

## Human Activity and the Environment – Teacher's Kit

### Slide set #2: What are ecosystem goods and services?



Release date: September 2014



Statistics  
Canada

Statistique  
Canada

Canada

## How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, [www.statcan.gc.ca](http://www.statcan.gc.ca).

You can also contact us by

**email** at [infostats@statcan.gc.ca](mailto:infostats@statcan.gc.ca),

**telephone**, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following toll-free numbers:

- |   |                |
|---|----------------|
| • Statistical Information Service                             | 1-800-263-1136 |
| • National telecommunications device for the hearing impaired | 1-800-363-7629 |
| • Fax line  | 1-877-287-4369 |

## Depository Services Program

- |                  |                |
|------------------|----------------|
| • Inquiries line | 1-800-635-7943 |
| • Fax line       | 1-800-565-7757 |

## To access this product

This product, Catalogue no. 16-507-X, is available free in electronic format. To obtain a single issue, visit our website, [www.statcan.gc.ca](http://www.statcan.gc.ca), and browse by “Key resource” > “Publications.”

## Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on [www.statcan.gc.ca](http://www.statcan.gc.ca) under “About us” > “The agency” > “Providing services to Canadians.”

Published by authority of the Minister responsible for  
Statistics Canada

© Minister of Industry, 2014

All rights reserved. Use of this publication is governed by the  
Statistics Canada Open Licence Agreement ([www.statcan.gc.ca/reference/copyright-droit-auteur-eng.htm](http://www.statcan.gc.ca/reference/copyright-droit-auteur-eng.htm)).

Cette publication est aussi disponible en français.

## Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

## Standard symbols

The following symbols are used in Statistics Canada publications:

- |                |  |
|----------------|--|
| .              | not available for any reference period   |
| ..             | not available for a specific reference period  |
| ...            | not applicable   |
| 0              | true zero or a value rounded to zero   |
| 0 <sup>s</sup> | value rounded to 0 (zero) where there is a meaningful distinction between true zero and the value that was rounded |
| P              | preliminary  |
| r              | revised  |
| X              | suppressed to meet the confidentiality requirements of the <i>Statistics Act</i>                                   |
| E              | use with caution   |
| F              | too unreliable to be published   |
| *              | significantly different from reference category ( $p < 0.05$ )   |

## Set #2: What are ecosystem goods and services?

Set #2 of a three-part series, this presentation and related learning materials include the following activities:

- Learners discuss possible understandings of economic goods and services.
- Learners identify goods and services present in images of ecosystems.
- Learners explore the impact of human actions and ecosystem changes on ecosystem goods and services (EGS).

### Key learning outcomes:

- understand economic goods and services
- understand ecosystem goods and services
- understand the importance of studying ecosystems

**Intended audience:** grades 7 to 12 social studies, geography, science, biology, and environmental education classes; introductory post-secondary

These PowerPoint presentations and corresponding teacher notes and activities accompany and support the learning activities for “What are ecosystem goods and services?” and the Statistics Canada publication, *Human Activity and the Environment 2013: Measuring ecosystem goods and services in Canada*.

Title slide

© kjay / Fotolia.com

## References

kjay, 2014, Douglas Fir Tree Silhouette, <http://us.fotolia.com/id/5470456> (accessed May 28, 2014).

# Think about the task

Today's task

What goods and services does this ecosystem provide?



© sababa66 / Fotolia.com

## What will I learn?

- how to identify goods and services
- how to identify goods and services found in ecosystems
- why it might be important to study ecosystem goods and services

Slide 1

## References

sababa66, 2014, fisherman on the boat, <http://us.fotolia.com/id/57707069> (accessed May 28, 2014).

# Explore the ideas

What **goods** might each business sell?  
What **services** might each business sell?

## ROLAND'S TENNIS ACADEMY

- improve your game with pro coaching
- visit our pro shop for the latest in racquets and other tennis gear
- custom racquet repair

## Wally's Electronics Warehouse

*From personal devices to home entertainment systems, we have all the latest and greatest gadgets!*

**THINK** about these business ads

**TALK** to a partner

**SHARE** with the class

Slide 2

# Test the definition

What is a *good*?  
Select the *non-example*



© ml / Fotolia.com



© Anatolii / Fotolia.com



© alexlukin / Fotolia.com



© trekandphoto / Fotolia.com

Slide 3

## References

- ml, 2014, Your Coffee, <http://us.fotolia.com/id/47616687> (accessed May 28, 2014).  
Anatolii, 2014, Pig on white, <http://us.fotolia.com/id/55475672> (accessed May 28, 2014).  
alexlukin, 2014, Blue bottle of pure water with drops, <http://us.fotolia.com/id/64125231> (accessed May 28, 2014).  
trekandphoto, 2014, Skateboard Isolated With Clipping Path, <http://us.fotolia.com/id/43721468> (accessed May 28, 2014).

# Test the definition

What is a **service**?  
Identify the *non-example*.



