energy in the community that is low-carbon and renewably sourced; see Table 3. When leveraged on top of other strategies already referenced in the transportation and building sectors (including increasing electric vehicles, reducing energy use in buildings, and fuel switching), the renewable energy strategies are estimated to reduce 2050 emissions by 40 percent below the 2010 baseline.

Table 3: Renewable energy strategies for Mountain Village.

Renewable Energy Strategy	Suggested Supporting Action	Reduction from 2010 Baseline
R1. Implement policies and programs that support comprehensive	R1a. Work with SMPA to identify opportunities to enhance the number of renewables on the cooperative utility's grid, including through community solar.	33%

¹⁴ Based on data and information provided by Tri-State. Assumes that emissions will reduce at a linear rate between 2020 and the 2030 goal.

renewable energy growth for the community.	R1b. Provide mechanisms (e.g. rebates, education, community solar) to encourage adoption of solar in all sectors.	
	R1c. Continue to source renewable electricity for municipal operations.	
	R1d. Explore the feasibility and applicability of other renewable energy technologies that would be productive in the region.	
	R1e. Encourage greater participation in SMPA's Totally Green program through education and incentives.	
R2. Support policies to advance a clean energy agenda in the state.	R2a. Actively engage in efforts to advance clean energy in Colorado through participation in regional organizations and in statewide legislative work.	N/A*

**Strategies for which the emissions reduction potential is assumed to be minimal were not included in the modeling effort.*

Successfully achieving the significant reduction in emissions projected with renewable energy growth will require a concerted effort on the part of the Town and in collaboration with local organizations and SMPA to enhance programs and benefits associated with installing renewable energy or acquiring RECs. Mountain Village may benefit from working with SMPA to enhance the amount of renewables on the cooperative's grid up to SMPA's contractual limit; this could include exploring the development of a community solar garden that would provide power and potential cost savings to Town residents and businesses. Mountain Village can develop programs to ease access to solar in the community by making it easier and cheaper to permit systems and by providing education, rebates, and incentives (such as a bulk purchase program).



The Town already powers the gondola system with on-site solar and the purchase of RECs and could further look to install solar and/or purchase RECs to offset use at other municipal buildings as well. SMPA's Totally Green program offers customers the opportunity to invest in renewable energy through a

voluntary per-kilowatt hour adjustment on their bill; the Town can help to promote this program and could consider other ways to incentivize residents and businesses to use it.

There is interest throughout the community in exploring other renewable energy technologies outside of solar and conducting a feasibility study on the potential for solar, wind energy, biomass, and other renewable technologies to be utilized in Mountain Village may be worthwhile. Outside of direct investment in renewable energy and offsets, Mountain Village should enhance its participation in regional and state-wide conversations regarding renewable energy. By working locally with utility and municipal partners and on a state-wide level by joining organizations such as Colorado Communities for

Climate Action (CC4CA),¹⁵ Mountain Village can leverage its position to help ensure that statewide policies regarding energy use and supply align with state a local GHG reduction goals.

WASTE STRATEGIES

Mountain Village and the Town’s Green Team Committee are actively interested in reducing the amount of waste generated in the community, and the Town has a goal to be ‘zero waste’ by 2025.¹⁶ Mountain Village has already taken action to limit the amount of single-use plastic waste in the community, and the Planet Over Plastics Coalition is actively working to help businesses locally transition away from single-use plastics.¹⁷ The Town’s waste reduction work includes one high-level strategy with multiple discrete actions to support it; see Table 4. This work is anticipated to reduce the community’s GHG emissions by approximately 7 percent from the 2010 baseline between now and 2050.

Table 4: Waste strategies for Mountain Village.

Waste Strategy	Suggested Supporting Action	Reduction from 2010 Baseline
W1. Reduce solid waste and increase diversion.	W1a. Develop and expand policies that promote waste minimization and recycling for businesses.	7%
	W1b. Develop a purchase policy for green materials at City.	
	W1c. Reuse construction site waste and identify efficient use of materials.	
	W1d. Increase recycling collection.	
	W1e. Develop incentives and a policy for providing commercial composting, focusing on food waste.	
	W1f. Set aside gleaned food for those in need.	
	W1g. Develop businesses that mulch yard waste to increase water retention and soil nutrients.	

In 2019, the Town’s overall diversion rate for municipal solid waste (MSW) was 42 percent, which is higher than both the state of Colorado and national average (both of which are approximately 35 percent);¹⁸ however, the Town will need to significantly ramp up efforts to increase waste diversion to meet its 2025 goal.

Mountain Village should continue to build off the Town’s success with waste diversion programs. There is a significant amount of interest in local food in the community, so leveraging this connection to reduce food waste, provide excess food to those in need, and utilize food waste to create compost for local farms and gardens may be a worthwhile investment of staff and Green Team Committee time and

¹⁵ For more information see <https://www.cc4ca.org/>.

¹⁶ For more information see <https://townofmountainvillage.com/green-living/waste-recycling/recycling-zero-waste/>.

¹⁷ For more information see <https://townofmountainvillage.com/green-living/incentive-programs/planet-over-plastics/>.

