

2018-20 Strategic Plan

Department of Environmental Quality [440]

Mission

The Department of Environmental Quality (DEQ) protects and enhances Virginia's environment, and promotes the health and well-being of the citizens of the Commonwealth.

Vision

Virginians will enjoy cleaner water available for all uses, improved air quality that supports communities and ecosystems, and the productive reuse of contaminated land.

Values

Commitment: We are committed to supporting each other and the mission and value of the agency.

Collaboration: We work together and with the community to accomplish our tasks.

Consistency: We apply laws and regulations and provide public services uniformly throughout the Commonwealth.

Customer Service: We evaluate and solve problems professionally, courteously, and responsively with citizens, the regulated community, and our co-workers.

Communication: We exchange information freely.

Certainty: We provide clear, accurate, and timely information and evaluation.

Closure: We follow through to resolve issues effectively and on time.

Finance

Financial Overview

In the base budget, DEQ is funded 30% by general fund appropriations, 25% with federal funds, and 45% through other non-general fund appropriations in the base budget. The other non-general fund appropriations are primarily for the Virginia Petroleum Storage Tank Fund, Title V air permit fees, water and waste permit fees, and indirect cost revenue from federal grants and the Title V program. A variety of other smaller fund sources are also included in DEQ's budget. The Water Quality Improvement Fund (WQIF) is not funded in the agency's base budget appropriation as these appropriations are one-time in nature and are dedicated solely for the reimbursements to waste water treatment facilities for mandatory upgrades. Of the total agency base budget, a large portion (41%) of expenditures are 'pass-through' funds for Clean Water revolving loans, reimbursements to tank owners and payments to local governments and other state agencies. The remaining 59% of funds are used to support DEQ staff and operational programming.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	60,361,783	139,960,369	40,042,583	139,960,369
Changes to Initial Appropriation	0	0	859,075	0

(Changes to Initial Appropriation will be 0 when the plan is created. They will change when the plan is updated mid-biennium.)

Customers

Anticipated Changes to Customer Base

Current Customer List

Predefined Group	User Defined Group	Number Served Annually	Potential Number of Annual Customers	Projected Customer Trend
Environmental Pollution and Control	Facilities subject to stationary source air inspection	1,350	4,663	Increase
Environmental Pollution and Control	Groundwater withdrawal permittees	322	427	Stable
Environmental Pollution and Control	Hazardous waste facilities (regulated)	843	7,500	Increase

Environmental Pollution and Control	Permits for land application of pollutants	167	175	Stable
Environmental Pollution and Control	Pretreatment program permittees	43	47	Stable
Environmental Pollution and Control	Regulated Tank Owners	8,000	15,000	Increase
Environmental Pollution and Control	Solid Waste Facilities	348	5,000	Increase
Environmental Pollution and Control	Voluntary Remediation Program	424	10,000	Increase
Environmental Pollution and Control	VPDES general permit holders	6,493	6,493	Stable
Environmental Pollution and Control	VPDES individual point source discharge permittees	895	1,000	Stable
Environmental Pollution and Control	VWP permit holders (general)	330	2,315	Stable
Environmental Pollution and Control	VWP permit holders (individual)	51	482	Stable
Farm/Forest Owner	VPA General Permits for animal feeding operation facilities	1,028	1,028	Stable
Local or Regional Government Authorities	Citizens, businesses, local governments reporting pollution incidents	3,900	3,900	Increase
Local or Regional Government Authorities	Local Governments in Virginia	518	518	Stable
Local or Regional Government Authorities	Wastewater Operators	600	4,500	Stable
Resident	Homeowners with leaking heating oil tanks	1,200	250,000	Stable
Vehicle Owner	Vehicle owners subject to emissions inspections	809,466	1,560,975	Increase
Environmental Pollution and Control	Chemical Manufacturing and Storage Facilities	4,500	7,000	Stable
Local or Regional Government Authorities	Regional Planning District Commissions, and Soil and Water Conservation Districts	68	68	Stable

Partners

Name	Description
U.S. Environmental Protection Agency (EPA)	EPA is responsible for maintaining and enforcing national standards under a variety of environmental laws, in consultation with state, tribal and local governments. It delegates some permitting, monitoring, and enforcement responsibility to Virginia and other states and federally recognized tribes. EPA enforcement powers include fines, sanctions, and other measures. The agency conducts environmental assessment, research, and education and works with industries and all levels of government in a wide variety of voluntary pollution prevention and energy conservation efforts.
Other Federal Agencies	Agency for Toxic Substances and Disease Registry; Department of Agriculture; Department of Defense; Department of Energy; Federal Energy Regulatory Commission; Fish and Wildlife Service; National Oceanic and Atmospheric Administration; National Park Service; National Weather Service; Natural Resources Conservation Service; US Army Corps of Engineers; US Geological Survey
Other Virginia state agencies	Department of Accounts; Department of Agriculture and Consumer Services; Virginia Department of Business Assistance; Department of Conservation and Recreation; Department of Education; Department of Emergency Management; Department of Forestry; Department of Game and Inland Fisheries; Department of General Services; Department of Health; Department of Historic Resources; Department of Human Resource Management; Department of Labor and Industry; Department of Mines, Minerals and Energy; Department of Planning and Budget; Department of Transportation; GenEdge; Manufacturing Technology Center; State Corporation Commission; Virginia Economic Development Partnership; Virginia Environmental Endowment; Virginia Information Technology Agency; Virginia Marine Resources Commission; Virginia Museum of Natural History; Virginia Resources Authority; Virginia Tourism Corporation
Federally Recognized Indian Tribes	Chickahominy, Eastern Chickahominy, Monacan Nation, Nansemond, Pamunkey, Rappahannock and Upper Mattaponi

Academic Institutions	Center for Climate Change Communication (George Mason University); Center for Leadership and Ethics (Virginia Military Institute); Environmental Resilience Institute (University of Virginia); Georgetown Climate Center; Institute for Environmental Negotiation (University of Virginia); Institute for Energy and Environmental Research (James Madison University); Center for Sea Level Rise (Old Dominion University); Virginia Coastal Policy Center (William and Mary Law School); Virginia Center for Consensus Building (Virginia Commonwealth University); Virginia Institute of Marine Science (College of William and Mary); Virginia Water Resources Research Center (Virginia Tech); Virginia Center for Environmental Studies (Virginia Commonwealth)
Non-profits	Alliance for Chesapeake Bay; Back Bay Restoration Foundation; Chesapeake Bay Foundation; Chesapeake Climate Action Network; Citizens for Better Eastern Shore; Clean Virginia Waterways; Ducks Unlimited; Eastern Shorekeepers; Elizabeth River Project; Environment Virginia; Friends of Dragon Run; Friends of the Rappahannock; Friends of the Potomac River Refuges; Friends of the Rappahannock; Garden Club of Virginia; Green Infrastructure Center; Hoffer Creek Wildlife Foundation; James River Association; Keep Virginia Beautiful; Lynnhaven River Now; Ocean Conservancy; The Nature Conservancy; Natural Resources Defense Council; Piedmont Environmental Council; Potomac Riverkeeper Network; Resilient Virginia; Shenandoah Valley Network; Sierra Club (National and Virginia Chapters); Southern Environmental Law Center; Virginia Aquarium; Virginia Association of Soil and Water Conservation Districts; Virginia Clean Cities; Virginia Clinicians for Climate Action; Virginia Conservation Network; Virginia Council on Litter Prevention and Recycling; Virginia Eastern Shore Land Trust; Virginia Forever; Virginia Green Travel Alliance; Virginia League of Conservation Voters; Virginia Master Naturalists; Virginia Natural Resources Institute; Virginia Native Plant Society; Virginia Recycling Association; Wetlands Watch
State Environmental Agencies and Associations	Association of Clean Water Administrators; Association of State and Territorial Solid Waste Management Officials; Coastal States Organization; Environmental Council of the States; Mid-Atlantic Regional Air Management Association; Mid-Atlantic Regional Council on the Ocean; National Association of Clean Air Agencies; National Pollution Prevention Roundtable; Neighboring/Regional State Environmental Agencies; Solid Waste Association of North America
Local/tribal governments, planning organizations, and commissions	Cities; counties; towns; planning district commissions; local air quality planning organizations; regional solid waste management planning units; Metropolitan Washington Council of Governments; Chesapeake Bay Commission; Soil and Water Conservation Districts; Middle Peninsula Public Access Authority; Hampton Roads Sanitation District; Regional Greenhouse Gas Initiative; Virginia Municipal League; Virginia Association of Counties
Trade Associations	Home Builders Association of Virginia; Virginia Agribusiness Council; Virginia Association of Municipal Wastewater Agencies; Virginia Association of Soil and Water Conservation Districts; Virginia Automotive Dealers Association; Virginia Chamber of Commerce; Virginia Farm Bureau; Virginia Independent Power Producers; Virginia Manufacturers Association; Virginia Municipal Stormwater Association; Virginia Poultry Federation; Virginia Retail Merchants Association

Agency Goals

• Achieve focused, more efficient programs to meet or exceed environmental standards

Summary and Alignment

Objectives

» Focused monitoring and assessment

Description

[Nothing Entered]

Objective Strategies

- Implement ambient groundwater quality strategy.
- Evaluate and implement ambient air quality monitoring plans in accordance with new and revised air quality standards.
- Evaluate efficiency and sufficiency of water monitoring program.

Measures

- ◆ Percentage of data captured, validated and uploaded to EPA's database through the ozone season
- ◆ The annual average of micrograms per cubic meter of fine particulate air matter measured
- ◆ The number of monitoring wells in the Potomac Aquifer showing stable water levels.
- ◆ Total annual statewide emissions of criteria pollutants from point sources.

» Provide proactive policy, comprehensive planning, and effective program development

Description

[Nothing Entered]

Objective Strategies

- Conduct comprehensive planning for the sustainable management of the Coastal Plain Aquifer System.
- Develop environmental quality plans and policies for groundwater protection, hydraulic fracturing, greenhouse gases and other emerging issues.
- Continue implementation of Stormwater management program
- Continue progress on the Chesapeake Bay Watershed Implementation Plan.
- Harmonize risk assessment and management of cleanups.
- Lead the Commonwealth's Environmental Management System efforts
- Ensure a responsive and efficient Pollution Response Program to address pollution incidents through clear communication, investigation and reporting

Measures

- ◆ Cumulative Number of leaks from regulated petroleum tanks.
- ◆ Cumulative number of watershed restoration projects underway
- ◆ Number of days to process reimbursement claims to petroleum tank owners for cleanup costs incurred.
- ◆ The number of days when ozone pollution is above the 2015 ozone standard of 70 parts per billion.
- ◆ The number of pounds of nitrogen discharged from major pollution point sources in the Chesapeake Bay watershed.
- ◆ The number of pounds of phosphorous discharged from major pollution sources in the Chesapeake Bay watershed.
- ◆ The number of rivers, streams or lakes removed from the Environmental Protection Agency's (EPA) Impaired Waters List.
- ◆ The percentage of regional and local solid waste planning districts meeting the mandated recycling rate.
- ◆ Tons of carbon dioxide emitted by power plants in Virginia
- ◆ Total Submerged Aquatic Vegetation (SAV) acres restored within Virginia portion of Chesapeake Bay in comparison to restoration goal; Number of Virginia Bay segments meeting their respective SAV acreage goals.

» **Certain, consistent and timely compliance, permits and enforcement.**

Description

[Nothing Entered]

Objective Strategies

- Ensure non-compliance is addressed through consistent and timely Compliance and Enforcement processes.
- Increase continuous improvement efforts including innovation and flexibility in permit programs.

Measures

- ◆ Cumulative acres of land certified complete through the Voluntary Remediation Program
- ◆ Cumulative percentage of Small Quantity Generators that have never been evaluated
- ◆ Number of hazardous waste sites where human exposures to hazardous waste releases are determined to be under control
- ◆ Percentage of DEQ technical reviews completed within 60 days of Stormwater Management Plan receipt.
- ◆ Percentage of Major and Minor New Source Review (NSR) issued within the regulatory time frames
- ◆ Percentage of Virginia Pollution Discharge Elimination System (VPDES) permits issued within 120 days of a completed application.
- ◆ The number of inspections completed by each underground storage tank inspector.
- ◆ The number of non-tidal wetland acres conserved (not lost to development).

- **Foster an informed and engaged community**

- Summary and Alignment**

- Objectives**

- » **Collaborative environmental problem solving with engaged stakeholders**

- Description*

- [Nothing Entered]

- Objective Strategies*

- Address problems proactively by continuing to implement community involvement best practices throughout DEQ operations.
 - Create consistent support and communication networks for program development and implementation.
 - Enhance public involvement by developing innovative tools that improve access to information.
 - Establish a program to facilitate Commonwealth environmental long-range priority collaboration.

- Measures*

- **Achieve an optimal use of current and new resources**

- Summary and Alignment**

- Objectives**

- » **Agency resources focused on priorities at full capacity**

- Description*

- [Nothing Entered]

- Objective Strategies*

- Build a culture of strategic thinking and continuous improvement.
 - Maximize use of technology.
 - Utilize audit and program assessment processes to facilitate efficient and effective practices.

- Measures*

- ◆ Number of improved agency program business processes.

