

NATURAL SETTING

Natural Setting is one of four Park City core values identified during the 2009 Community Visioning process. Park City's natural environment is identified as one of the main reasons most residents originally moved to town. It is at the core of who we are. The community's desire to maintain Park City's Natural Setting was expressed throughout the visioning.

One of the six key themes of community visioning is "Respect and conserve the natural environment." The core value of *Natural Setting* reflects not only the beauty of our natural environment, but also the important role of nature in Parkites' commitment to the environment. Residents voiced a need for firmer commitment to open space, sustainability, green building practices, balanced growth, and wildlife. Preserving the natural context of place within meaningful sequences of regionally distinctive landscapes reinforces the community's connection to the Natural Setting while supporting natural ecosystem function and health. Planning for air quality, water quality, and wildlife is imperative to provide the quality of life for future generations that we Parkites experience today.

Residents also treasure the Natural Setting for its diverse recreational opportunities. Access to nature improves residents' connection to the Natural Setting, promotes health and well-being, and creates an abundance of recreational opportunities. The continued expansion of trails for downhill skiing, cross country skiing, hiking, and mountain biking has elevated Parkites' standard of living. Park City has become a lifestyle community in which residents make a choice to live here for the high quality of life, especially outdoor recreation. Within all the residential neighborhoods, Parkites have direct access to nature for recreation and viewing.

Natural Setting plays a key role in economic development. Park City's visitors come here to experience the natural beauty and the many recreational amenities that our *Natural Setting* offers. From taking in the vast views of the Wasatch Mountains, to experiencing the epic dry powder on the local slopes, it is an essential part of what attracts visitors to Park City and what keeps Parkites here.

Over the past 20 years, the community has made a significant financial commitment through open space bonding to preserve the Natural Setting. Three separate open space bonds totaling \$40 million dollars were approved by an overwhelming majority of residents on each ballot. Acquiring open space is critical; managing this community asset is essential. Open space, without proper management, can lead to degradation of the natural system. As the City continues to preserve more open space it is essential that a natural resource management plan be adopted to balance human use of open space with ecosystem health.

Presently the City reserves a portion of the resort sales tax for the acquisition of open space.

Park City's legacy as a robust silver mining town at the turn of the 20th century came with a long-term cost of environmental degradation within certain areas of the City. The mine related waste continues to be a focus of Park City's environmental efforts due to the high levels of metals in the soils. The mine related waste is managed through Park City's Soil Ordinance and Environmental Management System (EMS), created in cooperation with the United States Environmental Protection Agency. Implementing best practices and clean-up efforts to reduce environmental impacts related to Park City's mining past is a focus of City Hall in the effort to ensure the health and safety of Park City's residents.

Climate change has become a great concern for our ski town. Average temperatures in the intermountain west have risen approximately 2°Fahrenheit (F) over the past 100 years¹ and are projected to rise an additional 1.9°F to 3°F by 2020 and up to 8°F by 2100. The snowpack, a major contributor to the Park City economy, is projected to decrease, resulting in a shorter ski season.² Future decisions made on the neighborhood, city, and regional level must consider how they will influence climate change and resiliency. Fortunately, mitigation strategies for climate change are in line with the vision Park City residents have for our future. For instance, complete streets with pedestrian and bicycle prioritization make the community more walkable while providing viable alternatives to the car, therefore decreasing the community carbon footprint; a win-win for walkability, recreation, and climate change mitigation.

Park City is committed to climate change mitigation and has taken certain steps to reduce greenhouse gas emissions. The City adopted an Environmental Strategic Plan in 2009 that outlined a vision for promoting environmental sustainability within City operations and for the community as a whole. The goals and objectives outlined in the strategic plan have been included within this section of the General Plan. The City also previously developed a Community Carbon Footprint and Roadmap for Reduction that was complemented by a "Save Our Snow" public awareness campaign. The community footprint identified, in detail, sources of local greenhouse emissions and created a

high-level roadmap for the community to decrease emissions by 15% by 2020. Strategies that have been implemented include: green building upgrades and construction of City facilities, installation of solar panels on City buildings, launching a local car-share program, expansion of public transportation options, fee waivers for renewable energy permits, behavior change programs such as the ParkCityGreen.org website, water efficiency programs, and ongoing support of greenhouse gas reductions through other policies and integrated programs.

