



Boulder County Comprehensive Plan

Environmental Resources Element

(Draft Update - January 25, 2013)

Goals of the Environmental Resources Element

B.1 Boulder County's unique or distinctive natural features and ecosystems shall be conserved and preserved through protection and restoration in recognition of the irreplaceable character of such resources and their importance to the quality of life in Boulder County.

B.2 Boulder County seeks to manage natural resources in a manner that is consistent with current ecological principles and sustainable conservation practices. To that end, in the management of these unique resources, Boulder County shall encourage the following: the allowance of natural processes to occur, the reintroduction of natural disturbances (e.g., fire and grazing), the maintenance or reintroduction of native species, the restoration of degraded resources, the elimination of undesirable non-native species, efforts to minimize human impacts, and the development of long-term ecological monitoring programs.

B.3 Boulder County recognizes that climate change is having significant impacts on our environmental resources. As the body of climate science knowledge grows and potential effects (e.g., increasingly severe weather and increased fire and flood frequency) are better understood, Boulder County shall modify plans and policies to adapt to environmental changes and to reduce potential adverse impacts on environmental resources.

B.4 Boulder County shall seek to conserve air, water and soil. Boulder County shall pursue restoration of such resources that are in a degraded condition to enhance the environmental health of the county. Air, water, soil, and noise or light pollution, and inappropriate development in natural hazard areas shall be eliminated or minimized to the greatest extent possible in order to prevent potential harm to life, health and property and to reduce incremental degradation of the overall environment.

B.5 Boulder County shall seek to protect prominent natural landmarks in the county in order to preserve their unique scenic, visual or aesthetic values and provide a record of the county's natural heritage.





B.6 Boulder County shall conserve and preserve Environmental Conservation Areas (ECAs) in order to perpetuate native species, biological communities, and ecological processes that function over large geographic areas and require a high degree of connectivity to thrive.

B.7 Boulder County shall protect High Biodiversity Areas, Natural Areas, Natural Landmarks, Significant Natural Communities, Critical Wildlife Habitats, Species of Special Concern, Wetlands, Riparian Areas, and Rare Plant Areas – through preservation, conservation, and restoration – in order to sustain natural ecosystems and to maintain and enhance the biodiversity of the region. These protections shall also provide a baseline of ecological processes and functions for monitoring long-term ecological change.

B.8 Boulder County shall pursue protection of critical environmental resources in partnership with private landowners, non-governmental organizations, and other governmental agencies.

Overview of Environmental Resource Policies

As described in the goals of the Environmental Resources Element, Boulder County strives to preserve, conserve and restore the unique and distinctive natural features and ecosystems of the county using sound resource management principles and practices at both a site-specific level and on a broader, landscape scale. Boulder County's important Environmental Resources include air, soil, and water, as well as our Species of Special Concern. Environmental Resources also include land areas that are designated to protect and conserve the county's landscapes, natural features and ecosystems. These are Environmental Conservation Areas, High Biodiversity Areas, Natural Areas, Natural Landmarks, Significant Natural Communities, Critical Wildlife Habitats, Wetlands and Riparian Areas, and Rare Plant Areas.

The general policies below (ER 1.01 to ER 1.06) pertain to all Environmental Resources. Additional policies follow the general policies that expand on and are unique and specific to Air, Water, Soil and Noise (ER 2.01 to ER 2.03), Environmental Conservation Areas (3.01 to 3.05), and Natural Areas and Natural Landmarks (ER 4.01 to ER 4.04).

An explanation of these Environmental Resources and of their importance to the ecosystems of Boulder County follows below (Note: As described in policy ER 1.02, the criteria used to determine the designation of specific resources is part of a task currently undertaken by staff).

Environmental Conservation Areas

Environmental Conservation Areas (ECAs) encompass the largest remaining relatively natural or restorable forests, shrublands, grasslands, and agricultural landscapes in Boulder County. Even with the current amount of relatively undeveloped public land in the county, and the conservation and preservation efforts of public land managers on these lands, broad shifts in animal and plant communities are occurring as a result of development, habitat degradation, climate change, and the exclusion or disruption of natural processes. ECAs are a planning tool developed by the County for analyzing land use and land management decisions in the context of the cumulative effects of development, roads, trails and increased human presence at a



landscape-scale on these large and complex ecologies. This type of tool is encouraged by the fields of landscape ecology and conservation biology as a strategy for maintaining the wide-ranging animal species, native plant communities, and natural ecological processes that operate at this scale.