- **Sustain an outcome oriented workforce and culture**

- Summary and Alignment**

- Objectives**

- » **A workforce that is prepared for the future**

- Description*

- [Nothing Entered]

- Objective Strategies*

- Attract, develop and retain skilled professionals to meet agency priorities.
 - Build a learning culture within the agency.

- Measures*

- ◆ Percentage of DEQ employees that rate DEQ as "outcome oriented"

Major Products and Services

DEQ monitors air and water quality, issues air quality forecasts, and works to restore the quality of waters such as the Chesapeake Bay and Virginia's rivers. DEQ also investigates fish kills, oversees cleanups at environmental incidents such as fuel and chemical spills, and conducts special studies to investigate environmental contamination and its sources. As part of its effort to protect human health and the environment,

DEQ issues environmental permits to businesses, local governments, and state and federal facilities. DEQ inspects and monitors permitted facilities, ensuring that they comply with regulations and permits. In cases where permit requirements are not met or where regulations are violated, DEQ focuses on bringing facilities into compliance. DEQ is the Commonwealth's lead agency for managing stormwater and nonpoint source pollution prevention.

DEQ communicates and collaborates regularly with individuals and organizations interested in environmental policy and procedures. DEQ's community involvement policy recognizes that stakeholders are valuable partners and seeks to engage people early and often in environmental decision-making. DEQ provides opportunities for meaningful involvement in all agency programs, looks for new ways to enhance public input, and develops materials and opportunities for public engagement in meetings and public hearings related to permits and regulations. Citizens can work with citizen organizations to monitor water quality, develop cleanup plans for "impaired" streams, rivers and lakes; and nominate waters of exceptional quality for special designation.

DEQ implements the Virginia Clean Water Revolving Loan Fund, which includes a number of loan programs including: Wastewater loans to local governments for upgrades and expansions of publicly-owned wastewater collection and treatment facilities; Brownfield loans to local governments, public authorities, partnerships or corporations for remediation activities undertaken at brownfield sites; Land Conservation loans to local governments and certain nonprofit organizations for permanent conservation or open space easements to protect water quality; Stormwater BMP loans to local governments for the construction of facilities or structures or implementation of stormwater best management practices; and, Living Shoreline loans to either fund local government living shoreline projects or allow the local government to establish a low-interest loan program for their residents to install living shoreline projects on private property.

DEQ serves as the lead agency for the Commonwealth's Coastal Zone Management Program, a network of Virginia state agencies and local governments that administers enforceable laws, regulations and policies that protect coastal resources and fosters sustainable development. DEQ administers the program's annual grant program of about \$2.5 million. DEQ also coordinates the Commonwealth's response to environmental documents for proposed state and federal projects. The Office of Environmental Impact Review staff distributes documents to appropriate state agencies, planning districts, and localities for their review and comment; upon consideration of all comments, the staff prepares a single state response. DEQ's Office of Pollution Prevention hosts a number of programs and initiatives that serve as a conduit for non-regulatory assistance to businesses, institutions, and communities. These efforts are aimed at motivating Virginia facilities to minimize their environmental footprint through actions that often exceed requirements while enhancing their bottom line.

DEQ's focus on lean business processes and operational business improvement plans (BIPs) addresses staffing vacancy challenges by streamlining business processes, identifying inefficiencies, and reducing costs. DEQ's Job Partnering Program allows employees to gain new skills and experience greater job satisfaction offered by increased work diversification. The agency benefits by having more versatile staff to address resource constraints or other challenges. This program strives to develop motivated employees through cross-media and cross-program work assignments. DEQ has a robust unpaid volunteer and Summer Student Intern Program. The program's objective is to provide professional level work experience for college students and was established as one of the key initiatives in the Department's commitment to expand and enhance the agency's workforce. Students participating in these programs must exhibit a genuine interest in learning about the agency as well as gaining practical work experience. Other DEQ recruitment and retention strategies include: teleworking, tuition reimbursement, recognition and reward programs, formal training, access to technology tools, and building an outcome-oriented organizational culture.

Performance Highlights

DEQ has a number of performance measures for the many programs that the agency administers. The three key measures below are representative of how agency efforts positively impact citizen and environmental health in the Commonwealth. Specifically, as portrayed by these highlighted measures, the amount of nitrogen and phosphorus discharged from significant point sources in the Chesapeake Bay watershed has a direct impact on the health and recovery of the water quality in the Bay, while a reduction in the amount of carbon dioxide emitted from power plants in Virginia helps lessen the impact of greenhouse gases that contribute to climate change. By increasing underground storage tank inspections, the agency's primary productivity measure improves compliance with pollution prevention requirements, which reduces the number of petroleum releases into the environment.

Staffing

Authorized Maximum Employment Level (MEL)	973
Salaried Employees	766
Wage Employees	47
Contracted Employees	2

Key Risk Factors

Several factors will have a significant impact on the agency in the future:

Long-term Groundwater Declines - Recent rates of pumping have led to groundwater level declines, land subsidence, and intrusion of saline water

into Virginia's aquifers. To address these issues and to reduce the overall rate of decline, Virginia implemented reductions of over 50% in permitted groundwater withdrawals in permits reissued through 2017 for the largest 14 withdrawals in the Eastern Virginia Groundwater Management Area. These reductions are expected to significantly slow the groundwater level declines over the next 50 years and were an important step toward sustainable groundwater use, especially in the Potomac Aquifer. Along with other regulatory and non-regulatory efforts currently underway, the Sustainable Water Initiative for Tomorrow (SWIFT) recharge project has started as a 1 million gallons per day demonstration pilot and may reach full capacity of 100 million gallons per day by 2027 if all regulatory and technical steps are cleared. The combination of the reduced permit withdrawal limits and the SWIFT project have the potential to increase water levels in the Eastern Virginia Groundwater Management Area significantly over the next decade, but will need continued evaluation as more information and data become available. For the Eastern Shore Groundwater Management Area, there is increased awareness of potential sustainability issues that will need systematic attention and management. In addition, water supply plan updates, including expectations of future groundwater need, will be submitted by the end of 2018 and may indicate the need for additional management actions both within and outside of the established groundwater management areas.

Chesapeake Bay Watershed Implementation Plan (WIP) - As the implementation of the plan progresses through 2025 and beyond, the interaction between point and nonpoint source pollution abatement efforts and voluntary and regulatory programs will become more frequent and complex. Difficult policy and budgetary decisions must be made based on a comprehensive view of the impact of various water pollution sources and the interaction between them.

Number of Environmental Regulations - New environmental regulations promulgated at the federal level result in the need for states to implement policy changes, to adopt or amend state regulations, and increase the workload on existing permit, compliance and monitoring. The majority of these federal requirements do not include associated funding and thus constitute unfunded federal mandates.

Workforce Continuity - DEQ faces the risk of workforce attrition due to an aging workforce, reduced staffing levels and recruitment competition from the federal government and private environmental companies. Currently, 31.5% of DEQ staff are eligible to retire with an unreduced benefit within the next five years. Being understaffed poses significant risk to agency operations.

Management Discussion

General Information About Ongoing Status of Agency

DEQ works to achieve its vision of cleaner water, improved air quality and productive re-use of contaminated land through a culture of efficient and effective government, excellent customer service, and continuous improvement. With limited resources and increasing demands, DEQ continues to meet all of its core obligations through strategic planning and prioritization of services. This focus has enabled the agency to maintain a high level of service despite a high rate of staff vacancy. As critical vacancies are filled, DEQ examines ways to enhance environmental management and improve services to customers while controlling costs in an environment of limited resources and increasing demands.

Focusing on these goals has helped DEQ achieve significant environmental improvements in the past 24 years. These improvements include:

- Air pollution in Virginia has decreased by more than 50 percent, and the number of high-ozone days has by about 96% statewide.
- 379 waterways— 21,800 acres of lakes/reservoirs, 29 square miles of estuaries, and 1,820 miles of rivers/streams—are considered “fully restored” and now meet designated uses.
- The state's recycling rate has grown from 32 percent to 42 percent, saving energy and conserving landfill space.
- Since the early 1990s, more than 30,000 leaking petroleum tank sites have been cleaned.
- More than 4000 acres of contaminated lands have been remediated.
- The continuous and successful Chesapeake Bay restoration efforts are illustrated in increases in birds, fish, wildlife, oysters, crabs and native plants.
- Less waste production, water consumption and energy use by more than 400 Virginia Environmental Excellence Program members, including manufacturers, military bases, agencies and universities who go "above and beyond" in an effort to save money and natural resources.

DEQ embraces the concept of continuous improvement and allocates resources to process and program improvements. DEQ uses Lean Six Sigma (a proven cost and waste elimination method that has been used successfully in public and private organizations). In addition, DEQ actively aligns operational and strategic plans and develops business improvement plans which target operational process improvements. DEQ also performs internal program reviews and audits that assess the efficiency and effectiveness of agency programs. These efforts identify potential operational changes that will improve the efficiency and effectiveness of agency operations and provide opportunities to reduce the costs of compliance.

Information Technology

DEQ is committed to using technology to provide more efficient service and to reduce operational costs. DEQ's current technology-based initiatives include:

- Comprehensive Environmental Data System (CEDS): DEQ's system of record for environmental data. DEQ is continuing to incorporate environmental program data into its system of record to ensure data integrity, deduplication and compliance with the Commonwealth IT security directives and policies. DEQ uses Agile iterative project development methodology to successfully deploy these system updates. The agency also uses business-led governance structure to manage technology project development across the agency based on agency need and alignment with its strategic goals.

- Enterprise Content Management System (ECM): DEQ's repository for documents of record, implementing approved document retention. DEQ is upgrading the system to include single sign-on and enhanced ability to integrate seamlessly with the other enterprise applications.
- Geographic Information System (GIS): Geospatial information across DEQ used for modeling, analysis, and public information. DEQ continues to implement its GIS strategic plan to ensure future efforts in this area are focused, cost effective, and continue to provide staff with time and cost saving tools.
- Oracle E-Business Suite (eBiz): DEQ's transaction and reporting database for financials, human resources, purchasing, and project costing. DEQ continues to upgrade and enhance eBiz to meet technical support requirements and evolving business needs.

The dynamic nature of environmental regulation demands ever-changing environmental data for analysis and decision-making, requiring a sustained effort toward efficient capture, storage, protection, and exchange of this data. By integrating CEDS, ECM, GIS, and eBiz, DEQ is laying the foundation for future initiatives that will benefit citizens, the regulated community and other government agencies. DEQ's plans for the future include:

- Web-based permit application process and reporting for the regulated community, which will reduce the cost of handling paper reports and increased accessibility to the public to facility-specific details through EPA's website.
- Mobilization of more inspectors, water quality assessors, and monitoring staff with tools for on-site data capture and global positioning;
- Sophisticated environmental data modeling and forecasting tools; and
- Efficient data retrieval using Business Intelligence technology and an enterprise data warehouse.

Estimate of Technology Funding Needs

Workforce Development

DEQ strategically addresses risks of an aging workforce, reduced staffing levels, and recruitment competition through training, recruitment and retention, succession planning and continuous improvement initiatives. DEQ has identified key agency roles and core skills, as well as knowledge, skills and abilities (KSAs) for those roles in order to facilitate targeted recruitment for KSA gaps and targeted retention planning for key roles.

DEQ faces workforce challenges due to an increasing number of employees who are eligible to retire; the loss of staff to the federal and local governments; and private industry firms that offer salary ranges much greater than DEQ can offer. Currently, 31.5% of DEQ's workforce will be eligible to retire without a reduced benefit in the next five years. DEQ has developed strategic objectives for a strong workforce development program described below.

A competency based career progression program (Career Path) that develops staff technical competence and provides incentive for staff to stay with the agency by providing advancement and development opportunities within one's current job. DEQ's turnover rate continues to trend downward compared to the state average. Lateral transfers within DEQ provide employees with new opportunities to acquire new/additional competencies to help them better compete for future leadership roles. For 2018, DEQ's turnover rate was 6.6% compared to the state turnover rate of 14.5%.

A competency-based leadership development program that identifies and develops high performing staff to ensure the agency has a pipeline of qualified leaders to meet future challenges. This program helps ensure DEQ has leadership bench strength to promote from within.

DEQ's leadership training program for middle management integrates planning for the future into operational areas and increases coaching frequency, facilitates knowledge transfer, and creates development opportunities. The program also holds managers accountable for displaying core leadership competencies through performance appraisals and requires 8 hours of leadership training every year.

DEQ offers a Graduate Tuition Reimbursement Program whereby staff are reimbursed up to \$1,500 per fiscal year for graduate courses at an accredited university. Participants must sign a retention agreement that is active for one year after the graduate course is complete.

DEQ's focus on lean business processes and operational business improvement plans (BIPs) addresses staffing vacancy challenges by streamlining business processes, identifying inefficiencies, and reducing costs.

DEQ's Job Partnering Program allows employees to gain new skills and experience greater job satisfaction offered by increased work diversification. The agency benefits by having more versatile staff to address resource constraints or other challenges. This program strives to develop motivated employees through cross-media and cross-program work assignments.

DEQ has a robust unpaid volunteer and Summer Student Intern Program. The program's objective is to provide professional level work experience for college students and was established as one of the key initiatives in the Department's commitment to expand and enhance the agency's workforce. Students participating in these programs must exhibit a genuine interest in learning about the agency as well as gaining practical work experience.