To take climate change mitigation to the next level and reverse the detrimental trends, the City and residents must work collaboratively toward a paradigm shift to create profound changes in energy generation, consumption of natural resources and fossil fuels, and waste generation. Park City has the opportunity to become the greenest ski town in the United States if the citizens and its leaders so decide. The community vision certainly sets the tone toward greater environmental stewardship locally.





Open Space: Conserve a connected, healthy network of open space for continued access to and respect for the *Natural Setting*.

The panoramic *Natural Setting* in which Park City rests sets the City apart. Our natural setting in Park City is as important as the built environment, if not more so due to the finite opportunities for additional open space. Preserving connected open space is essential to maintaining *the Park City experience* for locals, tourists, and the diversity of species which exist along the Wasatch Back.

Ecosystem health depends on the natural system working cooperatively and in balance, including; healthy soils, microbes, water, flora and fauna, wildlife, and air (temperature and guality). In order to maintain healthy ecosystems and wildlife populations, the natural setting must remain connected. The City must take steps to prevent fragmentation, for once a portion of natural system is fragmented the negative impacts are difficult and costly to reverse. Along with ecosystem heath, conserving a meaningful network of open space also supports the active lifestyle of Parkites. A win-win for all.



The map to the left shows all protected open space within Park City and the Snyderville Basin in 2013. Park City has done an exemplary job to preserve open space. **Opportunities exist** to ensure that the protected open space remains connected, avoiding fragmentation and maintaining safe wildlife corridors. **Ecosystem health** depends on the system remaining connected. This results in a winwin for recreation enthusiasts, nature lovers, and the wildlife. The 2013 City Boundary is represented in blue.

Objectives

- **4A** Protect natural areas critical to biodiversity and healthy ecological function.
- **4B** Buffer entry corridors from development and protect mountain vistas to enhance the natural setting, quality of life, and visitor experience.
- **4**C Prevent fragmentation of open space to support ecosystem health, wildlife corridors, and recreation opportunities.
- **4**D Minimize further land disturbance and conversion of remaining undisturbed land areas to development to minimize the effects on neighborhoods.
- **4**E Collaborate with neighborhoods to create small parks or passive open space areas.

The map to the right illustrates, in green, those ares that are protected open spaces within and surrounding Park City. It also illustrates, in yellow, those areas that are NOT protected open space within and surrounding Park City. The areas depicted in yellow are those that represent opportunities for possible open space acquisition in the future. These areas illustrate possible connections for Park City's existing open space, connections that provide for trail connectivity and wildlife corridors. If not protected via acquisition, the City should look closely at land use tools to mitigate development impacts by private owners in the future. Open space connectivity is noted in the above Principle 4C - Prevent fragmentation of open space to support ecosystem health, wildlife corridors, and recreation opportunities.



NATURAL SETTING

Community Planning Strategies

- **4.1** Identify local and regional wildlife corridors. Protect wildlife corridors through designation of open space and/or an overlay zone to ensure safe connections between natural areas for wildlife movement. Include overland wildlife corridors for SR 224, SR 248 and US 40 to accommodate wildlife movement.
- **4.2** Create increased opportunities for preservation of open space through designation of TDR sending zones and identify appropriate areas for increased density within TDR receiving zones.
- **4.3** Update the Transfer of Development Rights (TDR) program as needed to reflect market rate valuations of properties included with TDR zones; multipliers may be used to incentivize the conservation of open space. Ensure the public is educated regarding the use and function of TDRs and that the update is a public process. Consider a City "bank" for TDRs.
- **4.4** Utilize findings of the Park City Natural Resource Inventory study to identify sensitive lands to be protected within the Sensitive Lands Overlay of the Land Management Code.
- **4-5** Re-examine annexation policy and Annexation Expansion Area (AEA) boundary to establish strategies that ensure future development within the City preserves open space and enhances the connectivity of open space.



