



# Promote Stewardship of Wildlife and Natural Resources (Theme 1)

## *Statement of Ideal*

***Maintain viable populations of all native species; and preserve the natural, scenic, and agricultural resources that define Teton County's character.***

### ***What does this theme address?***

- 1.1 – Wildlife***
- 1.2 – Human Impacts to Natural Resources***
- 1.3 – Energy Consumption***
- 1.4 – Protecting Humans from Natural Hazards***
- 1.5 – Scenic Resources***
- 1.6 – Agricultural Resources***
- 1.7 – Access to Nature***

## **Why is this theme addressed?**

Teton County's abundant wildlife and natural and scenic resources are an international treasure. These resources largely define the community's natural, social, and economic character. Most members of the community live in the area because of the unparalleled access to wildlife, natural resources, and recreation. The community recognizes that its policies regarding development, transportation, recreation, and energy consumption ultimately have impacts on

these resources. Most members of the community wish to be responsible stewards of these important resources by supporting and maintaining the stewardship, conservation, and agricultural ethic that has been present throughout the county's history. Conservation of private lands has resulted in about 20,000 acres of permanently conserved open space. Another 15,000 acres are still in agricultural use.



**This property is one of many conservation easements in the county protecting scenic quality and open space.**

Teton County 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 federally protected from development, the dynamic natural systems so unique to Teton County do not conform to jurisdictional boundaries. This makes wildlife throughout the ecosystem susceptible to the impacts of development. Privately owned lands in the county continue to provide critical winter habitat for many species. Therefore, effective stewardship of these species requires protection of crucial resources and minimizing development impacts to surrounding public lands.

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 community's natural beauty, have all had both direct and indirect impacts on the

ecosystem at a local and regional level.

The cumulative impact of energy consumption is a recent example of the way in which the sum of human impact creates a much larger threat to our ecosystem. Consumption of non-renewable energy is increasingly costly and contributes to climate change in ways that may threaten the viability of native species, attract non-native species, and diminish air and water quality. The cumulative effect of these impacts may only be apparent and measurable on a regional scale, which complicates our ability to appropriately plan and mitigate the impacts of development.

The importance of wildlife and natural and scenic resources is not just ecological and ideological. The conservation of these resources has a direct and profound effect on the economic well being of the community. The international desire to live and/or visit Jackson Hole depends upon the continued stewardship of wildlife and natural and scenic resources.



**Wildlife and natural resources are one of the priority themes of the plan.**

## What the community has said about this theme



Protection of wildlife and open space has consistently been identified as the highest priority of the citizens of this community. Throughout the planning process, the public continually reiterated that the abundance of wildlife and natural resources is not only unique to Jackson Hole, but that it sets us apart from our peers. The community recognizes wildlife and natural resources as the basis of the community's natural, social, and economic livelihood; and some members of the community believe that wildlife and natural resource protection should be the organizing theme of the entire Comprehensive Plan.

The community takes pride in the stewardship efforts of past conservationists and agriculturalists and wishes to continue in that tradition. Towards that end, the community is supportive of recent governmental and community efforts to increase energy efficiency.

### *2008 polling indicated that:*

- A large majority of the community agrees with the implementation of stronger standards to protect natural resource areas as part of new developments.
- A majority of the community believes that preserving more wildlife habitat and migration corridors is a higher priority than building more deed restricted workforce housing while some believe the goals are equally important.
- A large majority of the community agrees with establishing a funding source to acquire open space or conservation easements for critical habitat.
- Most of the community agrees that more development and population growth should occur in county nodes to limit development in the rural areas of Teton County.
- Many in the community agree that development should be increased at the "Y" and in the Jackson downtown area as a tradeoff for conserving natural resources in other areas.

## Principles and Policies

### Principle 1.1—Maintain viable populations of all native species

*The community's wildlife stewardship ethic must be understood in the context of our location within the Greater Yellowstone Ecosystem. The prevalence of elk, deer, moose, bald eagles, and other wildlife depends upon the health of the entire ecosystem. Without striving to support native species within the ecosystem, the web of support for the most visible species begins to weaken and the intact ecosystem begins to break down. Direct and indirect human impacts in Jackson Hole and surrounding valleys will have an impact on the viability of all native species.*



This plan aims to protect focal species and habitats, as illustrated in this image.

