



## Land Use

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### BOULDER COUNTY PLANNING COMMISSION AGENDA ITEM #5

June 19, 2013 – 4:00 PM

Hearing Room, Third Floor  
Boulder County Courthouse

#### **Docket BCCP-08-003: BOULDER COUNTY COMPREHENSIVE PLAN UPDATE: Environmental Resources Element revision Update**

Planning Commission review and action on the draft Environmental Resources Element update, including revisions prepared by staff pursuant to the May 15, 2013 Planning Commission hearing.

*Action Requested: Approval - Public Testimony Will Be Taken*

(Staff Planners: Peter Fogg and William Davidson – Land Use; Justin Atherton-Wood – Parks and Open Space)

#### **Introduction and Summary**

The Land Use Department has initiated a wide-ranging, cover-to-cover update of the Boulder County Comprehensive Plan (the Comprehensive Plan or BCCP). The current phase of the update is to reexamine the applicability, effectiveness and clarity of all the existing BCCP Elements' policies

The attached draft of an updated Environmental Resources Element (ER Element, or ERE) has been revised to reflect Planning Commission and public input received at the May 15, 2013 public hearing on this docket. This revised draft also includes the changes resulting from the April 4, 2013 Planning Commission hearing and the February 28, 2013 POSAC meeting.

New text and text revisions in this draft are shown in **orange Calibri font**. Text deletions are shown as strikeouts. All text changes are accompanied with footnotes to identify the source of the revision.

Attachment A is the draft with the changes and explanatory notes as discussed above. Attachment B is a clean copy of the updated Element with final text only. This is the version of the draft for which staff requests approval.

Page 10 of the attached draft is an example of how staff proposes to identify the various plans, programs, and other management techniques that may be employed to continue to implement ERE policies. These will be placed in an Appendix to the BCCP, which will contain a glossary, discussion of programs designed to carry out the goals and policies, criteria, and technical data. It is intended that this approach will be the most efficient way of

presenting more detailed data than goals or policies are intended to, rather than encumbering the policies themselves with partial and inevitably incomplete lists. Our intention is to provide readers and users of the BCCP with appendices and links to other sources of information about the methods and programs available for translating the Goals and Policies into action.

Staff is requesting that the Planning Commission APPROVE Docket BCCP-08-003: BOULDER COUNTY COMPREHENSIVE PLAN UPDATE: Environmental Resources Element revision Update.

## **Proposed Revisions from the May 15 Meeting**

Based on Planning Commission's comments at the May 15 meeting, staff has made a number of changes to the draft, and has provided comments in *italics* summarizing the changes that were or were not made as well as why.

### **List of Commission comments, requests, and suggestions for revisions from the May 15 meeting with staff responses**

1. The natural rights issue is still a question. *Response: No changes were made to the draft to further address this issue. At the May 15 meeting, staff described concerns about why they do not support including "natural rights" in the BCCP.*
2. Get rid of the qualifying adverbs (e.g. "shall seek to...", "work to...", etc.) and just use verbs (e.g. "shall protect", "shall conserve", "shall designate", etc.). *Response: Numerous changes have been made to eliminate these.*
3. Use of terms "landscape scale", "site-specific", and "regional scale" – provide a one-two descriptive sentence for each. *Response: Paragraph two of the Overview has been rewritten to better explain the concepts. The term "regional scale" is no longer used in the draft. Detailed definitions for the other two terms can appear in the glossary in the Appendix.*
4. "Invasive" only mentioned in one place (in the ECA description in the Overview). We need something more general about invasive species. *Response: A full explanation of invasive species is too specific and programmatic for goals or policies, and staff believes that a full discussion should take place in the Appendix.*
5. How much more emphasis do we need to give to invasive species control in the BCCP? What extent of control would be considered a violation of "natural rights"? *Response: Staff sees no benefit in adding additional language to the text of the Element.*
6. Is "best science" as used in Goal B. 3 regarded as state-of-the-art language? *Response: The phrase has been changed to "best scientific information."*
7. Goal B. 4 could be condensed to one sentence. *Response: wording changes were made to this Goal (now numbered B.5), but the sentences were not combined since the current*

wording provides what staff feels is appropriate clarity. Also, “best science” has been changed to “best scientific information.”

