

STAFF REPORT



Meeting Date:	10/17/2022	Meeting Title:	Town Council Workshop
Submitting Department:	Community Development	Presenter:	Tanya Anderson
Agenda Item:	Town of Jackson Sustainability Plan	Public Comment:	Yes

Purpose & Policy Considerations.

The Town Council sets the policy for sustainability for the Town organization.

Requested Action.

The Community Development Department seeks guidance on the priorities, overarching goals and scope of the Town of Jackson Sustainability Plan.

Recommendations.

Staff recommends approval of the priorities of Ecosystem Stewardship, Climate Stewardship, and Climate Resiliency for a Community-wide or Hybrid Sustainability Plan that includes Scope 1, Scope 2, and Scope 3 emissions with the overarching goals and guiding questions outlined in this report.

Background.

The Town of Jackson has embarked on two main sustainability plans since 2006. The 10x10 initiative, a joint project between the Town of Jackson and Teton County, aimed for a 10% reduction in total electricity and fossil fuel consumption by 2010 from 2006 levels. This initiative was very successful in some key areas. Existing Town of Jackson facilities used 29% less energy in 2010 than they did in 2006, the Public Works Streets Department reduced gasoline use by 32%, and the Police Department reduced gasoline use by 52%. Natural gas and propane produce higher emissions than electricity, so high reductions in electricity use did not translate to high total emissions reductions. Also, the initiative was a joint Town-County effort and included new facilities built during that period, which made the total emissions reduction goals challenging. At the end of 2010, the initiative had achieved a 3% reduction in total energy use despite facilities growth.

The second sustainability plan, the 40x20 initiative, set goals to increase efficiencies by 20-40% by 2020 from either 2006 or 2010 levels depending on the year that baseline data was first collected. This program was highly successful at reaching and exceeding most of the goals. The Town achieved:

- 42% efficiency in Btu/ft²
- 52% increase in efficiency for non-START Town vehicles in miles per gallon or hours per gallon
- 69% water usage efficiency in gallons per fixture
- 76% waste diversion
- 7% increase in efficiency pumping water, per gallon
- 64% more efficient per gallon of wastewater treated

These efforts saved the Town an estimated \$2,339,057 in energy costs related to fuel, electricity, natural gas, and propane from FY2006 thru FY2020 while avoiding 2,914 tons of CO₂ equivalent. The Town of Jackson also committed to purchasing 100% of its electrical power from renewable sources, approved an idle-free resolution, and installed several public Electric Vehicle Charging Stations.

On April 6, 2020, Town Council passed a Net-Zero 2030 Resolution, joining other mountain towns in the region and communities across the United States and around the world in this endeavor. Net zero means balancing carbon emissions with carbon removal. There are four main ways for communities to reach net zero.

1. Reduce emissions
2. Install more GREEN energy projects
3. Create and protect carbon sinks through tree planting, regenerative agriculture, and other landscape improvements
4. Purchase carbon offsets

In 2020, the Jackson Hole Climate Action Collective convened interested community members to create a community Climate Action Plan. That effort birthed the Teton Climate Action Partnership, a collaborative of community members working to identify, fund, and bring to fruition projects that support the goal of equitable net zero. Both groups continue to do valuable work in this arena, with the Jackson Hole Climate Action Collective focusing on the drafting of a Climate Action Roadmap for the community, and the Teton Climate Action Partnership working on projects that can make an impact immediately to reduce our emissions. The two groups have an amicable relationship and communicate regularly regarding areas of overlap.

