

Virginia Water Central

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American Rubyspot damselfly perched on a Water-willow flower head in the New River at Fosters Falls (Wythe County), July 23, 2011. Photo by Anne Jacobsen.

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Editor's Note



By Alan Raflo, Virginia Water Central Editor

This issue of *Water Central* is devoted primarily to our annual inventory of water-related bills in the Virginia General Assembly. Because the inventory takes a lot of space, I've omitted from this issue some of the usual content, particularly the news section. The Water Status Review, Government Issues Review, and Notices sections, however, are included.

Let me remind you about four other services that the Virginia Water Center provides to help you keep up with water-related news, events, and activities.

The **Virginia Water Central News Grouper**, available online at <http://vawatercentralnewsgrouper.wordpress.com/>, provides annotated links to water news items, grouped into topics.

The **Quick Guide to Virginia Water-related Conferences, Workshops, and Similar Events**, online at <http://vwrrc.vt.edu/VAConfQuickGuide.html>, provides basic information on various events and has links to the events lists from many other organizations, including the Virginia Regulatory Town Hall's listing of government meetings.

Virginia Water Radio, available online at virginiawaterradio.org, features two-minute segments of sounds and music and how they relate to Virginia water resources. This is a change, since June 2011, from Virginia Water Radio's original format, which had about eight minutes of news, sounds, and events. A podcast or RSS subscription is available.

And the **Virginia Water Monitoring Council** provides regular e-mail announcements of meetings, reports, and other items related to water quality and water monitoring. You can receive the e-mail by joining the Council; to do so, contact Jane Walker at (540) 231-4159 or janewalk@vt.edu.

Thank you for your continued interest in *Virginia Water Central*, and I hope you'll give these other services a try.



TEACHING WATER Especially for Virginia's K-12 teachers

This Issue and the Virginia Standards of Learning

Below are suggestions for Virginia Standards of Learning (SOLs) that may be supported by items in this issue. The SOLs listed below are from Virginia's 2010 Science SOLs and 2008 Social Studies SOLs. Abbreviations: CE = civics and economics; ES=earth science; GOV = Va. and U.S. government; LS=life science; WG = world geography.

Newsletter Section	Science SOLs	Social Studies SOLs
Feature: Water in the 2011 Virginia General Assembly	6.7, 6.9, ES.10	CE.7, CE.8, GOV.8, GOV.9, GOV.16
Water Status: Precipitation, Groundwater, Streamflow, and Drought	3.9, 4.6, 4.9, 6.3, 6.7, LS.6, ES.6, ES.8, ES.12	WG.2

FEATURE ARTICLE

Water in the 2011 Virginia General Assembly

The 2011 Virginia General Assembly convened January 12 and adjourned February 26. The reconvened (“veto”) session was held April 6. During the session, the Assembly considered 2965 measures (2692 introduced this year and 273 continued from 2010), passing 1599 of them and defeating 1366. The Assembly also considered amendments to the 2010-12 biennial state budget.

In this article, *Virginia Water Central* lists 183 measures in the 2011 Assembly that dealt with water resources directly or with land uses or other activities that are likely to affect water. The list comes from the Legislative Information System (LIS) Web site, at <http://leg1.state.va.us>, in the categories indicated by sub-headings below. Bill summaries were also taken from LIS (edited in some cases for space or clarity). Bills are listed under only one category, even if LIS listed them more than once. The categories searched and the bills listed include all those with *direct* water relevance (such as bills in the “Water and Sewer Systems” category) as well as those with a *potential or indirect* relevance to water (such as bills dealing with land conservation and energy-efficiency, two activities that ultimately affect water resources). *Water Central’s* list below *does not necessarily include all bills* that potentially affect Virginia’s water resources.

Within each category, bills are listed in order of their **bill number**, using the following abbreviations: **HB** = bill started in House of Delegates; **HJ** = joint resolution started in the House; **SB** = bill started in the Senate; and **SJ** = joint resolution started in the Senate. Numbers in the left-hand column have been added by *Water Central* for cross-referencing among the bills.

A table at the end of the article lists several topics and bills from the 2011 Assembly that received attention in various news media. For a selection of online news articles about water-related legislation in the 2011 Assembly, please visit the *Virginia Water Central* News Grouper at <http://www.delicious.com/araflo/11VaGenAssembly>.

Water Central’s inventories of water-related bills in previous General Assembly sessions (1998-2010) are available online at www.vwrrc.vt.edu/legislation.html.



2011 Virginia General Assembly Water-related Bill Inventory

If you are reading this article online, click on the bill numbers to access bill information at the Legislative Information System (LIS).

Frequently used abbreviations: DCR = Department of Conservation and Recreation; DEQ = Virginia Department of Environmental Quality; DGIF = Department of Game and Inland Fisheries; DMME = Department of Mines, Minerals and Energy; EPA = U.S. Environmental Protection Agency; House ACNR = House Agriculture, Chesapeake, and Natural Resources committee; SCC = State Corporation Commission; Senate ACNR = Senate Agriculture, Conservation, and Natural Resources committee; VDH = Virginia Department of Health; IMS = Virginia Institute of Marine Science; VMRC = Virginia Marine Resources Commission.

BUDGET

1	HB 1500	Budget Bill. Amendments to the 2010-12 biennial budget (July 1, 2010-June 30, 2012).	Passed.
2	HB 1938	Budget process; changes State's budget from biennial budget to budget covering single fiscal year.	Failed in House Appropriations.
3	HB 2517	Budget process; zero-based principles required for preparation of budget bills.	Failed in House Appropriations.
4	SB 800	Budget Bill. Appropriations for the 2010-2012 biennial budget.	Passed.

CONSERVATION

Land Conservation Bills

5	HB 1445	Land preservation tax credit. Limits maximum amount that any taxpayer may receive to \$10 million annually.	Incorporated into HB 1820 (#8).
6	HB 1621	Open-space land. Expands the definition in the Open-Space Land Act to include lands provided or preserved for agricultural and forestal production.	Passed.
7	HB 1715	Conservation easements. Removes requirement that person recording easement mail certified copy to attorney general, but requires copies to other parties.	Passed.
8	HB 1820	Land preservation tax credits. Limits maximum amount of credits in any calendar year by the Department of Taxation to \$100 million plus any previously issued credits that have been disallowed or invalidated by the Department.	Passed.
9	SB 979	Land preservation tax credit. Provides that the annual report compiled by the DCR on qualified donations include information on riparian buffers required on land qualifying for tax credits.	Passed.
10	SB 1087	Land preservation tax credits; requires use of licensed transfer agent to transfer to taxpayer.	Incorporated into SB 1232 (#13).
11	SB 1088	Land preservation tax credits; refunded by the Tax Commissioner.	Failed in Senate Finance.
12	SB 1104	Open-space land. Companion is HB 1621 (#6); please see that bill for summary.	Passed.
13	SB 1232	Land preservation tax credits. Companion is HB 1820 (#8); please see that bill for summary.	Passed.

Other Conservation Bills

14	HB 1397	Residential energy-efficiency standards and federal legislation. Would have exempted any residential building or manufactured home in Virginia from being subject to federal legislation relating to residential energy-efficiency standards if such buildings comply with the Statewide Uniform Building Code, and would have prohibited state agencies from assisting implementation of federal climate change legislation.	Passed House; failed in Senate ACNR.
15	HB 1398	State responses to carbon dioxide standards. Would have deferred to the U.S. EPA the enforcement of any carbon dioxide standards or cap-and-trade provisions that are included in the federal Clean Air Act; prohibited the governor or the General Assembly from enforcing any climate-change international agreement until approved by the U.S. Senate; and authorized the attorney general to bring an action against the EPA if he or she finds that mandated standards are based on a finding that is not scientifically demonstrated.	Failed in House Courts of Justice.
16	HB 1418	Special license plates for the Blue Ridge Parkway and James River Park System. Authorizes these plates and designates the activities in these areas to be supported by the revenue generated.	Passed.
17	HB 1474	Erosion and sediment control. Would have allowed public service authorities annually to file general erosion and sediment control specifications with the Virginia Soil and Water Conservation Board for construction of water and sewer lines. See similar HB 1495 (#18).	Failed in House ACNR.
18	HB 1495	Erosion and sediment control plans. Authorizes water, sewer, sewage disposal, stormwater control, refuse collection, and disposal authorities to file a general erosion and sediment control plan annually with the Virginia Soil and Water Conservation Board. See similar HB 1474 (#17).	Passed.
19	HB 1498	Non-durable plastic bags. Would have banned the use of non-durable plastic carry-out bags by retailers.	Failed in House ACNR.
20	HB 1737	Stormwater management systems. Clarifies statutory language and makes technical changes regarding a locality's authority to regulate stormwater management.	Passed.
21	HB 1751	Lawn fertilizers; prohibits applications of those containing phosphorus for use on lawns, etc.	Incorporated into HB 1831 (#26).
22	HB 1760	Stormwater management fees; localities shall provide waivers to federal, state, etc., agencies.	Incorporated into HB 1737 (#20).
23	HB 1828	Virginia Pollution Abatement Permit inspections. Removes the requirement that the DEQ inspect facilities covered by a permit annually for confined animal-feeding operations or once every five years for other facilities, and sets a new standard that all facilities should be inspected to ensure compliance with statutory, regulatory, and permit requirements. Companion is SB 1298 (not listed in table).	Passed.
24	HB 1829	Virginia Soil and Water Conservation Board membership. Increases the board's voting membership from 10 to 12 by adding three new at-large members—who are required to be knowledgeable of stormwater management—and changing the DCR director to a non-voting member.	Passed.
25	HB 1830	Agricultural resource-management plans; compliance with water-quality requirements. Allows agricultural landowners who implement a resource-management plan—following criteria to be specified by the Soil and Water Conservation Board—to be deemed in full compliance with (i) any load allocation contained in a total maximum daily load (TMDL) established under the federal Clean	Passed.

		Water Act addressing benthic, bacteria, nutrient, or sediment impairments; (ii) any requirements of the Virginia Chesapeake Bay TMDL Watershed Implementation Plan; and (iii) applicable state water-quality requirements for nutrients and sediment. The presumption does not preclude enforcement of provisions pursuant to a resource-management plan otherwise required by law, of a Virginia Pollutant Discharge Elimination System permit, of a Virginia Pollution Abatement permit, or of requirements of the Virginia Chesapeake Bay Preservation Act.	
26	HB 1831	Banning lawn fertilizers with phosphorus, de-icers with urea. Prohibits the sale, distribution and use of lawn maintenance fertilizer containing phosphorus beginning December 31, 2013 (not applicable to starter fertilizer, manipulated manure, yard waste compost, and certain other materials). Also, beginning on December 31, 2013, it will be unlawful to offer for sale any de-icing agent containing urea, nitrogen, or phosphorus intended for application on parking lots, roadways, and sidewalks, or other paved surfaces. The Board of Agriculture and Consumer Services will establish reporting requirements for contractor-applicators and licensees who apply lawn fertilizer to more than 100 acres of non-agricultural lands annually. Golf courses must implement a nutrient-management plan—reviewed by the DCRs—by July 1, 2017. The DCR is to establish a cost-share program to assist in implementation of the nutrient-management plans. The Department of Agriculture and Consumer Services is authorized to develop consumer information and recommended best practices for the application of lawn fertilizer and is required to provide a list of contractor-applicators who apply fertilizer on non-agricultural lands and have met the training requirements. The bill prohibits localities from further regulating contractor-applicators who are in compliance with the fertilizer laws, golf courses that have approved nutrient management plans, and agricultural operations with a resources-management plan or a nutrient-management plan.	Passed.
27	HB 2047	Virginia Waterways Clean Up and Consumer Choice Act; paper and plastic bag fee. Would have imposed a five-cent fee on non-durable paper and plastic bags (with certain exemptions). Retailers would have retained one cent (or two cents) if the retailer has a customer bag-credit program) with the rest of the revenue to be deposited in the Virginia Water Quality Improvement Fund.	Failed in House Finance.
28	HB 2057	Regulation of fertilizers. Revises laws governing the manufacture and application of fertilizer, with provisions regarding labeling, permit periods, reporting by commercial fertilizer distributors, and penalties.	Passed.
29	HB 2058	Water quality reports. Consolidates several reports on the progress in cleaning up Virginia's impaired waters into semi-annual and annual reports submitted by the Secretary of Natural Resources to the legislative committees of oversight.	Passed.
30	HB 2071	Stormwater utility fees: exemption for certain religious and non-profit uses.	Failed in House Counties, Cities and Towns.
31	HB 2287	Non-hazardous solid waste management facilities. Would have established the same fee structure for sanitary landfills, non-captive industrial landfills, and construction and demolition debris landfills, at \$0.145 per ton of waste deposited in their facility, to be adjusted annually based on the Consumer Price Index. Incinerators and energy recovery facilities would have been assessed an annual fee of \$0.03 per ton . The bill also would have required the DEQ to develop and implement policies and procedures to maximize efficiency and eliminate unnecessary delays in processing waste-permit	Failed in House ACNR.

		applications and amendments. See similar SB 1007 (#118).	
32	HB 2341	Plastic bags; 20-cent plastic bag fee.	Incorporated into HB 2047 (#27).
33	HB 2344	Cigarette butts disposal. Would have imposed a civil penalty of \$100 for each cigarette butt disposed of improperly, with proceeds to be deposited in the Litter Control and Recycling Fund.	Failed in House ACNR.
34	HB 2348	Fertilizer and deicing agents; requires certain localities to regulate sale and application.	Incorporated into HB 1831 (#26).
35	HB 2368	Supplemental environmental projects. Authorizes the Virginia Soil and Water Conservation Board and the DCR to utilize supplemental environmental projects through court orders. The bill defines "supplemental environmental project," establishes objectives that such projects must meet, and specifies conditions for using such projects as part of a court order. The DEQ has had similar authority since 1997.	Passed.
36	HB 2372	Flashing amber warning lights. Allows flashing amber warning lights on certain state vehicles performing environmental functions.	Passed.
37	HB 2414	License plates, special; issuance to supporters of the James River Park System.	Incorporated into HB 1418 (#16).
38	HB 2463	Fertilizer and deicing agents; regulation of application, report.	Incorporated into HB 1831 (#26).
39	HB 2520	Advisory boards, councils, and other advisory collegial bodies: elimination of certain ones. Among several other provisions, the Lower James River Advisory Committee is eliminated.	Passed.
40	SB 875	Renewable portfolio standards. Would have removes the requirement that utilities participating in a renewable portfolio standard (RPS) program collectively use no more than 1.5 million tons of forest products each year towards meeting RPS goals.	Failed in Senate ACNR.
41	SB 990	Regulation of fertilizers. Companion bill is HB 2057 (#28); please see that bill for summary.	Passed.
42	SB 922	Fertilizer; regulation of application and labeling.	Incorporated into SB 1055 (#44).
43	SB 968	Endangered and threatened species programs. Would have consolidated into one program the endangered plant and insect species program administered by the Virginia Department of Agriculture and Consumer Services, the Virginia Natural Area Preserve Program and Cave Protection Program administered by the DCR, and the endangered fish and wildlife program.	Failed in Senate ACNR.
44	SB 1055	Banning lawn fertilizers with phosphorus, de-icers with urea. Companion is HB 1831 (#28); please see that bill for summary.	Passed.
45	SB 1060	Impoundment structures; determination of hazard potential classification, development of permit. Allows the DCR director to provide financial assistance for the determination of the hazard classification for impounding structures, dam-break analysis, mapping and digitization of dam-break inundation zones, incremental-damage analysis, and other engineering requirements such as emergency action plan development. The bill authorizes, under certain circumstances, a simplified dam-break inundation-zone analysis to determine whether the impounding structure has a low hazard-potential classification.	Passed.
46	SB 1064	Erosion & sediment control plans. Companion is HB 1495 (#18); please see that bill for summary.	Passed.
47	SB 1099	Nonpoint nutrient offsets. Establishes priorities to be used by	Passed.

		permit issuing authorities when considering off-site phosphorous control options for stormwater permits, and provides conditions under which use of an off-site option can be granted.	
48	SB 1233	Virginia Law Officers Retirement System. Adds DCR conservation officers as members of this retirement system.	Passed Senate; failed in House Appropriations.
49	SB 1412	Virginia Soil and Water Conservation Board membership. Companion bill is HB 1829 (#24); please see that bill for summary.	Passed.
50	SB 1465	Lawn fertilizer; regulation of application and labeling.	Incorporated into SB 1055 (#44).
51	SB 1471	Advisory boards, councils, and other advisory collegial bodies: elimination of certain ones. Companion is HB 2520 (#39); please see that bill for summary.	Passed.

