Aggregate Resource Mapping in Washington

WHAT IS CONSTRUCTION AGGREGATE?
Aggregate is sand, gravel, or crushed stone. It is impossible to construct a city or road without construction-quality aggregate.

In November 2021, the federal Infrastructure Investment and Jobs Act was signed into law. The legislation will invest $110 billion in additional funding to repair roads and bridges. These projects will increase the need for construction aggregate.

From 2020 to 2021, aggregate use in the U.S. increased by 6 percent.

Planning for aggregate needs and use is required under Revised Code of Washington (RCW) 36.70A.131 and Washington Administrative Code (WAC) 365-190-070. The provisions require that counties and cities identify and designate aggregate of long-term commercial significance. The Growth Management Act (GMA) requires that counties and cities base their land-use decisions related to mineral resources and Mineral Resource Lands (MRLs) on information provided by the Department of Natural Resources (DNR). The Washington Geological Survey (WGS) is part of DNR.

WGS is reaching out to staff in counties and cities in Washington as part of our effort to establish our aggregate resource mapping priorities and schedule. We know that aggregate resource maps are useful, especially in land-use planning. We also know that every county and city in the state is required to conduct a periodic update of its comprehensive plan and development regulations, though the obligation varies depending on whether the jurisdiction is fully or partially planning or is exempt (RCW 36.70A.130(1)).

WHAT IS WGS’s aggregate resource mapping and how can it help your jurisdiction’s land-use planning?
Aggregate resource mapping falls within the science and research arm of WGS. Your jurisdiction can leverage the aggregate resource data and maps that WGS produces, alongside your jurisdiction’s specific data, to make more informed decisions on where MRLs should be designated. When jurisdictions know where their aggregate resources are, they can plan to protect them.

What does aggregate resource mapping NOT do?
The aggregate resource mapping effort is not a regulatory program, nor will it tell you where to designate MRLs. We provide the aggregate resource maps and data that help you make informed MRL designations.

HOW ARE OUR AGGREGATE MAPS MADE AND WHAT DO THEY SHOW?
We use existing geologic maps, subsurface data, and materials-testing data to designate suitable areas as either indicated, hypothetical, or speculated aggregate resource areas. These designations vary based on size, quality, and uncertainty of the resource. The maps also communicate areas where unsuitable aggregate resources are likely to be found. Unsuitable areas could include resources that are of poor quality, are either not large enough or thick enough to be mined, or are located within federally protected lands.

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PRODUCTS WGS CAN OFFER YOUR COUNTY

WGS will work with your county to determine the most useful products for your needs, including GIS data in a variety of formats. Here are some of the potential resources available to you after the aggregate map has been completed in your county.

WHAT AGGREGATE RESOURCE MAPS ARE ALREADY AVAILABLE?

6 1:100,000-scale quadrangle maps
4 county maps

WGS aims to produce 39 county based aggregate resource maps and datasets.

TIMELINE FOR PRODUCING YOUR MAPS

1 WGS works with you before and during your county GMA update process to clarify your county’s needs for MRL planning.

2 WGS begins work on an aggregate resource map, data, and other tools for your county.

3 WGS meets with your county and cities prior to publishing our aggregate resource map and related materials.

4 WGS delivers the final products to you for your planning needs. WGS provides training opportunities to support the use of the aggregate resource map.

CONTACT

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GROWTH MANAGEMENT ACT BEST AVAILABLE SCIENCE WAC 365-195.

LEARN MORE AT OUR WEBSITE
https://www.dnr.wa.gov/aggregate-resources