



Using the USNVC to Protect Rare Communities

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Colorado Natural Heritage Program

Natural Heritage Methodology



- Document and Track Occurrences of Natural Communities, Rare Plants, and Animals
- USNVC Associations are “Elements of Biodiversity”
- NatureServe Global and Sub-National (State) Ranks
 - G1/S1 – Critically Imperiled
 - G2/S2 – Imperiled
 - G3/S3 – Vulnerable
 - G4/S4 – Apparently Secure
 - G5/S5 – Secure
- Occurrences Ranked on Size, Condition, and Landscape Context: A-Rank to D-Rank
- Data Collected from Field Observations, Historical Reports, and other Published Sources

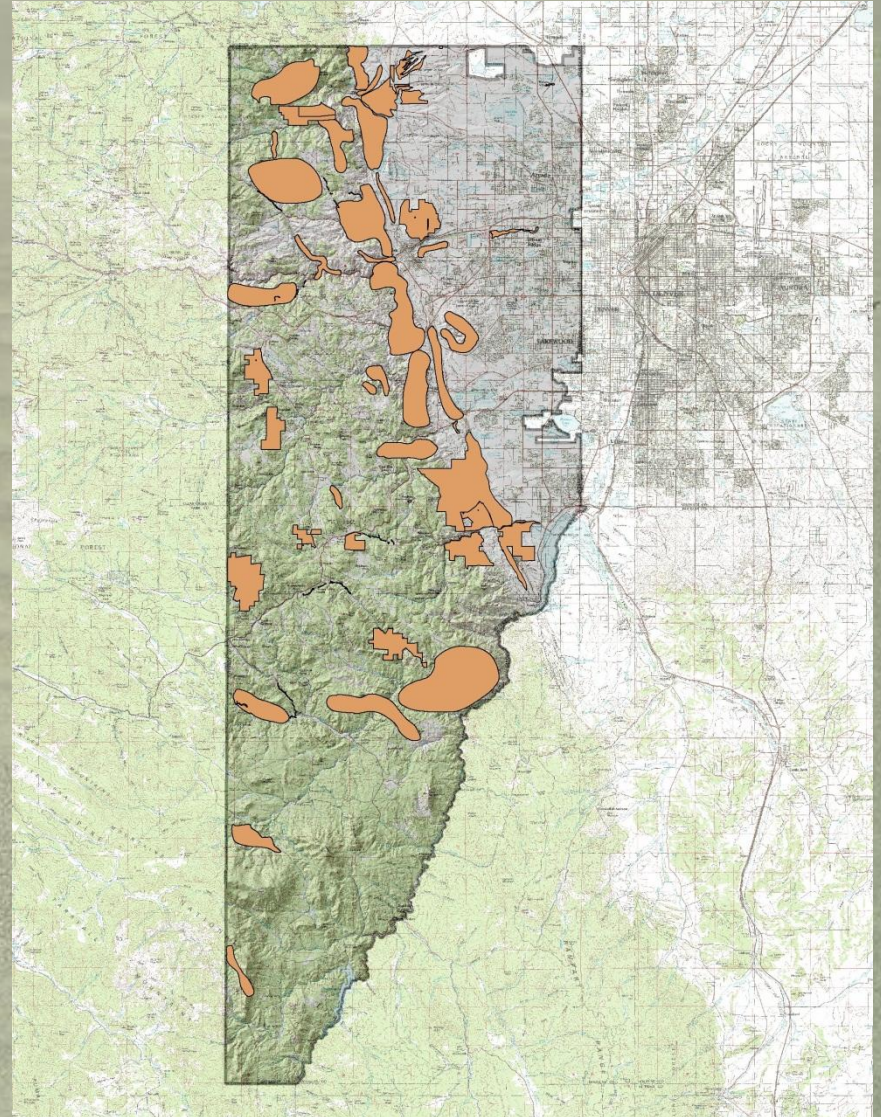
County Biological Inventories



- Funded by GOCO, EPA, or the County
- Plants, Animals, and Natural Communities
- NVC Associations are Basis for Natural Community Inventory
- Targeted Inventory Analysis
- Field Investigations Identify Element Occurrences
- Describe Potential Conservation Areas (PCA's)
- Jefferson County – Focused on Large Private Land Parcels

