

# Virginia Water Central

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South Fork Shenandoah River at Rileyville (Page County), July 22, 2012.

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## FEATURE ARTICLE

### Water in the 2012 Virginia General Assembly

The 2012 [Virginia General Assembly](#) convened January 11 and adjourned March 10. A Special Session on the state budget convened March 10 and adjourned May 15 with passage of the budget. The reconvened session—for the General Assembly to consider vetoes or amendments by the governor—was held April 18. During the session, the Assembly considered 2876 measures, passing 1616 of them, defeating 934, and continuing 326 to next year’s session. The Assembly also considered amendments to the 2010-12 biennial state budget and the new 2012-14 budget.

In this article, *Virginia Water Central* lists 171 measures in the 2012 Assembly (including six budget bills) dealing with water resources directly or indirectly. 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 2012 Assembly that received attention in various news media. For a selection of online news articles about water-related legislation in the 2012 Assembly, please visit the *Virginia Water Central* News Grouper at <http://vawatercentralnewsgrouper.wordpress.com/category/2012-virginia-general-assembly/>.

*Water Central’s* inventories of water-related bills in previous General Assembly sessions (1998-2011) are available online at [www.vwrrc.vt.edu/legislation.html](http://www.vwrrc.vt.edu/legislation.html).



## 2012 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; DOF = Department of Forestry; EPA = U.S. Environmental Protection Agency; House ACNR = House Agriculture, Chesapeake, and Natural Resources committee; House APP = House Appropriations committee; SCC = State Corporation Commission; Senate ACNR = Senate Agriculture, Conservation, and Natural Resources committee; SWCB = State Water Control Board; VDH = Virginia Department of Health; VDOT = Virginia Department of Transportation; VIMS = Virginia Institute of Marine Science; VMRC = Virginia Marine Resources Commission.

### BUDGET

1	<a href="#">HB 29</a>	<b>Budget Bill.</b> Amendments to the 2010-2012 biennial budget.	Failed in Senate.
2	<a href="#">HB 30</a>	<b>Budget Bill.</b> Appropriations for the 2012-2014 biennium (July 1, 2012-June 30, 2014).	Failed in Senate.
3	<a href="#">SB 29</a>	<b>Budget Bill.</b> Amendments to the 2010-2012 biennial budget.	Failed in Senate.
4	<a href="#">SB 30</a>	<b>Budget Bill.</b> Appropriations for the 2012-2014 biennium (July 1, 2012-June 30, 2014).	Failed in Senate.
5	<a href="#">HB 1300</a>	<b>Budget Bill.</b> Amendments to the 2010-2012 biennial budget.	Passed in 2012 Special Session.
6	<a href="#">HB 1301</a>	<b>Budget Bill.</b> Appropriations for the 2012-2014 biennium (July 1, 2012-June 30, 2014).	Passed in 2012 Special Session.

### CONSERVATION

#### Land Conservation Bills

7	<a href="#">HB 240</a>	<b>Amherst County land conveyance.</b> Authorizes the DCR to convey a 31-acre parcel at State Route 1004 to Amherst County while requiring that the land remain open to the public.	Passed.
8	<a href="#">HB 336</a>	<b>Virginia Land Conservation Fund.</b> Prohibits distribution of revenues to federal entities.	Passed.
9	<a href="#">HB 456</a>	<b>Riparian forest tax credit.</b> Would make refundable. Companion bill is SB 404 (#18).	Continued to 2013 in House Finance.
10	<a href="#">HB 908</a>	<b>Land preservation tax credit.</b> Would provide for application for credits prior to any donation.	Continued to 2013 in House Finance.
11	<a href="#">HB 1113</a>	<b>Biscuit Run (planned state park).</b> Establishes a procedure that authorizes the DCR to exchange land it owns for interest in property owned by a private company near Biscuit Run in Charlottesville.	Passed.
12	<a href="#">HB 1268</a>	<b>Land preservation tax credit.</b> Would reduce from \$100,000 to \$50,000 the amount that may be claimed for taxable years 2012 and 2013.	Continued to 2013 in House Finance.
13	<a href="#">SB 123</a>	<b>Environmental covenants.</b> Limits the use of covenants under the Uniform Environmental Covenants Act to those	Passed.

		situations in which all parties agree to use such a covenant.	
14	<a href="#">SB 183</a>	<b>Virginia Outdoors Foundation.</b> Exempts this organization from having to pay the clerk of the circuit court a fee for remote access to land records.	Passed.
15	<a href="#">SB 352</a>	<b>Land conservation tax credit.</b> Would have allowed transfer in event of death of the taxpayer with the credit.	Failed in Senate Finance.
16	<a href="#">SB 355</a>	<b>Land preservation tax credit.</b> Would have required the Department of Taxation to publish annually information about approved credits.	Passed Senate; failed in House Finance.
17	<a href="#">SB 403</a>	<b>Land preservation tax credit for farmers.</b> Would increase for working farmers the land preservation tax credit from 40 percent to 50 percent of the fair market value of a conveyance.	Continued to 2013 in Senate Finance.
18	<a href="#">SB 404</a>	<b>Riparian Forest Grant Program.</b> Would have made program's tax credits refundable. Companion bill is HB 456 (#9).	Failed on Senate floor.

### Other Conservation Bills

19	<a href="#">HB 27</a>	<b>Residential energy-efficiency standards.</b> Would have exempted from federal standards residences meeting state building code.	Passed House; failed in Senate ACNR.
20	<a href="#">HB 114</a>	<b>Cigarettes.</b> Would have deemed cigarettes to be litter for purposes of criminal punishment for improper disposal of trash.	Failed in House Courts of Justice.
21	<a href="#">HB 239</a>	<b>Department of Forestry nursery treatments; methyl bromide.</b> Asserts that the Virginia DOF's preferred method of treatment of its forest tree nurseries is methyl bromide gas fumigation in pre-seeding land preparation under the U.S. Environmental Protection Agency's listed usage exemption. Companion bill is SB 126 (#36).	Passed.
22	<a href="#">HB 291</a>	<b>Timber cutting notice.</b> Would have required property owners to send written notice to all adjoining property owners prior to cutting.	Failed in House ACNR.
23	<a href="#">HB 302</a>	<b>Environmental laboratory certification program.</b> Exempts labs using protocols of the DCR's voluntary nutrient management training and certification program in determining soil fertility, animal manure nutrient content, or plant tissue nutrient uptake. Companion Bill is SB 52 (#35).	Passed.
24	<a href="#">HB 484</a>	<b>Court land records security.</b> Provides that providing secure remote access to land records includes locating technology in an offsite facility for purposes of improving public access or for the implementation of a disaster recovery plan; plus other provisions related to data security.	Passed.
25	<a href="#">HB 522</a>	<b>Statewide system of trails access to disabled.</b> Permits use of wheelchairs or other power-driven mobility devices permitted in accordance with the federal Americans with Disabilities Act.	Passed.
26	<a href="#">HB 758</a>	<b>Littering.</b> Would have defined littering and provided for penalties based on gravity of offense.	Failed in House Counties, Cities and Towns.
27	<a href="#">HB 926</a>	<b>Land records access fees.</b> Provides that clerks, in charging fees for their services, may accept debit cards in addition to credit cards; outsource processing of credit and debit card	Passed.

		transactions; and charge a convenience fee for processing credit or debit cards of up to \$2 per transaction or four percent of the amount paid (currently, such fee may not exceed four percent of the amount paid). Also provides that certain fees collected by the clerk be deposited into a special fund held by the clerk, and permanently authorizes a Prince William County program for the clerk to charge a convenience fee for remote access to land records.	
28	<a href="#">HB 932</a>	<b>Voluntary Nutrient Management Plan Program.</b> Provides that the DCR will operate a voluntary nutrient-management program to assist owners and operators of agricultural land and turf to effectively manage and apply nutrients to their land.	Passed.
29	<a href="#">HB 995</a>	<b>Timber sales payments.</b> Limits the payment made to localities by the DOF to one-fourth of the gross proceeds derived solely from the sale of timber harvested on state forest lands (except the counties of Appomattox, Buckingham, and Cumberland will receive one-eighth of the gross proceeds). Currently, localities receive one-fourth of the gross proceeds generated by <i>any</i> revenue-generating activity occurring on state forest lands. Companion bill is SB 428 (#41).	Passed.
30	<a href="#">HB 1009</a>	<b>Land-disturbing activities without plan or permit.</b> Specifies the means of serving an order for land disturbance where no plan has been approved or permit obtained (other than where an agricultural exemption applies).	Passed.
31	<a href="#">HB 1065</a>	<b>Erosion &amp; Sediment Control, Stormwater, &amp; Chesapeake Bay Preservation Acts; integration of programs.</b> Integrates elements of the Erosion and Sediment Control Act, the Stormwater Act, and Chesapeake Bay Preservation Act and defines “Virginia Erosion and Sediment Control Program” and “Virginia Erosion and Sediment Control Authority.” The bill also eliminates the Chesapeake Bay Local Assistance Board and places its responsibilities with the Virginia Soil and Water Conservation Board. Companion bill is SB 407 (#40).	Passed.
32	<a href="#">HB 1210</a>	<b>Lawn maintenance fertilizer.</b> Beginning July 1, 2014, allows for only sale, distribution, or use in the Commonwealth only lawn maintenance fertilizer that, when applied in accordance with its directions for use, results in the application of nitrogen at rates that are consistent with the nitrogen application rates recommended for turfgrass in the Virginia Nutrient Management Standards and Criteria.	Passed.
33	<a href="#">HB 1291</a>	<b>State government reorganization; Governor's reorganization of executive branch.</b> Water-related agency changes include the following (bolding added): <ul style="list-style-type: none"> <li>●Eliminates the <b>Reforestation Board</b> and transfers its responsibilities to the Board of Forestry. The terms of the current members of the Board of Forestry will expire July 1, 2012, and the Governor is authorized to appoint 11 new members to the Board. Initially, the members will be appointed for staggered terms;</li> <li>●Eliminates the <b>Pesticide Control Board</b> and transfers its duties and responsibilities to the Board of Agriculture and Consumer Services. The bill also increases the membership of the Board of Agriculture and Consumer Services by adding two pesticide applicators;</li> </ul>	Passed.

		<ul style="list-style-type: none"> <li>●Merges the <b>Board for Professional Soil Scientists and Wetland Professionals</b> with the Board for Geology;</li> <li>●Eliminates the <b>Board of Surface Mining Review</b> and requires any appeals of an order issued by the Department of Mines, Minerals and Energy to be conducted by the Department using the case decision procedures of the Administrative Process Act;</li> <li>●Eliminates the <b>Board of Mineral Mining Examiners</b> and places its duties and responsibilities with the Department of Mines, Minerals and Energy;</li> <li>●Moves the responsibility of providing <b>environmental education</b> programs from the Department of Environmental Quality to the Department of Conservation and Recreation;</li> <li>●Moves the <b>Municipal Separate Storm Sewer System (MS4) Program</b> from the Virginia Soil and Water Conservation Board to the State Water Control Board. This has to be reenacted to become effective, except that the assessment by the Secretary of Natural Resources of the water quality programs of the Commonwealth can begin July 1, 2012;</li> <li>●Eliminates the <b>Virginia Scenic River Board</b> and transfers its duties to the Board of Conservation and Recreation;</li> <li>●Eliminates the <b>Boating Advisory Committee</b>;</li> <li>●Eliminates the <b>Foundation for Virginia's Natural Resources</b>. The companion bill is SB 678 (#44).</li> </ul>	
34	HJ 129	<b>Chesapeake Bay Total Maximum Daily Load (TMDL)</b> ; Would have required the Virginia attorney general to explore a challenge to the constitutionality of Bay TMDL regulations issued by U.S. EPA.	Failed in House ACNR.
35	SB 52	<b>Environmental laboratory certification program.</b> Companion Bill is HB 302 (#23); please see that bill for summary.	Passed.
36	SB 126	<b>Department of Forestry nursery treatments; methyl bromide.</b> Companion bill is HB 239 (#21); please see that bill for summary.	Passed.
37	SB 174	<b>Stormwater program assistance</b> ; DCR to provide technical and staff assistance in managing.	Failed in Senate ACNR.
38	SB 357	<b>Virginia Law Officers' Retirement System.</b> Would add conservation officers of DCR as members.	Continued to 2013 in Senate Finance.
39	SB 402	<b>Nutrient Offset Fund.</b> Would establish as a priority for funding from the Nutrient Offset Fund those nutrient offsets that are produced from facilities that generate electrical or heat energy, steam, or hot water using animal waste as a fuel source.	Continued to 2013 in Senate ACNR.
40	SB 407	<b>Erosion &amp; Sediment Control, Stormwater, &amp; Chesapeake Bay Preservation Acts</b> ; integration of programs. Companion bill is HB 1065 (#31); please see that bill for summary.	Passed.
41	SB 428	<b>Timber sales payments.</b> Companion bill is HB 995 (#29); please see that bill for summary.	Passed.
42	SB 504	<b>Air quality, water quality or solid waste permits.</b> Provides that, to the extent allowed by federal law, any permit-holder intending to upgrade the permitted facility by installing technology, control equipment, or other apparatus that will result in improved energy efficiency, reduce emissions of regulated air pollutants, and meets the requirements of Best	Passed.

		Available Control Technology shall not be required to obtain a new, modified, or amended permit.	
43	<a href="#">SB 559</a>	<b>State forest land permits.</b> Authorizes the State Forester to issue the special use permit for certain activities on state forest lands without the approval of the Board of Forestry; removes the existing \$15 fee and leaves the DOF to set the fee through the regulatory process.	Passed.
44	<a href="#">SB 678</a>	<b>State government reorganization;</b> Governor's reorganization of executive branch. Companion bill is HB 1291 (#33); please see that bill above for summary.	Passed.

## DRAINAGE, SOIL CONSERVATION, SANITATION, AND PUBLIC FACILITIES DISTRICTS

45	<a href="#">HB 293</a>	<b>Dam safety.</b> Requires the Soil and Water Conservation Board to consult with the Department of Emergency Management in implementing the dam safety program and makes clarifying amendments. Companion bill is SB 253 (#47).	Passed.
46	<a href="#">HB 618</a>	<b>Soil and water conservation boards.</b> Would have authorized that representatives of a locality could be appointed by the local governing body, rather than chosen in an election.	Failed in House ACNR.
47	<a href="#">SB 253</a>	<b>Dam safety.</b> Companion bill is HB 293 (#45); please see that bill for summary.	Passed.
48	<a href="#">SB 560</a>	<b>Dams and sanitation districts.</b> Adds dams to the list of infrastructure that a local governing body is authorized to construct and maintain within sanitation districts.	Passed.
49	<a href="#">SB 629</a>	<b>Sanitation districts' commission expenses.</b> Would have allowed commission members to be paid a "reasonable per diem" (a change from the currently stipulated \$10 per diem) and increased the maximum annual payment to a member from \$300 to \$1500.	Passed but vetoed by governor.
50	<a href="#">SB 672</a>	<b>Hampton Roads Sanitation District revenue bonds, liability insurance, etc.</b> Amends the district's enabling act by expressly permitting the district commission to determine the rate of interest on revenue bonds, removing the six percent interest-rate cap for the sale of bonds, and allowing the commission to refund revenue bonds at a higher interest rate than that at which they were issued where the commission determines such a refund to be in the best interests of the district. Several other provisions also included.	Passed.