- **4.6** Identify important view corridors and natural buffers that are a high priority for protection and enhancement, including the community's entryways and highway corridors. Ensure protection of the identified community assets.
- **4.7** Utilize restrictive covenants such as deed restrictions and conservation easements to aid in the establishment of open space values ensuring future conservation where applicable.
- **4.8** Conduct a detailed analysis of the City's topography to ensure that all ridgelines are noted; update the existing Ridgeline Map. Evaluate the addition of new Vantage Points for inclusion within the LMC.

City Implementation Strategies

- **4-9** Continue to allocate annual dedicated public funds to ongoing open space acquisitions.
- **4.10** Create and adopt a natural resource management plan for public open space to balance human use of public land with ecosystem health and protection of biodiversity. Natural resource plan should address best practices for wildlife management and hunting.
- **4.11** Enhance the citywide parks and recreation system with safe pedestrian and bicycle connections between public parks, recreation amenities, and neighborhoods.
- **4.12** Create a matrix to prioritize open space acquisitions based on community values, including ecosystem health, sensitive lands, wildlife corridors, view corridors, and recreation.
- **4.13** Establish land stewardship education and incentive programs for private land owners with property dedicated as open space.
- **4.14** Provide both passive and active opportunities within the Natural Setting.
- **4.15** Collaborate with Summit County, Salt Lake County, and Wasatch County to identify and protect regional wildlife corridors and sensitive lands.
- **4.16** Manage public lands for ecosystem health. In instances where open space has been fragmented,

manage wildlife and recreation in an effort to restore the ecosystem to a healthy, natural state.

- **4.17** Continue to maintain environmental programs that embrace the City's responsibilities to protect public health and environment as set forth in the Park City's Soil Ordinance and Environmental Management System.
- **4.18** Require City employees to keep current on training and best practices related to their functions within the City's environmental responsibilities.
- **4.19** Improve and foster communication and education with residents to promote sound environmental management practices and compliance requirements.
- **4.20** Work with community partners and conservation groups to increase the effectiveness of the City's practices supporting its mission of environmental stewardship. Ensure that public participation continues to be integral to the City's environmental best practices.
- **4.21** Establish adequate policies and ordinances to protect riparian vegetation in terms of both water quality and as a natural resource that provides habitat for wildlife; examine waterways as possible wildlife corridors.
- **4.22** Protect natural vegetation and require new vegetation to compliment the existing vegetative character of a site.



GOAL 5 Environmental Mitigation: Park City will be a leader in energy efficiency and conservation of natural resources reducing greenhouse gas emissions by at least fifteen percent (15%) below 2005 levels in 2020.

A Native American proverb says "we do not inherit the earth from our ancestors; we borrow it from our children." In order to ensure that future generations are able to live, work and play in Park City, there must be a community-wide commitment to transform Park City into a more sustainable community. Our dependence on fossil fuels, our growing consumption of water, and our influence on ecosystem degradation has negative impacts on the natural system. Our own health is closely linked with the health of the environment in which we live. By reducing pollution in our air, water, and soils we help to improve our guality of life. By decreasing greenhouse gas (GHG) emissions, Park City will contribute to the global effort-to curb climate change.

Park City has considered multiple goals toward the reduction of greenhouse gases. The 2009 Community Carbon Footprint and Roadmap to Reduction proposed the pursuit of an emission reduction goal of 15 percent below 2005 levels by 2020. To achieve this reduction



To achieve the goal of reducing emissions 15 percent below 2005 emissions by 2020, the Community Carbon Advisory Board examined the potential benefits (as a percentage) of reducing emissions across six major categories:

<u>Community Leadership</u>: Develop frameworks within local government, educate individuals, form partnerships with local businesses.

