

# SNAPSHOT: MINERALS/ENERGY

## 1 Status

- Mineral and energy resource management is directed by an array of federal laws, regulations, and policies.
- Historic and current prospecting, exploration and production of mineral and energy resources contribute significant economic, social and recreational benefits to local, regional, and national interest.
- Mineral and energy resources currently utilized on this Forest include platinum and palladium, limestone, gravel, three oil and gas wells and two hydropower related facilities.
- While coal and coalbed methane resources occur on this Forest they are not currently utilized due to a combination of market forces, laws and regulations.
- Portions of the former Custer Forest are considered potentially suitable for wind energy. The Forest is not considered to be highly potentially suitable for solar or geothermal energy.
- The Stillwater Complex contain significant platinum and palladium resources necessary to support mining of these minerals for the next 30 -50 years.
- Minerals such as erionite, offretite and uranium, naturally and potentially represent health and safety concerns to humans particularly on the Sioux District.
- Hobbyist level gold placer operations are likely to continue.
- Scientifically important paleontological resources are found primarily on the Sioux District.

## 2 Trends

- Trends that affect energy and mineral activity include:
  - economics,
  - national and local politics,
  - environmental policies,
  - public perspectives of environmental impacts,
  - cultural shifts toward sustainable energy resources, (such as water and wind energy);
  - laws and legal decisions;
  - national and international supply/demand for natural resources
- Trends and drivers which influence the exploration and development of leasable mineral resources in the planning area are dependent upon many factors; including, but not limited to:
  - land status (i.e., outstanding mineral interest),
  - court mandates,
  - exploration costs,
  - quantity and economics of existing and projected reserves worldwide,
  - political climate,
  - and future world demand and prices
- The Forest contains numerous abandoned mine sites. Site restoration efforts with Forest Service mine safety program will continue to address both uranium exploration disturbances but also more complex abandoned mine hardrock explorations.
- Trends and drivers related to cave and karst resource is largely related to increasing visitor use. It is not uncommon for unstaffed and undermanaged geologic features and facilities to be degraded or destroyed.

## 3 Information Gaps

- There is an overall lack of information regarding the extent, type and features of the Forest cave and karst resources, along with a lack of cave and karst management guidelines and standards in the current forest plans.
- Additional investigations related to paleontological resource occurrence are desirable.
- Development of known locatable mineral occurrences or locations involving current or past mineral activities within a GIS layer would be helpful.
- Development of known leasable mineral occurrences or locations involving current or past leasable mineral activities within a GIS layer.

## 4 Need to Change Existing Forest Plans

- The current Forest Plans have no management direction pertaining to renewable energy resources, existing and potential abandoned mines sites; and geologic hazards such as erionite, offretite and uranium. There is a need to develop this direction consistent with overarching federal law and regulations.
- There are inconsistencies and/or conflicts in some instances for mineral management between the current Forest Plans. There is a need to develop consistent management direction consistent with existing law, regulation and policy.
- There is a need to review the 80 areas identified in the current Plans as withdrawn from mineral entry to determine if sites should be considered for future withdrawal continuation, withdrawal modification or withdrawal revocation.
- The current Forest Plans have no management direction pertaining to caves, Karst or paleontology resources. There is a need to develop this direction.