

THE DIGITAL DOMAIN NO. 8:

Selected Internet Resources for the Study of British Columbia's Environment and Natural Resources

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THIS COMPILATION LISTS SELECTED, publicly accessible Internet resources and Web sites documenting the environment and natural resources. The phenomenal growth and adoption of Web technology by government, non-profit, and educational organizations, the kinds of agencies whose work is the primary focus of this bibliography, means it is an impossible task in a limited amount of space and time to fairly and fully represent each of these topics. My goal was to sample and thereby attempt to represent a broad range of Internet and Web resources, including examples of some types of Internet tools for locating or displaying information. One major criteria for selection was that a Web site contain enough content to make it worth a visit, even if it consists only of a links page. This bibliography is organized into eight categories, which I feel best represent and provide the broadest coverage of these topics: General Reference; Government and the Environment; The Earth: Land and Water; Life forms; Climate Change and Global Warming; Human Impact on the Environment; Environmental Education and Advocacy Organizations; and Environmental and Natural Resources Policy and Law. The resources are organized within these subject areas alphabetically by the author of the Web site or print content, or by Web site title. Some earlier Digital Domains are found on the *BC Studies* Web site (<http://www.bcstudies.com>); URLs may, however, no longer work. I have included brief descriptions of some relevant resources described in previous Digital Domains. An abbreviation indicating which Digital Domain and *BC Studies* issue contained the original reference – for example, “(DD5, BCS no. 128)” – appears after each Web site author or title.

Unless specified, all references in this bibliography are Web sites with a URL (Universal/Uniform Resource Locator) or Internet address

beginning with the Internet protocol designator <http://>. Because the URL must include the Internet protocol designator, I have shown the Web protocol designator. Graphical Web browsers such as Firefox, Microsoft Internet Explorer, Mozilla, Netscape Navigator, and Opera all default to a Web URL when the Internet protocol designator is not included. Those accessing the Internet through a non-Internet Explorer browser, a proxy server, a firewall or who have high-security browser settings may encounter problems with some of these Web sites.

The Internet and Web environment has evolved significantly since the first "Digital Domain" appeared in 1998. Coincidentally, that was also the year Google debuted in beta form, with a formal launch a year later. While Google indexes over 4.2 billion Web pages, it has its limitations in the kind of content it can index and the manner in which its search results are displayed. Many professional Internet searchers use Google as a starting point, but rely on an array of other tools and services to locate the most current information possible.

Among the newest tools for discovering or keeping abreast of Internet resources, especially in the sciences, are **preprint servers** (Nicholas G. Tomaiuolo and Joan G. Packer, "Preprint Servers: Pushing the Envelope of Electronic Scholarly Publishing," *Searcher: The Magazine for Database Professionals*, v. 8, no. 9 (October 2000), URL: <http://www.infoday.com/searcher/octoo/tomaiuolo&packer.htm>, and University of Maryland Libraries, Virtual Technical Reports Center: EPrints, Preprints, & Technical Reports on the Web, <http://www.lib.umd.edu/ENGINE/TechReports/Virtual-TechReports.html>), **institutional repositories** (Miriam A. Drake, "Institutional Repositories: Hidden Treasures," *Searcher: The Magazine for Database Professionals*, v. 12, no. 5 (May 2004), URL: <http://www.infoday.com/searcher/mayo4/drake.shtml>), **metadata harvesters** such as the Open Archives Initiative-Protocol for Metadata Harvesting (<http://www.openarchives.org>), **Weblogs or blogs** (Charles W. Bailey, Scholarly Electronic Publishing Weblog, <http://info.lib.uh.edu/sep/sepw.htm>), and Web content syndication, mainly through **rss and Atom newsfeeds** (Michael Fagan, Fagan Finder: All About rss, <http://www.faganfinder.com/search/rss.shtml>, and AtomEnabled.org, <http://www.atomenabled.org/>). Scholarly publishing itself is also evolving through the so-called **Open Access** movement (Peter Suber, Open Access Overview, <http://www.earlham.edu/~peters/fos/overview.htm>, and Open Society

Institute, Budapest Open Access Initiative, <http://www.soros.org/openaccess/>).

Due to the evolving nature of the Internet and the Web, links within many of these sites may be obsolete. The URLs listed below are current as of 15 September 2004.

GENERAL REFERENCE

British Columbia. Ministry of Agriculture, Food & Fisheries. InfoBasket.

<http://infobasket.gov.bc.ca/Infoman/communities/community.asp?UserID=2&>

A searchable directory of Internet resources from within and outside the BC government relating to the ministry's mandate. The category (Communities) list does not include one for the environment, so you will need to use the search feature to find relevant resources which can consist of a Web site or an electronic publication. Each of the categories, however, may include "environmental considerations" as a facet or subtopic within the "production" subfolder of most of the categories.

Canada. Agriculture and Agri-Food Canada. AgriWeb Canada: Directory of Online Resources in Canadian Agriculture and Agri-Food.

<http://hahtext.agr.ca/agriweb/default.htm>

A searchable Web directory of "Canadian agriculture and agri-food information resources available via the Internet" vetted by "librarians and information professionals."

Community Mapping Network.

<http://www.shim.bc.ca>

A public-private sector partnership that developed a Sensitive Habitat Inventory and Mapping methodology and provides access to specific community mapping projects. The SHIM Methods manual can be read online or individual chapters downloaded as Adobe Acrobat PDF files.

Directory of Open Access Journals.

<http://www.doaj.org>

Hosted by Sweden's Lund University Libraries, the DOAJ "covers free, full text, quality controlled scientific and scholarly journals." Over 1,200 journals are listed and over 300 can be searched by content. One of the subject categories for browsing is Earth and Environmental Sciences.

EarthTrends: The Environmental Information Portal.

<http://earthtrends.wri.org>

Created by the World Resources Institute (Washington, DC), this site contains a database created from a variety of sources, and provides access to statistical data through various thematic views such as Coastal and Marine Ecosystems or Energy and Resources.

Eco-Portal: The Environmental Sustainability Info Source.

<http://www.environmentalsustainability.info>

A Web directory and environmental news site that claims to be “the Original and Best Environmental Portal,” this site is managed by Dr. Glen Barry of Wisconsin who maintains three other similar sites.

Keiser, Barbie E. “Our Environment.” *Searcher: The Magazine for Database Professionals.*

Part 1: General Sources, v. 10, no. 8 (September 2002): 28-38; URL: <http://www.infotoday.com/searcher/sep02/keiser.htm>. Part 2: Governments, Laws, and Organizations, v. 10, no. 10 (November/December 2002): 54-63; URL: <http://www.infotoday.com/searcher/nov02/keiser.htm>. Part 3: The Science and Technology, v. 11, no. 2 (February 2003): 16-25; URL: <http://www.infotoday.com/searcher/feb03/keiser.shtml>.

This is one of the most recent and thorough reviews in print and online of Internet resources pertaining to the environment.

getCITED, the Search Engine for Scholars and Scientists.