¹⁸ For more information see <https://www.colorado.gov/pacific/cdphe/2018-colorado-recycling-totals>.

resources. By focusing on source reduction (i.e., encouraging people to buy and consume less) and a waste hierarchy for disposal that puts reuse and repurposing above recycling, the Town may help to develop a circular economy locally that reduces the consumption of goods and materials locally, creates local markets, jobs, and wealth, and enhances the value of conservation across the community. While the impact on emissions from waste is relatively small compared to building energy use, the subject of waste and reducing waste is one that nearly all community members and visitors can relate to and participate in. This sector offers prime opportunities for engaging the community and telling the story of Mountain Village’s climate action work and how residents and visitors can be involved and support these efforts.



CONCLUSION

Mountain Village is prepared to own its part in preventing the worst effects of climate change. As a diverse community in a high alpine environment that sees many tourists pass through, Mountain Village recognizes that by addressing climate change through the implementation of the strategies outlined in this document, the community can also enhance the quality of life for all residents and visitors while spurring local innovation. Mountain Village will need to work collaboratively with its local



partners, regional organizations, and state and national agencies and entities that are also interested in this work; through collaboration and strategic implementation of the strategies in this document, Mountain Village can achieve its emission reduction goal while ensuring a healthy, equitable, and livable future now and in the years to come.

Agenda Item #6

For the Glass Grinder Pilot Program

Budget financing \$17000.00

Volunteer labor

Build a procurement plan for town to use in many uses

Health concerns from Finn

Opportunities of many uses

Where to locate placement

Pdf study from university of Hawaii did not paste very well

GL Sand Bottle Crusher

- Reduces volume of glass 10:1
- Keeps glass out of the landfill (a glass bottle takes 1,000,000 years to decompose) Good for the environment.
- Safer for employees/ less labor costs - move sand instead of glass making transportation easier, safer, and less frequent.
- Small footprint which allows unit to be placed at the source of where glass waste is being created in bars, restaurants, and nightclubs. They can also be placed for use in the housekeeping department
- By pulverizing glass bottles there is no need for big roll offs by the trash dock creating space for other uses and saving significant money on hauling costs.
- The sand product directly from pulverizing glass can be combined with our patented emulsion to create an asphalt patch for parking lots.

GLV Sleeve (Sand Sifter):

You can take the raw sand material and by sifting it into different grades reuse the material throughout the property. The sifted sand can also be sold locally to sandblasting companies, golf courses, and landfills as examples. Many other uses for this sand include but not limited to:

- Beach sand/ Volleyball sand/ Playgrounds
- Cement mix
- Roadways/pothole patch
- Abrasive Media for Sandblasting – typically \$3,000 - \$5,000 ton
- Pool/ Water Filtration - \$400/ton
- Filter medium for septic treatments/ wastewater
- Golf Course Sand – Divot sand/ top dressing for fairways and greens/ sand trap sand
- Landscaping
- Artist Sand – Sells online for around \$4000 ton (usually sold in 1 to 5 lb. bags)
- Soil aerator

- Leachate drainage layer material in landfills
- Sand Bags

Good morning Jonathan:

My afternoon got away from me yesterday and I wanted to give you the time this deserves. First and foremost, I truly enjoyed talking with you again yesterday. I know you are passionate about making a glass recycling program work for Telluride and the community is lucky to have you helping them with this. As we discussed, since we visited last, we have done a great deal in this area and I would like to believe I have gained a great amount of knowledge. I am more than glad to be a resource for you in any way I can.

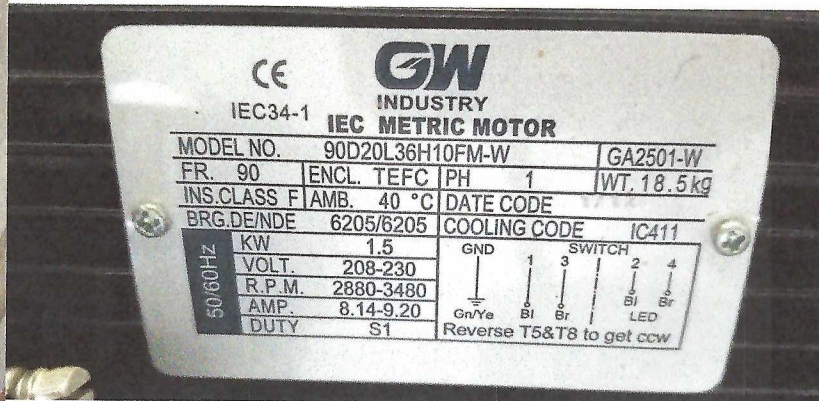
I had promised to send you the study that was done by the University of Hawaii. Hawaii has many of these glass crushers and most of the sand is being sifted and used to reinforce beaches across all of the islands. It was extremely important to them to ensure that the sand was completely safe for humans and as you will read it is. The uses for the sand are many. I am also attaching a piece that I put together for our properties in Vegas. I realize that there are differences with what you want to do but it gives a great overview of both the GL Sand machine and the sifter along with some of the many uses for sifted sand.

The small machines are nice because they do not have any special electrical requirements, they can be moved fairly easily and take up very little space so the amount of space you need is very limited as compared to needing a huge warehouse. In some of my other business models they have found this to be very compelling as real estate can be quite pricey. I have the GL Sand on special at the moment for \$6000 plus shipping. The GL Sleeve which is the sifter is on special currently for \$10,995. I do have a set of both that having been briefly trialed on the Caribbean island that should be arriving back to me in the next couple of weeks, which I could give you a little better deal on right now. I have three outstanding leasing companies that I currently work with that are having incredible rates and I can lease you a new GL Sand for less than \$150 month if that has any interest for you. You could start with one and as things ramp up you can also add on.

