

CITY OF HELENA
Citizen Conservation Board
SPECIAL MEETING
Monday, December 4, 2023 from 4:30-6 pm
Zoom Online Meeting: <https://us06web.zoom.us/j/85855496682>
City-County Building, Room 426

Call to Order and Roll Call

Updates from City Staff – Miranda Griffis, Sustainability Coordinator, and Leea Anderson, Public Works Dept.

Special Meeting Items

- A. Consider Unfinished Business: Discussion and Prioritize Recommendations to send to the City Commission re: MT Priority Climate Action Plan**
 - 1. Public Comment
 - 2. Motion

- B. Consider Unfinished Business: Discussion and Prioritize Recommendations to include in the CCB Annual Report to the City Commission (due 1/10/24 with presentation 1/17/24)**
 - 1. Public Comment
 - 2. Motion

Member Communications/Proposals for Next Agenda

Public Communications

Announcements

Adjournment

The City of Helena is committed to providing access to persons with disabilities for its meetings, in compliance with Title II of the Americans with Disabilities Act and the Montana Human Rights Act. The City will not exclude persons with disabilities from participation at its meetings or otherwise deny them the City's services, programs, or activities.

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Phone: (406) 447- 8490

TTY Relay Service 1-800-253-4091 or 711 Email: citycommunitydevelopment@helenamt.gov

Mailing Address & Physical Location: 316 North Park Avenue, Room 445, Helena, MT 59623.

Conservation Board - Survey to Establish Priorities

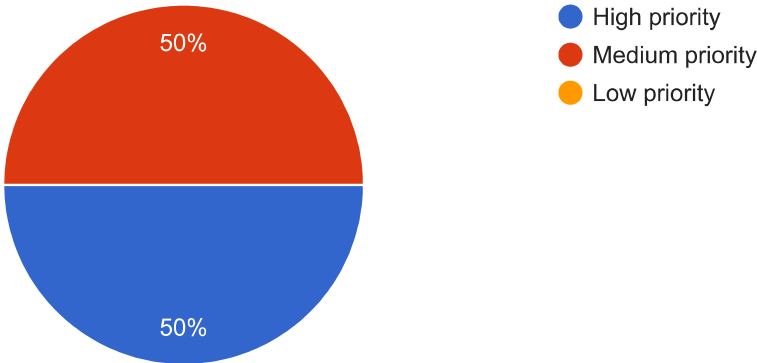
6 responses

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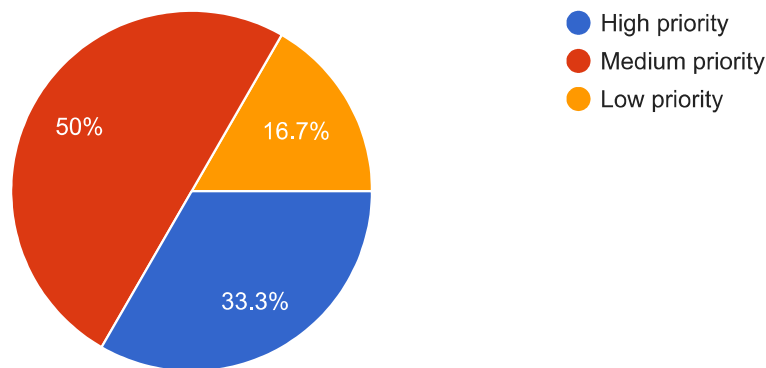
ENERGY: Prioritize upgrades to existing buildings to avoid upfront/embedded carbon emissions - City owned or funded as well as Privately-owned buildings (Prioritize upgrades to existing buildings to avoid upfront/embedded carbon emissions; Electrical upgrades to allow for building electrification; Heating and cooling upgrades (heat pumps); Hot water (heat pump water heaters); Envelope tightening and insulation; High performance windows and doors; High performance requirements for new city buildings and funding to assist; and Passive House standards preferred.)

6 responses



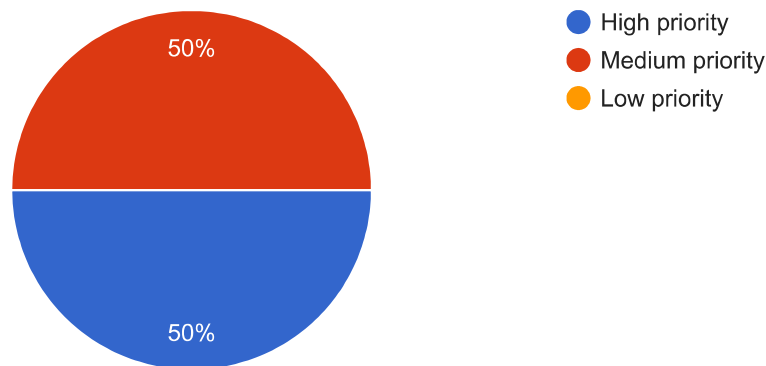
TRANSPORTATION: Mode shifts (bikes, e-bikes, walking, etc.) are very important and readily available. Funds should be provided to enable such shifts (Sidewalk infill and upgrades or new sidewalks where they don't already exist; Prioritize based on safe routes to school, access to essential services (grocery, pharmacy, etc.), equity; Protected bike lanes (so all people traveling by bicycle feel - and are - safe); Incentives for workplace charging infrastructure for private EV users (to shift peak charging to daytime when demand is lower and solar renewable energy production is higher); Funds to build charging stations and infrastructure for multifamily housing; Incentives for e-bikes (rebates, etc.); Incentives for carpooling; Incentives to avoiding driving).

6 responses



TRANSPORTATION: Fleet and Municipal Operations (Funding for electrical infrastructure improvements to allow EV charging; Charging equipment; Funding for replacement of ICE with EVs (fleet cars and trucks, four-wheelers, skip loaders, mowers, police cars, etc.); Buses for transit).