<http://www.getcited.org>

Established in 2000, lets researchers and authors, primarily within the academic community, establish a bibliography of their work. Registered users can update any database record for any other user. An audit trail helps determine who changed what. One of the most unusual features of getCITED, which relates to its name, is the linking mechanism through you can cite sources used in your own research, presentations, and publications, as well as link to another individual’s work which cites your own. As of mid-September 2004, there were over 340,000 individual “identities” and over 3.3 million publications in the database.

Global Master Change Directory, a Directory of Earth Science Data and Services.

<http://gcmd.gsfc.nasa.gov>

Operated by NASA (United States National Aeronautics and Space Administration), the GMCD features “more than 15,000 descriptions of Earth science data sets and services covering all aspects of Earth and environmental sciences.” If you are unfamiliar with this site, try the Portals page to access data sets compiled from specific earth observation projects (generally, satellite data), or to locate other environmental data portals sponsored by NASA and other government agencies. Some of the data set Portals worth investigating are the global observing systems whose abbreviations are GCOS, GORC, GOOS, and GTOS, as well as the Global Observing System Information Center (GOSIC), and the Remote Sensing for Conservation Data Sets portal. A Full Text query in the Advanced Search page for “British Columbia” produced 337 records.

Network (USENET) Newsgroups on the Environment.

Among the environment, ecosystems and climate change newsgroups accessible from Google Groups, which archives these USENET newsgroups, are:

[alt.global-warming](#) (unmoderated)

[sci.bio.conservation](#) (moderated)

sci.bio.ecology (unmoderated)
sci.bio.fisheries (unmoderated)
sci.environment (unmoderated)
sci.environment.waste (unmoderated)
sci.geo.meteorology (unmoderated)
talk.environment (unmoderated)

If you are operating a recent version of Windows, you can subscribe to and read these newsgroups through the free Outlook Express e-mail program. The latest version of the Opera Web browser is also capable of subscribing to and reading both USENET newsgroups and RSS newfeeds, and the Firefox browser can also subscribe to Atom and RSS newsfeeds.

The **Internet FAQ Archives** (<http://www.faqs.org/faqs/>) “contains USENET Frequently Asked Questions (FAQ) postings in HTML format and in text format.” These documents are usually authored by experts or moderators, and are designed for the novice and absent-minded Internet user. Many of the FAQs are regularly updated and packed with information and hyperlinks.

oJOSE (Online Journal Search Engine).

<http://www.ojose.com>

Created by Romain Lanners, Institute of Special Education, University of Fribourg, Switzerland, you can search up to 40 databases individually, including publishers’ indexes to their journals. You only have to specify your search term(s) once, and then select each database to repeat the search. oJOSE retains your search history for up to one hour. You can also print out a record of your search history.

ResMap.

<http://www.resmap.com>

This company provides “free online access to GIS-ready satellite data. Imagery covering the entire globe is accessible, with resolutions ranging from 1 km to 14.25 metres for most areas, and in some selected regions 1 metre imagery is available.” A free Web browser plugin is required to make full use of this data.

ScienceDaily Magazine.

<http://www.sciencedaily.com>

This site provides a large amount of daily science and technology news from a variety of sources, including academic and research institutions. The encyclopedia section contains content extracted from the free Wikipedia site to which anyone may contribute information.

SciencePort: Scientific NewsFeed Directory.

<http://scienceport.org>

Despite its name, this site, which was in beta mode as of 15 September 2004, also contains non-science RSS newsfeeds.

Scirus.

<http://www.scirus.com>

Owned by Elsevier, Scirus claims to search “over 167 million science-specific Web pages,” including peer-reviewed articles and preprint servers.

Sciseek, Science Online.

<http://www.sciseek.com>

Describes itself as a "Science Pay Per Click (PPC) Search Engine," which means most of the listings are sponsored or paid results. Its Science News page of current stories are from ScienceDaily Magazine (see elsewhere).

Social Science Information Gateway (SOSIG). (DD2, BCS no. 121).

<http://sosig.ac.uk>

See the Environmental Sciences section for one of the best, authoritative, annotated selection of Internet resources on this topic. SOSIG offers RSS feeds (http://sosig.ac.uk/about_us/rss.html) for each of its topical sections, for upcoming conferences, and for other kinds of events. The About Us page describes other ways of accessing SOSIG's content.

Tidepool: News for the Salmon Nation.

<http://www.tidepool.org>

Developed by Ecotrust (Portland, Oregon), this site, updated at 9 a.m. PST/DT daily, contains "the best news stories collected from more than three dozen on-line news sources" pertaining to the North Pacific coastline. One of the news sections or categories you can select is the Environment. Most of the news sources are from the United States. Canadian news sources include the *Vancouver Sun*, the *Globe and Mail*, and *The Tyee* electronic magazine (ezine) Web site.

UNEP.net, the United Nations Environment Network

<http://www.unep.net>

Operated by the UN Environment Programme, this site acts as "a global portal to authoritative environmental information based on themes and regions." Featured here are several thematic or subject portals such as Climate Change and the GEO Data Portal.

World Directory of Environmental Organizations Online.

<http://www.interenvironment.org/wd/index.htm>

Based on a publication first issued in 1973 by the California Institute of Public Affairs, this site offers "over 350 Web pages with thousands of entries and links. It has detailed subject and geographic sections, background pages, and numerous cross-references."

Yahoo! Groups.

<http://groups.yahoo.com> and (Canada only) <http://ca.groups.yahoo.com>

Yahoo! likely offers the largest set of Web-based bulletin boards or discussion groups. This service combines a Web interface for posting messages, along with e-mail and RSS news feeds. To make full use of Yahoo! Groups, you need to register for free as a Yahoo! user. Each group can impose some limitations on information access. Yahoo! inserts advertising throughout Yahoo! Groups, so the experience is somewhat like watching commercial TV. A search of Yahoo! Groups in mid-September 2004 for the word "environment" as part of the group name revealed 16 categories and 115 groups.

Yale University. JAKE (Jointly Administered Knowledge Environment).

<http://jake.med.yale.edu>

A project started in 1999 by Yale librarians, JAKE was specifically designed to deal with problems associated with print and electronic serials, both those purchased and licensed from commercial services, and those openly available on the Internet. Simon Fraser University Library's **Jake - PostgreSQL Server** (<http://mercury.lib.sfu.ca/~tholbroo/sfujake/search.cgi>) provides more search options. You can also use a version of JAKE via Openly Informatics, Inc.'s site (<http://jake.openly.com>).

GOVERNMENT AND THE ENVIRONMENT

The four British Columbia Government ministries most concerned with environmental and natural resources issues are the Ministry of Agriculture, Food and Fisheries (see elsewhere and DD5, BCS no. 128), the Ministry of Energy and Mines (DD2, BCS no. 121 and DD5, BCS no. 128), the Ministry of Forests (DD5, BCS no. 128), the Ministry of Sustainable Resource Management, and the Ministry of Water, Land, and Air Protection. The last two ministries were created from the former Ministry of Environment, Lands and Parks, some of whose resources were described in DD2, BCS no. 121 and DD5, BCS no. 128. The main government portal URL to access their Web sites is <http://www.gov.bc.ca>. The **British Columbia Environmental Assessment Office** (<http://www.eao.gov.bc.ca>), which reports to the Minister of Sustainable Resource Management, coordinates the environmental assessment process and maintains a database of assessment reports (Electronic Project Information Centre or e-PIC). On 11 March 2004, the Canada-British Columbia Agreement on Environmental Assessment Cooperation was signed in order to provide a single environmental assessment review for projects that required both provincial and federal evaluations. The **British Columbia Environmental Appeal Board** (<http://www.eab.gov.bc.ca>) considers appeals from decisions made under five different provincial statutes. Summaries of decisions back to 1989 can be viewed online.