<u>Transportation and Land Use</u>: Reduce vehicle miles traveled, create mass transit alternatives from Salt Lake, Increase fuel efficiency of vehicles, reduce air travel.

<u>Energy Use</u>: Require new construction to be more energy efficient, Incentivize existing building owners to reduce energy usage.

Energy Supply: Purchase/generate 25% of Park City's electricity from renewable resources.

Waste Reduction and Diversion: Overall reduction of solid waste diversion rate of 50%

Carbon Offsets: Provide a local option to offset GHG emissions.

target, the Park City community must collaborate to reduce projected emissions in 2020 to approximately 785,000 tCO2e. The 2009 Community Carbon Footprint and Roadmap to Reduction outlined 16 objectives under six major influential categories, including: community leadership,

Objectives

- **5A** Encourage development practices that decrease per capita carbon output, decrease vehicle miles traveled, increase carbon sequestration, protect significant existing vegetation and contribute to the community emission reduction goal.
- **5B** Encourage efficient infrastructure to include water conservation, energy conservation, renewable resource technology, decreased waste production, green public transit, and increased road and pathway connectivity.
- **5C** Park City Municipal Corporation will be a strong partner in efforts to reduce community GHG emissions, leading by example and providing policy guidance while promoting personal accountability and community responsibility.
- **5D** Align transportation goals with sustainable goals that reflect all four Core Values of the City.

transportation and land use, energy use, energy supply, waste reduction or diversion, and carbon offsets. To achieve the objectives and relative reductions, twenty-one (21) priority strategies (identified with a snowflake ** within the General Plan) were recommended within the roadmap.

Carbon footprint distribution in Park City



The graph above illustrates the primary contributors to Park City's carbon footprint. The percent noted indicates what percent of the City's footprint is attributable to that industry/segment of the economy.



Community Planning Strategies

The 21 priority strategies have been included within the General Plan and identified with a snowflake. The Multiple snowflakes represent an increase in tons of CO2 reduced by each strategy.

- **5.1** Incorporate environmental considerations as an integral part of reviewing future development and redevelopment projects, including incorporation of greenhouse gas (GHG) goals into land use planning evaluate land use impacts on GHG emissions.
- **5.2** Identify locations within existing neighborhoods in which increased density and/or mixed use are compatible, are located within ¼ mile of public transit, and would decrease trip generation.
- **5-3** Adopt new landscaping requirements (in the LMC) to decrease water utilization and preserve the native landscape. Encourage the use and protection of landscaping requirements to enable the continued utilization of renewable energy sources.
- **5.4** Encourage implementation and identify appropriate areas of town for large-scale renewable resource technology.
- **5-5** Adopt requirements for new development to be oriented for passive and/or renewable energy.
- **5.6** Encourage HOA to allow energy efficient practices



within CC&Rs, including installation of solar on rooftops.

- **5-7** Require proper infrastructure, such as dedicated parking and charging stations, to support electric and alternative fuel automobiles within new development and redevelopment.
- **5.8** Encourage energy efficiencies in construction including: infill, preservation, adaptive reuse, and redevelopment.
- **5-9** Consider the adoption of maximum home sizes for all neighborhoods.
- **5.10** Adopt consistent multiple-jurisdiction permit process for renewable resource technology to create a predictable, easy process. Allow expedited administrative staff review for appropriate small-scale projects.
- **5.11** Require recycling and waste reduction in construction mitigation plans.

City Implementation Strategies

- **5.12** Encourage local agriculture through adoption of standards to allow community gardens within neighborhoods and public common areas.
- **5.13** Encourage local infrastructure for sales of regionally produced livestock and agriculture, including temporary structures and farmer's markets.
- **5.14** Improve visibility of night sky through enforcement of the existing light ordinance and potential enactment of a new night sky ordinance.
- **5.15** Adopt flexible site design standards that encourage screened recycling areas for easy pick-up, including in parking areas if impacts can be mitigated.
- **5.16** Adopt regulations to mitigate phantom energy loads of second homes and nightly rentals.
- **5.17** Increase options and utilization of alternative modes of transportation including light rail, bus transit, car share, bike-share, cycling, and walking.