8. The word “maintain” should be kept in B.7. *Response: The current draft rearranges the goals, and what was previously B.7 is now numbered as B.2. Goal B.7 was moved to B.2 to strengthen the connection between B.1 and B.2. It allowed for the wording in B.2 to become more concise. For example, the word “maintain” has been eliminated. The suggested language has been tweaked to describe the concept in a similar manner.*
9. Rework Goal B. 7 to say “Boulder County shall designate, sustain and protect natural ecosystems and enhance the biodiversity of the region through preservation, conservation and restoration.” *Response: See previous explanation.*
10. Regarding “biodiversity”, do we really mean “increasing” it with no qualifiers or only increasing native biodiversity? *Response: Goal B.7 (now B.2) has been rewritten with multiple wording changes, to address this and other concerns. Detail regarding this terminology will be addressed by the criteria in the Appendix and the mapping.*
11. Biodiversity as an unqualified term; it can include more than native species and may not be desirable. *Response: This issue is complex in reference to native species, and is most appropriately addressed in greater detail in the Appendix. Per Goal B.1, it’s the biodiversity that is “unique and distinctive” to the county that the County will “sustain and protect per Goal B.2.*
12. Eliminate “enhance” so it reads “Boulder County shall ~~work to~~ designate, sustain and protect natural ecosystems and ~~to maintain and enhance to~~ biodiversity of the region...”? *Response: This word is no longer used in B.2 (previously numbered B.7) due to the extensive rewrite of the goal.*
13. B. 8 is “clumsy on the tongue” especially where it says “...with a more regional-scale, ecosystem approach”. Rework this. This goal sounds more like a policy with its many references to specifics like regulatory authority and all the partnership/advocacy/”other programs” citations. *Response: The phrase “...with a more regional-scale, ecosystem approach” was rewritten. The cited phrase has been eliminated, and the emphasis put on “...both at the site-specific scale and landscape scale...” The references to specifics like the partnership/advocacy/”other programs” citations were left in. This goal balances the more regulatory/decision-making oriented nature of the other goals and provide support for other actions the County may take in the protection of environmental resources.*
14. Some confusion about what is meant/the difference between “environmental resources” (ER 1.01) and “designated environmental resources” (ER 1.02) Is ER 1.01 meant to cover any and all resources with ER 1.02 meaning only designated resources? What’s the difference? What do these mean to an applicant/landowner seeking some kind of land use activity? Need some better parameters or clarity. *Response: Staff has inserted explanatory language into the Overview to alleviate confusion.*
15. ER 1.03 – This policy is much too vague and subjective - (needs some sharpening, clarity, examples of what a “valuable scenic resource” is e.g. Natural Landmark). Also, is the “preservation” of the scenic vista to be provided by managing land uses between the

vista and the points from where it is being seen, or by managing land uses on the features that make up the vista proper (or both)? *Response: The Scenic Vistas Policy was not changed in the same way as discussed by Planning Commission. The reason for this is that rather than narrowly defining scenic vistas, staff chose to leave the flexibility to consider appropriate ways of dealing with the issue on a case-by-case basis in the process of development review, as is the current practice. Attachment C shows excerpts from the Land Use Code that reference the concept of scenic vistas.*

16. “Valuable scenic vistas” needs better definition and/or clarity. *Response: This comment was addressed in the policy response immediately above.*
17. ER 1.07 – Rearrange the wording of ER 1.07 to make it proactive. For example, ER 1.07 could say “The County will encourage all landowners to seek...” *Response: Various changes have been made through the document to make wording proactive.*
18. ER 2.03 – reword to make this one sentence e.g. “Boulder County shall take a watershed approach to addressing water quality and quantity, including supporting and participating in local and regional partnerships engaged in watershed issues.” *Response: This policy is now one sentence. The word “addressing” has been changed to “engaged in.”*

## **Other Changes That Have Been Made**

The changes listed below are primarily minor wording changes which staff has made in addition to those changes addressing Planning Commission comments above.

