

November 29, 2013

Representative Crisanta Duran
Chair, Joint Budget Committee

Representative Randy Fischer
Chair, House Agriculture, Livestock, & Natural Resources

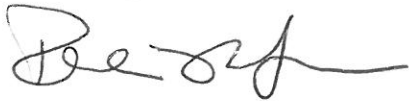
Senator Gail Schwartz
Chair, Senate Agriculture, Natural Resources, and Energy Committee
c/o Colorado General Assembly
200 East Colfax
Denver, CO 80203

Dear Representatives Duran and Fischer, and Senator Schwartz:

Pursuant to §23-41-210 C.R.S., I respectfully submit the following annual report on the Colorado Geological Survey to the Colorado General Assembly.

Please let me know if you have any questions on the report or would like additional information.

Best regards,



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2013 Report to Colorado General Assembly on Colorado Geological Survey

I. Overview and Update

Colorado School of Mines executed a memorandum of understanding with the Colorado Department of Natural Resources prior to December 31, 2012 pursuant to §23-41-201 C.R.S. As a result the Colorado Geological Survey officially transferred to Colorado School of Mines on January 31, 2013.

The Colorado Geological Survey reports to the Dean of the College of Earth Resource Sciences and Engineering at Mines. This organizational structure will allow CGS to develop close collaboration with key departments of Geology & Geological Engineering, Geophysics, Petroleum Engineering, Mining Engineering, Economics and Business and Liberal Arts and International Studies, which all report to the same college.

Mines has purchased a building located at 1801 19th Street in Golden from Jefferson County as the future home of the Colorado Geological Survey. This location provides the Survey with a location on the Mines campus, while allowing for easy public access. The building is still being occupied by the County's Health Department, and the anticipated move-in date for the Survey will be during the first quarter of 2014. During this interim period, the Survey is located in the main Jefferson County Government building in Golden.

Mines initiated a national search for the State Geologist in October 2013. The search committee consists of members of the Survey and Mines faculty. We anticipate hiring a new State Geologist sometime during the Spring 2014.

II. Functions and Objectives of Colorado Geological Survey

In the executed memorandum of understanding between Colorado School of Mines and the State of Colorado's Department of Natural Resources, the State provided funding for the following public safety functions:

- Review of schools for geologic hazards
- Review of preliminary development plans for geologic hazards.
- HB1041 Areas/Activities of State Interest – Geologic hazard technical assistance to state and local governments.
- Create Guidelines for land use in natural hazard areas.
- Designate suitable areas for hazardous waste disposal.
- Define and map geological hazards for city/county master plans.
- Determine areas of natural geologic hazards that could affect the safety of or economic loss to the citizens of Colorado.
- Assist and advise state and local governments on geologic problems.
- Collect and preserve geologic information related to geologic hazards.
- Evaluate the physical features of Colorado, related to natural hazards, for human and animal use.
- Prepare, public and distribute reports, maps and bulletins when necessary to meet statutory mission related to land use and geologic hazards.

In addition, the SB13-230 provided funding for the Geological Survey to perform the following functions related to mineral, energy, and water resources:

- Provide technical assistance to state and local governments on mineral and energy resources including geothermal.
- Assist and advise state and local governments on geologic problems related to mineral and energy resources.
- Prepare, publish and distribute reports, maps and bulletins when necessary to meet statutory mission related to mineral and energy resources.
- Provide advice and assistance to the Oil and Gas Conversation Commission as necessary.
- Collect and preserve geologic information related to mineral and energy resources.
- Update maps of commercial mineral interests.
- Inventory and analyze the State's mineral and energy resources as to quantity, chemical composition, physical properties, location and possible use.
- To conduct scientific studies of how geology affects and controls water resources, especially within Colorado.

It is anticipated that these functions will remain the priority of the Colorado Geological Survey for FY 14-15 pending continued funding levels from the Operational Severance Tax Trust Fund and the General Fund.

III. Funding

State Funding. For fiscal year 2013-14, \$1,295,601 has been appropriated from the Operational Severance Tax Trust Fund. In addition, \$300,000 has been appropriated from the General Fund.

The support from the General Fund is greatly appreciated. Without this funding, the Colorado Geological Survey would not have sufficient funding to continue to fulfill functions related to mineral and energy resources listed in Section II of this report.

Major funding sources outside of severance tax or general fund include:

- Colorado Department of Emergency Management
- Colorado Department of Transportation
- Colorado Water Conservation Board
- USGS
- Fees for Services to Local Governments
- Division of Mining, Reclamation & Safety
- US Department of Energy

IV. FTE

14.5 positions are budgeted to fulfill the prioritized functions of the Survey.

V. Collaborations and funding sources

Below is a chart identifying collaborations and partners by functional areas.

| Statutory Objective | Partner | Partner | Partner | Partner | Partner |
|---|--|---|--|---|--------------------|
| Geologic Hazards | | | | | |
| Review of schools, development plans and land-use plans for geologic hazards. Provide technical assistance to local governments. | 40 cities, towns, counties, and school districts | | | | |
| Prepare, publish, and distribute reports, maps, and bulletins when necessary to meet statutory mission | United State Geological Survey | Colorado Department of Emergency Management | | | |
| Determine areas of natural geologic hazards that could affect the safety of or economic loss to the citizens of Colorado | Colorado Department of Emergency Management | Colorado Department of Transportatio | Division of Mining, Reclamation & Safety | Natural Resources Conservati on Service | FEMA |
| Mineral and Energy Resources | | | | | |
| Identify Areas with Commercial Mineral Deposits | 20 different counties | | | | |
| Prepare annual report on status/viability of mineral industry in the state. | University of Colorado Leeds School of Business | | | | |
| Promote economic development of mineral and energy resources | United State Geological Survey | American Association of State Geologists | Colorado Mining Association | | |
| Prepare, publish, and distribute reports, maps, and bulletins when necessary to meet statutory mission | American Association of State Geologists | University of Arizona | University of Utah | | |
| Provide governmental agencies with technical assistance regarding geothermal resources. | US Department of Energy | Chaffee, Alamosa, Archuleta and Gunnison Counties | American Association of State Geologists | University of Arizona | |
| Inventory & analyze the state's mineral and energy resources as to quantity, chemical composition, physical properties, location, and possible use. | US Department of Energy | Chaffee, Alamosa, Archuleta and Gunnison Counties | American Association of State Geologists | University of Arizona | University of Utah |
| Water Resources | | | | | |
| To conduct scientific studies of how geology affects and controls water resources, especially within Colorado | Colorado Water Conservation Board | Coalition for the Upper South Platte | Douglas and Park Counties | Colorado State Land Board | State Engineer |
| Prepare, publish, and distribute reports, maps, and bulletins when necessary to meet statutory mission | Colorado Water Conservation Board | Coalition for the Upper South Platte | Douglas and Park Counties | State Engineer | |