This is the website the father and son are using for their recycling business in Omaha. They have been overwhelmed with business and have one small GL Sand machine. In September they are looking at purchasing one or two more machines. It is working great.

Expleco Glass Crusher

Basic Information and Potential Uses



Alicia Rittenberry

Benefits of Using Recycled Crushed Glass (RCG)

Using recycled materials conserves natural resources

Reduces controversial sand mining

Reduces landfill needs

There are potential carbon offsets to the supply of materials within cities as opposed to supply from materials outside of cities

There are substantial supplies of glass waste available

In some instances, RCG is cheaper than mined sand

Human Health Concerns

Glass has no regular crystal structure, and is considered a form of amorphous silica. Unlike crystalline silica dioxide, which is hazardous to breathe, amorphous silica dioxide is considered completely safe and is even approved by the FDA to be used as an anticaking material for keeping foods like shredded cheese from sticking together.

Optional safety and protective measures

- Wear safety glasses
 - Wear gloves
 - Wear dust mask
 - Wear long sleeves clothing that cover skin
-

Environmental Impact Concerns

A comprehensive series of chemical and environmental tests including total and leachate concentration for a range of contaminant constituents including heavy metals and aromatic hydrocarbons were carried out. Test results were compared with environmental protection authorities' requirements and **indicated that no leaching hazard will be experienced during the service life of recycled glass.**

Glass samples were tested for:

- Metals Pesticides
 - PAHs
 - VOCs
 - TPHs
 - Other general organics
 - Nutrients
 - BOD
 - Total suspended solids
 - COD
 - Asbestos
 - pH and the electrical resistivity
-

General Uses

Main uses involve sand/silica replacement

- Cement mix
 - Roadways/pothole patching
 - Abrasive media/ Sandblasting
 - Concrete/construction aggregate (replacing natural sand)
 - Pipe bedding material
 - Leachate drainage layer material in landfills
 - Water filtration, such as filter medium for septic treatments/wastewater
 - Soil Aerator
 - Sand traps at golf courses
 - Possible pig deterrent
-

Potential Uses at UHMC

Construction department - Cliff Rutherford

Apprenticeship program - OCET - Mike Young

Pothole patching on campus - O&M?

Sell

There are many buyers for RCG but a screening machine may be necessary

Other uses?

Planet Over Plastics- Budget Proposal Update

The Planet Over Plastics Committee received and reviewed proposals from four consulting firms. Each firm provided a unique and promising proposal for the future of our zero-waste mission. After consideration, the committee selected two firms to consider for recommendation to Town Council.

Summary of Selected Proposals

1. SERA Skumatz Economic Research Associates, Inc.
<https://serainc.com/>

Focus and Expertise

- Broad scope focused on implementing zero waste mission
- Over 40 years of experience in developing solid waste strategies (programs, policies, incentives)
- Located in Silverthorne, CO, providing local knowledge and experience with mountain and resort communities
- Action and result focused approach

Budget	Timelines	Deliverables
\$24,000-\$34,000 (full Zero Waste implementation) *Backward design budget option	6-12 months	<ol style="list-style-type: none"> 1. Briefing and Brainstorm to assess and revise current Zero Waste Plan 2. Prepare Early Period Detailed Implementation Plan 3. Prepare Phase 2 Detailed Implementation Plan 4. Monitoring, Ordinances, Enforcement, Updates, and Support

2. Upstream
<https://www.upstreamolutions.org/>

Focus and Expertise

- Drafting and enacting policy around source waste reduction
- Focus on extended producer responsibility
- Over 17 years creating “indisposable” communities through:
 Business Innovation: transform venues/food service & help tell their story
 Policy: seed and feed campaigns and coalitions to pass reusable foodware ordinances
 Culture Change: celebrate heroes and launch social marketing campaigns that amplify/co-create a better way than throw-away.

Budget	Timelines	Deliverables
\$7,800	Outcome-based	<ol style="list-style-type: none"> 1. Develop a set of policy options for City Council 2. Identify needed baseline information and existing resources 3. Develop community engagement and outreach plan 4. Co-Design / support community engagement and outreach *REUSE BUSINESS INNOVATION /ACCELERATION - <i>Costs TBD based on staffing</i>



AGENDA ITEM # 8

DATE: September 8, 2020

TO: Green Team Members

FROM: Cath Jett, Chair

SUBJECT: Creation of a Simple Solar Program REVISED

REQUESTED BUDGET AMOUNT: \$50,000 + staff time

At their July 16th meeting, the Town Council requested that the Green Team review and revitalize the Residential Solar Incentive program.

After that meeting, I reached out to Councilperson Peter Duprey to discuss what his vision for the program is.

Federal Solar Rebates have been declining over the past few years and in 2022, rebates will be eliminated. In addition, the current administration has placed tariffs on Chinese manufactured goods. Most solar panels currently come from China and a tariff on solar panels was not exempt. However, the cost of solar panels from China has been decreasing thereby offsetting the tariff somewhat.

Mr. Duprey would like to make it as easy as possible for homeowners to take advantage of federal government incentives before they sunset next year. He is also hoping to create an incentive from the town to help kick start the program. We are considering capping the Town's contribution at \$50,000.

