



## **Citizen Task Force Recommendations Final Report**

**Submitted to the Community Sustainability Advisory Board  
January 27, 2021**

### **Background**

Since 2007, Golden citizens have suggested ideas for more than 100 programs and policies to help the Golden community to become a more sustainable and vibrant place to live and work. Many programs were fairly simple (adding recycling to special events, improving energy efficiency of city buildings, adding circulator buses to connect people to the West Line Light Rail station, enhancing bike lanes and trails.) Others were part of a multi-year effort to ensure a customized approach for Golden (Pay-As-You-Throw residential waste collection, updating energy efficient building codes, investing in smart water meters for each home and business.) Throughout each initiative, Golden citizens play an important role in forming, refining, and supporting programs for our community.

In 2019, Golden City Council updated the Sustainability Goals to acknowledge past achievements and to set higher targets for conserving Golden's resources for future generations. With most of the "easy" projects done, the community now faces tougher choices about how the goals can be achieved between now and 2050. Tougher choices about lowering energy use, recycling even more materials and using water resources smartly and efficiently.

More than 80 participants met at 25 different meetings, starting in late 2019 and lasting throughout 2020. Residents, business owners, civic group leaders, employees and interested citizens worked to help prioritize projects, policies and programs. Additional comments were gathered through community feedback on the Guiding Golden website. These thoughtful conversations have been refined and condensed into the following table of recommendations for further analysis and potential action.

### **Next Steps**

The Community Sustainability Advisory Board will use this input to formulate the basis of policy recommendations to City Council over the next several years. The Board will periodically reach out to task force members to ask about voicing support for programs or policies as they are scheduled for review and potential adoption by City Council.

The Board and City staff wish to thank each of the participants who participated in person, online and who submitted email comments in this effort. Community input has been and will continue to be critical to the formulation of future sustainability programs.

## Recommendations

Table Legend	
Recommendations relating to:	
	Water goals
	Waste goals
	Energy goals

<b>Water Resiliency Group</b>		
Action	Key Components	Priority
Create Water Resiliency Plan	<ul style="list-style-type: none"> <li>Define resiliency in terms of water resources</li> <li>Engage consultant for assistance; develop RFP.</li> <li>Work with City planning and water departments to create plan</li> <li>Consider triggers for drought stages and identify areas where we can help prepare different community groups for next stages.</li> </ul>	Medium
Expand public education and outreach	<ul style="list-style-type: none"> <li>Include considerations for community signs or banner under Arch to link to education about drought stages, their meanings and impacts.</li> <li>Include information in water bills</li> <li>Include engagement to non-English speakers, commuting workers and employers.</li> <li>Outreach to HOAs</li> <li>Prepare best practice examples of homes, businesses and engage community leaders who are connected to neighborhoods.</li> </ul>	High
Recommendations from Golden Water Department	<ul style="list-style-type: none"> <li>Outdoor irrigation controller rebate (e.g. Rachio or other smart irrigation controller)</li> <li>Focus on outdoor irrigation at larger homeowner associations.</li> <li>Consider limited year round or seasonal water restrictions for specific uses.</li> <li>Update City ordinances pertaining to subsurface or drip irrigation and consider “waste of water” ordinance.</li> <li>Continue holding events such as water conserving national days, Earth Day, State of the River on Clear Creek.</li> <li>Update the City website to allow easier navigation of water page, billing and alerts; wider promotion of AquaHawk.</li> <li>Join Colorado Water Wise and other regional water conservation collaboration groups.</li> </ul>	High