British Columbia. Ministry of Sustainable Resource Management.

1. Land Information BC.

<http://www.gov.bc.ca/bvprd/bc/keyInitiativeHome.do?action=landInfoBCUser>

This site is a focal point for "a diverse set of data and information products and services from across the natural resource sector." Among the tools for locating data are the **Land and Resource Data Warehouse Catalogue** (<http://>

[//srmwww.gov.bc.ca/g/lrdw_catalog.html](http://srmwww.gov.bc.ca/g/lrdw_catalog.html)). The catalogue is in the form of a GIS map and includes such spatial data layers as Land Use Plans, Pollution and Prevention, Terrestrial Ecosystems and Water Management. The Land and Resource Data Warehouse also offers a metadata search engine called the **Land Information BC Discovery Service** or MSRM Corporate Metadata Service (<http://srmapps.gov.bc.ca/metastar/home.do>). The **Sensitive Ecosystems Inventories** (<http://srmwww.gov.bc.ca/sei/>) project identifies and maps ecosystems that may be at risk due to their fragile nature or proximity to human settlement.

2. Resource Information Branch.

<http://srmwww.gov.bc.ca/tib>

Consisting of a single page of hyperlinks, this is a convenient access point to provincial government resources on "terrestrial and aquatic [eco]systems."

Canada. Environment Canada. (DD5, no. 128)

<http://www.ec.gc.ca>

Environment Canada titles its site The Green Lane (La Voie verte). Environmental data sources here include the CEPA [*Canadian Environmental Protection Act*] Environmental Registry, the National Pollutant Release Inventory (DD2, BCS no. 121), the SARA [*Species at Risk Act*] Public Registry and the State of the Environment (soe) Infobase.

Canada. Natural Resources Canada. (DD5, BCS no. 128)

1. *The Atlas of Canada Online.*

<http://atlas.gc.ca>

Two of the Explore Our Maps sections cover the Environment and Climate Change.

2. GeoConnections Discovery Portal see under General: GeoConnections.

3. Pacific Forestry Centre.

http://www.pfc.cfs.nrcan.gc.ca/index_e.html

Part of the **Canadian Forestry Service** (http://www.nrcan.gc.ca/cfs-scf/index_e.html), the PFC, based in Victoria, is one of five national centres that researches and coordinates forestry programs public and private sector partnerships. In addition to the Pest Data for BC database highlighted in DD2, BCS no. 121, the PFC hosts several other specialized forest ecosystem databases (diagnostic resources), and **Canada's National Forest Inventory** (http://www.pfc.cfs.nrcan.gc.ca/monitoring/inventory/index_e.html).

Canada. Public Works and Government Services Canada.

Depository Services Program.

1. Electronic Publications (DSP E-collection).

<http://dsp-psd.pwgsc.gc.ca/Epubs/epubs-e.html>

You can browse lists of links to "all electronic publications that are currently available on the DSP server" by title, subject and corporate author. Some publications are only accessible to federal government depository libraries that have registered their Internet address with the program.

2. Canadian Government Information on the Internet.

<http://cgii.gc.ca>

Coordinated and edited by Anita Cannon, Mount Allison University, this site contains annotated descriptions written mainly by librarians of federal, provincial and municipal government information available on the Internet. The site also covers electronic sources such as mailing lists, library catalogues and electronic journals.

3. Supplement: Canadian Federal Government Databases Accessible Through the Internet (2001 Edition). (DD2, BCS no. 121)

<http://dsp-psd.pwgsc.gc.ca/Checklist/sor-or-e.html>

Published as a supplement to the *Weekly Checklist* 01-08 for 23 Feb 2001, the URL changed since this supplement was previously published in 1998.

Canadian Council of Ministers of the Environment

(Le Conseil canadien des ministres de l'environnement). (DD2, BCS no. 121)

<http://www.ccme.ca>

URL change. Browse through the Current Initiatives links to locate documents issued by the council or to link to various Web sites relating to its mandate as the "major intergovernmental forum in Canada for discussion and joint action on environmental issues of national and international concern."

Canadian Environmental Assessment Agency

(Agence canadienne d'évaluation environnementale). (DD2, no. 121)

<http://www.ceaa.gc.ca>

This agency operates the Canadian Environmental Assessment Registry database.

GeoConnections: Canada's Geographic Information on the Internet. (DD5, BCS no. 128)

<http://www.geoconnections.org>

Although from within the Data section you can search for geomatics data (maps, remote sensing images, and publications issued in and outside Canada) by location (e.g., British Columbia), you can also select the Advanced Search link on the Data page, which takes you to the separate **GeoConnections Discovery Portal** (<http://geodiscover.cgdi.ca>), an "online catalogue ... [for] the discovery and access of geospatial data for Canada," formerly known as CEONet (DD2, BCS no. 121 and DD5, BCS no. 128) and operated by Natural Resources Canada. From here you can also search for data by Location, Subject and Keyword. The GeoConnections Discovery Portal search page also contains a list of over 200 other Internet geospatial databases, some of which contain BC content.

United Nations Environment Programme.

<http://www.unep.org>

This agency, founded in 1972 during the United Nations Conference on the Human Environment, is a focal point for all UN efforts relating to the environment and sustainable development. The UNEP, along with other

international organizations, sponsors or hosts a large number of independent Web sites, including UNEP.net, an environmental information portal (see elsewhere).

United States. Environmental Protection Agency. (DD2, BCS no. 121)

<http://www.epa.gov>

The EPA offers links to electronic publications and Web sites relating to environmental and ecosystem issues in BC. The Enviro-Science e-Print Service can be accessed through the **Environmental Information Management System** (<http://www.epa.gov/eims/>). The Region 10 office covers the Pacific Northwest.

THE EARTH: LAND AND WATER

For air pollution and air quality see under Climate Change and Global Warming, and Human Impact on the Environment.

Land

This section covers such issues as waste management, and toxic substances from mining and industry.

BC Coalition for Sustainable Forest Solutions.

<http://www.forestolutions.ca>

An advocacy organization comprised of nearly 60 groups representing "First Nations, labour, environmental and community groups," which formed in response and opposition to the forestry policies of the Liberal Party of BC government (2001-), its Web site offers information around the issues of the softwood lumber tariff dispute with the United States, and sustainable forestry.

Canada. Natural Resources Canadian. Canadian Forestry Service.

Model Forest Network (Le Réseau Canadien de Forêts Modèles).

<http://www.modelforest.net>

Experimental forests created with community involvement that are intended to demonstrate principles of sustainable forestry, the Model Forest Network and its database of projects and publications contain a wealth of information based on best practices across Canada.