We are suggesting that the Green Team put together a packet of lenders, installers, Town Applications, rebate applications, and any other pertinent information that would make adding solar "one-stop shopping" for a resident.

The preference would be to waive any TMV application fees for such a project and to continue a specified amount as a residential solar rebate. The council should determine the cap for 2021.

To create a packet it might require creating an RFP process to secure lenders and installers. San Miguel Power has suggested we reach out to the following solar providers:

- Alternative Power Enterprises, Ridgway, 626-9842 www.alternative-power.com
- Cam Electric Inc, Montrose 240-1147 www.montroseelectricalcontractor.com

It would also require working with the Town's Planning Department to manage the program.

For further information, please review the following links.

[SMPA Renewable Rebates](#)

[The federal solar tax credit: all your questions answered](#)

[Alpine Bank Green Lending](#)

[NREL PV Watts Calculator](#)



SOLAR INCENTIVE PROGRAM APPLICATION FORM

I, _____, as the owner of _____ (insert address), (the "Property") located within the Town of Mountain Village, Colorado, do hereby agree to the following terms and conditions related to the rebate provided by the Town of Mountain Village, a home rule municipality and political subdivision of the State of Colorado (the "Town), for the purchase and installation of a rooftop solar energy system.

1. I am requesting a rebate in the amount of _____ Dollars (\$_____) ("Rebate") from the Town for my purchase of a _____ KW rooftop solar energy system at the address noted above. (Rebates are applied at \$.40/watt. Maximum rebate available is 5KW or 5,000 watts for residential and 10KW or 10,000 watts for commercial systems.)

2. My proof of rooftop solar installation is attached (circle one). Yes No

3. In the event that the solar contractor has not applied the rebate at time of sale, the rebate may be mailed directly to me at the following address:

4. If mailed directly to me, I understand that the town will send me a Federal 1099 Form if the rebate amount is over \$600.

SS# (resident) or Tax ID # (business): _____

5. Where did you hear about the Mountain Village Rooftop Solar Rebate Program?

I have agreed to the terms and conditions of this rebate program by executing this document on the ____ day of _____, 201____.

Owner:

Please return completed solar rebate application form to Drew Harrington Building Department:

Town of Mountain Village, 455 Mountain Village Boulevard, Suite A, Mountain Village, CO. 81435.

You may also deliver the form to Town Hall, or email the form to dharrington@mtnvillage.org.

Smart Building Incentive Program

In 2015, the Town of Mountain Village adopted the Smart Building Incentive Program allowing property owners to waive up to 100 percent of building permit fees.

With the intent to reduce the amount of energy and greenhouse gas emissions produced in our community, any resident or business owner renovating, expanding or building onto their property can participate in the Smart Building Incentive Program.

How Does This Work?

There are three owner incentives that can be used individually or collectively toward a building permit fee discount. If all three of the owner incentives listed below are accomplished collectively for efficient home design, 100 percent of the project's building permit fees will be waived. This could be a savings of tens of thousands of dollars!

Applicants will follow the standard [building permit procedures](#). Smart building initiatives must be shown within the [building permit application](#). Once the application has been approved, the appropriate fees will be waived.

Create a Smart Building Design

Complete incentives individually or collectively.

Renewable energy
incentive

Exterior energy use incentive

Interior energy use
HERS rating incentive

I WANT TO



	Renewable energy incentive	Exterior energy use incentive	Interior energy use HERS rating incentive
Individual Discount Available	20 percent building permit fee discount shall be provided.	15 percent building permit fee discount shall be provided.	Up to 100 percent building permit fee discount shall be provided.
Requirements	<p>There is no exterior energy use</p> <p style="text-align: center;">OR</p> <p>at least 20 percent of the estimated energy use is offset by a renewable energy source.</p>	<p>Building is designed with no exterior energy use elements other than lighting</p> <p style="text-align: center;">AND</p> <p>a covenant shall be recorded against the property for the benefit of the town, acknowledging the acceptance of the owner's forfeiture of the right to install any exterior energy use items after obtaining the certificate of occupancy (CO) for a period fifty years in a form acceptable to the town attorney office.</p>	<p>A building with a HERS rating of 0 or lower.</p> <p>(HERS ratings can be lowered by either on-site or off-site photovoltaic systems.)</p>

	Renewable energy incentive	Exterior energy use incentive	Interior energy use HERS rating incentive
Please note	Take advantage of our Solar Energy Incentive Program offering a 40 cent rebate per watt up to a total of \$2,000. An average home will install a 4,000-watt system which equates to a \$1,600 rebate from the Town.	If during this period after CO it is found that exterior energy use items are desired by the owner and installed, the awarded building permit fee discount pursuant to this section shall be paid to the town per the terms of the covenant.	<p>The discount calculation begins at HERS rating of 50. A new building with a HERS rating of 50 would pay 100% of the building permit fee. The building permit fee would be reduced proportionately with the percentage reduction in the HERS rating.</p> <p><i>(Example, a HERS score of 25 is a 50% reduction in the building permit fee. A HERS score of 0 would result in a 100% building permit fee discount.)</i></p>

Questions

For more information, please contact the Planning and Development Department by [email](#) or (970) 369-8251.

SIGN UP FOR OUR NEWSLETTER

Be the first to know about news and events in the Town of Mountain Village.