Targeted Inventory Analysis

- Guides Fieldwork for Increased Effectiveness
- Element Specific
- BIOTICS DB Occurrences, Observations File
- Expected New Locations – Maps, Imagery
- Defines Scope of Work



Jefferson Natural Community Targets

| USNVC ASSOCIATION SCIENTIFIC NAME | RANK |
|---|--------|
| Abies lasiocarpa-Picea engelmannii/Mertensia ciliata Forest | G5S5 |
| Alnus incana - Salix drummondiana Shrubland | G3S3 |
| Alnus incana/Equisetum arvense Shrubland | G3S3 |
| Alnus incana/Mesic Forbs Shrubland | G3S3 |
| Alnus incana/Mesic Graminoids Shrubland | G3S3 |
| Andropogon gerardii-Schizachyrium scoparium Western Great Plains Herbaceous Vegetation | G2?S2 |
| Andropogon gerardii-Sorghastrum nutans Western Great Plains Herbaceous Vegetation | G2S1S2 |
| Andropogon gerardii-Sporobolus heterolepis Western Great Plains Herbaceous Vegetation | G2S1S2 |
| Betula occidentalis/Cornus sericea Shrubland | G3S1S2 |
| Betula occidentalis/Maianthemum stellatum Shrubland | G4?S2 |
| Betula occidentalis/Mesic Graminoids Shrubland | G3S2 |

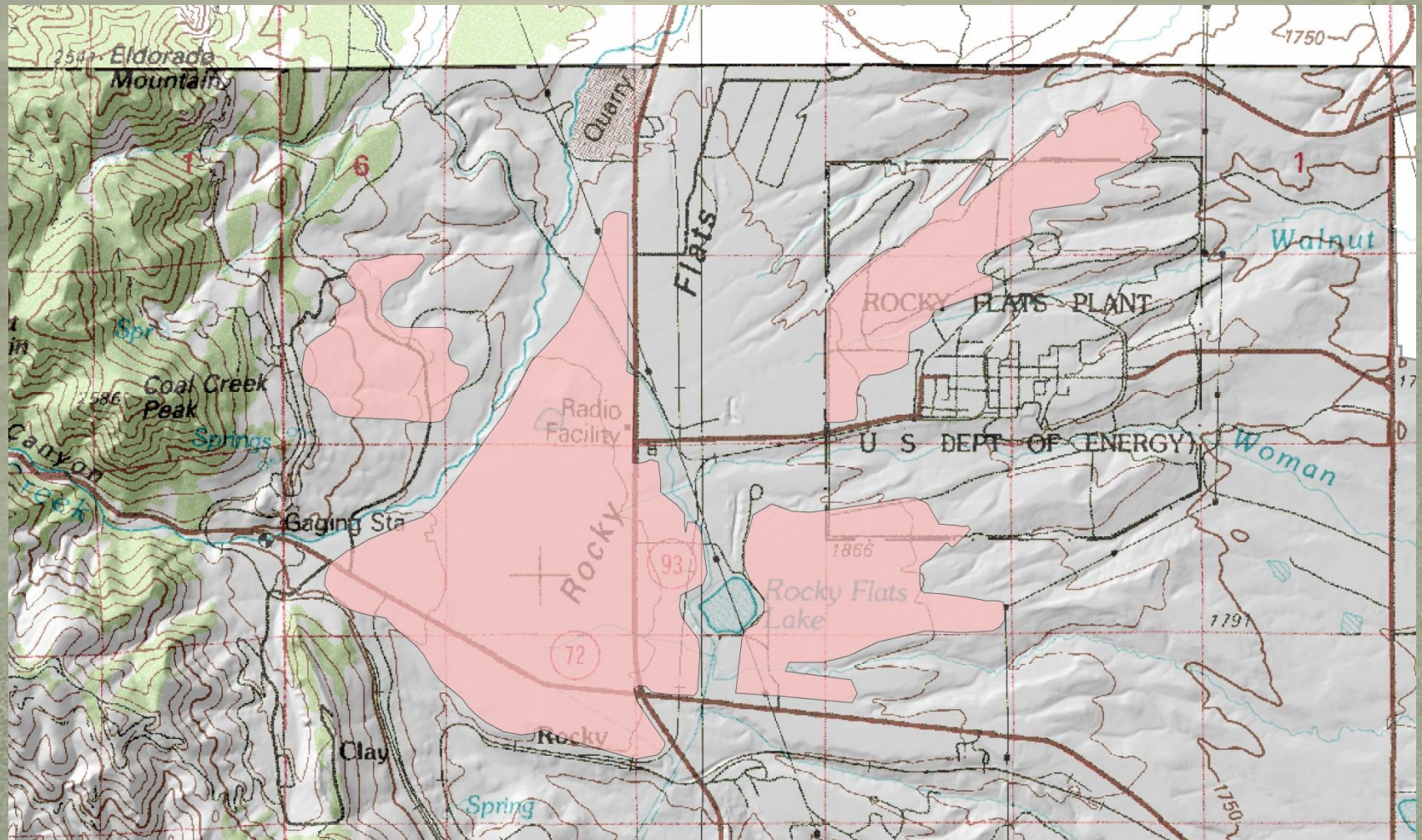
- 77 Natural Community Targets
- 34 Wetland Targets
- 43 Upland Targets
- 19 G1-G2 Associations
- 34 G3 Associations
- 24 G4-G5 Associations