#### Policy 1.1.a: Protect focal species and habitats

Elk, moose, deer, bald eagles, cutthroat trout, and trumpeter swans have been protected since 1994 and are symbolic of Teton County's abundant wildlife. However, their prevalence does not necessarily indicate ecosystem health. New regulations, incentives and programs to protect wildlife will be based on a focal group of species whose protection will indicate protection of all native species. Specifically, protecting the habitat of these focal species will, in turn, protect a number of other native species. Habitat protection of these focal species will become the basis for the Natural Resources Overlay, which will be administered as part of our Land Development Regulations. Until such protections are in place, crucial habitat for elk, moose, deer, bald eagles, cutthroat trout, and trumpeter swans will continue to be protected and mapped using the most recently available data.

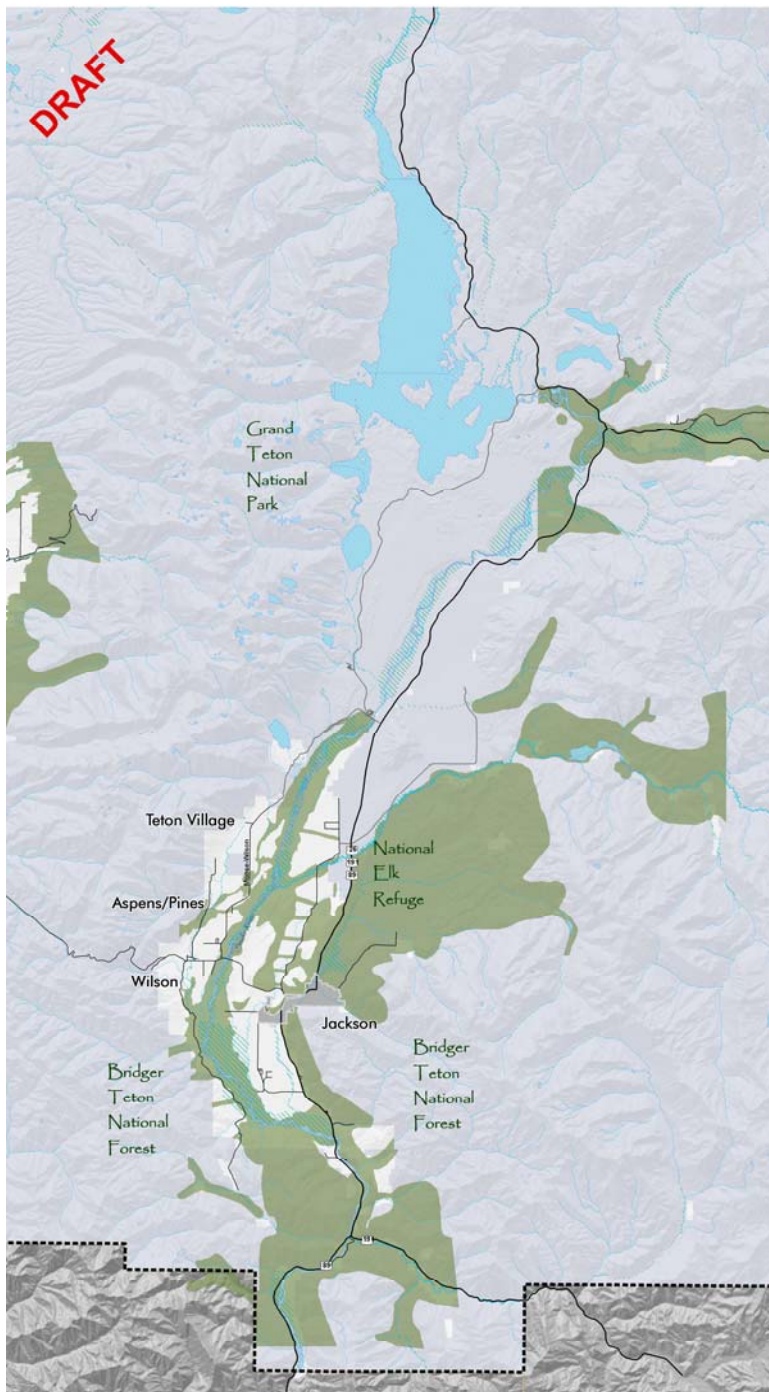
#### Policy 1.1.b: Monitor cumulative human impacts

