

Strategic Plan
(2012-2014 Version 1)

Department of Environmental Quality (440)
Agency Plan

Mission Statement

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

Vision Statement

The Department of Environmental Quality's vision is that Virginians will enjoy: cleaner water available for all uses, improved air quality that supports communities and ecosystems, and the productive re-use of contaminated land.

Values

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.

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

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

Customer Service: We evaluate and solve problems professionally, courteously and responsively with citizens, the regulated community and our co-workers. Certainty: We follow through to resolve issues effectively and on time. Communication: We exchange information freely.

Information Technology

Current Operational IT Investments

The Department of Environmental Quality (DEQ) provides a wide variety of environmental quality-related services to private citizens, regulated entities, other state agencies, and federal agencies, including the Environmental Protection Agency (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 business needs.

OIS is staffed by state employees, private sector consultants, and service providers who support all of DEQ's applications and are charged with delivering high quality, cost effective, and timely IT solutions and services. As a result, DEQ has a robust in-house custom application development capability with highly skilled IT technical staff to support its business needs. In conjunction with the Virginia Information Technology Agency (VITA), DEQ maintains several large-scale systems and a variety of technologies that collectively are used to deliver its services. Many of the various systems and technologies are constructed in such a manner that multiple software components operating on different hardware platforms are required to complete a given business transaction. In addition, DEQ contracts for goods and services with vendors supplying information technology products, services, and solutions to deliver services to our customers.

Over the past several years, DEQ has focused on the innovative use of technology in service delivery processes to provide faster, more convenient service as well as to reduce operational costs. All IT investments at DEQ require Executive level approval prior to execution to ensure that each investment aligns and contributes to the achievement of agency goals. Examples of current IT investments that directly support Strategic Alignment and/or Operational Efficiency include:

- Design and development of a modernized application suite that captures/distributes environmental data,
- Continued deployment of an electronic document imaging solution to replace paper processes,
- Continued enhancements to DEQ's website and related internet transactions,
- Automation of the administrative functions of issuing permits and related support systems, and
- Utilization of an IT Business/Technology Development Group that determines the best use of IT resources on project work.

DEQ is currently making progress with technology-based initiatives in several areas:

- Comprehensive Environmental Data System (CEDS)– CEDS is DEQ's system of record for environmental data. CEDS provides mission critical support to DEQ staff through modules designed for each of the agency's environmental programs. DEQ is currently converting the legacy Oracle Forms and Reports CEDS modules to an n-tier, mobile-ready architecture that will ensure that the CEDS application will more easily allow data communication with DEQ's other applications and the Web. The business drivers that support the investment in this technology for DEQ include:
 - Increasing efficiency of staff by significantly reducing paper-based tracking methods,
 - Increasing web-based sharing of data with citizens and regulated community, and
 - Providing a decision support system to improve the efficiency of permitting and compliance.
 - Enterprise Environmental Data Reporting – DEQ is currently revamping its enterprise reporting solution. This effort is two-pronged: (1) evaluation and probable replacement of the reporting tools being used, and (2) comprehensive analysis of DEQ's business-driven data needs to understand the best implementation. The business drivers that support the investment in this technology for DEQ include:
 - Providing improved analysis tools to improve the efficiency of permitting and compliance;
 - Providing data assessment tools to improve data quality;
 - Increasing sharing of data with citizens and regulated community; and

- Allowing the agency to quickly respond to Freedom of Information Act (FOIA) requests, and provide consistent, faster responses to DEQ customers.
- Enterprise Content Management System (ECM) - ECM contains DEQ's documents of record and maintains the approved document retention plans. DEQ implemented FileNet ECM software in 2009 and all core agency programs have now been incorporated in the system. DEQ continues to provide improvements to the system, including a recent upgrade and Active Directory integration. The efficiencies being realized for DEQ through ECM include:
 - Increasing efficiency of staff by significantly reducing the time necessary to copy, reproduce, and locate paper documents;
 - Providing support for the Continuity of Operations and telecommuting plans;
 - Allowing the agency to quickly respond to Freedom of Information Act (FOIA) requests, and provide consistent, faster responses to DEQ customers, and
 - Reducing leased rental space due to elimination of paper files.
- Geographic Information System (GIS) – DEQ collects and generates geospatial information across Air, Water, and Waste media for the purposes of modeling, analysis, and public information. DEQ has developed a GIS Strategic Plan to ensure that future efforts in this area are focused, cost effective, and continue to provide staff with time and cost saving tools. The agency continues to look for ways to take advantage of this technology and integrate it with other technologies in order to increase the efficiency of staff and reduce business costs. For example, a strategic initiative is underway to enable mobilization of the DEQ inspection workforce, with tools to perform multi-media inspections and electronic on-site data capture. The investment in this technology are critical to areas such as:
 - Modeling of potential withdrawal impacts to determine parameters for ground water withdrawal permits,
 - Analysis of impaired water within Total Maximum Daily Loads (TMDL) watersheds to determine permit VPDES permit parameters, and
 - Modeling and monitoring of air emissions across the Commonwealth.
- Oracle E-Business Suite (eBiz) – eBiz is DEQ's transaction and reporting database for Financials (enables processing of all financial accounting transactions that are sent to the statewide accounting system, CARS), Human Resources (enables tracking employee information and position information for DEQ), Purchasing (enables procurement of goods and services by DEQ; this information is sent to the statewide procurements system, E-Procurement Virginia (eVA)), and Project Costing (allows allocation of actual labor costs across multiple funding streams that are available to DEQ based on time accounting). DEQ is nearing completion on an important effort to upgrade the eBiz application to stay in compliance with Oracle support, as well as enhancing the modules to continue to meet evolving business needs. The business drivers that support the investment in this technology for DEQ include:
 - Improving interoperability with other state systems, and
 - Increasing efficiency of staff by significantly reducing the time necessary to process and analyze eBiz data.
- Electronic Discharge Monitoring Report (EDMR) – For the past several years, DEQ has provided an EDMR system for Virginia Pollutant Discharge Elimination System (VPDES) individual permit holders. Software updates to the base EDMR system and new EDMR functionality for Industrial Storm Water and Nutrient Trading general permits was recently deployed. The business drivers that support the investment in this technology for DEQ include:
 - Allowing the regulated community to file electronic reports with DEQ via the web; and
 - Improving effectiveness of DEQ staff and the regulated community by providing faster response for data analyses, compliance assessment, and decision-making.
- Air Quality Monitoring Data Acquisition System – DEQ is in the process of replacing its current Air Quality Monitoring system, which was purchased in 1987, with a state-of-the-art Commercial off-the-shelf (COTS) system. The competitive bid process was recently completed and the replacement project is currently underway. The business drivers that support the investment in this technology for DEQ include:
 - Meeting increasingly stringent EPA air monitoring requirements;
 - Improving data collection techniques, which provide improved data quality;
 - Increasing the timeliness of the data; and
 - Increasing efficiency of staff by significantly reducing the time necessary to process and analyze air quality data.
- Exchange Network Node – DEQ has recently upgraded their Exchange Network Node, which provides for automated, electronic exchange of consistently formatted environmental data between DEQ and the Environmental Protection Agency (EPA), as well as other stakeholders such as the Chesapeake Bay Program and other state agencies. An initiative to implement the ICIS-NPDES data exchange is currently underway.
- Infrastructure Upgrades – DEQ is an active participant with the VITA and Northrop Grumman (NG) Partnership's effort to transform the state's IT infrastructure. An initiative was recently completed to refresh the agency's aging desktop hardware and software. Replacement of the phone system is currently underway. In addition, DEQ has upgraded all of its databases and middleware to ensure that the software is current, supportable, and includes the latest security patches.
- Telecommuting – DEQ continues to work to deploy technologies, policies, and procedures to support telecommuting. The business drivers that support the investment in this technology for DEQ include:
 - Reducing costs associated with office space;
 - Increasing job satisfaction and improve staff retention and recruiting; and
 - Reducing automobile emissions, resulting in cleaner air for the Commonwealth.

Factors Impacting the Current Agency IT

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

EPA is replacing many legacy systems with its Integrated Compliance Information System (ICIS). This will require DEQ to update current business processes and IT systems to accommodate the new system requirements.

New and changing environmental regulations require enhancements to existing systems and/or the creation of new systems.

Other factors impacting information technology at DEQ include:

- Management of infrastructure by VITA/NG partnership.
- Aging systems and infrastructure supporting DEQs core business functions and services.
- 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 staffing shortage and hiring restrictions, DEQ IT supplements full-time staff with consultants. The agency's strategy has been to maintain a smaller staff, with technical contractors augmenting the staff, as well as working on specific projects. The ability to locate contractors with the skill set needed remains challenging.
- Agency's demands for IT services exceed capacity. Fulfilling 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 Directorate to prioritize project requests and other technology needs.
- Business process change and the potential for continued lean process improvements. As business organizations and processes change, IT must respond accordingly. Both anticipated and unanticipated changes affect an already constrained Information Technology Program.
- Conflicting business priorities. High priorities from each business partner present a difficult situation for IT and its limited resources.
- Impact of Commonwealth budget adjustments on DEQ's ability to develop IT solutions or fund IT services and investments.
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- Aging systems and infrastructure supporting DEQs core business functions and services.
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- Conflicting business priorities. High priorities from each business partner present a difficult situation for IT and its limited resources.
- Impact of Commonwealth budget adjustments on DEQ's ability to develop IT solutions or fund IT services and investments.
- Impact of VITA/NG Infrastructure services.

Proposed IT Solutions

DEQ is an information-driven organization. The dynamic nature of environmental regulation requires ever-changing environmental data for analysis and decision-making, and thus requires a sustained effort towards more efficient methods for capturing, storing, protecting, and exchanging this data.

In order to perform its core business functions and provide services effectively and efficiently, DEQ must continue to focus on utilizing technology to strengthen DEQ's system infrastructure. This includes redesigning and/or replacing core legacy systems and subsystems to integrate all DEQ environmental, GIS, financial, and document data; adhering to VITA standards; maintaining system reliability; and exploiting technology to deliver operational and service improvements for customers. In addition, with more external customers accessing DEQ applications, DEQ will continue to become more transparent in business decisions, activities, and reporting; IT will be heavily involved in this process as well.

DEQ's non-major IT projects will include new automated solutions, updates, and enhancements to support DEQ business processes, customer service, and external customers. DEQ's non-major procurements will address new software and equipment needs, equipment replacement and refresh needs, and software maintenance and upgrades.

As the demand on IT services continues to grow, so does the need for a robust and disciplined approach in project, resource, and budget management. To provide the necessary tools for managing these demands, DEQ is implementing an IT Portfolio Governance model, including a Business/Technology Development Group to prioritize the agency's IT projects. OIS will employ state-of-the-art technologies to develop and support IT applications and special projects, using innovative development methodologies, industry-standard best practices, and agency-wide project management tools and measures. Management oversight will ensure compliance with all accountability mandates. The initial focus areas are:

- Exploiting current data and improving data quality,
- Spatially enabling data,
- Enhancing data integration and reporting through agency-wide toolsets,
- Leveraging service-oriented architecture to accelerate project implementation,
- Maintaining a highly-skilled workforce through implementation of a career path management plan,
- Meeting COV and DEQ Security Policy requirements, and
- Maturing the agency Information Technology Investment Management processes.

As DEQ deploys technologies such as ECM, Business Intelligence, and GIS, the agency is laying the foundation for future initiatives that will benefit citizens, the regulated community and other government agencies. Initiatives that DEQ plans to investigate in the future include:

- Web-based permit application process for the regulated community;
- Additional web-based reporting systems for the regulated community;
- Mobilization of the DEQ water quality assessment workforce, with tools to perform on-site data capture and automatic Global Positioning;
- Mobilization of DEQ "emergency first responders" with tools to display GIS visuals and perform on-site data capture and automatic Global Positioning;
- Sophisticated environmental data modeling and forecasting tools; and
- More efficient retrieval of data from its environmental system of record, CEDS, with a long-term goal of deploying Business Intelligence technology and an enterprise-wide data warehouse.

Comments:

- Estimated Costs for Projects and New IT Investments

	Cost - Year 1		Cost - Year 2	
	General Fund	Non-general Fund	General Fund	Non-general Fund
Major IT Projects	\$0	\$0	\$0	\$0
Non-major IT Projects	\$0	\$0	\$0	\$0
Agency-level IT Projects	\$0	\$0	\$0	\$0
Major Stand Alone IT Procurements	\$0	\$0	\$0	\$0
Non-major Stand Alone IT Procurements	\$0	\$0	\$0	\$0
Total Proposed IT Investments	\$0	\$0	\$0	\$0

- **Projected Total IT Budget**

	Cost - Year 1		Cost - Year 2	
	General Fund	Non-general Fund	General Fund	Non-general Fund
Current IT Services	\$4,948,559	\$2,097,780	\$4,948,559	\$2,097,780
Proposed IT Investments	\$0	\$0	\$0	\$0
Total	\$4,948,559	\$2,097,780	\$4,948,559	\$2,097,780

- Appendix A - Agency's information technology investment detail maintained in VITA's ProSight system

Financial Overview

In the base budget, DEQ is funded 21% by general fund (GF) appropriation, 29% by federal funds, and 50% through other nongeneral fund revenues. The other nongeneral fund revenues are primarily from the Virginia Petroleum Storage Tank Fund, Title V 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 base budget. The Water Quality Improvement Fund (WQIF) is not funded in the base budget appropriation, but is funded in the changes to the base budget in the FY 2013 in GF appropriation. In FY 2013, the General Assembly (GA) included \$42.3 million GF appropriation for WQIF and another \$45.3 million appropriation from the FY 2011 state surplus for WQIF. Of the total base budget, a large portion (37%) of expenditures are 'pass-through' funds for water facilities revolving loans, reimbursements to tank owners, and payments to local governments and other state agencies. The remaining 63% of funds are used to support DEQ's operations.

