



## Documents Included on this CD

### Critical Areas Ordinance (CAO) on a CD

This data CD was originally prepared by Futurewise and the Washington Environmental Council for a series of training workshops in 2003 through 2005. Some earlier versions were produced through funding from the Public Involvement and Education Project, financed by proceeds from the Washington State Water Quality Account, and administered by the Puget Sound Action Team. The data CD is currently maintained by Futurewise which is solely responsible for its content and use.

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## ***Introduction***

One of the key innovations of Washington’s Growth Management Act is the requirement that all Washington counties, cities, and towns adopt regulations to protect the functions and values of critical areas.<sup>1</sup> “Critical areas” include the following areas and ecosystems: (a) Wetlands, (b) areas with a critical recharging effect on aquifers used for potable water (CARAs), (c) fish and wildlife habitat conservation areas (which include streams, lakes, the ocean, sounds, natural canals, other salt water bodies, and terrestrial wildlife habitats), (d) frequently flooded areas, and (e) geologically hazardous areas.<sup>2</sup>

Counties, cities, and towns are required to include best available science (BAS) in developing policies and development regulations to protect the functions and values of critical areas. Best available science must be included in the record and must be considered substantively in the development of critical areas policies and regulations.<sup>3</sup>

The purpose of this compact data disk (CD) is to assist citizens and local governments in using best available science to protect critical areas and human life and property. It does this by including information on how to prepare critical areas policies and regulations and use best available science along with many scientific studies available in the public domain. By

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<sup>1</sup> RCW 36.70A.060(2) & RCW 36.70A.172(1).

<sup>2</sup> RCW 36.70A.030(5) & WAC 365-190-080(5).

<sup>3</sup> *Whidbey Environmental Action Network (WEAN) v. Island County*, 122 Wn. App. 156, 171, 93 P.3d 885, 893 (2004) (reconsideration denied July 12, 2004) *review denied by Whidbey Environmental Action Network v. Island County*, 153 Wn.2d 1025, 110 P.3d 756 (March 29, 2005) (TABLE, NO. 75848-4). WEAN quoted *Honesty in Environmental Analysis & Legislation (HEAL) v. Central Puget Sound Growth Mgmt. Hearings Bd.*, 96 Wn. App. 522, 532, 979 P.2d 864 (1999).

including all of this on one CD, citizens, cities, towns, and counties can save time and money and produce better protections for people, our environment, and our quality of life.

This document lists the guides and scientific studies on the CD. The organization of this document mirrors that of the CD. The directories and subdirectories are listed in alphabetical order in the same order as the table of contents. The content of each CD directory is briefly summarized in the following bullets.

- **Biodiversity (Directory).** Biodiversity focuses on protecting areas and ecosystems that will maintain a region's natural diversity of plants and animals. This directory includes several papers that explain the concept and how to effectively carry it out.
- **CTED CA Handbook (Directory).** The Washington State Department of Community, Trade, and Economic Development (CTED) wrote a guidebook on effectively managing critical areas and preparing critical areas regulations. This handbook is included in this directory along with an example of a critical areas ordinance that complies with many Growth Management Act requirements.
- **Critical Aquifer Recharge Areas (CARAs) (Directory).** CARAs are areas that allow rain water to percolate into aquifers that are the source of potable or industrial water. This directory includes a guide to the protection of these areas and a link to a national website focused on salt water intrusion, a problem affecting coastal aquifers that border salt water bodies such as Puget Sound and the coast.
- **Fish and Wildlife Habitat (Directory).** This directory includes lists of species that critical areas policies and regulations should protect and scientific studies that identify how these important habitats should be protected. It includes subdirectories that focus on bird management, fish and aquatic areas, plants, salmon limiting factors report summaries, and saltwater habitats.
- **Flooded Areas (Directory).** Frequently flooded areas are lands that will be flooded during a flood that is likely to occur at least once every 100 years or a less frequent flood. It includes a guide to both protecting life and property and the valuable fish and wildlife habitats that depend on flood plains.
- **Geo Hazards (Directory).** Like flood plains, geological hazards are dangerous to people and property. This directory includes guides to reducing these hazards, scientific information on the location and damage caused by geological hazards, and maps that identify the location of these hazards. There are subdirectories for maps that identify soils likely to lose their strength and flow during an earthquake, areas subject to subsidence from mines or unstable mine slopes (mine hazards), tsunamis, and areas subject to volcanic hazards.
- **GMA & Regs (Directory).** This directory includes a copy of the Growth Management Act, the guidelines prepared by CTED that guide the preparation of critical areas policies and regulations, procedural criteria that describe best available science and how to use it, articles that summarize the law and Growth Board and court decisions on critical areas regulations and best available science; and summaries of the Growth Management Act.
- **Growth Board Materials (Directory).** The Growth Management Act created three three-person boards that hear and decide appeals claiming that comprehensive plans and

regulations, including critical areas policies and regulations, do not comply with the Growth Management Act. This directory includes copies of digests that summarize the decisions of the three boards, the key themes in cases decided by the Central Puget Sound Growth Management Hearings Board, and guidelines for framing legal issues for appeals.

- **Guides (Directory).** This directory includes documents that explain planning and critical areas protection under the Growth Management Act, how to effectively prepare a campaign to get good critical areas protections adopted, and the Washington Environmental Council's checklist and toolkit for evaluating critical areas and shoreline protections.
- **Information [Info] on Best Available Science (Directory).** This directory includes documents that explain the concept of best available science and recommended sources of best available science. Most of the recommended sources are included on this CD. There is also a subdirectory that includes a report prepared by King County that synthesizes much of the literature that includes best available science.
- **Low Impact Development (Directory).** Low impact development refers to development techniques that minimize storm water runoff. This is very important for protecting water quality and fish and wildlife habitats. This directory includes documents that summarize and explain this valuable technique.
- **Presentations (Directory).** This directory includes several PowerPoint presentations used at the one day training sessions. These presentations are good summaries of the topics. We appreciate our speakers sharing these with us. Also included is a free viewer for PowerPoint presentations if you do not have a copy of the Microsoft PowerPoint software.
- **SMA & Regs (Directory).** This directory includes a copy of the Shoreline Management Act, regulations adopted by the Washington State Department of Ecology to guide the preparation of shoreline master programs, and an introduction to the Shoreline Management Act.
- **Value of Ecological Services (Directory).** This directory includes a report that documents the important economic benefits our state derives from services performed by the natural environment. The Wetlands Directory also includes a report on the flood control value of wetlands entitled *The Economic Value of Wetlands: Wetlands' Role in Flood Protection in Western Washington*.
- **WA State Hazard Mitigation Plan (Directory).** This directory includes the *Washington State Enhanced Hazard Mitigation Plan*. This plan describes the natural hazards faced by Washington State and the state's strategy for protecting life and property from these hazards. Growth Management Act critical areas include many of these hazards. The state's strategies include strengthening city and county critical areas regulations and having city and county comprehensive plans direct growth away from hazardous areas.
- **Watershed Planning (Directory).** This directory includes information on the current status of watershed planning in Washington State. Watershed planning has the potential to provide important, basin specific science on how to protect critical areas. Growth Management Act critical areas updates and watershed planning should be linked.

- **Water Quality (Directory).** This directory includes studies that document how land use planning and critical areas regulations can protect water quality. It also includes studies of water quality in Washington State.
- **Wetlands (Directory).** This directory includes scientific reports on how to effectively protect Washington state wetlands. It also includes reports that evaluate how effective wetland protection regulations have been and how to make them more effective.

Within most of the directories, the files are listed alphabetically. Similarly, in the in this document the directories and the files within the directories are also listed alphabetically by the file name. The name of the document, the authors, and the sources are also listed in table format. Also included in each subdirectory is a file “00 Read Me – Files in this Directory.” This file lists the documents in that directory and the subdirectories in the directory.

While we endeavourer to provide high quality information in this compact disk, no warranty or guarantee of the completeness or accuracy of this information is provided. In addition, the documents on this CD may be updated over time and the state laws and regulations included will change over time. We urge you to confirm whether or not any document you are using has changed before relying on it. To assist you in doing that, we have provided you with the website from which the document may be downloaded.

The information on this CD was provided by the Futurewise and the Washington Environmental Council. While many of documents are from local, state or federal agencies or contractors, these documents were obtained from public sources and do not imply an endorsement of the training or the sponsors by the local, state, or federal agencies.

Many of the files on this CD are Adobe Acrobat files. If you do not have a copy of the free Adobe Acrobat Reader you can download it at:

<http://www.adobe.com/products/acrobat/readstep2.html>

Futurewise, [www.futurewise.org](http://www.futurewise.org)

### ***Biodiversity (Directory)***

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b><i>Biodiversity and Smart Growth.</i></b> Funders Network for Smart Growth and Livable Communities. Downloaded on January 22, 2003 at: <a href="http://www.fundersnetwork.org/usr_doc/biodiversity_paper.pdf">http://www.fundersnetwork.org/usr_doc/biodiversity_paper.pdf</a>	biodiversity_paper.pdf
<b><i>Planning for Biodiversity Conservation: Putting Conservation Science into Practice.</i></b> Craig R. Groves, Deborah B. Jensen, Laura L. Valutis, Kent H. Redford, Mark L. Shaffer, J. Michael Scott, Jeffrey V. Baumgartner, Jonathan V. Higgins, Michael W. Beck, And Mark G. Anderson.	ECParticle.pdf
<b><i>Incentives for Biodiversity Conservation: An Ecological and Economic Assessment,</i></b> Frank Casey, Sara Vickerman, Cheryl Hummon, and Bruce Taylor (Defenders of Wildlife, 2006) Downloaded on January 19, 2007 from:	Incentives2006.pdf

<a href="http://www.biodiversitypartners.org/incentives/Incentives2006.pdf">http://www.biodiversitypartners.org/incentives/Incentives2006.pdf</a>	
<i>Integrating Land Use Planning &amp; Biodiversity</i> . Defenders of Wildlife. File Name on CD: Downloaded on March 21, 2003 at: <a href="http://www.biodiversitypartners.org/Pubs/landuse/001.html">http://www.biodiversitypartners.org/Pubs/landuse/001.html</a>	landuse.pdf
<i>Biodiversity Conservation and Washington's Growth Management Act</i> (2005). Jerry Gorsline, Washington Environmental Council.	WEC Biodiversity Planning paper

See also the Biodiversity Partners website for good information on biodiversity:  
<http://www.biodiversitypartners.org/> The habitat and sprawl section of the website contains good information on how sprawl adversely affects wildlife habitats and wildlife diversity and steps to address this problem: <http://www.biodiversitypartners.org/habconser/sprawl.shtml>

### **CARAs (Critical Aquifer Recharge Areas) (Directory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<i>Critical Aquifer Recharge Areas Guidance Document</i> . Laurie Morgan (Washington State Department of Ecology - Water Quality Program, Olympia WA: Publication Number 05-10-028 January 2005). Downloaded on May 13, 2005 at: <a href="http://www.ecy.wa.gov/pubs/0510028.pdf">http://www.ecy.wa.gov/pubs/0510028.pdf</a>	0510028.pdf

See also SaltNet. Professor Alexander H.-D. Cheng of the Department of Civil Engineering University of Mississippi maintains SaltNet which is described as internet scientific resources on salt water intrusion and coastal aquifers. It can be found at:  
<http://www.olemiss.edu/sciencenet/saltnet/>

### **CTED CA Handbook (Directory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<i>Critical Areas Assistance Handbook: Protecting Critical Areas within the Framework of the Washington Growth Management Act</i> (November 2003). Washington State Department of Community, Trade, and Economic Development. The Handbook can be downloaded from: <a href="http://www.cted.wa.gov/_CTED/documents/ID_976_Publications.pdf">http://www.cted.wa.gov/_CTED/documents/ID_976_Publications.pdf</a> (Last Accessed March 15, 2006). Also see CTED's Critical Areas and Best Available Science (BAS) directory: <a href="http://www.cted.wa.gov/portal/alias_CTED/lang_en/tabID_418/DesktopDefault.aspx?init">http://www.cted.wa.gov/portal/alias_CTED/lang_en/tabID_418/DesktopDefault.aspx?init</a>	Click on the <b>Autoview</b> icon to bring up the main menu.

While there are additional files and subdirectories in this directory, the files are programmed to be accessed from the main menu which is started by clicking on the **Autoview** icon. The file Appendix\_A.pdf includes an example of a critical areas ordinance that complies with many Growth Management Act requirements.

## ***Fish and Wildlife Habitat (Directory)***

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b><i>Endangered by Sprawl: How Run Away Development Threatens America's Wildlife.</i></b> Reid Ewing and John Kostyack with Don Chen, Bruce Stein, and Michelle Ernst. (National Wildlife Federation, & Smart Growth America, & Nature Serve: 2005). Downloaded on January 28, 2005 from: <a href="http://www.smartgrowthamerica.org/ebreport/EndangeredBySprawl.pdf">http://www.smartgrowthamerica.org/ebreport/EndangeredBySprawl.pdf</a>	EndangeredBySprawl.pdf
<b><i>Core Habitat, Not Buffer Zone.</i></b> Raymond D. Semlitsch & John B. Jensen, National Wetlands Newsletter Vol. 23, No. 4 (2001). Downloaded on March 17, 2009 from: <a href="http://www.ecy.wa.gov/programs/sea/sma/download/pdf/douglas/CoreHabitat_semlitsch.pdf">http://www.ecy.wa.gov/programs/sea/sma/download/pdf/douglas/CoreHabitat_semlitsch.pdf</a>	CoreHabitat_semlitsch.pdf
<b><i>State of the Birds</i></b> Audubon Washington (2004). Downloaded on May 6, 2004 at: <a href="http://wa.audubon.org/new/audubon/userdocuments/SOTB-web.pdf">http://wa.audubon.org/new/audubon/userdocuments/SOTB-web.pdf</a>	SOTB-web.pdf

## **Fish Riparian & Aquatic Areas (Subdirectory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b><i>Riparian Areas: Functions and Strategies for Management.</i></b> Committee on Riparian Zone Functioning and Strategies for Management, Water Science and Technology Board, National Research Council (2002). Downloaded on May 22, 2006 at: <a href="http://fermat.nap.edu/execsumm_pdf/10327.pdf">http://fermat.nap.edu/execsumm_pdf/10327.pdf</a>	10327.pdf
<b><i>What is a Riparian Zone?</i></b> Washington State Department of Ecology. This is a three fold brochure that briefly describes the importance of Riparian Areas. Downloaded on June 22, 2004 from <a href="http://www.ecy.wa.gov/pubs/92br003.pdf">http://www.ecy.wa.gov/pubs/92br003.pdf</a>	92br003.pdf
<b><i>The Functions of Riparian Buffers in Urban Watersheds.</i></b> Jennifer Leavitt. A report submitted in partial fulfillment of the degree of Master of Science University of Washington 1998. Downloaded on June 24, 2004 at: <a href="http://depts.washington.edu/cuwrm/research/buffers.pdf">http://depts.washington.edu/cuwrm/research/buffers.pdf</a>	buffers.pdf
<b><i>Washington State Salmonid Stock Inventory: Bull Trout/Dolly Varden.</i></b> Washington Department of Fish and Wildlife (Olympia, Washington: July 1998). Downloaded on August 2, 2004 at: <a href="http://wdfw.wa.gov/fish/sassi/bulldolly.pdf">http://wdfw.wa.gov/fish/sassi/bulldolly.pdf</a>	bulldolly.pdf
<b><i>Reconstructing the historical riverine landscape of the Puget Lowland.</i></b> Collins, B. D., D. R. Montgomery, and A. J. Sheikh. 2003. In: D. R. Montgomery, S. M. Bolton, D. B. Booth, and L. Wall, eds. <i>Restoration of Puget Sound Rivers</i> , University of Washington Press, Seattle, WA. pp. 79-128. <b>File Name on CD:</b> Downloaded on April 9, 2004 at: <a href="http://rocky2.ess.washington.edu/riverhistory/pubs/cms_03.pdf">http://rocky2.ess.washington.edu/riverhistory/pubs/cms_03.pdf</a>	cms_03.pdf
<b><i>2000 Washington State Salmonid Stock Inventory: Coastal Cutthroat Trout.</i></b> Ann Blakley, Bob Leland, & Jim Ames, Editors (Washington	cutthroat.pdf