Natural Community Occurrences

- Identified and Documented in the Field
- Describe Composition and Structure
- Describe Environmental Characteristics
- Define the Boundaries
- Assign Occurrence Ranks based on:
 - Size
 - Condition
 - Landscape Context

Big Bluestem – Little Bluestem EOR

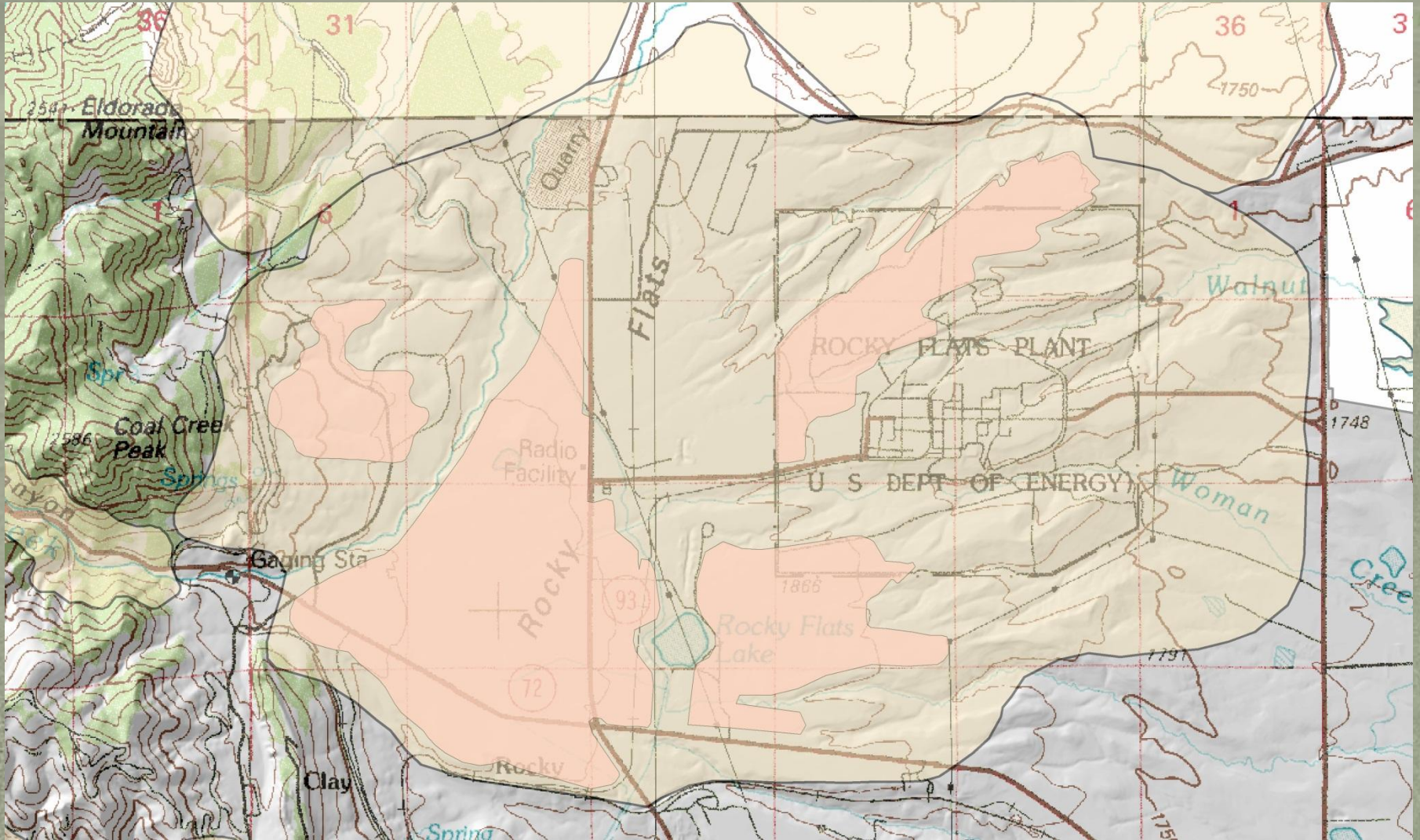
Andropogon gerardii-*Schizachyrium scoparium* Western Great Plains Herbaceous Vegetation