ENERGY CONSERVATION AND RESOURCES

52	HB 1542	Renewable energy property and energy audit tax credits. Would have granted an income tax credit (of various amounts and percentages of cost) to residences and businesses for renewable energy property (including solar panels, solar hot water, and geothermal heat pumps) and residential energy audits.	Failed in House Finance.
53	HB 1547	Income tax credit for nonprofit charitable donations for Energy Star qualified products. Would have granted a tax credit to taxpayers making a donation to charitable nonprofit organizations that use the donation for Energy Star qualified products.	Failed in House Finance.
54	HB 1598	Solar energy collection devices and community associations. Would have invalidated restrictive covenants adopted by a community association that prohibit solar energy devices on an owner's property.	Failed in House Counties, Cities and Towns.
55	HB 1685	Agricultural net energy metering. Would have made operators of agricultural net metering facilities an eligible category under the state's net energy metering program. ("Net energy metering" means measuring the difference electricity supplied to an eligible customer-generator from the electric grid and the electricity generated and fed back to the grid by the customer-generator.)	Failed in House Commerce and Labor.
56	HB 1686	Distributed solar generation demonstration programs. Directs the State Corporation Commission (SCC) to consider for approval petitions filed by a utility to own and operate distributed solar generation facilities and to offer special tariffs to facilitate customer-owned distributed solar generation as alternatives to net metering.	Passed.
57	HB 1912	Electric utility rate-making procedures and renewable energy. Directs the SCC, when required to approve the construction of an electric utility facility, to consider the economic and job-creation objectives of the Commonwealth Energy Policy, and to consider the extent to which the use of renewable energy resources by a utility would further the objectives of that Policy and whether the cost of such resources would result in unreasonable rate increases.	Passed.
58	HB 1983	Net energy metering program: allowable capacity. Increases from 10 to 20 kilowatts the maximum capacity of an electrical generation facility of a residential customer that qualifies for participation in a net energy metering program, and provides that a customer-generator with a capacity above 10 kilowatts shall pay a monthly standby charge.	Passed.
59	HB 2117	Electric utility regulatory system. Would have reinstated much of the system under which investor-owned electric utilities were regulated prior to 1999, repealed the Virginia Electric Utility Regulation Act, and	Failed in House Commerce and Labor.

		reenacted provisions relating to SCC ratemaking that existed prior to 2007 legislation that re-regulated most investor-owned electric utilities.	
60	HB 2191	Voluntary Solar Resource Development Fund established. Establishes this revolving-loan fund and requires the DMME to provide the option for electric-utility customers to make voluntary contributions. The fund will be used to make loans for eligible solar-energy projects. The measure expires July 1, 2016.	Passed House; in Senate Commerce and Labor.
61	HB 2308	Clean special fuels motor vehicle and plug-in electric motor vehicle tax credit.	Failed in House Finance.
62	HB 2316	Clean Energy Manufacturing Incentive Grant Program. Repeals the Solar Photovoltaic Manufacturing Incentive Grant Program effective July 1, 2013, and the Biofuels Production Incentive Grant Program effective July 1, 2017, to create a program that provides financial incentives to companies that manufacture or assemble equipment, systems, or products used to produce renewable or nuclear energy, or products used for energy conservation, storage, or grid efficiency. To be eligible for a grant, a manufacturer must make a capital investment greater than \$50 million and create at least 200 full-time jobs that pay at least the prevailing wage (a wind-energy supplier must make a capital investment of greater than \$10 million and create at least 30 full-time jobs).	Passed.
63	HB 2389	Virginia Resources Authority. Adds renewable energy projects to those projects which the Authority may finance.	Passed.
64	HB 2446	Renewable energy portfolio standard program. Would have provided that electric utilities would receive double credit toward meeting the goals of the renewable energy portfolio standard program for energy from biomass or waste-to-energy; triple credit toward such goals for energy from sunlight (formerly double); and quadruple credit toward such goals for energy from sunlight if the facility is located in Virginia and the majority of the products used to generate the energy are manufactured or assembled in the United States.	Passed House; failed in Senate Commerce and Labor.
65	HB 2447	Renewable energy incentives. Would have created various incentives for development of renewable energy facilities, including establishing a preference in energy procurement for state facilities for the use of renewable energy, setting a goal for 20 percent of the energy consumed at state facilities to be renewable energy by 2025, allowing the Department of General Services to contract for renewable energy on a negotiated basis without using a competitive procurement process, establishing a Virginia Resources Authority program under which 70 percent of the amount of loans for the capital cost of a qualifying facility may be guaranteed, and expanding the existing permit-by-rule program for small renewable energy facilities to include all renewable energy facilities, regardless of size.	Failed in House Commerce and Labor.
66	HB 2470	Carbon dioxide emissions. Would have prohibited the State Air Pollution Control Board and the DEQ from restricting emissions of carbon dioxide and would have declared any federal law or regulation on carbon dioxide emissions to be without authority and of no force within the boundaries of the Commonwealth.	Failed in House Health, Welfare and Institutions.
67	HB 2514	Electric utility regulation. Would have established various conditions for rate-of-return requests by investor-owned utilities.	Failed in House Commerce and Labor.
68	HJ 605	National Offshore Wind Technology Center. Expresses the General Assembly's support for establishing such a center in Hampton Roads.	Passed.
69	HR 72	Greenhouse gas emission regulation. Expresses the House's request that the Congress prohibit the U.S. EPA from regulating	Passed House.

		greenhouse gas emissions.	
70	SB 814	Offshore energy resources policy. Would have declared it the policy of the Commonwealth to support oil and natural gas exploration, development, and production 75 miles or more off Virginia's coast, subject to the condition that such activities not be permitted if they would adversely affect aquatic resources of the Chesapeake Bay. Currently, the Commonwealth's policy is to support these activities 50 miles or more off Virginia's coast. The measure also would have made support for commercial offshore wind facilities part of the Commonwealth's policy.	Failed in Senate Commerce and Labor.
71	SB 859	Mid-Atlantic Offshore Wind Energy Infrastructure Development Compact repealed.	Passed.
72	SB 862	Commonwealth Energy Policy on local renewable energy facility siting ordinances. Requires that such ordinances be consistent with the Commonwealth Energy Policy and provide reasonable criteria to be addressed in the siting of any wind or solar energy facility.	Passed.
73	SB 883	Electric utility regulatory system. Companion bill is HB 2117 (#59); please see that bill for summary.	Failed in Senate Commerce and Labor.
74	SB 975	Voluntary Solar Resource Development Fund established. Companion bill is HB 2191 (#60); please see that bill for summary.	Passed.
75	SB 981	Renewable energy sources; tax credit for producing energy. Would have established, beginning January 1, 2012 and ending July 1, 2016, a \$1-per-megawatt-hour income tax credit for electricity or thermal energy generated from renewable sources harvested or captured in Virginia.	Passed Senate; failed in House Finance.
76	SB 1134	Offshore Wind Development Authority; membership. Exempts members of the U.S. Armed Forces who serve on Authority from a provision barring federal government employees from holding a state office.	Passed.
77	SB 1229	Clean Energy Manufacturing Incentive Grant Program created.	Incorporated into SB 1360 (#79).
78	SB 1392	Electric utility ratemaking incentives for using Virginia coalbed methane gas. Authorizes electric utilities to earn an enhanced rate of return on investments in generation facilities that are fired at least 50 percent by coalbed methane gas produced from Virginia wells. Companion bill is HB 2337 (#113).	Passed Senate; in House Commerce and Labor.
79	SB 1360	Clean Energy Manufacturing Incentive Grant Program. Companion bill is HB 2316 (#62); please see that bill for summary.	Passed.
80	SB 1398	Coalbed methane gas; conflicting claims to ownership. Would have established rules for resolving conflicting claims.	Failed in Senate ACNR.

FISHERIES AND HABITAT OF TIDAL WATERS

81	HB 1656	Menhaden fishing restriction. Would have prohibited fishing for Menhaden within one mile of the low mean water mark in waters adjacent to the Hampton, Newport News, Norfolk, and Virginia Beach.	Failed in House ACNR.
82	HB 1689	Pound net licenses in waters of Chesapeake Bay. Would have prohibited the VMRC from issuing any additional pound net licenses for the waters of the Chesapeake Bay east of the Bay Bridge Tunnel, and prohibited current license holders from transferring the license to anyone who would set a pound net in the designated area, but allowed current license holders to fish these waters with pound nets.	Failed in House ACNR.

83	HB 1712	Fishing in interjurisdictional waters. Clarifies that a person fishing in interjurisdictional inland waters is subject to the laws of the jurisdiction in which he is fishing. Companion bill is SB 1299 (not included in this table).	Passed.
84	HB 1724	Crab dredging season. Authorizes the VMRC to adjust the opening or closing dates of a the Blue Crab dredge season or to close the crab dredge season for one or more years; currently the Commission may set the season for only one year at a time.	Passed House; failed in Senate ACNR.
85	HB 1886	Crabbing area. Clarifies the boundaries where taking or catching Blue Crabs is prohibited.	Passed.
86	HB 1913	Menhaden fishing restriction. Would have prohibited catching of Menhaden with purse nets in the Rappahannock River and its tributaries. Currently, such fishing is prohibited in the Rappahannock above and west of the R.O. Norris, Jr., Bridge (Route 3 between Lancaster County and Middlesex County).	Failed in House ACNR.
87	HB 1944	Public oyster ground closings notice. Increases from five to 30 days the public notice time that the VMRC is required to give before closing a public oyster ground, except for closings by the Virginia Department of Health or for state replenishment programs.	Passed.
88	HB 2165	Menhaden fishing. Would have authorized the VMRC to assess a \$10/ton fee on harvested Menhaden, with the fees o be used to evaluate the condition of the Menhaden fishery.	Failed in House Finance.
89	HB 2166	Summer flounder size limits. Would have directed the VMRC to set the same size limits for summer flounder taken by <i>commercially</i> licensed hook-and-line fishermen and persons fishing <i>recreationally</i> with a hook and line.	Failed in House ACNR.
90	HB 2186	Chesapeake Bay crab meat labeling. Would have required that containers of crab meat represented as Chesapeake Bay crab meat include at least 51 percent by weight crab meat from the Bay and meet VDH standards for blending and repacking of crab meat.	Failed in House ACNR.
91	HB 2263	Commercial fisheries taxation, regulatory relief, and preservation. Would have provided four mechanisms for commercial fishery tax relief, regulatory relief, and preservation, including land-preservation tax credits for waterfront land, local commercial fisheries zones, a separate class of property for tax rate purposes, procedures for covenants to preserve the availability and affordability of real property for commercial fisheries businesses.	Failed in House ACNR.
92	HB 2280	Menhaden management. Would have directed the VMRC to adopt regulations to implement the Interstate Fishery Management Plan for Atlantic Menhaden, required that any moratorium on the fishery be subject to legislative review, and repealed the governor's authority to implement Menhaden management measures by proclamation.	Failed in House ACNR.
93	HB 2369	Menhaden harvesting cap. Would have reduced—starting January 2012—the cap on the Menhaden harvesting 20 percent annually until the harvesting were prohibited.	Failed in House ACNR.
94	SB 765	Menhaden management. Companion bill is HB 2369 (#92); please see that bill for summary.	Failed in Senate ACNR.
95	SB 940	Striped Bass recognition. Designates the Striped Bass as Virginia's official saltwater fish, and changes the Brook Trout from official state fish to official freshwater fish.	Passed.
96	SB 963	Aquaculture opportunity zones. Removes the authority of the VMRC to establish commercial shellfish aquaculture opportunity zones in the waters off the shores of the Northern Neck, the Middle Peninsula, and Tangier Island.	Passed.

97	SB 964	Coastal resource management. Requires the VMRC to establish a general permit regulation that authorizes and encourages living shorelines as the preferred alternative for stabilizing tidal shorelines. The Commission, in cooperation with the DCR and with technical assistance from the Virginia Institute of Marine Science (VIMS), shall also develop integrated guidance for the management of tidal shoreline systems for the regulatory entities with authority over shoreline management projects. VIMS shall also develop comprehensive coastal resource management guidance for local governments. Those localities in Tidewater Virginia must incorporate such guidance at the next scheduled review of their comprehensive plan. [<i>Ed. Note:</i> See Rivers and Coast , Spring 2011, from VIMS Center for Coastal Resources Management, for an article about comprehensive coastal resource management plans.]	Passed.
98	SB 1190	Aquaculture production activities and right-to-farm law. Would have expanded the definitions of agricultural operation and production agriculture in the “Right to Farm Act” to include aquaculture, meaning no special exception or conditional use permit would be required for aquaculture in areas zoned for agriculture.	Passed Senate; failed in House ACNR.

GAME, INLAND FISHERIES, AND BOATING

99	HB 1622	Reckless operation of watercraft to include such operation of paddleboards and other self-propelled watercraft.	Failed in House ACNR.
100	HB 1629	Parking violations on their DGIF properties. Clarifies that parking violations on DGIF properties are subject to a \$25 civil penalty, not to criminal penalties.	Passed.
101	HB 1971	Acquisition of title to an abandoned vessel; changes notification procedures. Changes the newspaper notification requirement—from three days to three issues—for a landowner proceeding to acquire title to a vessel abandoned on his land or in water adjacent to his land.	Passed.
102	HB 2176	Stocking or introduction of game birds, animals, and fish. Requires that DGIF policies to acquire and introduce any new species of game birds, animals, or fish be implemented only with the authorization and cooperation of affected local governments.	Passed.
103	HB 2334	Fish and Wildlife Commission. Would have established an eight-member Fish and Wildlife Commission to review matters referred to it by legislative committees.	Passed House ACNR; failed in House Appropriations.
104	HB 2370	Multiple-year licenses. Authorizes the Board of Game and Inland Fisheries to issue multiple-year hunting, fishing, or trapping licenses or permits, with the costs of these licenses not to exceed the costs of permits or licenses purchased annually.	Passed.
105	HB 2423	Drunk boating; transfer of custody of person arrested. Reinstates language allowing for arrest without warrant of a person suspected of operating a boat while intoxicating and allowing the transfer of custody to another officer who may obtain a warrant.	Passed.
106	SB 982	Endangered and threatened species. Authorizes the Board of Game and Inland Fisheries to adopt regulations on the taking, possession, etc., of experimental populations of threatened or endangered species.	Passed.
107	SB 991	Acquisition of title to an abandoned vessel; changes notification procedures. Companion bill is HB 1971 (#101); please see that bill for summary.	Passed.

108	SB 995	Special combined individual sportfishing licenses; boat license. Creates an additional boat-license option for special combined individual sportfishing licenses (which allows licensees to fish in all the tidal waters of the Commonwealth) that enables recreational boaters to fish in the tidal waters of the Commonwealth under one combined license.	Passed.
109	SB 1017	Stocking or introduction of game birds, animals, and fish. Companion bill is HB 2176 (#102); please see that bill for summary.	Passed.