Title/Author/Source	File Name on CD
Department of Fish and Wildlife, Olympia, Washington: June 2000). Downloaded on August 2, 2004 at: <a href="http://wdfw.wa.gov/fish/sassi/cutthroat.pdf">http://wdfw.wa.gov/fish/sassi/cutthroat.pdf</a>	
<b><i>Towards an Integrated Approach to Watershed Planning: The role of land cover, human preference, and biotic condition in managing Puget Sound lowland streams.</i></b> Vivek Shandas, PhD Candidate. Part of the Proceedings of the 2005 Puget Sound Georgia Basin Research Conference. Downloaded on November 21, 2005 at: <a href="http://www.engr.washington.edu/epp/psgb/2005proceedings/papers/E6_SHAND.pdf">http://www.engr.washington.edu/epp/psgb/2005proceedings/papers/E6_SHAND.pdf</a>	E6_SHAND.pdf
<b><i>Salmon and Steelhead Habitat Inventory and Assessment Program (SSHIAP) Executive Summary.</i></b> The SSHIAP has created “Salmonscape,” a statewide an interactive mapping application designed to display and report a wide range of data related to salmon distribution, status, and habitats. Salmonscape is located on the web at: <a href="http://wdfw.wa.gov/hab/sshiap/index.htm">http://wdfw.wa.gov/hab/sshiap/index.htm</a>	execsmry.pdf
<b><i>Factors Influencing the Success of Riparian Planting Aspects of Fish Habitat Restoration Projects in the City of Surrey and Recommendations for Future Planting Plan Improvements.</i></b> Tracy L. Anderson, Jacques Whitford Limited, and Trevor R. Welton , City of Surrey. Part of the Proceedings of the 2005 Puget Sound Georgia Basin Research Conference. Downloaded on November 21, 2005 at: <a href="http://www.engr.washington.edu/epp/psgb/2005proceedings/papers/F8_WELTO.pdf">http://www.engr.washington.edu/epp/psgb/2005proceedings/papers/F8_WELTO.pdf</a>	F8_WELTO.pdf
<b><i>Urban Stream Rehabilitation in the Pacific Northwest: Physical, Biological and Social Considerations.</i></b> Booth, D. B, J. R. Karr, S. Schauman, C. P. Konrad, S. A. Morley, M. G. Larson, P. C. Henshaw, E. J. Nelson and S. J. Burges. 2001. Final Report, EPA Grant Number R82-5284-010. University of Washington. Seattle, Washington. Downloaded on June 24, 2004 at: <a href="http://depts.washington.edu/cuwrm/research/final%20rehab%20report.pdf">http://depts.washington.edu/cuwrm/research/final%20rehab%20report.pdf</a>	final%20rehab%20report.pdf
<b><i>Channel Design.</i></b> Dale E. Miller, Peter B. Skidmore, & Dale J. White (May 9, 2001). Downloaded on August 5, 2004 from: <a href="http://www.wdfw.wa.gov/hab/ahg/finalcd.pdf">http://www.wdfw.wa.gov/hab/ahg/finalcd.pdf</a>	finalcd.pdf
<b><i>A Review of the Literature and Assessment of Research Needs in Agricultural Streams in the Pacific Northwest as it Pertains to Freshwater Habitat for Salmonids.</i></b> Susan Bolton Ph.D., P.E. & Carrie Monohan, Center for Streamside Studies, University of Washington (July 21, 2001). Downloaded on August 5, 2004 at: <a href="http://depts.washington.edu/cssuw/Research/finalcted.pdf">http://depts.washington.edu/cssuw/Research/finalcted.pdf</a>	finalcted.pdf
<b><i>Dredging Activities: Marine Issues.</i></b> Downloaded on January 22, 2003 at: <a href="http://www.wdfw.wa.gov/hab/ahg/finaldrg.pdf">http://www.wdfw.wa.gov/hab/ahg/finaldrg.pdf</a>	finaldrg.pdf
<b><i>Over-Water Structures: Freshwater Issues.</i></b> Downloaded on January 22, 2003 at: <a href="http://www.wdfw.wa.gov/hab/ahg/finalfrs.pdf">http://www.wdfw.wa.gov/hab/ahg/finalfrs.pdf</a>	finalfrs.pdf
<b><i>Over-Water Structures: Marine Issues.</i></b> Downloaded on January 22, 2003	finalmar.pdf

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at: <a href="http://www.wdfw.wa.gov/hab/ahg/finalmar.pdf">http://www.wdfw.wa.gov/hab/ahg/finalmar.pdf</a>	
<b><i>Ecological Issues in Floodplains and Riparian Corridors.</i></b> Susan M. Bolton & Jeff Shellberg, University of Washington, Center for Streamside Studies. Final White Paper (July 11, 2001). Downloaded on August 5, 2004 from: <a href="http://www.wdfw.wa.gov/hab/ahg/finalrip.pdf">http://www.wdfw.wa.gov/hab/ahg/finalrip.pdf</a> Also available from: <a href="http://depts.washington.edu/trac/bulkdisk/pdf/524.1.pdf">http://depts.washington.edu/trac/bulkdisk/pdf/524.1.pdf</a>	finalrip.pdf
<b><i>Marine and Estuarine Shoreline Modification Issues.</i></b> Downloaded on January 22, 2003 at: <a href="http://www.wdfw.wa.gov/hab/ahg/finalsl.pdf">http://www.wdfw.wa.gov/hab/ahg/finalsl.pdf</a>	finalsl.pdf
<b><i>Treated Wood Issues Associated with Overwater Structures in Marine and Freshwater Environments.</i></b> Downloaded on January 22, 2003 at: <a href="http://www.wdfw.wa.gov/hab/ahg/finaltw.pdf">http://www.wdfw.wa.gov/hab/ahg/finaltw.pdf</a>	finaltw.pdf
<b><i>Flood Plains, Salmon Habitat, and Sand and Gravel Mining.</i></b> David K. Norman, C. Jeff Cederholm, and William S. Lingley, Jr, <i>Washington Geology</i> , vol. 26, no. 2/3, p. 3 (September 1998) & David K. Norman, <i>Reclamation of Flood-Plain Sand and Gravel Pits as Off-Channel Salmon Habitat</i> , <i>Washington Geology</i> , vol. 26, no. 2/3, p. 21 (September 1998). Downloaded on August 25, 2003 at: <a href="http://www.dnr.wa.gov/geology/pdf/fldplain.pdf">http://www.dnr.wa.gov/geology/pdf/fldplain.pdf</a>	fldplain.pdf
<b><i>Freshwater Gravel Mining and Dredging Issues.</i></b> Downloaded on August 5, 2004 at: <a href="http://www.wdfw.wa.gov/hab/ahg/freshdrg.pdf">http://www.wdfw.wa.gov/hab/ahg/freshdrg.pdf</a>	freshdrg.pdf
<b><i>Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the on-going National Flood Insurance Program carried out in the Puget Sound area in Washington State.</i></b> National Marine Fisheries Service (Sept. 22, 2008). Downloaded on March 10, 2009 from: <a href="https://pcts.nmfs.noaa.gov/pls/pcts-pub/biop_results_detail?reg_incluse_in=('NWR')&amp;idin=29082">https://pcts.nmfs.noaa.gov/pls/pcts-pub/biop_results_detail?reg_incluse_in=('NWR')&amp;idin=29082</a>	https__pcts.nmfs.n oaa.gov_pls_pcts- pub_sxn7.pcts_uplo ad.download_p_file =F3181_20060047 2_fema_nfip_09- 22-2008
<b><i>Notice of Error and Correction in Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the on-going National Flood Insurance Program carried out in the Puget Sound area in Washington State.</i></b> National Marine Fisheries Service (Oct. 23, 2008). Downloaded on March 10, 2009 from: <a href="https://pcts.nmfs.noaa.gov/pls/pcts-pub/biop_results_detail?reg_incluse_in=('NWR')&amp;idin=29082">https://pcts.nmfs.noaa.gov/pls/pcts-pub/biop_results_detail?reg_incluse_in=('NWR')&amp;idin=29082</a>	https__pcts.nmfs.n oaa.gov_pls_pcts- pub_sxn7.pcts_uplo ad.download_p_file =F13403_2006004 72_FEMANFIP_err ata_10-23-2008
<b><i>The Cumulative Impacts of Watershed Urbanization On Stream-Riparian Ecosystems.</i></b> Christopher W. May and Richard R. Horner AWRP Riparian Ecology And Management In Multiland Use Watersheds Conference Portland OR August 28-31, 2000.	May_Horner_ Riparian.doc
<b><i>NMFS National Gravel Extraction Policy.</i></b> Accessed on March 16, 2006 at: <a href="http://swr.ucsd.edu/hcd/gravelsw.htm#V.%20OPTIMUM%20MANAGEMENT%20OF%20GRAVEL%20EXTRACTION%20OPERATIONS">http://swr.ucsd.edu/hcd/gravelsw.htm#V.%20OPTIMUM%20MANAGEMENT%20OF%20GRAVEL%20EXTRACTION%20OPERATIONS</a>	National Gravel Extraction Policy NMFS.pdf
<b><i>Pacific Salmon and Wildlife: Ecological Contexts, Relationships, and Implications for Management.</i></b> Downloaded on August 5, 2004 at: <a href="http://wdfw.wa.gov/hab/salmonwild/salmonwild2.pdf">http://wdfw.wa.gov/hab/salmonwild/salmonwild2.pdf</a>	salmonwild2.pdf

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b><i>1992 Washington State Salmon and Steelhead Stock Inventory (SASSI)</i></b> . Washington Department of Fisheries, Washington Department of Wildlife and Western Washington Treaty Indian Tribes (Olympia, Washington: March 1993). Downloaded on August 2, 2004 at: <a href="http://wdfw.wa.gov/fish/sassi/sassi92.pdf">http://wdfw.wa.gov/fish/sassi/sassi92.pdf</a> Lists of critical and depressed fish stocks and whether they have been listed under the Federal Endangered Species Act can be found at: <a href="http://wdfw.wa.gov/fish/sassi/intro.htm">http://wdfw.wa.gov/fish/sassi/intro.htm</a>	sassi92.pdf
<b><i>Updated status of federally listed ESUs of West Coast salmon and steelhead</i></b> . Good, T.P., R.S. Waples, and P. Adams (editors) (U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-66: 2005). Downloaded on April 14, 2006 at: <a href="http://www.nwr.noaa.gov/Publications/Biological-Status-Reviews/upload/SR2005-allspecies.pdf">http://www.nwr.noaa.gov/Publications/Biological-Status-Reviews/upload/SR2005-allspecies.pdf</a>	SR2005-allspecies.pdf

Also see the Washington State Department of Fish and Wildlife's *Management Recommendations for Washington's Priority Habitats: Riparian* in the PSH (Priority Species and Habitats) Management Recs (Recommendations) Subdirectory of this directory.

ManTech Report (Sub-subdirectory)

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b><i>An Ecosystem Approach to Salmonid Conservation [ManTech Report]</i></b> . Brian C. Spence, Gregg A. Lomnicky, Robert M. Hughes, Richard P. Novitzki. ManTech Environmental Research Services Corporation. 21TR-4501-96-6057 (December 1996). Downloaded on May 29, 2002 at: <a href="http://www.nwr.noaa.gov/1habcon/habweb/habguide/ManTech/front.htm#Abstract">http://www.nwr.noaa.gov/1habcon/habweb/habguide/ManTech/front.htm#Abstract</a>	The file " <b>front.htm</b> " contains a table of contents that links to the other files in the ManTech Report sub-subdirectory

Streambank Protection Guidelines (Sub-subdirectory)

<b>Title/Author/Source</b>	<b>File Names on CD</b>
<b><i>Integrated Streambank Protection Guidelines</i></b> . Washington Department of Fish and Wildlife, Washington Department of Transportation, & Washington Department of Ecology (April 2003). Downloaded on August 4, 2003 at: <a href="http://www.wa.gov/wdfw/hab/ahg/ispdoc.htm">http://www.wa.gov/wdfw/hab/ahg/ispdoc.htm</a>	ispg_cover_front_final.pdf, ispg_title_page.pdf, ispg_signature_pages.pdf, ispg_acknowledgements.pdf, ispg_main_tableofcontents.pdf, ispg_preface.pdf, ispg_chap01.pdf, ispg_chap02.pdf, ispg_chap03.pdf, ispg_chap04.pdf, ispg_chap05.pdf, ispg_chap06_all.pdf, ispg_app_tableofcontents.pdf, ispg_app_a_reg_form.pdf,

Title/Author/Source	File Names on CD
	ispg_app_b_contactinfo.pdf, ispg_app_c_glossary.pdf, ispg_app_d_hydrology.pdf, ispg_app_e_hydraulics.pdf, ahg/isp_g_app_f_fluvialgeo.pdf, ispg_app_g_bio_consist.pdf, ispg_app_h_plantingconsist.pdf, ispg_app_i_anchoring.pdf, ispg_app_j_monitoring.pdf, /isp_g_app_k_lit_review.pdf, ispg_app_l_cost.pdf, and ispg_app_m_construct.pdf

### Forage Fish (Subdirectory)

Title/Author/Source	File Name on CD
<p><b><i>Bulkheading in Thurston County - Impacts on Forage Fish.</i></b>            Tim Abbe, Herrera Environmental Consultants; José Carrasquero-Verde, Herrera Environmental Consultants; Steven W Morrison, Thurston Regional Planning Council. Part of the Proceedings of the 2005 Puget Sound Georgia Basin Research Conference.            Downloaded on November 21, 2005 at:  <a href="http://www.engr.washington.edu/epp/psgb/2005proceedings/papers/A7_AB_BE.pdf">http://www.engr.washington.edu/epp/psgb/2005proceedings/papers/A7_AB_BE.pdf</a></p>	A7_ABBE.pdf
<p><b><i>Forage Fish.</i></b> Washington State Department of Fish and Wildlife.            Downloaded on August 3, 2004 at:  <a href="http://wdfw.wa.gov/fish/forage/smelt.htm#sbiology">http://wdfw.wa.gov/fish/forage/smelt.htm#sbiology</a></p>	WDFW -- Forage Fish Information.htm
<p><b><i>Anchovy.</i></b> Washington State Department of Fish and Wildlife. Downloaded on August 3, 2004 at: <a href="http://wdfw.wa.gov/fish/forage/anchovy.htm#abiology">http://wdfw.wa.gov/fish/forage/anchovy.htm#abiology</a></p>	WDFW -- WA State Forage Fish Anchovy.htm
<p><b><i>Pacific Herring.</i></b> Washington State Department of Fish and Wildlife.            Downloaded on August 3, 2004 at:  <a href="http://wdfw.wa.gov/fish/forage/herring.htm#hbiology">http://wdfw.wa.gov/fish/forage/herring.htm#hbiology</a></p>	WDFW -- WA State Forage Fish Pacific Herring.htm
<p><b><i>Sand Lance.</i></b> Washington State Department of Fish and Wildlife.            Downloaded on August 3, 2004 at:  <a href="http://wdfw.wa.gov/fish/forage/lance.htm#lbiology">http://wdfw.wa.gov/fish/forage/lance.htm#lbiology</a></p>	WDFW -- WA State Forage Fish Sand Lance.htm
<p><b><i>Surf Smelt.</i></b> Washington State Department of Fish and Wildlife.            Downloaded on August 3, 2004 at:  <a href="http://wdfw.wa.gov/fish/forage/smelt.htm#sbiology">http://wdfw.wa.gov/fish/forage/smelt.htm#sbiology</a></p>	WDFW -- WA State Forage Fish Surf Smelt.htm

## Impervious Surface & Forest Loss (Subdirectory)

Title/Author/Source	File Name on CD
<i>Forest Cover, Impervious-Surface Area, and the Mitigation of Urbanization Impacts In King County, Washington.</i> Derek B. Booth, Ph.D., P.E. (September 2000) Downloaded on June 24, 2004 at: <a href="http://depts.washington.edu/cuwrp/research/forest.pdf">http://depts.washington.edu/cuwrp/research/forest.pdf</a>	forest.pdf
<i>The Cumulative Effects of Urbanization on Small Streams in the Puget Sound Lowland.</i> Christopher W. May, Richard R. Horner, James R. Karr, Brian W. Mar, Eugene B. Welch, University of Washington, Seattle, Washington. Downloaded on January 23, 2003 at: <a href="http://pluto.apl.washington.edu/etg/chrisrdp.html">http://pluto.apl.washington.edu/etg/chrisrdp.html</a>	chrisrdp.pdf

## Lake Habitats (Subdirectory)

Title/Author/Source	File Name on CD
<i>Final Report: A Summary of the Effects of Bulkheads, Piers, and Other Artificial Structures and Shorezone Development on ESA-listed Salmonids in Lakes.</i> Tom Kahler, The Watershed Company, and Martin Grassley and David Beauchamp, Washington Cooperative Fish & Wildlife Research Unit, University of Washington, School of Fisheries (13 July 2000). Downloaded on December 5, 2008 from: <a href="http://www.ci.bellevue.wa.us/pdf/Utilities/dock_bulkhead.pdf">http://www.ci.bellevue.wa.us/pdf/Utilities/dock_bulkhead.pdf</a>	dock_bulkhead.pdf
<i>Crafting a Lake Protection Ordinance.</i> Karen Capiella and Tom Schueler, Urban Lake Management, Watershed Protection Techniques 3(4) (2001). Downloaded on September 1, 2009 at: <a href="http://www.cwp.org/Resource_Library/Center_Docs/special/lakes/ulm_lakeprotectionord.pdf">http://www.cwp.org/Resource_Library/Center_Docs/special/lakes/ulm_lakeprotectionord.pdf</a>	ulm_lakeprotectionord.pdf

Please also see the other directories for scientific information that is applicable to issues in protecting lake habitats.