The direct impacts of humans on wildlife can typically be estimated and mitigated. However, indirect and cumulative impacts are more difficult to measure and predict. In complex situations, science cannot always provide precise answers in the timeframe of a decision-making process. Scientific study of cumulative impacts is an ongoing and complex process from which the community may draw conclusions and make policy decisions, but it can not provide all of the answers. Local, state, and federal governments must work with local biologists to create, and keep current, a baseline inventory of habitat, wildlife and climate. Regulatory and behavioral best practices related to cumulative effects will be based on this data.

#### Policy 1.1.c: Conserve large, contiguous, and connected open spaces

Large and contiguous open spaces of habitat are the most valuable to wildlife because they protect connectivity between crucial areas, enable migration and reduce human conflict. Private efforts have been successful in permanently preserving such strategic lands. Continued public, private, and cooperative efforts are critical to conserving open space, particularly within the Natural Resources Overlay.





This figure shows the general location of the Natural Resources Overlay (NRO). NRO mapping will be updated.

**Policy 1.1.d: Limit development in crucial habitat**

Limiting the amount of direct impact on crucial habitat will ultimately reduce cumulative human impacts. The Natural Resources Overlay (generally shown to the left) identifies where restriction of development should occur in crucial habitat areas. Strategies to restrict development in the NRO include tools such as lowering maximum densities, building smaller structures, compacting development footprints, and reducing alteration to the natural landscape.

**Policy 1.1.e: Require mitigation of impacts to crucial habitat**

Impacts to the ecosystem are inevitable as long as humans live, work, and play. To avoid the cumulative impacts that threaten the viability of native species, the town and county will require impacts to be mitigated at appropriate levels. Direct impacts are more easily quantified and mitigated; however, programmatic steps should also be taken toward mitigation of identified indirect and cumulative impacts.

**Policy 1.1.f: Encourage restoration of degraded areas**

The Town of Jackson and Teton County will support public, private, and cooperative efforts on public and private lands to restore areas with ecological potential.

**Policy 1.1.g: Permeability of development design for wildlife**

In all areas, except those designated for mixed use or more intense development in the Town of Jackson or county nodes, development will be designed to accommodate wildlife movement. Residential subdivisions and other types of development will use best management and design practices (limited fencing, appropriate building placement, landscape clearing/modification, open spaces protected from recreation and pets, and others) to support wildlife migration.

## Principle 1.2—Preserve the quality of natural resources

*The natural resources in Teton County are internationally recognized for their quality and beauty. Stewardship of these resources is important for the sustainability of viable populations of native species and for the health of the human community. Clean air and water are the most basic requirements of a healthy community.*

### **Policy 1.2.a: Buffer water bodies, wetlands, and riparian areas from development**

Water bodies, wetlands, and riparian areas provide crucial habitat and are necessary for the viability of native species. Wetlands and riparian areas are more important to wildlife and ecological health than any other habitat type. Wetlands also provide sediment and nutrient filtration and natural flood protection. Clean surface water provides cleaner potable water supplies and better functioning wetlands and riparian areas. Consequently, development will be set back from water bodies, wetlands, and riparian to protect their functionality.



**Photo caption**

### **Policy 1.2.b: Require filtration of urban runoff**

In those cases where natural filtration systems such as wetlands, floodplains, and riparian areas are not enough to effectively protect the quality of surface water. The town and county will require best management practices and enhancement of natural systems. 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**

The extent of human impact on water quality in Teton County is not quantitatively known. It will be important to monitor the cumulative impacts of human actions and the effectiveness of mitigation efforts. The town and county will support baseline study and periodic reevaluation of Teton County water quality.