### **OVERVIEW**

- A. Page 2, end of Paragraph 2 (was Paragraph 3): deleted “Per policy ER 1.02”; combined it with paragraph above; made “list” into “lists.”
- B. Page 2, Paragraph 3  
Line 7: following “developed by the County” added “and its agency partners.”  
Line 9: changed “ecologies” to “ecosystems.”
- C. Page 2, Paragraph 4  
Lines 1 and 2: changed “the richest ecological sites” to “valuable ecological areas.”

### **GOALS**

- D. Goal B.1. (page 4). *Reorganized it to be more active. It now reads:*  
“**B.1** Boulder County<sup>2</sup>s **shall conserve and preserve** environmental resources including its unique or distinctive natural features, **biodiversity**, 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.”
- E. Goal B.3: changed “enhance” to “promote.”

## **APPENDIX – Potential Tools and Implementation Strategies**

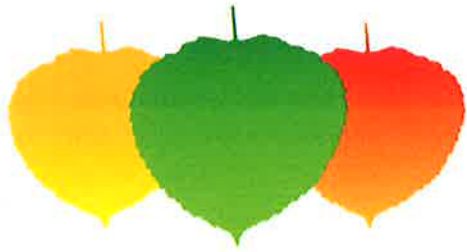
- F. Page 10: Removed Goals and Policies header and clarified in the description that these lists are not intended to be part of the Goals/Policies section but may appear in an appendix.

### **Recommendation**

Staff recommends that the Planning Commission APPROVE Docket BCCP-08-003; BOULDER COUNTY COMPREHENSIVE PLAN UPDATE: Environmental Resources Element Revision Update.

### **Attachments**

- A: Environmental Resources Element Draft 6/11/2013 with notations**
- B: Clean version of Environmental Resources Element draft**
- C. Land Use Code Language Addressing Scenic Vistas**



# Boulder County Comprehensive Plan

## ATTACHMENT A

### Environmental Resources Element

#### Draft 6/11/2013, ANNOTATED

##### Overview

~~As described in the goals and policies of the Environmental Resources Element that follow,~~ Boulder County values and strives to preserve, conserve and restore the unique and distinctive natural features, ecosystems and landscapes 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 naturally occurring ecosystems and their native species populations. Species of Special Concern are an integral component of this management approach. The list of Species of Special Concern ~~consists of the~~ includes<sup>1</sup> locally threatened or endangered flora and fauna that the county seeks to protect. Habitat for these Species of Special Concern is particularly vital, since it often presents our best chance to protect native species.

In addition to identifying Species of Special Concern, this Element designates areas of important habitat at **two scales**: a the "site-specific scale" and ~~on a~~ the broader, "landscape-scale." **At the site-specific scale, important environmental resources typically consist of an easily definable area such as an individual parcel of land or a distinct geographical location where specific resources exist. Designations at the site-specific scale include Critical Wildlife Habitats, Rare Plant Areas, Wetlands, Riparian Areas, and Significant Natural Communities (formerly referred to as Critical Plant Associations). Environmental resources designated at the landscape-scale are much larger and holistic in approach. At the landscape scale,** the designations of High Biodiversity Areas and Environmental Conservation Areas ~~are at the landscape scale~~ seek to preserve broader ecological processes and functions. **These areas often encompass multiple resources also designated at the site-specific scale<sup>2</sup>.** Natural Areas and Natural Landmarks

<sup>1</sup> Clarified language; Species of Special Concern are more than those that are threatened and endangered

<sup>2</sup> Revised text to better distinguish site-specific scale designations from landscape scale designations





designations are intended to encompass and protect unique and distinctive natural features and landscapes in the county. The fundamental and essential sustaining resources of air, soil, and water are also considered and addressed.

