

Why Ecosystem Services Matter

What exactly are “ecosystem services” and why should we care? Healthy natural systems supply water, clean air, soils, crop pollination, and weather stabilization, to name just a few of the resources and processes that impact our daily lives. Ask yourself which of these building blocks of life can you do without? Diverse and extensive, they determine human health and quality of life.

According to US Secretary of Agriculture, Ed Shafer, “Our Nation’s farms, ranches and forests provide goods and services that are vital to society – natural assets we call ‘ecosystem services.’” Until recently they were misperceived as infinite, permanent and free. Now we can see the increasing impacts of environmental degradation including air and water pollution, deforestation, declining fisheries, and a climate crisis. Fortunately, we are now learning more about how ecosystem services can be supported and managed in order to reverse such degradation.

This term is gaining common currency, especially with the founding of the new USDA Office of Ecosystem Services and Markets (OESM). In December 2008, Shafer announced the new office and the formation of a government-wide Conservation and Land Management Environmental Services Board to help assess, measure and define reporting protocols for ecosystem services. Shafer states “...[OESM] will enable America’s agricultural producers to better compete, . . .and make significant contributions to help improve the environment.”

Section 2709 of the 2008 Farm Bill triggered the founding of OESM and the new environmental services board. Shafer’s statement and Section 2709 are significant in that both formally recognize the many ‘free’ services that agricultural producers who employ conservation practices provide, such as purifying water, enriching and preserving soils, managing carbon sequestration, and protecting wildlife habitat. OESM will create a formal structure to market these services thus giving farmers, ranchers and forest landowners financial incentives to provide these critical public benefits.

Authorizing legislation directs OESM and the environmental service board to focus on carbon sequestration first. According to the US Department of Energy, carbon sequestration is “the placement of CO₂ into a repository in such a way that it will remain permanently sequestered. Efforts are focused on two categories of repositories: geologic formations and terrestrial ecosystems.” What concerns us most locally is the latter. ‘Terrestrial ecosystems’ translate into farmland and forests, both of which are still relatively abundant in San Juan County.

Changing the management of forests, agricultural lands and wetlands can remove more CO₂ from the air while reducing the CO₂ emissions of these ecosystems. Techniques such as rotational grazing and cropping, protecting and planting native trees and vegetation, and protection and restoration of wetlands and riparian areas are tools that help offset carbon emissions from other sources. Contact the San Juan Islands Conservation District for more information and free technical assistance, at www.sanjuanislandscd.org or 360-378-6621.

Along with adopting conservation practices, we can also support local efforts to preserve our farmlands and forests. Next month we will review these goals and feature successful models of island land management.