Ecoforestry Institute Society of Canada.

<http://www.ecoforestry.ca>

This site contains a large online library of publications about ecoforestry or sustainable forestry practices.

Environmental Mining Council of British Columbia.

<http://emcbc.miningwatch.org>

Comparable to MiningWatch Canada, this organization, created in 1992 during the controversy over mining in the Tatshenshini-Alsek watershed,

monitors mining activities in BC. The council also participates in the **Western Mining Activist Network** (<http://wman.miningwatch.org/wman/>) that looks at mining in the U.S. and Canada and was founded in 1997.

Forest Conservation Portal.

<http://forests.org>

A Web directory and news site on forestry operated by Dr. Glen Barry of Wisconsin, who also manages three other similar sites listed elsewhere.

Forest Stewardship Council of British Columbia.

<http://www.fsc-bc.org>

A chapter of the international Forest Stewardship Council based in Germany and founded in 1993, the FSC manages a voluntary forest certification standard to better manage forestry practices.

Forest.ca, Canada's Forest Network.

<http://www.forest.ca>

Web directory of forestry resources created under a public-private partnership. One of the directory categories is Forest Management and Environment.

FORREX (Forest Research Extension Partnership).

<http://www.forrex.org/>

Established in 1998, FORREX promotes through research, publications and other means eco-friendly management of the province's natural resources. The FORREX site includes a library of its own publications, including the online *Journal of Ecosystems & Management*, and a link to the **Natural Resources Information Network** (<http://www.nrin.org>), and an extensive catalogue of natural resource data sources, including links to electronic publications.

International Network of Forests and Communities.

<http://www.forestsandcommunities.org>

Part of the POLIS Project based at the University of Victoria, INFC was created in 1998 and promotes "ecosystem-based community forestry – forestry that is socially, ecologically, and economically sound." The Resources & Links section contains publications and other resources about BC community forestry practices.

MiningWatch Canada (Mines Alerte Canada).

<http://www.miningwatch.ca>

Established in 1999, this environmental advocacy organization monitors mining activities in Canada.

University of British Columbia. Faculty of Forestry.

<http://www.forestry.ubc.ca>

This department publishes the *Forestry Handbook for British Columbia* (5th ed., in press and scheduled for Fall 2004 release online and in print), and oversees a number of research "clusters" and centres such as the Centre for Applied Conservation Research, as well as manages and co-manages three research forests.

Water

This section includes sites and resources about water pollution and water quality, and covers inland waters, the BC coastal zone, and the North Pacific Ocean.

AquaNet: Network of Centres of Excellence in AquaCulture.

<http://www.aquanet.mun.ca/>

Hosted by Memorial University of Newfoundland, this is one of several Networks of Centres of Excellence (see elsewhere).

British Columbia. Ministry of Water, Land and Air Protection.

Water, Air and Climate Change Branch. Water Resource Information.

<http://wlapwww.gov.bc.ca/wat/>

This site acts as a subject gateway to all fresh water issues affecting humans and animals in BC. Water licenses and the database for locating them, formerly under the jurisdiction of this ministry, are now managed by the Crown corporation Land and Water British Columbia Inc. (<http://lwbc.bc.ca>).

Canada. Environment Canada. National Surface Water Data (Water Survey of Canada) (Données nationales sur les eaux de surface [Division des relevés hydrologiques du Canada]).

http://www.climate.weatheroffice.ec.gc.ca/rel_arch/index_e.html

This database offers "daily, monthly, and/or instantaneous information for streamflow, water level, suspended sediment concentration, sediment particle size, and sediment load" from over 8,000 active and inactive monitoring stations across Canada dating back to the 1850s. The water station location catalogue is online, but the data source, issued annually and called HYDAT, can only be purchased or downloaded as a CD-ROM image. Environment Canada also maintains free software for working with the data.

Canada. Fisheries and Oceans Canada (Pêches et Océans Canada).

1. Canadian Waters (Les Eaux canadiennes).

http://www.dfo-mpo.gc.ca/canwaters-eauxcan/index_e.asp

This site functions as an Information gateway to federal policy and management activities relating to ocean-dwelling fish habitats, including inland spawning grounds.

2. Marine Environmental Data Service (Service des données sur le milieu marin).

<http://www.meds-sdmm.dfo-mpo.gc.ca/>

MEDS preserves and provides access to oceanographic data gathered by DFO researcher-scientists, or acquired from external sources. Some public databases are available. MEDS is a member of the International Oceanographic Data and Information Exchange (IODE; see elsewhere).

Canadian Water Resources Association
(Association canadienne des ressources hydriques).

<http://www.cwra.org/>

Founded in 1947 in Lethbridge, Alberta, the CWRA has branches across the country; the BC branch was established in 1994. The Resource Centre page contains links to water-related journals, educational sites, and other water resource sites. The CWRA's 56th annual conference was held in Vancouver in June 2003.

Georgia Strait Alliance.

<http://www.georgiastrait.org>

Based in Nanaimo and formed in 1990, this advocacy organization offers information on issues relating to aquaculture, clean water, and coastal zone stewardship.

Intergovernmental Oceanographic Commission (IOC).

International Oceanographic Data and Information Exchange (IODE).

<http://ioc.unesco.org/iode/>

Created in 1960, the IOC set up the IODE a year later as a mechanism for the preservation and exchange of oceanographic research data. Fisheries and Oceans Canada's Marine Environmental Data Service (MEDS; see elsewhere) is a member of the IODE.

Mattison, David. "Information on the Seven Seas: International Ocean Science Web Resources." *Searcher: The Magazine for Database Professionals.*

Part I, v. II, no. 7 (July/August 2003): 14-22 (available online only in selected commercial/academic full-text databases). Part 2, v. II, no. 10 (November/December 2003): 16-25; URL: <http://www.infotoday.com/searcher/nov03/mattison.shtml>.

North Pacific Marine Science Organization (PICES). (DD2, BCS no. 121)

<http://www.pices.int>

URL change. One of the sponsors of the North Pacific Ecosystem Meta-database, which is hosted by U.S. National Oceanic and Atmospheric Administration's Pacific Marine Environmental Laboratory (see elsewhere), PICES, based at the Institute of Ocean Sciences in Sidney, periodically issues a North Pacific ecosystem status report, as well as being involved in other ocean observation systems.

OceanPortal.

<http://www.oceanportal.org>

A project of the International Oceanographic Data and Information Exchange (IODE; see elsewhere), this site is a directory of ocean sciences Web resources.

The Ocean Project: Ocean Resource Center.

<http://www.theoceanproject.org/resource/>

"An international network of aquariums, zoos, museums, and conservation organizations," the project's resource section includes links to the "Best Aquatic and Ocean Conservation Websites."

Oceana Network.

<http://community.oceana.org>

One of the new breed of virtual organizations, Oceana “organizes campaigns dedicated to restoring and protecting the world’s oceans through policy advocacy, science, law and public education.”

Pacific Streamkeepers Federation.

<http://www.pskf.ca>

A non-profit society created in 1995 and based in North Vancouver, this organization works on projects to restore and preserve freshwater habitats.

