

Virginia Water Central

Virginia Water Resources Research Center Blacksburg, Virginia January 2014 (No. 62)



The New River, near the Giles-Montgomery county line, at dawn on January 1, 2014.

IN THIS ISSUE

Feature: Water in the 2013 Virginia General Assembly _____	2	Va. Govt. Water Issues Overview _____	28
Following the 2014 General Assembly _____	19	Notices _____	31
A Water Photo Sampler from 2013 _____	21	Teaching Water _____	33
Water Status Report _____	22	At the Water Center: USGS Grants _____	34
		You Get the Last Word _____	35

FEATURE ARTICLE

Water in the 2013 Virginia General Assembly

The 2013 Virginia General Assembly convened January 9 and adjourned February 23. The reconvened session—for the General Assembly to consider vetoes or amendments by the governor—was held April 3. During the session, the Assembly considered 2899 measures along with amendments to the 2012-14 biennial state budget.

In this article, *Virginia Water Central* lists 143 measures in the 2013 Assembly (including nine budget or appropriations-process 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 2013 Assembly that received attention in various news media. For a selection of online news articles about water-related legislation in the 2013 Assembly, please visit the *Virginia Water Central* News Grouper at <http://vawatercentralnewsgrouper.wordpress.com/category/2013-virginia-general-assembly/>.

Thanks to Water Center work-study student Alex Thompson for compiling information on bill status and relationships among bills.

Water Central’s inventories of water-related bills in previous General Assembly sessions (1998-2012) are available online at www.vwrrc.vt.edu/legislation.html.



2013 Water-related Bill Inventory

(As of the completion of the reconvened session in April 2013)

Click on the bill numbers to access 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.

APPROPRIATIONS/BUDGET

1	HB 1500	Budget Bill. Amendments to the 2012-14 biennial budget.	Passed.
2	HB 1878	Sources of revenue; establishing and adjusting for appropriations of State and its localities. Similar to HB 2179 (#3).	Failed in House Finance.
3	HB 2179	Sources of revenue; establishing and adjusting for appropriations of State and its localities. Companion Bill is SB 717 (#5). Similar to HB 1878 (#2).	Failed in House Finance.
4	HJ 594	Constitutional amendment; limit on appropriations (first reference).	Passed House; failed in Senate Privileges and Elections.
5	SB 717	Sources of revenue; establishing and adjusting for appropriations of State and its localities. Companion Bill is HB 2179 (#3).	Failed in Senate Finance.
6	SB 800	Budget Bill. Amendments to the 2012-14 biennial budget.	Passed Senate; failed in House Appropriations.
7	SB 1105	Biennial appropriations; changing to start in odd-numbered year.	Passed Senate; failed in House Appropriations.
8	SB 1129	Reports required with appropriation bills.	Passed Senate; failed in House Appropriations.
9	SB 1161	Forty-eight hours required for consideration of conference committee report on biennial budget.	Passed Senate; failed in House Appropriations.

CONSERVATION

Land Conservation Bills

10	HB 1398	Land preservation tax credit. Provides that, beginning with calendar year 2013, the maximum amount of land preservation tax credits shall be \$100 million, with the \$100 million annually indexed, as is done under current law.	Passed.
11	HB 1462	Land preservation tax credit; assessments of additional tax. Would have set a one-year deadline for the Department of Taxation to	Failed in House Finance.

		assess any additional tax or penalty relating to the claiming of a land preservation tax credit.	
12	HB 1694	Land preservation tax credit; application for credits prior to any donation. Would have allowed taxpayers requesting at least \$1 million in land preservation tax credits with respect to a proposed donation to apply to the Department of Taxation for a conditional issuance of tax credits prior to making any donation of land.	Failed in House Finance.
13	HB 1800	Land preservation tax credit; property conveyances for public use. Would have set at 60 percent of fair-market value the land preservation tax credit for of any land conveyed for a public park, public recreational facility, public trail access easement, or other public use as identified in guidelines developed by the Department of Conservation and Recreation (DCR).	Failed in House Finance.
14	HB 2034	Land preservation tax credit; to be repealed effective January 1, 2014.	Failed in House Finance.
15	SB 799	Real property tax; special valuation for land preservation. Permits Goochland County to adopt certain variations in administering the special valuation of real property for land preservation for real property in service districts.	Passed.

Other Conservation Bills

16	HB 1367	Cigarettes as litter. Would have cigarettes as litter for purposes of criminal punishment for improper disposal of trash, and would have allowed community service in lieu of jail time for misdemeanor conviction. Similar (in part) to HB 1447 (#20) and SB 1166 (#38).	Failed in House Courts of Justice.
17	HB 1397	Dan River Scenic River Designation. Designates a 15-mile segment as a component of the Virginia Scenic Rivers System.	Passed.
18	HB 1399	Sales and use tax exemption for pollution-control equipment and facilities. Deletes that portion of the sales and use tax exemption for pollution-control equipment and facilities that expired July 1, 2006, related to coal, oil, and gas production, to clarify that such exemption did not expire in 2006, and continues because of a cross-reference to another statute.	Passed.
19	HB 1441	Certified nutrient management planners. Would have provided that that the Commonwealth certification of nutrient management planners it to have no effect on the rights or qualifications of licensed architects, professional engineers, land surveyors, or landscape architects, nor qualify such planners to practice the profession of engineering; and that qualifications of a licensed architect, professional engineer, land surveyor, or landscape architect meet the current certification requirement found in Department regulations for education and experience.	Failed in House ACNR.
20	HB 1447	Littering definition. Would have increased specificity as to what constitutes littering and provided an alternative penalty. Similar in part to HB 1367 (#16) and SB 1166 (#38).	Failed in House Transportation.
21	HB 1488	Stormwater management program. Would have delayed from July 2014 to July 2015 the date by which local governments have to implement the program.	Failed in House ACNR.
22	HB 1547	Tree canopies in cemeteries. Provides that local ordinances requiring certain tree canopy coverage in new developments may	Passed.

		require 10-percent minimum canopy coverage for a cemetery.	
23	HB 1548	Municipal separate storm sewer (MS4) permittees guidance documents and Bay TMDL. Would have requested the DCR and Department of Environmental Quality (DEQ) jointly to prepare guidance documents to assist MS4 permittees in developing and implementing their Chesapeake Bay Total Maximum Daily Load (Bay TMDL) Action Plans, including calculating nutrient reductions and best management practices efficiencies.	Failed in House ACNR.
24	HB 1591	Plastic bags; use by retailers. Would have banned the use of non-reusable plastic carryout bags by retailers at the point of sale.	Failed in House ACNR.
25	HB 1753	Meherrin River Scenic River Designation. Designates an additional 17.8-mile segment as a component of the Virginia Scenic Rivers System.	Passed.
26	HB 2069	Seedlings furnished by State Forester. Authorizes the State Forester to set conditions of sale of seedlings to private individuals.	Passed.
27	HB 2089	Electronic transmission of permits. Clarifies how the DEQ may use electronic communications to meet requirements for notice by "certified mail."	Passed.
28	HB 2137	Local environmental impact reports and the sale of certain deicing agents. Raises from \$500,000 to \$2 million the cost threshold at which a locality will be required to obtain an environmental impact report for a highway project. For certain projects costing more than \$500,000 and less than \$2 million, the locality is required to consult with the Department of Historic Resources to make efforts to minimize impacts to historic resources. The bill also exempts the sale of deicing agents containing urea from the current prohibition on such sales where the deicing agent is to be used by a municipal corporation at an airport.	Passed.
29	HB 2190	Stringency of stormwater management ordinances. Establishes a procedure for state review of the stringency of local stormwater ordinances. The bill requires localities within 30 days of the adoption of a more stringent stormwater ordinance or best management practice (BMP) requirement to submit a letter report to the DCR. The letter report is to include an explanation as to why the more stringent ordinance or requirement is necessary. In addition, within 90 days of the ordinance's adoption, a landowner or his agent can request the DCR to determine whether the ordinance or requirement meets the standards of the state law. The Department has 90 days to make such a determination.	Passed.
30	HB 2220	Banister River Scenic River Designation. Designates a 38.4-mile section as a component of the Virginia Scenic River System.	Passed.
31	HB 2283	Virginia Recreational Facilities Authority. Would have designated this Authority as an agency in the executive branch, reporting to the Secretary of Natural Resources. See related SB 1283 (#40).	Failed in House General Laws.
32	HB 2296	Virginia Urban Best Management Practices (BMP) Cost-Share Program and Fund. Would have required the DCR to administer an urban BMP cost-share program, providing matching funds of up to 50 percent to promote BMPs on private property in localities subject to stormwater permits, and would have established a sub-fund of the Virginia Water Quality Improvement Fund to provide the matching	Failed in House Appropriations.

		funds for the cost-share program.	
33	HJ 609	Biosolids study. Would have directed the DEQ to study the substances contained in biosolids generated from wastewater treatment facilities and applied to land for agricultural purposes.	Failed in House ACNR.
34	HJ 615	Chesapeake Bay Preservation Act study. Would have requested that the DCR study the feasibility of applying the provisions of the Chesapeake Bay Preservation Act to all localities within Virginia's Chesapeake Bay watershed.	Failed in House Rules.
35	SB 909	State park master-planning public-comment requirements. Requires the DCR, in considering public comments on stage one and stage two master plans, to make a reasonable effort to solicit comments and to provide timely notice of the comment period to trade associations and private businesses within a 10-mile radius of the park that offer similar services, including private campgrounds, marinas, and recreational facilities.	Passed.
36	SB 1055	Medical waste; repeals certain provisions regarding disposal. Repeals certain outdated provisions, superseded by federal air-emission regulations, regarding the permitting of infectious waste incinerators by the State Air Pollution Control Board and the Waste Management Board.	Passed.
37	SB 1068	Easement for access to Channels State Forest. Authorizes the conveyance of right-of-way easements between the Department of Forestry (DOF) and the Ratcliffe Foundation, in order to allow the DOF better access to Channels State Forest in Washington County and allow the Foundation access to property it owns in Russell County.	Passed.
38	SB 1166	Littering & illegal dumping. Provides that person convicted shall perform minimum of 10 hours of community service in lieu of jail time. Similar (in part) to HB 1367 (#16) and HB 1447 (#20).	Passed.
39	SB 1212	Waste information provided to DEQ; trade-secrets exemption. Requires that every person who the DEQ has reason to believe is generating or handling waste provide the department with information about the waste upon request. The bill exempts trade secrets contained in such information from disclosure required by the Virginia Freedom of Information Act under certain conditions while still allowing the department to provide such information to the Environmental Protection Agency or as otherwise required by law.	Passed.
40	SB 1267	Licensure of tree care service providers; penalties. Would have required anyone engaged in the business of providing tree care to be licensed by the Board for Contractors as of January 1, 2014.	Passed Senate; failed in House Appropriations.
41	SB 1283	Virginia Recreational Facilities Authority Fund established. Would have established the fund to assist in financing the Authority's operations. See related HB 2283 (#31).	Passed Senate; failed in House Appropriations.
42	SJ 338	Environmental regulation; need for reducing burden of EPA regulations. Would have resolved that the General Assembly recognizes a need for regulatory agencies to use administrative discretion to reduce the burden placed upon the coal and electricity-generation industries by regulations recently adopted by the U.S. Environmental Protection Agency (EPA).	Failed in Senate Rules.