MINES AND MINING

110	HB 1988	Ownership of space opened underground by coal removal. Would have provided that the owner or the lessee of coal retains the right to any coal remaining after mining as well as the shell, container chamber, passage, space and void opened underground that was created by the removal of the coal. The bill would not have affected ownership rights in natural gas or coalbed methane.	Passed House; failed in Senate ACNR.
111	HB 2123	Coal surface mining operations; National Pollutant Discharge Elimination System (NPDES) permits. Clarifies that the authority to issue NPDES permits for coal surface mining has been delegated by the SWCB to the director of the DMME, and expressly gives the director the authority to determine whether a discharge may violate a water-quality standard and to decide what testing or monitoring is necessary.	Passed.
112	HB 2181	Coalbed methane gas; conflicting claims to ownership. Companion bill is SB 1398 (#80); please see that bill for summary.	Passed House ACNR; failed in House Courts of Justice.
113	HB 2237	Electric utility ratemaking incentives for using Virginia coalbed methane gas. Companion bill is SB 1392 (#78); please see that bill for summary.	Passed.
114	SB 1025	Coal surface mining operations; National Pollutant Discharge Elimination System (NPDES) permits. Companion bill is HB 2123 (#111); please see that bill for summary.	Passed.
115	SB 1111	Virginia Coal Employment and Production Incentive Tax Credit. Extends from July 1, 2011, to July 1, 2016, the sunset date for the redemption or refund provision of this tax credit. Electricity generators in the Commonwealth are allowed three-dollar-per-ton credit for each ton of Virginia-mined coal used.	Passed.

WASTE DISPOSAL

116	HB 1703	Alcoholic beverages packaging: mandating recycling at government stores.	Failed in House General Laws.
117	HB 2268	Virginia Peninsula area solid waste management system authority. Would have set requirements for appointing a board of directors over any solid-waste authority serving specified Virginia Peninsula localities.	Failed in House Counties, Cities and Towns.
118	SB 1007	Non-hazardous solid waste management facilities. Establishes the same fee structure for sanitary landfills, non-captive industrial landfills, and construction and demolition debris landfills, at \$0.115 per ton of waste deposited in their facility, to be adjusted annually based on the Consumer Price Index. Incinerators and energy	Passed.

		recovery facilities will be assessed an annual fee of \$0.055 per ton . The bill also requires the DEQ to continue efforts to improve its solid-waste program and submit a report to the General Assembly regarding such efforts by December 1, 2011. See similar HB 2287 (#31), which failed.	
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WATER AND SEWER SYSTEMS

119	HB 508	Sewage sludge (or biosolids) land application. Would have required the SWCB to establish procedures for notifying health-sensitive individuals who live within two miles of the site where sewage sludge is going to be land-applied, and to adopt regulations that protect sensitive environmental features from the impacts of land application of sewage sludge.	Faired in House ACNR.
120	HB 1521	Water authorities, sewer authorities, etc., as political subdivisions of State. Specifies that water authorities, sewer authorities, sewage-disposal authorities, stormwater-control authorities, and refuse-collection/disposal authorities are political subdivisions of the Commonwealth.	Passed.
121	HB 1626	Onsite sewage systems: voluntary upgrades. Allows the owner of an onsite or alternative discharging sewage system that is not failing to obtain a construction permit to improve the system, in accordance with regulations of the Board of Health, provided such upgrade is for the purposes of reducing threats to the public health, or to ground and surface waters, including the reduction of nitrogen discharges.	Passed.
122	HB 1739	Municipal separate storm sewer systems (MS4) facilities; right of entry. Gives the operators of a permitted MS4 system the right of entry to inspect properties that discharge into their facilities.	Passed.
123	HB 1772	Water and sewer charges; lien on real estate in Clifton Forge. Adds the Town of Clifton Forge to those localities that may provide that charges imposed for water or sewers shall be a lien on the real estate served by such waterline or sewer, with certain conditions.	Passed.
124	HB 1888	Water and sewer charges; liens imposed by localities. Would have changed the method by which localities can collect delinquent water bills from users of residential rental properties, putting localities on the same footing as water and sewer authorities.	Failed in House Counties, Cities and Towns.
125	HB 1969	Sewage disposal systems: civil summonses. Would have allowed localities to use a properly licensed contractor working on behalf of the locality to issue civil summonses for certain violations related to sewage-disposal systems.	Passed House Counties, Cities and Towns; failed in House Courts of Justice.
126	HB 2185	Onsite sewage systems: submission of evaluations. Would have provided that the VDH require onsite soil evaluations with every application for an onsite sewage or alternative discharging sewage system (with authority for VDH to waive the requirement for applicants below the federal poverty guidelines).	Failed in House Health, Welfare and Institutions.
127	HB 2260	Well water systems provider license: exception for licensed plumber. Would have provided an exception for licensed plumbers to the requirement that well-water systems providers have a specific license as such a provider.	Failed in House General Laws.
128	HB 2297	Termination of water services: notice required. Provides that a public water-service utility providing shall not terminate service	Passed.

		for nonpayment until sending a written notice to the customer by mail 10 days in advance of making the termination, and that service cannot be terminated until 20 days after the customer's bill has become due.	
129	HB 2326	Waterworks systems: escrow. Authorizes that Board of Health regulations for determining the amount of bonds or escrowed funds required of licensed water suppliers may be based on the age and condition, operation cost, and replacement cost of system infrastructure, and that the Board or a local governing body may proceed against the bond or escrowed fund upon the revocation of a waterworks operation permit.	Passed.
130	HB 2409	Water and sewer charges: local authority for liens. Adds the Town of Abingdon to the list of localities that may by ordinance provide that taxes or charges for water or sewer service shall be a lien on the real estate served by such waterline or sewer system.	Passed.
131	HB 2425	Delinquent sewer and water fees and charges: notice. Established several provisions related to unpaid utility fees: 1) requires that prior to recording a lien on an owner's property for a tenant's unpaid water or sewer fees, the water or sewer authority shall provide the owner with 30 days' written notification, and the owner can avoid the lien by paying the obligations; 2) if the former tenant pays the authority after the owner already has, the property owner shall be entitled to receive a refund and shall be subrogated against the former tenant in place of the authority in the amount paid by the property owner; 3) requires an authority to notify a property owner, if he so requests, of a tenant's delinquent water bill when a tenant's water bill has become 15 days delinquent; and 4) prohibits an authority from denying service to a new tenant for unpaid charges unless a lien has been recorded against the property owner. Companion bill is SB 1216 (#136).	Passed House; in Senate Local Government.
132	HB 2492	Onsite sewage systems: certain owners may be exempt from requirements for operation and maintenance. Provides that the owner of an alternative onsite sewage system installed prior to January 1, 2010, with flows of less than 1,000 gallons per day, and serving a single-family dwelling occupied by the system owner shall be exempt from the requirements for the operation and maintenance of the alternative onsite sewage system serving his own residence.	Failed on House floor.
133	SB 846	Water and sewer charges and taxes: local authority for liens. Would have granted localities the same authority that water and sewer authorities have in placing liens against owners, lessees, or tenants of property and would have ranked the lien on parity with liens for unpaid real estate taxes.	Passed Senate; failed in House Counties, Cities and Towns.
134	SB 1056	Wastewater treatment discharge reduction. Would have authorizes the SWCB, in consultation with the DEQ, to develop strategies to eliminate 50 percent of wastewater discharges from sewage-treatment facilities by July 1, 2020.	Passed Senate; failed in House ACNR.
135	SB 1160	Water & sewer systems' authority to require adjacent property owners to connect. Provides that an authority may require adjacent property owners to connect their buildings to the authority's system <i>upon or after</i> the acquisition or construction of the water or sewer system (current law says only "upon.")	Passed.
136	SB 1216	Delinquent sewer and water fees and charges; notice.	Passed

		Companion bill is HB 2425 (#131); please see that bill for summary.	
137	SB 1228	Water and sewer charges: lien on real estate in Clifton Forge. Companion bill is HB 1772 (#123); please see that bill for summary.	Passed.
138	SB 1427	Water reuse: guidelines for grants. Requires the Secretary of Natural Resources, in developing written guidelines for awarding grants from the Water Quality Improvement Fund, to develop guidelines that define criteria and financial incentives for water reuse.	Passed.
139	SB 1466	Liens; water and waste authorities required to notify property owner of those that may be placed. Would have required that a property owner be informed in advance by written notice that liens may be placed on his property under certain circumstances for the unpaid charges by a tenant.	Passed Senate; failed on House floor.
140	SB 1475	Town of Leesburg differential rates for residents and non-residents. Would have provided that the resident vs. non-resident percentage differential for water/sewer rates, fees, and charges imposed by the Town of Leesburg could not be increased from the percentage existing as of January 1, 2011.	Failed in Senate Local Government.

WATERS OF THE STATE, PORTS AND HARBORS

141	HB 1623	Wetlands: no individual or general Virginia Water Protection Permit required if Corps of Engineers' permit approved. Companion bill is SB 885 (#163).	Passed House ACNR; failed in House Transportation.
142	HB 1624	Powers of DEQ executive director regarding consent orders for permit violations. Would have authorized the executive director of the DEQ, when the SWCB is not in session, to enter into consent orders over violations of groundwater permits or surface water management area permits.	Passed House; failed in Senate ACNR.
143	HB 1635	Virginia ports ownership. Would have required approval of the governor and the General Assembly before a change in ownership.	Failed in House Transportation.
144	HB 1649	Virginia Water Protection Permit fee exemption for Navy dredging. Extends the exemption from fee requirements for a Virginia Water Protection Permit to dredging activities performed by the Navy (the Army Corps of Engineers are already exempted from such fees).	Passed.
145	HB 1723	VMRC permits for encroachment on subaqueous beds. Increases from \$50,000 to \$500,000 the threshold value of projects eligible for an expedited review by the VMRC commission of a request for a permit for encroachment on subaqueous beds.	Passed.
146	HB 1734	Licensing soil scientists. Requires professional soil scientists to be licensed by the Board for Professional Soil Scientists and Wetland Professionals, effective July 1, 2013, and sets out requirements for licensure (currently, soil scientists are subject to voluntary certification).	Passed.
147	HB 1738	Reporting of water withdrawals above certain levels; SWCB to impose a civil penalty for failure to report. Would have authorized the SWCB to <i>require</i> the currently voluntary reporting of water withdrawals for crop irrigation exceeding in any month a total of one million gallons (for crop irrigation) or a daily average of 10,000 gallons per day (for all other uses) in any month, and to impose a civil penalty, not to exceed \$1,000, upon any person who	Passed, but vetoed by governor, and veto sustained in House.

		fails to register and report certain water withdrawal information. The revenue generated would have been deposited in a special fund used solely for DEQ water supply planning responsibilities.	
148	HB 1743	Nottoway River in Virginia Scenic Rivers System. Extends the Scenic River-designated portion of the Nottoway River from the current 39.5 miles to 72.5 miles. The bill includes language clarifying that the designation does not preclude the state or localities from constructing, reconstructing, operating, or performing necessary maintenance on any transportation or public water-supply project.	Passed.
149	HB 1855	Fish passageways for the Harvell Dam. Requires the Department of Game and Inland Fisheries—prior to any breach of the Harvell Dam on the Appomattox River in Petersburg—to prepare a report on the alternatives to the proposed breach of the dam. The report is due to the House ACNR and the Senate ACNR by November 30, 2011.	Passed.
150	HB 1943	No-discharge zones. Requires that criteria for establishing no-discharge zones shall be based on improvement of impaired tidal creeks, and describes actions that must be taken to ensure that there is no discharge of sewage from vessels while in a no-discharge zone.	Passed.
151	HB 2103	Aboveground storage tanks in City of Fairfax. Requires the SWCB to develop standards for facilities with aboveground storage tanks located in the City of Fairfax, having an aggregate capacity of one million gallons or greater, and existing prior to January 29, 1992, to upgrade to meet (by July 1, 2021) best practices standards for new or retrofitted tanks. The bill's specifications apply to the Pickett Road Tank Farm in Fairfax.	Passed.
152	HB 2126	Wetland mitigation banks. Replaces <i>Virginia Code</i> references to an outdated map used to identify mitigation banks with the more readily identifiable hydrologic unit boundaries of the National Watershed Boundary Dataset.	Passed.
153	HB 2137	Nottoway River; extends portion that is designated as a component of Virginia Scenic Rivers System.	Incorporated into HB 1743 (#148).
154	HB 2310	Filled subaqueous bottomlands: conveyance of title. Creates an administrative procedure that allows the VMRC to convey title to filled subaqueous bottomlands if the applicant can provide evidence that such fill was lawfully deposited; and removes the requirement that grantees compensate the Commonwealth in an amount equivalent to 25 percent of the assessed value of the specified parcel, providing instead that grantees will pay a fee reasonably related to the costs to effect the conveyance. The new procedure does not apply to subaqueous bottomlands filled by publicly funded initiative and put to a continuing public use such as beach nourishment projects and public landings. See related SB 1133 (#170).	Passed.
155	HB 2402	Interbasin water transfers. Would have established a procedure—including public notice, an environmental impact statement, an evaluation of alternatives, and measures to mitigate impacts—for people seeking an interbasin transfer of waters exceeding two million gallons per day.	Failed in House ACNR.
156	HB 2424	Appomattox River in Virginia Scenic Rivers System. Designates a 19.2-mile segment of the Appomattox River in Chesterfield County as a scenic river. The bill includes language clarifying that the designation does not preclude the state or	Passed.

		localities from constructing, reconstructing, operating, or performing necessary maintenance on any transportation or public water-supply project, and the owner of Harvell Dam in Petersburg may reconstruct, operate, and maintain the dam (subject to any other law or regulation).	
157	HB 2486	Impaired waters: SWCB restoration plans to be controlling. Requires that plans developed by the SWCB to restore impaired waters will be controlling unless amended or withdrawn by the SWCB.	Passed.
158	HB 2495	Advanced Shipbuilding Training Facility Grant Program. Revises this program to allow the Commonwealth, the eligible city, and the qualified shipbuilder to structure an agreement whereby the eligible city would receive grants, not to exceed \$42 million (subject to appropriation) for costs of building the facility, and the qualified shipbuilder—upon fulfilling performance requirements—would gain ownership of the facility at the end of the grant period. The bill also changes from June 30, 2009, to August 31, 2011, the date by which a memorandum of understanding must be reached to qualify a shipbuilder for the program.	Passed.
159	HB 2519	Virginia Water Protection Permits: agencies to submit comments within 45 days. Requires that agencies (such as the DGIF, the DCR, the VMRC, the VDH, and the Department of Agriculture and Consumer Services) having an opportunity to comment on a Virginia Water Protection Permit submit such comments within 45 days or be deemed as having waived the right to comment.	Passed.
160	SB 778	Nottoway River in Virginia Scenic Rivers System. Companion bill is HB 1743 (#148); please see that bill for summary.	Passed.
161	SB 814	Offshore energy resources. Would have made it Commonwealth policy to support oil and natural gas exploration, development, and production 75 miles or more off Virginia's coast, rather than 50 miles offshore as the current policy states, and would have made such activities subject to the condition that they not damage the natural resources of the Chesapeake Bay. The measure also included language supporting offshore wind-energy development, acknowledged risks evidenced by the Deepwater Horizon explosion in the Gulf of Mexico, and deleted from Commonwealth policy support for including Atlantic Planning Areas in the Mineral Management Service's (now Bureau of Ocean Energy Management, Regulation, and Enforcement) draft environmental impact statement on offshore oil and natural gas exploration.	Failed in Senate Commerce and Labor.
162	SB 843	Aboveground storage tanks in City of Fairfax. Companion bill is HB 2103 (#151); please see that bill for summary.	Passed.
163	SB 885	Wetlands: no individual or general Virginia Water Protection Permit required if Corps of Engineers' permit approved. Companion bill is HB 1623 (#141).	Failed in Senate ACNR.
164	SB 955	Craney Island Disposal Area. Would have authorized the Virginia Port Authority to dispose at Craney Island material dredged from sediment remediation and wetlands mitigation sites along the Southern Branch of the Elizabeth River.	Failed in Senate ACNR.
165	SB 961	Virginia Water Protection Permit fee exemption for Navy dredging. Companion bill is HB 1649 (#144); please see that bill for summary.	Passed.