## EMINENT DOMAIN

51	<a href="#">HB 597</a>	<b>Eminent domain;</b> definitions of lost profits and access.	Incorporated into HB 1035 (#52).
52	<a href="#">HB 1035</a>	<b>Eminent domain; lost profits and lost access.</b> Provides definitions for the terms "lost profits" and "lost access" and how to determine the amount of just compensation—which includes lost profits and lost access resulting from the taking—that must	Passed.

		be paid for property taken by eminent domain. Requires approval by voters of a Virginia Constitutional amendment. Companion bill is SB 437 (#54).	
53	HJ 3	<b>Constitutional amendment; taking or damaging of private property for public use (second reference).</b> The proposed amendment provides that private property can be taken or damaged only for a public use, only with just compensation to the owner, and only so much taken as is necessary for the public use. Just compensation must equal or exceed the value of the property taken, lost profits and lost access, and damages to the residue caused by the taking. A public service company, public service corporation, or railroad exercises the power of eminent domain for public use when such exercise is for the authorized provision of utility, common carrier, or railroad services. In all other cases, a taking or damaging of private property is not 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. The condemnor bears the burden of proving that the use is public, <i>without a presumption</i> that the use is public. Companion bill is SJ 3 (#56).	Passed.
54	SB 437	<b>Eminent domain; lost profits and lost access.</b> Companion bill to HB 1035 (#52); please see that bill for summary.	Passed.
55	SB 653	<b>Condemnation; proceedings generally.</b> Adds electricity and telephone lines to the uses specified for which Virginia condemnation proceedings can be used, adds a phrase that condemnation proceedings are allowable “except to the extent otherwise prohibited by law,” and identifies the enumerated purposes as allowable because they are “inherently public uses when undertaken by a locality.”	Passed.
56	SJ 3	<b>Constitutional amendment; taking or damaging of private property for public use (second reference).</b> Companion bill is HJ 3 (#53); please see that bill for summary.	Passed.

## ENERGY CONSERVATION AND RESOURCES

57	HB 66	<b>Incandescent light bulbs.</b> Would have encouraged manufacture and use of incandescent bulbs in Virginia and created procedure by which a manufacturer of these bulbs may obtain a license from SCC.	Failed in House Commerce and Labor.
58	HB 69	<b>Renewable energy portfolio standard.</b> Would have <i>required</i> investor-owned electric utilities and distribution cooperatives to participate in a renewable energy portfolio standard program, with each utility required to generate renewable energy or to purchase renewable energy certificates in amounts that start in 2013 at three percent of the total electric energy sold in the base year of 2007 and that increase to 20 percent of such amount in 2020. Currently, electricity providers may voluntarily apply to participate in a renewable energy program.	Failed in House Commerce and Labor.
59	HB 70	<b>Energy conservation goal and program.</b> Would have established a statewide goal of reducing electric energy	Failed in House Commerce and



		consumption—through energy conservation and efficiency actions taken by government, electric utilities, and retail customers—by 19 percent by 2025. The measure specified percentages of reductions to be attained through enhancements to the Statewide Building Code and appliance efficiency standards, improved energy performance of publicly owned buildings, energy performance improvements in the industrial sector, and combined heat and power. The bill would have required utilities to address their energy-efficiency and demand-response management programs in annual conservation reports and required cooperatives to file assessments of impediments to their implementation of certain rate initiatives.	Labor.
60	<a href="#">HB 105</a>	<b>Machinery and equipment recyclable materials tax credit.</b> Would have made eligible for this tax credit any machinery and equipment used in a manufacturing facility or plant unit that produces methane gas for sale through anaerobic (with oxygen) digestion.	Failed in House Finance.
61	<a href="#">HB 232</a>	<b>Renewable energy.</b> Expands the state’s definition of renewable energy to include landfill gas, for purposes of participation in the state’s voluntary renewable energy portfolio program. Companion bill is SB 492 (#82). See similar HB 645 (#66), which failed.	Passed.
62	<a href="#">HB 236</a>	<b>Sales and use tax exemption for hurricane preparedness products and energy-efficient or water-efficient products.</b> Would have merged these two sales-tax “holidays” into one time period.	Failed in House Finance.
63	<a href="#">HB 312</a>	<b>Energy efficiency programs at electric and natural-gas utilities.</b> Identical to HB 894 (#71), which passed; please see that bill for summary.	Failed in House Commerce and Labor.
64	<a href="#">HB 448</a>	<b>Net energy metering program.</b> Would have revised the requirement, enacted in 2011, that a customer-generator pay a monthly standby charge that allows its supplier to recover a portion of its infrastructure costs. The revisions would have provided that a supplier not assess standby charges until it has 1,000 customer-generators and that a supplier has the option <i>not</i> to assess standby charges. See related SB 582 (#84). HB 911 (#72) also addresses net metering.	Failed in House Commerce and Labor.
65	<a href="#">HB 590</a>	<b>Renewable energy facilities;</b> eligibility for incentives. Would have established a requirement that electricity generated from renewable sources be generated from a facility located in the Commonwealth or off of the Commonwealth's coastline in order to qualify as renewable energy for purposes of the renewable energy portfolio standard program.	Failed in House Commerce and Labor.
66	<a href="#">HB 645</a>	<b>Renewable energy.</b> Would have expanded the state’s definition of renewable energy to include landfill gas, for purposes of participation in the state’s voluntary renewable energy portfolio program. Also see similar HB 232 (#61), which passed.	Failed in House Commerce and Labor.
67	<a href="#">HB 657</a>	<b>Renewable energy portfolio standard program.</b> Would have adjusted the mix of energy sources that qualify as satisfying the requirements of the renewable energy portfolio standard program and limited the amount of renewable energy generated outside Virginia or its coastal waters that can qualify	Failed in House Commerce and Labor.

		for the program. The measure had several other key provisions.	
68	<a href="#">HB 660</a>	<b>Solar photovoltaic power production projects.</b> Would provide that VDOT may lease space within highway rights-of-way for solar photovoltaic power production projects.	Continued to 2013 in House Transportation.
69	<a href="#">HB 672</a>	<b>Community solar gardens.</b> Would have defined a community solar garden as a solar electric generation facility with a rated generation capacity of two megawatts or less that is located within the service territory of a utility, authorized their establishment, and set provisions for power generated to be purchased as net-metering credits by the utility.	Failed in House Commerce and Labor.
70	<a href="#">HB 883</a>	<b>Income tax credit for solar energy equipment systems.</b> Would provide a personal and corporate income tax credit beginning for purchase and installation of equipment that generates electricity from solar energy or uses solar energy to heat or cool a structure or provide hot water. See also similar HB 1170 (#76).	Continued to 2013 in House Finance.
71	<a href="#">HB 894</a>	<b>Energy efficiency programs at electric and natural-gas utilities.</b> Provides that an energy efficiency program proposed by an electric utility is in the public interest if the net present value of the benefits exceeds the net present value of the costs as determined by any three of four benefit/cost tests. A utility's energy efficiency program may be deemed to be in the public interest if it provides measurable and verifiable energy savings to low-income customers or elderly customers. The current standard for what constitutes a cost-effective conservation and energy efficiency program conducted by a natural gas utility is revised to conform to these new provisions for electric utilities. The measure expands the definition of "energy efficiency program" with regard to electric utilities to include customer engagement programs that result in measurable and verifiable energy savings that lead to efficient use patterns and practices. Companion bill is SB 493 (#83).	Passed.
72	<a href="#">HB 911</a>	<b>Renewable energy net-metering.</b> Would have required the SCC to establish a program of community net metering, which will allow a group of residential, commercial, industrial, and other customers to establish an "eligible community customer" to act collectively to generate renewable energy for their own use, with generating capacity of an eligible community customer's facility shall not exceed two megawatts at a single site. The measure also would have required the SCC to establish a process for issuing, monitoring, transferring, and using renewable energy certificates. HB 448 (#64) also addresses net metering.	Failed in House Commerce and Labor.
73	<a href="#">HB 1017</a>	<b>Renewable energy portfolio standard program.</b> Would have eliminated the performance incentive provision in the renewable energy portfolio standard (RPS) program that entitles an electric utility to a 50 basis point increase in its authorized combined rate of return on common equity if it meets the program's RPS goals. Also had other provisions on RPS-related costs and returns.	Failed in House Commerce and Labor.
74	<a href="#">HB 1102</a>	<b>Renewable energy portfolio standard program; credits for research investments.</b> Allows any investor-owned electric utility that participates in the renewable energy portfolio standard program (RPS) to meet up to 20 percent of an RPS	Passed.

		Goal through certificates evidencing the utility's expenses in conducting research and development activities in Virginia related to renewable or alternative energy sources, their economic-development impacts, or their environmental impacts. The measure prohibits participating utilities from recovering costs associated with qualified investments through rate adjustment clauses and is not authorized to earn a return on its qualified investments, and a participating utility is not eligible for a research and development tax credit for qualified investments. Companion bill is SB 413 (#81).	
75	<b>HB 1166</b>	<b>Renewable portfolio standard program reporting.</b> Requires each utility participating in the renewable portfolio standard program to identify, in its annual report to the SCC, the states where renewable energy was generated, the decades in which the renewable energy generating units were placed in service, and the fuel types used to generate the renewable energy. Companion bill is SB 382 (#80).	Passed.
76	<b>HB 1170</b>	<b>Income tax credit for renewable energy.</b> Would grant an income tax credit for individuals for placing into service renewable energy property using solar energy or geothermal energy. Also would grant an income tax credit corporations for placing into service renewable energy property from solar or geothermal. Specific credit amounts are stated. See also similar HB 883 (#70).	Continued to 2013 in House Finance.
77	<b>HB 1177</b>	<b>Virginia Energy Plan.</b> Adds to the list of the Commonwealth's energy objectives the following: ensuring an adequate energy supply and a Virginia-based energy production capacity; and minimizing the Commonwealth's long-term exposure to volatility and increases in world energy prices through greater energy independence.	Passed.
78	<b>HB 1261</b>	<b>Landlord and tenant law on energy submetering; adds campgrounds.</b> Adds campgrounds to residential and commercial buildings as the locations where energy submetering equipment, energy allocation equipment, water and sewer submetering equipment, or a ratio utility billing system may be used.	Passed.
79	<b>HJ 227</b>	<b>National energy policy resolution.</b> The proposed resolution lodges several criticisms of energy-rated actions by federal agencies and the current presidential administration, and calls upon the president and Congress to “adopt a national energy policy that supports the responsible exploration for and development of all of this nation's diverse energy resources in order to secure abundant supplies of affordable, reliable energy...; ...provide statutory oversight and direction to implement a responsible energy policy in light of the Executive Branch’s failure to implement such a policy; require that the EPA prepare and provide a cumulative regulatory impact assessment of all of the major regulations under consideration under the [Clean Air Act] and [Clean Water Act]...; and provide additional oversight over the EPA....”	Passed House; continued to 2013 in Senate Rules.
80	<b>SB 382</b>	<b>Renewable portfolio standard program reporting.</b> Companion bill is HB 1166 (#75); please see that bill for summary.	Passed.
81	<b>SB 413</b>	<b>Renewable energy portfolio standard program; credits</b>	Passed.

		<b>for research investments.</b> Companion bill is HB 1102 (#74); please see that bill for summary.	
82	<b>SB 492</b>	<b>Renewable energy;</b> expands definition to include landfill gas. Companion bill is HB 232 (#61); please see that bill for summary.	Passed.
83	<b>SB 493</b>	<b>Energy efficiency programs at electric and natural-gas utilities.</b> Companion bill is HB 894 (#71); please see that bill for summary.	Passed.
84	<b>SB 582</b>	<b>Net energy metering.</b> Would expand the required conditions necessary for the SCC to approve an electrical utility's proposed standby charge methodology applied to customers that generate electricity. See related HB 448 (#64).	Continued to 2013 in Senate Commerce and Labor.
85	<b>SB 621</b>	<b>Energy efficiency data for state-owned buildings.</b> Would require the Department of General Services to establish a program requiring an energy analysis of each state-owned building containing more than 50,000 square feet to identify opportunities for reduced energy use and require such buildings to obtain and publicize an energy efficiency score utilizing the Energy Star assessment and ratings program.	Continued to 2013 in Senate Finance.
86	<b>SB 627</b>	<b>Solar panel restrictions by community associations.</b> The bill would have allowed retroactive application (back to 2008) of the state's prohibition of a community association's authority to prohibit solar panels on private property. The governor's veto asserted that such a retroactive application would "contradict the general legislative rule that statutory enactments are applied prospectively."	Passed, but vetoed by governor, and veto sustained in Senate.

## FISHERIES AND HABITAT OF TIDAL WATERS

87	<b>HB 40</b>	<b>Coastal primary sand dunes protection; areas where exemptions may be allowed.</b> Would add the Chesapeake Beach subdivision to the Sandbridge Beach subdivision as the areas in which the Virginia Beach Wetlands Board is authorized to allow an exemption from the Coastal Primary Sand Dunes and Beaches Act, by determining which structures or properties are in imminent danger from erosion or storm damage and where, as a result, property owners are allowed to erect or maintain protective bulkheads.	Passed House; continued to 2013 in Senate ACNR.
88	<b>HB 88</b>	<b>Menhaden.</b> Would have removed the allowance for a carry-over of harvest levels over or under the annual Chesapeake Bay Menhaden harvest cap of 109,020 metric tons.	Failed in House ACNR.
89	<b>HB 175</b>	<b>Duck blinds.</b> Limits the placement of duck blinds by riparian landowners in Back Bay to the riparian owner's shoreline at the mean low water mark, but allows blinds erected and licensed by riparian owners in 2011 to remain at their current locations.	Passed.
90	<b>HB 196</b>	<b>Haul seine nets.</b> Requires a haul seine net that is longer than 1,000 yards and is anchored at one end to the shore and the other end mechanically drawn, without the aid of a boat or vessel, to have up to 400 feet of two-and one-half inch mesh.	Passed.
91	<b>HB 238</b>	<b>Blue Crabs.</b> Limits the VMRC's fisheries management authority in the Albemarle and Currituck watersheds to the recreational and commercial harvest of the Blue Crab.	Passed.