ENERGY CONSERVATION AND RESOURCES

43	HB 1790	Virginia Nuclear Energy Consortium Authority established. Establishes this Authority as a Commonwealth political subdivision of for the purposes of making the Commonwealth a national and global leader in nuclear energy and serving as an interdisciplinary study, research, and information resource for the Commonwealth on nuclear energy issues. Companion bill is SB 1138 (not included in this inventory).	Passed.
44	HB 1916	Tax credit for solar thermal systems. Would have established—beginning in 2013 and ending in 2018—an individual and corporate income tax credit for solar energy space heating, water heating, space cooling, and industrial and commercial process heating systems placed in service, equal to 35 percent of the installed cost of the system.	Failed in House Finance.
45	HB 1917	Renewable thermal energy definition expanded. Expands the definition of "renewable thermal energy" to include energy from certain solar energy systems located in the Commonwealth that heat air or water for residential, commercial, institutional, or industrial processes. Previously, the term encompassed only energy from renewable-fueled combined heat and power facilities, and only that used in industrial processes.	Passed.
46	HB 1946	Renewable energy portfolio standard (RPS) program. Would have amended the existing RPS program to require that for calendar years 2016 through 2025 a utility shall apply only renewable energy generated or purchased in Virginia, off its coast, or represented by a renewable energy certificate from eligible sources in Virginia or off its coast; and that renewable energy sales or renewable energy certificates from electric energy derived from any combination of sunlight, onshore wind, offshore wind, wave motion, tides, or geothermal power to meet at least 40 percent of the sales requirement for the RPS Goal in that year. The bill also would have eliminated provisions that give double or triple credit toward meeting the RPS Goals for energy from specified sources of energy. Companion bill SB 1269 (#51).	Failed in House Commerce and Labor.
47	HB 2180	Electric utilities; renewable energy portfolio standard program, eligible energy. Companion bill is SB 1259 (#50).	Passed.
48	HB 2305	Restrictions on solar panels by community associations. Clarifies that a community association may establish reasonable restrictions concerning the size, place, and manner of placement of solar energy collection devices on property designated and intended for individual ownership and use; the bill also requires a resale certificate and disclosure to contain a statement setting forth any restrictions on the right of an owner to install or use solar energy collection devices on his property.	Passed.
49	HJ 666	State renewable energy utility; study on feasibility of establishing. Would have establishes a joint subcommittee to study the feasibility of establishing a state renewable energy utility that would be authorized to issue tax-exempt bonds to fund renewable energy improvements at state buildings. The proposed resolution referenced Delaware's experience with such a utility.	Failed in House Rules.
50	SB 1259	Electric utilities; renewable energy portfolio standard program, eligible energy. Companion bill is HB 2180 (#47); please see that bill for summary.	Passed.

51	SB 1269	Renewable energy portfolio standard (RPS) program. Companion bill HB 1946 (#46); please see that bill for summary.	Failed in Senate Commerce and Labor.
52	SB 1286	Solar energy equipment tax exemption. Would have exempted certified solar energy equipment facilities and devices from state and local taxation.	Failed in Senate Finance.
53	SB 1341	Renewable energy facilities exemption from local zoning and land use regulations. Would have exempted certain renewable energy facilities from local zoning and land use requirements, under certain conditions.	Failed in Senate Local Government.

FISHERIES AND HABITAT OF TIDAL WATERS

54	HB 1400	Oyster replenishment tax replaced with user fee. Replaces the former price-based replenishment tax with a volume-based oyster resource user fee, specifying that no harvester shall pay more than one such fee per year; removes the exemption from licensing for an oyster grounds leaseholder; distinguishes from other fees the license fee to be paid by a person who buys from the catcher oysters caught from the public grounds; simplifies the description of the fisheries data that harvesters and others are required to record; simplifies the prohibition on carrying oysters out of state without a permit; and removes certain oyster inspection tax provisions.	Passed.
55	HB 1531	Sand replenishment for public beaches. Authorizes the Virginia Marine Resources Commission (VMRC) and the DEQ to establish an expedited application review process for sand dredging and beach replenishment on public beaches abutting the waters of the Chesapeake Bay. Companion bill is SB 946 (#59).	Passed.
56	HB 1805	Saltwater recreational fishing lifetime license for citizens 65 years or older. Allows Virginia residents 65 years of age and older to purchase a lifetime saltwater recreational fishing license for \$5. Companion bill is SB 1213 (#63).	Passed.
57	HB 1840	Menhaden; total allowable catch.	Incorporated into HB 2254 (#58).
58	HB 2254	Menhaden fishery; allowable catch for those landed in State, report. Emergency. Establishes total allowable landings of 144,272.84 metric tons per year for Atlantic Menhaden landed in Virginia by the purse seine Menhaden reduction sector, the purse seine Menhaden bait sector, and the non-purse seine Menhaden bait sector. This limit is a 20-percent reduction from the average 2009, 2010, and 2011 landings, as mandated by the Atlantic States Marine Fisheries Commission. Any overage of the total allowable landings in the current year will result in a reduction of the total allowable landings in the following year. The bill authorizes the VMRC to establish and administer a limited-entry purse-seine menhaden bait license according to specific criteria. Guidelines for monitoring of all sectors of the Menhaden fishery that may result in a closure of any or all sectors are established. All licensees of the three Menhaden sectors shall report to the VMRC according to the requirements established by that agency. The VMRC shall establish a biological sampling program to include development of an adult Menhaden survey index from Virginia pound nets. License fees are established for the purse-seine Menhaden reduction and purse-seine Menhaden	Passed.

		bait sectors. The annual Menhaden-harvest cap for the purse-seine Menhaden reduction sector shall be 87,216 metric tons, subject to annual adjustments for under-harvest or over-harvest of the cap. Companion bill is SB 1291 (#64).	
59	SB 946	Sand replenishment for public beaches. Companion bill is HB 1531 (#55); please see that bill for summary.	Passed.
60	SB 1106	Revocation of fishing licenses. Authorizes the VMRC to revoke a person's fishing privileges within tidal waters if he/she violates any tidal fishing law. The revocation can be for up to two years.	Passed
61	SB 1108	Potomac River Compact; illegal fishing. Amends the Potomac River Compact (established between Virginia and Maryland in 1958, revising a 1785 Compact) by changing the penalty for violating the fishing laws in the Potomac River from the current \$1,000 maximum penalty to a maximum penalty of \$3,000. The bill also requires the alleged offender, if he is a resident of Virginia or Maryland, to be tried in the state in which he resides. The bill's provisions do not take effect unless Maryland enacts similar legislation. See SB 1110 (#62), for another Potomac River Compact bill.	Passed.
62	SB 1110	Potomac River Compact; oyster inspection tax. Amends the Potomac River Compact to authorize the Potomac River Fisheries Commission to impose an oyster inspection tax not to exceed \$2 per bushel. Currently the Commission can impose an inspection tax no higher than the per-bushel severance tax on oysters imposed by Virginia or Maryland within their respective jurisdictions. The Commission's current per bushel inspection tax for oysters taken from the Potomac River is \$1. Proceeds from the tax are to be used for planting seed or shell oysters on the working river bottom. The bill's provisions do not take effect unless Maryland enacts similar legislation. See SB 1108 (#61), for another Potomac River Compact bill.	Passed.
63	SB 1213	Saltwater recreational fishing lifetime license for citizens 65 years or older. Companion bill is HB 1805 (#56); please see that bill for summary.	Passed.
64	SB 1291	Menhaden fishery; allowable catch for those landed in State, report. Emergency. Companion bill is HB 2254 (#58); please see that bill for summary.	Passed.

GAME, INLAND FISHERIES, AND BOATING

Hunting-on-Sunday Bills

65	HB 1762	Would have allowed hunting on Sundays on private lands in the counties of Fairfax, Fauquier, Loudoun, and Prince William.	Failed in House ACNR.
66	HB 2036	Would have allowed hunting with a bow-and-arrow on Sundays.	Failed in House ACNR.
67	HB 2037	Would have allowed hunting or killing of nuisance species on Sundays.	Failed in House ACNR.
68	HB 2112	Would have allowed hunting on Sundays on state and federal military bases, installations, and facilities with the approval of the commanding officer.	Failed in House ACNR.
69	HB 2225	Would have allowed hunting on private lands on Sundays with permission of the owner of the land.	Failed in House ACNR.

Other Game, Inland Fisheries, and Boating Bills

70	HB 1413	Nonresident freshwater fishing license. Would have established a one-day fishing license for nonresidents to fish in Virginia's inland waters.	Failed in House ACNR.
71	HB 1597	Personal flotation devices required children. Would have prohibited operation of a recreational vehicle (defined in the bill) on Commonwealth waters unless children 12 years of age or younger are wearing a U.S. Coast Guard-approved personal flotation device, except when the vessel is moored or anchored or the children are below deck. Federal law has this requirement for operation of recreational vessels on federal waters (according to the 2012 Virginia Freshwater Fishing and Watercraft Owner's Guide, p.56).	Failed in House ACNR.
72	HB 1629	Permit for American Eel harvest. Authorizes the Board of Game and Inland Fisheries to issue an annual permit to use pots to catch American Eels in the waters of Back Bay and the North Landing River and their tributaries (Back Bay and the North Landing River are in the City of Virginia Beach; some of the river's tributaries are in the City of Chesapeake).	Passed.
73	HB 1825	Duck blinds. Establishes time periods and procedures for obtaining a stationary blind license.	Passed.
74	HB 1954	Registration of antique motorboats. Would have established a special one-time/\$100 registration fee for antique motorboats (defined as vessels that are essentially as originally constructed, used for noncommercial purposes, and at least 30 years old), renewable every three years but at no additional cost.	Failed in House ACNR.
75	HB 2099	Trapping and shooting of muskrats and raccoons. Adds muskrats and raccoons to the fur-bearing animals that a landowner may trap upon his own land during the closed season when the animals are causing damage to crops or property, are posing a threat to human health or safety, or are causing a nuisance.	Passed.
76	HB 2149	Aquaculture-raised freshwater fish sale and purchase. Would have established conditions under which one may sell or purchase freshwater fish that are grown in an aquaculture facility.	Failed in House ACNR.
77	HB 2184	Trip hunting and fishing licenses. Authorizes the Board of Game and Inland Fisheries to issue trip hunting licenses to non-residents and trip fishing licenses to residents and non-residents for time periods and at costs <i>determined by the Board</i> . Current law allows nonresidents to purchase a three-day trip hunting license at a cost of \$40 and a five-day trip fishing license at a cost of \$10 and allows residents to purchase a five-day trip fishing license at a cost of \$5.	Passed.
78	SB 737	Navigation rights on freshwaters. As introduced, would have provided that the Virginia fresh waters would open to non-motorized vessels for recreation between sunrise and sunset, regardless of whether the water body is deemed navigable or non-navigable, or whether the adjoining banks are publicly or privately owned. A substitute bill, passed by the Senate ACNR but defeated on the Senate floor, would have provided that no person would be liable for trespass for travel upon rivers, streams, or creeks in Virginia (if such waterways are <i>second order</i> or larger, as defined based by U.S. Geological Survey conventions) if the travel consists solely of floating in or upon the water in a non-motorized vessel for recreation.	Failed on Senate floor.

79	SB 880	Inventory of non-tidal waters that are available for public recreation. Would have directed the DGIF and the VMRC to inventory non-tidal waters that flow above state-owned bottomlands and that may be used for public recreation. Would have prohibited an agency decision regarding such listing of particular waters from constituting a legal determination or from affecting land ownership.	Failed in Senate ACNR.
80	SB 985	G. Richard Thompson Wildlife Management Area conveyance. Authorizes the Board of Game and Inland Fisheries to convey to Warren County two parcels of land (3.19 acres total area) in the G. Richard Thompson Wildlife Management Area.	Passed.
81	SB 1053	Boating safety education exemption for certain Navy personnel. Adds U.S. Navy-qualified surface warfare officers and enlisted surface warfare specialists to the list of groups exempted from having to pass a boating-safety education course in order to operate a motorboat.	Passed
82	SB 1117	Watercraft titling certificates; adoption of uniform act; penalty. Repeals Virginia's existing watercraft titling law and enacts in its place the Uniform Certificate of Title for Vessels Act as adopted in 2011 by the National Conference of Commissioners on Uniform State Laws. Requires the owner of every watercraft (replaces "vessel") of a particular size and type to apply for and obtain a certificate of title, lowering the minimum boat length for which a title is required from 18 feet to 16 feet. Details the methods of creation or cancellation of certificates by the Virginia DGIF and describes the contents and effects of a certificate. Applies some of the principles of the Uniform Commercial Code to the realm of watercraft by defining the rights of secured parties and purchasers other than secured parties. Establishes rules for transferring ownership of a watercraft by a transfer statement or by operation of law, sets out the means of acquiring title to an abandoned watercraft, states the duties of the DGIF, provides several general provisions, and makes technical amendments. The bill contains an enactment clause making it effective on July 1, 2014.	Passed.
83	SB 1270	Marina operator reporting requirements. Includes state and local agencies among the operators of marinas or boat storage places that must file with the local commissioner of the revenue a list of boat owners and the name and number of the boats in the marina.	Passed.