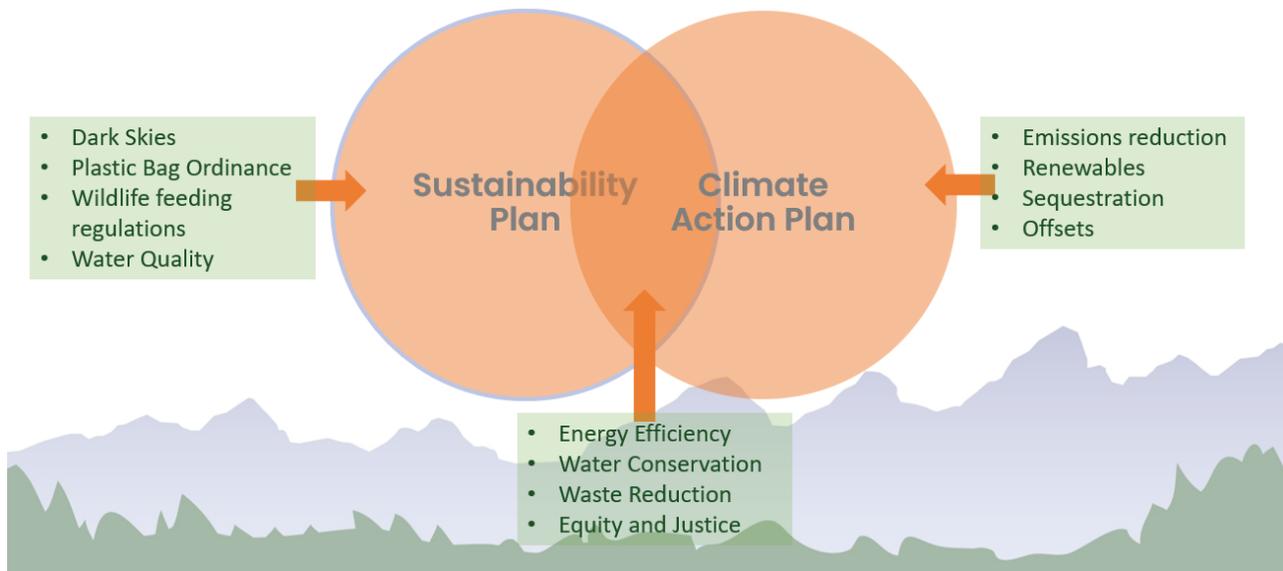
In the fall of 2021, Town Council approved a job description for the newly created Ecosystem Stewardship Administrator position. The approved job description designated 20% of time to be spent leading Town sustainability programming, and another 20% supporting the Teton Climate Action Partnership and Jackson Hole Climate Action Collective. The Ecosystem Stewardship Administrator started in May.

Analysis.

Priorities

The first step in creating a Sustainability Plan is to determine our priorities. What do we want to accomplish with a Sustainability Plan, and why? There are many different reasons to create a Sustainability Plan, ranging from financial prudence to environmental protection to community health and resiliency. Determining the priorities for the Town of Jackson will also determine what type of plan we should create.

