

Threats to our EG&S:

The remaining 25% of our prairie grassland and wetlands continues to be threatened by conversion to other uses: cultivation and drainage.

The quality of the water in our lakes and rivers is being degraded by nutrient loading, increased sedimentation from soil erosion, pollution and the continued expansion of exotic invasive species.

Lack of knowledge about the importance of natural capital and the EG&S that it provides continues to threaten its sustainable use and much needed conservation.



Sprague's Pipits prefer parcels of native prairie that are larger than 65 hectares and tend to avoid smaller grassland patches and habitat edges.

Loss of our EG&S is resulting in:

- 1) Poorer water quality and increased water treatment costs.
- 2) Increased health care costs associated with decreased human health.
- 3) Increased insurance costs (flooding, property damage, crop failure).
- 4) Loss of suitable land for agriculture.
- 5) Decreased property values due to the loss of natural land and the associated aesthetic appeal.
- 6) Irrigation water shortage.
- 7) Water hauling and deeper wells.
- 8) Decreased fish stocks.
- 9) Tourism losses.
- 10) Increased production of greenhouse gases.

Get involved:

Individuals — Educate yourselves on the importance of natural capital and the EG&S they provide; become active with an organization that conserves natural areas.

Educators — Recognize and incorporate the environmental and economic values of natural capital into your science, social studies, geography and economic courses.

Non-government Organizations — Fund and deliver programs that conserve and restore natural areas.

Government — Provide data on the amount and attributes of natural capital and changes to it over time, supplying decision makers with value upon which to base land use decisions; offer stewardship incentives for those who conserve natural areas; develop policies and legislation to protect our natural areas.



For more information visit:

www.ducks.ca/conservet/wetland_values/conservet.html

www.pcap-sk.org



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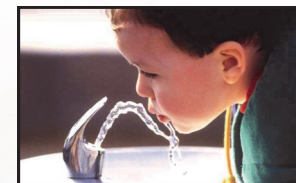
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Front cover photo credits: Sprague's Pipit (S. Davis), Antelope (J. Ng)

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Ecological Goods & Services: What you need to know



Natural Capital is the environmental and ecosystem resources (e.g. grasslands, lakes, wetlands, woodlands) that yield **Ecological Goods and Services (EG&S)** (e.g. food production, air and water purification, carbon sequestration, drought and flood protection) that are crucial to the viability of our economy and livelihood.

Natural Capital provides us with everything from the air we breathe to many of the medicines we use.

Grasslands are North America's most threatened ecosystem and up to 75% of the prairie grasslands have been lost and converted for agricultural production. Grasslands provide us with an abundance of EG&S such as filtering sediment and pollutants before they reach our freshwater sources, increasing water filtration, preventing soil erosion, providing pollination and pest control services essential to agriculture, and providing habitat for numerous plants and animals including those at risk such as the endangered Burrowing Owl and threatened Loggerhead Shrike and Sprague's Pipit, who require grasslands to nest in and produce young.

Burrowing Owls and Loggerhead Shrikes are natural forms of pest control. A family of Burrowing Owls can consume 1,800 rodents and 7,000 grasshoppers in one summer.



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FACT: Each year, soil erosion on the prairie grassland decreases the profits of crop production by \$6 million.

Wetlands are one of Earth's most productive ecosystems and also one of the most threatened. In Canada, we have approximately 25% of the world's remaining wetlands. Wetlands provide numerous EG&S such as filtering and recharging our freshwater, helping to prevent flooding, storing greenhouse gases and providing habitat for over 600 wildlife species as well as various tourism and recreation opportunities.

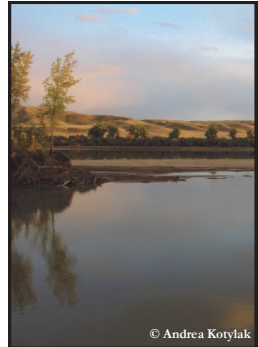


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FACT: The annual value of all the EG&S generated by 1 hectare of wetlands has been estimated to be between \$5,792 and \$24,330. The draining of just 6 hectares of wetlands releases the same amount of carbon dioxide that would be captured by switching from conventional tillage to zero tillage on 2,000 hectares of cropland.

Lakes and Rivers play a vital role in sustaining Canada's economy and the quality of life of Canadians.

Lakes and rivers provide us with numerous EG&S such as water sources for municipalities, irrigation, and industry, tourism and recreation opportunities, and habitat and forage for an abundant amount of plants, fish, insects and animals including Species at Risk such as the endangered Piping Plover.



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Responsible management practices have positive impacts on EG&S and are also responsible for the recent increase in the number of Piping Plovers in Saskatchewan.

FACT: The value of freshwater to the Canadian economy is estimated to be between \$7.5 and \$23 billion annually; amounts that are equal to the gross figures for agriculture and other major economic sectors.



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