HIGHWAYS, BRIDGES, AND FERRIES

84	HB 2044	Recycled materials in highway construction. Eliminates the Recycled Materials in Highway Construction Advisory Committee	Passed.
85	HB 2067	Virginia Alternative Fuels Revolving Fund. Would have provided that the Virginia Department of Transportation (VDOT) commissioner is to adopt "guidelines" rather than "regulations" to administer the fund.	Failed in House Transportation.
86	HB 2215	Charles K. "Pete" Estes Memorial Bridge. Designates the newly replaced U.S. Route 522 bridge over the Thornton River in Sperryville (Rappahannock County) as the "Charles K. 'Pete' Estes Memorial Bridge."	Passed.

MINES AND MINING

Uranium Mining Bills

87	HB 1804	State severance tax. Would have established a three-percent state severance tax on the gross receipts of any uranium severed from the earth in the Commonwealth. Companion bill is SB 919 (#89).	Failed in House Finance.
88	HB 2330	Uranium mining regulations and permitting. Would have established a process for the Department of Mines, Minerals and Energy (DMME) to issue permits for the mining of uranium ore; required the DMME, in consultation with several other state agencies, to adopt regulations governing uranium mining; and restricted the availability of uranium-mining permits to applicants that had an exploration permit as of July 1, 2013, and to areas within 10 miles of where an exploration permit was in effect as of January 1, 2012 (in effect, the proposed uranium-mining site in Pittsylvania County). Would also have established the Uranium Administrative Fund, Uranium Response Fund, and Long-Term Monitoring Fund, all to be funded by fees assessed on permittees. Companion bill is SB 1353 (#90).	Failed in House Commerce and Labor.
89	SB 919	State severance tax. Companion bill is HB 1804 (#87); please see that bill for summary.	Failed in Senate Finance.
90	SB 1353	Uranium; establishes process for DMME to issue permits for mining of uranium ore, report. Companion bill is HB 2330 (#88); please see that bill for summary.	Failed in Senate ACNR.

Other Mines and Mining Bills

91	HB 1824	Virginia port volume increase tax credit. Extends the tax credit beginning in 2013 to growers or producers of wheat, grains, fruits, nuts, crops; of tobacco, nursery, or floral products; of forestry products excluding raw wood fiber or wood fiber processed or manufactured for use as fuel for the generation of electricity; and of seafood, meat, dairy, or poultry products. The tax credit applies to manufacturers and distributors of manufactured goods that ship at least 75 net tons of non-containerized cargo or 10 loaded 20-foot equivalent units (TEUs) through Virginia port facilities during a calendar year are eligible for an income tax credit if their volume of shipments through such facilities increases by at least five percent over a designated base year volume.	Passed.
92	HB 2100	Local coal-severance taxes. Establishes a one-percent tax on the gross receipts from coal severed from the earth by coal producers, except that the gross receipts tax on coal from mines that sell less than 10,000 tons of coal per month is three-quarters of one percent. Provides that the only deduction allowed from gross receipts is for non-local transportation and processing costs of coal. Companion bill is SB 918 (#95).	Passed.
93	HB 2110	Coal and Gas Road Improvement Fund allowed for construction of natural gas service lines. Allows a locality in the Virginia Coalfield Economic Development Authority to apply a portion of its Coal and Gas Road Improvement Fund tax revenue—collected from the severance tax imposed upon the severance of coal or natural gas—to the construction of natural gas service lines. Previous law allowed localities to apply that money to the construction or	Passed.

		enhancement of water or sewer systems or lines.	
94	HB 2111	Repealing an obsolete chapter that regulates surface mining. Repeals an obsolete chapter in Title 45.1 of the <i>Virginia Code</i> that has been superseded by the Virginia Coal Surface Mining Control and Reclamation Act (1979; Virginia Code sec. 45.1-226 et seq.). Companion bill is SB 1014 (#96).	Passed.
95	SB 918	Local coal-severance taxes. Companion bill is HB 2100 (#92); please see that bill for summary.	Passed.
96	SB 1014	Repealing an obsolete chapter that regulates surface mining. Companion bill is HB 2111 (#94); please see that bill for summary.	Passed.

WATER AND SEWER SYSTEMS

97	HB 1448	Financing for repairs to failed septic systems. Authorizes a locality to create a loan program to enable the repair of property owners' failed septic systems. The locality may provide for the repayment of the loan through water or sewer billings, real property tax assessments, or other billings. The bill authorizes other features of a loan program and permits a locality to set a minimum ownership interest or minimum level of proof of ownership of the property.	Passed.
98	HB 1482	Wastewater works operators and conventional onsite sewage system operator examination. Allows Class 1 wastewater works operators to sit for the conventional onsite sewage-system operator examination.	Passed.
99	HB 1505	Betterment loans. Would have clarified that betterment loans (loans to repair, replace, or upgrade sewage systems sewage system for the purpose of reducing threats to public health or to surface waters or groundwater) may be used for conventional onsite, alternative onsite, and alternative discharging sewage systems; authorized the Board of Health to use up to 25 percent of the Onsite Sewage Indemnity Fund to provide or guarantee betterment loans; and increased the amount of each fee collected by the Department of Health that is contributed to the Onsite Sewage Indemnity Fund from \$10 to \$25.	Passed in House Health, Welfare, and Institutions; failed in House Appropriations.
100	HB 1611	Alternative onsite sewage system inspections. Would have required inspections of alternative onsite sewage systems once every two years.	Failed in House Health, Welfare and Institutions.
101	HB 1648	Discounted fees and charges for certain low-income and disabled customers. Provides that any locality that owns a water and sewer system and has a population density of 200 persons or fewer per square mile may develop criteria for providing discounted water and sewer fees and charges for low-income and disabled customers. Companion bill is SB 850 (#105).	Passed.
102	HB 1726	Non-gravel effluent drain systems for onsite sewage systems; regulations. Directs the Board of Health to promulgate regulations for two types of effluent-distribution systems—"chamber" and "bundled expanded polystyrene"—for onsite sewage systems, and regulations for other effluent-distribution system technologies for onsite sewage systems as may be deemed necessary by the Board.	Passed.
103	HB 1727	Water and waste authority rates. Would have clarified that a water or waste authorities have the ability to fix rates for services	Passed House; failed in Senate Local

		that are furnished by a refuse collection and disposal system; expanded the list of rate-setting powers that require a public hearing by adding the rate-setting power that includes the establishment of incentives for green roofs; combined the two parallel processes found in current law for the setting of rates for sewage disposal and refuse collection and it reduced the period for publication of notice of a rate-setting hearing from 60 days to 14 days; and provided that no rate established before January 1, 2013, shall be invalidated because of a failure to provide the required public notice. Companion bill is SB 1121 (#107).	Government.
104	SB 764	Water and sewer charges as a lien on real estate in Smyth County. Would have added Smyth County to the list of localities permitted to provide that charges for water and sewer shall be a lien on the real estate served by such waterline or sewer.	Failed in Senate Local Government.
105	SB 850	Discounted fees and charges for certain low-income and disabled customers. Companion bill is HB 1648 (#101); please see that bill for summary.	Passed.
106	SB 1095	Bond issuance for wastewater-treatment facilities. Would have authorized the Virginia Public Building Authority to issue an additional \$179 million in bonds to continue installing nutrient-removal technology in eligible wastewater-treatment facilities to comply with the Chesapeake Bay Total Maximum Daily Load (TMDL) pollution-reduction plan. A portion of the bond revenues could have been used for combined sewer overflow projects in the cities of Lynchburg and Richmond.	Passed Senate; failed in House Appropriations.
107	SB 1121	Water and waste authority rates. Companion bill is HB 1727 (#103); please see that bill for summary.	Passed.
108	SB 1358	Water and sewer connection requirement in Gloucester County. Would have added Gloucester 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 Senate Local Government.

WATERS OF THE STATE, PORTS AND HARBORS

109	HB 1327	Port of Virginia Economic and Infrastructure Development Zone Grant Fund. Adds the City of Franklin and the counties of Page and Shenandoah to the localities in where certain businesses related to commerce through the Port of Virginia may locate or expand and be eligible to apply for grants based on the number of new jobs created.	Passed.
110	HB 1334	Virginia ports; change in ownership.	Incorporated into HB 1691 (#114).
111	HB 1345	Rappahannock River Basin Commission membership. Reduces the Commission membership from 34 to 32 members, due to redistricting that removed one Senate district and one House of Delegates district from the basin area.	Passed.
112	HB 1579	Historic Lower James River (in Charles City, James City and Surry counties) and utility infrastructure. Would have provided that constructing new utility lines underwater would be one of the alternatives to be considered if use and development of water and related land resources along this section of river involve construction of new utility infrastructure. Similar to SB 1271 (#134).	Failed in House ACNR.

113	HB 1689	Virginia ports and Public-Private Transportation Act of 1995; approval required for comprehensive agreements. Would have provided that any proposed comprehensive agreement for a qualifying transportation facility that involves the sale of a port facility or a lease to operate a port facility for a period of 10 years or more shall be reviewed by the General Assembly prior to execution. Related to HB 1691 (#114) and HB 2276 (#123).	Failed in House Transportation.
114	HB 1691	Virginia Port Authority property acquisition and lease limitations. Would have prevented the Commonwealth and the Virginia Port Authority from accepting any unsolicited proposals under the Public-Private Transportation Act or the Public-Private Education Facilities and Infrastructure Act regarding the ownership or operation of any seaport or port facility. Incorporated HB 1334 (#110), HB 1896 (#116), and HB 2000 (#119). Related to HB 1689 (#113) and HB 2276 (#123).	Failed in House Transportation.
115	HB 1757	Wetland and Stream Replacement Fund established. Establishes a special non-reverting fund to receive moneys paid to the State Water Control Board (SWCB) as an alternative for compensatory mitigation for impacts from permitted projects or non-permitted activities on wetlands or other aquatic resources.	Passed.
116	HB 1896	Virginia ports; change in ownership or concession.	Incorporated into HB 1691 (#114).
117	HB 1964	Voluntary economic growth-sharing agreements by localities within the Port of Virginia Economic and Infrastructure Develop Zone. Allows two or more localities located within the Zone to enter into a voluntary economic growth-sharing agreement without the review of the Virginia Commission on Local Government. Companion bill is SB 833 (#127).	Passed.
118	HB 1965	Portsmouth Port and Industrial Commission annual report of financial performance. Would have required the Commission to have an independent certified public accountant prepare a report of financial performance each year, instead of current law's requirement that the Commission "arrange to have its records audited annually." Companion bill is SB 834 (#128).	Failed in House Counties, Cities and Towns.
119	HB 2000	Virginia ports; change in ownership or operation.	Incorporated into HB 1691 (#114).
120	HB 2039	Chesapeake Bay TMDL/Watershed Implementation Plan eligible to receive contributions of taxpayer refunds. Adds the Chesapeake Bay Watershed Implementation Plan submitted by the Commonwealth of Virginia (as part of the Bay Total Maximum Daily Load [TMDL] pollution plan), as a possible recipient of money from taxpayer refund-contributions under the Voluntary Chesapeake Bay Restoration Contribution. Companion bill is SB 1054 (#131).	Passed.
121	HB 2048	Water-quality programs administration transfer of responsibility. Moves several water-quality programs currently administered by the DCR to the DEQ. The DEQ and the SWCB will have oversight of water-quality planning and laws dealing with stormwater management, erosion and sediment control, and Chesapeake Bay Preservation Areas. The Virginia Soil and Water Conservation Board will have continuing responsibility for oversight of the soil and water conservation districts and of resource-management planning. The Soil and Water Conservation Board will continue to be responsible for administration of the flood-prevention	Passed.