Other DEQ recruitment and retention strategies include: teleworking, recognition and reward programs, formal training, access to technology tools, and building an outcome-oriented organizational culture.

Physical Plant

DEQ operates a central office in Richmond, six regional offices and two satellite offices across the state. All operating space is leased. Lease terms vary based on estimated local market conditions. Each time a lease comes up for renewal, DEQ works with the Department of General Services (DGS) to analyze the market conditions, physical location in relation to customers and field work, the availability of state-owned space, telecommuting opportunities, the potential for space reductions in relation to programmatic or budget changes, reducing paper file storage costs through the use of DEQ's Enterprise Content Management (ECM) System, and other metrics to make decisions about future lease agreements. Since office space is leased, there is always a concern that space will not be available when a lease is up for renewal.

Supporting Documents

Title

File Type

Land Protection Permitting [50925]

Description of this Program / Service Area

DEQ issues permits and approvals to facilities that manage solid and hazardous waste. The permits contain requirements for the design, operation (including environmental monitoring), and proper closure of a facility upon cessation of regulated activities. The permits also define the appropriate corrective action and measures to be undertaken should pollutants escape into the environment. The goal of developing and implementing a closure plan is to prevent such pollution from reaching the land and groundwater. Permits are required for treatment, storage, disposal, and incineration of hazardous and solid waste. DEQ issues the following permits:

- The [Hazardous Waste Management Regulations](#), which closely follow federal standards established under RCRA, require permits for storage, treatment and disposal of hazardous wastes.
- The [Regulated Medical Waste Management Regulations](#) set standards for the storage, and treatment of regulated medical waste. Regulated medical waste may be stored, steam sterilized, incinerated or treated by an acceptable alternative mechanism, in a facility permitted under the regulations.
- The [Solid Waste Management Regulations](#) set standards for the siting, design, construction, operation, closure and post-closure care of solid waste management facilities. The types of facilities described in the regulations include sanitary landfills, industrial waste landfills, and construction/demolition/debris landfills, transfer stations, composting facilities for other than yard waste, mass burn incinerators, materials recovery facilities, waste storage piles and other facilities of a similar nature. The standards in Virginia for sanitary landfills comply with RCRA Subtitle D.
- Certain categories of facilities regulated under the provisions of the Virginia Waste Management Act are deemed to have a permit if their owners or operators meet specific regulatory requirements based on the particular type of facility. For these facilities, the Permit-by-Rule (PBR) process is greatly simplified and permit application fees are not assessed. The owners or operators of the following waste facilities may elect the "permit-by-rule" process; solid waste transfer stations; materials recovery facilities; composting facilities; waste to energy, thermal treatment, or incineration facilities; waste piles; and, regulated medical waste management facilities.

The Virginia Waste Management Act institutes requirements that are designed to resolve issues concerning the location of hazardous waste management facilities. The act provides a mechanism for state preemption of local land use requirements that could block the siting of a facility, but requires extensive local participation in the siting decision. The applicant is called upon to address and try to resolve all legitimate local concerns before the Virginia Waste Management Board approves a site. To date, no applicant has sought approval of a site under this act.

Mission Alignment

DEQ works with the Environmental Protection Agency (EPA) and facilities to manage waste effectively, to perform environmental monitoring, and to cleanup waste releases. This protects and enhances Virginia’s environment, and promotes the health and well-being of the citizens of the Commonwealth.

Authority: Title 10.1 Code of Virginia, Chapter 14 - Virginia Waste Management Act; Resource Conservation and Recovery Act delegations from the Environmental Protection Agency on 7/31/00, 3/13/03, 5/2/03, 6/20/03, 5/10/06, 4/3/08, 6/3/08, 7/30/08 and 9/30/13. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

DEQ provides a service via the review and approval of the permit applications, closure and postclosure care plans, and corrective action plans developed to cleanup waste releases.

DEQ’s product is the permit, including operational requirements, closure plans, monitoring plans, and corrective action plans.

DEQ also provides determinations regarding current risks to human health, migration of contaminated groundwater, and remedy construction progress. DEQ also facilitates the reuse of unused properties by making final corrective action decisions.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Permits	Title 10.1 Code of Virginia, Chapter 14 - Virginia Waste Management Act; Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality. §	40 CFR, Parts 257, 258, and 260-272.	Required	84,206	3,701,528

6901 et seq. - Chapter 82 of Title 42 of the of the Resource Conservation and Recovery Act of 1976. Sections 1008(a)(3), 2002 and 4004(a) of the Resource Conservation and Recovery Act

Anticipated Changes

A more stable economy may increase the workload.

Factors Impacting

Economic fluctuations will affect the volume of permits.

Financial Overview

DEQ funding for Land Protection Permitting comes from federal funds (23%), general fund (GF) appropriation (2%), and other nongeneral fund revenues (75%), primarily from solid waste and hazardous waste permit fees. Federal funds are only provided for hazardous waste activity, and require matching funds that are provided by the hazardous waste permit fees and general funds. General funds and solid waste fee revenues constitute the solid waste permitting support.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	84,206	3,701,528	84,206	3,701,528
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Land Protection Compliance and Enforcement [50926]

Description of this Program / Service Area

DEQ inspects facilities that manage solid and hazardous waste. The regional solid and hazardous waste compliance staff conduct field inspections to verify adherence to permit requirements and regulations, review and track self reporting data from facilities, and provide technical guidance to the regulated community. DEQ conducts appropriate enforcement actions in response to the continued failure or unwillingness of regulated entities to comply with federal and state regulatory requirements regarding waste management. Enforcement activities include: compelling compliance and remediation through agreements or administrative orders; imposing penalties when appropriate to recover costs, remove the economic benefit of noncompliance, and deter future violations; identifying and responding to criminal violations; establishing comprehensive and consistent enforcement policies to ensure that all parties receive similar treatment for similar violations; providing assistance in cases referred to the Office of the Attorney General; coordinating with the EPA; assisting other federal and state agencies as necessary; and, providing advice to representatives of the regulated community and other departments of DEQ regarding regulatory interpretations.

DEQ's waste remediation staff review remediation plans to clean up contaminated sites including the Federal Facilities Restoration Program (sites at Department of Defense and Defense Logistics Agency installations and private sites on the National Priority List remediated under the Superfund Program or other federal authority). The Brownfield Program issues letters acknowledging that owners are protected from environmental liability; the Voluntary Remediation Program issues certificates of satisfactory completion to owners not mandated to remediate who voluntarily clean up their property thus removing the environmental concerns and releasing the property for resale.

Through regulation, inspection and approval of contingency plans, conducting or overseeing cleanup operations at sites contaminated by petroleum products, and assessing and responding to reported pollution incidents, DEQ seeks to reduce the number and severity of leaks from underground and aboveground storage tanks. DEQ accepts and maintains registration records of active regulated storage tanks; conducts compliance inspections at storage tank facilities; reviews and approves contingency plans for potential oil spills; and, provides technical assistance to tank owners. DEQ determines the Responsible Party (RP) and ensures that the RP performs proper site remediation. DEQ also processes reimbursement claims for investigation and cleanup by tank owners under this service area. The Pollution Investigation and Response activity is responsible for ensuring that the agency appropriately assesses and responds to all pollution reports it receives and conducts DEQ planning and coordination necessary to ensure that the agency meets its responsibilities in the event of an environmental emergency (primarily oil spill emergencies).

Mission Alignment

Through efforts in this service area, land is cleaned up that otherwise would not be remediated, petroleum leaks are prevented and cleaned up, green space is preserved, and blighted sites are put back into productive use.

Authority: Title 10.1 Code of Virginia, Chapter 14 - Virginia Waste Management Act; Resource Conservation and Recovery Act delegations from the Environmental Protection Agency on 7/31/00, 3/13/03, 5/2/03, 6/20/03, 5/10/06, 4/3/08, 6/3/08, 7/30/08 and 9/30/13. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Services include the review of facility operations and data, the review and approval of the eligibility application and remediation plans developed to clean up the sites. Products include the waste inspection report (indicating whether the facility is in compliance with requirements), warning letters or notices of violation, letters acknowledging owners are protected from environmental liability, and certificates of satisfactory completion to owners who cleanup their property.

Through inspections and reviews of facility operations and data, better operating practices are implemented at petroleum storage tank facilities that should reduce the severity and frequency of leaks. Agency oversight ensures that when leaks happen, they are addressed promptly and completely.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Compliance	Title 10.1 Code of Virginia, Chapter 14 - Virginia Waste Management Act; Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality. § 6901 et seq. - Chapter 82 of Title 42 of the of the	40 CFR, Parts 257, 258, and 260-272. 49 Code of Federal Regulations Parts 107, 170-180, 383 and 390-397	Required	458,407	22,514,173

Resource Conservation and Recovery Act of 1976. 49 USC 1809-1810. Sections 1008(a)(3), 2002 and 4004(a) of the Resource Conservation and Recovery Act				
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Anticipated Changes

An increase in permits will result in a corresponding increase in inspections.

Factors Impacting

Changes in the rate of violations by permittees. Also, economic changes should increase the volume of permits issued with a corresponding increase in compliance reviews performed.

Financial Overview

DEQ funding for Land Protection Compliance and Enforcement comes from the Virginia Petroleum Storage Tank Fund (VPSTF) (48%), federal funds (24%), general fund (GF) appropriation (2%), and other nongeneral fund revenues (26%) including revenues from solid waste and hazardous waste permit fees, The Virginia Environmental Emergency Response Fund, and other special revenues. The VPSTF funds were moved from the water protection program to the land protection program beginning in FY 2013. Federal funds are not available for solid waste management. Most of the federal funds require state matching funds.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	458,407	22,514,173	458,407	22,514,173
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title	File Type
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Land Protection Outreach [50927]

Description of this Program / Service Area

The Recycling and Litter Prevention Programs work closely with recycling program managers, as well as with local governments and solid waste planning units to ensure that locality-based recycling programs are able to meet or exceed the Commonwealth’s mandated recycling rates. DEQ provides guidance on recycling topics and programs; tracks and reports on Virginia’s recycling efforts; and works with businesses, localities, other state agencies, and environmental groups to promote environmental awareness through recycling. Staff work with the interested parties from the public and private sectors to identify opportunities to strengthen the state’s recycling infrastructures.

Mission Alignment

This service area is essential to supporting the agency mission of enhancing the environment in the Commonwealth and the health and well-being of its citizens by determining and taking the actions needed to meet or exceed environmental protection goals.

Authority: Title 10.1 Code of Virginia, Chapter 14 - Virginia Waste Management Act; Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Services include: (1) providing outreach to recycling program managers and localities in order to meet mandated recycling rates (2) distribution of Litter and Recycling Grant Funds to localities and planning entities.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Outreach/Grants	Title 10.1 Code of Virginia, Chapter 14 - Virginia Waste Management Act; Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality		Required	166,733	511,013

Anticipated Changes

No changes anticipated during this biennium.

Factors Impacting

No changes anticipated during this biennium.

Financial Overview

DEQ funding for Land Protection Outreach comes from federal funds (32%), general fund (GF) appropriation (25%), and revenues from nongeneral fund sources (43%).

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	166,733	511,013	166,733	511,013
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title	File Type
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Land Protection Planning and Policy [50928]

Description of this Program / Service Area

The land protection planning and policy service area involves the development and implementation of the overall waste management and remediation programs for the Commonwealth of Virginia to provide cleaner lands for its citizens. This is accomplished through the coordinated efforts of regulatory development and planning, data analysis, policy and program development, and litter control and recycling activities. These groups work in concert to improve the understanding of waste management and land resource conditions, provide information to the public and to decisionmakers, assist in developing policies, formulate plans and strategies to reduce waste and contamination, improve land resources, strive towards implementation of the waste management hierarchy, and protect the Commonwealth’s land resources. These programs also help to ensure the Commonwealth meets the many state and federal mandates related to waste management.

Reports from the regulated community under the Emergency Planning and Community Right-to-Know Act are received and managed for: (1) emergency planning (Section 302); (2) emergency releases of chemicals reporting (Section 304); (3) Safety Data Sheets (SDSs) - lists of SDS chemicals (Section 311); (4) Emergency and Hazardous chemical reporting Tier I/Tier/II (Section 312); and, (5) the Toxic Release Inventory (TRI) (Section 313). This information is made available to any citizen exercising his/her right-to-know what kinds and amounts of hazardous/toxic materials are stored, processed, generated, used, or released in the community. Additional activities include support to the TRI data QA/QC and data quality check against EPA TRI data, and, compilation and publishing of the annual Virginia TRI Summary Report by March of each year.

Mission Alignment

This service area is essential to supporting the agency mission of enhancing the environment in the Commonwealth and the health and well-being of its citizens by determining and taking the actions needed to meet or exceed environmental protection goals.

Authority: Title 10.1 Code of Virginia, Chapter 14 - Virginia Waste Management Act; Resource Conservation and Recovery Act delegations from the Environmental Protection Agency on 7/31/00, 3/13/03, 5/2/03, 6/20/03, 5/10/06, 4/3/08, 6/3/08, 7/30/08 and 9/30/13. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Services include: legislative and programmatic initiatives to promote waste management goals; development of waste management program planning documents and information; reviews of local solid waste management plans; and, development of regulations needed to implement and enforce waste management policies and plans. Products include the annual Virginia TRI Summary.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Policy/Planning	Title 10.1 Code of Virginia, Chapter 14 - Virginia Waste Management Act; Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality. § 6901 et seq. - Chapter 82 of Title 42 of the of the Resource Conservation and Recovery Act of 1976.	40 CFR, Parts 255 and 256, 258 and 260-272	Required	130,496	76,832

Anticipated Changes

Reduced federal funding.

