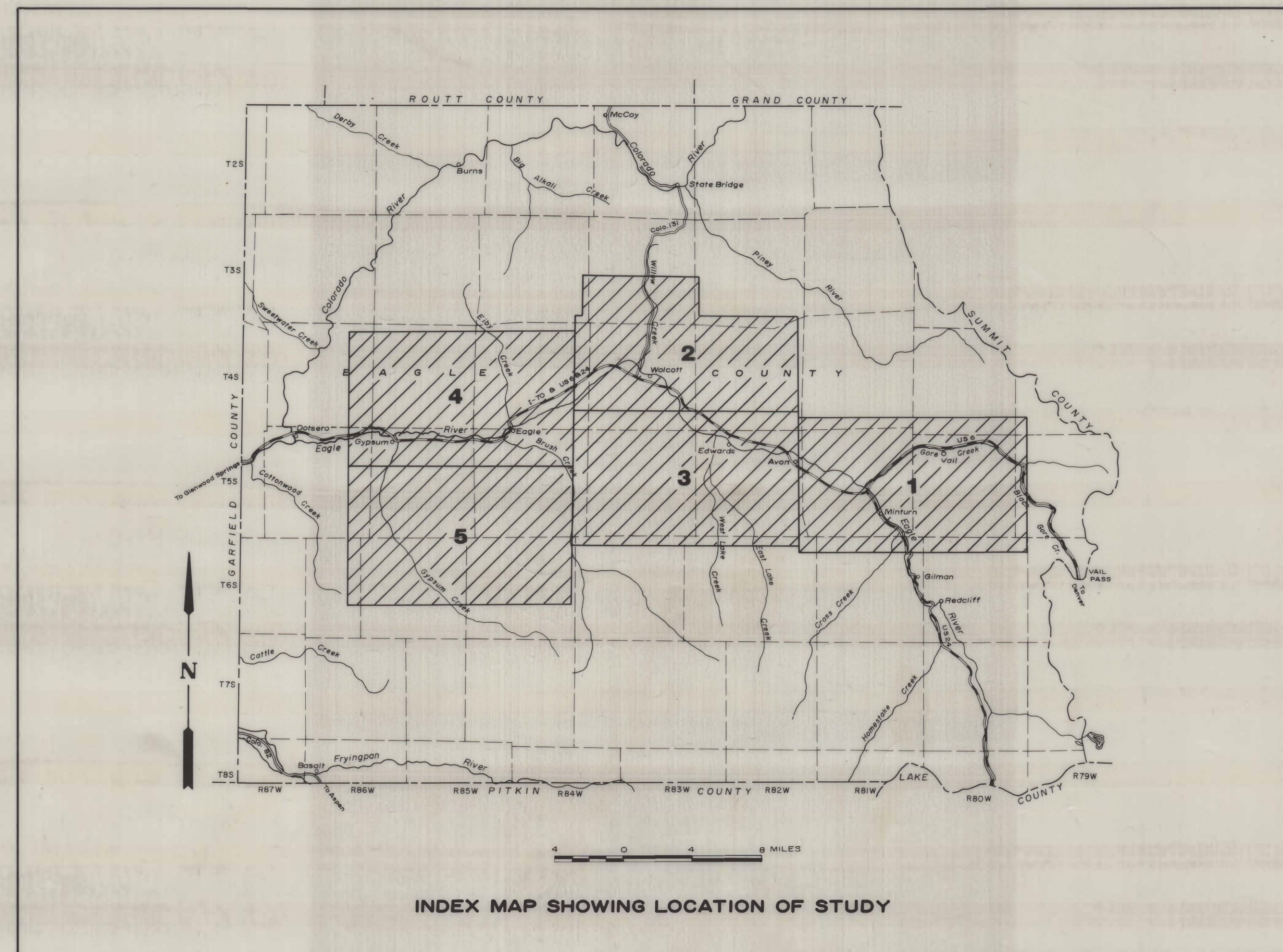


# FOLIO OF GEOLOGIC LAND USE MAPS

## EAGLE COUNTY, COLORADO



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# SNOW AVALANCHE HAZARD CLASSIFICATION

1

Areas where numerous or individual slide paths are readily identifiable.

2

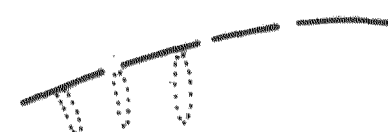
Areas highly susceptible to snow avalanches, but no paths readily identifiable.

2A

Areas considered as potential runoff or airblast zone associated with 1 or 2.

3

Area that may be susceptible to snow sliding or snow avalanches under extreme weather conditions.