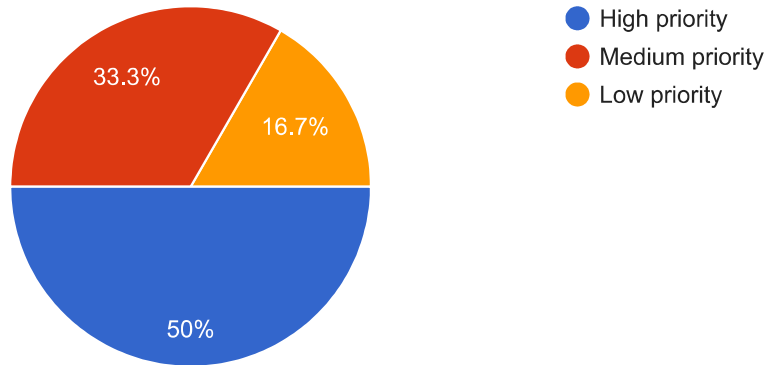
6 responses



SCHOOLS - if part of a coalition that could enable participation

(Buildings - efficiency and conservation; Buildings - electrification; Transportation - safe routes to school funding; Transportation electrify buses).

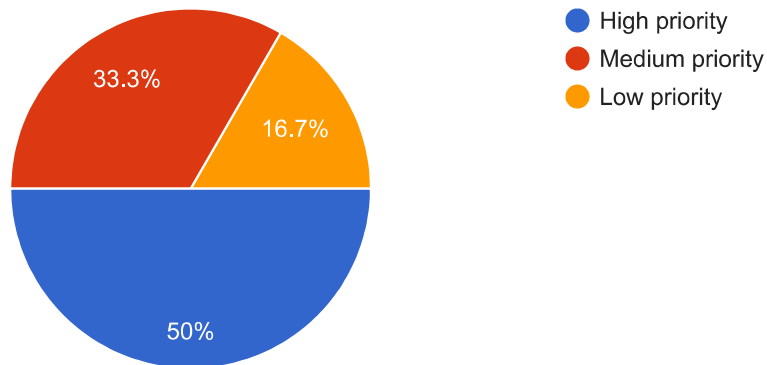
6 responses



COMPOSTING FOOD WASTE - decomposing organic material

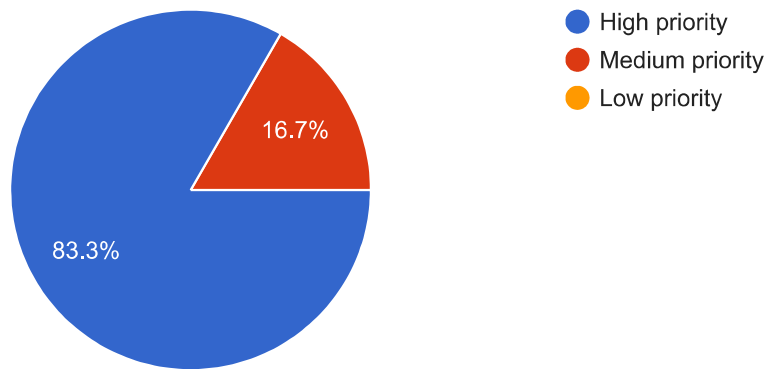
produces methane in landfills (Development of composting capabilities; Curbside pickup for composting; Facilitate unused food sharing).

6 responses



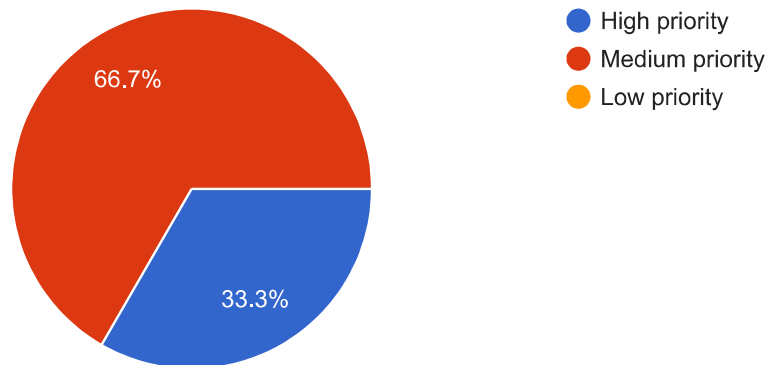
GREEN ELECTRICITY (Fund electrical infrastructure improvements to allow for solar or other renewable energy; Fund solar installations - both net metered systems, and behind-the-meter systems that would be appropriate for facilities with high demand during each day such as water and wastewater treatment plants; Cost share for renewable rate option, if approved by PSC in time; Fund zero-interest revolving loan program (like Helena's) to fund solar and energy efficiency projects for individual homeowners; Provide funds to implement SolarApp for solar permitting (to reduce cost and time spent for permitting solar).

6 responses



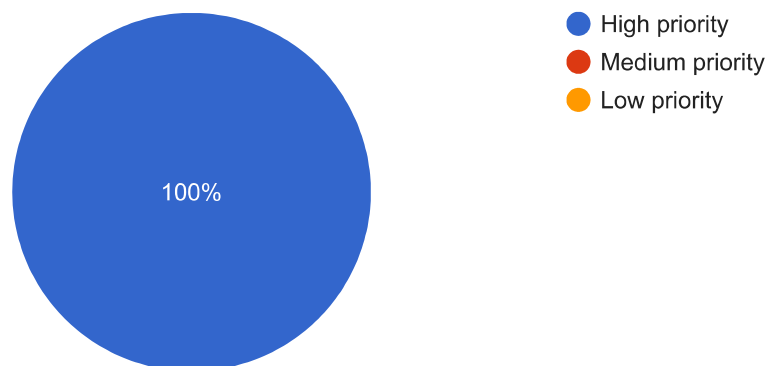
NATURE-BASED SOLUTIONS (Preservation and restoration of mature woodlands - outright purchase or conservation easement; Preservation and restoration of native grasslands - outright purchase or conservation easement); Preservation and restoration of wetlands - outright purchase or conservation easement; Increase canopy cover by planting trees along streets and other city properties - quick growing, long-lived species preferred); Implementation of green infrastructure systems - such as bioswales, rain gardens, tree trenches).