- **5.18** Encourage public-private partnerships to pursue large-scale renewable energy projects with the intent of reducing the CO₂ output from community's electricity use.
- **5.19** Identify opportunities for, and implementation where appropriate of, micro hydropower systems in Park City's water infrastructure.
- **5.20** Continue to review and investigate best practices that have the potential of substantially improving the environment.
- **5.21** Support community-wide recycling and composting while instituting "pay as you throw" pricing for waste disposal. Require designated recycling areas within development and redevelopment.
- **5.22** Strengthen the State Residential Energy Code through strongly advocating for state and national policies that conserve energy, reduce carbon emissions, and conserve water.
- **5.23** Establish an ongoing funding source to provide economic assistance for residents to incentivize implementation of strategies for Goal 5.
 - 4 Explore opportunities to reduce commercial and residential building mass and scale to create neighborhood compatibility and reduce energy usage.



City Implementation Strategies (continued)

- **5.25** Educate public on the impacts of airline transportation on the community carbon footprint. Work with residents and local businesses to create strategies to reduce and/or offset the amount of airline travel while still retaining a vibrant economy (e.g., support jet fuel efficiency research, increase length of visitor stay, adoption of carbon-offset programs, carbon sequestration, etc.).
- **5.26** Act as an educational resource for the community on environmental initiatives, concepts, and best practices.
- **5.27** Develop community-wide climate challenge: personal, per capita GHG reduction targets, specific challenges (e.g., replace incandescent light bulbs with LEDs).*
- 5.28 Offer free residential energy audits.
- **5.29** Provide low- or no-cost commercial building energy, water, and solid waste audits. *****
- **5-30** Develop enhanced Blue Sky program more renewable energy generation in Park City (premium tier that brings funds back to Park City).
- **5-31** Partner with utilities and state to offer building operator training on energy management for larger businesses. *****



- **5.32** Target education and incentives at second home owners to reduce energy, e.g., improved occupancy-based controls. *****
- 5-33 Expand existing utility rebates/incentives collaborate with potential funding organizations. ☆☆
- **5-34** Increase awareness of existing utility rebate programs. **
- **5-35** Encourage residential and commercial smart metering electrical meters to provide real-time energy consumption. *** ***
- **5.36** Use community carbon website to promote neighborhood meetings to discuss ideas and challenges for reducing emissions.
- **5-37** Pursue direct power purchase options with Rocky Mountain Power for renewable energy. ***

Park City, the Best Town **for** the Planet

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- **5.38** Work with Rocky Mountain Power to educate and expand the benchmark program that identifies individual energy use on utility bills or carbon web site to compare neighbors within neighborhood, in an effort to encourage conservation.
- **5-39** Develop employee outreach programs focused on large employers. ***
- **5.40** Expand and develop new tiered rates for energy use.
- **5.41** Develop community revolving grant/loan program for energy efficiency projects.
- **5.42** Engage largest employers to expand commercial recycling.
- 5-43 Encourage Rocky Mountain Power to fund local Smart Grid pilot project.
- 5.44 Provide incentives for participation in green building labeling systems for existing, leased, and new buildings. (Energy Star, LEED, Built Green, etc.) ☆ ☆
- **5.45** Provide incentives for residential and commercial renewable energy (e.g., tax credits, rebates).**
- **5.46** Develop a shared community teleconferencing facility to host meetings therefore encouraging reduced air travel. *****
- **5-47** Work with the Recycling Center to ensure the most

appropriate location for a new recycling center. Consider a partnership with the County for a regional facility.



Community and Government Working Together to Curb Climate Change

To reduce greenhouse gas emissions by fifteen percent (15%) below 2005 levels by 2020 it will take more than the local government. This type of change requires a community paradigm shift in decision making. To get there, the Community must lead as well as the local government.



GOAL

Climate Adaptation: Park City will implement climate adaptation strategies to enhance the City's resilience to the future impacts of climate change.