Email address

SIGN UP

Town Hall Address:

455 Mountain Village Blvd.
Suite A
Mountain Village, CO 81435
Mon. to Fri. 8 a.m. - 5 p.m.

Municipal Building address:

411 Mountain Village Blvd.
Mountain Village, CO 81435
Mon. to Fri. 8 a.m. - 5 p.m.

T: (970) 728-8000

[Archive Center](#)

[Lost & Found](#)

[ADA](#)

[Title VI](#)

[Terms & Conditions](#)

[Privacy Policy](#)

[Manage Your Cookies](#)

[Visitor Information](#)

[Staff Directory](#)

[Contact Us](#)

[Blog](#)

[Careers](#)

[FAQ](#)

[Webcams](#)

CONNECT WITH US

TRANSLATE SITE

Memo

To: Mountain Village Green Team

From: Heather Knox & Samantha Andrews

Date: August 6, 2020

Re: Farm to Community Food Program Composting Proposal

Note from Heather: I am an extremely grateful MV Farm to Community Food Program participant (Thank you!) and someone who is dedicated to composting. I fully believe composting would further enhance this tremendously valuable program.

This spring, as the 2020 Farm to Community Program was kicking off, I approached Samantha Andrews to ask if she would be willing to take my compost for the time during the program. Sam agreed to, and then she turned it around on me. Sam was aware of my overall interest and success with composting systems: The Town of Ophir composting system that I developed and secured funding for through a CDPHE RREO Mini-Grant, and my involvement with the Butcher & Baker composting system, which was funded through the Town of Telluride Green Grants Program. Sam thought a system similar to the Butcher and Bakers could actually meet the composting needs of everyone in the program (and possibly additional MV residents), as well as help the Program by creating high quality soil. After discussing strategies, Samantha and I are pleased to suggest the following composting proposal for the Farm to Community Food Program. Thank you very much for considering!

The Mountain Village Farm to Community Food Program is a very generous, healthy food program for families with children, living in deed-restricted housing, and lower income individuals. The nominal fee for the program is very affordable for the full season, so the group of participants is (likely) very appreciative, and committed. Because of this, this group could be looked to as a test group to train on waste reduction and sustainable behaviors.



Overall, the structure of the Farm to Community program meets the goals of Reduce & Reuse. The final step that could be consider is Recycle/Compost!

- ✓ Reduce: By providing vegetables and proteins directly from the farmers/ranchers/bakers, the program is inherently low waste; it avoids excessive packaging and the packaging required for long-distance shipping.
- ✓ Reuse: Each week families are asked to bring reusable bags and other bags as needed to pick up their items. Additionally, they are accepting egg cartons that are still in good shape for reuse. Overall, the program meets the goal of reuse.
- ✓ Recycle/Compost: The extensive fresh vegetables, bread, and eggs are wonderful! These create abundant organic waste, which is ALL recyclable/compostable. Developing a composting system for the 80+ families, and possibly all residents in the 222 units of VCA, would further decrease the program's carbon footprint. Composting would significantly reduce the waste generated by the program, AND educate participants on the benefits of composting, and what/how to sort compostable waste.

Recommended Farm to Community Composting System

1. First Choice: Pro-Tainer Organic Waste Collection Trailer (8- or 15-yard capacity)

Rather than committing all of the labor, oversight and management, as well as the land/space required to successfully operate our own Mountain Village composting system at 9500+’ elevation with numerous black bears and other animals that get into the trash, we are pleased to propose a composting system like the Butcher & Baker’s.

The Butcher & Baker Restaurant applied for and was awarded a Telluride Green Grant to purchase an 8-yard Pro-Tainer Composting Collection Trailer; Telluride Green Grants are funded by the Town of Telluride’s Renewable Energy Mitigation Program. The Pro-Tainer trailer is bear-proof, and it is parked behind the Butcher & Baker restaurant. The Butcher & Baker collects all of their organic waste in the trailer and then transports it every few weeks to their family’s farm in Montrose, CO where many of the vegetables for the restaurant are grown.

Transporting organic waste from the Farm to Community Program (and possibly other MV residents who want to participate), to the farms that grow the food for the program is a win-win. These farms already have successful composting operations on their farms; they are located at a lower elevation, so the composting process is faster, and there are less issues with bears and other animals. The Butcher & The Baker have been very pleased with the organic waste collection trailer. The price for the 8-yard shown in the Pro-Tainer bid is \$11,300. Pricing for both trailers includes decals to “brand” the trailer and shipping/transport to Telluride area. The second larger size up, which is 15 cubic yards, is also shown on the Pro-Tainer bid. The 15-yard trailer has a larger axel, and is longer. The cost for this is \$12,690. Either trailer could be stationed in the parking lot of Village Court Apartments, or elsewhere to serve the VCA housing facility and other Mountain Village residents.

The trailer could be pulled to Norwood weekly during the Farm to Community Food Program season, and we suggest possibly one of the Mountain Village employees who lives in Norwood and uses a MV work truck who drives to and from Norwood, return it, or possibly the Mountain Village employee shuttle? This transportation could possibly continue once the Farm to Community Food Program ends for the season. Obviously, the exact details would need to be worked out with the employees impacted. Communication would also need to be provided on which day of the week the organic waste collection trailer would not be available for residents to dump.

In addition to the trailer, it is suggested that an educational campaign would be provided to ensure only compostable waste is included, and to outline the value and environmental benefits of composting. Developing a required “commitment” for the participants to sign/agree to, that outlines the acceptable waste, and any special procedures, is recommended.

