

## Selected Internet Resources on Riparian Areas and Vegetated Buffers

*(Prepared by Russ Cohen as part of "The Science of Vegetated Buffers as a Water Quality Technique" workshop, presented at the MACC Annual Environmental Conference, Saturday, March 1, 2003. Updated + expanded version of this handout prepared 3/12/03.)*

- Massachusetts Wetlands Protection Act Regulations: <<http://www.state.ma.us/dep/brp/ww/files/310cmr10.pdf>>  
[Note: The section referring to the Riverfront Area resource area is at pp.81-92; the preface discussing the 12/20/02 amendment to the WPA regulations relating to "perennial vs. intermittent" can be found at pp.1-4.]
- "Exempt Minor Activities in Riverfront Areas and Buffer Zones under the Wetlands Protection Act" brochure:  
<<http://www.state.ma.us/dep/brp/ww/files/minoract.pdf>>
- "Vegetated Buffer Strips: Slow the Flow to Protect Water Quality", a fact sheet prepared by Mass. DEP as part of its on-line information on how to minimize pollution from horse-keeping operations: <<http://www.state.ma.us/dep/brp/ww/files/buffers.doc>>
- Nine fact sheets on the functions and values of naturally vegetated riparian areas, prepared by Russ Cohen, Riverways Programs, Mass. Dept. Fisheries, Wildlife & Env. Law Enforcement: <<http://www.state.ma.us/dfwele/river/rivfstoc.htm>>
- List of Native Plant Species Suitable for Planting in Riparian Areas in Mass., prepared by Russ Cohen:  
<<http://www.state.ma.us/dfwele/river/pdf/rivSp01NL.pdf>> (see article on page 5)  
[Note: A similar document prepared by Michael Abell of DEP is awaiting final approval by DEP Boston.]
- Riparian Buffers fact sheets, prepared by the Connecticut River Joint Commissions (CRJC) of VT/NH.:  
<<http://www.crjc.org/riparianbuffers.htm>>  
[NOTE: These are **excellent**. If you don't look at any other reference materials listed in this document, be sure to check out this one. The fact sheets are in .pdf format and your computer needs the free Adobe Acrobat software to view them. If you don't have this capability you could contact the CRJC at (603) 826-4800 and see if they would send you a hard copy of the fact sheets.]
- "A Homeowner's Guide to Nonpoint Source Pollution", also put out by the Connecticut River Joint Commissions:  
<<http://www.crjc.org/pdffiles/homeguide.pdf>>
- "National Management Measures to Protect and Restore Wetlands and Riparian Areas for the Abatement of Nonpoint Source Pollution" from the U.S. Environmental Protection Agency: <<http://www.epa.gov/owow/nps/wetmeasures/>>
- "Width of Riparian Zone for Birds", a very good research paper prepared by the U.S. Army Corps of Engineers:  
<<http://www.wes.army.mil/el/emrrp/pdf/si09.pdf>>
- "Rationale, Strategies and Resources for Restoring and Protecting Streamside Corridors", article in River Network's River Voices Newsletter: <<http://www.rivernetwork.org/library/rv1998v9n1.pdf>>
- Center for Watershed Protection (CWP) and the Stormwater Manager's Resource Center (SMRC)  
<<http://www.cwp.org>> and <<http://www.stormwatercenter.net>>  
[CWP is one of the country's best resources on protecting streams and watersheds from the adverse impacts of development. CWP's web site provides advice on buffer design as well as model ordinances requiring the establishment and/or retention of vegetated buffers along waterways. Also worth looking at are two articles on CWP's web site entitled "The Architecture of Urban Stream Buffers" and "Invisibility of Stream/Wetland Buffers: Can Their Integrity be Maintained?"]
- "Buffer Strips: Common Sense Conservation" website by the USDA Natural Resources Conservation Service (NRCS):  
<<http://www.nrcs.usda.gov/feature/buffers/>> [For local technical and financial assistance from the Mass. NRCS office on this issue, contact Rick DeVergilio at (413) 253-4351 or (413) 253-4375 (fax).]
- National Association of Conservation Districts (NACD)'s "Buffer Notes" monthly newsletter:  
<<http://www.nacdnet.org/buffers/archive.htm>>

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## Selected Internet Resources on Riparian Areas/Vegetated Buffers *(continued from reverse side)*