<b>Indoor Water Conservation Group</b>		
<b>Action</b>	<b>Key Components</b>	<b>Priority</b>
Expand Aquahawk access to water users inside city, but served by other districts	<ul style="list-style-type: none"> <li>• Areas include Coors Technology Center (North Table Mountain Water District), Pleasant View Water District, Consolidated Mutual Water District, etc.</li> <li>• Ongoing education of residential water users on use of AquaHawk website and water conservation in general in conjunction with monthly water billing.</li> <li>• Design communication and messaging strategy in conjunction with Water department staff.</li> <li>• Produce youtube video on how to most effectively use AquaHawk.</li> <li>• Add water bill inserts to view video and install Aquahawk.</li> <li>• Create content and schedule monthly messages through summer to focus on outdoor water resources.</li> </ul>	High
Create a direct campaign for Aquahawk users to set an alarm at high usages	<ul style="list-style-type: none"> <li>• Automatic alarm with automatic contact to user or user-set.</li> </ul>	High
Create an educational program about conservation	<ul style="list-style-type: none"> <li>• How to track water use over time, typical problems, and resources for a water auditors. Create PowerPoint or video for website and for commercial customers.</li> </ul>	Medium
Consider residential leak detection device incentives	<ul style="list-style-type: none"> <li>• Such as Ecosense Aqua-miser to shut off fixtures if leaks or non-seals are detected.</li> </ul>	Medium
Create a Golden breweries water use collaborative challenge	<ul style="list-style-type: none"> <li>• Goal to make Golden the most water-efficient brewing city. Typically, 7-10 gallons of water is used to brew 1 gallon of beer, but a 3:1 ratio is a best practice.</li> <li>• Breweries could voluntarily participate, report their usage (brewed ratio) and share best practices.</li> <li>• Use collaborative to also address other sustainable practices such as alternatives to Styrofoam.</li> <li>• Recognize participating breweries with “super green” branding and benefits.</li> </ul>	High

<b>Water Reuse Group</b>		
<b>Action</b>	<b>Key Components</b>	<b>Priority</b>
Create Laundry To Landscape Program	<ul style="list-style-type: none"> <li>• Consider a residential retrofit incentives program that includes water audits.</li> <li>• Look at standards for reuse design for new construction. Add to City’s sustainability menu</li> <li>• Create program for homeowner and contractor education with resources.</li> </ul>	High

<b>Outdoor Water Conservation Group</b>		
<b>Action</b>	<b>Key Components</b>	<b>Priority</b>
Study homeowner association irrigation	<ul style="list-style-type: none"> <li>Assemble map, needs, challenges, and develop a program to remove barriers, provide incentives and potentially adopt regulations for larger areas.</li> </ul>	High
Understand outdoor use by type	<ul style="list-style-type: none"> <li>Beyond single family, look at multi-family, industrial, commercial and prioritize programs in terms of the best use of funds for potential conservation.</li> </ul>	High
Research drip irrigation and applicability in Golden codes	<ul style="list-style-type: none"> <li>Identify best practices from other communities and draft code language for consideration.</li> </ul>	Medium
Develop smart technology program for large users	<ul style="list-style-type: none"> <li>Research technology and incentives for large users such as Colorado School of Mines, Jefferson County's campus, Jeffco R-1 school district and larger HOAs. Describe the Fossil Trace golf course system.</li> </ul>	High
Implement an average household comparison education program	<ul style="list-style-type: none"> <li>Similar to Xcel's, consumption could be aggregated by neighborhood and comparisons inserted into water bills for homeowner information.</li> </ul>	Medium
Support the Parks department in efforts to convert certain areas to xeriscape	<ul style="list-style-type: none"> <li>Survey community for "green" preferences, e.g. areas with turf vs native vegetation and create plan for redevelopment including designs for lower water use vegetation or activities and estimate costs for future budget inclusions. Hire consultant for surveys and make recommendations.</li> <li>Identify areas that may need smart or additional rain sensor technology in City Parks, to add to their Rainbird IQ app.</li> <li>Use City parks best practices/lessons learned to pursue stakeholder engagement for private properties.</li> <li>Reevaluate 19<sup>th</sup> Street Lid to reduce water use after vegetation has been established.</li> <li>Identify and quantify water conservation efforts that Parks already uses; mow height policies, Rainbird sensors, ongoing irrigation maintenance to prevent leaks, irrigation timing, employee xeric or low water use training.</li> </ul>	Medium
Limit outdoor watering during daytimes	<ul style="list-style-type: none"> <li>Research other communities, best practices and consider ordinance language to prohibit outdoor watering during the hottest portions of the day.</li> </ul>	High
Expand the non-potable water system	<ul style="list-style-type: none"> <li>Evaluate in terms of energy efficiency and potential treatment water and energy savings.</li> </ul>	Medium
Hire consultant for revising watering policies	<ul style="list-style-type: none"> <li>Research irrigation accounts and make recommendations for X gallons per square foot of land. Consider using a methodology similar to Boulder's water budget policy of 15 gal/sq. ft.</li> </ul>	Medium

