

KATE BROWN
SECRETARY OF STATE

BARRY PACK
DEPUTY SECRETARY OF STATE



ARCHIVES DIVISION
MARY BETH HERKERT
DIRECTOR
800 Summer Street NE
Salem, Oregon 97310
(503) 373-0701
Facsimile (503) 378-4118

Department of Geology and Mineral Industries

Administrative Overview

March 2012

Introduction

The Department of Geology and Mineral Industries (DOGAMI), formed on July 1, 1937, operates under ORS Chapters 516, 517, 520, and 522. The State Geologist, appointed by the Geology and Mineral Industries governing board, heads the agency. The five-member board is appointed by the governor to four year terms. DOGAMI's mission is "to provide earth science information and regulation to make Oregon safe and prosperous."

DOGAMI, which is headquartered in Portland, is the state's centralized source of earth science information, mineral development, regulation and guidance for Oregon. Its geologic information can be used by the public and by government to reduce the future loss of life and property due to earthquakes, tsunamis, coastal erosion, and other geologic hazards. The department facilitates the preparation and release of geologic maps that provide the framework for understanding hazards, such as earthquakes. In addition to serving as a cost-effective steward of mineral production, it is the lead regulator for geologic resources such as oil, gas, geothermal energy, metallic and industrial minerals, and sand, gravel, and crushed stone.

DOGAMI's Mineral Land Regulation and Reclamation Program, located in Albany, is the lead coordinating agency for state mining regulation, operating through an interagency team-permit process (exploration and operating permits and bonds are required in Oregon to ensure reclamation of land disturbed by mining).

DOGAMI emphasizes information dissemination as a public service and objective use of geologic data to assist in policy development is a key goal. Accurate geologic information is effectively provided to the public through publications and release of electronic data and through department participation in and coordination with state, federal, and local government natural resource agencies as well as with industry and other private sector groups. Technical and non-technical publications are available at the Nature of the Northwest Information Center.

History

Gold was discovered in 1851 in the territory that was eight years later to become the State of Oregon. This and the other gold discoveries that followed led directly to the admission of Oregon as the thirty third state in the Union in 1859. Since then, gold, other minerals, and the geologic landscape have remained valuable resources for the state.

The first state geologist was appointed by the State Legislature in 1872 (Laws of Oregon, 1872, pg. 104). Thomas Condon, a pioneer Congregational missionary whose main interest was fossils, served for four years without office or staff on a stipend of \$1,000 per year. He resigned in 1876 to become the first professor of geology at the newly formed University of Oregon.

On a national level, the U.S. Geological Survey (USGS) was established in 1879. It was placed in the Department of the Interior and charged with a combination of responsibilities: classification of public lands, and examination of the geological structure, mineral resources, and products of the national domain.

The Federal Bureau of Mines was created in 1910 to conduct mining and minerals research and analyses. The next year, the Oregon Legislature took action by creating a full-fledged department, the State Bureau of Mines (General Laws of Oregon, 1911, Ch. 227). The name was changed in 1913 to the Oregon Bureau of Mining and Geology. While the Bureau's achievements were many, particularly in the area of publishing technical information and assembling fundamental geologic data about Oregon, it was disbanded in 1923. Overlapping authorities, budget problems, public apathy to scientific investigations, and delayed publication of findings all contributed to its demise. All its records were turned over to the School of Mines at Oregon Agricultural College in Corvallis in 1925 (General Laws of Oregon, 1925, Ch. 296).

In an attempt to remedy the situation, the Legislature created an Oregon Mining Survey Board in 1925 but provided neither an office nor staff (General Laws of Oregon, 1925, Ch. 304). In 1929, a new State Mining Board was created specifically for the purpose of conducting mineral investigations under the supervision of the Federal Bureau of Mines. It ceased to function in 1933. That same year, a new Oregon State Mining Board was created having broad powers, but again with no operating funds (O.L. 1933, Ch. 292). Efforts were made in 1934 and 1935 to establish adequate funding, but these failed.

In 1937, the Legislature created the present Department of Geology and Mineral Industries (O.L. 1937, Ch. 179). The Department was required to initiate and conduct studies and surveys of the geologic and mineral resources of the state; to evaluate their commercial utility; and consider and study scientific and economic questions in the field of geology and mining deemed to be of value to the people of Oregon. Since its creation, the department has remained administratively separate from any other state agency.