6 responses



WATER AND ENERGY CONSERVATION: WTR-3 from the City's 2009 Climate Action Plan (Recommend City policy that all landscaping on City owned and managed properties be low water, drought-resistant native and/or climate-appropriate species; Develop outreach and education program and incentives for area residents).

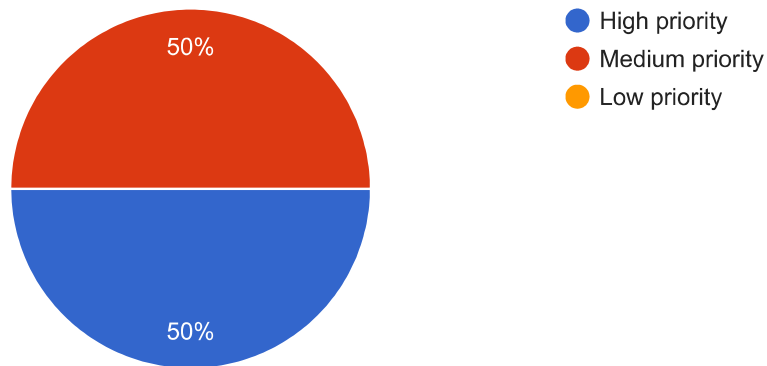
6 responses



GREEN TEAM: IMP-2 from the City's 2009 Climate Action Plan

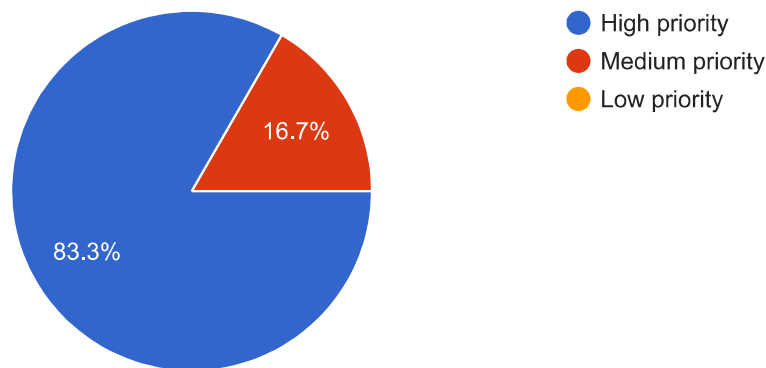
developed by the CAP Task Force ("...recommends forming a Green Team of staff from each City Department to ensure implementation of the Task Force recommendations, and to ensure input from City staff in the ongoing development of effective sustainability policies and practices...Green Team participation should be integrated into day-to-day City business creating efficiencies and cost savings.")

6 responses



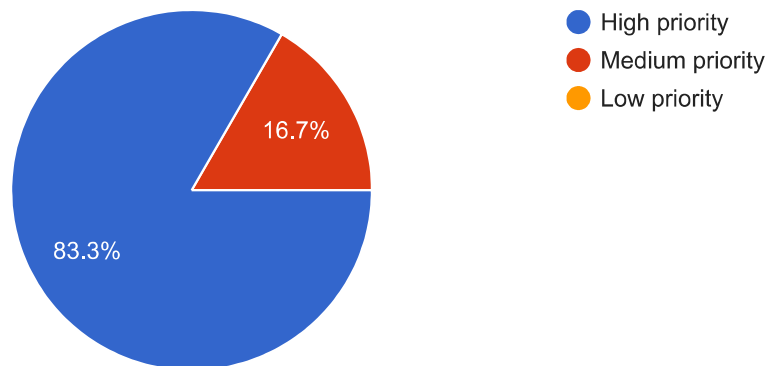
FULLTIME SUSTAINABILITY COORDINATOR: IMP-1 from the City's 2009 Climate Action Plan developed by the CAP Task Force ("To ensure implementation of the individual recommendations... related to both municipal and city-wide GHG reductions and water conservation, the Task Force recommends": Administer energy and conservation grants; create programs and policies that promote environmental sustainability; Track implementation of sustainability recommendations; Coordinate with the Green Team; Report on savings related to GHG emissions, water, energy, fuel, etc. in annual report to the Commission; Coordinate with MDEQ; Seek additional funding; and Staff and coordinate with the Green Team and Citizen Conservation Board).

6 responses



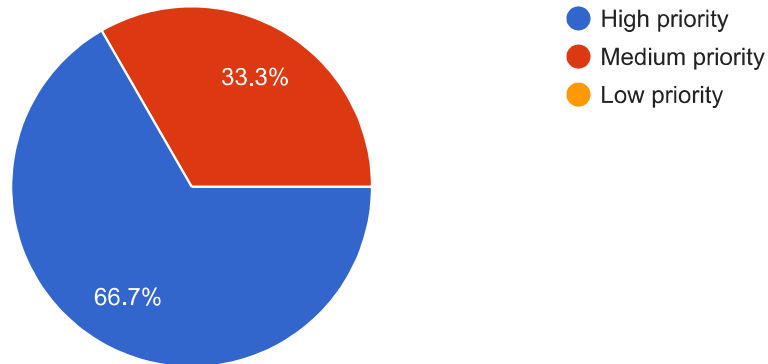
ENCOURAGE USE OF REUSABLE BAGS: RWRP-5 from the City's 2009 Climate Action Plan (Outreach to local businesses to encourage (recent State legislation prohibits any mandate or requirement) the use of reusable bags. Several local businesses have already adopted this practice voluntarily).