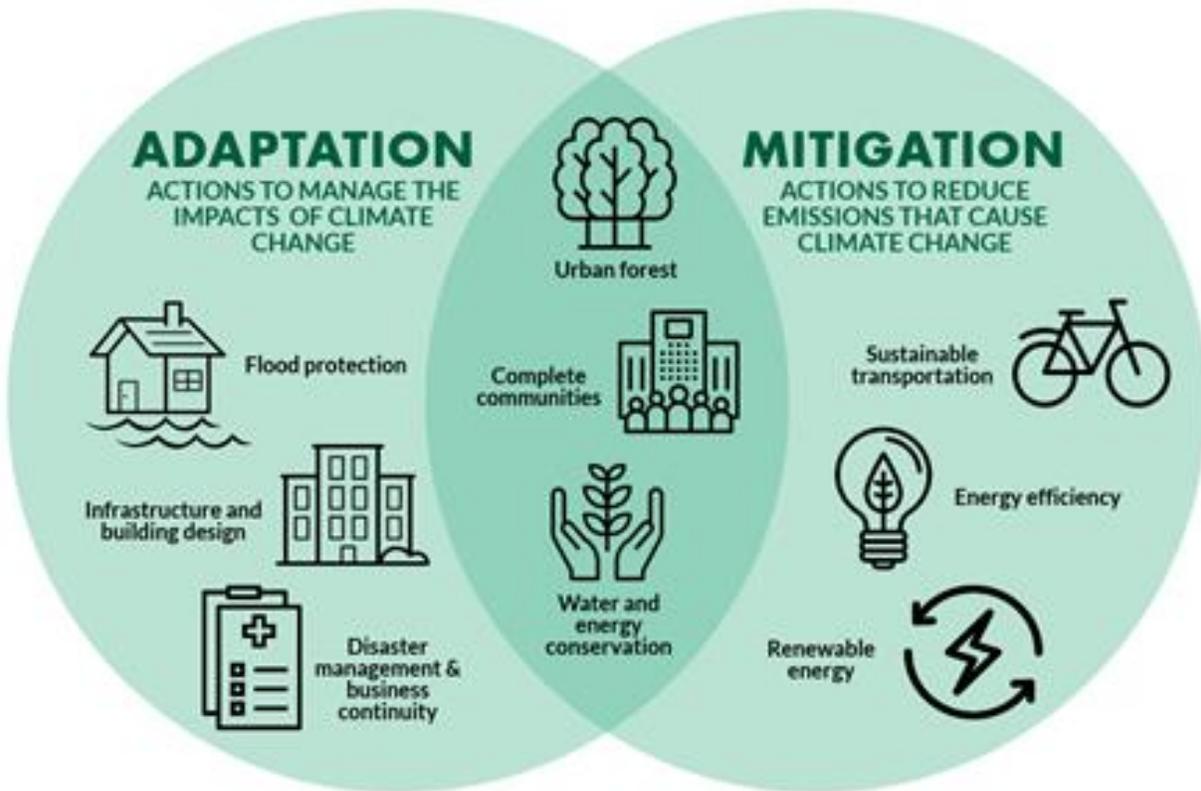
Sustainability is defined as a system of practices that are healthy for the environment, community, and economy and can be maintained for current and future generations. Many communities have Sustainability Plans, while others have Climate Action Plans. The difference between the two is that a Climate Action Plan focuses on targets associated with the reduction of emissions and shifting the energy mix to cleaner energy sources, while a Sustainability Plan includes many targets and practices that benefit the environment but do not necessarily reduce emissions. Some initiatives within a Sustainability Plan may even increase emissions. The previous Sustainability Plans that were adopted by the Town of Jackson would more accurately be described as Climate Action Plans, as the primary targets were related to emissions reduction. Some communities have successfully combined components of sustainability and climate action into one plan. The following graphic shows examples of priorities within each type of plan, as well as areas of overlap.



Staff Recommendation: Staff recommends a Sustainability Plan that combines sustainability and climate action.

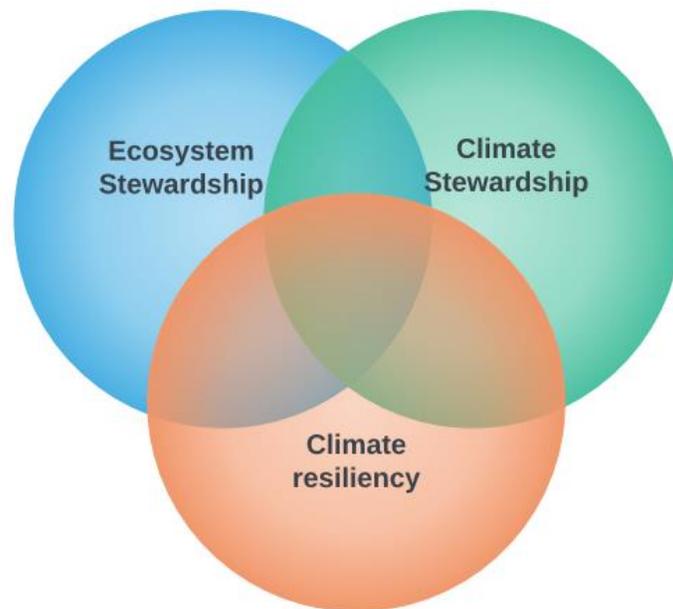
For communities that adopt Climate Action Plans, there is variation in the goals and purpose of those plans. Some communities with Climate Action Plans focus solely on mitigation by setting targets to reduce total emissions or increase efficiencies. These communities may be driven by potential cost savings, by a desire to “do their part” by reducing global emissions, to show their residents they care, or to be a leader in global climate action and inspire other communities to do the same. Our previous Sustainability Plans have accomplished many of these goals. Other communities with Climate Action Plans include strategies for adaptation to the impact of climate change. These communities may focus on improving human health and safety and community resiliency.

