



Fact Sheet 1

THE MARKETS FOR ECOSYSTEM SERVICES PROJECT

THE PROJECT

We are aiming to build the capacity of regional communities to address natural resource management challenges by creating markets that reward landholders for the ecosystem services they provide.

WHAT ARE ECOSYSTEM SERVICES?

Ecosystems provide many 'services' from which humans benefit. Ecosystem services are the transformation of a set of natural assets, such as soil, plants, animals, air and water into 'services' that we value. Examples include:

- provision of clean water;
- maintenance of liveable climates and atmospheres (carbon sequestration);
- pollination of crops and native vegetation;
- fulfilment of people's cultural, spiritual, intellectual needs; and,
- provision of options for the future, for example through the maintenance of biodiversity.

WHY MARKETS FOR ECOSYSTEM SERVICES?

Ecosystem services are found just about everywhere; in forests, farm paddocks, city parks and house gardens. Individuals, farms, towns, cities and industries rely on the services that ecosystems provide. These ecosystem services were once common but environmental degradation has reduced our supply of many of these services to levels where our quality of life is reduced or production costs are increased. But no one owns most ecosystem services, they cannot currently be bought or sold, and there are few incentives for landowners to invest in their production.

A traditional response is to turn to governments for continued supply of ecosystem services through regulations, cost sharing and other mechanisms. But the roles and values of ecosystem services vary from place to place, and monitoring is expensive. Besides, regulation is often ineffective because individuals evade the rules and sanctions when they do not benefit from them.

Given the difficulties governments face in ensuring production of ecosystem services, and the importance of ecosystem services, many alternatives should be examined. One option is to explore the use of market-based mechanisms.

Markets are used to supply many essential items in our lives including food, clothing and shelter and are the mechanism by which landowners are rewarded when their land produces valuable food and fibre products – even when their production reduces the production of ecosystem services. Markets work well at providing rewards – and markets for ecosystem services are one way of rewarding and encouraging land managers to protect and produce ecosystem services.

EXPLORING 'MARKETS' FOR ECOSYSTEM SERVICES

The 'markets project' builds on the extensive groundwork laid by The Ecosystem Services Project in defining the concept of ecosystem services and developing robust methods for their measurement. The project will explore how markets for ecosystem services could work through:

- identifying and matching market mechanisms and production of ecosystem services;
- finding ways to link measures of ecosystem services to landholder actions;

- designing market mechanisms that encourage non-government investment in natural resource management; and,
- analysing what governments should do and what they should avoid when creating markets.

Key challenges are to show where market mechanisms are most effective, where other mechanisms will work better, and, how market mechanisms fit into existing programs (such as regional land and water management planning).

HOW WILL THE PROJECT DELIVER?

'The Markets for Ecosystem Services Project' will directly address the challenge at the regional level by:

- building partnerships with appropriate groups in case study regions;
- integrating market based mechanisms with other programs in case study regions to achieve targets;
- quantifying changes to particular ecosystem services to measure what can be bought or sold in markets;
- testing pilot markets in practice, on the ground, in the case study regions to show they work;
- recommending policy changes to strengthen laws underpinning market creation and management.

A strong conceptual framework will underpin these steps. We will use the framework to help identify and analyse key opportunities, institutions and impediments to effective market-based mechanisms in the case study areas.

WHO IS INVOLVED?

CSIRO Sustainable Ecosystems, The Rural Industries Research and Development Corporation, Joint Venture Agroforestry Program and Land & Water Australia are funding the Project. Other organisations involved include case study representatives, Greening Australia; The World Wide Fund for Nature; Central Queensland University; The Market Place Company; state and federal agencies, and other CSIRO divisions.

The case study regions and key regional organisations where we are currently working include:

- The Goulburn Broken Catchment in Victoria, Goulburn Broken Catchment Management Authority.
- The Blackwood Basin in WA, Blackwood Basin Group.
- The Murrumbidgee Catchment in NSW; NSW Department of Land & Water Conservation.

WE WANT TO HEAR FROM YOU!

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