6 responses

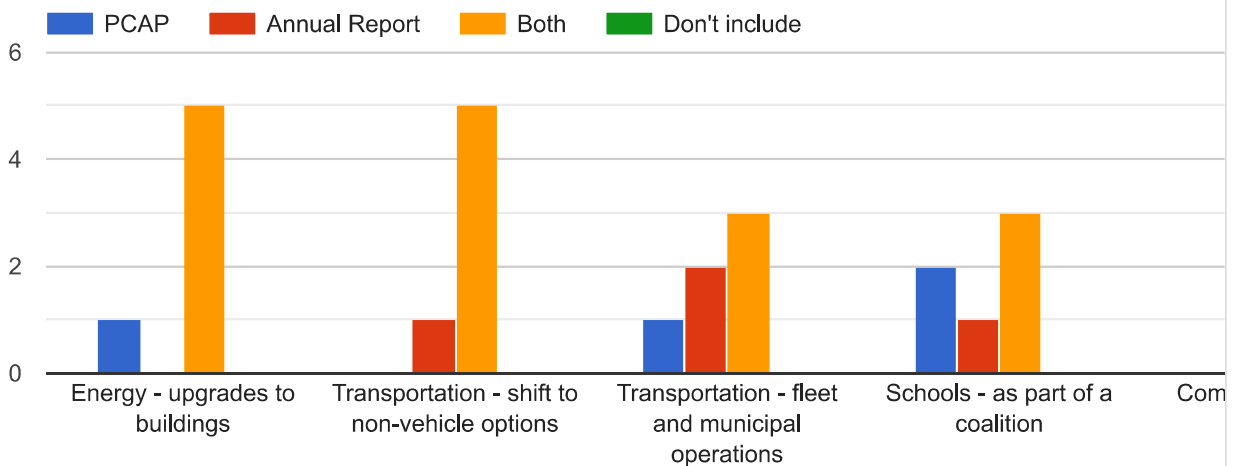


ENCOURAGE USE OF REUSABLE WATER BOTTLES AND INVEST IN A MOBILE REFILLING STATION: RWRP-6 'Back to the Tap' from the City's 2009 Climate Action Plan (Outreach to local businesses to *encourage* (recent State legislation prohibits any mandate or requirement) the use of reusable bags. Several local businesses have already adopted this practice voluntarily).

6 responses



As a CCB, we are working on recommendations for the State's PCAP (Priority Climate Action Plan) and our Annual Report to the City Commission. Of these topics, please indicate if you think the topic should be included in the: 1) PCAP; 2) Annual Report; 3) Possibly Both; or 4) Neither.



Other ideas? Please explain and indicate if it's a High/Medium/Low priority and if it should be part of the PCAP or Annual Report.

6 responses

We shouldn't be charging people to go to the dump to recycle. Every time I drop off my recycles, I have to pay 6 dollars. It's annoying because why am I being charged 6 dollars to protect the earth. I know from neighbors that they say why recycle when they make you pay for a good cause. High Priority.

None

Offer/find an alternative to dumping excessive calcium/sodium chloride on our streets all winter. It is hard on the environment (plants and amphibians), requires more clean up in spring as well as road repair, and requires replanting/replacement of grasses and trees near roadways.

HIGH priority for both reports

x

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I'd like our annual presentation to the Commission to include thoughts/suggestions about how we can better work together - the CCB, Commission, City Manager, City Staff, etc. to achieve the City's goals of water, waste, and energy and create a more sustainable, resilient, and climate-friendly city.

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Google Forms





Climate Action and Sustainability Plan 2023-2026

Helena Citizens Conservation Board

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Introduction

The Helena Citizens' Conservation Board (CCB) was created by the City Commission in 2017 (Resolution #20375 with a sunset date of sixty months after the first meeting) when the City signed on to the Paris Climate Accord (Resolution #20347).

The CCB was initially comprised of fourteen members, representing various fields i.e., Water/Watershed (2); Business/Building Industry (2); Environmental Organizations (2); Student Leaders (2); At-large (2); Earth Sciences Educator (1); Professional Engineer (1); Healthcare Community (1); and the Helena Citizens Council (1) and appointed by the City Commission.

The CCB is charged with making recommendations regarding sustainability and climate action to the City Commission. The CCB is building upon the research and recommendations of the Climate Action Task Force and its 2009 Climate Action Plan for the City of Helena.

The original CCB met for five years (January 2018-December 2022) and established four main Committees:

Executive (Chair, Vice, and Sec.)

Energy and Transportation

Waste Reduction

Water Conservation

During those five years, the CCB made several recommendations to the City Commission and took actions, resulting in:

- Creation of a full-time Sustainability and Recycling Coordinator position
- Resolution #20592 calling for 100% Clean Electricity by 2030 (80% by 2025)
- Resolution #20643 calling for 50% Waste Reduction in Helena by 2040 and 35% waste reduction by 2030
- Creation of a Strategic Plan for Waste Reduction outlining a menu of options to achieve Helena's waste reduction goals.
- Publication and distribution of a WaterWise Booklet to promote water efficiency and climate-appropriate planting and irrigation
- Installation of a Demonstration Xeriscape Garden at the Law and Justice Building with plans for additional demonstration projects
- WaterWise Workshops and Utility Bill inserts and displays to promote water conservation and efficiency

• Others to add?

New Conservation Board

In early 2023, the CCB was dissolved according to its sunset date of January 2023, and a new Conservation Board was established. The CCB now has nine At-large members. The current Board members are:

Lori Fitzgerald (new CCB appointee;
1-year term, expiring 2/28/24);

Diana Hammer (original CCB appointee;
1-year term, expiring 2/28/24);

Dick Sloan (original CCB appointee;
1-year term, expiring 2/28/24);

Mark Juedeman (former CCB appointee;
3-year term, expiring 2/28/26);

Devon Malizia (new CCB appointee;
3-year term, expiring 2/28/26); and

Nora-Paige McFadden (new CCB appointee;
1-year term, expiring 2/28/24)

Jason Selong (new CCB appointee;
3-year term, expiring 2/28/26)

At-large member - vacant

At-large member - vacant



Xeriscape Demonstration Garden at the Law and Justice Building on Fuller Street, Helena

Energy and Transportation

The Energy and Transportation Committee offers advice and recommendations to the Citizen Conservation Board, and ultimately to the Helena City Commission and Mayor, regarding mitigation of emissions associated with City and community transportation and energy use and adaptation of energy and transportation infrastructure to the impacts of climate change.

