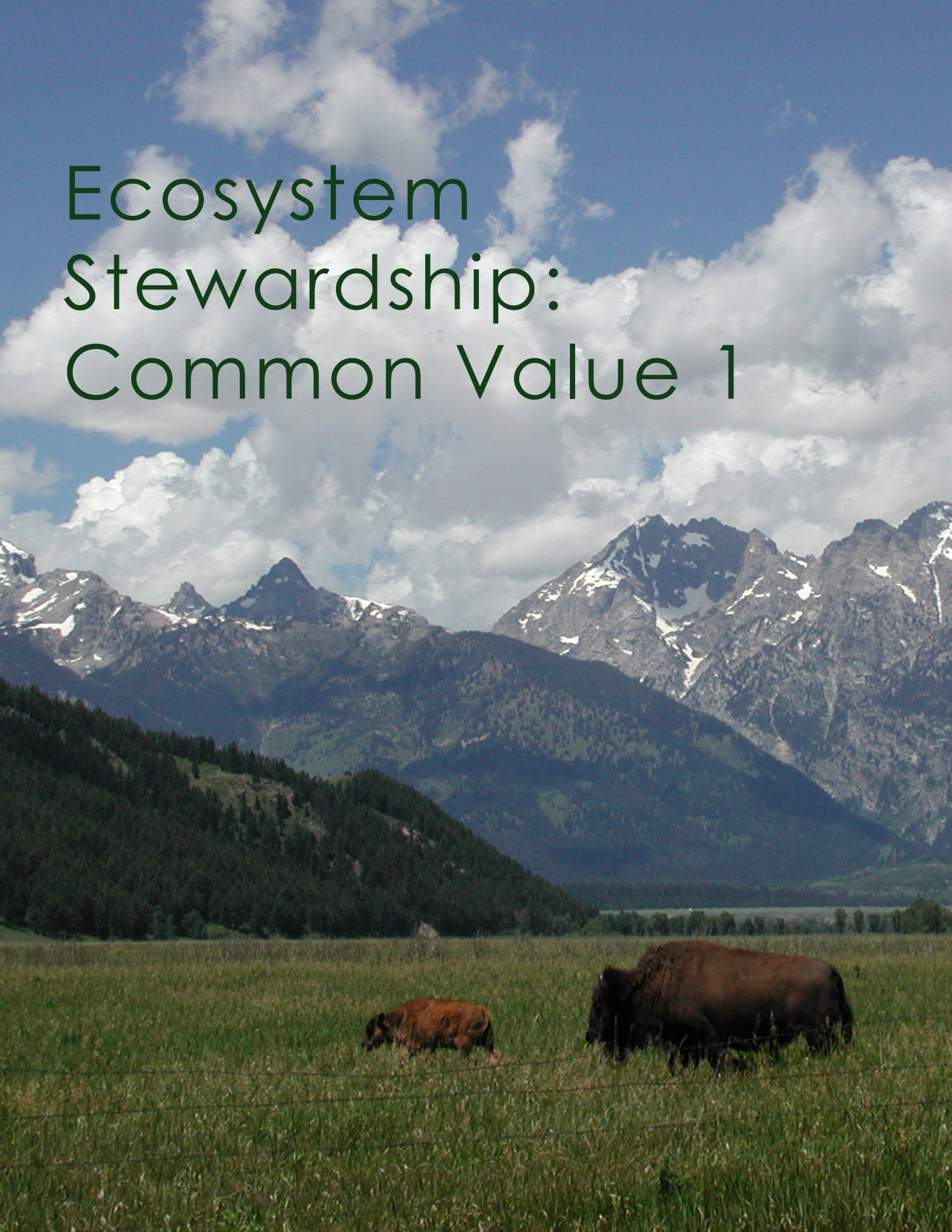
Ecosystem Stewardship: Common Value 1



Why is Ecosystem Stewardship a Common Value?

The Greater Yellowstone Ecosystem – the largest intact ecosystem in the lower 48 states – transcends the physical boundaries of Jackson and Teton County. Accordingly, stewardship of this ecosystem transcends all common values of our community. The quality of this ecosystem has attracted numerous visitors throughout the years and is the primary reason many residents moved to our community. The community's stewardship of this ecosystem has been and will continue to be our legacy to future generations. The community understands that our quality of life depends on many factors, but the primary factor is the continued health and viability of this ecosystem in which we live. With this Plan, the community recommits to responsible stewardship of the ecosystem that ensures the abundance of wildlife, natural resources and scenery that we experience today lasts long into the future. While our community's international popularity and location in an intact ecosystem heighten the importance of sustainable planning, they also provide the community with an opportunity to lead in the implementation of the concept of sustainability. Our community must practice what we preach and integrate the concepts of sustainability into our daily lives. Our neighborhoods will become models of sustainability through design requirements, building retrofits and compact built forms. Water and energy conservation will not be abstract concepts, but instead implementable renewable and conservation energy and water programs. We will consciously choose to move around in our community in a different way. The automobile and its inherent environmental consequences will be replaced with a preference for walking, biking and transit.