ECAs are a framework for ecosystem management that identifies and designates the richest ecological sites and delineates corridors of connectivity between them regardless of ownership. With this designation, land use and land management decisions within and adjacent to ECAs and their connectors can be made within a framework that seeks to: protect species that may be wide-ranging, ecologically specialized or human sensitive; encourage the return of species lost from the county; prevent additional habitat fragmentation; and limit increases in invasive non-native species in these ecologically-significant areas. Such planning and decision-making processes may include resource management plans, the location and extent of new development, future land and easement purchases for open space purposes, and the location of trails and other public facilities.

High Biodiversity Areas

High Biodiversity Areas are locales that have a concentration of rare environmental resources. If managed well, they represent the greatest opportunities for preserving specific aspects of Boulder County's natural heritage. HBA boundaries encompass those lands that provide the habitat and ecological processes upon which the resources depend for their continued existence. These areas have been identified and ranked -- by the CSU Natural Heritage Program -- as having *outstanding significance* (B1), *very high significance* (B2), or *high significance* (B3).

Natural Landmarks

Natural Landmarks are prominent landscape features that distinguish a specific locality in Boulder County. They are important for the views they afford, their value as scenic vistas and backdrops, and the intrinsic value they hold as wildlife or plant habitats, natural areas, park and open space preserves, and open land areas. However, the single criterion for designation shall be its visual and scenic prominence as a landscape feature. They provide a record of Boulder County's natural heritage.

State and County Natural Areas

State and County Natural Areas are physical or biological areas that are unique and important to the natural heritage of the state and/or the county. Each area either retains or has reestablished its natural character, although it need not be completely undisturbed. It typifies native vegetation and associated biological and geological features and provides habitat for rare or endangered animal or plant species or includes geologic or other natural features of scientific or educational value. State Natural Areas are designated as such by the Colorado Natural Areas Program.

Significant Natural Communities

Significant Natural Communities are areas that are recognized by the presence of a critical plant association that is limited in its distribution and occurrence. These areas have multiple



important environmental resources that co-occur and interact. These areas have species and processes that are relatively undisturbed by human actions and currently exist in their natural state.

Critical Wildlife Habitats

Critical Wildlife Habitats are the unique habitats which have a crucial role in sustaining populations of native wildlife and in perpetuating and encouraging a diversity of native species in the county.

Wetlands and Riparian Areas

Wetlands and Riparian Areas have unique and critical functions in the ecosystem. Wetlands have high biodiversity, are relatively rare, provide unique wildlife habitat, filter water, and buffer floods. Riparian Areas are a unique combination of terrestrial plant communities and aquatic systems associated with flowing water that provide unique habitat and important movement corridors for wildlife.

Rare Plant Areas

Rare Plant Areas are sites that are known to have or have a high likelihood of having occurrences of Plant Species of Special Concern.

Species of Special Concern

Species of Special Concern include the flora and fauna in the county whose populations may be threatened or endangered, locally rare, experiencing long-term non-cyclical population declines, isolated or restricted to distinct local habitat types, or native species which have ceased to exist within Boulder County.

General Policies for Environmental Resources

The following policies apply to all Environmental Resources in Boulder County

ER 1.01

Boulder County plans and attendant regulations shall be formulated to insure that land uses avoid where possible and otherwise minimize the destruction or adverse modification of environmental resources. Land use proposals shall be evaluated on a case-by-case basis for their potential impacts on the Environmental Resources identified in this plan. The applicant may be required to complete an Environmental Impact Report that addresses the proposal's potential impacts and includes recommendations for mitigation of those impacts.