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	32,853,834	121,954,797	32,853,834	121,954,797
Changes to Base	85,215,243	1,167,934	-102,803	-1,850,816
Total	118,069,077	123,122,731	32,751,031	120,103,981

Agency Goals

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

Goal Summary and Alignment

This agency goal is aimed toward the same outcomes identified in Virginia's long-term objective to be a national leader in the preservation and enhancement of our economy. Meeting or exceeding environmental standards will enable Virginia to compete for new business and industrial opportunities. Protection of our environmental resources will enable those resources to be utilized for the best economic benefit. Because withholding of federal highway trust funds can be a sanction imposed for nonattainment of air quality standards, this agency goal also is aligned with the long-term objective to ensure that Virginia has a transportation system that is safe, enables easy movement of people and goods, enhances the economy, and improves our quality of life. Finally, this agency goal most directly relates to the long-term objective to protect, conserve and wisely develop our natural, historical and cultural resources.

Long Term Goal

Protect, conserve and wisely develop our natural, historical and cultural resources.

Societal Indicator: Historic Resources

- Foster an informed and engaged community

Goal Summary and Alignment

DEQ recognizes the value of involving people in matters relating to their environment. Knowledge and awareness, enhanced through education and public outreach, will promote sound government and decision-making. This agency goal thus is directly aligned with Virginia's long-term objectives to elevate the levels of educational preparedness and attainment of our citizens, to engage and inform citizens to ensure we serve their interests, and to inspire and support Virginians toward healthy lives and strong and resilient families.

Long Term Goal

Elevate the levels of educational preparedness and attainment of our citizens.

Societal Indicator: Educational Attainment

- Achieve an optimal use of current and new resources

Goal Summary and Alignment

This agency goal shares the same focus with Virginia's long-term objective to be recognized as the best-managed state in the nation. Efficient use of our resources will enable our agency to optimally protect, conserve and wisely develop Virginia's natural, historical and cultural resources.

Long Term Goal

Protect, conserve and wisely develop our natural, historical and cultural resources.

Societal Indicator: Historic Resources

- Sustain an outcome oriented workforce and culture

Goal Summary and Alignment

This agency goal shares the same focus with Virginia's long-term objective to be recognized as the best-managed state in the nation. An engaged and motivated workforce will enhance DEQ's ability to protect, conserve and wisely develop Virginia's natural, historical and cultural resources.

Long Term Goal

Protect, conserve and wisely develop our natural, historical and cultural resources.

Societal Indicator: Historic Resources

- Strengthen the culture of preparedness across state agencies, their employees and customers.

Goal Summary and Alignment

This goal ensures compliance with federal and state regulations, policies and procedures for Commonwealth preparedness, as well as guidelines promulgated by the Assistant to the Governor for Commonwealth Preparedness, in collaboration with the Governor's Cabinet, the Commonwealth Preparedness Working Group, the Department of Planning and Budget and the Council on Virginia's Future. The goal supports achievement of the Commonwealth's statewide goal of protecting the public's safety and security, ensuring a fair and effective system of justice and providing a prepared response to emergencies and disasters of all kinds.

Long Term Goal

Protect the public's safety and security, ensuring a fair and effective system of justice and providing a prepared response to emergencies and disasters of all kinds.

Societal Indicator: Emergency Preparedness

Objectives for this Agency Goal

Objective

Be prepared to act in the interest of the citizens of the Commonwealth and its infrastructure during emergency situations by actively planning and training both as an agency and as individuals.

Description

Objective Strategies

- The agency Emergency Coordination Officer will stay in continuous communication with the Office of Commonwealth Preparedness and the Virginia Department of Emergency Management.

Programs and Service Areas for Agency

- 50925: Land Protection Permitting
- 50926: Land Protection Compliance and Enforcement
- 50927: Land Protection Outreach
- 50928: Land Protection Planning and Policy
- 51225: Water Protection Permitting
- 51226: Water Protection Compliance and Enforcement
- 51227: Water Protection Outreach
- 51228: Water Protection Planning and Policy
- 51229: Water Protection Monitoring and Assessment
- 51325: Air Protection Permitting
- 51326: Air Protection Compliance and Enforcement
- 51327: Air Protection Outreach
- 51328: Air Protection Planning and Policy
- 51329: Air Protection Monitoring and Assessment
- 51502: Financial Assistance for Environmental Resources Management
- 51503: Virginia Water Facilities Revolving Fund Loans and Grants
- 51507: Financial Assistance for Coastal Resources Management
- 51509: Litter Control and Recycling Grants

- 51510: Virginia Water Quality Improvement Fund
- 51511: Petroleum Tank Reimbursement
- 59901: General Management and Direction
- 59902: Information Technology Services

Customers

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Environmental Pollution and Control	Business and industry in Virginia	4,663	5,557	Increase
Organization	Community organizations	500	9,000	Increase
Environmental Pollution and Control	Facilities subject to stationary source air inspection	1,350	4,663	Increase
Environmental Pollution and Control	Hazardous waste facilities	400	30,000	Increase
Environmental Pollution and Control	Regulated tank owners	8,000	8,000	Stable
Environmental Pollution and Control	Solid waste facilities	355	5,000	Increase
Environmental Pollution and Control	Water runoff permittees	4,900	4,900	Stable
Environmental Pollution and Control	Wastewater treatment facilities	700	6,000	Increase

Key Risk Factors

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

Long-term Groundwater Declines - Current rates of pumping have led to groundwater level declines, land subsidence, and intrusion of saline water in Virginia's aquifers. These rates cannot be sustained; measured water levels and model simulations show that the state's primary aquifers are being pumped faster than replenishment. Increased needs for water will require additional tools and resources to assess and address these declines which are identified in local and regional water supply plans and further analyzed in the State Water Resources Plan.

Chesapeake Bay Watershed Implementation Plan (WIP) - As the implementation of the WIP progresses over the next decade 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.

Proliferation 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, 12% of DEQ staff are eligible to retire with an unreduced benefit and another 43% are eligible to retire with a reduced benefit. Being understaffed poses significant risk to agency operations.

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 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 groups to monitor water quality, develop cleanup plans for "impaired" streams, rivers and lakes; and nominate waters of exceptional quality for special designation.

On July 1st, following legislation passed by the 2013 General Assembly, DEQ became the Commonwealth's lead agency for managing stormwater and the nonpoint source pollution programs. This significant consolidation of programs previously managed by the Department of Conservation and Recreation (DCR) include stormwater permits, erosion and sediment control, Chesapeake Bay preservation, watershed restoration implementation (TMDLs) and nonpoint source training, funding and certifications. The transferred programs under one roof will complement programs already at DEQ and will enhance our service to the public helping to ensure that local governments, builders and developers, and the public are able to obtain the information and assistance they need for effective management and reduction of water pollution.

DEQ recently received \$35 million in bond authorization for the Stormwater Local Assistance Fund, which will provide matching grants to local governments for the planning, design and implementation of stormwater best management practices.

Trends

Rankings & Customer Trends

Ensuring the protection of Virginia's environment is a cooperative effort that involves communities, businesses and industries, educators, government agencies and many others. DEQ collaborates with these partners to strengthen the role everyone plays in environmental protection and to finding lasting solutions.

Trend Name	Trend Area
Maximize Use of Federal Funds	Increase
Manage Changing Regulations	Increase

Performance Highlights: Service Performance & Productivity Initiatives

DEQ has a number of performance measures for the many programs the agency administers. The three 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 discharged from point sources in the Chesapeake Bay watershed has a direct impact on the health and recovery of the water quality in the Bay, also reductions in air pollution levels and fewer days above the ozone standard have a positive impact on citizen health.

Management Discussion & Analysis

Future Direction, Expectations, and Priorities

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. DEQ examines ways to 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 20 years. These improvements include the following:

- Air pollution in Virginia has decreased by 42 percent, and the number of high-ozone days has dropped by 71 percent statewide.
- 51 waterways, and 264 miles of rivers and streams, are considered “fully restored” and now meet designated water uses.
- Abandoned tire sites, which once numbered more than 1,300 statewide, have declined to less than 130.
- The state’s recycling rate has grown from 32 percent to 43.5 percent, saving energy and conserving landfill space.
- 30,000 leaky petroleum tank sites have been cleaned.
- 85 % of hazardous waste facilities now meet all human health standards.
- Transition of stormwater, erosion and sediment, Bay preservation and nonpoint source programs to DEQ
- More than 400 Virginia Environmental Excellence members, including manufacturers, military bases, agencies and universities- go above and beyond to lessen their waste production, water consumption and energy use in an effort to save money and resources.

DEQ embraces the concept of continuous improvement, and one of the tools DEQ uses for program evaluations is “Lean Six Sigma” (a proven cost and waste elimination method that has been used successfully in public and private organizations). In addition, DEQ 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.

50925: Land Protection Permitting

Description

The Department of Environmental Quality (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. Remediation plans address the cleanup of any known or future releases. Waste permits are required for transportation, treatment, storage, disposal, and incineration of hazardous and solid waste.

Mission Alignment and Authority

The Department of Environmental Quality (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.

Customers for this Service Area

Anticipated Changes to Customers Base

Anticipated changes in the hazardous waste customer base include an addition of 158 facilities, due to these facilities fluctuating their services among large and small quantity generators. The number of solid waste facilities is expected to increase as potential sites are identified and addressed.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Environmental Pollution and Control	Hazardous waste facilities	400	30,000	Increase
Environmental Pollution and Control	Solid waste facilities	355	5,000	Increase

Partners for this Service Area

Partner	Description
Environmental Protection Agency (EPA)	The Environmental Protection Agency (EPA) is a partner with DEQ at hazardous waste facilities in issuing permits and determining remediation goals. DEQ is in the lead at permitted facilities. EPA is in the lead at non-permitted facilities that need corrective action. DEQ also provides project management and technical support at non-permitted facilities in a work-share agreement with EPA.

Products and Services

Factors Impacting the Products and/or Services

Economic fluctuations will affect the volume of permits.

Anticipated Changes to the Products and/or Services

At some point the economy will rebound and the workload will increase.

Listing of Products and / or Services

DEQ provides a service via the review and approval of the permit applications, environmental monitoring data, and corrective action plans developed to cleanup waste releases.

DEQ's product is the waste 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, and DEQ facilitates the reuse of unused properties by making final corrective action decisions.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	615,941	3,088,576	615,941	3,088,576
Changes to Base	0	0	0	0
Total	615,941	3,088,576	615,941	3,088,576

Objectives for this Service Area

Objective

Timely processing of accurate, effective, and defensible permits that are environmentally protective.

Description

Issue permits within the timeframe established by the Department of Environmental Quality's procedures manual.

Objective Strategies

- Ensure timely corrective action at hazardous waste facilities to control risk to human health and the environment, and to restore environmental media to maximum beneficial use.
- Amend permits with closure plans, using the Old Unlined Landfill Closure spreadsheet.
- Ensure timely groundwater corrective action at solid waste facilities.

Alignment to Agency Goals

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

Measures

- Number of old, unlined permitted sanitary landfills closed

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The cumulative number of facilities listed on the Department of Environmental Quality's (DEQ's) Old Unlined Sanitary Landfill database as compared to the baseline value (FY 2005). Due to a regulation change in 1988, new landfills were required to be lined so the maximum number of unlined closed landfills will max out at 25.

- Number of hazardous waste sites where human exposures to hazardous waste releases are determined to be under control

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The Department of Environmental Quality (DEQ) oversees clean-up activities at hazardous waste management facilities under a partnership agreement with the Environmental Protection Agency (EPA). The program goals include controlling human exposures to contaminant releases at 115 facilities by 2020. Both DEQ and EPA report program accomplishments in the EPA data base Resource Conservation and Recovery Act Information (RCRAInfo). The reported number is the cumulative total of sites as reported in RCRAInfo for each Federal Fiscal Year (FFY).

- Number of hazardous waste sites where remedies to address hazardous waste releases have been constructed or were not necessary

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The Department of Environmental Quality (DEQ) oversees clean-up activities at hazardous waste management facilities under a partnership agreement with the Environmental Protection Agency (EPA). The program goals include construction of remedies where necessary to remediate contamination at 115 facilities by 2020. Both DEQ and EPA report program accomplishments in the EPA data base Resource Conservation and Recovery Act Information (RCRAInfo). The reported number is the cumulative total of sites as reported in RCRAInfo for each Federal Fiscal Year (FFY).