Our region is already seeing some of the impacts of climate change. The Greater Yellowstone Climate Assessment predicts many more changes in the future, including but not limited to: more days with temperatures exceeding 90 degrees Fahrenheit, higher overnight temperatures that reduce the ability of our waterways to recover from high daytime temperatures, more wildfires, more precipitation falling as rain rather than snow, a shift in the timing of peak runoff, increased flooding and rain on snow events in the spring, and increased drought in the summer and fall due to lower inputs from snowmelt. These predicted changes will affect both human health and the ecosystem that we committed to preserving and protecting in our Comprehensive Plan. To account for the impacts that are already being felt in our community and prepare adequately for the future, staff finds it important to include Climate Resiliency in any Climate Action Plan. A Climate Resiliency Plan should identify vulnerabilities and strategies to minimize future impacts. It might plan for wildfire prevention, propose infrastructure that would reduce the impact of large flood events, ensure fish passage in the case of floods or droughts, protect water sources, identify resiliency centers, and develop ways to keep vulnerable populations safe during periods of extreme heat or poor air quality due to wildfire smoke. The following graphic shows examples of differences between climate mitigation plans and climate adaptation plans, as well as areas of overlap.



Staff Recommendation: Staff recommends including climate resiliency in our Sustainability Plan.

The Town of Jackson is the gateway to two national parks, is a part of the largest intact ecosystem in the lower 48 states and lies in the Snake River Headwaters. The vision of our Comprehensive Plan is to preserve and protect the area's ecosystem in order to ensure a healthy environment, community, and economy for current and future generations; doing so requires looking not just at emissions, but also at our impact on air, water, and wildlife. Staff finds it requires identifying the vulnerabilities our community faces due to the changes in climate that are already occurring and actively working to increase resiliency. As such, staff recommends developing a Town of Jackson Sustainability Plan that combines Ecosystem Stewardship, Climate Stewardship, and Climate Resiliency, as shown in the Venn diagram below.



Staff Recommendation: Staff recommends combining elements from a Climate Action and Adaptation Plan with a Sustainability Plan. To align with our community values and the wording in our Comprehensive Plan, staff recommends identifying the priorities as follows: Ecosystem Stewardship, Climate Stewardship, and Climate Resiliency.

Council Discussion Point: Does Council support the three priorities for a Sustainability Plan as described above? Council may support all three priorities. Alternatively, Council may support 1 or 2 of the above priorities or may reject all three and propose new priorities.

Overarching Goals

If Council supports the three priorities discussed above, our next step is to set overarching goals to guide plan creation within each priority. Many goals have already been set by Town Council through resolutions and in our Comprehensive Plan. Using those goals as a starting point that will help us to keep the big picture front of mind. Once direction is received from Town Council regarding the priorities and scope, teams will be assembled to set more specific and measurable targets within each of the priorities.

