



Economics, ecosystems and biodiversity

The “Economics of Ecosystems and Biodiversity”, a new United Nations report looks at the values of ecosystem services to the economy. It concludes that “Policy-makers who factor the planet's multi-trillion dollar ecosystem services into their national and international investment strategies are likely to see far higher rates of return and stronger economic growth in the 21st century”.

One key area of discussion is the investment in “ecological infrastructure”. This is another way to talk about protecting nature’s ability to provide us with freshwater, climate regulation, storm and flood management, and other services.

Study author, Pavan Sukhdev, points out that the annual benefits of protecting areas in land are worth up to \$5 trillion per year. He also states that investments to protect ecosystems can be worth 25-100 times more in benefits from the natural services they provide.

Water purification and waste water treatment are areas where the benefits of a healthy natural infrastructure are found to be particularly obvious. Unfortunately in many cases, these benefits are realized after the natural services have been lost, and public utilities have to pay to provide alternatives.

Some cities have protected areas to provide drinking water, saving costs on public treatment plants. These locations have included Rio de Janeiro, Johannesburg, Tokyo, Melbourne, New York and Jakarta. Victoria has also purchased forested and degraded lands in order to protect their water sources.

The report found that “forests, wetlands and protected areas with dedicated management actions often provide clean water at a much lower cost than man-made substitutes like water treatment plants”. In New York, the cost savings in infrastructure have been in the billions of dollars. The result is that taxpayers’ water bills have increased by 9% instead of doubling.

Values of natural areas rise incredibly when multiple services are evaluated. For example in our region we might set aside some riparian area to protect our water source. This one action would also reduce our carbon, regulate our microclimate a little better, absorb storms and flooding more effectively, and contribute to survival of salmon.

Perhaps there is a way for us to move forward and achieve several goals with few actions, and little cost. For example, by protecting portions of our watersheds we could contribute to our healthy water supply. Sustainable forestry, agriculture, fisheries and nature-based

tourism industries could also develop. In addition, others would be needed to provide materials and services to these industries.

In our region we know we need to clean our water, and ensure a level of quality. We also need to protect the quantity of our water. Perhaps we need to weigh our options and consider the costs and values of various approaches, including protection of our natural infrastructure.

This edition of Water Limited will explore issues of water management in our community. It is funded by the Georgia Basin Living Rivers Program and Mid Vancouver Island Habitat Enhancement Society (MVIHES). Articles are written by Michele Deakin. MVIHES coordinates the Englishman River Watershed Recovery Plan, and conducts education, restoration and monitoring projects throughout the mid island area. MVIHES also work to support healthy watersheds and shorelines, and continuity of our biodiversity as a way to contribute to protection and conservation of salmon habitat.