92	<a href="#">HB 258</a>	<b>Commercial fishing piers.</b> Would have authorized the VMRC to raise the minimum distance permitted for net fishing in the vicinity of a commercial fishing pier from 300 yards to as much as 1,000 yards and to promulgate other regulations.	Failed in House ACNR.
93	<a href="#">HB 934</a>	<b>Bottomlands conveyed by special grant.</b> In private civil actions for trespass upon bottomlands alleged to have been conveyed by a special grant or compact, the bill would have established a presumption that such bottomlands are owned by the Commonwealth. This presumption would only apply in such an action and not otherwise affect any person's property rights.	Failed in House ACNR.
94	<a href="#">HB 1159</a>	<b>Shark fins.</b> Would have banned the possession, sale, etc., with certain exceptions.	Failed in House ACNR.
95	<a href="#">HJ 50</a>	<b>Sea-level rise/recurrent flooding study.</b> Requests the Virginia Institute of Marine Science to study strategies of adaption for recurrent flooding resulting from past and predicted sea-level rises in Tidewater and Eastern Shore localities. The study is to include the participation of the Hampton Roads Planning District Commission and Old Dominion University. The report is due to the General Assembly by January 2013. Companion bill is SJ 76 (#101).	Passed.
96	<a href="#">HJ 96</a>	<b>Summer flounder.</b> Requests the Atlantic States Marine Fisheries Commission to include options for the <i>recreational</i> harvest of summer flounder that would encourage the retention of at least one 14-inch fish (current size limit is 17.5 inches).	Passed.
97	<a href="#">SB 18</a>	<b>Atlantic States Marine Fisheries Compact.</b> Would remove authorization for Virginia's membership in this 1950 fisheries management agreement among all the Atlantic coast states.	Continued to 2013 in Senate Finance.
98	<a href="#">SB 466</a>	<b>Menhaden.</b> Would authorize the VMRC to adopt regulations necessary to comply with Amendment 2 to the Atlantic States Marine Fisheries Commission Interstate Fishery Management Plan for Atlantic Menhaden.	Continued to 2013 in Senate ACNR.
99	<a href="#">SB 550</a>	<b>Public oyster beds.</b> Would instruct the VMRC to adjust the boundaries of the public oyster beds on the seaside of the Eastern Shore, following a public process and criteria set out in the bill.	Passed Senate; continued to 2013 in House ACNR.
100	<a href="#">SJ 75</a>	<b>Menhaden.</b> Would have requested the VMRC to study strategies for implementing new requirements under the amended Interstate Fishery Management Plan for Atlantic Menhaden. The Atlantic States Marine Fisheries Commission is in the process of developing an amendment to the plan that will require states to meet a new fishing mortality threshold.	Failed in Senate Rules (stricken at request of patron).
101	<a href="#">SJ 76</a>	<b>Sea-level rise/recurrent flooding study.</b> Companion bill is HJ 50 (#95); please see that bill for summary.	Passed.

## GAME, INLAND FISHERIES, AND BOATING

### Hunting on Sunday Bills

102	<a href="#">HB 369</a>	Would have allowed any person to hunt on private lands on Sundays, with permission of the owner.	Failed in House ACNR.
103	<a href="#">HB 921</a>	Would have allowed Sunday hunting of wild birds or animals.	Failed in House

			ACNR.
104	<a href="#">HB 989</a>	Would allowed hunting on Sundays between hours of 2:00 p.m. and sunset.	Failed in House ACNR.
105	<a href="#">HB 1002</a>	Would have allowed any person to hunt or kill any wild bird or wild animal on Sundays, on private lands, in the counties of Fairfax, Fauquier, Loudoun, and Prince William.	Failed in House ACNR.
106	<a href="#">SB 464</a>	Would have allowed hunting of any wild bird or wild animal on Sundays on private property or on state waters, except not within 250 yards of a house of worship; and hunting deer on Sundays with the assistance of dogs would have not been allowed. The bill incorporated three other Sunday-hunting bills.	Passed Senate; failed in House ACNR.

### Other Game, Inland Fisheries, and Boating Bills

107	<a href="#">HB 8</a>	<b>Vessel accident reporting.</b> Would require any passenger 18 years of age or older who is a passenger in a vessel that is involved in an accident resulting in serious bodily injury or death to notify a law-enforcement officer if the operator has failed to stop and render assistance and has failed to report the accident in accordance with procedures established by the Board of Game and Inland Fisheries. (See related HB 12 (#108) and HB 118 (#109)).	Passed House; continued to 2013 in Senate Courts of Justice.
108	<a href="#">HB 12</a>	<b>Boating accident.</b> Would have required the operator of a vessel, if he is involved in an accident, to immediately report the accident to law enforcement and to notify the Department of Game and Inland Fisheries.	Failed in House Courts of Justice.
109	<a href="#">HB 118</a>	<b>Vessel accident.</b> Would have changed from a misdemeanor to a Class 6 felony the failure of any operator of a vessel who damages property worth over \$2000 in a collision, accident or other casualty and who fails to report certain information to designated authorizes.	Failed in House Courts of Justice.
110	<a href="#">HB 145</a>	<b>Retail Sales and Use Tax on watercraft.</b> Would have removed the \$2,000 cap on this tax.	Failed in House Finance.
111	<a href="#">HB 150</a>	<b>Conservation police officers.</b> Would have prohibited conservation police officers from hunting or fishing in their assigned patrol areas.	Failed in House ACNR.
112	<a href="#">HB 307</a>	<b>Rural Retreat Lake Park in Wythe County.</b> Waives a DGIF facility-use permit fee for visitors to Rural Retreat Lake Park who are engaged in land-based recreational activity.	Passed.
113	<a href="#">HB 381</a>	<b>Motorboat registration.</b> Changes the expiration date from the current three years from the <i>first</i> day of the month of issuance to three years from the <i>last</i> day of the month of issuance.	Passed.
114	<a href="#">HB 538</a>	<b>Hunter-education program.</b> Requires the Board of Game and Inland Fisheries to establish at least one full-time hunter-education coordinator position in each of the DGIF's administrative regions.	Passed.
115	<a href="#">HB 719</a>	<b>Hunting and fishing licenses for disabled veterans.</b> Allows veterans with permanent, service-related disabilities to obtain at no cost a lifetime hunting and fishing license. See related HB 880 (#117).	Passed.

116	<a href="#">HB 855</a>	<b>Nuisance species.</b> Adds coyotes and feral swine to the definition of “nuisance species”; the list already includes blackbirds, crows, cowbirds, grackles, English sparrows, starlings, and any species designated as such by regulations of the Board of Game and Inland Fisheries.	Passed.
117	<a href="#">HB 880</a>	<b>Fishing license for disabled veterans.</b> Establishes a special fishing license, at one-half the regular cost, for veterans with a service-connected disability of at least 70 percent as rated by the U.S. Department of Veterans Affairs. See related HB 719 (#115).	Passed.
118	<a href="#">HB 1119</a>	<b>Wake surfing.</b> Amends motorboat law to allow this recreational activity.	Passed.
119	<a href="#">HB 1242</a>	<b>Possession of dangerous wild animals.</b> Would make it a Class 1 misdemeanor to privately possess, sell, transfer, or breed dangerous wild animals, which are identified by taxonomic classification. The bill would grandfather in the ownership of any existing lawful dangerous wild animals; however, the owner of such animals is required to meet certain conditions in order to maintain possession of the animals. The bill limits the possession of dangerous wild animals to certain types of entities and facilities. Companion bill is SB 477 (#126).	Continued until 2013 in House ACNR.
120	<a href="#">HB 1249</a>	<b>Duck blinds licenses.</b> Would change the dates for renewing a person's riparian duck blind license.	Continued until 2013 in House ACNR.
121	<a href="#">SB 17</a>	<b>Conservation police officers' title.</b> Would have changed the title of “conservation police officers” to “game wardens.”	Failed in Senate General Laws and Technology.
122	<a href="#">SB 25</a>	<b>Appointment of director of DGIF.</b> Would transfer to the governor the current authority of the Board of Game and Inland Fisheries to appoint the DGIF director.	Continued until 2013 in Senate ACNR.
123	<a href="#">SB 26</a>	<b>Conservation police officers' authority.</b> Would have clarified that conservation police officers may not stop a person for the purpose of determining compliance with the laws, rules, and regulations of the Commonwealth or its localities, without reasonable suspicion of criminal activity; and would have revoked authority of such officers to inspect game and fish for the purposes of enforcing bag and creel limits without first making an arrest.	Failed on Senate floor.
124	<a href="#">SB 176</a>	<b>Department of Game and Inland Fisheries enforcement.</b> Would remove from DGIF the jurisdiction to enforce fishing and boating laws in the waters of Back Bay and in inlets and navigable waters in Tidewater counties and cities.	Continued until 2013 in Senate ACNR.
125	<a href="#">SB 470</a>	<b>Special combined sportfishing license fees.</b> Removes references to specific dollar amounts currently charged for the freshwater and saltwater components of a combined sportfishing license and recognizes that the DGIF and VMRC have the authority independently to establish the price of each agency's component of the combined license.	Passed.
126	<a href="#">SB 477</a>	<b>Possession of dangerous wild animals.</b> Companion bill is HB 1242 (#119); please see that bill for summary.	Continued until 2013 in Senate ACNR.

## WASTE DISPOSAL

127	<a href="#">HB 1076</a>	<b>Special use permit for waste-management activities.</b> Provides that a locality may require a special use permit for certain waste-management activities on agriculturally zoned property.	Passed.
128	<a href="#">HB 564</a>	<b>Electric utility ratemaking incentives for using landfill gas generated at solid-waste facility.</b> Authorizes an enhanced rate of return on investments in electricity-generating facilities fired by methane or other combustible gas produced in a licensed solid waste management facility.	Passed.
129	<a href="#">HB 913</a>	<b>Regional and local solid waste management plans.</b> Would have made such plans optional.	Passed House; failed in Senate ACNR.
130	<a href="#">SB 676</a>	<b>Recycling reports.</b> Requires solid waste planning units and localities with population of 100,000 or less to submit a recycling report every four years, instead of annually (which remains for localities with population over 100,000).	Passed.

## WATER AND SEWER SYSTEMS

131	<a href="#">HB 199</a>	<b>Town of Onancock liens for water and sewer charges.</b> Adds Onancock to the list of localities permitted to provide by ordinance that charges for water and sewer shall be a lien on the real estate served by such waterline or sewer. Companion bill is SB 588 (#144)	Passed.
132	<a href="#">HB 567</a>	<b>Water and sewer metering.</b> Changes list of people who may establish water and sewer services in their own name.	Passed.
133	<a href="#">HB 757</a>	<b>Town of Urbanna liens for water and sewer charges.</b> Adds Urbanna to the list of towns permitted to provide by ordinance that charges for water and sewer shall be a lien on the real estate served by the waterline or sewer.	Passed.
134	<a href="#">HB 760</a>	<b>Water and sewer system connection requirement.</b> Would have added Gloucester County to those counties that may require connection to their water and sewage systems by owners of property that may be served by such systems.	Failed in House Counties, Cities, and Towns.
135	<a href="#">HB 942</a>	<b>Alternative onsite sewage system performance.</b> Would have provided that a locality shall <i>not</i> require the owner of an alternative onsite sewage system to enter into a performance agreement or otherwise require the owner to post a sum of cash, a letter of credit, or a bond.	Failed in House Counties, Cities, and Towns.
136	<a href="#">HB 1071</a>	<b>Alternative onsite sewage system operation and maintenance.</b> Would have set criteria (flows of less than 1,000 gallons per day serving a church or a single-family dwelling) to exempt an alternative onsite sewage system owner from State Board of Health requirements for the operation and maintenance of the systems. See similar SB 356 (#141).	Failed in House Counties, Cities, and Towns.
137	<a href="#">HB 1180</a>	<b>Nutrient removal by wastewater treatment facilities.</b> Would authorize the Virginia Public Building Authority to issue an additional <b>\$300 million</b> in bonds to continue installing nutrient-removal technology in wastewater treatment facilities to comply with the Chesapeake Bay Total Maximum Daily Load (TMDL). These funds would complete projects at facilities	Continued until 2013 in House Appropriations.



		under existing Water Quality Improvement Fund agreements and at additional eligible facilities that did not receive money from bonds issued in 2007. See similar SB 494 (#143).	
138	<a href="#">HB 1231</a>	<b>Onsite sewage systems inspections.</b> Clarifies that if a licensed professional engineer or onsite soil evaluator does <i>not</i> inspect an onsite sewage system that he or she has certified, or declines to certify that the installation was completed substantially in accordance with the evaluation and design, the owner may petition the VDH to inspect the installation and approve or disapprove the installation.	Passed.
139	<a href="#">HB 1262</a>	<b>Examination requirements for conventional onsite sewage system installers.</b> Provides that regulations of the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals shall include division of sewage system installers into classes, and removes examination requirement for licensure for installers in class of conventional onsite sewage-systems who have certain, specified experience. Companion bill is SB 662 (#145).	Passed.
140	<a href="#">SB 102</a>	<b>Water and waste authority liens.</b> Would have prohibited a water authority in some circumstances from establishing a lien against a landlord's property for a tenant's delinquent fees absent an agreement signed by the landlord permitting such recourse.	Passed Senate; failed in House Counties, Cities and Towns.
141	<a href="#">SB 356</a>	<b>Alternative onsite sewage system operation and maintenance.</b> Would have set certain criteria (in any county with a population density of 50 persons per square mile or less, and serving an individual single-family dwelling) to exempt an alternative onsite sewage system owner from State Board of Health requirements for the operation and maintenance of the systems. See similar HB 1071 (#136).	Failed in Senate Local Government.
142	<a href="#">SB 442</a>	<b>Onsite sewage systems design and inspection.</b> Would have designated public and private drinking water sources, shellfish waters, and karst-related surface features as the focus of setback requirements for onsite sewage systems, and would have established minimum requirements for frequency of inspection of alternative onsite systems.	Passed Senate; failed in House Health, Welfare and Institutions.
143	<a href="#">SB 494</a>	<b>Nutrient removal by wastewater treatment facilities.</b> Would authorize the Virginia Public Building Authority to issue an additional <b>\$378 million</b> in bonds to continue installing nutrient-removal technology in wastewater treatment facilities to comply with the Chesapeake Bay Total Maximum Daily Load (TMDL). These funds would complete projects at facilities under existing Water Quality Improvement Fund agreements and at additional eligible facilities that did not receive money from bonds issued in 2007. A portion of the bond revenues could also be used for combined sewer overflow projects in the Cities of Lynchburg and Richmond. See similar HB 1180 (#137)	Passed Senate; continued to 2013 in House Appropriations.
144	<a href="#">SB 588</a>	<b>Town of Onancock liens for water and sewer charges.</b> Companion bill is HB 199 (#131); please see that bill for summary.	Passed.
145	<a href="#">SB 662</a>	<b>Examination requirements for conventional onsite sewage system installers.</b> Companion bill is HB 1262 (#139); please see that bill for summary.	Passed.