Analyze water data	<ul style="list-style-type: none"> <li>Hire an intern or consultant to assist with further refinement of water data to clarify user categories and analyze potential opportunities.</li> </ul>	High
Expand urban tree canopy mapping effort	<ul style="list-style-type: none"> <li>Quantify value of trees in relationship to water conservation, model scenarios for loss or expansion of tree canopy, consider public versus private tree values.</li> </ul>	Medium
Provide irrigation audits to larger users	<ul style="list-style-type: none"> <li>Consider irrigation audit program for users larger than what is covered by Resource Central's Slow The Flow residential program.</li> </ul>	High

<b>Waste Task Forces – Renew Residential Pay-As-You-Throw Contract</b>		
Action	Key Components	Priority
Add new services to Request For Proposals to solicit information and pricing on new options	<ul style="list-style-type: none"> <li>Optional bear-proof carts</li> <li>Better alley service, revisit moving from curb to areas that have alleys, use smaller trucks to ensure areas are served in snow conditions.</li> <li>More cart size options for recycling and organics</li> <li>Periodic electronic waste drop-off events</li> <li>Consider a once per month recycling service to consolidate appliances and add mattresses, metal and other less commonly recycled items.</li> <li>Include data we need for tracking progress toward goals and diversion rates.</li> <li>Cost estimate for purchasing all compost bins (lease to own, similar to waste and recycling carts, make them a different color?)</li> <li>Survey needed to current customers: what's working, what do people want?</li> <li>Look a different options for compost collection (include as 3<sup>rd</sup> stream, different cart size options, colored carts, spring through fall only?)</li> <li>What services provided through the annual Community Pride Days can be shifted to the curbside program?</li> </ul>	High

<b>Waste Task Force groups (consolidated recommendations from residential group, commercial group and single use plastics group due to commonalities across recommendations.)</b>		
Action	Key Components	Priority
Expand education about recycling and compost	<ul style="list-style-type: none"> <li>Flow of materials through collection, sorting, and processing inside and outside of U.S.</li> <li>What is a circular economy and why is it important?</li> </ul>	High

	<ul style="list-style-type: none"> <li>Promote local companies who accept less commonly recycled items (tires, paper shredding, textiles, metal, etc.)</li> </ul>	
Expand recycling access to Multi-family and Commercial properties	<ul style="list-style-type: none"> <li>Access is an equity issue and the City should ensure that all residents and businesses receive curbside or dumpster recycling services. Considerations for amending the City's dumpster enclosure ordinance so owners may have extra years to build expanded enclosures to accommodate extra dumpsters for recycling and/or compost.</li> </ul>	High
Analyze industrial waste streams	<ul style="list-style-type: none"> <li>Use student intern to find end markets or connect companies to recycling processors. Inventory all streams and post with recyclecolorado.com</li> </ul>	Medium
Limit use of single use plastics and Styrofoam	<ul style="list-style-type: none"> <li>Implement a compostable takeout container incentive program for Golden restaurants</li> <li>Consider a bag fee program, similar to other Colorado communities, even with state statute limitation.</li> <li>Advocate and support state legislative bills for bans or removal of state statute limitation</li> </ul>	High
Expand access to compost service to multi-family and commercial properties	<ul style="list-style-type: none"> <li>Work with Golden grocery stores to divert organic waste from produce departments.</li> <li>Consider buy-back program to facilitate closed loop system and support compost industry.</li> <li>Support regional compost transfer station location through partnerships with neighboring cities and Jefferson County for purposes of lowering costs (transportation) and diverting greater volumes of green waste.</li> </ul>	High

