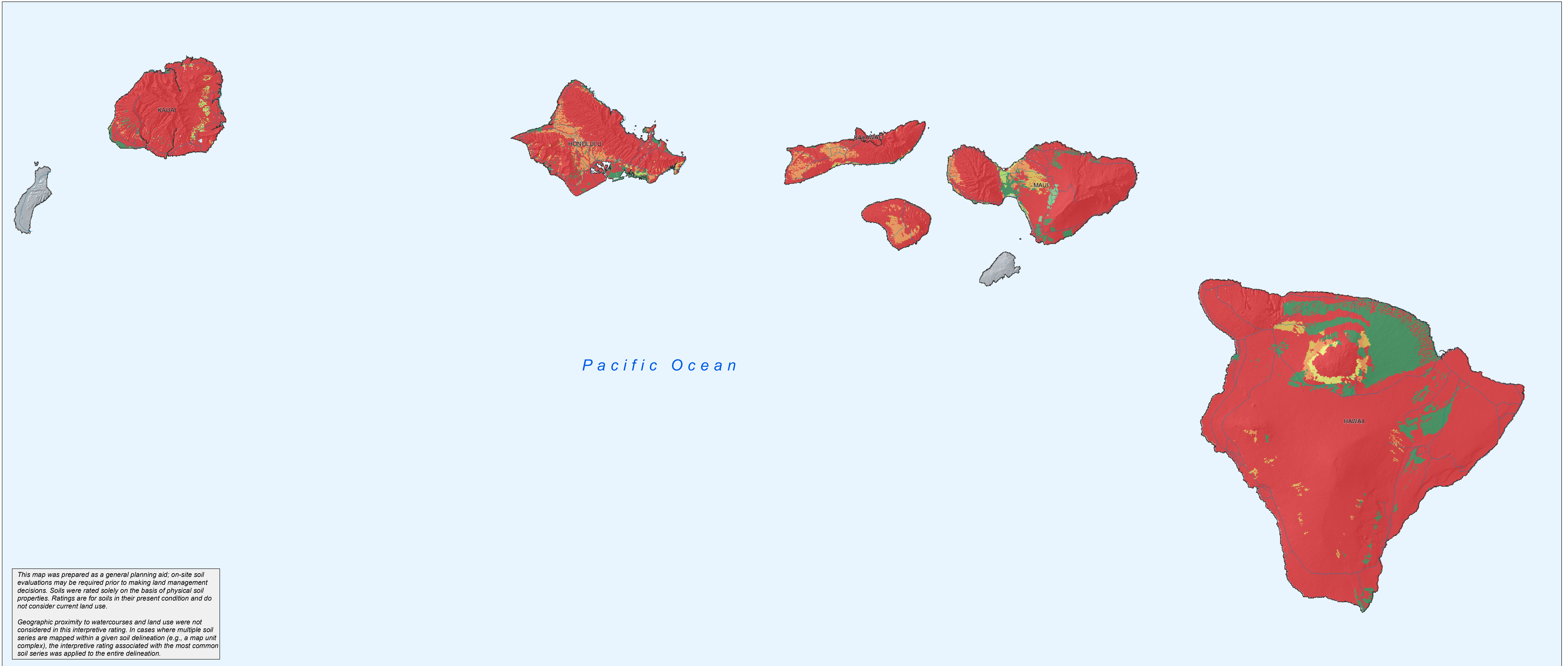


# Suitability for Construction Materials: Roadfill Source - Hawaii (2008)



*This map was prepared as a general planning aid; on-site soil evaluations may be required prior to making land management decisions. Soils were rated solely on the basis of physical soil properties. Ratings are for soils in their present condition and do not consider current land use.*

*Geographic proximity to watercourses and land use were not considered in this interpretive rating. In cases where multiple soil series are mapped within a given soil delineation (e.g., a map unit complex), the interpretive rating associated with the most common soil series was applied to the entire delineation.*