## WATERS OF THE STATE, PORTS AND HARBORS

146	<a href="#">HB 67</a>	<b>Non-navigable state waters.</b> Would have asserted that isolated bodies of water not fed by or replenished by perennial streams are to be considered non-navigable waterways and, as such, would not be subject to regulation by the U.S. Army Corps of Engineers or the U.S. Environmental Protection Agency under the federal Clean Water Act.	Failed in House ACNR.
147	<a href="#">HB 80</a>	<b>Real property tax; assessment of wetlands.</b> Requires the local assessing official, if requested by a property owner, to “consider” separately assessing the fair market value of wetlands on real property; also sets certain stipulations for assessment of value.	Passed.
148	<a href="#">HB 176</a>	<b>Nutrient Trading Act and nutrient credit certification.</b> Directs the Virginia Soil and Water Conservation Board to adopt regulations governing certification of certain nutrient credits from non-point source generators of nutrients. The bill sets out certain requirements of the regulations, directs the DCR to establish an online registry of certified credits, and provides for enforcement and appeals. Procedures are to be established to certify credits from agricultural and urban stormwater best management practices, use or management of manures, managed turf, land use conversion, stream or wetlands projects, shellfish aquaculture, algal harvesting, and other methods of nutrient control or removal; and for converting wetland and stream credits to nutrient credits. The bill provides that an operator of a credit-generating facility found to be in violation of the Nutrient Trading Act or any attendant regulations shall be subject to a civil penalty not exceeding \$10,000. Companion bill is SB 77 (#161).	Passed.
149	<a href="#">HB 186</a>	<b>Sewage sludge land application.</b> Would authorize any locality, by ordinance, to prohibit the land application of sewage sludge (biosolids) within its boundaries.	Continued to 2013 in House ACNR.
150	<a href="#">HB 510</a>	<b>Virginia ports ownership.</b> Would have required the approval of both the governor and the General Assembly for any change in ownership of any Virginia port.	Failed in House Transportation.
151	<a href="#">HB 687</a>	<b>Virginia Resources Authority Board of Directors membership.</b> Allows designees of the Virginia state treasurer and the state health commissioner to be members. Companion bill is SB 370 (#162).	Passed.
152	<a href="#">HB 799</a>	<b>Wetland and stream impacts mitigation.</b> Would add streams to wetlands as resources where impacts require mitigation under the Virginia Water Protection Permit, and set conditions for making a contribution to a SWCB-approved fund in lieu of creating or restoring compensatory wetland or stream acreage. Companion bill is SB 410 (#163).	Continued to 2013 in House ACNR.
153	<a href="#">HB 1034</a>	<b>Interstate agreements and commissions; withdrawal of Virginia.</b> Withdraws the Commonwealth from the Southern Growth Policies Agreement, as of July 1, 2013. (Earlier versions would also have withdrawn Virginia from the Interstate Commission on the Potomac River Basin and the Education Commission of the States.)	Passed.

154	<a href="#">HB 1158</a>	<b>Virginia Water Protection Permit and state water-supply plan.</b> Requires the SWCB to give consideration to any relevant information contained in the state water supply plan when determining whether to issue a Virginia Water Protection Permit. There is a specific exemption for the Lake Anna cooling facilities at the North Anna Nuclear Station.	Passed.
155	<a href="#">HB 1183</a>	<b>Virginia Port Authority.</b> Amends several provisions relating to the Authority and conduct of its business. The bill (i) extends until 2017 the international trade facility tax credit, the barge and rail usage tax credit, and the Virginia port volume increase tax credit; (ii) specifies that the members of the Authority have expertise in particular industries; (iii) authorizes the Board to form a Maritime Advisory Council to provide advice and counsel to the Board; and (iv) creates the Port Opportunity Fund for the development and implementation of marketing for the Port and to expand the use of the Virginia Port Authority facilities. A governor's recommendation added creation of the Port of Virginia Economic and Infrastructure Development Zone, establishing tax credits for businesses that locate in the zone. Companion bill is SB 578 (#166).	Passed.
156	<a href="#">HB 1218</a>	<b>Stream and wetland mitigation banks in southwestern Virginia.</b> Combines the Tennessee River Basin and the Big Sandy River Basin into one basin for the purpose of establishing and operating a stream or wetland mitigation bank.	Passed.
157	<a href="#">HB 1281</a>	<b>Wetland and dredge-and-fill programs.</b> Would have authorized the SWCB to assume full responsibility for regulating wetlands and dredge-and-fill programs that are currently also under the authority of the U.S. Army Corps of Engineers, and eliminate dual permitting requirements, under section 404 of the federal Clean Water Act. The U.S. Environmental Protection Agency would have determined whether Virginia has this authority. See related HJ 243 (#160).	Failed in House ACNR.
158	<a href="#">HJ 113</a>	<b>Interstate Commission on the Potomac River Basin (ICPRB)—Virginia withdrawal.</b> Companion bill is SJ 96 (#167); please see that bill for summary.	Failed in House Rules.
159	<a href="#">HJ 131</a>	<b>Route 28 Study.</b> Would have requested VDOT to study the desirability and feasibility of extension of Virginia Route 28 across the Potomac River into Maryland and the inclusion of Route 28 in the interstate highway system.	Failed in House Rules.
160	<a href="#">HJ 243</a>	<b>Wetlands regulation study.</b> Requests the DEQ to study the benefits and costs of seeking authority from the U.S. Environmental Protection Agency to administer the Section 404 permitting program under the federal Clean Water Act. That section covers dredging and filling activities that affect wetlands or waterways. The study is due by the start of the 2013 General Assembly. See related HB 1281 (#157).	Passed.
161	<a href="#">SB 77</a>	<b>Nutrient Trading Act and nutrient credit certification.</b> Companion bill is HB 176 (#148); please see that bill for summary.	Passed.
162	<a href="#">SB 370</a>	<b>Virginia Resources Authority Board of Directors membership.</b> Companion bill is HB 687 (#151); please see that bill for summary.	Passed.

163	<a href="#">SB 410</a>	<b>Wetland and stream impacts mitigation.</b> Companion bill is HB 799 (#152); please see that bill for summary.	Continued until 2013 in Senate ACNR.
164	<a href="#">SB 425</a>	<b>Inter-basin transfer of water resources.</b> Requires the SWCB to establish additional procedures for obtaining a Virginia Water Protection Permit in the case of a transfer of water resources between major river basins in Virginia that may impact water basins in another state. The bill requires the applicant for an interbasin transfer of water to provide certain information, including an analysis of alternatives to the transfer and a comprehensive analysis of the impacts that would occur in the source and receiving basins.	Passed.
165	<a href="#">SB 509</a>	<b>State Water Control Board powers and duties.</b> Would have amended the law establishing SWCB powers and duties to require that Virginia water-quality laws be no more restrictive than federal requirements. (Currently, more stringent state regulations are allowed so long as the reasons for the more restrictive provisions are disclosed to the committees having oversight responsibilities.)	Failed in Senate ACNR (stricken at request of patron).
166	<a href="#">SB 578</a>	<b>Virginia Port Authority.</b> Companion bill is HB 1183 (#155); please see that bill for summary.	Passed.
167	<a href="#">SJ 96</a>	<b>Interstate Commission on the Potomac River Basin (ICPRB)—Virginia withdrawal.</b> Would establish a joint subcommittee to study Virginia's withdrawal from the ICPRB and its effects upon the viability of the Potomac as a source of drinking water, recreation, and other benefits. Companion bill is HB 113 (#158).	Continued to 2013 in Senate Rules.

## FROM MISCELLANEOUS CATEGORIES

168	<a href="#">HB 440</a>	<b>FROM HIGHWAYS, BRIDGES, AND FERRIES</b> <b>Vessels and bridges.</b> Would have prohibited promulgation of VDOT regulations that forbid vessels no more than 25 feet long from making fast to or lying alongside any bridge in the system of state highways.	Failed in House Transportation.
169	<a href="#">SB 145</a>	<b>FROM MINING</b> <b>Coalbed methane drilling; pooling orders.</b> Would have required a well operator to obtain any required pooling order before applying for a well permit.	Failed in Senate ACNR (stricken at request of patron).
170	<a href="#">SB 152</a>	<b>FROM MINING</b> <b>Virginia Gas and Oil Act.</b> Would have established civil and criminal penalties for operating without a permit, disregarding orders, or making false statements.	Failed in n Senate ACNR.
171	<a href="#">HB 124</a>	<b>FROM TAXATION</b> <b>Plastic bag tax.</b> Would have imposed a tax of 20 cents on non-durable plastic bags used by purchasers to carry tangible personal property purchased in grocery stores, convenience stores, or drug stores.	Failed in House Finance.

## Some 2012 General Assembly Issues and Bills Covered by News Media

### **Biosolids (Treated Sewage Sludge)**

HB 186 (#149 above) – Giving localities authority to prohibit land application of biosolids – Continued to 2013 in House ACNR Committee.

### **Chesapeake Bay Total Maximum Daily Load (TMDL)**

HJ 129 (#34 above) - Requesting attorney general to explore challenge to Bay TMDL - FAILED.

### **Climate Change**

HJ 50 (#95 above) and SJ 76 (#101 above) - Sea-level rise study in Hampton Roads – PASSED.

### **Energy: Conservation/Demand**

HB 66 (#57 above) - Encouraging use of incandescent light bulbs – FAILED.

### **Energy: Renewable Energy Generally**

HB 1102 (#74 above) and SB 413 (#81 above) – Renewable Portfolio Standard credits for investing in renewable energy research – PASSED.

### **Interstate Commission on the Potomac River Basin (ICPRB)**

HB 1034 (#153 above) – Removal of Virginia from membership in this interstate organization, along with several others – PASSED, but without the ICPRB provision.

HJ 113 (#158 above) and SJ 96 (#167 above) – Study of Virginia withdrawal from ICPRB – HJ 133 FAILED in House Rules Committee, but SJ 96 was continued to 2013 in Senate Rules Committee.

### **Menhaden Fishery Management**

SB 18 (#97 above) - Removing Virginia from the Atlantic States Fisheries Management Council (ASMFC) – Continued to 2013 in Senate Finance Committee.

SB 466 (#98 above) – Transferring Menhaden fishery regulation from the General Assembly to the Virginia Marine Resources Commission – Continued to 2013 in Senate ACNR Committee.

SJ 75 (#100 above) – Virginia Marine Resources Commission to study implementation of ASMFC's new plan for lower Menhaden quota – FAILED.

### **Mining-Uranium**

No bill - Gov. McDonnell sent a January 19 directive asking the General Assembly not to lift the moratorium and setting up the Virginia Uranium Working Group (<http://www.uwg.vi.virginia.gov/>).

### **State Government Reorganization (affecting several natural-resources boards and agencies)**

HB 1291 (#33 above) – PASSED.

### **Waste Management: Plastic Bags**

HB 124 (#171 above) – 20-cent tax on non-durable plastic bags in grocery stores, convenience stores, and drug stores - FAILED.

### **Wastewater**

HB 1180 (#137 above) and SB 494 (#143 above) - Bond package for nutrient removal improvements at wastewater-treatment plant projects – Continued to 2013 in House Appropriations Committee.

### **Wetlands**

HB 1281 (#157 above) – Authorizing SWCB to assume administration of Clean Water Act Section 404 in Virginia – FAILED.

HJ 243 (#160 above) - Study of costs/benefits to Virginia administering Clean Water Act Section 404 – PASSED.

### **Sources (each issue, but not necessarily each bill, was mentioned by one or more sources noted):**

*Charlottesville Tomorrow; Daily Press (Newport News); Lynchburg News & Advance; Southern Maryland Newspapers Online; Richmond Times-Dispatch; Roanoke Times; Virginian-Pilot (Norfolk); Washington Post; Washington Times.*