Transboundary Watershed Alliance.

<http://www.riverswithoutborders.org>

This international advocacy organization consists of 22 groups that are concerned about environmental degradation of the shared Canadian-Alaskan watershed, much of which involves BC rivers such as the Stikine-Iskut and the Taku.

University of Stirling (Scotland). Institute of Aquaculture and Aqua TT. Fishing for Information.

<http://www.fishing4info.com>

First launched in 1995, the university partnered with the private company Aqua TT and redesigned the site in 2004 to provide database searching of its collection of links on aquaculture and aquatic resource management.

Water Conserve: Water Conservation Portal.

<http://www.waterconserve.info>

This is another of the four Web directories and news sites managed by Dr. Glen Barry of Wisconsin.

World Water Council.

<http://www.worldwatercouncil.org>

Founded in 1996 and based in France, the council describes itself as “the international water policy think tank.” The Links page contains a large assortment of fresh water resources, including some Canadian sites.

LIFEFORMS

This section describes resources about environmental quality as it relates to human, animal, and plant life. For resources on biodiversity and species extinction see under Human Impact On the Environment.

British Columbia. Ministry of Agriculture, Food & Fisheries.

See elsewhere and DD5, BCS no. 128.

Canada. Environment Canada. Canadian Biodiversity Information Network (Réseau canadien de la biodiversité).

<http://www.cbin.ec.gc.ca/>

This network is the official regional network under the UN's Convention on Biological Diversity Clearing-house Mechanism (<http://www.biodiv.org/chm/>).

Canada. Fisheries and Oceans Canada. Pacific Region (Pêches et Océans Canada Région du Pacifique). (DD2, BCS no. 121)

<http://www.pac.dfo-mpo.gc.ca>.

An indispensable site for learning about federally funded research into Pacific Ocean fisheries management and protection of ocean resources.

DIVERSITAS, An International Programme of Biodiversity Science.

<http://www.diversitas-international.org>

One of four research networks under the Earth System Science Partnership (<http://www.ess-p.org>), DIVERSITAS was created in 1991 to address issues around ecosystem biodiversity.

Global Biodiversity Information Facility.

<http://www.gbif.org>

Begun by the Organization for Economic Co-operation and Development (OECD) in 1996, the GBIF hopes "to make the world's primary data on biodiversity freely and universally available via the Internet." It works with other similar organizations such as the UN's Convention on Biological Diversity and its Clearing-house Mechanism (<http://www.biodiv.org/chm/>).

oneFish Community Knowledge Directory.

<http://www.onefish.org>

This site, developed by a research unit of the UN's Food and Agriculture Organization, contains a vast amount of information on aquaculture and fisheries research from around the world.

Orcagirl.com.

<http://www.orcagirl.com>

Established by Victoria resident Chantelle Tucker in 2000, her site "focuses on cultural documentation and research of marine environments and non profit projects." In addition to her volunteer and commercial work as a photographer and videographer, she produces non-profit Web sites such as **Luna Stewardship** (<http://www.lunastewardship.com>) and **Ocean Society** (<http://www.ocean-society.com>). The News section of her site is the Weblog (<http://www.orcagirl.com/orcablog/orcablog.html>), and is hosted on Blogger.com (owned by Google); she started posting on 28 July 2001.

Pacific Fisheries Resource Conservation Council (Conseil pour la Conservation des Ressources Halieutiques du Pacifique).

<http://www.fish.bc.ca>

An independent body established by the federal and provincial governments in 1998 to "report annually on the status of British Columbia's salmon stocks, their habitat and related ecosystems," all of its publications since 1998 are online.

State of the Salmon.

<http://www.stateofthesalmon.org>

Established in 2003 as a joint project of the U.S. Wild Salmon Center, itself a cooperative U.S.-Russian program to study and protect North Pacific salmon, and Ecotrust (Portland, Oregon), this site is building a comprehensive set of data, maps, publications and other kinds of resources on this important food species.

Sustainable Fisheries Foundation.

<http://www.sff.bc.ca/>

Based in Nanaimo, the foundation offers some of its publications for download or viewing online as Adobe Acrobat PDF files.

University of British Columbia. Fisheries Centre.

<http://www.fisheries.ubc.ca>

Established in 1992 "to promote the multidisciplinary study of fisheries," for which it has garnered an international reputation, the UBC Fisheries Centre is also building with its partners an Aquatic Ecosystem Research Laboratory on the UBC campus.

CLIMATE CHANGE AND GLOBAL WARMING**BC Climate Exchange.**

<http://www.bcclimateexchange.ca>

Part of a national education and outreach initiative called the Climate Change Hub Gateway (see under Canada. National Climate Change Secretariat), the BC site's Clearinghouse for Educational Resources contains many useful links to related organizations and electronic publications.

BIOCAP Canada Foundation (Fondation BIOCAP Canada).

<http://www.biocap.ca>

This organization, established in 1998, funds and manages research programs such as **Greenhouse Gas Management Canada** (<http://www.biocap.ca/ghg/>) and **Fluxnet Canada** (<http://www.fluxnet-canada.ca>).

British Columbia. Ministry of Water, Land and Air Protection.**Water, Air and Climate Change Branch.**

<http://wlapwww.gov.bc.ca/air/index.html>

This branch "develops legislation and policies to protect air quality, water (surface and groundwater) quality, drinking-water sources and the land. It sets standards for, and does monitoring and reporting for, ambient air and water (surface and groundwater) quality." Among the online data sources accessible via this site are **Air Quality Online** and the **Aquifers Database**, along with links to several other related BC and Canadian government sites.

Canada. Climate Change (Changements climatiques).

<http://climatechange.gc.ca>

Informational site assembled by the Government of Canada on climate change and the need to reduce greenhouse gas emissions. Resources are

available for teachers and students, as well as a large links directory. Some information may be drawn from climate change sites maintained by Environment Canada and Natural Resources Canada.

Canada. Environment Canada.

1. Canadian Centre for Climate Modelling and Analysis (Centre canadien de la modélisation et de l'analyse climatique).

<http://www.cccma.bc.ec.gc.ca>

Based at the University of Victoria, the CCCMA researches "coupled and atmospheric climate modeling, sea-ice modeling, climate variability and predictability, the carbon cycle, and a number of other areas."

2. National Climate Archive (Archives climatiques nationales).

<http://www.climate.weatheroffice.ec.gc.ca>

This site provides access to selected "climate and weather observations for Canada" through online searches and downloadable data sources.

Canada. National Climate Change Secretariat. Canada's National Climate Change Process. Climate Change Hub Gateway (Passerelle des carrefours du changement climatique).

http://www.nccp.ca/NCCP/cchg/index_e.html

This gateway features links on "climate change outreach activities" from governments across Canada. Our province's site is known as the BC Climate Exchange (see elsewhere).

Canada. Natural Resources Canada. Climate Change (Changements climatiques).

<http://climatechange.nrcan.gc.ca>

The main feature of this site is the Web links directory. Some of the agencies that operate under this department's umbrella, such as the Canadian Forest Service, also maintain their own sites on climate change.