### **Policy 1.2.d: Improve air quality**

Air quality in Teton County is 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, and other emissions on air quality. Strategies to improve air quality will include: reducing vehicle miles traveled, reducing wood burning emissions, reducing dust from unpaved roads and large construction sites, and offering incentives for the use of new technologies that reduce carbon emissions.

## Principle 1.3—Promote sustainable use of resources and reduce greenhouse gas emissions

*Consumption of non-renewable energy produces waste that contributes to air pollution, rapid depletion of resources, and climate change. Stewardship of natural resources requires that we focus on how the community and region consume resources such as energy and water. Increased investment in energy efficiency, renewable energy, and energy conservation can lower energy bills, reduce demand for fossil fuels, and help stabilize energy prices and energy system reliability. It can also help reduce air pollutants and heat trapping gas emissions that contribute to climate change.*

### **Policy 1.3.a: Use resources efficiently and promote renewable energy**

The community will use our region's natural resources, including energy, in a manner that meets our present needs without compromising those resources for future generations. The town and county will promote private and public conservation of energy resources by enabling, providing incentives for, and (where appropriate) requiring the conservation of energy and use of renewable energy.

### **Policy 1.3.b: Reduce greenhouse gas emissions associated with development patterns and transportation**

Nodal development at the town, county and regional level, which is designed to provide the housing and basic service needs of a community, can reduce greenhouse gas emissions caused by buildings and vehicles. New and existing development patterns and designs will be evaluated for energy efficiency. The town and county will promote alternative modes of travel, renewable energy, energy conservation, and reduction of greenhouse gas emissions associated with building and transportation.

### **Policy 1.3.c: Reduce greenhouse gas emissions associated with buildings.**

New construction will comply with energy conservation standards, use renewable resources, and reduce carbon emissions. The town and county will pursue regulations, incentives, and allowances necessary to realize carbon neutral buildings by 2030. Publicly funded construction projects will lead by example in implementing this policy, but existing and new private developments should also work toward a reduction of emissions.

### **Policy 1.3.d: Encourage water conservation**

Use of the region's prized water resources in an unsustainable manner threatens the amount of water available for wildlife habitat, human consumption, and recreation. Although the community has numerous water resources, they are finite. Conservation of water is one approach to support sustainable resource use.

### **Policy 1.3.e: Increase recycling and composting**

The disposal of solid waste in a landfill involves not only long term decomposition but also long distance transportation. The community will increase opportunities for recycling, reuse, and composting to minimize the solid waste that must be hauled to a landfill.

## Principle 1.4—Limit development in naturally hazardous areas

*Development in hazardous areas threatens the health, safety and welfare of the people inhabiting the development. 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 they can be disastrous. Development in floodplains and other hazardous areas should be minimized or avoided.*

### Policy 1.4.a: Protect development against flooding

Flooding can cause serious damage to property and threaten public safety. Development in the 100-year floodplain and floodway will be in compliance with the Teton County Floodplain Management Resolution to minimize risks to human safety and to structures.



Photo caption

### Policy 1.4.b: Protect development against avalanches and landslides

An avalanche can easily displace a building or trap occupants inside. Development within 100-year avalanche paths will be limited. Where development does occur within an avalanche path, mitigation measures will be installed. Recent storm events have also shown the destructive power of landslides. Development in potential landslide paths will be avoided or mitigated.

### Policy 1.4.c: Prohibit development on steep slopes

Development on steep slopes decreases the stability of the slopes leading to erosion and landslides. In

addition, the level of disturbance required to develop steep slopes has a disproportionate impact on natural resources. Slope development also poses difficulties for emergency access. The town and county will prohibit new development on natural slopes of greater than 25%. Development on lesser slopes will be required to employ best management practices in slope stabilization, erosion control, and stormwater management. Impacts will be reduced by minimizing disturbance and adapting development to fit the topography rather than modifying the topography to accommodate development.