## 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 2011-July 2012

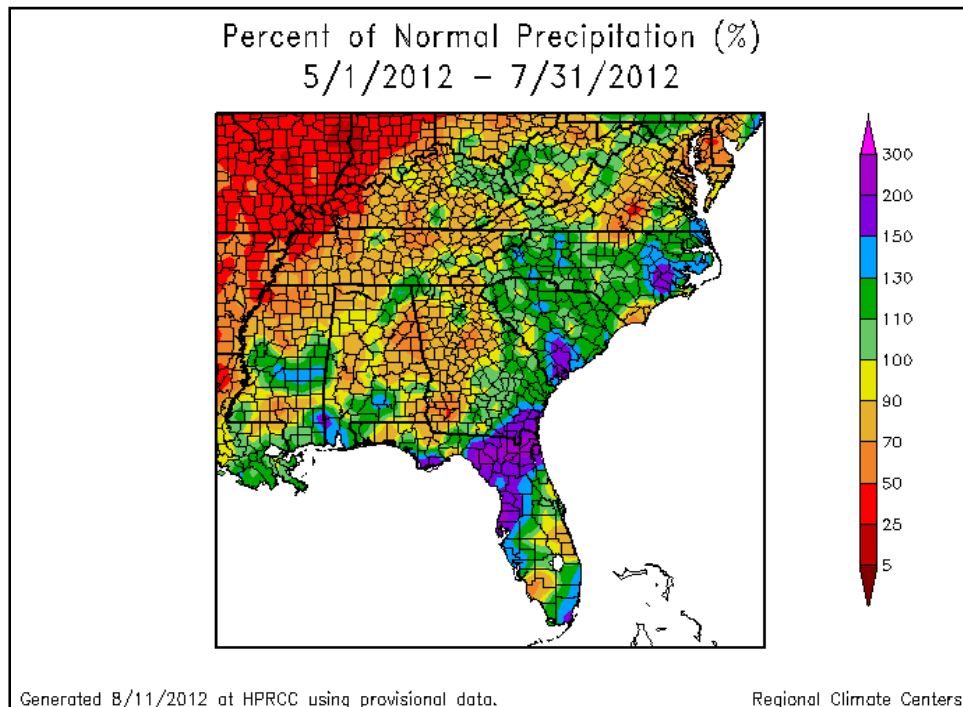
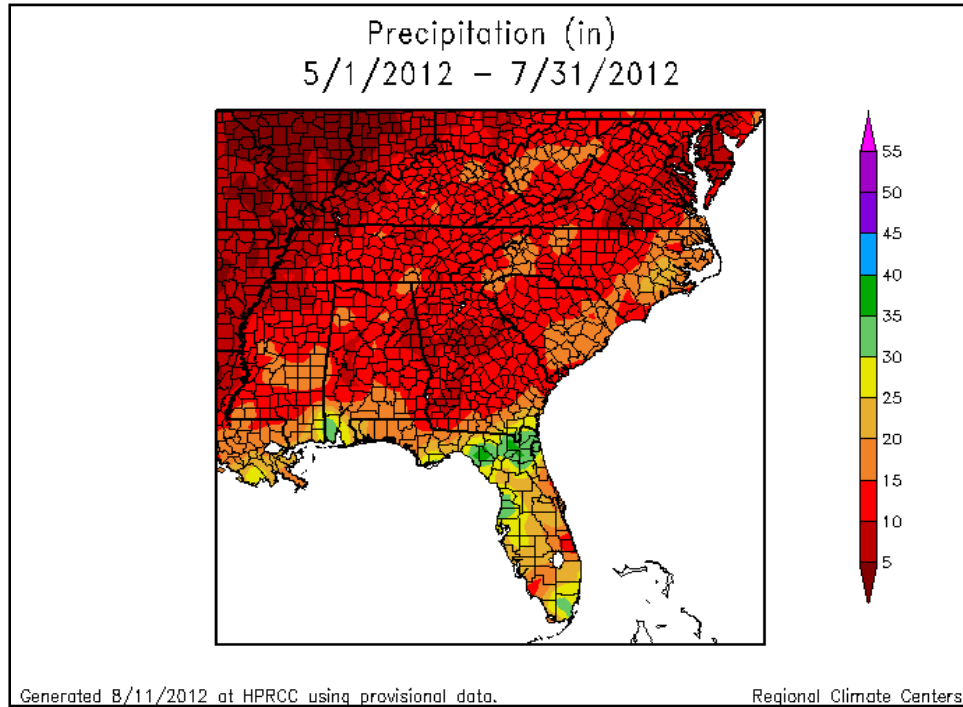
The chart below shows precipitation (in inches) over the last 12 months at nine National Weather Service (NWS) observation sites in or near Virginia. The numbers in the rows marked "O" are **observed precipitation** for the respective site and month (with yearly total at the bottom of the chart), including 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](http://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](http://www.weather.gov/climate/index.php?wfo=rnk), for Blacksburg, Danville, Lynchburg, and Roanoke; [www.weather.gov/climate/index.php?wfo=lxw](http://www.weather.gov/climate/index.php?wfo=lxw), for Washington-Dulles; and <http://mi.nws.noaa.gov/climate/index.php?wfo=akq>, for Norfolk, Richmond, and Wallops Island. The number in the rows marked "N" (in red) are the **normal** (average) **precipitation** for the locality and month, from 1981-2010 records that were released from the National Climatic Data Center (NCDC) in 2011 (<http://www.ncdc.noaa.gov/oa/climate/normal/usnormals.html>). 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	Wallops Island
Aug11 O	2.47	1.25	1.47	2.06	10.79	7.10	1.45	3.74	8.38
Aug N	3.47	3.59	3.97	3.26	5.52	4.66	3.56	3.53	4.19
Sep11 O	3.14	4.92	5.52	4.49	7.26	8.95	7.39	7.93	3.27
Sep N	2.99	3.10	3.96	3.88	4.76	4.13	3.89	3.92	3.98
Oct 11 O	2.84	2.94	3.45	2.95	2.13	2.79	4.06	6.27	3.59
Oct N	2.10	2.78	3.53	3.11	3.42	2.98	2.89	3.25	3.17
Nov11 O	4.60	3.70	4.98	3.27	1.84	4.18	4.30	2.18	2.30
Nov N	3.10	2.87	3.36	3.41	3.15	3.24	3.40	3.41	2.87
Dec11 O	4.10	3.62	2.19	4.61	1.56	2.03	4.19	4.46	1.12
Dec N	3.37	2.95	3.27	3.24	3.26	3.26	2.94	2.96	3.43
Jan12 O	4.60	2.09	1.99	2.22	1.80	1.73	1.69	1.85	2.12
Jan N	3.37	3.08	3.42	3.14	3.40	3.04	2.92	2.68	3.04
Feb12 O	3.71	3.52	2.12	2.61	2.67	3.22	2.21	2.24	4.54
Feb N	3.45	2.81	3.01	2.93	3.12	2.76	2.89	2.74	2.76
Mar12 O	2.58	3.84	3.55	5.78	2.62	2.51	3.52	1.52	2.18
Mar N	3.44	3.64	4.11	3.58	3.68	4.04	3.46	3.38	4.00
Apr12 O	3.83	4.81	2.76	2.44	2.95	2.40	3.04	1.82	3.78
Apr N	3.33	3.48	3.46	3.31	3.41	3.27	3.37	3.47	3.07
May12 O	2.07	3.77	2.12	2.36	6.43	2.45	4.03	5.38	3.64
May N	3.80	4.33	3.88	3.73	3.41	3.78	4.06	4.55	2.90
Jun12 O	1.20	2.96	3.53	1.71	5.27	4.27	3.25	1.79	2.72
Jun N	3.90	4.00	3.85	3.62	4.26	3.93	3.83	3.98	3.29
Jul12 O	12.70*	3.87	2.57	2.73	4.81	5.29	3.14	2.43	3.46
Jul N	4.69	4.26	4.59	4.36	5.14	4.51	4.04	3.67	4.09
<b>TOTAL O</b>	47.84	41.29	36.25	37.23	50.13	46.92	42.27	41.61	41.10
<b>TOTAL N</b>	41.01	40.89	44.41	41.57	46.53	43.60	41.25	43.04	40.79

\* Record high for month.

## Precipitation, continued: Regional Precipitation May-July 2012

For a more visual presentation over a wider area, the two graphs below—from the National Oceanic and Atmospheric Administration's (NOAA) **Southeast Regional Climate Center**, located at the University of North Carolina in Chapel Hill—show the total precipitation (in inches; top graph) for February 23-May 22, 2012, and the departure from normal (in percentage of normal; bottom graph) over that period. *These data are provisional.* These graphs were taken from [http://www.sercc.com/climateinfo/precip\\_maps](http://www.sercc.com/climateinfo/precip_maps) on 8/17/12.



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](mailto:climate@virginia.edu).

## Groundwater Levels at Selected Virginia Wells, August 2012

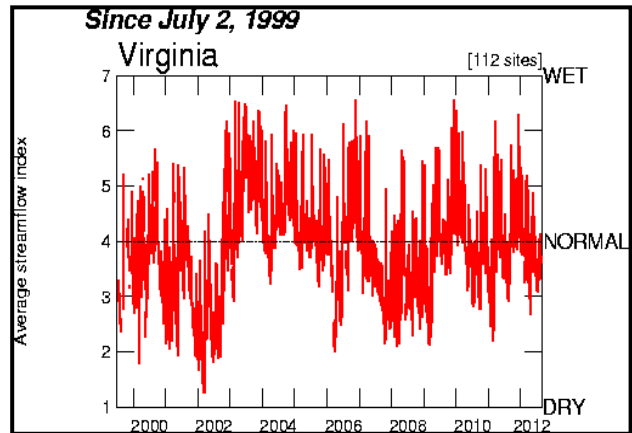
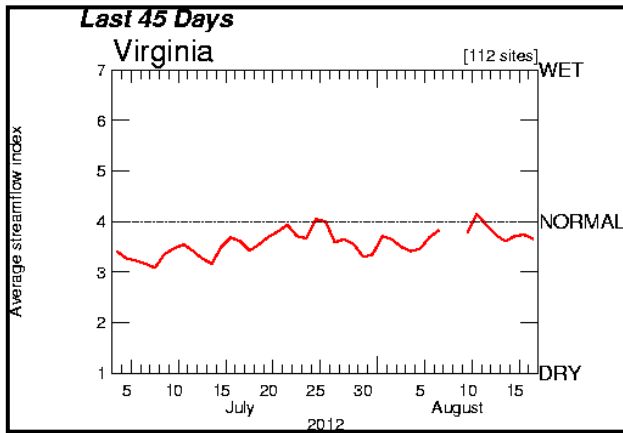
As of August 16, 2012, the Virginia Active Water Level Network—maintained by the U.S. Geological Survey (USGS) and available online at <http://groundwaterwatch.usgs.gov/StateMaps/VA.html>—provided access to groundwater levels at 438 active wells in 63 Virginia counties and cities. At 117 of these observation wells in 39 localities, *real-time data* (updated every 5 to 60 minutes) were being recorded. The table below shows the August 16, 2012, daily 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 the current month, the deepest (driest) level, and the shallowest (wettest) level 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 2011; for previous years, check your local library for printed copies of the reports.

Well (Local #)	8/16/12 Level	5/22/12 Level	1/10/12 Level	August Median	Record Deepest (Driest)	Record Shallowest (Wettest)	Period of Record
Accomack (66M19SOW110S)	10.1	9.1	9.6	9.7	11.3 (Nov. 1981)	6.8 (Mar. 2010)	Since Sep. 1978
Buckingham (41H 3)	28.1	24.0	24.7	23.3	36.4 (Oct. 2002)	7.4 (Apr. 1973)	Since Mar. 1971
Clarke (46W 175)	40.3	39.4	37.4	38.0	45.7 (Sep. 2002)	23.5 (Sep. 2003)	Since Mar. 1987
Fairfax (52V 2D)	16.3	13.4	12.3	15.4	24.9 (Dec. 1998)	6.5 (Mar. 1984)	Since Oct. 1976
Hanover (53K 19 SOW 080)	20.1	16.3	15.7	20.2	22.9 (Aug. 1984)	5.1 (Aug. 2004)	Since Jan. 1978
Loudoun (49Y 1 SOW 022)	60.3	58.8	58.6	60.1	62.0 (Feb. 2008)	48.0 (June 1972)	Since Nov. 1963
Montgomery (27F 2 SOW 019)	5.7	4.2	3.4	5.3	7.3 (Dec. 1969)	< 0.0 (Mar. 1993)	Since Jul. 1953
Northampton (63H 6 SOW 103A)	8.5	8.1	8.2	6.6	10.0 (Oct. 2002)	0.8 (Aug. 2004)	Since Sep. 1977
Orange (45P 1 SOW 030)	31.3	26.4	22.3	27.6	39.0 (Aug. 2002)	11.8 (Apr. 1973)	Since Feb. 1965
Prince William (49V 1)	10.9	9.4	8.6	10.6	15.4 (Jul. 2011)	6.5 (Mar. 2010)	Since Nov. 1968
Roanoke City (31G 1 SOW 008)	19.0	18.8	18.8	18.5	19.3 (Jun. 1987)	12.4 (Feb. 1986)	Since Aug. 1966
Rockbridge (35K 1 SOW 063)	25.6	21.4	23.3	25.6	30.4 (Sep. 2002)	14.3 (Apr. 1987)	Since Feb. 1964
Rockingham (41Q 1)	73.5	67.6	69.9	70.9	99.0 (Oct. 2002)	57.7 (Feb. 1998)	Since Aug. 1970
Shenandoah (40U 3 SOW 218)	13.0	14.0	14.1	15.1	16.3 (Oct. 2009)	10.6 (May 2011)	Since Oct. 2006
Suffolk (58B 13)	9.4	9.8	9.7	10.3	13.4 (Jan. 1981)	2.0 (Sep. 1999)	Since Mar. 1975
Surry (57E 13 SOW 094C)	8.1	9.2	8.2	9.2	11.3 (Sep. 2010)	3.9 (May 1980)	Since Jul. 1978
Virginia Beach (62B 1 SOW 098A)	2.4	1.8	2.7	5.7	12.0 (Sep. 1980)	0.8 (Nov. 2009)	Since Jun. 1979
Westmoreland (55P 9)	9.0	2.3	1.4 (11/5/11)	8.0	12.8 (Dec. 1988)	< 0.0 (Dec. 2009)	Since Jul. 1977
York (59F 74 SOW184C)	9.0	7.8	9.0	9.6	14.1 (Jan. 2002)	0.9 (Nov. 2006)	Since Jun. 1990



## Stream Flow in Virginia: July-August 2012, and 1999-2012

### 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—Current Water Resources Conditions" Web site (<http://water.usgs.gov/waterwatch/?m=real&r=va&w=real%2Cplot>, 8/17/12), compare recent Virginia stream flow to historical records.

The data in the graphs come from 112 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 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 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 is record high for that date.

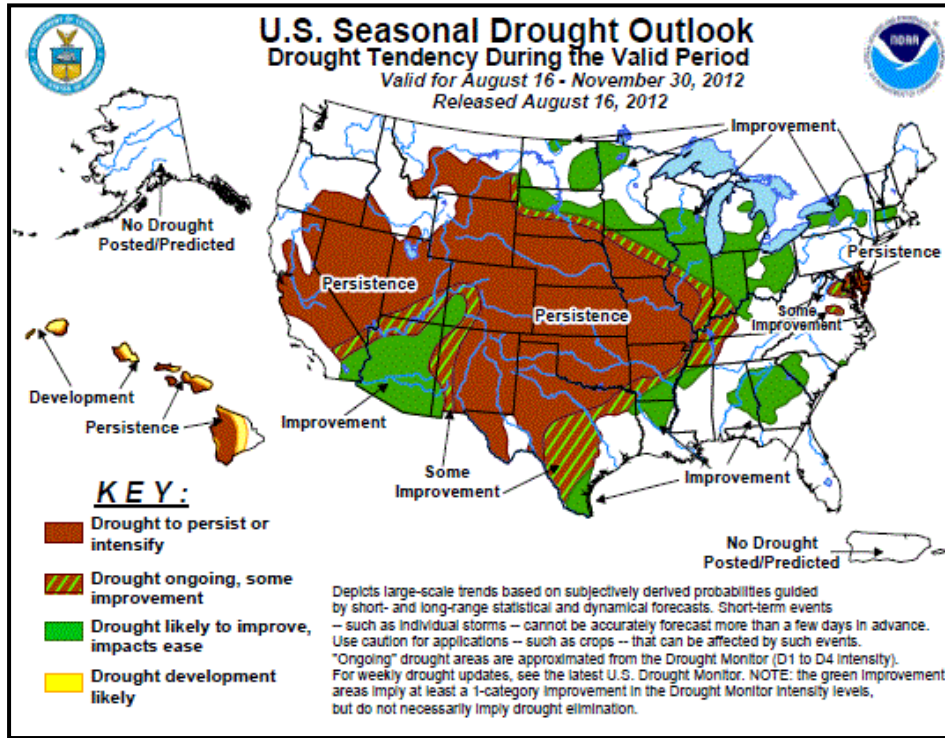
**Gaps in the data:** Data are not plotted for days when less than two-thirds of the sites report data (due to equipment or weather problems), because a statewide average on those days may misrepresent actual conditions.

The USGS WaterWatch site, at <http://water.usgs.gov/waterwatch/?m=real&r=va>, also has a maps of stream flow conditions compared to historical records for current levels and for average levels over the previous 1 day, 7 days, 14 days, 28 days, and month.