For the first biennium, funds were appropriated for operating costs, and also for the administration of the "Grubstake Act" (O.L. 1937, Ch. 179, section 11), grubstakes for placer miners. DOGAMI's new governing board, three citizens appointed by the Governor for four years terms, immediately took action to organize the department by hiring the first Director. (The title of State Geologist was not given to the new Director. It wasn't until 1963 that the position of State Geologist was restored, at no cost to the taxpayers [O.L. 1963, Ch. 192]. The department head wore the two hats of Director and State Geologist with no increase in salary.)

In 1937, the Board launched an ambitious list of programs and projects. In its first year, DOGAMI issued ten publications; started a state-wide minerals inventory; processed over 300 grubstake applications; responded to a flood of inquiries from the public and professionals; set up assay offices in Grants Pass and Baker City; and began issuing monthly Press Bulletins. The bulletins were replaced in 1939 with the monthly publication The Ore.-Bin.

The two field assay offices provided analyses for up to two samples per month supplied by the public from mines and prospects within the state. The service was free of charge and the results were placed in a file for public inspection.

DOGAMI assisted in the creation of the Rogue River Coordination Board in 1939 when a major controversy grew out of disagreements between miners and fishermen (O.L. 1939, Ch. 377). Placer mining activities had increased to the point that river waters were becoming increasingly muddied and affecting the fish populations downstream. The Board published studies about the situation. Its efforts were among the first in the state to deal with and environmental problem

By 1939, DOGAMI reported over 200 mines active in the state. One of them, the Oregon Bonanza mine, was the largest quicksilver (mercury) mine in the U.S. One year later, 79 placer mines and dredges were active.

The period from Pearl Harbor to VJ Day found the department almost exclusively engaged in war efforts, including field investigations for strategic and critical minerals (particularly chromite and mercury), stockpile programs, access roads, underground shelters, and the creation of camouflage paints from mineral sources. DOGAMI's spectrographic laboratory started operation in 1942 providing a much needed analytical service for the metallurgical plants and shipyards in the area during World War II. In 1943, the field offices' assay services were consolidated and moved to the Portland office as a wartime conservation measure.

In the late 1940s, the department spearheaded the formation of a State Mapping Advisory Committee that was composed of map users from many organizations and businesses. The committee coordinated the needs of various agencies for new mapping into a single request to the Topographic Branch of the U.S. Geological Survey. After several moves between 1969 and 1978, the committee was finally placed under the administration of DOGAMI.

The importance of natural resources had been recognized early on, although it wasn't until 1951 that a Committee on Natural Resources was created by the Legislature (O.L. 1951, Ch. 340). The Director of DOGAMI was one of the members.

The postwar years and the beginning of the Atomic Age brought attention to the importance of radioactive minerals. The department was besieged by professional and novice prospectors who wanted information on where to look and how to have samples tested. The interest paid off when the first uranium strike occurred in Oregon in 1954.

During the same period, the Legislature adopted the Oil and Gas Conservation Act in 1953 (ORS 1953, Ch. 667) assigning regulatory responsibilities for drilling and operation of wells to DOGAMI. In 1958, a petroleum engineer position was created within the department for the purpose of administering the Act. One of the responsibilities was that the engineer had to be present to witness the critical stages during drilling operations from site preparation to final capping. DOGAMI was also required to maintain a collection of cuttings and cores from oil and gas wells drilled in the state. At the same time, DOGAMI began in earnest to study geothermal resources in the state.

During the early 1960s, DOGAMI became involved with the National Aeronautic and Space Agency's (NASA) lunar program. Astronauts in the program came to central Oregon to study

the volcanic terrain and geologic features that were thought to be similar to the moon's surface. DOGAMI was involved in several phases of the lunar program prior to the first manned landing on the moon. One project in particular, the Water-from-Rocks project, garnered national media attention and appeared as a story on Walter Cronkite's news program on CBS.