		and dam-safety laws and will continue to be staffed by the DCR. Companion bill is SB 1279 (#135). Related to HB 2209 (#122).	
122	HB 2209	Virginia Soil and Water Conservation Board powers and duties. Transfers from the DCR to the Soil and Water Conservation Board authority for administering the voluntary nutrient-management training and certification program and for adopting regulations on nitrogen-application rates. Empowers the Board to “oversee,” rather than “coordinate,” soil and water conservation districts' programs and to allocate general funds to support district operations. Companion bill is SB 1309 (#137). Related to HB 2048 (#121).	Passed.
123	HB 2276	Virginia Port Authority governance and powers reforms. Adds the Chief Executive Officer of the Virginia Economic Development Partnership to the Board of Commissioners; adds the Authority Executive Director to the Commonwealth Transportation Board; prevents the Commonwealth and the Authority from accepting any unsolicited proposal under the Public-Private Transportation Act or the Public-Private Education Facilities and Infrastructure Act regarding the ownership or operation of any seaport or port facility; grants powers of industrial development authorities to the Authority and exempts the port from various purchasing and procurement requirements. Companion bill is SB 1305 (#136). Related to HB 1689 (#113) and HB 1691 (#114).	Passed.
124	HJ 621	Port of Virginia study by JLARC. Directs the Joint Legislative Audit and Review Commission (JLARC) to conduct a one-year study of the competitiveness, efficiency, and governance structure of the Port of Virginia.	Passed.
125	SB 716	Virginia ports; change in ownership.	Incorporated into SB 1305 (#136).
126	SB 768	Chesapeake Bay TMDL/Implementation Plan; directs state agencies to remove Lynnhaven River. Directs state agencies to remove the Lynnhaven River watershed from inclusion in the James River Basin for purposes of the Chesapeake Bay Total Maximum Daily Load (TMDL) Watershed Implementation Plan.	Passed.
127	SB 833	Voluntary economic growth-sharing agreements by localities within the Port of Virginia Economic and Infrastructure Develop Zone. Companion bill is HB 1964 (#117); please see that bill for summary.	Passed.
128	SB 834	Portsmouth Port and Industrial Commission; annual report of financial performance. Companion bill is HB 1965 (#118); please see that bill for summary.	Failed in Senate Finance.
129	SB 884	Impoundment structures; requirement for notice of increase in the flow of water. Would have prohibited an owner of an impounding structure (dam) that has a high hazard potential from increasing the flow of water in a manner that increases water depths below the structure by more than two feet without notifying certain property owners and emergency services.	Passed Senate; Failed in House ACNR.
130	SB 926	Wetlands; governmental activity. Would have removed from Virginia's standard wetlands zoning ordinance the condition that wetlands be owned or leased by the Commonwealth or political subdivision for a governmental activity to be authorized in the wetlands.	Failed in Senate ACNR.

131	SB 1054	Chesapeake Bay TMDL/Watershed Implementation Plan eligible to receive contributions of taxpayer refunds. Companion bill is HB 2039 (#120); please see that bill for summary.	Passed.
132	SB 1107	Lake level contingency plans; wastewater releases from power-generating facilities during drought. Would have provided that any temporary reduction in wastewater releases from power-generating facilities during drought conditions not be considered in determining discharge limits for other existing, downstream, permitted facilities. Same as SB 1268 (#133).	Failed in Senate ACNR.
133	SB 1268	Lake level contingency plans; wastewater releases from power-generating facilities. Same as SB 1107 (#132); please see that bill for summary.	Failed in Senate ACNR.
134	SB 1271	Historic Lower James River (in Charles City, James City and Surry counties) and utility infrastructure. Companion bill is HB 1579 (#112); please see that bill for summary.	Failed in Senate ACNR.
135	SB 1279	Water-quality programs administration transfer of responsibility. Companion bill is HB 2048 (#121); please see that bill for summary.	Passed.
136	SB 1305	Virginia Port Authority governance and powers reforms. Companion bill is HB 2276 (#123); please see that bill for summary. This bill incorporated SB 713 (not included in this table; click here for link to that bill), SB 716 (#125), and SB 1351 (#139).	Passed.
137	SB 1309	Virginia Soil and Water Conservation Board powers and duties. Companion bill is HB 2209 (#122); please see that bill for summary.	Passed.
138	SB 1316	Wetland-delineator certification. Removes the requirement that for certification as a wetland delineator that experience in wetland delineation prior to applying for certification must have occurred under the supervision of a certified professional wetland delineator.	Passed.
139	SB 1351	Virginia Port Authority governance and powers reforms.	Incorporated into SB 1305 (#136).

FROM MISCELLANEOUS CATEGORIES

140	HB 2250	Underground Utility Damage Prevention Act exemptions for sanitary district employees. (<i>From Drainage, Soil Conservation, Sanitation, and Public Facilities Districts category.</i>) Would have exempted from certain provisions of the Act employees of any sanitary district that maintains at least 20 miles of its own streets and roads.	Failed in House Transportation.
141	HB 2072	Condemnation process and applications for local permits. (<i>From Eminent Domain category.</i>) Provides that no locality shall condition or delay the timely consideration of any application for, or grant of, any permit or other approval for any real property in its jurisdiction for the purpose of allowing the locality to condemn or otherwise acquire the property.	Passed.
142	HB 2306	Eminent domain compensation. (<i>From Eminent Domain category.</i>) Provides that just compensation paid for real property taken pursuant to eminent domain shall not be less than the greater of (i) the appraisal of the fair market value of such property, if such an appraisal is required, or (ii) the current assessed value of such property for real estate tax purposes when the entire parcel is to be	Passed.

		acquired, provided that the property has not physically changed since such that the current assessment no longer represents the property's value. Under current law, just compensation shall not be less than the appraisal of fair market value if such an appraisal is required.	
143	HB 2203	Solid-waste disposal fee in Pittsylvania County. (<i>From Waste Disposal category.</i>) Revises the powers allowed to Pittsylvania County in imposing a solid-waste disposal fee. Also allows Pittsylvania to exempt certain disable veterans from such fees.	Passed.

Some 2013 General Assembly Issues and Bills Covered by News Media

Budget Bill Amendment

\$216.9 million for water-quality items.

Budget Bill Amendment

Hybrid vehicle registration tax in comprehensive transportation plan.

Budget Bill Amendment

\$2 million for oyster restoration.

Boating

HB 1597 (#71 above) - Requiring *wearing* of life jackets by children 12 and under.

SB 737 (#78 above) - Access for non-motorized vessels on freshwater streams.

Beach Replenishment

HB 1531 (#55 above) and SB 946 (#59 above) - Expedited application review process for sand dredging and beach replenishment on public Chesapeake Bay beaches.

Energy: Nuclear

HB 1790 (#43 above) - Nuclear Energy Consortium Authority.

Fish/Fisheries

HB 2184 (#77 above) - Trip fishing-license fees.

Hunting on Sunday

HB 1762, HB 2036, HB 2037, HB 2112, and HB 2225 (#s 65-69 above).

Land Use/Conservation: Tax credits

HB 1398, HB 1462, HB 1694, HB 1800, HB 2034, and SB 799 (#s 10-15 above).

Menhaden Fishery Management

HB 2254 (#58 above) and SB 1291 (#64 above) - 20-percent reduction in catch, as called for by Atlantic States Marine Fisheries Commission.

Mining-Uranium

HB 1804 (# 87 above) and SB 919 (#89 above) - 3-percent state severance tax.

HB 2330 (#88 above) and SB 1353 #90 above) – Removing state moratorium on uranium mining and establishing process for issuing permits.

Waste Management

HB 1591 - Banning use of plastic bags by retailers.

Sources (each issue listed, but not necessarily each bill, was mentioned by one or more of the following sources):

Chatham Star-Tribune; Daily Press (Newport News); Danville Register & Bee; Fredericksburg Free Lance-Star; Lynchburg News & Advance; Richmond Times-Dispatch; Roanoke Times; Virginian-Pilot (Norfolk); Washington Post; WSLS-TV (Roanoke-Lynchburg).

FOLLOWING THE 2014 VIRGINIA GENERAL ASSEMBLY

2014 Session Key Dates

(As of 1/16/14, a link to the General Assembly session calendar is available at <http://viriniageneralassembly.gov/membersAndSession.php?secid=1&activesec=0#!hb=1&mainContentTabs=0>.)

The 2014 session is scheduled for 60 days—a so-called “long” session—as are the session’s in all even-numbered years. During long sessions, the Commonwealth’s budget for the upcoming two years is considered. *Amendments* to the biennial budget are considered in the “short” sessions (scheduled for 30 days) in odd-numbered years. In some years, sessions are extended beyond the scheduled length, particularly for budget discussions.

January 8	General Assembly convenes.
January 17	All bills and joint resolutions must be filed with clerk.
February 11	Each house’s committee responsible for revenue bills of that house to complete work.
February 11	Each house to complete work on its own legislation except for its own Budget Bill and revenue bills.
February 14	Each house to complete work on its own revenue bills.
February 24	Each house to complete work on its own Budget Bill.
February 25	Each house’s committee responsible for revenue bills from other house to complete work.
February 26	Each house to complete work on the other house’s Budget Bill and revenue bills.
March 1	First conference on revenue bills to complete work.
March 3	Last day for any committee action on legislation.
March 6	Last day to put bills in conference.
March 7	Only conference reports and certain joint resolutions can be considered.
March 8	Adjournment <i>sine die</i> .
April 23	Reconvened (“veto”) session.

Following Bills and Contacting Legislators

The General Assembly’s Web site, <http://viriniageneralassembly.gov/>, offers several useful features, including member lists, session calendars, live video of floor sessions (see below), and information on legislative processes. The Legislative Information System (LIS) Web site at <http://lis.virginia.gov/lis.htm> provides lists and summaries of all bills, searchable by topic, member, committee, etc.

To express an opinion on legislation, citizens are requested to contact their respective delegate of senator. If you do not know your representatives or their contact information, you can use the online “Who’s My Legislator” service, available at <http://conview.state.va.us/whosmy.nsf/main?openform>. You can find members’ contact information at these links:

House: <http://viriniageneralassembly.gov/house/members/members.php>;

Senate: <http://apps.lis.virginia.gov/sfb1/Senate/TelephoneList.aspx>.

If you know the numbers of your legislative districts, you can also use the **following code to identify your representatives’ Capitol phone numbers**: for delegates, (804) 698-10 + district number (for example, 698-1003 for the District 3 delegate); for senators, (804) 698-75 + district number (for example, 698-7510 for the District 10 senator).

The **Lobbyist-In-A-Box** subscriber service also offers free tracking for up to five bills, and it offers tracking of more than five bills for a fee; visit <http://lis.virginia.gov/h015.htm>. For assistance, phone Legislative Automated Systems at (804) 786-9631.

Live Video of House and Senate Floor Sessions

Here are the Web addresses for **live-streaming video of House and Senate floor sessions**:

House of Delegates – http://virginia-house.granicus.com/ViewPublisher.php?view_id=3;

Senate – http://virginia-senate.granicus.com/ViewPublisher.php?view_id=3.

Standing Virginia General Assembly Committees

Committees and subcommittees play key roles in the progress of legislation in the General Assembly. Following are the General Assembly's **standing (or permanent) committees**, according to the LIS Web site at <http://leg1.state.va.us/121/com/COM.HTM> (1/16/14). That site provides links to each committee; in turn, each committee's online page provides a list of members, agendas, reports, and legislation on the committee's docket.