Staff proposes using the following overarching goals to guide this process:

Climate Stewardship goal:

- Net zero by 2030

Ecosystem Stewardship Goals:

- Maintain healthy populations of all native species
- Preserve and enhance surface water and groundwater quality
- Reduce air pollutants produced in our community from 2022 levels

Climate Resiliency Goal:

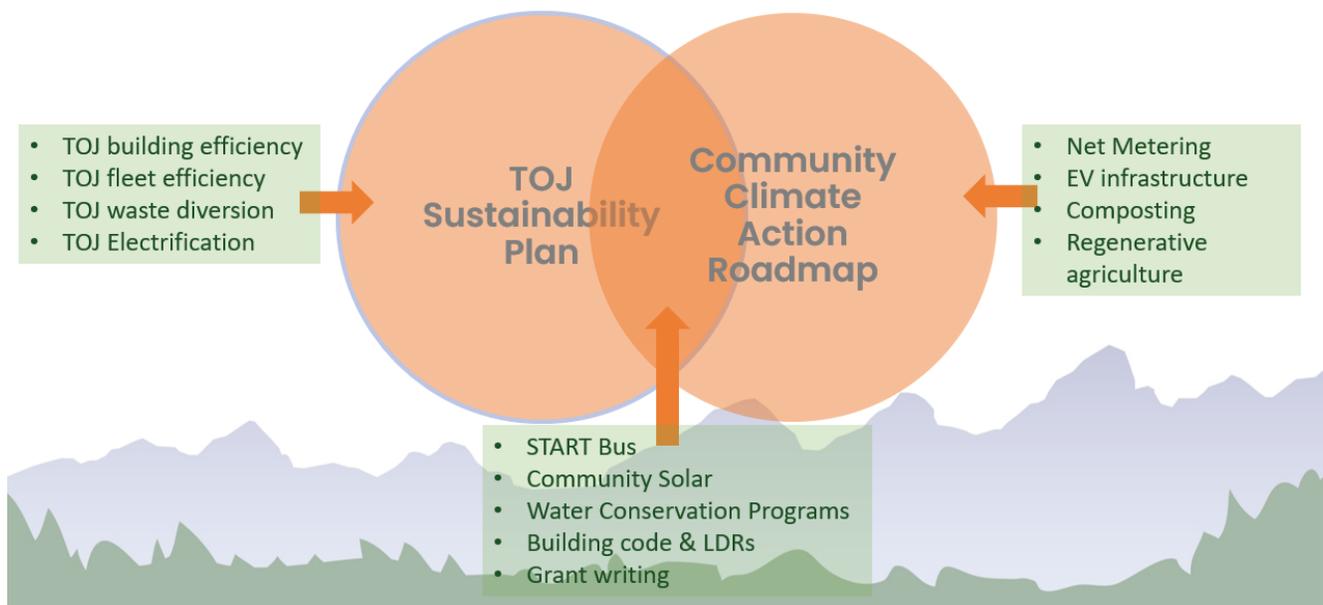
- Identify areas of vulnerability in our community and actively work to increase resiliency

Staff Recommendation: Staff recommends the above goals to guide the creation of a Sustainability Plan.

Council Discussion Point: Does Council support the proposed overarching goals? Council may support goals in all three priority areas. Alternatively, Council may pick one or two overarching goals and reject others or may accept some overarching goals and propose different goals.

Plan Scope

The reach of the plan also needs to be determined. In the past, the Town of Jackson Sustainability Plan applied only to Town-owned properties and vehicles and Town-run operations. Some operations, such as START and staff housing, were excluded. However, reaching a goal of Net-Zero by 2030, which was approved by Town Council resolution in April or 2020, requires action to reduce emissions throughout the community. Currently, the Jackson Hole Climate Action Collective is working on a community-wide Climate Action Roadmap. Draft versions of the Roadmap show many areas of overlap with a Town Sustainability Plan. The following diagram shows examples of things typically included in a Municipal Sustainability Plan, things typically included in Community-wide Climate Action Plans, and areas of overlap, where the municipality has direct control over policies and programs that affect the carbon footprint and sustainability of the greater community.



A recent [Sustainability Plan](#) created by the Town of Breckenridge shows an example of a plan that includes Municipal Goals and Community Goals within each priority area. It was created in alignment with the goals set forth in a larger county-wide Climate Action Plan. Other communities have recommended merging multiple plans into one whenever possible.