Canadian Climate Impacts and Adaptation Research Network, British Columbia Region (C-CIARN British Columbia).

<http://c-ciarn-bc.ires.ubc.ca>

Hosted at UBC and part of a national research network started by Natural Resources Canada, C-CIARN BC supplies "various services to researchers and stakeholders interested in climate impacts, vulnerabilities, risks, and adaptation in British Columbia." C-CIARN BC offers a bibliographic database of published research with more advanced search options than is available through the same database on the national site (<http://c-ciarn.ca>).

Canadian Foundation for Climate and Atmospheric Sciences (Fondation canadienne pour les sciences du climat et de l'atmosphère).

<http://www.cfcas.org>

Created in 2000 through the initiative of the Canadian Meteorological and Oceanographic Society (<http://www.cmos.ca>), this organization funds "research and modeling in the climate system and atmospheric sciences." Under Funded Projects you will find a page of Network Awards with links to Web sites and research.

ClimateArk: Climate Change Portal.

<http://www.climateark.org>

One of the four Web directories and news sites managed by Dr. Glen Barry of Wisconsin.

CORDLink Digital Library Project. (DD5, BCS no. 128)

<http://cordlink.gsc.nrcan.gc.ca/cordlinkr>

URL change. Environmental geology is one of the science themes covered by this multimedia library.

Greater Vancouver Regional District. Temperature Rising: Climate Change in Southwestern British Columbia.

<http://www.gvrd.bc.ca/climate/>

Educational Web site with information for teachers and students.

Intergovernmental Panel on Climate Change.

<http://www.ipcc.ch>

Founded in 1988 by the World Meteorological Organization and the United Nations Environment Programme, the IPCC, while not a research agency, periodically issues reports based on peer-reviewed scientific literature about the state of climate change. The third report appeared in 2001 in electronic formats, while the fourth report will be issued in 2007. The **IPPC Data Distribution Centre** (<http://ipcc-ddc.cru.uea.ac.uk>), managed by British and German climate change research agencies, offers contributed climate change computer models.

International Geosphere-Biosphere Programme.

<http://www.igbp.kva.se/cgi-bin/php/frameset.php>

Established in 1986 and one of four research programs under the **Earth System Science Partnership** (<http://www.ess-p.org>), this program sponsors some of the global observation research systems that look at environmental change and sustainability issues.

Pembina Institute for Appropriate Development.**Climate Change Solutions (Solutions pour les changements climatiques).**

<http://www.climatechangesolutions.com>

An impressive presentation by an environmental education and advocacy organization assembled in partnership with public and private sector agencies. The Pembina Institute also offers further insights into sustainable development through its own Web site (<http://www.pembina.org/>).

United Nations Framework Convention on Climate Change.

<http://unfccc.int>

This site is home to the UN's treaty ("convention") on climate change (signed May 1992) and the Kyoto Protocol or Treaty (signed December 1997), the mechanism by which climate change through greenhouse gas emissions was supposed to be mitigated.

United States. National Oceanic and Atmospheric Administration.

1. National Climatic Data Center.

<http://www.ncdc.noaa.gov/oa/ncdc.html>

The NCDC distinguishes itself as the “world’s largest archive of climatic data.”

2. Pacific Marine Environmental Laboratory.

Based in Seattle, this facility hosts the **North Pacific Ecosystem Metadatabase: A Clearinghouse for North Pacific Metadata** (<http://www.pmel.noaa.gov/np/mdb/index.html>).

University of East Anglia. School of Environmental Sciences.

Climatic Research Unit. Tiempo Climate Cyberlibrary.

<http://www.tiempocyberclimate.org>

Although the focus is on “global warming and the third world,” Tiempo contains a well-organized and large amount of electronic information, including Canadian content, concerning “global warming, climate change, sea-level rise and related issues.”

University of Victoria. Canadian Institute for Climate Studies.

<http://www.cics.uvic.ca>

Created by the Meteorological Service of Canada and the BC Government as a non-profit corporation, cics develops and publicizes climate change models for public use. After registering, you can view maps and data through the Canadian Climate and Impact Scenarios site. Other information on this latter site does not require registration.

VCR Inc. Registry. (DD2, BCS no. 121)

<http://www.vcr-mvr.ca>

The Voluntary Challenge & Registry (vcr) Inc. Web site features a number of databases relating to the voluntary reduction of greenhouse gas emissions by companies and governments. The vcr Inc. announced it hopes to transfer most of these public databases to a non-profit Canadian organization by the end of 2004.

World Climate Research Programme.

<http://www.wmo.ch/web/wcrp/wcrp-home.html>

Jointly sponsored by the International Council for Science, the World Meteorological Organization and the Intergovernmental Oceanographic Commission, this program oversees global observation and research systems around climatic issues. The WCRP is one of four “global change” and sustainability research efforts under the **Earth System Science Partnership** (<http://www.ess-p.org>).

HUMAN IMPACT ON THE ENVIRONMENT

This section describes resources that pertain to known human influences on the environment and ecosystems such as pollution, ecosystem stewardship and species extinction.

British Columbia. Ministry of Sustainable Resource Management. Land Information BC. Conservation Data Centre.

<http://srmwww.gov.bc.ca/cdc/>

Established in 1991 as a joint public-private partnership, the CDC "systematically collects and disseminates information on plants, animals and plant communities at risk." Online access to most of the CDC data is through the BC Species and Ecosystems Explorer, which also provides links to the complementary NatureServe Explorer (<http://www.natureserve.org>).

Canada. Environment Canada. Canadian Pollution Prevention Information Clearinghouse (Le Centre canadien d'information sur la prévention de la pollution).

<http://www.ec.gc.ca/cppic/>

The main feature of this site is the pollution prevention database with over 1,200 references. A total of 66 citations to online information from BC were returned on 15 September 2004.

Canadian Centre for Pollution Prevention.

<http://www.c2p2online.com>

Part of the **Pollution Prevention World Information Network** (<http://www.p2win.org>), the centre is a non-profit private organization based in Sarnia, Ontario, and originally established by Environment Canada in 1992 as the Great Lakes Pollution Prevention Centre. Under Tools & Resources, the Library and Links section includes much online information.

Columbia University. Center for International Earth Science Information Network.

<http://www.ciesin.org>

CIESIN, along with the university's **Center on Globalization and Sustainable Development** (<http://www.earthinstitute.columbia.edu/cgsd/>), both part of the Earth Institute, offers public access to a variety of "global" data sources that look at the influence of human activity on the environment and natural resources.

Evergreen.

<http://www.evergreen.ca>

A national, charitable society established in 1991, Evergreen promotes the reclamation of green spaces within urban or built environments. Highlights of this site are the Native Plant Database that covers all Canada, and the Library of print and online documents.

Fraser Basin Council.

<http://www.fraserbasin.bc.ca>

Established in 1997, the council evolved out of an earlier federal government program to help manage the Fraser River as a source of freshwater. The council has a broad mandate that encompasses the entire watershed of the river, and, as a non-government body, helps facilitate the resolution of complex issues between different jurisdictions.