CCB Energy and Transportation goals

1. Prioritize activities first by City emissions sector (in order, highest to lowest: Electricity, Transportation, Natural Gas, Employee Commute, Waste), **and then Community emissions sector** (in order, highest to lowest: Transportation, Electricity, Natural Gas, Waste) **and then develop strategies to address each.**

2. Within the City emissions sectors, consider both working with individual departments and working with the Commission to provide policy guidance through resolution.

The Sustainability Coordinator has a key role to play, but given the division of duties between Sustainability and Recycling, and half-time each, support from the Energy and Transportation committee will be vital. There is much to do, and so little time, and the position deserves to be both expanded and moved to a more strategic position within the City organization.

Goal: 2020 Goal by City Commission resolution: achieve 100% Clean Electricity (for City operations) by 2030, with an interim goal of 80% by 2025.

3. Within the Community emissions sectors, the City can play several roles.

City government can consider infrastructure improvements that make emission reduction easier (such as biking, walking, charging EVs).

The City can direct funds (perhaps federal) to incentivize actions that reduce emissions (such as support for carpooling or using e-bikes for commuting). It can provide information and educational outreach. The City can lead by example.

4. Most of all, the City should prioritize action on climate mitigation and adaptation. It should act as if there is a climate emergency—because there is—and be the leader in Montana commensurate with being the Capital City.

This may take the form of a package of Commission resolutions which would initiate quick, decisive, and effective action by City government.

Waste Reduction

The Waste Committee of the Helena Citizens Conservation Board (CCB) is working to help the City significantly reduce the amount of waste generated in the greater Helena community, following the Waste Reduction Hierarchy and the principles of the 5 Rs: Refuse, Reduce, Reuse, Recycle, and Rot.

Waste Reduction Strategies:

1. Work closely with the City Commission, City staff, the public and businesses to ensure that the City achieves its Waste Reduction Goals
2. Closely monitor and advance the City's implementation of the Strategic Waste Reduction Plan developed by Zero Waste Associates
3. Represent the CCB on the Integrated Solid Waste Master Plan Steering Committee
4. Engage with the Public to help educate and advocate for waste reduction/diversion measures

Goal: Reduce the City's Waste 50% by 2050 with an intermediate goal of 40% by 2040.



Water Conservation and Efficiency

The Water Conservation and Efficiency Committee is working to reduce water consumption and increase water efficiency in Helena.

Strategies to accomplish this include:

1. Outreach and Education

- Target homeowners: workshops, garden tours, xeriscaping, flyers, etc.
- Target businesses and large institutions and water users: conservation information, incentives
- City website should be a useful resource; social media

2. City Policy/Planning - Recommendations

- Water Master Plan (complete 2022) and Wastewater Master Plan (update in progress) to develop a long-term Comprehensive Water Management Plan (per capita water, growth, annexation, future development, etc.)
- Tiered water rates (targeting the largest water users - businesses, Parks, Carroll, State of MT, etc.)
- Use revenue from increased water rates to fund Outreach and Education activities, provide water conservation incentives
- Develop a City policy requiring low water use and xeriscaping policy on City Properties
- Hire City Water Conservation Specialist

Goal: Reduce average consumption to less than 100 gallons/person/day;

2019 water use: 154 gallons/person/day

Goal: By 2026, change the culture/mindset about how Helena considers water use.

Metric: 50% of users reduce summer water use by 50%

3. Partnerships/Community/Actions

- Lake Helena Watershed Group, Water Quality Protection District, and other organizations re: WaterWise best practices
- Partner with City - websites, water bill inserts, outreach and education
- Partner with others (TBD) to participate in/sponsor/hold events

4. Infrastructure

- Water Meters - meter replacement and update in progress; leak detection
- Tracking City water line replacements to increase efficiency, fix leaks and reduce loss
- Stormwater capture and management (green infrastructure and other opportunities)

Next Steps



DRAFT



Appendix

DRAFT

CCB Work Plan/Work Sheet for Energy and Transportation Committee

Members: Pat Judge, Mark Juedeman, Dick Sloan, Brian Solan, Paden Wallace, Paul Pacini

Description of Committee's work/issue area: The Energy and Transportation Committee offers advice and recommendations to the Citizen Conservation Board, and ultimately to the Helena City Commission and Mayor, regarding mitigation of emissions associated with City and community transportation and energy use and adaptation of energy and transportation infrastructure to the impacts of climate change.

Goal: 2020 Goal by City Commission resolution: achieve 100% Clean Electricity (for City operations) by 2030, with an interim goal of 80% by 2025.

- Start with the WHAT. 'Back cast' and ask: what do we need to accomplish in the next two years to make these accomplishments by 2026? What big things need to happen in 2023? 2024?
- What will have the biggest impact? What is doable? What are our short-, medium-, and long-term actions? What are our goals?

1. Prioritize activities first by City emissions sector (in order, highest to lowest: Electricity, Transportation, Natural Gas, Employee Commute, Waste), and then Community emissions sector (in order, highest to lowest: Transportation, Electricity, Natural Gas, Waste) and then develop strategies to address each.

2. Within the City emissions sectors, consider both working with individual departments and working with the Commission to provide policy guidance through resolution. The Sustainability Coordinator has a key role to play, but given the division of duties between Sustainability and Recycling, and half-time each, support from the Energy and Transportation committee will be vital. There is much to do, and so little time, and the position deserves to be both expanded and moved to a more strategic position within the City organization.

3. Within the Community emissions sectors, the City can play several roles. City government can consider infrastructure improvements that make emission reduction easier (such as biking, walking, charging EVs). The City can direct funds (perhaps federal) to incentivize actions that reduce emissions (such as support for carpooling or using e-bikes for commuting). It can provide information and educational outreach. The City can lead by example.

4. Most of all, the City should prioritize action on climate mitigation and adaptation. It should act as if there is a climate emergency—because there is—and be the leader in Montana commensurate with being the Capital City. This may take the form of a package of Commission resolutions which would initiate quick, decisive, and effective action by City government.

- Then think more specifically about the HOW and WHEN to achieve the WHAT.
Set SMART goals (Specific, Measurable, Achievable, Relevant, Time-based)

What and who do we need to meet these goals? Be as specific as possible.

- Next, begin filling in the worksheet below.