While this Element calls specific attention to the aforementioned ~~designations~~ **designated environmental resources (Environmental Resources)**, it also recognizes that these are not the only environmental resources of significance and importance that should be considered in land use decisions and cared for through management practices. With this in mind, Boulder County's overarching intention is to maintain the overall health and integrity of our rich and diverse environment to the greatest extent possible as our knowledge and understanding of environmental functions and interconnections evolves. ~~To this end, it is intended that~~ The term "environmental resources" as used in this Element consists of both the designated "Environmental Resources" and undesigned environmental resources<sup>3</sup>. ~~though particular consideration in decision-making processes may be given to designated environmental resources.~~

To provide some context for the goals and policies, a brief explanation of the environmental resource designations and their importance to the ecosystems of Boulder County follows. For the most part, these designations are those that already are utilized by reference in the Boulder County Land Use Code. Designations added or amended in updates to this Element **will also be protected through administration of the Code and in conformance with applicable Federal and State law**<sup>4</sup>. ~~also to be protected through administration of the Land Use Code. Per policy ER 1-02,~~ The criteria used to determine these designations are periodically reviewed and updated resulting in ~~both an~~ updated lists<sup>5</sup> of Species of Special Concern and updated maps of the Environmental Resources Element. Descriptions of these designations follow.

#### *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 **and its agency partners**<sup>6</sup> 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~~ **ecosystems**<sup>7</sup>. ~~This~~

<sup>3</sup> Revised text to better distinguish usage of the phrase "environmental resources" from "Environmental Resources"

<sup>4</sup> Clarifying legal relationship of ERE designations to the Code and other laws

<sup>5</sup> Separate lists for flora and fauna are being proposed

<sup>6</sup> Clarification; the ECA concept was developed collaborative

<sup>7</sup> Revised with better term



~~type of~~ This land use decision-making tool is encouraged by the fields of landscape ecology and conservation biology as used as a strategy for maintaining the wide-ranging animal species, native plant communities, and natural ecological processes that operate at this landscape<sup>8</sup> scale.

ECAs are a framework for ecosystem management that identifies and designates the richest valuable ecological sites areas<sup>9</sup> 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 disturbed by human presence; 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 (HBAs) 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. The boundaries of HBAs 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). [Note: this is a new designation being created by this Update].

*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

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<sup>8</sup> Strengthened; the term “tool” was used ambiguously  
<sup>9</sup> Clarified language consistent with “landscape-scale” definition above





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. These areas are also referred to as Critical Plant Associations in the Boulder County Land Use Regulations.

#### *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 are **generally described as** lands transitional between terrestrial and aquatic systems where ~~the water table is usually at or near the surface or~~ the land is covered by shallow water **or soils are saturated during the growing season**<sup>10</sup>. 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 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.

To summarize, restoring, protecting and preserving our natural environment and all of its interdependent components upon which all things depend have been core values and objectives of Boulder County since the adoption of the first county-wide comprehensive plan in 1978. Numerous initiatives, plans and programs have been diligently pursued and implemented in this quest, and have benefited from the involvement of many stakeholders and interested

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<sup>10</sup> Revised; better definition for our arid landscape



parties in both the public and private sectors. The Environmental Resources Element is both a compass and a tool for use in sustaining and advancing these efforts.

## Goals of the Environmental Resources Element

(Note: These goals represent an update to the Environmental Management Goals found on **Goals -Page 2** of the existing Comp Plan and not in the existing Environmental Resources Element.)

**B.1** Boulder County's ~~shall conserve and preserve~~<sup>11</sup> environmental resources including its unique or distinctive natural features, **biodiversity**<sup>12</sup>, 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.7~~ **B.2** Boulder County ~~shall work to sustain~~ and protects **native species**, natural ecosystems and ~~to maintain and enhance~~ the biodiversity of the region by designating and ~~protecting~~ environmental resources through ~~preservation, conservation, and restoration~~. These ~~designations include~~ High Biodiversity Areas, Natural Areas, Natural Landmarks, Significant Natural Communities, Critical Wildlife Habitats, Species of Special Concern, Wetlands, Riparian Areas, and Rare Plant Areas. ~~as well as~~ Other resources and designations ~~that~~ may be identified in the future. These **designated** areas and species ~~lists~~ **protections** shall also provide a **point of reference** ~~a baseline of ecological processes and functions~~ for **continued** monitoring of long-term ecological change<sup>13</sup>.

