Data Descriptions and References for Uranium Resource Regions of the United States

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Data was compiled from published sources by US Geological Survey geoscientists Mark J. Mihalasky, Susan M. Hall and Robert A. Zielinski. This dataset was provided to the U.S. Energy Information Administration in February of 2019 to facilitate updating of national uranium resource distribution maps. The data sources are listed below.

Uranium - Identified Resource Areas

The location of uranium provinces, districts and select important deposits located outside of these broader regions was taken from a variety of sources listed alphabetically below.

Adams S.S.; Smith R.B., 1981, Geology and recognition criteria for sandstone uranium deposits in mixed fluvial-shallow marine sedimentary sequences, South Texas; U.S. Department of Energy Report GJBX-4(81), 145 p.

Colorado Geological Survey, 2018, Uranium Districts – Colorado; published on the Colorado Geological Survey website at http://coloradogeologicalsurvey.org/energy-resources/uranium-2/map/.

Chenoweth, W.L., 1980, Uranium in Colorado; Rocky Mountain Association of Geologists, 1980 Symposium, p. 217-224

Gloyn, R.W.; Bon, R.L.; Wakefield, S.; Krahulec, K., 2005, Uranium and vanadium map of Utah; Map 215, Utah Department of Natural Resources, Utah Geological Survey, 1:750,000 scale, 1 sheet. Metadata download at: https://gis.utah.gov/data/energy/uranium/

Gregory R.W., 2016, Uranium: Geology and Applications; Wyoming State Geological Survey Public Information Circular No 46, 36 p.

Keith, S.B.; Gest, D.E.; DeWitt, E; 1983, Metallic mineral districts of Arizona; Arizona Bureau of Geology and Mineral Technology, Geological Survey Branch, Tucson, AZ, 1:1,000,000 scale, 1 sheet

Kyle L, Beahm D, 2013, NI 43-101 preliminary economic assessment update (revised), Coles Hill uranium property, Pittsylvania County, VA USA; prepared by Lyntek Incorporated, Lakewood, CO; 2013, 126 p. Figure 1.1.

McLemore, V.T. and Chenoweth, W.L., 1989, Uranium resources in New Mexico; New Mexico Bureau of Mines and Minerals Resources, Resource Map 18, 36 p. Available at: https://geoinfo.nmt.edu/faq/mining/home.html

Uranium – Associated with Phosphate

Some sedimentary phosphate deposits contain trace uranium. Historically when uranium prices were high enough, this uranium was extracted as part of the phosphate mining process. In 2019

no uranium is being commercially extracted as part of phosphate mining in the United States. The location of uraniferous phosphate deposits within the United States is shown on this layer. Details and location information is from:

DeVoto, R.H.; Stevens, D.N. (eds.), 1979, Uraniferous phosphate resources and technology and economics of uranium recovery from phosphate resources, United States and free world; GJBX-110(79), Volume 1, 724 p. Volume 2, 50 p. plus plates.

Uranium – NURE Favorable Areas

The U.S. Department of Energy systematically assessed the uranium resource potential of the United States from 1974 to 1982 as part of the National Uranium Resource Evaluation (NURE) program. This layer shows areas that the NURE methodology considered favorable for uranium. For information about the methodology used to delineate these favorable areas as well as a description of relative favorability see: U.S. Department of Energy, 1980, An assessment report on uranium in the United States of America; U.S. Department of Energy, Grand Junction, Colorado, GJO-111(80), 1980. p. 148.

The U.S. Geological Survey analyzed whether the NURE favorable areas identified in Texas accurately predicted the location of discrete uranium deposits. This study is: Review of the NURE assessment of the U.S. Gulf Coast Uranium Province, Natural Resources Research, v.22, issue 3, 18 p. and is available at: https://pubs.er.usgs.gov/publication/70121427