## Mammals (Subdirectory)

Title/Author/Source	File Name on CD
<b>Pallid Bat</b> Ferguson, Howard, and Jeffrey M. Azerrad. 2004. Pallid Bat ( <i>Antrozous pallidus</i> ). In J. M. Azerrad, editor. Management Recommendations for Washington's Priority Species, Volume V: Mammals [Online]. Downloaded on March 10, 2005 at: <a href="http://wdfw.wa.gov/hab/phs/vol5/anpa.pdf">http://wdfw.wa.gov/hab/phs/vol5/anpa.pdf</a>	anpa.pdf
<i>Management Recommendations for Washington's Priority Species, Volume V: Mammals Appendix A: Contacts Useful When Evaluating Pesticides and Their Alternatives.</i> J. M. Azerrad, editor. [Online]. Downloaded on August 3, 2004 at: <a href="http://wdfw.wa.gov/hab/phs/vol5/appendixa.pdf">http://wdfw.wa.gov/hab/phs/vol5/appendixa.pdf</a>	appendixa.pdf
<b>Columbian white-tailed deer</b>	odvil.pdf

<b>Title/Author/Source</b>	<b>File Name on CD</b>
Brookshier, Jennifer. 2004. Columbian white-tailed deer ( <i>Odocoileus virginianus leucurus</i> ). In J. M. Azerrad, editor. <i>Management Recommendations for Washington's Priority Species, Volume V: Mammals</i> [Online]. Downloaded on August 3, 2004 at: <a href="http://wdfw.wa.gov/hab/phs/vol5/odvil.pdf">http://wdfw.wa.gov/hab/phs/vol5/odvil.pdf</a>	
<b>Merriam's shrew</b> Azerrad, Jeffrey M. 2004. Merriam's shrew ( <i>Sorex merriami</i> ). In J. M. Azerrad, editor. <i>Management Recommendations for Washington's Priority Species, Volume V: Mammals</i> [Online]. Downloaded on August 3, 2004 at: <a href="http://wdfw.wa.gov/hab/phs/vol5/some.pdf">http://wdfw.wa.gov/hab/phs/vol5/some.pdf</a>	some.pdf
<b>Townsend's big-eared bat</b> Kent Woodruff and Howard Ferguson. 2005. Townsend's big-eared bat ( <i>Corynorhinus townsendii</i> ). In J. M. Azerrad, editor. <i>Management Recommendations for Washington's Priority Species, Volume V: Mammals</i> [Online]. Downloaded on November 27, 2005 from: <a href="http://wdfw.wa.gov/hab/phs/vol5/townsendbat.pdf">http://wdfw.wa.gov/hab/phs/vol5/townsendbat.pdf</a>	townsendbat.pdf

### **Marine & Saltwater Habitats (Subdirectory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b><i>New Approaches to Shellfish Protection in Puget Sound.</i></b> Stuart Glasoe and Harriet Beale, Puget Sound Action Team; Marina Alberti and Marcie Bidwell, University of Washington Urban Ecology Research Laboratory; Aimee Christy, Pacific Shellfish Institute; & Christopher May, Battelle Marine Science Laboratories. Part of the Proceedings of the 2005 Puget Sound Georgia Basin Research Conference. Downloaded on November 21, 2005 at: <a href="http://www.psat.wa.gov/Programs/shellfish/Shellfish_quality/a8_glaso.pdf">http://www.psat.wa.gov/Programs/shellfish/Shellfish_quality/a8_glaso.pdf</a>	A8_GLASO.pdf
<b><i>Marine Riparian: An Assessment of Riparian Functions in Marine Ecosystems,</i></b> Brennan, J.S., and H. Culverwell 2004. Published by Washington Sea Grant Program Copyright 2005, UW Board of Regents Seattle, WA. Downloaded on March 19, 2007 from: <a href="http://www.wsg.washington.edu/research/ecohealth/brennan.pdf">http://www.wsg.washington.edu/research/ecohealth/brennan.pdf</a>	brennan.pdf
<b><i>Status and Trends For a Suite of Key Diving Marine Bird Species Characteristic of Greater Puget Sound, As Examined by the Marine Bird Component, Puget Sound Ambient Monitoring Program (PSAMP).</i></b> David R. Nysewander, Joseph R. Evenson, Bryan L. Murphie and Thomas A. Cyra, Washington Department of Fish and Wildlife in Puget Sound Research 2001. Downloaded on April 12, 2006 at: <a href="http://www.psat.wa.gov/Publications/01_proceedings/sessions/poster/c_nysewa.pdf">http://www.psat.wa.gov/Publications/01_proceedings/sessions/poster/c_nysewa.pdf</a>	c_nysewa.pdf
<b><i>GASP! The Response of Marine Fishes to Water with Low Dissolved Oxygen in Southern Hood Canal, Washington.</i></b> Wayne A. Palsson, Robert E. Pacunski, Tony R. Parra, Washington Department of Fish and Wildlife. Part of the Proceedings of the 2005 Puget Sound Georgia Basin	D5_PALSS.pdf

Title/Author/Source	File Name on CD
<p>Research Conference. Downloaded on November 21, 2005 at:  <a href="http://www.engr.washington.edu/epp/psgb/2005proceedings/papers/D5_PALSS.pdf">http://www.engr.washington.edu/epp/psgb/2005proceedings/papers/D5_PALSS.pdf</a></p>	
<p><b>Historical reconstruction, classification, and change analysis of Puget Sound tidal marshes</b> (June 2005). Brian D. Collins and Amir J. Sheikh. Downloaded on November 29, 2007 at:  <a href="http://www.pugetsoundnearshore.org/technical_papers/historical_shoreline_dnr.pdf">http://www.pugetsoundnearshore.org/technical_papers/historical_shoreline_dnr.pdf</a></p>	historical_shoreline_dnr.pdf
<p><b>Juvenile Pacific Salmon and the Nearshore Ecosystem of Puget Sound.</b> Puget Sound Nearshore Partnership Report No. 2006-06. Fresh, K.L. 2006. Downloaded on November 29, 2007 at:  <a href="http://www.pugetsoundnearshore.org/technical_papers/juv_salmon.pdf">http://www.pugetsoundnearshore.org/technical_papers/juv_salmon.pdf</a></p>	juv_salmon.pdf
<p><b>Juvenile Salmon Composition, Timing, Distribution, and Diet in Marine Nearshore Waters of Central Puget Sound in 2001-2002.</b> J.S. Brennan, K.F. Higgins, J.R. Cordell, and V.A. Stamatiou. (King County Department of Natural Resources and Parks, Seattle, WA: 2004). Downloaded on September 17, 2004 at:  <a href="ftp://dnr.metrokc.gov/dnr/library/2004/kcr1658.pdf">ftp://dnr.metrokc.gov/dnr/library/2004/kcr1658.pdf</a></p>	kcr1658.pdf
<p><b>Proceedings of the DFO/PSAT sponsored Marine Riparian Experts Workshop</b>, Tsawwassen, BC, February 17-18, 2004. Lemieux, J.P., Brennan, J.S., Farrell, M., Levings, C.D., and Myers, D. 2004. Can. Man. Rep. Fish. Aquat. Sci. No. 2680. viii + 83p.</p>	MREW Proceedings5
<p><b>Protecting Nearshore Habitat and Functions in Puget Sound: An Interim Guide</b> (October 2007) EnviroVision, Herrera Environmental, and Aquatic Habitat Guidelines Working Group. Downloaded on November 29, 2007 at: <a href="http://wdfw.wa.gov/hab/nearshore_guidelines/">http://wdfw.wa.gov/hab/nearshore_guidelines/</a>  More information on this report can be found in the file: "WDFW Protecting Nearshore Habitat and Functions in Puget Sound webpage.pdf" in this subdirectory.</p>	nearshore_interim_guide_october_2007_final_draft.pdf
<p><b>Regional Nearshore and Marine Aspects of Salmon Recovery in Puget Sound.</b> Compiled and edited by Scott Redman, Doug Myers, and Dan Averill Puget Sound Action Team From contributions by the editors and Kurt Fresh and Bill Graeber, NOAA Fisheries (June 28, 2005). Downloaded on April 12, 2006 at:  <a href="http://www.psat.wa.gov/Programs/salmon_recovery/RegionalNearshore.pdf">http://www.psat.wa.gov/Programs/salmon_recovery/RegionalNearshore.pdf</a></p>	RegionalNearshore.pdf
<p><b>Marine Riparian Vegetation Communities of Puget Sound.</b> Puget Sound Nearshore Partnership Report No. 2007-02. Brennan, J.S. 2007. Downloaded on November 29, 2007 at:  <a href="http://www.pugetsoundnearshore.org/technical_papers/riparian.pdf">http://www.pugetsoundnearshore.org/technical_papers/riparian.pdf</a></p>	riparian.pdf
<p><b>Examples of Regulatory Language for Nearshore and Marine Shoreline.</b> GeoEngineers. (Puget Sound Action Team, Olympia Washington January 2005). Downloaded on May 12, 2005 at:  <a href="http://www.psat.wa.gov/Programs/GMA/regulatory_examples_final_1-21-05.pdf">http://www.psat.wa.gov/Programs/GMA/regulatory_examples_final_1-21-05.pdf</a></p>	regulatory_examples_final_1-21-05.pdf

Title/Author/Source	File Name on CD
<p><b><i>Literature Review and Analysis: Coastal Urbanization and Microbial Contamination of Shellfish Growing Areas.</i></b> Stuart Glasoe and Aimee Christy. (Puget Sound Action Team, State of Washington, Olympia, Washington: June 2004 Publication #: PSAT04-09). Downloaded on June 24, 2004 at:  <a href="http://www.psat.wa.gov/Programs/shellfish/sf_lit_review0604.pdf">http://www.psat.wa.gov/Programs/shellfish/sf_lit_review0604.pdf</a></p>	sf_lit_review0604.pdf
<p><b><i>Native Shellfish in Nearshore Ecosystems of Washington State.</i></b> Puget Sound Nearshore Partnership Report No. 2006-04. Dethier, M. 2006. Downloaded on November 29, 2007 at:  <a href="http://www.pugetsoundnearshore.org/technical_papers/shellfish.pdf">http://www.pugetsoundnearshore.org/technical_papers/shellfish.pdf</a></p>	shellfish.pdf
<p><b><i>Nearshore Birds in Puget Sound.</i></b> Puget Sound Nearshore Partnership Report number 2006-05. Buchanan, J.B. 2006. Downloaded on November 29, 2007 at:  <a href="http://www.pugetsoundnearshore.org/technical_papers/shorebirds.pdf">http://www.pugetsoundnearshore.org/technical_papers/shorebirds.pdf</a></p>	shorebirds.pdf
<p><b><i>Washington State ShoreZone Inventory Summary of Key Findings.</i></b> Downloaded on December 17, 2008 at:  <a href="http://www.dnr.wa.gov/Publications/aqr_nrsh_shrzne_sum_find.pdf">http://www.dnr.wa.gov/Publications/aqr_nrsh_shrzne_sum_find.pdf</a></p>	aqr_nrsh_shrzne_sum_find.pdf
<p><b><i>Effects of Shoreline Modification on a Northern Puget Sound Beach: Microclimate and Embryo Mortality in Surf Smelt (<i>Hypomesus pretiosus</i>)</i></b> Casimir A. Rice <i>Estuaries and Coasts</i> Vol. 29, No. 1, p. 63–71 February 2006</p>	smelt-and-armoring_Rice_2006.pdf
<p><b><i>Sound Science: Synthesizing ecological and socioeconomic information about the Puget Sound ecosystem.</i></b> 2007. Mary H. Ruckelshaus and Michelle M. McClure, coordinators; prepared in cooperation with the Sound Science collaborative team. U.S. Dept. of Commerce, National Oceanic &amp; Atmospheric Administration (NMFS), Northwest Fisheries Science Center. Seattle, Washington. Downloaded on March 21, 2007 from:  <a href="http://www.nwfsc.noaa.gov/research/shared/sound_science/documents/soundscience2007.pdf">http://www.nwfsc.noaa.gov/research/shared/sound_science/documents/soundscience2007.pdf</a></p>	soundscience2007.pdf

The Puget Sound Action Team (PSAT) maintains a website with links to information and science on Puget Sound. Available at:

[http://www.psat.wa.gov/Publications/salmon\\_recovery/resources.htm](http://www.psat.wa.gov/Publications/salmon_recovery/resources.htm)

King County’s *Puget Sound Nearshore Environments* webpage also contains excellent illustrations showing the processes that occur in the near shore environment and the adverse impacts of inappropriate development on the nearshore. They are at:

<http://dnr.metrokc.gov/wlr/watersheds/puget/nearshore/index.htm>

Washington State Department of Ecology’s **oblique aerial photographs** of Washington’s saltwater shorelines. These photos help to visualize upland land uses adjacent to Puget Sound, the Pacific Ocean, and the Strait of Juan de Fuca as well as dominant intertidal and onshore features. Available at: <http://apps.ecy.wa.gov/shorephotos/>

Washington State Department of Ecology's **Digital Coastal Atlas**. The atlas is a web-based mapping tool that allows users to identify important features on Puget Sound the straits. Available data include drift cells, historic and current aerial photos, and mapped habitat units. [http://www.ecy.wa.gov/programs/sea/SMA/atlas\\_home.html](http://www.ecy.wa.gov/programs/sea/SMA/atlas_home.html)

The Northwest Straits Commission's Online Bibliography is a collection of inventories and reports addressing marine issues for the counties that are part of the straits commissioned or supported by the Northwest Straits Commission and local Marine Resources Committees. The webpage is at: <http://www.nwstraits.org/reports-biblio.html>

Also see the Forage Fish subdirectory in the Fish and Wildlife Habitat directory of this CD.