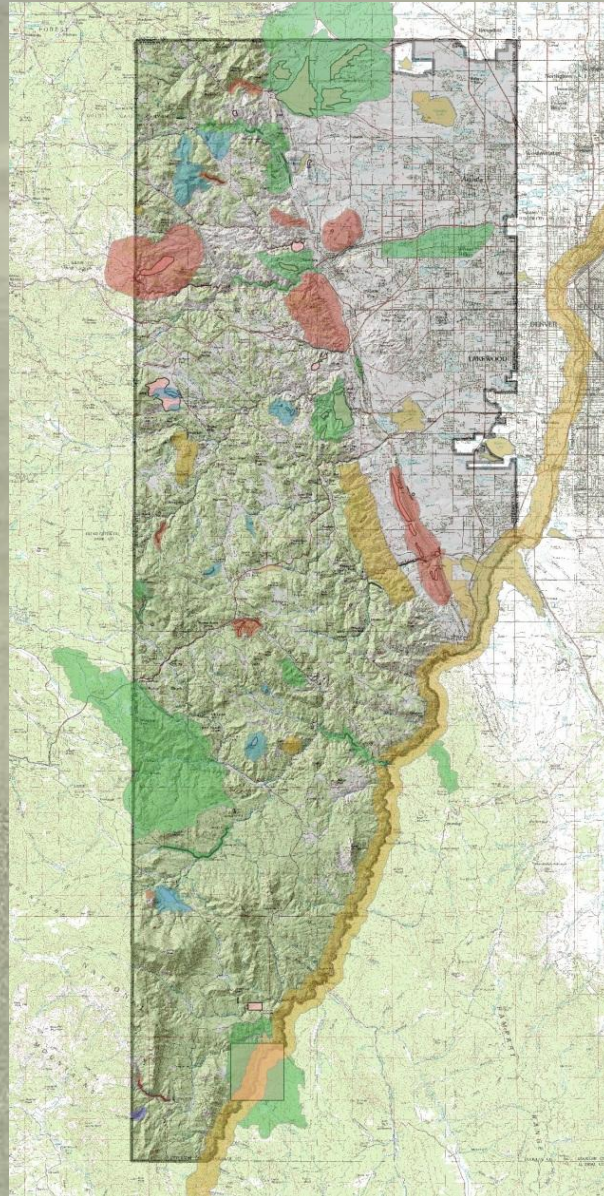
Potential Conservation Areas

- Not a Legal Designation
- Best Estimate of Area needed for Conservation
- Based on Physical Features and Ecological Processes
- Sites are Ranked Based on Rarity of Driving Element
 - G1 Elements → B1 Site – Outstanding Significance
 - G5 Elements → B5 Site – Local Significance
- Land Use Planners, Land Managers