House Standing Committees

Agriculture, Chesapeake and Natural Resources
 Appropriations
 Commerce and Labor
 Counties, Cities and Towns
 Courts of Justice
 Education
 Finance
 General Laws
 Health, Welfare and Institutions
 Militia, Police and Public Safety
 Privileges and Elections
 Rules
 Science and Technology
 Transportation

Senate Standing Committees

Agriculture, Conservation and Natural Resources
 Commerce and Labor
 Courts of Justice
 Education and Health
 Finance
 General Laws and Technology
 Local Government
 Privileges and Elections
 Rehabilitation and Social Services
 Rules
 Transportation

Water Central's Water Bills and News Services

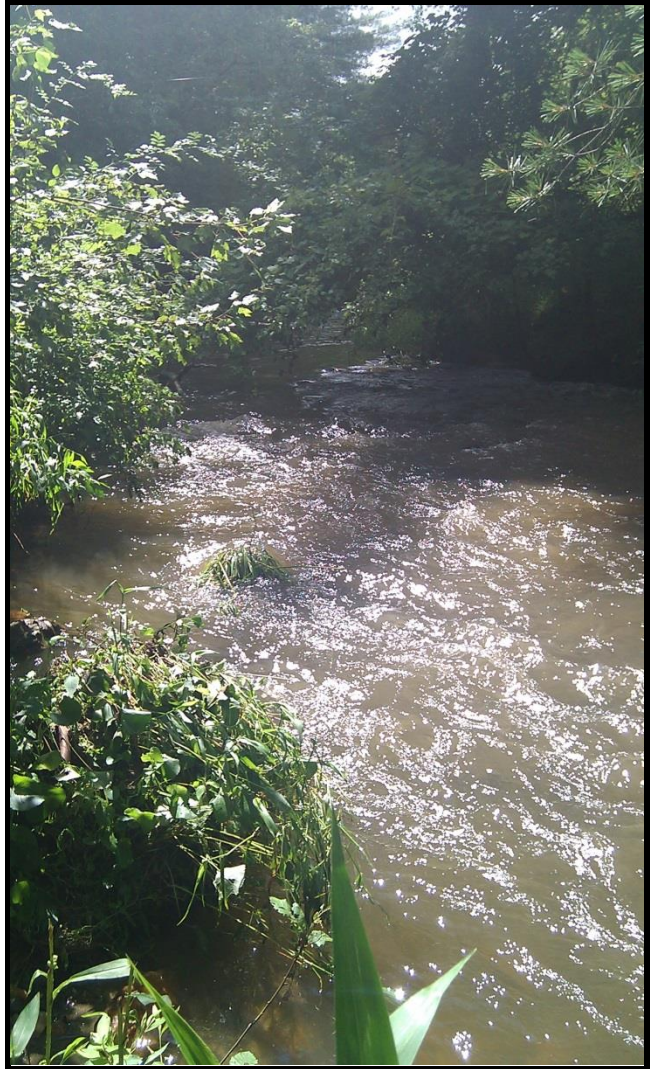
Beginning in late January each year, *Virginia Water Central* posts a list of water-related legislation in the Virginia General Assembly on the Water Center's Web site at www.vwrrc.vt.edu/legislation.html. Typically one or more updates follow during the session. Water-related bill inventories for sessions back to 1998 are also available at this site. As done in this issue, *Water Central* annually publishes a final inventory of water-related legislation (showing the final status for the year of bills) sometime after the Assembly's reconvened session.

Also, the *Virginia Water Central News Grouper* posts links to online news articles about water-related legislation in the General Assembly. To find these items, please visit <http://vawatercentralnewsgrouper.wordpress.com/>, click on the "Select Categories" in a box on the right, and then click on "2014 Virginia General Assembly" or other years of interest; General Assembly-related items go back to 2012.

A WATER PHOTO SAMPLER FROM 2013



Ladies on the “Lady’s Slipper” batteau at the James River Batteau Festival in Lynchburg, 6/15/13.



West Fork Chestnut Creek in Grayson County, 7/5/13.



Whirligig Beetles on the Big Otter River in Bedford County, 6/15/13.



Puddles just after a thunderstorm along the New River Trail in Pulaski County, 8/31/13.



Chestnut Creek in Carroll County, 12/7/13.

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, January—December 2013

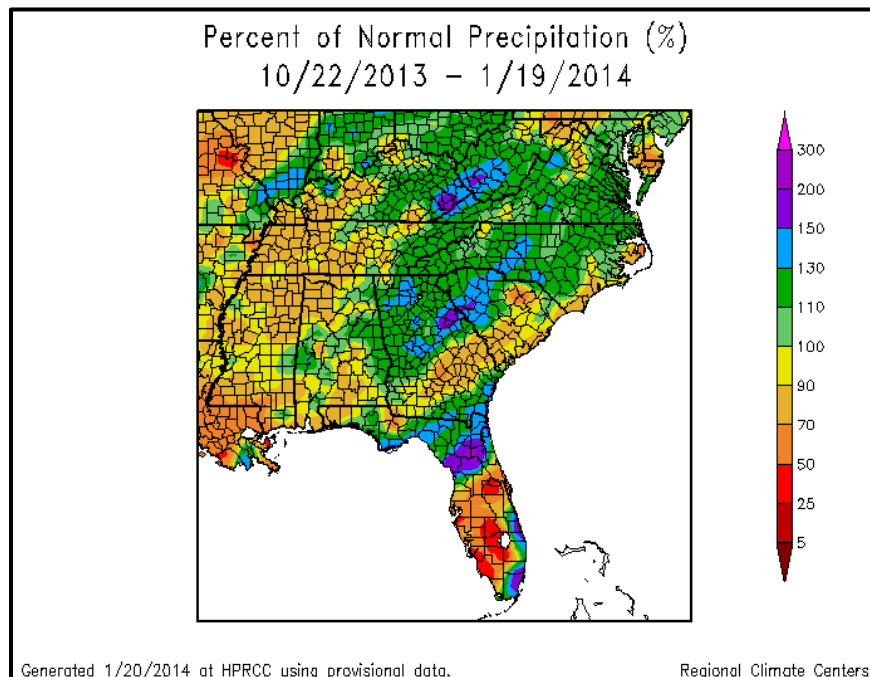
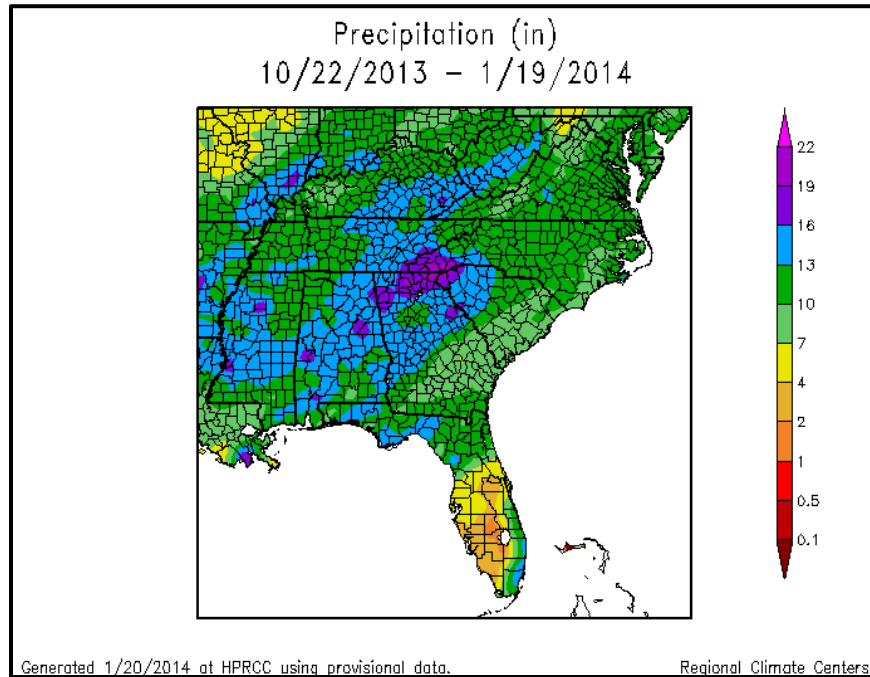
The chart below shows precipitation (in inches) over the last 12 months at nine National Weather Service (NWS) observation sites in or near Virginia. The numbers in the rows marked "O" are **observed precipitation** (rain plus the water amount in any frozen precipitation) for the respective site and month (with yearly total at the bottom of the chart). These values were found at the "Climate" sections of NWS Web sites, as follows: www.weather.gov/climate/index.php?wfo=mrx for the Tri-cities Airport in Tennessee, about 20 miles from Bristol, Va.; www.weather.gov/climate/index.php?wfo=rnk, for Blacksburg, Danville, Lynchburg, and Roanoke; www.weather.gov/climate/index.php?wfo=lwx, for Washington-Dulles; and <http://mi.nws.noaa.gov/climate/index.php?wfo=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 published in 2011 by the National Climatic Data Center (NCDC) (<http://www.ncdc.noaa.gov/oa/climate/normals/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
Jan13 O	9.99*	7.74*	7.16	6.06	2.76	5.33	7.21	3.70	3.61
Jan N	3.37	3.08	3.42	3.14	3.40	3.04	2.92	2.68	3.04
Feb13 O	1.86	1.36	2.65	1.57	4.80	2.60	2.08	1.63	4.63
Feb N	3.45	2.81	3.01	2.93	3.12	2.76	2.89	2.74	2.76
Mar13 O	4.62	3.32	2.55	3.31	2.50	5.57	3.40	3.16	4.67
Mar N	3.44	3.64	4.11	3.58	3.68	4.04	3.46	3.38	4.00
Apr13 O	4.13	3.62	3.04	3.38	3.21	2.88	2.94	2.30	3.77
Apr N	3.33	3.48	3.46	3.31	3.41	3.27	3.37	3.47	3.07
May13 O	4.09	5.83	4.81	6.12	4.15	2.50	4.91	3.20	1.39
May N	3.80	4.33	3.88	3.73	3.41	3.78	4.06	4.55	2.95
Jun13 O	8.37	7.94	5.94	6.32	2.62	6.50	6.49	4.64	3.81
Jun N	3.90	4.00	3.85	3.62	4.26	3.93	3.83	3.98	3.29
Jul13 O	7.11	7.78	11.50*	3.41	8.19	5.88	12.73*	7.27	5.74
Jul N	4.69	4.26	4.59	4.36	5.14	4.51	4.04	3.67	4.09
Aug13 O	4.70	1.96	3.66	3.55	5.04	7.64	2.55	1.95	1.74
Aug N	3.47	3.59	3.97	3.26	5.52	4.66	3.56	3.53	4.19
Sep13 O	1.85	1.13	1.15	0.48	0.93	1.39	1.13	1.61	1.30
Sep N	2.99	3.10	3.96	3.88	4.76	4.13	3.89	3.92	3.98
Oct 13 O	0.68	2.65	1.20	2.34	4.13	4.25	2.54	7.51	4.20
Oct N	2.10	2.78	3.53	3.11	3.42	2.98	2.89	3.25	3.17
Nov13 O	3.94	3.01	2.89	3.35	2.57	3.06	2.74	2.79	2.48
Nov N	3.10	2.87	3.36	3.41	3.15	3.24	3.40	3.41	2.87
Dec13 O	6.34	5.26	4.23	5.69	4.75	6.11	4.38	5.58	5.74
Dec N	3.37	2.95	3.27	3.24	3.26	3.26	2.94	2.96	3.43
TOTAL O	57.68	43.82	50.78	45.58	45.65	53.71	53.10	45.34	43.08
TOTAL N	41.01	40.89	44.41	41.57	46.53	43.60	41.25	41.54	40.84

* Record high for month.

Precipitation, continued: Regional Precipitation, Mid-October 2013—Mid-January 2014

For a visual presentation of recent regional precipitation, the two graphs below show the southeastern United States' total precipitation (in inches; top graph) and the departure from normal (in percentage of normal; bottom graph), for October 22, 2013—January 19, 2014. *These data are provisional.* These graphs were taken from the National Oceanic and Atmospheric Administration's (NOAA) **Southeast Regional Climate Center**, located at the University of North Carolina in Chapel Hill, accessed online at http://www.sercc.com/climateinfo/precip_maps, 1/20/14.