#### KC Nearshore Recon (Subsubdirectory)

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b><i>Reconnaissance Assessment of the State of the Nearshore Ecosystem: Eastern Shore of Central Puget Sound, Including Vashon and Maury Islands (WRIAs 8 and 9)</i></b> . Williams, G.D., R.M. Thom, J.E. Starks, J.S. Brennan, J. P. Houghton, D. Woodruff, P.L. Striplin, M. Miller, M. Pedersen, A. Skillman, R. Kropp, A. Borde, C. Freeland, K. McArthur, V. Fagerness, S. Blanton, and L. Blackmore. 2001. J.S. Brennan, Editor. Report prepared for King County Department of Natural Resources, Seattle, WA. Downloaded on June 24, 2004 from: <a href="http://dnr.metrokc.gov/wlr/watersheds/puget/nearshore/sonr.htm#figures">http://dnr.metrokc.gov/wlr/watersheds/puget/nearshore/sonr.htm#figures</a>	
Executive Summary	SONRExecSummary.pdf
Cover, Front Matter, and List of Acronyms/Abbreviations	SONR00.pdf
Chapter 1: Introduction	SONR01.pdf
Chapter 2: Conceptual Model Of The Nearshore	SONR02.pdf
Chapter 3: Features Of Puget Sound Region: Oceanography And Physical Processes	SONR03.pdf
Chapter 4: Nutrient Dynamics And Other Water Properties	SONR04.pdf
Chapter 5: Primary Productivity Dynamics And Rates	SONR05.pdf
Chapter 6: Food Web	SONR06.pdf
Chapter 7: Selected Nearshore Habitat Types	SONR07.pdf
Chapter 8: Selected Fishes	SONR08.pdf
Chapter 9: Selected Invertebrates	SONR09.pdf
Chapter 10: Shoreline Conditions	SONR10.pdf
Chapter 11: Elliott Bay And The Duwamish River Estuary	SONR11.pdf
Chapter 12: Conclusions And Recommendations	SONR12.pdf
Chapter 13: Literature Cited	SONR13.pdf
Appendix: Data Gaps And Key Findings	SONRApdx.pdf
Figure 1: Study Area	01StudyArea.pdf
Figure 2: Nearshore Section Illustrating Typical Zonation	02Section.pdf
Figure 3: Nearshore Environment Habitat Types	03AerialHabTypes.pdf
Figure 4: Simplified Conceptual Model of the Puget Sound Nearshore Ecosystem	04ConceptEcosys.pdf
Figure 5: Riverine/Estuarine Ecosystems	05Riverine-EstEc.pdf
Figure 6: Conceptual Model of Salmonid Use of the Nearshore	06ConceptModel.pdf

<b>Title/Author/Source</b>	<b>File Name on CD</b>
Environment	
Figure 7: Potential Stressors in the Coastal Ecosystems of the Pacific Northwest and Associated Ecological, Economic, and Social Impacts	07PotStressors.pdf
Figure 8: General Conceptual Model, with Example for Evaluating Effects of Shoreline Armoring and Mitigation Actions	08GenConcept.pdf
Figure 9: WRIA 8 Nearshore Bathymetry and Topography	09W8NearBathy.pdf
Figure 10: WRIA 9 Nearshore Bathymetry and Topography	10BathyW9.pdf
Figure 11: WRIA 8 Nearshore Drift Cells	11DriftW8.pdf
Figure 12: WRIA 9 Nearshore Drift Cells	12DriftW9.pdf
Figure 13: Simplified Example of a Detritus-based Shallow Subtidal Food Web in Puget Sound	13Foodweb.pdf
Figure 14: Eelgrass and Kelp Areas Mapped Using Side-Scan Sonar	14EelSonar.pdf
Figure 15: Eelgrass and Kelp Shoreline Lengths	15EelgrassKelp.pdf
Figure 16: Fucus and Ulva Shoreline Lengths	16FucusUlva.pdf
Figure 17: Conceptual Model of Marine Riparian Functions	17RipFunctions.pdf
Figure 18: Salmonid Use of the Nearshore Environment	18SalmonUse.pdf
Figure 19: Known Forage Fish Spawning Areas	19ForageFish.pdf
Figure 20: Distribution of Selected Invertebrates	20Invert.pdf
Figure 21: Historic channel/Shore Locations, Upland Forest and Wetlands of the Duwamish River Estuary	21DuwHist.pdf
Figure 22: Artificial Channel Constraints and Shoreline Modifications - Elliott Bay & Duwamish Waterway	22ShoreMod-Elliott.pdf
Figure 23: Artificial Channel Constraints and Large Woody Debris - Map 1 of 3	23Est1.pdf
Figure 24: Artificial Channel Constraints and Large Woody Debris - Map 2 of 3	24Est2.pdf
Figure 25: Artificial Channel Constraints and Large Woody Debris - Map 3 of 3	25Est3.pdf
Figure 26: Yearly Minimum Dissolved Oxygen (mg/L) in the Duwamish River	26DissOxy.pdf
Figure 27: Yearly Average Ammonia Nitrogen (mg/L) in the Duwamish River	27AmmNit.pdf

### **Plants (Subdirectory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<p><i>List of Plants Tracked by the Washington Natural Heritage Program.</i>  Washington Natural Heritage Information System (April 2004).  Downloaded on June 24, 2004 at  <a href="http://www.dnr.wa.gov/nhp/refdesk/lists/plantrnk.html">http://www.dnr.wa.gov/nhp/refdesk/lists/plantrnk.html</a> This table lists threatened, endangered, and sensitive plants and other plants requiring management and protection.</p>	Plants Tracked by the Washington Natural Heritage Program.htm

Lists of Washington Rare Plant Species by County can be downloaded at:  
<http://www.dnr.wa.gov/nhp/refdesk/lists/plantsxco/countyindex.html>

List of Washington High-Quality Plant Communities and Wetland Ecosystems by County can be downloaded at: <http://www.dnr.wa.gov/nhp/refdesk/lists/communitiesxco/countyindex.html>

**PSH (Priority Species and Habitats) Management Recs (Recommendations)  
(Subdirectory)**

Title/Author/Source	File Name on CD
<b>Management Recommendations for Washington's Priority Habitats and Species: Dungeness Crab Cancer magister.</b> Wendy Fisher and Donald Velasquez (State of Washington, Department of Fish and Wildlife: December 2008). Accessed on June 8, 2009 at: <a href="http://wdfw.wa.gov/hab/phs/dungeness_crab/2008_dungeness_crab_phs_recs.pdf">http://wdfw.wa.gov/hab/phs/dungeness_crab/2008_dungeness_crab_phs_recs.pdf</a>	2008_dungeness_crab_phs_recs.pdf
<b>Descriptions of Standard Maps and Digital Data Products,</b> Washington Department of Fish and Wildlife (March 2005). Downloaded on April 11, 2005 from <a href="http://wdfw.wa.gov/hab/datasrc_jan1005.pdf">http://wdfw.wa.gov/hab/datasrc_jan1005.pdf</a>	datasrc_jan1005.pdf
<b>Fish and Wildlife Geographic Information System Digital Dataset Structures (V2),</b> Washington Department of Fish and Wildlife (January 2009). Downloaded on June 8, 2009 at: <a href="http://wdfw.wa.gov/hab/digital_doc.pdf">http://wdfw.wa.gov/hab/digital_doc.pdf</a>	digital_doc.pdf
<b>Priority Species and Habitats List.</b> Washington State Department of Fish and Wildlife (Olympia, Washington: 2008.) Downloaded on August 29, 2008 at: <a href="http://wdfw.wa.gov/hab/phs/phs_list_2008.pdf">http://wdfw.wa.gov/hab/phs/phs_list_2008.pdf</a>	phs_list_2008.pdf
<b>Management recommendations for Washington's priority species, Volume IV: Birds.</b> E. Larsen, J. M. Azerrad, N. Nordstrom, editors. 2004. Washington Department of Fish and Wildlife, Olympia, Washington, USA. Downloaded on June 24, 2004 from: <a href="http://wdfw.wa.gov/hab/phs/vol4/phs_vol4_birds.pdf">http://wdfw.wa.gov/hab/phs/vol4/phs_vol4_birds.pdf</a>	phs_vol4_birds.pdf
<b>Management recommendations for Washington's priority habitats and species.</b> Elizabeth Rodrick and Ruth Miller, editors. May 1991. Washington Department of Wildlife, Wildlife Management, Fish Management, and Habitat Management Division. Olympia, Washington, USA. Downloaded on June 24, 2004 at: <a href="http://wdfw.wa.gov/hab/phs/phs1991.pdf">http://wdfw.wa.gov/hab/phs/phs1991.pdf</a>	phs1991.pdf
<b>Management Recommendations for Washington's Priority Habitats: Riparian.</b> Knutson, K. L. and V. L. Naef. 1997. Washington Department of Fish and Wildlife, Olympia. 181 pp. Downloaded on August 5, 2004 at: <a href="http://wdfw.wa.gov/hab/ripfinal.pdf">http://wdfw.wa.gov/hab/ripfinal.pdf</a>	ripfinal.pdf
<b>Management Recommendations for Washington's Priority Species, Volume I: Invertebrates.</b> Larsen, E.M., E. Roderick, and R. Milner, eds. 1995. Washington Department of Fish and Wildlife, Olympia. Downloaded on August 5, 2004 at: <a href="http://wdfw.wa.gov/hab/vol1.pdf">http://wdfw.wa.gov/hab/vol1.pdf</a>	vol1.pdf
<b>Management Recommendations for Washington's Priority Species,</b>	vol3.pdf

Title/Author/Source	File Name on CD
<b>Volume III: Amphibians and Reptiles.</b> Larsen, E. M., editor. 1997. Washington Department of Fish and Wildlife, Olympia. Downloaded on June 24, 2004 at: <a href="http://wdfw.wa.gov/hab/vol3.pdf">http://wdfw.wa.gov/hab/vol3.pdf</a>	
<b>Species of Concern in Washington State.</b> Washington State Department of Fish and Wildlife. Downloaded on June 24, 2004 at: <a href="http://wdfw.wa.gov/wlm/diversty/soc/soc.htm">http://wdfw.wa.gov/wlm/diversty/soc/soc.htm</a>	WFW – Species of Concern

Also please see the Mammals Subdirectory that contains the Priority Species and Habitats Management Recommendations for mammals.

### Salmon Limiting Factors Summary Reports (Subdirectory)

The limiting factors analysis prepared as part of the state's Watershed Planning can help identify salmon habitats that need to be protected by city and county critical areas ordinances or regulations. The report summaries available in April 2003 are in this directory. They were downloaded from <http://salmon.scc.wa.gov/reports/index.html> You can also request the full copies of the available reports from this website. The file titles on the CD show the Water Resource Inventory Areas (WRIAs) covered by the summary.

### Shrub-Steppe (Subdirectory)

Title/Author/Source	File Name on CD
<b>Teetering on the Edge or Too Late? Conservation and Research Issues for Avifauna of Sagebrush Habitats.</b> Report of the Cooper Ornithological Society Committee for Conservation of Sagebrush Ecosystems. Steven T. Knick, David S. Dobkin, John T. Rotenberry, Michael A. Schroeder, W. Matthew Vander Haegen, & Charles Van Riper III. <i>The Condor</i> 105:611–634 (2003). Downloaded on August 2, 2004 at: <a href="http://wdfw.wa.gov/wlm/research/papers/shrub/conservation_avifauna.pdf">http://wdfw.wa.gov/wlm/research/papers/shrub/conservation_avifauna.pdf</a>	conservation_avifauna.pdf
Predation on Real and Artificial Nests in Shrubsteppe Landscapes Fragmented by Agriculture. W. Matthew Vander Haegen, Michael A. Schroeder & Richard M. Degraaf <i>The Condor</i> 104:496–506. Downloaded on August 2, 2004 at: <a href="http://wdfw.wa.gov/wlm/research/papers/shrub/nest_predation.pdf">http://wdfw.wa.gov/wlm/research/papers/shrub/nest_predation.pdf</a>	nest_predation.pdf
<b>Status of Washington's Shrub-Steppe Ecosystem: Extent, ownership, and wildlife/vegetation relationships.</b> Frederick C. Dobler, Jim Eby, Chuck Perry, Scott Richardson, and Matthew Vander Haegen. (Washington Department of Fish and Wildlife, Olympia, Washington: August 1996). Downloaded on August 2, 2004 at: <a href="http://wdfw.wa.gov/wlm/research/songbird/shrub.pdf">http://wdfw.wa.gov/wlm/research/songbird/shrub.pdf</a>	shrub.pdf
<b>Shrubsteppe Bird Response to Habitat and Landscape Variables in Eastern Washington, USA.</b> W. Matthew Vander Haegen, Frederick C. Dobler and D. John Pierce <i>Conservation Biology</i> 14: 1145-1160 (August	shrubsteppe.pdf

Title/Author/Source	File Name on CD
2000). Downloaded on August 2, 2004 at: <a href="http://wdfw.wa.gov/wlm/research/papers/shrub/shrubsteppe.pdf">http://wdfw.wa.gov/wlm/research/papers/shrub/shrubsteppe.pdf</a>	
<b><i>Shrubsteppe Mapping Of Eastern Washington Using Landsat Satellite Thematic Mapper Data.</i></b> John E. Jacobson & Michelle C. Snyder. (Washington State Department of Fish and Wildlife: August 2000) Downloaded on August 2, 2004 at: <a href="http://wdfw.wa.gov/wlm/research/papers/shrubsteppe_map/shrubsteppe_map.pdf">http://wdfw.wa.gov/wlm/research/papers/shrubsteppe_map/shrubsteppe_map.pdf</a>	shrubsteppe_map/shrubsteppe_map.pdf
<b><i>Wildlife of Eastside Shrubland and Grassland Habitats.</i></b> W. Matthew Vander Haegen, Scott M. McCorquodale, Charles R. Peterson, Gregory A. Green, & Eric Yensen. (2001). Downloaded on August 2, 2004 at: <a href="http://wdfw.wa.gov/wlm/research/papers/shrub/wildlife_of_shrubsteppe.pdf">http://wdfw.wa.gov/wlm/research/papers/shrub/wildlife_of_shrubsteppe.pdf</a>	wildlife_of_shrubsteppe.pdf

### ***Flooded Areas (Directory)***

Title/Author/Source	File Name on CD
<b><i>Floodplain Management in the State of Washington: A Status Report as of February 2004.</i></b> Washington Department of Ecology Northwest Regional Office. (Publication #04-06-016 March, 2004). Downloaded on July 27, 2004 from: <a href="http://www.ecy.wa.gov/pubs/0406016.pdf">http://www.ecy.wa.gov/pubs/0406016.pdf</a>	0406016.pdf
<b><i>Floodplain Management: Higher Regulatory Standards.</i></b> Federal Emergency Management Agency (FEMA).	FEMA Floodplain Reg Standards.pdf
<b><i>Questions &amp; Answers on NOAA's Fisheries Service's Biological Opinion on the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) in Puget Sound (September 2008).</i></b> National Marine Fisheries Service. Downloaded on September 2, 2009 from: <a href="http://www.nwr.noaa.gov/Salmon-Habitat/ESA-Consultations/FEMA-BO.cfm">http://www.nwr.noaa.gov/Salmon-Habitat/ESA-Consultations/FEMA-BO.cfm</a>	FEMA_BO_QA.pdf
<b><i>Second Notice of Error and Correction in Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the on-going National Flood Insurance Program carried out in the Puget Sound area in Washington State.</i></b> HUC 17110020 Puget Sound. National Marine Fisheries Service. Downloaded on September 2, 2009 from: <a href="http://www.nwr.noaa.gov/Salmon-Habitat/ESA-Consultations/FEMA-BO.cfm">http://www.nwr.noaa.gov/Salmon-Habitat/ESA-Consultations/FEMA-BO.cfm</a>	https__pcts.nmfs.noaa.gov_pls_pcts-pub_sxn7.pcts_upload.download_p_file=F22552_200600472_FEMANFIP_errata2_05-14-2009.pdf
<b><i>Notice of Error and Correction in Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the on-going National Flood Insurance Program carried out in the Puget Sound area in Washington State.</i></b> HUC 17110020 Puget Sound. National Marine Fisheries Service. Downloaded on September 2, 2009 from: <a href="http://www.nwr.noaa.gov/Salmon-Habitat/ESA-Consultations/FEMA-">http://www.nwr.noaa.gov/Salmon-Habitat/ESA-Consultations/FEMA-</a>	https__pcts.nmfs.noaa.gov_pls_pcts-pub_sxn7.pcts_upload.download_p_file=F13403_200600472_FEMANFIP_errata_10-23-

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<a href="#">BO.cfm</a>	2008.pdf
<i>Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the on-going National Flood Insurance Program carried out in the Puget Sound area in Washington State.</i> HUC 17110020 Puget Sound. National Marine Fisheries Service. Downloaded on September 2, 2009 from: <a href="http://www.nwr.noaa.gov/Salmon-Habitat/ESA-Consultations/FEMA-BO.cfm">http://www.nwr.noaa.gov/Salmon-Habitat/ESA-Consultations/FEMA-BO.cfm</a>	https___pcts.nmfs.noaa.gov_pls_pcts-pub_sxn7.pcts_upload.download_p_file=F3181_200600472_fema_nfip_09-22-2008.pdf

See also the Tsunami Hazards Subdirectory in the Geo Hazards Directory maps showing the land that would be inundation during a tsunami for some areas of Washington State.