166	SB 1021	Virginia Water Protection Permits: agencies to submit comments within 45 days. Companion bill is HB 2519 (#159); please see that bill for summary.	Passed.
167	SB 1100	Nutrient Offset Fund. Creates this fund within the existing Virginia Water Quality Improvement Fund (WQIF), to be administered by the director of the DEQ for purchase of nutrient reductions under the Chesapeake Bay Watershed Nutrient Credit Exchange Program. Priority is to be given to nutrient offsets produced from facilities that generate electricity from animal waste. The nutrient offsets purchased with money from the new fund will be available for sale to owners or operators of new or expanded facilities required to offset nutrient loads through the watershed general permit.	Passed.
168	SB 1102	Nutrient trading: trades from certain non-point source activities not subject to a two-for-one trading ratio. Exempts animal waste-to-energy or animal waste-reduction facilities from the “two-for-one” trading ratio rule of the Chesapeake Bay Watershed Nutrient Credit Exchange Program, which requires that two pounds of a nutrient be purchased for each pound to be offset when the allocation is purchased from a nonpoint source	Passed.
169	SB 1119	Permit compliance: civil penalty limits. Would have increased the limit of a civil penalty issued by a special order of the DEQ director of the Department of Environmental Quality from \$10,000 to \$10,000 for an initial violation, \$15,000 for a second violation of the same provision, or \$30,000 for a third or subsequent violation of the same provision. The DEQ would have been required to develop guidance to improve coordination between the department and local governments regarding landfills.	Passed, but vetoed by governor, and veto sustained in Senate.
170	SB 1133	Filled subaqueous bottomlands: conveyance of title. Declares that lands that (i) were once or may have been state-owned bottomlands, (ii) were filled prior to July 1, 1960, and (iii) were acquired by private persons after the bottomlands were filled, are free and clear of any claimed ownership by the Commonwealth. If a person desires further assurance of title, he may request the conveyance through a special Act of Assembly using the current conveyance procedure. In choosing to obtain the conveyance through this procedure, the person seeking the conveyance would be required to pay an amount equivalent to 25 percent of the assessed value of the specified parcel. See related HB 2310 (#154).	Passed.
171	SB 1237	Groundwater withdrawal permit fees. Would have increased from \$6,000 to \$12,000 the maximum amount that the SWCB can charge for a permit to withdraw groundwater from \$6,000 to \$12,000, and authorized the SWCB to set up a schedule for paying fees annually over the life of the permit.	Passed Senate; failed in House ACNR.
172	SB 1265	Licensing soil scientists. Companion bill is HB 1734 (#146); please see that bill for summary.	Passed.
173	SB 1441	Impaired waters: SWCB restoration plans to be controlling. Companion bill is HB 2486 (#157); please see that bill for summary.	Passed.
174	SB 1456	Safety certifications for dams. Requires dam owners who submit annual safety-compliance certifications to do so each year by January 15. At each meeting of the Soil and Water Conservation Board, the director of the DCR shall identify those impounding structures that are currently classified as “high hazard” and determined to be noncompliant.	Passed.

FROM MISCELLANEOUS CATEGORIES

175	HB 1412	Vehicles damaged by water (<i>Motor Vehicles category</i>). Increases from \$1,000 to \$3,500 the threshold for reporting water damage and requires insurance companies to report payment of such a claim to the Department of Motor Vehicles.	Passed.
176	HB 1522	Water and waste authorities; eminent domain powers (<i>Eminent Domain category</i>). Amends current law so that water and waste authorities may exercise eminent domain as set out in Chapter 2 (§ 25.1-200 et seq.) or Chapter 3 (§ 25.1-300 et seq.) of Title 25.1 of the <i>Code of Virginia</i> , rather than with the same authority as is vested in the Commonwealth Transportation Commissioner.	Passed.
177	HB 2173	Drinking water community confidence reports; publication options for systems under 10,000 customers (<i>Health category</i>). Requires the Board of Health to include in its regulations governing waterworks, water supplies, and pure water a process for granting a waiver to waterworks serving fewer than 10,000 people of the requirement to mail to each customer a copy of its annual Consumer Confidence Report [required by the federal Safe Drinking Water Act]. The bill allows notification of the existence of the consumer confidence report through a notice in a newspaper of general circulation or by other means as the Board may deem appropriate. Companion bill is SB 1024 (not included in table).	Passed.
178	HB 2399	Snow and ice removal from vehicles. (<i>Motor vehicles category</i>).	Failed in House Transportation.
179	HB 2503	Governor's Transportation Regulatory Review Commission (<i>Transportation category</i>). Would have created this advisory commission to review regulations annually and identify those regulations that may impede the construction or maintenance of any state or local transportation project.	Failed in House Rules.
180	HB 2516	Agricultural best management practices tax credit (<i>Agriculture, Horticulture, and Food category</i>). Would have made several changes to the <i>Virginia Code</i> section (58.1-339.3) governing this tax credit.	Failed in House Finance.
181	HJ 693	Constitutional amendment on taking of private property for public use (first reference) (<i>Eminent Domain category</i>). Revises the prohibition on the enactment by the General Assembly of laws whereby private property may be taken or damaged; removes General Assembly authority to define public use; provides that private property can be taken or damaged only for a public use, only with just compensation (which is defined) to the owner, and only so much taken as is necessary for the public use; states that public service companies, public service corporations, or railroads exercise eminent domain for public use the action is for authorized provision of utility, common carrier, or railroad services; states that in all other cases, a taking or damaging of private property is <i>not</i> for public use if the primary use is for private gain, private benefit, private enterprise, increasing jobs, increasing tax revenue, or economic development, except for the elimination of a public nuisance existing on the property; states that the condemnor bears the burden of proving that the use is public, without a presumption that it is.	Passed.
182	SB 894	Transportation Board; repeals Va. Code section authorizing Board cooperation with persons establishing certain marine museums (<i>Highways, Bridges, and Ferries category</i>).	Passed.

183	SB 1436	<p>Eminent domain procedures (<i>Eminent Domain category</i>).</p> <p>Provides that if a condemnor is required to provide an appraisal to the owner of property sought to be condemned, the condemnor must provide copies of all appraisals that the condemnor obtained prior to making an offer to acquire or initiating negotiations for the property; and changes the procedure for offering to sell condemned property back to the former owner to clarify when such an offer is required and how such an offer is communicated. The bill identifies entities to which the bill does not apply. Companion bill is HB 2161 (not included in table).</p>	Passed.
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Some 2011 General Assembly Issues and Bills Covered by News Media

Biosolids

- a) HB 508 - Notification of land-application to health-sensitive individuals - FAILED.

Chesapeake Bay Fisheries

- a) HB 2186 - Labeling requirement for Bay crab meat - FAILED.
- b) HB 1724 - Blue Crab winter dredging season - FAILED.

Climate Change

- a) HR 72 - Requesting Congress prohibit EPA from regulating greenhouse gas emissions - PASSED HOUSE.

Fish/Fisheries

- a) SB 940 - Striped Bass as state saltwater fish and Brook Trout as state freshwater fish - PASSED.
- b) SB 963 - VMRC authority to establish aquaculture opportunity zones - PASSED.
- c) SB 1190 - Applying Virginia right-to-farm protections to aquaculture - FAILED.

Groundwater

- a) HB 2103/SB 843 - Construction standards at Fairfax' Picket Road Tank Farm - PASSED.

Land Use/Nutrient Management

- a) HB 1831/SB 1055 - Banning lawn fertilizers containing phosphorus and de-icers containing urea - PASSED.
- b) HB 2057/SB 990 - Fertilizer regulation - PASSED.
- c) HB 1830 - Farm resource-management plans and effect on Total Maximum Daily Loads (TMDL) - PASSED.

Menhaden Fishery Management

- a) HB 2280/SB 765 - Transferring Menhaden management from General Assembly to VMRC – FAILED.
- b) HB 2369 - Regarding the cap on Chesapeake Bay Menhaden harvesting – FAILED.
- c) HB 1656 - Menhaden harvesting nears shorelines in Hampton Roads - FAILED.
- d) HB 1913 - Purse-seine harvesting of Menhaden in the Rappahannock River and tributaries - FAILED.
- e) HB 2165 - \$10-per-ton fee on Menhaden caught in Virginia waters – FAILED.

Waste Management: Plastic Bags

- a) HB 1498 - Ban on non-durable plastic bags by retailers - FAILED.
- b) HB 2047 - Five-cent fee on paper and plastic bags - FAILED.
- c) HB 2341 - Twenty-cent fee on plastic bags - INCORPORATED into HB 2047.

Wetlands

- a) HB 1623/SB 885 - Va. Water Protection permits and Corps of Engineers wetlands permits - FAILED.
- b) HB 2310 and SB 1133 - Conveyance of state bottomlands - PASSED.

Miscellaneous

- a) HB 2399 - Snow and ice removal from cars - FAILED.
- c) SB 1119 - Increasing limit on civil fines by DEQ – PASSED but VETOED by governor.

Sources (each issue was mentioned by at least one source)

Associated Press; *Baltimore Sun*; *Bay Daily* [Chesapeake Bay Foundation blog]; *Charlottesville Daily Progress*; *Daily Press* [Hampton Roads area]; *Fairfax Connection*; *Fredericksburg Free Lance-Star*; *Powhatan Today*; *Richmond Progressive Examiner*; *Richmond Times-Dispatch*; *Roanoke Times*; *Staunton News-Leader*; *Virginian-Pilot*; *Washington Post*; WDBJ-TV (Roanoke); WJZ-TV (Baltimore, Md.); WRIC-TV (Richmond).

VIRGINIA WATER STATUS REPORT

This section of Water Central presents recent and historical data on Virginia's precipitation, groundwater levels, stream flow, and occurrence of drought conditions.

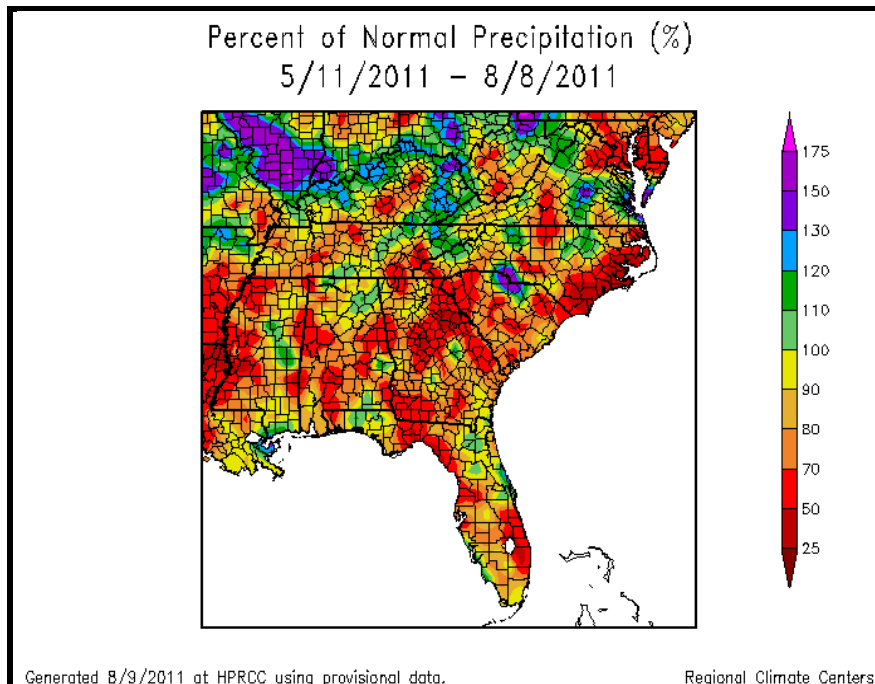
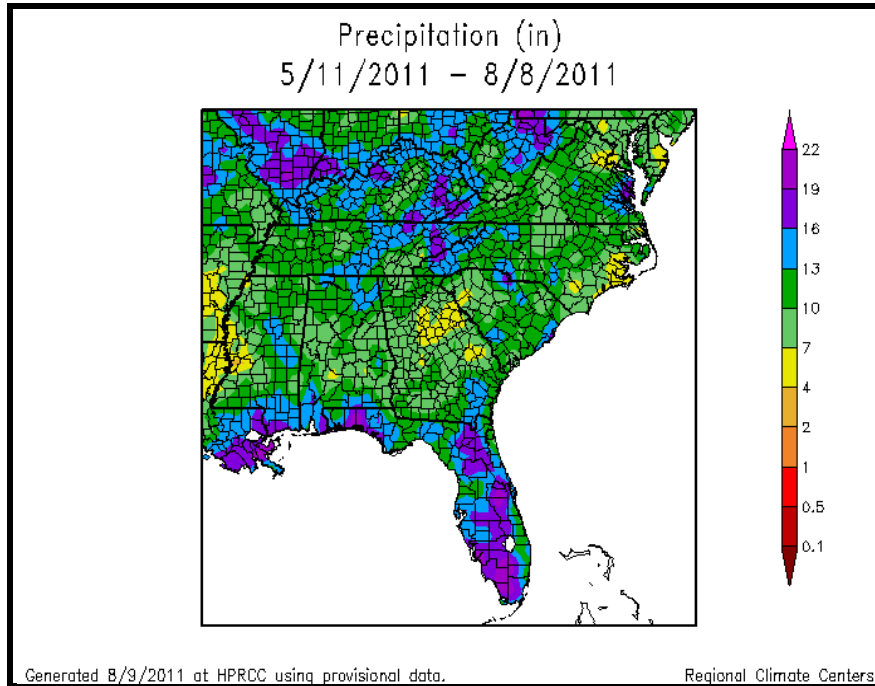
Precipitation in Virginia, August 2010-July 2011

The chart below shows precipitation (in inches) over the last 12 months at eight National Weather Service (NWS) observation sites in or near Virginia. The numbers in the rows marked "O" are **observed precipitation** for the respective site and month (with yearly total at the bottom of the chart), including the equivalent amount of water contained in any snowfall or other frozen precipitation. These values were found at the "Climate" sections of NWS Web sites, as follows: www.weather.gov/climate/index.php?wfo=mrj for the Tri-cities Airport in Tennessee, about 20 miles from Bristol, Va.; www.weather.gov/climate/index.php?wfo=rnk, for Blacksburg, Danville, Lynchburg, and Roanoke; www.weather.gov/climate/index.php?wfo=lwx, for Washington-Dulles; and <http://mi.nws.noaa.gov/climate/index.php?wfo=akg>, for Norfolk and Richmond. The number in the rows marked "N" (in red) are the **normal** (average) **precipitation** for the locality and month (again, with the yearly total at the bottom of the chart), over the period 1971—2000, according to the National Climatic Data Center (NCDC), available at <http://cdo.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl>, as of 8/9/11. (**New normals, based on the period 1981-2010**, were released by the National Climatic Data Center, or NCDC, on July 1, 2011. As of August 2011, specific data are not easily found, but more user-friendly products are expected by January 2012, according to the NCDC Web site at <http://www.ncdc.noaa.gov/oa/climate/normals/usnormals.html>.) RL and RH mean record low or high, respectively, for that month. The amounts listed here are classified by the NWS as *provisional* data and are subject to revision; the NCDC maintains any edited and *certified* data that are available.