How are we going to achieve Ecosystem Stewardship?

Section 1. Stewardship of Wildlife, Natural Resources and Scenery

- Maintain healthy populations of all native species (Principle 1.1)
- Preserve and enhance water and air quality (Principle 1.2)
- Maintain the scenic resources of the area (Principle 1.3)
- Conserve remaining undeveloped open space (Principle 1.4)

Section 2. Climate Sustainability through Energy Conservation

- Reduce consumption of non-renewable energy (Principle 2.1)
- Reduce energy consumption through land use (Principle 2.2)
- Reduce energy consumption through transportation (Principle 2.3)
- Increase energy efficiency in buildings (Principle 2.4)
- Conserve energy through waste management and water conservation (Principle 2.5)

Section 1. Stewardship of Wildlife, Natural Resources and Scenery

Maintain healthy populations of all native species; and preserve the ability of future generations to enjoy the quality natural, scenic, and agricultural resources that define Teton County's current physical character.

What does this section address?

Principle 1.1 - Maintain healthy populations of all native species

Principle 1.2 - Preserve and enhance water and air quality

Principle 1.3 - Maintain the scenic resources of the area

Principle 1.4 - Conserve remaining undeveloped open space

Why is this section addressed?

Our abundant wildlife, natural and scenic resources are internationally renowned. These resources largely define the community's natural, social, and economic character. Most members of the community live in the area because of the access to wildlife, natural resources, and recreation. The community recognizes that its policies regarding development, transportation, recreation, and energy consumption ultimately have both direct impacts on these resources and indirect impacts on the entire ecosystem. The community desires to continue responsible stewardship of these important resources by supporting and maintaining the stewardship, conservation, and agricultural ethic that has been present throughout the community's history.

The community is part of the Greater Yellowstone Ecosystem—the largest generally intact ecosystem in the lower 48 states. Our location in this ecosystem sets the Town of Jackson and Teton County apart from other resort and rural communities, particularly in terms of the abundance of wildlife. Although 97% of Teton County is publicly owned, the dynamic natural systems of our ecosystem do not conform to jurisdictional boundaries. This makes wildlife susceptible to the impacts of local development, transportation and energy consumption policies.

Privately owned lands in the county continue to provide critical habitat for many species. The community respects land owners' private property rights while acknowledging that effective stewardship of wildlife requires protecting critical areas from the impacts of development. Preserving habitat quality is also needed to lessen the impacts of global climate change.

The human causes of natural and scenic resource degradation are not always immediately apparent. While direct local impacts can usually be identified and mitigated, it is the sum of direct and indirect impacts that, over time, threaten the health of the ecosystem at a regional scale. The human populations in Jackson Hole, Teton Valley, Idaho, and Star Valley, which have grown because of our area's natural beauty, will continue to have direct and indirect impacts on the ecosystem at a local and regional level that must be addressed.

The protection of wildlife and natural and scenic resources provides for the economic well being of the community. Abundant wildlife, daily interactions with nature, and panoramic scenic vistas are cornerstones of the quality of life of Teton County residents and the quality of our visitors' experience.

The international desire to live and/or visit Jackson Hole depends upon the continued stewardship of wildlife and natural and scenic resources. It also provides the opportunity for us to set a positive ecosystem stewardship and energy conservation example for approximately 3 million visitors a year.

Jackson Hole's stewardship of wildlife and natural resources is part of our history. Of the 76,000 acres of private land in Teton County, conservation efforts have resulted in approximately 22,000 acres of permanently protected and actively stewarded open space while 36,000 acres remain as agricultural open space. Moving forward we realize that it is in the best interest of the ecosystem and the community to continue to act as stewards of wildlife, scenic and natural resources.

Principles and Policies

Principle 1.1—Maintain healthy populations of all native species

In order 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 culture and economy requires an intact ecosystem that supports all native species. Therefore, efforts to protect wildlife must extend to all native species.

Policy 1.1.a: Protect focal species habitat based on relative criticalness

Future efforts to protect wildlife habitat should consider the importance and abundance of habitat types and be based on a set of focal species that provide indication of the health of the entire ecosystem. The best approach for protecting wildlife species is to protect wildlife habitat and wildlife movement corridors. Since 1994, critical winter range, migration corridors and birthing areas of elk, moose, mule deer, bald eagles, cutthroat trout, and trumpeter swans have been protected by the Town and County. While these species are symbolic of the area's abundant wildlife, their prevalence does not necessarily indicate overall ecosystem health. Likewise, while the protected habitats are important, some may be abundant and therefore only relatively critical. Other habitats may be declining and/or disappearing due to development and climate change and are therefore absolutely critical. As our programs to protect wildlife habitat from the impacts of development and transportation evolve, they should be updated to reflect the best available data on the relative criticalness of different habitat types for identified focal species.