Factors Impacting

Changes in funding.

Financial Overview

DEQ funding for Land Protection Planning and Policy comes primarily from general fund (GF) appropriation (63%), revenues from nongeneral fund sources (24%). with a small amount from federal funds (13%).

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	130,496	76,832	130,496	76,832
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Water Protection Permitting [51225]

Description of this Program / Service Area

Permitting for water protection involves the issuance of Virginia Pollution Discharge Elimination System (VPDES) permits and Virginia Pollution Abatement (VPA) permits for discharges of pollutants to state waters; Virginia Water Protection (VWP) permits for impacts to wetlands and streams related to development activities; and, water withdrawal permit for surface water and groundwater withdrawals.

- VPDES program authority is delegated by EPA to Virginia in order to implement provisions of the Clean Water Act and ensuing regulations. Virginia State Water Control Law is also enforced through this program and its regulations. VPDES permits are issued to point source dischargers of wastewater in order to control discharged pollutants to the degree necessary to protect State waters. DEQ also operates a Pretreatment Program under VPDES to treat the toxic, hazardous, and concentrated pollutants discharged as a result of industrial manufacturing processes. Pretreatment is the treatment of industrial wastewater at the industrial facility itself, before the wastewater is discharged into the local sewer system. The protection is achieved by regulating the nondomestic user of the municipal treatment works, commonly called industrial users or indirect dischargers.
- The VPA permit program implements Virginia law for managing pollutants where there is no point source discharge but a potential impact to state waters exists. The most common activity regulated by this permit is land application of solid or liquid wastes such as biosolids, animal manure, and reclaimed wastewater.
- The VWP permit program implements Virginia law to regulate activities involving impacts to wetlands and streams to assure maintenance of state waters at such quality as will protect or enhance all beneficial uses. The VWP permit program is also Virginia’s 401 Certification program under the Clean Water Act.
- The Water Withdrawal Permitting program implements Virginia law for withdrawals from groundwater and surface water. For surface water withdrawals, a VWP permit is required for certain withdrawals. For groundwater withdrawals, permits are required in designated groundwater management areas to assure that all existing lawful users can maintain groundwater as a future water supply. Withdrawals in excess of 300,000 gallons in any month are required to apply for and receive a permit prior to initiation of withdrawal.
- Permitting for water protection involves the issuance of Virginia Pollution Discharge Elimination System (VPDES) permits and Virginia Pollution Abatement (VPA) permits for discharges of pollutants to state waters; Virginia Water Protection (VWP) permits for impacts to wetlands and streams related to development activities; and, water withdrawal permit for surface water and groundwater withdrawals.

Mission Alignment

The VWP, VPDES, VPA, and water withdrawal regulatory programs provide effective and responsible means of ensuring protection of the Commonwealth’s surface waters, groundwater, wetlands, and aquatic resources, while allowing for continued economic development in an environmentally sound manner.

Authority: Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 62.1 Code of Virginia, Chapter 25 - Groundwater Management Act. National Pollution Discharge Elimination delegations from the Environmental Protection Agency authorized on 3/31/75, 2/9/82, 4/14/89 and 4/20/91. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

DEQ reviews and issues permits and provides expertise and advice to a variety of customers, ranging from specific projects to general public inquiries. DEQ’s VWP, VPDES, VPA and water withdrawal permitting staff provide: responsive evaluation of impacts and benefits of permit applications and compensation proposals; forums for input by stakeholders when program changes or new initiatives are planned; and, educational, technical and policy training, and guidance to customers through a variety of means.

Other products and services of this service area include: developing procedural manuals, guidance, and onsite inspections, interpretations of laws and regulations; negotiating permit approvals with EPA; drafting permits, working with the permittees, the public, EPA, other state agencies and environmental groups to gather data; and, monitoring the permitting activity as well as the losses and gains of the resource itself. DEQ manages, administers, develops, and implements guidance for these programs in order to issue consistent, timely, and enforceable permits to protect and manage the state’s water resource in accordance with federal and state laws and regulations. Onsite inspections conducted by DEQ and laboratory inspections conducted by the Department General Services’ Division of Laboratory Consolidated Services assure valid data is being generated and reported to DEQ. To streamline the permitting process for applicants and DEQ, general permits are developed and adopted as regulations. DEQ will also initiate updates of regulations to comply with federal and state laws and regulations, review legislation for impacts to the Commonwealth, and address other complex permit issues as necessary.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or	GF	NGF

			Discretionary		
Permit	Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 62.1 Code of Virginia, Chapter 24 - Surface Water Management Areas. Title 62.1 Code of Virginia, Chapter 25 - Groundwater Management Act. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality. Section 401 of the Clean Water Act. Section 402 of the Clean Water Act.	40 CFR, Parts 122, 123, 124, 403 and 503	Required	4,848,128	5,360,829

Anticipated Changes

Some growth in the number of water withdrawal permits is anticipated. No other significant changes in the customer base are anticipated

Factors Impacting

With the expansion of the Ground Water Management area on January 1, 2014, and some recent compliance activities, the number of permits and DEQ services associated with Ground Water Withdrawal Permits are expected to increase. The strength of the current economy has caused some surface water withdrawals to inquire about potential expansions of new sources. These pre-application contacts may develop into new VWP permit applications. Even during slow economic conditions, permittees and DEQ services are expected to remain stable.

Financial Overview

DEQ funding for Water Protection Permitting comes from federal funds (7%), general fund (GF) appropriation (47%), and other nongeneral fund revenues (46%) including water permit fees. Use of the available federal funds requires matching funds.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	4,848,128	5,360,829	4,848,128	5,360,829
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title	File Type
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Water Protection Compliance and Enforcement [51226]

Description of this Program / Service Area

The purpose of this service area is to ensure that facilities regulated by DEQ are in compliance with water protection requirements. Compliance activities involve inspecting permitted facilities that discharge to state waters to determine if they are adhering to the conditions of their permit. DEQ also conducts compliance activities for groundwater and surface water withdrawal permits following Virginia law and regulations. While minor corrective actions are informal, sometimes compliance activities result in formal enforcement actions to ensure that corrective actions are taken and remediation occurs. Enforcement activities include: compelling compliance and remediation through agreements or administrative orders; imposing penalties when appropriate to recover costs, remove the economic benefit of noncompliance, and deter future violations; identifying and responding to criminal violations; establishing comprehensive and consistent enforcement policies to ensure that all parties receive similar treatment for similar violations; providing assistance in cases referred to the Office of the Attorney General; coordinating with the EPA; assisting other federal and state agencies as necessary; and, providing advice to representatives of the regulated community and other departments of DEQ regarding regulatory interpretations.

Inspections of permitted facilities assure permit compliance and improve and protect water quality of Virginia’s surface waters. DEQ conducts onsite inspections of facilities with VPDES permits for their discharges of pollutants to state waters. These facilities are required to monitor their discharge for compliance with their permit conditions and report the results to DEQ on a routine basis. DEQ validates VPDES self monitored data, with the goal of protecting high quality waters and returning impacted waters to safely fishable and swimmable conditions. DEQ conducts onsite and desktop inspections of facilities with withdrawal permits (groundwater or surface water) to ensure facilities are in compliance with the requirements of their permits. DEQ also reviews surface water and groundwater withdrawal reports submitted by facilities not required to obtain a permit to ensure the reporting requirements in Virginia state law and regulations are met.

Mission Alignment

This service area protects and enhances Virginia’s environment and promotes the health and wellbeing of the citizens of the Commonwealth by preventing contamination to the lands and state waters, protecting high quality waters and ensuring that all state waters meet water quality standards that are protective of aquatic life.

Authority: Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 62.1 Code of Virginia, Chapter 25 - Groundwater Management Act. National Pollution Discharge Elimination delegations from the Environmental Protection Agency authorized on 3/31/75, 2/9/82, 4/14/89 and 4/20/91. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality.

Products and Services

Description of Major Products and Services

Services include compliance assistance, inspections, enforcement and review of facilities, operations, and data.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Compliance	Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 62.1 Code of Virginia, Chapter 25 - Groundwater Management Act. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality. Section 401 of the Clean Water Act. Section 402 of the Clean Water Act.	40 CFR, Parts 122, 123, 124, 403 and 503	Required	3,986,687	3,880,192

Anticipated Changes

The number of permittees and services provided by DEQ is expected to remain stable even during slow economic times.

Factors Impacting

The number of permittees and economic fluctuations.

Financial Overview

DEQ funding for Water Protection Compliance and Enforcement comes from federal funds (15%), general fund (GF) appropriation (51%), and other nongeneral fund revenues (34%) including water permit fees. Virginia Petroleum Storage Tank Funds were moved to the Land Protection service area (50926) beginning in FY 2013. Use of the available federal funds requires matching funds.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	3,986,687	3,880,192	3,986,687	3,880,192
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title File Type

Water Protection Outreach [51227]

Description of this Program / Service Area

The water protection outreach service area involves providing information, training, technical assistance, and support to citizens, community groups, local governments, and regulated facilities about water resources protection and environmental protection programs in the Commonwealth. DEQ works with educational organizations, business and industry, local governments, interested citizens and organized groups to inform people about watersheds, the protection and restoration of Virginia's water quality and water supplies. DEQ's outreach activities also provide technical assistance and training to regulated entities to help ensure compliance with environmental statutes and regulations.

- The Office of Public Information and Outreach is involved in outreach related to water quality and protection of water resources through various channels of communication, including: assistance for DEQ staff; development and implementation of outreach policies, goals, and missions; improvement of communication between the agency and Virginians on participation opportunities in environmental decisions; and development of an external website.
- The Office of Training Services provides training and certification to local governments and other parties related to erosion and sediment control and stormwater management to implement regulations required by Virginia's Stormwater Management Act and Erosion and Sediment Control Law and federal Clean Water Act.
- DEQ's Division of Water Permitting's Operator Training and Assistance Program provides training and assistance to Virginia's localities, industries, businesses, schools, and others to ensure wastewater treatment facilities are operated efficiently by competent personnel to achieve compliance with all applicable state and federal laws and regulations.
- DEQ's Office of Ecology engages the public through its Total Maximum Daily Load development and implementation and Chesapeake Bay Watershed Implementation Plan development and implementation.
- The Office of Watershed Programs provides technical assistance and training to grantees to assist with nonpoint source implementation projects.
- The Office of Water Supply provides training and technical assistance to local governments in support of local and regional water supply planning efforts and to various stakeholders to assist with well installation and water withdrawal reporting requirements.
- The Office of Pollution Prevention is a multimedia program that hosts a number of initiatives that serve as a conduit for non-regulatory assistance to businesses, institutions and communities. These efforts are aimed at motivating Virginia facilities to minimize their environmental footprints through actions that often exceed requirements while enhancing their bottom line. In support of Virginia's Pollution Prevention Program Law adopted in 1993, the office develops voluntary programs that are targeted to a specific sector or issue. Voluntary programs and partnerships, including the Virginia Environmental Excellence Program, the Governor's Environmental Excellence Awards, and Virginia Green, create opportunities for assistance, awards, and public recognition.
- The Virginia Zone Coastal Management Program is a network of Virginia state agencies and local governments headquartered at DEQ that administers enforceable laws, regulations, and policies that protect the Commonwealth's coastal resources and foster sustainable development. The program also administers an annual grant award from the National Oceanic and Atmospheric Administration (NOAA) to implement and improve Virginia's laws and policies that affect coastal resources within the defined coastal zone. This zone includes all cities, counties and towns that touch on tidal waters.

Mission Alignment

This service area directly aligns with DEQ's mission by providing the assistance needed by communities and other organizations for complying with water quality requirements. Training and outreach programs help stakeholders understand state and federal laws and regulations. It helps to ensure that the citizens we serve have access to information and have a better understanding of the programs implemented by DEQ. It improves the information provided for the agency's use in making environmental protection decisions, which results in better decisions. This service area is essential to supporting the agency mission of enhancing the environment in the Commonwealth and the health and well-being of its citizens by providing the information, technical assistance and understanding needed to meet or exceed environmental protection goals.