	Bristol (Tri-Cities Airport)	Blacks- burg (VT Airport)	Danville (Station #37)	Lynchburg (Regional Airport)	Norfolk (Internat. Airport)	Richmond (Byrd Intern. Airport)	Roanoke (Woodrum Airport)	Wash.- Dulles Airport
Aug.10 O	6.26	5.09	5.52	6.53	3.59	3.92	5.00	4.42
Aug. N	3.00	3.68	3.54	3.41	4.79	4.18	3.74	3.78
Sep.10 O	4.04	3.59	6.44	6.83	12.16	6.49	6.92	6.16
Sep. N	3.08	3.39	4.08	3.88	4.06	3.98	3.85	3.82
Oct. 10 O	2.41	2.92	3.06	2.49	2.68	2.14	1.69	2.38
Oct. N	2.30	3.19	3.71	3.39	3.47	3.6	3.15	3.37
Nov.10 O	4.79	2.92	1.51	1.93	0.43	1.27	3.47	2.50
Nov. N	3.08	2.96	3.07	3.18	2.98	3.06	3.21	3.31
Dec.10 O	2.56	2.51	1.79	2.16	2.88	3.26	1.99	1.47
Dec. N	3.39	2.87	3.16	3.23	3.03	3.12	2.86	3.07
Jan. 11 O	1.88	0.84	1.24	1.30	3.64	2.48	0.82	1.87
Jan. N	3.52	3.37	4.03	3.54	3.93	3.55	3.23	3.05
Feb.11 O	4.53	2.96	1.98	2.12	2.24	2.09	2.20	2.21
Feb. N	3.4	3.02	3.41	3.1	3.34	2.98	3.08	2.77
Mar.11 O	6.37	4.38	4.22	2.69	2.96	4.28	4.23	5.07
Mar. N	3.91	3.83	4.25	3.83	4.08	4.09	3.84	3.55
Apr.11 O	4.57	5.19	3.19	5.36	1.21	2.63	5.33	5.21
Apr. N	3.23	3.83	3.83	3.46	3.38	3.18	3.61	3.22
May11 O	5.93	7.32	5.33	3.33	1.95	4.35	3.79	3.28
May N	4.32	4.39	3.96	4.11	3.74	3.96	4.24	4.22
Jun.11 O	3.40	2.78	1.56	3.81	4.63	3.03	3.51	1.40
Jun. N	3.89	3.93	3.5	3.79	3.77	3.54	3.68	4.07
Jul.11 O	3.85	3.78	3.88	2.99	10.89	3.63	3.76	2.58
Jul. N	4.21	4.17	4.44	4.39	5.17	4.67	4	3.57
Observed	50.59	44.28	39.72	41.54	49.26	39.57	42.71	38.55
Normal	41.33	42.63	44.98	43.31	45.74	43.91	42.49	41.80

Precipitation, continued: Regional Precipitation Over the Past Three Months

For a more visual presentation over a wider area, the two graphs below—from the National Oceanic and Atmospheric Administration’s Southeast Regional Climate Center (online at <http://www.sercc.com/index.php>), located at the University of North Carolina in Chapel Hill—show the total precipitation in inches (top graph) over the past three months and the percent departure from normal (bottom graph) over that period. Note that the values represented by a given color differ between the two graphs. *These data are provisional.* These graphs were taken from http://www.sercc.com/climateinfo/precip_maps on August 9, 2011.



More Virginia climate information and data are available from the University of Virginia Climatology Office, online at <http://climate.virginia.edu>. To contact the office in Charlottesville, phone (434) 924-0548 or send e-mail to climate@virginia.edu.

Groundwater Levels at Selected Virginia Wells, August 2011

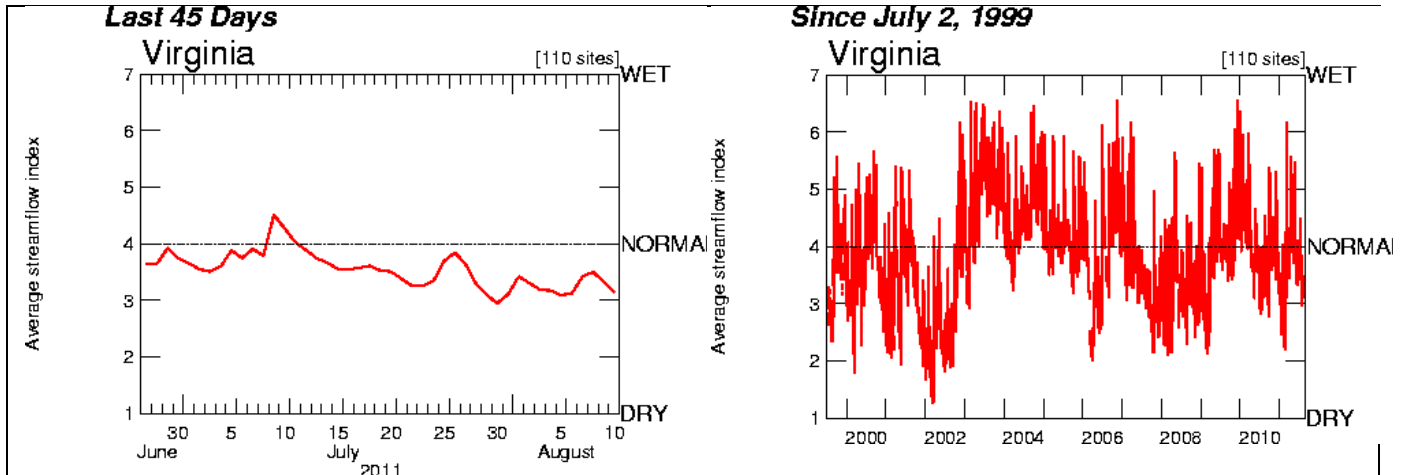
As of August 10, 2011, the Virginia Active Water Level Network—maintained by the U.S. Geological Survey (USGS) and available online at <http://groundwaterwatch.usgs.gov/StateMaps/VA.html>—provided access to groundwater levels at 486 active wells in 66 Virginia counties and cities. At 117 of these observation wells in 40 localities, *real-time data* (updated every 5 to 60 minutes) were being recorded. The table below shows the August 9, 2011, daily average level from real-time wells in 19 localities. These readings are *provisional* (i.e., subject to revision). All measurements are in **feet below the land surface**, rounded to the nearest 0.1 foot; **a smaller value means wetter conditions, while a larger value means drier conditions**. The table also shows levels reported in previous issues of *Water Central*, plus the median level for this month, the deepest (driest) level, and the shallowest (wettest) level (all for each well's period of record). Historical information on groundwater is also available from USGS annual reports of groundwater, available online at <http://wdr.water.usgs.gov/> for years 2002 to 2010; for previous years, check your local library for printed copies of the reports.

Well (Local #)	8/9/11 Level	3/14/11 Level	9/6/10 Level	August Median	Record Deepest (Driest)	Record Shallowest (Wettest)	Period of Record
Accomack (66M19SOW110S)	10.9	9.4	10.5	9.7	11.3 (Nov. 1981)	6.8 (Mar. 2010)	Since Sep. 1978
Buckingham (41H 3)	25.1	22.2	21.1	22.3	36.4 (Oct. 2002)	7.4 (Apr. 1973)	Since Mar. 1971
Clarke (46W 175)	36.0	35.3	37.5	38.1	45.7 (Sep. 2002)	23.5 (Sep. 2003)	Since Mar. 1987
Fairfax (52V 2D)	16.4	12.6	16.9	15.3	24.9 (Dec. 1998)	6.5 (Mar. 1984)	Since Oct. 1976
Hanover (53K 19 SOW 080)	19.9	18.4	20.9	20.2	22.9 (Aug. 1984)	5.1 (Aug. 2004)	Since Jan. 1978
Loudoun (49Y 1 SOW 022)	60.2	55.5	60.4	60.0	62.0 (Feb. 2008)	48.0 (June 1972)	Since Nov. 1963
Montgomery (27F 2 SOW 019)	4.2	2.5	5.6	5.0	7.3 (Dec. 1969)	< 0.0 (Mar. 1993)	Since Jul. 1953
Northampton (63H 6 SOW 103A)	8.0	7.6	6.8	6.6	10.0 (Oct. 2002)	0.8 (Aug. 2004)	Since Sep. 1977
Orange (45P 1 SOW 030)	28.7	27.4	31.2	27.5	39.0 (Aug. 2002)	11.8 (Apr. 1973)	Since Feb. 1965
Prince William (49V 1)	10.9	7.1	10.7	10.5	15.4 (Jul. 2011)	6.5 (Mar. 2010)	Since Nov. 1968
Roanoke City (31G 1 SOW 008)	19.0	18.7	18.9	18.5	19.3 (Jun. 1987)	12.4 (Feb. 1986)	Since Aug. 1966
Rockbridge (35K 1 SOW 063)	26.5	21.2	27.5	25.5	30.4 (Sep. 2002)	14.3 (Apr. 1987)	Since Feb. 1964
Rockingham (41Q 1)	71.7	74.4	75.2	70.7	99.0 (Oct. 2002)	57.7 (Feb. 1998)	Since Aug. 1970
Shenandoah ¹ (40U 3 SOW 218)	15.0	12.7	15.4	Not available	16.3 (Oct. 2009)	10.6 (May 2011)	Since Oct. 2006
Suffolk (58B 13)	12.2	7.3	12.1	10.3	13.4 (Jan. 1981)	2.0 (Sep. 1999)	Since Mar. 1975
Surry (57E 13 SOW 094C)	8.0	8.3	11.0	9.3	11.3 (Sep. 2010)	3.9 (May 1980)	Since Jul. 1978
Virginia Beach (62B 1 SOW 098A)	5.9	2.4	5.6	5.6	12.0 (Sep. 1980)	0.8 (Nov. 2009)	Since Jun. 1979
Westmoreland (55P 9)	8.2	7.5 (1/19/11)	9.2 (8/3/10)	8.0	12.8 (Dec. 1988)	< 0.0 (Dec. 2009)	Since Jul. 1977
York (59F 74 SOW184C)	9.1	7.4	11.7	9.3	14.1 (Jan. 2002)	0.9 (Nov. 2006)	Since Jun. 1990

¹ The Shenandoah County well has been included in this table only since the May 2010 issue of *Water Central*. It replaced Frederick County well 46X 110, where data collection was discontinued in November 2009.

Stream Flow in Virginia: June-August 2011, and 1999-2011

Average Daily Stream Flow Index, Compared to the Historical Average for the Date



The graphs above, from the U.S. Geological Survey's (USGS) "WaterWatch" Web site ("Current Streamflow/Summary Plot," at http://waterwatch.usgs.gov/new/index.php?id=real&sid=w_plot&r=va, 8/10/11), compare recent Virginia stream flow to historical records.

The data in these graphs come from 110 sites that have at least 30 years of records. Each graph uses a "stream flow index," which measures how a site's average stream flow over 24 hours (the **average daily stream flow**) compares to the historical average stream flow for that same site and date. The graphs show a further average: the stream flow index averaged over all monitoring stations.

Index values (1-7 on the vertical axis in the graphs) mean the following:

Values indicating dry conditions:

- 1 = average daily flow is a record low for that date;
- 2 = average daily flow is in the lowest 10 percent of historical values for that date;
- 3 = average daily flow is in the lowest 25 percent of historical values for that date, but exceeds the lowest 10 percent.

Value indicating "normal" flow:

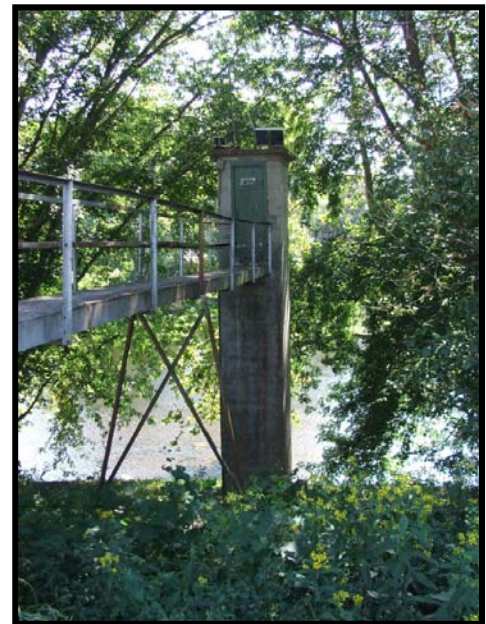
- 4 = average daily flow exceeds the lowest 25 percent of historical values for that date, but is less than the highest 25 percent of values.

Values indicating wet conditions:

- 5 = average daily flow exceeds 75 percent of historical values for the date, but is lower than the highest 10 percent of values.
- 6 = average daily flow exceeds 90 percent of historical values for that date;
- 7 = average daily flow for the graphed date is record high for that date.

Gaps in the data: Data are not plotted for days when less than two-thirds of the sites report data (due to equipment or weather problems), because a statewide average on those days may misrepresent actual conditions.

The USGS WaterWatch site also has a map of current Virginia flow conditions compared to historical records, as well as maps for flows over the past 1 day, 7 days, 14 days, 28 days, and month.

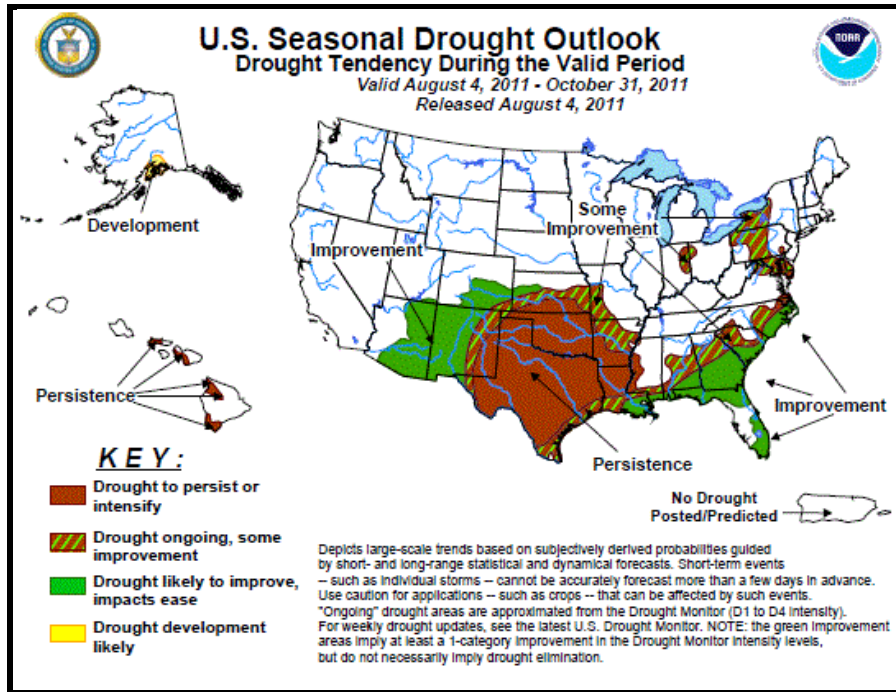


Gaging station on the James River at Buchanan (Botetourt County), 9/19/10

Don't Forget the Water Center's Online Water Status Page!

The Water Center's online "Water Status Information" area has links to current and historical information on drought, groundwater, precipitation, stream flow, and severe weather. Find it at www.vwrrc.vt.edu/water_status.html.