Area susceptible to snow avalanches with photo interpreted avalanche path outlined.

Classification takes into account

1. Slope, 5-40°
2. Wind direction, W-N
3. Elevation, >8000'
4. Slope aspect, lee slopes
5. Ability to identify paths
6. vegetation density

1

BASIC GEOLOGIC AND ENGINEERING INVESTIGATIONS OF AREA AS REQUIRED BY SENATE BILL 35, ADEQUATE FOR DEVELOPMENT PLANNING AND GENERALLY FOR CONSTRUCTION SITE SELECTION.

- A. High stable gravel covered terraces above the physiographic floodplain. Emphasis on, but not limited to, groundwater, surface and subsurface drainage, composition and characteristics of underlying bedrock that may be penetrated and possible resource evaluation.
- B. Stable colluvium or bedrock on flat to gentle slopes. Emphasis on, but not limited to, surface and subsurface drainage and slope stability.
- C. Stable glacial material on flat to gentle slopes. Emphasis on, but not limited to, surface and subsurface drainage, slope stability, and possible resource evaluation.

2

GENERAL GEOLOGIC AND ENGINEERING INVESTIGATIONS OF AREA REQUIRED FOR DEVELOPMENT PLANNING FOR EACH CONSTRUCTION SITE.

- A. Stable colluvium or bedrock on gentle slopes that may have a thin gravel cap. Emphasis on, but not limited to, surface and subsurface drainage, composition and characteristics of near surface bedrock and slope stability.
- B. Stable glacial deposits on gentle to moderate slopes. Emphasis on, but not limited to, surface and subsurface drainage, slope stability and possible resource evaluation.
- C. Swamps, bogs or lakes where surface water collects permanently or seasonally. Emphasis on, but not limited to, compaction, high ground water table and surface drainage.
- D. Stable colluvial slopes with gravel cap in areas of past subsidence. Emphasis on, but not limited to, subsidence potential, corrosive and expansive soils.

3

DETAILED GEOLOGIC AND ENGINEERING INVESTIGATIONS OF ENTIRE AREA IS REQUIRED FOR DEVELOPMENT PLANNING AND FOR SELECTION OF CONSTRUCTION SITES.

- A. Stable colluvium and bedrock on gentle to moderate slopes. Emphasis on, but not limited to, surface and subsurface drainage, slope stability and possible resource evaluation.
- B. Thick colluvium on gentle to moderate slopes. Emphasis on, but not limited to, expansive and corrosive soils, surface and subsurface drainage and hydrocompaction.
- C. Fine grained tailings deposit on flat to moderate slopes. Emphasis on, but not limited to, slope stability, corrosive material, surface and subsurface drainage.

## EXPLANATION

### ENVIRONMENTAL AND ENGINEERING GEOLOGIC MAP FOR LAND USE CLASSIFICATION OF AREAS INDICATING MINIMUM ENGINEERING AND ENGINEERING GEOLOGIC INVESTIGATIONS REQUIRED FOR DEVELOPMENT PLANNING

- D. Debris fans. Gentle thick colluvial slopes consisting of fine to coarse rounded material. Emphasis on, but not limited to, surface and subsurface drainage, frequency and control of mudflows and debris flows, hydrocompaction and possible resource evaluation.
- E. Potential rockfall hazard. Emphasis on, but not limited to, slope stability, surface and subsurface drainage.
- F. Thin colluvium on potentially unstable gentle to moderate slopes. Emphasis on, but not limited to, surface and subsurface drainage, slope stability and corrosive and expansive soils.

4

DETAILED GEOLOGIC AND ENGINEERING INVESTIGATIONS REQUIRED FOR ENTIRE AREA FOR DEVELOPMENT PLANNING AND SOME CONSTRUCTION SITES MAY REQUIRE SPECIALIZED GEOLOGIC AND ENGINEERING INVESTIGATIONS FOR DESIGN PURPOSES.

- A. Thin glacial deposits overlying potentially unstable moderate to steep colluvial and bedrock slopes. Emphasis on, but not limited to, slope stability, surface and subsurface drainage.
- B. Stable colluvium and bedrock on moderate to steep slopes. Emphasis on, but not limited to, slope stability, rockfall hazard, expansive and corrosive soils and surface and subsurface drainage.
- C. Potential rockfall areas associated with talus slopes. Medium to coarse blocky material deposited by rockfall at the base of cliffs. Emphasis on, but not limited to, rockfall hazard, slope stability, surface and subsurface drainage.
- D. Areas of swamps or bogs on potentially unstable gentle to moderate slopes. Emphasis on, but not limited to, surface and subsurface drainage and slope stability.
- E. Area of active debris flows. Emphasis on but not limited to, flooding, control of water entrained debris.