Until updates can be made to habitat protection priorities; elk, moose, mule deer, bald eagle and trumpeter swan crucial winter habitat, elk and mule deer migration corridors, bald eagle and trumpeter swan nesting areas and cutthroat trout spawning areas, these habitats will continue to be protected using the best available science and data.

Policy 1.1.b: Protect wildlife from the impacts of development

The community is committed to protecting the wildlife, wildlife habitat, and wildlife movement corridors that exist on private land. However, it is necessary to respect the development rights of private property owners and the need for certain transportation network infrastructure. When such development occurs it should be sized, located, and designed to limit impacts to wildlife. A tiered system of protection should be established so that the most critical habitat and movement corridors (as defined by Policy 1.1.a) receive the highest level of protection and site specific study. Applicable tiers of protection should respect property rights, previous approvals, and community-wide clustering efforts. For example, a stricter tier of protection will likely apply along the Snake River than would apply downtown. Limits to impacts from development within each tier may address density, intensity, building size, location and consolidation of development, alteration to the natural landscape and wildlife permeability.

Policy 1.1.c: Design for wildlife permeability

Whether small or large, development and transportation corridors should be designed to accommodate wildlife movement. Protecting critical habitat is important, but equally essential is ensuring that wildlife can move between areas of habitat. The tiered system of protections described in Policy 1.1.b should include best management and design practices for wildlife permeability. Best practices may include wildlife friendly fencing, pet control, building clustering, landscape modification and clearing and wildlife crossings.

Policy 1.1.d: Limit human/wildlife conflicts
Limiting impacts to wildlife, wildlife habitat, and wildlife movement includes limiting wildlife/human conflicts. Design for wildlife permeability is necessary, but attracting wildlife into the built environment can be dangerous for both wildlife and humans. Human/wildlife conflicts, especially those involving large predators, can result in human injury and/or relocation or killing of the animal. The tiered system of protections described in Policy 1.1.b should consider measures to limit wildlife attractants such as palatable vegetation and accessible trash near the built environment.

Policy 1.1.e: Understand the impacts of development on wildlife
It is a goal of the community to better understand the impacts of development on wildlife. In complex situations, such as understanding cumulative impacts, science cannot provide precise answers in the timeframe of an individual project because baseline study and years of data are needed. Through the Natural Resource Technical Advisory Board, the Town and County will gather the baseline information needed to create and implement a system to monitor the impacts of growth and development on wildlife, wildlife habitat, and wildlife mobility over time. As we gain a greater understanding of our impact on wildlife, our protection measures can be updated to ensure we are acting as the best possible stewards of the ecosystem.

Policy 1.1.f: Require mitigation of impacts to habitat
Acting as stewards of all native species, the Town and County will require mitigation of impacts to the most critical habitat types resulting from development and transportation projects. These impacts are inevitable as humans live, work, and play in the community; however, they can be mitigated in order to maintain healthy populations of all native species. Direct impacts are more easily quantified and therefore mitigated; however, programmatic steps consistent with Policy 1.1.e should also be taken to identify and mitigate indirect and cumulative impacts.

Policy 1.1.g: Encourage restoration of degraded areas
The community supports public, private, and cooperative efforts on public and private lands to restore areas with habitat potential. Beyond protecting existing critical habitat and corridors there are also opportunities to enhance the ecosystem by increasing the wildlife habitat and/or corridor value of some degraded areas. The Town and County should work with private and public land owners and managers to identify degraded areas with wildlife habitat or connectivity potential and direct off-site mitigation and restoration efforts to those areas.

Policy 1.1.h: Promote responsible use of public lands
Stewardship of wildlife, wildlife habitat, and wildlife movement corridors cannot be achieved through the management of growth and development on private lands alone; it must also be pursued through the responsible enjoyment of State and Federal lands. Ranchers, river guides, back country outfitters, and other commercial users of public lands have long understood that responsible use allows for continued access to and enjoyment of public lands in the future. Individual users of public lands must accept the same responsibility. If recreationists and other users cannot enjoy public lands responsibly, the health of our intact ecosystem will suffer and State and Federal land managers will likely have to further regulate and restrict public use and access. The Town and County will work with State and Federal agencies to promote stewardship and responsible use of public lands; preserve and steward existing authorized access points to rivers; creeks; and State and Federal lands; and eliminate unauthorized access points. Managing access points will help to guide user behavior and manage public use.