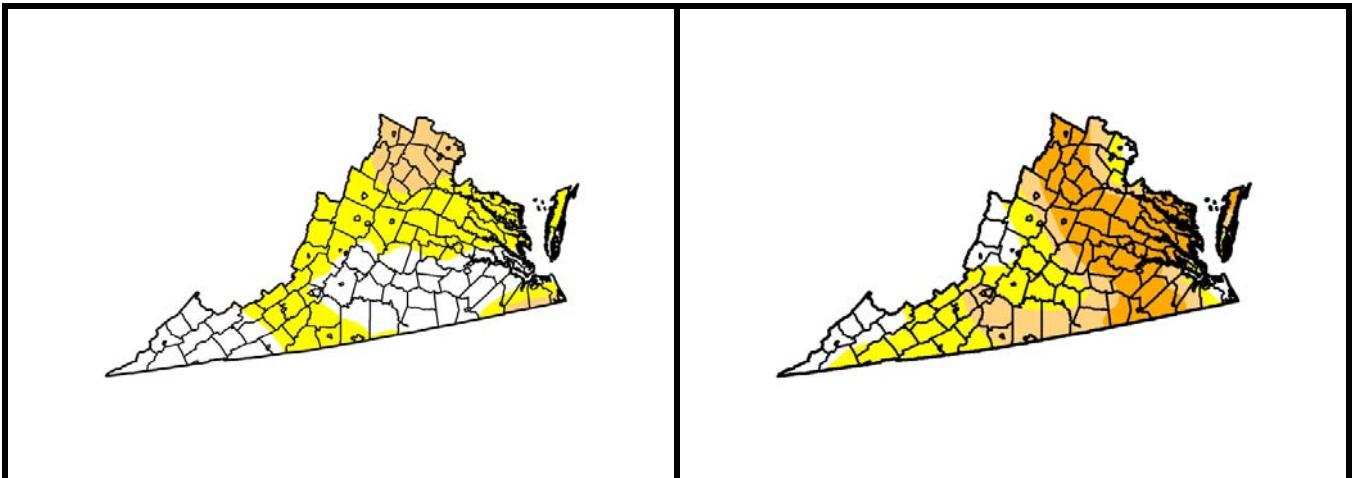
Drought Update



The national drought outlook for August-October 2011, according to the National Oceanic and Atmospheric Administration/National Weather Service’s Climate Prediction Center Web site, www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html, accessed 8/10/10.

From the U.S. Drought Monitor: Virginia Conditions Now and One Year Ago

The U.S. Drought Monitor, available online at www.drought.unl.edu/dm/monitor.html, is a weekly nationwide drought assessment by federal agencies and state climatological centers. The following graphs show Drought Monitor assessments of Virginia conditions on August 2, 2011, compared to August 3, 2010. Note on the much more widespread drought conditions in August 2010, including a large area of severe drought.



August 2, 2011

August 3, 2010

= D0 Abnormally Dry
 = D1 Moderate Drought
 = D2 Severe Drought
 = D3 Extreme Drought
 = D4 Exceptional Drought

Source: Images taken from archive of U.S. Drought Monitor, www.drought.unl.edu/dm/archive.html, 9/9/10. Authors: Brad Rippey, USDA, for 8/2/11 map; D. Miskus, NOAA, for 8/3/10 map.

The Drought Monitor also gives *percentages* of the country, of regions, and of individual states classified in the drought categories. The following table shows how much of the country and of Virginia received different Drought Monitor ratings in recent months and one year ago.

Drought Monitor Report Date	Percentage of area rated “abnormally dry” (D0) or worse	Percentage of area rated “severe drought” (D2) or worse
8/2/11	US = 40%; VA = 57%	US = 21%; VA = 0%
7/5/11	US = 35%; VA = 39%	US = 20%; VA = 1%
6/7/11	US = 31%; VA = 26%	US = 18%; VA = 0.1%
5/3/11	US = 31%; VA = 38%	US = 16%; VA = 0%
8/3/10	US = 25%; VA = 87%	US = 2%; VA = 34%

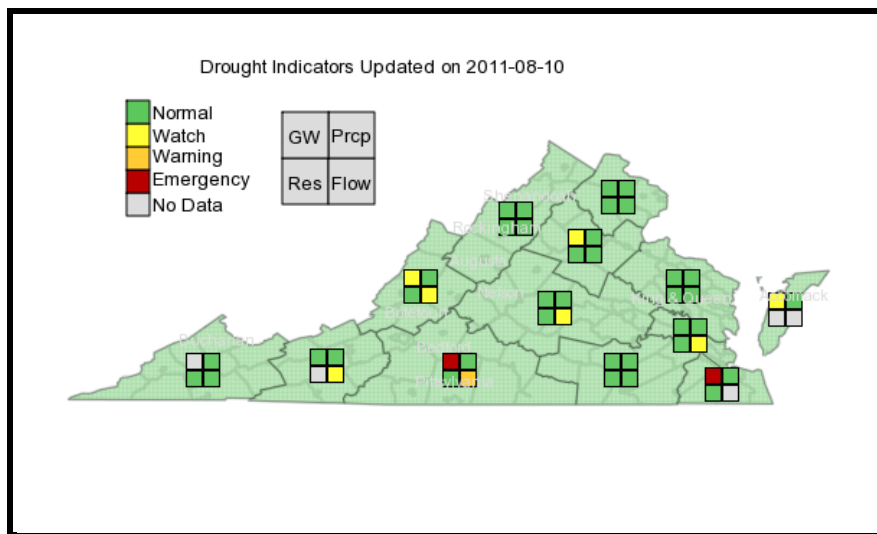
Special Note on the Southern and Southwestern U.S. Drought

Throughout 2011, much of the southern United States has experienced severe (D2), extreme (D3), and even exceptional (D4) drought conditions. Here are the percentages of those conditions for six hard-hit states, as of August 2, 2011:

STATE	D2 = Severe Drought	D3 = Extreme Drought	D4 = Exceptional Drought
Arkansas	64%	9%	0%
Georgia	80%	68%	4%
Louisiana	94%	57%	18%
New Mexico	93%	79%	47%
Oklahoma	100%	88%	64%
Texas	99%	92%	73%

From the Virginia Drought Monitoring Task Force

The map below, from the Virginia Drought Monitoring Web page at <http://www.deq.virginia.gov/waterresources/drought/homepage.html>, shows the **August 10, 2011, status of four drought indicators**—groundwater (GW), precipitation (Prpc), stream flow (Flow), and reservoir levels (Res)—in Virginia’s 13 drought-evaluation regions. The Drought Monitoring Task Force issued its most recent statewide drought assessment on July 14, 2011. That report, previous reports, and more information is available at the Web site listed above.



Other Useful Sources of Information Online

- Va. Dept. of Forestry map of local burning restrictions: <http://www.dof.virginia.gov/fire/burn-bans.htm>.
- Va. Dept. of Environmental Quality water-conservation tips: www.deq.virginia.gov/waterresources/waterconservation.html.

VIRGINIA GOVERNMENT WATER ISSUES OVERVIEW

For a weekly list of upcoming Virginia government meetings on water-related topics, visit the “Quick Guide to Virginia Water Conferences, Meetings, and Other Events,” at www.vwrrc.vt.edu/VAConfQuickGuide.html.

This section lists water issues under current consideration (study or regulation) by state boards, commissions, or agencies in Virginia. Information in this issue is based on public meetings listed **March 8-July 12, 2011**, on the **Virginia Regulatory Town Hall** Web site, at www.townhall.state.va.us/L/meetings.cfm. The Town Hall site posts agendas of upcoming meetings and minutes of past meetings held by Virginia’s boards, commissions, and departments; **the site can be searched for “water” or other specific topics**. Unless otherwise noted, all contact people listed in this section are Virginia state employees. To find the e-mail address any state employee, go online to <http://www.employeeDirectory.virginia.gov/>. You can also request state employee phone numbers by calling (800) 422-2319. All Web sites listed in this section were functional as of 8/10/11.

Abbreviations: DCR = Dept. Conservation and Recreation; DEQ = Dept. Environmental Quality; DGIF = Dept. Game and Inland Fisheries; DMME = Dept. Mines, Minerals and Energy; DPOR = Department of Professional and Occupational Regulation; SWCB = State Water Control Board; VDH = Department of Health. “VAC” numbers indicate the *Virginia Administrative Code* section for a particular regulation; you can access and search the VAC at <http://leg1.state.va.us/cgi-bin/legp504.exe?000+men+SRR>. “NOIRA” stands for Notice of Intended Regulatory Action.

Total Maximum Daily Load (TMDL) Processes

Under the federal Clean Water, when a water body fails (with a certain frequency) to meet state water-quality standards, the water is to be designated as “impaired,” requiring development of a total maximum daily load (TMDL). A TMDL *study* identifies the pollutant source(s) causing the impairment and determines how much of the pollutant(s) the water can receive (the “load”) and still meet standards. A TMDL *implementation plan* (required by Virginia law) maps a process for reducing the pollutant load to the TMDL level. Many Virginia TMDLs are underway, each involving many public meetings. The table below lists those where public meetings were held during the period noted above; unless otherwise noted, the contacts listed for more information are with the Virginia Department of Environmental Quality. Information on the status of all TMDLs in Virginia is available online at www.deq.state.va.us/tmdl/.

Location	Water(s) & Impairment	Larger Watershed(s)	Most Recent Meeting Date	For More Information
Various	Chesapeake Bay and tributaries for nutrients and sediments.	Atlantic Ocean	4/26/11 (Phase II implementation plan--meeting of stakeholder advisory group)	Christine Wallington, DCR
Several localities	James River from Fall Line to Surry County line, plus tributaries Appomattox River, Chickahominy River, Elizabeth River, Nansemond River, Pagan River, Hampton River, Willoughby Bay, and several smaller tributaries, all for PBCs.	Chesapeake Bay	4/27/11 (TMDL study—advisory committee meeting)	Margaret Smigo, DEQ
Buchanan County	Bull Creek and tributaries for aquatic life impairment.	Big Sandy River	3/8/11 (TMDL study—final public meeting)	Allen Newman/Shelley Williams, DEQ
Chesterfield, Henrico, and Powhatan counties and City of	James River and several tributaries—Almond, Bernards, Falling, Gillie, Goode, No Name,	Chesapeake Bay	5/18/11 (TMDL implementation plan)	Margaret Smigo, DEQ

Richmond.	Powhatan, Powhite, and Reedy creeks--all for bacteria.			
Fairfax and Loudoun counties	Mine Run, Pimmit Run, and Sugarland Run, all for bacteria.	Potomac River	4/13/11 (TMDL study—first public meetings)	Jennifer Carlson, DEQ
Fauquier and Stafford counties	Aquia Creek, Accokeek Creek, Austin Creek, Potomac Creek, and Potomac Run, all for bacteria.	Potomac River	4/19/11 (TMDL study—first public meeting)	Jennifer Carlson, DEQ
Floyd, Montgomery, and Pulaski counties	Little River (Floyd, Montgomery and Pulaski counties) for aquatic life impairment, bacteria, and temperature; Little River Reservoir (Pulaski and Montgomery counties), for bacteria; Brush Creek, Meadow Creek, Mill Creek, and Poplar Branch (all Montgomery County) for bacteria; Meadow Run (Floyd County) for aquatic life impairment and bacteria; Dodd Creek, Pine Creek, and West Fork Dodd Creek (all Floyd County) for bacteria and temperature; Laurel Creek (Floyd County) for bacteria; Big Indian Creek (Floyd County) for temperature.	New River	3/16/11 (TMDL study)	Mary Dail, DEQ
Greensville, Southampton, and Sussex counties	Flat Swamp, Upper and Lower Three Creek, Mill Swamp, Darden Mill Run, and Tarrara Creek—all for bacteria.	Chowan River	5/19/11 (TMDL study)	Jennifer Howell
Louisa, Orange, and Spotsylvania counties	Goldmine Creek in Louisa County; Beaver Creek, Mountain Run, Pamunkey Creek, and Terry's Run in Orange County; and Plentiful Creek in Spotsylvania County; all for bacteria.	York River	6/21/11 (TMDL implementation plan)	May Sligh, DCR
Prince William County	Powells Creek, Quantico Creek, South Fork Quantico Creek, and North Branch Chopawamsic Creek, all for bacteria.	Potomac River	4/20/11 (TMDL study—first public meeting)	Jennifer Carlson, DEQ
Northampton County	Mill Creek for bacteria.	Atlantic Ocean	3/10/11 (TMDL study)	Jennifer Howell, DEQ
Cities of Portsmouth and Suffolk	Hoffler Creek for bacteria.	James River	3/9/11 (TMDL study)	Jennifer Howell, DEQ
Russell and Tazewell counties	Clinch River and tributaries Big Cedar Creek, Indian Creek, Lewis Creek, Swords Creek, and Weaver Creek in Russell County and Maiden Spring Creek and Little River in Tazewell	Tennessee River/Ohio River/Gulf of Mexico	5/26/11 (TMDL study—first public meeting)	Martha Chapman, DEQ

Tazewell County	County, all for bacteria. Clinch River and tributaries Coal Creek, Middle Creek, and Plum Creek, all for bacteria; Coal Creek also has an aquatic-life impairment.	Tennessee River/Ohio River/Gulf of Mexico	5/12/11 (TMDL implementation plan—steering committee meeting)	Allen Newman, DEQ
Wise County	South Fork Pound River for aquatic life impairment.	Russell Fork/Big Sandy River	3/8/11 (TMDL study—final public meeting)	Allen Newman/Shelley Williams, DEQ

Other Topics Under Current Consideration

The following lists topics considered in public meetings held during the period noted at the beginning of this section. This list *does not necessarily include all* meetings of significance to Virginia water resources, and *does not list regular meetings* of state boards or commissions. Items are listed alphabetically by topic, followed by the agency or group coordinating state study or action and then a contact name. Minutes of most meetings listed are available at the Virginia Regulatory Town Hall Web site, www.townhall.state.va.us/L/meetings.cfm,

Biosolids Regulations (9 VAC 25-20, 25-31, and 25-32)—Public hearings on proposed changes to regulations: 3/31/11, 4/5/11, and 4/12/11. The proposed changes to regulations for biosolids (treated sewage sludge) were published in the February 28, 2011, *Virginia Register* and the public comment period ran 2/28/11 to 4/29/11. Following the public comment period, the Biosolids Technical Advisory Committee was reconvened to consider public comment on proposed revisions to 9 VAC 25-32 and then to provide input for final regulatory edits. The TAC met on 6/24/11. More information: William K. Norris, DEQ.

Gas and Oil Drilling—meetings of sub-committee of the Gas and Oil Board studying horizontal gas and oil drilling units and related field rules: 3/14/11. More information: David Asbury, DMME.

Hazardous Waste Management Regulations (9 VAC 20-60-273)—Public meeting on **fluorescent lights and mercury-containing lamps**: 5/18/11. The DEQ held this public meeting to get input on the crushing of fluorescent lights and mercury-containing lamps under the provisions of Virginia's Hazardous Waste Management Regulations. More information: Leslie Romanchik, DEQ.

Mined Land Reclamation (coal lands, abandoned lands, etc.): **1)** Coal Surface Mining Reclamation Fund Advisory Board meeting: 5/3/11; more information: Gavin Bledsoe, DMME. **2)** Abandoned Mine Land Advisory Committee meeting: 5/25/11; more information: Roger Williams, DMME. **3)** The Orphaned Land Advisory Committee, which meets annually to help the DMME prioritize *non-coal-mining* abandoned sites for reclamation using the Orphaned Land Fund, met 6/1/11. More information: Allan Bishop, DMME. **4)** Division of Mined Land Reclamation regulatory review work group meeting: 6/22/11. More information: Michael Skiffington, DMME.

Nutrient Credit Trading in the Chesapeake Bay Watershed—**1)** Meetings of the Credit Exchange Expansion Stakeholder Committee: 4/13/11, 6/16/11. [Senate Joint Resolution 334 in the 2011 Virginia General Assembly](#) called for a study of the possible expansion of Virginia's Chesapeake Bay Watershed Nutrient Credit Exchange Program. A stakeholder committee was formed pursuant to that resolution. More information: Russ Baxter, DEQ. **2)** Meetings of Advisory Committee on **General Discharge Permit Regulation (9 VAC 25-820)**—2/17/11, 7/6/11. The SWCB is working toward reissuance and possible amendment of this regulation. The proposes changes were published in the 5/23/11 *Virginia Register*, with a public comment period until 7/22/11. More information: Allan Brockenbrough, DEQ, and online at <http://www.townhall.state.va.us/L/viewchapter.cfm?chapterid=2466>.

Poultry Litter to Energy—Meeting of the Shenandoah Valley Poultry Litter to Energy Watershed and Air Advisory Group: 3/28/11. The Virginia DEQ and DCR established this advisory group to assist in developing a study to evaluate the concept of a large-scale poultry litter-to-energy project. More information: Rick Weeks, DEQ.