2. Second Option: Green Mountain Technologies, Earth Cubes

The second option for composting does not seem as desirable, because it requires much more physical work, management, and indoor space. This system is the same as the composting system that the Town of Ophir uses: Green Mountain Technologies, Earth Cubes. Due to bears, Earth Cubes must be stored in an enclosed, locked area. Each Earth Cube holds approximately 1.4 –yards. There are approximately <200 residents in the Town of Ophir. Ophir initially started with 2 Earth Cubes, but they quickly had to upgrade to 4 Earth Cubes, because they were filling the units much quicker than the 30 days required for them to sit/locked once full. Additionally, other indoor space is required to for the compost to “cure” after the 30 days each Earth Cube is locked.

I secured the Town of Ophir’s first two Earth Cubes through an CDPHE RREO Mini-Grant in fall of 2018. 2020 was going to be another year for RREO Mini-Grants, but that just recently got abolished due to policy changes at the State level.

In 2018, each Earth Cube cost right around \$8,500. Similar to Ophir, Mountain Village would likely need 4 Earth Cubes, for a total of approximately \$34,000. There are also larger Green Mountain composting units available. If this is a something the MV Green Team would like to pursue further, I would be happy to secure a formal quote from Green Mountain Technologies.

Thank you to the Green Team for considering these options for composting for Farm to Community Program participants and possibly other MV residents. I would love to be able to continue to compost my organic waste year-round. Thank you.



1301 36TH AVE WEST
 PO BOX 427
 ALEXANDRIA, MN 56308

PROPOSAL

Date	Estimate No.
8/6/2020	3319

Bill To
 Heather Knox
 Telluride, CO 81435

Ship To
 Heather Knox
 Telluride, CO 81435
 970-729-3362

Terms	PO
20%/PrePay	

Item	Description	Qty	Rate	Total
PROT03-03	Pro-Tilt Trailer, 3k, 8yd, Single Axle Sealed Back Door Bear Proof Lids Decals	1	11,300.00	11,300.00
PROT06-15	Pro-Tilt Trailer, 6k, 15yd, Single Axle Sealed Back Door Bear Proof Lids Decals Price delivered to Telluride, CO	1	12,690.00	12,690.00

I have examined the above information on equipment to be purchased from Pro-Tainer, Inc. and find this information to be correct. This form must be signed and returned to Pro-Tainer, Inc. before production will begin on this equipment. Proposal valid for 30 days.

Signature: _____ Date: _____

Subtotal	\$23,990.00
Sales Tax (0.0%)	\$0.00
Total	\$23,990.00

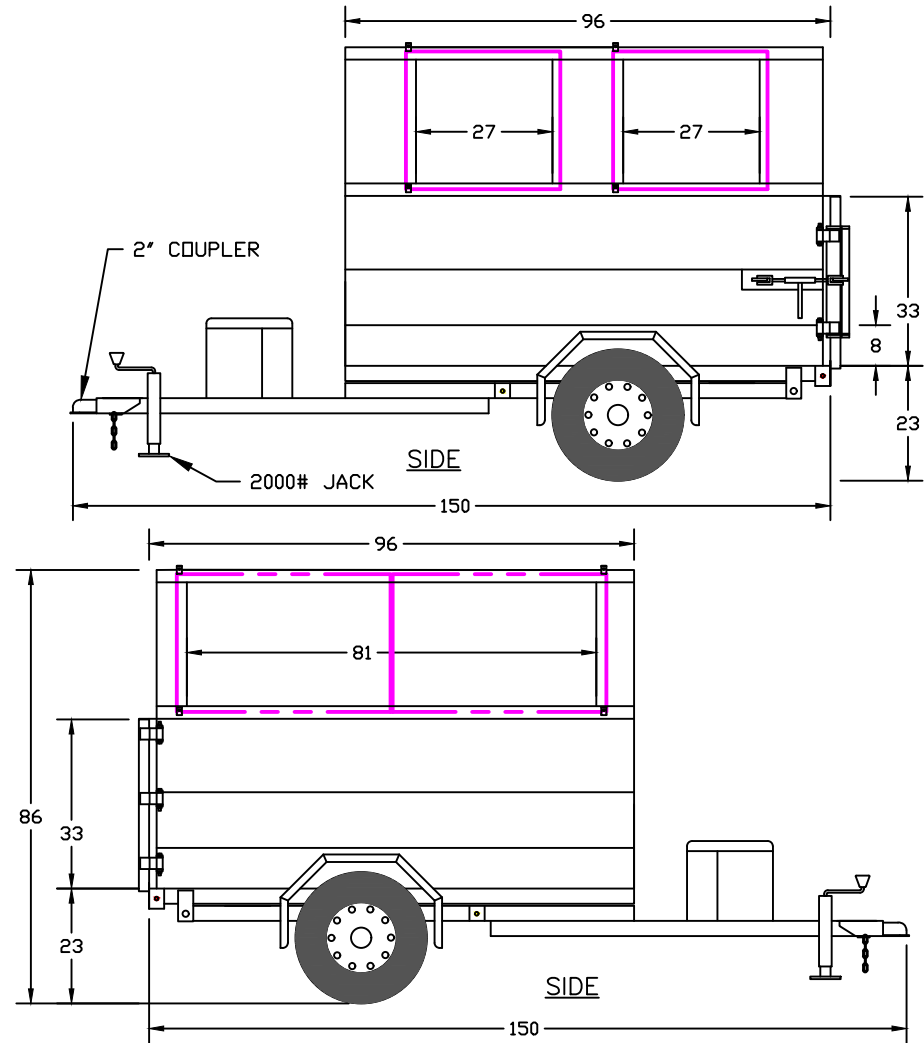
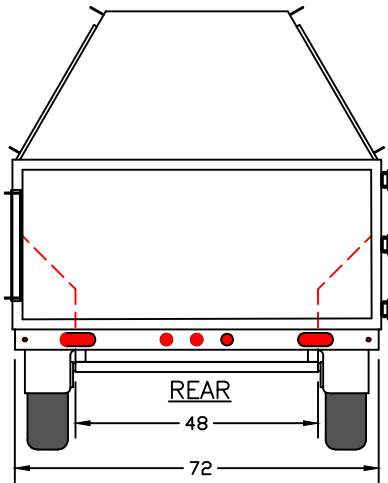
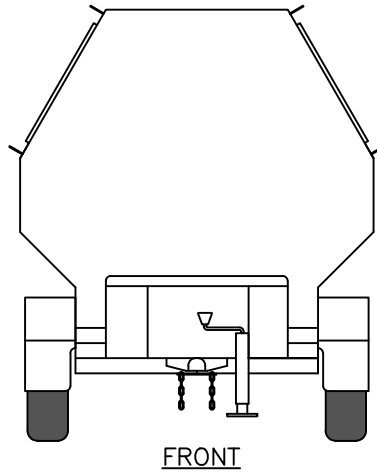
ACCEPTED BY: _____