Principle 1.2—Preserve and enhance water and air quality

Clean air and water are the most basic requirements of a healthy ecosystem and community. The high water and air quality of Jackson and Teton County are important to the ecosystem and scenic beauty that residents and visitors enjoy. Stewardship of waterbodies, wetlands, riparian areas, and air is important to sustain healthy populations of native species and for the health and safety of the human community.

Policy 1.2.a: Buffer waterbodies, wetlands, and riparian areas from development

In the interest of ecosystem and community health, the Town and County will protect the functionality of waterbodies, wetlands, and riparian areas as growth and development occurs. Wetlands and riparian areas are more important to wildlife and ecological health than any other habitat type. They also provide natural flood protection, sediment control, and nutrient filtration, all of which improve water quality. Clean surface water is essential to high quality aquatic habitat, clean potable water supplies, and better functioning wetlands and riparian areas. Development should be designed to include buffers around waterbodies, wetlands and riparian areas that preserve their ecological function.

Policy 1.2.b: Require filtration of runoff

In cases where natural filtration systems such as wetlands, floodplains and riparian areas cannot effectively protect surface water quality, best management practices should be employed to enhance the function of natural systems. Land development causes changes to the natural quantity and quality of stormwater that drains into the area's water bodies. The Town and County will promote innovative stormwater and snowmelt collection, storage, and diversion systems to reduce the amount of sediment and pollution entering our local water bodies. This is especially applicable in developed areas along waterways such as Flat Creek, Cache Creek and Fish Creek.

Policy 1.2.c: Monitor and maintain water quality

Maintaining quality water is essential to ecosystem and public health. Because the extent of human impact on water quality in the community is not quantitatively known, it will be important to monitor the cumulative impacts of human actions on water quality and the effectiveness of mitigation efforts as part of the monitoring system established by Policy 1.1.e. The Town and County will exceed State and Federal requirements for quality and monitoring to maintain and enhance water quality in the area.

Policy 1.2.d: Improve air quality

Also critical for ecosystem protection and public health is air quality. Air quality in Teton County is currently well within the levels mandated by the Environmental Protection Agency. However, our location in a high mountain valley exacerbates the effects of wood smoke, dust, vehicle exhaust and other emissions on air quality, so there is still an opportunity to improve our air quality. Efforts to improve air quality may include: reducing vehicle miles traveled through an improved transportation network, reducing wood burning emissions, reducing dust from unpaved roads and large construction sites and offering incentives for the use of new technologies and practices that reduce carbon emissions.

Principle 1.3—Maintain the scenic resources of the area

Scenic resources, natural landforms and dark skies are vital to the community's natural character. Mountains, moraines, meadows and other natural viewsheds provide residents and guests with a constant reminder of their location within the Greater Yellowstone Ecosystem. Interruption of these natural forms by the built environment detracts from Teton County's scenic character and should be avoided.

Policy 1.3.a: Maintain natural skylines
Development along butte tops and ridgelines will be restricted and mitigated so that key skyline viewsheds appear to be natural and uninterrupted by built forms. Buttes, ridgelines, and mountains are the most prominent aspects of our landscape. Through mitigation and development restrictions, skyline viewshed protection from the Town and County will be enhanced beyond the guidance of the 1994 Plan to the extent that it does not prohibit development of property rights or impact wildlife habitat or wildlife movement.

Policy 1.3.b: Maintain expansive hillside and foreground vistas
Development on hillsides and in the scenic foreground should be located and mitigated to protect the appearance of vast, uninterrupted natural vistas. Views of expansive forested hillsides and foreground meadows are essential to the rural and scenic character of the community. Through mitigation and development restrictions, the protection of scenic foregrounds and forested hillsides in the Town and County will be enhanced beyond the guidance of the 1994 Plan to the extent that it does not prohibit development of property rights or impact wildlife habitat or wildlife movement.

Policy 1.3.c: Maintain natural landforms
In order to avoid the appearance of a manmade landscape, natural landforms should be protected and maintained. Town and County regulations on grading and landform modification should ensure that final contours appear to be naturally occurring, are consistent with surrounding features, and do not obstruct protected viewsheds.

Policy 1.3.d: Maintain dark night skies
The prominence of nature over the built environment should extend beyond daytime viewsheds. Lighting of individual developments cumulatively impacts the ability to see dark and starry night skies. Although lighting is required for public safety, especially along pedestrian corridors, non-essential lighting will 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 1.4—Conserve remaining undeveloped open space

Protecting undeveloped open space preserves habitat and scenery and maintains our agricultural western heritage. Avoiding development in critical wildlife areas and providing recreational opportunities that reduce pressure on habitat are vital to maintaining a healthy ecosystem. Agricultural open space provides much of our scenic and western character, and should be protected and encouraged.