### Policy 1.4.d: Limit development on poor soils

Development on poor soils threatens the integrity of structures, encourages erosion and landslides, and may cause groundwater contamination if septic systems are used in such areas. Development on poor soils will be avoided.

### Policy 1.4.e: Protect development against seismic activity

Teton County is located in a seismically active area. Strict adherence to building code recommendations for the size of seismic events possible in this area will continue.

### Policy 1.4.f: Protect development against wildfire

Surrounded by National Forest, private lands throughout Teton County are susceptible to wildfires. The mapped Wildland Urban Interface will continue to be updated and refined and development in such areas will be required to mitigate for wildfire hazard.



## Principle 1.5—Maintain the scenic resources of the area

*Scenic resources, rural character, and dark skies play an important role in the community's relationship with nature. The views of mountains, moraines, meadows, and other natural vistas provide the community and guests with a constant reminder of their location within the Greater Yellowstone Ecosystem and give Teton County its scenic character. Interruption of those natural forms by built forms detracts from that character and will be prevented as much as possible.*

### Policy 1.5.a: Maintain natural skylines

The most prominent aspects of our landscape are the buttes, ridgelines, and mountains. Development along butte tops and ridgelines will be restricted and mitigated so that only natural skylines are seen from public roads and parks.



Photo caption

### Policy 1.5.b: Maintain expansive hillside and foreground vistas

Views of expansive forested hillsides and foreground meadows are essential to the rural and scenic character of the community. Views of these vistas from public roads and parks will be protected. Development in such areas will retain these vistas by being located at the periphery of the expanse and naturally screened. Alteration of the landscape that screens the natural vista as well as the development will be avoided.

### Policy 1.5.c: Maintain natural landforms

Maintenance of natural landforms is important to avoiding the perception that the landscape is manmade. All land disturbances will be completed and mitigated so as to appear to fit the natural landscape.

### Policy 1.5.d: Maintain dark night skies

The prevalence of nature over the built form extends beyond the views that can be seen during the day. Lighting of individual developments cumulatively impacts the ability to see dark and starry night skies. Some lighting is required for safe transportation corridors; however, non-essential lighting will be limited and all lighting will be designed to meet dark skies best practices. The town and county will incentivize existing development compliance with this policy.



Photo caption

## Principle 1.6—Conserve remaining agricultural resources

*Historically, agriculture has been the largest land use in Teton County, and at one time played a major role in the economy and social ethic of the community. Throughout the years it has been the agricultural community that has provided much of the stewardship of natural and scenic resources that our community values. Most of the remaining agricultural land has been owned for multiple generations by the same families that own it today; and many of those landowners would like to continue agricultural operations on their land—if it is economically possible.*

### Policy 1.6.a: Conserve agricultural lands and agriculture throughout Teton County

Conservation of agriculture and agricultural lands is important to the historic western character of the community as well as for preserving scenic and natural resource values. The county will support efforts of landowners and land trusts to permanently conserve large intact parcels of land and to continue farming in Alta, Buffalo Valley, the Gros Ventre area, Spring Gulch, and south Fall Creek Road.



**Agricultural land is part of the character of Teton County.**

### Policy 1.6.b: Prioritize conservation of agriculture in Alta

More than any other place in the county, Alta remains an agricultural community. Viable farms still operate and the community has retained its agricultural ethic. Especially in Alta, the focus of land use and other decisions will prioritize the conservation of agricultural lands and agricultural uses. The county will explore incentives for landowners to conserve agricultural lands.

### Policy 1.6.c: Recognize agriculturalists for their stewardship

As the historic leaders of the community's stewardship efforts and the holders of much of the ecologically valuable and most scenic private land, agriculturalists deserve recognition from the community for their promotion of public values. Regulatory exemptions and allowances will be provided to ensure the continued operation of agricultural stewardship and associated contribution to the public goal of conservation.