- Number of solid waste sites with Groundwater Protection Standard (GPS) exceedance(s) where a Corrective Action Plan or alternative plan has been approved.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The Department of Environmental Quality (DEQ) oversees groundwater monitoring and clean-up activities at solid waste disposal facilities across Virginia. The program goals include implementation of corrective action plans or alternative plans to address, and remediate where necessary, exceedances of Groundwater Protection Standards. As of March 2011, 56 facilities needed corrective plans or alternative plans. The reported number is the cumulative total of solid waste sites as reported in DEQ's Ground Water (GW) Database where a corrective plan or alternative plan has been approved for implementation.

50926: Land Protection Compliance and Enforcement

Description

The Department of Environmental Quality (DEQ) works with the Environmental Protection Agency (EPA) and facilities to manage waste effectively and to cleanup waste releases. 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.

Traditionally, enforcement efforts have supported the permitting programs by ensuring that permit conditions are followed and that permitted facilities can compete on an equal basis with other entities in the marketplace. Enforcement has also sought to eliminate unpermitted activities either by terminating those activities or requiring them to obtain a permit, remediating any environmental damage that may have been done, and deterring future violations by eliminating the economic benefits of noncompliance.

Enforcement activities have generally been undertaken for all waste permit programs, including hazardous, solid and regulated medical wastes; open dumps; and other, unpermitted, waste disposal activities.

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

The Pollution Investigation and Response activity is responsible for ensuring that the agency appropriately assesses and responds to all pollution reports it receives, and for conducting DEQ planning and coordination necessary to ensure that the agency meets its responsibilities in the event of an environmental emergency. The Virginia Environmental Emergency Response Fund is utilized for investigation and response to nonpetroleum contamination when the responsible party is unknown or unwilling.

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. Underground and aboveground petroleum storage tanks are required by law and regulation to meet operational and construction requirements for the early detection and prevention of leaks. DEQ accepts and maintains registration records of approximately 38,000 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. The cleanup activity requires remediation of the many sites in Virginia that are contaminated by petroleum products each year (approximately 1,500/year). As part of site corrective action, clean water is provided to individuals with petroleum contaminated water supplies. DEQ determines the Responsible Party (RP) and ensures that the RP performs proper site remediation. DEQ provides guidance on the extent of site characterization to be done, reviews characterization reports, requires cleanup activity appropriate to the environmental and health risks posed by the contamination and monitors cleanup progress. Where the RP of a petroleum release cannot be determined or is unable to correct the problem, DEQ conducts state-led investigations and cleanups. 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 for conducting DEQ planning and coordination necessary to ensure that the agency meets its responsibilities in the event of an environmental emergency (primarily oil spill emergencies). This service area also provides the budgeting, tracking and other administrative functions required for the day-to-day operation of the Virginia Underground Storage Tank (UST) Fund itself.

Mission Alignment and Authority

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

Customers for this Service Area

Anticipated Changes to Customers Base

Hazardous waste facilities are expected to increase due to facilities fluctuating between serving large and small quantity generators. The number of solid waste facilities is expected to increase, as potential sites are identified and addressed. The number of Brownfields and Voluntary Remediation Program facilities is expected to increase as the programs grow. The numbers of Federal Facilities and Superfund sites are expected to decrease, as sites are remediated.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Environmental Pollution and Control	Brownfields Redevelopment Program	40	5,000	Increase
Federal Agency	Federal Facilities Restoration Program	42	42	Stable
Environmental Pollution and Control	Hazardous Waste Facilities	400	30,000	Increase
Environmental Pollution and Control	Solid Waste Facilities	355	5,000	Increase
Environmental Pollution and Control	Superfund Program	19	19	Decrease
Environmental Pollution and Control	Voluntary Remediation Program	248	5,000	Increase
Environmental Pollution and Control	Regulated Tank Owners	8,000	8,000	Stable

Partners for this Service Area

Partner	Description
Environmental Protection Agency (EPA) and Department of Defense (DOD)	The Environmental Protection Agency (EPA) and the Department of Defense (DOD) are partners with DEQ in waste remediation programs, through a formal process called Partnering, where teams decide the best remediation approach at a site. DOD is in the lead at Federal Facilities Restoration sites. EPA is in the lead at Superfund sites. DEQ is in the lead at Voluntary Remediation sites and Brownfield Redevelopment sites.

Products and Services

Factors Impacting the Products and/or Services

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.

Anticipated Changes to the Products and/or Services

We expect an increase in permits and a corresponding increase in violations.

Listing of Products and / or 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.

Beginning in FY13, this service area will administer the cost of reimbursing the cleanup of underground storage tanks. Leaking tanks could pose serious risk to the drinking water surrounding the them. This function was originally part of service area 51226.

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.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	1,133,656	5,810,524	1,133,656	5,810,524
Changes to Base	0	0	0	0
Total	1,133,656	5,810,524	1,133,656	5,810,524

Objectives for this Service Area

Objectives for this Service Area

Objective

Achieve certain, consistent, timely compliance and enforcement.

Description

In a timely manner, conduct appropriate enforcement actions in response to comply with federal and state regulatory requirements regarding waste management.

Objective Strategies

- DEQ facilitates the cleanup of contaminated property.
- Link solid and hazardous waste compliance program to risk based strategy focusing on the facilities which pose the greatest threat to human health and the environment. Small handlers of hazardous waste (known as Small Quantity Generators (SQG)) constitute an elevated level of risk to human health and the environment due to their potential lack of resources to adequately understand and ensure compliance

Alignment to Agency Goals

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

Measures

- Cumulative acres of land certified complete through the Voluntary Remediation Program

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The totals are obtained from the Voluntary Remediation Program database and compared to the baseline (calendar year 2004).

- Annual Number of full compliance evaluation inspections of Small Quantity Generators

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Data related to the number of inspections is obtained from the US Environmental Protection Agency (EPA) federal database known as RCRAInfo (Resource Conservation and Recovery Act Information System).

- Number of open petroleum cleanup cases

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The agency's Comprehensive Environmental Database System (CEDS) database is used to determine the number of open petroleum cases at year end. This figure is compared to the baseline levels measured during calendar year 2008 to produce the result for this measure.

50927: Land Protection Outreach

Description

DEQ's primary outreach programs include: Public Information and Outreach, Public Affairs, Litter Prevention and Recycling, Pollution Prevention, and Coastal Zone Management.

Mission Alignment and Authority

Information and outreach programs help people understand the way the natural world works and how people influence and are influenced by their environment. Programs work to help people, individually and collectively, make responsible and informed decisions about their own behaviors and act voluntarily to conserve or protect natural resources.

Customers for this Service Area

Anticipated Changes to Customers Base

No material changes anticipated.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Organization	Community Organizations	500	9,000	Stable
Local or Regional Government Authorities	Localities	324	324	Stable

Partners for this Service Area

Partner	Description
<i>No partners currently entered in plan</i>	

Products and Services

Factors Impacting the Products and/or Services

No changes anticipated during this biennium.

Anticipated Changes to the Products and/or Services

In July the Virginia Naturally program (Office of Environmental Education) was transferred to the Department of Conservation and Recreation resulting in decreased staff conducting outreach and training in litter prevention, waste management, pollution prevention and services to support teachers, local governments, and community organizations .

Listing of Products and / or Services

Services: 1. Information to citizens, the media and other organizations through correspondence, media releases, the agency web-site 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. Educational products: fact sheets, brochures, website, and exhibits. 2. Research products: reports, data, maps, interactive mapping sites and other online resources, management tools.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	197,461	2,021,705	197,461	2,021,705
Changes to Base	67,227	-1,609,746	67,499	-1,607,522
Total	264,688	411,959	264,960	414,183

Objectives for this Service Area

Objectives for this Service Area

Objective

Improved environmental results through a more informed and engaged public

Description

These outreach activities provide for a better informed public that will improve environmental protection decisions and promote cleaner water, improved air quality, and protection of our land resources.

Objective Strategies

- Provide outreach efforts and support to community organizations, regional open houses, and partnerships with environmental education organizations.

Alignment to Agency Goals

- Foster an informed and engaged community

50928: Land Protection Planning and Policy

Description

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 staff. These groups work in concert to improve the understanding of waste management and land resource conditions, provide information to the public and to decision-makers, 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.

The Virginia Coastal Management Program receives annual funding from 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. 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. 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 Program.

Reports from the regulated community under the Emergency Planning and Community Right-to-Know Act are received and managed for: (1) emergency releases of chemicals reportings (Section 304); (2) Material Safety Data Sheets (MSDSs) of lists of MSDS chemicals (Section 311); (3) Emergency and Hazardous chemical reporting - Tier I/Tier/II (Section 312); (4) and the Toxic Release Inventory (TRI) reportings (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. Support is provided to the Virginia Emergency Response Council (VERC); to conduct TRI data QA/QC and make data quality check against Environmental Protection Agency TRI data; to compile and publish annual Virginia TRI Summary Report by March of each year.

Mission Alignment and Authority

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.

Customers for this Service Area

Anticipated Changes to Customers Base

Individual citizens, businesses, industries, and local governments benefit from safe waste management practices and the resulting improvement to their health, welfare, and quality of life. As the population increases additional stress will be placed on the waste management capacity. As these demands increase, it will be increasingly important to move towards implementation of the waste management hierarchy, in this order: avoiding the generation of waste (or source reduction), reuse, recycling, resource recovery (waste-to-energy), incineration, and land filling, and ensure the proper management and oversight of waste disposal practices and facilities.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Environmental Pollution and Control	Hazardous waste facilities (regulated)	400	30,000	Stable
Environmental Pollution and Control	Solid waste facilities (regulated)	355	5,000	Stable

Partners for this Service Area

Partner	Description
National/Local Environmental Groups	Groups specifically interested in promoting safe and proper waste management
Other Citizen Interest Groups	Other groups with general or particular interests in the waste management process.
Regional Solid Waste Management Planning Units	Local Governments that work together to meet waste management goals and responsibilities.
U.S. EPA	Federal agency responsible, in partnership with the states, for the implementation of the federal waste management statutes.

Products and Services

Factors Impacting the Products and/or Services

Changes in funding.

Anticipated Changes to the Products and/or Services

Reduced federal funding.

Listing of Products and / or Services

Policy – Develops overall agency waste management policies by working with agency stakeholders and with executive and legislative branch officials. This work results in legislative and programmatic initiatives to promote waste management goals.

Planning – Develops waste management program planning documents and information and reviews local solid waste management plans.

Regulatory Development – Develops regulations needed to implement and enforce waste management policies and plans.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	307,591	22,323	307,591	22,323
Changes to Base	-88,093	176	-88,473	176
Total	219,498	22,499	219,118	22,499

Objectives for this Service Area

Objectives for this Service Area

Objective

Provide proactive policy, comprehensive planning, and effective program development

Description

Increase solid waste recycling rates.

Objective Strategies

- Increase solid waste recycling with better planning.
- Work with planning units to improve solid waste management plans and increase their recycling rates.

Alignment to Agency Goals

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

Measures

- Percentage of regional and local solid waste management planning units meeting the recycling rate mandate.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The Recycling Rate Reports obtained from localities are used to determine the percentage of the 71 local solid waste planning units established in accordance with Section 10.1-1411 of the Virginia Waste Management Act, which achieve the recommended recycling rate. . Changes to the Statute during the 2012 Session reduced the reporting frequency for planning units of a population of 100,000 or less to once every four years.

51225: Water Protection Permitting

Description

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 or surface water withdrawals; and Ground Water Withdrawal (GWW) permits for significant withdrawals from ground water in designated ground water management areas.

VPDES program authority is delegated by the Environmental Protection Agency (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 non-domestic 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 fill and excavation in wetlands and streams and the withdrawal of surface water 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 GWW permit program implements Virginia law to designate groundwater management areas and to regulate the withdrawal of groundwater within these areas to assure that all existing lawful users can maintain their uses into the future. Withdrawals in excess of 300,000 gallons per month are required to apply for and receive a permit prior to initiation of withdrawal.

Mission Alignment and Authority

The VWP, VPDES, VPA and GWW 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.

Customers for this Service Area

Anticipated Changes to Customers Base

The number of municipal permittees is stable and will not change appreciably in the future. Industrial dischargers are more dynamic in nature and may fluctuate based on economic demands. In general major permittees have competent environmental staffs that keep their facilities in compliance with their permits. Smaller facilities do not have dedicated environmental personnel and as a result have more compliance issues.

Groundwater Withdrawal Permitting is expected to have an increase in customer base because of the proposed expansion of the Groundwater Management Area to include the Northern Neck and the Middle Peninsula. Approximately 50 known ground water users that withdraw groundwater above the regulatory threshold will need to be permitted. Historically 20-30% more users apply for historic use permits (than were previously known) once a new area is designated.