**B.3** ~~B.2~~ Boulder County ~~seeks to~~ **shall promote**<sup>14</sup> the viability and integrity of all naturally occurring ecosystems and their native species populations by applying a variety of environmental resources management strategies in a manner that is consistent with current ecological principles and sustainable conservation practices (*see Potential Tools and Implementation Strategies*<sup>15</sup>).

**B.4** ~~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 are better understood, Boulder County shall ~~seek to~~<sup>16</sup> incorporate the best ~~science~~ **scientific information**<sup>17</sup> into planning and decision-making to adapt to and offset those impacts.

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<sup>11</sup> Revised language with an active tense

<sup>12</sup> Added "biodiversity" to this goal as an important aspect of environmental resource in the county

<sup>13</sup> Moved the position of this goal up from B.7; clarified purpose of designations and built on Goal B.1

<sup>14</sup> Revised language with an active tense

<sup>15</sup> This list will be found in an appendix

<sup>16</sup> Revised language with an active tense

<sup>17</sup> Clarified language



**B.5** ~~B.4~~ Boulder County shall ~~seek~~ **continue** to protect air, water and soil resources and quality, ~~as well as Boulder County shall pursue restoration of such~~ **restore** resources ~~that are~~ in a degraded condition to enhance ~~the~~ **overall** environmental health ~~of the county~~. Pollution of air, water, and soil, and pollution caused by noise or light, 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<sup>18</sup>.

**B.6** ~~B.5~~ Boulder County shall ~~seek~~ **continue**<sup>19</sup> to protect prominent natural landmarks and other unique scenic, visual and aesthetic resources in the county.

**B.7** ~~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.8** ~~In addition to regulatory authority,~~ Boulder County shall ~~pursue~~ protection of environmental resources both at the site-specific scale and **landscape scale** ~~with a more regional scale, ecosystem approach~~ through a variety of means such as partnerships with private landowners, non-governmental organizations, and other governmental agencies; education and outreach; advocacy at the state and federal level; and other programs consistent with the goals and policies of the Comprehensive Plan.<sup>20</sup>

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<sup>18</sup> Revised language with an active tense

<sup>19</sup> Revised language with an active tense; "continue" is added to demonstrate that such landmarks are already identified/inventoried and protected

<sup>20</sup> Revised language with an active tense and for consistency with the phrase "landscape scale"



# Environmental Resource Policies

## *Introduction*

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).

## **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 to environmental resources identified in the BCCP as well as those resources that may be identified on the site and in the vicinity of the proposal during a county development review process. The applicant may be required to complete other studies, inventories, or reports that address the proposal's potential impacts on environmental resources and include recommendations for mitigation of those impacts.

**ER 1.02** Boulder County shall continue to identify and designate 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 to the extent practicable. Boulder County may periodically reevaluate such criteria and designations.

**ER 1.03** ~~Areas that are considered as valuable~~ Scenic vistas shall be preserved as much as possible in their natural state<sup>21</sup>.

**ER 1.04** Boulder County shall work with federal, state, municipal and other public or quasi-public entities that have a jurisdictional or property interest in unincorporated lands within or surrounding any designated environmental resources to achieve their protection<sup>22</sup>. ~~of these resources.~~

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<sup>21</sup> Scenic vistas are given considerable treatment in the Land Use Code; reiteration of this policy in the updated ERE and BCCP continues to support this aspect of the Code

<sup>22</sup> Simplified language



**ER 1.05** Boulder County shall work in partnership with private land owners and non-governmental organizations to protect, conserve, and restore designated environmental resources using a variety of tools (*See Potential Tools and Implementation Strategies*)<sup>23</sup>.

**ER 1.06** Boulder County shall use its open space program as one means of achieving its goals for protecting ~~designated~~ environmental resources<sup>24</sup>.

