

Recommendations and Options

Effectiveness of Virginia's Water Resource Planning and Management

RECOMMENDATION 1

The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Department of Environmental Quality to identify high priority locations for additional sites for monitoring land subsidence, salt concentration, and groundwater level. Priority should be assigned based on (i) high potential to improve the accuracy of the state's modeling predictions for land subsidence, salt concentrations, and groundwater levels, and (ii) cost-effectiveness. (Chapter 2)

RECOMMENDATION 2

The Virginia Department of Environmental Quality should improve the accuracy of and confidence in its surface water demand and supply estimates through steps such as (i) reviewing research literature and consulting water resource researchers and planners to refine assumptions, and (ii) using a range of possible supply and demand assumptions to conduct multiple modeling scenarios. (Chapter 3)

RECOMMENDATION 3

The Virginia Department of Environmental Quality should model scenarios of surface water sustainability using a range of (i) measures for a shortfall and (ii) intervals between 10 and 30 years. (Chapter 3)

RECOMMENDATION 4

The Virginia Department of Environmental Quality should identify the river and stream segments in Virginia at the greatest risk for a water shortfall and establish a methodology to determine the reasons for the predicted shortfalls. (Chapter 3)

RECOMMENDATION 5

The General Assembly may wish to consider amending § 62.1-44.38 of the Code of Virginia to (i) clarify that reporting water withdrawal information would not alter the status of existing exemptions from permitting under the Virginia Water Protection program and (ii) authorize the State Water Control Board to impose a civil penalty for failure to report water withdrawal information (as required under § 62.1-44.38) on users of water from the river and stream segments at greatest risk of shortfall. (Chapter 3)

RECOMMENDATION 6

The General Assembly may wish to consider amending § 62.1-44.38:1 of the Code of Virginia to require the State Water Control Board to designate regional water planning areas based on (i) primary source of water, (ii) local jurisdictional boundaries, (iii) geographic proximity, (iv) existing regional groups that have already developed water resource plans, (v) existing regional entities, and (vi) other appropriate factors. (Chapter 4)

RECOMMENDATION 7

The State Water Control Board should amend the water supply planning regulations (9VAC25-780-40) to define the membership requirements of regional planning groups such that they incorporate representatives of a variety of local stakeholder groups. As applicable, local stakeholder groups should include representatives of local governments, industrial and agricultural water users, public water suppliers, developers and economic development organizations, and conservation and environmental organizations. (Chapter 4)

RECOMMENDATION 8

The General Assembly may wish to consider amending § 62.1-44.38:1 of the Code of Virginia to direct the State Water Control Board to require regional water planning groups to (i) evaluate potential projects using standardized criteria developed by the Board; (ii) identify a workable and cost-effective water supply strategy; and (iii) decide on a course of action to address the region's water supply needs. (Chapter 4)

RECOMMENDATION 9

The General Assembly may wish to consider amending § 62.1-44.38:1 of the Code of Virginia to require that, when regional water plans are completed, the Virginia Department of Environmental Quality report to the State Water Commission on the extent to which each regional plan (i) identifies a workable and cost-effective water supply strategy and (ii) reflects adequate regional cooperation. (Chapter 4)

RECOMMENDATION 10

The General Assembly may wish to consider amending § 62.1-44.38:1 of the Code of Virginia to require the Virginia Department of Environmental Quality to use the state water plan to clearly articulate how the state will (i) facilitate regional planning and (ii) provide planning, policy, and technical assistance to each region, differentiated according to each region's sustainability problems, existing resources, and other factors. (Chapter 4)

RECOMMENDATION 11

The General Assembly may wish to include language in the Appropriation Act directing the Virginia Department of Environmental Quality to assess and report on additional resources needed to facilitate regional planning and provide differentiated regional assistance. The report should be submitted to the State Water Commission, House Appropriations, and Senate Finance Committees no later than July 1, 2017. (Chapter 4)