The permitting program for concentrated animal feeding operations (CAFO) is evolving. All CAFO are currently permitted through Virginia Pollution Abatement (VPA) general permits. Approximately 100 CAFOs may be required to convert to individual VPDES permits based upon new federal/state requirements.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Farm/Forest Owner	VPA General Permits for animal feeding operation facilities	1,025	1,025	Stable
Environmental Pollution and Control	Groundwater withdrawal permittees	358	448	Stable
Environmental Pollution and Control	Permits for land application of pollutants	180	180	Stable
Environmental Pollution and Control	Pretreatment program permittees	41	41	Stable
Environmental Pollution and Control	VPDES general permit holders	4,576	4,576	Stable
Environmental Pollution and Control	VPDES individual point source discharge permittees	985	985	Stable
Environmental Pollution and Control	VWP permit holders (general)	2,315	2,315	Stable
Environmental Pollution and Control	VWP permit holders (individual)	482	482	Stable

Partners for this Service Area

Partner	Description
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State and Federal Agencies	DEQ participates with other state and federal agencies in the regulatory program in a cooperative manner through the permitting program. DEQ partners with local, state, and federal agencies, industry, environmental groups and other stakeholders typically serving on many different work groups and technical advisory groups. DEQ has even partnered with others (i.e., universities and Non government organizations) on cooperative research and resource monitoring grants.
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Products and Services

Factors Impacting the Products and/or Services

With the expansion of the Ground Water Management area the number of permits and DEQ services associated with Ground Water Withdrawal Permits are expected to increase. Even during slow economic conditions permittees and DEQ services are expected to remain stable.

Anticipated Changes to the Products and/or Services

Other than Ground Water Withdraw Permits, no significant changes in the customer base are anticipated.

Listing of Products and / or 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 GWW staff provide responsive evaluation of impacts and benefits of permit applications and compensation proposals; 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 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.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	3,442,387	5,076,905	3,442,387	5,076,905
Changes to Base	0	0	0	0
Total	3,442,387	5,076,905	3,442,387	5,076,905

Objectives for this Service Area

Objectives for this Service Area

Objective

Provide proactive policy, comprehensive planning, and effective program development

Description

Objective Strategies

- Utilize audit and program assessment processes to facilitate efficient and effective practices.

Alignment to Agency Goals

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

Measures

- Percentage of Groundwater Technical Evaluations completed within the 60 day timeframe required by the procedures manual.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Data relating to technical evaluations will be obtained from the Groundwater (GW) Permit Tracking Database. This is a new measure that will use FY 2011 as the baseline. Percentage will be measured by comparison to baseline value.

Objective

Timely processing of accurate, effective and defensible permits that are environmentally protective

Description

By achieving this objective, the permitting program will ensure that the quality of state waters is maintained, improvements in deteriorating waters are achieved and that the water resources of the Commonwealth will be utilized in a manner that assures that existing instream and offstream beneficial uses will be protected in the future. Reducing water pollution and conserving aquatic resources will result in improved health for Virginians, and protection and improvement in the Commonwealth's water resources and the Chesapeake Bay.

Objective Strategies

- Ensure that our wetland permit program addresses state and national goals of no net loss of wetland acreage and function.
- Utilize audit and program assessment processes to facilitate efficient and effective practices.

Alignment to Agency Goals

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

Measures

- Percentage of Virginia Water Protection (VWP) permits issued within statutory time frames

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Statewide totals are obtained from permit information in the Comprehensive Environmental Data System (CEDS) database, then compared to the baseline (FY 2005).

- Number of acres representing the net change in non-tidal wetlands acreage.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The measure reflects the annual difference between permitted impacts vs. acres compensated through creation, restoration and enhancement, and the purchase of credits at mitigation banks (does not include In-Lieu Fee Funds or Preservation). Statewide totals are obtained from permit information entered into Comprehensive Environmental Data System (CEDS). The net loss in acres of existing wetlands through permitted activities is offset against the net resource gain in acreage or function and compared to the baseline (CY 2005). Net gain is shown as a positive number, and net loss is shown as a negative number. The Department of Environmental Quality (DEQ) has a statutory requirement for no net loss of wetland acreage from permitted impacts; hence, our mid and long term targets are 0.00 acres. While DEQ meets our no net loss requirement, we also strive to achieve a net gain in wetland acres.

However, there are several factors (eg. economic conditions of the construction sector and the willingness of private property owners to restore wetlands, etc.) that reduce DEQ's ability to predict gains. As seen in the prior year values, we have realized an overall net gain of wetland acres, but we are still unable to quantify specific net gain goals because of the uncontrollable factors mentioned above.

- Percentage of new Virginia Pollution Discharge Elimination System (VPDES) permits issued within 120 days of a completed application.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Statewide totals are obtained from permit information in the Comprehensive Environmental Data System (CEDS) database, then compared to the baseline (FY 2010).

51226: Water Protection Compliance and Enforcement

Description

The purpose of this service area is to ensure that facilities regulated by the Department of Environmental Quality (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. While minor corrective actions are informal, sometimes compliance activities result in formal enforcement actions to ensure that corrective actions are taken and remediation occurs.

Inspections of Virginia Pollution Discharge Elimination System (VPDES) permitted facilities will assure permit compliance and improve and protect water quality of Virginia's surface waters. DEQ conducts onsite inspections of facilities having Virginia Pollution Discharge Elimination System (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 inspects the approximately 1,033 individual VPDES permit facilities and approximately 4,307 general VPDES permit facilities for compliance with their self monitoring requirements. DEQ also validates VPDES self-monitored data, with the goal of protecting high quality waters and returning impacted waters to safely fishable and swimmable conditions.

Mission Alignment and Authority

This service area protects and enhances Virginia's environment and promotes the health and well-being 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.

Customers for this Service Area

Anticipated Changes to Customers Base

The number of municipal permittees is stable and will not change appreciably in the future. Industrial dischargers are much more dynamic in nature and will fluctuate based on economic demands. In general, industrial and municipal majors have large competent environmental staffs that keep their facilities in compliance with their VPDES permits. Smaller facilities do not have dedicated environmental personnel and as a result have more compliance issues. Evaluations of small unpermitted Animal Feeding Operation (AFOs) will occur annually from 2012-2014 as part of the implementation of the Environmental Protection Agency (EPA) Concentrated Animal Feeding Operation (CAFO) rule.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Agriculture and Food	Animal feeding operations	1,035	1,035	Stable
Agriculture and Food	Small unpermitted animal feeding operations	0	250	Stable
Environmental Pollution and Control	Commercial laboratories	100	100	Stable
Environmental Pollution and Control	Consultants	150	150	Stable
Environmental Pollution and Control	General VPDES permittees	3,500	3,500	Stable
Environmental Pollution and Control	Individual VPDES permittees	1,125	1,125	Stable

Partners for this Service Area

Partner	Description
Federal Agencies	Environmental Protection Agency, Army Corp of Engineers.
Other state agencies	Department of Conservation and Recreation, Department of Consolidated Laboratory Services and the Department of Health

Products and Services

Factors Impacting the Products and/or Services

The number of permittees and economic fluctuations.

Anticipated Changes to the Products and/or Services

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

Listing of Products and / or Services

Inspections and review of facilities, operations, and data.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF

Base	2,746,183	16,416,700	2,746,183	16,416,700
Changes to Base	727,064	-10,519,136	730,024	-10,519,136
Total	3,473,247	5,897,564	3,476,207	5,897,564

Objectives for this Service Area

Objectives for this Service Area

Objective

Achieve certain, consistent, and timely enforcement

Description

Objective Strategies

- Improve compliance with permits through outreach and compliance assistance inspections.

Alignment to Agency Goals

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

Measures

- Percentage of Virginia Pollutant Discharge Elimination System (VPDES) facilities in compliance with water permit requirements

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Using criteria set out by the Environmental Protection Agency (EPA) and the Department of Environmental Quality's (DEQ's) Comprehensive Environmental Data System (CEDS) database, calculate the number of facilities in significant noncompliance (SNC) during the fiscal year, and compare that to the universe of major facilities. Baseline year is Federal Fiscal Year (FFY) 2005.

51227: Water Protection Outreach

Description

The water protection outreach service area involves providing information, training, technical assistance, and support to citizens, community groups, local governments, regulated facilities, and teachers about water resources protection and environmental protection programs in the Commonwealth. The Department of Environmental Quality (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 assure compliance with environmental statutes and regulations.

DEQ's primary water protection outreach programs include: Public Information and Outreach, Public Affairs, Wastewater Treatment Plant Operator Assistance, Wastewater Treatment Plant Construction Assistance, Citizen Monitoring, Pollution Prevention, Environmental Impact Review, and Coastal Zone Management.

The Public Information and Outreach Program provides training using standards-based Project WET materials to community educators about water quality and quantity. The Office of Training 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 Bay Act and federal Clean Water Act.

Mission Alignment and Authority

This service area directly aligns with DEQ's mission by providing the assistance needed by communities and other organizations for meeting water quality requirements. Training and outreach programs help people understand state and federal laws and regulations and how people, individually and collectively, can make responsible and informed decisions about their own behaviors and can act voluntarily to conserve or protect natural resources. 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.

Customers for this Service Area

Anticipated Changes to Customers Base

No change to the customer base is anticipated.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Agriculture and Food	Agricultural Producers	200	200	Stable
Non-Profit Agency (Boards/Foundation),	Non-Profit Organizations	3	100	Stable
Local or Regional Government Authorities	Local Governments	150	300	Stable
Student	Students	1,000	1,100,000	Stable
Local or Regional Government Authorities	Communities	500	9,000	Increase
Local or Regional Government Authorities	Wastewater Operators	700	6,000	Stable

Partners for this Service Area

Partner	Description
Federal Agencies	Environmental Protection Agency, Army Corp of Engineers, National Oceanic and Atmospheric Administration
State Agencies	Departments of Agriculture, Conservation and Recreation, Education, Health, Game and Inland Fisheries, and the Virginia Marine Resources Commission.

Products and Services

Factors Impacting the Products and/or Services

In July 2012 the Virginia Naturally program (Office of Environmental Education) was transferred to the Department of Conservation and Recreation resulting in decreased staff and services supporting outreach. In July 2013 Virginia's stormwater programs, including erosion and sediment control, will move from the Department of Conservation and Recreation to DEQ. New state and federal regulatory deadlines, especially on local governments, to meet nutrient and sediment reductions will spur additional demand for services.

Anticipated Changes to the Products and/or Services

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

Listing of Products and / or Services

Services: 1. Information to citizens, the media and other organizations through correspondence, media releases, the agency website and other venues. 2. Technical assistance to waste water treatment plants, local governments, citizen monitors, agencies, grantees and other customers (e.g. coordinating meetings, providing information, conducting conferences, initiating new programs. 3. Financial Assistance to grantees (e.g. Water Quality Improvement Fund) 4. Training and workshops to support waste

water treatment plants, citizen water monitors, local governments and community organizations.

Products: 1. Educational products: training programs, fact sheets, brochures, website, exhibits, curriculum. 2. Research products, reports, data, maps, interactive mapping sites and other online resources, management tools.

Training: Transfer certification programs from DCR to DEQ (number is unknown at this time).

Outreach and Education:

Sponsor training for 500 science and community educators annually to incorporate water and environmental stewardship into local watershed restoration (TMDL) implementation plans.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	509,659	4,157,701	509,659	4,157,701
Changes to Base	0	0	0	0
Total	509,659	4,157,701	509,659	4,157,701

Objectives for this Service Area

Objectives for this Service Area

Objective

Improved environmental results through a more informed and engaged public.

Description

Develop and provide programs to disseminate educational training materials and information related to reducing the amount of pollution in Virginia's watersheds.

Objective Strategies

- Administer training and certification programs related to stormwater and erosion and sediment control regulations.
- Assist wastewater treatment facilities with the development and implementation of interim optimization plans for existing treatment systems. These plans will evaluate systems modifications to achieve optimum nutrient reductions and/or to address nutrient related compliance problems.
- Conduct training institutes for community educators and science teachers and train 500 educators annually in Water Education for Teachers.
- Increase access and availability to information about agency activities.

Alignment to Agency Goals

- Foster an informed and engaged community

Measures

- Number of Virginia educators attending environmental education / professional development training programs related to water.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The Department of Environmental Quality (DEQ) Office of Public Information and Outreach data is used to determine progress and then compared to the baseline (calendar year 2005). Num

- Number of waste water operator training hours provided coordinated by DEQ

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The Department of Environmental Quality's (DEQ's) Wastewater Treatment Plant Operator Training Program (OTP) conducts a series of courses throughout the Commonwealth that train operators of all levels and ensure they have access to courses with Department of Professional and Occupational Regulation (DPOR) approved curriculum to earn the required contact hours. DEQ's OTP also coordinates with Virginia Polytechnic Institute (Virginia Tech) in conducting the Wastewater Treatment Plant Operators Short School annually in Blacksburg, VA. The Short School is probably the highest attended single training event in the wastewater treatment field. The measure is the number of training courses conducted by DEQ's training program annually (Fall/Winter & Spring/Summer); the result will be the number of licensed operators in attendance multiplied by the number of hours spent in each course attended.

51228: Water Protection Planning and Policy

Description

State and federal requirements for water quality and water resource 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 drinking 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 across the Commonwealth;

- Identify areas where water quality needs improvement or water resources are stressed;
- Develop and implement strategies to reduce pollution 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
- Evaluate progress and ensure that the resulting water quality and water resources improvements remain in the future.

This is accomplished through the coordinated efforts of DEQ water supply planning, ground water management, water quality planning, groundwater characterization and water quality research, regulatory development, and policy and program development staff. These groups work in concert to improve the understanding of ground water resources 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.