2023

What/Action	When (dates? short-, med-, long-term?)	How	Who (lead)	Partners	Critical Needs/ Challenges	Notes
Aggressive Solar Project expansion	Mid 2023	Identify opportunities for roof or ground-mount systems on City property, to be followed by proposals in 2024	Sustainability Coordinator	Facilities E&T Committee	Understand IRA funding opportunities, timelines, and process	<p>Aim to size at 50kW cap</p> <p>Investigate economics of 2-axis tracking at 50kW cap</p> <p>Look into exceeding cap with behind-the-meter systems</p>

What/Action	When (dates? short-, med-, long-term?)	How	Who (lead)	Partners	Critical Needs/ Challenges	Notes
Energy Performance Contract	Early 2023 (input to budget) Late 2023-2024 (send out RFPs and select Energy Service Provider)	Ensure that FY2023 budget has funding for Investment Grade Audit	Sustainability Coordinator			
Participation in Green Tariff Program	Early 2023 (input to budget)	Ensure that FY2023 budget has funding for support of Green Tariff program development in concert with Bozeman and Missoula	Sustainability Coordinator			Possible that Green Tariff is already not an option
Re-engage with NWE regarding Helena pilot	Early 2023		Interested E&T Committee member	NWE Sustainability Coordinator		Push for solar or solar+storage?
Require high performance buildings and solar for City-associated affordable housing	Mid 2023	Draft resolution for Commission establishing minimum standards for performance (including heat pumps) and solar for buildings funded by City	E&T Committee	Sustainability Coordinator Facilities?	Will certainly require review by City attorney	Part of resolution package? Mid 2023 date so that Commission can action by Late 2023

What/Action	When (dates? short-, med-, long-term?)	How	Who (lead)	Partners	Critical Needs/ Challenges	Notes
Fleet Electrification (by Commission resolution)	Mid 2023	Resolution to require that replacement of any fleet vehicle will be electric by default, unless case can be made that ICE is required	E&T Committee	Sustainability Coordinator Fleet operator	Will certainly require review by City attorney	Part of resolution package? Mid 2023 date so that Commission can action by Late 2023
Identify opportunities to reduce emissions associated with employee commutes, such as incentives for carpooling, E-bike incentives, 4-day workweek, and work-at-home options	Late 2023	Work with HR to develop policies that will reduce commute-related City emissions	Sustainability Coordinator	HR Finance		
MSU Capstone Project(s) for local glass recycling	Propose Late 2022 (by Thanksgiving); work with students Spring Semester 2023	Propose MSU Industrial Engineering Capstone project(s) to remove glass contaminants and allow for recycling	Sustainability Coordinator	Dr. Sage Kittleman, MSU Energy and Transportation Committee		Presumes that students select proposed project(s)

What/Action	When (dates? short-, med-, long-term?)	How	Who (lead)	Partners	Critical Needs/ Challenges	Notes
		at Ashgrove Cement, and/or identify other uses for glass in local area. Work with students on whatever has been accepted.				
Increase funding for zero-interest solar and energy efficiency loan program and effectively promote	Early 2023 (input to budget)	Increase funding beyond \$60,000/year. Understand bottlenecks and friction in program that reduce participation, and correct. Actively promote the program through effective outreach.	Sustainability Coordinator	Finance PIO		May defer to early 2024 if it appears that IRA funding might be available
Anti-idling education program	Start developing Late 2023	Help to educate public about cost savings and pollution reduction associated with reducing idling.	Sustainability Coordinator	PIO		

2024-2026

Action	When (dates? short-, med-, long-term?)	How	Who (lead)	Partners	Critical Needs/ Challenges	Notes
Begin to implement aggressive Solar Project expansion	Early 2024: apply for USB funding and IRA funding for solar projects Early 2025: ensure that City budget includes match funding for solar projects	Obtain funding for projects, issue RFPs, build-out	Sustainability Coordinator	Finance Facilities Energy & Transportation Committee		Important to have a lead focal point who understands the programs funded by IRA and how to qualify and apply
Air Source Heat pumps in new City construction	Mid 2024	Establish by City Commission resolution a requirement to use heat pumps for heating and cooling in any new occupied City construction	Energy and Transportation Committee	Facilities, Sustainability Coordinator		Part of a package of Commission resolutions in 2023?
Building performance standards for new City buildings	Mid 2024	Establish by City Commission resolution a requirement to use or develop standards (LEED, Passive House, etc.) for City construction	Energy and Transportation Committee	Facilities, Sustainability Coordinator		Part of a package of Commission resolutions in 2023?

Develop and execute strategy to expand and complete active transportation (biking and walking) infrastructure	Develop strategy by late 2024, make sure that funding is in budget early 2025, implement starting late 2025.	Create a plan to infill gaps in existing bike and sidewalk networks, and figure out where new and expanded networks make sense	Sustainability Coordinator	Transportation Systems Department Community Development Active Transportation Board Bike Helena, AARP, etc.	Need to be holistic in design (integrated with all transportation systems)	IRA or Infrastructure Act funds are available?
Incentive program for E-bikes	Starting research Late 2024, implement by Late 2026	Research effective E-bike incentive programs and funding sources. Develop policy and communication plan. Implement.	Sustainability Coordinator	Transportation Systems Department? Community Development?		IRA funds available? Coordinate with build-out of bicycle network. Anticipate possible conflicts with bicycle users, and work to reduce such conflicts through education and policy.
Incentive programs for using carpooling, transit, or active transportation	Start research on programs effective elsewhere and possible funding options Late 2024,	Some communities have used reward programs (coupons, etc.) to incentivize mode	Sustainability Coordinator	?		