In anticipation of increasing land use activities, DOGAMI began assessing the geologic capabilities and hazards of the state's lands during the 1960s, an activity which still continues today. When Tom McCall, an advocate for environmental protection in the state, became governor in 1967, DOGAMI's workload increased significantly. The department became busily engaged providing geologic information for assistance with land use decisions by state agencies and local governments. In 1967, the Legislature adopted an act requiring state agencies to consult with DOGAMI before issuing leases for mining or for oil and gas exploration (O.L. 1967, Ch. 421, section 83).

The first commercial use of geothermal heat in Oregon occurred in 1969. At the urging of the department, the Legislature passed the Geothermal Resources Act in 1971 which assigned regulatory responsibilities to DOGAMI (O.L. 1971, Ch. 776). The department was required to monitor all wells drilled for geothermal energy. That same year, the Mined Land Reclamation Act was adopted and enforcement responsibilities were assigned to DOGAMI (O.L. 1971, Ch. 719). The act ensured that all open mining pits would be reclaimed upon abandonment. DOGAMI opened an office in Albany for the purpose of administering the reclamation program.

The oil energy crisis of the early 1970s precipitated more interest in gas and oil resources. After several years, the first commercial natural gas well began operation in 1979 near Mist, Oregon. That same year, DOGAMI changed the title of their publication The Ore. Bin to Oregon Geology.

Congress passed the Surface Mining Control and Reclamation Act in 1977 for the purpose of regulating and enforcing the reclamation of surface mined lands, the safe operation of coal mines, and reclamation of abandoned mine sites.

Throughout the 1970s and 80s, DOGAMI became increasingly involved in interagency projects and cooperative programs with state and local governments. The department functioned as both a scientific research and investigative body and as a service arm of the State government. Most local governments had no staff geologists and DOGAMI was relied upon heavily to supply geologic planning assistance and information.

Mount St. Helens' eruption in southwestern Washington in 1980 prompted significant renewed interest in volcanoes. In 1981, DOGAMI discontinued assay services for the public, as the Department became busy with its own projects. The assay facilities were reserved for in-house research and analysis. DOGAMI provided lists of laboratories with assay services to the public where they would be charged for the service.

During the 1980s, many changes were made to the laws and regulations governing DOGAMI. The Geothermal Resources law expanded to include unitization (O.L. 1981, Ch. 694). The Mined Land Reclamation law was amended and expanded during the decade to include non-aggregate mineral mining operations (O.L. 1981, Ch. 622); surface impacts of underground mining (O.L. 1983, Ch. 46); and feasibility plans for re-vegetation of reclaimed lands (O.L. 1985, Ch. 291).

Other changes included: noise pollution controls on mining operations (O.L. 1985, Ch. 292); the development of ocean resource planning as part of the Ocean Resources Management Task Force (O.L. 1987, Ch. 576); the requirement for mining exploration permits, considered a separate action from mining operations; and placer mining being banned on designated scenic waterways (O.L. 1995, Ch. 223).

In 1992, the National Geologic Mapping Act was passed by Congress for the purpose of enhancing the geologic mapping of the United States. The U.S. Geological Survey (USGS) works in collaboration with the State Geological Surveys, including DOGAMI. National concerns continue to rise over global environmental changes. The USGS continues its work researching and analyzing information about geologic hazards (volcanoes, earthquakes, and landslides), marine and coastal geology, and energy resource surveys. In addition, the Federal Bureau of Mines was terminated in 1996 and its mineral responsibilities were transferred to the USGS.

In the late 1990's, metal ore mining tapered off in Oregon, although gravel mining is still common. The agency's current focus is mapping the state's geology and natural hazards, such as earthquakes, tsunamis, and landslides. The agency is also responsible for active outreach and public education programs related to natural hazards. Another of DOGAMI's core functions is the regulation of oil, gas, and geothermal energy exploration and production.

Current Organization

Director/State Geologist

The Director holds the position of State Geologist (ORS 516.120-516.130) and is responsible for implementing the policies of the Geology and Mineral Industries Governing Board (ORS 516.080-516.090). The Director oversees the administrative responsibilities for the Board and directs the technical and administrative operation of the Department in accordance with the Board's direction.