- Riparian Forest Buffers information from the National Agroforestry Center: <<http://www.unl.edu/nac/riparian.html>>
- Riparian Buffer and “Streamside Science” information from the state of Oregon: <<http://www.oacd.org/fs05stbu.htm>> and <[http://www.planning.ci.portland.or.us/pdf/hps\\_sci\\_sum.pdf](http://www.planning.ci.portland.or.us/pdf/hps_sci_sum.pdf)>
- Riparian Forest Buffer information from the Chesapeake Bay Program: <<http://www.chesapeakebay.net/info/forestbuff.cfm>> [NOTE: under the “Publications” section on this page you will find a link to a .pdf version of a 481-page document entitled “Chesapeake Bay Riparian Handbook: A Guide for Establishing & Maintaining Riparian Forest Buffers”.]
- Values of Riparian Buffers, from the state of Vermont: <<http://www.anr.state.vt.us/dec/waterq/Rivers/benefitsriparian.pdf>> and <<http://www.anr.state.vt.us/dec/waterq/VT319Watershed.htm>>. [Vermont has also published an attractive and informative newsletter entitled “The Streamside Sentinel” that extols the virtues of naturally vegetated riparian areas – you can obtain a free copy by calling (802) 241-3770 or view on-line at <<http://www.vtwaterquality.org/Planning/streamsideSentinel.pdf>>.]
- “Delaware’s Riparian Buffers – Building a line of defense to protect our state’s waters”: <<http://www.dnrec.state.de.us/dnrec2000/Library/RIPARIANBUFFERS1.PDF>>
- “The Use of Riparian Buffers to Reduce Nonpoint Source Pollution from Development”, a report to the Maine Legislature’s Joint Standing Committee: <<http://www.state.me.us/dep/blwq/report/buffer.pdf>>
- “The space between: Lying at the edge of land and water, riparian habitats play a crucial role in the ecosystem” – article appearing in the Gulf of Maine Times, Fall 2002: <[http://www.gulfofmaine.org/times/fall2002/science\\_insights.html](http://www.gulfofmaine.org/times/fall2002/science_insights.html)>
- Riparian buffer information from the Commonwealth of Virginia: <<http://state.vipnet.org/dof/rfb/riparian/rwg/genbuff.htm>>
- “Understanding the Science Behind Riparian Forest Buffers: Effects on Water Quality”, from Virginia Cooperative Extension: <<http://www.ext.vt.edu/pubs/forestry/420-151/420-151.html>>
- Riparian buffer fact sheets and other source materials from the State of Maryland (in .pdf and .html format): <<http://www.riparianbuffers.umd.edu/home.html>> and <<http://www.agnr.umd.edu/MCE/Publications/Category.cfm?ID=8&top=32>> (see documents FS 724-FS 733)
- “Healthy Land – Clean Water – Riparian Management Systems”, information on the effectiveness of riparian buffers in filtering out excess nutrients and other pollutants from agricultural land, from Iowa State University: <<http://www.buffer.forestry.iastate.edu/>>
- “Riparian Forest Revegetation for Water Quality Improvement” – from Minnesota: <<http://www.hort.agri.umn.edu/h5015/97papers/hanson.html>>
- “Why Restoring Shoreland Vegetation is Important” [and how to do it] – from Wisconsin Cooperative Extension: <<http://www.uwex.edu/ces/shoreland/Why2/whyres.htm>>
- Research on Shoreland Systems, from Wisconsin DNR - a **wealth** of information + hot links to research papers on the value of vegetated shorelines for water quality and other functions: <<http://www.dnr.state.wi.us/org/water/wm/dsfm/shore/research.htm>>
- Healthy lawns and gardens without chemicals brochure and demonstration plot, Marblehead, MA: <<http://208.56.92.121/community.old/PDF/Lawn.pdf>>
- Why Phosphorous is a problem and what to do about it, from the New York State Federation of Lake Associations: <<http://www.nysfola.org/phosphorus/>>
- How to assess the health of riparian areas (from the province of Alberta): <<http://www.cowsandfish.org/health.html>>

And, last but not least:

- “Riparian Areas: Functions and Strategies for Management” <<http://books.nap.edu/books/0309082951/html/index.html>> [This is the title of a new book produced by the well-respected National Academy Press and National Research Council. An on-line version of the book may be viewed for free on-line at this Web address. A description of the research project that led to the publication of this book can be read at <<http://www4.nas.edu/webcr.nsf/ProjectScopeDisplay/WSTB-U-98-01-A>>. I have not yet had a chance to review this information in detail, but from the looks of it, it is a carefully and extensively researched publication put together by an impressive team of experts on the topic. This publication should prove to be quite helpful in providing further proof of the importance of protecting and restoring naturally vegetated riparian areas.]