Policy 1.4.a: Encourage non-development conservation of wildlife habitat

Avoiding development in critical wildlife habitat and wildlife movement corridors is a central goal of the community. Large, contiguous expanses of habitat that provide connectivity between critical areas, enable migration and reduce human conflict are most valuable to wildlife. However, small areas can also provide critical habitat and may be just as important to ensuring countywide habitat connectivity.
Past private efforts have been very successful in permanently preserving such strategic habitat lands. The community will continue to explore incentives and partnerships that conserve valuable open space for wildlife from future development.

Policy 1.4.b: Conserve agricultural lands and agriculture

The conservation of agriculture and agricultural lands also conserves open space from development. Historically, the agricultural community has provided much of the stewardship of the natural and scenic resources valued by the community. Conservation of open space via agriculture protects the historic western character of the community and can support wildlife movement corridors, natural resources and scenery. Most of the existing agricultural land has been owned for multiple generations by the same families who own it today, and many of these landowners would like to continue agricultural operations on their land. Regulations that are generally applicable to development may functionally or procedurally impede the continuation of agricultural uses. The County will evaluate the impacts of its regulations on agriculture and continue to provide exemptions to requirements that preclude continued agricultural stewardship of large tracts of open space. The County will also explore other incentives to support and encourage continued agricultural conservation of open space.

Policy 1.4.c: Encourage rural development to include quality open space

It is the community's primary goal to permanently extinguish development rights in critical wildlife habitat, habitat connections, scenic viewsheds and agricultural open space. However, in order to achieve the community's stewardships goals state statute and existing parcel configurations may necessitate continued development incentives in exchange for the donation of permanent conservation easements and clustering of development away from sensitive areas. The incentive program should be designed to achieve a more functional web of wildlife habitat and connections than is possible under state statute. Possible incentives include density bonuses such as house size, locations, guesthouses and other options.

Policy 1.4.d: Establish a funding source for open space

The community should explore the establishment of a dedicated funding source for conservation easements that protect the wildlife habitat, habitat connections, and scenery valued by the community. Conservation easements provide permanent protection of open space from development as well as active stewardship of the land by the holder of the easement. However critical habitat, habitat connections and scenic viewsheds are often located on valuable private land. A dedicated funding source would allow the Town and County to work with conservation groups and private land owners to establish permanent conservation easements on lands the community wants to protect from development.

Policy 1.4.e: Conserve open space to use public lands more responsibly

Providing alternative locations for recreational activities can reduce impacts to wildlife and scenery in sensitive areas. Trails, parks, pathways, dog parks and other public recreational opportunities should be pursued on Town and County lands as part of a conservation strategy. As the community grows, so will recreational use of State and Federal lands and the associated impacts to valuable wildlife habitat and corridors. Conservation easements may also provide the opportunity to manage access to public lands in coordination with State and Federal land managers.

Strategies

The community will undertake the following strategies in initial implementation of the policies of this common value. While this list is only a starting point, and not all inclusive, the community shall periodically update strategies as tasks are completed or as additional action is necessary, based on monitoring of relevant indicators.

Strategies to maintain healthy populations of all native species (Principle 1.1)

1.1.S.1: Create a vegetation cover map that can be used to help inform the identification of relative criticalness of habitat types.

1.1.S.2: Identify focal species that are indicative of ecosystem health and determine important habitat types for those species. Evaluate habitat importance, abundance and use to determine relative criticalness of various habitat types.

1.1.S.3: Establish a monitoring system for assessing the cumulative impacts of growth and development on wildlife and natural resources. Implement actions in response to what is learned to provide better habitat and movement corridor protection.

1.1.S.4: Reevaluate and amend standards for development density, intensity, location, clustering, permeability and wildlife-human conflict. Standards should be tiered based on the wildlife protection goals of an area and the relative criticalness of habitat for focal species.

1.1.S.5: In the interim, as focal species are being identified, work with Wyoming Game and Fish and other partnering agencies and entities to update the mapping that provides a general indication of the location of the Natural Resources Overlay (NRO), based on current protection of critical "species of special concern" habitat.

1.1.S.6: Evaluate and update mitigation standards for impacts to critical habitat and habitat connections as needed.

1.1.S.7: Identify areas appropriate for public and private ecological restoration efforts.

1.1.S.8: Identify areas appropriate for underpasses and overpasses and speed reductions in heavy volume wildlife-crossing areas.

Strategies to preserve and enhance water and air quality (Principle 1.2)

1.2.S.1: Evaluate and update natural resource protection standards for waterbodies, wetlands and riparian areas.

1.2.S.2: Evaluate and update surface water filtration standards, focusing on developed areas near important waterbodies.

Strategies to maintain the scenic resources of the area (Principle 1.3)

1.3.S.1: Evaluate and remap the Scenic Resources Overlay based on accumulated knowledge of potential visual impacts and changes to scenic policy.