Authority: Virginia Coastal Zone Management Program: approved by the National Oceanic and Atmospheric Administration in 1986 under the Coastal Zone Management Act; Office of Pollution Prevention: Title 10.1 Code of Virginia, Chapter 14 (Virginia Waste Management Act) Article 3.3. Office of Training Services, Division of Water Permitting's Operator Training and Assistance Program, Office of Ecology, Office of Watershed Programs: Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Office of Water Supply: Title 62.1, Code of Virginia, Chapter 25 (Ground Water Management Act of 1992). Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Virginia Coastal Zone Management Program: approved by the National Oceanic and Atmospheric Administration in 1986 under the Coastal Zone Management Act; Office of Pollution Prevention: Title 10.1 Code of Virginia, Chapter 14 (Virginia Waste Management Act) Article 3.3. Office of Training Services, Division of Water Permitting's Operator Training and Assistance Program, Office of Ecology, Office of Watershed Programs: Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Office of Water Supply: Title 62.1, Code of Virginia, Chapter 25 (Ground Water Management Act of 1992). Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Services in this service area include: information to citizens, the news media, and other organizations through correspondence, media releases, the agency website and other venues; technical assistance to waste water treatment plants, facilities, local governments, citizen monitors, agencies,

grantees and other customers (e.g. coordinating meetings, providing information, conducting conferences, facilitating new programs); and training and workshops to support voluntary pollution prevention programs, waste water treatment plants, biosolids land appliers, citizen water monitors, local governments and community organizations. Products in this service area include: training programs, fact sheets, brochures, website, webinars, exhibits, curriculum; research products, reports, data, maps, interactive mapping sites and other online resources, management tools; and, training.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Outreach	Virginia Coastal Zone Management Program: approved by the National Oceanic and Atmospheric Administration in 1986 under the Coastal Zone Management Act; Office of Pollution Prevention: Title 10.1 Code of Virginia, Chapter 14 (Virginia Waste Management Act		Required	627,792	1,519,965

Anticipated Changes

An increased demand for technical assistance and training from local governments is anticipated.

Factors Impacting

New state and federal regulatory deadlines, especially on local governments, to meet nutrient and sediment reductions will spur additional demand for services.

Financial Overview

DEQ funding for Water Protection Outreach comes from federal funds (19%), general fund (GF) appropriation (29%), and other nongeneral fund revenues (52%). Use of the available federal funds requires matching funds.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	627,792	1,519,965	627,792	1,519,965
Changes to Initial Appropriation	0	0	124,915	0

Supporting Documents

Title	File Type
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Water Protection Planning and Policy [51228]**Description of this Program / Service Area**

State and federal requirements for water quality and water resource management plans and regulations have substantially increased in recent years to address areas that do not meet water quality standards, to restore the Chesapeake Bay, and to ensure a safe and adequate water supply for all Virginians.

The water protection planning and policy service area involves the development and implementation of the overall water quality improvement and water resources protection programs for the Commonwealth. The basic approach to the water quality and water resources planning process is to: examine water quality and quantity across the Commonwealth; identify areas where water quality needs improvement or water resources are stressed; develop and implement strategies to reduce pollutants and to bring about the necessary improvements to water quality or to manage the demands placed upon the water resources to ensure beneficial uses are protected and water supplies are sufficient; to ensure compliance with the Chesapeake Bay Preservation Act, which requires improved local land use decision making; to support activities necessary to address the Chesapeake Bay total maximum daily load (TMDL) by 2025; and, evaluate progress and ensure that the resulting water quality improvements and water resource productivity and availability remain in the future.

This is accomplished through the coordinated efforts of DEQ water supply planning, local government assistance programs, water resources research modeling and data analysis, watershed programs, planning and nonpoint source program implementation, water quality research, regulatory development and oversight, local total maximum daily load (TMDL) development and implementation and policy and program development staff. These groups work in concert to improve the understanding of ground water and surface water conditions, provide information to the public and decision-makers, assist in developing policies, formulate plans and strategies to reduce water pollution, improve water quality and protect wetlands, and ensure every person in the Commonwealth has access to a safe and adequate water supply. These programs also help to ensure the Commonwealth meets the many state and federal mandates that promote water quality.

- DEQ's Chesapeake Bay Preservation Act program in the Office of Ecology includes regulatory oversight to the 84 localities subject to the Bay Act as well as the provision of technical and financial assistance for Bay Act implementation. The Bay Act requires local governments to provide water quality protection through their zoning and subdivision ordinances as well as their comprehensive plans to ensure that they use, development, and redevelopment of lands is done in a manner that reduces pollutant loadings to the waters of the state.
- DEQ's Office of Ecology administers a comprehensive program to address the Chesapeake Bay Total Maximum Daily Load (TMDL) by 2025. Activities under this program include supporting the Secretary of Natural Resources in coordinating with multiple agencies and programs on 2-year milestone reporting, Chesapeake Bay model analysis, BMP reporting, the development and implementation of Watershed Implementation Plans, outreach and engagement of local entities in addressing the Bay TMDL and participation in a variety of Chesapeake Bay program committees, workgroups, and task forces.
- DEQ's Office of Ecology also administers the water quality standards program. Water quality standards are the regulatory yardsticks against which we measure the water quality required to protect both aquatic life and the health of the citizens of the Commonwealth. This regulation consists of both narrative and numerical criteria and designated uses of state waters. Water quality standards serve as the regulatory basis for setting appropriate permit limits for the discharges to state waters under DEQ's water permitting programs. In addition, we use our biennial water quality assessment process to compare our water monitoring data to the water quality standards to determine if the water quality is being maintained and to assess water quality for federal reporting requirements.
- DEQ's Office of Watershed Programs is responsible for the development of local TMDLs and the associated regulations, the development of local TMDL implementation plans and watershed plans, and for the implementation of associated nonpoint source pollution control projects and Best Management Practices.
- DEQ's Office of Water Supply coordinates water supply planning activities including the development and maintenance of basic science on the occurrence and availability of water supplies for all beneficial uses. This includes the development of water availability models and data management systems.
- DEQ is a member of the Ohio River Basin Sanitation Commission (ORSANCO) and a participant in the Interstate Commission on the Potomac River Basin (ICPRB) interstate compacts. The agency also supports the Roanoke River Basin Bistate Commission and the Virginia Roanoke River Basin Advisory Committee. These interstate compacts and river basin planning commissions enhance cooperative planning for the resource management of their respective watersheds.
- DEQ's Environmental Impact Review Program coordinates the Commonwealth's review of Environmental Impact Reports for major state projects, federal documents developed pursuant to the National Environmental Policy Act, permits for construction or expansion of public airports or runways, permits to drill for oil or gas in Tidewater, environmental documents addressing the exploration for and extraction of minerals on state-owned lands, and other federal intergovernmental reviews. DEQ reviews federal actions (direct, indirect, and federally funded) which affect Virginia's Coastal Zone to ensure consistency with the Virginia Coastal Zone Management Program.
- The Office of Regulatory Affairs facilitates the development of agency water policies, regulations and laws by working with agency stakeholders and executive and legislative branch officials.

Mission Alignment

This service area is essential to supporting the agency mission of enhancing the environment and ensuring all Virginians will enjoy cleaner water that is available for all uses.

Authority: Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 62.1 Code of Virginia, Chapter 25 - Groundwater Management Act. National Pollution Discharge Elimination delegations from the Environmental Protection Agency authorized on 3/31/75, 2/9/82, 4/14/89 and 4/20/91. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Develops overall agency water quality and water resources policies by working with agency stakeholders and with executive and legislative branch officials. This work results in legislative and programmatic initiatives to promote water quality and water resources goals.

Develops water quality plans and strategies, including local TMDLs, develops and implements nonpoint source TMDL implementation plans, develops statewide water resources plans, and assists localities in developing and implementing local and regional water supply plans. Products also include the Annual Report on the Status of Virginia's Water Resources and the biennial Report on Toxics Reduction in State Waters and the Annual Chesapeake Bay and Virginia Waters Clean-Up Report, the biennial 303(d)/305(b) Water Quality Integrated Assessment Report and the Annual Nonpoint Source Report.

Develops regulations needed to implement and enforce water quality and water resources policies and plans.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Policy/Planning	Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 62.1 Code of Virginia, Chapter 25 - Groundwater Management Act. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality -Section 401 of the Clean Water Act - Section 402 of the Clean Water Act	§ 303 of the Clean Water Act	Required	3,796,855	2,023,678

Anticipated Changes

Federal and state funding are expected to decline. Support from local governments is expected to be stable.

Factors Impacting

Federal and state funding for water research and analysis activities, development of plans, and implementation of plans.

Support from and cooperation with local governments and citizen groups.

Financial Overview

DEQ funding for Water Protection Planning and Policy comes from federal funds (34%), general fund (GF) appropriation (65%) and other nongeneral funds (1%). Use of the available federal funds requires matching funds.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	3,796,855	2,023,678	3,796,855	2,023,678
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Water Protection Monitoring and Assessment [51229]

Description of this Program / Service Area

State waters are monitored on a routine basis in order to assess their physical, chemical, and biological quality to ensure that water quality standards are met and that waters are suitable for all designated uses (aquatic life, fish consumption, shellfishing, recreation, public water supply, and wildlife). Chemical, benthic, and/or fish tissue data from surface waters are collected throughout Virginia at nearly 2,000 locations. These data are assessed (i.e. compared to state water quality standards) enabling a determination of whether water quality supports, or does not support, the historical (designated) uses available to benefit the public at large. Also included is targeted monitoring to determine if nutrient reduction requirements set forth by the EPA’s Chesapeake Bay TMDL and Virginia’s related Watershed Implementation Plan to restore and protect the quality of the Chesapeake Bay and its tidal tributary rivers are being met. DEQ’s Office of Ecology is responsible for these activities.

Surface water quantity data are used to process discharge permits, develop TMDLs, evaluate compliance with water quality standards, determine safe yields of water sources to support water supply planning activities, aid in the design of bridges and intake structures, and indicate the severity of a flood or drought. Part of the data collection effort includes conducting stream flow measurements during floods and droughts. DEQ’s Office of Virginia Water Protection Permitting is responsible for these activities.

Groundwater characterization data provide water level and aquifer system information which allow an evaluation of the impacts of numerous withdrawals on ground water resources, basic information to support water supply planning activities, and further indications of drought severity. The data are also used to calibrate and verify the Coastal Plain Groundwater Model that is used to support the Groundwater Withdrawal Permitting Program. The ambient groundwater monitoring program provides information on groundwater quality across Virginia as well as on saltwater intrusion effects in the coastal aquifer system. DEQ’s Office of Water Supply is responsible for these activities.

Mission Alignment

This service area protects the quality of state waters enhances Virginia’s environment and is essential to enhancing the health and well-being of the citizens of Virginia.

Authority: Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 62.1 Code of Virginia, Chapter 25 - Groundwater Management Act. National Pollution Discharge Elimination delegations from the Environmental Protection Agency authorized on 3/31/75, 2/9/82, 4/14/89 and 4/20/91. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Services include the routine monitoring of state waters and collection and assessment of related data. Products include findings, which are published biennially in even numbered years in the 303(d)/305(b) Water Quality Integrated Assessment Report and submitted to EPA for review and approval. Products also include the Annual Report on the Status of Virginia’s Water Resources and the biennial Report on Toxics Reduction in State Waters and the Annual Chesapeake Bay and Virginia Waters Clean-up Report.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Monitoring/Assessment	Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 62.1 Code of Virginia, Chapter 25 - Groundwater Management Act. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality	§ 303 of the Clean Water Act	Required	6,959,777	1,754,178

Anticipated Changes

Federal and state funding are expected to decline.

Factors Impacting

Federal and state funding for water quality and quantity monitoring and assessment activities.

Support from and cooperation with local governments and citizen groups.

Financial Overview

DEQ funding for Water Protection Monitoring and Assessment comes from federal funds (18%), general fund (GF) appropriation (80%), and other nongeneral fund revenues (2%). Use of the available federal funds requires matching funds.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	6,959,777	1,754,178	6,959,777	1,754,178
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Water Protection Stormwater Management [51230]

Description of this Program / Service Area

Water protection associated with stormwater from land disturbing activities involves implementation of the Virginia Stormwater Management Program (VSMP), Erosion and Sediment Control (ESC) Program and the VPDES permits for construction activities.

- Presently there are 94 localities implementing the VSMP throughout the state. DEQ is the VSMP authority for the 54 localities that have not elected to run the program. As required by state law and regulation localities and DEQ ensure that land disturbing activities obtain erosion and sediment control and VPDES construction permits as well as meet post construction requirements for quantity and quality of stormwater runoff.
- The ESC Program implements Virginia law for managing erosion and sediment control from construction activities. Localities, with DEQ oversight are responsible for review and approval of erosion and sediment control plans for local public projects and most privately owned projects. DEQ reviews and approves ESC plans for land disturbing activities for certain private projects state and federal projects.
- VPDES program authority is delegated by EPA to Virginia in order to implement provisions of the Clean Water Act and ensuing regulations. Virginia State Water Control Law is also enforced through this program and its regulations. Coverage under the General VPDES permit for Discharges of Stormwater from Construction Activities is issued to operators of construction sites in order to control pollutants discharged from construction sites to protect State waters.

Mission Alignment

The VSMP, VPDES Construction Stormwater Permitting and ESC programs provide effective and responsible means of ensuring protection of the Commonwealth’s surface waters, groundwater, wetlands and aquatic resources, while allowing for continued economic development in an environmentally sound manner.

Authority: Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

DEQ provides support and oversight in the implementation of the locality VSMP and ESC programs. In addition, DEQ issues VPDES construction permits and provides expertise and advice to a variety of customers, ranging from localities to general public inquiries. DEQ staff: provide responsive evaluation of stormwater impacts to surface waters through evaluation of Stormwater Management Plans (water quantity and quality), ESC plans, permit registration statements and ordinances; provide for forums for input by stakeholders when program changes or new initiatives are planned; and, provide educational, technical and policy training and guidance to customers through a variety of means.