**ER 1.07** *Boulder County shall encourage* all private landowners ~~are encouraged~~ to seek assistance from appropriate governmental and non-governmental entities to protect Boulder County's ~~designated~~ environmental resources<sup>25</sup>.

**ER 1.08** Boulder County shall modify plans, policies and regulations as necessary to adapt to climate change in order to reduce species and ecosystem vulnerability and other potential adverse impacts on environmental resources. These measures will guide environmental resource management implementation aimed at protecting biodiversity and ecological resiliency.

## **Air, Soil, Water, Noise and Light Policies**

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

**ER 2.01** Boulder County shall seek to protect overall public and environmental health by enforcing regulations concerning air, soil, water, noise and light pollution at the local level in accordance with applicable law.

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

**ER 2.03** Boulder County shall take a watershed approach to addressing water quality and water quantity *including supporting and participating in* local and regional *watershed* partnerships. ~~to address watershed issues. County departments shall participate in these partnerships as appropriate.~~<sup>26</sup>

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<sup>23</sup> List to be found in an appendix

<sup>24</sup> Clarified language consistent with objectives of Open Space program with regard to all environmental resources

<sup>25</sup> Revised language with an active tense; and, similar to above, expanded to include all environmental resources

<sup>26</sup> Synthesized language



## 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.

**ER 3.02** Boulder County shall encourage the removal of development rights from ECAs through transfer, donation, acquisition, or trade, or other incentives<sup>27</sup>.

**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<sup>28</sup> 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.

**ER 4.02** 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 4.03** Boulder County shall coordinate with local, state, and federal agencies and municipalities, as well as with willing 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.

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<sup>27</sup> Allows for the possibility of the utilization of other incentives

<sup>28</sup> Reduces repetition

## APPENDIX

### Potential Tools and Implementation Strategies

*This is a list of tools and other implementation strategies identified during the formulation of the Update. These are concepts that are either contained in the existing Element that remain relevant or have been identified during the course of developing the Update. These lists are would not appear in the Goals and Policies section but may be appear in an appendix.*

Below is a list of potential strategies or tools that could be used consistent with Policy ER 1.05 to work in partnership with private land owners and non-governmental organizations to protect, conserve, and restore designated environmental resources:

- density transfers
- conservation easements
- restrictions on properties as part of development review
- purchase by public entities

Consistent with Goal B.2, Boulder County may encourage environmental resources management strategies identified below through its land use decision-making process, management planning, and various other programmatic activities:

- minimizing human impacts
- allowing natural processes to occur
- reintroducing disturbances (e.g., such as fire and grazing)
- maintaining or reintroducing native species
- restoring degraded resources
- eliminating undesirable non-native species
- developing long-term ecological monitoring programs





# Boulder County Comprehensive Plan

## **ATTACHMENT B**

### **Environmental Resources Element**

**Draft 6/11/2013**

#### **Overview**

Boulder County values and strives to preserve, conserve and restore the unique and distinctive natural features, ecosystems and landscapes 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 naturally occurring ecosystems and their native species populations. Species of Special Concern are an integral component of this management approach. The list of Species of Special Concern includes locally threatened or endangered flora and fauna that the county seeks to protect. Habitat for these Species of Special Concern is particularly vital, since it often presents our best chance to protect native species.

In addition to identifying Species of Special Concern, this Element designates areas of important habitat at two scales: the "site-specific scale" and the broader, "landscape-scale." At the site-specific scale, important environmental resources typically consist of an easily definable area such as an individual parcel of land or a distinct geographical location where specific resources exist. Designations at the site-specific scale include Critical Wildlife Habitats, Rare Plant Areas, Wetlands, Riparian Areas, and Significant Natural Communities (formerly referred to as Critical Plant Associations). Environmental resources designated at the landscape-scale are much larger and holistic in approach. At this scale, the designations of High Biodiversity Areas and Environmental Conservation Areas seek to preserve broader ecological processes and functions. These areas often encompass multiple resources also designated at the site-specific scale. Natural Areas and Natural Landmarks designations are intended to encompass and protect unique and distinctive natural features and landscapes in the county. The fundamental and essential sustaining resources of air, soil, and water are also considered and addressed.