1.3.S.2: Evaluate and amend lighting standards based on dark skies best practices.

Strategies to conserve remaining undeveloped open space (Principle 1.4)

1.4.S.1: Update the Planned Residential Development (PRD) tool to better protect wildlife resources. Reconsider applicability of the PRD tool on smaller (35- to 120-acre) parcels. Consider incentives in addition to density bonuses including house size, locations, guesthouses, and other options.

1.4.S.2: Evaluate and update agricultural exemptions and incentives to encourage continued agricultural conservation of open space. Ensure exemptions and provide incentives to enable continuation of agriculture.

1.4.S.3: Explore non-development incentives for the permanent protection of open space.

1.4.S.4: Explore establishment of a dedicated funding source for the acquisition of permanent open space for wildlife habitat protection, scenic vista protection and agriculture preservation.

1.4.S.5: Evaluate and update the definition of publicly valuable open space to include the provision of active recreation opportunities in less critical habitat to relieve recreation pressure in areas of more critical habitat, and public lands access management.

Section 2. Climate Sustainability through Energy Conservation

Consume less nonrenewable energy as a community in the future than we do today.

What does this section address:

Principle 2.1 - Reduce consumption of non-renewable energy

Principle 2.2 - Reduce energy consumption through land use

Principle 2.3 - Reduce energy consumption through transportation

Principle 2.4 - Increase energy efficiency in buildings

Principle 2.5 - Conserve energy through waste management and water conservation

Sustainability

is a system of practices that are healthy for the environment, community and economy and can be maintained for current and future generations.

Why is this section addressed?

The contribution to climate change from the consumption of nonrenewable energy is a perfect example of how seemingly insignificant individual actions can add up to a significant impact at a larger scale. Climate change cannot be addressed by our community alone, but the local, regional, and global impacts of climate change are unacceptable and must be addressed where possible. A changing climate threatens the Greater Yellowstone Ecosystem by altering or eliminating habitats, which makes it harder for native species to survive. We will also feel the effects locally as food, potable water and habitable land are diminished across the world. The cost of bringing food into our remote location, demand for our water, and pressure to develop our valued open space will all increase. Our local economy will also need to adapt as transportation becomes more costly and recreational seasons shift.

However, the community sees climate change as an opportunity as much as a threat. Our stewardship legacy and international recognition provide the perfect chance for us to set an example of how the global issue of climate change can be addressed at the community level. We can become a model for energy conservation and energy independence for over 3 million visitors every year. We have hydro, solar, wind, and geothermal renewable energy resources available to us. Through the development and use of renewable resources and improved energy conservation we can limit our dependence on non-renewable energy resources. As we become a true example of sustainable energy consumption, visitors may be attracted to the area for our climate stewardship alone.

Climate sustainability through energy conservation is included in this Plan because transportation and buildings constitute 95% of the community's energy consumption. In order to meaningfully address our climate impacts in the long-term, energy consumption, land use, and transportation planning must be holistically addressed. The transportation and infrastructure required to sustain a sprawling development pattern requires far more energy consumption than a compact, connected series of complete neighborhoods where services and infrastructure already exist and residents can use alternate modes of travel to move within and between built areas. Buildings can also be designed to be much more energy efficient than they are now.

Beyond reducing our contributions to climate change, energy conservation also makes economic sense for the community. Reliance on diminishing non-renewable resources will cause the cost of energy to increase. This will further increase the cost of living in our community and have detrimental effects on our goals for community character. If we can reduce the amount of motor vehicle travel needed to move around the community, we will be less affected by rising gas prices. If we consume less power in the operation and construction of our public and private buildings and our management of waste, we can continue to have some of the lowest priced and most renewable power in the country.

Awareness of the importance of energy conservation has recently gained momentum with an initiative to reduce Town and County energy consumption by 10% compared to the past five years and the completion of a communitywide emissions inventory through an unprecedented cooperative commitment between the Town, County and Lower Valley Energy. These efforts will assist in meeting the community's energy consumption reduction goals. Moving forward, we realize that it is in the best interest of the ecosystem and the community to continue promoting climate sustainability through energy conservation.

Principles and Policies

Principle 2.1— Reduce consumption of non-renewable energy

In order to reduce the emission of greenhouse gases that contribute to climate change, the community will 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 will be the daily responsibility of the entire community to reduce consumption of non-renewable energy whether for climate, financial or other reasons.

Policy 2.1.a: Shift community energy consumption behavior

The community commits to shifting its behaviors to consume less energy. Reducing energy demand is the simplest way to consume fewer nonrenewable energy resources. Achieving communitywide energy conservation requires reducing individual consumption of energy with every decision. The Town, County, and partnering organizations will educate the community on best available methods for reduction of energy demand and facilitate and encourage each community member to reduce personal energy consumption.