Other products and services of this program include development of regulations, procedural manuals, guidance, and onsite inspections, interpretations of laws and regulations, negotiation with EPA on regulation approval, working with the localities, permittees, the public, EPA, other state agencies and environmental groups to implement these programs. DEQ provides oversight to localities as well as manages, administers, develops, and implements guidance in order to implement consistent, timely and enforceable programs to protect and manage the state’s water resource in accordance with federal and state laws and regulations. To streamline the program local VSMP authorities process registration statements for the VPDES construction general permits and DEQ issues permit coverage.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Stormwater Management	Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality. Section 402 of the Clean Water Act.	40 CFR, Parts 122, 123, 124, 403 and 503	Required	2,046,986	7,234,320

Anticipated Changes

In 2016 significant legislation was passed to consolidate the erosion and sediment control and stormwater management programs with an effective date of July 1, 2018 or 30 days after promulgation of consolidated regulations by DEQ. DEQ is beginning the regulatory process to implement the consolidated legislation in the fall of 2018 and anticipates the process will take approximately 24 months.

In the 2017 session of the General Assembly, additional legislation required a work group to study alternative methods of stormwater management

in rural Tidewater localities. As a result of the study, legislation was passed during the 2018 General Assembly session that allows rural Tidewater localities, for Chesapeake Bay Preservation Act land disturbing activities, to: 1) provide an alternative to meeting certain stormwater management technical criteria requirements; and 2) accept stormwater management plans signed, sealed, and stamped by a licensed professional. Legislation was also passed in 2018 that requires VSMP authorities to recommend to DEQ within 60 days of receipt of a complete notice of termination for a construction site that Construction Stormwater permit coverage be terminated. The State Water Control Board approved amendments to the VSMP regulations as a result of these statutory changes through the final exempt regulatory process at its meeting on September 20, 2018.

Factors Impacting

Depending on the outcome of the work group to study alternative methods of stormwater management in rural Tidewater localities and subsequent legislation, DEQ services may change in the future.

Financial Overview

DEQ funding for Stormwater Management comes from federal funds (23%), general fund (GF) appropriation (22%), other nongeneral fund revenues (13%), and the VA Stormwater Management Fund (42%). Use of the available federal funds requires matching funds.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	2,046,986	7,234,320	2,046,986	7,234,320
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Air Protection Permitting [51325]

Description of this Program / Service Area

The air protection permitting service area issues permits for companies to construct and operate in a manner that will protect, maintain and improve air quality without discouraging economic development in Virginia. Permit writers work with companies and citizens to assure that when a company constructs or modifies a facility, the amount of pollution that will be released into the air will be minimized to the greatest extent possible. The companies are issued a permit to construct and operate and the larger facilities are required to obtain an additional federal operating permit issued by the state. DEQ issues the following air permits:

- General permits that are developed for specific categories that have similar pieces of equipment and similar control requirements for facilities that will emit less than 100 tons per year of regulated air pollutants. The facility has the option of getting a general permit or going through the regular minor New Source Review permitting process. Virginia currently has four general permits: Non-Metallic Mineral Processing; Biomass Pilot Test Facility; Voluntary Demand Response Generator; and, Emergency Generator.
- Major New Source Review (NSR) Permits – Prevention of Significant Deterioration (PSD) permits are required by any major new source that is being constructed and any modification to an existing major source. Nonattainment permits are required by any major new source that is being constructed in a nonattainment area and is major for the pollutant for which the area is in nonattainment.
- Minor New Source Review (NSR) Permits, which constitute the majority of permits issued in Virginia, are required for the construction and operation of any new stationary source or any project that will emit regulated air pollutants above the specified exemption thresholds.
- Title V Operating Permits are required for facilities which have the potential to emit air pollutants above the major source thresholds or area sources of hazardous air pollutants not explicitly exempted by EPA.
- State Major Permits – Title V major facilities that are not PSD facilities are commonly referred to as “state majors”; permits are issued through the same regulations as minor NSR permits.
- State Operating Permits are most often used by stationary sources to establish federally enforceable limits on potential to emit to avoid major NSR permitting, Title V permitting, and/or major source MACT applicability.

Mission Alignment

This service area is essential to supporting the agency mission of enhancing the environment in the Commonwealth and the health and well-being of its citizens by issuing effective, accurate, defensible permits that are environmentally protective and technically achievable.

Authority: Title 10.1 Code of Virginia, Chapter 13 - Air Pollution Control Board. Clean Air Act (42 USC § 7511(a))/40 CFR Parts 1 through 99; updated on a continual basis since 1972, and implemented via the State Implementation Plan (SIP) covering § 110/40 CFR Parts 51-52; New Source Performance Standards covering § 111(b)/40 CFR Part 60; Designated Pollutant Plans covering § 111(d)/40 CFR Part 60; National Emission Standards for Sources of Hazardous Air Pollutants covering § 112/40 CFR Parts 61 and 62; new source review covering Subparts C and D of Title I/40 CFR Parts 51 and 52; and federal operating permits covering Title V/40 CFR Parts 70 and 72. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Permits – Issue air permits that are protective of human health and the environment while maintaining a productive economic climate in Virginia. Develop and issue new major and minor source permits to construct and operate that allow a facility to be built employing the best available control technology and methods to minimize air pollution emissions and to assure emissions will be minimized during operation.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Permits	Title 10.1 Code of Virginia, Chapter 13 - Air Pollution Control Board. Clean Air Act (42 USC § 7511(a))	40 CFR Parts 1 through 99; updated on a continual basis since 1972, and implemented via the State Implementation Plan (SIP) covering § 110/40 CFR Parts	Required	299,638	6,069,831

Anticipated Changes

No changes to the program are anticipated at this time.

Factors Impacting

The economy plays a substantial part in the number of permits issued. The better the economy, generally the more permits requested and issued.

Financial Overview

The Department of Environmental Quality (DEQ) funding for Air Protection Permitting comes from federal funds (12%), general fund (GF) appropriation (5%), and other nongeneral fund revenues (83%), primarily Title V fees. Use of the available federal funds requires matching funds. Use of the air permit fees is restricted by federal statute.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	299,638	6,069,831	299,638	6,069,831
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Air Protection Compliance and Enforcement [51326]

Description of this Program / Service Area

The air protection compliance and enforcement regional staff conduct field inspections of stationary sources of air pollution, to evaluate compliance with all applicable state and federal regulations. The approach includes an evaluation of all permit requirements, self-reporting data from facilities, continuous monitoring equipment, air pollution control equipment, and visible stack emissions. The approach includes onsite inspection, stack testing observation, and evaluations of all permit requirements, self-reporting data from facilities, continuous monitoring equipment, air pollution control equipment and visible stack emissions.

When discrepancies are discovered, staff utilizes agency policies to pursue a timely and appropriate enforcement response. This enforcement response enables DEQ to bring a facility back into compliance in an expeditious manner, which reduces the overall impact on the environment.

In Northern Virginia, vehicle emissions are the single greatest source of air pollution. DEQ regulates these mobile sources of air pollution by operating Air Check Virginia, the Commonwealth’s vehicle Inspection and Maintenance (I&M) Program. The I&M Program requires vehicles subject to the program to submit to biennial emissions testing. Additionally, the program’s remote sensing devices detect high emitter vehicles not subject to biennial inspections and require they also submit to inspection. Vehicles failing to pass inspection must be brought into compliance or face applicable enforcement procedures.

These program areas also serve to meet the many federal and state mandates that promote clean air.

Mission Alignment

This service area is essential to supporting the agency mission of enhancing the environment in the Commonwealth and the health and well-being of its citizens by enforcing and taking the actions needed to meet or exceed clean air goals.

Authority: Title 10.1 Code of Virginia, Chapter 13 - Air Pollution Control Board. Clean Air Act (42 USC § 7511(a))/40 CFR Parts 1 through 99; updated on a continual basis since 1972, and implemented via the State Implementation Plan (SIP) covering § 110/40 CFR Parts 51-52; New Source Performance Standards covering § 111(b)/40 CFR Part 60; Designated Pollutant Plans covering § 111(d)/40 CFR Part 60; National Emission Standards for Sources of Hazardous Air Pollutants covering § 112/40 CFR Parts 61 and 62; new source review covering Subparts C and D of Title I/40 CFR Parts 51 and 52; and federal operating permits covering Title V/40 CFR Parts 70 and 72. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Services include compliance assistance, inspections, enforcement and review of facilities, operations, and data.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Compliance	Title 10.1 Code of Virginia, Chapter 13 - Air Pollution Control Board. Clean Air Act (42 USC § 7511(a))	40 CFR Parts 1 through 99; updated on a continual basis since 1972, and implemented via the State Implementation Plan (SIP) covering § 110/40 CFR Parts	Required	172,005	6,375,629

Anticipated Changes

None anticipated.

Factors Impacting

Changes to EPA’s regulations and Virginia’s Inspection and Maintenance legislation.

Financial Overview

DEQ funding for Air Protection Compliance and Enforcement comes from federal funds (4%), general fund (GF) appropriation (3%), and other nongeneral fund revenues (93%), primarily Title V air permit fees and the Vehicle Emissions Inspection Program Fund. Use of the available federal funds requires matching funds. Use of the air permit fees is restricted by federal statute.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	172,005	6,375,629	172,005	6,375,629
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Air Protection Outreach [51327]

Description of this Program / Service Area

The air protection outreach service area provides information and technical assistance to citizens, community groups, local governments, and regulated facilities about the air quality and air quality protection programs in the Commonwealth. DEQ works with educational organizations, business and industry, local governments, interested citizens, and other organizations to inform people about air quality and environmental protection and programs. DEQ also provides technical assistance to regulated entities to help ensure compliance with environmental statutes and regulations. The Virginia Small Business Assistance Program provides small businesses free and confidential technical assistance on air quality and other related environmental requirements.

The Office of Public Information and Outreach is involved in outreach related to air quality through various channels of communication, including: assistance for DEQ staff; development and implementation of outreach policies, goals, and missions; improvement of communication between the agency and Virginians on participation opportunities in environmental decisions; and, development of an external website.

Mission Alignment

This service area directly aligns with DEQ’s mission by providing the assistance needed by communities and other organizations for meeting the air quality requirements. It helps to ensure that the citizens we serve have access to information and have a better understanding of the programs implemented by DEQ. It improves the information provided for the agency’s use in making environmental protection decisions, which results in better decisions. This service area is essential to supporting the agency mission of enhancing the environment in the Commonwealth and the health and well-being of its citizens by providing the information, technical assistance and understanding needed to meet or exceed environmental protection goals.

Authority: Title 10.1 Code of Virginia, Chapter 13 - Air Pollution Control Board. Clean Air Act (42 USC § 7511(a))/40 CFR Parts 1 through 99; updated on a continual basis since 1972, and implemented via the State Implementation Plan (SIP) covering § 110/40 CFR Parts 51-52; New Source Performance Standards covering § 111(b)/40 CFR Part 60; Designated Pollutant Plans covering § 111(d)/40 CFR Part 60; National Emission Standards for Sources of Hazardous Air Pollutants covering § 112/40 CFR Parts 61 and 62; new source review covering Subparts C and D of Title I/40 CFR Parts 51 and 52; and federal operating permits covering Title V/40 CFR Parts 70 and 72. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Services: 1. Information as requested to citizens, the news media and other organizations through correspondence, media releases, the agency website and other venues. 2. Technical assistance to agencies, grantees and other customers (e.g. coordinating meetings, providing information, conducting conferences, initiating new programs). 3. Financial assistance to grantees (e.g. funding positions, supplies, travel, etc.).

Products: 1. Website and topical fact sheets. 2. Research products: reports, data, maps, interactive mapping sites and other online resources.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Outreach	Title 10.1 Code of Virginia, Chapter 13 - Air Pollution Control Board. Clean Air Act (42 USC § 7511(a))	40 CFR Parts 1 through 99; updated on a continual basis since 1972, and implemented via the State Implementation Plan (SIP) covering § 110/40 CFR Parts	Required	74,376	74,211

Anticipated Changes

None anticipated during this biennium.

Factors Impacting

Financial Overview

DEQ funding for Air Protection Outreach comes from general fund (GF) appropriation (50%), federal funds (7%) and the Vehicle Emissions Inspection Program Fund (43%). Restrictions on the allowable use of these funds exist in both federal and state statutes.

Biennial Budget

	2019	2019	2020	2020
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	General Fund	Nongeneral Fund	General Fund	Nongeneral Fund
Initial Appropriation for the Biennium	74,376	74,211	74,376	74,211
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Air Protection Planning and Policy [51328]

Description of this Program / Service Area

The air protection planning and policy service area involves the development and implementation of the overall air quality improvement program for Virginia to provide cleaner air to its citizens. The basic approach to the air quality planning process is to:

- Examine air quality across the Commonwealth using monitoring and modeling data;
- Identify areas where air quality needs improvement as compared to established air quality standards;
- Inventory the sources contributing to the problem;
- Determine the degree of air quality improvement needed;
- Develop and implement strategies to reduce emissions from the contributing sources to bring about the necessary improvement in air quality;
- Evaluate and monitor progress and ensure that the resulting air quality improvement remains in the future;

This overall process is accomplished through the coordinated efforts of DEQ's Air Division (air planning and data analysis) and the Division of Policy (air policy, regulations, laws) by working with agency stakeholders and executive and legislative branch officials. These groups work in concert to formulate policies and then turn them into plans and strategies to reduce air pollution and improve air quality. This program area also serves to meet the many mandates that promote clean air at the federal and state levels. The Division of Policy also issues permits for the construction and operation of renewable energy projects of 150 megawatts or less (wind and solar).

