

ENVIRONMENTAL CONSERVATION AREAS DESIGNATION CRITERIA

Methods of Identifying Environmental Conservation Areas – Environmental Conservation Areas (ECA's) are large and relatively undeveloped areas of the County that possess a high degree of naturalness, contain high quality or unique landscape features, and/or have significant restoration potential. Their size, quality and geographic location make them an important tool for combating the effects of habitat fragmentation. Following are the primary factors used to evaluate potential environmental conservation areas:

- **Naturalness** - Relatively undeveloped landscapes offer greater opportunities for maintaining natural processes, minimizing landscape fragmentation caused by development and roads;
- **Quality and Uniqueness** - This includes high quality plant communities such as native prairie or old-growth forests, and unique landscape features such as elk winter concentration areas and winter raptor concentration areas;
- **Size** - Bigger is better, more capable of supporting natural disturbance regimes, meeting the needs of wide-ranging animals and protecting a mosaic of landscapes;
- **Restoration Potential** – The ability of a site to be restored to a native plant community and/or good wildlife habitat.

Criteria for designating Environmental Conservation Areas

- 1) They should be centered on undeveloped landscapes and include high quality and unique landscape components as revealed in the biological and ecological assessment. ECA's should be a minimum of 2,500 acres in size in order to be effective management units.
- 2) They should cover all lifezones and habitat types.
- 3) Boundaries of ECA's are influenced by the following:
 - a. The larger the ECA, the greater probability of meeting the needs of wide-ranging species, allowing natural disturbance regimes and minimizing adverse impacts from development. ECA's should include all contiguous undeveloped land and nodes of high quality or unique landscape features.
 - b. Boundaries should avoid areas with significant existing development.
 - c. The shape should minimize fragmentation and edge effects.
 - d. The shape and geographic location of ECA's should facilitate connectivity within the regional landscape.

Connectivity Between Environmental Conservation Areas – Environmental Conservation Areas need to function as part of an integrated system of wildlife habitat and plant communities. Wide-ranging animals will need to move throughout the landscape of the County. ECA's function as source areas for species that find optimal habitat within undeveloped landscapes. Individuals of these species will generally migrate out of the ECA and occupy suitable, but less than optimal, areas. If a major disturbance or disease eliminates a particular species from an ECA, individuals from other source areas will need a pathway to the vacant habitat for recolonization.

Three types of habitat connectors, or movement corridors, can provide landscape connectivity for Environmental Conservation Areas. Riparian and stream ecosystems provide significant migration routes, hiding cover and wildlife habitat. Large-mammal migration corridors are important habitat connectors particularly for mountain ecosystems. Finally, other undeveloped corridors and land not within ECA's provide a matrix of dispersal and movement options for wildlife.

The County should work to protect riparian ecosystems and large-mammal movement corridors. Development within other parts of the County should be evaluated as to its impact on connectivity between environmental conservation areas.

Buffering Environmental Conservation Areas – Land uses adjacent to ECA's should be low intensity and provide a degree of buffering between the ECA and high intensity land uses that may exist throughout the county. In essence, there should be a gradient of land use intensity that diminishes as one moves toward the core of an ECA. We want to avoid the many problems associated with high intensity development adjacent to relatively natural areas, the problems that plague many of our national parks.

ECA #	Name	Lifezones
1	Indian Peaks	Montane/Subalpine/Alpine
2	North St. Vrain	Montane/Foothills
3	South St. Vrain/Foothills	Montane/Foothills
4	Walker Mountain	Montane
5	Fourmile Creek/Bald Mountain	Montane
6	Winiger Ridge	Montane
7	Hawkin Gulch/Walker Ranch/Upper Eldorado Canyon	Foothills/Plains
8	Boulder Mountain Park/South Boulder	Foothills/Plains
9	Rabbit Mountain	Foothills/Plains
10	Table Mountain	Plains
11	Boulder Valley Ranch/Beech Open Space	Plains
12	White Rocks/Gunbarrel Hill	Plains
13	East County	Plains
14	Magnolia	Montane