Staff has identified three options for the scope of the Town of Jackson sustainability plan:

1. Sustainability Plan for Town of Jackson operations only. This option is in line with what was done in the past and would focus on Municipal Operations only. A Municipal Plan is easier to manage because it limits the scope of work. However, it only addresses a portion of the total emissions in our community.

2. Hybrid Municipal and Town of Jackson Sustainability Plan. This option would include both targets for Town of Jackson Municipal Operations and also targets and initiatives that the Town of Jackson can influence through Municipal Code and LDR amendments, resolutions, incentives, projects, and education. Building efficiency, waste reduction incentives, water conservation programs, and electric vehicle infrastructure are examples of things that might be included in a hybrid-plan.
3. Community-wide Sustainability Plan. This would merge goals related to Town operations with a Community-wide Climate Action and Sustainability Plan. It would involve coordination with the Jackson Hole Climate Action Collective, the Board of County Commissioners and other stakeholders. This is the most comprehensive level of Sustainability Plan.

Staff Recommendation: Staff recommends expanding the scope of our Sustainability Plan from a Town-Only plan to either alternative 2, a Hybrid Sustainability Plan, or alternative 3, a Community-wide Sustainability Plan.

Council Discussion Point: What should the scope be for a Sustainability Plan?

Emissions Scope

If Climate Action is approved as a priority for the Sustainability Plan, the depth to which we measure emissions needs to be determined. The sustainability industry has divided different types of emissions into three categories, defined below:

Scope 1 emissions – On-site combustion of fossil fuels such as natural gas, diesel, gasoline, propane, and methane. These emissions contribute to local air and water pollution and affect the health of local community members. A local example is the emissions from diesel and gasoline burned by Town-Owned vehicles.

Scope 2 emissions- Indirect emissions from purchased electricity. These emissions affect communities where power plants are located. A local example is the emissions from the creation of electricity used to power Town-Owned Electric Vehicles.

Scope 3 emissions - Emissions from businesses that create the products we use or transport goods and people to, from and within our community. These emissions may affect both our local community and other communities. Examples of Scope 3 emissions include staff commutes to and from work, air travel for business, emissions from capital purchases, investments, and emissions produced by waste sent to the landfill in Idaho Falls. Scope 3 emissions are the most difficult to track. A local example is the emissions from motor vehicles and flights staff used to attend a recent conference in Colorado.

In the past, Town of Jackson Sustainability Plans measured emissions that were emitted in our community through the burning of fossil fuels such as gasoline and diesel, natural gas, and propane, in Town-owned vehicles and buildings. We also measured emissions that were generated to produce our electricity, and which entered the environment in other communities. These emissions fall primarily within Scope 1 and Scope 2 emissions. Outside of efforts to reduce the amount of waste sent to the landfill, the Town has not focused on reducing Scope 3 emissions. The difficulty of measuring Scope 3 emissions can be a barrier to including them in a Sustainability Plan. However, some Scope 3 emissions are easier to measure than others, such as staff air travel for business. Other Scope 3 emissions may be estimated using industry standards to simplify. It is also possible to have goals related to Scope 3 emissions that do not measure emissions. For example, past Town of

Jackson Sustainability Plans measured waste diversion rather than tons of carbon reduced through waste reduction efforts. This reduces staff time spent calculating emissions while still taking steps to reduce Scope 3 emissions. Finally, a commitment to including Scope 3 emissions does not require the Town to include *every* Scope 3 emission. If Council approves including Scope 3 emissions in a Sustainability Plan, staff on teams in each priority area can determine which Scope 3 emissions to focus on.

Staff Recommendation: Staff recommends embarking on a Sustainability Plan that includes goals related to Scope 3 emissions in select categories.

Council Discussion Point: Should the Town of Jackson include Scope 3 emissions in a Climate Action or Sustainability Plan?