DEQ's transportation and general conformity review program evaluates transportation plans and projects, and major nontransportation projects that can have an impact on state and on regional air quality. The purpose of this program is to ensure that these plans and projects are consistent with air quality goals and plans, and that they will not have a negative impact on air quality.

Mission Alignment

This service area is essential to supporting the agency mission of enhancing the environment in the Commonwealth and the health and well-being of its citizens by determining and taking the actions needed to meet or exceed clean air goals.

Authority: Title 10.1 Code of Virginia, Chapter 13 - Air Pollution Control Board. Clean Air Act (42 USC § 7511(a))/40 CFR Parts 1 through 99; updated on a continual basis since 1972, and implemented via the State Implementation Plan (SIP) covering § 110/40 CFR Parts 51-52; New Source Performance Standards covering § 111(b)/40 CFR Part 60; Designated Pollutant Plans covering § 111(d)/40 CFR Part 60; National Emission Standards for Sources of Hazardous Air Pollutants covering § 112/40 CFR Parts 61 and 62; new source review covering Subparts C and D of Title 1/40 CFR Parts 51 and 52; and federal operating permits covering Title V/40 CFR Parts 70 and 72. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Coordinate overall agency air quality policies by working with the executive and legislative branches.

Establish and communicate agency air quality policies and priorities.

Develop initiatives for actions that require legislative authority.

Serve as liaison to the State Legislature and the State Air Pollution Control Board, Office of the Attorney General and EPA

Prepare air quality plans and strategies in consultation with local organizations designed to reduce air pollution and meet air quality standards.

Develop attainment plans for areas that do not meet air quality standards.

Develop maintenance plans for areas that have met air quality standards.

Coordinate with regional and local organizations to develop maintenance and attainment plans.

Regulatory development – develop regulations needed to implement and enforce air quality policies and plans.

Develop air quality regulations to reflect agency policies and enact the strategies developed during the air quality planning process.

Revise air quality regulations as needed to respond to changes in federal/state requirements or air quality needs.

Evaluation and Assessment – determine status of areas regarding air quality standards. Evaluate the feasibility and effectiveness of proposed policies, plans, and regulations and estimate the resulting environmental benefits. Track the progress towards meeting established air quality and pollution reduction goals.

Determine and track overall emissions levels (emissions inventories).

Estimate emission reductions resulting from control strategies and measures.

Analyze air quality benefits of plans and strategies using air quality simulation (modeling) and other analytical techniques.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Policy/Planning	Title 10.1 Code of Virginia, Chapter 13 - Air Pollution Control Board. Clean Air Act (42 USC § 7511(a))	40 CFR Parts 1 through 99; updated on a continual basis since 1972, and implemented via the State Implementation Plan (SIP) covering § 110/40 CFR Parts	Required	298,090	1,769,347

Anticipated Changes

Reduced Federal funding.

Factors Impacting

Decline in funding.

Financial Overview

DEQ funding for Air Protection Planning and Policy comes from federal funds (32%), general fund (GF) appropriation (14%), and other nongeneral fund revenues (54%), including Title V air permit fees and the Vehicle Emissions Inspection Program Fund. Use of the available federal funds requires matching funds. Use of the air permit fees is restricted by federal statute.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	298,090	1,769,347	298,090	1,769,347
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Air Protection Monitoring and Assessment [51329]

Description of this Program / Service Area

The collection, assessment, and dissemination of ambient air quality data from across the Commonwealth is the most important means of informing the public and decision makers about the potential health impacts related to air quality, and identifying areas with poor air quality needing improvements.

- The air monitoring network provides the data that establishes the foundation or basis for all air quality management programs necessary to meet both national ambient air quality standards and federal Clean Air Act requirements.
- Data are collected for both criteria and toxic air pollutants.
- Data for ozone and fine particles are collected continuously and reported to the public in near real time to indicate the levels of pollution for these pollutants. Data for ozone is reported during the months of March through October.
- Data for ozone and fine particles are further analyzed to develop forecasts of future air quality levels and to issue health advisories when air quality is poor or unhealthy in a given area.

Mission Alignment

The federal Clean Air Act and the federal Code of Regulations provide the basis for all air pollution controls programs operated by DEQ. They specify the requirements and schedules for air quality programs including the provisions for an air monitoring network and the reporting of air quality conditions through the state. The air monitoring and assessment service area is clearly aligned with the overall mission of DEQ. These programs support the goals and objectives of DEQ by collecting data that quantifies pollution conditions and provides information necessary to implement programs to both enhance the air environment in the Commonwealth and maintain air quality in those areas that have good air quality.

Authority: Title 10.1 Code of Virginia, Chapter 13 - Air Pollution Control Board. Clean Air Act (42 USC § 7511(a))/40 CFR Parts 1 through 99; updated on a continual basis since 1972, and implemented via the State Implementation Plan (SIP) covering § 110/40 CFR Parts 51-52; New Source Performance Standards covering § 111(b)/40 CFR Part 60; Designated Pollutant Plans covering § 111(d)/40 CFR Part 60; National Emission Standards for Sources of Hazardous Air Pollutants covering § 112/40 CFR Parts 61 and 62; new source review covering Subparts C and D of Title I/40 CFR Parts 51 and 52; and federal operating permits covering Title V/40 CFR Parts 70 and 72. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

The air quality data are compiled in an annual report made public each year. Air quality data are necessary for industry stakeholders to evaluate any air quality impacts that are expected when seeking approval of permit applications for new sources of air pollution. Data is also now available on the DEQ Air Division Web Page.

Air quality data are further analyzed to determine if areas are in compliance with air quality standards, and to determine the major contributors to unacceptable levels of air quality. Air monitoring data establish the baseline for all air quality planning and control strategies to meet changing federal requirements including new and more stringent national ambient air quality standards. Air monitoring is conducted in response to citizens' air pollution complaints as a service that helps resolve specific compliance and air pollution problems such as odors from landfills or emissions from a specific facility.

The air monitoring program produces air quality data from some 36 monitoring stations and some 121 air quality monitors across the Commonwealth including data collected in coordination with the National Park Service and the US Forestry Service.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Monitoring/Assessment	Title 10.1 Code of Virginia, Chapter 13 - Air Pollution Control Board. Clean Air Act (42 USC § 7511(a))	40 CFR Parts 1 through 99; updated on a continual basis since 1972, and implemented via the State Implementation Plan (SIP) covering § 110/40 CFR Parts	Required	52,433	3,050,895

Anticipated Changes

Several changes were made to the Air Quality Monitoring Network in State FY 16. The Roanoke Lead Monitor was relocated to a new site located on the Mario Industries site along Patterson Avenue in Roanoke. The new Near Road air monitoring site in the Northern Virginia area was installed and began operation in April of 2016. This site is required due to the revised Nitrogen Dioxide national standard that was promulgated in CY 2010.

The Alexandria site was shut down due to the redundancy with the new near road site in northern Virginia. The Photochemical Assessment Monitoring (PAMS) air monitoring site was shut down due to equipment failure. It is required by regulation by June 1, 2019, to be up and running again. DEQ performed a special air monitoring project in Alexandria at Stevenson Park based on requests from the citizens living near the new flyover at Turkeycock Run. This site was run throughout SFY 15 and part of SFY 16.

Factors Impacting

Available funding, new and more rigorous air quality standards, upgrading of the air monitoring data communication network, new and more advanced air monitoring hardware requirements.

Financial Overview

DEQ funding for Air Protection Monitoring and Assessment comes from federal funds (72%), general funds (2%), and other nongeneral fund revenues (26%), primarily Title V fees. Use of the available federal funds requires matching funds. Use of the air permit fees is restricted by federal statute.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	52,433	3,050,895	52,433	3,050,895
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Financial Assistance for Environmental Resources Management [51502]

Description of this Program / Service Area

DEQ provides financial assistance in a variety of programs.

- Citizen Monitoring Grants: The agency provides grants to volunteer citizen water monitoring organizations and pass through funding to local governments via the Water Quality Monitoring Grant Program to generate citizen-collected water quality data that is scientifically valid and accurate. In 2016, a total of \$88,000 in grant funds was available.
- Combined Sewer Overflow (CSO) Fund: The CSO Fund was established for the purpose of providing grants to localities for projects that reduce or eliminate combined sewer overflows.
- Stormwater Local Assistance Fund (SLAF): The SLAF provides matching grants to local governments for the planning, design, and implementation of stormwater best management practices that address cost efficiency and commitments related to reducing water quality pollutant loads. To date, \$100 million has been authorized by the General Assembly through five (5) fiscal years. Of that amount, \$80 million has been authorized by DEQ for 193 stormwater projects and fund contingency, and a solicitation for projects has been issued for the remaining \$20 million. Project applications are due October 2018.
- Chesapeake Bay Preservation Act: The Office of Ecology uses EPA Chesapeake Bay Implementation Grants (CBIG) to provide financial assistance to local governments, planning district commissions, and other entities for the implementation of the Chesapeake Bay Preservation Act.
- Section 319 Nonpoint Source Pollution Grants: Through Section 319 of the Clean Water Act, Virginia is awarded grant funds to implement nonpoint source programs. DEQ administers the money, in coordination with an advisory committee, to fund watershed projects, demonstration and educational programs, nonpoint source pollution control program development, and technical and program staff.
- Section 317 Chesapeake Bay Implementation Grants:
- Section 117 Chesapeake Bay Regulatory and Accountability Program:
- Waste Tire End User Reimbursement Program: The Waste Tire End User Reimbursement Program makes direct payments to beneficial end users of Virginia-generated waste tire material. End uses have included tire-derived fuel, landfill drainage media, landfill trench and cover material, septic drainfield material, and mulch.
- Biosolids Reimbursements/Grants

Mission Alignment

Maintaining the quality of state environmental resources enhances Virginia’s environment and is essential to enhancing the health and well-being of the citizens of Virginia. The citizen monitoring grant program promotes the health and wellbeing of the citizens of the Commonwealth by helping the agency identify waters of concern or impaired waters requiring restoration and additional monitoring by the agency.

Authority: Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

1.) Grants to local governments and citizen water monitoring organizations to support the reduction/elimination of water pollution, 2.) Water quality data collected during the grant period, 3.) The final report detailing project activities including the Quality Assurance Project Plan and the Standard Operating Procedures manual.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Financial Assistance	Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality		Required	537,034	8,208,034

Anticipated Changes

No anticipated changes are seen at this time.

Factors Impacting

Grants are awarded based on available funds. If less funding is provided through General Assembly appropriations, then fewer grants are awarded and smaller award amounts result in less data.

Financial Overview

DEQ funding for Financial Assistance for Environmental Resources Management comes from federal funds (61%), general fund (GF) appropriation (6%), and revenues from nongeneral fund sources (33%).

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	537,034	8,208,034	217,834	8,208,034
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Virginia Water Facilities Revolving Fund Loans and Grants [51503]

Description of this Program / Service Area

This service area administers the Virginia Clean Water Revolving Loan Fund (VCWRLF). The VCWRLF is capitalized through annual federal grants and a 20% state match with additional funds available from repayments from previous loans and interest earnings. Products and services include providing low interest loans and associated financial assistance services to local governments, farmers, corporations, and nonprofit organizations for clean water projects. Clean water project types include wastewater collection and treatment, stormwater best management practices, structural agricultural best management practices, living shorelines, Brownfield remediation, and land conservation.

Mission Alignment

This service area directly aligns with DEQ’s mission by providing financial assistance to communities and other organizations to achieve the water quality requirements set forth by the agency.

Authority: Title 62.1 Code of Virginia, Chapter 22 - Waters of the State, Ports and Harbors. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

The main products provided by the service area are loans to local governments, nonprofits, farmers, and corporations to fund water quality improvements. During the delivery of these loans, the unit provides financial and technical assistance services to help insure that the funded projects are financially viable, technically sound, properly managed, and in conformance with state and federal requirements.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Financial Assistance	Title 62.1 Code of Virginia, Chapter 3.1 - State Water Control Law. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality. Section 216, Title VI of the Water Quality Act of 1987		Required	22,135,780	21,453,097

Anticipated Changes

Clarification to the regulations for the Agricultural BMP loan authorization and reinstating of the Ag BMP loan program are forthcoming.

Factors Impacting

Continued demand is expected for funding from VCWRLF related to Virginia’s Watershed Implementation Plan (WIP) III and the MS4 program

Financial Overview

Base Budget DEQ funding for Virginia Water Facilities Revolving Fund Loans and Grants comes from federal funds (49%) and general fund (GF) appropriation (51%). Use of the available federal funds for loan fund capitalization requires matching funds.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	22,135,780	21,453,097	2,135,780	21,453,097
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title File Type

Financial Assistance for Coastal Resources Management [51507]

Description of this Program / Service Area

The Virginia Coastal Management Program is a network of Virginia state agencies and local governments headquartered at DEQ which administers enforceable laws, regulations, and policies that protect the Commonwealth’s coastal resources and foster sustainable development. This zone includes all cities, counties and towns that touch on tidal waters. By virtue of having a federally approved Coastal Zone Management Program, Virginia has the authority to require that federal actions be consistent with the state’s enforceable, incorporated coastal laws. The program also administers an annual grant award using annual funding from the National Oceanic and Atmospheric Administration (NOAA) under the federal Coastal Zone Management Act to implement and improve Virginia’s laws and policies that affect coastal resources within the defined coastal zone. As a “maximum-funded state,” Virginia receives about \$2.8 million annually.