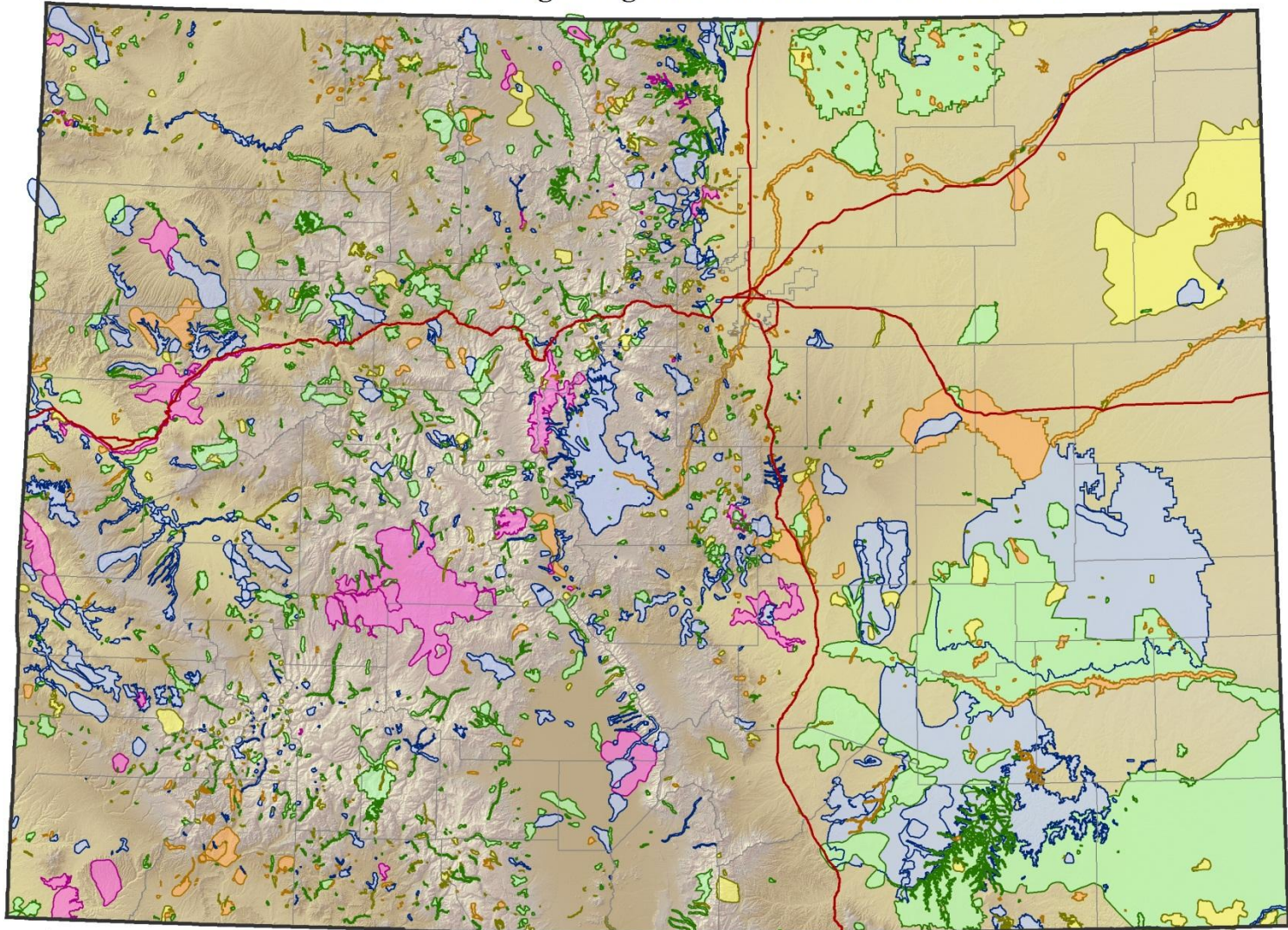
Rocky Flats PCA



Jefferson County PCA's



Colorado Natural Heritage Program Potential Conservation Areas



0 25 50 N
Miles
Version Date: July 26, 2011

Biodiversity Significance Rank

- B1: Outstanding Biodiversity Significance
- B2: Very High Biodiversity Significance

- B3: High Biodiversity Significance
- B4: Moderate Biodiversity Significance
- B5: General Biodiversity Interest

Elevation
High
Low