## Suitability for Construction Materials: Roadfill

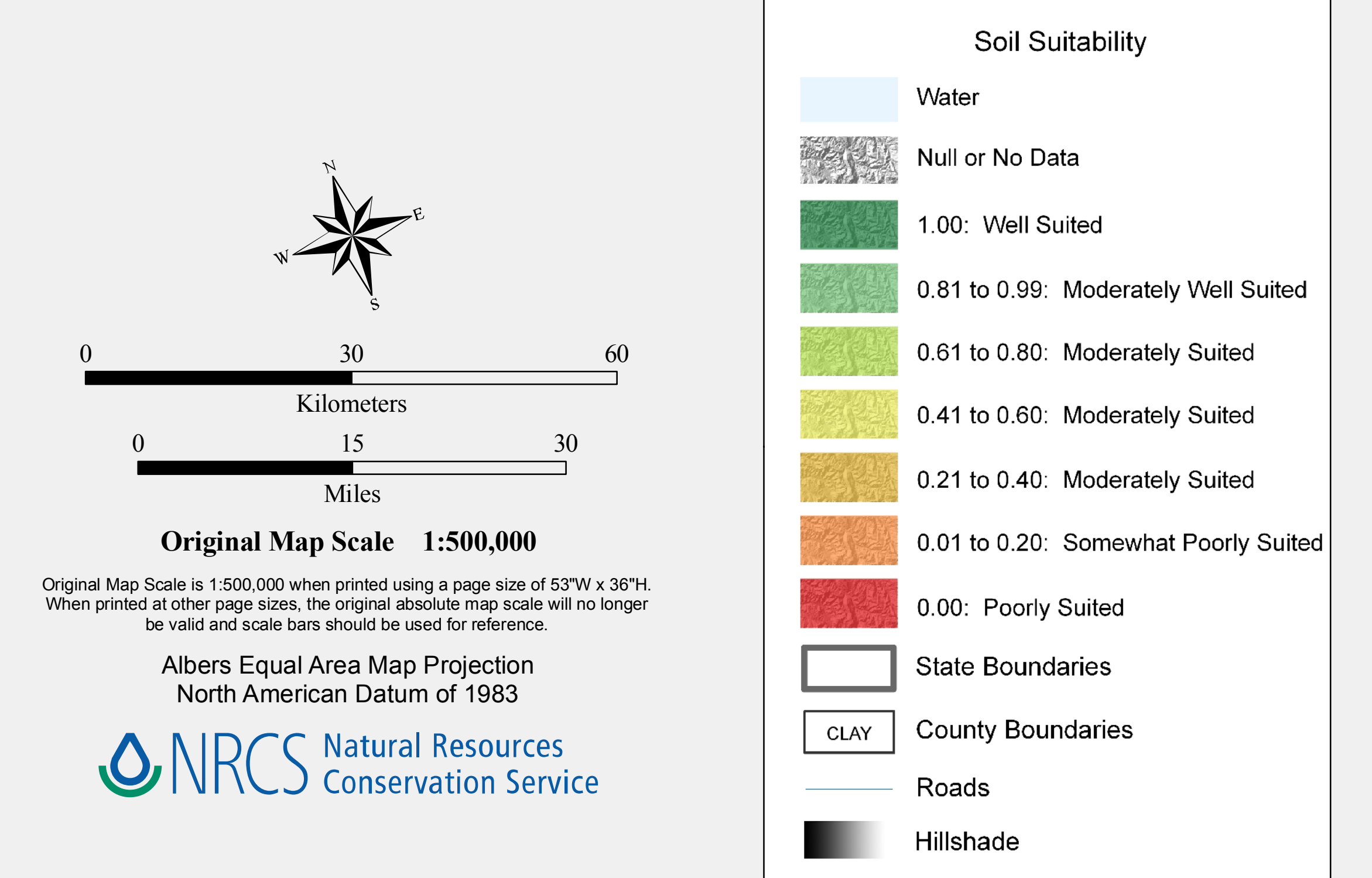
Roadfill consists of soil material that is excavated from its original position and used in road embankments elsewhere. The evaluations for roadfill are for low embankments that generally are less than 6 feet in height and are less exacting in design than high embankments, such as those along super-highways. The rating is given for the whole soil, from the surface to a depth of about 5 feet, based on the assumption that soil horizons will be mixed in loading, dumping, and spreading.

Soils are rated as to the amount of material available for excavation, the ease of excavation, and how well the material performs after it is in place. Soils are placed into suitability rating classes per their rating indices. These are poor (rating index = 0), fair (rating index > 0 and < 1.0), or good (rating index = 1.0).

Soil properties that affect the amount of material available for excavation are thickness of suitable material above bedrock or other material that is not suitable. The percent of coarse fragments more than 3 inches in diameter, the depth to a seasonal high water

table, and the slope are properties that influence the ease of excavation. How well the soil performs in place is indicated by the AASHTO classification and group index and by the shrink-swell potential. A high content of gypsum can cause piping or pitting. Some damage to the borrow area is expected, but if revegetation and erosion control are likely to be difficult, the soil is rated severe.

Soil survey interpretations for construction materials are designed to provide guidance to users in selecting the site of a potential source. Soils may be selected as potential source materials because they are nearby, are the only source available, or meets some or all of the physical or chemical properties required for the intended application. In theory, every soil may be used as source materials, but in reality, only a few soils have the profile characteristics that meet the defined criteria and performance requirements when rated for a specific purpose. The use of rating guides can provide the user a means to select potential sites for further evaluation.



Source: ESRI, 1992. 1:3,000,000 OceanView, ArcWorld, ESRI - Redlands, CA.  
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 USGS, Analytical Hillslope computed from 30-meter National Elevation Dataset (NED) using the following parameters: 315 degrees azimuth, 45 degrees azimuth, and 2 Meter. Prepared by USDA-NRCS-NDSC, Morgantown, WV.