Guiding Questions

To balance multiple priority areas, it is important to ask a series of questions for any sustainability initiative to ensure that a benefit for one area does not have a negative impact on the other. In addition, it is important to evaluate initiatives for equity to ensure that actions do not have a negative effect on some segments of the population while they benefit others. One aspect of equity includes choosing actions that benefit our community without displacing harm to other communities where energy is produced or products are made. Staff propose four guiding questions to use as a filter for all sustainability initiatives:

1. Does it promote a healthy environment, here and elsewhere?
2. Does it promote a healthy community?
3. Do the long-term benefits outweigh the economic impacts of implementation?
4. Is it equitable?

Staff Recommendation: Staff recommends the four questions listed to guide strategies used within a Sustainability Plan.

Council Discussion Point: Are there the right questions to ask when developing strategies to reach the goals set within a Sustainability Plan?

Possible Alternatives.

Priorities:

1. Reject all priorities
2. Accept one or two of the proposed priorities

Overarching Goals:

1. Reject all overarching goals
2. Accept some of the proposed goals, but not others

Plan Scope:

1. Approve a Municipal Plan

Emissions Scope

2. Approve a plan that addresses Scope 1 and Scope 2 emissions only

Guiding Questions

1. Reject all guiding questions
2. Approve some of the guiding questions, but not others

Comprehensive Plan & Priority Alignment.

Principle 1.1—Maintain healthy populations of all native species.

For future generations to enjoy the ecosystem that exists today the community must manage our impacts to wildlife, wildlife habitat, and wildlife movement corridors on private and public land. The prevalence of wildlife that is central to our ecological, social, and economic character requires an intact ecosystem that supports all native species. Therefore, efforts to protect wildlife must extend to all native species.

Principle 1.2 – Preserve and enhance surface water and groundwater quality.

Clean water is one of the most basic requirements of a healthy ecosystem and community. Protecting the water quality of Jackson and Teton County is essential to the ecosystem and scenic beauty that residents and visitors enjoy. In addition, the public has the right to clean, affordable drinking water. Stewardship of surface water bodies of all sizes, the Snake River Sole Source Aquifer, wetlands, riparian areas, and groundwater, is vital to sustaining healthy populations of native species and for the health and safety of the human community. Preservation of water quality includes water features, from small creeks to large systems, including the Snake River Sole Source Aquifer, due to its importance as the community's water source. Among other measures, it is integral to minimize pollution from wastewater and stormwater that cause water quality impairment and threaten overall ecosystem health.

Policy 1.3.d Maintain dark night skies

The prominence of nature over the built environment should extend beyond daytime viewsheds. The lighting of individual developments cumulatively impacts the ability to see dark and starry night skies. Although illumination is required for public safety, especially along pedestrian corridors, non-essential lighting should be limited, and all lighting will be designed to meet dark skies best practices. Existing development will also be encouraged to implement best practices.

Principle 2.1 – Reduce energy consumption of non-renewable energy

To reduce the emission of greenhouse gases that contribute to climate change, the community should reduce its consumption of energy from non-renewable sources. The Town and County will lead by example and encourage reductions in energy demand and the use of renewable energy sources. However, it is the daily responsibility of the entire community to reduce greenhouse gas emissions whether for climate, financial or other reasons.

Principle 2.2 Reduce greenhouse gas emissions through land use

Land use patterns have a great effect on the community's overall energy consumption and should be designed with energy efficiency in mind. Complete Neighborhoods require less energy consumption for travel within and around the community; and compact mixed-use infill and redevelopment requires less energy in the provision of services and infrastructure.

Principle 2.3 – Reduce greenhouse gas emissions through transportation

Transportation accounts for approximately 80% of the total carbon emissions in the community and should be a focus of the community's efforts to reduce energy consumption. Reducing fuels consumed for transportation and using renewable fuels has the greatest potential to reduce the community's overall carbon emissions and consumption of non-renewable resources.

