

CONCLUSION

This report considered different land-use patterns and their effects on water, soil and air quality, and biodiversity. The impact of urban areas on these environmental aspects is generally negative. Urban areas modify the local hydrology resulting in the erosion of streams and the contamination of streams, rivers and lakes from urban runoff. The contaminated particles from urban runoff reduce capacity, decrease water quality, and threaten animal habitats in these water bodies. Conventional agriculture also tends to harm the environment and, as is the case with the environmental impacts of urban land use, the effects of conventional practices in agriculture on water quality, soil and biodiversity are often interrelated and complex.

Yet agricultural land-use may not necessarily be harmful to the environment. A range of agricultural practices associated with conservation management can minimize its harmful effects and even benefit the environment. Non-tillage, minimum tillage, non - or surface - incorporation of crop residues, the establishment of cover crops and crop rotation contribute to improved water quality and reduce both soil erosion and the emission of carbon dioxide. A range of alternative practices associated with conservation management and working landscapes promote carbon sequestration and gains in biodiversity. Sound conservation management agricultural practices can indeed increase the value of farmland, attract well-directed subsidies to encourage such action, and promoting farmland amenities may provide farmers with additional financial support.

Globally, it has become increasingly important to develop meaningful indicators of the environmental benefits of well-managed farmland in order to accurately account for such benefits - both nationally, and in the agricultural sector¹⁸⁰ - and to achieve effective policy measures for addressing immediate and looming environmental concerns. Absorbing the values attached to the various positive externalities and public goods associated with well-managed farmland will benefit all parties interested in preserving and improving the

¹⁸⁰ Economics for the Environment Consultancy (eftec) and Institute for European Environmental Policy (IEEP), (2004), *Framework for Environmental Accounts for Agriculture*, Final Report, July 2004.

environment. If such benefits may be accurately accounted and absorbed into the policy making process, then not only will farmers who adopt conservation management practices assume a win-win position, environmental groups and governments can promote the neutralization of the environmental costs traditionally associated with conventional agriculture while they witness the tangible environmental benefits tied to well-managed farmland.