Georgia Basin Digital Library Project. GB-Explorer.

<http://www.georgiabasin.info>

GB-Explorer is part of and linked to the Georgia Basin Futures Project. GB-Explorer is basically an information portal for those interested in the development and future of the region. Features include the digital library collections, a community- and map-based Local Stories component, a categorized News and Information page, and an Ideas & Perspectives Java-based tool.

Georgia Basin Futures Project.

<http://www.basinfutures.net>

A joint five-year research project of UBC's Sustainable Development Research Initiative and Institute for Resources, Environment and Sustainability (see elsewhere) that officially ended on 31 March 2004, GBFP researchers at UBC, along with staff at Simon Fraser University and University of Victoria, applied for a five-year funding extension through a Social Sciences and Humanities Research Council program.

Habitat Conservation Trust Fund.

<http://www.hctf.ca>

Created in 1996 through an amendment to the BC *Wildlife Act*, this organization finances ecosystem conservation and stewardship projects.

Inner Coast Natural Resource Centre.

<http://www.icnrc.org>

Based at Alert Bay and incorporated as a non-profit society in 1997, the ICNRC is a public-private sector partnership centred around First Nations values and which attempts to "link academic research with local knowledge." The research study area is focused on northern Vancouver Island and includes the *Pacific Coast Resources Atlas* (<http://www.shim.bc.ca/coastal2/main.htm>).

**International Human Dimensions Programme
on Global Environmental Change.**

<http://www.ihdp.org>

One of four programs operating under the *Earth System Science Partnership* (<http://www.ess-p.org>), this research effort examines the nature of human impact on the environment.

**Memorial University of Newfoundland and University of Victoria,
Coasts Under Stress: The Impact of Social and Environmental
Restructuring on Environmental and Human Health in Canada.**

<http://www.coastunderstress.ca>

Funded for five years beginning in April 2000, this unique bicoastal research project is examining through case studies "the long- and short-term impacts of socio-environmental restructuring on the health of people, their communities and the environment."

Stewardship Canada Web Portal.

<http://www.stewardshipcanada.ca>

Led by Wildlife Habitat Canada, provincial stewardship networks include the **BC Stewardship Centre** (<http://www.stewardshipcentre.bc.ca>). Both sites offer a large amount of information and electronic publications on caring for the environment and ecosystems. Both sites also feature hundreds of links to conservation and environmental organizations, including government agencies. The Stewardship Canada portal also hosts Web sites for other organizations such as the **WaterBucket** (<http://www.waterbucket.ca>), which features information on water resource management.

United Nations Environment Programme.

UNEP World Conservation Monitoring Centre.

<http://www.unep-wcmc.org>

With a history dating back to 1979 through the initial efforts of the IUCN World Conservation Union, the wcmc was "established in 2000 as the world biodiversity information and assessment centre of the United Nations Environment Programme." A highlight of this site is the Interactive Map Services (IMAPS) GIS maps that depict biodiversity, endangered species, and sensitive/protected areas data.

ENVIRONMENTAL EDUCATION
AND ADVOCACY ORGANIZATIONS

This section lists general education and advocacy organizations. Associations that focus on a specific environmental or resource component are listed under other sections such as **THE EARTH OR LIFEFORMS**.

BCFacts.org.

<http://www.bcfacts.org>

"Hosted and maintained by the Environmental Support Centre, a non-profit society," this site provides a scorecard service for the BC government's environmental promises and actions.

British Columbia Environmental Network.

<http://www.bcen.bc.ca>

Part of the Canadian Environmental Network (see elsewhere).

British Columbia Wildlife Federation.

<http://www.bcwf.bc.ca>

Registered as a non-profit society in 1951, the BCWF is the province's "largest and oldest conservation organization."

Canadian Association of Physicians for the Environment.

<http://www.cape.ca>

This organization of health professionals "addresses issues of environmental degradation by educating health care professionals and the public, through advocacy and in close cooperation with partner groups."

Canadian Environmental Network (Réseau canadien de l'environnement).

<http://www.cen-rce.org>

Founded in 1977, this non-profit, independent organization aggregates the work of 11 regional networks, including the **British Columbia Environmental Network** (<http://www.bcen.bc.ca>). CEN publishes a print guide to Canadian environmental groups (*Green List*) and produces a weekly online newsletter.

Canadian Parks and Wilderness Society, BC Chapter.

<http://cpawsbc.org>

Established in 1979, the BC chapter has a similar mandate to the BC Wildlife Federation in "protecting Canada's wilderness heritage."

David Suzuki Foundation.

<http://www.davidsuzuki.org>

Founded in 1990 by now-retired UBC geneticist Dr. David Suzuki, the foundation boasts over 40,000 members. Its purpose is "to work towards balancing human needs with the Earth's ability to sustain all life." The foundation researches and educates in four areas: "oceans and sustainable fishing, forests and wild lands, climate change and clean energy, and the web of life."

Ecotrust Canada.

<http://www.ecotrustcan.org>

Responsible singly or jointly for some significant GIS resources such as the Aboriginal Mapping Network (DD5, BCS no. 128), Inforain (DD2, BCS no. 121), and State of the Salmon (see under Lifeforms), Ecotrust Canada works with Ecotrust (Portland, Oregon) to "promote the emergence of a conservation economy in the coastal temperate rainforests of British Columbia."

EnviroLink Network.

<http://www.envirolink.org/>

Established in 1991 by a freshman student at Carnegie Mellon University, EnviroLink Network is incorporated as a non-profit society under the same name and acts as a worldwide clearinghouse and support centre for environmental activists.

Friends of Ecological Reserves.

<http://www.ecoreserves.bc.ca>

This organization helps support ecological reserves in BC and offers a variety of educational information about these protective sanctuaries.

Greenpeace Canada.

<http://www.greenpeace.ca>

Founded as an antinuclear and environmental organization in 1971 by Vancouver activists, Greenpeace is one of the largest environmental advocacy associations in the world. Its Web site offers a variety of educational resources, including commissioned reports.

IUCN, the World Conservation Union.

<http://www.iucn.org>

Established in France in 1948, the IUCN is one of the oldest, largest and most respected environmental organizations whose many sponsored research projects are the backbone of much of our knowledge about ecosystems.

NatureServe.

<http://www.natureserve.org>

A non-profit conservation education organization, NatureServe "represents an international network of biological inventories-known as natural heritage programs or conservation data centers-operating in all 50 U.S. states, Canada, Latin America and the Caribbean."

Raincoast Conservation Society.

<http://www.raincoast.org>

With a mandate similar to Ecotrust Canada, this group, established in 1990, conducts research in partnership with other parties and advocates "support for decisions that protect marine and rainforest habitat on BC's central and north coast."

Sierra Club of British Columbia.

<http://bc.sierraclub.ca>

Founded in 1969 as a chapter of the Sierra Club of Canada, this organization works on similar programs to other environmental associations such as climate change, sustainable development, and ecosystem conservation and stewardship.

Society Promoting Environmental Conservation (SPEC).

<http://www.spec.bc.ca/>

Established in 1969, SPEC operates the Vancouver Environmental Information Centre that contains a Green Community Resource guide. As part of its Provincial Drinking Water Campaign, SPEC developed the BC Community Drinking Water Atlas.