Groundwater Characterization efforts include the publication of the Sediment Distribution and Hydrologic Conditions of the Potomac Aquifer, initiation of the study of the Hydrologic Characteristics of the Piney Point Aquifer for Water Supply Development in the Virginia Coastal Plain, optimization of the saltwater intrusion monitoring network, and start-up of a state-wide ambient groundwater monitoring program. The ambient groundwater monitoring program will be a vital component in the implementation of the state groundwater quality standards.

All local and regional water supply plans have been submitted and are under review. The information will serve as the basis for the first analysis of statewide water availability and problem areas known as the State Water Resources Plan.

Water quality research initiatives include the water quality standards program and biological risk assessment activities. 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 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,

The biological risk assessment program involves three statewide monitoring programs (macroinvertebrate biomonitoring, fish tissue and sediment risk assessment, and lake monitoring) and the James River Kepone fish tissue monitoring program. Information from the biological monitoring activities along with water chemistry information is used to assess whether current surface water quality is sufficient to support designated uses specified in the water quality standards regulations for that water body. The results of these collections are summarized in the state water quality assessment report to Congress required under the federal Clean Water Act. This information is also used by the agency's regional staff to establish water quality limited segments and assessment needs. The Virginia Health Department also uses the Kepone and statewide tissue monitoring information in establishing fishing health advisories and bans. Furthermore, the information collected from lake monitoring is used to establish a priority ranking list of publicly owned lakes eligible for restoration grant funds under the federal Clean Water Act. The information also serves as a basis for regulation designation of nutrient enriched waters to control phosphorus in the permitted effluents.

Water Quality Planning consists of four components, as described by Section 303 of the Clean Water Act:

1. The 303(e) Continuing Planning Process;
2. The 303(d) Total Maximum Daily Load (TMDL) Priority List;
3. The development of TMDL regulations; and
4. The 303(e) Water Quality Management Plans.

The 303(e) Continuing Planning Process describes all of Virginia's water quality programs involved with attaining and maintaining the water quality of the waters of the Commonwealth.

The 303(d) TMDL Priority List identifies and describes the waters in the state which need watershed clean up planning, such as TMDLs or permit-based solutions. These are waters which violate Virginia's water quality standards and waters that receive effluent from treatment facilities which are scheduled to install advanced treatment to maintain water quality.

Virginia is required to develop watershed clean up plans, such as TMDLs, for all waters listed on the biennial 303(d) TMDL Priority List. The TMDLs have an extensive public participation process and area adopted by the State Water Control Board as regulations.

The 303(e) Water Quality Management Plans are the repository of the TMDLs and the TMDL implementation plans for attaining and maintaining water quality standards.

Additionally, the agency 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. These interstate compacts enhance cooperative planning for the resource management of their respective watersheds.

The Environmental Impact Review Program coordinates the Commonwealths' review of Environmental Impact Reports for major state or federal projects, construction or expansion of public airports or runways, oil or gas drilling in Tidewater, the exploration for and extraction of minerals on state-owned lands, and other federally required environmental reviews.

The Virginia Coastal Program receives annual funding from the National Oceanic and Atmospheric Administration to implement and improve its 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 and all coastal waters out to the 3 mile territorial sea boundary. DEQ serves as the lead agency for this networked program of state agencies and local governments.

Mission Alignment and Authority

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.

Customers for this Service Area

Anticipated Changes to Customers Base

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Industries and Businesses - Cooperative water supply planning	25	25	Stable
Local or Regional Government Authorities	Local Governments	65	134	Stable

Partners for this Service Area

Partner	Description
Local governments	Cities and towns of Virginia
Other Virginia state agencies	Department of Conservation and Recreation, Department of Game and Inland Fisheries, Department of Health, Department of Agriculture and Consumer Services
Business and Industry	Stakeholder groups and environmental advocacy organizations
Federal agencies	U.S. Army Corps of Engineers, U.S. Environmental Protection Agency

Products and Services

Factors Impacting the Products and/or Services

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

Support from and cooperation with local governments and citizen groups.

Anticipated Changes to the Products and/or Services

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

Listing of Products and / or 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 Total Maximum Daily Loads (TMDLs), develops statewide water resources plans, and assists localities in developing and implementing local and regional water supply plans.

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

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	2,814,975	2,031,952	2,814,975	2,031,952
Changes to Base	-103,919	-722,691	-103,791	-722,479

Total	2,711,056	1,309,261	2,711,184	1,309,473
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Objectives for this Service Area

Objectives for this Service Area

Objective

Provide proactive policy, comprehensive planning, and effective program development

Description

Develop and implement water quality improvement and water resources protection programs for the Commonwealth.

Objective Strategies

- Establish a state water resources plan with criteria for local/regional planning.
- Implement water quality planning strategies.

Alignment to Agency Goals

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

Measures

- Number of waters fully or partially removed from the Environmental Protection Agency's (EPA) Impaired Waters List.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The Department of Environmental Quality (DEQ) provides the Environmental Protection Agency (EPA) with periodic summaries of Total Maximum Daily Load (TMDL) development progress. Implementation of TMDL plans has begun to increase. Water quality monitoring data is used to assess compliance with Water Quality Standards and compared to the baseline, measured on 6/30/2005. Note: The 2002 Virginia Impaired Waters List (the List) contained 1,430 waters. Despite the removal of 262 waters from the List by FY 2005, the overall number of impaired waters increased to 1,712 by FY 2006. Some of the waters that remain on the 2002 List will not have TMDLs completed until after 2014. The schedule originally set by DEQ and agreed upon by EPA for fully or partially removing waters from the List is as follows: by FY 2014 (total 1,175); and by FY2020 (total 1,289). These data are based on the expectation that waters will be at least partially restored to meeting water quality standards within 10 years of completing a TMDL. The Chesapeake Bay and Virginia Waters Clean-Up Plan (most recent update January 2012), developed pursuant to HB 1150 (2006) recognizes both fully and partially restored waters. Virginia is meeting this original schedule to a great extent, however, Virginia's current TMDL goal, developed with the approval by the EPA, has been to implement the watershed approach for TMDL development and finalize 50 TMDLs per year. This allows for better use of resources and more comprehensive TMDLs, but is not consistent with the goal where specific small stream segments are targeted. (States have been asking EPA for the last few years, to update the baseline year of 2002 to a more current year. Once this is done DEQ shall have a new impaired waters number, or comparable metric, to measure delistings against).

- Percentage of registered water permitted withdrawals that reported monthly water use

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Data from the ground water database will be compared to values for the total number of reporting users versus the total number of registered reporting users. This is a new measure using CY 2010 as a base line.

51229: Water Protection Monitoring and Assessment

Description

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 aquatic uses. Chemical, benthic, and/or fish tissue data from surface waters are collected throughout Virginia at over 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 reductions requirements set forth by the Virginia Tributary Strategies to restore and protect the quality of the Chesapeake Bay and its tidal rivers are being met.

Surface water quantity data are used to process discharge permits, develop Total Maximum Daily Loads (TMDLs), evaluate water quality data, determine safe yields of water sources to support water supply planning activities, aide 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.

Groundwater data collected provides an indication 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 used to calibrate and verify the Coastal Plain Groundwater Model that is used to support the Groundwater Withdrawal Permitting Program.

Mission Alignment and Authority

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.

Customers for this Service Area

Anticipated Changes to Customers Base

None anticipated.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Professional consultants	25	40	Increase
Local or Regional Government Authorities	Local governments	300	300	Stable
Consumer	Citizens requesting copies of the 305(b) report	300	500	Increase

Partners for this Service Area

Partner	Description
National Weather Service	Provides data to U.S.Geological Survey for use in flood routing
Office of Emergency Services	Provides space and data at gauging stations for the IFLOWS emergency flood program
U.S. Army Corps of Engineers	Provides data
U.S. Environmental Protection Agency	Provides financial support and policy review
U.S. Geological Survey	Provides both water quality and water quantity data
Virginia Department of Game & Inland Fisheries, and Department of Forestry	APCO Electric Utility
Virginia Department of Health	Provides beach monitoring data and fish consumption advisories
Virginia Department of Conservation and Recreation	Provides water quality data and policy review related to 303(d)/305(b) Water Quality IR and support WQMIRA
Virginia Dept Conservation & Recreation	Provides water quality data and policy review related to 303(d)/305(b) Water Quality IR and support WQMIRA

Products and Services

Factors Impacting the Products and/or Services

N/A

Anticipated Changes to the Products and/or Services

None

Listing of Products and / or Services

Includes the routine monitoring of state waters, and collection and assessment of related data. Findings are published biennially (even-numbered years) in the 303(d)/305 (b) Water Quality Integrated Assessment Report, which is submitted to the U.S. EPA for review and approval.

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	6,786,869	561,359	6,786,869	561,359
Changes to Base	0	0	0	0
Total	6,786,869	561,359	6,786,869	561,359

Objectives for this Service Area

Objectives for this Service Area

Objective

Optimize monitoring and assessment

Description

To monitor and assess state waters and provide data to ensure they are suitable for all designated uses (aquatic life, fish consumption, shellfishing, recreation, public water supply, and wildlife).

Objective Strategies

- Finalize and implement water quality monitoring strategy

Alignment to Agency Goals

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

Measures

- Number of watersheds for which an assessment of surface water has been conducted

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The number of watersheds which have been assessed is determined using Federal Clean Water Act Section 305(b) Water Quality Assessment Reports ("WQ Integrated Assessment Report") and DEQ databases. The baseline data was collected during 2005, when 873 watersheds were assessed. Although preliminary analysis described 1,275 watersheds in Virginia, the final delineation of 1,247 watersheds better represents the number that are shared by Virginia and surrounding states. An assessment of surface water quality in each of the 1,247 watersheds in Virginia is required between years 2002 and 2020. Because 9 watersheds have been found to contain no perennial waters, the maximum number of watersheds for which an assessment can be made is 1,238. The assessment is done on a biennial basis (every other year).

51325: Air Protection Permitting

Description

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 the Commonwealth of 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. After construction, operating permits are issued to companies to guarantee they will continue to operate in compliance with all requirements to protect air quality and the health of Virginia citizens.

Mission Alignment and Authority

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.

Customers for this Service Area

Anticipated Changes to Customers Base

No major change in the number of sources is anticipated in the coming years.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Environmental Pollution and Control	Permittee facilities	1,848	1,848	Stable

Partners for this Service Area

Partner	Description
Federal Land Managers (FLMs)	The FLMs administer the nation's federal Class I areas (national parks, wilderness areas and memorial parks). The FLMs include the U.S. Department of Agriculture/Forest Service (USFS), the National Park Service (NPS) and the Fish and Wildlife Service (USFWS). The FLMs are charged under the Clean Air Act (§165) to protect and enhance the Air Quality Related Values (AQRVs) of the Class I areas from the adverse effects of air pollution. The FLMs comment and participate in the permitting process of any air permit that may adversely affect a Class I area in Virginia. The Shenandoah National Park and the James River Wilderness Face are both Class I areas.
Mid-Atlantic Regional Air Management Association (MARAMA)	MARAMA provides training on an ongoing basis to improve permit writers knowledge of regulations and topics that are incorporated into air permits, ultimately improving the quality and accuracy of air permits. The members of MARAMA include Virginia, Maryland, DC, Pennsylvania, West Virginia, Delaware, New Jersey and North Carolina.
National/Local Environmental Groups	Groups specifically interested in assuring permits are protective of the environment.
Other States' Agencies	Permit information is shared among state agencies, especially states that border Virginia (North Carolina, Maryland, West Virginia, Tennessee, Kentucky, D.C.) to assure a permit in a surrounding state will not adversely affect Virginia.
Other Virginia agencies (such as Virginia Department of Health)	VDH assists in assuring levels of toxic pollutants are set to ensure public health is protected.
State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials	Provides an opportunity to interact with officials from air permit programs across the country through monthly conference calls and workshops. Provides a forum for interaction with EPA Office of Air Quality Programs and Standards (OAQPS).
Trade Associations	Organizations such as the Virginia Manufacturers Association (VMA) work with permitting staff to ensure that the permits reflect an accurate picture of the air pollution controls available and the economic consequences of potential air permit conditions.
U.S. Environmental Protection Agency	Federal agency responsible for the implementation of the Clean Air Act and achieving air quality standards and goals.

Products and Services

Factors Impacting the Products and/or Services

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

Anticipated Changes to the Products and/or Services

Starting in FY 2013, most permits will have an associated fee. This fee applies to most air permit actions.

Listing of Products and / or 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 construction permits that allow a facility to be built employing the best available control technology and methods to minimize air pollution emissions. Develop and issue operating permits (Title V and State Operating Permits) that require a source to operate in compliance with all applicable requirements.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	251,073	5,249,610	251,073	5,249,610
Changes to Base	176,678	148,545	571,030	-244,631
Total	427,751	5,398,155	822,103	5,004,979

Objectives for this Service Area

Objectives for this Service Area

Objective

Timely processing of accurate, effective and defensible permits that are environmentally protective

Description

This objective is of critical importance to meeting the overall agency mission as well as the long and short term objectives and goals of enhancing Virginia's environment and the health and welfare of the citizens of the Commonwealth.

Objective Strategies

- Utilize audit and program assessment processes to facilitate efficient and effective practices.