Stream-gaging station on Little River at Graysontown on the Montgomery Co./Pulaski Co. border, 7/15/12.  
Photo by Will Stacy.

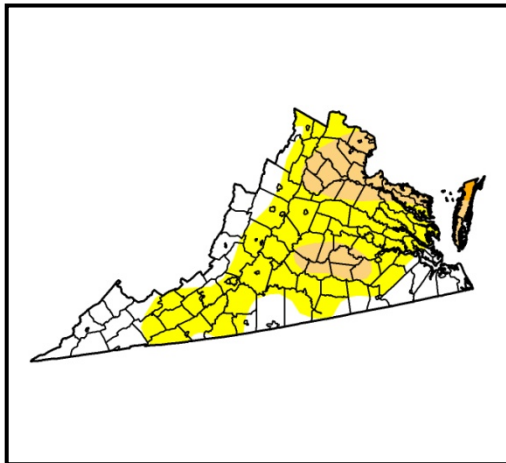
# Drought Update



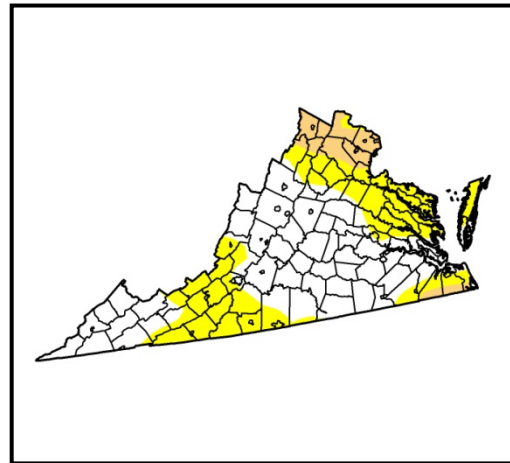
The national drought outlook for August 16-November 30, 2012, according to the National Oceanic and Atmospheric Administration (NOAA) Climate Prediction Center Web site, [www.cpc.ncep.noaa.gov/products/expert\\_assessment/seasonal\\_drought.html](http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html), accessed 8/21/12.

## 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](http://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 14, 2012, compared to August 16, 2011.



August 14, 2012



August 16, 2011

■ = 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, <http://droughtmonitor.unl.edu/archive.html>, 8/21/12.

**Authors:** Michael Brewer, National Climatic Data Center/NOAA, for 8/14/12 map; Laura Edwards, Western Regional Climate Center, for 8/16/11 map.

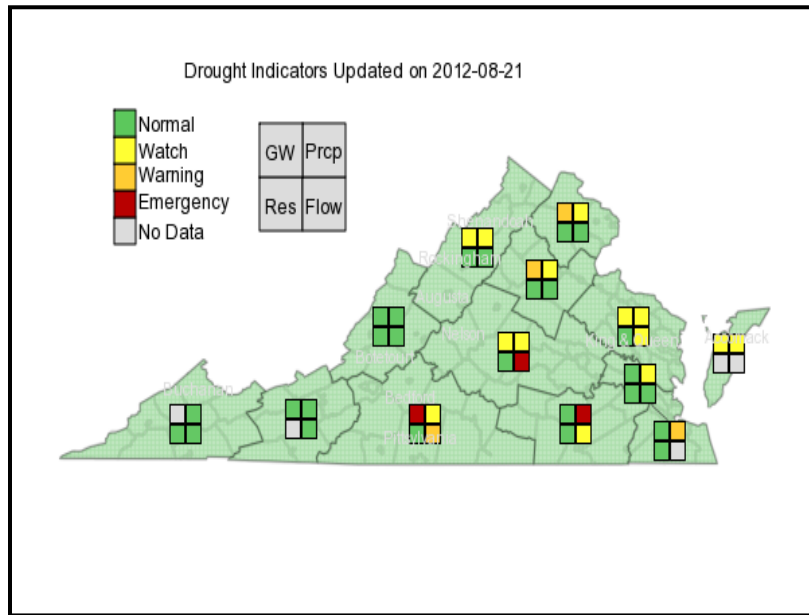
The Drought Monitor also gives *percentages* of the country, of regions, and of individual states classified in the drought categories. The following table shows how much of the country and of Virginia received different Drought Monitor ratings in recent months and one year ago.

Drought Monitor Report Date	Percentage of area rated “abnormally dry” (D0) or worse	Percentage of area rated “severe drought” (D2) or worse
8/14/12	US = 70%; VA = 70%	US = 38%; VA = 0.6%
7/17/12	US = 72%; VA = 89%	US = 35%; VA = 0%
6/12/12	US = 52%; VA = 9%	US = 16%; VA = 0%
5/15/12	US = 46%; VA = 54%	US = 15%; VA = 0%
8/16/11	US = 40%; VA = 41%	US = 20%; VA = 12%

### From the Virginia Drought Monitoring Task Force

Another look at water conditions comes from the **Virginia Drought Monitoring Task Force**, which produces a daily map rating groundwater levels, precipitation deficits, reservoir storage, and streamflow conditions across the Commonwealth. The August 21, 2012, map is shown below. In each area, a color code indicates “normal,” “watch,” “warning,” or “emergency conditions.” The current map and more information on drought status in Virginia are available online at

<http://www.deq.virginia.gov/Programs/Water/WaterSupplyWaterQuantity/Drought.aspx>.



### 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 information: <http://www.deq.virginia.gov/Programs/PollutionPrevention/VirginiaGreen/ResourcesLinks/Water.aspx>.

### Don't Forget the Water Center's Other Water Status Services!

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 [http://vwrc.vt.edu/waterstatus\\_new.html](http://vwrc.vt.edu/waterstatus_new.html). And the Virginia Water Central News Grouper, at <http://vawatercentralnewsgrouper.wordpress.com/>, posts a Virginia water-status update at the beginning of each month and a mid-month drought update. Click the “Weather” category for past posts.

## VIRGINIA GOVERNMENT WATER ISSUES OVERVIEW

For an online list of upcoming Virginia government meetings on water-related topics, updated weekly, visit the “Quick Guide to Virginia Water-related Events,” at <http://virginiawaterevents.wordpress.com/> and click on the “Government” category (right side of page).

This section lists water issues under consideration (study or regulation) between **June 1—September 3, 2012**, by state boards, commissions, or agencies in Virginia. 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. Information in this issue is based primarily on the Virginia Regulatory Town Hall Web site, at [www.townhall.state.va.us/L/meetings.cfm](http://www.townhall.state.va.us/L/meetings.cfm). The Town Hall site posts agendas of upcoming meetings and minutes of past meetings; 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.employee-directory.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 August 21, 2012. **If you are reading this online, click on meeting dates for more information.**

**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; VDACS = Department of Agriculture and Consumer Services; 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>.

### 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. Information on the status of all TMDLs in Virginia is available online at <http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/TMDL.aspx>.

Location	Water(s) & Impairment	Larger Watershed(s)	Most Recent Meeting Date	For More Information
Accomack County	Gargathy Creek (aquatic life, bacteria, and dissolved oxygen), Finney Creek (bacteria), Northam Creek (dissolved oxygen), Folly Creek (aquatic life and dissolved oxygen), Ross Branch (aquatic life) and Wachapreague Channel (bacteria)	Atlantic Ocean	<a href="#">7/18/12</a>	Jennifer Howell, DEQ
Amherst County	Aquatic life impairments in Buffalo River, Long Branch, and Rutledge Creek, and bacterial impairments in Mill Creek, Rutledge Creek, and Turner Creek	James River/ Chesapeake Bay	<a href="#">6/25/12</a>	Paula Nash, DEQ
Amherst and Nelson counties	Bacterial impairments in Tye River and tributaries		<a href="#">7/9/12</a>	Tara Sieber, DEQ

	Hat Creek, Piney River, and Rucker Run			
Appomattox County	Aquatic life impairment in Phelps Branch and bacterial impairments in Bent Creek, North Creek, Stonewall Creek, Walkers Ford Creek, Wreck Island Creek, and James River	James River/ Chesapeake Bay	<a href="#">6/28/12</a>	Paula Nash, DEQ
Bedford and Campbell counties	Aquatic life impairments in Johns Creek, Little Otter River, Wells Creek, and Buffalo Creek	Roanoke River/ Albemarle Sound	<a href="#">8/14/12</a>	Mary Dail, DEQ
Bland, Scott, Smyth, Tazewell, and Washington counties	Bacteria impairments in the North Fork Holston River and 21 tributaries, and aquatic-life impairments in the North Fork Holston and two tributaries	Holston River/ Upper Tennessee River/ Ohio River/ Mississippi River	<a href="#">7/17/12</a> and <a href="#">7/19/12</a>	Martha Chapman, DEQ
Hanover and Henrico counties	Aquatic life impairments in Chickahominy River	James River/ Chesapeake Bay	<a href="#">6/7/12</a>	Margaret Smigo, DEQ
Rockingham County	Aquatic life impairments in Long Meadow Run and Turley Creek	Shenandoah River/ Potomac River/ Chesapeake Bay	<a href="#">6/6/12</a>	Tara Sieber, DEQ
Smyth and Washington counties	Aquatic life and bacterial impairments in the Middle Fork Holston River in Smyth and Washington counties and in Wolf Creek in Washington County.	South Holston Lake/ Upper Tennessee River/ Ohio River/ Mississippi River	<a href="#">7/24/12</a>	Charlie Lunsford, DCR

## Other Topics

*Items below are listed alphabetically by topic, then by date. More information on the meetings listed is available at the Virginia Regulatory Town Hall Web site, [www.townhall.state.va.us/L/meetings.cfm](http://www.townhall.state.va.us/L/meetings.cfm) (organized by date, going back one year, and searchable by topic).*

### Biosolids (Treated Sewage Sludge) Land-application Permit Requests

[6/20/12](#): On the permit-modification application by Recyc Systems, Inc., to land-apply biosolids to an additional 4737 acres in Hanover County. More information: Scott Haley, DEQ.

### Clean Water Act Section 404 Permitting/Wetlands

[6/21/12](#): **Assumption of 404 Study Stakeholders Group Meeting.** This group is assisting the DEQ in determining the benefits and costs of Virginia seeking authority from the U.S. EPA for the Clean Water Act Section 404 permitting program, which regulates dredging and filling activities that impact wetlands and other surface waters and which is currently administered by the U.S. Army Corps of Engineers. This determination is pursuant to House Joint Resolution 243 in the 2012 Virginia General Assembly. More information: William Norris, DEQ.

### Drinking Water Infrastructure Construction Funding

[8/23/12](#): Virginia Department of Health (VDH) public meeting on the **Drinking Water State Revolving Fund Program Intended Use Plan for Fiscal Year 2012**. The VDH prepared this Intended Use Plan (IUP) based on funding requests and set-aside suggestions. This draft plan is available for review and comment by the public through September 3, 2012. The draft IUP is available online at <http://www.vdh.virginia.gov/ODW/financial/IntendedUsePlan12.htm>. More information: J. Dale Kitchen, VDH.

### Electricity Generation: Natural Gas

[8/8/12](#): Air Pollution Control Board public hearing on draft permit for **Gateway Cogeneration 1, LLC to build the Smart Water Project**, a combined-cycle, natural gas and diesel combustion turbine facility in Prince George County. More information: Alison Sinclair, DEQ.

### Endangered Species

[8/7/12](#): **Virginia Board of Agriculture and Consumer Services** public hearing on the Proposed Rules and Regulations for the Enforcement of the Endangered Plant and Insect Species Act (2 VAC 5-320 in the *Virginia Administrative Code*). More information: Roy Seward, VDACS.

### Mined Land Reclamation

[7/26/12](#): **Coal Surface Mining Reclamation Fund Advisory Board**. More information: Gavin Bledsoe, DMME.

### Pesticides

[6/28/12](#) and [8/23/12](#): Technical Advisory Committee on **general permit for discharges resulting from the application of pesticides to surface waters**. The committee is considering reissuance and possible amendments to this general discharge permit. The *Virginia Administrative Code* section is 9 VAC 25-800. More information: William Norris, DEQ.

### Poultry Waste-to-Energy

[6/6/12](#): **Shenandoah Valley Poultry Litter-to-Energy Watershed and Air Advisory Group**. More information: Rick Weeks, DEQ.

### Resource Management Plans

[8/13/12](#), [8/14/12](#), and [8/15/12](#): Department of Conservation and Recreation (DCR) public hearings on **draft Resource Management Plan Regulations**. The DCR is seeking public input on these draft regulations adopted by the Virginia Soil and Water Conservation Board on March 28, 2012. The regulations were developed to implement §10.1-104.8. of the *Code of Virginia*, under which agricultural landowners or operators who fully implement and maintain a resource management plan will be considered compliant with any load allocation in a TMDL (Total Maximum Daily Load), requirements of the Chesapeake Bay Phase I Watershed Implementation Plan (WIP), and any applicable state water quality requirements for nutrients and sediment. This law was passed by the 2011 Virginia General Assembly ([HB 1830](#)). More information: David Dowling, DCR.

### Soil and Water Conservation Districts

[6/8/12](#): Virginia Soil and Water Conservation Board subcommittee meeting on **funding for districts**. More information: David Dowling, DCR.

[7/11/12](#) and [8/15/12](#): **Soil and Water Conservation Board Summer Study Stakeholder Advisory Group**. The group is to advise the Virginia secretary of natural resources on funding needs by soil and water conservation districts for administration and for providing technical assistance on agricultural best management practices to help meet Virginia's Chesapeake Bay Total Maximum Daily Load (TMDL) Watershed Implementation Plan as well as TMDLs in Virginia's other watersheds (the "Southern Rivers"). More information: David Dowling, DCR.

### Solar Energy

[8/30/12](#): **Local Government Stakeholder Group/Renewable Energy Solar Technical Group**. The DEQ is meeting with stakeholders to facilitate development of a model local ordinance for solar projects. More information: Carol Wampler, DEQ.

### Solid Waste Management

[6/7/12](#): DEQ public meeting on a proposed statewide variance for **beneficial use of lightly contaminated soil, debris, and sediment**. The public comment period on the proposed variance was May 17 to June 18, 2012. More information: Justin Williams, DEQ.

### State Parks

[6/6/12](#): Department of Conservation and Recreation public meeting on draft master plan update for **High Bridge Trail State Park** in Prince Edward County. More information: Jennifer Wampler, DCR.

## State Water Supply Plan

[6/28/12](#). and [8/8/12](#): **State Water Supply Plan Advisory Committee**. The Water Supply Plan Advisory Committee was established by the 2010 Virginia General Assembly to assist the DEQ in developing, revising, and implementing a state water resources plan. The bill creating the committee was SB 569; information about that bill is at the Virginia Legislative Information System Web site, at <http://leg1.state.va.us/cgi-bin/legp504.exe?101+sum+SB569>. More information: Tammy Stephenson, DEQ.