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

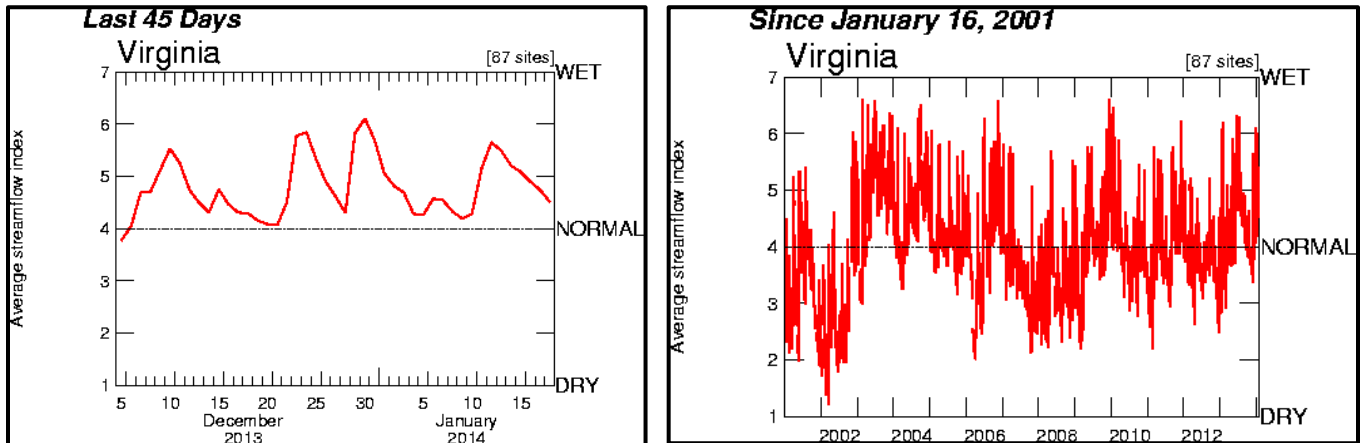
Groundwater Levels at Selected Virginia Wells, Mid-January 2014

As of January 20, 2014, 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 411 active wells in 62 Virginia counties and cities. At 129 of these observation wells in 41 localities, *real-time data* (updated every 5 to 60 minutes) were being recorded. The table below shows the January 19, 2014, 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 this 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 #)	1/19/14 Level	12/13/13 Level	12/19/12 Level	January Median	Record Deepest (Driest)	Record Shallowest (Wettest)	Records Since
Accomack (66M19SOW110S)	8.4	9.7	9.2	9.4	11.3 (Nov. 1981)	6.8 (Mar. 2010)	Sep.1978
Buckingham (41H 3)	26.5	28.1	30.4	22.6	36.4 (Oct. 2002)	7.4 (Apr. 1973)	Mar. 1971
Clarke (46W 175)	32.9	34.4	38.5	37.4	45.7 (Sep. 2002)	23.5 (Sep. 2003)	Mar. 1987
Fairfax (52V 2D)	12.0	14.3	15.8	13.4	24.9 (Dec. 1998)	6.5 (Mar. 1984)	Oct. 1976
Hanover (53K 19 SOW 080)	14.1	17.6	21.2	18.1	22.9 (Aug. 1984)	5.1 (Aug. 2004)	Jan. 1978
Loudoun (49Y 1 SOW 022)	57.5	58.8	59.9	58.9	62.0 (Jan. 2002)	48.0 (June 1972)	Nov.1963
Montgomery (27F 2 SOW 019)	2.5	3.1	5.9	3.8	7.3 (Dec. 1969)	< 0.0 (Mar. 1993)	Jul. 1953
Northampton (63H 6 SOW 103A)	5.7	7.0	7.9	7.4	10.0 (Oct. 2002)	0.8 (Aug. 2004)	Sep.1977
Orange (45P 1 SOW 030)	21.0	23.7	30.7	23.3	39.0 (Aug. 2002)	11.8 (Apr. 1973)	Feb. 1965
Prince William (49V 1)	8.4	7.8	9.5	8.9	15.4 (Jul. 2011)	6.5 (Mar. 2010)	Nov.1968
Roanoke City (31G 1 SOW 008)	18.7	18.7	19.1	17.9	19.3 (Jun. 1987)	12.4 (Feb. 1986)	Aug.1966
Rockbridge (35K 1 SOW 063)	21.2	23.7	28.5	24.2	30.4 (Sep. 2002)	14.3 (Apr. 1987)	Feb. 1964
Rockingham (41Q 1)	69.5	78.9	85.7	69.4	99.0 (Oct. 2002)	57.7 (Feb. 1998)	Aug.1970
Shenandoah (40U 3 SOW 218)	12.9	13.1	14.1	13.9	16.3 (Oct. 2009)	10.6 (May 2011)	Oct. 2006
Suffolk (58B 13)	5.7	6.9	8.8	8.5	13.4 (Jan. 1981)	2.0 (Sep. 1999)	Mar. 1975
Surry (57E 13 SOW 094C)	5.3	6.7	7.5	8.3	11.3 (Sep. 2010)	3.9 (May 1980)	Jul. 1978
Virginia Beach (62B 1 SOW 098A)	1.4	1.5	1.9	2.0	12.0 (Sep. 1980)	0.8 (Nov. 2009)	Jun. 1979
Westmoreland (55P 9)	0.0	8.2	10.4	0.9	12.8 (Dec. 1988)	< 0.0 (Dec. 2009)	Jul. 1977
York (59F 74 SOW184C)	5.8	7.7	8.8	5.9	14.1 (Jan. 2002)	0.9 (Nov. 2006)	Jun. 1990

Stream Flow in Virginia: Nov. 2013—Mid-Jan. 2014, and 2001-2014

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



The graphs above, accessed 1/20/14 from the U.S. Geological Survey's (USGS) "WaterWatch" Web site, at <http://water.usgs.gov/waterwatch/?m=real&r=va> (for Virginia), compare recent Virginia stream flow to historical records.

The data in the graphs come from 87 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:

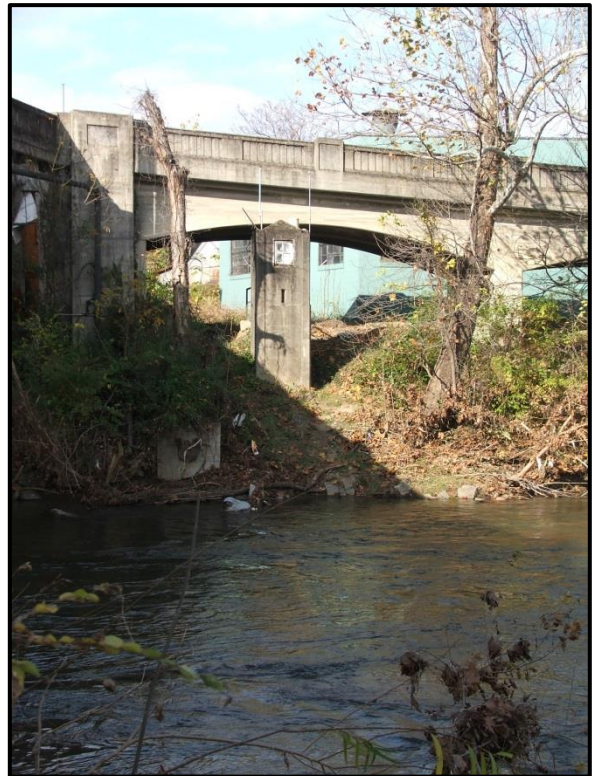
- 4 = average daily flow exceeds the lowest 25 percent of historical values for that date, but is less than the highest 25 percent of values.

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 also has color-coded maps of stream flow conditions—compared to historical records—for current (real-time) flow and for average levels over the previous 1 day, 7 days, 14 days, 28 days, and month.

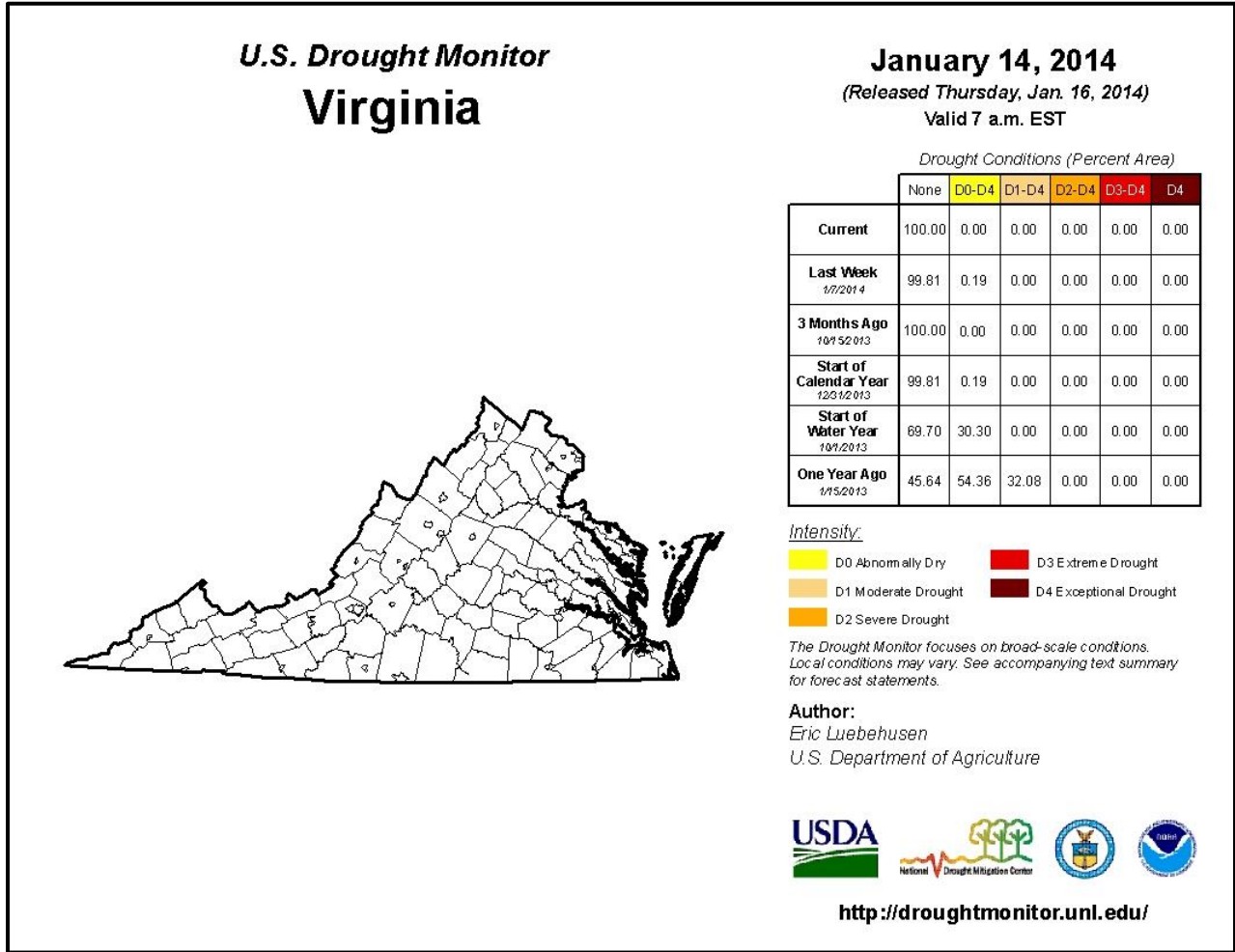


Above: Stream-gaging station on the Roanoke River at Walnut Street in Roanoke, Va., 11/26/09.

Drought Update

From the U.S. Drought Monitor

The U.S. Drought Monitor, produced by the University of Nebraska-Lincoln and available online at <http://droughtmonitor.unl.edu/>, is a weekly nationwide drought assessment by federal agencies and state climatological centers. The following graph shows the Drought Monitor assessments of Virginia conditions on January 14, 2014. The table gives percentages or area in each drought category on that date and one week earlier, three months earlier, at the start of this calendar year, at the start of this water year (October 1), and one year earlier.

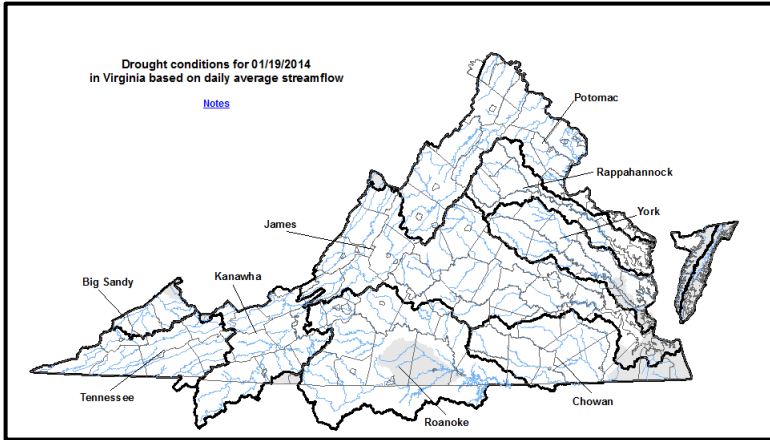


The following table shows how much of the entire United States received different ratings in the same Drought Monitor reports shown in the Virginia table above.