Alignment to Agency Goals

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

Measures

- Number of tons of emissions from major sources reduced through the emissions permitting process.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Using information submitted by facilities in their permit applications as well as agency engineering calculations, the difference between a new major (Title V) source's potential to emit (24 hrs/day, 7 days/week, 52 weeks/year or 8,760 hours) and the permitted limit (allowable emissions). This number will be divided by the potential to emit, and compared to the baseline year (FY 2005).

51326: Air Protection Compliance and Enforcement

Description

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.

When discrepancies are discovered, staff utilizes agency policies to pursue a timely and appropriate enforcement response. This enforcement response enables the Department of Environmental Quality (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 vehicle Inspection and Maintenance (I&M) program reduces ozone-forming pollutants, by requiring tail-pipe emissions testing on all vehicles. Vehicles that fail to pass an emissions test are required to be repaired, then re-tested.

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

Mission Alignment and Authority

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.

Customers for this Service Area

Anticipated Changes to Customers Base

The number of areas and citizens impacted by poor air quality has increased due to the recent adoption of more stringent federal standards. As a result, additional inspections at source facilities will be required.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Environmental Pollution and Control	Facilities subject to stationary source air inspection	1,350	4,663	Increase
Vehicle Owner	Vehicle owners subject to emissions inspections	745,466	1,750,000	Increase

Partners for this Service Area

Partner	Description
U.S. Environmental Protection Agency	Federal agency responsible for the implementation of the Clean Air Act and achieving air quality standards and goals.

Products and Services

Factors Impacting the Products and/or Services

Changes to The Environmental Protection Agency's regulations.

Anticipated Changes to the Products and/or Services

None anticipated.

Listing of Products and / or Services

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.

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's vehicle Inspection and Maintenance (I&M) program reduces ozone forming pollutants, by requiring tail-pipe emissions testing on all vehicles. Vehicles that fail to pass an emissions test are required to be repaired, and then re-tested.

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

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	337,532	6,062,133	337,532	6,062,133

Changes to Base	0	0	0	0
Total	337,532	6,062,133	337,532	6,062,133

Objectives for this Service Area

Objectives for this Service Area

Objective

Achieve certain, consistent, and timely enforcement

Description

Develop and implement all necessary plans, policies and related programs required to improve air quality in the Commonwealth and provide cleaner air for its citizens

Objective Strategies

- Implement the air compliance program consistent with US Environmental Protection Agency's (EPA's) National Compliance Monitoring Strategy and Virginia's Risk Based Inspection Strategy.
- Implement the mobile source Inspection and Monitoring (I&M) policy by performing vehicle inspections on half of all registered vehicles in Northern Virginia subject to the program.

Alignment to Agency Goals

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

Measures

- Percentage of eligible, registered vehicles in nonattainment areas that were inspected

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Data relating to the number of inspections is obtained from the agency's vehicle database and compared to the baseline year (CY 2004). Nonattainment areas are defined by the federal Clean Air Act as a locality where pollution levels persistently exceed National Ambient Air Quality Standards. Owners are required to have their vehicles inspected every other year. The measure is updated on the same schedule.

- Weighted inspections per inspector

Measure Class Preferred Trend Frequency

Data Source and Calculation

Virginia's Department of Environmental Quality (DEQ) employs a Risk Based Inspection Strategy (RBIS) to target facilities for inspection that may not typically be targeted based on standard recommended frequencies provided by The Environmental Protection Agency's (EPA) Compliance Monitoring Strategy (CMS). Based on the ongoing restrictions to resources, RBIS offers additional flexibility for inspection targeting, as well as an additional foundation (e.g., compliance history) for targeting beyond only a source's potential for air emissions. This focus on various source types and categories allows VA DEQ to maintain a sufficient field presence and a strong air compliance program, and at the same time reduce the number of inspections performed at sources that may not pose risk beyond what they may be permitted to emit. The goal of this measure is to factor in the emphasis ("weighting") on inspection targeting when calculating the efficiency, ultimately providing a value that compares the effort of air compliance staff (i.e., "Weighted Inspections") to the amount of air compliance resources (i.e., "Inspectors"). Improved efficiency can be indicated by an increase in this ratio (Weighted Inspections per Inspector).

51327: Air Protection Outreach

Description

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. The Department of Environmental Quality (DEQ) works with educational organizations, business and industry, local governments, schools, 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 assure compliance with environmental statutes and regulations.

DEQ's primary air protection outreach programs include Public Information and Outreach, Public Affairs, and Pollution Prevention. The Public Information and Outreach program provides information to citizens and the media, maintains the agency's website, responds to citizen inquiries and promotes community involvement. The Pollution Prevention Program provides non-regulatory, voluntary pollution prevention assessments, training, workshops, research and information. Implementation of Virginia's Environmental Excellence Program includes a mentoring program, and financial and regulatory incentives to participating facilities. DEQ's Environmental Impact Review Program coordinates the Commonwealth's review of Environmental Impact Reports for major state and federal projects, construction or expansion of public airports or runways, drilling for oil or gas in Tidewater, the exploration for and extraction of minerals on state-owned lands, and other federal intergovernmental reviews. The Environmental Impact Review Office also reviews new or expanded energy generation and transmission projects which require a certification from the State Corporation Commission.

Mission Alignment and Authority

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. Environmental Education and outreach programs help people understand the way the natural world works and how people influence and are influenced by their environment. It includes understanding how people, individually and collectively, can make responsible and informed decisions about their own behaviors and can act voluntarily to conserve or protect natural resources. 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.

Customers for this Service Area

Anticipated Changes to Customers Base

The customer base is constantly changing as Environmental Protection Agency (EPA) and Virginia promulgate additional air regulations.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Environmental Pollution and Control	Regulated facilities	313	4,663	Increase
Organization	Community Organizations	500	9,000	Increase
Employer/ Business Owner	Small Businesses	10,000	50,000	Stable

Partners for this Service Area

Partner	Description
Virginia Department of Business Assistance	The Department of Business Assistance administers the loan program of the Small Business Environmental Compliance Assistance Fund, through an interagency agreement, for the Department of Environmental Quality.

Products and Services

Factors Impacting the Products and/or Services

In July the Virginia Naturally program (Office of Environmental Education) was transferred to the Department of Conservation and Recreation resulting in decreased staff and services supporting outreach.

Anticipated Changes to the Products and/or Services

None anticipated during this biennium.

Listing of Products and / or Services

Services: 1. Information as requested to citizens, the media and other organizations through correspondence, media releases, the agency web-site 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.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	111,813	54,901	111,813	54,901
Changes to Base	917	15,768	917	15,832
Total	112,730	70,669	112,730	70,733

Objectives for this Service Area

Objectives for this Service Area

Objective

Improved environmental results through a more informed and engaged public

Description

Objective Strategies

- Enhance regulatory development and program activity.
- Targeted communications to stakeholders.

Alignment to Agency Goals

- Foster an informed and engaged community

Measures

- Number of facilities in good standing with Virginia Environmental Excellence Program requirements.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The number of facilities in good standing with Virginia Environmental Excellence Program (VEEP) is determined by reviewing the data in the agency's VEEP database and comparing it to the baseline, measured at the end of FY 2005. VEEP status is awarded by the department to facilities that demonstrate extraordinary environmental management systems that typically go beyond minimum compliance thresholds.

51328: Air Protection Planning and Policy

Description

The air protection planning and policy service area involves the development and implementation of the overall air quality improvement program for the Commonwealth of 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 the Department of Environmental Quality (DEQ) air policy, planning, data analysis, and regulatory development groups. 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.

DEQ's transportation and general conformity review program evaluates transportation plans and projects, and major non-transportation 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.

DEQ's Environmental Impact Review Program coordinates the Commonwealth's review of Environmental Impact Reports for major state and federal projects, construction or expansion of public airports or runways, drilling for oil or gas in Tidewater, the exploration for and extraction of minerals on state-owned lands, and other federal intergovernmental reviews.

Mission Alignment and Authority

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.

Customers for this Service Area

Anticipated Changes to Customers Base

The number of areas and citizens impacted by poor air quality has recently increased due to the recent adoption of more stringent federal standards.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Industries and businesses	542	542	Stable
Local or Regional Government Authorities	Local Jurisdictions/MPOs/LPOs	50	150	Increase

Partners for this Service Area

Partner	Description
Local Air Quality Planning Organizations (LPOs)	Local air quality planning groups specifically established and certified by the Governor to assist in the development of air quality plans.
National/Local Environmental Groups	Group specifically interested in promoting air quality improvement and impacting to formulation of air quality plans and policies on the state and national levels.
Other Citizen Interest Groups	Other groups with general or particular interests in the air quality planning process.
Other Local Planning Organizations (PDCs/MPOs)	Other organizations that have vested interests in benefits and impacts of the local air quality planning process on transportation and economic development interests.
Other State Agencies (VDOT)	VDOT in particular to coordinate the air quality and transportation planning processes.
Regional Air Quality Planning Organizations –	Planning and technical support organizations that represent multiple states to address air quality issues that are regional in nature.
U.S. Environmental Protection Agency (EPA)	Federal agency responsible, in partnership with the states, for the implementation of the Clean Air Act and achieving air quality standards and goals.
Washington Council of Governments	A local government group which promotes the implementation of the Clean Air Act and achieving air quality standards and goals.

Products and Services

Factors Impacting the Products and/or Services

Anticipated Changes to the Products and/or Services

Listing of Products and / or 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
- 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.
- Research, 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.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	1,203,659	995,638	1,203,659	995,638
Changes to Base	-422,113	563,032	-423,921	564,880
Total	781,546	1,558,670	779,738	1,560,518

Objectives for this Service Area

Objectives for this Service Area

Objective
 Develop and implement all necessary plans, policies, and related programs necessary to improve air quality in the Commonwealth and provide cleaner air for its citizens

Description

Objective Strategies

- Develop and implement all local and regional emission control measures to produce sufficient pollution reductions needed to bring all areas in Virginia into compliance with the standards and ensure future compliance with the standards, and to adequately address Virginia's contribution to pollution.
- Develop and implement all local and regional plans and measures needed to bring all areas in Virginia into compliance with the fine particulate standard.
- Develop and implement all local and regional plans and measures needed to bring all areas in Virginia into compliance with the ozone standard.

Alignment to Agency Goals

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

Measures

- The annual number of days when ozone levels are above the 2008 8-hour ozone standard of 75 parts per billion.

Measure Class **Agency Key** Measure Type **Outcome** Preferred Trend **Decrease** Frequency **Annually**

Data Source and Calculation

Ambient ozone concentrations are recorded continuously during the summer months by the agency's ozone monitoring network. To determine performance, the annual monitoring report and the ozone monitoring network data are used to determine the number of days when ozone levels are above the 8-hour ozone standard of 75 parts per billion, then compared to the baseline (measured during calendar year 2007). This is a change from previous reporting measure that was based on the old 1997 8-hour ozone standard of 84 parts per billion.

51329: Air Protection Monitoring and Assessment

Description

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 real time to indicate the levels of pollution for these pollutants. Data for ozone is reported during the months of April 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 and Authority

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.

Customers for this Service Area

Anticipated Changes to Customers Base

DEQ's efforts to address citizens' requests for more air monitoring stations and along with Environmental Protection Agency (EPA) requirements to monitor for more air pollutants is an on-going and evolving process to maintain a comprehensive statewide air monitoring network.

The need for network enhancement is also influenced as more health based information is released about the adverse effects of air pollution, especially sensitive population groups.

The customer base will change as the needs and concerns described above are addressed, and as people become more knowledgeable about air pollution and its effects.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Business & industry in Virginia	4,663	5,557	Increase

Partners for this Service Area

Partner	Description
The Environmental Protection Agency	Federal Agency
Contractor	Assists DEQ by supporting the data acquisition and web page display of the monitoring data.

Products and Services

Factors Impacting the Products and/or Services

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.

Anticipated Changes to the Products and/or Services

Several monitoring sites were shutdown during State FY 13. The particulate monitors in Culpeper and Front Royal collected data through the end of 2012 and were then shutdown and removed. The monitoring site at the Science Museum of Virginia was shutdown and removed to make room for the new Redskins Training facility. The Photochemical site in Caroline County will not be started up for the summer of 2013. Rather the monitors will be relocated to the monitoring site at the MathScience Center in Eastern Henrico County. The Alexandria site has been relocated causing the ozone monitor to be removed from the network. The monitoring site in Central City Roanoke was shutdown in March 2013 due to construction activity at the Round Hill School where it was located. The Lead monitor in Roanoke is scheduled to be relocated. DEQ is currently under contract to upgrade the communication infrastructure of all sites to better inform the public.

Listing of Products and / or 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 41 monitoring stations and some 123 air quality monitors across the Commonwealth including data collected in coordination with the City of Alexandria, the National Park Service, and the US Forestry Service.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	0	2,637,262	0	2,637,262
Changes to Base	0	0	0	0
Total	0	2,637,262	0	2,637,262

Objectives for this Service Area

Objectives for this Service Area

Objective
Optimize monitoring and assessment

Description

Improve air monitoring network and data assessment capability. The Department of Environmental Quality (DEQ) has plans to improve the air monitoring network as well as the data evaluation, assessment, and dissemination activities. These plans resulted from DEQ's review of the current monitoring network and data assessment functions to determine if the current ambient air quality data program meets the needs of our customers. Where such needs are not being met, required changes and network enhancements have been identified including the need for additional monitoring stations and updated instrumentation. The air monitoring network upgrades will be implemented in State FY 13 and State FY14.