Program 1 - Geologic Survey and Services (GS&S)

The Program 1 Assistant Director manages the technical and administrative operation of Program 1 (GS&S). Duties include tracking legislation, coordinating agency projects, and budget development. GS&S partners with federal, state, and local agencies to develop studies and maps that describe the geology of the state and identify natural hazards, such as earthquake faults, landslides, coastal erosion, tsunami inundation zones and floodplains. GS&S functions include Mapping & Minerals, Geohazards, and Coastal. GS&S also includes Governance and Operations which provides administrative support; Public Education and Outreach which disseminates earth science and natural hazard information and risk mitigation products; Technical Services, which includes cartographers and information specialists; and the Nature of the Northwest Information Center.

The Business Office provides support for agency administrative, personnel, and financial services.

Program 2 - Mineral Land Regulation and Reclamation (MLRR)

The Program 2 Assistant Director manages the technical and administrative operation of Program 2 (MLRR). Duties include tracking legislation, coordinating agency projects, budget development, and administrative rule development. MLRR oversees surface mining, oil, gas and geothermal wells, and mine water quality. It is responsible for regulating surface mined land

reclamation per ORS 517. MLRR issues permits, enforces the law at current mining operations, coordinates with other agencies who issue mine related permits, and coordinates reclamation operations on illegally abandoned sites.

Primary Agency Statutes and Administrative Rule Chapters

ORS 516, Department of Geology and Mineral Industries

ORS 517, Mining and Mining Claims

ORS 520, Conservation of Gas and Oil

ORS 522, Geothermal Resources

ORS 523 Geothermal Heating Districts

OAR 632

Chronology

1851 Gold discovered in Oregon Territory

1859 Oregon becomes the 33rd U.S. state

1872 First State Geologist, Dr. Thomas Condon, appointed

1879 U.S. Geological Survey established

1910 Federal Bureau of Mines established

1911 Oregon State Bureau of Mines created

1913 Bureau is renamed the Oregon Bureau of Mining and Geology and its responsibilities are expanded by the Legislature

1923 Oregon Bureau of Mining and Geology is disbanded

1925 Legislature creates Oregon Mining Survey, but without office or staff

1929 Legislature creates State Mining Board, but without office or staff

1937 Department of Geology and Mineral Industries (DOGAMI) created with offices in Portland, Baker City, and Grants Pass. Legislature passes the Grubstake Act.

1939 DOGAMI reports over 200 mines active in the state. *The Ore. Bin* begins publication. The Rogue River Coordination Board is created

1940 Oregon Bonanza quicksilver mine becomes largest U.S. producer

1943 Assay services are consolidated and moved to Portland office

1951 Committee on Natural Resources created with DOGAMI as head

1953 Oregon Oil and Gas Conservation Act adopted. Regulatory responsibilities assigned to DOGAMI

1954 First uranium strike in Oregon

1955 DOGAMI starts investigating uranium deposits in southern Oregon

1956 DOGAMI published first volcanic study map

1958 DOGAMI begins long term study of geothermal resources in the state

1969 First commercial use of geothermal heat in the state

1971 Oregon Geothermal Resources Act and Mined Land Reclamation Act adopted. Regulatory responsibilities assigned to DOGAMI

1977 Federal Surface Mining Control and Reclamation Act passed

1979 First commercial natural gas well in the state begins operation. DOGAMI becomes responsible for the State Mapping Advisory Committee.

1980 Mt. St. Helens erupts in southwestern Washington

1981 Mined Land Reclamation Act expanded to include nonaggregate operations. Assay services were discontinued for the public

1991 The Nature of the Northwest Information Center opened in Portland

1992 National Geologic Mapping Act was adopted

1996 Federal Bureau of Mines was disbanded. Its responsibilities were transferred to the U.S. Geological Survey

Bibliography

Department of Geology and Mineral Industries, <http://www.oregongeology.org> accessed March 5, 2012

Mason, Ralph S. The Way it Was, 1937-1980: A Personal History of the Oregon Department of Geology and Mineral Industries, DOGAMI, 1985 (?).

Oregon Laws, 1872-2010.

Oregon Secretary of State. Oregon Blue Book, 1995-2010.

Oregon State Planning Board. Duties and Functions of a State Department of Geology and Mineral Industries, August 1936.

U.S. Office of Surface Mining Reclamation and Enforcement, <http://www.osmre.gov> accessed Sept. 27, 2010

U.S. Geological Survey, <http://www.usgs.gov> accessed March 5, 2012