(TITLE) ON _____
(DATE)

FOR: _____

COLOR: _____

SIGNATURE: _____



PROT-0308

THIS DRAWING AND IDEAS SHOWN ARE THE EXCLUSIVE PROPERTY OF PRO-TAINER AND ARE NOT TO BE USED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF PRO-TAINER

Pro-Tainer INC.
It's How You Haul It!
1301 36th Avenue West
P.O. Box 427
Alexandria, MN 56308
protain@protainer.com
1-800-248-7761
320-763-7550
Fax: 320-763-7667
www.protainer.com

PRO-TILT TRAILER

SIZE	DRAWING NUMBER	SK 233-16 REV2	7/19
B			
SCALE	1:16	DRWN BY	B Holm
		PAGE	1 of 1

Memo

To: Mountain Village Green Team

From: Heather Knox & Samantha Andrews

Date: September 4, 2020

Re: Pro-Tainer Trailer for Farm to Community & Other MV Composting

Thank you to the Green Team for considering purchasing the Pro-Tainer Trailer to collect Farm to Community Food Program organic waste for composting! The Pro-Tainer trailer, with its 8-yard volume, has capacity to collect and divert much waste from the Mountain Village. This trailer could serve the Farm to Community participants, and other residents or businesses that the MV Green Team/Town of Mountain Village prioritize for composting. Food waste from Mountain Village restaurants, MV Market, Village Court Apartments (or others), landscaping waste, shredded office paper and more could all potentially be diverted and composted!

In an effort to gather more information on actual use of the Pro-Tainer, I reached out to Megan Ossolo, one of the owners of The Butcher & Baker. The Butcher & Baker Restaurant applied for, and was awarded, a Telluride Green Grant to purchase an 8-yard Pro-Tainer Composting Collection Trailer in July of 2019. It was ordered, shipped and the Butcher & Baker Composting program has been in operation for nearly one year. The Pro-Tainer trailer is bear-proof; it is located behind the Butcher & Baker Restaurant in Telluride. The Butcher & Baker collects all of their organic waste in the trailer and then transports it to the Ossolo family farm in Montrose, CO where many of the vegetables for the restaurant are grown. Megan Ossolo was very helpful in providing information on the Pro-Tainer (please see attached).

Sam Andrews, contractor for the MV Farm Community Food Program, and I, have gone through the information that Megan Ossolo provided – it is very helpful information! We are grateful that Megan took the time to answer these questions and share more information with us. It is also valuable to know there is a local resource who is having success with the Pro-Tainer. Although it does sound like the composting program is a lot of work, Sam continues to be committed/interested in moving forward with this potential composting project on her land. Sam owns land in San Miguel County, and no special permitting would be required; it would fall under the State of Colorado's regulation on "Backyard Composting", which allows composting of Type 1 and 2 feedstocks, with no more than 100 cubic yards in process at one time.

NOTE: Type 1 Feedstock is Vegetative waste, and other materials determined by the CO Department of Public Health and Environment to pose a low risk to human health and the environment. Type 2

Feedstock is Animal waste, manure, source-separated organics, food residuals and food processing vegetative waste.

If the Green Team/Town of MV does choose to fund the purchase of a Pro-Tainer Trailer, Sam would like to move forward with composting the waste from the Farm to Community participants, and other food/organic waste determined by Mountain Village to be the priority. Pre-consumer food waste from MV restaurants, and/or produce waste from the Mountain Village Market would likely have the greatest volume/impact, but it could serve whoever MV determines. If it goes forward, I recommend starting with one sector, getting that moving forward, review what's going well (or not), and then grow to other sectors to ensure success.