## Stormwater

[6/14/12](#) and [8/9/12](#): **Stormwater Local Government Advisory Committee**. The committee is advising the DCR on the process of developing local stormwater programs statewide under the new stormwater management regulations by the July 1, 2014, implementation date. More information: David Dowling, DCR.

[6/20/12](#), [7/25/12](#), [8/7/12](#), and [8/22/12](#): **MS4 General Permit Regulatory Advisory Panel**. The panel is assisting the Soil and Water Conservation Board in considering possible revisions of regulations for municipal storm separate storm sewer systems (MS4s). MS4 stands for “municipal storm separate storm sewer system.” More information: David Dowling, DCR.

[7/23/12](#): **Virginia Stormwater Best Management Practices Clearinghouse Committee**. The Stormwater Best Management Practices (BMPs) Clearinghouse is a Web site on design standards and specifications of all stormwater BMPs approved for use in Virginia to control the quality and/or quantity of stormwater runoff. More information about the Stormwater BMP Clearinghouse Committee is available at <http://www.vwrrc.vt.edu/swc/>. More information: David Dowling, DCR.

[8/29/12](#): Regulatory Advisory Panel on **general permit for construction activities**.

[8/30/12](#): Virginia DCR meeting (last of a series held statewide in July and August 2012) to assist staff of planning district commissions, soil and water conservation districts, and local governments in the **development and implementation of local stormwater management programs**. DCR presenters explained the requirements of the Virginia’s revised stormwater management regulations, previewed tools under development to assist localities in implementing their local programs, and clarified timelines for implementation. The DCR’s Web page for the Virginia Stormwater Management Program is [http://www.dcr.virginia.gov/stormwater\\_management/stormwat.shtml](http://www.dcr.virginia.gov/stormwater_management/stormwat.shtml).

## Uranium Mining

[6/18/12](#): **Coal and Energy Commission’s Uranium Mining Subcommittee**. More information: Marty Farber, Division of Legislative Services.

[8/7/12](#), [8/15/12](#), and [8/29/12](#): **VDH evening meetings to gather public input** on issues of private water supply wells and of recreational water related to uranium mining and milling in Virginia. VDH staff gathered public comments on four questions: 1. What are the public’s concerns related to the impact of uranium mining and milling on water quality and quantity of private wells? 2. What are the public’s concerns related to the impact of uranium mining and milling on recreational use of surface water? 3. What role should VDH play in assuring that public health is protected in regard to private wells and recreational water use in regard to uranium mining and milling? 4. What safeguards should be in place to protect private wells and recreational water? More information: Jim Bowles, VDH.

[8/8/12](#), [8/16/12](#), and [8/30/12](#): **VDH day-long discussion-group meetings** on issues of private water supply wells and of recreational water related to uranium mining and milling in Virginia. The discussion group meetings are designed to allow a 15-20 people to discuss in more depth public health concerns related to uranium mining. More information: Jim Bowles, VDH.

[8/28/12](#): **Uranium Working Group**. This group was established by Gov. McDonnell in January 2012 to create a “draft statutory and conceptual regulatory framework” for possible uranium mining,” according to the group’s Web site. More information: <http://www.uwg.vi.virginia.gov/>.

## Wastewater Permits

[6/7/12](#) and [7/10/12](#): Technical Advisory Committee on the **general discharge permit for concrete products facilities**. The committee is assisting in considering possible amendments to this regulation. The *Virginia Administrative Code* section is 9 VAC 25-193. More information: Elleanore Daub, DEQ.

[6/13/12](#): DEQ/State Water Control Board public hearing on proposed amendments to the **General Permit Regulation for Noncontact Cooling Water Discharges of 50,000 Gallons Per Day or Less**.

The *Virginia Administrative Code* section is 9 VAC 25-196. The public comment period was May 7 to July 6, 2012. More information: Burton Tuxford, DEQ.

**6/13/12:** DEQ/State Water Control Board public hearing on proposed amendments to the **General Permit Regulation for Discharges from Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests**. The *Virginia Administrative Code* section is 9 VAC 25-120. The public comment period was May 7 to July 6, 2012. More information: Burton Tuxford, DEQ.

### Water Quality Regulation and Standards

**8/27/12:** **Stakeholder Advisory Group on the James River Chlorophyll Study**. The advisory group is assisting the DEQ on the current chlorophyll-a criteria for the tidal James River. The *Virginia Administrative Code* section is 9 VAC 25-260-310 bb. More information: David Whitehurst, DEQ.

**8/30/12:** **Assumption of Clean Water Act Section 404 Study Stakeholders Group**. The DEQ is convening a group of stakeholders to assist in determining the benefits and costs of the Commonwealth seeking authority from the U.S. EPA for the Section 404 permitting program under the federal Clean Water Act (CWA). Section 404 covers dredge and fill activities and is a key wetlands-related section of the CWA; it is currently administered by the U.S. Army Corps of Engineers. The study was called for by House Joint Resolution 243 in the 2012 Virginia General Assembly. More information: William Norrise, DEQ.

### General Information for Key Water-related Statewide Boards and Commissions

**Marine Resources Commission**—Meets monthly. Phone (757) 247-2200, TDD (757) 247-2292. Web site: <http://www.mrc.virginia.gov/index.shtm>.

**State Water Control Board**—Meets quarterly. Phone (800) 592-5482 (main number for DEQ; toll-free in Virginia). Web site: <http://www.deq.state.va.us/LawsRegulations/CitizenBoards.aspx>.

**Cave Board**—Meet three times per year. Phone (804) 786-7951 (DCR's Natural Heritage Program); Web site: [www.dcr.virginia.gov/natural\\_heritage/cavehome.shtml](http://www.dcr.virginia.gov/natural_heritage/cavehome.shtml).

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

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

**Gas and Oil Board**—Meets monthly, usually in southwestern Virginia. Phone: (276) 415-9700 (DMME's Division of Gas and Oil); Web site: [www.dmme.virginia.gov/divisiongasoil.shtml](http://www.dmme.virginia.gov/divisiongasoil.shtml).

**Groundwater Protection Steering Committee**—Meets third Tuesday of odd-numbered months. Phone: Mary Ann Massie, (804) 698-4042; Web site: <http://www.deq.state.va.us/Programs/Water/WaterSupplyWaterQuantity/GroundwaterProtectionSteeringCommittee.aspx>.

**Land Conservation Foundation**—Meets about three times per year. Phone (804) 225-2048; Web site: [www.dcr.virginia.gov/virginia\\_land\\_conservation\\_foundation/index.shtml](http://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: <http://www.dpor.virginia.gov/Boards/>.

**Outdoors Foundation**—Meets at least quarterly. Phone: (540) 327-7727; Web site: [www.virginiaoutdoorsfoundation.org](http://www.virginiaoutdoorsfoundation.org).

**Scenic River Advisory Board**—*Eliminated, with its functions assigned to the Conservation and Recreation Board, by HB 1291/SB 678 in the 2012 Virginia General Assembly.* Phone: Lynn Crump, (804) 786-5054; Scenic Rivers Program Web site: [www.dcr.virginia.gov/recreational\\_planning/srmain.shtml](http://www.dcr.virginia.gov/recreational_planning/srmain.shtml).

**Soil and Water Conservation Board**—Meets bimonthly. Phone: (804) 786-2064 (DCR's Stormwater Management Division); Web site: [http://www.dcr.virginia.gov/stormwater\\_management/vs\\_and\\_wcb.shtml](http://www.dcr.virginia.gov/stormwater_management/vs_and_wcb.shtml).

**Waste Management Board**—Meets about three times per year. Phone: (800) 592-5482 (main number for DEQ). Web site: <http://www.deq.state.va.us/LawsRegulations/CitizenBoards.aspx>.



## 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](mailto:janewalk@vt.edu).*

*For a regularly updated, online list of Virginia water-related events, please see the Water Center's "Quick Guide to Virginia Water Conferences, Meetings, and Other Events," at <http://virginiawaterevents.wordpress.com/>. All Web sites listed in this section were functional as of 8/21/12.*

### **Stewardship Virginia is September 1-October 31, 2012**

**Stewardship Virginia** is a statewide initiative held twice annually to help citizens with projects that enhance and conserve Virginia's natural and cultural resources. 2012 is the tenth year for the campaign. April 1-May 31 was the first period in 2012, and September 1-October 31 is the second. To learn how you can get involved, visit the Virginia Department of Conservation and Recreation's Web site at [www.dcr.virginia.gov/stewardship/](http://www.dcr.virginia.gov/stewardship/). More information is also available by phoning (877) 42-WATER; in Richmond, 786-5056.

### **18<sup>th</sup> Annual Virginia Waterways Cleanups is also September 1-October 31, 2012**

Clean Virginia Waterway's annual Waterways Cleanup Day is a series of local beach, bay, river, stream, lake, and pond cleanups across the state in September and October. This is the 18th year that Clean Virginia Waterways has coordinated the Virginia cleanup as part of the [International Coastal Cleanup](#), organized by the Ocean Conservancy. For more information about joining or sponsoring a Virginia event: phone (434) 395-2602 or e-mail [cleanva@longwood.edu](mailto:cleanva@longwood.edu); Web site: [www.longwood.edu/cleanva/iccva.htm](http://www.longwood.edu/cleanva/iccva.htm).

### **Clean Water Act Marks 40<sup>th</sup> Anniversary**

This is the 40<sup>th</sup> anniversary of the 1972 amendments to the federal Water Pollution Control Act of 1948. Those far-reaching amendments have become known as the Clean Water Act (CWA), which was also in turn amended significantly in 1977 and 1987. One of the many activities marking the CWA anniversary is an invitation by the U.S. EPA for people to submit 15-second videos on the importance of water in their lives. Information on the video project and about the CWA anniversary are available online at <http://water.epa.gov/action/cleanwater40c/>.

### **"Estuaries 101" and Other Educational Resources for Estuaries**

The National Oceanic and Atmospheric Administration's (NOAA) National Estuarine Research Reserve System provides an extensive Web site for teaching and learning about estuaries, which are coastal bodies of water where freshwater and salt water mix (such as Virginia's most famous estuary, the Chesapeake Bay). In June 2012, NOAA and the Alabama Department of Conservation and Natural Resources announced the addition of the "Estuaries 101" middle school curriculum of information and activities, to accompany the existing high school curriculum. A news release on the middle school curriculum resource is available at <http://estuaries.noaa.gov/News/Default.aspx?id=396>, and the main "Estuary Education" Web site is <http://estuaries.noaa.gov/>. Be sure to see the [gallery of dozens of videos](#) on various estuary topics!

### **National Wetland Plant List – 2012 Version**

In May 2012, the U.S. Army Corps of Engineers made available the final 2012 version of the "National Wetland Plant List." The new list was effective as of June 1, 2012, and it replaces the U.S. Fish and Wildlife Service's 1988 "National List of Plant Species that Occur in Wetlands." As noted on the Corps Web site for the list, it is "used extensively in wetland delineation, wetland restoration and research, and the development of compensatory mitigation goals, as well as in providing general botanical information about wetland plants." Online access to the list is available at [http://geo.usace.army.mil/wetland\\_plants/index.html](http://geo.usace.army.mil/wetland_plants/index.html). More information is available from the Corps via e-mail to [NWPL@usace.army.mil](mailto:NWPL@usace.army.mil).

## Water Composition and Dairy Cows

Virginia Tech researchers Susan Duncan (Food Science and Technology), Katharine Knowlton (Dairy Science), and Andrea Dietrich (Civil and Environmental Engineering) are investigating how levels of iron and other minerals in drinking water used by dairy cows can affect milk production, animal health, and quality of dairy products. The research relates particularly to situations where dairy farmers facing water shortages are considering alternative sources of water—for example, rainwater capture or new groundwater sources—that may contain high levels of minerals. An account of the issue and the research, and an approximately 2-minute video, are available in “Virginia Tech College of Agriculture and Life Sciences Innovations,” Vol. 1/Issue 1, online at <http://news.cals.vt.edu/innovations/2012/05/are-too-many-minerals-in-water-a-bad-thing-for-cows/>.

## Low Impact Development Atlas

The Low Impact Development (LID) Atlas is an online tool for finding the location and description of various LID practices around the country. Practices include bioswales, rain gardens, rain barrels, wetlands, green roofs, permeable pavement, and others. The Atlas was created for the National Nonpoint Education for Municipal Officials (NEMO) Network by the Connecticut NEMO Program and the California Center for Water and Land Use. As of mid-June 2012, 31 NEMO Network programs nationwide had added projects to the Atlas, including 87 projects in North Carolina and 26 projects in Tennessee, but none in Virginia, Maryland, or Pennsylvania. The Atlas is available at [http://nemo.udel.edu/mapping\\_liddeatlas.aspx](http://nemo.udel.edu/mapping_liddeatlas.aspx).

## Calling Dragonfly Watchers

“**Dragonfly Pond Watch**” is a program for volunteers to help collect information on the location and migration of two species of dragonflies, the Common Green Darner (*Anax junius*) and Black Saddlebags (*Tramea lacerata*). The Migratory Dragonfly Partnership is seeking the assistance to help increase knowledge of dragonfly migrations across North America. Anyone who can have access to a pond or wetland can participate. For more information, visit [www.migratorydragonflypartnership.org](http://www.migratorydragonflypartnership.org), or e-mail Celeste Mazzacano at [dragonfly@xerces.org](mailto:dragonfly@xerces.org).

## U.S. Geological Survey Changing News Release Distribution System

Between July and September 2012, the U.S. Geological Survey (USGS) is switching to a new distribution service for its news releases. After September 1, the agency will discontinue sending news release through a listserv system in favor of offering subscriptions to e-mail or RSS notifications. At <http://usgs.gov/getournews> users can choose to subscribe by either system to releases in one or more categories (shown below). People not wishing to subscribe can find USGS releases at <http://usgs.gov/newsroom>. Virginia’s state office of the USGS is the Virginia Water Science Center, located at 1730 East Parham Road in Richmond; phone (804) 261-2600; e-mail: [dc\\_va@usgs.gov](mailto:dc_va@usgs.gov); Web site: <http://va.water.usgs.gov/>.

## Energy and Climate Notices

•The actual and potential impacts of natural gas hydraulic fracturing (“fracking”) on forests and watersheds—including the Chesapeake Bay watershed—are the focus of “**Fracking’s Footprint—Scientists Study Impact of Shale Gas Development on Pennsylvania’s Forests**,” in the July 2012 issue of *CSA News*, available online at <https://www.crops.org/publications/csa-news/>. The article gives an introduction to the rapid expansion since 2004 of hydraulic fracturing wells in Pennsylvania and other mid-Atlantic states and discusses several research questions being investigated to help identify and possibly better manage fracking’s impacts. *CSA News* is published by the Crop Science Society of America, the Soil Science Society of America, and the American Society of Agronomy. For more information about *CSA News*, phone (608) 273-8080 or e-mail [headquarters@sciencesocieties.org](mailto:headquarters@sciencesocieties.org).