While this Element calls specific attention to the aforementioned designated environmental resources (Environmental Resources), it also recognizes that these are not the only







environmental resources of significance and importance that should be considered in land use decisions and cared for through management practices. With this in mind, Boulder County's overarching intention is to maintain the overall health and integrity of our rich and diverse environment to the greatest extent possible as our knowledge and understanding of environmental functions and interconnections evolves. The term "environmental resources" as used in this Element consists of both the designated "Environmental Resources" and undesignated environmental resources.

To provide some context for the goals and policies, a brief explanation of the environmental resource designations and their importance to the ecosystems of Boulder County follows. For the most part, these designations are those that already are utilized by reference in the Boulder County Land Use Code. Designations added or amended in updates to this Element will also be protected through administration of the Code and in conformance with applicable Federal and State law. The criteria used to determine these designations are periodically reviewed and updated resulting in updated lists of Species of Special Concern and updated maps of the Environmental Resources Element. Descriptions of these designations follow.

#### *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 and its agency partners 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 ecosystems. This land use decision-making tool is used as a strategy for maintaining the wide-ranging animal species, native plant communities, and natural ecological processes that operate at this landscape scale.

ECAs are a framework for ecosystem management that identifies and designates valuable ecological areas 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 disturbed by human presence; 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 (HBAs) 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. The boundaries of HBAs 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 Colorado 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. These areas are also referred to as Critical Plant Associations in the Boulder County Land Use Regulations.

#### *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 are generally described as lands transitional between terrestrial and aquatic systems where the land is covered by shallow water or soils are saturated during the growing season. 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 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.

To summarize, restoring, protecting and preserving our natural environment and all of its interdependent components upon which all things depend have been core values and objectives of Boulder County since the adoption of the first county-wide comprehensive plan in 1978. Numerous initiatives, plans and programs have been diligently pursued and implemented in this quest, and have benefited from the involvement of many stakeholders and interested parties in both the public and private sectors. The Environmental Resources Element is both a compass and a tool for use in sustaining and advancing these efforts.

## **Goals of the Environmental Resources Element**

**B.1** Boulder County shall conserve and preserve environmental resources including its unique or distinctive natural features, biodiversity, and ecosystems 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 sustains and protects native species, natural ecosystems and the biodiversity of the region by designating High Biodiversity Areas, Natural Areas, Natural Landmarks, Significant Natural Communities, Critical Wildlife Habitats, Species of Special Concern, Wetlands, Riparian Areas, and Rare Plant Areas. Other resources and designations may be identified in the future. These designated areas and species lists also provide a point of reference for continued monitoring of long-term ecological change.

**B.3** Boulder County shall promote the viability and integrity of all naturally occurring ecosystems and their native species populations by applying a variety of environmental resources management strategies in a manner that is consistent with current ecological principles and sustainable conservation practices.

**B.4** 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 are better understood, Boulder County shall incorporate the best scientific information into planning and decision-making to adapt to and offset those impacts.



**B.5** Boulder County shall continue to protect air, water and soil resources and quality, as well as restore resources in a degraded condition to enhance overall environmental health. Pollution of air, water, and soil, and pollution caused by noise or light, 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 environment.

**B.6** Boulder County shall continue to protect prominent natural landmarks and other unique scenic, visual and aesthetic resources in the county.

**B.7** 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.8** Boulder County shall protect environmental resources both at the site-specific scale and landscape scale through a variety of means such as partnerships with private landowners, non-governmental organizations, and other governmental agencies; education and outreach; advocacy at the state and federal level; and other programs consistent with the goals and policies of the Comprehensive Plan.

## **Environmental Resource Policies**

### *Introduction*

The general policies below (ER 1.01 to ER 1.08) 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 4.03).