As stated, Sam Andrews is committed to accepting the MV compostable waste and managing the composting process on her land. She does have a tractor to unload the trailer (as Megan mentioned) if the Pro-Tainer motor cannot handle the weight. However, a more substantial motor might be available for an up-charge? Sam would like to have help in transporting the trailer to-from Norwood by Mountain Village a few times a month, or as needed. This could potentially happen through MV employees who drive MV company trucks to-from Norwood, or with the Norwood employee shuttle. This is obviously one of the details that would have to be solidified once it is confirmed if the Pro-Tainer will be in the 2021 Mountain Village Budget.

I hope this information is helpful to the Green Team. Again, thank you for considering this exciting project to divert significant food/green waste for composting!

From: megan ossola <meganossola@gmail.com>
Sent: Thursday, August 13, 2020 7:31 AM
To: hknox9500@gmail.com
Subject: Re: Composting trailer

- Is your trailer serving other parties besides just the Butcher & Baker? I thought maybe you were collecting for Ghost Town too(?), but I wasn't totally sure. Anyone else?

Yes. La Cocina, The Coffee Cowboy; I'm not sure if Ghosttown waste is making its way to us or not. Also, loads and loads of community members and a few lawn maintenance companies.

- How quickly does it get full and you have to dump it? Is transporting it a hassle? ie. Does it ride smoothly? Etc.

We dump once a week. Transport is not really a hassle, it gets heavy for sure. It rides pretty well. Our biggest problem is the motor/lift isn't strong enough for the weight. We have to use our tractor to help the lift.

- Is the amount of compost you are collecting overwhelming at all? Are you keeping up with the composting process?

No, it is not overwhelming; we have a great system. We are using the trailer to go to other farms in Montrose and collect manure and straw to mix in. The loads are not properly mixed with brown/green... we have to work that in separately.

- Are you collecting compost from restaurant diners or just pre-consumer waste?

Pre Consumer. People are not informed and they also just don't care enough to pay attention to make people scrape plates. If we had a grinder and a heater with our compost system we could compost more for sure. We just rely on the pile and turning it to compost.

- Any other feedback or input?

It is a lot of work that goes into the project as a whole. I think it works for us because it's an additional business for our farm, which not only needs the compost, but has the infrastructure to maintain it. We take care of it because we are invested in it on every level. You'd definitely need someone to oversee it that has a serious level of commitment to it.



AGENDA ITEM # 10

DATE: September 8, 2020

TO: Green Team & Mountain Village Town Council

FROM: Cath Jett, Green Team Chairperson

SUBJECT: CREATION OF SUSTAINABILITY DEPARTMENT

The Green Team recommends to Town Council the creation of a Sustainability Department. This department would be headed by a Director who would report directly to the Town Manager and would require additional staff to develop, present, and manage all aspects of the Town's Environmental Initiatives: - residential, commercial, and municipal.

The responsibility of this department would be for sourcing renewable energy, creating, implementing, and managing a zero-waste program, allocation of "REMP" monies to city projects, and approval authority over any purchases required to meet the goals of the Town.

It has become imperative to create this department because the environmental goals that were previously created are being overlooked.

- In July of 2017, the Green Team was formed to "encourage the Town's community to appreciate and preserve the natural world and to invite and facilitate positive change in the conservation behavior of the community and its members by sharing knowledge and resources and advise the Town Council on matters related to environmental quality."¹
- It is also a "non-binding" group, which essentially means that none of what the Green Team does requires implementation.
- The Town's internal sustainability initiatives are managed by the Human Resources department, while the Green Team is supported by the Communications and Business Development Department.
- There is a misconception within the Town Council that the Green Team is to act as an employee of the town.
- Eco Action Partners (EAP), the current sub-contractor to help implement Green Initiatives and Behaviors for the Town and to measure the Green House Gas Inventory, has been without an Executive Director since December of 2019. The COVID outbreak also affected their ability to create and monitor current programs.

These issues are preventing the Town from moving toward the Zero Waste Goals that were

¹ Mountain Village Green Team Bylaws, revised and adopted on December 12, 2019

approved by Town Council in 2008. The deadline for these goals is 2025.

The issues have also minimized the ability for the Town to reach its goals of decreasing Green House Gas Emissions by 26% by 2025. This action joined Mountain Village with other Colorado Communities to meet then-Governor John Hickenlooper's initiatives that mirrored the U.S. Climate Alliance's Goals.

According to the journal "Science", the Colorado River Basin's natural flow has decreased by 20% between 1913 and 2017². This summer, the temperature increased by 2C. The risks of climate change can be significantly reduced by maintaining temperatures below the 2C increase.³ These changes will continue to impact our region through less snowfall and more severe and increased drought conditions throughout the year. These climate occurrences will impact us all financially - fewer skier days, less desirable golf conditions, more smoke, and haze from nearby fires...the list goes on.

The department could be funded in a variety of ways.

- Reconfiguring the current budget to eliminate subcontractors
- Billing for trash in-house and adding a use fee to trash collection
- Allocating funds that are currently directed toward the HR and Business Development Departments.

We have dropped the ball on the environment and we need to pick it up again and start moving forward.

It's time to make a change to save our Town - economically and environmentally - by taking these critical steps.

1. Must we change?

2. Can we change?

3. Will we change?

² Science, Vol 367, Issue 6483, 13 March 2020

³ <https://theconversation.com/a-matter-of-degrees-why-2c-warming-is-officially-unsafe-42308>