Recycling—DEQ's Litter Control and Recycling Fund Advisory Board meeting: 4/15/11; more information: Sheila Mary Barnett, DEQ. DEQ's Recycling Markets Development Council meetings: 4/13/11; 6/15/11. More information: Steve Coe, DEQ.

Renewable Energy from Combustion—Meetings of the regulatory advisory panel for small renewable combustion energy projects (under 20 megawatts): 4/12/11, 6/20/11, and 6/28/11. This advisory panel is helping the DEQ develop a permit by rule for small renewable energy projects using combustion of

biomass, a regulatory action that the 2009 General Assembly (HB 2175/SB 1347) required for small renewable energy projects from various sources. A notice on the establishment of this panel was published in the 2/28/11 *Virginia Register*. More information: Carol C. Wampler, DEQ.

Roanoke River Basin Issues—Meeting of the Virginia Roanoke River Basin Advisory Committee: 5/5/11; more information: Tammy Stephenson, DEQ. Meeting of the Roanoke River Bi-State Commission (Virginia and North Carolina): 5/323/11; more information: Tammy Stephenson, DEQ.

Scenic Rivers—Specific river advisory committees meetings: Catoctin Creek, 3/18/11, 4/27/11, and 5/23/11; Goose Creek, 3/16/11. More information: David Dowling, DCR.

Sewage Handling and Disposal: Onsite Sewage Handling and Disposal Appeals Review Board: Most recent meetings: 4/6/11, 5/11/11. The VDH's Sewage Handling and Disposal Appeals Review Board hears all administrative appeals of denials of onsite sewage disposal system permits and appeals of refusals of indemnification requests filed pursuant to *Virginia Code* Sec. 32.1-164.1:01. More information: Donna Tiller, VDH.

Sewage Handling and Disposal Regulations (start at 12 VAC 5-613)—VDH's advisory committee meetings: 3/18/11; 4/1/11; 6/10/11. The Virginia Board of Health is considering whether to adopt new performance-based regulations for locating, designing, constructing, and operating **alternative onsite sewage systems**. The Board approved **emergency regulations** for six months in April 2011. More information: Allen Knapp or Marcia Degen, VDH.

Solid Waste Management and Groundwater—1) 3/31/11: Public hearing on draft permit modification for the **Southeastern Public Service Authority** regional landfill in Suffolk. Under consideration were exceptions to Virginia's solid-waste management regulations to allow an alternative liner design and alternative groundwater chemical concentration limits. The public comment period ran 3/1-4/15/11. More information: Milton Johnson, DEQ. **2)** 6/22/11: Public hearing on permit application by **Orange County** for a new sanitary landfill. More information: Ladun Olaseni, DEQ. **3)** 6/28/11: Public hearing on the draft of a modification to the Hazardous Waste Permit for the **Radford Army Ammunition Plant in Radford**, including implementation of groundwater Corrective Action at the open-burning portion of the facility. More information: Russell McAvoy, DEQ.

State Parks—Advisory committee or public meetings on park master plans: **Biscuit Run** (future park in Albemarle County), 6/6/11; more information: Janit Llewellyn, DCR. **Lake Anna** (Spotsylvania County), 3/21/11 and 4/25/11; more information: Lynn Crump, DCR. **Sky Meadows** (Fauquier County), 4/26/11; more information: Bill Conkle, DCR.

Stormwater Best Management Practices (BMPs)—Virginia Stormwater BMP Clearinghouse Committee meeting: 4/18/11. The BMP Clearinghouse Committee, coordinated by the Va. DCR and the Virginia Water Resources Research Center, is working to develop design guidelines and Web site that will serve as the Virginia's reference point for stormwater BMPs. Under discussion on 4/18/11 were BMP listing criteria, Web site content, and database design guidelines. More information: David Dowling, DCR.

Stormwater Management Regulations (4 VAC 50-60)—The Soil and Water Conservation Board adopted new stormwater management regulations on May 24, 2011. The regulation changes then underwent an administrative review until August 5, to be followed by publication in the *Virginia Register of Regulations* (expected in August) and then a 30-day "adoption period." More information: David Dowling, DCR, and <http://www.dcr.virginia.gov/lr2d.shtml>.

Uniform Environmental Covenants Act Regulation—public meeting regarding covenants on use of contaminated properties: 5/2/11. More information is available at <http://townhall.virginia.gov/L/ViewNotice.cfm?gnid=335>, or from Carol Wampler, DEQ.

Wastewater Discharge from Boats—Federal No Discharge Zone (NDZ) Designations. **1)** 5/31/11: Public meeting on intent to designate several creeks and portions of the Little Wicomico, Great Wicomico, and Yeocomico rivers in Northumberland County and a portion of the Yeocomico River in Westmoreland County; **2)** 6/14/11: Public meeting on intent to designate 17 water bodies in Westmoreland County and one water body in King George. Federal NDZ designations would ban the overboard discharge of human sewage, either treated or untreated, in these water bodies (it is currently illegal to discharge *untreated* sewage in U.S. territorial waters). [House Bill 1774 in the 2009 Virginia General Assembly](#) established that all tidal creeks in Virginia be designated federal No Discharge Zones, and directed the DEQ to pursue this designation. More information: Margaret Smigo, DEQ.

Wastewater Discharge from Car Wash Facilities (9 VAC 25-194)—Technical Advisory Committee meetings: 3/23/11, 4/20/11, and 5/25/11. The committee is assisting the DEQ in developing a regulation to

reissue, and if necessary amend, the regulations for the general Virginia Pollutant Discharge Elimination System (VPDES) permit for car wash facilities. More information: George Cosby, DEQ.

Water reclamation and reuse regulation (9 VAC 25-740)—Regulatory Advisory Panel meetings:

4/21/11, 5/2/11, 6/2/11, and 7/7/11. According to the [minutes of the April 21 meeting](#), the committee is considering at least 22 amendments this regulation, addressing issues raised by 2011 Virginia General Assembly bills [SB 1427](#) (regarding adding financial incentives for water reuse to criteria for Virginia Water Quality Improvement Fund grants), and addressing a letter from Delegate Harvey Morgan asking the committee to study ways to increase water reuse. A NOIRA was published in the January 3, 2011, *Virginia Register of Regulations*. More information: William K. Norris, DEQ and online at www.townhall.state.va.us/L/viewchapter.cfm?chapterid=1508.

Water Supply Planning—State Water Supply Plan Advisory Committee meetings: 3/29/11, 6/29/11 (sub-committee 3, focusing on methods for calculated estimated future water demand), 6/30/11 (sub-committee 2, focusing on identifying and minimizing potential conflicts among various submitted local and regional plans. The State Water Supply Plan Advisory Committee was established by the 2010 Virginia General Assembly to assist the Department of Environmental Quality in developing, revising, and implementing a state water resources plan. The bill creating the committee was SB 569; information about that bill is at <http://leg1.state.va.us/cgi-bin/legp504.exe?101+sum+SB569>. More information: Tammy Stephenson, DEQ.

Wildlife Management—Dedication of Mattaponi Wildlife Management Area in Caroline County, 5/5/11. More information: Matt Koch, DGIF.

Wind Energy Development—Meetings of the **Virginia Offshore Wind Development Authority**: 3/31/11, 5/3/11, and 6/14/11. This Authority was created by the 2010 Virginia General Assembly (HB 389/SB 577) to facilitate and support development of the offshore wind industry and wind-powered electric energy facilities located off the coast of the Commonwealth. More information: Evie Christopher, DMME.

Wind Energy Permitting by Localities—Meetings of Local Government Stakeholder Group on Model Wind Ordinance: 3/31/11, and 6/8/11. The DEQ is meeting with local stakeholders to help develop a model ordinance for local permitting of wind-energy facilities. More information: Carol Wampler, DEQ.

General Information for Key Water-related Statewide Boards and Commissions (as 8/10/11)

Marine Resources Commission—Meets monthly; minutes of meetings are available online at www.mrc.virginia.gov/calendar.shtm. More information: phone (757) 247-2200, TDD (757) 247-2292.

State Water Control Board—Meets quarterly; minutes of meetings are available at <http://www.deq.state.va.us/cboards>. More information: (800) 592-5482 (main number for DEQ).

Cave Board—Meet three times per year. More information: phone (804) 786-7951; Web site: www.dcr.virginia.gov/natural_heritage/cavehome.shtml.

Conservation and Recreation Board—Meets at least three times/year, upon call of chair. More information: (804) 786-1712 (main number for DCR); Web site: www.dcr.virginia.gov/bcr.shtml.

Game and Inland Fisheries Board—Full board meets bimonthly; committee meetings at other times. More information: (804) 367-1000 (main number for DGIF); Web site: www.dgif.virginia.gov/about/board/.

Gas and Oil Board—Meets monthly, usually in southwestern Virginia. More information: (804) 692-3200 (main number for DMME); Web site: www.dmme.virginia.gov/divisiongasoil.shtml.

Groundwater Protection Steering Committee—Meets third Tuesday of odd-numbered months. More information: Mary Ann Massie, (804) 698-4042; Web site: www.deq.virginia.gov/gwpsc/.

Land Conservation Foundation—Meets about three times per year. More information: phone (804) 786-3218; Web site: www.dcr.virginia.gov/virginia_land_conservation_foundation/index.shtml.

Licensing and Regulation Boards—Licensing boards for engineers, geologists, onsite sewage system professionals, soil scientists, waste-management facility operators, waterworks and wastewater works operators, and wetland delineators are under the Dept. of Professional and Occupational Regulation; phone (804) 367-8500, TDD (804) 367-9753; Web site: www.dpor.virginia.gov/dporweb/boards.cfm.

Outdoors Foundation—Meets at least quarterly. More information: (540) 327-7727; Web site: www.virginiaoutdoorsfoundation.org.

Scenic River Advisory Board—Meets at least two times a year. More information: Lynn Crump, (804) 786-5054; Web site: www.dcr.virginia.gov/recreational_planning/srmain.shtml.

Soil and Water Conservation Board—Meets bimonthly. More information: (804) 786-1712 (main number for DCR); Web site: http://www.dcr.virginia.gov/stormwater_management/vs_and_wcb.shtml.

Waste Management Board—Meets about three times per year; minutes of meetings are available at <http://www.deq.state.va.us/cboards>. More information: (800) 592-5482 (main number for DEQ).

N O T I C E S

If you would like to receive **regular e-mail notifications** about meetings, reports, and other items related to water quality and water monitoring, you may do so by joining the **Virginia Water Monitoring Council**; contact Jane Walker at (540) 231-4159 or janewalk@vt.edu.

For a regularly updated, online list of Virginia water-related educational events, please see the Water Center's "Quick Guide to Virginia Water Conferences, Meetings, and Other Events," at www.vwrrc.vt.edu/VAConfQuickGuide.html.

All Web sites listed in this section were functional as of 8/10/11.

Virginia Citizen Monitoring Grants – Proposals Due September 2

The Virginia Department of Environmental Quality (DEQ) is accepting applications for Citizen Monitoring Grants for 2012. The grant can support volunteer water-quality monitoring activities from January 1 through December 31, 2012, including paying for equipment, laboratory analysis, publications, and other related items. Grant awards cannot pay for office space, staff salaries, or staff benefits but may be used for contractual services. **Applications are due by September 2, 2011; maximum awards are \$4,000.** Recipients must have a DEQ-approved Quality Assurance Project Plan and Standard Operating Procedures. A copy of the grant request for proposals and more information are available online at www.deq.virginia.gov/cmonitor/grant.html. For more information, contact Stuart Torbeck at charles.torbeck@deq.virginia.gov or (804) 698-4461.

Chesapeake Bay License Plate Fund Grants – Proposals Due October 1

The Chesapeake Bay Restoration Advisory Committee has about \$308,000 available for grants to support environmental education and action-oriented conservation and restoration projects within Virginia's Chesapeake Bay watershed. Applications are accepted from state agencies, local governments, and public or private not-for-profit agencies, institutions, or organizations; individuals are not eligible to apply. The application deadline is October 1, 2011, and the grants will be made in May-June 2012. Links to the guidelines for applying and to the application form are available at http://dls.virginia.gov/GROUPS/cbrfac/cbrfac_downloads.htm. For more information, contact Martin Farber or Gwen Foley at the Division of Legislative Services, (804) 786-3591.

Virginia Rainwater Harvesting and Use Guidelines

This 15-page booklet was published in March 2011 by the Virginia Department of Health (VDH). [Click here to go directly to the PDF](#); access the document online through the Web site of the VDH's Division of Onsite Sewage, Water Services, Environmental Engineering, and Marina Programs, at <http://www.vdh.state.va.us/environmentalhealth/Onsite/index.htm> (click on "Technical Resources"); or phone your local VDH office to find out how to get a copy.

Chesapeake Bay Satellite Photos and Water-quality Data

Daily satellite photos of the Chesapeake Bay are available at the Maryland Department of Natural Resources' "Eyes on the Bay" Web site, at www.eyesonthebay.net. The site also has links to continuous surface-water quality monitoring maps and data in Maryland, and links to similar products for Virginia from the Virginia Institute of Marine Science, at <http://www3.vims.edu/vecos/>.

Resources on the Chesapeake Bay TMDL

- "A Citizen's Guide to the Chesapeake Bay TMDL," produced by NOAA's Chesapeake Bay Program Office and the University of Maryland Center for Environmental Science, is a four-page guide on the science, goals, implementation plans, and local impacts of the Chesapeake Bay Total Maximum Daily Load (TMDL), issued in December 2010. The guide is available at <http://www.eco-check.org/> or http://ian.umces.edu/pdfs/ecocheck_newsletter_314.pdf.

- The U.S. EPA's **Bay TMDL Tracking and Accounting System**, online at <http://stat.chesapeakebay.net>, allows users to follow the progress states make toward the commitments set in the Bay TMDL, compared to a 2009 baseline for nutrients and sediment.

- The Chesapeake Executive Council's Local Government Advisory Committee and the Alliance for the Chesapeake Bay's **"Our Waters, Our Towns, Local Governments' Role In The Watershed**

Implementation Plans,” online at <https://allianceforthebay.org/?p=1861>, aims to help local governments in the Bay watershed understand their requirements and potential opportunities under Phase II Watershed Implementation Plans now being developed by the six Bay states and the District of Columbia. More information: Rick Keister at rkeister@allianceforthebay.org or (443) 949-0575.

Water Quality Criteria for Nitrogen and Phosphorus Pollution

A recently launched Web site by the U.S. EPA, at <http://www.epa.gov/nutrientpollution/>, provides information on how excess nitrogen and phosphorus cause water pollution and on state efforts to include numeric criteria for nitrogen and phosphorus in their water-quality standards.

Chesapeake National Water Trail Boating Guide

The National Park Service, the Chesapeake Conservancy, and the Chesapeake Bay Foundation have published *A Boater’s Guide to the Captain John Smith Chesapeake National Historic Trail*, the first boating guide to the first U.S. national water trail. The 102-page guide and more information about the Smith Water Trail are available online at <http://www.smithtrail.net/>, or contact the Park Service’s Chesapeake Bay Office at 410 Severn Ave., Ste. 314, Annapolis, MD 21403; (410) 260-2470.

Invasive Species in Virginia Web Site and Poster

Keep informed about non-native, invasive species at the Virginia Department of Conservation and Recreation/Natural Heritage Program’s Web site at http://www.dcr.virginia.gov/natural_heritage/vaisc/. The site includes news about invasive species, species profiles and other information about invasive species in Virginia, information on the Virginia Invasive Species Working Group, the Virginia Invasive Species Management Plan laws and regulations pertaining to invasive species, and other resources. Meanwhile, the Natural Heritage Program asks citizens to report suspected new invasive species infestations to Kevin Heffernan at (804) 786-9112.

Speaking of Invasive Species...