### **Geo Hazards (Directory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<i>Optional Comprehensive Plan Element for Natural Hazard Reduction.</i> Jane Preuss, Doug Pflugh, Richard Mayo, Lori Emadi (Urban Regional Research), Roger Wagoner & Nancy Eklund (Berryman & Henigar) & Jon Koloski & Mary Ann Reinhart (GeoEngineers). (Olympia, Washington: Department of Community, Trade, and Economic Development June 1999). Downloaded on February 21, 2005 at: <a href="http://qa.cted.wa.gov/CTED/documents/ID_879_Publications.pdf">http://qa.cted.wa.gov/CTED/documents/ID_879_Publications.pdf</a>	ID_879_Publications.pdf

### **Channel Migration Zones, also known as Meander Zones (Subdirectory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<i>A Framework for Delineating Channel Migration Zones.</i> Cygnia F. Rapp, R.G. & Timothy B. Abbe, Ph.D., R.G. (Olympia, Washington, Ecology Publication #03-06-027 [Final Draft] November 2003). Downloaded on August 3, 2004 from: <a href="http://www.ecy.wa.gov/pubs/0306027.pdf">http://www.ecy.wa.gov/pubs/0306027.pdf</a>	0306027.pdf

### **Earthquake Hazards (Subdirectory)**

<b>Title/Author/Source</b>	<b>File Names on CD</b>
<i>Liquefaction Susceptibility of the Greater Tacoma Urban Area, Pierce and King Counties, Washington.</i> Stephen P. Palmer, William J. Perkins, and W. Paul Grant. Washington Division of Geology and Earth Resources Geologic Map GM-51 (June 2003). Downloaded on August 25, 2003 at: <a href="http://www.dnr.wa.gov/geology/pubs/pubs_ol.htm#bibs">http://www.dnr.wa.gov/geology/pubs/pubs_ol.htm#bibs</a>	gm51.pdf (this is the report), gm51_env.pdf (the report cover), and gm51_plate.pdf (the map showing the liquefaction susceptibility).

## Liquefaction (Susceptibility) Maps by County (Subsubdirectory)

In response to the Nisqually earthquake of 2001, the Washington State Department of Natural Resources Division of Geology and Earth Resources (DGER) was awarded a grant by the Federal Emergency Management Agency and Washington Emergency Management Division to develop two types of earthquake hazard maps for every county in the state—liquefaction susceptibility maps, which outline areas where water-saturated sandy soil loses strength during earthquake shaking, and NEHRP (National Earthquake Hazards Reduction Program) site class maps, which outline areas where soils amplify ground shaking. The maps will be used by State and local governments to update existing hazard mitigation plans and to delineate geologically hazardous areas under the Growth Management Act.

The project team of Eric Bilderback, Derek Folger, Sammantha Magsino, Rebecca Niggemann, James Poelstra, and Steve Palmer were assisted by other DGER staff. The team completed and released a preliminary version of these statewide hazard maps in September, 2003. The project team has now completed the final liquefaction susceptibility and NEHRP site class maps that include the results of more than 90 shear-wave velocity surveys and evaluation of geotechnical boring and water well data.

The liquefaction susceptibility and site class maps and reports (as PDF files) and GIS data for each county may be downloaded from: <ftp://198.187.3.44/geology/hazards/hmgrp/> [folder: liquefaction\_suscep\_nehrp\_site\_class\_maps] Clicking on this link will take you to a Department of Natural Resources' FTP site—[please read the information below](#) on proper use of this FTP site. The maps in this subdirectory were downloaded on February 4, 2005.

Due to the size of these files, only the maps for selected counties are included on the CD. You can download maps for other counties from the above FTP site. Futurewise also maintains a data DVD that includes data for all counties. For a copy of this DVD, which requires a DVD data drive, can be requested from [tim@futurewise.org](mailto:tim@futurewise.org)

### Earthquake Faults

The United States Geological Survey (USGS) maintains the Quaternary Faults and Fold Database of the United States at: <http://qfaults.cr.usgs.gov/> This website contains information on faults and associated folds in the United States that are believed to be sources of Magnitude 6 earthquakes during the Quaternary geological period.

### Landslide Hazards (Subdirectory)

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<i>Coastal Landsliding on Puget Sound: A review of landslides occurring between 1996 and 1999.</i> Hugh Shipman. (Washington Department of Ecology Report #01-06-019, Olympia, Washington: August, 2001) Available from: <a href="http://www.ecy.wa.gov/pubs/0106019.pdf">http://www.ecy.wa.gov/pubs/0106019.pdf</a>	0106019.pdf
<i>Geologically Hazardous Areas</i> Douglas J. Canning.	Geologically%20Hazardous

Title/Author/Source	File Name on CD
(Washington Department of Ecology, Olympia: November, 2001) Available from: <a href="http://www.ecy.wa.gov/programs/sea/sma/data/reports/Geologically%20Hazardous%20Areas.pdf">http://www.ecy.wa.gov/programs/sea/sma/data/reports/Geologically%20Hazardous%20Areas.pdf</a>	%20Areas[1].pdf
Scott Burns, <i>Prevention Is the Best Medicine: Doing Site Evaluations to Prevent Geological Hazard Catastrophes</i> Geotimes (February 2007). Downloaded on November 25, 2008 from: <a href="http://www.geotimes.org/feb07/feature_prevention.html">http://www.geotimes.org/feb07/feature_prevention.html</a>	GEOTIMES Prevention is the Best Medicine.pdf
<b><i>Landslides Triggered by the Winter 1996-97 Storms in the Puget Lowland, Washington (online edition)</i></b> . Rex L. Baum, Alan F. Chleborad, and Robert L. Schuster (U.S. Geological Survey 1998). Downloaded on August 22, 2003 at: <a href="http://pubs.usgs.gov/of/1998/ofr-98-239/ofr-98-239.html">http://pubs.usgs.gov/of/1998/ofr-98-239/ofr-98-239.html</a>  This directory includes numerous files and directories used by this one report. Start by clicking on the file “Landslides Triggered by the Winter 1996-97 Storms in the Puget Lowland, Washington (online edition).htm” and then click on the links, this will then call up the other needed files.	Landslides Triggered by the Winter 1996-97 Storms in the Puget Lowland, Washington (online edition).htm
<b><i>National Landslide Hazards Mitigation Strategy: A Framework for Loss Reduction</i></b> . Elliott C. Spiker and Paula L. Gori. U.S. Geological Survey Open-File Report 00-450 (2000) Downloaded on January 28, 2005 at: <a href="http://pubs.usgs.gov/of/2000/ofr-00-0450/ofr-00-0450.pdf">http://pubs.usgs.gov/of/2000/ofr-00-0450/ofr-00-0450.pdf</a>	ofr-00-0450.pdf
Hugh Shipman. “Coastal Bluffs and Sea Cliffs on Puget Sound, Washington” in Monty A. Hampton and Gary B. Griggs, Editors <i>Formation, Evolution, and Stability of Coastal Cliffs–Status and Trends</i> (U.S. Geological Survey Professional Paper 1693: 2004). The entire Professional Paper 1693 is available from: <a href="http://pubs.usgs.gov/pp/pp1693/">http://pubs.usgs.gov/pp/pp1693/</a> (this is a large 15 megabyte document). Mr. Shipman’s paper alone (which is much smaller) is available from: <a href="http://www.ecy.wa.gov/pubs/0406029.pdf">http://www.ecy.wa.gov/pubs/0406029.pdf</a>	pp1693.pdf
<b><i>Digital Compilation of “Landslide Overview Map Of The Conterminous United States”</i></b> by Dorothy H. Radbruch-Hall, Roger B. Colton, William E. Davies, Ivo Lucchitta, Betty A. Skipp, and David J. Varnes, 1982. Jonathan W. Godt. U.S. Department of the Interior, U.S. Geological Survey Open-File Report 97-289.	Slide (The word file contains the cover and citation) Slide (The image file contains the map.)

Landslide hazard maps for Puget Sound and the Strait of Juan De Fuca can be accessed at the following website: <http://www.ecy.wa.gov/programs/sea/landslides/maps/maps.html>

U.S. Department of Agriculture Natural Resources Conservation Services, Soils Surveys for Washington State available from: [http://www.or.nrcs.usda.gov/pnw\\_soil/wa\\_reports.html](http://www.or.nrcs.usda.gov/pnw_soil/wa_reports.html) You can download GIS soil data layers, the soil surveys, and view and print soil maps super imposed over aerial photographs.

Washington State Department of Natural Resources, Division of Geology and Earth Resources Website: <http://www.dnr.wa.gov/geology/> Includes downloadable geological maps, reports, and data sources.

The American Planning Association’s Landslide Hazards and Planning website includes excellent information on minimizing the hazards to life and property that result from landslides including many links. The website is at: <http://www.planning.org/landslides/docs/main.html> Due to the Growth Management Act, Washington is a national leader in addressing this serious problem.

### Mine Hazards (Subdirectory)

Title/Author/Source	File Name on CD
<p><b><i>Inactive And Abandoned Mine Lands — Roy and Barnum-McDonnell Mines, Morton Cinnabar Mining District, Lewis County, Washington.</i></b> Fritz E. Wolff, Donald T. McKay, Jr., David K. Norman. Washington Division of Geology and Earth Resources Open File Report 2001-1 (December 2001). <b>This report also includes the following files on the CD:</b> dscn1404.jpg, dscn1406.jpg, dscn1409.jpg, dscn1410.jpg, dscn1411.jpg, dscn1412.jpg, dscn1414.jpg, dscn1415.jpg, dscn1416.jpg, dscn1418.jpg, dscn1422.jpg, dscn1424.jpg, dscn1426.jpg, dscn1428.jpg, dscn1429.jpg, dscn1430.jpg, dscn1431.jpg, dscn1433.jpg, dscn1436.jpg, dscn1439.jpg, dscn1440.jpg, dscn1441.jpg, dscn1640.jpg, dscn1641.jpg, dscn1642.jpg, dscn1643.jpg, dscn1644.jpg, &amp; dscn1647.jpg Downloaded on August 25, 2003 at: <a href="http://www.dnr.wa.gov/geology/iaml/01-1/index.html">http://www.dnr.wa.gov/geology/iaml/01-1/index.html</a></p>	ofr01-1.pdf
<p><b><i>Inactive And Abandoned Mine Lands— Apex Mine, Money Creek Mining District, King County, Washington.</i></b> Fritz E. Wolff, Donald T. McKay, Jr., and David K. Norman. Washington Division of Geology and Earth Resources Open File Report 2001-2 (December 2001). <b>This report also includes the following files on the CD:</b> dscn1593.jpg, dscn1594.jpg, dscn1595.jpg, dscn1596.jpg, dscn1598.jpg, dscn1599.jpg, dscn1609.jpg, dscn1610.jpg, dscn1611.jpg, and dscn1612.jpg Downloaded on August 25, 2003 at: <a href="http://www.dnr.wa.gov/geology/iaml/01-2/index.html">http://www.dnr.wa.gov/geology/iaml/01-2/index.html</a></p>	ofr01-2.pdf
<p><b><i>Inactive And Abandoned Mine Lands— Azurite Mine, Whatcom County, Washington.</i></b> Fritz E. Wolff, Donald T. McKay, Jr., and David K. Norman. Washington Division of Geology and Earth Resources Open File Report 2002-3 (August 2002). <b>This report also includes the following files on the CD:</b> dscn2101.jpg, dscn2105.jpg, dscn2106.jpg, dscn2107.jpg, dscn2134.jpg, dscn2136.jpg, dscn2137.jpg, dscn2138.jpg, dscn2139.jpg, and dscn2140.jpg Downloaded on August 25, 2003 at:</p>	ofr02-3.pdf

Title/Author/Source	File Name on CD
<a href="http://www.dnr.wa.gov/geology/iaml/02-3/index.html">http://www.dnr.wa.gov/geology/iaml/02-3/index.html</a>	
<p><b><i>The Washington State coal mine map collection--A catalog, index, and user's guide.</i></b> Schasse, Henry W.; Koler, M. Lorraine; Eberle, Nancy A.; Christie, Rebecca A. Washington Division of Geology and Earth Resources Open File Report 94-7, 109 p. (1994). Downloaded on August 28, 2003 at: <a href="http://www.dnr.wa.gov/geology/coalmaps.htm">http://www.dnr.wa.gov/geology/coalmaps.htm</a></p> <p>This website also includes information on how to order underground coal mine maps from the state which are an invaluable source in identifying coal mine hazard areas, areas subject to potential subsidence because of underground coal mining. Abandoned coal mines underlie at least 50,000 acres in western and central Washington, in both rural and urban areas.</p>	ofr94-7.pdf