Western Canada Wilderness Committee.

<http://www.wildernesscommittee.org>

Established in 1980, the WCWC advocates through educational and activist campaigns for the protection of wilderness areas.

ENVIRONMENTAL AND NATURAL RESOURCES POLICY AND LAW

This section describes legal resources pertaining to the environment and natural resources, as well as sites that examine the implications of sustainable development.

B.C. Guide to Watershed Law and Planning.

<http://www.bcwatersheds.org/issues/water/bcgwlp/>

Published by West Coast Environment Law, the guide is "designed to assist the public in understanding laws and planning processes that may have a bearing on watershed management."

Canada. SDinfo (Sustainable Development Information System; Système d'information sur le développement durable).

<http://www.sdinfo.gc.ca>

This site centralizes information from the Canadian government and other jurisdictions relating to sustainable development.

Canada. Sustaining the Environment and Resources for Canadians (Soutenir l'environnement et les ressources pour les canadiens).

<http://www.environmentandresources.ca>

This site contains information and links to data sources on environmental impacts relating to sustainable development.

Canadian Institute for Environmental Law and Policy (L'Institut canadien du droit et de la politique de l'environnement).

<http://www.cielap.org>

Founded in 1970 in Ontario, CIELP conducts research into issues around the relationship of environmental law and sustainable development. Some of its Citizen's Guides to these issues are online, along with its policy briefs and reports (free registration is required to access the latter).

ECOLEX, A Gateway to Environmental Law.

<http://www.ecolex.org>

Sponsored by the United Nations Environment Programme, the Food and Agriculture Organization of the UN and the World Conservation Union, the ECOLEX database "includes information on treaties, international soft-law and other non-binding policy and technical guidance documents, national legislation, judicial decisions, and law and policy literature. Users have direct access to the abstracts and indexing information about each document, as well as to the full text of most of the information provided."

International Institute for Sustainable Development. Linkages: A Multimedia Resource for Environment and Development Policy Makers.

<http://www.iisd.ca/>

Described as "a multimedia resource for environment and development policy makers," this site documents international developments in the field

of sustainable economic practices. An RSS feed is available. The IISD's main site (<http://www.iisd.org/default.asp>), headquartered in Winnipeg, includes links to its own publications and many other online resources on sustainable development via its Research Library. IISD also hosts the **Climate Change Knowledge Network** (<http://www.cckn.net>) and the **Sustainable Development Communications Network** (<http://www.sdcn.org>).

Pan Canadian Community Futures Network

(Réseau pancanadien des sociétés d'aide au développement des collectives).

<http://www.communityfutures.ca>

This Web site connects nearly 300 Community Development Offices or Community Future Development Corporations across Canada, including 33 in BC which are represented by the Community Futures Development Association of BC (founded 1992).

Sierra Legal Defence Fund.

<http://www.sierralegal.org>

Created in 1990 in Vancouver, this organization provides "free legal services to environmental groups and concerned citizens," and issues reports on a variety of environmental concerns.

Simon Fraser University.

1. Centre for Coastal Studies.

<http://www.sfu.ca/coastalstudies/>

This research centre conducts interdisciplinary and collaborative research into coastal zone ecosystems and development issues.

2. Centre for Sustainable Community Development.

<http://www.sfu.ca/cscd/>

Established in 1989 as the Centre for Economic Development, this research and advisory group changed its name in 2004 to more clearly signal its mandate of "integrating economic, social and environmental objectives in community development" at the local and global levels.

3. Continuing Studies in Science.

<http://www.sfu.ca/cstudies/science/index.htm>

Many of its publications are available for download or viewing online as Adobe Acrobat PDF files. CSS hosted the World Summit on Salmon in June 2003. This program coordinates its work with SFU's Centre for Coastal Studies, and looks after the latter's outreach activities.

STAR (Sustainability Tools And Resources).

<http://www.sustainabilitytools.ca/>

"STAR is a community support resource developed by the UBC Georgia Basin Futures Project, the Fraser Basin Council, and the UBC Public Knowledge Project in cooperation with the Georgia Basin Digital Library."

Sustainable Communities Network.

<http://www.sustainable.org>

Based in the U.S. and founded in 1993, the most useful part of this Web site is the annotated resource links, which include international electronic, print and audiovisual sources.

United Nations Human Settlements Programme (UN-HABITAT).

<http://www.unhcs.org>

This organization evolved from the original Habitat created in 1978 after the international conference of the same name in Vancouver. The UN strengthened its commitment to the program's mandate in 2002, whose main goal is "to reduce poverty and promote sustainable development." World Habitat Day has been held annually since 1985 on 4 October.

University of British Columbia. Institute for Resources, Environment and Sustainability.

<http://www.ires.ubc.ca/>

Launched in September 2002 as an amalgamation of the university's Institute for Resources and Environment (IRE) and the Sustainable Development Research Institute (SDRI), the new organization incorporates the **Sustainable Development Research Initiative** (SDRI; <http://www.sdri.ubc.ca/>) that also oversees the Georgia Basin Futures Project (see elsewhere). IRES also coordinates the BC portion of C-CIARN (Canadian Climate Impacts and Adaptation Research Network; <http://c-ciarn-bc.ires.ubc.ca/>). SDRI developed the **Climate Change Calculator** (<http://www.climcalc.net/>). Among the spinoffs from SDRI is Envision Sustainability Tools that commercialized development of QUEST, a sustainability planning tool that will be available through GB-Explorer.

University of Victoria.

1. Centre for Global Studies.

<http://www.globalcentres.org>

One of the research themes here is sustainability.

2. POLIS Project on Ecological Governance.

<http://www.polisproject.org>

Evolved from the appointment of the first Eco-Research Chair of Environmental Law and Policy in 1995, POLIS is now a research centre that examines sustainable development issues within a community context. POLIS was awarded Saanich's 2004 "Environmental Achievement - Business/Industry Award" on 27 June 2004.

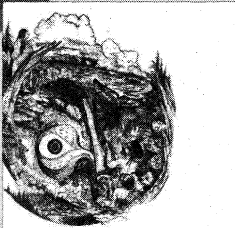
West Coast Environmental Law.

<http://www.wcel.org>

Established in 1974 in Vancouver, this organization works on environmental law reform. A large number of its publications are online.

* Opinions expressed in this article are my own personal views and not necessarily shared by my employer.

Thought that counts.



A Nuu-chah-nulth Worldview

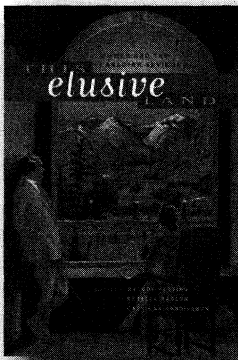
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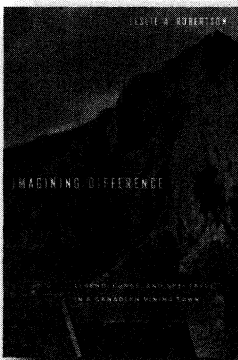
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