Policy 2.1.b: Encourage energy conservation through energy pricing

The Town and County will work with local energy providers to develop a sliding scale energy pricing structure where the cost of a unit of energy increases with the total amount energy consumed. Money is a significant motivator in all decisions, including energy conservation. The pricing structure will be set up to reward energy consumers contributing to the community goals of conservative and efficient use of energy without punishing households that cannot afford to upgrade energy inefficient structures.

Policy 2.1.c: Increase local use and generation of renewable energy

Using solar, wind, geothermal, and/or hydro energy that has less impact to the climate is the community's preference. The community will work with local utilities and other agencies, non-profits, and businesses to identify local renewable energy generation opportunities so that it is not necessary to add non-renewable energy sources to the community's energy portfolio. Integration of renewable energy into the community's energy portfolio should be done consistently with the community's vision.

Policy 2.1.d: Allow and encourage onsite renewable energy generation

Production of energy from renewable sources on individual properties should be allowed and encouraged. The transmission of electricity is extremely inefficient. Reducing that component of our energy infrastructure could have a large cumulative effect on demand for non-renewable energy and overall energy efficiency. Exemptions to Town and County regulations should be considered to facilitate the installation of on-site renewable energy sources. The community will also explore incentives for on-site renewable energy, utilizing best available practices.

Principle 2.2— Reduce energy consumption 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.

Policy 2.2.a: Enhance existing and future complete neighborhoods

Principle 3.2 details the community's policies to encourage development, infill, and redevelopment that enhances existing and future complete neighborhoods with: defined character and quality design; public utilities; quality public space; a variety of housing types; schools, childcare, commercial, recreation and other amenities within walking distance; and connection by complete streets. Complete neighborhoods contain the greatest potential for low energy consumption living because of the close proximity of residences to services and jobs. Complete neighborhoods in the Town and County will lead to energy conservation through a reduction in motor vehicle miles traveled and consolidation of waste disposal and other infrastructure.

Policy 2.2.b: Direct growth out of habitat, scenery, and open space

Principle 3.1 details the community's policies for conservation of wildlife habitat, habitat connections, scenic viewsheds, and undeveloped open space through the direction of growth into Town and County complete neighborhoods that contain existing infrastructure and services. This will reduce the amount of energy needed to install and maintain infrastructure and transport people and energy around the community.

Principle 2.3— Reduce energy consumption 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 instead has the greatest potential to reduce the community's overall carbon emissions and consumption of non-renewable resources.

Policy 2.3.a: Promote the use of alternative modes of transportation

Principle 7.1 details the community's policies to promote the use of alternative modes over use of the single occupancy motor vehicle. The use of single occupancy motor vehicles is the least energy efficient mode of transportation, as only one person is transported and associated road and parking infrastructure is required.

Policy 2.3.b: Create a safe, efficient, interconnected multimodal transportation network

Principle 7.2 details the community's policies to increase the use of alternative modes of travel to meet our future transportation demand. Walking, cycling, ride-sharing, and transit are the most energy efficient modes of transportation. The community will fund an integrated transportation management plan that will look at all modes of travel and the most effective solutions for transportation in the community, considering long-term impacts such as consumption of non-renewable fuels and the energy costs of transportation infrastructure.

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 currently 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.

Policy 2.4.a: Construct energy efficient buildings
The community should improve the energy efficiency of its buildings. Buildings with tight building envelopes that minimize the loss of energy are more energy efficient because they require less energy yet provide the same level of comfort as buildings with other designs. The Town and County will adopt the most recent energy codes in order to maximize the energy efficiency of new construction and improvements to existing buildings. The Town and County will explore additional incentives for building design that employ best practices for energy efficiency in new and retrofitted buildings.

Policy 2.4.b: Renovate and reuse existing buildings
Where appropriate, the community should renovate, reuse, and repurpose existing buildings. The energy required to extract, produce, transport, and assemble building materials is known as the "embodied energy" of a building. The easiest way to reduce the embodied energy of a structure is to reuse a structure that already exists. The community will encourage the reuse, repurposing and renovation of existing buildings where a safe, energy efficient building can be achieved without constructing a new building.

Policy 2.4.c: Use and reuse construction material sustainably
Where it is not practical to renovate an existing building as described in Policy 2.4.b, the embodied energy of a building should be reduced through the recycling and reuse of building materials or use of sustainable, local materials. The Town and County will lead by example when constructing public buildings and affordable housing units by giving preference to recycled and local materials and local contractors, within reasonable performance and cost limits.

The Town and County should also explore providing locations for materials recycling that make it more cost-effective to recycle than to dispose of material.