### Tsunami Hazards (Subdirectory)

Title/Author/Source	File Name on CD
<p><b><i>Surviving a Tsunami—Lessons from Chile, Hawaii, and Japan</i></b>, compiled by Brian F. Atwater, Marco Cisternas V., Joanne Bourgeois, Walter C. Dudley, James W. Hendley II, and Peter H. Stauffer (U.S. Geological Survey Circular 1187 Version 1.0 1999). Downloaded on July 22, 2005 at: <a href="http://pubs.usgs.gov/circ/c1187/c1187.pdf">http://pubs.usgs.gov/circ/c1187/c1187.pdf</a></p>	c1187.pdf
<p><b><i>Designing for Tsunamis: Seven Principles for Planning and Designing for Tsunami Hazards</i></b>, National Tsunami Hazard Mitigation Program &amp; NOAA, USGS, FEMA, NSF, Alaska, California, Hawaii, Oregon, and Washington (March 2001) Downloaded on July 22, 2005 at: <a href="http://www.prh.noaa.gov/itic/library/pubs/online_docs/">http://www.prh.noaa.gov/itic/library/pubs/online_docs/</a> scroll down to “Designing for Tsunamis.pdf”</p>	Designing_for_Tsunamis[1].pdf
<p><b><i>Tsunami hazard map of the southern Washington coast—Modeled tsunami inundation from a Cascadia subduction zone earthquake</i></b>, by T. J. Walsh, C. G. Caruthers, A. C. Heinitz, E. P. Myers III, A. M. Baptista, G. B. Erdakos, and R. A. Kamphaus. 2000. Downloaded on February 4, 2005 at: <a href="http://www.dnr.wa.gov/geology/pubs/pubs_ol.htm#bibs">http://www.dnr.wa.gov/geology/pubs/pubs_ol.htm#bibs</a></p>	Gm49_env.pdf Gm49_plate.pdf Gm49_pamphlet.pdf
<p><b><i>Tsunami inundation map of the Port Angeles, Washington, area</i></b>, by T. J. Walsh, E. P. Myers III, and A. M. Baptista. 2002. Downloaded on February 4, 2005 at: <a href="http://www.dnr.wa.gov/geology/pdf/ofr02-1.pdf">http://www.dnr.wa.gov/geology/pdf/ofr02-1.pdf</a></p>	ofr02-1.pdf
<p><b><i>Tsunami inundation map of the Port Townsend, Washington, area</i></b>, by T. J. Walsh, E. P. Myers III, and A. M. Baptista. 2002. Downloaded on February 4, 2005 at: <a href="http://www.dnr.wa.gov/geology/pdf/ofr02-2.pdf">http://www.dnr.wa.gov/geology/pdf/ofr02-2.pdf</a></p>	ofr02-2.pdf
<p><b><i>Tsunami inundation map of the Quileute, Washington, area</i></b>, by T. J. Walsh, E. P. Myers III, and A. M. Baptista. 2003. Downloaded on February 4, 2005 at: <a href="http://www.dnr.wa.gov/geology/pdf/ofr03-1.pdf">http://www.dnr.wa.gov/geology/pdf/ofr03-1.pdf</a></p>	ofr03-1.pdf
<p><b><i>Tsunami hazard map of the Elliott Bay area, Seattle, Washington—Modeled tsunami inundation from a Seattle fault earthquake</i></b>, by T. J. Walsh, V. V. Titov, A. J. Venturato, H. O. Mofjeld, and F. I. Gonzalez. Downloaded on February 4, 2005 at:</p>	ofr03-14.pdf

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<a href="http://www.dnr.wa.gov/geology/pdf/ofr03-14.pdf">http://www.dnr.wa.gov/geology/pdf/ofr03-14.pdf</a>	
<b><i>Tsunami inundation map of the Neah Bay, Washington, area</i></b> , by T. J. Walsh, E. P. Myers III, and A. M. Baptista. 2003. Downloaded on February 4, 2005 at: <a href="http://www.dnr.wa.gov/geology/pdf/ofr03-2.pdf">http://www.dnr.wa.gov/geology/pdf/ofr03-2.pdf</a>	ofr03-2.pdf
<b><i>Tsunami hazard map of the Bellingham area, Washington—Modeled tsunami inundation from a Cascadia subduction zone earthquake</i></b> , by T. J. Walsh, V. V. Titov, A. J. Venturato, H. O. Mofjeld, and F. I. González. Downloaded on February 4, 2005 at: <a href="http://www.dnr.wa.gov/geology/pdf/ofr04-15.pdf">http://www.dnr.wa.gov/geology/pdf/ofr04-15.pdf</a>	ofr04-15.pdf
<b><i>Tsunami Hazard Map of the Anacortes –Whidbey Island Area, Washington: Modeled Tsunami Inundation from a Cascadia Subduction Zone Earthquake</i></b> by Timothy J. Walsh, Vasily V. Titov, Angie J. Venturato, Harold O. Mofjeld, and Frank I. Gonzalez (January 2005). Downloaded on November 21, 2006 at: <a href="http://www.dnr.wa.gov/geology/pdf/ofr05-1.pdf">http://www.dnr.wa.gov/geology/pdf/ofr05-1.pdf</a>	ofr05-1.pdf
<b><i>Development of Design Guidelines for Structures that Serve as Tsunami Vertical Evacuation Sites</i></b> by Harry Yeh, Ian Robertson, and Jane Preuss Washington Department of Natural Resources, Division of Geology and Earth Resources Open File Report 2005-4 (November 2005). Downloaded on November 21, 2006 at: <a href="http://www.dnr.wa.gov/geology/pdf/ofr05-4.pdf">http://www.dnr.wa.gov/geology/pdf/ofr05-4.pdf</a>	ofr05-4.pdf

### **Volcanic Hazards (Subdirectory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b><i>Reducing the Risk From Volcano Hazards: What are Volcano Hazards?</i></b> U.S. Geological Survey. Downloaded on August 12, 2003 at: <a href="http://wrgis.wr.usgs.gov/fact-sheet/fs002-97/fs002-97.pdf">http://wrgis.wr.usgs.gov/fact-sheet/fs002-97/fs002-97.pdf</a>	fs002-97.pdf
<b><i>Mount Rainier -- Learning to Live with Volcanic Risk.</i></b> U.S. Geological Survey Fact Sheet 034-02 Online Version 1.0. Downloaded on November 21, 2005 from: <a href="http://pubs.usgs.gov/fs/2002/fs034-02/">http://pubs.usgs.gov/fs/2002/fs034-02/</a>	Mount Rainier -- Learning to Live with Volcanic Risk.pdf
<b><i>Volcano Hazards in the Mount Adams Region, Washington:</i></b> USGS Open-File Report 95-492. W.E. Scott, R.M. Iverson, J.W. Vallance, and W. Hildreth (1995). Downloaded on August 12, 2003 at: <a href="http://vulcan.wr.usgs.gov/Volcanoes/Adams/Hazards/OFR95-492/OFR95-492.pdf">http://vulcan.wr.usgs.gov/Volcanoes/Adams/Hazards/OFR95-492/OFR95-492.pdf</a> . The hazards map hazard_map ORR95-492.pdf accompanies this report. Downloaded on August 12, 2003 at: <a href="http://vulcan.wr.usgs.gov/Volcanoes/Adams/Hazards/OFR95-492/hazard_map.pdf">http://vulcan.wr.usgs.gov/Volcanoes/Adams/Hazards/OFR95-492/hazard_map.pdf</a>	OFR95-492.pdf hazard_map ORR95-492.pdf
<b><i>Volcanic-Hazard Zonation for Mount St. Helens, Washington:</i></b> USGS Open-File Report 95-497 Edward W. Wolfe and Thomas C. Pierson (1995). Downloaded on August 12, 2003 at: <a href="http://vulcan.wr.usgs.gov/Volcanoes/MSH/Hazards/OFR95-497/OFR95-497.pdf">http://vulcan.wr.usgs.gov/Volcanoes/MSH/Hazards/OFR95-497/OFR95-497.pdf</a> The hazards map hazards_map OFR95-497.pdf accompanies this report. Downloaded on August 12, 2003 at:	OFR95-497.pdf hazards_map OFR95-497.pdf

<a href="http://vulcan.wr.usgs.gov/Volcanoes/MSH/Hazards/OFR95-497/hazard_map.pdf">http://vulcan.wr.usgs.gov/Volcanoes/MSH/Hazards/OFR95-497/hazard_map.pdf</a>	
<p><b>Potential Volcanic Hazards from Future Activity of Mount Baker, Washington:</b> USGS Open-File Report 95-498 C.A. Gardner, K.M. Scott, C.D. Miller, B. Myers, W. Hildreth, and P.T. Pringle (1995). Downloaded on August 12, 2003 at: <a href="http://vulcan.wr.usgs.gov/Volcanoes/Baker/Hazards/OFR95-498/OFR95-498.pdf">http://vulcan.wr.usgs.gov/Volcanoes/Baker/Hazards/OFR95-498/OFR95-498.pdf</a> The hazards map mtbaker.pdf accompanies this report. Downloaded on August 12, 2003 at: <a href="http://vulcan.wr.usgs.gov/Hazards/DataSets/Washington/Pdf/mtbaker.pdf">http://vulcan.wr.usgs.gov/Hazards/DataSets/Washington/Pdf/mtbaker.pdf</a></p>	<p>OFR95-498.pdf mtbaker.pdf</p>
<p><b>Volcanic-Hazard Zonation for Glacier Peak Volcano, Washington:</b> USGS Open-File Report 95-499 Richard B. Waitt, Larry G. Mastin, and James E. Begét (1995). Downloaded on August 12, 2003 at: <a href="http://vulcan.wr.usgs.gov/Volcanoes/GlacierPeak/Hazards/OFR95-499/OFR95-499.pdf">http://vulcan.wr.usgs.gov/Volcanoes/GlacierPeak/Hazards/OFR95-499/OFR95-499.pdf</a> The hazards map hazards_map OFR95-499.pdf accompanies this report. Downloaded on August 12, 2003 at: <a href="http://vulcan.wr.usgs.gov/Volcanoes/GlacierPeak/Hazards/OFR95-499/hazards_map.pdf">http://vulcan.wr.usgs.gov/Volcanoes/GlacierPeak/Hazards/OFR95-499/hazards_map.pdf</a></p>	<p>OFR95-499.pdf hazards_map OFR95-499.pdf</p>
<p><b>Volcano Hazards from Mount Rainier, Washington,</b> Revised 1998: USGS Open-File Report 98-428 P. Hoblitt, J.S. Walder, C.L. Driedger, K.M. Scott, P.T. Pringle, and J.W. Vallance (1998). Downloaded on August 12, 2003 at: <a href="http://vulcan.wr.usgs.gov/Volcanoes/Rainier/Hazards/OFR98-428/OFR98-428.pdf">http://vulcan.wr.usgs.gov/Volcanoes/Rainier/Hazards/OFR98-428/OFR98-428.pdf</a> The following hazards maps hazards_map_plate1_bw.pdf, hazards_map_plate2_bw.pdf, and FS065-97_map.pdf accompany this report. Downloaded on August 12, 2003 at: <a href="http://vulcan.wr.usgs.gov/Volcanoes/Rainier/Hazards/OFR98-428/hazards_map_plate1_bw.pdf">http://vulcan.wr.usgs.gov/Volcanoes/Rainier/Hazards/OFR98-428/hazards_map_plate1_bw.pdf</a> <a href="http://vulcan.wr.usgs.gov/Volcanoes/Rainier/Hazards/OFR98-428/hazards_map_plate2_bw.pdf">http://vulcan.wr.usgs.gov/Volcanoes/Rainier/Hazards/OFR98-428/hazards_map_plate2_bw.pdf</a> <a href="http://vulcan.wr.usgs.gov/Volcanoes/Rainier/Publications/FS065-97/FS065-97_map.pdf">http://vulcan.wr.usgs.gov/Volcanoes/Rainier/Publications/FS065-97/FS065-97_map.pdf</a></p>	<p>OFR98-428.pdf hazards_map_plate1_bw.pdf hazards_map_plate2_bw.pdf FS065-97_map.pdf</p>
<p><b>Sedimentology, Behavior, and Hazards of Debris Flows at Mount Rainier, Washington,</b> U.S. Geological Survey Professional Paper 1547 (1995). K.M. Scott, J.W. Vallance, and P.T. Pringle. Downloaded on November 21, 2005 from: <a href="http://infotrek.er.usgs.gov/pubs/">http://infotrek.er.usgs.gov/pubs/</a> These files are in the LizardTech DjVu file format which requires the free DjVu viewer available from: <a href="http://www.lizardtech.com/download/dl_download.php?detail=doc_djvu_plugin&amp;platform=win">http://www.lizardtech.com/download/dl_download.php?detail=doc_djvu_plugin&amp;platform=win</a></p>	<p>pp_1547 pp_1547_plt</p>

Much of the data from the reports and hazards maps, except the 1998 Mount Rainier report, is also available as GIS files from the USGS Cascades Volcano Observatory website at:

<http://vulcan.wr.usgs.gov/Hazards/DataSets/Washington/framework.html>

## GMA & Regs (Directory)

(GMA refers to the Growth Management Act, Chapter 36.70A RCW.)

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b><i>The Designation and Protection of Critical Areas Under the Growth Management Act (2002).</i></b> Alan D. Copsey.	Copsey on BAS.doc
<b><i>The Protection Of Wildlife Under Washington’s Growth Management Act.</i></b> Alan D. Copsey.	Copsey on GMA Wildlife Protection.doc
<b><i>The Washington State Growth Management Act: An Overview.</i></b> State of Washington Department of Community, Trade, and Economic Development. Downloaded on April 8, 2004 at: <a href="http://www.cted.wa.gov/uploads/GMA_OV.pdf">http://www.cted.wa.gov/uploads/GMA_OV.pdf</a>	GMA_OV.pdf
<b><i>Growth Management: Overview of the Growth Management Act.</i></b> State of Washington Department of Community, Trade, and Economic Development. Downloaded on February 21, 2005 at: <a href="http://qa.cted.wa.gov/CTED/documents/ID_892_Publications.pdf">http://qa.cted.wa.gov/CTED/documents/ID_892_Publications.pdf</a>	ID_892_Publications.pdf
<b>Chapter 36.70A RCW, the Growth Management Act</b> (Current through October 4, 2005). Downloaded on October 12, 2005 at: <a href="http://slc.leg.wa.gov/">http://slc.leg.wa.gov/</a>	RCW 36_70A CHAPTER
<b><i>Technical Bulletin 1.1 GMA Updates: Counties and Cities Planning for Critical Areas and Natural Resource Lands under the Growth Management Act</i></b> Washington State Department of Community Development (predecessor to the CTED) (September 6, 2002). Downloaded on February 21, 2005 at: <a href="http://qa.cted.wa.gov/CTED/documents/ID_962_Publications.pdf">http://qa.cted.wa.gov/CTED/documents/ID_962_Publications.pdf</a>	ID_962_Publications.pdf
<b>Chapter 365-190 WAC Minimum Guidelines to Classify Agriculture, Forest, Mineral Lands and Critical Areas</b> (Current through June 2, 2004). Downloaded on July 20, 2004 at: <a href="http://slc.leg.wa.gov/">http://slc.leg.wa.gov/</a>	WAC 365-190 CHAPTER
<b>Chapter 365-195 WAC Procedural Criteria For Adopting Comprehensive Plans And Development Regulations (Includes the Best Available Science [BAS] regulations)</b> (Current through June 2, 2004). Downloaded on July 20, 2004 at: <a href="http://slc.leg.wa.gov/">http://slc.leg.wa.gov/</a>	WAC 365-195 CHAPTER

## Growth Board Materials (Directory)

The Central Puget Sound, Eastern, and Western Washington Growth Management Hearings Boards maintain websites with helpful digests (summaries) of their decisions and the full text of their decisions. The board’s websites are at: <http://www.gmhb.wa.gov/index.html>

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b><i>Key Themes in Growth Management Act Case Law in the Central Puget Sound Region.</i></b> Downloaded on April 2, 2004 at:	cps_keythemes.pdf