5

DETAILED GEOLOGIC AND ENGINEERING INVESTIGATIONS OF ENTIRE AREA REQUIRED FOR DEVELOPMENT PLANNING AND SPECIALIZED INVESTIGATIONS REQUIRED FOR SPECIFIC CONSTRUCTION SITES.

- A. Rockfall hazard areas and talus on moderate to steep bedrock and colluvial slopes. Emphasis on, but not limited to, slope stability, surface and subsurface drainage and expansive and corrosive soils.
- B. Debris slides, bedrock slides and slope failure complexes composed of poorly sorted thin to thick, fine to coarse colluvial and bedrock on gentle to steep slopes. Emphasis on, but not limited to, slope stability, surface and subsurface drainage, corrosive and expansive soils.
- C. Stable or potentially unstable colluvium or bedrock on moderate to steep slopes. Emphasis on, but not limited to, slope stability, surface and subsurface drainage, debris flows in higher mountain areas.

6

EXTENSIVE DETAILED GEOLOGIC AND ENGINEERING INVESTIGATIONS NECESSARY FOR DEVELOPMENT PLANNING. MOST OF THE AREA WITHIN THIS CLASSIFICATION MAY NOT BE SUITABLE FOR PERMANENT STRUCTURES.

- A. Debris slides and slope failure complexes made up of unsorted thick colluvial material on moderate to steep unstable or metastable slopes. Emphasis on, but not limited to, slope stability, surface and subsurface drainage, corrosive and expansive soils.
- B. Areas of accelerated creep composed of colluvial or bedrock on steep unstable or metastable slopes. Emphasis on, but not limited to, slope stability, surface and subsurface drainage, corrosive and expansive soils.
- C. Areas near physiographic floodplain that may be susceptible to flooding during severe weather conditions. Emphasis on, but not limited to, flooding potential, frequency and control.
- D. Rockfall hazard in gypsiferous material. Steep, unstable or potentially unstable bedrock slopes. Emphasis on, but not limited to, slope stability, surface and subsurface drainage and corrosive and expansive soils.

7

EXTENSIVE DETAILED GEOLOGIC AND ENGINEERING FIELD INVESTIGATIONS REQUIRED FOR DEVELOPMENT PLANNING. UTILITY CORRIDORS, TEMPORARY STRUCTURES AND SOME PERMANENT STRUCTURES MAY UTILIZE PARTS OF THESE AREAS AFTER EXTENSIVE INVESTIGATIONS AND DESIGN FOR THE SPECIALIZED PROBLEMS INVOLVED.

- A. Physiographic floodplain where erosion and deposition is presently active and is generally subject to recurrent flooding on an approximate 25-year cycle. Emphasis on, but not limited to, frequency, depth and control of water and water entrained debris.



Line delimiting areas susceptible to snow sliding or snow avalanches. See Snow Avalanche Hazard Map for details. Development within this area requires a thorough evaluation of snow avalanche hazard before development begins.

## GEOLOGIC RESOURCES MAP

### METALLIC MINERALS\*

Production

Over \$100,000,000

\$100,000 to \$1,000,000

\$10,000 to \$100,000

Less than \$10,000

Reported occurrence, no record of production

NON-METALLIC MINERALS

Sand and gravel (known deposits)

Sand, Gravel and Quarry Aggregate

TERRACE  
UNEVALUATED  
COVERED

F  
Floodplain Deposit

T  
Stream Terrace Deposit

AF  
Alluvial Fan

U  
Upland Deposit

G  
Glacial Deposit

Coarse Aggregate

(at least 30% retained on #4 screen, visual estimation)

1  
Gravel: relatively clean and sound

2  
Gravel: significant fines, decomposed rock, calcium carbonate.

Fine Aggregate

3  
Sand

Unevaluated Resource

4

C

Possible resource covered by other  
Surficial material

Volcanic scoria

Potassium mineral leases  
(State of Colorado)

Building stone

Perlite and pumice

MINERAL FUELS

Oil and gas

Dry hole

Dry hole, show of oil and gas

URANIUM

Mineral showing

Radioactive anomaly

Uranium bearing sedimentary unit. ~~Ne~~ Chinle formation.

Line delimits area of probable location of possible disseminated or massive base metal sulfide deposits.

Line delimits area of probable location of possible vein type mineral deposits.

\* Primary Mineralization

Au Gold

Ag Silver

Cu Copper

Pb Lead

Zn Zinc

V Vanadium