© Ljupco Smokovski / Fotolia.com



© Kurhan / Fotolia.com



© Jenner / Fotolia.com



© Rido / Fotolia.com

Slide 4

## References

- Ljupco Smokovski, 2014, Mature fisherman holding a fishing equipment, <http://us.fotolia.com/id/39321209> (accessed May 28, 2014).  
Kurhan, 2014, Professional plumber, <http://us.fotolia.com/id/42525849> (accessed May 28, 2014).  
Jenner, 2014, Portrait of a happy Female Doctor, <http://us.fotolia.com/id/44089744> (accessed May 28, 2014).  
Rido, 2014, Satisfied professional chef, <http://us.fotolia.com/id/44776659> (accessed May 28, 2014).



A **good** is a tangible thing that can be used or consumed.



© trekandphoto / Fotolia.com

A **service** is any activity that provides a benefit.



© Kurhan / Fotolia.com

Slide 5

## References

- trekandphoto, 2014, Skateboard Isolated With Clipping Path, <http://us.fotolia.com/id/43721468> (accessed May 28, 2014).  
Kurhan, 2014, Professional plumber, <http://us.fotolia.com/id/42525849> (accessed May 28, 2014).



# Extend the definition

Ecosystems also provide goods and services.  
Which are **goods**?  
Which are **services**?



L. Hislop / GRID-Arendal



© mahony / Fotolia.com



J. Galloway / U.S. Geological Survey



© wiktör bubniak / Fotolia.com

**THINK** about these images  
**TALK** to a partner  
**SHARE** with the class

Slide 6

## References

Hislop, Lawrence, 2010, Tree stumps, Canada, [http://www.grida.no/photolib/detail/tree-stumps-canada\\_18fd](http://www.grida.no/photolib/detail/tree-stumps-canada_18fd) (accessed April 22, 2014).  
Galloway, Joel M., 2011, Missouri River, U.S. Geological Survey, [http://gallery.usgs.gov/photos/06\\_28\\_2011\\_lpg6Jvu3ID\\_06\\_28\\_2011\\_18](http://gallery.usgs.gov/photos/06_28_2011_lpg6Jvu3ID_06_28_2011_18) (accessed April 24, 2014).  
mahony, 2014, Man relaxing on the seaside, <http://us.fotolia.com/id/63616337> (accessed May 28, 2014).  
wiktör bubniak, 2014, Nordic walking in mountains, Young female, <http://us.fotolia.com/id/9463965> (accessed May 28, 2014).

## Three categories of EGS



© kjay / Fotolia.com

Slide 7

**Provisioning:** the goods and materials provided.

**Regulating:** the services of regulating climatic, water, bio-chemical and biological processes.

**Cultural:** services provided through recreation, knowledge, relaxation and spiritual reflection.

## References

kjay, 2014, Douglas Fir Tree Silhouette, <http://us.fotolia.com/id/5470456> (accessed May 28, 2014).

# Categorize the EGS

In which categories do these EGS belong:  
provisioning, regulating or cultural?



L. Hislop / GRID-Arendal



© mahony / Fotolia.com



J. Galloway / U.S. Geological Survey



© wiktör bubniak / Fotolia.com

Slide 8

## References

- Hislop, Lawrence, 2010, Tree stumps, Canada, [http://www.grida.no/photolib/detail/tree-stumps-canada\\_18fd](http://www.grida.no/photolib/detail/tree-stumps-canada_18fd) (accessed April 22, 2014).  
Galloway, Joel M., 2011, Missouri River, U.S. Geological Survey, [http://gallery.usgs.gov/photos/06\\_28\\_2011\\_lpg6Jvu3ID\\_06\\_28\\_2011\\_18](http://gallery.usgs.gov/photos/06_28_2011_lpg6Jvu3ID_06_28_2011_18) (accessed April 24, 2014).  
mahony, 2014, Man relaxing on the seaside, <http://us.fotolia.com/id/63616337> (accessed May 28, 2014).  
wiktör bubniak, 2014, Nordic walking in mountains, Young female, <http://us.fotolia.com/id/9463965> (accessed May 28, 2014).

# Do ecosystems have goods and services?

What goods and services might be found in this ecosystem?



Slide 9

© sababa66 / Fotolia.com

## References

sababa66, 2014, fisherman on the boat, <http://us.fotolia.com/id/57707069> (accessed May 28, 2014).



How has human activity affected the goods and services provided by this ecosystem?



L. Hislop / GRID-Arendal

**LOOK** at the image carefully

**DESCRIBE** what you see to your partner

**IDENTIFY** how human activity has affected the goods and services provided

Slide 10

## References

Hislop, Lawrence, 2010, Fallen trees in a plantation, Canada, [http://grida.no/photolib/detail/fallen-trees-in-a-plantation-canada\\_56e1](http://grida.no/photolib/detail/fallen-trees-in-a-plantation-canada_56e1) (accessed April 24, 2014).