Objective Strategies

- Gather, organize and verify all data collected at all air quality monitoring sites throughout the Commonwealth; validate all data and identify invalid data and flag this information in the national database; automate data collection and communication capabilities.

Alignment to Agency Goals

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

Measures

- Number of micrograms per cubic meter of particulate air matter measured

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Data for ozone and fine particles are collected continuously and analyzed to indicate the levels of pollution, to develop forecasts of future air quality levels and to issue health advisories when air quality is poor or unhealthy in a given area. The average fine particulate concentration is determined using the agency's Fine Particulate Matter (FPM) monitoring network. Data from the FPM monitoring network and the annual monitoring report done by the agency will be reviewed and compared to the baseline to the calculated results.

- Cost per air monitoring site

Measure Class Preferred Trend Frequency

Data Source and Calculation

The costs of air monitoring sites, including personnel, benefits, gasoline, telephone and software expenditures, were summed and then divided by the number of sites that Department of Environmental Quality (DEQ) currently maintains. The air quality monitoring network is currently undergoing an upgrade of the software and the communications system. Each continuous site will be outfitted with automatic valves that will enable operators to perform quality checks from their desks, decreasing the number of site visits to the stations, thereby decreasing costs. Currently there are 24 continuous monitoring stations that are maintained by DEQ all of which report data to the web page but none of which are outfitted with the automated equipment. As the agency progresses in the implementation of these operational efficiencies, it is expected that costs will decrease.

51502: Financial Assistance for Environmental Resources Management

Description

The agency provides grants to volunteer citizen water monitoring organizations and pass through funding to local governments via the Water Quality Management (WQM) fund. Grant funds are used to cover supplies, equipment, lab analysis, and some travel costs for participating organizations and governments. In return, data collected by grantees are submitted to the agency following agency approved quality assurance guidelines. The submitted data are used by the agency (if the grantee's Quality Assurance/Quality Control procedures meet DEQ's highest standards for validity and accuracy) to assess the quality of surface waters in water bodies including those not concurrently monitored by the agency. Grantee-generated data at lesser QA/QC levels is still used as an indicator of where problems may be starting or where more State attention is needed.

Mission Alignment and Authority

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 well-being 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.

Customers for this Service Area

Anticipated Changes to Customers Base

Greater use of citizen-collected chemical and biological water quality data.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Local or Regional Government Authorities	Local Governments (cities and towns)	1	5	Stable
State Agency(s),	State Government (volunteer monitors)	1	1	Stable
Higher Education Institutions	Colleges/Universities (volunteer monitors)	1	3	Stable
Non-Profit Agency (Boards/Foundation),	Non-profit Organizations	2	10	Increase
Organization	Citizen Monitoring Organizations/Groups	13	120	Increase

Partners for this Service Area

Partner	Description
None	

Products and Services

Factors Impacting the Products and/or Services

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.

Anticipated Changes to the Products and/or Services

No anticipated changes are seen at this time.

Listing of Products and / or 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.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	517,834	3,627,166	517,834	3,627,166
Changes to Base	0	0	0	0
Total	517,834	3,627,166	517,834	3,627,166

Objectives for this Service Area

Objectives for this Service Area

Objective

Support and enhance water quality monitoring by non-Department of Environmental Quality (DEQ) organizations

Description

To provide resources to volunteer citizen organizations to study surface water bodies not monitored by the Department of Environmental Quality.

Objective Strategies

- Provide a stable and reliable financial support via a grant application system to support citizen volunteer monitoring in Virginia.

Alignment to Agency Goals

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

Measures

- Number of waters fully or partially removed from the Environmental Protection Agency's (EPA) Impaired Waters List.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The Department of Environmental Quality (DEQ) provides the Environmental Protection Agency (EPA) with periodic summaries of Total Maximum Daily Load (TMDL) development progress. Implementation of TMDL plans has begun to increase. Water quality monitoring data is used to assess compliance with Water Quality Standards and compared to the baseline, measured on 6/30/2005. Note: The 2002 Virginia Impaired Waters List (the List) contained 1,430 waters. Despite the removal of 262 waters from the List by FY 2005, the overall number of impaired waters increased to 1,712 by FY 2006. Some of the waters that remain on the 2002 List will not have TMDLs completed until after 2014,. The schedule originally set by DEQ and agreed upon by EPA for fully or partially removing waters from the List is as follows: by FY 2014 (total 1,175); and by FY2020 (total 1,289). These data are based on the expectation that waters will be at least partially restored to meeting water quality standards within 10 years of completing a TMDL. The Chesapeake Bay and Virginia Waters Clean-Up Plan (most recent update January 2012), developed pursuant to HB 1150 (2006) recognizes both fully and partially restored waters. Virginia is meeting this original schedule to a great extent, however, Virginia's current TMDL goal, developed with the approval by the EPA, has been to implement the watershed approach for TMDL development and finalize 50 TMDLs per year. This allows for better use of resources and more comprehensive TMDLs, but is not consistent with the goal where specific small stream segments are targeted. (States have been asking EPA for the last few years, to update the baseline year of 2002 to a more current year. Once this is done DEQ shall have a new impaired waters number, or comparable metric, to measure delistings against).

51503: Virginia Water Facilities Revolving Fund Loans and Grants

Description

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, structural agricultural best management practices, Brownfield remediation, and land conservation.

Mission Alignment and Authority

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.

Customers for this Service Area

Anticipated Changes to Customers Base

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Farm/Forest Owner	Agricultural Producers	200	200	Stable
Employer/ Business Owner	Corporations	6	6	Stable
Non-Profit Agency (Boards/Foundations),	Non-profit Organizations	3	100	Stable
Local or Regional Government Authorities	Local Governments	150	300	Stable

Partners for this Service Area

Partner	Description
Other State and Federal agencies	Federal agencies including the US Department of Agriculture (USDA), the Natural Resources Conservation Service (NRCS), and Environmental Protection Agency (EPA) as well as other state agencies including the Department of Conservation and Recreation (DCR) and Department of Health (VDH) in co-funding some projects.
U.S. Environmental Protection Agency	The USEPA provides capitalization funding for the Fund and performs annual reviews of the program.
Virginia Resources Authority	The Virginia Resources Authority is the financial administrator of the Fund and handles many of the financial aspects for the program. In addition, we partner with other funding agencies including the US Department of Agriculture (USDA), the Natural Resources Conservation Service (NRCS), and EPA as well as other state agencies including the Department of Conservation and Recreation (DCR) and Department of Health (VDH) in co-funding some projects.

Products and Services

Factors Impacting the Products and/or Services

Development and implementation of new regulations related to water quality will impact this service area.

Anticipated Changes to the Products and/or Services

Loan funding for stormwater management projects is a new product for this service area.

Listing of Products and / or Services

The main products provided by the service area are loans to local governments, non-profits, 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.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	1,705,946	21,453,097	1,705,946	21,453,097
Changes to Base	87,569,394	0	0	0
Total	89,275,340	21,453,097	1,705,946	21,453,097

Objectives for this Service Area

Objectives for this Service Area

Objective

Proactive policy, comprehensive planning, and effective program development

Description

Increase the implementation of good water quality improvement projects in areas where water quality does not meet state standards and the beneficial uses of those waters are impaired.

Objective Strategies

- Continue to strongly market the program through regional and headquarter offices to insure that high quality projects are solicited, maintain the project priority system so that "impaired waters" projects rank very high, and aggressively manage the financial resources through investments and leveraging so that funding capacity is maximized.

Alignment to Agency Goals

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

Measures

- Percentage of loans and grants from the Virginia Water Facilities Revolving Loan Fund directed to projects impacting waters considered "Impaired"

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

"Impaired Waters" are those waters in the Commonwealth that do not meet the water quality standards established by the Department of Environmental Quality (DEQ) for that body of water and therefore are not of a quality needed to fully support the designated uses of that water body (i.e. aquatic life, recreation, public water supply, wildlife, etc). One of DEQ's main goals is to reduce the amount of impaired waters in the state and therefore it is important that we target available funding to projects which help achieve that goal. Using the Virginia Clean Water Revolving Loan Fund (VCWRLF) Annual Report, determine the percentage of funds directed to these projects.

51507: Financial Assistance for Coastal Resources Management

Description

The Virginia Coastal Zone Management Program (CZM) Program receives annual funding from National Oceanic and Atmospheric Administration (NOAA) under the federal Coastal Zone Management Act (CZMA) 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 and all coastal waters out to the three mile territorial sea boundary.

The program has a staff of 6 Full Time Equivalent (FTEs) and is guided by a 25 member interagency Coastal Policy Team. The Team represents agencies which implement programs aimed at ensuring that critical land and water uses in the coastal zone are subject to Commonwealth regulation. The Department of Environmental Quality (DEQ) serves as the lead agency for this networked program of state agencies and local governments.

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.

Mission Alignment and Authority

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

Customers for this Service Area

Anticipated Changes to Customers Base

There has been a decrease in the number of people who can make a living in Virginia harvesting and processing seafood and an increase in the number who are making a living from ecotourism. Another change is that the coastal population of Virginia has increased steadily causing major stresses on our coastal ecosystems, habitats and wildlife due to the increased number of waterfront homes and recreational boaters.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Federal Agency	Federal Agencies	8	8	Stable
Non-Profit Agency (Boards/Foundation),	Non-Profit Organizations	17	20	Stable
Employer/ Business Owner	Private Partners	6	15	Stable
Higher Education Institutions	Educational Institutions	5	8	Stable
Local or Regional Government Authorities	Local Governments	97	97	Stable
State Agency(s),	State Agencies	11	11	Stable

Partners for this Service Area

Partner	Description
Federal Agencies	Environmental Protection Agency, National Oceanic and Atmospheric Administration (NOAA), Bureau of Ocean Energy Management, US Fish & Wildlife Service
State Agencies	VA Marine Resources Commission, VA Dept. of Game & Inland Fisheries, VA Dept. of Historic Resources, VA Institute of Marine Science, Virginia Department of Transportation, Department of Mines Minerals and Energy, Department of Health, Department of Conservation and Recreation
Local governments and commissions	Cities, counties and towns that touch on tidal waters as well as the 8 coastal Planning District Commissions
Non-profits	Alliance for Chesapeake Bay, Chesapeake Bay Foundation, Chesapeake Bay Commission, Citizens for Better Eastern Shore, Clean Virginia Waterways, Coastal States Organization, Ducks Unlimited, Elizabeth River Project, Friends of Dragon Run, Green Infrastructure Center, James River Association, Ocean Conservancy, The Nature Conservancy, Virginia Aquarium ,VA Conservation Network, , VA Eastern Shore Land Trust, Wetlands Watch

Products and Services

Factors Impacting the Products and/or Services

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.

Anticipated Changes to the Products and/or Services

It is anticipated that budget reductions for CZM awards from the National Oceanic and Atmospheric Administration (NOAA) are likely.

Listing of Products and / or Services

Services: 1. Financial Assistance to grantees (e.g. funding positions, supplies, travel, etc.) who in turn are able to provide the following products;

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)

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	0	4,424,500	0	4,424,500
Changes to Base	0	-2,000,000	0	-2,000,000
Total	0	2,424,500	0	2,424,500

Objectives for this Service Area

Objectives for this Service Area

Objective

Provide proactive policy, comprehensive planning, and effective program development

Description

Through financial assistance to state agencies facilitate the protection and restoration of coastal resources, habitats and species of the Commonwealth.

Objective Strategies

- Restore critical marine habitat on the Seaside of Virginia's Eastern Shore.

Alignment to Agency Goals

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

Measures

- Cumulative acres of eelgrass mapped.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

This measure is designed to track progress on eelgrass restoration on the seaside of Virginia's Eastern Shore funded by the Virginia Coastal Zone Management (CZM) Program. Eelgrass, which grows rooted to the bottom of shallow bays, provides habitat for fish, crabs and bay scallops. It was wiped out on the seaside (along with bay scallop fishery that depended on it) by hurricanes and diseases in the 1930's and was absent until the CZM Program initiated restoration through grants to the Virginia Institute of Marine Science (VIMS) in 2000. Expanding eelgrass beds provide multiple benefits to the seafood industry; in addition to providing a safe nursery for young fish to hide from predators eelgrass also takes up nitrogen thereby improving water quality, which in turn also helps maintain healthy seafood production and ensures clean water for the shore's expanding ecotourism industry. Eelgrass also helps to trap sand and dampen the effects of wave action which causes erosion of private property thus providing another benefit to Virginia's citizens. Over 200 acres of eelgrass seeds have been planted and through annual aerial surveys and mapping, we now know they have spread to about 4,000 acres. Virginia CZM continues to fund the effort and this measure tracks the number of acres planted. The data are updated by reviewing semiannual and final progress reports from the VIMS.

51509: Litter Control and Recycling Grants

Description

This service area provides annual no-match cash grants to Virginia's 325 local governments to support the costs of their litter control and recycling programs.