Drought Monitor Report Date	Percentage of United States rated "abnormally dry" (D0) or worse	Percentage of United States rated "severe drought" (D2) or worse
1/14/14	46.0	15.9
1/7/14 (week ago)	47.1	14.3
10/15/13 (3 mos. ago)	51.1	15.2
Start of Calendar Year (12/31/13)	45.8	14.0
Start of Water Year (10/1/13)	55.8	17.3
1/15/13 (year ago)	69.2	33.7

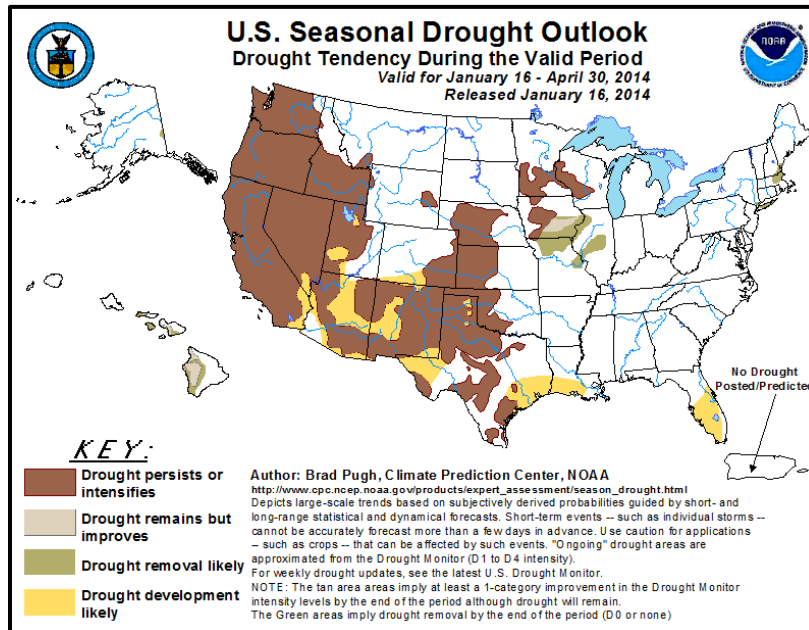
U.S. Geological Survey Drought Assessment based on Stream Flow

Another look at drought conditions comes from the U.S. Geological Survey, whose Virginia Water Science Center (<http://va.water.usgs.gov/>) produces daily maps assessing drought conditions based on stream flow averages from the previous 1 day, 7 days, 14 days, and 28 days. The January 19, 2014, map of drought conditions based on **average 1-day stream flow** is shown below. The USGS' chart explaining the map colors is also shown; the 1/19/14 map indicated no drought conditions and so no colors. The maps are available online at http://va.water.usgs.gov/drought2/drght_map.htm.



EXPLANATION - Percentile classes				
Low	≤5	6-9	10-24	Insufficient data
Extreme drought	Severe drought	Moderate drought	Below normal	

NOAA Drought Outlook



The national drought outlook for January 16—April 30, 2014, according to the National Oceanic and Atmospheric Administration (NOAA) Climate Prediction Center Web site, http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.html, accessed 1/20/14.

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://vwrrc.vt.edu/waterstatus_new.html. And the Virginia Water Central News Grouper posts a Virginia water-status update at the beginning of each month and a mid-month drought update. Find these posts at the weather category link, <http://vawatercentralnewsgrouper.wordpress.com/category/weather/>.

VIRGINIA GOVERNMENT WATER ISSUES OVERVIEW

For an online list—updated weekly—of upcoming Virginia government meetings on water-related topics, visit the Virginia Water Central News Grouper, at <http://vawatercentralnewsgrouper.wordpress.com/category/events/>.

All Web sites listed in this section were functional as of 1-20-14.

This section lists water issues under consideration (study or regulation) at meetings between **January 1, 2014—January 30, 2014**, by state boards, commissions, or agencies in Virginia. This list *does not necessarily include all* meeting topics of significance to Virginia water resources, and *does not list regular meetings* of state boards or commissions. Information in this issue is based on public meetings listed on the **Virginia Regulatory Town Hall** Web site, at <http://townhall.virginia.gov/L/meetings.cfm?time=future>. 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.employeeDirectory.virginia.gov/>. You can also request state employee phone numbers by calling the State Operator, (804) 786-0000, 8 a.m.-5 p.m. Eastern Time on days when state offices are open.

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

Total Maximum Daily Load (TMDL) Processes

Under the federal Clean Water, when a water body fails (with a certain frequency) to meet state water-quality standards, the water is to be designated as “impaired,” requiring development of a total maximum daily load (TMDL). A TMDL *study* identifies the pollutant source(s) causing the impairment and determines how much of the pollutant(s) the water can receive (the “load”) and still meet standards. A TMDL *implementation plan* (required by Virginia law) maps a process for reducing the pollutant load to the TMDL level. Many Virginia TMDLs are underway, each involving many public meetings. The table below lists those where public meetings were held during the period noted above. Information on the status of all Virginia TMDLs 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
Clarke, Frederick, and Warren counties	Aquatic life (benthic and dissolved oxygen) and bacterial impairments in Crooked Run and tributaries (Stephens Run, West Run, Happy Creek, Manassas Run, Willow Brook, Borden Marsh Run, and Long Branch).	Shenandoah River	1/9/14	Tara Sieber, DEQ
Halifax and Mecklenburg counties	Aquatic life (benthic) and bacterial impairments in Aarons Creek, North Fork Aarons Creek, Big Bluewing Creek, Coleman Creek, Little Coleman Creek, Little Buffalo Creek, Hyco River, and Beech Creek.	Roanoke (Staunton) River	1/9/14	Paula Nash, DEQ

Amherst, Bedford, and Campbell counties and in the City of Lynchburg	Bacterial impairments in eight streams in eight stream segments in the James River watershed.	James River	1/23/14	Paula Nash, DEQ
Smyth, and Wythe counties	Bacterial impairments in Cripple Creek.	New River	1/28/14	Patrick Lizon, DEQ
Grayson County	Bacteria impairment in Elk Creek.	New River	1/28/14	Patrick Lizon, DEQ

Other Topics

Items below are listed alphabetically by topic category and then by date (oldest first). More information on the meetings listed is available at the Virginia Regulatory Town Hall Web site, <http://townhall.virginia.gov/L/meetings.cfm?time=future>, (organized by date, going back one year). If you are reading this online, click on any meeting date to go to the respective Town Hall listing.

Biosolids (Treated Sewage Sludge) Land-application Permit Requests

[1/16/14](#): DEQ public meeting on the permit application by KPD, Inc., to land-apply biosolids to 139 acres in Augusta County. More information: Keith Showman, DEQ.

Infrastructure Construction Funding—Water Supply

[1/15/14](#): VDH public-comment meeting on Fiscal Year 2014 Intended Use Plan for the **Drinking Water State Revolving Loan Fund Program**. For details on drinking water funding in Virginia, visit the VDH Web site at <http://www.vdh.virginia.gov/odw/financial/dwffundingprogramdetails.htm>. More information: Theresa Hewlett, VDH.

Mining and Mined Land Reclamation

[1/22/14](#): Five DMME **informal public hearings on issuances of notices of violation**. The notice of violation numbers, companies involved, and mine sites follow; click on a notice of violation number to access the Regulatory Town Hall's online meeting information on that particular public hearing. The contact person for more information about all five public hearings is Harve Mooney, DMME.

[Notice of Violation WAC0009499](#) to Baden Reclamation Company, Inc. The mine site is located 2.6 miles southwest of Clintwood in Dickenson County.

[Notice of Violation WAC0009455](#) to Baden Reclamation Company, Inc. The mine site is 2.6 miles southwest of Clintwood in Dickenson County.

[Notice of Violation TMM0008620](#) to Black River Coal LLC. The mine site is 2.65 miles northwest of Harman on North Branch Indian Creek in Tazewell County.

[Notice of Violation LJJ0000777](#) to A & G Corporation. The mine site is 1 mile north of Appalachia in Wise County.

[Notice of Violation RDS0010040](#) to A & G Corporation. The mine site is 1 mile north of Stonega on Callahan Creek in Wise County.

Scenic Rivers Advisory Board Meetings

[1/13/14](#): Catoctin Creek (Loudoun County); and [1/15/14](#): Goose Creek (Loudoun County). More information: David Dowling, DCR.

Solid or Hazardous Waste Management

[1/30/14](#): DEQ public hearing on a draft permit modification for the Atlantic Waste Disposal, Inc., landfill in Sussex County, regarding increasing the landfill's size. The public comment period ran 12/25/13 to 1/14/14. More information: Josh Byerly, DEQ.

Wastewater Regulation

1/13/14: VDH public hearing on proposed amendments to **Alternative Sewage Treatment Discharging Regulations for Individual Single Family Home Dwellings**. The pertinent section in the *Virginia Administrative Code* is 12 VAC 5-640. The proposed regulation appeared in the *Virginia Register of Regulations* on December 16, 2013; the public comment period runs 60 days from that date. More information: online at <http://townhall.virginia.gov/L/viewaction.cfm?actionid=3422&display=stages>; Marcia Degen, VDH.

Water Quality Regulation and Standards

1/16/14: DEQ Regulatory Advisory Panel on **the triennial review of water-quality standards**. The pertinent section in the *Virginia Administrative Code* is 9 VAC 25-260. According to DEQ information online (<http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/WaterQualityStandards/LawsMandates.aspx>), *Virginia Code* section 62.1-44.15 (3a), part of Virginia's State Water Control Law, requires the State Water Control Board to review and update the Commonwealth's water-quality standards at least every three years. More information: David Whitehurst, DEQ.

Wind Energy

1/16/14: **Virginia Offshore Wind Development Authority**. More information: Evie Christopher, DMME.

General Information for Water-related Statewide Boards and Commissions (phone numbers as of 12/18/13)

Cave Board— Meet at least three times per year. Phone (804) 786-7951 (DCR's Natural Heritage Program); Web site: 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.

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/.

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

Groundwater Protection Steering Committee—Meets via conference call several times per year. Phone: Mary Ann Massie, (804) 698-4042; Web site:

<http://www.deq.state.va.us/Programs/Water/WaterSupplyWaterQuantity/GroundwaterProtectionSteeringCommittee.aspx>.

Land Conservation Foundation Board of Trustees—Meets about three times per year. Phone (804) 225-2048; Web site: www.dcr.virginia.gov/virginia_land_conservation_foundation/index.shtml.

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

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

Outdoors Foundation Board of Trustees—Meets at least quarterly. Phone: (540) 327-7727; Web site: www.virginiaoutdoorsfoundation.org.

Soil and Water Conservation Board—Meets bimonthly. Phone: 804-225-3653 (DCR's Water Quality Division); Web site: http://www.dcr.virginia.gov/water_quality/vs_and_wcb.shtml.

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>.

Waste Management Board—Meets about two 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.

For an online list of Virginia water-related events (updated regularly), please see the Virginia Water Central News Grouper's "Quick Guide to Virginia Water Events," at <http://vawatercentralnewsgrouper.wordpress.com/?s=Quick+Guide>.

For an online list of water-related conferences and meetings outside of Virginia (updated quarterly), please see the Virginia Water Central News Grouper's "Water Conference Sampler from around the United States and Elsewhere," at <http://vawatercentralnewsgrouper.wordpress.com/?s=Water+Conference+Sampler>.

All Web sites listed in this section were functional as of 1/20/14.

Southwestern Virginia's Freshwater Mussels Highlighted in January 2014 Radio Feature

In a three-minute feature first broadcast on January 7, 2014, WVTF-FM public radio highlighted the remarkable diversity of freshwater mussels in southwestern Virginia—some 300 species are found there—and the Virginia Tech Freshwater Mollusk Conservation Center's facilities for research and restoration. The audio and transcript are available online at <http://wvtf.org/post/growing-mussels>. More information about the Mollusk Conservation Center, which is operated by the Virginia Tech Department of Fisheries and Wildlife Sciences, is available online at <http://fishwild.vt.edu/mussel/index.html>; or phone (540)231-7241.