Principle 2.4 – Increase energy efficiency in buildings

It is the community's goal to achieve carbon neutral buildings by 2030. Increasing the energy efficiency of buildings and reducing the energy used for the construction of buildings will greatly increase the community's energy conservation efforts, as the construction and operation of buildings accounts for close to 15% of energy use in Jackson and Teton County. Publicly funded construction projects will lead by example in implementing this policy, and incentives will be provided to reduce the energy demand of new and existing private buildings.

Principle 2.5 – Reduce greenhouse gas emissions through waste management and water conservation

The community will reduce the amount of energy required to distribute, clean, and dispose of water and waste through conservation efforts. Our current water consumption and waste management practices will have long-term adverse impacts on the ecosystem and the community's energy demand if conservation measures are not pursued.

Principle 3.4 – Limit development in naturally hazardous areas

Development in hazardous areas threatens the health, safety and welfare of human inhabitants. Steep slopes, poor soils, avalanche chutes, floodplains, dense forests and areas along fault lines offer unique opportunities for interaction with the environment, but when natural events do occur in these areas the results can be disastrous.

Principle 7.1 – Meet future transportation demand with walk, bike, carpool, transit and micro-mobility infrastructure

If the fastest way to travel around the community and region is by walking, biking, carpooling or taking transit, residents, and visitors will move in a way that benefits the environment, their pocketbook, and their health. To achieve this goal, capital investment in transportation must be focused on walking, biking, carpooling, and transit. Single occupancy vehicle solutions have the most significant environmental footprint while providing transportation access to a limited portion of the population. Increasingly, the transportation network will be an interconnection of walking, biking, carpool and transit infrastructure that makes the single-occupancy vehicle the least convenient mode of travel.

Principle 7.2 – Reduce greenhouse gas emissions from vehicles from 2012 levels

One of the biggest threats to the health of the ecosystem is climate change. The most significant local contributor to greenhouse gas emissions is surface transportation – the cars, trucks, and buses we use to travel into, within, and out of the community. As stewards of the ecosystem, we will manage our transportation to reduce emissions. Cleaner vehicles, fewer trips, and trips that move more people will be prioritized over strategies focused on reducing congestion.

Principle 9.3 – Anticipate future issues and pioneer innovative solutions

Existing implementation tools will not be enough to fully achieve the community's aspirational goals. We have identified many tools that will move the community toward its Vision. We have also purposefully set the Vision out of reach of conventional approaches to challenge ourselves to explore the adjacent possible and reset the leading edge. To find new solutions, we will have to be willing to analyze and perhaps pilot atypical approaches that do not have historical precedent and may not yield tangible progress.

Fiscal Impact.

\$75,000 in the budget for sustainability projects this fiscal year. None has been spent to date.

Staff Impact.

20% of the Ecosystem Stewardship Administrator's job description, or approximately 357 hours annually, is dedicated to the Town Sustainability plan. She has spent 80 hours conducting research and assembling this report to date. Other staff, including Interim Town Manager Tyler Sinclair and Public Works Assistant Director Johnny Ziem, have spent an estimated 16 hours providing background information and feedback. For the remainder of the fiscal year, the Ecosystem Stewardship Administrator will spend approximately 8 hours per week on the Sustainability Plan. Other staff who participate in teams assembled to create specific strategies and targets will spend an estimated 80 hours supporting the creation of a Plan.

Attachments or Links.

None.

Suggested Motion. *Council always has the option to adopt, approve with conditions, continue, or deny items.*

1. I move to approve the priorities of ecosystem stewardship, climate stewardship, and climate resiliency and the overarching goals and guiding questions as written in this October 17, 2022 staff report for a *Community-wide Sustainability Plan* that includes Scope 1, Scope 2, and Scope 3 emissions.
2. I move to approve the priorities of ecosystem stewardship, climate stewardship, and climate resiliency and the overarching goals and guiding questions as written in this October 17, 2022 staff report for a *Hybrid Municipal and Town of Jackson Sustainability Plan* that includes Scope 1, Scope 2, and Scope 3 emissions.