RECOMMENDATION 12

The General Assembly may wish to consider amending the Groundwater Management Act (§§ 62.1-254 through 62.1-270 of the Code of Virginia) to require that the State Water Control Board issue permits for groundwater withdrawals for non-human consumptive uses only after meeting permit requests for human consumptive needs. (Chapter 5)

RECOMMENDATION 13

The General Assembly may wish to consider amending the Groundwater Management Act (§§ 62.1-254 through 62.1-270 of the Code of Virginia) to require that the State Water Control Board reduce permitted withdrawal amounts for non-human consumptive use as necessary to provide permit capacity to meet human consumptive needs. (Chapter 5)

RECOMMENDATION 14

The General Assembly may wish to consider amending the Groundwater Management Act (§§ 62.1-254 through 62.1-270 of the Code of Virginia) to establish a limit on the proportion of overall permitted withdrawal capacity to be granted to an individual permit holder in the coastal aquifer. (Chapter 5)

RECOMMENDATION 15

The Virginia Department of Environmental Quality should develop a plan to reduce the amount of withdrawal capacity granted by each groundwater permit issued, to more closely reflect the actual amount needed. The plan should be presented to the State Water Control Board and State Water Commission by December 1, 2017. (Chapter 5)

RECOMMENDATION 16

The Virginia Department of Environmental Quality should develop and publish a groundwater permitting process transition plan. The plan should specify how the groundwater permitting requirements and process will change, when the changes will be implemented, how the department will engage permit holders, and how the department will inform permit holders as new permit requirements and processes are implemented. (Chapter 5)

RECOMMENDATION 17

The State Water Control Board should amend the regulations for the Virginia Water Protection permit program (9VAC25-210) to specify the metrics that will be used to assess the likely impact of proposed surface water withdrawals from river segments at greater risk for water shortfalls. The Board should update the regulations no less than every five years to incorporate scientific and technological development in surface water metrics. (Chapter 5)

RECOMMENDATION 18

The Virginia Department of Environmental Quality should collaborate with the Virginia Department of Health and other relevant entities to identify all grandfathered surface water withdrawers in Virginia. (Chapter 5)

RECOMMENDATION 19

The General Assembly may wish to consider including language in the Appropriation Act directing the State Water Control Board to create an advisory panel to recommend amendments to § 62.1-44.15:20 of the Code of Virginia that would clarify (i) the conditions under which grandfathered users of surface water would be required to obtain a Virginia Water Protection permit and (ii) the criteria to be used to determine the amount of surface water to be permitted to grandfathered users. (Chapter 5)

RECOMMENDATION 20

The General Assembly may wish to consider including language in the Appropriation Act directing the State Water Control Board to create an advisory panel to clarify whether and how the definition of safe yield should be changed in the Virginia Administrative Code. (Chapter 5)

RECOMMENDATION 21

The General Assembly may wish to consider including language in the Appropriation Act directing the Virginia Department of Environmental Quality to develop a proposal for providing additional water planning assistance, to include (i) planning and policy guidance for projects with cross-jurisdictional impact and (ii) technical assistance for localities that lack technical resources and expertise in project identification, planning, and construction. The proposal, which should include an assessment of the feasibility of and resources needed to perform this new function, should be submitted to the State Water Commission and House Appropriations and Senate Finance Committees no later than July 1, 2017. (Chapter 6)

RECOMMENDATION 22

The General Assembly may wish to consider including language in the Appropriation Act directing the State Water Commission to evaluate the establishment of a fund to provide (i) incentives for regional collaboration in water planning and (ii) financing for regional water projects. (Chapter 6)

OPTION 1

The General Assembly could amend the Code of Virginia to establish statutory authority for a user fee for water withdrawn from the coastal aquifer. (Chapter 5)

OPTION 2

The General Assembly could amend the Code of Virginia to establish statutory authority for a priority system to award groundwater withdrawal permits to industrial users likely to have the greatest economic benefit. (Chapter 5)