<a href="http://www.gmhb.wa.gov/central/cps_keythemes.pdf">http://www.gmhb.wa.gov/central/cps_keythemes.pdf</a>	
<b>Central Puget Sound Growth Management Hearings Board Digest of Decisions, 1992 – 2007</b> 6th Edition (Updated February 12, 2007). Downloaded on July 18, 2007 from: <a href="http://www.gmhb.wa.gov/central/CPSDigest6thEditionthroughFebruary12-2007.pdf">http://www.gmhb.wa.gov/central/CPSDigest6thEditionthroughFebruary12-2007.pdf</a>	CPSDigest6thEditionthroughFebruary12-2007.pdf
<b>Eastern Washington Growth Management Hearings Board Digest of Decisions – 4<sup>th</sup> Edition (1992 – August 2006)</b> . Downloaded on July 18, 2007 at: <a href="http://www.gmhb.wa.gov/eastern/EWGMHBDigestofDecisionsUpdatedAug2006-9-11-06.pdf">http://www.gmhb.wa.gov/eastern/EWGMHBDigestofDecisionsUpdatedAug2006-9-11-06.pdf</a>	EWGMHBDigestofDecisionsUpdatedAug2006-9-11-06.pdf
Citizen’s Guide to Petitioning Growth Management Hearings Boards for Review of Local Legislative Actions, Futurewise (Updated February 2007). Downloaded on July 18, 2007 from: <a href="http://futurewise.volcano.onenw.org/resources/publications/Futurewise%20Citizens%20Guide%20to%20GMHB%20Petitions.pdf">http://futurewise.volcano.onenw.org/resources/publications/Futurewise%20Citizens%20Guide%20to%20GMHB%20Petitions.pdf</a>	Futurewise%20Citizens%20Guide%20to%20GMHB%20Petitions.pdf
<b>Guidelines for Framing Legal Issues.</b> Central Puget Sound Growth Management Hearings Board.	Guidelines for Framing Legal Issues
<b>Practicing before the Growth Management Hearings Boards for Washington State</b> (July 2007 Draft). State of Washington Growth Management Hearing Boards Downloaded on July 18, 2007 from: <a href="http://www.gmhb.wa.gov/images/pdf/July2007PracticeHandbookWorkingDraft.pdf">http://www.gmhb.wa.gov/images/pdf/July2007PracticeHandbookWorkingDraft.pdf</a>	July2007PracticeHandbookWorkingDraft.pdf
Northwest Planners’ Forum WWGMHB Digest off Decisions October – December 2006 Downloaded on July 18, 2007 from: <a href="http://www.gmhb.wa.gov/western/PlannersForumDigestOctDec06.pdf">http://www.gmhb.wa.gov/western/PlannersForumDigestOctDec06.pdf</a>	PlannersForumDigestOctDec06.pdf
<b>Western Washington Growth Management Hearings Board Digest of Decisions</b> , Fourth Edition (December 2006). Downloaded on July 18, 2007 at: <a href="http://www.gmhb.wa.gov/western/WWGMHB_Digest.pdf">http://www.gmhb.wa.gov/western/WWGMHB_Digest.pdf</a>	WWGMHB_Digest.pdf

## Guides (Directory)

Title/Author/Source	File Name on CD
<b>Smart Development: An Analysis of 10 Common Myths About Development State.</b> Barclay, Elizabeth and David Batker. With assistance by Amanda Kaler. (Seattle, WA: Asia Pacific Environmental Exchange, 1000 Friends of Washington, & Washington Environmental Council, June 2004). Produced through funding from the Public Involvement and Education Project, financed by proceeds from the Washington State Water Quality Account, and	10_Myths_6-24-04.pdf

<b>Title/Author/Source</b>	<b>File Name on CD</b>
administered by the Puget Sound Action Team.	
<i>Economic Analysis: Growth Management and Watershed Planning</i> (May 2003). John S. Mayers.	Economic Analysis for GM Development.doc
<i>You Can Make a Difference! A Citizen's Guide to Periodic Comprehensive Plan and Development Regulation Updates</i> 1000 Friends of Washington (2003). Downloaded on February 4, 2005 at: <a href="http://www.futurewise.org/resources/publications/Citizens_Guide_June2002.pdf">http://www.futurewise.org/resources/publications/Citizens_Guide_June2002.pdf</a>	Periodic Comp Plan Dev Reg Update Citizen Guide 2003.doc
<i>GMA Update Recommendations to Local Governments in Puget Sound</i> Puget Sound Action Team (April 2004). Downloaded on February 4, 2005 at: <a href="http://www.psat.wa.gov/Programs/GMA/GMA_checklist_2004.pdf">http://www.psat.wa.gov/Programs/GMA/GMA_checklist_2004.pdf</a>	PSAT GMA_checklist_2004.pdf
<i>Protecting People and Property from Landslide Hazards</i> . Futurewise (November 2005).	Protecting People and Property from Landslide Hazards
<i>Riparian &amp; Wetland Buffers Are Not a "Takings" Risk</i> . 1000 Friends of Washington.	Riparian Buffers Do Not Create A Major Takings Risk.doc
<i>WEC Checklist for Draft Critical Areas Ordinance</i> . Washington Environmental Council (2005). This is a word version of the checklist of the <i>Habitat Protection Toolkit: A Guide to Habitat Conservation Planning under the Growth Management Act</i> . You can print this out to use or fill it out in Word.	WEC Checklist v.2.doc
<i>Habitat Protection Toolkit: A Guide to Habitat Conservation Planning under the Growth Management Act</i> . Washington Environmental Council (June 2004). Downloaded on February 4, 2005 at: <a href="http://www.wecprotects.org/habitat/documents/2004TKf_000.pdf">http://www.wecprotects.org/habitat/documents/2004TKf_000.pdf</a>	WEC Habitat Toolkit V.2

### **Information [Info] on Best Available Science (Directory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<i>Best Available Science and the Designation and Protection of Critical Areas</i> . Downloaded on January 22, 2003 at: <a href="http://www.ocd.wa.gov/info/lgd/growth/bas/index.tpl">http://www.ocd.wa.gov/info/lgd/growth/bas/index.tpl</a>	BAS_explanation
<i>Critical Areas Ordinance Updates: An Overview of What is Required</i> . (Seattle, Washington: Futurewise, May 2005). Available at: <a href="http://www.futurewise.org/resources/publications/index_html">http://www.futurewise.org/resources/publications/index_html</a>	CAO Updates ELUL Newsletter.pdf
<i>Citations of Recommended Sources of Best Available Science for Designating and Protecting Critical Areas</i> . Chris Parsons (Olympia, Washington: Washington State Office of Community Development, March 2002). Downloaded on August 24, 2009 at: <a href="http://www.commerce.wa.gov/CTED/documents/ID_874_Publications.pdf">http://www.commerce.wa.gov/CTED/documents/ID_874_Publications.pdf</a>	ID_874_Publications.pdf

### **BAS Synthesis Reports (Subdirectory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
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<b>Title/Author/Source</b>	<b>File Name on CD</b>
<p><i>Stream-Riparian Ecosystems In the Puget Sound Lowland Eco-Region: A Review of Best Available Science</i>  Christopher W. May (Watershed Ecology LLC: 2003)  prepared for Kitsap County. Downloaded on June 24, 2004 at:  <a href="http://www.kitsapgov.com/nr/cao/cao_bas/fw/Riparian_BAS_Rpt_May.pdf">http://www.kitsapgov.com/nr/cao/cao_bas/fw/Riparian_BAS_Rpt_May.pdf</a></p>	Riparian_BAS_Rpt_May.pdf

King County (Sub-Subdirectory)

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<p><b><i>Best Available Science: Volume I: A Review of Science Literature</i></b>,  Stephanie Brown, Terry Butler, Robert Fuerstenberg, Ph.D, Priscilla Kaufmann, Gino Lucchetti, Klaus Richter, Ph.D., Jeanne Stypula, P.E. Jennifer Vanderhoof, &amp; James Hatch (Seattle, Washington: King County Executive Report, February 2004). Accessed on April 6, 2004 and available at: <a href="http://www.metrokc.gov/ddes/cao/">http://www.metrokc.gov/ddes/cao/</a></p>	See the sub-sub-subdirectory BAS Volume I for files
<p><b><i>Best Available Science: Volume II: Assessment of Proposed Ordinances</i></b>,  Stephanie Brown, Terry Butler, Robert Fuerstenberg, Ph.D, Priscilla Kaufmann, Gino Lucchetti, Klaus Richter, Ph.D., Jeanne Stypula, P.E. Jennifer Vanderhoof, &amp; James Hatch (Seattle, Washington: King County Executive Report, February 2004). Accessed on April 6, 2004 and available at: <a href="http://www.metrokc.gov/ddes/cao/">http://www.metrokc.gov/ddes/cao/</a></p>	See the sub-sub-subdirectory BAS Volume II for files

**Low Impact Development (Directory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<p><b><i>Low Impact Development</i></b>, Puget Sound Action Team.  Downloaded on March 23, 2004 at:  <a href="http://www.psat.wa.gov/Programs/LID/lid_cd/brochure.pdf">http://www.psat.wa.gov/Programs/LID/lid_cd/brochure.pdf</a></p>	LID brochure.pdf
<p><b><i>Natural Approaches to Stormwater Management: Low Impact Development in Puget Sound</i></b>, Puget Sound Action Team.  Downloaded on March 23, 2004 at:  <a href="http://www.psat.wa.gov/Publications/LID_studies/LID_approaches.htm">http://www.psat.wa.gov/Publications/LID_studies/LID_approaches.htm</a></p>	lid_natural_approaches.pdf
<p><b><i>Low Impact Development: Technical Guidance Manual For Puget Sound</i></b>, Curtis Hinman (Puget Sound Action Team &amp; Washington State University Pierce County Extension, Publication No. PSAT 05-03, January 2005). Downloaded on March 10, 2004 from:  <a href="http://www.psat.wa.gov/Publications/LID_tech_manual05/LID_manual2005.pdf">http://www.psat.wa.gov/Publications/LID_tech_manual05/LID_manual2005.pdf</a></p>	LID_tech_manual05/LID_manual2005.pdf
<p><b><i>Technical Memorandum No. 1: Review of Low-Impact</i></b></p>	PSAT_TechMemo1.pdf

Title/Author/Source	File Name on CD
<p><i>Development Techniques</i>, Bill Derry, Carolyn Butchart, Patrick Graham CH2M Hill, Produced through Funding from the Department of Ecology and Administered by the Puget Sound Action Team (January 16, 2004). Downloaded on March 10, 2004 from:  <a href="http://www.psat.wa.gov/Programs/LID/PSAT_TechMemo1.pdf">http://www.psat.wa.gov/Programs/LID/PSAT_TechMemo1.pdf</a></p>	
<p><b><i>Technical Memorandum No. 2: Analysis and Recommendations for the Use of LID Techniques in Puget Sound</i></b>, Bill Derry, Carolyn Butchart, Patrick Graham CH2M Hill, Produced through Funding from the Department of Ecology and Administered by the Puget Sound Action Team (January 16, 2004). Downloaded on March 10, 2004 from:  <a href="http://www.psat.wa.gov/Programs/LID/PSAT_TechMemo2.pdf">http://www.psat.wa.gov/Programs/LID/PSAT_TechMemo2.pdf</a></p>	PSAT_TechMemo2.pdf
<p><b><i>Technical Memorandum No. 3: Suggested Adaptations to BMPs in the Washington Stormwater Management Manual to Include Benefits of LID Techniques</i></b>, Bill Derry, Carolyn Butchart, Patrick Graham CH2M Hill, Produced through Funding from the Department of Ecology and Administered by the Puget Sound Action Team (January 16, 2004). Downloaded on March 10, 2004 from:  <a href="http://www.psat.wa.gov/Programs/LID/PSAT_TechMemo3.pdf">http://www.psat.wa.gov/Programs/LID/PSAT_TechMemo3.pdf</a></p>	PSAT_TechMemo3.pdf

## ***Presentations (Directory)***

This includes some of the PowerPoint presentations used at the training session on the critical areas ordinances.

If you do not have Microsoft PowerPoint installed on your computer, the file ppviewer.exe is a free PowerPoint Viewer that can be installed on your computer. A copy of ppviewer.exe is included on the CD. It was downloaded on April 8, 2004 from:

<http://www.microsoft.com/downloads/details.aspx?FamilyId=428D5727-43AB-4F24-90B7-A94784AF71A4&displaylang=en>

### **To install this Program:**

1. Copy ppviewer.exe to your hard disk.
2. Double-click the **PPViewer.exe** program file on your hard disk to start the setup program.
3. Follow the instructions on the screen to complete the installation.

To install on a computer running Windows 98 Second Edition (SE):

1. Install the updated [Windows installer for Windows 98](#).
2. Restart your computer.

- Follow the installation instructions in the section above.

**Instructions for use:**

Once you have installed this download, from the **Start** menu under **All Programs**, open **Microsoft Office PowerPoint Viewer 2003**.

**Note** The PowerPoint 2003 Viewer registers with the .ppt, .pot, and .pps file extensions only if a version of PowerPoint is not installed on your computer. If registered, double-clicking on these file types will launch the PowerPoint 2003 Viewer.

**SMA & Regs (Directory)**

(SMA refers to the Shoreline Management Act of 1971, Chapter 90.58 RCW)

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<b>Chapter 90.58 RCW, the Shoreline Management Act</b> (Current through October 4, 2005). Downloaded on October 12, 2005 at: <a href="http://slc.leg.wa.gov/">http://slc.leg.wa.gov/</a>	RCW 90_58 CHAPTER
<b>Chapter 173-26 WAC, State Master Program Approval/Amendment Procedures and Master Program Guidelines</b> (Current through June 2, 2004). Downloaded on July 20, 2004 at: <a href="http://slc.leg.wa.gov/">http://slc.leg.wa.gov/</a>	WAC 173-26 CHAPTER
<b>Department of Ecology &amp; Department of Community, Trade and Economic Development Guidance on SHB 1933. File Names on CD:</b> The guidance is posted on Ecology’s Web site at: <a href="http://www.ecy.wa.gov/programs/sea/sma/laws_rules/90-58/1933_Guidance.pdf">http://www.ecy.wa.gov/programs/sea/sma/laws_rules/90-58/1933_Guidance.pdf</a> Received on March 17, 2004 via e-mail.	1933 guidance cover letter.doc 1933 guidance 2-17-04 w RCWs Attach1.pdf 1033-s_hbr Attach 2.pdf
<i>Introduction to Washington’s Shoreline Management Act.</i> Downloaded on March 23, 2004 at: <a href="http://www.ecy.wa.gov/pubs/99113.pdf">http://www.ecy.wa.gov/pubs/99113.pdf</a>	99113.pdf
Washington State Department of Ecology. <i>Focus on Guidance on Application of the WAC 173-26 (2003 guidelines) to Less Than Comprehensive Updates or Amendments to Master Programs</i> (May 2004). Downloaded on July 20, 2004 at: <a href="http://www.ecy.wa.gov/pubs/0406018.pdf">http://www.ecy.wa.gov/pubs/0406018.pdf</a>	0406018.pdf

**Value of Ecological Services (Directory)**

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<i>A New View of the Puget Sound Economy: The Economic Value of Nature’s Services in the Puget Sound Basin</i> , David Batker, Paula Swedeen, Robert Costanza, Isabel de la Torre, Roelof Boumans, & Kenneth Bagstad (Earth Economics 2008). Downloaded on August 13, 2008 from: <a href="http://www.earthconomics.org/">http://www.earthconomics.org/</a>	A_New_View_of_the_Puget_Sound_Economy.pdf

<b>Title/Author/Source</b>	<b>File Name on CD</b>
<a href="#">A New View of the Puget Sound Economy.pdf</a>	
<b>Ecological Economic Evaluation: Maury Island, King County, Washington</b> , Herrera Environmental Consultants, Inc., Northern Economics Inc., Spatial Informatics Group, LLC (Prepared for King County, June 8, 2004). Downloaded on March 18, 2005 at: <a href="ftp://dnr.metrokc.gov/dnr/library/2004/kcr982/MauryEcoReport.PDF">ftp://dnr.metrokc.gov/dnr/library/2004/kcr982/MauryEcoReport.PDF</a>	MauryEcoReport.PDF
<b>Untold Value: Nature's Services in Washington State</b> Barclay, Elizabeth and David Batker with assistance by Amanda Kaler. (Seattle, WA: Asia Pacific Environmental Exchange, 1000 Friends of Washington, & Washington Environmental Council, April 2004). Produced through funding from the Public Involvement and Education Project, financed by proceeds from the Washington State Water Quality Account, and administered by the Puget Sound Action Team.	Nature's Services 6-24-04.pdf

Also please see *The Economic Value of Wetlands: Wetlands' Role in Flood Protection in Western Washington* in the Wetlands Directory with the filename: "97100.pdf."