ER 1.02

Boulder County shall designate the above described Environmental Resources that have significance to Boulder County. Such designations, and attendant maps, will be based on criteria that use science, collaboration with experts, and on-the-ground verification. Boulder County may periodically reevaluate such criteria and designations. (Note: designation criteria,



inventories, and maps are being updated currently by staff as a subsequent task for future review. It is anticipated that these will be integrated into the Plan as appendices).

ER 1.03 Areas that are considered as valuable scenic vistas shall be preserved as much as possible in their natural state.

ER 1.04 Boulder County shall work with federal, state, municipalities and other public or quasi-public entities, having a jurisdictional or property interest in unincorporated lands within or surrounding any Environmental Resources to achieve the protection of these resources.

ER 1.05 Boulder County shall work in partnership with private land owners and non-governmental organizations to protect, conserve, and restore Environmental Resources. The tools used for these purposes may include, but are not limited to, density transfers, conservation easements, restrictions on properties as part of development review, or purchase by public entities. These measures shall incorporate a regional approach to protection of the Environmental Resources.

ER 1.06 Boulder County shall use its open space program as one means of achieving its goals for protecting the Environmental Resources.

ER 1.07 All private landowners are encouraged to seek assistance from appropriate governmental and non-governmental entities to protect the Boulder County's Environmental Resources.

Air, Soil, Water, and Noise Policies

In addition to the general policies above, the following policies also apply specifically to air, soil, water and noise.

ER 2.01 Boulder County shall enact local air, soil, water and noise pollution laws or regulations pursuant to and in accordance with State law to attain and exceed environmental health standards and the overall environmental health of the county.

ER 2.02 Boulder County shall evaluate land use proposals and other planned activities considering their cumulative impacts on environmental health. These proposals and activities shall comply with air, soil, and water quality standards, as well as noise level standards, established by county and state agencies or the Boulder County Land Use Code. Mitigation of any impacts may be required for the proposal or activity to be approved.

ER 2.03 Boulder County shall take a water basin approach to maintaining water quality. Boulder County encourages the formation of management subcommittees for every county water basin identified in the Regional 208 Water Quality Plan. As appropriate, county departments shall participate in these committees.



Environmental Conservation Areas Policies

In addition to the general policies above, the following policies apply specifically to Environmental Conservation Areas.

ER 3.01 Boulder County shall designate and map Environmental Conservation Areas as well as Overland and Stream Habitat (riparian) Corridors at a landscape scale. (Note: designation criteria, inventories, and maps are being updated by staff as a subsequent task for future review. It is anticipated that this work will be integrated into the Plan as appendices).

ER 3.02 Boulder County shall encourage the removal of development rights from ECAs through transfer, donation, acquisition or trade.

ER 3.03 Development within ECAs shall be located and designed to minimize the cumulative impacts on the environmental resource values of ECAs.

ER 3.04 Development outside of ECAs shall be located and designed to minimize impacts on ECAs and connectivity between ECAs.

ER 3.05 Boulder County shall encourage and participate with the appropriate public entities and private land owners in the development of coordinated management plans to conserve, preserve and restore the environmental resource values of ECAs.

Natural Landmarks and Natural Areas Policies

In addition to the general policies above, the following policies apply specifically to Natural Landmarks and Natural Areas.

ER 4.01 Natural Landmarks and Natural Areas identified in the Environmental Resources Element and as may be identified from time to time by the state under the Colorado Natural Areas Act, shall be protected from destruction or harmful alteration. (Note: designation criteria, inventories, and maps are being updated by staff as a subsequent task for future review. This work will be integrated into the Plan as appendices).

ER 4.02 Boulder County shall coordinate with local, state, and federal agencies and municipalities, as well as with private landowners, to protect natural resource values within Natural Landmarks and Natural Areas. This may include: identification of specific resources of concern including scenic values; recommendations for long-term management; mitigation of existing or foreseen impacts; or protection through acquisition of land interest.

ER 4.03 Boulder County shall submit any County Natural Area that may be of state-wide importance to the Colorado Natural Areas Program for designation as a State Natural Area.

ER 4.04 In cases where a Natural Landmark or a Natural Area contain or are adjacent to private lands, the Boulder County may work with those landowners to formulate management programs.