Faculty in the Virginia Tech departments of Horticulture and of Forest Resources and Environmental Conservation have developed an online **Emerald Ash Borer Monitoring and Management Course**. The free, six-module, 90-minute course gives an overview of ash borer ecology and equips learners to detect and manage the insect. Access to the course is available at <http://www.hort.vt.edu/eab> to get started. More information: Sarah Gugercin at dickins@vt.edu.

National Assessment of Wetlands Conditions

In summer 2011, the field component of the first-ever **National Wetland Condition Assessment** is being conducted. Preparation for the assessment began in 2007, and the results are to be completed by 2013. The assessment is intended to provide a new national baseline on the *quality* of wetlands in the United States and to be used in conjunction with the *Wetland Status and Trends* reports by the U.S. Fish and Wildlife Service (available online at www.fws.gov/wetlands/StatusAndTrends/index.html), which are an inventory of the *quantity* of wetlands. The effort is being led by the U.S. EPA in collaboration with states and tribes. EPA’s Web site for the project is www.epa.gov/wetlands/survey/.

Watershed Conditions in National Forests

In May 2011, the U.S. Forest Service released *Watershed Condition Framework* (FS 977), a report describing a process for assessing and improving the conditions of over 15,000 watersheds in the national forests and grasslands. The first step in using the framework was the production of national and regional maps rating current conditions. The report describing the framework and to maps of watershed conditions are available online at <http://www.fs.fed.us/publications/watershed/>.

Detecting Bacterial Pathogens in Water Samples

A technique to detect pathogenic bacteria in water samples is the focus of a U.S. Agricultural Research Service project in Watkinsville, Georgia. The technique combines several lab procedures to concentrate and increase the biochemical signals of *Salmonella* and pathogenic *E. coli* bacteria, and results have shown that the technique can detect those bacteria at levels of only a few cells in a 10-liter water sample. The studies were published in the February 2009 issue of the *Journal of Applied Microbiology*; a newsletter account of the work is available in the article [A Better Way to Track Salmonella and E. coli in Waterways](#) in the February 2011 issue of *Agricultural Research* from the USDA Agricultural Research Service.

Videos on Groundwater, Wells, and Septic Systems

The Montana State University Extension Water Quality Program has produced several videos on how property owners should maintain and protect their wells and septic systems. The “Taking Care of Your Groundwater” series, available online at <http://waterquality.montana.edu/docs/videos.shtml>, includes segments on maintenance, wellhead protection, sampling and testing, interpreting testing results, shock chlorination, and water treatment. More information: MSU Extension Water Quality Program, P.O. Box 173120, Bozeman, MT 59717-3120; (406) 994-7381; waterquality@montana.edu.

Colorado River Basin Water Use

Municipal Deliveries of Colorado River Basin Water, published in June 2011 by the Pacific Institute, documents Colorado River basin water use between 1990 and 2008 by 100 water-supply systems—including those in Phoenix, Las Vegas, and southern California—serving about 35 million people in the United States and Mexico. The report found that per capita water use by these systems decreased an average of one percent during that period, with 28 water agencies reducing the actual amount of water they used during that period. The report is online at http://www.pacinst.org/reports/co_river_municipal_deliveries/index.htm, or contact Pacific Institute at (510) 251-1600 or publications@pacinst.org.

Upcoming Conferences, Workshops, and Other Events

Events In Virginia

•Through September, at all Virginia state parks: **75th Anniversary of Virginia State Parks events**, celebrating the June 15, 1936, opening of a statewide park system in Virginia. More information is on line at http://www.dcr.virginia.gov/state_parks/75th.shtml#bday and at your nearest state park.

•Aug. 17, 8:30 a.m.-4 p.m., Southwest Virginia Higher Education Center, Abingdon: **Preparing for the Emerald Ash Borer**. A workshop organized by Trees Virginia (the Virginia Urban Forestry Council). More information: Becky Woodson at (434) 220-9024 or becky.woodson@dof.virginia.gov; <http://treesvirginia.org/joomla/>.

•Aug. 23, 8 a.m.-4 p.m., on the James River at Pony Pasture in Richmond: **Flathead Catfish workshop** for ages 16 and up. Conducted by Virginia Department of Game and Inland Fisheries angling educator Mike Ostrander. **Register by August 16**. More information: Chris Dunnivant at chris.dunnivant@dgif.virginia.gov or (804) 367-6778; <http://www3.dgif.virginia.gov/web/events/>.

•Sep. 16-17, Wintergreen Resort, Wintergreen: **2011 Virginia Environmental Assembly**. This year's theme is "Natural Assets: Conservation and the Rural Economy." Organized by the Virginia Conservation Network. More information: (804) 644-0283; <http://vcnva.org>.

•Sep. 1-Oct. 31, statewide: **Virginia Waterways Cleanup and the International Coastal Cleanup in Virginia**. Organized by Clean Virginia Waterways as part of the International Coastal Cleanup. Schools, businesses, churches, youth groups and other organizations are encouraged to coordinate a site, and serve as “Site Captains.” More information: 434-395-2602 or cleanva@longwood.edu; <http://www.longwood.edu/cleanva/>.

•Sep. 20 and Oct. 17, specific locations TBD: **Kick-off meetings and sample collection for Virginia Household Water Quality Drinking Water Clinics:**

••Sep. 20: Buckingham County, contact is Jennifer Ligon at (434) 969-4261 or jligon@vt.edu;

••Sep. 20, Lunenburg and Nottoway counties, contact is Donna Daniel at (434) 696-5526 or ddaniel@vt.edu;

••Oct. 17: Spotsylvania and Stafford counties, contacts are Kim Elkins at KimElkins@vt.edu or John Howe at jhowe@vt.edu; phone: (540) 507-7570.

More information on the clinics is available online at <http://www.wellwater.bse.vt.edu/events.php>.

•Oct. 7-9, Williamsburg: **2011 Mid-Atlantic Marine Educators Association & Virginia Environmental Education Conference**. Organized by the Virginia Office of Environmental Education and the Mid-Atlantic Marine Educators Association (MAMEA). More information: Lisa Ayers Lawrence at ayers@vims.edu; <http://www.mamea.org/conf.html>.

•Nov. 18-19, Williamsburg Hospitality House, Williamsburg: **Virginia Aquaculture Conference 2011**. Organized by the Virginia Sea Grant Marine Extension Program and several other agencies, organizations, and universities. More information: Karen Hudson, Virginia Institute of Marine Science at khudson@vims.edu or (804) 684-7742; <http://www.vaaquacultureconference.com/index.html>.

Events Elsewhere

•Sep. 13-16, 2011, Bozeman, Mont.: **Sustaining the Blue Planet—Global Water Education Conference**. Organized by the Project WET Foundation. More information: (406) 585-2236 or blueplanet@projectwet.org; <http://www.projectwet.org/>.

•Sep. 14-18, 2011, Flathead Lake Biological Station, Polson, Mont.: **North American Diatom Symposium**. Organized by the Project WET Foundation. More information: <http://www.northamericadiatomsymposium.org/>.

•Sep. 25-29, 2011, Gaylord National Hotel and Conference Center, National Harbor, Md.: **National Dam Safety Conference**. Annual conference of the Association of Dam Safety Officials (ASDSO). More information: Brittany Lewis, (859) 257-5140 or blewis@damsafety.org; <http://www.damsafety.org>.

•Sep.26-29, 2011, Raleigh, N.C.: **Hydric Soils—An In-Depth, Two-Part Short Course for Wetland Professionals**. Organized by North Carolina State University and the Soils Science Society of North Carolina. More information: (706) 583-0347; <http://www.soil.ncsu.edu/wetlands>.

•Sep. 29-Oct. 2, 2011, National Conservation Training Center, Shepherdstown, W. Va.: **6th Annual Chesapeake Watershed Forum**. More information: Lou Etgen, letgen@allianceforthebay.org or (443) 949-0575; https://allianceforthebay.org/?page_id=1946.

•Oct. 3-5, 2011, Asheville, NC: **Southeast Stormwater Association Annual Conference**. More information: (866) 367-7379; <http://www.seswa.org/>.

•Oct. 3-7, 2011, Chapel Hill, N.C.: **Water and Health—Where Science Meets Policy**. Organized by the University of North Carolina's Institute for the Environment and Water Institute. More information: Margo Ginsberg at margo.ginsberg@unc.edu or (919) 966-7302; <http://whconference.unc.edu/index.cfm>.

•Oct. 4-6, 2011, Omaha, Neb.: **Collaborative Approaches to Groundwater Protection**. Annual conference of the Groundwater Foundation. More information: (800) 858-4844; <http://www.groundwater.org>.

•Oct.6-7, 2011, Great Falls, Mont.: **2011 Montana Water Conference**. Organized by the Montana Water Center and the Montana section of the American Water Resources Association. More information: water@montana.edu or (406) 994-6690; <http://water.montana.edu/awra/>.

•Oct. 19-20, 2011, St. Paul, Minn.: **Minnesota Water Resources Conference**. Organized by the University of Minnesota Water Resources Center. More information: (612) 624-9282 or umwrc@umn.edu; <http://wrc.umn.edu>.

•Oct. 31-Nov. 4, 2011, Austin, Tex.: **World Lake Conference**. Organized by the International Lake Environment Committee Foundation, the United Nations Environmental Programme, and the River Systems Institute at Texas State University- San Marcos. More information: River Systems Institute, Texas State University, (512)245-7420; www.wlc14.org.

•Nov. 7-10, 2011, Albuquerque, N.M.: **Annual conference of the American Water Resources Association**. More information: (540) 687-8390 or info@awra.org; <http://www.awra.org/meetings/ABQ2011/>.

•Nov. 15-17, 2011, Rocky Gap Resort, Flintstone, Md.: **Mid-Atlantic Stream Restoration Conference**. This year's theme is "Science, Engineering, and Technology." Organized by the U.S. Fish and Wildlife Service. For more information: masrc11@gmail.com; www.fws.gov/chesapeakebay/Masrc/index.html.

•Dec. 5-7, 2011, Las Vegas, Nev.: **First International Conference on Water and Society**. Organized by the Wessex Institute of Technology, Ashurst, United Kingdom. More information: Phone +44 (0)238 029 3223; e-mail: wit@wessex.ac.uk; www.wessex.ac.uk/11-conferences/waterandsociety-2011.html.

Also Out There...

(Brief descriptions of some interesting articles *Water Central* has recently discovered.)

•**"Kepone's Legacy,"** *Hopewell News and Patriot*, 6/13/11. A look back at the Kepone contamination in the 1960s and 1970s from the former Allied Chemical/Life Science Products plant (now owned by Honeywell) in Hopewell, which hospitalized 29 people, caused a decade-long fishing ban on the James from Richmond to the Chesapeake Bay, and resulted in hundreds of criminal charges and a \$13-million fine. Available online at www.hopewellnews.com/article_3468.shtml, or contact the newspaper at (804) 458-8511.

•**"Coastal Resource Management Planning,"** Spring 2011 issue of *Rivers & Coast*, from the Virginia Institute of Marine Science (VIMS) Center for Coastal Resources Management. This eight-page newsletter describes coastal resource management plans as a tool for responding to development and sea-level rise along Virginia's coast. Legislation in the 2011 Virginia General Assembly ([Senate Bill 964](#)) will require Tidewater localities to consider such plans during their comprehensive planning reviews. Available online

at <http://www.cerm.vims.edu/publications/pubs/rivers&coast/index.html>, or contact the Center at P.O. Box 1346, Gloucester Point, Virginia 23062-1346; (804) 684-7380; ccrm@vims.edu.

• **“Working Waterfronts and Waterways: From Local Success to a National Movement,”** Winter 2011 issue of *Virginia Marine Resource Bulletin*, from Virginia Sea Grant, examines how communities in Virginia and other coastal states are working to maintain waterfronts that provide multiple public and commercial uses. Online at <http://vaseagrant.vims.edu/>, or contact Virginia Sea Grant at the Virginia Institute of Marine Science, (804) 684-7167 or vsgpubs@vims.edu.

• **“Alien invaders—State officials in constant, costly combat against non-native species,”** *Maryland Gazette*, 5/13/11. From a Maryland perspective, this article overviews the topic of non-native, invasive species, with several examples (such as the Emerald Ash Borer and Northern Snakehead fish) relevant to water and land resources in Virginia and many other states besides Maryland. Online at http://www.gazette.net/stories/05132011/poline193715_32538.php, or phone the *Gazette* at (301) 670-2565.

• **“Blue Catfish Boom Threatens Region’s River Ecosystems,”** May 2011 issue of *Bay Journal*. This article examines the impacts of increasing populations of non-native Blue Catfish on native fish species in the James River, Rappahannock River, and other Chesapeake Bay tributaries. The article is available online at <http://www.bayjournal.com/index.cfm?issue=329>, or contact the *Bay Journal* at (717) 428-2819 or bayjournal@earthlink.net.

• **“Celebrating 30 Years,”** the Summer/Fall 2010 issue of *Coastal Heritage*, marking the 30th anniversary of the South Carolina Sea Grant Consortium. The issue includes detailed retrospectives—with assessments of current situations—on the seafood industry, disaster preparedness, climate change, shoreline management, and stormwater management. While the articles focus on South Carolina, of course, they also provide useful information and perspective from other Atlantic Coast states, including Virginia. Available online at http://www.scseagrant.org/oldsite/library/library_coaher.htm, or contact the Consortium at 287 Meeting Street, Charleston, SC 29401; (843) 953-2078; annette.dunmeyer@scseagrant.org.

• **“Geography of Water Resources: Comparing International and Colorado River Basins,”** in the May/June 2010 issue of *Colorado Water*, from the Water Center of Colorado State University. This eight-page article consists of eight essays by university geography students who compared water-resources issues in Colorado watersheds to issues in comparable river basins around the world, including the Yukon in Alaska, Tigris-Euphrates in Iraq, and Murray-Darling in Australia. The comparisons reveal several recurring themes, such as the challenge of providing adequate water quantity and quality for multiple uses, and the potential conflicts involved in transferring water between jurisdictions. The publication is available online at <http://www.cwi.colostate.edu/>, or contact the Center at (970) 491-6308 or cwi@colostate.edu.

AT THE WATER CENTER

To reach the Virginia Water Resources Research Center: phone (540) 231-5624; FAX (540) 231-6673; e-mail water@vt.edu; Web site www.vwrrc.vt.edu.

So Long to Our Communications Manager

The Water Center bids a fond farewell to our communications manager, **Patrick Fay**, who left at the end of May to become the marketing and communications manager for the Office of Undergraduate Admissions at East Carolina University in Greenville, North Carolina. A graduate of Liberty University, Patrick came to the Water Center in October 2008. His contributions here included audio/visual coverage of Water Center events and research, Virginia Tech News “spotlights” on Center research projects, new display materials for conferences, Web site management, collaboration in creating and producing Virginia Water Radio, and mentoring several undergraduate interns from the Virginia Tech Communication Department. We wish Patrick and his family good luck in their new home.



Virginia Water Central

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Water Central is available online at www.vwrrc.vt.edu/watercentral.html. If you would like an e-mail notification when new issues are posted, please notify us at (540) 231-5463 or araflo@vt.edu. Also, please let us know if your e-mail address has changed or if you no longer wish to receive the e-mail notification.

If you do not have Internet access and would like a photocopy of the newsletter, please contact us.
Thank you!

YOU GET THE LAST WORD

Please answer the following questions to let us know whether the newsletter is meeting your needs. Please mail this page to the Water Center address listed in the box above, or e-mail your responses to araflo@vt.edu. Thank you.

1. Would you rate the **content** of this issue as good, fair, or poor?

2. Would you rate the **appearance** as good, fair, or poor?

3. Would you rate the **readability** of the articles as good, fair, or poor?

4. What **length** is about right?

5. What **frequency** is about right? 4 issues per year? 6 issues per year? More?____ Fewer?____

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