## Principle 1.7—Maintain public access to public lands

*Stewardship of natural and scenic resources is of highest priority because of the community's strong connection to nature. Much of this connection results from recreational use and access to natural resources. Continued access to public lands, along with responsible use and limited impact, is important to the community.*

### Policy 1.7.a: Provide recreation opportunities on private land

As the recreational use of public lands increases, other multi-use goals are compromised. In order to avoid excessive pressure on nearby public lands, recreational opportunities, such as dog parks, trails, parks, and pathways will be provided in developed and developing areas. Additionally, public and private efforts will be made to promote ecologically responsible recreational use of public lands.

### Policy 1.7.b: Provide continued access to waterways and public lands

Recreational access to public lands should be planned and provided for in a manner that is consistent with stewardship and conservation of natural resources. Local government and private interests will coordinate with state and federal agencies regarding the creation and maintenance of access points to state and federal lands and rivers and creeks. In particular, Teton County will promote the strategies of the Bureau of Land Management's Snake River Resource Management Plan. New developments will not obstruct existing public access points. Unauthorized access points will be eliminated.

## Strategies

The Town of Jackson and Teton County will undertake the following strategies in initial implementation of the policies of this theme. The town and county should periodically update strategies as tasks are completed or when additional action is necessary, based on monitoring of the Theme's indicators.

### Strategy 1.1: Establish an Environment Commission

- The Environment Commission will be an appointed volunteer committee of scientists charged with making recommendations to elected officials regarding stewardship of wildlife and natural resources.
- The Commission will create and maintain an action plan for research and studies related to wildlife and natural resource stewardship, and will help to coordinate data and efforts from multiple agencies.
- Part of their charge will be to address the challenges of evaluating cumulative impacts of human actions as described in Policy 1.1 b.
- Based on completed studies, and conclusions drawn from the indicators of this theme, the Commission will make recommendations to elected officials regarding appropriate policy and/or regulatory changes.

### Strategy 1.2: Update Natural Resources Overlay (NRO) mapping and natural resource protection standards

- Initially, the town and county will work with partnering agencies and entities to update the Natural Resource Overlay (NRO) map to reflect the most recent Wyoming Game and Fish data.

- Reevaluate and amend standards for development density, intensity, and design within the NRO to reduce development footprint and minimize impacts to wildlife.
- Evaluate and amend natural resource protection standards with a focus on water bodies, wetlands, and riparian areas.
- Create a vegetation cover map for the county.
- Change the basis of the NRO, as the necessary research and evaluation is completed—from the current “species of special concern” to identified focal species that are indicative of entire ecosystem health.
- Map areas appropriate for public and private ecological restoration efforts.

**Strategy 1.3: Map natural hazard areas**

- Study and map avalanche and landslide areas.
- Update and refine the Urban Wildland Interface maps.
- Update steep slopes maps.

**Strategy 1.4: Amend Land Development Regulations and the zoning map**

- Evaluate and amend lighting standards based on a dark skies policy.
- Evaluate and remap the Scenic Resources Overlay based on accumulated knowledge of potential visual impacts and changes to scenic policy.
- Eliminate barriers, provide incentives, and establish requirements for the implementation of energy efficient development.
- Adopt an Energy Mitigation Program for residential and nonresidential construction.

## Indicators

The community will use the following indicators to monitor achievement of this theme’s values.

Stewardship of Wildlife and Natural Resources Indicators	Goal	Review Period
1. Acres of land in conservation easement by primary conservation value	<b>increase, especially in NRO</b>	<b>1 yr</b>
2. Ratio of conserved land to developed land in NRO	<b>increase</b>	<b>1 yr</b>
3. Amount of material removed from storm water treatment units	<b>decrease</b>	<b>1 yr</b>
4. Flat Creek sediment loading	<b>decrease</b>	<b>5 yr</b>
5. Ratio of successful habitat mitigation to habitat disturbance	<b>&gt;1:1</b>	<b>5 yr</b>
6. Building-related carbon emissions	<b>Carbon neutral by 2030</b>	<b>5 yr</b>
7. Agricultural acres	<b>monitor</b>	<b>1 yr</b>
8. Access points to waterways and public lands	<b>no net loss</b>	<b>1 yr</b>