Monitoring Osprey

OspreyWatch, online at <http://www.osprey-watch.org/>, is a program where volunteers around the world record observations of breeding Osprey. According to the program's Web site, "The mission of OspreyWatch is to collect information on a large enough spatial scale to be useful in addressing three of the most pressing issues facing aquatic ecosystems including global climate change, depletion of fish stocks, and environmental contaminants." Volunteer "osprey watchers" submit their observations on the Web site. As of 3/20/13, the program had 959 watchers who had reported 3367 nests and posted 12,938 updates. The effort is coordinated by the Center for Conservation Biology, a group of research scientists at the College of William and Mary and Virginia Commonwealth University who focus on research and education about particular bird species of concern. For more information on the Center, please see <http://www.ccbirds.org/about-us/>; phone (757) 221-1645; or e-mail: info@ccbirds.org. For a news account on OspreyWatch in 2013, please see [Ospreys offer clues on the environment](#), *Richmond Times-Dispatch*, 3/19/13.



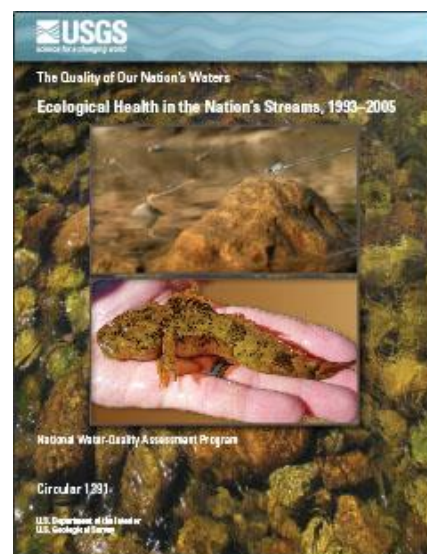
Osprey nest on channel marker in James River below Richmond, June 22, 2007.

PBS News Report on Ocean Acidification

On September 16, 2013, the Public Broadcasting System (PBS) "NewsHour" aired a report on the impacts of **increasing ocean acidification** (caused by increased atmospheric carbon dioxide that dissolves into ocean waters) on Red King Crab and Snow Crab—two highly valuable commercial species—in Alaska's Bering Sea. The seven-minute video is available online at http://www.pbs.org/newshour/bb/climate-change/july-dec13/arctic_09-16.html.

USGS Report on Ecological Health of U.S. Streams

In mid-July 2013, the U.S. Geological Survey (USGS) released “Ecological Health in the Nation’s Streams, 1993–2005,” by Daren M. Carlisle *et al.* (Circular 1391), part of the agency’s National Water Quality Assessment (NAWQA) program. The 120-page report is a nationwide assessment of the impacts of human-caused streamflow and water-quality changes on populations of algae, aquatic insects and other macroinvertebrates, and fish. The USGS’ July 11 news release on the report is available at this link: [Health of U.S. Streams Reduced by Streamflow Modifications and Contaminants](#), and the direct link to the report is <http://pubs.usgs.gov/circ/1391/>. To request a print copy, phone the USGS at 1-888-ASK-USGS (1-888-275-8747). For more information, contact the NAWQA program at the U.S. Geological Survey, 413 National Center, Reston, VA 20192; (703)-648-5716; e-mail: gs-w_nawqa_whq@usgs.gov.



Upcoming Conferences, Workshops, and Other Events

Events In Virginia

Feb. 3, 2014, Glen Allen: **Virginia Association of Forest Health Professionals 22nd Annual Conference**. More information:

<https://www.regonline.com/register/checkin.aspx?eventid=1335727&int=29-110-1>; (703) 792-4066.

Feb. 11-12, 2014, Richmond: **Energy and Sustainability Conference—Advancing Business with Leadership in Sustainability**. Organized by Virginia Commonwealth University and the Virginia Chamber of Commerce. More information: <http://www.esc-east.org/>; Larry Cummings at (804) 496-4146 or Larry.cummings@trane.com.

Mar. 1, 2014, Jepson Hall Auditorium, University of Richmond: **Taking the Heat—A Look at Plants and Climate Change**. 2014 Workshop by the Virginia Native Plant Society. More information: <http://www.vnps.org>; (540) 837-1600; e-mail: vnpsoc@shentel.net.

Mar. 9-11, 2014, Richmond: **Virginia Water Conference 2013**. Organized by the Virginia Lakes and Watersheds Association. More information: <http://www.vlwa.org/VirginiaWaterConference.aspx>.

Mar. 11-14, 2014: Westmoreland State Park, Montross: **National Association for Interpretation Region 2 Chesapeake Workshop**. Organized by the National Association of Interpreters. This year’s theme is “Westmoreland, Watermen, and Wildlife: Bay Stories—Interpreting Our Shared Heritage.” More information: <http://nairegion2.weebly.com/>; e-mail: dodie.lewis@loudoun.gov.

Apr. 8-10, 2014, Virginia Military Institute, Lexington: **25th Annual Environment Virginia Symposium**. Organized by the VMI Center for Leadership and Ethics. More information: <http://www.vmi.edu/environmentva>; Kathy Wirtanen at (540) 464-7361 or wirtanenki@vmi.edu.

Apr. 10-11, 2014, Virginia Tech Inn and Conference Center, Blacksburg: **63rd Annual Meeting of the Geological Society of America’s Southeastern Section**. This year’s theme is “Elevating Geosciences in the Southeastern U.S.—New Ideas about Old Terranes. More information: <http://www.geosociety.org/sections/se/2014mtg/index.htm>; Bob Trach at rtracy@vt.edu or Ken Eriksson at kaeson@vt.edu.

Nov. 3-6, 2014, Tyson’s Corner: **2014 American Water Resources Association (AWRA) Annual Conference**. More information: <http://www.awra.org/meetings/Annual2014/>; or send e-mail for Gerry Galloway or Betsy Cody to 2014AnnualSpecialSessions@awra.org.

Events Elsewhere

Feb. 26-27, 2014, Toronto, Canada: **International Conference on Stormwater and Urban Water Systems Modeling**. Organized by Computational Hydraulics International (CHI), located in Guelph, Ontario. More information: <http://www.chiwater.com/Training/Conferences/conferencetoronto.asp>; (888) 972-7966; info@chiwater.com.

Mar. 4-5, 2014, Sacramento, Calif.: **Groundwater Issues and Water Management—Strategies Addressing the Challenges of Sustainability in California**. Organized by the Groundwater Resources Association of California. More information: <http://www.grac.org/giwm.asp>; Chris Peterson, (530) 792-3239

or cpetersen@westyost.com; Steve Phillips, (916) 278-3002 or sphillip@usgs.gov; or Vicki Kretsinger Grabert, (530-661-0109 or vkretsinger@lsce.com).

Mar. 28-30, 2014, St. Paul, Minn.: **2014 Meeting of the Society for Ecological Restoration's Midwest-Great Lakes Chapter**. This year's theme is "Building on the Midwest Legacy of Restoration: Linking Theory and Practice." Organized by the University of Minnesota. More information: <http://chapter.ser.org/midwestgreatlakes/current-meeting/>; (202) 299-9518 (Society office in Washington, D.C.).

Apr. 8, 2014, Tucson, Ariz.: **Annual conference of the University of Arizona Water Resources Research Center**. More information: <https://wrrc.arizona.edu/node/12404>; (520) 621-9591.

Apr. 28—May 2, 2014, Cincinnati, Ohio: **9th National Monitoring Conference**. This year's theme is "Working Together for Clean Water." Organized by the National Water Monitoring Council, the U.S. EPA, the U.S. Geological Survey, and the North American Lake Management Society. More information: <http://acwi.gov/monitoring/conference/2014/index.html#>.

May 12-14, 2014, Salt Lake City, Utah: **2014 American Water Resources Association's Spring Specialty Conference—"GIS and Water Resources VIII—Data to Decisions."** More information: <http://www.awra.org/meetings/SnowBird2014/index.html>; (540) 687-8390 (Middleburg, Va., headquarters of AWRA); e-mail: info@awra.org.

Jun. 24-27, 2014, Big Sky, Mont.: **Sustaining the Blue Planet 2014—Global Water Education Conference**. Organized by the Project WET Foundation. More information: <https://mtds.emettingsonline.com/emettings/websitev2.asp?mmnno=292&pagename=SITE8103>; <http://ameetingbydesign.com>; (406) 522-9038.

Jun. 30—Jul. 2, 2014, Reno, Nev.: **American Water Resources Association (AWRA) Integrated Water Resources Management Conference**. More information: <http://www.awra.org/meetings/Reno2014/index.html>; (540) 687-8390; info@awra.org. (The AWRA is headquartered in Middleburg, Va.)

Oct. 8-10, 2014, Charleston, S.C.: **9th Annual Regional Stormwater Conference**. The theme this year is "Improving Water Quality through Relationships, Regulations, and Research." Organized by the Southeast Stormwater Association. Presentation proposals are being accepted through February 28. More information: <http://www.seswa.org/annual-conference>; SESWA@ksanet.net; (866) 367-7379.

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 2013 Virginia General Assembly (pages 2-18) <i>and</i> Following the 2014 Virginia General Assembly (pages 19-20)	6.7, 6.9, LS.11, ES.6, ES.10	CE.1, CE.7, CE.9, WG.7, GOV.1, GOV.8, GOV.9, GOV.16
Water Status Report (pages 22-27)	4.6, 4.9, 6.7, LS.6, ES.6, ES.8, ES.12.	WG.2

AT THE WATER CENTER

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

USGS 104G Water Resources Research National Competitive Grants Program Request for Proposals (RFP) for Fiscal Year 2014; Proposal Deadline Feb. 20, 2014

The U.S. Geological Survey (USGS), in cooperation with the National Institutes for Water Resources (NIWR), requests proposals for matching grants to support research on the topic of improving and enhancing the nation's water supply, including the following specific areas of inquiry (levels of priority are not assigned, and the order of listing does not indicate the level of priority):

- Evaluation of innovative approaches to water treatment, infrastructure design, retrofitting, maintenance, management, and replacement.
- Exploration and model development of the dynamics of extreme hydro-meteorological events and associated economic, environmental, social, and or infrastructure costs.
- Development of methods for better estimation of water supply, both surface and groundwater, at gaged and ungaged sites, including estimation of the physical supply and of the economic supply of water.
- Development and evaluation of alternative approaches and governance mechanisms for integrated surface/groundwater management.
- Evaluation and assessment of the effects of water-conservation practices, as well as adoption, penetration, and permanence.

This program provides university researchers with up to \$250,000 for projects of 1 to 3 years in duration. It requires a 1:1 non-federal match. The intent of the program is to encourage projects with collaboration between universities and the USGS. Funds have not been appropriated for this program, but the USGS is proceeding with the proposal-solicitation process anticipating an appropriation will be received. The appropriation is expected to be approximately \$1 million for FY 2014, if received.

The RFP, online at https://niwr.net/public/get_RFP/?type=%31%30%34G, gives information on the electronic application -filing process and on previous funding, including award amounts and funding success rates.

If you are a **water-resources researcher at an accredited institution of higher education in Virginia** and you are interested in submitting a proposal for this RFP, please promptly contact Virginia Water Resources Research Center Director Stephen Schoenholtz at (540) 231-0711 or stephen.schoenholtz@vt.edu; or Associate Director Kevin McGuire at (540) 231-6017 or kevin.mcguire@vt.edu. **Proposal and budget should be submitted by 4:00 p.m., Eastern Time, February 20, 2014**, online at the NIWR Web site, <https://niwr.net/public/Migration/niwr.net>.

Virginia Water Central

Published by the Virginia Water Resources Research Center (0444), 210 Cheatham Hall, Blacksburg, VA 24061; (540) 231-5624; fax (540) 231-6673; Stephen Schoenholtz, director. *Water Central* staff: Alan Raflo, editor (araflo@vt.edu); photographs by Alan Raflo, unless otherwise noted.

Opinions expressed herein are not necessarily those of the Water Center or Virginia Tech, nor does the mention of trade names, commercial products, or services constitute an endorsement. Reproduction of articles, with proper credit, is welcomed.

Virginia Tech does not discriminate against employees, students, or applicants on the basis of race, color, sex, sexual orientation, disability, age, veteran status, national origin, religion, or political affiliation. Anyone having questions concerning discrimination or accessibility should contact the Office for Equity and Inclusion, 336 Burruss Hall, Blacksburg, Virginia 24061-0216, (540) 231-7500; diversity@vt.edu; www.diversity.vt.edu.

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

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

YOU GET THE LAST WORD

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

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

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

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

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

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

6. Please add any other **comments** you wish to make.