Mission Alignment

This service area addresses DEQ’s mission by preserving, protecting and restoring coastal resources while strengthening the coastal economy.

Authority: Virginia Coastal Zone Management Program: approved by the National Oceanic and Atmospheric Administration in 1986 under the Coastal Zone Management Act; authorized by transmittal letter from Governor Northam to NOAA. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality.

Products and Services

Description of Major Products and Services

Services: 1. Financial and Technical Assistance to grantees (e.g. funding positions, supplies, travel, subcontracts, etc.) who in turn are able to provide the following products: coastal mapping, outreach & publications; coastal and federal consistency reviews; marine resources permit review & compliance; habitat protection and restoration; tidal wetlands technical support; healthy waters programming; land acquisition; public access construction; eelgrass & bay scallop restoration; technical assistance to coastal localities; working waterfronts, ecotourism and aquaculture policy development; living shorelines; shoreline management plans; ocean planning; and, marine debris reduction.

Products:

1. Educational products: magazine, brochures, website, exhibits.
2. Research products: reports, coastal policy options and recommendations, data, maps, interactive mapping sites and other online resources, management tools.
3. Coastal land acquisitions; construction of boardwalks, trails, information kiosks, canoe launches, fishing piers, observation decks and other ecotourism amenities; restoration of habitats (e.g. oyster reefs, underwater grass beds, wetlands, riparian buffers, migratory songbird stopover habitat, invasive species removal)

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Financial Assistance	Authority: Virginia Coastal Zone Management Program: approved by the National Oceanic and Atmospheric Administration in 1986 under the Coastal Zone Management Act; authorized by transmittal letter from Governor Northam to NOAA. Title 10.1 Code of Virginia		Required	0	1,924,500

Anticipated Changes

Efforts related to ocean planning, marine debris and coastal resilience, which have increased in recent years, are expected to continue. Additional emphasis on sustainable economic development, which depends on coastal resources, is also expected.

Factors Impacting

The Virginia Coastal Zone Management (CZM) Program operates on federal funds only. No state general funds are appropriated to this program.

Therefore the major factor impacting products and services is Congressional appropriation.

Financial Overview

DEQ funding for Financial Assistance for Coastal Resources Management comes from federal funds (100%). Use of the available federal funds requires matching funds. Most of the recipients provide at least a portion of the required match.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	0	1,924,500	0	1,924,500
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Litter Control and Recycling Grants [51509]

Description of this Program / Service Area

This service area provides annual no-match cash grants to qualifying Virginia local governments (324 are eligible) to support the costs of their litter control and recycling programs.

Each year, DEQ distributes application materials to all localities, receives and processes applications and then distributes the funds based on annual General Assembly appropriations into the Litter Control and Recycling Fund. Funds are distributed in accordance with an allocation formula adopted by the Litter Control and Recycling Fund Advisory Board. Grants are released once the locality submits its Performance and Accounting (“P&A”) report from the previous year’s grant. Data from these reports are compiled into the annual P&A Report, which summarizes the collective achievements of localities using these funds.

Mission Alignment

This service area protects and enhances Virginia’s environment and promotes the health and wellbeing of the citizens of the Commonwealth by providing financial aid to local litter and recycling programs. Such programs reduce the dangers and health risks of litter and conserves landfill capacity and natural resources by recycling solid wastes. In addition, the grants can help local governments meet their statutory requirement of achieving a minimum 25% recycling rate in their communities.

Authority: Title 10.1 Code of Virginia, Chapter 14 (Virginia Waste Management Act) - 1414 - 1425. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Grants to cities and counties for litter and recycling programs by localities.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Financial Assistance	Title 10.1 Code of Virginia, Chapter 14 (Virginia Waste Management Act) - 1414 - 1425. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality		Required	0	2,039,509

Anticipated Changes

None anticipated.

Factors Impacting

Available funding.

Financial Overview

DEQ funding for Litter Control and Recycling Grants comes from nongeneral fund revenues (100%), which are derived from litter taxes, soft drink and beer excise taxes.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	0	2,039,509	0	2,039,509
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title File Type

Virginia Water Quality Improvement Fund [51510]

Description of this Program / Service Area

The DEQ Director is authorized to sign grant agreements with eligible owners of publicly owned wastewater treatment plants to provide costshare reimbursement for the construction of nutrient removal facilities. Eligible plants are those located in the Chesapeake Bay watershed and subject to nutrient removal requirements of EPA's Chesapeake Bay TMDL and Virginia's Watershed Implementation Plan (WIP). Other worthwhile water quality point source projects are eligible for funding as long as sufficient funding is available for substantial and continuing progress in implementing the WIP. In addition, DEQ may provide grants for stormwater and nonpoint source water quality projects, including municipal stormwater systems, as funding becomes available.

Mission Alignment

This service area directly aligns with DEQ's mission by providing the financial assistance needed by communities to meet the nutrient reductions requirements set forth by EPA's Chesapeake Bay TMDL and Virginia's Watershed Implementation Plan to restore and protect the quality of the Chesapeake Bay and its tidal rivers.

Authority: Title 62.1 Code of Virginia, Chapter 21.1 - Water Quality Improvement Act of 1997. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Product: A legally binding and enforceable agreement between the grant recipient and the DEQ governs all Water Quality Improvement Fund (WQIF) point source grants. In accordance with Section 10.12131 of the Clean Water Act, the agreement includes: 1) Numerical effluent concentration limits on nutrient discharges to state waters designed to achieve the nutrient reduction goals of the applicable tributary strategy plan and 2) enforceable provisions related to the maintenance of the numerical concentration.

Service: DEQ manages the allocation of grants from the WQIF to ensure full funding of executed grant agreements and to forecast the estimated disbursements from the fund in satisfaction of approved grants. Provided sufficient monies are available in the WQIF, DEQ staff reviews and promptly disburses to a Grantee (customer) any grant funds due. DEQ may determine that monies are not sufficient to promptly disburse grant funds when there are competing grant requests.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Financial Assistance	Title 62.1 Code of Virginia, Chapter 21.1 - Water Quality Improvement Act of 1997. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality		Required	0	0

Anticipated Changes

Increased demand for cost share from the WQIF is likely due to the outcome of the James River Chlorophyll-a study. If the study requires nitrogen and/or phosphorus reductions at wastewater treatment plants in the James River basin, the upgrade projects will qualify for WQIF funding.

Factors Impacting

Continued demand is expected for funding from WQIF related to nutrient removal requirements of EPA's Chesapeake Bay TMDL and Virginia's Watershed Implementation Plan (WIP) III.

Financial Overview

The Virginia Water Quality Improvement Fund does not usually have base budget appropriation. Appropriation is typically added each fiscal year on an as-needed basis.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund

Initial Appropriation for the Biennium	0	0	0	0
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title **File Type**

Service Area Plan

Petroleum Tank Reimbursement [51511]

Description of this Program / Service Area

This service area reimburses petroleum tank owners for costs incurred in cleaning up oil contamination and assessing and responding to reported pollution incidents. This service area also provides funding to localities for public water supply projects to address petroleum contaminated drinking water.

The Virginia Petroleum Storage Tank Fund (VPSTF) provides money for reimbursing responsible parties, for the reasonable and necessary costs they incur while conducting petroleum cleanups. DEQ reimburses tank owners based upon eligibility, necessity, and reasonableness determinations.

Mission Alignment

This service area provides for reimbursement of eligible petroleum cleanup costs at petroleum contaminated sites, returning properties into productive reuse.

Authority: Title 62.1 Code of Virginia, Chapter 3.1 (State Water Control Law) - 44.34.10 - 44.34.13. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Reimbursements to eligible stakeholders.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Financial Assistance	Title 62.1 Code of Virginia, Chapter 3.1 (State Water Control Law) - 44.34.10 - 44.34.13. Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality		Required	0	25,334,757

Anticipated Changes

No anticipated changes.

Factors Impacting

Fluctuations in claim volume.

Revenues available to pay claims.

Financial Overview

The Department of Environmental Quality (DEQ) funding for petroleum tank reimbursement comes almost entirely from the Virginia Petroleum Storage Tank Fund (VPSTF) a nongeneral fund source. Revenue to the fund comes from a per gallon fee assessed on the sale of petroleum products.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	0	25,334,757	0	25,334,757
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title	File Type
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Service Area Plan

General Management and Direction [59901]

Description of this Program / Service Area

This service area includes agency executive management and administrative activities that provide leadership and support for agency programs and staff.

Mission Alignment

This support activity is critical to the delivery of the services provided by DEQ and the information needs of DEQ’s customers and partners.

Authority: Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Executive management – providing planning and guidance to ensure efficient delivery of DEQ services. Human Resources – delivering employee recruitment, organizational development including training, performance management, benefits processing, and associated services and related products. Financial – delivering agency budget and strategic plan development and execution, procurement management services and related products. Administrative – provides accounting and payroll services and renders assistance to employees to improve the organization of their work. This service area also represents general overhead costs; the largest of which is related to leased facilities for DEQ’s 8 locations.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Administrative and Support Services	Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality		Required	7,068,904	13,054,353

Anticipated Changes

None

Factors Impacting

Changes to state and federal mandates related to the employment of staff.

Financial Overview

DEQ funding for General Management and Direction comes from federal funds (15%), general fund (GF) appropriation (35%), and other nongeneral fund revenues (50%). The nongeneral fund revenues are primarily indirect cost recoveries (0280 fund) from federal grants and air permit fees.

There are also accounting transactions, which are necessary to record the indirect cost revenue, that exist in the Title V air permit fees fund (0510) and federal funds (1000). Excluding these accounting transactions, the General Management and Direction budget would be reduced by approximately \$5 million.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund
Initial Appropriation for the Biennium	7,068,904	13,054,353	7,068,904	13,054,353
Changes to Initial Appropriation	0	0	0	0

Supporting Documents

Title	File Type
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Information Technology Services [59902]

Description of this Program / Service Area

DEQ provides a wide variety of environmental quality- related services to private citizens, regulated entities, other state agencies, and federal agencies, including EPA. Due to the nature of DEQ’s business processes, the work performed by the agency requires substantial use of information technology products, services, and solutions. It is imperative that the agency operates its programs in an efficient, economical, and secure manner, incorporating into its operation those technological developments and improvements that will enhance the delivery of services to DEQ’s clients. The mission of DEQ’s Information Technology Program is to optimize DEQ’s operational efficiency through information engineering and innovative deployment of technology. While the business divisions identify their strategic directives and define business needs, the Office of Information Systems (OIS) is charged with defining and implementing innovative technology solutions to meet those directions and needs.

The Virginia Information Technology Agency (VITA) provides technology infrastructure support services to DEQ including telecommunications, internet, email, local and wide area networks, servers and storage.

Mission Alignment

This support activity is critical to the delivery of the services provided by DEQ and the information needs of DEQ’s customers and partners.

Authority: Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality

Products and Services

Description of Major Products and Services

Delivery of information technological product capability and service support to facilitate DEQ’s mission achievement.

Products / Services					
Product / Service	Statutory Authority	Regulatory Authority	Required Or Discretionary	GF	NGF
Information Technology Services	Title 10.1 Code of Virginia, Chapter 11.1 - Department of Environmental Quality		Required	6,617,456	2,029,498

Anticipated Changes

Ability to attract highly skilled applicants. In order to deliver as promised according to the Division’s mission. It is crucial that a highly-skilled workforce be procured and maintained. Faced with a classified employee IT staffing shortage and hiring restrictions, DEQ IT supplements fulltime staff with consultants. The agency’s strategy has been to maintain a smaller staff, with technical contractors augmenting the staff to work on specific projects. The ability to locate contractors with the skill set needed remains challenging.

Agency’s demands for IT services exceed capacity. To fulfill all of the Agency directives and prioritized business needs continues to require additional IT resources. This is a constant challenge. DEQ IT must work closely with the agency’s Directorates to prioritize project requests and other technology needs, while maintaining its current systems.

Factors Impacting

Funding is the most critical component for successful IT enhancements and sustainability. Many projects including Web based e-document enhancements carry long-term cost benefits, but require onetime funding in one fiscal year and continuous financial support for maintenance in succeeding years.

EPA has mandated that data required by its Integrated Compliance Information System (ICIS) be captured electronically from the source under its NPDES Electronic Reporting Rule. This will require DEQ to update current business processes and IT systems to accommodate these new requirements. New and changing environmental regulations require enhancements to existing systems and/or the creation of new systems. Other factors include management of infrastructure by VITA and aging systems and infrastructure supporting DEQs core business functions and services.

Financial Overview

DEQ funding for Information Technology Services comes federal funding (5%), general fund (GF) appropriation (77%), and other nongeneral fund revenues (18%), primarily indirect cost revenues.

Biennial Budget

	2019 General Fund	2019 Nongeneral Fund	2020 General Fund	2020 Nongeneral Fund

Initial Appropriation for the Biennium	6,617,456	2,029,498	6,617,456	2,029,498
Changes to Initial Appropriation	0	0	734,160	0

Supporting Documents

Title **File Type**