## **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 to environmental resources identified in the BCCP as well as those resources that may be identified on the site and in the vicinity of the proposal during a county development review process. The applicant may be required to complete other studies, inventories, or reports that address the proposal's potential impacts on environmental resources and include recommendations for mitigation of those impacts.



**ER 1.02** Boulder County shall continue to identify and designate 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 to the extent practicable. Boulder County may periodically reevaluate such criteria and designations.

**ER 1.03** Scenic vistas shall be preserved as much as possible in their natural state.

**ER 1.04** Boulder County shall work with federal, state, municipal and other public or quasi-public entities that have a jurisdictional or property interest in unincorporated lands within or surrounding any designated environmental resources to achieve their protection.

**ER 1.05** Boulder County shall work in partnership with private land owners and non-governmental organizations to protect, conserve, and restore designated environmental resources using a variety of tools.

**ER 1.06** Boulder County shall use its open space program as one means of achieving its goals for protecting environmental resources.

**ER 1.07** Boulder County shall encourage all private landowners to seek assistance from appropriate governmental and non-governmental entities to protect Boulder County's environmental resources.

**ER 1.08** Boulder County shall modify plans, policies and regulations as necessary to adapt to climate change in order to reduce species and ecosystem vulnerability and other potential adverse impacts on environmental resources. These measures will guide environmental resource management implementation aimed at protecting biodiversity and ecological resiliency.

## **Air, Soil, Water, Noise and Light Policies**

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

**ER 2.01** Boulder County shall seek to protect overall public and environmental health by enforcing regulations concerning air, soil, water, noise and light pollution at the local level in accordance with applicable law.

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



**ER 2.03** Boulder County shall take a watershed approach to addressing water quality and water quantity including supporting and participating in local and regional watershed partnerships.

## **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.

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

**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 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.

**ER 4.02** 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 4.03** Boulder County shall coordinate with local, state, and federal agencies and municipalities, as well as with willing 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.

# ATTACHMENT C

## Scenic Vistas and the Land Use Code

The Land Use Code is the main source of specificity in how Scenic Vista policy is carried out. The Site Plan Review process is the primary vehicle through which this occurs.

Scenic vistas are referenced in the Land Use Code, where development review processes such as Site Plan Review use methods of visual mitigation of development impacts. Various methods are used to mitigate these impacts, as the excerpts from the Land Use Code show in the language below. In addition, the zoning districts in the Code include the View Protection Overlay District. This overlay provides for reduced height in areas potentially affecting significant views.

The language in the existing scenic vistas policy in the BCCP has changed little over the years. During that time, it has successfully formed the policy basis for regulations which have resulted in more visually sensitive development through the years.

The following excerpts from the Land Use Code are germane to the scenic vistas issue:

**4-806.A.11 Site Plan Review Standards** The development shall not have a significant negative visual impact on the natural features or neighborhood character of surrounding area. Development shall avoid prominent, steeply sloped, or visually exposed portions of the property. Particular consideration shall be given to protecting views from public lands and rights-of-way, although impacts on views of or from private properties shall also be considered. Development within or affecting features or areas of visual significance may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable Site Plan Review criteria.

- a. In reviewing development proposals in the Peak-to-Peak Scenic Corridor Area, special attention will be paid to the visibility of the development from the Peak-to-Peak Highway, with the intent to ensure development is minimally visible from the Highway.
- b. For development anywhere in the unincorporated areas of the county, mitigation of visual impact may include changing structure location, reducing or relocating windows and glazing to minimize visibility, reducing structure height, changing structure orientation, requiring exterior color and materials that blend into the natural environment, and/or lighting requirements to reduce visibility at night.

### **4-200.D View Protection Overlay District**

#### **Maximum Structure Height Requirement**

1. For existing building lots with a slope of less than 20 degrees, no portion of a structure, including additions to an existing structure, may exceed 35 feet in height as measured from the natural grade of the lot at the lowest elevation within 25 feet of the structure.

2. For building lots with a slope of 20 degrees or greater, no portion of a structure, including additions to an existing structure, may exceed 25 feet in height as measured from the natural grade of the lot at the lowest elevation of the structure.