### **WA State Hazard Mitigation Plan (Directory)**

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<b>Washington State Hazard Mitigation Plan Executive Summary.</b> Washington Military Department Emergency Management Division (July 2004). Downloaded on August 5, 2004 at: <a href="http://www.emd.wa.gov/3-map/mit/mit-pubs-forms/hazmit-plan/exec-sum.pdf">http://www.emd.wa.gov/3-map/mit/mit-pubs-forms/hazmit-plan/exec-sum.pdf</a>	exec-sum.pdf
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<b>Description of the State of Washington.</b> Downloaded on August 5, 2004 at: <a href="http://www.emd.wa.gov/3-map/mit/mit-pubs-forms/hazmit-plan/state-profile.pdf">http://www.emd.wa.gov/3-map/mit/mit-pubs-forms/hazmit-plan/state-profile.pdf</a>	state-profile.pdf
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<b>Enhanced Plan – Comprehensive State Hazard Mitigation Program.</b> Downloaded on August 5, 2004 at: <a href="http://www.emd.wa.gov/3-map/mit/mit-pubs-forms/hazmit-plan/comp-state-prgm.pdf">http://www.emd.wa.gov/3-map/mit/mit-pubs-forms/hazmit-plan/comp-state-prgm.pdf</a>	comp-state-prgm.pdf
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<b>a. Hazard Profiles</b>	
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<b><i>Water Quality in the Central Columbia Plateau, Washington and Idaho, 1992-95:</i></b> U.S. Geological Survey Circular 1144. Williamson, A.K., Munn, M.D., Ryker, S.J., Wagner, R.J., Ebbert, J.C., and Vanderpool, A.M., 1998. Downloaded on March 10, 2006 at: <a href="http://pubs.usgs.gov/circ/circ1144/ccpt.book.pdf">http://pubs.usgs.gov/circ/circ1144/ccpt.book.pdf</a>	circ1144.pdf
<b><i>Water Quality in the Puget Sound Basin, Washington and British Columbia, 1996-98:</i></b> U.S. Geological Survey Circular 1216. Ebbert, J.C., Embrey, S.S., Black, R.W., Tesoriero, A.J., and Haggland A.L., 2000. Downloaded on March 10, 2006 at: <a href="http://pubs.usgs.gov/circ/circ1216/pdf/circ1216.pdf">http://pubs.usgs.gov/circ/circ1216/pdf/circ1216.pdf</a>	circ1216.pdf
<b><i>The Quality of Our Nation's Waters: Pesticides in the Nation's Streams and Ground Water, 1992-2001.</i></b> Robert J. Gilliom, Jack E. Barbash, Charles G. Crawford, Pixie A. Hamilton, Jeffrey D. Martin, Naomi Nakagaki, Lisa H. Nowell, Jonathan C. Scott, Paul E. Stackelberg, Gail P. Thelin, and David M. Wolock. 2006 U.S. Geological Survey Circular 1291. Downloaded on March 10, 2006 at: <a href="http://pubs.usgs.gov/circ/2005/1291/pdf/circ1291.pdf">http://pubs.usgs.gov/circ/2005/1291/pdf/circ1291.pdf</a>	circ1291.pdf
<b><i>Water quality in the Northern Rockies Intermontane Basins, Idaho, Montana, and Washington, 1999-2001:</i></b> U.S. Geological Survey Circular 1235. Clark, Gregory M., Caldwell, Rodney R., Maret, Terry R., Bowers, Craig L., Dutton, DeAnn M., and Beckwith, Michael A., 2004. Downloaded on March 10, 2006 at: <a href="http://pubs.usgs.gov/circ/2004/1235/pdf/circular1235.pdf">http://pubs.usgs.gov/circ/2004/1235/pdf/circular1235.pdf</a>	circular1235.pdf
<b><i>Water Quality in the Yakima River Basin, Washington, 1999-2000:</i></b> U.S. Geological Survey Circular 1237. Fuhrer, G.J., Morace, J.L., Johnson,	circular1237.pdf

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H.M., Rinella, J.F., Ebbert, J.C., Embrey, S.S., Waite, I.R., Carpenter, K.D., Wise, D.R., and Hughes, C.A., 2004, Downloaded on March 10, 2006 at: <a href="http://pubs.usgs.gov/circ/2004/1237/pdf/circular1237.pdf">http://pubs.usgs.gov/circ/2004/1237/pdf/circular1237.pdf</a>	
<b><i>Impervious Cover and Land Use in the Chesapeake Bay Watershed.</i></b> Karen Cappiella and Kenneth Brown (Center for Watershed Protection, Ellicott City, MD: January, 2001). Downloaded on September 1, 2009at: <a href="http://www.cwp.org/Resource_Library/Center_Docs/IC/ELC_IMPERV.pdf">http://www.cwp.org/Resource_Library/Center_Docs/IC/ELC_IMPERV.pdf</a>	ELC_IMPERV.pdf
<b><i>Hood Canal Low Dissolved Oxygen Preliminary Assessment and Corrective Action Plan</i></b> Duane Fagergren, Anne Criss, & David Christensen (Puget Sound Action Team & Hood Canal Coordinating Council: Publication #PSAT04-06 VERSION 1. May 6, 2004). Downloaded on August 3, 2004 at: <a href="http://www.psat.wa.gov/Programs/hood_canal/HC_PACA.pdf">http://www.psat.wa.gov/Programs/hood_canal/HC_PACA.pdf</a>	HC_PACA.pdf
<b><i>Protecting Water Resources with Higher-Density Development.</i></b> U.S. Environmental Protection Agency (2006 Publication Number 231-R-06-001). Available from: <a href="http://www.epa.gov/smartgrowth/pdf/protect_water_higher_density.pdf">http://www.epa.gov/smartgrowth/pdf/protect_water_higher_density.pdf</a>	<a href="#"><u>protect_water_higher_density.pdf</u></a>
<b><i>National Management Measures to Control Nonpoint Source Pollution from Urban Areas.</i></b> United States Environmental Protection Agency (Publication Number EPA 841-B-05-004, November 2005) Downloaded on January 3, 2006 at: <a href="http://www.epa.gov/owow/nps/urbanmm/">http://www.epa.gov/owow/nps/urbanmm/</a>	urban_guidance.pdf

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<b><i>Urban Watershed Forestry Manual Part 1: Methods for Increasing Forest Cover in a Watershed,</i></b> Karen Cappiella, Tom Schueler, and Tiffany Wright (The Center for Watershed Protection: July 2005). Downloaded on May 11, 2006 from: <a href="http://www.cwp.org/forestry/completopart1forestrymanual.pdf">http://www.cwp.org/forestry/completopart1forestrymanual.p df</a>	completopart1forestrymanual.pdf
<b><i>Urban Watershed Forestry Manual Part 2: Conserving and Planting Trees at Development Sites,</i></b> Karen Cappiella, Tom Schueler, and Tiffany Wright (Center for Watershed Protection June 2005). Downloaded on May 11, 2006 from: <a href="http://www.cwp.org/forestry/part2forestrymanual.pdf">http://www.cwp.org/forestry/part2forestrymanual.pdf</a>	part2forestrymanual.pdf
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<i>Washington State Wetland Mitigation Evaluation Study, Phase I: Compliance.</i> 0206009.pdf is a companion study. Downloaded on January 22, 2003 at: <a href="http://www.ecy.wa.gov/biblio/0006016.html">http://www.ecy.wa.gov/biblio/0006016.html</a>	0006016.pdf
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<i>Washington State Wetland Mitigation Evaluation Study - Phase 2, Evaluating Success.</i> 0006016.pdf is a companion study. Downloaded on January 22, 2003 at: <a href="http://www.ecy.wa.gov/biblio/0206009.html">http://www.ecy.wa.gov/biblio/0206009.html</a>	0206009.pdf
<i>Focus on Prior Converted Croplands/Wetlands – Clarifying State Authority and the Regulatory Process.</i> Washington State Department of Ecology (December 2003). Downloaded on August 3, 2004 at: <a href="http://www.ecy.wa.gov/pubs/0306032.pdf">http://www.ecy.wa.gov/pubs/0306032.pdf</a>	0306032.pdf
<i>Washington State Wetland Rating System for Eastern Washington Revised.</i> Hruby, T. (2004) Ecology Publication # 04-06-015. Downloaded on August 27, 2004 at: <a href="http://www.ecy.wa.gov/pubs/0406015.pdf">http://www.ecy.wa.gov/pubs/0406015.pdf</a>	0406015.pdf
<i>Washington State Wetland Rating System for Western Washington – Revised.</i> T. Hruby (Washington State Department of Ecology Publication # 04-06-025: 2004). Downloaded on August 27, 2004 at: <a href="http://www.ecy.wa.gov/pubs/0406025.pdf">http://www.ecy.wa.gov/pubs/0406025.pdf</a>	0406025.pdf
<i>Wetlands in Washington State - Volume 1: A Synthesis of the Science.</i> Sheldon, D., T. Hruby, P. Johnson, K. Harper, A. McMillan, T. Granger, S. Stanley, and E. Stockdale. March 2005. Washington State Department of Ecology. Publication #05-06-006. Olympia, WA. Downloaded on March 16, 2005 at: <a href="http://www.ecy.wa.gov/pubs/0506006.pdf">http://www.ecy.wa.gov/pubs/0506006.pdf</a> 0406024.pdf is a companion study	0506006.pdf
<i>Wetlands in Washington State - Volume 2: Guidance for Protecting and Managing Wetlands.</i> Granger, T., T. Hruby, A. McMillan, D. Peters, J. Rubey, D. Sheldon, S. Stanley, E. Stockdale. April 2005.. Washington State Department of Ecology. Publication #05-06-008. Olympia, WA. Downloaded on April 29, 2005 at:	0506008.pdf

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<a href="http://www.ecy.wa.gov/pubs/0506008.pdf">http://www.ecy.wa.gov/pubs/0506008.pdf</a>	
<b><i>Making Mitigation Work: The Report of the Mitigation that Works Forum</i></b> , ESA and Ross & Associates Environmental Consulting, Ltd., (Washington State Department of Ecology, Olympia, Washington: December 2008 Publication No. 08-06-018). Downloaded on January 8, 2009 at: <a href="http://www.ecy.wa.gov/pubs/0806018.pdf">http://www.ecy.wa.gov/pubs/0806018.pdf</a>	0806018.pdf
<b><i>Exploring Wetlands Stewardship: A Reference Guide for Assisting Washington Landowners &amp; Local Communities</i></b> . Jane Rubey with 1st edition assist from Sharon O'Connor. (Washington State Department of Ecology Shorelands and Environmental Assistance Program Publication No. 96-120, 2nd Revision in January 2004). Downloaded on June 29, 2004 at: <a href="http://www.ecy.wa.gov/pubs/96120.pdf">http://www.ecy.wa.gov/pubs/96120.pdf</a>	96120.pdf
<b><i>Washington State Wetlands Identification and Delineation Manual</i></b> . Downloaded on January 22, 2003 at: <a href="http://www.ecy.wa.gov/biblio/9694.html">http://www.ecy.wa.gov/biblio/9694.html</a>	9694.pdf
<b><i>The Economic Value of Wetlands: Wetlands' Role in Flood Protection in Western Washington</i></b> . Downloaded on January 22, 2003 at: <a href="http://www.ecy.wa.gov/biblio/97100.html">http://www.ecy.wa.gov/biblio/97100.html</a>	97100.pdf
<b><i>An ecological assessment of Ohio mitigation banks: Vegetation, Amphibians, Hydrology, and Soils</i></b> . Mack, J.J and M. Micacchion. 2006. Ohio EPA Technical Report WET/2006-1. Ohio Environmental Protection Agency, Division of Surface Water, Wetland Ecology Group, Columbus, Ohio. Downloaded on June 23, 2006 at: <a href="http://www.epa.state.oh.us/dsw/wetlands/Bank_Report_Ohio_Final.pdf">http://www.epa.state.oh.us/dsw/wetlands/Bank_Report_Ohio_Final.pdf</a>	Bank_Report_Ohio_Final.pdf
<b><i>Core Habitat, Not Buffer Zone</i></b> . Raymond D. Semlitsch & John B. Jensen, National Wetlands Newsletter Vol. 23, No. 4 (2001). Downloaded on March 17, 2009 from: <a href="http://www.ecy.wa.gov/programs/sea/sma/download/pdf/douglas/CoreHabitat_semlitsch.pdf">http://www.ecy.wa.gov/programs/sea/sma/download/pdf/douglas/CoreHabitat_semlitsch.pdf</a>	CoreHabitat_semlitsch.pdf
<b><i>Washington State Wetland Rating System for Eastern Washington Revised Annotated Version March 2007</i></b> , Thomas Hrubby, PhD (Ecology Publication # 04-06-15) Downloaded on August 27, 2004 at: <a href="http://www.ecy.wa.gov/programs/sea/wetlands/ratingsystems/EasternWARating_annotated.pdf">http://www.ecy.wa.gov/programs/sea/wetlands/ratingsystems/EasternWARating_annotated.pdf</a>	EasternWARating_annotated.pdf
Personal communication from Dr. Tom Hrubby, Washington State Department of Ecology to Erick Stockdale documenting the basis for the definition of high intensity uses (Wednesday, February 06, 2008)	E-mail from Dr Hurby explaining the science behind the definition of high intensity uses.pdf
<b><i>An Evaluation of Fish and Amphibian Use of Restored and Natural Floodplain Wetlands</i></b> . Julie Henning., Julie. Final Report EPA Grant CD-97024901-1 (Washington Department of Fish and Wildlife, Olympia, Washington, USA: 2004). Downloaded on November 10, 2004 at: <a href="http://wdfw.wa.gov/fish/papers/floodplain_wetlands/floodplain_wetlands.pdf">http://wdfw.wa.gov/fish/papers/floodplain_wetlands/floodplain_wetlands.pdf</a>	floodplain_wetlands.pdf

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<p><b>Tracking Development on Streams and Wetlands.</b> Thurston Regional Planning Council. (November 2001). Downloaded on April 16, 2003 at: <a href="http://www.trpc.org/programs/environment/water/tracking+developments.htm">http://www.trpc.org/programs/environment/water/tracking+developments.htm</a></p> <p>It also includes the following files: track_dev_nov_2001_exec_summary.pdf (Executive Summary), track_dev_nov_2001_tech_appx_toc.pdf (Table of Contents for the Appendices), track_dev_nov_2001_tech_appx_a.pdf (Appendix A), track_dev_nov_2001_tech_appx_b.pdf (Appendix B), track_dev_nov_2001_tech_appx_c.pdf (Appendix C), track_dev_nov_2001_tech_appx_fig2.pdf (Figure 2), track_dev_nov_2001_tech_appx_fig3.pdf (Figure 3), track_dev_nov_2001_tech_appx_fig5.pdf (Figure 5),</p>	<p>track_dev_nov_2001.pdf (The Report)</p>
<p><b>WDOE Irrigation and Wetlands Guidance.</b> Washington State Department of Ecology. (November 2003).</p>	<p>WDOE Irrigation and Wetlands Guidance.pdf</p>
<p><b>Washington State Wetland Rating System for Western Washington Revised Annotated Version August 2006,</b> Thomas Hruby, PhD (Ecology Publication # 04-06-025). Downloaded on April 5, 2007 at: <a href="http://www.ecy.wa.gov/programs/sea/wetlands/ratingsystems/WesternWARating_annotated.pdf">http://www.ecy.wa.gov/programs/sea/wetlands/ratingsystems/WesternWARating_annotated.pdf</a></p>	<p>WesternWARating_annotated.pdf</p>
<p><b>Wetlands and Urbanization: Implications for the Future.</b> Azous, Amanda L. and Richard R. Horner, 1997. <i>Final Report of the Puget Sound Wetlands and Stormwater Management Research Program.</i> Downloaded on June 2, 2003 at: <a href="http://splash.metrokc.gov/wlr/basins/weturban.htm">http://splash.metrokc.gov/wlr/basins/weturban.htm</a></p>	<p>Wet_rept.doc</p>

U.S. Fish & Wildlife Service's **National Wetlands Inventory (NWI)**. This website includes information on the National Wetlands Inventory, interactive maps of wetlands, and downloadable National Wetlands Inventory Maps. Available at: <http://wetlands.fws.gov/>

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