Hawaiian Islands Focal Resources

Selected by Stakeholder Working Group

Habitats

Alpine/subalpine
Coastal (e.g., shrub, dune, beach, salt marsh, etc.)
Aquatic (e.g., anchialine pond, perennial streams, intermittent streams, bogs, etc.)
Dry forest (e.g., lowland, montane)
Mesic/wet forest (e.g., lowland, montane)

Ecosystem Services – benefits people obtain from ecosystems

Provisioning services (products obtained from ecosystems)

- Food and fiber. Range of products derived from plants and animals (e.g., taro, agriculture, wood).
- Ornamental resources. Animal and plant products, such as shells and flowers, used as ornaments and whole plants used for landscaping and ornaments.
- Fresh water (supply, quality)

Regulating services (benefits obtained from regulation of ecosystem processes

• Flood and erosion control (e.g., sediment deposition). Vegetation plays an important role in soil and sediment retention.

Cultural services (nonmaterial benefits people obtain from ecosystems)

- Cultural knowledge and heritage values (e.g., cultural landscapes, culturally significant species). Ecosystems influence the types of knowledge and social systems developed by different cultures; includes maintenance of historically important sites, traditional knowledge, and culturally significant species.
- **Aesthetic values**. Beauty found in various aspects of ecosystems, as reflected in the support for parks, scenic drives, and selection of housing locations.
- **Recreation and tourism**. People often choose where to spend their leisure time based in part on the characteristics of the natural or cultivated landscapes in a particular area.

Ecosystem Services Key Terms and Definitions

<u>Ecological Integrity</u>: necessary for the production of all other ecosystem services ("supporting services" MEA 2005); support and preservation of those processes and structure which are essential prerequisites of the ecological ability for self-organization of ecosystems (Barkmann et al. 2001); based on variables of energy and matter budgets and structural features of whole ecosystems and represent the base for the other types of ecosystem services

 Includes things such as: abiotic heterogeneity, biodiversity, biotic waterflows, metabolic efficiency, nutrient cycling, storage capacity

Provisioning Services: the products obtained from ecosystems

• Includes things such as crops, livestock, capture fisheries, aquaculture, wild foods, timber, wood fuel, energy (biomass), fresh water

Regulating Services: the benefits obtained from the regulation of ecosystem processes

• Includes things such as local and global climate regulation, flood protection/erosion control, groundwater recharge, air quality regulation, nutrient regulation, water purification/quality, pollination

<u>Cultural Services</u>: nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences

• Includes things such as recreation and aesthetic values, intrinsic value of biodiversity, spiritual value

Millennium Ecosystem Assessment (MEA). 2005. Ecosystems and Human Well-Being: Synthesis. Island Press, Washington, DC. http://www.millenniumassessment.org/documents/document.356.aspx.pdf