	implement by late 2026	shift. Research the effectiveness and cost of these programs, identify funding streams, and implement if warranted.				
Communicate available incentives from State or Federal government for energy efficiency, conservation, and renewables.	Mid 2024	Understand what incentives (rebates, tax credits, etc.) are available and effectively educate and communicate.	Sustainability Coordinator	PIO		
Support for Passenger Rail through Helena (if approved)	2024?	If Amtrak establishes long-distance southern Montana route, work to provide facilities and services such as a station.	Facilities?	Sustainability Coordinator		Potentially, lease existing depot from BNSF?
Electrify School Buses	Start planning Mid 2024	Work with School District to find funding (IRA) for buses and charging infrastructure	Sustainability Coordinator	State Energy Office (DEQ)		Proceed as IRA fund availability is understood.
Facilitate workplace EV charging	Start planning mid 2024	Develop a strategy to encourage	Sustainability Coordinator			Widespread adoption of EVs will require

		workplace charging though permitting changes, cost share, etc.				shifting charging from nighttime (at home) to during the day (at work) when renewable resources are more available, and demand is less.
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CCB Work Plan for Water Committee

10/13/22

Members: Stan Bradshaw, Diana Hammer, Patricia Heiser

Description of Committee's focus: Create and use Water Wise materials and activities to reduce water consumption and increase efficiency

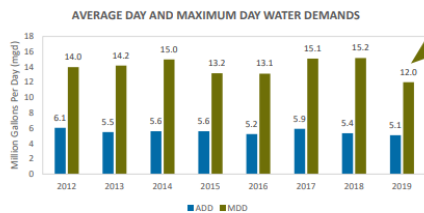
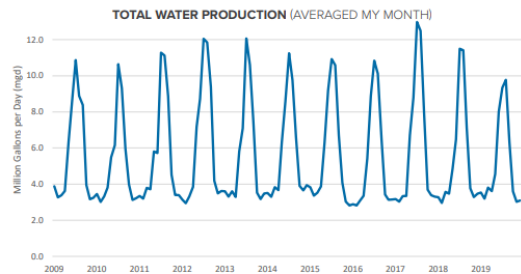
2009 CAP established water goal: **Reduce average consumption to less than 100 gallons/person/day**; 2019 water use: 154 gallons/person/day

Goal: By 2026, change the culture/mindset about how Helena considers water use. Metric: 50% of users reduce summer water use by 50%

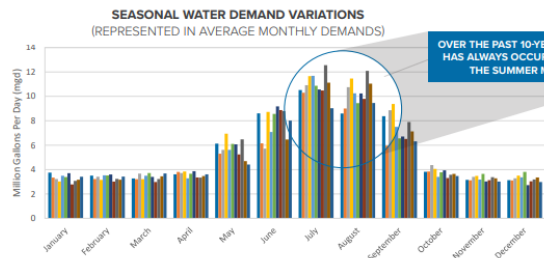


HOW MUCH WATER DO WE USE?

Water use characterization is critical when assessing the performance of the existing and future distribution system. Understanding how water is currently being used can help refine water conservation goals and establish strategies to better position the utility to meet future water needs.

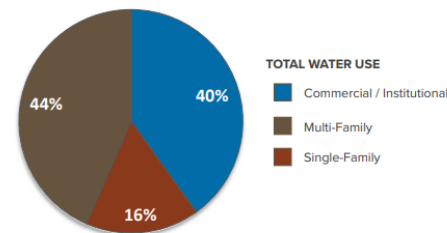


Peaking factors are calculated by dividing Maximum Day Demand (MDD) by the Average Day Demand (ADD). Based on past trends, a peaking factor of 2.8 is recommended for system design.



WHO ARE OUR CUSTOMERS & HOW MUCH WATER ARE THEY USING?

Understanding where the City's water is delivered after treatment, and the quantity your customers need is important when estimating future water demands.



In 2019, the average per capita demand = **154 GALLONS PER CAPITA PER DAY**



HOW MUCH WATER WILL WE NEED?

Water demand projections are important when sizing future infrastructure and developing capital improvement plans. Future demands were estimated by defining the volume of water needed for an Equivalent Residential Unit (ERU) based on historical water use and projecting that into the future based on the expected growth rate. Additional maximum day demands for each future growth area as well as total future water demands for the City are shown below.

- SOUTHEAST HELENA**
0.29 MGD BY 2025
0.94 MGD BY 2040
- NORTH HELENA**
0.10 MGD BY 2025
0.31 MGD BY 2040
- CENTRAL & NORTH VALLEY LONG-TERM EXPANSION AREAS**
CENTRAL = 6.5 MGD AT BUILDOUT
NORTH = 1.9 MGD AT BUILDOUT

TOTAL FUTURE WATER DEMANDS

Year	Average Day Demand (ADD) [mgd]	Maximum Day Demand (MDD) [mgd]
2018	5.4	15.2
2025	5.6	15.6
2040	5.9	16.4

Create and use Water Wise materials and activities to reduce water consumption and increase efficiency

2009 CAP established water goal: **Reduce average consumption to less than 100 gallons/person/day**; 2019 water use: 154 gallons/person/day
Goal: By 2026, change the culture/mindset about how Helena considers water use. Metric: 50% of users reduce summer water use by 50%

1. Outreach and Education

- Target homeowners: workshops, garden tours, xeriscaping, flyers, etc.
- Target businesses and large institutions and water users: conservation information, incentives
- City website should be a useful resource; social media

2. City Policy/Planning - Recommendations

- Water Master Plan (complete 2022) and Wastewater Master Plan (update in progress) to develop a long-term Comprehensive Water Management Plan (per capita water, growth, annexation, future development, etc.)
- Tiered water rates (targeting the largest water users - businesses, Parks, Carroll, State of MT, etc.)
- Use revenue from increased water rates to fund Outreach and Education activities, provide water conservation incentives
- Develop a City policy requiring low water use and xeriscaping policy on City Property
- Hire City Water Conservation Specialist

3. Partnerships/Community/Actions

- Lake Helena Watershed Group, Water Quality Protection District, and other organizations re: WaterWise best practices
- Partner with City - websites, water bill inserts, outreach and education (videos, PSAs, etc)
- Partner with others (TBD) to participate in/sponsor/hold events

4. Infrastructure

- Water Meters - meter replacement and update in progress; leak detection
- Tracking City water line replacements to increase efficiency, fix leaks and reduce loss
- Stormwater capture and management (green infrastructure and other opportunities)