While scientists agree that our planet's climate is changing, the effects of climate change vary from region to region. Probable scenarios for the Intermountain West include drought, heat waves, diminished mountain snowpack, earlier snowmelt, catastrophic wildfires, and other disruptions to natural processes and wildlife habitat.¹ Climate change also creates economic uncertainties for our economy which is heavily dependent upon snow fall. If our ski season is shortened, what would the impact on our tourism industry and economy be? Would Park City experience decline as it did in the early 20th century with the fall of silver prices or will more people move to high elevations to escape increased temperatures at lower elevations thus increasing population pressures upon Park City? By taking a proactive approach and planning for a variety of probable climate related scenarios, Park City can be well prepared to adapt to climate change.

Objectives

- **6A** Prepare for probable scenarios that could threaten health, welfare, and safety of residents. Implementation of climate adaptation strategies is necessary to become more resilient to wildfire, flood, and drought.
- **6B** Encourage opportunities for local food production and sales of food produced regionally.
- **6C** Support ecosystem health, biodiversity, and natural buffers between development and sensitive lands.
- 6D Encourage regional planning efforts as a mechanism to mitigate population growth.



CLIMATE CHANGES OVER THE NEXT 50 YEARS MAY HAVE SIGNIFICANT IMPACTS ON PARK CITY'S RECREATION ECONOMY

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Carbon sequestration is the process of removing carbon from the atmosphere and depositing it in a reservoir.

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Community Planning Strategies

- **6.1** Implement the Community Wildfire Protection Plan in cooperation with the Park City Fire District and local partners including the ski areas.
- **6.2** Adopt a natural resource management plan to manage wildfire prevention, water conservation, energy conservation, and biodiversity protection.
- **6.3** Regulate impermeable surface area of lots to ensure proper drainage, hydrology, and mitigation of heat island effect.
- **6.4** Adopt standards to allow community gardens within neighborhoods and subdivisions.
- **6.5** Zone existing agricultural lands and future agricultural land within the Annexation Declaration Area as low density (1 unit per 60 acres).
- 6.6 Factor climate change into long term budget policies and projections. Incorporate adaptable planning principles and sustainable capital projects to mitigate impacts of changing resort development and operations.
- **6.7** The City should investigate opportunities to encourage grey water infrastructure (internal reuse only; not for landscaping) in existing and future developments. This must be coordinated with the State and the County Health Department.



"We are in a unique position to lead with exposure to the nation and the world on how to incorporate sustainable values in the context of an existing historic place."

Comment from resident during 2009 Community Visioning

City Implementation Strategies

- **6.8** Include climate change in the Hazard and Vulnerability analysis of the Natural Disaster Response Plan.
- **6.9** Utilize regional platforms for information sharing and ongoing dialogue among regional partners to continually improve understanding of shared climate risks and capitalize on regional adaptation opportunities.
- **6.10** Upgrade public infrastructure not only to manage water supply for extreme (high and low) water years but also to maintain and enhance the community's water quality.
- **6.11** Integrate climate adaptation policies into all aspects of public and private planning including water, sewer, and storm water management.
- **6.12** Support innovative technology in water conservation, stormwater management, and sustainable snow making.
- **6.13** Explore strategies to incentivize local agriculture including local property tax abatement.
- **6.14** Consider the option of surcharges or offsets for heat melt driveway systems that do not utilize renewable energy sources.



Regional Climate Adaptation Planning Alliance

Report on Climate Change and Planning Frameworks for the Intermountain West



Prepared by ICLEI For Members of the Urban Sustainability Directors Network August 2011

In 2011, Park City participated in a regional adaptation effort that included municipalities from Tucson, Flagstaff, Las Vegas, Salt Lake City, Boulder County, Fort Collins, and Denver known as the Regional Climate Adaptation Planning Alliance. The group's networking efforts culminated in a formal report by ICLEI titled "Report on Climate Change and Planning Frameworks for the Intermountain West"