## Upcoming Conferences, Workshops, and Other Events

### Events In Virginia

•Sep. 14-16, 2012, Wyndham Virginia Crossings Conference Center, Glen Allen: “**Then and Now Along the James: Changing Landscapes, Changing Plants**.” Annual meeting of the Virginia Native Plant Society. More information: <http://vnps.org/wp/vnps-2012-annual-meeting-september-14-16/>; phone (540) 837-1600; e-mail: [vnpsoc@shentel.net](mailto:vnpsoc@shentel.net).

- Oct. 5-7, 2012, Cape Charles: **Eastern Shore Birding and Wildlife Festival**. Organized by ESVA Festivals. More information: <http://www.esvafestivals.org/>; phone (757) 581-1081.
- Oct. 9-12, 2012, Norfolk: **Keeping Natural Areas Relevant and Resilient—39th Annual Natural Areas Conference**. Organized by the Virginia Department of Conservation and Recreation. More information: <http://www.naturalarea.org/12conference/>; Julie Buchanan, phone 804-786-2292; e-mail: [Julie.Buchanan@dcr.virginia.gov](mailto:Julie.Buchanan@dcr.virginia.gov).
- Oct. 25-26, 2012, Hungry Mother State Park, Marion: **2012 Virginia Environmental Education Conference**. This year's theme is "Enriching Environmental Education through Heritage and Biodiversity." Organized by the Virginia Department of Environmental Quality. More information: <http://www.deq.state.va.us/ConnectWithDEQ/EnvironmentalInformation/VirginiaNaturally/2012EnvironmentalEducationConference.aspx>; e-mail: Sheila Barnett at [sheila.barnett@deq.virginia.gov](mailto:sheila.barnett@deq.virginia.gov) or David Ruble at [david.ruble@deq.virginia.gov](mailto:david.ruble@deq.virginia.gov).
- Oct. 27, 2012, Copley Science Center at Randolph-Macon College, Ashland: **Virginia Citizens for Water Quality Summit**. Organized by the Alliance for the Chesapeake Bay, Virginia Department of Environmental Quality, and York River/Small Coastal Basins Roundtable. More information: <https://allianceforthebay.org/2012/08/virginia-citizens-for-water-quality-summit/>; Anna Mathis, [amathis@allianceforthebay.org](mailto:amathis@allianceforthebay.org).
- Mar. 3-5, 2013, Holiday Inn Select Koger Conference Center, Richmond: **Virginia Water Conference 2013**. Organized by the Virginia Lakes and Watersheds Association. More information: <http://www.vlwa.org>.
- Apr. 9-11, 2013, Lexington: **24th Annual Environment Virginia Symposium**. Organized by Virginia Military Institute (VMI). Abstracts for proposed presentations are being accepted August 1-October 16. More information: VMI Center for Leadership and Ethics, [http://www.vmi.edu/Conferences/Environment\\_Virginia/Environment\\_Virginia/](http://www.vmi.edu/Conferences/Environment_Virginia/Environment_Virginia/); phone (540) 464-7361; e-mail: [cle@vmi.edu](mailto:cle@vmi.edu).

### **Events Elsewhere**

- Aug. 28, 2012, Las Cruces, N.M.: **57th Annual New Mexico Water Conference**. This year's theme is "Hard Choices: Adapting Policy and Management to Water Scarcity." Organized by the New Mexico Water Resources Research Institute. More information: <http://2012.wrri.nmsu.edu/>; phone (575) 646-4337; e-mail: [nmwrri@nmsu.edu](mailto:nmwrri@nmsu.edu).
- Aug. 28-30, 2012, Austin, Tex.: **Texas Groundwater Summit**. Organized by the Texas Alliance of Groundwater Districts. More information: <http://www.texasgroundwatersummit.com>; phone Angie Rhem at (800) 775-2774, ext. 211; e-mail: [angie.rhem@iemshows.com](mailto:angie.rhem@iemshows.com).
- Sep. 5-6, 2012, Daniels, W. Va.: **2012 West Virginia Brownfields Conference**. Organized by the West Virginia Brownfields Assistance Centers. More information: <http://www.wvbrownfields.com/conferences/2012/index.cfm>; phone Patrick Kirby at (304) 293-6984; e-mail: [patrick.kirby@mail.wvu.edu](mailto:patrick.kirby@mail.wvu.edu).
- Sep. 9-12, 2012, St. Louis, Missouri: **Distribution Systems Symposium & Exposition plus Water Security and Emergency Preparedness Conference & Exposition**. Organized by the American Water Works Association. More information: <http://www.awwa.org/Conferences/SpecConf.cfm?ItemNumber=50778&navItemNumber=50780>; phone (800) 926-7337.
- Sep. 18-19, Harrisburg, Penn.: **"Stormwater—Green Solutions Beyond Gray Pipes: A Conference on Policy, Financing, and Technology."** Organized by the Pennsylvania Environmental Council. More information: <http://www.pastormwater.org>; phone (800) 322-9214.
- Sep. 18-20, 2012, Bozeman, Mont.: **Wetland Restoration and Management**. Organized by the Montana Water Center. More information: <http://watercenter.montana.edu/>; phone (406) 994-6690; e-mail: [water@montana.edu](mailto:water@montana.edu).
- Sep. 27-30, 2012, Shepherdstown, W. Va.: **Chesapeake Watershed Forum**. Organized by the Alliance for the Chesapeake Bay. More information: <https://allianceforthebay.org/initiatives/connecting-people/chesapeake-watershed-forum/>; phone (443) 949-0575; e-mail: [letgen@allianceforthebay.org](mailto:letgen@allianceforthebay.org).
- Oct. 8-10, 2012, Baltimore, Md.: **Watershed and Stormwater Conference 2012**. Organized by the Center for Watershed Protection, headquartered in Ellicott City, Md., and with an office in Charlottesville, Va. The meeting will also be a celebration of the center's 20th anniversary and of the start of the center's

new Association of Watershed and Stormwater Professionals (see <http://www.awsps.org/>). More information: <http://www.cwp2012event.awsps.org/>; phone (410) 461-8323; e-mail: [center@cwp.org](mailto:center@cwp.org).

- Oct. 11-12, 2012, Anaconda, Mont.: **Montana Water Conference**. Organized by the Montana Section of the American Water Resources Association and by the Montana Water Center. More information: <http://state.awra.org/montana/>; phone (406) 994-1772; e-mail: [water@montana.edu](mailto:water@montana.edu).

- Oct. 15-17, 2012, Cincinnati, Ohio: **Urban Water Sustainability Leadership Conference**. Organized by Clean Water America Alliance. More information: <http://www.cleanwateramericaalliance.org/>; phone (202) 533-1819; e-mail: [lloken@cwaa.us](mailto:lloken@cwaa.us).

- Oct. 15-18, 2012, Amherst, Mass.: **28<sup>th</sup> International Conference on Soils, Sediments, Water, and Energy**. Organized by University of Massachusetts-Amherst. More information: <http://www.umasssoils.com>; phone: (413) 549-5170; e-mail: [brenna@aehsfoundation.org](mailto:brenna@aehsfoundation.org).

- Oct. 16-17, 2012, St. Paul, Minn.: **Minnesota Water Resources Conference**. Organized by the University of Minnesota Water Resources Center. More information: <http://www.wrc.umn.edu/waterconf/>; phone (612) 624-9282; e-mail: [umwrc@umn.edu](mailto:umwrc@umn.edu).

- Oct. 20-24, 2012, Tampa, Fla.: **6<sup>th</sup> National Conference on Coastal and Estuarine Habitat Restoration**. This year's theme is "Restoring Ecosystems, Strengthening Communities." Organized by Restore America's Estuaries. More information: <http://www.estuaries.org/conference/>; phone (703) 524-0248; e-mail: [hpotts@estuaries.org](mailto:hpotts@estuaries.org).

- Oct. 30, 2012, Brookings, S.D.: **7<sup>th</sup> Annual Eastern South Dakota Water Conference**. Organized by the South Dakota Water Resources Institute and several other organizations. More information: <http://www.sdstate.edu/abe/wri/activities/ESDWC/index.cfm>; phone (605) 688-4910; e-mail: [trista.koropatnicki@sdstate.edu](mailto:trista.koropatnicki@sdstate.edu).

- Oct. 30-31, 2012, Morgantown, W. Va.: **"Protecting Our Water Resources, Providing for Our Energy Future."** Annual West Virginia Water Research Institute conference. More information: <http://www.vvwaterconference.org/2012/index.cfm>; phone (304) 293-2867; e-mail: [dave.saville@mail.wvu.edu](mailto:dave.saville@mail.wvu.edu).

- Nov. 4-8, 2012, Toronto, Canada: **Water Quality Technology Conference and Exposition**. Organized by the American Water Works Association. More information: <http://www.awwa.org/Conferences/wqtc.cfm?ItemNumber=32120&navItemNumber=3545>; phone (800) 926-7337.

- Nov. 12-15, 2012, Jacksonville, Fla.: **American Water Resources Association Annual Conference**. More information: <http://www.awra.org/meetings/Jacksonville2012/>; phone (361) 593-2001 e-mail: [kusjn000@tamuk.edu](mailto:kusjn000@tamuk.edu) (Stephen Nix, General Conference Chair).

- Nov. 13, 2012, Lincoln, Neb.: **"Water: Science, Practice, and Policy."** Focusing on water research and management in Nebraska and the Great Plains. Organized by the University of Nebraska Water Center and several partners. More information: <http://watercenter.unl.edu/Symposium2012/index.asp>; phone (402) 472-3305; e-mail: [waterinfo@unl.edu](mailto:waterinfo@unl.edu).

- Nov. 14, 2012, Lincoln, Neb.: **Annual Water Law Conference**. Organized by the University of Nebraska Water Center and several partners. More information: <http://watercenter.unl.edu/Symposium2012/index.asp>; phone (402) 472-3305; e-mail: [waterinfo@unl.edu](mailto:waterinfo@unl.edu).

- Dec. 6, 2012, North Linthicum, Md.: **Annual conference of the Maryland Water Monitoring Council**. The theme this year is "What Else is in Your Water? From Arsenic to Zinc." More information <http://mddnr.chesapeakebay.net/MWMC/MWMC2010/annualConference.asp>; Dan Broward, Maryland Department of Natural Resources, phone (410) 260-8605, or e-mail: [dboward@dnr.state.md.us](mailto:dboward@dnr.state.md.us).

- Jan. 27-30, 2013, Cape May, N.J.: **Delaware Estuary Science and Environmental Summit**. The theme this year is "Weathering Change—Shifting Environments, Shifting Policies, Shifting Needs." Organized by the Partnership for the Delaware Estuary. More information: [http://www.delawareestuary.org/news\\_pde\\_science\\_conference.asp](http://www.delawareestuary.org/news_pde_science_conference.asp); Dr. Danielle Kreeger at (800) 445-4935, ext. 104; or Lisa Wool at (800) 445-4935, ext. 105.

- Mar. 25-27, 2013, St. Louis, Mo.: **"Agricultural Hydrology and Water Quality II"—the 2013 Spring Specialty Conference of the American Water Resources Association**. Abstracts for presentation proposals accepted until October 9, 2012. More information: <http://www.awra.org/meetings/Spring2013/>; phone (540) 687-8390 (AWRA headquarters in Middleburg, Va.); e-mail: [williard@siu.edu](mailto:williard@siu.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](mailto:water@vt.edu); Web site [www.vwrrc.vt.edu](http://www.vwrrc.vt.edu).

### Presentations from the Virginia Water Monitoring Council's May 2012 Conference

Slide presentations are now available from the Virginia Water Monitoring Council's (VWMC) annual conference, "Water Quality Monitoring: Tools for MS4 Compliance, TMDL Implementation, and Water Quality Protection & Restoration" held May 18, 2012. The presentations are posted at <http://vwrrc.vt.edu/vwmc/2012Conference.htm>. The conference was sponsored by Clean Virginia Waterways, Henrico County, Longwood University, the Virginia Water Resources Research Center, Virginia Tech, Filterra, Sutron, and YSI.

### Grants Awarded

In June 2012, the Water Center announced the recipients for its **2012 Competitive Grants Program**. This is the first year that the Water Center has used this program to fund proposals at up to \$5,000 for **student** research grants. The funded researchers and their projects for 2012 are as follows:

- Polydefkis (Pol) Bouratsis, Virginia Tech Department of Civil and Environmental Engineering: "Large-scale bridge scour modeling."
- Sarah Eagle, Virginia Tech Department of Geosciences: "Multivariate Statistical Analysis of Geochemical Data to Characterize the Role of the Epikarst in Controlling the Quantity and Quality of Recharge to a Karst Aquifer."
- C. Nathan Jones, Virginia Tech Department of Biological System Engineering: "The Development of an Ecohydraulic Model to Estimate Nitrogen Loss in a Floodplain."
- Oluyinka Oyewumi, Virginia Tech Department of Geosciences: "Using column experiments to examine transport of roxarsone (As) and other trace elements released from poultry litter: Implications for trace element mobility in agricultural watersheds."

These proposals were selected from 14 submitted.

More information about this program is available online at [http://vwrrc.vt.edu/competitive\\_grants.html](http://vwrrc.vt.edu/competitive_grants.html); or contact Dr. Kevin McGuire at [kevin.mcguire@vt.edu](mailto:kevin.mcguire@vt.edu) or (540) 231-6017.

### Walker Award Winners

The Water Center is pleased to announce the **2012 William R. Walker Graduate Research Fellows**: Sarah Eagle from the Department of Geosciences at Virginia Tech and Beatriz Mogollón from the Department of Fish and Wildlife Conservation at Virginia Tech. The Walker Award, which honors the late founding director of the Water Center, is given annually to help water resources graduate students. More information on the Walker Award is available online at [http://vwrrc.vt.edu/walker\\_fellowship.html](http://vwrrc.vt.edu/walker_fellowship.html), or contact Dr. Kevin McGuire at [kevin.mcguire@vt.edu](mailto:kevin.mcguire@vt.edu) or (540) 231-6017.

## TEACHING WATER Especially for Virginia's K-12 teachers

### This Issue and the Virginia Standards of Learning

Below are suggested Virginia Standards of Learning (SOLs) that may be supported by items in this issue. The SOLs listed 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 2012 Virginia General Assembly	6.7, 6.9, LS.11, ES.6, ES.10.	CE.7, WG.7, GOV.8, GOV.9, GOV.16
Water Status Report	4.6, 4.9, 6.7, LS.6, ES.6, ES.8, ES.12.	WG.2

## Virginia Water Central

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