<b>Energy Task Force</b>		
<b>Action</b>	<b>Key Components</b>	<b>Priority</b>
Electrify Transportation	<ul style="list-style-type: none"> <li>Expand access to public electric vehicle charging stations, identify gaps in underserved areas. High priority</li> <li>Support political and legislative efforts to electrify regional fleets (RTD, CDOT, Jeffco R-1 buses). Medium priority</li> <li>Create plan for municipal fleet electrification (GoEV program, high priority) and address private fleet programs (carshares, rideshares, medium priority)</li> <li>Require new homes to be EV ready. Include 220v connection in garage, encourage in new homes, but do not mandate, provide discounts on building permits. High priority.</li> <li>Add charging stations to existing commercial and multi-family parking lots. Match funds to offset costs during renovations if not new construction. High priority.</li> <li>Actively support the extension of the Golden Line light rail and/or West Line to downtown Golden. Evaluate bus rapid transit for interim option. Long term, but high priority.</li> </ul>	Medium to high

<p>Increase rooftop solar for homes and businesses</p>	<ul style="list-style-type: none"> <li>• Create additional rebates and incentives for residential. High priority to retain existing rebates. Evaluate effectiveness of program and utilize social pressure to increase neighborhood adoption. Consider low income/rental/multi-family needs.</li> <li>• Discounts for homeowners and businesses through bulk purchases by the City. What are other cities doing? Support local installers. Lower priority.</li> <li>• Require solar or purchase of community solar share for all new residential construction. Evaluate unintended consequences, exceptions. High priority.</li> <li>• Pursue additional community solar models such as larger rooftops, warehouses and covered parking. Medium priority.</li> <li>• Require solar for major renovations of homes and businesses. Consider dollar amount trigger of new investment. Low priority.</li> </ul>	<p>Varies</p>
<p>Reduce Natural Gas use</p>	<ul style="list-style-type: none"> <li>• Strengthen building codes to achieve higher energy efficiency of existing and new buildings. High priority.</li> <li>• Place limits on the number of new gas-powered appliances in new homes and businesses. Medium priority.</li> <li>• Consider restriction of new gas lines to new housing developments. Research needed, medium priority.</li> <li>• Create incentives and regulations for replacement program of gas-powered appliances when older appliances reach end of life. Medium priority.</li> </ul>	<p>Medium to high</p>
<p>Energy Improvements for Non-Residential Buildings</p>	<ul style="list-style-type: none"> <li>• Provide businesses with design and technical assistance to plan for long range upgrades and facility improvements. Medium priority.</li> <li>• Provide financial assistance such as matching rebates for existing utility incentives. Medium priority.</li> <li>• Require energy performance milestones for improvements and upgrades with consideration for financial ability. High priority for recognition program, survey businesses to determine priority for benchmarking ordinance.</li> </ul>	<p>Medium to high</p>
<p>Use Microgrids to Increase Golden's Energy Resiliency</p>	<ul style="list-style-type: none"> <li>• Advocate at the state and federal level to promote the technology. Medium priority.</li> <li>• Look for pilot program funding opportunities through the department of Energy. Medium priority.</li> <li>• City investment in microgrid technology for the direct benefit of Golden residents and businesses. Low priority due to immature industry. Pursue for essential services such as fire station or medial facilities.</li> </ul>	<p>Low to medium</p>
<p>Preserve the Right to Solar for all</p>	<ul style="list-style-type: none"> <li>• Create a community solar offset fund to provide solar subscriptions to owners impacted by taller neighboring</li> </ul>	<p>Low</p>

	<p>developments. Wait until community solar projects are in place.</p> <ul style="list-style-type: none"><li>• Create a tree preservation fund to replace the value of private trees and public trees in case of tree removals for neighboring solar installations. Low priority.</li><li>• Create a solar access ordinance that could include compensation for neighbors impacted by adjacent new developments. Low priority.</li></ul>	
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