Each year, the Department of Environmental Quality (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 ("Fund 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 and Authority

This service area protects and enhances Virginia's environment and promotes the health and well-being 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.

Customers for this Service Area

Anticipated Changes to Customers Base

No changes expected.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Local or Regional Government Authorities	Local Governments in Virginia	324	324	Stable

Partners for this Service Area

Partner	Description
Related associations	Partners in this work include the Virginia Council on Litter Prevention and Recycling, the Virginia Recycling Association and the Virginia Organized Industries Concerned about the Environment (VOICE).

Products and Services

Factors Impacting the Products and/or Services

Available funding.

Anticipated Changes to the Products and/or Services

None anticipated.

Listing of Products and / or Services

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

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	0	0	0	0
Changes to Base	0	0	0	0
Total	0	0	0	0

Objectives for this Service Area

Objectives for this Service Area

Objective
Maximize efficient use of current resources

Description
Allocate and disburse grants to as many localities as possible.

Objective Strategies

- Continue the grant process and encourage all localities to apply.

Alignment to Agency Goals

- Achieve an optimal use of current and new resources

Measures

- Number of litter control and recycling grants disbursed to either individual towns or to cooperatives

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Each year, the Department of Environmental Quality (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 ("Fund Board"). To update measure DEQ staff review grant applications and data available in the grant allocations database and compare results to baseline data (collected during FY 2005).

51510: Virginia Water Quality Improvement Fund

Description

The Department of Environmental Quality (DEQ) Director is authorized to sign grant agreements with eligible owners of publicly owned wastewater treatment plants to provide cost-share 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.

Under EPA's Chesapeake Bay TMDL (approved in Dec. 2010) Virginia is obligated to control nutrient inputs to the Chesapeake Bay to improve dissolved oxygen levels, restore underwater grasses and improve water clarity. Staff provide input into developing and implementing Virginia's WIP for the Potomac, Rappahannock, York, James, and small coastal basins. In addition, staff participate in periodic progress reporting, assessing achievement of interim 2-year WIP milestones, CBP modeling activities, assessing nutrient impacts and management options. The models aid in estimating nutrient reduction progress and achievement of nutrient reduction targets for these basins.

Mission Alignment and Authority

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.

Customers for this Service Area

Anticipated Changes to Customers Base

The customer base includes towns, cities, counties and local wastewater authorities that own and operate publicly owned wastewater facilities located within the Chesapeake Bay watershed (an area constituting approximately 55% of the Commonwealth's land area). Eligible facilities are those designated as significant dischargers in the Bay watershed with regulatory nutrient waste load allocations ("caps" on annual total nitrogen and total phosphorus loads), as well as smaller, non-significant dischargers proposing an expansion and required to maintain their "permitted design capacity". In 2005, legislation named the 90 eligible "significant dischargers" and defined the "non-significant dischargers" that qualified for grant consideration. In any given year, the General Assembly may extend eligibility to other facilities through budget language, as they have done several times in the past (e.g., grants allowed to certain privately owned facilities meeting specified design flow size and location requirements).

All Virginia publicly owned wastewater facilities are eligible for funding under the allowance to use grant funds for other water quality improvement projects, when the DEQ Director determines that sufficient funding is available for substantial and continuing progress under Virginia's Chesapeake Bay Watershed Implementation Plan.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Local or Regional Government Authorities	Local Governments	50	20	Decrease

Partners for this Service Area

Partner	Description
None	

Products and Services

Factors Impacting the Products and/or Services

Changes in WQIF appropriations.

Anticipated Changes to the Products and/or Services

Based on current and projected needs, the WQIF should have sufficient funds to cover estimated reimbursement requests until sometime during the FY15-16 biennium. This is due to appropriations made by the 2013 General Assembly, which authorized \$101 million in new bond proceeds to continue funding for existing signed grant agreements, as well as an anticipated 11 additional grant awards within the next year. In addition to the \$101 million authorization, a specific \$5 million supplemental grant was made available for the pending Hopewell RWTF project.

Listing of Products and / or 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 10.1-2131 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. Factors impacting a change to the product include on-going revisions to the WQIF Guidelines currently under consideration by the Secretary of Natural Resources.

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. DEQ makes this forecast publicly available each year for use in the state's budgetary process. 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.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	0	0	0	0
Changes to Base	0	0	0	0
Total	0	0	0	0

Objectives for this Service Area

Objectives for this Service Area

Objective
 Improve and protect water quality, especially in the Chesapeake Bay and its tidal rivers

Description

Objective Strategies

- Through the issuance of permits with nutrient limitations, and grants awarded under the Water Quality Improvement Fund (WQIF), the discharge of nutrients from point sources will be reduced to Waste Load Allocations issued under the EPA Chesapeake Bay TMDL.

Alignment to Agency Goals

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

Measures

- Number of pounds of nitrogen nutrients discharged from significant point sources in the Chesapeake Bay watershed.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Pounds of nutrients discharged each year is obtained from permit data available in Comprehensive Environmental Data System (CEDs), annual Water Quality Improvement Fund (WQIF) reports, Chesapeake Bay Program (CBP) Watershed Model, and other sources. It is then compared to the baseline data, collected during calendar year 2004.

- Number of pounds of phosphorus nutrients discharged from significant point sources in the Chesapeake Bay watershed.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Pounds of nutrients discharged each year is obtained from permit data available in the Comprehensive Environmental Data System (CEDs), annual Water Quality Improvement Fund (WQIF) reports, Chesapeake Bay Program (CBP) Watershed Model, and other sources. It is then compared to that collected during the baseline period, calendar year 2004.

51511: Petroleum Tank Reimbursement

Description

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 (Fund) provides money for reimbursing responsible parties, for the reasonable and necessary costs they incur while conducting petroleum cleanups. The Department of Environmental Quality (DEQ) reimburses tank owners based upon eligibility, necessity, and reasonableness determinations.

Mission Alignment and Authority

This service area provides for reimbursement of eligible petroleum cleanup costs at petroleum contaminated sites, returning properties into productive re-use

Customers for this Service Area

Anticipated Changes to Customers Base

None

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
Employer/ Business Owner	Consultants	150	150	Stable
Resident	Homeowners with leaking heating oil tanks	1,200	250,000	Stable
Environmental Pollution and Control	Regulated Tank Owners	350	4,500	Stable
Local or Regional Government Authorities	Citizens, businesses, local governments reporting pollution incidents	3,500	3,500	Stable

Partners for this Service Area

Partner	Description
None	

Products and Services

Factors Impacting the Products and/or Services

Fluctuations in claim volume.

Revenues available to pay claims.

Anticipated Changes to the Products and/or Services

National trends in declining sales of petroleum products result in declining revenue for the Virginia Petroleum Storage Tank Fund (VPSTF) which is funded by a fee levied against each gallon of gasoline sold in Virginia. As people reduce the number of miles traveled and drive more fuel efficient vehicles, we expect this revenue decline trend to continue.

Listing of Products and / or Services

Reimbursements to eligible stakeholders.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	0	24,253,146	0	24,253,146
Changes to Base	0	785,277	0	785,277
Total	0	25,038,423	0	25,038,423

Objectives for this Service Area

Objectives for this Service Area

Objective

Proactive policy, comprehensive planning, and effective program development

Description

Timely claims reimbursement processing

Objective Strategies

- Implement claims processing plan

Alignment to Agency Goals

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

Measures

- Number of days to process reimbursement claims to petroleum tank owners for cleanup costs incurred.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Reimbursement of eligible petroleum cleanup costs at petroleum contaminated sites enables owners to return their properties to productive uses. The agency's Comprehensive Environmental Data System (CEDS) database is used to determine the average number of days between receipt of the claim and the decision mailing. This figure is then compared to the baseline level, measured during calendar year 2008.

59901: General Management and Direction

Description

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

Mission Alignment and Authority

This support activity is critical to the delivery of the services provided by The Department of Environmental Quality (DEQ) and the information needs of DEQ's customers and partners.

Customers for this Service Area

Anticipated Changes to Customers Base

DEQ is faced with staff recruitment and retention issues. This is attributed to the fact that 26% of the existing staff will be eligible to retire within 5 years; and retention of staff with less than five years of state experience due to competition from private, federal and local employers. DEQ must continue to enhance programs to attract a highly skilled workforce.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
State Agency(s),	The Department of Human Resource Management	1	1	Stable
State Government Employee	State employees employed by the Department of Environmental Quality	750	900	Stable

Partners for this Service Area

Partner	Description
Central agencies of the Commonwealth	The Department of Human Resource Management, Department of Accounts, Department of Planning and Budget.

Products and Services

Factors Impacting the Products and/or Services

Changes to state and federal mandates related to the employment of staff. Rising lease costs for regional activities.

Anticipated Changes to the Products and/or Services

None

Listing of Products and / or 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 10 locations.

Financial Overview

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	5,618,585	12,243,815	5,618,585	12,243,815
Changes to Base	0	0	0	0
Total	5,618,585	12,243,815	5,618,585	12,243,815

Objectives for this Service Area

Objectives for this Service Area

Objective

Continuously improve the agency's organizational development program

Description

Provide organizational policies and procedures for succession planning and leadership development.

Objective Strategies

- Enhance agency Workforce Development Program
- Enhance training initiatives

Alignment to Agency Goals

- Sustain an outcome oriented workforce and culture

Measures

- Number of leadership training hours attended by agency staff

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The agency's Learning Management System (LMS) reports disclose the number of leadership training hours attended by agency staff.

- Percent of DEQ employees that rate DEQ as "outcome oriented"

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

The agency's Human Resources division administers an electronic employee survey every 2 years. The number of employees answering 'Yes' or 'True' to the employee survey question: "Our culture today is outcome oriented" is divided by the total number of employees responding to this question to get a percentage.

Objective

Embrace continuous improvement in program development

Description

Management of agency operations.

Objective Strategies

- Improve the efficiency and effectiveness of internal business processes.
- Increase the amount of leadership training and development delivered.
- Routinely evaluate program performance using data and metrics

Alignment to Agency Goals

- Achieve an optimal use of current and new resources

Measures

- Number of improved agency program business processes.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Cumulative number reported in Environmental Council of States' (ECOS) Lean Inventory

59902: Information Technology Services

Description

The Department of Environmental Quality (DEQ) provides a wide variety of environmental quality-related services to private citizens, regulated entities, other state agencies, and federal agencies, including the Environmental Protection Agency (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.

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

Mission Alignment and Authority

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

Customers for this Service Area

Anticipated Changes to Customers Base

As technology changes (mobile phones, tablets, etc.) we anticipate an increasing number of customers who wish to submit and receive data electronically.

Current Customer Base

Pre-Defined Customer Group	User Specified Customer Group	Customers Served Annually	Potential Annual Customers	Projected Trend in # of Customers
State Agency(s),	COV state agencies	10	10	Stable
Federal Agency	The Environmental Protection Agency	1	1	Stable
Environmental Pollution and Control	Firms interested in applying for permits to operate their business	10,000	50,000	Increase

Partners for this Service Area

Partner	Description
Department of Consolidated Laboratory Services	Provides laboratory services (testing and analysis)
Environmental Council of States	Policy development for all 50 states.
Other state agencies	The Virginia Information Technology Agency (VITA)
U.S. Environmental Protection Agency	Federal Agency

Products and Services

Factors Impacting the Products and/or Services

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 one-time funding in one fiscal year and continuous financial support for maintenance in succeeding years.

EPA is replacing many legacy systems with an Integrated Compliance Information System (ICIS). This will require DEQ to update current business processes and IT systems to accommodate the new system 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/NG partnership and aging systems and infrastructure supporting DEQs core business functions and services.

Anticipated Changes to the Products and/or Services

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 staffing shortage and hiring restrictions, DEQ IT supplements full-time staff with consultants. The agency's strategy has been to maintain a smaller staff, with technical contractors augmenting the staff as well as working on specific projects. The ability to locate contractors with the skill set needed 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 Directorate's to prioritize project requests and other technology needs.

Listing of Products and / or Services

Delivery of information technological product capability and service support to facilitate The Department of Environmental Quality's (DEQ) mission achievement.

Budget Component	2013 GF	2013 NGF	2014 GF	2014 NGF
Base	4,552,670	453,714	4,552,670	453,714
Changes to Base	0	0	0	0
Total	4,552,670	453,714	4,552,670	453,714

Objectives for this Service Area

Objectives for this Service Area

Objective

Maximize use of technology to create efficiencies

Description

Increase electronic data exchange opportunities

Objective Strategies

- Increase electronic data exchange opportunities

Alignment to Agency Goals

- Achieve an optimal use of current and new resources

Measures

- Number of available electronic submittal systems offered by the Department of Environmental Quality (DEQ) to its customers.

Measure Class Measure Type Preferred Trend Frequency

Data Source and Calculation

Data in the environmental databases is collected and compared with that recorded during the base year, FY 2011. Electronic transactions currently offered by DEQ to its customers includes electronic applications for air non-metallic mineral mining general permits, regulated medical waste transporter registrations, solid waste information and assessments (SWIA), Emissions Inspector License Extensions, and Electronic Discharge Monitoring Reports (EDMR) for Virginia Pollutant Discharge Elimination System (VPDES) permit information. The agency is continually seeking ways to increase its electronic transaction offerings and anticipates more to be available in the future.