2022 - 2023

What/Action	Fall 2022	Winter 2023	Spring 2023	Summer 2023	Fall 2023
Outreach to Large Water Users to promote water conservation	Review 2018 Water Use Report and draft Plan by December 1, 2022	Reach out to larger water users with Tips			
Xeriscape Plan for Law & Justice Campus, Blvds, and Parking Lots	Fall 2022; initial meeting by 11/1/22	Work with Facilities and Develop Plan	Signage installed	Implement?	
Water Rates Study	Fall 2021-?				
Water and WasteWater Rate Changes - Oppty	Before Tiered Rate changes/decision announcement				
Water Master Plan	Fall 2021-2022 (+review 2020 Master Plan)				
WasteWater Master Plan	Fall 2021-?				
Per Capita Water Use Goal - average annual + summer use?	November 2022				
WaterWise Workshops		Revise 2021 Workshop .pptx and post to Resilient Helena website	In-person Workshops offered March 7, 21, and April 4 at MT Wild 6:30-7:30 pm		
Virtual WaterWise Garden Tour	Work with City on Virtual Tour/Story Map	Add sites and finalize	Ready to launch in March 2023		
Identify Potential Xeriscape Sites - public/private property; City Parks?			March 1, 2023		
WaterWise City Policy(ies)			Initiate by March 1, 2023; in place by March 1, 2024		

What/Action	Fall 2022	Winter 2023	Spring 2023	Summer 2023	Fall 2023
Water Bill inserts			June	August	
WaterWise Garden Tour				July-August	
Water Conservation Window Display				August 1-31	
Update Work Plan for 2024-2026					

2024-2026

Action	2024	2025	2026
Secret Garden tour includes xeriscaping and WaterWise Gardens	Explore/Coordinate in person Tour		
Policy recommendation re: waterwise landscaping and watering practices on city properties	initiate early 2023; implement 2024		
Green Infrastructure demonstration sites in City	Identified in 2023; Recommendations to City by Spring	Additional sites installed in City	Additional sites installed in City
Rainwater capture / diversion from downtown properties (Flash floods –capture and use rainwater; reduce surge and need to treat rainwater when combined in the sewer system and additional impact on WWTP)	Early 2024 Research solutions; then initiate discussions with City		
Water meter upgrades and online billing	In progress		
City Gray Water Policy Regs and Permitting Process			
Continue to engage with City on current long-term planning efforts			

CCB Work Plan for the Waste Committee

Members: Ann Brodsky and Denise Barber, Co-Chairs with input from Diana Hammer, Becca Boslough, Patricia Heiser

11/3/22

Description of Committee’s work/issue area: The Waste Committee of the Helena Citizens Conservation Board (CCB) is working to help the City significantly reduce the amount of waste generated in the greater Helena community, following the Waste Reduction Hierarchy and the principles of the 5 Rs: Refuse, Reduce, ReUse, Recycle, and Rot.

Goal: Reduce the City’s Waste 50% by 2050 with an intermediate goal of 40% by 2040.

Strategies to achieve this goal:

1. Work closely with the City Commission, City staff, the public and businesses to ensure that the City achieves its Waste Reduction Goals
2. Closely monitor and advance the City’s implementation of the Strategic Waste Reduction Plan developed by Zero Waste Associates
3. Represent the CCB on the Integrated Solid Waste Master Plan Steering Committee
4. Engage with the Public to help educate and advocate for waste reduction/diversion measures

What/Action	When (Dates? Short-term, medium-term, long-term?)	How	Who (lead)	Partners	Critical Needs/Challenges	Notes (Category)
Meet regularly with the Sustainability Coordinator/PWD to help identify educational programs as part of Phase 1 of the SWRP	2022+					Education
Post waste reduction educational messages on the	2022+					Education

Resilient Helena website and Zero Waste MT FB pages						
Write/submit editorials to the IR on what individuals can do to reduce their waste stream.	2022+					Education
Continue exploring the idea of a website that is fully dedicated to all waste reduction efforts in the City and County, including by private entities	2023+					Education
Help City begin to communicate/promote the concept of universal curbside recycling/compost	2023+					Education
Develop a wish list for the Master Plan (for ex: a recycling sorting center, city/county composting operation, expansion of the C&D recycling facilities available in the Helena area (i.e. for drywall specifically) etc.	11/18/22					Master Plan
Continue involvement with the development of the City/County Waste Master Plan	2022+					Master Plan
Continue engaging with other community groups outside of Helena/L&C County to learn from and support (Missoula,	2022+					Outreach

Glacier County Climate Task Force, etc)						
Continue participating in the WasteNotWorkingGroup (WNWG)	2022+					Outreach
Help conduct the WNWG's survey of downtown restaurants and bars to learn of challenges/interest in waste reduction	2022+					Outreach
Engage with business community (ReStore, Recycling Companies, Restaurants, Hospital, etc.) to help them reduce their waste stream	2022+					Outreach
Develop/implement outreach plan to work with large waste producers - Helena School District, Carroll College, St. Pete's, Airport, State/County/City offices	2023+					Outreach
Research adoption of a Skip The Stuff education campaign &/or ordinance	2022+					Policy
Consider advocating the City support legislation to repeal the 2021 Container Bill in the 2023 Legislature (IF there is statewide support/movement to do so)	2022+					Policy

Ask the City to put out more recycling bins in the community	2023+					Policy
Advocate that the City develop and follow Best Practices Procurement policies	2023+					Policy
Advocate that the SC position be re-configured so that 1/2 of their time is spent on waste REDUCTION and implementation of the SWRP, not 'just' Transfer station recycling logistics	2023+					Policy
Advocate for City adoption of Waste Prevention and Diversion (recycling, composting) in all municipal buildings, city-owned public spaces, and city-based events (p. 3-16 and B-12 to 14 in the Strategic Plan)	2023+					Policy
Research the fiscal impacts/adjustments that may be necessary as less waste goes to the landfill	2022+					Research
Explore possibility of funding (from EPA et al) for both the City and nonprofits to develop educational materials	2023+					Research