

**Sayre, Roger**<sup>1</sup>, Dawn Wright<sup>2</sup>, Sean Breyer<sup>2</sup>, Kevin Butler<sup>2</sup>, Keith Van Graafeiland<sup>2</sup>, Charlie Frye<sup>2</sup>

<sup>1</sup>United States Geological Survey,

<sup>2</sup>Esri

## **Standardized terrestrial and marine ecosystems of Oceania**

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### **Abstract:**

The U.S. Geological Survey and Esri, in collaboration with other government, non-government, and academic organizations, have recently released a set of detailed maps, data, and apps describing both global terrestrial ecosystems and global marine ecosystems. The ecological land units (ELUs) represent physically distinct areas on the planet with their associated vegetation, based on differences in climate, landform, lithology, and land cover. The ecological marine units (EMUs) represent physically and chemically distinct volumetric regions based on differences in temperature, salinity, oxygen, and nutrients. The global land mass has been partitioned into approximately 3600 ELUs at a base spatial resolution of 250 m. The global ocean has been partitioned into 37 EMUs, volumetric global water masses at a base spatial resolution of ¼ degree (~27 km). The ELUs and EMUs are intended to be useful for a variety of applications, including ecosystem accounting and economic and social valuation of ecosystem goods and services. The EMU and ELU resources are available in the public domain, and as content in Esri's Living Atlas. The development of the ELUs and EMUs will be characterized, with emphasis on the terrestrial and marine ecosystems of Oceania.