Policy 2.4.d: Use energy efficient building systems and appliances
Practices to reduce energy consumption should continue throughout the use of a building, regardless of the energy efficiency of a building's design or the amount of energy initially used to create the building. The Town and County will provide standards for high efficiency heating, ventilation and air conditioning (HVAC) equipment, lighting fixtures, appliances, and other building systems. Where possible, programs will encourage the use of the best available energy efficiency technology for building systems and appliances.

Policy 2.4.e: Encourage smaller buildings
The Town and County will encourage the construction of smaller, energy efficient buildings to improve energy conservation communitywide. Energy efficiency and the amount of energy required to construct a building is directly related to overall building size. Smaller buildings require less material to achieve high energy efficiency and contain less volume to condition, light, and maintain. The community will explore regulations and incentives to encourage the construction of smaller buildings.

Principle 2.5—Conserve energy 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.

Policy 2.5.a: Encourage water conservation

While our community is lucky to have abundant water supplies, water conservation should still be pursued in order to conserve energy and manage natural resources responsibly. As fresh water resources are depleted, the energy required to provide potable water increases. Conservation of water saves aquifer supplies for future generations, protects habitat, and respects downstream users. To better encourage water conservation, municipal pricing should reflect the true long-term cost of production and encourage water conservation. The Town and County will also encourage practices that demand less water, such as landscaping with native species.

Policy 2.5.b: Increase recycling and composting

The community will reduce the amount of solid waste it directs to landfills by increasing efforts to recycle and compost waste. Disposing of solid waste in landfills requires energy for waste transportation, land moving, and other landfill operations. Landfill disposal also requires increased disturbance of otherwise open spaces due to the length of the decomposition process. The community will increase opportunities for recycling, reuse, and composting to minimize the solid waste that must be placed in a landfill. In addition, the Town and County will lead by example by using products that can be recycled or composted and encouraging all members of the community to do the same.

Policy 2.5.c: Reduce energy consumption in wastewater treatment

The community should utilize the most energy efficient wastewater treatment methods and technology to discharge effluent that meets or exceeds the quality of the receiving waters at any time. Wastewater treatment is extremely important to the health of the ecosystem and the community, but can be an enormous consumer of energy. The Town and County will lead by example in attempting to exceed State discharge requirements while limiting the amount of energy consumed by wastewater treatment processes.

Strategies

The community will undertake the following strategies in initial implementation of the policies of this common value. While this list is only a starting point, and not all inclusive, the community shall periodically update strategies as tasks are completed or as additional action is necessary, based on monitoring of relevant indicators.

Strategies to reduce consumption of non-renewable energy (Principle 2.1)

2.1.S.1: Coordinate with the wide range of organizations working on energy conservation to educate the community about the benefits of reducing consumption of energy from non-renewable sources.

2.1.S.2: Work with partners to distribute technological devices, such as home area networks, into the community to raise awareness of the amount of energy being consumed and opportunities for reduced consumption.

2.1.S.3: Partner with organizations such as the Yellowstone-Teton Clean Energy Coalition to educate residents and guests about the negative impacts of vehicle idling.

2.1.S.4: Work with local energy providers to develop a sliding scale energy pricing structure where unit cost increases with total energy consumption.

2.1.S.5: Evaluate and update land use regulations to support renewable energy generation in the community.

2.1.S.6: Coordinate education efforts to avoid private Codes, Covenants & Restrictions (CC&Rs) that prohibit on-site renewable energy generation and other sustainable practices.

Strategies to reduce energy consumption through land use (Principle 2.2)

See Strategies 3.1.S.1 through 3.1.S.5 and 3.2.S.1 through 3.2.S.8.

Strategies to reduce energy consumption through transportation (Principle 2.3)

See Strategies 7.1.S.1 through 7.1.S.7 and 7.2.S.1 through 7.2.S.8.

Strategies to increase energy efficiency in buildings (Principle 2.4)

2.4.S.1: Adopt the most recent International Energy Conservation Code.

2.4.S.2: Develop a comprehensive sustainable building program that includes requirements and incentives for government operations and new private construction to use energy efficiency best practices.

2.4.S.3: Develop a program of incentives and financing options for owners of existing buildings to participate in a communitywide energy retrofit program.

2.4.S.4: Develop a program to facilitate the reuse and recycling of building materials and raise awareness of the benefits of the use of sustainable construction materials.

2.4.S.5: Develop a program to encourage the use of the most energy efficient building systems and appliances.

2.4.S.6: Evaluate and update regulations on building size to encourage smaller, more energy efficient buildings and consume less energy.

Strategies to conserve energy through waste management and water conservation (Principle 2.5)

2.5.S.1: Implement a sliding scale water pricing structure.

2.5.S.2: Increase awareness and opportunities for recycling, reuse, and composting, including communitywide curbside recycling.

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